# **City of Hamilton**

## **Approved Products List**

\*\*\*This is the most recent version of the Approved Products List, dated September 16, 2025. Please note that the City is currently in the process of transitioning to a new platform for managing this list. As a result, no further updates will be made until the transition is complete. \*\*\*

Product	Standards	Manufacturer	Model/Series	Remarks
Backflow		Watts Industries (Canada) Inc.	LF909	75mm to 200mm
Preventers	COMMISSIONING PURPOSES ONLY	` ,	009	16mm to 50mm
Backwater Valve		Bibby Ste Croix (Div of Canada Pipe Co. Ltd.)	69060	
Corrosion Protection	Zinc Anodes, Type 2, and Magnesium Anodes, M1 Zinc Anodes: 5.4 Kg ad 10.5 Kg, ASTM B-418, Type 2 Magnesium Anodes: 14.5 Kg - B-107, ASTM 843, Type M1, OPSS.MUNI 442			
	Protective coatings for	Advanced Corrosion Solutions Inc.	ACS PetroGuard	mastic
	metal fittings		ACS PetroGuard	primer
			ACS PetroGuard	tape
		Bren Technologies Inc./Petro Coating Systems Ltd.		mastic
				primer
				tape
		Denso North America Inc.	Denso Wrap	primer
			Denso Wrap	tape
			Denso Wrap	mastic
		Interprovincial Corrosion Control	PetroWrap	primer, tape
		Company Ltd.	PetroWrap	mastic
		Trenton Corporation	No. 1 Wax Tape	(primer, mastic, tape)
	Polyethylene encasement for ductile iron watermain pipe and fittings ANSI/AWWA C105 A21.5 - 8 mil low density Poly-Tube with overlap			

	anufacturers' Products fo		T	T
Product	Standards	Manufacturer	Model/Series	Remarks
Couplings	Water Service Couplings	A.Y. McDonald Mfg. Co.	74758Q	
	19mm to 50mm, compression fit copper to	Cambridge Brass	118NL	
	compression in copper to	Ford Meter Box Company Inc.	C44-Q-NL	
	AWWA C800, NSF 61(Annex G)	Mueller Canada	H-15403N	
	Water Service Couplings 19mm to 50mm, copper to lead or alloy connection AWWA C800, NSF 61(Annex G)	Ford Meter Box Company Inc.	Q14-NL,Q24-NL, Q34-NL with internal stop	
	Direct Buried Watermain	Ford Meter Box Company Inc.	FC1	100mm to 300mm DI and PVC
	Pipe Couplings		FC2A	100mm to 300mm DI and PVC
	AWWA C219 expoxy coated with stainless steel straps, nuts		FC2W-xx-SH	100mm to 400mm DI and PVC
	and bolts	Georg Fischer Piping Systems	MULTI/JOINT® 3000 Plus Restraint System	Sizes up to 42" O.D.
		Krausz Industries Ltd.	Hymax Model No. 2000	100mm to 600mm DI and PVC
		Robar Industries Ltd.	1506 (4 or 5 bolt model)	100mm to 400mm DI and PVC
		Romac Industries Inc.	Macro HP	100mm to 300mm DI and PVC
		Viking Johnson Ltd.	MaxiFit	(available up to 700mm O.D.)
	In-Chamber Watermain Pipe Couplings	Romac Industries Inc.	Alpha FC	Restrained Flange Coupling Adapter (100mm to 300mm)
	epoxy coated with stainless steel nuts and bolts	Victaulic Company of Canada	Style AGS W77	(used when specified in the contract documents), 500mm and Larger, Steel Pipe and CPP
			Style 31	300mm & 400mm (DI pipe)
			Style 44	500mm and Larger Steel Pipe and CPP
Curb Stops	Curb Stop, 19mm to	A.Y. McDonald Mfg. Co.	76100Q	
	50mm, compression ends	Cambridge Brass	202NL	
	ball type, non-draining. AWWA C800, NSF 61(Annex	Ford Meter Box Company Inc.	B44-Q-NL	
	G)	Mueller Canada	300 B-25209N	

Approved Manu	ıfacturers' Products fo	r Watermain		
Product	Standards	Manufacturer	Model/Series	Remarks
Fittings	Ductile Iron Up to 300mm Pressure Class 350,	Bibby Ste Croix (Div of Canada Pipe Co. Ltd.)		
	cement lined AWWA C104, C110/A21.10, C153/A2.53, OPSS.MUNI 441,	RCT	Flex-Tite Fittings (Self Restrained Fittings)	100mm to 300mm
	NSF 61	Sigma Corporation		
		SIP Industries	CDMJ, XDMJ, DF	Compact MJ, Full Body MJ and Flanged Fittings (CDMJ, XDMJ, DF)
		Star® Pipe Products		
		Tyler Union	DM, DFF and XM	
	Ductile Iron 400mm and larger Class 52, cement	Bibby Ste Croix (Div of Canada Pipe Co. Ltd.)		
	lined restrained	Sigma Corporation		
	mechanical joint AWWA C104, C110/A21.10, OPSS.MUNI 441.05.02	SIP Industries	CDMJ, XDMJ, DF	Compact MJ, Full Body MJ and Flanged Fittings (CDMJ, XDMJ, DF). Up to 600mm dia.
		Star® Pipe Products		
		Tyler Union	DM, DFF and XM	
	PVC 100mm, 150mm,	IPEX Inc.	Blue Brute	
	200mm, injection molded AWWA C907, B137.3, OPSS.MUNI 441	Westlake Pipe & Fittings	Royal	
	PVC 300mm to 750mm CSA B137.3 shall use AWWA C900 pipe, bonded and over-wrapped with fiberglass-reinforced polyester	IPEX Inc.	Big Brute	
			Blue Brute	
		Westlake Pipe & Fittings		
	Flanged Dismantling Joint	Smith-Blair Inc.	Dismantling Joint - Model 975	For use in-chamber only
Hydrants	3 way hydrants, AWWA C502	American AVK Company	Style 2780	
	CAN/ULC S-520, 2-63.5mm side ports, CSA standard	Clow Canada	Brigadier Series M -67	
	thread, stainless steel nuts, bolts and studs 100mm "STORZ" pumper connection 25mm hydrant operating nut open left (counter clockwise) Extensions permitted at boot only. All parts of the hydrant above ground shall be primed and painted #Red#, including caps, bonnets and Storz nozzles.	Mueller Canada	Darling B-50-B	
Hydrant Anti-Tampering Devices		Cromer Industries Corp.	WC-ATD	Colour Coded # GOLD for AVK Model 2780, YELLOW for Clow Brigadier, BLACK for Mueller B-50-B
Insulation	Extruded Polystyrene	Owens Corning Canada LP	Foamular 1000 (Pink)	

Approved Mar	Approved Manufacturers' Products for Watermain					
Product	Standards	Manufacturer	Model/Series	Remarks		
Joint Restraint	Ductile Iron Pipe	Canada Pipe Company Ltd.	TR Flex Joint Pipe	Self Restrained Joint Pipe (up to 900mm)		
		EBAA Iron Sales, Inc.	Mega-Lug Series 1100	Black epoxy coated wedges and nuts (100mm to 1200mm)		
		Ford Meter Box Company Inc.	Uni-Flange Series 1390	100mm to 300 mm		
		Sigma Corporation	One-Lok - SLDE	100mm to 600mm		
		SIP Industries	Model EZD	100mm to 600mm		
		Smith-Blair Inc.	Bell-Lock 115 and 165	100mm to 300 mm		
			Cam-Lock Series 111	epoxy coated wedges and nuts (100mm to 600 mm)		
		Star® Pipe Products	Stargrip Series 3000 and 3100	100mm to 1200mm		
			ALL Stargrip® series 4300	100mm to 300mm		
		Tyler Union	TUFGrip Dual TLD (black)			
			TUFGrip Dual Wedge (TDW)	Series 1500 (100mm to 600mm)		
	Polyvinyl Chloride Pipe	EBAA Iron Sales, Inc.	Tru-Dual Series 1500TD	100mm to 300 mm		
	(PVC)	Ford Meter Box Company Inc.	Uni-Flange Series 1390	100mm to 300 mm		
	AWWA C900, ASTM F1674	Sigma Corporation	PV-LOK - SLC	100mm to 600mm		
		SIP Industries	Model EZPVC	100mm to 600mm		
		Smith-Blair Inc.	Bell-Lock 115	100mm to 300mm		
			Cam-Lock Series 120	100mm to 600mm		
		Star® Pipe Products	1000C	pipe to MJ or Push-On Fittings (100mm to 600mm)		
			1000G2C	pipe to MJ push-on fittings (100mm to 300mm), formerly 9000C		
			1100C	Bell Joints (100mm to 600mm)		
			1100G2C	Bell Joints (100mm to 300mm)		
			1200C	pipe to PVC Pressure Fittings with DI pipe OD (100mm to 300mm)		
			1200G2C	pipe to PVC pressure fittings with DI pipe OD AWWA C907 (100mm to 300mm), formerly 9200C		
			Stargrip Series 4000	Top breakaway nut same size as the T-bolt (100mm to 750mm)		
			Stargrip Series 4000G2	100mm to 300 mm		
			ALL Stargrip® series 4300	100mm to 300mm		
		Tyler Union	TUFGrip TLP (red)			
			TUFGrip Dual Wedge (TDW)	Series 1500 (100mm to 600mm)		
		Westlake Pipe & Fittings	Certa-Lok RJIB	Restrained Joint Integral Bell Pipe (100mm to 200mm & 300mm)		

Approved Manufacturers' Products for Watermain					
Product	Standards	Manufacturer	Model/Series	Remarks	
Joint Restraint (continued)	Molecularly Oriented Polyvinyl Chloride (PVCO)	Sigma Corporation	PV-LOK	PWM - PVCO to MJ fitting, PVPF - PVCO to PVC fitting, PWP - PVCO bell and spigot	
	AWWA C909	SIP Industries	Model EZPVC	100mm to 300mm	
		Star® Pipe Products	Stargrip Series 4000	100mm to 300mm	
			Stargrip Series 4000G2	100mm to 300mm	
			1000G2C	pipe to MJ or Push-On Fittings (100mm to 300mm), formerly 9000C	
			1100G2C	Bell Joints (100mm to 300mm), formerly 9100C	
			1200G2C	pipe to PVC pressure fittings with DI pipe OD AWWA C907 (100mm to 300mm), formerly 9200C	
			ALL Stargrip® series 4300	100mm to 300mm. Note: Deflection for C909 PVCO is not allowed per pipe manufacturer.	
		Tyler Union	TUFGrip TLP (red)	pipe to MJ fittings (100mm to 300mm)	
			TUFGrip Dual Wedge (TDW)	Series 1500 (100mm to 300mm)	
Main Stops	19mm to 50mm,	A.Y. McDonald Mfg. Co.	74701BQ		
(Corporations)	compression end, ball	Cambridge Brass	301NL	A3H3, A4H4, A6H6, A7H7	
	Type non-draining AWWA C800, NSF 61(Annex	Ford Meter Box Company Inc.	FB1000 Series	Q Type	
	G)	Mueller Canada	300 B-25008N		

Approved M	lanufacturers' Products fo	r watermain	_	
Product	Standards	Manufacturer	Model/Series	Remarks
Pipe	Concrete Pressure Pipe 500mm and larger	DECAST Ltd.		
	AWWA C301 and C303, OPSS.MUNI 441	Rinker Materials (formerly Forterra Pipe		
	Plant Pre-Qualified by ACPPA	and Precast)		
	Ductile Iron Pipe 100mm	McWane Ductile	TR Flex Joint Pipe	
	to 200mm & 300mm Pressure Class 350 AWWA C104/A21.4, C150/A21.50, C151/A21.51, OPSS.MUNI 441 (Includes polyethelene encasement of pipe and fittings, AWWA C105/A21.5)		Tyton Joint Pipe	
	Ductile Iron Pipe,	McWane Ductile	TR Flex Joint Pipe	400mm to 900mm
	Thickness Class 52 AWWA C104/A21.4,C150/A21.50, C151/A21.51, OPSS.MUNI 441 (Includes polyethelene encasement of pipe and		Tyton Joint Pipe	400mm to 1050mm
	fittings, AWWA C105/A21.5)	McWane Ductile	Tyton Joint Pipe	
	Pressure Class 350 AWWA C104/A21.4, C150/A21.50, C151/A21.51, OPSS.MUNI 441 (Includes polyethelene encasement of pipe and fittings, AWWA C105/A21.5)			
	Polyvinyl Chloride (PVC)	Diamond Plastics Corporation	AWWA C900	(100mm to 200mm & 300mm)
	AWWA C900 - DR18, OPSS.MUNI 441	IPEX Inc.	Blue Brute	(100mm to 200mm & 300mm & 400mm)
	OF 33.IMOINI 44 I		Centurion	400mm
			TerraBrute® CR	Up to 300mm
		National Pipe & Plastics, Inc.	AWWA C900	(100mm to 200mm & 300mm)
		Next Polymers	Aqualoc	(100mm to 200mm & 300mm & 400mm)
		Westlake Pipe & Fittings	CIOD Pressure	(100mm to 200mm & 300mm)
			Certa-Lok R RJIB	Restrained Joint Integral Bell (100mm to 200mm & 300mm)
	Molecularly Oriented	IPEX Inc.	Bionax	100mm - 200mm, 300mm
	Polyvinyl Chloride (PVCO) AWWA C909-PC235, OPSS.MUNI 441	Westlake Pipe & Fittings	AquaMax	150mm to 300mm
	Polyvinyl Chloride (PVC) 500mm to 750mm	IPEX Inc.	Big Brute	
	AWWA C900, OPSS.MUNI 441		Centurion	

<b>Approved Man</b>	ufacturers' Products fo	r Watermain		
Product	Standards	Manufacturer	Model/Series	Remarks
	•	Westlake Pipe & Fittings		
	Steel Pipe 600mm and larger OPSS.MUNI 441, AWWA M11,	Ewing Fabricators	Straight Seam - Welded Steel Cylinder	Cement mortar lining (shop applied), AWWA C205, Polyurithane coating AWWA C222, Field welded joins AWWA C206
	AWWA C200 (Approved for use in special projects only per the Contract Documents).	Northwest Pipe Company	Spiral Seam	Cement mortar lining (shop applied), AWWA C205, Polyurithane coating AWWA C222, Field welded joins AWWA C206
	Water Service Pipe 19mm to 50mm, Type K Soft Copper AWWA C800, OPSS.MUNI 441, ASTM B88	Great Lakes Copper Inc.		
Repair Clamps	Direct Buried	Cambridge Brass	Series 425	with Lifter Plate
	clamps to be supplied with		Series 435	with Lifter Plate
	conductivity strip	Ford Meter Box Company Inc.	FS1	
			FS2	
			FS3	
		Robar Industries Ltd.	5616, 5626, 5636	
		Smith-Blair Inc.	Model 261	
			Model 262	
			Model 263	
	In-Chamber	Hamilton Kent, Straub Couplings	Straub-Flex, non-restrained up to 1200mm	(modified for Hamilton)
Service Boxes	Slide adjustment type	Cedar Infrastructure Products LP	Model N3909	
	Stainless steel rods	Clow Canada	#D# Series	
	stainless steel cotter pin	Mueller Canada	H-10300 Series	
Service Saddles	DI, PVC Pipe Outlet size:	Cambridge Brass	Series 403	
	19mm to 50mm		Series 812	
		Ford Meter Box Company Inc.	FS202	
		Robar Industries Ltd.	2616	
			2506 DS	
		Romac Industries Inc.	Style 306	For DI and PVC
		Smith-Blair Inc.	313	For D.I. Pipe
			317	For PVC Pipe
			Models 373 and 375	For DI and PVC Pipe
	Concrete Pressure Pipe Outlet size:19mm to 50mm	Ayotte Enterprises Inc.	A-900 with A-571 thermoplastic coating	(400 mm only)

Approved Man	Approved Manufacturers' Products for Watermain					
Product	Standards	Manufacturer	Model/Series	Remarks		
Tapping Sleeves	Outlet size: 100mm to 400mm Protective coating shall be applied to all steel sleeves	Ayotte Enterprises Inc.	A-600 with A-571 thermoplastic coating, stainless steel nuts and bolts - concrete pipe only			
		JCM Industries	JCM 415	epoxy coated with stainless steel nuts and bolts, concrete pipe only		
		Robar Industries Ltd.	6808 and 6906 epoxy coated	Ductile Iron, C900 PVC only (100mm to 500mm)		
		Romac Industries Inc.	FTS420 epoxy coated	Ductile Iron pipe		
		Smith-Blair Inc.	#622 epoxy coated	Ductile Iron and PVC pipe (up to 750mm)		
			Model 625	For Concrete Pressure Pipe		
Tracer Wire	Solid 12 gauge copper TWU75 or RWU90XLPE					

Approved Ma	anufacturers' Products fo	r Watermain		
Product	Standards	Manufacturer	Model/Series	Remarks
Valves	Butterfly Valve 450mm and Larger	American AVK Company	Concentric Butterfly Valve - Series S816	(Flanged ends) 500mm and 600mm
	AWWA C504, Class 150B manual actuator - traveling nut type with external position	Clow Canada	Series 4700 and 4750 Seat On Body Butterfly Valves	500mm - 900mm (flanged ends)
	indicator nuts, bolts, and bolt	Henry Pratt Company	2FII	(450mm and 500mm)
	studs to be stainless steel, 50mm operating nut, open left		Triton XR-70	(Flanged ends) 600mm and larger
	(counter clockwise)	Mueller Canada	Lineseal	
	Gate Valve* Resilient	American AVK Company	Series 65	
	Wedge 100mm to 300mm AWWA C509, C515	Clow Canada	F-6100	
	nuts, bolts, and bolt studs to be		F-6102	
	stainless steel, bronze pin top		F-6106	
	adjustment not permitted, 50mm operating nut, open left	Mueller Canada	A2360-6, A2360-19, A2360-23	
	(counter clockwise) *includes hydrant secondary valves	Vahn-Tech International Inc.	VT-GV-A15	
	Gate Valve Resilient Wedge 400mm	American AVK Company	Series 45/MMN, Series 45/FFN	MMN - for direct bury applications, FFN - for in-chamber applications
	AWWA C509, C515 nuts, bolts, and bolt studs to be	Clow Canada	F-6102	
	stainless steel, 50mm operating nut, open left (counter clockwise)	Mueller Canada	A2361-6	
	Combination Air Release	A.R.I. Flow Control Accessories	D-060 C HF NS	
	and Vacuum Breaker Valves AWWA C512	International Valve Marketing, LLC	Vent-tech Model WTR and WTW	
	with surge protection	Vent-O-Mat	Water RBX Series	
		American AVK Company	Series 45/MFT	Mechanical Joint x Tapping Sleeve Flanged End
	300 mm	Clow Canada	F-6106	
	AWWA C509	Mueller Canada	A2360-19	
	Tapping Valves 400mm to	Clow Canada	F-6106BG	
	600mm AWWA C509	Mueller Canada	A-2361-19	
	Check Valves	Cla-Val Canada	Model 585	Outside Lever and Weight
	(In-Chamber)	Clow Canada	Model 1106 Swing Check Valve (Kennedy)	Outside Lever and Weight
		Henry Pratt Company	Series 9001	Outside Lever and Weight
Valve Boxes	Sliding Type with 6mm pre-drilled tracer wire hole	Bibby Ste Croix (Div of Canada Pipe Co. Ltd.)	VB1000 Series	
	and grommet in upper section	Cedar Infrastructure Products LP	N3907	RB Agarwalla Valve Box (4 1/4 inch) and Components
	Section	DomCast Group	DF64	
		Star® Pipe Products	VB-5000 Series	(VBDF414-48, VBDF414-60)

Approved Manu	ıfacturers' Products fo	r Watermain	,	,
Product	Standards	Manufacturer	Model/Series	Remarks
Valve Chambers	Valve Chambers	DECAST Ltd.		
	OPSS 407, 1351 Plant must be pre-qualified by	Anchor Concrete Products Ltd.		
	the Ontario Concrete Pipe	Con Cast Pipe Inc.		
	Association	Green Infrastructure Partners Inc.		
		M CON Products Inc.		
		Omni Precast		
		Rinker Materials (formerly Forterra Pipe and Precast)		
		Wilkinson Heavy Precast Limited		
Valve Chamber Frame and Cover	Cast Iron, Square Frame with Vented Circular Cover OPSS 1850, OPSD 402.011, WM 212.03	Bibby Ste Croix (Div of Canada Pipe Co. Ltd.)		
		EJ Canada		
		R.B. Agarwalla		Distributor: Cedar Infrastructure Products LP
	750mm cover OPSS 1850 10 - 25mm vent holes "WATER" cast into cover 4 lifting keyways	EJ Canada	Frame 1220Z1, Product No. 00122016 Cover 1220B, Product No. 00122028	
Water Meter Reader Enclosure		Hoffman Enclosures Inc	Hoffman Nema 4x, fiberglass	Includes internal mounting plate
Meter Box	Plastic Meter Pit	Ford Meter Box Company Inc.	Model PDBHC-488-20-60-NL	
			Model PDBHC-488-20-72-NL	
	Meter Box Cover	Ford Meter Box Company Inc.	Model W3-TP	
			Model W3-T	

Approved Man	ufacturers' Products	or Sewer		
Product	Standards	Manufacturer	Model/Series	Remarks
Backwater Valve		Syntec Process Equipment Limited	Checkmate (Tideflex)	In-line back water valve for sewer outfall applications
		Wapro	WaStop	In-line back water valve for sewer outfall applications
Catch Basins	CSA A257.4 Form 700	DECAST Ltd.		
	OPSS 407 OPSS 1351	Coldstream Concrete Ltd		
	Supplied from a plant prequalified by the OCPA			
		Con Cast Pipe Inc.		
		Green Infrastructure Partners Inc.		
		M CON Products Inc.		
		Omni Precast		
		Rinker Materials (formerly Forterra Pipe and Precast)		
		Wilkinson Heavy Precast Limited		

Approved Manu	Approved Manufacturers' Products for Sewer					
Product	Standards	Manufacturer	Model/Series	Remarks		
Catch Basin Frames & Covers	OPSD 400.100 ASTM A48 OPSS 1850	Bibby Ste Croix (Div of Canada Pipe Co. Ltd.)				
		DomCast Group				
		EJ Canada	"All in one" cover			
		Govind Steel Company Ltd	GS			
		Labco Foundry Ltd				
		Prosperity Exim Private Limited	MF/CBMI	Conqueror		
		R.B. Argawalla		Distritutor: Cedar Infrastructure Products LP		
	OPSD 400.082 ASTM A48 OPSS1850	Cedar Infrastructure Products LP	N2330-FSH	OPSD 400.082 with inlet bars		
		EJ Canada	400.082Z2	OPSD 400.082 with inlet bars		
	OPSD 400.020 ASTM A48 OPSS1850	Cedar Infrastructure Products LP	Herringbone Style Frame and Cover - OPSD 400.02			
		DomCast Group	Herringbone Style Frame and Cover - OPSD 400.02			
		EJ Canada	Herringbone Style Frame and Cover - OPSD 400.02 - Model# MC400020306	Optimized Frame and Cover - Modified OPSD 402.02		
Couplings	CSA B182.2 CSA B182.4	Fernco Connectors Ltd.				
	OPSS 1841	Flex Connection Inc. dba JOINTS	Calder Repair Coupling			
		Mission Rubber Company				
		PIPECONX				
		Preper Inc.				
		Rollee Industrial Products	KWIK Couplings			

Approved Manu	facturers' Products fo	r Sewer		
Product	Standards	Manufacturer	Model/Series	Remarks
Culvert Pipe	Galvanized Steel Pipe	Atlantic Industries Limited		Corrugated Steel Pipe
	(Corrugated or Spiral Rib) CSA G401	Armtec Inc.		Steelcor
	OPSS.MUNI 1801		Ultra Flo	Spiral Rib Pipe
	Up to 1000mm - 1.6 Gauge.		Hel-Cor	Corrugated Steel Pipe
	Over 1000mm - 2.0 Gauge.	E.S.Hubbell Highway and Drainage Products		Corrugated Steel Pipe
		Soleno Inc.		Corrugated Steel Pipe
	Aluminized Steel Pipe	Atlantic Industries Limited		Corrugated Steel Pipe
	Type 2 (Corrugated or Spiral Rib)	Attuitte maastres Emitted	Hi-Flo	Spiral Rib Pipe
	CSA G401	Armtec Inc.	Ultra Flo	Spiral Rib Pipe
	OPSS.MUNI 1801		FloCore	Spiral Rib Pipe
	Up to 1000mm - 1.6 Gauge. Over 1000mm - 2.0 Gauge.	E.S.Hubbell Highway and Drainage Products		Corrugated Steel Pipe
	Polymer Laminated Steel	Atlantic Industries Limited		Corrugated Steel Pipe
	Pipe (Corrugated or Spiral Rib) CSA G401 OPSS.MUNI 1801 Up to 1000mm - 1.6 Gauge. Over 1000mm - 2.0 Gauge.		Hi-Flo	Spiral Rib Pipe
		Armtec Inc.	Ultra Flo	Spiral Rib Pipe
	HDPE	ADS Canada	N12 Watertight	100-750mm
	OPSS 1840, ASTM F 894, 320 KPa Pipe Stiffness		N12 Watertight	900-1500mm
	320 KPa Pipe Stillness	Armtec Inc.	Boss 2000	
		Soleno Inc.	SolfloMax watertight - BIGC, DBIG, DBIGG	Up to 900mm
Goss Traps	SEW-304	North America Traffic Inc.	CB Trap	
Maintenance Holes	CSA A257.4-M92 Form	DECAST Ltd.		
	700 OPSS 1351 1200mm	Coldstream Concrete Ltd		1200mm to 3600mm diameter
	to 3000mm Supplied from a plant	Con Cast Pipe Inc.		
	prequalified by the OCPA	Green Infrastructure Partners Inc.		
		M CON Products Inc.		
		Omni Precast		
		Rinker Materials (formerly Forterra Pipe and Precast)		
		Wilkinson Heavy Precast Limited		

Approved Manu	facturers' Products fo	r Sewer		
Product	Standards	Manufacturer	Model/Series	Remarks
Maintenance Hole Frames & Covers	OPSD 401.010 Type A and B	Bibby Ste Croix (Div of Canada Pipe Co. Ltd.)		Types A & B
	ASTM A48	DomCast Group		
		EJ Canada	Туре А	closed
			Туре В	open
			MC401010406	Optimized Frame and Cover - An alternate to OPSD 401.010 Type A
		Govind Steel Company Ltd	GS	Types A & B
		Prosperity Exim Private Limited	MF/CMBI	Types A & B, Conqueror
		R.B. Argawalla		Types A & B, Distributor: Cedar Infrastructure Products LP
Sewer Pipe	Vitrified Clay Pipe 150mm to 600mm CSA A60.1M-1976, Form 500	The Logan Clay Products Company	Т-Тар	(without flanges)
	Concrete Pipe -	DECAST Ltd.		
	Reinforced 300mm or	Coldstream Concrete Ltd	Reinforced Concrete Pipe	
	greater CSA A257.2, 65-D, 100-D,	Con Cast Pipe Inc.	PERFECT PIPE	(600mm, 900mm &1200mm)
	140-D Form 500 and 700, OPSS 1820 Supplied from a plant prequalified by the OCPA		Reinforced Concrete Pipe	
		Green Infrastructure Partners Inc.		
		M CON Products Inc.		
		Omni Precast		
		Rinker Materials (formerly Forterra Pipe and Precast)	Concrete Bell	(mortared in)
	Polyvinyl Chloride Pipe (PVC) Smooth Wall	Diamond Plastics Corporation	SANI-21	
		IPEX Inc.	Enviro-Tite	
	150mm - SDR 28 200mm to 600mm - SDR 35 CSA		Ring-Tite	
	CSA B182.2, Form 500, OPSS	National Pipe & Plastics, Inc.	PVC Sewer Pipe	
	1841	Next Polymers	NEXT Duraloc	
		Westlake Pipe & Fittings	Royal	
Sewer Pipe (PVC)	CAN/CSA-B182.2 [See	Galaxy Plastics Ltd.	Galaxy / Tigre	PVC Plastic Sewer Main (PSM) Fittings
Fittings - Injection	B1800]	IPEX Inc.	Fittings - RING-TITE	
Molded and Fabricated		Next Polymers	Next Duraloc Fittings	
		Pro-Line Fittings East Inc.	PVC Gasketed Sewer Fittings	
		Westlake Pipe & Fittings	STI Gasketed Sewer Fittings	
Saddles /	CSA B182.2 CSA B182.4	ADS Canada	Inserta-Tee	
Connections	100mm to 300mm	Specialty Products 2000	Core Bell Adaptor	150mm

Approved Man	Approved Manufacturers' Products for Sewer					
Product	Standards	Manufacturer	Model/Series	Remarks		
Valves	Combination Air / Vacuum	A.R.I. Flow Control Accessories	D020	(stainless steel)		
	Breaker AWWA C512	International Valve Marketing, LLC	986-01 wastewater combination air valve c/w stainless-steel body	H-Tec		
			986-04 direct bury air valve set for sewer c/w epoxy-steel body	H-Tec		
			988-00 high-volume wastewater combination air valve c/w stainless steel body	H-Tec		
			989-00 short body wastewater combination air valve c/w stainless steel body	H-Tec		
			Vent-Tech Air Valves Models SWG, SXG, SDG, SZG			

Approved Manu	Approved Manufacturers' Products for Street Lighting					
Product	Standards	Manufacturer	Model/Series	Remarks		
	Non-cycling, TCLP compliant	Current Lighting Canada	Ecolux NC			
wattages, medium and mogul base	including lead-free brass base 30,000+ hours life, universal operating position. Meet ANSI specification corresponding to wattage.	Osram Sylvania Ltd.	Lumalux Plus/Eco			
	Inclusive of probe start, pulse	Current Lighting Canada	Multi-Vapor			
medium and mogul base	start and ceramic metal halide. Operating position designation as per luminaire requirements. Meet ANSI specification corresponding to wattage.	Osram Sylvania Ltd.	Metalarc			
Metal Halide Lamps - 200W	200W pulse start lamps	Venture Lighting	Uni-Form			
Photocell -		Acuity Brands Lighting Canada, Inc.	DTL Series	DSS 124		
	controller with NEMA rated locking type blades OPSS 2485 Use only permitted for maintenance/replacement. Prohibited for use with LED luminaires.	Precision Solar Controls				
Photocell - Long life, twist-lock type	Long Life Photoelectric controller with NEMA rated locking type blades OPSS 2485	Acuity Brands Lighting Canada, Inc.	DTL Series	DLL 127		
Photocell - Standard life, button	Photoelectric controller - button/micro	Acuity Brands Lighting Canada, Inc.	DTL Series	DBE Series		

Approved Manu	Approved Manufacturers' Products for Street Lighting						
Product	Standards	Manufacturer	Model/Series	Remarks			
type	CSA C239						
Cobra-head	Prismatic drop glass high	American Electric Lighting	115 Series				
Luminaires - drop	pressure sodium and	Cooper Lighting Solutions	OVZ Series				
glass, all wattages	metal halide "cobra-head" luminaires Integral twist-lock photocell socket CSA C22.2 No. 9.0-96, CSA C653-08, OPSS 2432 Use only permitted for maintenance/replacement.	Current Lighting Canada	M-250R2 Series				
LED Cobra-head		Current Lighting Canada	EVOLVE				
Luminaires - all	"cobra-head" luminaires						
wattages	conforming to specifications established in RFPQ C11-59-12						
Cobra-head	Sag glass/flat glass	American Electric Lighting	115 Series				
Luminaire - sag/flat	(cut-off) high pressure	Cooper Lighting Solutions	OVF Series				
glass, all wattages	sodium and metal halide "cobra-head" luminaire. Integral twist-lock photocell socket	Current Lighting Canada	M-250R2 Series				
	CSA C22.2 No.9.0-96, CSA C653.08, OPSS 2432 Use only permitted for maintenance replacement.						
Decorative	Decorative carriage	Acuity Brands Lighting Canada, Inc.	Cyclone Hudson - HUDT4A				
Luminaire -	(4-sided lantern) high	Cyclone Lighting	Elencia Series				
Carriage Style, all wattages	pressure sodium luminaire. Integral twist-lock photocell socket CSA 22.2 No. 9.0-96, CSA C653-08	King Luminaire	K601 Empress Series				
Decorative	Decorative tear-drop	Lumec Manufacturing, A Philips Group Brand	Renaissance Series				
Luminaire - Tear	(lantern) high pressure	Holophane Canada Inc.	Memphis Series				
wattages twist-lock photocell so	sodium luminaire. Integral twist-lock photocell socket CSA 22.2 No. 9.0-96, CSA C653-08	King Luminaire	K211 Manchester Series				
Decorative Luminaire - Acorn Style, all wattages	Decorative post-top (lantern) high pressure sodium luminaire. Integral twist-lock photocell socket CSA 22.2 No. 9.0-96, CSA C653-08	King Luminaire	K118 Washington Series				

Approved Manu	facturers' Products fo	r Street Lighting		
Product	Standards	Manufacturer	Model/Series	Remarks
Power Supply	Single conductor, stranded	Anixter Canada Inc.	6CN Series (or equal)	
Pedestal Feeder	copper wire 90 degree	General Cable Company		
Wiring	Celsius, 600V rated Type RWU90-XLPE #2 AWG (minimum)	Southwire Canada Company		
	CSA C22.2 No.38		00110 1 ( 1)	
Pole-to-pole and Branch Feeder	Single conductor, stranded copper wire 90 degree		6CN Series (or equal)	
Wiring	Celsius, 600V rated Type	General Cable Company		
	RWU90-XLPE #6 AWG (minimum) CSA C22.2 No.38	Southwire Canada Company		
In-pole/In-arm	Single conductor, solid	Anixter Canada Inc.	6CA Series (or equal)	
(internal) Wiring	copper wire 90 degree	General Cable Company		
	Celsius, 600V rated Type TWU #12 AWG (minimum) CSA C22.2 No.75	Southwire Canada Company		
Electrical Conduit	Type II rigid polyvinyl	IPEX Inc.	Scepter	Conduit
and Fittings	chloride (PVC) 50mm		Scepter	Conduit Fittings
	(minimum) CSA C22.2 No.211.2-06	Westlake Pipe & Fittings	Rigicon	Conduit
	00/1 022.2 110.2 11.2 00		Rigicon	Conduit Fittings
Concrete Pole -	Direct buried, spun	StressCrete Ltd.		
Standard Duty, all lengths	concrete pole- street lighting use. Class B	Utility Structures Inc.		
lenguis	(minimum) CSAA14-M1979, CSA C22.2 No.206-M, OPSS 2421, OPSD 2225.01			
Concrete Pole -	Direct buried, spun	StressCrete Ltd.		
Heavy Duty, all lengths	concrete pole - combined use (street lighting & traffic signals) Class D (minimum), CSAA14-M1979, CSA C22.2 No.206-M, OPSS 2421, OPSD 2225.01	Utility Structures Inc.		
Concrete Pole -	Direct buried, spun	StressCrete Ltd.		
Decorative Octagonal, all lengths	concrete pole - street lighting use. Class B (minimum) Octagonal decorative tapered profile, midnight black etched finish CSAA14-M1979, CSA C22.2 No.206-M, OPSS 2421, OPSD 2225.01	Utility Structures Inc.		
Concrete Pole -	Direct buried, spun	StressCrete Ltd.	Sheridan Collection Series	

Approved Manu	facturers' Products fo	r Street Lighting		
Product	Standards	Manufacturer	Model/Series	Remarks
	concrete pole - street lighting use. Decorative, including profiled decorative base, midnight black etched finish - post top luminaire mounting CSAA14-M1979, CSA C22.2 No.206-M, OPSS 2421, OPSD 2225.01			
Street Light	Aluminum tapered	Aluminous Lighting Products		
Luminaire Bracket Arm - Standard, all projection lengths	sidemount elliptical bracket arms OPSS 2428, OPSD 2250.01,	Dynapole, Div of Dynametal Industries Ltd.		
	OPSD 2420.01	StressCrete Ltd.		
Street Light Luminaire Bracket Arm - Decorative, all projection lengths	Decorative metal "Victorian" scroll arm - side mount configuration - midnight black painted finish	StressCrete Ltd.	17x Series	
Pole Identification	Aluminum Engraved	Almetek Industries, Inc.	E-Z Tag V400-TH-A	
	modular number/letter insert type pole ID tags 25mm letter/numbers, black text on white or natural aluminum background. Vertical orientation, affixed with aluminum banding	Electromark		
Power Supply	Complete pedestal	Keltour Controls Inc.		
	assembly consisting of the following: -100A rated meter socket c/w blank/shorting meter socket insert -120/240V, 100A panelboard c/w 60A-2P main breaker, 6x40A-1P branch breakers and provision for up to 12 breakers -All equipment contained within a weather proof, tamper proof, dark green in colour metal ground/pad mounted enclosure -Enclosure door and internal panelboard door shall have provision for pad-locking CSA or ESA Approved	Pedestal Solutions Inc.	HSLM271-6-40	
Ground Rod Inspection Well	Polymer 254mm dia. Light duty inspection well/handwell ASTM C857 - A0.3 SCTE - Light Duty	Carson (Oldcastle Precast)	L Series 910	

Approved Manu	facturers' Products fo	r Traffic Signals		
Product	Standards	Manufacturer	Model/Series	Remarks
Electrical Conduit and Fittings	Polyvinyl Chloride (PVC) 25mm, 50mm and 75mm	IPEX Inc.	Scepter (type II), includes IPEX 100 conduit cement	Conduit
	Bell end conduit NEMA TC-2 Schedule 80, CSA C22.2 No. 21a.2-06, OPSS.MUNI 603 and Traffic Control Device Specification 603.05.08		Scepter (type II), includes IPEX 100 conduit cement	Conduit Fittings
	High Density Polyethylene	Carlon		Conduit and Fittings
	(HDPE) CSA B137.1-05, ASTM F2160, OPSS.MUNI 603 and Traffic Control Device Specification 603.05.08	IPEX Inc.		Conduit and Fittings
Electrical Handholes	Precast concrete with cast iron frame & cover (460mm dia.) ANSI/ASTM A48	Hy-Grade Precast Concrete Ltd.		
Detector Loop Lead-in Cable	# 14 AWG Overall shielded, twisted pair Polyethylene insulation PVC Jacket, 600 V	Belden Wire & Cable Co	8720	
Detector Loop	Non-shrinking	3M Canada - Electrical Products Division	Detector Loop Sealant 5000	
Sealant	Won't fracture at -40 degrees C	H.B. Fuller	Q-Seal: 290W	
			Q-Seal: 290S	
			Q-Seal: 295S, 295M	
' '	Vinyl electrical tape OPSS 623 compliant, CSA 22.2 No. 197, 600 volts (-18 degrees C to 105 degrees C)	3M Canada - Electrical Products Division	Scotch Super 88	
Detector Loop Wire	Stranded copper wire #14 AWG, Black Type RWU-90 X-link 1000 V - 40# C OPSS 623 - CSA 22.2 N0. 38	General Cable Company	Spec. # 5600	
Grid Interconnecting		ERICO International Corporation	Eritech	
Conductors	un-insulated Bare #2 AWG copper wire	Southwire Canada Company		
Ground Electrode	#2 AWG Soft Wire -	General Cable Company		
Conductor	Stranded Copper Wire RWU90-XLPE Insulated Green #3 AWG and #6 AWG Traffic Control Device Specification Sub section 609.05.04	Noramco Wire and Cable Co. Ltd.		
Ground Electrode Connectors	Compression connectors	ABB (Thomas & Betts)	Blackburn	E-Z-Ground

Approved Manu	Approved Manufacturers' Products for Traffic Signals					
Product	Standards	Manufacturer	Model/Series	Remarks		
Ground	< 20 ohm-cm resistivity	ERICO International Corporation	GEM25A			
Enhancement	MSDS sheet required, OPSS609 and Traffic Control	Harger Lighting & Grounding	Ultrafill			
Material	Device Specification 609.05.10	SAE Inc.	Conducrete DM100			
Ground Rod Inspection Well	Polymer Concrete	Carson (Oldcastle Precast)	Carson H-Series			
Grounding Plates	254mm x 400mm x 6mm	ABB (Thomas & Betts)	Blackburn 1016TB			
	(10	ERICO International Corporation	Eritech EGGPC			
	CSA C22.2 No. 41-M or UL467 Min 0.2 sq. metre surface area, OPSS 609 and Traffic Control Device Specification 609.05.02	Hydel Enterprises Inc	1016GPGC			
Grounding Rods	3.0m x 19mm (10	ABB (Thomas & Betts)	Blackburn 7510			
	CSA C22.2 No. 41-M or UL467, OPSS 609 and Traffic	ERICO International Corporation	Eritech 613400			
	Control Device Specification 609.05.02	Hydel Enterprises Inc	3410CC			
Junction Boxes for Detector Loop Splices	Fibre reinforced PVC OPSD 2300.010, Type No. P1-5 200mm x 200mm x 175mm Flanged with cover H-10 highway loading		Scepter - H887			

Approved Manu	facturers' Products fo	or Parks		
Product	Standards	Manufacturer	Model/Series	Remarks
Drinking Fountains	Wall-Mounted Drinking Fountain	Most Dependable Fountains, Inc.	450 WMSS	
	Single Pedestal Drinking	Most Dependable Fountains, Inc.	400 SM/SMSS	
	Fountain		410 SM/SMSS	
		Murdock Manufacturing	GRF34-37	
			GRJ84-87	
	Single Pedestal Drinking	Most Dependable Fountains, Inc.	10135 SM/SMSS	
	Fountain + bottle filler	Murdock Manufacturing	GYM74-77	
	Single Pedestal Drinking Fountain + pet fountain	Most Dependable Fountains, Inc.	400 SM/SMSS with pet fountain option	
			410 SM/SMSS with pet fountain option	
		Murdock Manufacturing	GRF34-37 with pet fountain option	
			GRJ84-87 with pet fountain option	
	Single Pedestal Drinking Fountain + bottle filler + pet fountain	Most Dependable Fountains, Inc.	10155 SM/SMSS	
		Murdock Manufacturing	GYM74-77 with pet fountain option	
	Double Pedestal Drinking	Most Dependable Fountains, Inc.	440 SM/SMSS/SMSSFA	
	Fountain	Murdock Manufacturing	GRM44-47	
	Double Pedestal Drinking Fountain + bottle filler	Most Dependable Fountains, Inc.	10145 SM/SMSS/SMFA/SMSSFA	
		Murdock Manufacturing	GYQ84-87	
	Double Pedestal Drinking Fountain + pet fountain	Most Dependable Fountains, Inc.	440 SM/SMSS/SMFA/SMSSFA with pet fountain option	
		Murdock Manufacturing	GRM44-47 with pet fountain option	
Geotextile	Non-Woven PK-0210.01	Terrafix Geosynthetics Inc.	270R	

<b>Approved Manu</b>	Approved Manufacturers' Products for Parks					
Product	Standards	Manufacturer	Model/Series	Remarks		
Lighting Fixtures	Outdoor ice rink light fixture (2 required per pole/bullhorn)	Holophane Canada Inc.	Predator LED: Fixture: PSLED P4 40K MVOLT 65 KM 20KV BKSDP 20KV PR7 PCLL Visor: PMLEDFV-BP	Predator Medium LED, 5-module, 4000K CCT, 1050mA driver, auto-sensing voltage (120 thru 277), 6x5 beam pattern, tenon slipfitter-knuckle mount, black, 120V photocontrol with 5-pin receptacle, visor.		
	Standard Park Light Fixture	Signify Canada Limited	Optima Series LED: Lamp#OT10-80WLED-120V with Photoelectric Cell	#OT10-80W48LED4K-G2-ACDR-LE2A-120-DMG- DF10-HS-[PH8]-BKTX To be used with Lumec Pole: SPR5J-15-BKTX		
		StressCrete Ltd.	K134 York: VL 1, 60 Watt, 120 Volt, LED: #K134R-B2PR-III-60(SSL)-104 2120:277-K14-PR	To be used with StressCrete Group Pole: E200-APO-G-E11 c/w 140-35/35 (below)		
	Sun Shelter Ceiling Light (Vandal Resistant)	Kenall Manufacturing	Millenium Round MR17 Series	Deep Profile Housing:#MR17FD-PP-MB-50L40K-120BPC (black ); #MR17FD-PP-MW-50L40K-120BPC (white)		
Lighting Poles	Flood light pole (7.6m high, galvanized steel) with 180 deg. Bullhorn	Valmont West Coast Engineering Ltd.	Pole: RT-25-11B-2.0, galvanized with black powder coat Bullhorn: BH2-180, galvanized with black powder coat	Pole: Round Tapered Steel Pole, 11 gauge shaft, 178mm Base OD, 254mm BCD, top tenon 60mm OD Bullhorn: Bullhorn for 2 fixtures at 180 deg. apart.		
	Standard Park Light Pole (4.6m high, steel)	Signify Canada Limited	Round Steel Pole: #SPR5J-15-BKTX	carbon steel, black textured finish, aluminum base cover with finish to match pole. To be used with Philips Lumec Fixture: #OT10-80W48LED4K-R-ACDRLE2A-120-DF10-HS -(PHS)BKTX		
	Standard Park Light Pole (6.1m high, concrete)	StressCrete Ltd.	Octagonal Class A - Light Duty Pole:#E200-APO-G-E11 c/w 14035/35, black etched	To be used with StressCrete Group Fixture: #K134R-B2PR-III-60(SSL)-1042120:277-K14-PR (above)		
Spray Pad Activator Buttons	Vandal Resistant Push Button with LED, Momentary	Polara Engineering, Inc.	Bulldog Series III: #BDL3-X			
Swings	CAN/CSA-Z614-14	Landscape Structures Inc.	177350A, with one (1) seat strap and ProGuard chains	Chain length as required to hang on swing structure. Clearances must adhere to CAN/CSA-Z614		
Tree Stake Tie	PK-1105.04	DeepRoot Canada Corp.	Arbor Tie	- Trees <150mm Cal.: Arbor Tie Green (900lb. Break strength) - Trees greater than or equal to 150mm Cal.: Arbour Tie White (2,500lb break strength)		
		GCS, Inc.	Treestrap	Vstrap, biodegradable cotton		
Tree Guard	Plastic Forms 25cm high tree trunk wrap	Arborguard Tree Specialists				