

**APPENDIX A**  
**CITY OF CORONA**  
**DEPARTMENT OF WATER AND POWER**  
**APPROVED LIST OF MATERIALS FOR WATER FACILITIES**

**Ductile Iron Pipe and Fittings**

**Approved Manufacturers:**

ITEM	MANUFACTURER/MODEL
Ductile-Iron Pipe	American Cast Iron Pipe
	Clow Water Systems Company
	Griffin Pipe Products
	Pacific States Cast Iron Pipe Co Div. McWane, Inc.
	U.S. Pipe and Foundry
Ductile-Iron Pipe Fittings	American Cast Iron Pipe
	Clow Water Systems Company
	Griffin Pipe Products
	Star Pipe Products
	Tyler Union
	U.S. Pipe and Foundry
Push-on Joints	American Cast Iron Pipe "Fastite"
	Clow Water Systems Company
	Griffin Pipe Products
	Pacific States Cast Iron Pipe Co Div. McWane, Inc.
	U.S. Pipe and Foundry "Tyton"
Restrained Joints – Locking Gasket Type	American Cast Iron Pipe "Fast-Grip"
	Griffin Pipe Products "Talon"
	Pacific States Cast Iron Pipe "Sure-Stop"
	U.S. Pipe and Foundry "Field-Lok"
Restrained Joints – Third-party Follower-Gland-Type Mechanical Joint Restraints for Ductile Iron Pipe	EBAA Iron Series #1100 for use on new MJ fittings (Size 3-48 inches) #1100SD for use on existing MJ fittings (Size 3-48 inches)
	FORD Uni-Flange Series #1300 Restrained End Cap (Size 4-16 inches) #1400 (Size 4-36 inches)
	EBAA Iron Megalug Series 2000 #2000PV for new MJ fittings (Size 4-24 inches) #2000SV for existing MJ fittings (Size 4-24 inches)
	Ford Uni-Flange Series 1500 Circle Lock for MJ Fittings (Size 4-24 inches)
Restrained Joints – Third-party Ductile Iron Pipe Restraint Harness for Push-On Bells (For DIP only. Do not use on PVC)	EBAA Iron #1700 (Size 3-36 inches)
	FORD Uni-Flange Series #1450 Series (Size 3-36 inches)
Flanged Coupling Adapter for Ductile Iron Pipe	Romac Industries (FCA 501)
	Smith Blair, Inc. Style 912 Ductile Iron (Size 3-12 inches) Style 913 Steel (Size 3-24 inches)

Flanged Coupling Adapter for Ductile Iron Pipe (Restrained)	EBAA Iron #2100 Megaflange Restrained Flange Adapter (Size 3-36 inches)
	FORD Uni-Flange Series UFR 1400 (Size 3-24 inches)

**Requirements:**

Pressure class 350 minimum (Size 3 – 12 inches)

Pressure class 250 minimum (Size 16 inches and larger)

Ductile iron pipe and fittings to be cement mortar lined per ANSI AWWA C104 - A21.4.

Wrap buried pipe, fittings, and connections with 2 layers of 8-mil polyethylene

Gland Kits and accessories shall meet or exceed ANSI AWWA C11-A21 .11.

Type 316 stainless steel bolts, washers, and nuts installed with anti-seize compound (except greater than 250-psi shall be A307 bolts with non-oxide grease).

All products made in USA

**Notes:**

1. All new pressure pipe shall be constructed using restrained joints and fittings.

**C-900 and C-905 PVC Pipe and Fittings**

**CONSTRUCTION OF NEW PVC PIPE WATERMAINS IS NOT ALLOWED –  
FITTINGS LISTED BELOW ARE ALLOWED ONLY FOR REPAIRS OR  
CONNECTIONS TO EXISTING PVC WATERMAINS**

**Approved Manufacturers:**

ITEM	MANUFACTURER/MODEL
PVC Pressure Pipe	Not Allowed
Ductile-Iron Pipe Fittings	American Cast Iron Pipe
	Clow Water Systems Company
	Griffin Pipe Products
	Star Pipe Products
	Tyler Union
	U.S. Pipe and Foundry
Push-on Joints	Not Allowed
Restrained Joints – Third-party Follower-Gland-Type Mechanical Joint Restraints for Joining Existing PVC Pipe	EBAA Iron Series #2000PV for use on new MJ fittings (Size 4-24 inches) #2000SV for use on existing MJ fittings (Size 4-12 inches)
	Ford Uni-Flange Series 1500 Circle Lock for MJ Fittings (Size 4-24 inches)
Flange Coupling Adapter Restraints	EBAA Iron #2100 Megaflange Restrained Flange Adapter (Size 3-36 inches)
	FORD Uni-Flange Series Restrained Flange Adapter (Size 3-24 inches)
Push-On Joint Bell Restraints	Not Allowed

**Requirements:**

Ductile iron fittings to be cement lined per ANSI AWWA C104 - A21.4.  
Wrap buried fittings and connections with 2 layers of 8-mil polyethylene  
Gland Kits and accessories shall meet or exceed ANSI AWWA C11-A21 .11.  
Type 316 stainless steel bolts, washers, and nuts installed with anti-seize compound (except greater than 250-psi shall be A307 bolts with non-oxide grease).  
All products made in USA

**Resilient Wedge Gate Valves**

**Approved Manufacturers:**

**AMERICAN FLOW CONTROL  
CLOW  
KENNEDY  
M&H  
MUELLER**

**Requirements:**

AWWA C-515  
NSF-61  
Non-Rising Stem with 2-inch AWWA square operating nut  
Epoxy Lined and Coated  
Ductile iron body  
Ductile iron wedge with vulcanized rubber face (potable water); ductile iron with peroxide cured EPDM (reclaimed water)  
Ductile iron flanges 0-275 psi pressure - ASME/ANSI B16.42 Class 150  
Type 316 stainless steel valve trim kits  
Type 316 stainless steel bolts, washers, and nuts installed with anti-seize compound (except greater than 250-psi shall be A307 bolts with non-oxide grease).  
Wrap all buried valves with 2 layers of 8-mil polyethylene.  
FLG x FLG, FLG x MJ, or MJ x MJ connections, unless otherwise specified  
All products made in USA

## **Butterfly Valves**

### **Approved Manufacturers:**

**DEZURIK**

**PRATT**

### **Requirements:**

Buried Service:

DEZURIK BAW

PRATT GROUNDHOG II

Travelling nut actuator with 2-inch AWWA square operating nut for buried service

Wrap all buried valves with 2 layers of 8-mil polyethylene.

Above-Ground Service:

DEZURIK BAW

PRATT MODEL 2FII

Hand lever (up to 4-inch size)

MDT manual actuator with handwheel (larger than 4-inch size)

AWWA C-504

NSF-61

Epoxy Lined and Coated

Cast iron body

Cast iron disc

Peroxide cured EPDM resilient seats secured to valve body

Type 316 stainless steel valve trim kits

Type 316 stainless steel bolts, washers, and nuts installed with anti-seize compound (except greater than 250-psi shall be A307 bolts with non-oxide grease).

FLG x FLG connections, unless otherwise specified

All products made in USA

## **Diaphragm-Actuated Control Valves**

### **Approved Manufacturers:**

**CLA-VAL (No Exceptions)**

### **Requirements:**

AWWA C-530

NSF-61

Epoxy Lined and Coated

Ductile iron body for pressures 0-300 psi

Ductile iron disc with Buna-N rubber

300 series stainless steel trim and tubing

Type 316 stainless steel valve trim, disc guide, seat, and cover bearing

Type 316 stainless steel bolts, washers, and nuts installed with anti-seize compound (except greater than 250-psi shall be A307 bolts with non-oxide grease).

FLG x FLG connections, unless otherwise specified

All products made in USA

## Check Valves

### **Approved Manufacturers/Model:**

**M&H Swing Check Valve (Size 2-12 inches)**

**APCO Slanting Disc Check Valve (Size larger than 12 inches)**

#### **Requirements:**

Swing Check:

AWWA C-508

Outside lever and spring

Slanting Disc:

Top-mounted dashpot

NSF-61

Epoxy Lined and Coated

Cast iron body

Type 316 stainless steel flange bolts, washers, and nuts installed with anti-seize compound (except greater than 250-psi shall be A307 bolts with non-oxide grease).

FLG x FLG connections, unless otherwise specified

All products made in USA

## Stainless Steel Tapping Sleeve

### **Approved Manufacturers/Model:**

**SMITH - BLAIR 663**

**ROMAC SST III**

#### **Requirements:**

NSF-61

Stainless steel

Type 316 stainless steel mounting hardware

All products made in USA

#### **Notes:**

Outlet taps larger than 67% of tapped pipe size not permitted unless specifically approved by the DWP General Manager or designee

## Straight and Transition Couplings

### **Approved Manufacturers/Model:**

**SMITH - BLAIR 461**

**HYMAX 2000**

**ROMAC 501**

#### **Requirements:**

NSF-61

Epoxy lined and coated ductile iron or steel body

Type 316 stainless steel mounting hardware

All products made in USA

## **Flanged Coupling Adapters**

### **Approved Manufacturers/Model:**

**SMITH - BLAIR 912 (Size 3-12 inches)**

**SMITH-BLAIR 913 (Size 3-24 inches)**

### **Requirements:**

NSF-61

Epoxy lined and coated ductile iron or steel body

Type 316 stainless steel mounting hardware

Wrap buried couplings with 2 layers of 8-mil polyethylene

## **Combination Air Release and Vacuum Relief Valves**

### **Approved Manufacturers/Model:**

**ARI D-040-C (Size 1-2 inches)**

**ARI D-015 (Size 3-8 inches)**

### **Requirements:**

Rolling seal style

Flanged connection

Type 316 stainless steel mounting hardware

Epoxy coated

## **Fire Hydrants**

### **Approved Manufacturers/Model:**

**CLOW**

**JAMES JONES**

### **Requirements:**

8-hole pattern

Standard:

Clow: 850 and 2050

James Jones: 3710 and 4040B

Super:

Clow: 860, 865, and 2065

James Jones: 3765, 3775, and 4060B

All products made in USA

## Magnetic Flowmeter

**Approved Manufacturers/Model:**

**ENDRESS+HAUSER PROMAG 53W (NO EXCEPTIONS)**

**Requirements:**

3-inches and larger

NSF-61

Epoxy lined and coated steel body

Type 316 stainless steel mounting hardware

CITY OF CORONA  
DEPARTMENT OF WATER AND POWER  
APPROVED LIST OF MATERIALS FOR SEWER FACILITIES

**Sewer Forcemains**

**Ductile Iron Pipe and Fittings for Sewer Forcemains**

**Approved Manufacturers:**

ITEM	MANUFACTURER/MODEL
Ductile-Iron Pipe	American Cast Iron Pipe
	Clow Water Systems Company
	Griffin Pipe Products
	Pacific States Cast Iron Pipe Co Div. McWane, Inc.
	U.S. Pipe and Foundry
Ductile-Iron Pipe Fittings	American Cast Iron Pipe
	Clow Water Systems Company
	Griffin Pipe Products
	Star Pipe Products
	Tyler Union
	U.S. Pipe and Foundry
Push-on Joints	American Cast Iron Pipe "Fastite"
	Clow Water Systems Company
	Griffin Pipe Products
	Pacific States Cast Iron Pipe Co Div. McWane, Inc.
	U.S. Pipe and Foundry "Tyton"
Restrained Joints – Locking Gasket Type	American Cast Iron Pipe "Fast-Grip"
	Griffin Pipe Products "Talon"
	Pacific States Cast Iron Pipe "Sure-Stop"
	U.S. Pipe and Foundry "Field-Lok"
Restrained Joints – Third-party Follower-Gland-Type Mechanical Joint Restraints for Ductile Iron Pipe	EBAA Iron Series #1100 for use on new MJ fittings (Size 3-48 inches) #1100SD for use on existing MJ fittings (Size 3-48 inches)
	FORD Uni-Flange Series #1300 Restrained End Cap (Size 4-16 inches) #1400 (Size 4-36 inches)
	EBAA Iron Megalug Series 2000 #2000PV for new MJ fittings (Size 4-24 inches) #2000SV for existing MJ fittings (Size 4-24 inches)
	Ford Uni-Flange Series 1500 Circle Lock for MJ Fittings (Size 4-24 inches)
Restrained Joints – Third-party Ductile Iron Pipe Restraint Harness for Push-On Bells (For DIP only. Do not use on PVC)	EBAA Iron #1700 (Size 3-36 inches)
	FORD Uni-Flange Series #1450 Series (Size 3-36 inches)
Flanged Coupling Adapter for Ductile Iron Pipe	Romac Industries (FCA 501)
	Smith Blair, Inc.
	Style 912 Ductile Iron (Size 3-12 inches)
	Style 913 Steel (Size 3-24 inches)



Flanged Coupling Adapter for Ductile Iron Pipe (Restrained)	EBAA Iron #2100 Megaflange Restrained Flange Adapter (Size 3-36 inches)
	FORD Uni-Flange Series UFR 1400 (Size 3-24 inches)

**Requirements:**

Pressure class 350 minimum (Size 3 – 12 inches)

Pressure class 250 minimum (Size 16 inches and larger)

Ductile iron pipe for sewer force main service to be ceramic epoxy lined – Protecto 401

Wrap buried pipe, fittings, and connections with 2 layers of 8-mil polyethylene

Gland Kits and accessories shall meet or exceed ANSI AWWA C11-A21 .11.

Type 316 stainless steel bolts, washers, and nuts installed with anti-seize compound (except greater than 250-psi shall be A307 bolts with non-oxide grease).

All products made in USA

**Notes:**

1. All new pressure pipe shall be constructed using restrained joints and fittings.

**C-900 and C-905 PVC Pipe and Fittings for Sewer Force Mains**

**CONSTRUCTION OF NEW PVC PIPE SEWER FORCE MAINS IS NOT ALLOWED – FITTINGS LISTED BELOW ARE ALLOWED ONLY FOR REPAIRS OR CONNECTIONS TO EXISTING PVC SEWER FORCE MAINS**

**Approved Manufacturers:**

ITEM	MANUFACTURER/MODEL
PVC Pressure Pipe	Not Allowed
Ductile-Iron Pipe Fittings	American Cast Iron Pipe
	Clow Water Systems Company
	Griffin Pipe Products
	Star Pipe Products
	Tyler Union
U.S. Pipe and Foundry	
Push-on Joints	Not Allowed
Mechanical Joint Restraints	EBAA Iron Series
	#2000 PV for use on new MJ fittings (Size 4-24 inches)
	#2000 SV for use on existing MJ fittings (Size 4-12 inches)
Flange Adapter Restraints	FORD Uni-Flange Series
	Series 1500 Circle Lock for MJ Fittings (Size 4-24 inches)
	EBAA Iron
Push-On Joint Bell Restraints	#2100 Megaflange Restrained Flange Adapter (Size 3- inches)
	FORD Uni-Flange Series
	Restrained Flange Adapter (Size 3-24 inches)
Push-On Joint Bell Restraints	Not Allowed

**Requirements:**

Ductile iron fittings for sewer service to be ceramic epoxy lined – Protecto 401

Wrap buried fittings and connections with 2 layers of 8-mil polyethylene

Gland Kits and accessories shall meet or exceed ANSI AWWA C11-A21 .11.

Type 316 stainless steel bolts, washers, and nuts installed with anti-seize compound (except greater than 250-psi shall be A307 bolts with non-oxide grease).

All products made in USA

**Gravity Sewers**

**Vitrified Clay Pipe (VCP) and Fittings for Gravity Sewers**

**Approved Manufacturers:**

**GLADDING McBEAN**

**MISSION CLAY PRODUCTS**

**Requirements:**

Extra-strength pipe and fittings

Polyurethane compression joint

All products made in USA

**PVC Pipe for Gravity Sewers**

**Approved Manufacturers:**

**PW PIPE**

**CERTAINTEED**

**Requirements:**

SDR-35 (minimum)

SDR-26 (where depths, loading conditions, or other factors exceed the allowable/recommended loading for SDR 35 PVC pipe)

All products made in USA

## Ductile Iron Pipe for Gravity Sewers

### Approved Manufacturers:

ITEM	MANUFACTURER/MODEL
Ductile-Iron Pipe	American Cast Iron Pipe
	Clow Water Systems Company
	Griffin Pipe Products
	Pacific States Cast Iron Pipe Co Div. McWane, Inc.
	U.S. Pipe and Foundry
Push-on Joints	American Cast Iron Pipe "Fastite"
	Clow Water Systems Company
	Griffin Pipe Products
	Pacific States Cast Iron Pipe Co Div. McWane, Inc.
	U.S. Pipe and Foundry "Tyton"
Push-On Joint Bell Restraints in Steel Casings	EBAA Iron #1700 (Size 4-36 inches)
	FORD Uni-Flange Series #1450 (Size 4-16 inches)
	American Cast Iron Pipe Fastite with Fast-Grip Gasket
	US Pipe Field-Lok Restraint Gasket

### Requirements:

- Pressure class 350 minimum (Size 4 – 12 inches)
- Pressure class 250 minimum (Size 16 inches and larger)
- Ductile iron pipe for sewer service to be ceramic epoxy lined – Protecto 401
- Wrap buried pipe with 2 layers of 8-mil polyethylene
- All products made in USA

## Eccentric Plug Valves

### Approved Manufacturers/Model:

**DEZURIK PEF (Size 3-18 inch)**

**PRATT BALLCENTRIC (Size 3-18 inch)**

### Requirements:

- Full port
- Manual actuator with lever (Size 3-4 inches); handwheel (Size 6-18 inches)
- Cast iron body
- Epoxy Lined and Coated
- Type 316 stainless steel flange bolts, washers, and nuts installed with anti-seize compound (except greater than 250-psi shall be A307 bolts with non-oxide grease).
- All buried valves shall be wrapped with 2 layers of 8-mil polyethylene.
- Flange x Flange connections, ANSI B16.1 Class 125 unless otherwise specified

## **Pre-Cast Manholes**

**Approved Manufacturers/Model:**  
**OLSON PRE-CAST COMPANY**  
**JENSEN PRECAST**

**Requirements:**

Coat exterior with 80-mils of coal tar epoxy to prevent water intrusion  
Line interior with polyurethane – Sancon 100

## **Pre-Cast Manhole Frame and Cover**

**Approved Manufacturers/Model:**  
**ALHAMBRA #A-1420-6**  
**SOUTH BAY FOUNDRY #SBF 1906**  
**NEENAH #R-1578-A**

**Requirements:**

Cast “City of Corona - Sewer” in cover