

Solicitation 972-11945

Wastewater (Sewer) Pipes and Fittings

Bid Designation: Public



City of Fort Lauderdale

Bid 972-11945 Wastewater (Sewer) Pipes and Fittings

Bid Number 972-11945
Bid Title Wastewater (Sewer) Pipes and Fittings

Bid Start Date May 25, 2017 3:47:07 PM EDT
Bid End Date Jun 21, 2017 2:00:00 PM EDT
Question & Answer End Date Jun 8, 2017 5:00:00 PM EDT

Bid Contact Hendry J Lopez
Procurement Specialist I
Finance / Procurement
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Contract Duration One Time Purchase
Contract Renewal Not Applicable
Prices Good for 120 days

Bid Comments The City of Fort Lauderdale, Florida (City) is seeking bids from qualified bidders, hereinafter referred to as the Contractor, to provide Wastewater (Sewer) Pipes and Fittings for the City's Public Works Utility Division as required, in accordance with the terms, conditions, and specifications contained in this Invitation to Bid (ITB).

For information concerning technical specifications please utilize the question / answer feature provided by BidSync at www.bidsync.com . Questions of a material nature must be received prior to the cut-off date specified in the solicitation. Material changes, if any, to the scope of services or bidding procedures will only be transmitted by written addendum. (See addendum section of BidSync Site). Contractors please note: No part of your bid can be submitted via FAX.

Added on Jun 14, 2017:
Solicitation end date has been extended to June 21, 2017 at 2:00 PM. All other terms and conditions remain unchanged.
Added on Jun 19, 2017:
Exhibit 1 has been added. All other information remain unchanged.

Addendum # 1

Previous End Date	Jun 15, 2017 2:00:00 PM EDT	New End Date	Jun 21, 2017 2:00:00 PM EDT
Previous Contract Renewal	Not Applicable	New Contract Renewal	Not Applicable

Addendum # 2

New Documents	Exhibit 1.pdf		
Previous Contract Renewal	Not Applicable	New Contract Renewal	Not Applicable

Item **972-11945--01-01 - Ductile Iron Pipe - Protecto 401 Epoxy Ceramic Lining 4"**
 Quantity **120 foot**
 Unit Price
 Warranty
 Delivery days
 (business) after
 Purchase Order is received
 Delivery Location **City of Fort Lauderdale**
No Location Specified
 Qty 120

Description
 Diameter (Inches) - 4 / Length - 120 feet. See ITB Part II for more details.

Item **972-11945--01-02 - Ductile Iron Pipe - Protecto 401 Epoxy Ceramic Lining 6"**
 Quantity **120 foot**
 Unit Price
 Warranty
 Delivery days
 (business) after
 Purchase Order is received
 Delivery Location **City of Fort Lauderdale**
No Location Specified
 Qty 120

Description
 Diameter (Inches) - 6 / Length - 120 feet. See ITB Part II for more details.

Item **972-11945--01-03 - Ductile Iron Pipe - Protecto 401 Epoxy Ceramic Lining 8"**
 Quantity **120 foot**
 Unit Price
 Warranty
 Delivery days
 (business) after
 Purchase Order is received
 Delivery Location **City of Fort Lauderdale**
No Location Specified
 Qty 120

Description
 Diameter (Inches) - 8 / Length - 120 feet. See ITB Part II for more details.

Item **972-11945--01-04 - Ductile Iron Pipe - Protecto 401 Epoxy Ceramic Lining 10"**
 Quantity **120 foot**
 Unit Price
 Warranty
 Delivery days (business) after Purchase Order is received
 Delivery Location **City of Fort Lauderdale**
No Location Specified
 Qty 120

Description
 Diameter (Inches) - 10 / Length - 120 feet. See ITB Part II for more details.

Item **972-11945--01-05 - Ductile Iron Pipe - Protecto 401 Epoxy Ceramic Lining 12"**
 Quantity **120 foot**
 Unit Price
 Warranty
 Delivery days (business) after Purchase Order is received
 Delivery Location **City of Fort Lauderdale**
No Location Specified
 Qty 120

Description
 Diameter (Inches) - 12 / Length - 120 feet. See ITB Part II for more details.

Item **972-11945--01-06 - Ductile Iron Pipe - Protecto 401 Epoxy Ceramic Lining 14"**
 Quantity **120 foot**
 Unit Price
 Warranty
 Delivery days (business) after Purchase Order is received
 Delivery Location **City of Fort Lauderdale**
No Location Specified
 Qty 120

Description
 Diameter (Inches) - 14 / Length - 120 feet. See ITB Part II for more details.

Item **972-11945--01-07 - Ductile Iron Pipe - Protecto 401 Epoxy Ceramic Lining 16"**

5 of 127

Quantity **360 foot**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 360

Description

Diameter (Inches) - 16 / Length - 360 feet. See ITB Part II for more details.

Item **972-11945--01-08 - Ductile Iron Pipe - Protecto 401 Epoxy Ceramic Lining 18"**

Quantity **120 foot**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 120

Description

Diameter (Inches) - 18 / Length - 120 feet. See ITB Part II for more details.

Item **972-11945--01-09 - Ductile Iron Pipe - Protecto 401 Epoxy Ceramic Lining 20"**

Quantity **240 foot**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 240

Description

Diameter (Inches) - 20 / Length - 240 feet. See ITB Part II for more details.

Item **972-11945--01-10 - Ductile Iron Pipe - Protecto 401 Epoxy Ceramic Lining 24"**

Quantity **360 foot**

6 of 127

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 360

Description

Diameter (Inches) - 24 / Length - 360 feet. See ITB Part II for more details.

Item **972-11945--01-11 - Ductile Iron Pipe - Protecto 401 Epoxy Ceramic Lining 30"**

Quantity **360 foot**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 360

Description

Diameter (Inches) - 30 / Length - 360 feet. See ITB Part II for more details.

Item **972-11945--01-12 - Ductile Iron Pipe - Protecto 401 Epoxy Ceramic Lining 36"**

Quantity **240 foot**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 240

Description

Diameter (Inches) - 36 / Length - 240 feet. See ITB Part II for more details.

Item **972-11945--01-13 - Ductile Iron Pipe - Protecto 401 Epoxy Ceramic Lining 42"**

Quantity **120 foot**

Unit Price

7 of 127

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 120

Description

Diameter (Inches) - 42 / Length - 120 feet. See ITB Part II for more details.

Item **972-11945--01-14 - Ductile Iron Pipe - Protecto 401 Epoxy Ceramic Lining 48"**

Quantity **40 foot**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 40

Description

Diameter (Inches) - 48 / Length - 40 feet. See ITB Part II for more details.

Item **972-11945--01-15 - Ductile Iron Pipe - Protecto 401 Epoxy Ceramic Lining 54"**

Quantity **40 foot**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 40

Description

Diameter (Inches) - 54 / Length - 40 feet. See ITB Part II for more details.

Item **972-11945--01-16 - Mechanical Joint (MJ X MJ Sleeves) 4"**

Quantity **6 each**

Unit Price

Warranty

8 of 127

Delivery days
(business) after
Purchase Order is
received

Delivery Location

City of Fort Lauderdale

No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ X MJ Sleeves) 4". See ITB for more details.

Item **972-11945--01-17 - Mechanical Joint (MJ X MJ Sleeves) 6"**

Quantity **6 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location

City of Fort Lauderdale

No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ X MJ Sleeves) 6". See ITB Part II for more details.

Item **972-11945--01-18 - Mechanical Joint (MJ X MJ Sleeves) 8"**

Quantity **6 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location

City of Fort Lauderdale

No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ X MJ Sleeves) 8". See ITB Part II for more details.

Item **972-11945--01-19 - Mechanical Joint (MJ X MJ Sleeves) 10"**

Quantity **6 each**

Unit Price

Warranty

Delivery days

9 of 127
(business) after
Purchase Order is
received

Delivery Location

City of Fort Lauderdale

No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ X MJ Sleeves) 10". See ITB Part II for more details.

Item **972-11945--01-20 - Mechanical Joint (MJ X MJ Sleeves) 12"**

Quantity **6 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location

City of Fort Lauderdale

No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ X MJ Sleeves) 12". See ITB Part II for more details.

Item **972-11945--01-21 - Mechanical Joint (MJ X MJ Sleeves) 14"**

Quantity **6 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location

City of Fort Lauderdale

No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ X MJ Sleeves) 14". See ITB Part II for more details.

Item **972-11945--01-22 - Mechanical Joint (MJ X MJ Sleeves) 16"**

Quantity **6 each**

Unit Price

Warranty

Delivery days
(business) after

10 of 127
Purchase Order is received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ X MJ Sleeves) 16". See ITB Part II for more details.

Item **972-11945--01-23 - Mechanical Joint (MJ X MJ Sleeves) 18"**

Quantity **6 each**

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ X MJ Sleeves) 18". See ITB Part II for more details.

Item **972-11945--01-24 - Mechanical Joint (MJ X MJ Sleeves) 20"**

Quantity **6 each**

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ X MJ Sleeves) 20". See ITB Part II for more details.

Item **972-11945--01-25 - Mechanical Joint (MJ X MJ Sleeves) 24"**

Quantity **6 each**

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

11 of 127

received

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ X MJ Sleeves) 24". See ITB Part II for more details.

Item **972-11945--01-26 - Mechanical Joint (MJ X MJ Sleeves) 30"**

Quantity **6 each**

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ X MJ Sleeves) 30". See ITB Part II for more details.

Item **972-11945--01-27 - Mechanical Joint (MJ X MJ Sleeves) 36"**

Quantity **6 each**

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ X MJ Sleeves) 36". See ITB Part II for more details.

Item **972-11945--01-28 - Mechanical Joint (MJ X MJ Sleeves) 42"**

Quantity **6 each**

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

12 of 127

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ X MJ Sleeves) 42". See ITB Part II for more details.

Item **972-11945--01-29 - Mechanical Joint (MJ X MJ Sleeves) 48"**

Quantity **2 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 2

Description

Fittings: Mechanical Joint (MJ X MJ Sleeves) 48". See ITB Part II for more details.

Item **972-11945--01-30 - Mechanical Joint (MJ X MJ Sleeves) 54"**

Quantity **2 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 2

Description

Fittings: Mechanical Joint (MJ X MJ Sleeves) 54". See ITB Part II for more details.

Item **972-11945--01-31 - Mechanical Joint (MJ 45 Degree Bend) 4"**

Quantity **6 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ 45 Degree Bend) 4". See ITB Part II for more details.

Item **972-11945--01-32 - Mechanical Joint (MJ 45 Degree Bend) 6"**

Quantity **6 each**

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ 45 Degree Bend) 6". See ITB Part II for more details.

Item **972-11945--01-33 - Mechanical Joint (MJ 45 Degree Bend) 8"**

Quantity **6 each**

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ 45 Degree Bend) 8". See ITB Part II for more details.

Item **972-11945--01-34 - Mechanical Joint (MJ 45 Degree Bend) 10"**

Quantity **6 each**

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ 45 Degree Bend) 10". See ITB Part II for more details.

Item **972-11945--01-35 - Mechanical Joint (MJ 45 Degree Bend) 12"**

Quantity **6 each**

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ 45 Degree Bend) 12". See ITB Part II for more details.

Item **972-11945--01-36 - Mechanical Joint (MJ 45 Degree Bend) 14"**

Quantity **6 each**

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ 45 Degree Bend) 14". See ITB Part II for more details.

Item **972-11945--01-37 - Mechanical Joint (MJ 45 Degree Bend) 16"**

Quantity **6 each**

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ 45 Degree Bend) 16". See ITB Part II for more details.

Item **972-11945--01-38 - Mechanical Joint (MJ 45 Degree Bend) 18"**

Quantity **6 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ 45 Degree Bend) 18". See ITB Part II for more details.

Item **972-11945--01-39 - Mechanical Joint (MJ 45 Degree Bend) 20"**

Quantity **6 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ 45 Degree Bend) 20". See ITB Part II for more details.

Item **972-11945--01-40 - Mechanical Joint (MJ 45 Degree Bend) 24"**

Quantity **6 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ 45 Degree Bend) 24". See ITB Part II for more details.

Item 972-11945--01-41 - Mechanical Joint (MJ 45 Degree Bend) 30"

Quantity 6 each

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ 45 Degree Bend) 30". See ITB Part II for more details.

Item 972-11945--01-42 - Mechanical Joint (MJ 45 Degree Bend) 36"

Quantity 6 each

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ 45 Degree Bend) 36". See ITB Part II for more details.

Item 972-11945--01-43 - Mechanical Joint (MJ 45 Degree Bend) 42"

Quantity 6 each

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Mechanical Joint (MJ 45 Degree Bend) 42". See ITB Part II for more details.

Item **972-11945--01-44 - Mechanical Joint (MJ 45 Degree Bend) 48"**

Quantity **2 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 2

Description

Fittings: Mechanical Joint (MJ 45 Degree Bend) 48". See ITB Part II for more details.

Item **972-11945--01-45 - Mechanical Joint (MJ 45 Degree Bend) 54"**

Quantity **2 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 2

Description

Fittings: Mechanical Joint (MJ 45 Degree Bend) 54". See ITB Part II for more details.

Item **972-11945--01-46 - Mega Lugs 4"**

Quantity **6 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Mega Lugs 4". See ITB Part II for more details.

Item 972-11945--01-47 - Mega Lugs 6"

Quantity 6 each

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location City of Fort Lauderdale
No Location Specified

Qty 6

Description

Fittings: Mega Lugs 6". See ITB Part II for more details.

Item 972-11945--01-48 - Mega Lugs 8"

Quantity 6 each

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location City of Fort Lauderdale
No Location Specified

Qty 6

Description

Fittings: Mega Lugs 8". See ITB Part II for more details.

Item 972-11945--01-49 - Mega Lugs 10"

Quantity 6 each

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location City of Fort Lauderdale
No Location Specified

Qty 6

Description

Fittings: Mega Lugs 10". See ITB Part II for more details.

Item **972-11945--01-50 - Mega Lugs 12"**
 Quantity **6 each**
 Unit Price
 Warranty
 Delivery days
 (business) after
 Purchase Order is
 received
 Delivery Location **City of Fort Lauderdale**
No Location Specified
 Qty 6

Description
 Fittings: Mega Lugs 12". See ITB Part II for more details.

Item **972-11945--01-51 - Mega Lugs 14"**
 Quantity **6 each**
 Unit Price
 Warranty
 Delivery days
 (business) after
 Purchase Order is
 received
 Delivery Location **City of Fort Lauderdale**
No Location Specified
 Qty 6

Description
 Fittings: Mega Lugs 14". See ITB Part II for more details.

Item **972-11945--01-52 - Mega Lugs 16"**
 Quantity **6 each**
 Unit Price
 Warranty
 Delivery days
 (business) after
 Purchase Order is
 received
 Delivery Location **City of Fort Lauderdale**
No Location Specified
 Qty 6

Description
 Fittings: Mega Lugs 16". See ITB Part II for more details.

Item **972-11945--01-53 - Mega Lugs 18"**

20 of 127

Quantity **6 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Mega Lugs 18". See ITB Part II for more details.

Item **972-11945--01-54 - Mega Lugs 20"**

Quantity **6 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Mega Lugs 20". See ITB Part II for more details.

Item **972-11945--01-55 - Mega Lugs 24"**

Quantity **6 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Mega Lugs 24". See ITB Part II for more details.

Item **972-11945--01-56 - Mega Lugs 30"**

Quantity **6 each**

21 of 127

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Mega Lugs 30". See ITB Part II for more details.

Item **972-11945--01-57 - Mega Lugs 36"**

Quantity **6 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Mega Lugs 36". See ITB Part II for more details.

Item **972-11945--01-58 - Mega Lugs 42"**

Quantity **6 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Mega Lugs 42". See ITB Part II for more details.

Item **972-11945--01-59 - Mega Lugs 48"**

Quantity **2 each**

Unit Price

22 of 127

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 2

Description

Fittings: 48" Mega Lugs - See section II of ITB for details.

Item **972-11945--01-60 - Mega Lugs 54"**

Quantity **2 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 2

Description

Fittings - 54" Mega Lugs - See section II of ITB for details.

Item **972-11945--01-61 - Stainless Steel Long Pattern Repair Clams 4"**

Quantity **6 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 6

Description

Fittings: Stainless Steel Long Pattern Repair Clams 4". See ITB Part II for more details.

Item **972-11945--01-62 - Stainless Steel Long Pattern Repair Clams 6"**

Quantity **6 each**

Unit Price

Warranty

23 of 127

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Stainless Steel Long Pattern Repair Clams 6". See ITB Part II for more details.

Item **972-11945--01-63 - Stainless Steel Long Pattern Repair Clams 8"**

Quantity **6 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Stainless Steel Long Pattern Repair Clams 8". See ITB Part II for more details.

Item **972-11945--01-64 - Stainless Steel Long Pattern Repair Clams 10"**

Quantity **6 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Stainless Steel Long Pattern Repair Clams 10". See ITB Part II for more details.

Item **972-11945--01-65 - Stainless Steel Long Pattern Repair Clams 12"**

Quantity **6 each**

Unit Price

Warranty

Delivery days

24 of 127
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Stainless Steel Long Pattern Repair Clams 12". See ITB Part II for more details.

Item **972-11945--01-66 - Stainless Steel Long Pattern Repair Clams 14"**

Quantity **6 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Stainless Steel Long Pattern Repair Clams 14". See ITB Part II for more details.

Item **972-11945--01-67 - Stainless Steel Long Pattern Repair Clams 16"**

Quantity **6 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Stainless Steel Long Pattern Repair Clams 16". See ITB Part II for more details.

Item **972-11945--01-68 - Stainless Steel Long Pattern Repair Clams 18"**

Quantity **6 each**

Unit Price

Warranty

Delivery days
(business) after

25 of 127
Purchase Order is received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Stainless Steel Long Pattern Repair Clams 18". See ITB Part II for more details.

Item **972-11945--01-69 - Stainless Steel Long Pattern Repair Clams 20"**

Quantity **6 each**

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Stainless Steel Long Pattern Repair Clams 20". See ITB Part II for more details.

Item **972-11945--01-70 - Stainless Steel Long Pattern Repair Clams 24"**

Quantity **6 each**

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Stainless Steel Long Pattern Repair Clams 24". See ITB Part II for more details.

Item **972-11945--01-71 - Stainless Steel Long Pattern Repair Clams 30"**

Quantity **6 each**

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

26 of 127

received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Stainless Steel Long Pattern Repair Clams 30". See ITB Part II for more details.

Item **972-11945--01-72 - Stainless Steel Long Pattern Repair Clams 36"**

Quantity **6 each**

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Stainless Steel Long Pattern Repair Clams 36". See ITB Part II for more details.

Item **972-11945--01-73 - Stainless Steel Long Pattern Repair Clams 42"**

Quantity **6 each**

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location **City of Fort Lauderdale**
No Location Specified

Qty 6

Description

Fittings: Stainless Steel Long Pattern Repair Clams 42". See ITB Part II for more details.

Item **972-11945--01-74 - Stainless Steel Long Pattern Repair Clams 48"**

Quantity **2 each**

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

27 of 127

Delivery Location

City of Fort Lauderdale

No Location Specified

Qty 2

Description

Fittings: Stainless Steel Long Pattern Repair Clams 48". See ITB Part II for more details.

Item 972-11945--01-75 - Stainless Steel Long Pattern Repair Clams 54"

Quantity 2 each

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location

City of Fort Lauderdale

No Location Specified

Qty 2

Description

Fittings: Stainless Steel Long Pattern Repair Clams 54". See ITB Part II for more details.

Item 972-11945--01-76 - Plug Valves 12"

Quantity 2 each

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location

City of Fort Lauderdale

No Location Specified

Qty 2

Description

Plug Valves 12". See ITB Part II for more details.

Item 972-11945--01-77 - Plug Valves 14"

Quantity 2 each

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

28 of 127

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 2

Description

Plug Valves 14". See ITB Part II for more details.

Item **972-11945--01-78 - Plug Valves 16"**

Quantity **2 each**

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 2

Description

Plug Valves 16". See ITB Part II for more details.

Item **972-11945--01-79 - Plug Valves 18"**

Quantity **2 each**

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location **City of Fort Lauderdale**

No Location Specified

Qty 2

Description

Plug Valves 18". See ITB Part II for more details.

Item **972-11945--01-80 - Plug Valves 20"**

Quantity **2 each**

Unit Price

Warranty

Delivery days (business) after Purchase Order is received

Delivery Location

City of Fort Lauderdale

No Location Specified

Qty 2

Description

Plug Valves 20". See ITB Part II for more details.

Item **972-11945--01-81 - Plug Valves 24"**

Quantity **2 each**

Unit Price

Warranty

Delivery days
(business) after
Purchase Order is
received

Delivery Location

City of Fort Lauderdale

No Location Specified

Qty 2

Description

Plug Valves 24". See ITB Part II for more details.

TITLE: Wastewater (Sewer) Pipes and Fittings**PART I - INFORMATION SPECIAL CONDITIONS****01. PURPOSE**

The City of Fort Lauderdale, Florida (City) is seeking bids from qualified bidders, hereinafter referred to as the Contractor, to provide Wastewater (Sewer) Pipes and Fittings for the City's Public Works (Utilities) Department, in accordance with the terms, conditions, and specifications contained in this Invitation To Bid (ITB).

02. INFORMATION OR CLARIFICATION

For information concerning procedures for responding to this solicitation, contact Procurement Specialist, Hendry Lopez, at (954) 828-5189 or email at hlopez@fortlauderdale.gov. Such contact shall be for clarification purposes only.

For information concerning technical specifications please utilize the question / answer feature provided by BidSync at www.bidsync.com. Questions of a material nature must be received prior to the cut-off date specified in the solicitation. Material changes, if any, to the scope of services or bidding procedures will only be transmitted by written addendum. (See addendum section of BidSync Site). Contractors please note: No part of your bid can be submitted via FAX. No variation in price or conditions shall be permitted based upon a claim of ignorance. Submission of a bid will be considered evidence that the Contractor has familiarized themselves with the nature and extent of the work, and the equipment, materials, and labor required. The entire bid response must be submitted in accordance with all specifications contained in this solicitation. The questions and answers submitted in BidSync shall become part of any contract that is created from this ITB.

It is the sole responsibility of the Contractor to ensure that their bid is submitted electronically through BidSync at www.bidsync.com or reaches the City of Fort Lauderdale City Hall, Procurement Services Division, 6th floor, Suite 619, 100 N. Andrews Avenue, Fort Lauderdale, FL 33301 in a sealed envelope marked on the outside with the ITB solicitation number and Contractor's name, no later than the time and date specified in this solicitation.

03. TRANSACTION FEES

The City of Fort Lauderdale uses BidSync (www.bidsync.com) to distribute and receive bids and proposals. There is no charge to vendors/contractors to register and participate in the solicitation process, nor will any fees be charged to the awarded contractor.

04. PRE-BID CONFERENCE AND/OR SITE VISIT

There will not be a pre-bid conference or site visit for this Invitation to Bid.

It will be the sole responsibility of the Contractor to become familiar with the scope of the City's requirements and systems prior to submitting a proposal. No variation in price or conditions shall be permitted based upon a claim of ignorance. Submission of a proposal will be considered evidence that the proposer has familiarized themselves with the nature and extent of the work, equipment, materials, and labor required.

05. ELIGIBILITY

To be eligible for award of a contract in response to this solicitation, the Contractor must demonstrate that they have successfully completed services, as specified in the Technical Specifications / Scope of Services section of this solicitation, are normally and routinely engaged in performing such services, and are properly and legally licensed to perform such work. In addition, the Contractor must have no conflict of interest with regard to any other work performed by the Contractor for the City of Fort Lauderdale.

The successful bidder shall have experience with the sale of ductile iron pipe and fittings of required size on this bid.

06. PRICING/DELIVERY

Delivery is required within 30 business days after receipt of purchase order. Failure to meet this delivery date may be deemed as non-responsive.

All deliveries are to be shipped F.O.B. Destination, Freight included.

Failure to provide costs as requested in this ITB may deem your bid non-responsive.

Delivery address: 3501 West Prospect Road, Fort Lauderdale, FL 33309

Coordination for all deliveries needs to be made by calling 954-828-7877. All deliveries must be completed by 2:30 pm.

07. BID DOCUMENTS

The Contractor shall examine this bid carefully. Ignorance of the requirements will not relieve the Contractor from liability and obligation under the Contract.

08. METHOD OF AWARD

Contractor must bid on all items. Partial bids will not be considered.

The City also reserves the right to accept or reject any or all bids, part of bids, and to waive minor irregularities or variations to specifications contained in bids, and minor irregularities in the bidding process. The City also reserves the right to award the contract on a split order basis, lump sum basis, individual item basis, or such combination as shall best serve the interest of the City.

09. PRICE VALIDITY

Prices provided in this Invitation to bid (ITB) are valid for 120 days from time of ITB opening. The City shall award contract within this time period or shall request to the recommended awarded vendor an extension to hold pricing, until products/services have been awarded.

10. GENERAL CONDITIONS

General Conditions Form G-107 Rev. 02/15 (GC) are included and made a part of this ITB.

11. NEWS RELEASES/PUBLICITY

News releases, publicity releases, or advertisements relating to this contract or the tasks or projects associated with the project shall not be made without prior City approval.

12. CONTRACTORS' COSTS

The City shall not be liable for any costs incurred by proposers in responding to this solicitation.

13. RULES AND SUBMITTALS OF BIDS

The signer of the bid must declare that the only person(s), company or parties interested in the proposal as principals are named therein; that the bid is made without collusion with any other person(s), company or parties submitting a bid; that it is in all respects fair and in good faith, without collusion or fraud; and that the signer of the bid has full authority to bind the principal bidder.

14. APPROVED EQUAL OR ALTERNATIVE PRODUCT PROPOSALS – N/A

15. MANUFACTURER/BRAND/MODEL SPECIFIC REQUEST

This is a manufacturer/brand/model specification. No substitutions will be allowed.

16. ~~WARRANT~~ WARRANTIES OF USAGE – N/A

17. CONTRACT PERIOD – N/A

18. COST ADJUSTMENTS – N/A

19. SERVICE TEST PERIOD – N/A

20. CONTRACT COORDINATOR – N/A

21. CONTRACTOR PERFORMANCE REVIEWS AND RATINGS – N/A

22. INVOICES/PAYMENT

Payment terms will be considered to be net 45 days in accordance with the Florida Local Government Prompt Payment Act after the date of satisfactory delivery at the place of acceptance and receipt of correct invoice at the office specified, whichever occurs last. Bidder may offer cash discounts for prompt payment but they will not be considered in determination of award.

23. PAYMENT METHOD

The City of Fort Lauderdale has implemented a Procurement Card (P-Card) program which changes how payments are remitted to its vendors. The City has transitioned from traditional paper checks to payment by credit card via MasterCard or Visa. This allows you as a vendor of the City of Fort Lauderdale to receive your payment fast and safely. No more waiting for checks to be printed and mailed. Payments will be made utilizing the City's P-Card (MasterCard or Visa). Accordingly, firms must presently have the ability to accept credit card payment or take whatever steps necessary to implement acceptance of a credit card before the commencement of a contract. See Contract Payment Method form attached.

24. RELATED EXPENSES/TRAVEL EXPENSES

All costs including travel are to be included in your proposal. The City will not accept any additional costs.

25. NO EXCLUSIVE CONTRACT/ADDITIONAL SERVICES

While this contract is for services provided to the department referenced in this Invitation For Bid, the City may require similar work for other City departments. Contractor agrees to take on such work unless such work would not be considered reasonable or become an undue burden to the Contractor.

Contractor agrees and understands that the contract shall not be construed as an exclusive arrangement and further agrees that the City may, at any time, secure similar or identical services from another vendor at the City's sole option.

The City may require additional items or services of a similar nature, but not specifically listed in the contract. The Contractor agrees to provide such items or services, and shall provide the City prices on such additional items or services. If the price(s) offered are not acceptable to the City, and the situation cannot be resolved to the satisfaction of the City, the City reserves the right to procure those items or services from other vendors, or to cancel the contract upon giving the Contractor 30 days written notice.

26. DELETION OR MODIFICATION OF SERVICES – N/A

27. SUBSTITUTION OF PERSONNEL – N/A

28. INSURANCE

The Contractor shall furnish proof of insurance requirements as indicated below. The coverage is to remain in force at all times during the contract period. The following minimum insurance coverage is required. The City is to be added as an "additional insured" with relation to General Liability Insurance. This MUST be written in the description section of the insurance certificate, even if you have a check-off box on your insurance certificate. Any costs for adding the City as "additional insured" will be at the contractor's expense.

The City of Fort Lauderdale shall be given notice ten days prior to cancellation or modification of any stipulated insurance. The insurance provided shall be endorsed or amended to comply with this notice requirement. In the event that the insurer is unable to accommodate, it shall be the responsibility of the Contractor to provide the proper notice. Such notification will be in writing by registered mail, return receipt requested and addressed to the Procurement Services Division.

The Contractor's insurance must be provided by an A.M. Best's "A-" rated or better insurance company authorized to issue insurance policies in the State of Florida, subject to approval by the City's Risk Manager. Any exclusions or provisions in the insurance maintained by the contractor that precludes coverage for work contemplated in this ITB shall be deemed unacceptable, and shall be considered breach of contract.

Workers' Compensation and Employers' Liability Insurance

Limits: Workers' Compensation – Per Florida Statute 440
Employers' Liability - \$500,000

Any firm performing work on behalf of the City of Fort Lauderdale must provide Workers' Compensation insurance. Exceptions and exemptions can only be made if they are in accordance with Florida Statute. For additional information contact the Department of Financial Services, Workers' Compensation Division at (850) 413-1601 or on the web at www.fldfs.com.

Commercial General Liability Insurance

Covering premises-operations, products-completed operations, independent contractors and contractual liability.

Limits: Combined single limit bodily injury/property damage \$1,000,000.

This coverage must include, but not limited to:

- a. Coverage for the liability assumed by the contractor under the indemnity provision of the contract.
- b. Coverage for Premises/Operations
- c. Products/Completed Operations
- d. Broad Form Contractual Liability
- e. Independent Contractors

Automobile Liability Insurance

Covering all owned, hired and non-owned automobile equipment.

Limits: Bodily injury	\$250,000 each person
	\$500,000 each occurrence
Property damage	\$100,000 each occurrence

A copy of **ANY** current Certificate of Insurance should be included with your proposal.

In the event that you are the successful bidder, you will be required to provide a certificate naming the City as an “additional insured” for General Liability.

Certificate holder should be addressed as follows:

City of Fort Lauderdale
Procurement Services Division
100 N. Andrews Avenue, Suite 619
Fort Lauderdale, FL 33301

29. SUB-CONTRACTORS

If the Contractor proposes to use subcontractors in the course of providing these services to the City, this information shall be a part of the bid response. Such information shall be subject to review, acceptance and approval of the City, prior to any contract award. The City reserves the right to approve or disapprove of any subcontractor candidate in its best interest and to require Contractor to replace subcontractor with one that meets City approval.

Contractor shall ensure that all of Contractor’s subcontractors perform in accordance with the terms and conditions of this Contract. Contractor shall be fully responsible for all of Contractor’s subcontractors’ performance, and liable for any of Contractor’s subcontractors’ non-performance and all of Contractor’s subcontractors’ acts and omissions. Contractor shall defend, at Contractor’s expense, counsel being subject to the City’s approval or disapproval, and indemnify and hold harmless the City and the City’s officers, employees, and agents from and against any claim, lawsuit, third-party action, or judgment, including any award of attorney fees and any award of costs, by or in favor of any Contractor’s subcontractors for payment for work performed for the City.

30. INSURANCE – SUB-CONTRACTORS

Contractor shall require all of its sub-contractors to provide the aforementioned coverage as well as any other coverage that the contractor may consider necessary, and any deficiency in the coverage or policy limits of said sub-contractors will be the sole responsibility of the contractor.

31. INSURANCE FOR COLLECTION OF CREDIT CARD PAYMENTS – N/A

32. BID SURETY – N/A

33. PAYMENT AND PERFORMANCE BOND – N/A

34. OWNERSHIP OF WORK – N/A

35. CONDITION OF TRADE IN OF EQUIPMENT – N/A

36. CONDITIONS OF TRADE IN SHIPMENT AND PURCHASE PAYMENT –N/A

37. UNCONTROLLABLE CIRCUMSTANCES ("Force Majeure")

The City and Contractor will be excused from the performance of their respective obligations under this agreement when and to the extent that their performance is delayed or prevented by any circumstances beyond their control including, fire, flood, explosion, strikes or other labor disputes, act of God or public emergency, war, riot, civil commotion, malicious damage, act or omission of any governmental authority, delay or failure or shortage of any type of transportation, equipment, or service from a public utility needed for their performance, provided that:

- A. The non performing party gives the other party prompt written notice describing the particulars of the Force Majeure including, but not limited to, the nature of the

35 of 127

occurrence and its expected duration, and continues to furnish timely reports with respect thereto during the period of the Force Majeure;

- B. The excuse of performance is of no greater scope and of no longer duration than is required by the Force Majeure;
- C. No obligations of either party that arose before the Force Majeure causing the excuse of performance are excused as a result of the Force Majeure; and
- D. The non performing party uses its best efforts to remedy its inability to perform.

Notwithstanding the above, performance shall not be excused under this Section for a period in excess of two months, provided that in extenuating circumstances, the City may excuse performance for a longer term. Economic hardship of the Contractor will not constitute Force Majeure. The term of the agreement shall be extended by a period equal to that during which either party's performance is suspended under this Section.

38. PUBLIC ENTITY CRIMES

NOTE: Contractor, by submitting a proposal attests she/he/it has not been placed on the convicted vendor list.

A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, Florida Statutes, for Category Two for a period of 36 months from the date of being placed on the convicted vendor list.

39. DAMAGE TO PUBLIC OR PRIVATE PROPERTY

Extreme care shall be taken to safeguard all existing facilities, site amenities, irrigation systems, vehicles, etc. on or around the job site. Damage to public and/or private property shall be the responsibility of the Contractor and shall be repaired and/or replaced at no additional cost to the City.

40. SAFETY

The Contractor(s) shall adhere to the Florida Department of Transportation's Uniform manual on Traffic Control for construction and maintenance work zones when working on or near a roadway. It will be the sole responsibility of the Contractor to make themselves and their employees fully aware of these provisions, especially those applicable to safety.

41. CANADIAN COMPANIES

The City may enforce in the United States of America or in Canada or in both countries a judgment entered against the Contractor. The Contractor waives any and all defenses to the City's enforcement in Canada, of a judgment entered by a court in the United States of America. All monetary amounts set forth in this Contract are in United States dollars.

42. LOBBYING ACTIVITIES

ALL CONTRACTORS PLEASE NOTE: Any contractor submitting a response to this solicitation must comply, if applicable, with City of Fort Lauderdale Ordinance No. C-00-27 & Resolution No. 07-101, Lobbying Activities. Copies of Ordinance No. C-00-27 and Resolution No. 07-101 may be obtained from the City Clerk's Office on the 7th Floor of City Hall, 100 N. Andrews Avenue, Fort Lauderdale, Florida. The ordinance may also be viewed on the City's website at http://www.fortlauderdale.gov/clerk/LobbyistDocs/lobbyist_ordinance.pdf.

36 of 127

43. **BID TABULATIONS/INTENT TO AWARD**
Notice of Intent to Award Contract/Bid, resulting from the City's Formal solicitation process, requiring City Commission action, may be found at: <http://www.fortlauderdale.gov/departments/finance/procurement-services/notices-of-intent-to-award>. Tabulations of receipt of those parties responding to a formal solicitation may be found at: <http://www.fortlauderdale.gov/departments/finance/procurement-services/bid-results> , or any interested party may call the Procurement Services Division at 954-828-5933.
44. **VERIFICATION OF EMPLOYMENT STATUS – N/A**
45. **SAMPLE CONTRACT AGREEMENT**
A sample of the formal agreement template, which may be required to be executed by the awarded vendor can be found at our website: <http://www.fortlauderdale.gov/purchasing/AWARDS/CONTRACT%20TEMPLATE%20SERVICE%200060214.pdf>
46. **SERVICE ORGANIZATION CONTROLS – N/A**
47. **LOCAL BUSINESS PREFERENCE- N/A**
48. **PUBLIC RECORDS**
All bids will become the property of the City. The Bidder's response to the ITB is a public record pursuant to Florida law, which is subject to disclosure by the City under the State of Florida Public Records Law, Florida Statutes Chapter 119.07 ("Public Records Law"). The City shall permit public access to all documents, papers, letters or other material submitted in connection with this ITB and any resulting Contract to be executed for this ITB, subject to the provisions of Chapter 119.07 of the Florida Statutes. Any language contained in the Bidder's response to the ITB purporting to require confidentiality of any portion of the Bidder's response to the ITB, except to the extent that certain information is in the City's opinion a Trade Secret pursuant to Florida law, shall be void. If a Bidder submits any documents or other information to the City which the Bidder claims is Trade Secret information and exempt from Florida Statutes Chapter 119.07 ("Public Records Laws"), the Bidder shall clearly designate that it is a Trade Secret and that it is asserting that the document or information is exempt. The Bidder must specifically identify the exemption being claimed under Florida Statutes 119.07. The City shall be the final arbiter of whether any information contained in the Bidder's response to the ITB constitutes a Trade Secret. The city's determination of whether an exemption applies shall be final, and the Bidder agrees to defend, indemnify, and hold harmless the city and the city's officers, employees, and agent, against any loss or damages incurred by any person or entity as a result of the city's treatment of records as public records. In the event of Contract award, all documentation produced as part of the Contract shall become the exclusive property of the City.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT. CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT: (954-828-5002, PRRCONTRACT@FORTLAUDERDALE.GOV, CITY CLERK'S OFFICE, 100 NORTH ANDREWS AVENUE, FORT LAUDERDALE, FLORIDA 33301)

PART II - TECHNICAL SPECIFICATIONS/SCOPE OF SERVICES

The City of Fort Lauderdale is responsible for the operation, maintenance, repair, and improvement of the water distribution, wastewater collection, and pumping system. This includes more than 1,400 miles of water mains, sewer force-mains, and gravity sewer lines in the City's service area.

The City of Fort Lauderdale, Public Works Department Utilities Division, is soliciting bids from qualified bidders, to purchase wastewater (sewer) pipe and fittings.

ITEM	ITEM DESCRIPTION	Diameter (inches)	Pressure Class	Nominal Thickness	Length (Per Feet)
4" Ductile Iron - With Protecto 401 Epoxy Lining	4" Ductile Iron - With Protecto 401 Epoxy Lining, Pressure Class 350, Nominal Thickness 0.25, length in feet 120	4"	350	0.25	120
6" Ductile Iron - With Protecto 401 Epoxy Lining	6" Ductile Iron - With Protecto 401 Epoxy Lining, Pressure Class 350, Nominal Thickness 0.25, length in feet 120	6"	350	0.25	120
8" Ductile Iron - With Protecto 401 Epoxy Lining	8" Ductile Iron - With Protecto 401 Epoxy Lining, Pressure Class 350, Nominal Thickness 0.25, length in feet 120	8"	350	0.25	120
10" Ductile Iron - With Protecto 401 Epoxy Lining	10" Ductile Iron - With Protecto 401 Epoxy Lining, Pressure Class 350, Nominal Thickness 0.26, length in feet 120	10"	350	0.26	120
12" Ductile Iron - With Protecto 401 Epoxy Lining	12" Ductile Iron - With Protecto 401 Epoxy Lining, Pressure Class 350, Nominal Thickness 0.28, length in feet 120	12"	350	0.28	120
14" Ductile Iron - With Protecto 401 Epoxy Lining	14" Ductile Iron - With Protecto 401 Epoxy Lining, Pressure Class 350, Nominal Thickness 0.31, length in feet 120	14"	350	0.31	120
16" Ductile Iron - With Protecto 401 Epoxy Lining	16" Ductile Iron - With Protecto 401 Epoxy Lining, Pressure Class 350, Nominal Thickness 0.34, length in feet 360	16"	350	0.34	360
18" Ductile Iron - With Protecto 401 Epoxy Lining	18" Ductile Iron - With Protecto 401 Epoxy Lining, Pressure Class 350, Nominal Thickness 0.36, length in feet 120	18"	350	0.36	120
20" Ductile Iron - With Protecto 401 Epoxy Lining	20" Ductile Iron - With Protecto 401 Epoxy Lining, Pressure Class 350, Nominal Thickness 0.38, length in feet 120	20"	350	0.38	240
24" Ductile Iron - With Protecto 401 Epoxy Lining	24" Ductile Iron - With Protecto 401 Epoxy Lining, Pressure Class 350, Nominal Thickness 0.43, length in feet 120	24"	350	0.43	360
30" Ductile Iron - With Protecto 401 Epoxy Lining	30" Ductile Iron - With Protecto 401 Epoxy Lining, Pressure Class 350, Nominal Thickness 0.49, length in feet 120.	30"	350	0.49	360
36" Ductile Iron - With Protecto 401 Epoxy Lining	36" Ductile Iron - With Protecto 401 Epoxy Lining, Pressure Class 350, Nominal Thickness 0.56, length in feet 120.	36"	350	0.56	240
42" Ductile Iron - With Protecto 401 Epoxy Lining	42" Ductile Iron - With Protecto 401 Epoxy Lining, Pressure Class 350, Nominal Thickness 0.63, length in feet 120	42"	350	0.63	120
48" Ductile Iron - With Protecto 401 Epoxy Lining	48" Ductile Iron - With Protecto 401 Epoxy Lining, Pressure Class 350, Nominal Thickness 0.70, length in feet 40	48"	350	0.70	40
54" Ductile Iron - With Protecto 401 Epoxy Lining	54" Ductile Iron - With Protecto 401 Epoxy Lining, Pressure Class 350, Nominal Thickness 0.79, length in feet 40	54"	350	0.79	40

38 of 127	ITEM	ITEM DESCRIPTION	DIAMETER (INCHES)	QUANTITY
	4" Mechanical Joint (MJ X MJ)	Mechanical Joint (MJ X MJ) - 4", Sleeve, Solid, Ductile Iron, P401 Epoxy Ceramic Lining), Pressure Class 350	4	6
	6" Mechanical Joint (MJ X MJ)	Mechanical Joint (MJ X MJ) - 6", Sleeve, Solid, Ductile Iron, P401 Epoxy Ceramic Lining), Pressure Class 350	6	6
	8" Mechanical Joint (MJ X MJ)	Mechanical Joint (MJ X MJ) - 8", Sleeve, Solid, Ductile Iron, P401 Epoxy Ceramic Lining), Pressure Class 350	8	6
	10" Mechanical Joint (MJ X MJ)	Mechanical Joint (MJ X MJ) - 10", Sleeve, Solid, Ductile Iron, P401 Epoxy Ceramic Lining), Pressure Class 350	10	6
	12" Mechanical Joint (MJ X MJ)	Mechanical Joint (MJ X MJ) - 12", Sleeve, Solid, Ductile Iron, P401 Epoxy Ceramic Lining), Pressure Class 350	12	6
	14" Mechanical Joint (MJ X MJ)	Mechanical Joint (MJ X MJ) - 14", Sleeve, Solid, Ductile Iron, P401 Epoxy Ceramic Lining), Pressure Class 350	14	6
	16" Mechanical Joint (MJ X MJ)	Mechanical Joint (MJ X MJ) - 16", Sleeve, Solid, Ductile Iron, P401 Epoxy Ceramic Lining), Pressure Class 350	16	6
	18" Mechanical Joint (MJ X MJ)	Mechanical Joint (MJ X MJ) - 18", Sleeve, Solid, Ductile Iron, P401 Epoxy Ceramic Lining), Pressure Class 350	18	6
	20" Mechanical Joint (MJ X MJ)	Mechanical Joint (MJ X MJ) - 20", Sleeve, Solid, Ductile Iron, P401 Epoxy Ceramic Lining), Pressure Class 350	20	6
	24" Mechanical Joint (MJ X MJ)	Mechanical Joint (MJ X MJ) - 24", Sleeve, Solid, Ductile Iron, P401 Epoxy Ceramic Lining), Pressure Class 350	24	6
	30" Mechanical Joint (MJ X MJ)	Mechanical Joint (MJ X MJ) - 30", Sleeve, Solid, Ductile Iron, P401 Epoxy Ceramic Lining), Pressure Class 350	30	6
	36" Mechanical Joint (MJ X MJ)	Mechanical Joint (MJ X MJ) - 36", Sleeve, Solid, Ductile Iron, P401 Epoxy Ceramic Lining), Pressure Class 350	36	6
	42" Mechanical Joint (MJ X MJ)	Mechanical Joint (MJ X MJ) - 42", Sleeve, Solid, Ductile Iron, P401 Epoxy Ceramic Lining), Pressure Class 350	42	6
	48" Mechanical Joint (MJ X MJ)	Mechanical Joint (MJ X MJ) - 48", Sleeve, Solid, Ductile Iron, P401 Epoxy Ceramic Lining), Pressure Class 350	48	2
	54" Mechanical Joint (MJ X MJ)	Mechanical Joint (MJ X MJ) - 54", Sleeve, Solid, Ductile Iron, P401 Epoxy Ceramic Lining), Pressure Class 350	54	2

ITEM	ITEM DESCRIPTION	DIAMETER (INCHES)	QUANTITY
Mechanical Joint - (4" X 45 Degree)	Mechanical Joint - (4" X 45 Degree Bend), MJ X MJ, Ductile Iron, P401 Epoxy Ceramic Lining, Pressure Class 350	4	6
Mechanical Joint - (6" X 45 Degree)	Mechanical Joint - (6" X 45 Degree Bend), MJ X MJ, Ductile Iron, P401 Epoxy Ceramic Lining, Pressure Class 350	6	6
Mechanical Joint - (8" X 45 Degree)	Mechanical Joint - (8" X 45 Degree Bend), MJ X MJ, Ductile Iron, P401 Epoxy Ceramic Lining, Pressure Class 350	8	6
Mechanical Joint - (10" X 45 Degree)	Mechanical Joint - (10" X 45 Degree Bend), MJ X MJ, Ductile Iron, P401 Epoxy Ceramic Lining, Pressure Class 350	10	6
Mechanical Joint - (12" X 45 Degree)	Mechanical Joint - (12" X 45 Degree Bend), MJ X MJ, Ductile Iron, P401 Epoxy Ceramic Lining, Pressure Class 350	12	6
Mechanical Joint - (14" X 45 Degree)	Mechanical Joint - (14" X 45 Degree Bend), MJ X MJ, Ductile Iron, P401 Epoxy Ceramic Lining, Pressure Class 350	14	6
Mechanical Joint - (16" X 45 Degree)	Mechanical Joint - (16" X 45 Degree Bend), MJ X MJ, Ductile Iron, P401 Epoxy Ceramic Lining, Pressure Class 350	16	6
Mechanical Joint - (18" X 45 Degree)	Mechanical Joint - (18" X 45 Degree Bend), MJ X MJ, Ductile Iron, P401 Epoxy Ceramic Lining, Pressure Class 350	18	6
Mechanical Joint - (20" X 45 Degree)	Mechanical Joint - (20" X 45 Degree Bend), MJ X MJ, Ductile Iron, P401 Epoxy Ceramic Lining, Pressure Class 350	20	6
Mechanical Joint - (24" X 45 Degree)	Mechanical Joint - (24" X 45 Degree Bend), MJ X MJ, Ductile Iron, P401 Epoxy Ceramic Lining, Pressure Class 350	24	6
Mechanical Joint - (30" X 45 Degree)	Mechanical Joint - (30" X 45 Degree Bend), MJ X MJ, Ductile Iron, P401 Epoxy Ceramic Lining, Pressure Class 350	30	6
Mechanical Joint - (36" X 45 Degree)	Mechanical Joint - (36" X 45 Degree Bend), MJ X MJ, Ductile Iron, P401 Epoxy Ceramic Lining, Pressure Class 350	36	6
Mechanical Joint - (42" X 45 Degree)	Mechanical Joint - (42" X 45 Degree Bend), MJ X MJ, Ductile Iron, P401 Epoxy Ceramic Lining, Pressure Class 350	42	6
Mechanical Joint - (48" X 45 Degree)	Mechanical Joint - (48" X 45 Degree Bend), MJ X MJ, Ductile Iron, P401 Epoxy Ceramic Lining, Pressure Class 350	48	2
Mechanical Joint - (54" X 45 Degree)	Mechanical Joint - (54" X 45 Degree Bend), MJ X MJ, Ductile Iron, P401 Epoxy Ceramic Lining, Pressure Class 350	54	2

40 of 127 ITEM	ITEM DESCRIPTION	DIAMETER (INCHES)	QUANTITY
4" Mega Lugs Accessories	4" Mega Lugs Accessories - Gland, Restrained, Ductilie Iron, With P401 Epoxy Ceramic Lining, Pressure Class 250	4	6
6" Mega Lugs Accessories	6" Mega Lugs Accessories - Gland, Restrained, Ductilie Iron, With P401 Epoxy Ceramic Lining, Pressure Class 250	6	6
8" Mega Lugs Accessories	8" Mega Lugs Accessories - Gland, Restrained, Ductilie Iron, With P401 Epoxy Ceramic Lining, Pressure Class 250	8	6
10" Mega Lugs Accessories	10" Mega Lugs Accessories - Gland, Restrained, Ductilie Iron, With P401 Epoxy Ceramic Lining, Pressure Class 250	10	6
12" Mega Lugs Accessories	12" Mega Lugs Accessories - Gland, Restrained, Ductilie Iron, With P401 Epoxy Ceramic Lining, Pressure Class 250	12	6
14" Mega Lugs Accessories	14" Mega Lugs Accessories - Gland, Restrained, Ductilie Iron, With P401 Epoxy Ceramic Lining, Pressure Class 250	14	6
16" Mega Lugs Accessories	16" Mega Lugs Accessories - Gland, Restrained, Ductilie Iron, With P401 Epoxy Ceramic Lining, Pressure Class 250	16	6
18" Mega Lugs Accessories	18" Mega Lugs Accessories - Gland, Restrained, Ductilie Iron, With P401 Epoxy Ceramic Lining, Pressure Class 250	18	6
20" Mega Lugs Accessories	20" Mega Lugs Accessories - Gland, Restrained, Ductilie Iron, With P401 Epoxy Ceramic Lining, Pressure Class 250	20	6
24" Mega Lugs Accessories	24" Mega Lugs Accessories - Gland, Restrained, Ductilie Iron, With P401 Epoxy Ceramic Lining, Pressure Class 250	24	6
30" Mega Lugs Accessories	30" Mega Lugs Accessories - Gland, Restrained, Ductilie Iron, With P401 Epoxy Ceramic Lining, Pressure Class 250	30	6
36" Mega Lugs Accessories	36" Mega Lugs Accessories - Gland, Restrained, Ductilie Iron, With P401 Epoxy Ceramic Lining, Pressure Class 250	36	6
42" Mega Lugs Accessories	42" Mega Lugs Accessories - Gland, Restrained, Ductilie Iron, With P401 Epoxy Ceramic Lining, Pressure Class 250	42	6
48" Mega Lugs Accessories	48" Mega Lugs Accessories - Gland, Restrained, Ductilie Iron, With P401 Epoxy Ceramic Lining, Pressure Class 250	48	2
54" Mega Lugs Accessories	54" Mega Lugs Accessories - Gland, Restrained, Ductilie Iron, With P401 Epoxy Ceramic Lining, Pressure Class 250	54	2

41 of 127

ITEM	ITEM DESCRIPTION	DIAMETER (INCHES)	QUANTITY
4" Stainless Steel Long Pattern Repair Clamps, Circle,	4" Stainless Steel Long Pattern Repair Clamps, Circle, Pressure Class 250	4	6
6" Stainless Steel Long Pattern Repair Clamps, Circle,	6" Stainless Steel Long Pattern Repair Clamps, Circle, Pressure Class 250	6	6
8" Stainless Steel Long Pattern Repair Clamps, Circle,	8" Stainless Steel Long Pattern Repair Clamps, Circle, Pressure Class 250	8	6
10" Stainless Steel Long Pattern Repair Clamps, Circle,	10" Stainless Steel Long Pattern Repair Clamps, Circle, Pressure Class 250	10	6
12" Stainless Steel Long Pattern Repair Clamps, Circle,	12" Stainless Steel Long Pattern Repair Clamps, Circle, Pressure Class 250	12	6
14" Stainless Steel Long Pattern Repair Clamps, Circle,	14" Stainless Steel Long Pattern Repair Clamps, Circle, Pressure Class 250	14	6
16" Stainless Steel Long Pattern Repair Clamps, Circle,	16" Stainless Steel Long Pattern Repair Clamps, Circle, Pressure Class 250	16	6
18" Stainless Steel Long Pattern Repair Clamps, Circle,	18" Stainless Steel Long Pattern Repair Clamps, Circle, Pressure Class 250	18	6
20" Stainless Steel Long Pattern Repair Clamps, Circle,	20" Stainless Steel Long Pattern Repair Clamps, Circle, Pressure Class 250	20	6
24" Stainless Steel Long Pattern Repair Clamps, Circle,	24" Stainless Steel Long Pattern Repair Clamps, Circle, Pressure Class 250	24	6
30" Stainless Steel Long Pattern Repair Clamps, Circle,	30" Stainless Steel Long Pattern Repair Clamps, Circle, Pressure Class 250	30	6
36" Stainless Steel Long Pattern Repair Clamps, Circle,	36" Stainless Steel Long Pattern Repair Clamps, Circle, Pressure Class 250	36	6
42" Stainless Steel Long Pattern Repair Clamps, Circle,	42" Stainless Steel Long Pattern Repair Clamps, Circle, Pressure Class 250	42	6
48" Stainless Steel Long Pattern Repair Clamps, Circle,	48" Stainless Steel Long Pattern Repair Clamps, Circle, Pressure Class 250	48	2
54" Stainless Steel Long Pattern Repair Clamps, Circle,	54" Stainless Steel Long Pattern Repair Clamps, Circle, Pressure Class 250	54	2

ITEM	ITEM DESCRIPTION	DIAMETER (INCHES)	QUANTITY
12" Plug Valve	12" Plug Valve, With Side Gear, 2" Inch Operating Nut, MJ, Ductile Iron, 175 psi - Pressure Rating	12	2
14" Plug Valve	14" Plug Valve, With Side Gear, 2" Inch Operating Nut, MJ, Ductile Iron, 150 psi - Pressure Rating	14	2
16" Plug Valve	16" Plug Valve, With Side Gear, 2" Inch Operating Nut, MJ, Ductile Iron, 150 psi - Pressure Rating	16	2
18" Plug Valve	18" Plug Valve, With Side Gear, 2" Inch Operating Nut, MJ, Ductile Iron, 150 psi - Pressure Rating	18	2
20" Plug Valve	20" Plug Valve, With Side Gear, 2" Inch Operating Nut, MJ, Ductile Iron, 150 psi - Pressure Rating	20	2
24" Plug Valve	24" Plug Valve, With Side Gear, 2" Inch Operating Nut, MJ, Ductile Iron, 150 psi - Pressure Rating	24	2

Additional Information:

General: The ductile iron pipe and fittings shall be designed and manufactured in accordance with published standards of the American National Standards Institute (ANSI), the American Water Works Association (AWWA) and the American Society of Testing and Materials (ASTM) based on the following standards:

- Shall meet or exceed ANSI 61, latest revision
- Shall meet or exceed the following (latest revisions):
 - AWWA/ANSI C151/A21.51,
 - AWWA C150,
 - AWWA/ANSI C110/A21.11,
 - AWWA/ANSI C110/A21.1,
- Material shall be ductile iron and shall meet or exceed ASTM A536, latest revision

Lining: –Sanitary sewer piping and fittings shall have an interior coating of Protecto 401, minimum 40 mils thick.

Buried pipe and fittings shall have an exterior bituminous coating.

Fittings: The fittings shall be lined with Protecto 401™ Ceramic Epoxy.

- Mechanical or push-on joints shall be the rubber gasket compression type.

Tests: All ductile-iron pipe and fittings shall be tested in accordance with the applicable provisions of the specifications and the class and weight.

Length: Pipe shall be furnished in standard laying length not exceeding 20 feet.

Marking Stamp:

- Each length of pipe shall be marked with a print line with the name of the manufacturer, size, material class, and standard dimensions ratio (SDR)
- Sanitary sewer piping shall have a readily visible green stripe running longitudinally along the pipe which can be applied by the manufacturer.

Note:

- Pipe deflection shall not exceed 50% of the manufacturer's specified maximum amount.
- All push-on fittings and joint restraints manufactured by the pipe manufacturer are approved for use on their respective pipes.

Underwriter's Approval: Applicable ductile-iron pipe and fittings shall be approved by the Underwriter's Laboratories, Inc.

Pipe and fittings: All pipe and fittings shall be new.

Rejection: Ductile-iron and fittings may be rejected for failure to meet all of the requirements of specification.

Certification: A manufacturer's certification that the product was manufactured, tested, and supplied in accordance with this specification shall be furnished to the City upon request.

QUESTIONNAIRE

**Bidder certifies the truth and accuracy of all statements and the answers contained herein.
Failure to answer each question could result in the disqualification of your bid.**

Company Name: _____
Contact Name: _____
Contact Phone: _____
Contact Email: _____

- 1. Provide complete information of three references for which you have performed the services listed in this Bid.

Entity name: _____
Address: _____
Contact Name: _____
Telephone Number: _____
Public Works Project: _____
Date of Project: _____
Email _____
Value of Project _____

Entity name: _____
Address: _____
Contact Name: _____
Telephone Number: _____
Public Works Project: _____
Date of Project: _____
Email _____
Value of Project _____

Entity name: _____
Address: _____
Contact Name: _____
Telephone Number: _____
Public Works Project: _____
Date of Project: _____
Email _____
Value of Project _____

- 2. Number of years experience you have had in providing as described on this ITB services.

- 3. Have you ever failed to complete work awarded to you? If so, where and why?
Yes____ No____

- 5. Have you included proof of insurance, including General Liability, Auto Liability and Worker's Compensation with your bid submittal?

General Liability Yes____ No____
Auto Liability Yes____ No____
Worker's Comp Yes____ No____

4. Provide information on manufacturers that you will be supplying the pipe and parts from such as name and years in business. Manufacturer's certification that the product was manufactured, tested, and supplied in accordance with this specification shall be furnished to the City upon request.
5. All The ductile iron pipe and fittings are designed and manufactured in accordance with published standards of the American National Standards Institute (ANSI), the American Water Works Association (AWWA) and the American Society of Testing and Materials (ASTM) based on the following standards:
- ANSI/AWWA C150/A21.50 AND ANSI/AWWA C151/A21.51 - Design and manufacturing standards for ductile iron pipe for water and other liquids under pressure.
 - American Water Works Association (AWWA) standard C151-09 – Ductile iron pipe 3 inches in diameter and larger centrifugally cast for water or other liquids.
 - ASTM A746 for ductile iron gravity sewer pipe.
 - ANSI/AWWA C153/A21.53
 - The pipes shall be lined with Protecto 401™ Ceramic Epoxy.
 - The fittings shall be lined with Protecto 401™ Ceramic Epoxy.
 - All ductile-iron pipe and fittings shall be tested in accordance with the applicable provisions of the specifications and the class and weight.

Do you adhere to these standards? Yes _____ No _____

The bidder understands that the information contained in these bid pages is to be relied upon by the City in awarding the proposed contract, and such information is warranted by the bidder to be true. The bidder agrees to furnish such additional information, prior to acceptance of any contract relating to the qualifications of the bidder, as may be required by the City.

Please review the questionnaire to make sure all questions have been answered. Attach additional sheets if necessary. **Failure to answer each question could result in the disqualification of your bid.**



Public Works Department • Water & Wastewater Services

WATER & WASTEWATER ENGINEERING DIVISION

2555 West Copans Road • Pompano Beach, Florida 33369 • 954-831-0745 • FAX 954-831-0798/0925

PRODUCT SPECIFICATION SHEETS

Date: March 12, 2014

Date Last Issued: December 3, 2013

Date First Issued: June 23, 2010

This document approved by the Broward County Water & Wastewater Services Technical Standards Committee.

A handwritten signature in blue ink, appearing to read "Steven W. Uhrick".

Steven W. Uhrick, P.E., Chair

The following product specification sheets were added or changed since the last issuance of this document:

These product specification sheets describe the minimum requirements established by Broward County's Water and Wastewater Services (WWS) for products used in WWS' potable water, reclaimed water and sanitary sewer distribution and collection systems. Products specific to treatment plants are not included.

Additionally, the product specification sheets list manufacturer's product models that are pre-approved by WWS to meet the described minimum requirements. However, products installed in WWS systems are not limited to those identified as pre-approved. The pre-approved list is **not** an exclusive collection of authorized products.

Some pre-approved manufacturer's listings contain just manufacturer's names while other listings include manufacturer's names and model or type designations. Unless otherwise noted, inclusion of model or type designations in the manufacturer's listing means **only** that designated model or type has been pre-approved.

Products listed as pre-approved do not require the submittal of shop drawings for WWS Technical Standards Committee approval. Shop drawings for other products that meet the minimum requirements may be submitted for consideration. The submitted shop drawings must be approved by the Engineer of Record and the WWS Technical Standards Committee. Product categories not covered by the specification sheets require a submittal and WWS Technical Standards Committee approval of shop drawings.

Manufacturers are encouraged to submit their products' technical information to the WWS Technical Standards Committee for review. Upon conclusion of the review, the products may become listed as pre-approved.

These product specifications do not supersede any of the Broward County Purchasing Division's rules or regulations, the standard form construction documents, or the contract's technical specifications. Conflicts with any of the preceding documents should be submitted to WWS Engineering for resolution.

These product specifications are one part of WWS' "Minimum Design and Construction Standards" and are meant to work in conjunction with the other parts of the "Minimum Design and Construction Standards" which include published standard details.

The following minimum requirements apply to all products:

- All products must be new and unused
- All products coming into contact with potable water must be ANSI/NSF 61 compliant
- Defective products shall always be cause for rejection
- Where reference is made to a standard or specification, like ANSI, NSF, ASTM, etc., the reference is to the latest version of that standard or specification.

These products are "off the shelf manufactured products" which are designed and produced by manufacturers under the exemption from the requirement that the work be done by a licensed professional engineer as set out in Section 471.003(2)(c) of the Florida Statutes, therefore a professional engineer's signing and sealing of shop drawings is not required.

Chloramine resistance is a required material specification for some system elements in contact with potable water. Some manufacturers provide a chloramine resistant material as the standard configuration of their product, while others offer chloramine resistant material as an option specified at the time of purchase. In the case where a chloramine resistant material is an optional product, the manufacturers have been identified with the symbol "[CRTag]" after their name/ product name on the product specification sheets. Products with the "[CRTag]" symbol must come with a factory applied tag indicating the material used and that the product supplied is chloramine resistant. The following materials are deemed chloramine resistant: EPDM, isobutyl-isoprene, fluorocarbons and silicones. Any other materials such as nitriles (NBR), SBR, natural rubbers and neoprenes must be approved by the Technical Standards Committee.

Which manufacturer's products are installed on a particular project is to be documented by the Engineer of Record using the WWS "Products Used In Construction" form, which is a separate fillable, saveable Adobe PDF document located on the WWS website. The form is to be submitted to the WWS project manager at the beginning of the project and each time a product manufacturer is changed.

Table of Contents

1. Pipe

- 1.1 Ductile Iron Pipe & Fittings
- 1.2 High Density Polyethylene Pipe & Fittings (4" and Above)
- 1.3 PVC Pressure Pipe & Fittings for Gravity Sewer and Reclaimed Water
- 1.4 PVC Non-Pressure Pipe (6" – 15")

2. Fittings and Accessories

- 2.1 Casing Spacers for Carrier Pipe 6" and Above
- 2.2 Fire Hydrants
- 2.3 Flanged Fittings
- 2.4 Flexible Couplings
- 2.5 Mechanical Joint Fittings
- 2.6 PVC Fittings for Gravity Sewer up to 12' in Depth (6" – 15")
- 2.7 Tapping Sleeves
- 2.8 Transition Couplings
- 2.9 Pressure Pipe Repair Clamps

3. Adapters and Joint Restraints

- 3.1 Bell Joint Restraint for Ductile Iron and PVC Pipe
- 3.2 Ductile Iron Flange Adapters
- 3.3 Gripping Ring Joint Restraint for Ductile Iron and PVC Pipe
- 3.4 Mechanical Joint Restraint for Ductile Iron and PVC Pipe
- 3.5 Gripping Gasket Joint Restraint for Ductile Iron and PVC Pipe

4. Valves

- 4.1 Air Release Valves for Potable Water and Reclaimed Water
- 4.2 Air Release Valves for Wastewater
- 4.3 Automatic Blowoffs
- 4.4 Butterfly Valves (12" and Larger)
- 4.5 Check Valves for Lift Stations
- 4.6 Check Valves for Potable Water
- 4.7 Double Disc Gate and Tapping Valves (12" – 48")
- 4.8 Eccentric Plug Valves
- 4.9 Gate and Tapping Valves
- 4.10 Insertion Valves
- 4.11 Potable Water Air Release Valve Inflow Preventers

5. Water Service Lines and Appurtenances

- 5.1 Check Valves for Water Services

- 5.2 Corporation Stops
- 5.3 Couplings and Adapters for Water Services
- 5.4 Curb Stops/ Meter Valves
- 5.5 Double Strap Service Saddles
- 5.6 Meter Flanges for Water Services
- 5.7 Polyethylene Tubing for 1" and 2" Water Services
- 5.8 Type K Copper Tubing for 1" and 2" Water Services
- 5.9 U-Branches
- 5.10 Yokes
- 5.11 Dual Check Valves For Water Services

6. Meters

- 6.1 Compound Fireline Water Meters
- 6.2 Water Meters (4", 6", 8")
- 6.3 Fire Protection By-Pass Meters (1")
- 6.4 Service Meters (5/8", 1", 1 1/2", 2")

7. System Structures, Boxes, and Covers

- 7.1 Box and Cover
- 7.2 Cleanout Box and Cover
- 7.3 Manholes
- 7.4 Manhole Risers
- 7.5 Manhole Connectors
- 7.6 Manhole Grade Rings
- 7.7 Manhole Ring and Cover
- 7.8 Meter Box and Lid
- 7.9 Valve Boxes
- 7.10 Wetwell and Valve Pit Structures
- 7.11 Wall Penetrating Seals

8. Liners and Coatings

- 8.1 Coating for External Ductile Iron Pipe and Non-wet Concrete Surfaces
- 8.2 Manhole Chimney Seals
- 8.3 Wetwell, Valve Pit, & Manhole Coatings
- 8.4 Wetwell, Valve Pit, & Manhole Liners

9. Pumps

- 9.1 Submersible Wastewater Lift Station Pumps (3-100 HP)



**Water & Wastewater Services
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33069
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PRODUCT SPECIFICATIONS

**DUCTILE IRON PIPE
& FITTINGS**

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed AWWA/ANSI C151/A21.51, AWWA C150, AWWA/ANSI C111/A21.11, and AWWA/ANSI C110/A21.1, latest revisions.
- Material shall be ductile iron and shall meet or exceed ASTM A536, latest revision.
- Pressure classification for diameters 4” through 24” shall be 350, minimum.
- Pressure classification for diameters larger than 24” shall be determined by the Engineer of Record.
- Working pressure shall be 150 psi, minimum.
- Mechanical or push-on joints shall be the rubber gasket compression type.
- Sanitary sewer piping and fittings shall have an interior coating of Protecto 401, minimum 40 mils thick.
- Buried pipe and fittings shall have an exterior bituminous coating.
- Potable water main and fittings shall be cement lined and seal coated which shall meet or exceed AWWA/ANSI C104/A21.4, latest revision.
- Potable water main shall have a readily visible blue stripe running longitudinally along the pipe which can be applied by the manufacturer or in the field.
- Sanitary sewer piping shall have a readily visible green stripe running longitudinally along the pipe which can be applied by the manufacturer or in the field.

Note:

- Pipe deflection shall not exceed 50% of the manufacturer’s specified maximum amount.
- All push-on fittings and joint restraints manufactured by the pipe manufacturer are approved for use on their respective pipes.



PRE-APPROVED MANUFACTURERS:

- ACIPCO (American Cast Iron Pipe Company)
- US PIPE
- McWANE (all plants)
- CLOW
- GRIFFIN PIPE

Date: January 22, 2014
 Date Last Issued: May 29, 2013
 Date First Issued: June 23, 2010
 Standard Detail: 131, 153, 224, 322

Sheet Number 1.1



**Water & Wastewater Services
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**PRODUCT SPECIFICATIONS
HIGH DENSITY POLYETHYLENE
PIPE & FITTINGS
(4" AND ABOVE)**

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall be DR 9 and meet or exceed AWWA C906, latest revision.
- Resin material shall meet or exceed the requirements of ASTM D3350, latest revision.
- Material shall be high density polyethylene (HDPE), PE 4710, PE 3608 or PE 3408.
- Permanent identification of the piping shall be provided by equally spaced color stripes on the outside surface or by a solid colored pipe shell. The identifying colors are as follows:

COLOR	SERVICE
Blue	Potable Water
Green	Wastewater
Purple	Reclaimed Water

- Pipe lengths and fittings shall be capable of being joined using fusion or mechanical joint methods according to ASTM F2620, D2657, and F1290, latest revisions.

Note:

- Product use is acceptable only when installing pipe by directional drilling at the approval of WWS.
- All fittings and joint restraints manufactured by the pipe manufacturer are approved for use on their respective pipes.
- Size shall be chosen to maintain an internal diameter relatively equal to that of ductile iron pipe as indicated in the table below:

DIP SIZE	HDPE SIZE
4"	4"
6"	8"
8"	10"
10"	12"
12"	16"
14"	18"
16"	20"

- Shall be installed with two 10 gauge copper clad steel tracer wires.



PRE-APPROVED MANUFACTURERS:

- JM EAGLE (Ductile Iron Pipe Size)
- Performance Pipe (Driscopex 4000/4100)
- Charter Plastics
- WL Plastics

Date: December 3, 2013
Date Last Issued: January 23, 2013
Date First Issued: June 23, 2010
Standard Detail:

Sheet Number 1.2



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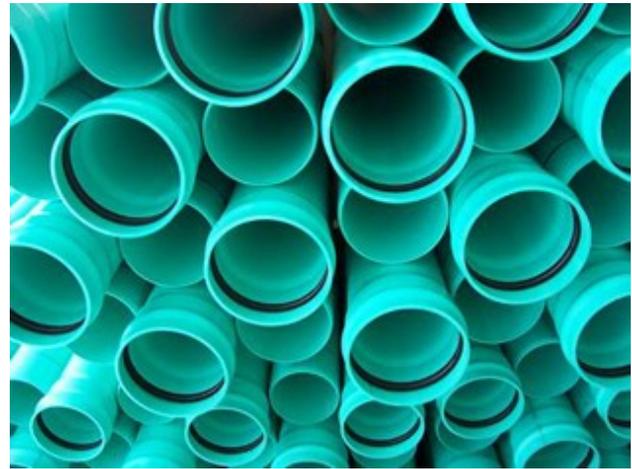
**PRODUCT SPECIFICATIONS
PVC PRESSURE PIPE & FITTINGS
FOR GRAVITY SEWER AND
RECLAIMED WATER**

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed the latest revision of AWWA C900 or C905 or C909.
- C900 and C905 pipe shall be DR 18.
- C909 shall be pressure class 150.
- Shall be new and not subjected to ultraviolet degradation.
- Working pressure shall be 150 psi, minimum.

Note:

- Shall be used for gravity sewer installed at depths greater than 12 feet.
- All fittings and joint restraints manufactured by the pipe manufacturer are approved for use on their respective pipes.



PRE-APPROVED MANUFACTURERS:

- DIAMOND PLASTICS CORP.
- JM EAGLE
- CERTAIN TEED
- SANDERSON PIPES
- NORTH AMERICAN PIPE

Date: January 23, 2013
Date Last Issued: July 13, 2011
Date First Issued: June 23, 2010
Standard Detail:

Sheet Number 1.3



**Water & Wastewater Services
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PRODUCT SPECIFICATIONS

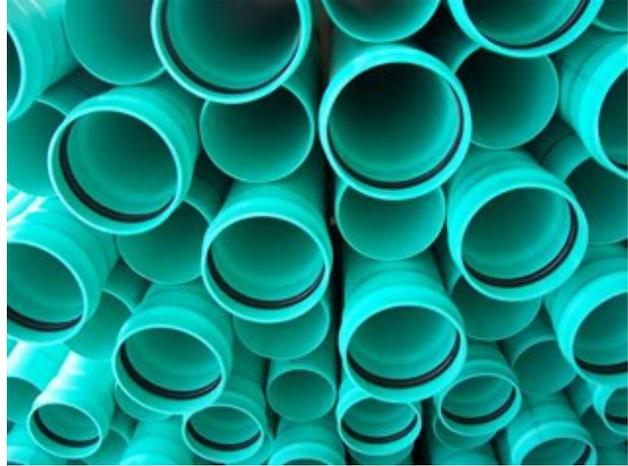
**PVC NON-PRESSURE PIPE
(6" - 15")**

Minimum Requirements:

- Shall be SDR 26.
- Shall be new and not subjected to ultraviolet degradation.
- Pipe material shall be made of compounds meeting or exceeding ASTM D1784, latest revision, and meet the material requirements of ASTM D3034, latest revision.
- Joints shall be bell and spigot push-on rubber type gaskets meeting or exceeding the requirements of ASTM D3212, latest revision.
- Gaskets shall meet the requirements of ASTM F477, latest revision.
- No solvent weld or threaded joints will be permitted.

Note:

- Shall not be used at depths greater than 12'.



PRE-APPROVED MANUFACTURERS:

- DIAMOND PLASTICS CORP.
- JM EAGLE
- SANDERSON PIPES
- NORTH AMERICAN PIPE

Date: January 23, 2013
Date Last Issued: July 13, 2011
Date First Issued: June 23, 2010
Standard Detail: 313, 322, 331, 341

Sheet Number 1.4



**Water & Wastewater Services
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PRODUCT SPECIFICATIONS

**CASING SPACERS FOR CARRIER
PIPE 6" AND ABOVE**

Minimum Requirements:

- Band, riser, and hardware material shall be stainless steel (Type 304 minimum).
- Liner material shall be PVC.
- Polymer runners shall be mechanically bolted to the riser.
- Riser shall be minimum 10 gauge and sized to support the pipe.
- Liner shall have a minimum thickness of 0.09".
- Band width shall be a minimum of 8".
- The band shall be a minimum 14 gauge.
- Runner coefficient of friction shall be per ASTM D1894 , latest revision, or better.



PRE-APPROVED MANUFACTURERS:

- PSI (S8G-2, S12G-2)
- CASCADE WATERWORKS MFG. (CCS)
- ADVANCED PRODUCTS & SYSTEMS, INC. (SSI8, SSI12)

Date: January 23, 2013
Date Last Issued: June 23, 2010
Date First Issued: June 23, 2010
Standard Detail: 153, 154, 155

Sheet Number

2.1



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
Pompano Beach, Florida
33069
Tel 954-831-0745
FAX 954-831-0798

PRODUCT SPECIFICATIONS

FIRE HYDRANTS

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed AWWA C502, latest revision.
- Rated working pressure shall be minimum 250 psi, test pressure shall be minimum 500 psi.
- Hydrant bonnet assembly shall be provided with a grease or oil reservoir and lubrication system that automatically circulates lubricant to all operating stem threads and bearing surfaces each time the hydrant is operated. The system shall be completely sealed from the waterway and from external contaminants.
- The grease or oil used for lubrication shall be nontoxic and safe for use in potable water systems.
- All hydrants will be of the traffic "breakaway" type with safety stem coupling and breakable flange that permits full 360 degree rotation of the nozzle section. Cut down bolts are not acceptable for this requirement.
- The main valve opening of the hydrant shall not be less than 5-1/4".
- Hydrant nozzles shall consist of two (2) 2-1/2" hose nozzles and one (1) 4-1/2" pumper nozzle. Threads on these nozzles will conform to the latest revision of NFPA #1963 standard for screw threads and gaskets for fire hose couplings.
- All nozzles shall be field replaceable with noncorrosive locking devices.
- The hydrant shall be designed with an anti-friction bearing, located so that it reduces the torque required to operate the hydrant.
- The ferrous waterway of the hydrant's shoe must be epoxy coated.
- The main valve material shall be resistant to chloramines.
- Fire hydrant shall be painted yellow with a reflective type paint that meets NFPA #291, latest revision, or per the latest requirements of the local fire department having jurisdiction.
- Inlet shall be six-inch (6") mechanical joint (MJ).

Note:

- Reflective pavement markers in blue shall be used to identify the fire hydrant locations. Each marker is to be placed on the center line of the roadway lane closest to the hydrant.



PRE-APPROVED MANUFACTURERS:

- MUELLER HIGH SECURITY SUPER CENTURION (250, A-423)
- CLOW MEDALLION *[CRTag]
- AMERICAN DARLING (B84B-5)
- AMERICAN AVK (NOSTALGIC STYLE)
- U.S. PIPE METROPOLITAN (M-94) *[CRTag]

Note: The Mueller hydrant main valve material must be Robbins 1018201 SBR.

Date: May 29, 2013
Date Last Issued: January 23, 2013
Date First Issued: June 23, 2010
Standard Detail: 231

Sheet Number 2.2



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
Pompano Beach, Florida
33069
Tel 954-831-0745
FAX 954-831-0798

PRODUCT SPECIFICATIONS

FLANGED FITTINGS

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed AWWA C153 (latest revision) or C110, latest revision.
- Joints shall meet or exceed to AWWA/ANSI C111/ A21.11, latest revision.
- Bolt circle and bolt holes shall meet ANSI B16.1, Class 125, latest revision.
- Gasket shall be full flanged.
- Fitting body material shall be ductile iron meeting or exceeding ASTM 536, latest revision.
- Bolt material shall be stainless steel (Type 304 minimum).
- Pressure rating shall be 250 psi, minimum.
- Sanitary sewer fittings shall have an interior coating of Protecto 401, minimum 40 mils thick.
- Potable water fittings shall be cement lined and seal coated which shall meet or exceed AWWA/ANSI C104/A21.4, latest revision.



PRE-APPROVED MANUFACTURERS:

- ACIPCO (American Cast Iron Pipe Company)
- US PIPE
- STAR PIPE PRODUCTS
- TYLER UNION
- SIGMA (water main only)

Date: July 24, 2013
 Date Last Issued: January 23, 2013
 Date First Issued: June 23, 2010
 Standard Detail:

Sheet Number 2.3



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
Pompano Beach, Florida
33069
Tel 954-831-0745
FAX 954-831-0798

PRODUCT SPECIFICATIONS

FLEXIBLE COUPLINGS

Minimum Requirements:

- Clamp and shear ring material shall be stainless steel (Type 304 minimum).
- Shall connect to pipe of the same or different size and same or different material.
- Shall provide a positive seal against infiltration and exfiltration.
- Bushings are not permitted.



PRE-APPROVED MANUFACTURERS:

- FERNCO (Standard, SS Shear Rings, Strong Back RC, 5000 Series Strong Back, No-Hub)
- MISSION

Date: January 23, 2013
Date Last Issued: January 26, 2011
Date First Issued: June 23, 2010
Standard Detail:

Sheet Number 2.4



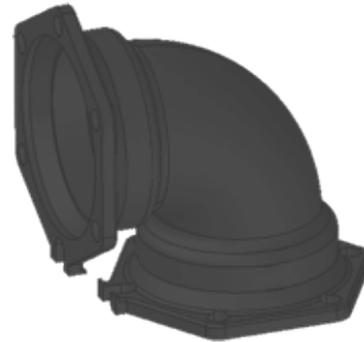
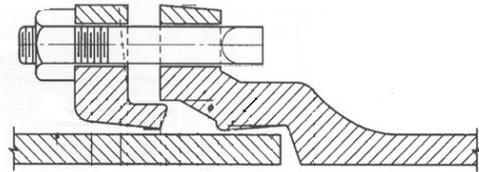
**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
Pompano Beach, Florida
33069
Tel 954-831-0745
FAX 954-831-0798

PRODUCT SPECIFICATIONS

MECHANICAL JOINT FITTINGS

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed AWWA/ANSI C153/A21.53 (latest revision) or C110/A21.1, latest revision.
- Shall be the rubber gasket compression type.
- Joints shall meet or exceed AWWA/ANSI C111/A21.11, latest revision.
- Fitting body material shall be ductile iron meeting or exceeding ASTM 536, latest revision.
- Pressure rating shall be minimum 350 psi for 4" - 24" diameter fittings.
- Plain end fittings are not permitted.
- Sanitary sewer fittings shall have an interior coating of Protecto 401, minimum 40 mils thick.
- Buried pipe and fittings shall have an exterior bituminous coating.
- Potable water fittings shall be cement lined and seal coated which shall meet or exceed AWWA/ANSI C104/A21.4, latest revision.



PRE-APPROVED MANUFACTURERS:

- ACIPCO (American Cast Iron Pipe Company)
- US PIPE
- STAR PIPE PRODUCTS
- TYLER UNION
- SIGMA (water main only)*

Date: July 24, 2013
Date Last Issued: January 23, 2013
Date First Issued: June 23, 2010
Standard Detail: 109, 110, 111, 112

Sheet Number 2.5



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
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FAX 954-831-0798

PRODUCT SPECIFICATIONS

**PVC FITTINGS FOR GRAVITY
SEWER UP TO 12' IN DEPTH
(6" - 15")**

Minimum Requirements:

- Shall be SDR 26.
- Shall meet or exceed ASTM D3034, D3212, and F477, latest revisions.
- Shall be monolithic construction.
- Joints shall be spigot push-on rubber type gaskets meeting the requirements of ASTM D3212, latest revision. No solvent weld or threaded joints will be permitted.
- Gaskets shall meet the requirements of ASTM F477, latest revision.

Note:

- Shall not be used at depths greater than 12'.



PRE-APPROVED MANUFACTURERS:

- HARCO
- PLASTIC TRENDS
- MULTI-FITTINGS

Date: December 3, 2013
Date Last Issued: January 23, 2013
Date First Issued: June 23, 2010
Standard Detail: 313, 331, 341

Sheet Number 2.6



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
Pompano Beach, Florida
33069
Tel 954-831-0745
FAX 954-831-0798

PRODUCT SPECIFICATIONS

TAPPING SLEEVES

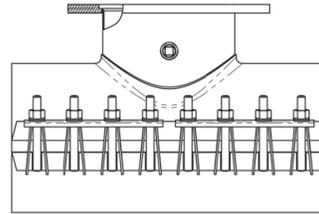
Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed AWWA C223, latest revision.
- A test plug shall be provided on the outlet throat.
- Shall be recessed for a tapping valve.
- Recess dimensions shall comply with MSS- SP 60, latest revision.
- Shall have a flat-faced flange.
- Body material shall be stainless steel (Type 304 minimum) or ductile iron.
- Gaskets on stainless steel models shall have restraints incorporated into the sleeve.
- Ductile iron models shall be the mechanical joint type with all end and side gaskets totally confined.

Note:

- Size on size wet taps on asbestos cement pipe are not permitted.
- Minimum tap sizes mains:
 - 6" thru 16" : 6" Tap
 - 18" thru 30" : 12" Tap
 - 36" and larger : 20" Tap

Stainless Steel



Ductile Iron

PRE-APPROVED MANUFACTURERS:

- **Ductile Iron**
AMERICAN FLOW CONTROL (2800 Series)
TYLER UNION
MUELLER (H-615 Series)
US PIPE (Type 9)
- **Stainless Steel**
JCM (432)
FORD METER BOX (Style FTSS)
SMITH BLAIR (663)
MUELLER (H-304)
ROMAC (Series SST)
CASCADE (CST-EX)
TOTAL PIPING SOLUTIONS

16" and larger requires shop drawing approval by Engineer of Record and WWS project manager.

Date: August 21, 2013
Date Last Issued: January 23, 2013
Date First Issued: June 23, 2010
Standard Detail: 131

Sheet Number

2.7



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
Pompano Beach, Florida
33069
Tel 954-831-0745
FAX 954-831-0798

**PRODUCT SPECIFICATIONS
TRANSITION COUPLINGS**

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed AWWA C219, latest revision.
- Working pressure shall be 150 psi, minimum.
- Sleeve body material shall be fusion bonded epoxy coated ductile iron meeting or exceeding ASTM A536 (latest revision), fusion bonded epoxy coated carbon steel or stainless steel (Type 304 minimum).
- Flange material shall be fusion bonded epoxy coated ductile iron meeting or exceeding to ASTM A536, latest revision.
- Hardware material shall be stainless steel (Type 304 minimum).



PRE-APPROVED MANUFACTURERS:

- JCM INDUSTRIES (212)
- SMITH BLAIR (441)
- HYMAX (2000-2100 SERIES)

Date: January 23, 2013
Date Last Issued: January 9, 2013
Date First Issued: June 23, 2010
Standard Detail:

Sheet Number 2.8



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
Pompano Beach, Florida
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PRODUCT SPECIFICATIONS

**PRESSURE PIPE
REPAIR CLAMPS**

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed AWWA/ANSI C230, latest revision
- Clamp band (body) and fasteners material shall be stainless steel (Type 304 minimum)
- Lugs material shall be stainless steel (Type 304 minimum) or fusion bonded epoxy coated ductile iron meeting or exceeding ASTM A536, latest revision.
- Gasket shall be virgin SBR per ASTM D2000, latest revision.



PRE-APPROVED MANUFACTURERS:

- FORD METER BOX
- ROMAC INDUSTRIES
- SMITH-BLAIR

Date: January 23, 2013
 Date Last Issued: January 23, 2013
 Date First Issued: January 23, 2013
 Standard Detail: None

Sheet Number 2.9



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
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33069
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FAX 954-831-0798

PRODUCT SPECIFICATIONS

**BELL JOINT RESTRAINT FOR
DUCTILE IRON AND PVC PIPE**

Minimum Requirements:

- Shall be compatible with joints which meet AWWA C111, latest revision.
- Restraining rings material shall be ductile iron meeting or exceeding ASTM 536.
- Restraining rod material shall be stainless steel (Type 304 minimum).
- Working pressure shall be 250 psi, minimum, for ductile iron pipe.
- Working pressure shall be 150 psi, minimum, for PVC.
- The restraint device shall consist of split restraint rings with serrations on the inside diameter.



PRE-APPROVED MANUFACTURERS:

Ductile Iron Pipe

- SIGMA (PV LOK)
- EBAA IRON (1700 MEGALUG HARNESS)
- STAR (SERIES 1100, BELOW 10" DIAMETER)

PVC Pipe

- FORD METER BOX (UNI-FLANGE SERIES 1390)
- EBAA IRON (SERIES 1600PV, SERIES 1500PV)
- SIGMA (PV LOK)
- STAR (SERIES 1100)

Date: April 3, 2013
Date Last Issued: January 23, 2013
Date First Issued: June 23, 2010
Standard Detail:

Sheet Number 3.1



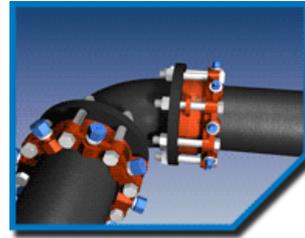
**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
Pompano Beach, Florida
33069
Tel 954-831-0745
FAX 954-831-0798

PRODUCT SPECIFICATIONS

**DUCTILE IRON FLANGE
ADAPTERS**

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Flange bolt circles shall meet or exceed AWWA/ANSI C110/A21.10, latest revision.
- Body material shall be ductile iron meeting or exceeding ASTM A536, latest revision.
- Shall utilize gripping wedges to maximize restraint capabilities.
- Torque limiting actuating screws shall be used to ensure proper initial setting of the gripping wedges.
- Shall be capable of deflection up to 5 degrees.
- Shall allow a minimum 0.6 inch gap between the end of the pipe and the mating flange without effecting the integrity of the seal.
- Minimum pressure rating, categorized by pipe material, shall be as follows:
 - Ductile iron 20" and under: 200 psi
 - PVC C-900 DR18 20" and under: 150 psi



PRE-APPROVED MANUFACTURERS:

- EBAA IRON (Series 2100)

Date: January 23, 2013
 Date Last Issued: March 21, 2012
 Date First Issued: June 23, 2010
 Standard Detail:

Sheet Number 3.2



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
Pompano Beach, Florida
33069
Tel 954-831-0745
FAX 954-831-0798

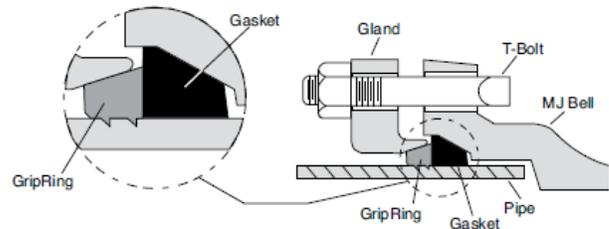
PRODUCT SPECIFICATIONS
GRIPPING RING JOINT
RESTRAINT FOR DUCTILE IRON
AND PVC PIPE

Minimum Requirements:

- Shall be compatible with joints which meet AWWA C111, latest revision.
- The gripping ring type mechanical joint restraint shall be acceptable on pipe diameters 4" through 12".
- Shall meet or exceed ASTM F1674 (latest revision) for use on PVC pipe.
- Gland body and gripping ring material shall be ductile iron meeting or exceeding ASTM 536, latest revision.
- T-bolts and nuts shall meet or exceed AWWA C111, latest revision.
- Working pressure shall be 250 psi, minimum, for ductile iron pipe.
- Shall be rated to the full working pressure of PVC pipe.
- Restraint device shall consist of a gripping ring held in place by the follower gland.

Note:

- Pipe deflection shall not exceed 50% of the manufacturer's specified maximum amount.



PRE-APPROVED MANUFACTURERS:

Ductile Iron

- ROMAC (GRIP RING)

PVC Pipe

- ROMAC (GRIP RING)

Date: January 23, 2013
Date Last Issued: March 21, 2012
Date First Issued: June 23, 2010
Standard Detail:

Sheet Number 3.3



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
Pompano Beach, Florida
33069
Tel 954-831-0745
FAX 954-831-0798

PRODUCT SPECIFICATIONS
MECHANICAL JOINT RESTRAINT
FOR DUCTILE IRON AND PVC
PIPE

Minimum Requirements:

- Shall be compatible with joints which meet AWWA C111, latest revision.
- The follower gland and gripping wedge style joint restraint shall be acceptable on pipe diameters 4" and above.
- Shall meet or exceed ASTM F1674 (latest revision) for use on PVC.
- Body material shall be ductile iron meeting or exceeding ASTM 536, latest revision.
- Gripping wedge and actuating component material shall be ductile iron meeting or exceeding ASTM 536, latest revision.
- Working pressure shall be 250 psi, minimum, for use on ductile iron pipe.
- Shall be rated to the full working pressure of the PVC pipe.
- Restraint devices shall consist of multiple gripping wedges incorporated into the follower gland.
- Mechanism shall be in place to ensure proper tightening of the restraint without overstressing the pipe. Properly tightening the restraint shall not depend upon accurate field measurements of applied pressure or utilize a tool which requires calibration. Torque-off bolts are an example of an acceptable tightening mechanism.



PRE-APPROVED MANUFACTURERS:

Ductile Iron Pipe

- EBAA IRON (MEGALUG SERIES 1100)
- ROMAC (ROMA GRIP)
- FORD METER BOX (UNI-FLANGE SERIES 1400)
- STAR PIPE PRODUCTS (STARGRIP SERIES 3000)
- SIGMA (One-Lok SLD)

PVC Pipe

- FORD METER BOX (UNI-FLANGE SERIES 1500)
- EBAA IRON (MEGALUG SERIES 2000 PV)
- STAR PIPE PRODUCTS (STARGRIP SERIES 4000)
- SIGMA (ONE-LOK SLC)

Date: January 23, 2013
Date Last Issued: March 21, 2012
Date First Issued: June 23, 2010
Standard Detail: 109, 110, 111, 112

Sheet Number 3.4



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
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33069
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FAX 954-831-0798

PRODUCT SPECIFICATIONS
GRIPPING GASKET JOINT
RESTRAINT FOR DUCTILE IRON
AND PVC PIPE

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Gripping gasket pressure rating shall meet or exceed the pressure rating of the pipe.
- Gripping gaskets shall meet or exceed the material requirements of AWWA C111, latest revision.
- Locking material shall be stainless steel (Type 304 minimum).

Note:

- Pipe deflection shall not exceed 50% of the manufacturer's specified maximum amount.



PRE-APPROVED MANUFACTURERS:

- ACIPC (Fast Grip Gaskets)
- US PIPE (Field Lok 350)

Date: January 23, 2013
Date Last Issued: March 21, 2012
Date First Issued: February 22, 2012
Standard Detail:

Sheet Number 3.5

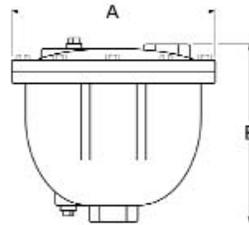


**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
Pompano Beach, Florida
33069
Tel 954-831-0745
FAX 954-831-0798

**PRODUCT SPECIFICATIONS
AIR RELEASE VALVES FOR
POTABLE WATER AND
RECLAIMED WATER**

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed AWWA C512, latest revision.
- Body, cover, and baffle material shall be cast iron or ductile iron meeting or exceeding ASTM A126 (latest revision) or A536, latest revision.
- Float and trim material shall be stainless steel (Type 304 minimum).
- Air release shall automatically release small pockets of air from the pipeline while in operation and under pressure.
- Shall have a minimum 3/32" orifice for a minimum working pressure of 150 psi.
- Valve inlet and outlet shall be threaded.
- Combination Air/Vacuum Valves are not acceptable.
- Except where otherwise specified, interior ferrous surfaces, exclusive of stainless steel surfaces, of all valves shall be coated with two-part thermosetting epoxy coating or fusion bonded epoxy coating. Flange faces of valves shall not be epoxy coated.
- Exterior surfaces shall be coated with a primer.
- The epoxy shall be suitable for use in potable and reclaimed water.



PRE-APPROVED MANUFACTURERS:

- GA INDUSTRIES (#920, #922)
- CRISPIN (PL10, PL10A, PL20, PL20A)

Date: January 23, 2013
Date Last Issued: October 31, 2012
Date First Issued: June 23, 2010
Standard Detail: 127

Sheet Number 4.1



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
Pompano Beach, Florida
33069
Tel 954-831-0745
FAX 954-831-0798

PRODUCT SPECIFICATIONS

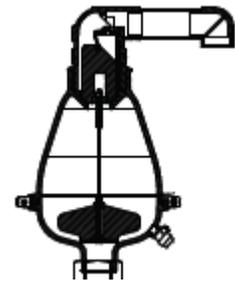
**AIR RELEASE VALVES FOR
WASTEWATER**

Minimum Requirements:

- Shall meet or exceed AWWA C512, latest revision.
- Combination Air Valves are acceptable when required based upon calculations by the Engineer of Record. Specific brand and model will be determined by the Technical Standards Committee.
- Air Release Valve shall be of the type that automatically releases air, gas, or vapor under pressure during system operation.
- Body and cover material shall be cast or ductile iron meeting or exceeding ASTM A126 (latest revision) or ASTM A536 (latest revision), or stainless steel (Type 304 minimum).
- Trim, float, and seat material shall be stainless steel (Type 304 minimum).
- Orifice button material shall be synthetic rubber.
- The outlet shall be threaded.
- Working pressure shall be 150 psi, minimum.
- Except where otherwise specified, interior ferrous surfaces, exclusive of stainless steel surfaces, of all valves shall be coated with two-part thermosetting epoxy coating or fusion bonded epoxy coating. Flange faces of valves shall not be epoxy coated.
- Exterior surfaces shall be coated with a primer.
- The epoxy shall be suitable for use in wastewater.

Note:

- The inlet, outlet, and venting orifice shall be sized by the Engineer of Record.



PRE-APPROVED MANUFACTURERS:

- GA INDUSTRIES (#929)
- CRISPIN (S Series)
- H-Tec (Model 986) (where height of the valve is not an issue)
- ARI (D-025PT)

Date: July 10, 2013
Date Last Issued: January 23, 2013
Date First Issued: June 23, 2010
Standard Detail: 127

Sheet Number 4.2



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
Pompano Beach, Florida
33069
Tel 954-831-0745
FAX 954-831-0798

PRODUCT SPECIFICATIONS

AUTOMATIC BLOWOFFS

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall be a self-contained unit powered by a 9V battery with a 1 year minimum operational life.
- Material for the above-grade components shall be designed for direct exposure to the sun.
- Internal piping material shall be schedule 80 PVC.
- Mounting brackets and hardware material shall be stainless steel (Type 304 minimum).
- Internal piping and control valve shall have a minimum operational rating of 200 psi.
- Internal piping and control valve shall be removed from the housing by means of a quick-disconnect.
- Shall have a male 2" NPT water supply connection.
- Discharged water shall be directed downward.
- Sampling system shall be designed to reduce potential for contamination.
- Shall have a minimum of four (4) programmable flushing cycles.
- Shall have manual on/off functions with a locking dome cover.



PRE-APPROVED MANUFACTURERS:

- HYDRO-GUARD STANDARD UNIT
- KUPFERLE FOUNDRY CO. (9400 WC ECLIPSE)

Date: January 23, 2013
Date Last Issued: June 23, 2010
Date First Issued: June 23, 2010
Standard Detail: 253, 254

Sheet Number 4.3



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
Pompano Beach, Florida
33069
Tel 954-831-0745
FAX 954-831-0798

PRODUCT SPECIFICATIONS

BUTTERFLY VALVES (12" AND LARGER)



Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed AWWA C-504, Class 150B, latest revision.
- Body and disc material shall be cast or ductile iron meeting or exceeding ASTM A126 (latest revision) or A536, latest revision.
- Seat and all rubber material shall be chloramine resistant.
- Shaft, nuts, screws, and hardware material shall be stainless steel (Type 304 minimum).
- Valve disc shall be rigidly attached to the shaft to eliminate any relative motion.
- Shaft shall be offset from the disc and body seats so that they do not intersect.
- Shafts of 3" diameter and smaller shall be one piece through the valve with factory set thruster(s) to center the disc in the seat.
- Shafts larger than 3" diameter shall be stub-shafts rigidly keyed to the disc.
- Stub-shafts shall be provided with an adjustable thruster(s) to move the disc and shaft assembly positively in either direction to center the disc in the seat.
- Valves shall open left, or counterclockwise.
- Buried service valves shall have a 2" operating nut.
- Valve operators for valves 24" and smaller shall be traveling nut or worm gear type; Valves larger than 24" shall be equipped with worm gear type operators.
- Operators shall be one size larger than the minimum specified by the manufacturer.
- Except where otherwise specified, interior and exterior ferrous surfaces, exclusive of stainless steel surfaces, in all valves shall be coated with two-part thermosetting epoxy coating or fusion bonded epoxy coating. Flange faces of valves shall not be epoxy coated.
- The epoxy shall be suitable for use in potable water, reclaimed water, and wastewater.

PRE-APPROVED MANUFACTURERS:

- MUELLER (LINESEAL III) *[CRTag]
- VAL-MATIC *[CRTag]
- MILLIKEN *[CRTag]
- PRATT (#2MII, #2FII, TRITON-XR70) *[CRTag]
- CLOW (Model 4500 12" only) *[CRTag]
- M&H (Model 4500 12" only) *[CRTag]
- KENNEDY (Model 4500 12" only) *[CRTag]

Date: January 15, 2014
Date Last Issued: January 23, 2013
Date First Issued: June 23, 2010
Standard Detail:

Sheet Number 4.4



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
Pompano Beach, Florida
33069
Tel 954-831-0745
FAX 954-831-0798

PRODUCT SPECIFICATIONS

CHECK VALVES FOR LIFT STATIONS

Minimum Requirements:

- Shall meet or exceed AWWA C508 , latest revision.
- Shall be the flapper type with a lever and weight and capable of handling sewage fluids under pressure.
- Seating material shall be bronze to metal.
- Material for all internal working parts shall be stainless steel (Type 304 minimum).
- Shall have O-ring packing.
- Shall have flanged ends.
- Side plugs are not permitted.
- Except where otherwise specified, ferrous surfaces, exclusive of stainless steel surfaces, of all valves four (4)-inch and larger, as well as the exterior surfaces of all submerged valves, shall be coated with two-part thermosetting epoxy coating or fusion bonded epoxy coating. Flange faces of valves shall not be epoxy coated.
- The epoxy shall be suitable for use in reclaimed water and wastewater.



PRE-APPROVED MANUFACTURERS:

- M&H (159-02)
- MUELLER (2600-6-01)
- AMERICAN FLOW CONTROL (SERIES 52-SC)
- CLOW (5380)
- AMERICAN AVK (SERIES 41)

Date: March 5, 2014
 Date Last Issued: March 6, 2013
 Date First Issued: June 23, 2010
 Standard Detail: WWS Standard Lift Station
 Details

Sheet Number 4.5



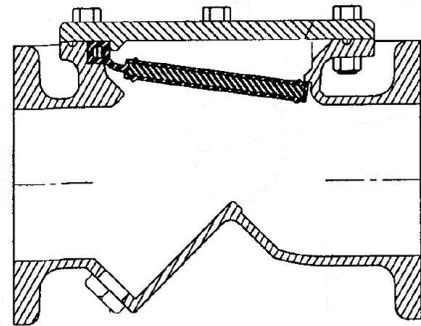
**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
Pompano Beach, Florida
33069
Tel 954-831-0745
FAX 954-831-0798

PRODUCT SPECIFICATIONS

**CHECK VALVES FOR
POTABLE WATER**

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed AWWA C508, latest revision.
- Shall be the flexible, rubber coated disc type.
- Body material shall be cast or ductile iron meeting or exceeding ASTM A126 (latest revision) or ASTM A536, latest revision.
- Seating shall be rubber to metal.
- Rubber material shall be chloramine resistant.
- Bolts and nuts shall be stainless steel (Type 304 minimum).
- Working pressure shall be 250 psi minimum.
- Side plugs shall not be permitted.
- Valves shall have a resilient hinge. Valves designed with a shaft and mechanical hinge are not permitted.
- Except where otherwise specified, interior and exterior ferrous surfaces, exclusive of stainless steel surfaces, in all valves four (4)-inch and larger shall be coated with two-part thermosetting epoxy coating or fusion bonded epoxy coating.
- The epoxy shall be suitable for use in potable water and reclaimed water.



PRE-APPROVED MANUFACTURERS:

- MUELLER (FLEXIBLE DISK) *[CRTag]
- DANFOSS FLO-FLEX (745) *[CRTag]
- AFC (SERIES 2100) (FLANGED BY FLANGED)
- AFC (2100 HYDRANT SECURITY CHECK VALVE) (MJ BY SOLID GLAND)
- CLOW (306AS with SS nuts and bolts)

Date: January 23, 2013
Date Last Issued: February 22, 2012
Date First Issued: June 23, 2010
Standard Detail: 231, 235, 236

Sheet Number 4.6

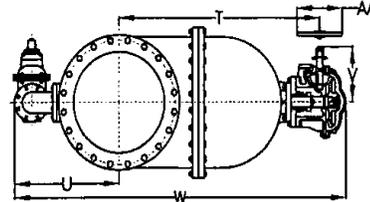


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PRODUCT SPECIFICATIONS
**DOUBLE DISC GATE AND
TAPPING VALVES (12" - 48")**

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed AWWA C500, latest revision.
- Tapping valves shall have one flanged end meeting ANSI standards.
- Shall have clear waterway equal to the full nominal diameter of the valve.
- Body material shall be cast or ductile iron meeting or exceeding ASTM A126 (latest revision) or A536, latest revision.
- Valve seat material shall be bronze.
- Stuffing box and operating nut material shall be cast or ductile iron meeting or exceeding ASTM A126 (latest revision) or A536, latest revision.
- Valve stem material shall be bronze meeting or exceeding ASTM B62 (latest revision) or stainless steel (Type 304 minimum) for valves 42" and greater.
- Nuts and bolts material shall be stainless steel (Type 304 minimum).
- Valves are to be iron body, bronze mounted, double disc, non-rising stem, parallel seat type, opening left (counter-clockwise).
- The operating mechanism shall be for buried service with a 2" square operating nut.
- Valves shall have a minimum of 2 points of bearing in the wedging mechanism.
- Valves 16" and larger shall be furnished with bevel gears and by-pass valves. Bevel geared valves shall have roller, tracks, and scrapers.
- Valves 12" in size shall have a minimum working pressure of 200 psi and be tested at 400 psi (minimum); Valves 14" and larger shall have a minimum working pressure of 150 psi and be tested at 300 psi minimum.
- Except where otherwise specified, interior and exterior ferrous surfaces, exclusive of stainless steel surfaces, in all valves shall be coated with two-part thermosetting epoxy coating or fusion bonded epoxy coating. Flange faces of valves shall not be epoxy coated.
- The epoxy shall be suitable for use in potable water, reclaimed water, and wastewater.



Flanged ends, NRS,
with Bevel Gears,
By-Pass

PRE-APPROVED MANUFACTURERS:

- MUELLER (A-2380, H-667)
- KENNEDY VALVE
- CLOW VALVE
- M&H VALVE

Date: January 23, 2013
Date Last Issued: March 21, 2012
Date First Issued: June 23, 2010
Standard Detail: 131

Sheet Number 4.7



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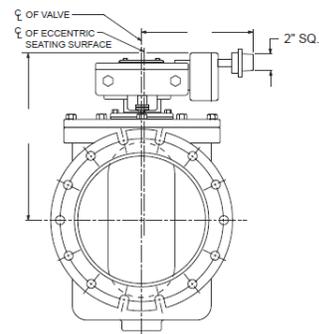
**PRODUCT SPECIFICATIONS
ECCENTRIC PLUG VALVES**

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed AWWA C517, latest revision.
- Valve and actuator shall be capable of operation in either direction of flow.
- Valve shall be bubble tight in both directions.
- Shall be designed for buried service.
- Body material shall be cast or ductile iron meeting or exceeding ASTM A126 or ASTM A536.
- Body seat material shall be welded nickel alloy or type 316 (minimum) stainless steel.
- Material for the bearings shall be permanently lubricated 316 (minimum) stainless steel, bronze, or Teflon.
- Material for the nuts, bolts, springs, and washers shall be 316 (minimum) stainless steel.
- Pressure rating shall be 175 psi, minimum, for valves up to 12" diameter.
- Pressure rating shall be 150 psi, minimum, for valves 14" diameter and above.
- Shall be operated by a two (2) inch operating nut.
- Port area of valves shall be minimum 100% of the full pipe area.
- Stainless steel plate seats must be locked in the body cavity and replaceable through the bonnet access.
- Bearing areas shall be isolated from the flow.
- Shall have packing bonnets where the shaft protrudes from the valve.
- Packing shall be the self-adjusting type and replaceable without removing the bonnet.
- Valves 10" and greater shall have worm gear operators.
- Operators shall be sized one size greater than the manufacturer's suggested minimum.
- Except where otherwise specified, interior and exterior ferrous surfaces, exclusive of stainless steel surfaces, of all valves four (4)-inch and larger shall be coated with two-part thermosetting epoxy coating or fusion bonded epoxy coating. Flange faces of valves shall not be epoxy coated.
- The epoxy shall be suitable for use in potable and reclaimed water, and wastewater.

Note:

- Buried service valves shall have mechanical joint ends.
- Lift Station valves shall have flange ends.



PRE-APPROVED MANUFACTURERS:

- DEZURIK (PEF)
- MILLIKEN VALVE CO. (Series 600/601)
- HENRY PRATT

16" and larger requires shop drawing approval by Engineer of Record and WWS project manager.

Date: January 23, 2013
Date Last Issued: October 31, 2012
Date First Issued: June 23, 2010
Standard Detail: 418

Sheet Number 4.8



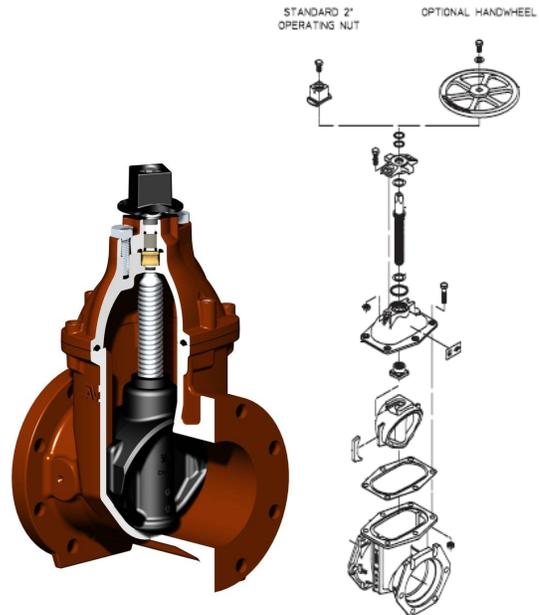
**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
Pompano Beach, Florida
33069
Tel 954-831-0745
FAX 954-831-0798

PRODUCT SPECIFICATIONS

GATE AND TAPPING VALVES

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Resilient wedge line valves shall meet or exceed AWWA C509 (latest revision) or AWWA C515, latest revisions.
- Valves shall meet or exceed AWWA C550, latest revision.
- Shall be the resilient seat type, with a non-rising stem, opening left (counterclockwise).
- No leakage will be allowed or permitted.
- Body material shall be cast or ductile iron meeting or exceeding ASTM A126 (latest revision) or A536, latest revision.
- Wedge material shall be cast or ductile iron, fully encapsulated with a chloramine resistant material.
- Stuffing box and operating nut material shall be cast or ductile iron meeting or exceeding ASTM A126 (latest revision) or A536, latest revision.
- Gate valve stem material shall be bronze meeting or exceeding ASTM B62 (latest revision) or stainless steel (Type 304 minimum).
- Hex head nuts and bolts material shall be stainless steel (Type 304 minimum).
- Valve disc shall be contoured to assure uniform seating.
- Both ends shall be mechanical joint meeting ANSI/ AWWA A21.11/C111, latest revision.
- Pressure rating shall be 250 psi, minimum.
- Shall have a two-inch (2") square operating nut.
- Resilient seat and other rubber tight parts shall be formed of synthetic elastomer which is corrosion and chloramine resistant.
- Except where otherwise specified, interior and exterior ferrous surfaces, exclusive of stainless steel surfaces, in all valves four (4)-inch and larger shall be coated with two-part thermosetting epoxy coating or fusion bonded epoxy coating. Flange faces of valves shall not be epoxy coated.
- The epoxy shall be suitable for use in potable water and reclaimed water.



PRE-APPROVED MANUFACTURERS:

- AMERICAN FLOW CONTROL (2500 SERIES)
- AMERICAN AVK
- CLOW (2639) *[CRTag]
- KENNEDY VALVE *[CRTag]
- MUELLER (A2360, T2360) *see note

MUELLER A2360 and T2360 product tag must end with 0331 which indicates chloramine resistance

Date: January 23, 2013
Date Last Issued: April 18, 2012
Date First Issued: June 23, 2010
Standard Detail: 123

Sheet Number 4.9



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PRODUCT SPECIFICATIONS

INSERTION VALVES

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Applicable valve components shall meet or exceed the requirements of AWWA C509, latest revision.
- Valve stem material shall be in meet AWWA C500, latest revision.
- Pressure rating shall be 250 psi, minimum.
- Shall be able to be installed on operating mains with pressure up to 150 psi without interruption of service to customers.
- Insertion valve shall be compatible with pipe material.
- Valve shall open and close with the standard number of turns.
- Valve height shall be comparable to standard valve heights.
- Shall have a two-inch (2") square operating nut.
- Hardware shall be stainless steel (Type 304 minimum).
- Valve sleeve, body bonnet and/ or neck shall be ductile iron or stainless steel (Type 304 minimum).
- Wedge material shall be cast or ductile iron, fully encapsulated with a chloramine resistant material.
- Except where otherwise specified, interior and exterior ferrous surfaces, exclusive of stainless steel surfaces, in all valves four (4)-inch and larger shall be coated with two-part thermosetting epoxy coating or fusion bonded epoxy coating. Flange faces of valves shall not be epoxy coated. The epoxy shall be suitable for use in potable water and reclaimed water.
- Gasket system shall prevent leakage at the valve insertion point.



PRE-APPROVED MANUFACTURERS:

- ADVANCED VALVE TECHNOLOGIES
- TEAM INDUSTRIAL SERVICES (4" - 12", with optional 304SS bolts)

16" and larger requires shop drawing approval by Engineer of Record and WWS project manager.

Date: March 20, 2013
Date Last Issued: January 23, 2013
Date First Issued: January 26, 2011
Standard Detail:

Sheet Number 4.10



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33069
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PRODUCT SPECIFICATIONS

**POTABLE WATER AIR RELEASE
VALVE INFLOW PREVENTERS**

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall be designed, manufactured and tested to meet or exceed ASSE 1063, latest revision.
- Shall be fully automatic, float operated and designed to close in the event of a flooded structure to prevent contaminated water from reaching the air release valve outlet with submergence pressure up to 20 psi.
- Shall be designed to allow the air release valve to perform its normal function of admitting and discharging air under normal operating conditions.
- The device shall consist of a lower chamber with a float actuated closure member, and an upper chamber to provide redundancy including an independent closure member.
- The device shall provide greater flow area than an equivalently sized air release valve resulting in minimal flow restriction.
- The screen shall be made of stainless steel (Type 304 minimum) and have a quick-disconnect joint for easy removal and inspection.
- The upper and lower chambers shall be cast iron or ductile iron meeting or exceeding ASTM A126 (latest revision) or A536, latest revision.
- Floats and trim material shall be stainless steel (Type 304 minimum).
- The upper chamber air inlet shall be a threaded connection equal to the nominal size of the vent outlet piping.
- Except where otherwise specified, all interior and exterior ferrous surfaces, exclusive of stainless steel surfaces, shall be coated with a two-part thermosetting epoxy coating or fusion bonded epoxy coating.
- Epoxy shall be suitable for use in potable water and reclaimed water.



PRE-APPROVED MANUFACTURERS:

- VAL-MATIC (Floodsafe Series 1300)

Date: January 23, 2013
 Date Last Issued: November 14, 2012
 Date First Issued: November 14, 2012
 Standard Detail: 127

Sheet Number 4.11



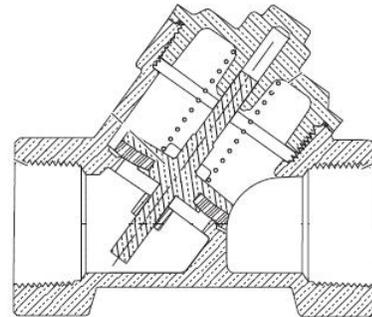
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Engineering Division**
2555 West Copans Road
Pompano Beach, Florida
33069
Tel 954-831-0745
FAX 954-831-0798

PRODUCT SPECIFICATIONS

CHECK VALVES FOR WATER SERVICES

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed AWWA C800, latest revision, for all brass components.
- Body material shall be brass meeting or exceeding ASTM B62, latest revision.
- Spring material shall be stainless steel (Type 304 minimum).
- Shall be a single spring and poppet assembly.
- Removable access cap shall allow for inspection and replacement of internal working parts without removing the check valve from the service line.
- Working pressure shall be 150 psi, minimum.
- Maximum head loss shall be as follows:
 - 1" valve: not to exceed 4 psi at 20 gpm.
 - 2" valve: not to exceed 1 psi at 50 gpm.
- Shall have a female iron pipe inlet and outlet.



PRE-APPROVED MANUFACTURERS:

- FORD METER BOX (HS11-444 [1"], HS11-777 [2"])

Date: January 23, 2013
 Date Last Issued: March 21, 2012
 Date First Issued: June 23, 2010
 Standard Detail: 221, 222, 224, 226, 227, 228

Sheet Number 5.1



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PRODUCT SPECIFICATIONS

CORPORATION STOPS

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed AWWA C800, latest revision.
- Body material shall be brass alloy meeting or exceeding ASTM B62, latest revision.
- Shall be ball valve type.
- Inlet shall be male threaded to match the saddle.
- Outlet connections shall have a compression type fitting for water service lines. All other connections shall be per the design.
- All rubber gasket seals shall be chloramine resistant.



PRE-APPROVED MANUFACTURERS:

- FORD METER BOX (FB-1000)
- MUELLER (B-25008) *[CRTag]
- CAMBRIDGE BRASS (301) *[CRTag]
- A.Y. McDONALD MFG. CO. (4701B-22)

Date: January 23, 2013
 Date Last Issued: June 23, 2010
 Date First Issued: June 23, 2010
 Standard Detail: 205, 206, 221, 222, 224,
 235, 236, 237

Sheet Number 5.2



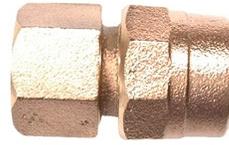
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PRODUCT SPECIFICATIONS

**COUPLINGS AND ADAPTERS
FOR WATER SERVICES**

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed AWWA C800, latest revision.
- Working pressure shall be 150 psi, minimum.



PRE-APPROVED MANUFACTURERS:

- CAMBRIDGE BRASS (105, 117, 119, 417)
- MUELLER
- FORD METER BOX
- A.Y. McDONALD (4761-22, 4753-22, 4754-22, 4758-22, 4620)

Date: January 23, 2013

Date Last Issued: June 23, 2010

Date First Issued: June 23, 2010

Standard Detail: 226, 227, 228

Sheet Number

5.3



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FAX 954-831-0798

PRODUCT SPECIFICATIONS

CURB STOPS/ METER VALVES

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed AWWA C800, latest revision.
- Body material shall be brass meeting or exceeding ASTM B62, latest revision.
- Shall be the ball valve type with full port opening.
- Ball and seat material shall be coated with a chloramine resistant seat material; or nickel and chrome plated brass with a chloramine resistant seat.
- Shall have a tee-head with a locking wing.
- Shall be water tight against flow in either direction.
- Seal around the stem shall consist of two O-rings.
- O-ring material shall be chloramine resistant.
- Valve shall open and close with a 90° turn of a standard slotted wrench.
- Shall have a working pressure of 300 psi, minimum.
- Shall have a pack-joint compression fitting on the inlet.

Note:

- Meter valves for 1 1/2" and 2" meters shall have flanged connections on the outlet sides. Meter valves over 2" will be considered on an individual basis for the particular installation involved.



PRE-APPROVED MANUFACTURERS:

- FORD METER BOX CURB STOP BALL VALVES (B41-444, B41-777)
- FORD METER BOX BALL METER VALVES (B43-444W, B43-344W, BF43-777W)
- MUELLER 300 BALL CURB VALVES (P25122) *[CRTag]
- MUELLER 300 BALL STRAIGHT METER VALVES (P24335, P24350) *[CRTag]
- CAMBRIDGE BRASS (210, 212, 292) *[CRTag]
- A.Y. McDONALD MFG. CO. (4602B-22, 74602B-22, 6101MW, 76101MW, 6100MW-22, 76100MW-22)

Date: January 23, 2013
 Date Last Issued: January 9, 2013
 Date First Issued: June 23, 2010
 Standard Detail: 226, 227, 228

Sheet Number 5.4

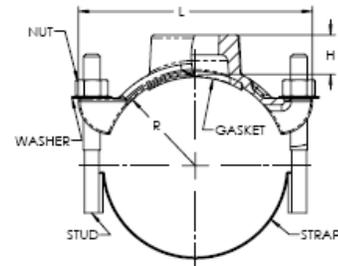


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PRODUCT SPECIFICATIONS
**DOUBLE STRAP SERVICE
SADDLES**

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed AWWA C800, latest revision.
- Shall be double strap design.
- Saddle material shall be ductile iron meeting or exceeding ASTM A536, latest revision.
- Material for the straps, bales, nuts, and washers shall be stainless steel (Type 304 minimum).
- Straps shall tighten to conform to the curvature of the pipe.
- An O-ring gasket confined in a retaining groove shall seal as the straps are tightened.
- The saddle shall have an outlet for the service connection that will accommodate an NPT or AWWA thread.
- Shall have a factory applied epoxy coating.



PRE-APPROVED MANUFACTURERS:

- JCM (406)
- SMITH-BLAIR (Series 317)
- ROMAC (202NS, 202NU)
- FORD METER BOX (FC202, FCD202)
- A.Y.McDONALD MFG. CO. (4825A, 4826A, 4855A, 4856A)
- MUELLER

Date: January 23, 2013
Date Last Issued: March 21, 2012
Date First Issued: June 23, 2010
Standard Detail: 205, 206, 221, 222

Sheet Number 5.5



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PRODUCT SPECIFICATIONS

**METER FLANGES FOR
WATER SERVICES**

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed AWWA C800, latest revision.
- Working pressure of 150 psi, minimum.
- Material for the nuts and bolts shall be stainless steel (Type 304 minimum).



PRE-APPROVED MANUFACTURERS:

- CAMBRIDGE BRASS (421, 424)
- FORD METER BOX
- MUELLER
- A.Y.McDONALD MFG. CO. (610F, 610M)

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

Sheet Number 5.6



**Water & Wastewater Services
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FAX 954-831-0798

PRODUCT SPECIFICATIONS

**POLYETHYLENE TUBING FOR
1" AND 2" WATER SERVICES**

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed AWWA C901, latest revision.
- Shall be SDR 9.
- Shall have surfaces free from bumps and irregularities.
- Shall comply with ASTM 3350 (latest revision) providing for an inner and outer layer of UV protection for 5 years in direct sunlight.
- Shall display labels at intervals of not more than 5 feet which convey the following information:
 - Manufacturer's name
 - Brandname or Trademark
 - Nominal size
 - HDPE designation code
 - Standard dimension ratio (SDR)
 - Pressure Class: PC 200
 - AWWA C901
 - Mark or seal of the testing agency
- Fittings shall be of the compression type utilizing a totally confined grip seal and coupling nut.

Note:

- Stainless steel (Type 304 minimum) tube stiffener insert shall be used for tubing services.



PRE-APPROVED MANUFACTURERS:

- PERFORMANCE PIPE (DRISCOPLEX)
- ENDOT ENDOPOLY
- MUNICIPEX PEXa
- ADS (POLYFLEX)

Date: August 7, 2013
 Date Last Issued: January 23, 2013
 Date First Issued: June 23, 2010
 Standard Detail: 221, 222, 224, 226, 227, 228

Sheet Number 5.7



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
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FAX 954-831-0798

PRODUCT SPECIFICATIONS

**TYPE K COPPER TUBING FOR
1" AND 2" WATER SERVICES**

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed the requirements of AWWA C800 (latest revision), Section A.2 and ASTM B88, latest revision.
- Pipe material shall be Type K Copper.
- Threaded fittings for underground tubing shall be of the compression type utilizing a totally confined grip seal and coupling nut.

Note:

- Soldered fittings are acceptable on aboveground tubing.



PRE-APPROVED MANUFACTURERS:

Use requires shop drawing approval by Engineer of Record.

Date: January 23, 2013
 Date Last Issued: October 31, 2012
 Date First Issued: June 23, 2010
 Standard Detail: 206, 221, 222, 224, 226,
 227, 228, 235, 236, 237

Sheet Number 5.8



**Water & Wastewater Services
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33069
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PRODUCT SPECIFICATIONS

U-BRANCHES

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed the requirements of AWWA C800, latest revision.
- Working pressure shall be 150 psi, minimum.



PRE-APPROVED MANUFACTURERS:

- A.Y.McDONALD MFG. CO.
- CABRIDGE BRASS
- FORD METER BOX
- MUELLER

Date: January 23, 2013
Date Last Issued: June 23, 2010
Date First Issued: June 23, 2010
Standard Detail: 227

Sheet Number 5.9



**Water & Wastewater Services
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FAX 954-831-0798

PRODUCT SPECIFICATIONS

YOKES

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Spacing shall accommodate meter lengths as described in AWWA C800, latest revision.
- Body material shall be cast iron ASTM A48 (latest revision) or A126, latest revision.

Note:

- Not allowed on new construction.



PRE-APPROVED MANUFACTURERS:

- FORD METER BOX (IRON YOKE BARS, Y500 SERIES)
- MUELLER (IRON METER YOKES, H-5020)

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

Sheet Number 5.10



**Water & Wastewater Services
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**PRODUCT SPECIFICATIONS
DUAL CHECK VALVES FOR
WATER SERVICES**

Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed ANSI/ASSE 1024, latest revision.
- The wetted surface of this product contacted by consumable water shall contain less than 0.25% of lead by weight.
- Spring material shall be stainless steel (Type 304 minimum)
- Working pressure shall be 150 psi, minimum.
- Shall have two independently operating spring loaded check valves.
- Maximum head loss shall be as follows:
 - 3/4" valve: not to exceed 5 psi at 12 gpm.
 - 1" valve: not to exceed 6 psi at 20 gpm.

Note:

- Inlet and outlet types vary depending on the specific situation.
- This product is approved only for residential water service and only when the residence has access to reclaimed water.
- To be installed immediately downstream of the water meter.



PRE-APPROVED MANUFACTURERS:

- WATTS SERIES LF7R
- WILKINS MODEL 700XL

Date: May 29, 2013
 Date Last Issued: May 29, 2013
 Date First Issued: May 29, 2013
 Standard Detail: None

Sheet Number 5.11



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
Pompano Beach, Florida
33069
Tel 954-831-0745
FAX 954-831-0798

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 125.
- 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: February 6, 2013
Date Last Issued: January 23, 2013
Date First Issued: June 23, 2010
Standard Detail:

Sheet Number 6.1



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
Pompano Beach, Florida
33069
Tel 954-831-0745
FAX 954-831-0798

PRODUCT SPECIFICATIONS

WATER METERS (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)

Date: January 23, 2013

Date Last Issued: July 26, 2010

Date First Issued: June 23, 2010

Standard Detail:

Sheet Number

6.2



**Water & Wastewater Services
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FAX 954-831-0798

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: October 31, 2012
Date Last Issued: June 23, 2010
Date First Issued: June 23, 2010
Standard Detail: 226, 235, 237

Sheet Number 6.3



**Water & Wastewater Services
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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 bronze or brass.
- 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 standards.
- The chamber shall be of the nutating disc or oscillating piston style.
- The chamber magnet shall be a minimum 4-pole magnet and 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



**Water & Wastewater Services
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PRODUCT SPECIFICATIONS

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



Minimum Requirements (Cont'd):

- All meters requiring strainers shall be provided with non-corrosive 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 13, 2013
Date Last Issued: January 23, 2013
Date First Issued: June 23, 2010
Standard Detail: 224, 226, 227, 228

Sheet Number 6.4 (Cont'd)



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
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Tel 954-831-0745
FAX 954-831-0798

PRODUCT SPECIFICATIONS

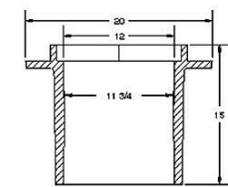
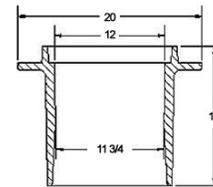
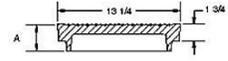
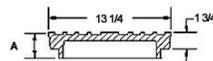
BOX AND COVER

Minimum Requirements:

- Box and cover material shall be cast iron meeting or exceeding ASTM A48 (latest revision) Class 35B.

Note:

- The box and cover are to be used in casing pipe vent and manual blow off situations.
- The box and cover with extensions are to be used on clean outs.
- The Engineer of Record is responsible for complying with FAA Engineering Guidance 98-11 when this item could be subject to aircraft loading.



PRE-APPROVED MANUFACTURERS:

- US FOUNDRY (7630)
- US FOUNDRY (7635, Standard Detail Figure 154 only)

Date: May 29, 2013
Date Last Issued: January 23, 2013
Date First Issued: June 23, 2010
Standard Detail: 154, 252, 418

Sheet Number

7.1



**Water & Wastewater Services
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2555 West Copans Road
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PRODUCT SPECIFICATIONS

CLEANOUT BOX AND COVER

Minimum Requirements:

- Box material shall be polyethylene, cast iron, or ductile iron.
- Cover shall be ductile iron, hexagonal shaped, and marked with "Sewer" or an "S".
- Cover dimensions shall be 11 3/4" ID x 15".
- The cover shall meet or exceed a minimum proof load of 25,000 pounds on a 9" x 9" area.

Note:

- The Engineer of Record is responsible for complying with FAA Engineering Guidance 98-11 when this item could be subject to aircraft loading.



PRE-APPROVED MANUFACTURERS:

- US FOUNDRY (USF 7635, FJ cover)
- US FOUNDRY (USF 7636, MJ cover)
- CARSON (MSCO-3)

Date: May 29, 2013
Date Last Issued: January 23, 2013
Date First Issued: June 23, 2010
Standard Detail: 341

Sheet Number 7.2



**Water & Wastewater Services
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2555 West Copans Road
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FAX 954-831-0798

PRODUCT SPECIFICATIONS

MANHOLES

Minimum Requirements:

- Shall meet or exceed ASTM C478, latest revision.
- Structure material shall be Type II concrete.
- Shall have an 8" minimum wall and base thickness.
- Base section inside diameters shall be 48", minimum.
- Minimum height of the base section shall be 3 feet from the outside bottom of the base slab. The base section shall be cast monolithically with the bottom section's wall.
- Lifting holes are not permitted.
- Invert channels shall be smooth and accurately shaped to a semicircular bottom conforming to the inside of the adjacent sewer section.
- Inside drop connections are not permitted.
- Steps or ladders are not permitted.
- Structure shall be designed for a minimum proof load of 25,000 pounds.
- Vertical crush to exceed 18,000 pounds and sidewall load to exceed 200 pounds per square inch.

Note:

- Sections shall be joined with a preformed plastic joint sealing compound consisting of either bituminous or butyl rubber base, meeting or exceeding Federal Specification SS-S-210A, Type I.
- Sealing compound shall be protected with a two piece cover to prevent adhesion until used, and shall be a minimum of 7/8" by 1-3/8" wide.
- The Engineer of Record is responsible for complying with FAA Engineering Guidance 98-11 when this item could be subject to aircraft loading.



PRE-APPROVED MANUFACTURERS:

- All manufacturers that meet or exceed ASTM, Florida Department of Transportation, and Broward County Highway Construction and Engineering Division specifications.*

Use requires shop drawing approval (non-structural details only) by Engineer of Record and WWS project manager for each manhole. The shop drawings are to be signed and sealed by the Engineer of Record.

Date: May 29, 2013
 Date Last Issued: January 23, 2013
 Date First Issued: June 23, 2010
 Standard Detail: 311, 312, 313, 318, 322

Sheet Number 7.3



**Water & Wastewater Services
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PRODUCT SPECIFICATIONS

MANHOLE RISERS

Minimum Requirements:

- Risers shall have an adjustable diameter.
- Riser material shall be ASTM A36 (latest edition) hot roll steel and galvanized metal or electro-coating.
- Stud material shall be stainless steel (Type 304 minimum).

Note:

- Product shall not be used on new manhole installations.



PRE-APPROVED MANUFACTURERS:

- RELL (TYPE 1 & 2) (Not approved for new manhole installations)
- EJ USA (M2 & M5) (Not approved for new manhole installations)

Date: March 5, 2014
Date Last Issued: January 23, 2013
Date First Issued: June 23, 2010
Standard Detail:

Sheet Number 7.4



**Water & Wastewater Services
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PRODUCT SPECIFICATIONS

MANHOLE CONNECTORS

Minimum Requirements:

- Shall meet or exceed the testing requirements set forth in ASTM C923, latest edition.
- Body material shall be rubber.
- Hardware material shall be stainless steel (Type 304 minimum).
- Shall provide a flexible, watertight seal between the pipe and concrete structure.
- The seal between the connector and the pipe shall be made by compressing the connector against the outside circumference of the pipe.
- Shall allow for deflection and vertical or horizontal movement without loss of seal.

Note:

- Shall be cast integrally with the structure wall during the manufacturing process in a manner that it will not pull out during pipe coupling.



PRE-APPROVED MANUFACTURERS:

- A-LOK (Z-LOK) (CAST IN BOOT CONNECTOR)
- KOR-N-SEAL I (706 SERIES)
- A-LOK (X-CEL) (DOES NOT REQUIRE STAINLESS STEEL BAND)

Date: June 13, 2012
Date Last Issued: June 1, 2011
Date First Issued: June 23, 2010
Standard Detail: 322

Sheet Number 7.5



**Water & Wastewater Services
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FAX 954-831-0798

**PRODUCT SPECIFICATIONS
MANHOLE GRADE RINGS**

Minimum Requirements:

Concrete

- Concrete grade rings shall meet or exceed ASTM C478, latest revision.
- Concrete grade ring material shall be Type II concrete with a minimum 28 day strength of 4000 psi.

Plastic

- Plastic manhole grade rings shall meet or exceed ASTM D4976 (latest revision) and shall be used only in conjunction with an approved chimney seal system.
- 100% recycled material is preferred for plastic grade rings.
- Plastic grade rings shall be manufactured using the injection molding process and tested to assure compliance with the impact and loading requirements per the ASSHTO Standard Specification for Highway Bridges.

Note:

- Concrete grade rings can be used on new manhole installations or on existing manholes.
- Plastic manhole grade rings shall be used only on new manhole installations.
- Plastic grade rings shall be sealed with a butyl sealant in the annular space between the rings and cone basin, the rings, and the rings and cover frame
- Plastic ring Installation shall be per the manufacturer's recommendations.
- The Engineer of Record is responsible for complying with FAA Engineering Guidance 98-11 when this item could be subject to aircraft loading.



PRE-APPROVED MANUFACTURERS:

Concrete

- All manufacturers that meet or exceed ASTM, Florida Department of Transportation, and Broward County Highway Construction and Engineering Division specifications.

Plastic

- LADTECH, INC.

Use requires shop drawing approval by Engineer of Record.

Date: May 29, 2013
Date Last Issued: January 23, 2013
Date First Issued: June 23, 2010
Standard Detail: 312, 311, 313

Sheet Number 7.6



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
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FAX 954-831-0798

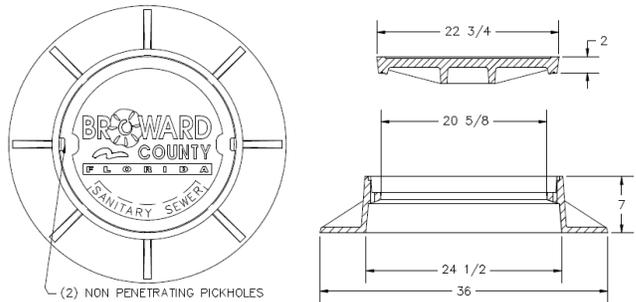
**PRODUCT SPECIFICATIONS
MANHOLE RING AND COVER**

Minimum Requirements:

- Cover material shall be cast iron or ductile iron meeting or exceeding ASTM A48, latest revision.
- Frame material shall be cast iron or ductile iron meeting or exceeding ASTM A48, latest revision.
- The combined weight of the frame and cover shall not be less than 400 pounds.
- The cover shall weigh a minimum of 160 pounds.
- The cover shall be coated with a shop coat to minimize rusting prior to delivery.
- The seating surfaces between frame and cover shall be machined to fit true and shall be water tight.
- Non-penetrating pick holes will be cast into the lid.

Note:

- No plugging or filling will be allowed.
- The Engineer of Record is responsible for complying with FAA Engineering Guidance 98-11 when this item could be subject to aircraft loading.



PRE-APPROVED MANUFACTURERS:

- US FOUNDRY (420 LR-ORS, 540 LR-ORS)
- US FOUNDRY (690 AG-M, for Air Release Valve manholes only, County logo not required)
- EJ USA (1072Z frame and 1072A1GS cover)

Date: January 8, 2014
Date Last Issued: December 3, 2013
Date First Issued: June 23, 2010
Standard Detail: 161

Sheet Number 7.7



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
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33069
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FAX 954-831-0798

PRODUCT SPECIFICATIONS

METER BOX AND LID

Minimum Requirements:

- The meter box shall be made from high-density 100% homogenous polyethylene material, of one-piece molded construction for durability and impact strength or equal.
- Interior wall shall be smooth finish.
- Wall thickness shall be a minimum of .50 inches with wall core interior are of rigid foam construction and offering insulation and tensile strength.
- Vertical crush to exceed 18,000 pounds and sidewall load to exceed 200 pounds per square inch.
- A flange shall encircle the top area for installation in concrete.
- Meter boxes must be constructed with pre-cut knock-outs for piping. The box shall have removable pre-cut pipe entry areas, 3" wide X 4" high, located on the center of each end (short side) of the box for single meter installations, and 3 pre-cut pipe entry areas (single in, dual out) for dual meter installations. The dual out knockouts shall be 10" from outside edge to outside edge.
- Meter box shall meet the dimensions indicated on the standard details and shall fit all pre-approved lids so that the lids may be interchanged without adjustment to the meter box.
- Meter box lids shall be ductile iron meeting or exceeding ASTM A536 (latest revision), Grade 60-40-18.
- Lids shall have reader/window with hinged flap to be located over the meter.
- The meter box lid shall meet or exceed a minimum proof load of 25,000 pounds on a 9" x 9" area.
- Lids shall be coated with a shop coat to minimize rusting prior to delivery.
- Testing shall be verified by an independent third party.
- All meter box lids shall have a minimum of ten years limited warranty.



PRE-APPROVED MANUFACTURERS:

- OLDCASTLE/CARSON BRAND (BOX) (MSBCF 1324-12; MSBCF 1416-12; MSBCF 1730-12)
- OLDCASTLE/ EAST JORDAN IRON WORKS (LID)
- EBAA IRON (LID)
- DFW (DWF39C-12-BODY and DFW1324C-12-BODY BOXES)

Date: December 3, 2013
Date Last Issued: January 23, 2013
Date First Issued: June 23, 2010
Standard Detail: 226, 227, 228

Sheet Number 7.8



**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
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33069
Tel 954-831-0745
FAX 954-831-0798

PRODUCT SPECIFICATIONS

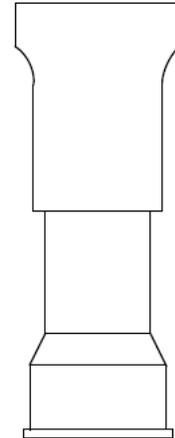
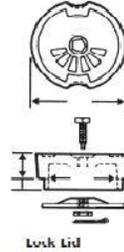
VALVE BOXES

Minimum Requirements:

- Valve boxes shall be cast iron ASTM A48 (latest revision), extension, adjustable screw type.
- Shaft diameter shall be 5-1/4".
- Covers shall be labeled per the standard detail.
- Extensions 18" through 24" are acceptable.
- All lids shall be locking type.

Note:

- The stem of a buried valve shall be within 18" of the finished grade.



PRE-APPROVED MANUFACTURERS:

- TYLER UNION
- STAR PIPE PRODUCTS
- US FOUNDRY
- EJ USA (8850 Box and 6800 Lid)

Date: January 8, 2014
Date Last Issued: January 23, 2013
Date First Issued: June 23, 2010
Standard Detail: 121, 123, and 418

Sheet Number 7.9



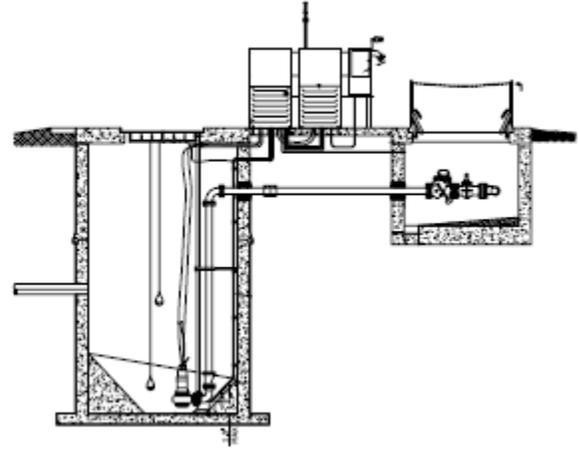
**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
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33069
Tel 954-831-0745
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PRODUCT SPECIFICATIONS

WETWELL AND VALVE PIT STRUCTURES

Minimum Requirements:

- The standard lift station detail drawings are a part of these specifications and contain the latest information on WWS lift station requirements.



PRE-APPROVED MANUFACTURERS:

- Any manufacturer who meets ASTM, FDOT, and Broward County Specifications.*

Use requires shop drawing approval by Engineer of Record and WWS project manager for each structure. Shop drawings to describe non-structural details and include buoyancy calculations when the structure is installed by the Tremie Seal method. The shop drawings are to signed and sealed by the Engineer of Record.

Date: January 23, 2013
Date Last Issued: October 31, 2012
Date First Issued: June 23, 2010
Standard Detail: WWS Lift Station Details

Sheet Number 7.10

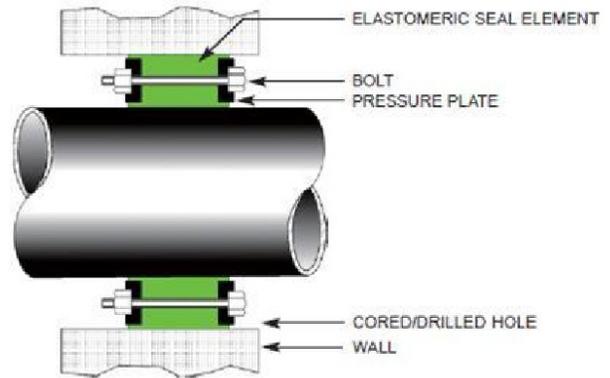


**Water & Wastewater Services
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**PRODUCT SPECIFICATIONS
WALL PENETRATING SEALS**

Minimum Requirements:

- Seals shall be the modular, mechanical type, consisting of a series of interlocking, molded synthetic rubber links with pressure plates and corrosion resistant nuts and bolts.
- Rubber links shall be shaped to continuously fill the annular space between the pipe and wall or casing opening.
- Shall be designed to provide a hydrostatic seal, rated to 20 psi minimum , between the pipe and wall penetration.
- The link material shall be EPDM.
- The nuts and bolts material shall be stainless steel (Type 304 minimum).
- The pressure plate material shall be reinforced plastic.
- Seals shall be sized and selected per the manufacturer recommendations.



PRE-APPROVED MANUFACTURERS:

- PSI (Thunderline/Link Seal, S-316)
- ADVANCED PRODUCTS & SYSTEMS, INC. (Innerlynx, S-316)
- METRAFLEX (Metraseal, ES)

Date: January 23, 2013
Date Last Issued: June 29, 2011
Date First Issued: June 29, 2011
Standard Detail: 313

Sheet Number 7.11



**Water & Wastewater Services
Engineering Division**
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**PRODUCT SPECIFICATIONS
COATING FOR EXTERNAL
DUCTILE IRON PIPE AND NON-
WET CONCRETE SURFACES**

Minimum Requirements:

- Composition shall be 100% solids polyamine epoxy and provide resistance against the corrosion caused by hydrogen sulfide found in wastewater.
- Coating color shall be beige.
- Coating shall be suitable for application in confined spaces.

Note:

- Surface preparations, priming, and application shall be in accordance with the more stringent of the manufacturers recommendations or the WWS specifications.

PRE-APPROVED MANUFACTURERS:

- TNEMEC PERMA-GLAZE 435
(In extreme wastewater environments, prime non-concrete surfaces with Series 218 Mortarclad)

Date: January 23, 2013
Date Last Issued: June 23, 2010
Date First Issued: June 23, 2010
Standard Detail: WWS Lift Station Details

Sheet Number 8.1



**Water & Wastewater Services
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PRODUCT SPECIFICATIONS

MANHOLE CHIMNEY SEALS

Minimum Requirements:

- Shall use a heat shrinkable wraparound sleeve to create a barrier to water infiltration and protect the structure from ground moisture.
- Shall provide for a water tight seal between the cone and cover.
- Shall bond to primed concrete and metal surfaces.
- Shall have a 40% minimum shrink factor.
- Maximum water absorption shall be .05% per ASTM D570 (Standard Test Method for Water Absorption of Plastics), latest revision.
- Adhesive shall be heat activated.

Note:

- Alternative systems will be considered on a case-by-case basis.



PRE-APPROVED MANUFACTURERS:

- WRAPIDSEAL

Date: January 23, 2013

Date Last Issued: June 23, 2010

Date First Issued: June 23, 2010

Standard Detail:

Sheet Number

8.2



**Water & Wastewater Services
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PRODUCT SPECIFICATIONS

**WETWELL, VALVE PIT, &
MANHOLE COATINGS**

Minimum Requirements:

- Coating shall meet or exceed the latest revisions of ASTM C78, C109, C138, C157, C293, C457, C496, C580, D638, C642, D695, C666, C882, C1202, D2240, and D4541, as applicable.
- Shall provide resistance against the corrosion caused by hydrogen sulfide found in wastewater as well as other industrial chemicals.
- Shall cure in damp environments.
- Shall be suitable for application in confined spaces.
- Coating levels are defined as follows:

Level I: new or rehabilitated surface, non-corrosive to slightly corrosive environment;

- **Composition:** Coal tar epoxy

Level II: new or rehabilitated surface, corrosive environment (medium—high);

- **Composition:** Cement mortar with abrasion and corrosion-resistant qualities

Level III: new or rehabilitated surface, highly corrosive and abrasive environment;

- **Composition:** 100% solids cyclo-aliphatic amine-cured epoxy coating.
- New or rehabilitated surfaces in areas designated Level III shall be coated with sprayable, high-build, moisture tolerant, chemical resistant, epoxy coating designed to be applied on dry or damp concrete surfaces and yielding a hard, durable, chemical resistant finish to a pH of 1.

Note:

- Application of the coating shall be in accordance with the manufacturer's specification.
- Preparation of the surface shall meet or exceed WWS requirements.
- The coating shall be Level II or Level III in highly corrosive areas, as directed by WWS.



PRE-APPROVED MANUFACTURERS:

LEVEL I

- CARBOLINE 300M

LEVEL II

- SEWPER COAT
- BASF SP15

LEVEL III

- BASF SEWER GUARD HBS 100 EPOXY LINER

Date: January 23, 2013

Date Last Issued: June 23, 2010

Date First Issued: June 23, 2010

Standard Detail: WWS Standard Lift Station
Details, 311, 312, 313

Sheet Number

8.3



**Water & Wastewater Services
Engineering Division**
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PRODUCT SPECIFICATIONS

**WETWELL, VALVE PIT, &
MANHOLE LINERS**

- Shall be approved on a case-by-case basis by the WWS Technical Standards Committee.



PRE-APPROVED MANUFACTURERS:

Date: June 23, 2010
 Date Last Issued: June 23, 2010
 Date First Issued: June 23, 2010
 Standard Detail:

Sheet Number 8.4



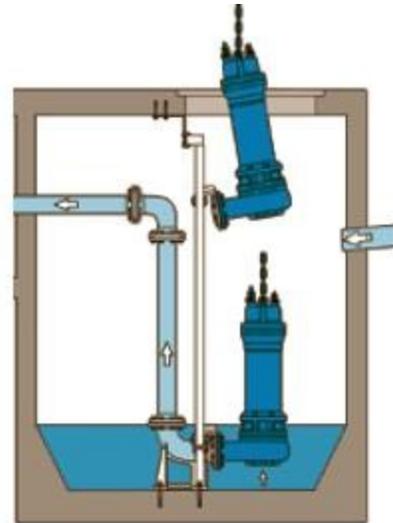
**Water & Wastewater Services
Engineering Division**
2555 West Copans Road
Pompano Beach, Florida
33069
Tel 954-831-0745
FAX 954-831-0798

PRODUCT SPECIFICATIONS

**SUBMERSIBLE WASTEWATER LIFT
STATION PUMPS (3-100 HP)**

Minimum Requirements:

- Shall be Factory Mutual Explosion Proof listed submersible sewage pumps suitable for continuous duty operation underwater without loss of watertight integrity to a minimum depth of 50 feet.
- Pump system design shall include an Ebara/Flygt compatible guide rail system such that the pump will be automatically connected to the discharge piping when lowered into place on the discharge connection. The pump shall be easily removable for inspection or service, requiring no bolts, nuts, or other fasteners to be disconnected, or the need for personnel to enter the wet well.
- The motor and pump shall be designed, manufactured, and assembled by the same manufacturer.
- All major parts of the pumping unit including casing, impeller, suction cover, motor frame and discharge elbow shall be manufactured from gray cast iron, ASTM A48 (latest revision), Class 30 minimum.
- Castings shall have smooth surfaces devoid of blowholes or other casting irregularities.
- Casing design shall be centerline discharge with a large radius on the cutwater to prevent clogging.
- Units shall be furnished with an Ebara/Flygt compatible discharge elbow that has a 125 lb. flat face ANSI flange on the discharge side.
- All exposed bolts and nuts shall be stainless steel (Type 304 minimum).
- All mating surfaces of major components shall be machined and fitted with NBR O-rings where watertight sealing is required.
- Machining and fitting shall be such that sealing is accomplished by automatic compression of O-rings in two planes and O-ring contact is made on four surfaces without the requirement of specific torque limits.
- Internal and external surfaces are prepared to SPPC-VISI-SP -3-63 (latest revision) then coated with a zinc-chromate primer.
- The external surfaces are then coated with a coal tar epoxy specifically designed for use in wastewater applications.
- The impellers shall be single or multi-vane, semi-open or enclosed design.
- Pumps shall be capable of passing intact hard spheres of at least 3 inches in diameter. Pump suction and discharge openings shall be at least 4 inches in diameter .
- The impellers shall be dynamically balanced and shall be designed for solids handling with a long thru let without acute turns.
- The inlet edge of the impeller vanes shall be angled toward the impeller periphery.
- The impeller design shall include back pump out vanes.
- A lip seal shall be located behind the impeller hub.
- The design shall include a replaceable cast iron wear ring/plate.
- The wear ring shall be designed such that it may be adjusted to maintain working clearances and hydraulic efficiencies.



PRE-APPROVED MANUFACTURERS:

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Standard Detail: See Next Page

Sheet Number

9.1



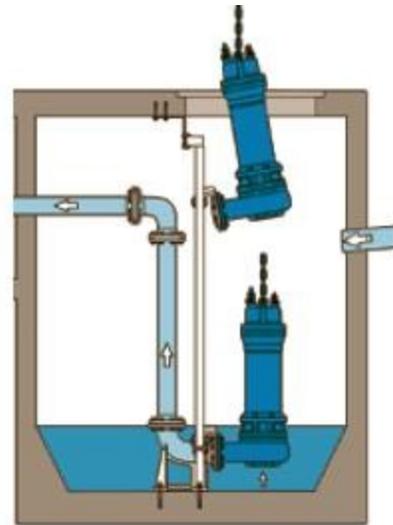
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PRODUCT SPECIFICATIONS

**SUBMERSIBLE WASTEWATER LIFT
STATION PUMPS (3-100 HP)**

Minimum Requirements (Cont'd):

- The manufacturer shall offer vortex impellers on pumps 3 to 30 HP as a standard option.
- The design shall include replaceable shoe adapter plates that are not cast as part of the pump assembly.
- There shall be a replaceable rubber gasket interface between the base elbow and pump discharge for pumps under 50 HP. Pumps larger than 50 HP shall have a replaceable wear plate.
- Pumps shall be designed to include a double mechanical seal in a cartridge mounted or tandem arrangement.
- Each seal shall be positively driven and act independently with its own spring system.
- The oil filled seal chamber shall be designed to prevent over-filling and include an anti-vortexing vane to insure proper lubrication of both seal faces.
- Lower face materials shall be silicon carbide, upper faces carbon vs. ceramic, NBR elastomers, and stainless steel (Type 304 minimum) hardware.
- Seal system shall not rely on pumping medium for lubrication.
- The pump motor shall be an air filled induction type with a squirrel cage rotor, shell type design, built to NEMA MG-1 (latest revision), Design B specifications.
- The motor shall be rated by Factory Mutual as Explosion Proof and suitable for operation in Class 1, Division 1, Groups C & D environments. Ratings by other agencies are not acceptable and will not be considered.
- The pump motor will be furnished with a large lifting bail constructed of stainless steel (Type 304 minimum). Lifting rings are not acceptable. The bail shall not be an integral part of any other pump casting/housing. The bail shall be replaceable.
- The lifting bails must provide proper balance to the pump so that it is tilted to properly engage the guide rail system and base elbow.
- 3 HP through 60 HP models shall be capable of operating on 208, 230 or 460 volts without requiring a special stator.
- 75 HP and larger shall operate on 460 volts.
- Stator windings shall be copper, insulated with moisture resistant Class F insulation, rated for 311°F minimum.
- The stator shall be dipped and baked in minimum Class F varnish and heat shrunk fitted into the stator housing.
- Rotor bars and short circuit rings shall be manufactured of cast aluminum.
- Motor shaft shall be one piece stainless steel (Type 304 minimum) rotating on two permanently grease lubricated ball bearings designed for a minimum L-10 life of 60,000 hours.
- On pumps 3 to 60 HP the motor service factor shall be 1.15 minimum rated for a maximum of 10 starts per hour.
- Pumps 75 HP and larger shall have a 1.10 minimum motor service factor rated for a maximum of 10 starts per hour.
- The motor shall be designed for intermittent pumping in a dry environment or at a maximum sump temperature of 120°F.
- Voltage and frequency tolerances shall be a maximum 10 / 5% respectively.



PRE-APPROVED MANUFACTURERS:

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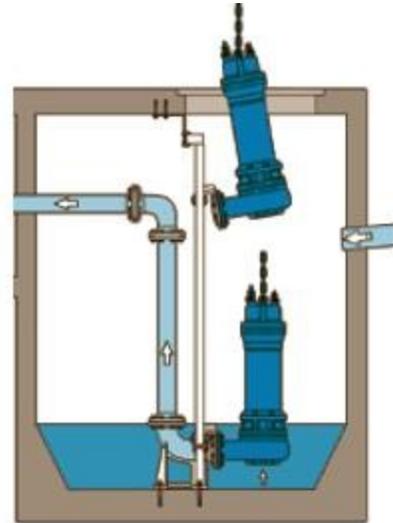
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PRODUCT SPECIFICATIONS

**SUBMERSIBLE WASTEWATER LIFT
STATION PUMPS (3-100 HP)**

Minimum Requirements (Cont'd):

- Motor over temperature protection shall be provided by three (3) thermal protectors (klixons) embedded in the windings.
- The (3) klixons shall be normally closed and embedded, one in each of the three phases. The klixons shall be wired in series.
- A system to detect mechanical seal failure shall be provided.
- Motors 75 HP and larger shall be capable of being furnished with an integral cooling jacket.
- Power cable jacket shall be manufactured of an oil resistant chloroprene rubber material designed for submerged applications.
- The cable entry seal shall be watertight to a depth of 50 feet.
- The cable entry system shall be the same for both the power and control cables. The power and sensor cable furnished must be a minimum of 60' long.
- The pump design shall include an Ebara/Flygt compatible discharge flange suitable for guiding the pump on two stainless steel (Type 304 minimum) schedule 40 guide rails sized to mount directly to a base elbow at the floor of the wet well and to a stainless steel (Type 304 minimum) guide rail bracket at the top of the wet well below the hatch opening. Guide cables are not an acceptable substitute for guide rails.
- The proposed pump guide rail system shall be fully compatible and interchangeable with systems currently installed and in use in the WWS system : a) pumps 3 HP to 30 HP will use 2 inch schedule 40 stainless steel (Type 304 minimum) double guide rails, and b) pumps 40 HP and larger will use 3 inch schedule 40 stainless steel (Type 304 minimum) double guide rails.
- The Ebara/Flygt compatible base elbow shall be manufactured of cast iron, ASTM A48 Class 30 minimum.
- The base elbow shall be designed to adequately support the guide rails, discharge piping, and pumping unit under both static and dynamic loading conditions with support legs that are suitable for anchoring it to the wet well floor. The entire weight of the pump unit shall be guided to and wedged tightly against the inlet flange of the base elbow.
- The face of the inlet base elbow flange shall be perpendicular to the floor of the wet well.
- The discharge flange of the base elbow shall meet ANSI B16.1 (latest revision) Class 125.
- The pump design shall include a self-aligning sliding bracket.
- Sealing of the pumping unit to the base elbow shall be accomplished by a single, linear, downward motion of the pump.
- The motor junction area shall use either rings eyes or a terminal board to connect the power cables to the stator leads.



PRE-APPROVED MANUFACTURERS:

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

Sheet Number 9.1(Cont'd)



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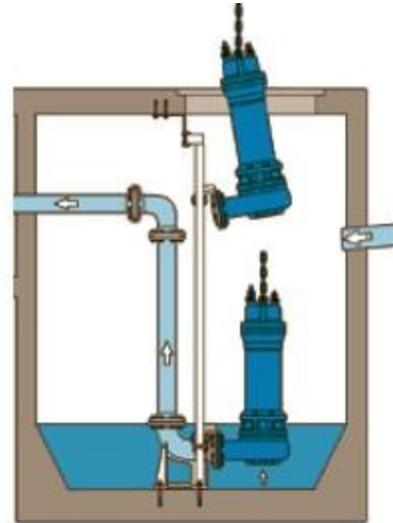
PRODUCT SPECIFICATIONS

**SUBMERSIBLE WASTEWATER LIFT
STATION PUMPS (3-100 HP)**

Minimum Requirements (Cont'd):

- The pump design will provide for being not submerged a distance equal to half the height of the pump during each pump down cycle.
- WWS uses 15 standard pump curves shown below. A manufacturer's trimmed or untrimmed impeller pump curve must be within 15% of the required flow at the required head for the left and right points and within 7% of the required flow at the required head for the mid point for the manufacturer's pump to meet WWS minimum requirements for that standard curve. It is expected that one manufacturer may not be able to meet minimum standard curve requirements for all curves.
- All pumps will be supplied with the impellers that meets WWS standard curve requirements, except for pumps for curves numbers 14 and 15. Curve 14 and 15 pump impellers may be further trimmed to meet specific design parameters.

Curve	Left Point	Mid Point	Right Point
1	129 gpm @ 29 ft.	234 gpm @ 24 ft.	382 gpm @ 16 ft.
2	74 gpm @ 47 ft.	156 gpm @ 40 ft.	324 gpm @ 27 ft.
3	225 gpm @ 44 ft.	375 gpm @ 36 ft.	580 gpm @ 23 ft.
4	127 gpm @ 57 ft.	268 gpm @ 47 ft.	457 gpm @ 36 ft.
5	265 gpm @ 49 ft.	565 gpm @ 39 ft.	910 gpm @ 27 ft.
6	191 gpm @ 65 ft.	407 gpm @ 54 ft.	621 gpm @ 40 ft.
7	401 gpm @ 70 ft.	674 gpm @ 54 ft.	974 gpm @ 34 ft.
8	282 gpm @ 84 ft.	402 gpm @ 74 ft.	641 gpm @ 56 ft.
9	182 gpm @ 104 ft.	367 gpm @ 87 ft.	600 gpm @ 66 ft.
10	340 gpm @ 81 ft.	650 gpm @ 66 ft.	970 gpm @ 50 ft.
11	240 gpm @ 107 ft.	400 gpm @ 97 ft.	625 gpm @ 76 ft.
12	220 gpm @ 123 ft.	491 gpm @ 104 ft.	859 gpm @ 78 ft.
13	501 gpm @ 90 ft.	953 gpm @ 73 ft.	1494 gpm @ 50 ft.
14	470 gpm @ 122 ft.	855 gpm @ 102 ft.	1340 gpm @ 73 ft.
15	670 gpm @ 140 ft.	1030 gpm @ 119 ft.	1555 gpm @ 87 ft.



PRE-APPROVED MANUFACTURERS:

- EBARA*
- FLYGT*
- HOMA*

* Not approved for all standard pump curves. Use requires shop drawing approval by Engineer of Record and WWS project manager for each lift (pumping) station. Shop drawings to detail hydraulic performance only.

Date: July 10, 2013
 Date Last Issued: January 23, 2013
 Date First Issued: June 23, 2010
 Standard Detail: WWS Standard Lift Station
 Details

Sheet Number 9.1(Cont'd)

**CITY OF FORT LAUDERDALE
GENERAL CONDITIONS**

These instructions are standard for all contracts for commodities or services issued through the City of Fort Lauderdale Procurement Services Division. The City may delete, supersede, or modify any of these standard instructions for a particular contract by indicating such change in the Invitation to Bid (ITB) Special Conditions, Technical Specifications, Instructions, Proposal Pages, Addenda, and Legal Advertisement. In this general conditions document, Invitation to Bid (ITB), Request for Qualifications (RFQ), and Request for Proposal (RFP) are interchangeable.

PART I BIDDER PROPOSAL PAGE(S) CONDITIONS:

- 1.01 BIDDER ADDRESS:** The City maintains automated vendor address lists that have been generated for each specific Commodity Class item through our bid issuing service, BidSync. Notices of Invitations to Bid (ITB'S) are sent by e-mail to the selection of bidders who have fully registered with BidSync or faxed (if applicable) to every vendor on those lists, who may then view the bid documents online. Bidders who have been informed of a bid's availability in any other manner are responsible for registering with BidSync in order to view the bid documents. There is no fee for doing so. If you wish bid notifications be provided to another e-mail address or fax, please contact BidSync. If you wish purchase orders sent to a different address, please so indicate in your bid response. If you wish payments sent to a different address, please so indicate on your invoice.
- 1.02 DELIVERY:** Time will be of the essence for any orders placed as a result of this ITB. The City reserves the right to cancel any orders, or part thereof, without obligation if delivery is not made in accordance with the schedule specified by the Bidder and accepted by the City.
- 1.03 PACKING SLIPS:** It will be the responsibility of the awarded Contractor, to attach all packing slips to the OUTSIDE of each shipment. Packing slips must provide a detailed description of what is to be received and reference the City of Fort Lauderdale purchase order number that is associated with the shipment. Failure to provide a detailed packing slip attached to the outside of shipment may result in refusal of shipment at Contractor's expense.
- 1.04 PAYMENT TERMS AND CASH DISCOUNTS:** Payment terms, unless otherwise stated in this ITB, will be considered to be net 45 days after the date of satisfactory delivery at the place of acceptance and receipt of correct invoice at the office specified, whichever occurs last. Bidder may offer cash discounts for prompt payment but they will not be considered in determination of award. If a Bidder offers a discount, it is understood that the discount time will be computed from the date of satisfactory delivery, at the place of acceptance, and receipt of correct invoice, at the office specified, whichever occurs last.
- 1.05 TOTAL BID DISCOUNT:** If Bidder offers a discount for award of all items listed in the bid, such discount shall be deducted from the total of the firm net unit prices bid and shall be considered in tabulation and award of bid.
- 1.06 BIDS FIRM FOR ACCEPTANCE:** Bidder warrants, by virtue of bidding, that the bid and the prices quoted in the bid will be firm for acceptance by the City for a period of one hundred twenty (120) days from the date of bid opening unless otherwise stated in the ITB.
- 1.07 VARIANCES:** For purposes of bid evaluation, Bidder's must indicate any variances, no matter how slight, from ITB General Conditions, Special Conditions, Specifications or Addenda in the space provided in the ITB. No variations or exceptions by a Bidder will be considered or deemed a part of the bid submitted unless such variances or exceptions are listed in the bid and referenced in the space provided on the bidder proposal pages. If variances are not stated, or referenced as required, it will be assumed that the product or service fully complies with the City's terms, conditions, and specifications.
- By receiving a bid, City does not necessarily accept any variances contained in the bid. All variances submitted are subject to review and approval by the City. If any bid contains material variances that, in the City's sole opinion, make that bid conditional in nature, the City reserves the right to reject the bid or part of the bid that is declared, by the City as conditional.
- 1.08 NO BIDS:** If you do not intend to bid please indicate the reason, such as insufficient time to respond, do not offer product or service, unable to meet specifications, schedule would not permit, or any other reason, in the space provided in this ITB. Failure to bid or return no bid comments prior to the bid due and opening date and time, indicated in this ITB, may result in your firm being deleted from our Bidder's registration list for the Commodity Class Item requested in this ITB.
- 1.09 MINORITY AND WOMEN BUSINESS ENTERPRISE PARTICIPATION AND BUSINESS DEFINITIONS:** The City of Fort Lauderdale wants to increase the participation of Minority Business Enterprises (MBE), Women Business Enterprises (WBE), and Small Business Enterprises (SBE) in its procurement activities. If your firm qualifies in accordance with the below definitions please indicate in the space provided in this ITB.

Minority Business Enterprise (MBE) "A Minority Business" is a business enterprise that is owned or controlled by one or more socially or economically disadvantaged persons. Such disadvantage may arise from cultural, racial, chronic economic

115 of 127

circumstances or background or other similar cause. Such persons include, but are not limited to: Blacks, Hispanics, Asian Americans, and Native Americans.

The term "Minority Business Enterprise" means a business at least 51 percent of which is owned by minority group members or, in the case of a publicly owned business, at least 51 percent of the stock of which is owned by minority group members. For the purpose of the preceding sentence, minority group members are citizens of the United States who include, but are not limited to: Blacks, Hispanics, Asian Americans, and Native Americans.

Women Business Enterprise (WBE) a "Women Owned or Controlled Business" is a business enterprise at least 51 percent of which is owned by females or, in the case of a publicly owned business, at least 51 percent of the stock of which is owned by females.

Small Business Enterprise (SBE) "Small Business" means a corporation, partnership, sole proprietorship, or other legal entity formed for the purpose of making a profit, which is independently owned and operated, has either fewer than 100 employees or less than \$1,000,000 in annual gross receipts.

BLACK, which includes persons having origins in any of the Black racial groups of Africa.

WHITE, which includes persons whose origins are Anglo-Saxon and Europeans and persons of Indo-European decent including Pakistani and East Indian.

HISPANIC, which includes persons of Mexican, Puerto Rican, Cuban, Central and South American, or other Spanish culture or origin, regardless of race.

NATIVE AMERICAN, which includes persons whose origins are American Indians, Eskimos, Aleuts, or Native Hawaiians.

ASIAN AMERICAN, which includes persons having origin in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands.

1.10 **MINORITY-WOMEN BUSINESS ENTERPRISE PARTICIPATION**

It is the desire of the City of Fort Lauderdale to increase the participation of minority (MBE) and women-owned (WBE) businesses in its contracting and procurement programs. While the City does not have any preference or set aside programs in place, it is committed to a policy of equitable participation for these firms. Proposers are requested to include in their proposals a narrative describing their past accomplishments and intended actions in this area. If proposers are considering minority or women owned enterprise participation in their proposal, those firms, and their specific duties have to be identified in the proposal. If a proposer is considered for award, he or she will be asked to meet with City staff so that the intended MBE/WBE participation can be formalized and included in the subsequent contract.

1.11 **SCRUTINIZED COMPANIES**

Subject to *Odebrecht Construction, Inc., v. Prasad*, 876 F.Supp.2d 1305 (S.D. Fla. 2012), *affirmed*, *Odebrecht Construction, Inc., v. Secretary, Florida Department of Transportation*, 715 F.3d 1268 (11th Cir. 2013), with regard to the "Cuba Amendment," the Contractor certifies that it is not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List or the Scrutinized Companies that Boycott Israel List created pursuant to Section 215.4725, Florida Statutes (2016), that it is not engaged in a boycott of Israel, and that it does not have business operations in Cuba or Syria, as provided in section 287.135, Florida Statutes (2016), as may be amended or revised. The City may terminate this Agreement at the City's option if the Contractor is found to have submitted a false certification as provided under subsection (5) of section 287.135, Florida Statutes (2016), as may be amended or revised, or been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List or the Scrutinized Companies that Boycott Israel List created pursuant to Section 215.4725, Florida Statutes (2016), or is engaged in a boycott of Israel or has been engaged in business operations in Cuba or Syria, as defined in Section 287.135, Florida Statutes (2016), as may be amended or revised.

1.12 **DEBARRED OR SUSPENDED BIDDERS OR PROPOSERS**

The bidder or proposer certifies, by submission of a response to this solicitation, that neither it nor its principals and subcontractors are presently debarred or suspended by any Federal department or agency.

Part II DEFINITIONS/ORDER OF PRECEDENCE:

- 2.01 BIDDING DEFINITIONS** The City will use the following definitions in its general conditions, special conditions, technical specifications, instructions to bidders, addenda and any other document used in the bidding process:
INVITATION TO BID (ITB) when the City is requesting bids from qualified Bidders.

116 of 127

REQUEST FOR PROPOSALS (RFP) when the City is requesting proposals from qualified Proposers.

REQUEST FOR QUALIFICATIONS (RFQ) when the City is requesting qualifications from qualified Proposers.

BID – a price and terms quote received in response to an ITB.

PROPOSAL – a proposal received in response to an RFP.

BIDDER – Person or firm submitting a Bid.

PROPOSER – Person or firm submitting a Proposal.

RESPONSIVE BIDDER – A person whose bid conforms in all material respects to the terms and conditions included in the ITB.

RESPONSIBLE BIDDER – A person who has the capability in all respects to perform in full the contract requirements, as stated in the ITB, and the integrity and reliability that will assure good faith performance.

FIRST RANKED PROPOSER – That Proposer, responding to a City RFP, whose Proposal is deemed by the City, the most advantageous to the City after applying the evaluation criteria contained in the RFP.

SELLER – Successful Bidder or Proposer who is awarded a Purchase Order or Contract to provide goods or services to the City.

CONTRACTOR – Successful Bidder or Proposer who is awarded a Purchase Order, award Contract, Blanket Purchase Order agreement, or Term Contract to provide goods or services to the City.

CONTRACT – A deliberate verbal or written agreement between two or more competent parties to perform or not to perform a certain act or acts, including all types of agreements, regardless of what they may be called, for the procurement or disposal of equipment, materials, supplies, services or construction.

CONSULTANT – Successful Bidder or Proposer who is awarded a contract to provide professional services to the City.

The following terms may be used interchangeably by the City: ITB and/or RFP; Bid or Proposal; Bidder, Proposer, or Seller; Contractor or Consultant; Contract, Award, Agreement or Purchase Order.

- 2.02 SPECIAL CONDITIONS:** Any and all Special Conditions contained in this ITB that may be in variance or conflict with these General Conditions shall have precedence over these General Conditions. If no changes or deletions to General Conditions are made in the Special Conditions, then the General Conditions shall prevail in their entirety,

PART III BIDDING AND AWARD PROCEDURES:

- 3.01 SUBMISSION AND RECEIPT OF BIDS:** To receive consideration, bids must be received prior to the bid opening date and time. Unless otherwise specified, Bidders should use the proposal forms provided by the City. These forms may be duplicated, but failure to use the forms may cause the bid to be rejected. Any erasures or corrections on the bid must be made in ink and initialed by Bidder in ink. All information submitted by the Bidder shall be printed, typewritten or filled in with pen and ink. Bids shall be signed in ink. Separate bids must be submitted for each ITB issued by the City in separate sealed envelopes properly marked. When a particular ITB or RFP requires multiple copies of bids or proposals they may be included in a single envelope or package properly sealed and identified. Only send bids via facsimile transmission (FAX) if the ITB specifically states that bids sent via FAX will be considered. If such a statement is not included in the ITB, bids sent via FAX will be rejected. Bids will be publicly opened in the Procurement Office, or other designated area, in the presence of Bidders, the public, and City staff. Bidders and the public are invited and encouraged to attend bid openings. Bids will be tabulated and made available for review by Bidder's and the public in accordance with applicable regulations.
- 3.02 MODEL NUMBER CORRECTIONS:** If the model number for the make specified in this ITB is incorrect, or no longer available and replaced with an updated model with new specifications, the Bidder shall enter the correct model number on the bidder proposal page. In the case of an updated model with new specifications, Bidder shall provide adequate information to allow the City to determine if the model bid meets the City's requirements.
- 3.03 PRICES QUOTED:** Deduct trade discounts, and quote firm net prices. Give both unit price and extended total. In the case of a discrepancy in computing the amount of the bid, the unit price quoted will govern. All prices quoted shall be F.O.B. destination, freight prepaid (Bidder pays and bears freight charges, Bidder owns goods in transit and files any claims), unless otherwise stated in Special Conditions. Each item must be bid separately. No attempt shall be made to tie any item or items contained in the ITB with any other business with the City.
- 3.04 TAXES:** The City of Fort Lauderdale is exempt from Federal Excise and Florida Sales taxes on direct purchase of tangible property. Exemption **number for EIN is 59-6000319, and State Sales tax exemption number is 85-8013875578C-1.**
- 3.05 WARRANTIES OF USAGE:** Any quantities listed in this ITB as estimated or projected are provided for tabulation and information purposes only. No warranty or guarantee of quantities is given or implied. It is understood that the Contractor will furnish the City's needs as they arise.
- 3.06 APPROVED EQUAL:** When the technical specifications call for a brand name, manufacturer, make, model, or vendor catalog number with acceptance of APPROVED EQUAL, it shall be for the purpose of establishing a level of quality and features desired and acceptable to the City. In such cases, the City will be receptive to any unit that would be considered by qualified City personnel as an approved equal. In that the specified make and model represent a level of quality and features desired by the City, the Bidder must state clearly in the bid any variance from those specifications. It is the Bidder's responsibility to provide adequate information, in the bid, to enable the City to ensure that the bid meets the required criteria. If adequate information is not submitted with the bid, it may be rejected. The City will be the sole judge in determining if the item bid qualifies as an approved equal.

117 of 127

- 3.07 MINIMUM AND MANDATORY TECHNICAL SPECIFICATIONS:** The technical specifications may include items that are considered minimum, mandatory, or required. If any Bidder is unable to meet or exceed these items, and feels that the technical specifications are overly restrictive, the bidder must notify the Procurement Services Division immediately. Such notification must be received by the Procurement Services Division prior to the deadline contained in the ITB, for questions of a material nature, or prior to five (5) days before bid due and open date, whichever occurs first. If no such notification is received prior to that deadline, the City will consider the technical specifications to be acceptable to all bidders.
- 3.08 MISTAKES:** Bidders are cautioned to examine all terms, conditions, specifications, drawings, exhibits, addenda, delivery instructions and special conditions pertaining to the ITB. Failure of the Bidder to examine all pertinent documents shall not entitle the bidder to any relief from the conditions imposed in the contract.
- 3.09 SAMPLES AND DEMONSTRATIONS:** Samples or inspection of product may be requested to determine suitability. Unless otherwise specified in Special Conditions, samples shall be requested after the date of bid opening, and if requested should be received by the City within seven (7) working days of request. Samples, when requested, must be furnished free of expense to the City and if not used in testing or destroyed, will upon request of the Bidder, be returned within thirty (30) days of bid award at Bidder's expense. When required, the City may request full demonstrations of units prior to award. When such demonstrations are requested, the Bidder shall respond promptly and arrange a demonstration at a convenient location. Failure to provide samples or demonstrations as specified by the City may result in rejection of a bid.
- 3.10 LIFE CYCLE COSTING:** If so specified in the ITB, the City may elect to evaluate equipment proposed on the basis of total cost of ownership. In using Life Cycle Costing, factors such as the following may be considered: estimated useful life, maintenance costs, cost of supplies, labor intensity, energy usage, environmental impact, and residual value. The City reserves the right to use those or other applicable criteria, in its sole opinion that will most accurately estimate total cost of use and ownership.
- 3.11 BIDDING ITEMS WITH RECYCLED CONTENT:** In addressing environmental concerns, the City of Fort Lauderdale encourages Bidders to submit bids or alternate bids containing items with recycled content. When submitting bids containing items with recycled content, Bidder shall provide documentation adequate for the City to verify the recycled content. The City prefers packaging consisting of materials that are degradable or able to be recycled. When specifically stated in the ITB, the City may give preference to bids containing items manufactured with recycled material or packaging that is able to be recycled.
- 3.12 USE OF OTHER GOVERNMENTAL CONTRACTS:** The City reserves the right to reject any part or all of any bids received and utilize other available governmental contracts, if such action is in its best interest.
- 3.13 QUALIFICATIONS/INSPECTION:** Bids will only be considered from firms normally engaged in providing the types of commodities/services specified herein. The City reserves the right to inspect the Bidder's facilities, equipment, personnel, and organization at any time, or to take any other action necessary to determine Bidder's ability to perform. The Procurement Director reserves the right to reject bids where evidence or evaluation is determined to indicate inability to perform.
- 3.14 BID SURETY:** If Special Conditions require a bid security, it shall be submitted in the amount stated. A bid security can be in the form of a bid bond or cashier's check. Bid security will be returned to the unsuccessful bidders as soon as practicable after opening of bids. Bid security will be returned to the successful bidder after acceptance of the performance bond, if required; acceptance of insurance coverage, if required; and full execution of contract documents, if required; or conditions as stated in Special Conditions.
- 3.15 PUBLIC RECORDS/TRADE SECRETS/COPYRIGHT:** The Proposer's response to the RFP is a public record pursuant to Florida law, which is subject to disclosure by the City under the State of Florida Public Records Law, Florida Statutes Chapter 119.07 ("Public Records Law"). The City shall permit public access to all documents, papers, letters or other material submitted in connection with this RFP and the Contract to be executed for this RFP, subject to the provisions of Chapter 119.07 of the Florida Statutes.

Any language contained in the Proposer's response to the RFP purporting to require confidentiality of any portion of the Proposer's response to the RFP, except to the extent that certain information is in the City's opinion a Trade Secret pursuant to Florida law, shall be void. If a Proposer submits any documents or other information to the City which the Proposer claims is Trade Secret information and exempt from Florida Statutes Chapter 119.07 ("Public Records Laws"), the Proposer shall clearly designate that it is a Trade Secret and that it is asserting that the document or information is exempt. The Proposer must specifically identify the exemption being claimed under Florida Statutes 119.07. The City shall be the final arbiter of whether any information contained in the Proposer's response to the RFP constitutes a Trade Secret. The city's determination of whether an exemption applies shall be final, and the proposer agrees to defend, indemnify, and hold harmless the city and the city's officers, employees, and agent, against any loss or damages incurred by any person or entity as a result of the city's treatment of records as public records. Proposals purporting to be subject to copyright protection in full or in part will be rejected.

EXCEPT FOR CLEARLY MARKED PORTIONS THAT ARE BONA FIDE TRADE SECRETS PURSUANT TO FLORIDA LAW, DO NOT MARK YOUR RESPONSE TO THE RFP AS PROPRIETARY OR CONFIDENTIAL. DO NOT MARK YOUR RESPONSE TO THE RFP OR ANY PART THEREOF AS COPYRIGHTED.

- 3.16 PROHIBITION OF INTEREST:** No contract will be awarded to a bidding firm who has City elected officials, officers or

118 of 127

employees affiliated with it, unless the bidding firm has fully complied with current Florida State Statutes and City Ordinances relating to this issue. Bidders must disclose any such affiliation. Failure to disclose any such affiliation will result in disqualification of the Bidder and removal of the Bidder from the City's bidder lists and prohibition from engaging in any business with the City.

- 3.17 RESERVATIONS FOR AWARD AND REJECTION OF BIDS:** The City reserves the right to accept or reject any or all bids, part of bids, and to waive minor irregularities or variations to specifications contained in bids, and minor irregularities in the bidding process. The City also reserves the right to award the contract on a split order basis, lump sum basis, individual item basis, or such combination as shall best serve the interest of the City. The City reserves the right to make an award to the responsive and responsible bidder whose product or service meets the terms, conditions, and specifications of the ITB and whose bid is considered to best serve the City's interest. In determining the responsiveness of the offer and the responsibility of the Bidder, the following shall be considered when applicable: the ability, capacity and skill of the Bidder to perform as required; whether the Bidder can perform promptly, or within the time specified, without delay or interference; the character, integrity, reputation, judgment, experience and efficiency of the Bidder; the quality of past performance by the Bidder; the previous and existing compliance by the Bidder with related laws and ordinances; the sufficiency of the Bidder's financial resources; the availability, quality and adaptability of the Bidder's supplies or services to the required use; the ability of the Bidder to provide future maintenance, service or parts; the number and scope of conditions attached to the bid.

If the ITB provides for a contract trial period, the City reserves the right, in the event the selected bidder does not perform satisfactorily, to award a trial period to the next ranked bidder or to award a contract to the next ranked bidder, if that bidder has successfully provided services to the City in the past. This procedure to continue until a bidder is selected or the contract is re-bid, at the sole option of the City.

- 3.18 LEGAL REQUIREMENTS:** Applicable provisions of all federal, state, county laws, and local ordinances, rules and regulations, shall govern development, submittal and evaluation of all bids received in response hereto and shall govern any and all claims and disputes which may arise between person(s) submitting a bid response hereto and the City by and through its officers, employees and authorized representatives, or any other person, natural or otherwise; and lack of knowledge by any bidder shall not constitute a cognizable defense against the legal effect thereof.

- 3.19 BID PROTEST PROCEDURE: ANY PROPOSER OR BIDDER WHO IS NOT RECOMMENDED FOR AWARD OF A CONTRACT AND WHO ALLEGES A FAILURE BY THE CITY TO FOLLOW THE CITY'S PROCUREMENT ORDINANCE OR ANY APPLICABLE LAW MAY PROTEST TO THE DIRECTOR OF PROCUREMENT SERVICES DIVISION (DIRECTOR), BY DELIVERING A LETTER OF PROTEST TO THE DIRECTOR WITHIN FIVE (5) DAYS AFTER A NOTICE OF INTENT TO AWARD IS POSTED ON THE CITY'S WEB SITE AT THE FOLLOWING LINK:**
http://www.fortlauderdale.gov/purchasing/notices_of_intent.htm

THE COMPLETE PROTEST ORDINANCE MAY BE FOUND ON THE CITY'S WEB SITE AT THE FOLLOWING LINK:
<http://www.fortlauderdale.gov/purchasing/protestordinance.pdf>

PART IV BONDS AND INSURANCE

- 4.01 PERFORMANCE BOND:** If a performance bond is required in Special Conditions, the Contractor shall within fifteen (15) working days after notification of award, furnish to the City a Performance Bond, payable to the City of Fort Lauderdale, Florida, in the face amount specified in Special Conditions as surety for faithful performance under the terms and conditions of the contract. If the bond is on an annual coverage basis, renewal for each succeeding year shall be submitted to the City thirty (30) days prior to the termination date of the existing Performance Bond. The Performance Bond must be executed by a surety company of recognized standing, authorized to do business in the State of Florida and having a resident agent.

Acknowledgement and agreement is given by both parties that the amount herein set for the Performance Bond is not intended to be nor shall be deemed to be in the nature of liquidated damages nor is it intended to limit the liability of the Contractor to the City in the event of a material breach of this Agreement by the Contractor.

- 4.02 INSURANCE:** If the Contractor is required to go on to City property to perform work or services as a result of ITB award, the Contractor shall assume full responsibility and expense to obtain all necessary insurance as required by City or specified in Special Conditions.

The Contractor shall provide to the Procurement Services Division original certificates of coverage and receive notification of approval of those certificates by the City's Risk Manager prior to engaging in any activities under this contract. The Contractor's insurance is subject to the approval of the City's Risk Manager. The certificates must list the City as an ADDITIONAL INSURED for General Liability Insurance, and shall have no less than thirty (30) days written notice of cancellation or material change. Further modification of the insurance requirements may be made at the sole discretion of the City's Risk Manager if circumstances change or adequate protection of the City is not presented. Bidder, by submitting the bid, agrees to abide by such modifications.

PART V PURCHASE ORDER AND CONTRACT TERMS:

- 5.01 COMPLIANCE TO SPECIFICATIONS, LATE DELIVERIES/PENALTIES:** Items offered may be tested for compliance to bid

119 of 127

specifications. Items delivered which do not conform to bid specifications may be rejected and returned at Contractor's expense. Any violation resulting in contract termination for cause or delivery of items not conforming to specifications, or late delivery may also result in:

- Bidders name being removed from the City's bidder's mailing list for a specified period and Bidder will not be recommended for any award during that period.
- All City Departments being advised to refrain from doing business with the Bidder.
- All other remedies in law or equity.

- 5.02 ACCEPTANCE, CONDITION, AND PACKAGING:** The material delivered in response to ITB award shall remain the property of the Seller until a physical inspection is made and the material accepted to the satisfaction of the City. The material must comply fully with the terms of the ITB, be of the required quality, new, and the latest model. All containers shall be suitable for storage and shipment by common carrier, and all prices shall include standard commercial packaging. The City will not accept substitutes of any kind. Any substitutes or material not meeting specifications will be returned at the Bidder's expense. Payment will be made only after City receipt and acceptance of materials or services.
- 5.03 SAFETY STANDARDS:** All manufactured items and fabricated assemblies shall comply with applicable requirements of the Occupation Safety and Health Act of 1970 as amended, and be in compliance with Chapter 442, Florida Statutes. Any toxic substance listed in Section 38F-41.03 of the Florida Administrative Code delivered as a result of this order must be accompanied by a completed Safety Data Sheet (SDS).
- 5.04 ASBESTOS STATEMENT:** All material supplied must be 100% asbestos free. Bidder, by virtue of bidding, certifies that if awarded any portion of the ITB the bidder will supply only material or equipment that is 100% asbestos free.
- 5.05 OTHER GOVERNMENTAL ENTITIES:** If the Bidder is awarded a contract as a result of this ITB, the bidder may, if the bidder has sufficient capacity or quantities available, provide to other governmental agencies, so requesting, the products or services awarded in accordance with the terms and conditions of the ITB and resulting contract. Prices shall be F.O.B. delivered to the requesting agency.
- 5.06 VERBAL INSTRUCTIONS PROCEDURE:** No negotiations, decisions, or actions shall be initiated or executed by the Contractor as a result of any discussions with any City employee. Only those communications which are in writing from an authorized City representative may be considered. Only written communications from Contractors, which are assigned by a person designated as authorized to bind the Contractor, will be recognized by the City as duly authorized expressions on behalf of Contractors.
- 5.07 INDEPENDENT CONTRACTOR:** The Contractor is an independent contractor under this Agreement. Personal services provided by the Proposer shall be by employees of the Contractor and subject to supervision by the Contractor, and not as officers, employees, or agents of the City. Personnel policies, tax responsibilities, social security, health insurance, employee benefits, procurement policies unless otherwise stated in this ITB, and other similar administrative procedures applicable to services rendered under this contract shall be those of the Contractor.
- 5.08 INDEMNITY/HOLD HARMLESS AGREEMENT:** The Contractor agrees to protect, defend, indemnify, and hold harmless the City of Fort Lauderdale and its officers, employees and agents from and against any and all losses, penalties, damages, settlements, claims, costs, charges for other expenses, or liabilities of every and any kind including attorney's fees, in connection with or arising directly or indirectly out of the work agreed to or performed by Contractor under the terms of any agreement that may arise due to the bidding process. Without limiting the foregoing, any and all such claims, suits, or other actions relating to personal injury, death, damage to property, defects in materials or workmanship, actual or alleged violations of any applicable Statute, ordinance, administrative order, rule or regulation, or decree of any court shall be included in the indemnity hereunder.
- 5.09 TERMINATION FOR CAUSE:** If, through any cause, the Contractor shall fail to fulfill in a timely and proper manner its obligations under this Agreement, or if the Contractor shall violate any of the provisions of this Agreement, the City may upon written notice to the Contractor terminate the right of the Contractor to proceed under this Agreement, or with such part or parts of the Agreement as to which there has been default, and may hold the Contractor liable for any damages caused to the City by reason of such default and termination. In the event of such termination, any completed services performed by the Contractor under this Agreement shall, at the option of the City, become the City's property and the Contractor shall be entitled to receive equitable compensation for any work completed to the satisfaction of the City. The Contractor, however, shall not be relieved of liability to the City for damages sustained by the City by reason of any breach of the Agreement by the Contractor, and the City may withhold any payments to the Contractor for the purpose of setoff until such time as the amount of damages due to the City from the Contractor can be determined.
- 5.10 TERMINATION FOR CONVENIENCE:** The City reserves the right, in its best interest as determined by the City, to cancel contract by giving written notice to the Contractor thirty (30) days prior to the effective date of such cancellation.
- 5.11 CANCELLATION FOR UNAPPROPRIATED FUNDS:** The obligation of the City for payment to a Contractor is limited to the availability of funds appropriated in a current fiscal period, and continuation of the contract into a subsequent fiscal period is subject to appropriation of funds, unless otherwise authorized by law.
- 5.12 RECORDS/AUDIT:** The Contractor shall maintain during the term of the contract all books of account, reports and records in

120 of 127

accordance with generally accepted accounting practices and standards for records directly related to this contract. The Contractor agrees to make available to the City Auditor or designee, during normal business hours and in Broward, Miami-Dade or Palm Beach Counties, all books of account, reports and records relating to this contract should be retained for the duration of the contract and for three years after the final payment under this Agreement, or until all pending audits, investigations or litigation matters relating to the contract are closed, whichever is later.

- 5.13 PERMITS, TAXES, LICENSES:** The successful Contractor shall, at their own expense, obtain all necessary permits, pay all licenses, fees and taxes, required to comply with all local ordinances, state and federal laws, rules and regulations applicable to business to be carried out under this contract.
- 5.14 LAWS/ORDINANCES:** The Contractor shall observe and comply with all Federal, state, local and municipal laws, ordinances rules and regulations that would apply to this contract.
- 5.15 NON-DISCRIMINATION:** There shall be no discrimination as to race, sex, color, creed, age or national origin in the operations conducted under this contract.
- 5.16 UNUSUAL CIRCUMSTANCES:** If during a contract term where costs to the City are to remain firm or adjustments are restricted by a percentage or CPI cap, unusual circumstances that could not have been foreseen by either party of the contract occur, and those circumstances significantly affect the Contractor's cost in providing the required prior items or services, then the Contractor may request adjustments to the costs to the City to reflect the changed circumstances. The circumstances must be beyond the control of the Contractor, and the requested adjustments must be fully documented. The City may, after examination, refuse to accept the adjusted costs if they are not properly documented, increases are considered to be excessive, or decreases are considered to be insufficient. In the event the City does not wish to accept the adjusted costs and the matter cannot be resolved to the satisfaction of the City, the City will reserve the following options:
1. The contract can be canceled by the City upon giving thirty (30) days written notice to the Contractor with no penalty to the City or Contractor. The Contractor shall fill all City requirements submitted to the Contractor until the termination date contained in the notice.
 2. The City requires the Contractor to continue to provide the items and services at the firm fixed (non-adjusted) cost until the termination of the contract term then in effect.
 3. If the City, in its interest and in its sole opinion, determines that the Contractor in a capricious manner attempted to use this section of the contract to relieve them of a legitimate obligation under the contract, and no unusual circumstances had occurred, the City reserves the right to take any and all action under law or equity. Such action shall include, but not be limited to, declaring the Contractor in default and disqualifying him for receiving any business from the City for a stated period of time.
- If the City does agree to adjusted costs, these adjusted costs shall not be invoiced to the City until the Contractor receives notice in writing signed by a person authorized to bind the City in such matters.
- 5.17 ELIGIBILITY:** If applicable, the Contractor must first register with the Department of State of the State of Florida, in accordance with Florida State Statutes, prior to entering into a contract with the City.
- 5.18 PATENTS AND ROYALTIES:** The Contractor, without exception, shall indemnify and save harmless the City and its employees from liability of any nature and kind, including cost and expenses for or on account of any copyrighted, patented or un-patented invention, process, or article manufactured or used in the performance of the contract, including its use by the City. If the Contractor uses any design, device, or materials covered by letters, patent or copyright, it is mutually agreed and understood without exception that the bid prices shall include all royalties or costs arising from the use of such design, device, or materials in any way involved in the work.
- 5.19 ASSIGNMENT:** Contractor shall not transfer or assign the performance required by this ITB without the prior written consent of the City. Any award issued pursuant to this ITB, and the monies, which may become due hereunder, are not assignable except with the prior written approval of the City Commission or the City Manager or City Manager's designee, depending on original award approval.
- 5.20 LITIGATION VENUE:** The parties waive the privilege of venue and agree that all litigation between them in the state courts shall take place in Broward County, Florida and that all litigation between them in the federal courts shall take place in the Southern District in and for the State of Florida.
- 5.21 LOCATION OF UNDERGROUND FACILITIES:** If the Contractor, for the purpose of responding to this solicitation, requests the location of underground facilities through the Sunshine State One-Call of Florida, Inc. notification system or through any person or entity providing a facility locating service, and underground facilities are marked with paint, stakes or other markings within the City pursuant to such a request, then the Contractor, shall be deemed non-responsive to this solicitation in accordance with Section 2-184(5) of the City of Fort Lauderdale Code of Ordinances.

5.22 PUBLIC RECORDS

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT. CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT: (954-828-5002, PRRCONTRACT@FORTLAUDERDALE.GOV, CITY CLERK'S OFFICE, 100 NORTH ANDREWS AVENUE, FORT LAUDERDALE, FLORIDA 33301)

- Contractor shall:

1. Keep and maintain public records that ordinarily and necessarily would be required by the City in order to perform the service.
2. Upon request from the City's custodian of public records, provide the City with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes (2016), as may be amended or revised, or as otherwise provided by law.
3. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of this contract if the Contractor does not transfer the records to the City.
4. Upon completion of the Contract, transfer, at no cost, to the City all public records in possession of the Contractor or keep and maintain public records required by the City to perform the service. If the Contractor transfers all public records to the City upon completion of this Contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Contractor keeps and maintains public records upon completion of this Contract, the Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City's custodian of public records, in a format that is compatible with the information technology systems of the City.

NON-COLLUSION STATEMENT:

By signing this offer, the vendor/contractor certifies that this offer is made independently and *free* from collusion. Vendor shall disclose below any City of Fort Lauderdale, FL officer or employee, or any relative of any such officer or employee 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 City of Fort Lauderdale, FL 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.

For purposes hereof, a person has a material interest if they directly or indirectly own more than 5 percent of the total assets or capital stock of any business entity, or if they otherwise stand to personally gain if the contract is awarded to this vendor.

In accordance with City of Fort Lauderdale, FL Policy and Standards Manual, 6.10.8.3,

3.3. City employees may not contract with the City through any corporation or business entity in which they or their immediate family members hold a controlling financial interest (e.g. ownership of five (5) percent or more).

3.4. Immediate family members (spouse, parents and children) are also prohibited from contracting with the City subject to the same general rules.

Failure of a vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the City Procurement Code.

NAME

RELATIONSHIPS

-

In the event the vendor does not indicate any names, the City shall interpret this to mean that the vendor has indicated that no such relationships exist.

CONTRACT PAYMENT METHOD BY P-CARD

THIS FORM MUST BY SUBMITTED WITH YOUR RESPONSE

The City of Fort Lauderdale has implemented a Procurement Card (P-Card) program which changes how payments are remitted to its vendors. The City has transitioned from traditional paper checks to payment by credit card via MasterCard or Visa. This allows you as a vendor of the City of Fort Lauderdale to receive your payment fast and safely. No more waiting for checks to be printed and mailed.

Payments will be made utilizing the City's P-Card (MasterCard or Visa). Accordingly, firms must presently have the ability to accept credit card payment or take whatever steps necessary to implement acceptance of a credit card before the commencement of a contract.

Please indicate which credit card payment you prefer:

Master Card

Visa Card

Company Name:

Name (Printed)

Signature

Date:

Title

BID/PROPOSAL CERTIFICATION

Please Note: If responding to this solicitation through BidSync, the electronic version of the bid response will prevail, unless a paper version is clearly marked **by the bidder** in some manner to indicate that it will supplant the electronic version. All fields below must be completed. If the field does not apply to you, please note N/A in that field.

If you are a foreign corporation, you may be required to obtain a certificate of authority from the department of state, in accordance with Florida Statute §607.1501 (visit <http://www.dos.state.fl.us/>).

Company: (Legal Registration)

Address:

City: State: Zip:

Telephone No. FAX No. Email:

Delivery: Calendar days after receipt of Purchase Order (**section 1.02 of General Conditions**):

Total Bid Discount (**section 1.05 of General Conditions**):

Does your firm qualify for MBE or WBE status (**section 1.09 of General Conditions**): MBE WBE

ADDENDUM ACKNOWLEDGEMENT - Proposer acknowledges that the following addenda have been received and are included in the proposal:

<u>Addendum No.</u>	<u>Date Issued</u>	<u>Addendum No.</u>	<u>Date Issued</u>	<u>Addendum No.</u>	<u>Date Issued</u>
<input type="text"/>					
<input type="text"/>					
<input type="text"/>					
<input type="text"/>					

VARIANCES: If you take exception or have variances to any term, condition, specification, scope of service, or requirement in this competitive solicitation you must specify such exception or variance in the space provided below or reference in the space provided below all variances contained on other pages within your response. Additional pages may be attached if necessary. No exceptions or variances will be deemed to be part of the response submitted unless such is listed and contained in the space provided below. The City does not, by virtue of submitting a variance, necessarily accept any variances. If no statement is contained in the below space, it is hereby implied that your response is in full compliance with this competitive solicitation. If you do not have variances, simply mark N/A. **If submitting your response electronically through BIDSUNC you must also click the "Take Exception" button.**

The below signatory hereby agrees to furnish the following article(s) or services at the price(s) and terms stated subject to all instructions, conditions, specifications addenda, legal advertisement, and conditions contained in the bid/proposal. I have read all attachments including the specifications and fully understand what is required. By submitting this signed proposal I will accept a contract if approved by the City and such acceptance covers all terms, conditions, and specifications of this bid/proposal. The below signatory also hereby agrees, by virtue of submitting or attempting to submit a response, that in no event shall the City's liability for respondent's direct, indirect, incidental, consequential, special or exemplary damages, expenses, or lost profits arising out of this competitive solicitation process, including but not limited to public advertisement, bid conferences, site visits, evaluations, oral presentations, or award proceedings exceed the amount of Five Hundred Dollars (\$500.00). This limitation shall not apply to claims arising under any provision of indemnification or the City's protest ordinance contained in this competitive solicitation.

Submitted by:

Name (printed)

Signature

Date:

Title

Question and Answers for Bid #972-11945 - Wastewater (Sewer) Pipes and Fittings

Overall Bid Questions

Question 1

For the stainless steel repair clamps, could you clarify how long you want them? (Submitted: May 26, 2017

1:09:55 PM EDT)

Answer

- STAINLESS STEEL LONG PATTERN REPAIR CLAMPS

DIAMETER (INCHES) LENGTH QUANTITY

4 12 INCHES 6

6 12 INCHES 6

8 12 INCHES 6

10 12 INCHES 6

12 12 INCHES 6

14 18 INCHES 6

16 18 INCHES 6

18 18 INCHES 6

20 18 INCHES 6

24 24 INCHES 6

30 24 INCHES 6

36 24 INCHES 6

42 24 INCHES 6

48 24 INCHES 2

54 24 INCHES 2 (Answered: Jun 2, 2017 1:02:29 PM EDT)

- See Part II - Technical Specifications/Scope of Work section of the ITB for details. (Answered: Jun 2, 2017

1:07:48 PM EDT)

Question 2

Are the MJ fittings to be C110 or C153 compact? (Submitted: May 29, 2017 8:53:52 PM EDT)

Answer

- C110. (Answered: Jun 2, 2017 1:02:29 PM EDT)

Question 3

Are there any domestic requirements for plug valves and if so, which one? (Submitted: Jun 1, 2017 2:42:50

PM EDT)

Answer

- Dezurik or Val-Matic. (Answered: Jun 2, 2017 1:02:29 PM EDT)

Question 4

Please confirm, do you want standard port DI body plug valves? Broward County standards call for 100% port CI body plug valves w/ 316 SS bolting. (Submitted: Jun 1, 2017 2:44:33 PM EDT)

Answer

- Standard port DI body /w 316 Stainless Steel Bolts. (Answered: Jun 2, 2017 1:02:29 PM EDT)

Question 5

GA industries manufacturers plug valves that are equal to Dezurik and Valmatic. Are we able to quote those?

(Submitted: Jun 5, 2017 8:56:28 PM EDT)

Answer

- No, those valves cannot be quoted. (Answered: Jun 11, 2017 8:30:46 PM EDT)

Question 6

Good afternoon,

Can the DIP submitted be Mc Wane Pipe Brand? if not, will partial bid can be accepted?

Can the DI Fittings be Import?

127 of 127

Can the Megalugs be the StarGrip series 3000, which are manufacturer by Star pipe and meet the requirements as equal to Ebaa Megalugs?

Thank you for your response (Submitted: Jun 6, 2017 5:08:18 PM EDT)

Answer

- 1 - No McWayne Brand. Partial bid will not be accepted, as stated in section 08 Method of award of the solicitation.

2- DI Fittings cannot be import.

3- No they cannot. (Answered: Jun 11, 2017 8:30:46 PM EDT)