# CHARLOTTE COUNTY UTILITIES APPROVED PRODUCTS LIST (APL)

DATE PUBLISHED: April 16, 2024 STANDARD SPECIFICATION SECTIONS

Gravity Sewer System
Force Mains
Low Pressure Sewer System
Potable Water and Fire Hydrants
Reclaimed Water Mains
Standard Lift Station
Precast Concrete
Surface Preparation, Painting and Coating
Vacuum Sewer Collection System

**Note:** This APL is effective on April 16, 2024 and is subject to change based on utility requirements with a new APL effective date. The products listed in this APL supersedes the approved products in the CCU Design Compliance Standards dated November 1, 2011 and all previous APLs. The intent is that this APL will be updated annually.

**IMPORTANT NOTICE:** By incorporating these items into a design, this does not relieve any liability by the Engineer of Record to ensure the items are appropriate for the project.

**Note to Manufacturers:** If CCU becomes aware of any changes to your products as they appear on the list, they may be considered for removal from the next updated APL and will require resubmittal to CCU for consideration.

This APL requires all products to be produced and manufactured in the United States of America (USA) and verified through a standard shop drawing submittal review. Any products that do not comply and are requested for project use must be approved through a specific submittal process subject to CCU approval.

Further, brass above ground meter installation service materials not listed such as pipe adapters, nipples, reducers, meter couplings, ball valves, and elbows shall meet lead free certification to NSF 61/ANSI 372 standards. Due to limited availability, brass above ground meter installation service materials shall be temporarily exempted from the Made in USA requirement if they still meet the lead-free certification to NSF 61/ANSI 372 until further notice and shall be annually reviewed to continue the exemption.

All approved products are listed in the most current CCU Approved Products List, which is posted on the County website. Any products not listed on this approved APL will be required to go through the CCU submittal process.

# 002320 GRAVITY SEWER MAINS / 002340 VALVES / 002445 JACK AND BORE

Product	Туре	Manufacturer	Model #	Size	Product Comments
Coupling	Shear Ring	Max Adapter			
		Cascade	CCES	Made to order	
Casing End Seal	Casing End Seal	PSI	TYPE KT	Made to order	
		CCI	ESC	Made to order	
Elastomeric Gasket	(Manhole Boot)				As approved by CCU
Hydrophilic Water Stop		Swell Seal			Additional joint sealant
Manhole External	Coal Tar Epoxy	Whitlam / Plumb-Pro	Black Dragon		
Coatings	Water Based Epoxy	Pro-Tech	EW-1 AquaPoxy		
Coulings	Coal Tar Epoxy	Koppers	300M Carboline		
	Polymorphic Resin	IET	SYSTEM 3		
	Epoxy resin (monolithic)	Raven	Raven 405		
Manhole Internal Coating	Polyurethane coating	Spray Roq	Spraywall		
Walling Internal Coating	Polyetheramine	GML Coatings	Green Monster		
	Polymorphic Resin	Restoration and Protective Solutions LLC.	Gas Guard 1000		
	Metallic Detectable Marking Tape	Pro-Line	SEWER	3"	
Marker Tape		Presco	SEWER	3"	
		Sigma	SEWER	3"	
Marker, Electronic	Sewer Ball	3M	1424-XR/ID	4"	
Manhole Joint Seal, Circular	Rubber Gasket		R-4		
Manhole Joint Seal,	Butyl Rubber	Conseal	CS-102	1-1/2"	
Rectangular or Square	Rubber Gasket		R-4		
Manhole External Joint	Butyl Rubber	Henry	RU-116	6" 9" 12"	
Wrap	butyi Kubbei	Conseal	CS 212	6", 8", 12", 24", 36" 48"	
Manhole Structural	Pure-fused calcium aluminate	Kerneos	SEWPERCOAT 2000HS		
Internal Coating	mortar	Madewell / Mainstay	ML-CA		
Manufacta Di e C C	Non-Hinged	U.S.Foundry	225 AS	25 3/4"	
Manhole Ring & Cover (R&C)	ARV Vault	U.S.Foundry	230-AA	32-1/8"	
(//)	Hinged	Pamrex / Ergo	00104084L01		As approved by CCU

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	Ductile Iron	American Cast Iron Pipe (ACIPCO)	Fastite Pipe	4" to 60"	P401 epoxy coated
	( Push On Joint Type )	Griffin	Tyton Joint	3" to 64"	P401 epoxy coated
		US Pipe	Tyton Joint	3" to 64"	P401 epoxy coated
	DVC 40 / 00	Westlake Pipe & Fittings (NAPCO)	PR - SCH 40 / 80	.5" to 3"	
	PVC 40 / 80	Silverline	PR - SCH 40 / 80	.5" to 3"	
		Charlotte Pipe and Foundry	PR - SCH 40 / 80	.5" to 3"	
		Westlake Pipe & Fittings (NAPCO)	SDR 26	4" to 15"	
Pipe	PVC SDR 26	Diamond Plastic Corporation (DPC)	SDR 26	4" to 15"	
		JM Eagle	SDR 26	4" to 36"	
		National Pipe and Plastics	SDR 26	4" to 48"	
		Westlake Pipe & Fittings (NAPCO)	DR 14 / 18	4" to 36"	
	PVC DR 14/18	Diamond Plastic Corporation (DPC)	DR 14 / 18	4" to 36"	
		JM EAGLE	DR 14 / 18	4" to 48"	
		National Pipe and Plastics	DR 14 / 18	4" to 48"	
	PVC Certa-Lok	Westlake Pipe & Fittings (NAPCO)		2" to 16"	As approved by CCU
	PVC 3034 (Gasketed)	Harco	SDR 26	4" to 15"	
		Multi Fittings	SDR 26	4" to 42"	
Pipe Fittings		Tigre-ADS USA	SDR 26	4" to 36"	
ripe rittings		Harco	C900	4" to 12"	
	PVC C900 (Gasketed)	Multi Fittings	BRUTE	4" to 48"	
		NACO / IPEX	C900Pressure Gasketed	4" to 36"	
	Cured in place	Insituform of North America			
Pipe Lining	PVC	As Approved by CCU		See Specification	
	Polyethylene	U-Liner		See Specification	
Polyethylene Sleeve, DIP	Polyethylene			Minimum 8 mil.	See Specifications
Sewer Wye	SDR 26	Multi Fittings	SDR 26	Various 4" to 10"	
,			S	4" to 48" plus	
		PSI	С	4" to 48" plus	
Spacer	Casing		S8G-2	4" to 38" plus	
,	-	Cascade	CCS	Made to order	
1		CCI	CSS8	Made to order	

#### 002325 - FORCE MAINS / 002340 VALVES / 002445 JACK AND BORE

Air Release Enclosure, High Traffic Vulnerable Areas  ARV Manhole  Compression Fitting Hymax Alpha  Coupling / Repair  Casing End Seal  Flange Gasket  Manhole External Coatings  Flow Meter  Manhole Internal Coating  Marker Tape  Manhole Ring & Cover (R&C)  Manhole Ring & Cover (R&C)  Manhole Joint Seal, Circular  Manhole Joint Seal, Circular  FRP-lined, Gel Coat Exter  Concrete Base  Concrete Base  FRP-lined, Gel Coat Exter  Concrete Base  Concrete Base  Concrete Base  Concrete Base  Author  Concrete Base  Compression Fitting  Hymax  Alpha  Casing End Seal  Mater Ring  Coal Tar Epoxy  Water Based Epoxy  Coal Tar Epoxy  Mag meter  Polymorphic Resin  Epoxy resin (monolithing)  Polyetheramine  Polymorphic Resin  Rubber Gasket	Manufacturer	Model #	Size	Product Comments
Air Release Enclosure, High Traffic Vulnerable Areas  ARV Manhole  Compression Fitting Hymax Alpha  Alpha  Solid Sleeve FBE  Shear Ring  Casing End Seal  Casing End Seal  Casing End Seal  Flange Gasket  Ductile Iron Pipe  Coal Tar Epoxy Water Based Epoxy Coal Tar Epoxy  Flow Meter  Mag meter  Polymorphic Resin Epoxy resin (monolithi Polyurethane coating Polyetheramine Polymorphic Resin  Marker Tape  Metallic Detectable Markin  Marker, Electronic  Manhole Ring & Cover (R&C)  Manhole Joint Seal, Circular  Manbole Gasket  Rubber Gasket	PenCell Plastics/Hubbell	AGVNS-1420 Hasps Waste Water		
Traffic Vulnerable Areas  ARV Manhole  Compression Fitting Hymax Alpha  Solid Sleeve FBE  Shear Ring  Casing End Seal  Casing End Seal  Casing End Seal  Casing End Seal  Flange Gasket  Ductile Iron Pipe  Coal Tar Epoxy Water Based Epoxy Coal Tar Epoxy  Water Based Epoxy Coal Tar Epoxy  Flow Meter  Mag meter  Polymorphic Resin Epoxy resin (monolithi Polyurethane coating Polyetheramine Polymorphic Resin  Marker Tape  Metallic Detectable Markin  Marker, Electronic  Manhole Ring & Cover (R&C)  Manhole Joint Seal, Circular  Rubber Gasket	Water Plus Corporation	131632		
Coupling / Repair  Coupling / Repair  Coupling / Repair  Colid Sleeve FBE  Shear Ring  Casing End Seal  Coal Tar Epoxy  Water Based Epoxy  Coal Tar Epoxy  Water Based Epoxy  Coal Tar Epoxy  Hag meter  Polymorphic Resin  Epoxy resin (monolithi  Polyurethane coating  Polyetheramine  Polymorphic Resin  Marker Tape  Metallic Detectable Markin  Marker, Electronic  Manhole Ring & Cover  (R&C)  Manhole Joint Seal, Circular  Rubber Gasket	ior, Predl Systems North America Inc.	PREDL ARV Capsule	S 30" or L 42"	High Traffic Areas as Approved by CCU
Coupling / Repair  Coupling / Repair  Solid Sleeve FBE  Shear Ring  Casing End Seal  Casing End Seal  Casing End Seal  Ductile Iron Pipe  Coal Tar Epoxy Water Based Epoxy Coal Tar Epoxy  Hag meter  Polymorphic Resin Epoxy resin (monolithi Polyurethane coating Polyetheramine Polymorphic Resin  Marker Tape  Metallic Detectable Markin  Manhole Ring & Cover (R&C)  Manhole Joint Seal, Circular  Rubber Gasket				See Specifications
Coupling / Repair  Solid Sleeve FBE  Shear Ring  Casing End Seal  Casing End Seal  Ductile Iron Pipe  Coal Tar Epoxy Water Based Epoxy Coal Tar Epoxy  Flow Meter  Manhole Internal Coating  Manhole Internal Coating  Marker Tape  Marker, Electronic  Manhole Ring & Cover (R&C)  Manhole Joint Seal, Circular  Alpha  Alph	Universal Transition Coupling (UTC)			·
Coupling / Repair  Solid Sleeve FBE  Shear Ring  Casing End Seal  Casing End Seal  Ductile Iron Pipe  Coal Tar Epoxy Water Based Epoxy Coal Tar Epoxy  Flow Meter  Manhole Internal Coating  Manhole Internal Coating  Marker Tape  Marker, Electronic  Manhole Ring & Cover (R&C)  Manhole Joint Seal, Circular  Shear Ring  Casing End Seal  Ductile Iron Pipe  Coal Tar Epoxy Water Based Epoxy Coal Tar Epoxy Polymorphic Resin Epoxy resin (monolithi Polymorphic Resin Polymorphic Resin  Metallic Detectable Markin  Sub-Aqueous Crossin Hinged Non-Hinged Rubber Gasket	Krausz	НҮМАХ	1.5" to 60"	
Solid Sleeve FBE  Shear Ring  Casing End Seal  Casing End Seal  Ductile Iron Pipe  Coal Tar Epoxy Water Based Epoxy Coal Tar Epoxy  Flow Meter  Mag meter Polymorphic Resin Epoxy resin (monolithi Polyurethane coating Polyetheramine Polymorphic Resin  Marker Tape  Metallic Detectable Markin  Marker, Electronic  Manhole Ring & Cover (R&C)  Manhole Joint Seal, Circular  Rubber Gasket	Romac		4" to 12"	
Solid Sleeve FBE  Shear Ring  Casing End Seal  Casing End Seal  Plange Gasket  Ductile Iron Pipe  Coal Tar Epoxy Water Based Epoxy Coal Tar Epoxy  Flow Meter  Mag meter Polymorphic Resin Epoxy resin (monolithi Polyurethane coating Polyetheramine Polymorphic Resin  Marker Tape  Metallic Detectable Markin  Marker, Electronic  Manhole Ring & Cover (R&C)  Manhole Joint Seal, Circular  Rubber Gasket	Star	Solid Sleeve	4" to 48"	
Casing End Seal  Flange Gasket  Ductile Iron Pipe  Coal Tar Epoxy Water Based Epoxy Coal Tar Epoxy Manhole External Coatings  Flow Meter  Mag meter Polymorphic Resin Epoxy resin (monolithi Polyurethane coating Polymorphic Resin Polymorphic Resin Warker Tape  Metallic Detectable Markin  Marker, Electronic Manhole Ring & Cover (R&C)  Manhole Joint Seal, Circular  Rubber Gasket	Sigma	Solid Sleeve	2" to 64"	
Casing End Seal  Flange Gasket  Ductile Iron Pipe  Coal Tar Epoxy Water Based Epoxy Coal Tar Epoxy Manhole External Coatings  Flow Meter  Mag meter Polymorphic Resin Epoxy resin (monolithi Polyurethane coating Polymorphic Resin Polymorphic Resin Warker Tape  Metallic Detectable Markin  Marker, Electronic Manhole Ring & Cover (R&C)  Manhole Joint Seal, Circular  Rubber Gasket	Tyler/Union	Solid Sleeve	3" to 48"	
Casing End Seal  Flange Gasket  Ductile Iron Pipe  Coal Tar Epoxy Water Based Epoxy Coal Tar Epoxy Manhole External Coatings  Flow Meter  Mag meter Polymorphic Resin Epoxy resin (monolithi Polyurethane coating Polymorphic Resin Polymorphic Resin Warker Tape  Metallic Detectable Markin  Marker, Electronic Manhole Ring & Cover (R&C)  Manhole Joint Seal, Circular  Rubber Gasket	Max Adapter			
Flange Gasket  Ductile Iron Pipe  Coal Tar Epoxy Water Based Epoxy Coal Tar Epoxy  Mag meter Polymorphic Resin Epoxy resin (monolithi Polyurethane coating Polymorphic Resin Polymorphic Resin Polymorphic Resin Polymorphic Resin Warker Tape Metallic Detectable Markin  Marker, Electronic Manhole Ring & Cover (R&C) Manhole Joint Seal, Circular Rubber Gasket	Cascade	CCES	Made to order	
Manhole External Coatings  Manhole External Coatings  Flow Meter  Manhole Internal Coating  Manhole Internal Coating  Marker Tape  Marker, Electronic  Manhole Ring & Cover (R&C)  Manhole Joint Seal, Circular  Coal Tar Epoxy  Mag meter  Polymorphic Resin  Epoxy resin (monolithi  Polyurethane coating  Polymorphic Resin  Metallic Detectable Markin  Sub-Aqueous Crossin  Hinged  Non-Hinged	PSI	TYPE KT	Made to order	
Manhole External Coatings  Manhole External Coatings  Flow Meter  Manhole Internal Coating  Manhole Internal Coating  Marker Tape  Marker, Electronic  Manhole Ring & Cover (R&C)  Manhole Joint Seal, Circular  Coal Tar Epoxy  Mag meter  Polymorphic Resin  Epoxy resin (monolithi  Polyurethane coating  Polymorphic Resin  Metallic Detectable Markin  Sub-Aqueous Crossin  Hinged  Non-Hinged	CCI	ESC	Made to order	
Manhole External Coatings     Water Based Epoxy       Flow Meter     Mag meter       Polymorphic Resin     Epoxy resin (monolithi       Polyurethane coating     Polyurethane coating       Polymorphic Resin     Polymorphic Resin       Marker Tape     Metallic Detectable Markin       Manhole Ring & Cover (R&C)     Sub-Aqueous Crossin       Hinged     Non-Hinged       Manhole Joint Seal, Circular     Rubber Gasket	American Cast Iron Pipe (ACIPCO)	Toruseal		
Toal Tar Epoxy Flow Meter  Mag meter Polymorphic Resin Epoxy resin (monolithi Polyurethane coating Polyetheramine Polymorphic Resin Marker Tape Metallic Detectable Markin  Marker, Electronic Manhole Ring & Cover (R&C) Manhole Joint Seal, Circular  Coal Tar Epoxy Mag meter Polymorphic Resin  Metallic Detectable Markin Sub-Aqueous Crossin Hinged Non-Hinged Rubber Gasket	Whitlam / Plumb-Pro	Black Dragon		
Flow Meter  Mag meter Polymorphic Resin Epoxy resin (monolithi Polyurethane coating Polyetheramine Polymorphic Resin  Marker Tape Metallic Detectable Markin  Marker, Electronic Manhole Ring & Cover (R&C) Manhole Joint Seal, Circular  Rubber Gasket	Pro-Tech	EW-1 AquaPoxy		
Manhole Internal Coating  Polymorphic Resin Epoxy resin (monolithi Polyurethane coating Polyetheramine  Polymorphic Resin  Marker Tape  Metallic Detectable Markin  Marker, Electronic Sewer Ball Sub-Aqueous Crossin Hinged Non-Hinged Non-Hinged  Manhole Joint Seal, Circular  Rubber Gasket	Koppers	300M Carboline		
Epoxy resin (monolithi	Rosemount	As approved by CCU	Various	
Manhole Internal Coating  Polyurethane coating Polyetheramine Polymorphic Resin  Marker Tape  Metallic Detectable Markin  Sewer Ball Sub-Aqueous Crossin Hinged Non-Hinged Non-Hinged  Manhole Joint Seal, Circular  Polyurethane coating Polyur	IET	SYSTEM 3		
Polyetheramine Polymorphic Resin  Marker Tape Metallic Detectable Markin  Manhole Ring & Cover (R&C) Manhole Joint Seal, Circular  Polyetheramine  Polyetheramine  Sub-Aqueous Crossin Hinged Non-Hinged Rubber Gasket	c) Raven	Raven 405		
Polyetheramine Polymorphic Resin  Marker Tape  Metallic Detectable Markin  Sewer Ball  Sub-Aqueous Crossin Hinged Non-Hinged Non-Hinged  Manhole Joint Seal, Circular  Rubber Gasket	Spray Roq	Spraywall		
Marker Tape  Metallic Detectable Markin  Marker, Electronic  Sewer Ball  Sub-Aqueous Crossin  Hinged  Non-Hinged  Non-Hinged  Rubber Gasket	GML Coatings	Green Monster		
Manhole Joint Seal, Circular  Marker, Electronic Sewer Ball Sub-Aqueous Crossin Hinged Non-Hinged Rubber Gasket	Restoration and Protective Solutions LLC.	Gas Guard 100		
Marker, Electronic  Manhole Ring & Cover (R&C)  Manhole Joint Seal, Circular  Sub-Aqueous Crossin Hinged Non-Hinged Rubber Gasket	Pro-Line	SEWER	3"	
Manhole Ring & Cover (R&C)  Sub-Aqueous Crossin Hinged Non-Hinged Rubber Gasket	g Tape Presco	SEWER	3"	
Manhole Ring & Cover (R&C)  Sub-Aqueous Crossin Hinged Non-Hinged Rubber Gasket	Sigma	SEWER	3"	
Manhole Ring & Cover (R&C)  Sub-Aqueous Crossin Hinged Non-Hinged Rubber Gasket	3M	1424-XR/ID	4"	
Manhole Ring & Cover (R&C)  Hinged  Non-Hinged  Rubber Gasket		230-AA	32-1/8"	
Manhole Joint Seal, Circular Rubber Gasket	Pamrex / Ergo	00104084L01	24"	As approved by CCU
Manhole Joint Seal, Circular Rubber Gasket	U.S. Foundry	225 AS-1 Size	24" ID, 25 3/4" OD	
		R-4		
Manhole External Joint	Henry	RU-116	6" 9" 12"	
Wrap Butyl Rubber	Conseal	CS 212	6", 8", 12", 24", 36" 48"	1
Manhole Structural Pure-fused calcium alumi		SEWPERCOAT 2000HS	3,0,12,27,30 40	<u> </u>
Internal Coating mortar	Madewell / Mainstay	ML-CA		

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Pipe Pipe Fittings  Polyethylene Sleeve, DIP  Restraints  Spacer		Westlake Pipe & Fittings (NAPCO)	DR 14 / 18	4" to 36"	
	PVC DR14 / 18	Diamond Plastic Corporation (DPC)	DR 14 / 18	4" to 36"	
		JM EAGLE	DR 14 / 18	4" to 48"	
Pipe		National Pipe and Plastics	DR 14 / 18	4" to 48"	
Ріре	HDPE 3408, DIPS	Performance/Driscoplex	SDR 9 / 11	2" to 54"	
	1101 E 3406, DIF 3	JM Eagle	SDR 9 / 11	.5" to 63"	
		W.L. Plastics	SDR 9 / 11	1/2" to 54"	
		Sigma	MJ	2" to 64"	
		Sigma	FLANGED	2" to 64"	
	Ductile Iron	Star	MJ	2" to 64"	
	MJ or Flange	Star	FLANGED	2" to 64"	
Pipe Fittings		Tyler Union	MJ	2" to 64"	
		Tyler Union	FLANGED	2" to 64"	
		Harco		4" to 12"	
	PVC C900 (Gasketed)	Multi Fittings	BRUTE	4" to 48"	
		NACO / IPEX	C900 Pressure Gasketed	4" to 36"	
Polyethylene Sleeve, DIP	Polyethylene	·		Minimum 8 mil.	See Specifications
· · · · · · · · · · · · · · · · · · ·	, ,	EBAA	1100 Series DI	3" to 54"	·
	Megalug DI / PVC	Star	4000G2 PVC Series	3" to 36"	
		Sigma	SERIES D-SLCE PVC	3" to 36"	
		Star	1100 PVC Bell Restrainers	4" to 48"	
	Pipe / Bell PVC / DI	Star	1000C / 1100C DI Bell Restrainers	4" to 48"	
Restraints		Sigma	PV LOK DI	4" to 42"	
		Sigma	PV LOK PVC	4" to 42"	
		EBAA	1600 / 2800 PVC	4" to 48"	
		EBAA	1500 / 1700 DI	4" to 48"	
		RieberLok Gaskets		4" to 24"	Warranty letter from pipe manufacturer required
			S	4" to 48" plus	
		PSI	С	4" to 48" plus	
Spacer	Casing		S8G-2	4" to 38" plus	
		Cascade	CCS	Made to order	
		CCI	CSS8	Made to order	
		EBAA	MEGAFLANGE 2100 Ser.	3" to 48"	
Flange Adapters	Epoxy, SS, W/Rest.	JCM	301 SERIES	3" to 12"	
		Romac	RFCA	3" to 12"	
Tracer Wire (for HDD)	Copper-clad steel	Copperhead	Soloshot Extra-High Strength, 1045 CCS Tracer wire	#10 AWG (0.1019" diameter)	2,032 break load, 45 mil HDP insulation
Value Boy	CAST IDON / COMPOSITE	Bingham and Taylor		No. 18, 20,21,22	Screw Type Only
Valve, Box	CAST IRON / COMPOSITE	Tyler/Union	6850 SERIES 461S	4" to 24"	Screw Type Only

	Polymer Concrete	GlasMasters	Wastewater VBC7420-5-CCWW		Grass Areas
		Tyler Union	(25 lbs.) DOM Deep Depth water valve lid		Pavement areas: Roadways above 45 mph
Valve, Box Lid	Cashinan	Bingham and Taylor	(25 lbs.) DOM Deep Depth water valve lid		Pavement areas: Roadways above 45 mph
	Cast Iron	Tyler Union	Standard Lid		Pavement areas: Roadways under 45 mph
		Bingham and Taylor	Standard Lid		Pavement areas: Roadways under 45 mph
		Dezurik		4" to 72"	100% port
Valve, Plug	Iron, MJ or FL	Golden Anderson		4" to 36"	100% port
		Kennedy		3" to 36"	100% port
		Val-Matic	200 Series	1/2" to 20" Combo	
Valve, Air Release	Waste Water	Val-Matic	48A W/BWA	2" to 4"	
		H-TEC	Model 986	2" to 8" Combo	
		ARI	D-025	2" - 3" - 4" Combo	
		ARI	D-020	2" to 8" Combo	•

#### 002330 LOW PRESSURE SEWER SYSTEM / 002340 VALVES / 002445 JACK AND BORE

Product	Туре	Manufacturer	Model # / Size	Size	Product Comments
		PenCell Plastics/Hubbell	AGVNS-1420 Hasps Waste Water		
Air Release Enclosure	Polyethylene	Water Plus Corporation	131632		
Air Release Enclosure, High Traffic Vulnerable Areas	FRP-lined, Gel Coat Exterior, Concrete Base	Predl Systems North America	PREDL ARV Capsule	S 30" or L 42"	High Traffic Areas as Approved by CCU
Box, Wastewater		Hubbell (formerly CDR)	zite Gray Box - 3x1 Mouse Holes w/ Light Green C	15"x17"	
		Ford	FB1000-4-U-ANWT-NL	1" OR 2"	
Corporation stops	Brass	Mueller	B25024	1" OR 2"	
		A.Y. McDonald	74701BH	1" OR 2"	
		Ford	B43-342W-Q-NL 1" OR -B43-342W-Q-NL 2"  Straight Valve Compression	1" Meter Swivel or 2" meter flange	
Curb Stops	Brass	Mueller	B24350N - Straight Valve Compression 1" meter B24335N - Straight Valve Compression 2" Flange	1" Meter Swivel or 2" meter flange	
		A.Y. McDonald	76100MWQ 1" OR 76100MWQ 2"- Straight Valve Compression	1" Meter Swivel or 2" meter flange	
		Cascade	CCES	Made to order	
Casing End Seal	Casing End Seal	PSI	TYPE KT	Made to order	
-		CCI	ESC	Made to order	
Clamps	316 SS	Lawson	58844- 316 SS		
Control Panels	N/A	N/A	N/A		As approved by CCU
		IPEX		.5" to 2"	
Conduit		Scepter		.5" to 2"	
		Cantex		.5" to 2"	
Cable Clamps	Polypropylene	All-states	5-HPP	.3125"	
Hose	Flex Hose	Novaflex	Type 19	2 3/8"	
Flange Gasket	Ductile Iron Pipe	American Cast Iron Pipe (ACIPCO)	Toruseal		
Float Hangars	HACBHOPBCH CABLE HOLDER 316SS+ PBCH	Flygt	591022	1/2" and 3/16" hooks	
HDPE Electrofusion Fittings	Electrofusion	JM Eagle	EFC PE3408	4" to 60"	
TIDE LIECTIOJUSION FILLINGS	LIECTI OTUSIOTI	Georg Fischer	EFC PE3408	.5" to 26"	
Floats	Alarm	Anchor Scientific	M40NO		
110013	Load / Duty	Conery	MERCWA 90 degree wide angle		
Marker, Electronic	Sewer Ball	3M	1424-XR/ID	4"	
	Metallic Detectable Marking	Pro-Line	SEWER	3"	
Marker Tape	Tape	Presco	SEWER	3"	
		Sigma	SEWER	3"	

		JM Eagle	Eagle Loc 900 Sizes	4" to 12"	
	Field Lok Gaskets	American Cast Iron Pipe (ACIPCO)	Amarillo Fast-Grip	4" to 30"	
		US Pipe	Field Lok Gasket	4" to 24"	
		Westlake Pipe & Fittings (NAPCO)	DR 14 / 18	4" to 36"	
	PVC DR14 / 18	Diamond Plastics Company (DPC)	DR 14 / 18	4" to 60"	
		JM EAGLE	DR 14 / 18	4" to 48"	
		National Pipe and Plastics	DR 14 / 18	4" to 48"	
	PVC Certa-Lok	Westlake Pipe & Fittings (NAPCO)		2" to 16"	As approved by CCU
Pipe		Westlake Pipe & Fittings (NAPCO)	PR, SCH 40 / 80	.5" to 3"	
	PVC 40 / 80	Silverline	PR. SCH 40 / 80	.5" to 3"	
		Charlotte Pipe and Foundry	PR, SCH 40 / 80	.5" to 3"	
	PVC SDR 26	Westlake Pipe & Fittings (NAPCO)	SDR 26	4" to 36"	
		Diamond Plastics Company (DPC)	SDR 26	4" to 60"	
		JM Eagle	SDR 26	4" to 36"	
		National Pipe and Plastics	SDR 26	4" to 48"	
	HDPE 3408, DIPS	Performance/Driscoplex	SDR 9 / 11	2" to 54"	
		JM Eagle	SDR 9 / 11	.5" to 63"	
		W.L. Plastics	SDR 9 / 11	1/2" to 54"	
		Sigma	MJ	2" to 64"	
		Sigma	FLANGED	2" to 64"	
	Ductile Iron	Star	MJ	2" to 64"	
	MJ or Flange	Star	FLANGED	2" to 64"	
		Tyler Union	MJ	2" to 64"	
Pipe Fittings		Tyler Union	FLANGED	2" to 64"	
		Nibco/Lasco	SCH 40 / 80	Various	
	DVC 40 /00	Spears	SCH 40 / 80	Various	
	PVC 40 / 80	FLO Control / NDS	SCH 40 / 80	Various	
		Charlotte Foundry	SCH 40 / 80	Various	
Polyethylene Sleeve, DIP	Polyethylene			Minimum 8 mil.	See Specifications
		Champion	CPE5 .5HP		
Pumps, LPS	Effluent, High Head	Barnes	EH512L .5HP		
	, 5	Milwaukee	LE5-1 .5HP		

		Star	1100 PVC Bell Restrainers	4" to 48"	
Restraints		Star	1000C / 1100C DI Bell Restrainers	4" to 48"	
	Pipe / Bell	Sigma	PV LOK DI	4" to 42"	
	PVC / DI	Sigma	PV LOK PVC	4" to 42"	
		EBAA	1600 / 2800 PVC Sizes 4" to 48"	4" to 48"	
		EBAA	1500 / 1700 DI Sizes 4" to 48"	4" to 48"	
		EBAA	1100 Series DI	3" to 54"	
	Megalug DI / PVC	Star	4000G2 PVC Series	3" to 36"	
		Sigma	SERIES D-SLCE PVC	3" to 36"	
			S	4" to 48" plus	
		PSI	С	4" to 48" plus	
Spacer	Casing		S8G-2	4" to 38" plus	
		Cascade	ccs	Made to order	
		CCI	CSS8	Made to order	
	Service Tubing, CTS / LPS	Ford	50 / 70 STAINLESS STEEL	3/4" to 2"	
Stiffeners		Mueller	STAINLESS STEEL	3/4" TO 2"	
Sujjeners	HDPE -	Romac	WEDGE TYPE	4" to 36"	LGR ON REQUEST
		Cascade	WEDGE TYPE	2" to 20"	LGR ON REQUEST
Service Tubing Sewer	PE 3408, CTS SDR9 (Green)	Endot	Endot PE 4710 Green	.5" to 2"	
Service rubing sewer		Charter Plastics	Charter PE 4710 Green	.75" to 2"	
	Brass	Ford	PACK JOINT/COMP/ INSTA-TITE		
Service Fittings		Mueller	PACK JOINT/COMP/ INSTA-TITE		
		A.Y. McDonald	PACK JOINT/COMP/ INSTA-TITE		
		Power Seal	3417DI	2" to 24"	
Service Saddles	Epoxy Double SS Strap / Band	Ford	FCD202	4" to 30"	
		Romac	202NS	2" to 30"	
	Fiberglass	Alpha	HD20	750/900 Gallons	LGR ON REQUEST
Tank, Low Pressure	Fibel glass	Дірпа	CAT - 4	900AB/STEP C4	NON TRAFFIC BEARING AREAS ONL
	HDPE	Infiltrator	CM - 1060, IM - 1060		IM - 1060 manufacture has ended
	Concrete/Commercial Only		Project Specific		
Pump Chamber		Alpha			
•		Infiltrator / TOPPS			
Value Ben	CAST IDON / COMPOSITE	Bingham and Taylor		No. 18, 20, 21,22	
Valve, Box	CAST IRON / COMPOSITE	Tyler/Union	6850 SERIES 461S	4" to 24"	

	Polymer Concrete	GlasMasters	Wastewater VBC7420-5-CCWW		Grass Areas
		Tyler Union	(25 lbs.) DOM Deep Depth water valve lid		Pavement areas: Roadways above 45 mph
Valve, Box Lid	Cast Iron	Bingham and Taylor	(25 lbs.) DOM Deep Depth water valve lid		Pavement areas: Roadways above 45 mph
	Cast Hull	Tyler Union	Standard Lid		Pavement areas: Roadways under 45 mph
		Bingham and Taylor	Standard Lid		Pavement areas: Roadways under 45 mph
Valve, Check	PVC, Flap	FLO Control / NDS	1520 Series	2"	
vaive, Check	PVC, Flap	Spears	S1520 Series	2"	
Valve, Ball		Hayward	TC100 SERIES	2"	
	PVC, Ball	Spears	2622 Series	2"	
		Proflo	PFPSBV Series	2"	

# 002332 VACUUM SEWER COLLECTION SYSTEM SYSTEM / 002340 VALVES / 002445 JACK AND BORE

	Product	Туре	Manufacturer	Model # / Size	Size	Product Comments
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TO BE DETERMINED

#### 002335 RECLAIMED WATER MAINS / 002340 VALVES / 002445 JACK AND BORE

Product	Туре	Manufacturer	Model #	Size	Product Comments	
		Eclipse / Kupferle	9400-WC (2" W/1' BURY)			
Automatic Flush Device	In Line	Hydro-Guard / Mueller	HG-1-INT			
		PenCell Plastics/Hubbell	AGVNS-1420 Hasps Waste Water			
Air Release Enclosure	Polyethylene	Water Plus Corporation	131632			
ir Release Enclosure, High Traffic Vulnerable Areas	FRP-lined, Gel Coat Exterior, Concrete Base	Predl Systems North America Inc.	PREDL ARV Capsule	S 30" or L 42"	High Traffic Areas as Approved by CCU	
ARV Manhole					See Specifications	
		Wilkins / Zurn / Rexnord	975XL	1/4" - 2"		
- 10		Conbraco	40-200 / 200s / 700	1/4" - 10"		
Backflow	RPZ		009 SERIES	1/4" – 2"		
		Watts	957 SERIES	21/2" – 10"		
			S	4" to 48" plus		
		PSI	С	4" to 48" plus		
Spacer	Casing		S8G-2	4" to 38" plus		
•		Cascade	CCS	Sizes made to order		
		CCI	CSS8	Sizes made to order		
		Cascade	CCES	Sizes made to order		
Casing End Seal	Casing End Seal  Brass	PSI	TYPE KT	Sizes made to order		
J		CCI	ESC	Sizes made to order		
Corporation Stops		Brass	Ford	FBRW1700	3/4" to 2 1/2" TPPR.	needs to have the Ford Pack Joint nut connectio piece added to make th connection to the servic tube
corporation stops			FBRW 1100	3/4" to 2"		
			FBRW 1101	3/4" to 2"		
		Mueller	B25024-20	3/4" to 1"		
		A.Y. McDonald	73149B	1" to 2"	for NPT and reclaimed water stamp	
	Community Filting	Harco Fittings/Philmac	Universal Transition Coupling (UTC)	BxB, BxC, CxC	·	
	Compression Fitting	Elster / Honeywell	Hydrosert	3/4" to 2"		
6		Sigma	Solid Sleeve	2" to 64"		
Coupling / Repair	Called Classes EDE	Tyler/Union	Solid Sleeve	3" to 48"		
	Solid Sleeve FBE	Star	Solid Sleeve	4" to 48"		
		Max Adapter				
	Adata III - Bata atalia Adadi a	Pro-Line	REUSE	Size 3"		
Marker Tape	Metallic Detectable Marking	Presco	REUSE	Size 3"		
	Таре	Sigma	REUSE	Size 3"		
Marker, Electronic	Reclaim Ball	3M	1428-XR/ID	4"		
Meter Box and Lid	Reclaim	Glas Masters	Per most recent approved products by Utility from Glasmasters			
		Hubbell (formerly CDR)	Quazite Gray Box - 3x1 Mouse Holes w/ Purple Cover Pantone 522	15"x17"		

Motor Actuators	Reclaim	Rotork	IQ3 range	2" to 24"	
Reclaimed Meter	Reclaim	METER PROVIDED BY UTILITY			
	Ductile Iron	American Cast Iron Pipe (ACIPCO)	Fastite Pipe	4" to 60"	Purple Marked
	( Push On Joint Type )	Griffin	Tyton Joint	3" to 64"	Purple Marked
		US Pipe	Tyton Joint	3" to 64"	Purple Marked
	Field Lok Gaskets	American Cast Iron Pipe (ACIPCO)	Amarillo Fast-Grip	4" to 30"	Purple Marked
		US Pipe	Field Lok Gasket	4" to 24"	Purple Marked
Pipe		Westlake Pipe & Fittings (NAPCO)	DR 14 / 18	4" to 36"	Purple Marked
	PVC DR14 / 18	Diamond Plastics Corporation (DPC)	DR 14 / 18	4" to 60"	Purple Marked
		JM EAGLE	DR 14 / 18	4" to 48"	Purple Marked
		National Pipe and Plastics	DR 14 / 18	4" to 48"	Purple Marked
		Performance/Driscoplex	SDR 9 / 11	2" to 54"	Purple Marked
	HDPE 3408, DIPS	JM Eagle	SDR 9 / 11	.5" to 63"	Purple Marked
		W.L. Plastics	SDR 9 / 11	1/2" to 54"	Purple Marked
		Sigma	MJ	2" to 64"	
	Ductile Iron MJ or Flange	Sigma	FLANGED	2" to 64"	
Pipe Fittings		Star	MJ	2" to 64"	
riperituings		Star	FLANGED	2" to 64"	
		Tyler Union	MJ	2" to 64"	
		Tyler Union	FLANGED	2" to 64"	
Polyethylene Sleeve, DIP	Polyethylene			Minimum 8 mil.	See Specifications
Pressure Transducer	Submersible				As approved by CCU
Pressure Transducer	Above ground	Rosemount	2088	4-20ma, 0-100psi	As approved by CCU
		EBAA	2000PV Series PVC	3" to 48"	
		EBAA	1100 Series DI	3" to 54"	
	Megalug DI / PVC	Star	4000G2 PVC Series	3" to 36"	
		Star	3000 DI Series	3" to 48"	
		Sigma	SERIES D-SLDE DI	3" to 48"	
-		Sigma	SERIES D-SLCE PVC	3" to 36"	
		Star	1100 PVC Bell Restrainers	4" to 48"	
Restraints		Star	1000C / 1100C DI Bell Restrainers	4" to 48"	
		Sigma	PV LOK DI	4" to 42"	
	Pipe / Bell	Sigma	PV LOK PVC	4" to 42"	
	PVC / DI	EBAA	1600 / 2800 PVC	4" to 48"	
		EBAA	1500 / 1700 DI	4" to 48"	
		ReiberLok Gasket		4" to 24"	Warranty letter from pipe manufacturer required
	Sorvice Tubing CTS	Ford	50 / 70 STAINLESS STEEL	3/4" to 2"	
Stiffeners	Service Tubing, CTS	Mueller	STAINLESS STEEL	3/4" TO 2"	
Jujjeners	HDPE (purple)	Romac	WEDGE TYPE LGR ON REQUEST	4" to 36"	
	TIDI L (purple)	Cascade	WEDGE TYPE LGR ON REQUEST	2" to 20"	

		Endot	EndoPure PE-4710	.5" to 2"	Marked Purple
Service Tubing	PE 3408, LPS SDR9 (Purple)	Charter Plastics	Charter PE 4710 Purple	.75" to 2"	Marked Purple
		Vanguard / CB Supplies	BRUISER HDPE	.75" to 2"	Marked Purple
		Power Seal	3417DI	2" to 24"	
Service Saddles	Epoxy Double SS Strap / Band	Ford	FCD202	4" to 30"	
		Romac	202NS	2" to 30"	
		Mueller	H15365	1"x3/4"x6-1/2"	
		Ford	U48-43-65-U-NL	1"x3/4"x6-1/2"	
U-Branch	Brass		709UHFWRWT	1x3/4x6.5	
		A.Y. McDonald	709UHFWRWC	1x3/4x6.6	
			709UHFWRWT	1x3/4x6.7	
				1" Meter Swivel or 2" Meter	
			H14267NRW - Angle Valve-Stab	Flange	
				1" Meter Swivel or 2" Meter	
			H14258NRW - Angle Valve Compression	Flange	
				1" Meter Swivel or 2" Meter	
		Mueller	P14258NRW - Angle Valve Pack Joint	Flange	
			B24363NRW - Straight Valve -Stab	1" Meter Swivel or 2" Meter	
				Flange	
			B24350NRW - Straight Valve Compression	1" Meter Swivel or 2" Meter	
				Flange	
			P24350NRW - Straight Valve Pack Joint	1" Meter Swivel or 2" Meter	
				Flange	
			FIP X RW Meter Swivel	1" Meter Swivel or 2" Meter	
				Flange	
			24.42.24.24.44.44.44.44.44.44.44.44.44.4	1" Meter Swivel or 2" Meter	
			BA43-342W-U-AWT-NLRW - Angle Valve-Stab	Flange	
				1" Meter Swivel or 2" Meter	
			BA43-342W-Q-NLRW - Angle Valve Compression	Flange	
				1" Meter Swivel or 2" Meter	
			BA43-342W-NLRW - Angle Valve Pack Joint	Flange	
	F I		1" Meter Swivel or 2" Meter		
		Ford	B43-342W-U-NL RW- Straight Valve -Stab	Flange	
				1" Meter Swivel or 2" Meter	
			B43-342W-Q-NLRW - Straight Valve Compression	Flange	
				1" Meter Swivel or 2" Meter	
			B43-342W-NLRW - Straight Valve Pack Joint	Flange	
Curb Stops for Reclaimed				1" Meter Swivel or 2" Meter	
Water Services	Brass	BRW13-W-NL - FIP X Meter Swivel		Flange	

			90 degree Curb stop Compression 74602BQ RWT	1"	
			90 degree Curb stop Compression 74602BQRWC or		
			74602BQRWT	2"	
i			90 degree Curb stop Pack 74602B-22 RWT	1"	
			90 degree Curb stop Pack 74602B-22RWC or 74602B-		
			22RWT	2"	
			90 degree Curb stop Stab 74602BH RWT	1"	
			90 degree Curb stop Stab 74602BHRWC or		
			74602BHRWT	2"	
			Straight Curb Stop Compression 76100MWQ RWT		
			1x3/4x3/4	1"	
			Straight Curb Stop Compression 76100MWQWRWT or		
			76100MWQRWC	2"	
		AY McDonald	Straight Curb Stop Stab 76100MWH RWT	1"	
			Straight Curb Stop Stab 76100MWHRWT OR		
			76100MWHRWC	2"	
			Straight Curb Stop Pack 76100MW-22 RWT	1"	
				ī	
			Straight Curb Stop Pack 76100MW-22RWT OR	2"	
			76100MW-22RWC		
				1"	
			Angle FIP x Meter Swivel 74604B RWT (3/4" - 2")		
			Angle FIP x Meter Swivel 74604BRWT 2	2"	
			Straight FIP x Meter Swivel 76101MW RWT (3/4"-2")	1"	
			Straight FIP x Meter Swivel 76101WRWT 2 OR		
			76101WRWC 2	2"	
		EBAA	MEGAFLANGE 2100 Ser.	3" to 48"	
Flange Adapters	Epoxy, SS, W/Rest.	JCM	301 SERIES	3" to 12"	
- ,		Romac	RFCA	3" to 12"	
Flange Gasket	Ductile Iron Pipe	American Cast Iron Pipe (ACIPCO)	Toruseal		
		(ACIPCO)			
Tracer Wire (for HDD)	Copper-clad steel	Copperhead	Soloshot Extra-High Strength, 1045 CCS Tracer wire	#10 AWG (0.1019" diameter)	2,032 lb break load, 45 mi HDPE insulation
	Polymer Concrete	GlasMasters	Reclaim Water VBC7420-4-CCU		Grass Areas
		Tyler Union	(25 lbs.) DOM Deep Depth reclaimed water valve lid		Pavement areas: Roadway above 45 mph
Valve, Box Lid	Cast Iron	Bingham and Taylor	(25 lbs.) DOM Deep Depth reclaimed water valve lid		Pavement areas: Roadway above 45 mph
		Tyler Union	Standard reclaimed lid		Pavement areas: roadway: below 45mph
		Bingham and Taylor	Standard reclaimed lid		Pavement areas: Roadways below 45 mph

Valve, Box	CAST IRON / COMPOSITE	Bingham and Taylor		No. 18, 20, 21,22	Screw Type
vaive, Box	CAST IRON / COMPOSITE	Tyler/Union	6850 SERIES heavy duty - domestic	Various	Screw Type
		Kennedy	4500 SERIES	4" to 24"	
Valve, Butterfly	Iron, MJ or FL	Dezurik	Dezurik BFV	3" to 36"	
		Mueller	LINE SEAL	3" to 48"	
		Kennedy	C508/1106LW	2" to 24"	
Valve, Check	Iron, W&L	Muller	A - 2600 SERIES	2" to 12"	
valve, check	non, wat	AFC	SERIES 2100	3" to 16"	
Makes Air Balanca	Reclaim / No Vacuum	ARI	S-021	1" to 2"	NO VACUUM
vaive, Air Reiease	Valve, Air Release Permitted	Val-Matic	15A - 15A.3	2" to 6"	NO VACUUM
		AFC	2500 / 2500-1 Series	2" to 36"	
Value Cata	Iron Milor II or Tonning	Mueller	A 2360 / 2361 Series	2" to 48"	
Valve, Gate	Iron, MJ or FL or Tapping	Teams	Inserta Valve	4" to 12"	
		Clow	6100 Series	4" to 48"	
		Kennedy		3" to 36"	100% port
Valve, Plug	Iron, MJ or FL	Golden Anderson		4" to 36"	100% port
		Dezurik		4" to 72"	100% port
Valve, Pressure Sustaining		Cla-val	As approved by CCU		
vaive, Fressure Sustaining		Ber-mad	As approved by CCU		

#### 002335 POTABLE WATER MAINS / 002345 FIRE HYDRANTS / 002340 VALVES / 002445 JACK AND BORE

Product	Туре	Manufacturer	Model #	Size	Product Comments	
	In Line	Eclipse / Kupferle	9400-WC (2" W/1' BURY)			
Automatic Flush Device	III LINE	Hydro-Guard / Mueller	HG-1-INT			
Automatic Flush Device	11. odnovak	Eclipse / Kupferle	9700 (Red)			
	Hydrant	Hydro-Guard / Mueller	HG-6			
Air Balance Fuelous	Polostic Inc.	PenCell Plastics/Hubbell	AGVNS-1420 Hasps Water			
Air Release Enclosure	Polyethylene	Water Plus Corporation	131632			
Air Release Enclosure, High Traffic Vulnerable Areas	FRP-lined, Gel Coat Exterior, Concrete Base	Predl Systems North America Inc.	PREDL ARV Capsule	S 30" or L 42"	High Traffic Areas as Approved by CCU	
		Wilkins / Zurn / Rexnord	975XL	1/4" - 2"		
	207	Conbraco	40-200 / 200s / 700	1/4" - 10"		
	RPZ	RPZ	14/-11-	009 SERIES	1/4" – 2"	
Backflow		Watts	957 SERIES	21/2" – 10"		
	Double Detector	Watts	757DCDA	21/2" – 10"		
		Wilkins / Zurn / Rexnord	350 DAOSY	21/2" – 12"		
		Conbraco/ Apollo	As approved by CCU	3" - 10"		
			S Sizes	4" to 48" plus		
		PSI	C Sizes	4" to 48" plus		
Spacer	Casing		S8G-2	4" to 38" plus		
		Cascade	CCS	made to order		
		CCI	CSS8	made to order		
		Cascade	CCES	made to order		
Casing End Seal	Casing End Seal	PSI	TYPE KT	made to order		
		CCI	ESC	made to order		
Corporation stops for water services		Ford	FB1100-4-U-ANWT-NL	1" OR 2"		
		Mueller	B25024	1" OR 2"		
		A.Y. McDonald	73149B	1" OR 2"		
Corporation stop & Tapping Sleeve	Glass Reinforced Polymer	Utility Supply Corporation	Tapper Main Stop Saddle: 200-ST_X_	3/4" or 1"		

			H14267N - Angle Valve-Stab 1" meter	1" Meter Swivel or 2" meter flange
			H14258N - Angle Valve Compression 1" meter, OR B- 24276N - Angle Valve Compression 2" Flange	1" Meter Swivel or 2" meter flange
			P14258N - Angle Valve Pack Joint 1" meter , OR BFA43777WNL - Angle Valve Pack Joint 2" Flange	1" Meter Swivel or 2" meter flange
		Mueller	B24363N - Straight Valve -Stab 1" meter	1" Meter Swivel or 2" meter flange
			B24350N - Straight Valve Compression 1" meter OR B24335N - Straight Valve Compression 2" Flange	1" Meter Swivel or 2" meter flange
			P24350N - Straight Valve Pack Joint 1" METER, OR - BF43777WNL Straight Valve Pack Joint 2" Flange	1" Meter Swivel or 2" meter flange
			FIP X Meter Swivel	1" Meter Swivel or 2" meter flange
			BA43-342W-U-AWT-NL 1" - Angle Valve-Stab	1" Meter Swivel or 2" meter flange
			BA43-342W-Q-NL 1" OR BA43-342W-Q-NL 2"- Angle  Valve Compression	1" Meter Swivel or 2" meter flange
	Brass	Ford	BA43-342W-NL 1" OR BFA43777WNL 2" Angle Valve Pack Joint	1" Meter Swivel or 2" meter flange 1" Meter Swivel or 2" meter
Curb Stops for Water Services			B43-342W-U-AWT-NL 1" - Straight Valve -Stab B43-342W-Q-NL 1" OR -B43-342W-Q-NL 2" Straight	flange 1" Meter Swivel or 2" meter
			Valve Compression	flange
			B43-342W-NL 1" OR - BF43777WNL 2" Straight Valve	1" Meter Swivel or 2" meter
			Pack Joint	flange
			B13-332W-NL FIP X Meter Swivel 1" OR B13-332W-NL FIP X Meter FLANGE 2"	1" Meter Swivel or 2" meter flange
			74602BH 1" - Angle Valve-Stab	1" Meter Swivel or 2" meter flange
			74602BQ 1" OR 74602BQ 2"- Angle Valve Compression	1" Meter Swivel or 2" meter flange
			74602B22 1" OR BFA43777WNL 2" - Angle Valve Pack Joint	1" Meter Swivel or 2" meter flange
		AY McDonald	76100MWH 1" - Straight Valve -Stab	1" Meter Swivel or 2" meter flange
		71 Webbilaia	76100MWQ 1" OR 76100MWQ 2"- Straight Valve Compression	1" Meter Swivel or 2" meter flange
			76100WW22 1" OR BF43777WNL 2" - Straight Valve Pack Joint	1" Meter Swivel or 2" meter flange
			74604B 1" OR 74604b 2"- FIP X Meter Swivel Angle	1" Meter Swivel or 2" meter flange
			76101 1" OR 76101 2" - FIP X Meter Swivel St	1" Meter Swivel or 2" meter flange
	Glass Reinforced Polymer	Utility Supply Corporation	MegaTite - Straight Ball Service Valves: 210-X_X_	3/4" or 1"

	Compression Fitting	Harco Fittings/Philmac Universal Transition Coupling	BxB, BxC, CxC		
Coupling / Repair	Solid Sleeve FBE	Star	Solid Sleeve	4" to 48"	
	Glass Reinforced Polymer	Utility Supply Corporation	MegaTite - Full Bore Coupling: 118-X_X_	3/4" or 1"	
		Mueller	A - 423 CENTURION		
Fire Hydrant	Dry Barrel	AFC	B84B		
		Clow	MEDALLION		
Flange Gasket	Ductile Iron Pipe	American Cast Iron Pipe (ACIPCO)	Toruseal		
		Pro-Line	WATER	Size 3"	
	Metallic Detectable Marking Tape	Presco	WATER	Size 3"	
Marker Tape		Sigma	WATER	Size 3"	
Marker, Electronic	Water Ball	3M	1423-XR/ID	4"	
Mater Borrand Lid	Maken	GlasMasters	Per most recent approved products by Utility from Glasmasters		
Meter Box and Lid	Water	Hubbell (formerly CDR)	Quazite Gray Box - 3x1 Mouse Holes w/ Light Blue Cover	15"x17"	
Meter, Water	Water	METER PROVIDED BY UTILITY	Utility Supplied		

		American Cast Iron Pipe (ACIPCO)	Fastite Pipe	4" to 60"	Cement lined / Fusion bonded epoxy lining : NSF 61 Certified
	Ductile Iron	Griffin	Tyton Joint	3" to 64"	Cement lined / Fusion bonded epoxy lining : NSF 61 Certified
		US Pipe	Tyton Joint	3" to 64"	Cement lined / Fusion bonded epoxy lining : NSF 61 Certified
		JM Eagle	Eagle Loc 900 Sizes	4" to 12"	
	Field Lok Gaskets	American cast from Pipe	Amarillo Fast-Grip	4" to 30"	
		US Pipe	Field Lok Gasket	4" to 24"	
		Westlake Pipe & Fittings (NAPCO)	DR 14 / 18	4" to 36"	
	PVC 14/18	Diamond Plastics Company	DR 14 / 18	4" to 60"	
		JM EAGLE	DR 14 / 18	4" to 48"	
Pipe		National Pipe and Plastics	DR 14 / 18	4" to 48"	
·	PVC Certa-Lok	Westlake Pipe & Fittings (NAPCO)		2" to 16"	As approved by CCU
		Westlake Pipe & Fittings (NAPCO)	PR, SCH 40 / 80	.5" to 3"	
	PVC 40/80	Silverline	PR. SCH 40 / 80	.5" to 3"	
		Charlotte Pipe and Foundry	PR, SCH 40 / 80	.5" to 3"	
		Performance/Driscoplex	SDR 9 / 11	2" to 54"	
	HDPE 3408, DIPS	JM Eagle	SDR 9 / 11	.5" to 63"	
		W.L. Plastics	SDR 9 / 11	1/2" to 54"	

		Sigma	MJ	2" to 64"	Cement lined / Fusion bonded epoxy lining : NSF 61 Certified
		Sigma	FLANGED	2" to 64"	Cement lined / Fusion bonded epoxy lining : NSF 61 Certified cement inned / Fusion bonded epoxy inning
	Ductile Iron	Star	MJ	2" to 64"	Cement linea / Fusion bonded epoxy lining
	MJ or Flange	Star	FLANGED	2" to 64"	Cement lined / Fusion bonded epoxy lining : NSF 61 Certified
		Tyler Union	MJ	2" to 64"	Cement lined / Fusion bonded epoxy lining : NSF 61 Certified
		Tyler Union	FLANGED	2" to 64"	Cement lined / Fusion bonded epoxy lining : NSF 61 Certified
		Nibco/Lasco	SCH 40 / 80	Sizes Various	
Pipe Fittings	B. (0.40. / 0.0	Spears	SCH 40 / 80	Sizes Various	
	PVC 40 / 80	FLO Control / NDS	SCH 40 / 80	Sizes Various	
		Charlotte Foundry	SCH 40 / 80	Sizes Various	
		Harco	SDR 26	4" to 15"	
	PVC 3034 (Gasketed)	Multi Fittings	SDR 26	4" to 42"	
		Tigre-ADS USA	SDR 26	4" to 36"	
	PVC C900 (Gasketed)	Harco	C900	4" to 12"	
		Multi Fittings	BRUTE	4" to 48"	
		NACO / IPEX	C900/905 Pressure Gasketed	4" to 36"	
	HDPE	Elster / Honeywell	Hydrosert	3/4" to 2"	
Polyethylene Sleeve, DIP	Polyethylene			Minimum 8 mil.	See Specifications
		EBAA	2000PV Series PVC	3" to 48"	
		EBAA	1100 Series DI	3" to 54"	
		Star	4000G2 PVC Series	3" to 12"	
	Megalug DI / PVC	Star	4000 PVC Series	3" to 36"	
		Star	3000 DI Series	3" to 48"	
		Sigma	SERIES D-SLDE DI Sizes	3" to 48"	
		Sigma	SERIES D-SLCE PVC	3" to 36"	
Restraints		Star	1100 PVC Bell Restrainers	4" to 48"	
		Star	1000C / 1100C DI Bell Restrainers	4" to 48"	
	Dine / D. II	Sigma	PV LOK DI	4" to 42"	
	Pipe / Bell PVC / DI	Sigma	PV LOK PVC	4" to 42"	
	PVC / DI	EBAA	1600 / 2800 PVC	4" to 48"	
		EBAA	1500 / 1700 DI	4" to 48"	
		Reiber Lok Gasket		4" to 24"	

	Epoxy Double SS Strap /	Power Seal	3417DI	2" to 24"	
Service Saddles	' '	Ford	FCD202	4" to 30"	
	Dallu	Ford   FCD202   4" to 30"   Romac   202NS   2" to 30"   E ford   Pack Joint OR Ultra Tight   1/2" to 2"   A.Y. McDonald   Pack Joint OR Ultra Tight   1/2" to 2"   E floot   E floop for E floor   E floop for E floor   E floor			
		Ford	Pack Joint OR Ultra Tight	1/2" to 2"	
Miscellaneous Water Service Brass	Brass	Mueller	300 series	1/2" to 2"	
		Ford			
		Endot			
Service Tubing Water	PE 3408, LPS SDR9 (Blue)	Charter Plastics	Charter PE 4710 Blue Ice	1" or 2"	
		Vanguard / CB Supplies	BRUISER HDPE	1" or 2"	
		Ford	50 / 70 STAINLESS STEEL	1" or 2"	
Stiffeners	Service Tubing, CTS / LPS	Mueller	STAINLESS STEEL	1" or 2"	
		Romac	WEDGE TYPE	4" to 36"	LGR ON REQUEST
Stiffeners	HDPE	Cascade	WEDGE TYPE	2" to 20"	LGR ON REQUEST
		Romac	SST III SERIES	4" to 30"	
Tapping Sleeves	Stainless Steel	TPS Total Pipe Solutions	Triple Tap Extended Range		
		Powerseal	3490MJ/3940AS		
		AY McDonald	709UHFW	1"x3/4"x6-1/2"	
U-Branch	Brass	Mueller	H15365	1"x3/4"x6-1/2"	
		Ford	U48-43-65-U-NL	1"x3/4"x6-1/2"	
		EBAA	MEGAFLANGE 2100 Ser.	3" to 48"	
Flange Adapters	Epoxy, SS, W/Rest.	JCM	301 SERIES	3" to 12"	
		Romac	RFCA	3" to 12"	
Tracer Wire (for HDD)	Copper-clad steel	Copperhead	Soloshot Extra-High Strength, 1045 CCS Tracer wire	#10 AWG (0.1019" diameter)	2,032 lb break load, 45 mil HDPE insulation
	Polymer Concrete	GlasMasters	Potable Water VBC7420-4-CCU		Grass Areas
		Tyler Union	(25 lbs.) DOM Deep Depth water valve lid		Pavement areas: Roadways above 45 mph
Valve, Box Lid	Cast Iron	Bingham and Taylor	(25 lbs.) DOM Deep Depth water valve lid		Pavement areas: Roadways above 45 mph
	Cast IIOII	Tyler Union	Standard Lid		Pavement areas: Roadways under 45 mph
		Bingham and Taylor	Standard Lid		Pavement areas: Roadways under 45 mph
Valve Box	Cast Iron	Bingham and Taylor		No. 18, 20, 21, 22	Screw Type Only
Valve DOX	Cast II UII	Tyler/Union	6850 SERIES 461S	4" to 24"	Screw Type Only
		Kennedy	4500 SERIES	4" to 24"	Fusion bonded Epoxy Lining : NSF 61 Certified
Valve, Butterfly	Iron, MJ or FL	Dezurik	Dezurik BFV	3" to 36"	Fusion bonded Epoxy Lining : NSF 61 Certified
		Mueller	LINE SEAL	3" to 48"	Fusion bonded Epoxy Lining : NSF 61 Certified

		Kennedy	C508/1106LW	2" to 24"	Fusion bonded Epoxy Lining : NSF 61 Certified
Valve, Check	Iron, W&L	Muller	A - 2600 SERIES	2" to 12"	Fusion bonded Epoxy Lining : NSF 61 Certified
		AFC	SERIES 2100	3" to 16"	Fusion bonded Epoxy Lining : NSF 61 Certified
Makes Air Balance	Water / No Vacuum	ARI	D-040-V-STST	3/4" to 2"	NO VACUUM
Valve, Air Release	Permitted	Val-Matic	15A - 15A.3	1/2" to 1'	NO VACUUM
		AFC	2500 / 2500-1 Series	2" to 36"	Fusion bonded Epoxy Lining : NSF 61 Certified
Valve, Gate	Iron, MJ or FL or Tapping: No side actuating valves	Mueller	A 2360 / 2361 Series	2" to 48"	Fusion bonded Epoxy Lining : NSF 61 Certified
vaive, date	allowed	Teams	Insert Valve	4" to 12"	Fusion bonded Epoxy Lining : NSF 61 Certified
		Clow	6100 Series	4" to 48"	Fusion bonded Epoxy Lining : NSF 61 Certified
		AFC	2500 Series	2.5" to 24"	Fusion bonded Epoxy Lining : NSF 61 Certified
Valves, OS&Y	Wheel / OS&Y	Kennedy	KS-FW Series	2" to 24"	Fusion bonded Epoxy Lining : NSF 61 Certified
		Mueller	2360 / 2361 Series	2.5" to 24"	Fusion bonded Epoxy Lining : NSF 61 Certified

# 002540 STANDARD LIFT STATION / 002340 VALVES / 002445 JACK AND BORE

Product	Туре	Manufacturer	Model #	Size	Product Comments
Automatic Transfer Switch	As approved by generator manufactuer				
Coating, LS External and Coating,	Coal Tar Epoxy	Whitlam / Plumb-Pro	BLACK DRAGON		
	Coai fai Epoxy	Koppers	300M CARBOLINE		
Manhole External	Water Based Epoxy	Pro-Tech	EW-1 AquaPoxy		
Control Panel Support Posts	SCH40 Aluminum			4" to 6"	As approved by CCU
Control Panel	N/A	N/A	N/A	N/A	As approved by CCU
		Cascade	CCES	Made to order	
Casing End Seal	Casing End Seal	PSI	TYPE KT	Made to order	
		CCI	ESC	Made to order	
Elastomeric Gasket	Manhole Boot				As approved by CCU
Fence	N/A	N/A	N/A	N/A	Refer to Specifications
		EBAA	MEGAFLANGE 2100 Ser.	3" to 48"	
Florence Admintons	Epoxy, SS, W/Rest.	JCM	301 SERIES	3" to 12"	
Flange Adapters		Romac	RFCA	3" to 12"	
	PVC SCH 80	Vanstone		6" to 8"	
Flange Gasket	Ductile Iron Pipe	American Cast Iron Pipe (ACIPCO)	Toruseal		
Float Hangar	HACBHOPBCH CABLE HOLDER 316SS+ PBCH	Flygt	591022	1/2" and 3/16" hooks	
Flanta	Data Flants	A male and Catanatifica	Type S/ Suspended	40ft Normal Open	
Floats	Roto Floats	Anchor Scientific	Type S/ Suspended	60ft Normal Open	
Flow Meter	Mag meter	Rosemont	As approved by CCU	Various	
Guide Rails	316 SS /SCH 40			2" to 3"	As approved by CCU
Guide Rail Brackets	316 SS	N/A	N/A	2" to 3"	As approved by CCU
		Caterpillar			
Generators	Stand-By	Cummins/Onan			
		Kohler			
Hydrophilic Water Stop		Swell Seal			Additional joint sealant
•		Dixon	Aluminum Fittings	1/2" to 8"	-
LS Bypass Fitting/Camlocks	Camlock	Kamlock	Aluminum Fittings	1/2" to 4"	
	Chain added per request	ProFlow	Aluminum Fittings	1/2" to 6"	
		MJK	As approved by CCU		
Level Transmitters	Submersible	Dwyer	As approved by CCU		
		KPSI	As approved by CCU		
		Siemens	As approved by CCU		
	ultrasonic	Drexelbrook	As approved by CCU		
		Flowline	As approved by CCU		
Hatch Cover	Aluminum Accoss Hatch	Halliday	Per Engineering Specs.		
nuttri Cover	Aluminum Access Hatch	U.S. Fabrication	Per Engineering Specs.		

UDDE Electroficion Eithings	Electrofusion	JM Eagle	EFC PE3408	4" to 60"	
HDPE Electrofusion Fittings	Electrofusion	Georg Fischer	EFC PE3408	.5" to 26"	
HDPE Backup Ring	316L SS				As approved by CCU
Meter, Water, Reuse	Water / Reuse	METER PROVIDED BY UTILITY			
Odor Control	Bio Filter	SIEMENS / Hayward	Zabocs Biofilter		
	Ductile Iron - S	American Cast Iron Pipe (ACIPCO)	Fastite Pipe	4" to 60"	P401 epoxy coated
	( Push On Joint Type )	Griffin	Tyton Joint	3" to 64"	P401 epoxy coated
		US Pipe	Tyton Joint	3" to 64"	P401 epoxy coated
Pipe	DVC CCT 80	Westlake Pipe & Fittings (NAPCO)	PR, SCH 80	6" to 8"	
•	PVC SCH 80	Silverline	PR, SCH 80	6" to 8"	
		Charlotte Pipe and Foundry	PR, SCH 80	6" to 8"	
		Performance/Driscoplex	SDR 9 / 11	2" to 54"	
	HDPE 3408, DIPS	JM Eagle	SDR 9 / 11	.5" to 63"	
		W.L. Plastics	SDR 9 / 11	1/2" to 54"	
		Sigma	MJ	2" to 64"	
		Sigma	FLANGED	2" to 64"	
	Ductile Iron	Star	MJ	2" to 64"	
	MJ or Flange	Star	FLANGED	2" to 64"	
Din - Fittin		Tyler Union	MJ	2" to 64"	
Pipe Fittings		Tyler Union	FLANGED	2" to 64"	
		Nibco/Lasco	SCH 40 / 80	Various	
	DVC 40 / 00	Spears	SCH 40 / 80	Various	
	PVC 40 / 80	FLO Control / NDS	SCH 40 / 80	Various	
		Charlotte Foundry	SCH 40 / 80	Various	
Penetration Seal		Link Seal			As approved by CCU
Pressure Sensor					As approved by CCL
		Flygt/ITT/Xylem			
Pumps, LS	Submersible	Wilo	Project Specific		
		ABS / Sulzer			
Pump Base, Elbow	Cast Iron	Flygt/ITT/Xylem		2" to 12"	As approved by CCU
		Wilo	Pump Specific	2" to 12"	As approved by CCL
		ABS / Sulzer		2" to 12"	As approved by CCL
Lifting Chain Cleavis	316 SS			3/8"	As approved by CCL
Pump Lifiting Chain	316 SS			3/8"	As approved by CCL
SCADA	N/A	N/A	N/A	N/A	See separate SCADA I
Stiffeners	11005	Romac	WEDGE TYPE	4" to 36"	LGR ON REQUEST
	HDPE	Cascade	WEDGE TYPE	2" to 20"	LGR ON REQUEST
Support Stands	316 SS	N/A	N/A	N/A	Refer to Specification
Strut Channel		Unistrut	P1000T 10SS	1-5/8" x 10ft	

Spacer	Casing	PSI	S	4" to 48" plus	
			С	4" to 48" plus	
			\$8G-2	4" to 38" plus	
		Cascade	CCS	Made to order	
		CCI	CSS8	Made to order	
Valve, Check	Iron, MJ or FL	Kennedy	Quiet Closing/Swing Check/Weight & Lever	2" to 36"	
		Mueller		2" to 36"	
		M&H		2" to 36"	
Valve, Plug	Iron, MJ or FL	Kennedy		3" to 48"	100% port
		Golden Anderson		4" to 36"	100% port
		Dezurik		4" to 72"	100% port
Valve, Air Release	Waste Water	Val-Matic	200 Series	1/2" to 20" Combo	
		Val-Matic	48A W/BWA	2" to 4"	
		H-TEC	Model 986	2" to 8" Combo	
		ARI	D-025	2" - 3" - 4" Combo	
		ARI	D-020	2" to 8" Combo	
Yard Light					As approved by CCU

# 003300 PRECAST CONCRETE

Product	Туре	Manufacturer	Model #	Size	<b>Product Comments</b>
Concrete Precast	Portland Cement Type II	Cast Systems L.L.C.			
		Oldcastle Precast East Inc			
		Quality Precast Solutions, LLC			
		Foley Products Company, LLC			
Hydrophilic Water Stop		Swell Seal			Additional joint sealant
Deliferation start	Grade 60	Cast Systems L.L.C.			
		Oldcastle Precast East Inc			
Reinforcing steel		Quality Precast Solutions, LLC			
		Foley Products Company, LLC			
Wet well, Joint Seal, Circular	Rubber Gasket	Press-Seal	R-4		
Wet well, Joint Seal, Rectangular	0.1011		00.400	4.4./20	
or Square	Butyl Rubber	Conseal	CS-102	1-1/2"	
	Butyl Rubber	Henry	RU-116	6" 9" 12"	
Wet well, External Joint Wrap		Conseal	CS 212	6", 8", 12", 24",	
				36" 48"	
Wet Well, External Coatings	Coal Tar Epoxy	Whitlam / Plumb-Pro	Black Dragon		
		Koppers	300M Carboline		
	Water Based Epoxy	Pro-Tech	EW-1 AquaPoxy		
	Polymorphic Resin	IET	SYSTEM 3		
	Epoxy resin (monolithic)	Raven	Raven 405		
Manhole Internal Coating	Polyurethane coating	Spray Roq	Spraywall		
Mannole Internal Coating	Polyetheramine	GML Coatings	Green Monster		
	Polymorphic Resin	Restoration and Protective Solutions LLC.	Gas Guard 1000		
Wet well, Structural Internal	Pure-fused calcium aluminate	Kerneos	SEWPERCOAT 2000HS		
Coating	mortar	Madewell / Mainstay	Mainstay ML-CA		
Wet well, Internal Coating	Polymorphic Resin	IET	SYSTEM 3		
	Epoxy resin (monolithic)	Raven	Raven 405		
	Polyurethane coating	Spray Roq	Spraywall		
	Polyetheramine	GML Coatings	Green Monster		
	Polymorphic Resin	Restoration and Protective Solutions LLC.	Gas Guard 1000		

# 009900 SURFACE PREPARATION PAINTING AND COATING

Product	Manufacturer	Product Comments		
Desirat Destruction	Sherwin Williams	As approved by CCU		
Paint, Protective	Tnemec	As approved by CCU		
	Carboline Company	As approved by CCU		
Specialty Coatings	Enecon	As approved by CCU		