



**APPROVED PRODUCTS LIST**

This Reference Document lists materials and products that are either approved, restricted, or not allowed, for Works and Services performed within the City of Courtenay.

If a material or product is not listed in relation to an MMCD or a Supplementary Specification, any product meeting the requirements of such specification shall be accepted.

Where brand names are specified for a product, any proposal for an alternate product requires the approval of the Director of Engineering.

MMCD Section	Section Description	Product	Manufacturer	Approved Model	Restrictions/Additional Specifications
<b>03 40 01</b>	<b>Precast Concrete</b>				
		Concrete Fence for Arterial Roads	<ul style="list-style-type: none"> <li>American Technocrete</li> <li>Approved equal</li> </ul>	<ul style="list-style-type: none"> <li>Woodcrete Wall, Buffer Color</li> </ul>	<ul style="list-style-type: none"> <li>Posts at 1.5m c/c</li> </ul>
		Concrete Fence for Wet Detention Pond	<ul style="list-style-type: none"> <li>American Technocrete</li> <li>Approved equal</li> </ul>	<ul style="list-style-type: none"> <li>Woodcrete Rail, Buffer Colour</li> </ul>	<ul style="list-style-type: none"> <li>Post at 2.44 c/c &amp; 2 Rail Fence</li> </ul>
		Concrete MSE Retaining Wall	<ul style="list-style-type: none"> <li>Langley Precast</li> <li>Ocean Precast</li> </ul>		
<b>26 56 01</b>	<b>Roadway Lighting</b>				
	<i>Products</i>	LED Luminaires	<ul style="list-style-type: none"> <li>Philips</li> </ul>	<ul style="list-style-type: none"> <li>Roadfocus</li> </ul>	3000 K, RFS, RFM and RFL Series, as applicable
<b>31 11 45</b>	<b>Shrub and Tree Preservation</b>				
		Snow Fence	<ul style="list-style-type: none"> <li>Dupont</li> </ul>	<ul style="list-style-type: none"> <li>L-70</li> </ul>	
<b>32 92 19</b>	<b>Hydraulic Seeding</b>				
	<i>Fertilizer</i>		<ul style="list-style-type: none"> <li>Direct Solutions</li> </ul>	<ul style="list-style-type: none"> <li>20-2-16</li> </ul>	
<b>32 93 01</b>	<b>Planting of Trees, Shrubs and Ground-covers</b>				
		Tree Guy Anchors	<ul style="list-style-type: none"> <li>Tree Guy Systems</li> </ul>	<ul style="list-style-type: none"> <li>Arrow Anchor</li> </ul>	
		Tree Trunk Protection	<ul style="list-style-type: none"> <li>Deep Roots Products</li> </ul>	<ul style="list-style-type: none"> <li>Arborgard</li> </ul>	
		Tree Ties	<ul style="list-style-type: none"> <li>Deep Roots Products</li> </ul>	<ul style="list-style-type: none"> <li>Arbor Tie</li> </ul>	
	<b>Misc. Products</b>	Root Barrier	<ul style="list-style-type: none"> <li>deeproot</li> </ul>	<ul style="list-style-type: none"> <li>UB 18-2</li> </ul>	
		Adhesive	<ul style="list-style-type: none"> <li>OSI Sealants</li> </ul>	<ul style="list-style-type: none"> <li>PL 200</li> </ul>	
		Drain Mat	<ul style="list-style-type: none"> <li>Nilex Geotextile</li> </ul>	<ul style="list-style-type: none"> <li>Nudrain WD/15</li> </ul>	
		Filter Fabric	<ul style="list-style-type: none"> <li>Nilex Geotextile</li> </ul>	<ul style="list-style-type: none"> <li>Nilex 4545</li> </ul>	



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<b>32 94 015 Irrigation System</b>					
	<b>Backflow Prevention Device</b>		<ul style="list-style-type: none"> <li>Watts</li> </ul>	<ul style="list-style-type: none"> <li>Model 007-QT</li> </ul>	
	<b>Electronic Control Valves</b>		<ul style="list-style-type: none"> <li>Rain Bird</li> </ul>	<ul style="list-style-type: none"> <li>EFB CP Series Brass</li> <li>300 BPES Series Brass</li> </ul>	<ul style="list-style-type: none"> <li>&lt; 75mm</li> <li>≥ 75mm</li> </ul>
	<b>Master Valve</b>		<ul style="list-style-type: none"> <li>Rain Bird</li> </ul>	<ul style="list-style-type: none"> <li>EFB CP Series Brass</li> <li>300 BPES Series Brass</li> </ul>	<ul style="list-style-type: none"> <li>&lt; 75mm</li> <li>≥ 75mm</li> </ul>
	<b>Pressure Regulating Modules</b>		<ul style="list-style-type: none"> <li>Toro</li> <li>Rain Bird</li> </ul>	<ul style="list-style-type: none"> <li>EZR-100</li> <li>PRS-Dial</li> </ul>	
	<b>Automatic Controllers</b>		<ul style="list-style-type: none"> <li>Toro</li> </ul>	<ul style="list-style-type: none"> <li>Sentinel Satellite Controller</li> </ul>	
	<b>Control Wire</b>	Wire	<ul style="list-style-type: none"> <li>Paige Wire</li> </ul>	<ul style="list-style-type: none"> <li>P7079D</li> </ul>	<p>Common Wire to be min. 14-gauge</p> <p>Master Valve Wire to be min. 14-gauge</p>
		Flow / pulse transmitter wiring	<ul style="list-style-type: none"> <li>Belden</li> </ul>	<ul style="list-style-type: none"> <li>PE39</li> </ul>	<p>8mm Aluminum Polyester Shield</p> <p>Black HDPE Jacket</p>
		Wire splice	<ul style="list-style-type: none"> <li>3M</li> </ul>	<ul style="list-style-type: none"> <li>DBY connector</li> </ul>	
	<b>Sprinkler Heads</b>		<ul style="list-style-type: none"> <li>Toro</li> <li>Rain Bird</li> <li>Hunter</li> </ul>		<p>Additions to existing irrigation systems to be same product</p>
<b>33 11 01 Waterworks</b>					
	<b>Water Main Ductile Iron</b>	<ul style="list-style-type: none"> <li>Ductile Iron</li> </ul>	<ul style="list-style-type: none"> <li>McWane Group</li> <li>US Pipe</li> </ul>		<p>CL 50 for all mains less than 400mm dia. and Pressure Class 350 for all mains larger than 400mm dia.</p>
	<b>Water Main PVC</b>	<ul style="list-style-type: none"> <li>PVC</li> <li>PVCO</li> </ul>	<ul style="list-style-type: none"> <li>Ipex</li> <li>Royal Pipe Systems</li> </ul>	<ul style="list-style-type: none"> <li>Blue Brute</li> <li>Seal</li> <li>Bionax</li> </ul>	<p>PVC pipe to AWWA C900 / C 905/ C 909 – 100 mm to 300 mm diameter</p> <p>DR18 Minimum. Compliance with MMCD updated Section 33 11 01 2.2.2.2 for thickened bell and spigot pipe</p> <p>All PVC / PVCO water mains shall be pigmented blue.</p> <p>Nitro gasket shall be used when hydro carbon is encountered in surrounding soil.</p>



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					Bionax to be accepted for use in seismic condition
	<b>Water Main HDPE</b>	<ul style="list-style-type: none"> <li>HDPE</li> </ul>	<ul style="list-style-type: none"> <li>KWH Pipe</li> <li>Isco Pipe</li> <li>Polytubes</li> </ul>	<ul style="list-style-type: none"> <li>Sclairpipe</li> <li>WL Plastics</li> </ul>	AWWA C 153 AWWA C110
	<b>Water Main Fitting Ductile Iron</b>	<ul style="list-style-type: none"> <li>Ductile Iron</li> </ul>	<ul style="list-style-type: none"> <li>Terminal City Iron Works</li> <li>Sigma</li> </ul>		
	<b>PVC Injection Molded Fittings</b>	<ul style="list-style-type: none"> <li>PVC</li> <li>PVCO</li> </ul>	<ul style="list-style-type: none"> <li>IPEX</li> <li>Royal</li> </ul>		
	<b>PVC Fabricated Fittings</b>	<ul style="list-style-type: none"> <li>PVC</li> <li>PVCO</li> </ul>	<ul style="list-style-type: none"> <li>IPEX</li> <li>Pro-line</li> <li>Galaxy Plastics</li> </ul>		
	<b>Nuts and Bolts</b>	Stainless Steel ASTM A194 type 304			
	<b>Tie Rod</b>	Zinc or Cadmium Plated ASTM A354 Grade BC Steel	<ul style="list-style-type: none"> <li>Cor-ten Steel</li> </ul>		
	<b>Couplings and Flange Coupling Adapters</b>	Plain End Coupler	<ul style="list-style-type: none"> <li>Robar</li> <li>Smith-Blair</li> <li>Romac</li> <li>Mueller</li> <li>Ford</li> </ul>	<ul style="list-style-type: none"> <li>Robar 1408</li> <li>Smith-Blair441</li> <li>Romac 501</li> <li>Mueller MRC</li> <li>Ford FC1</li> </ul>	
		Flanged Adapter	<ul style="list-style-type: none"> <li>Robar</li> <li>Smith-Blair</li> <li>Romac</li> <li>Mueller</li> <li>EBAA</li> <li>Clow</li> </ul>	<ul style="list-style-type: none"> <li>Robar 7404/6</li> <li>Smith-Blair912</li> <li>Romac</li> <li>Mueller</li> <li>EBAA Iron 1000</li> <li>Clow Series 40, DI</li> <li>Clow Series 90, PVC</li> </ul>	
		Restrained Flange Adaptors	<ul style="list-style-type: none"> <li>Romac</li> <li>Uniflange</li> <li>EBAA</li> </ul>	<ul style="list-style-type: none"> <li>Romac RFCA</li> <li>Uniflange RFAP</li> <li>EBAA 2100</li> </ul>	
		Repair Clamps	<ul style="list-style-type: none"> <li>Canpac</li> <li>Mueller</li> <li>Robar</li> <li>Clow</li> <li>Romac</li> </ul>	<ul style="list-style-type: none"> <li>Canpac CR-2</li> <li>Mueller 520</li> <li>Robar 400 and 1500</li> <li>Clow 100, 200, 300</li> <li>Romac SS2</li> </ul>	Repair clamps shall be stainless steel
	<b>Joint Restraint Ductile Iron Mains</b>		<ul style="list-style-type: none"> <li>UniFlange Series 1400</li> <li>EBAA Iron</li> <li>Clow</li> </ul>	<ul style="list-style-type: none"> <li>UniFlange Series 1400</li> <li>EBAA Iron Megalug1700</li> <li>Clow Tufgrip TDG</li> </ul>	All joint restraints shall have a pressure rating equal or greater than the mainline pipe.



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	<b>Joint Restraint PVC / PVCO Mains</b>		<ul style="list-style-type: none"> <li>UniFlange</li> <li>EBAA Iron</li> <li>Romac</li> </ul>	<ul style="list-style-type: none"> <li>UniFlange Series 1300</li> <li>EBAA Iron MJ Series 1500</li> <li>EBAA Iron 1900</li> <li>Romac Alpha</li> </ul>	No wedge action type for PVC or PVCO pipes. Restraint systems for PVC or PVCO pipe shall be approved by the pipe manufacturer to not reduce the pipe recommended working pressure.
	<b>Restrained Joint Pipe Systems (PVC)</b>		<ul style="list-style-type: none"> <li>Ipex</li> <li>Royal</li> </ul>	<ul style="list-style-type: none"> <li>Ipex Terra Brute</li> <li>Royal Cobra Lock</li> </ul>	
	<b>Restrained Joint Pipe Systems (DI)</b>		<ul style="list-style-type: none"> <li>US Pipe</li> <li>McWane</li> </ul>	<ul style="list-style-type: none"> <li>Field-Lok Gasket</li> <li>SureStop Gasket</li> </ul>	
	<b>Valves and Valve Boxes</b>	75 mm – 300 mm Resilient-seated	<ul style="list-style-type: none"> <li>Mueller</li> <li>Clow Canada</li> <li>AVK</li> <li>Dobney</li> <li>Terminal City</li> </ul>	<ul style="list-style-type: none"> <li>Mueller A2362</li> <li>Clow 6100</li> <li>AVK</li> </ul>	All valves shall have epoxy coated ductile iron body with Stainless Steel Bolts
	<b>Blowoff Valve</b>	50mm Resilient Seat Gate Valve	<ul style="list-style-type: none"> <li>AVK</li> <li>Mueller</li> <li>Clow</li> </ul>	<ul style="list-style-type: none"> <li>AVK</li> <li>Mueller A2360</li> <li>Clow F6103</li> </ul>	
	<b>Air Valve</b>		<ul style="list-style-type: none"> <li>Apco</li> <li>Val-Matic</li> <li>Crispin</li> </ul>	<ul style="list-style-type: none"> <li>APCO 143C</li> <li>Val-Matic 201C</li> <li>Crispin UL</li> </ul>	Internally Coated
	<b>Water Valve Box</b>		<ul style="list-style-type: none"> <li>Terminal City</li> <li>Dobney</li> <li>Sigma</li> </ul>		Square type Cover shall be marked with "Water".
	<b>Curb Stop Box</b>		<ul style="list-style-type: none"> <li>Dobney</li> <li>Trojan</li> <li>Mueller</li> </ul>		Square type Cover shall be marked with "Water".
	<b>Joint Protection</b>	Petrolatum Tape & Mastic	<ul style="list-style-type: none"> <li>Petrowrap</li> <li>Trenton Tec Tape</li> <li>Denso</li> </ul>		AWWA C209 AWWA C214 AWWA C217-90
	<b>Water Service Connection</b>	Type K Copper – 19mm to 75mm			ASTM B88M
		Polyethylene	<ul style="list-style-type: none"> <li>Rehau</li> </ul>	<ul style="list-style-type: none"> <li>Rehau Municipex (PexA)</li> </ul>	With 10 Gauge Tracer Wire (AWG)
	<b>Saddles for Ductile Iron Mains</b>		<ul style="list-style-type: none"> <li>Robar</li> <li>Canpac</li> <li>Mueller</li> <li>Romac</li> </ul>	<ul style="list-style-type: none"> <li>Robar 2406/8</li> <li>Canpac 313</li> <li>Mueller DR2A</li> <li>Romac 202BS</li> </ul>	
	<b>Saddles for PVC / PVCO Main</b>		<ul style="list-style-type: none"> <li>Canpac</li> <li>Robar</li> <li>Cambridge Brass</li> </ul>	<ul style="list-style-type: none"> <li>Series 81Z</li> </ul>	Saddles required for service installation on all PVC / PVCO mains - Bronze body with stainless steel straps



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	<b>Tapping Sleeve for PVC</b>		<ul style="list-style-type: none"> <li>Ford Meter Box</li> <li>JCM</li> <li>Romac</li> </ul>	<ul style="list-style-type: none"> <li>Ford FS313</li> <li>JCM 422 Series</li> <li>SST Series</li> </ul>	
	<b>Abandon Service Sleeve</b>		<ul style="list-style-type: none"> <li>Robar</li> </ul>	<ul style="list-style-type: none"> <li>6636AS</li> </ul>	NC T 304 SS Const
	<b>Hydrant</b>		<ul style="list-style-type: none"> <li>Terminal City</li> <li>Mueller Co.</li>   <li>AVK</li> </ul>	<ul style="list-style-type: none"> <li>C71P – H105</li> <li>Modern Centurion (A-442)</li> <li>2780</li> </ul>	Must have 100mm Storz fitting on pumper port Paint colours shall be as follows: <ul style="list-style-type: none"> <li>Red body</li> <li>White top</li> <li>2 white side ports</li> <li>black Storz</li> </ul>
	<b>Corporation Stop</b>	Full Port Ball Valve	<ul style="list-style-type: none"> <li>Cambridge</li> <li>Ford</li> <li>Mueller</li> <li>Al-MacDonald</li> </ul>	<ul style="list-style-type: none"> <li>Cambridge 301</li> <li>Ford FB600</li> <li>Mueller B25008</li> <li>Al-MacDonald 4700</li> </ul>	Shall be full-port ball valve to 50 mm only. Use mainline gate valve for sizes >50 mm
	<b>Curb Stop</b>	Full Port Ball Valve	<ul style="list-style-type: none"> <li>Cambridge</li> <li>Ford</li> <li>Mueller</li> <li>Al-MacDonald</li> </ul>	<ul style="list-style-type: none"> <li>Cambridge 202</li> <li>Ford B44-343G</li> <li>Mueller B25209</li> <li>Al-MacDonald 6100</li> </ul>	Shall be full-port ball valve to 50 mm with 90° turn stop. Use mainline gate valve for larger sizes > 50mm
	<b>Meter Setters</b>		<ul style="list-style-type: none"> <li>Cambridge Brass</li> </ul>	<ul style="list-style-type: none"> <li>1" 6031 Series</li> <li>1 ½" – 2" 6020 series</li> </ul>	
	<b>Idler Bar</b>		<ul style="list-style-type: none"> <li>Cambridge Brass</li> </ul>	<ul style="list-style-type: none"> <li>450 Plastic (25mm Service Connection)</li> <li>450NL Copper (50mm Service Connection)</li> </ul>	
	<b>Meter Pits</b>		<ul style="list-style-type: none"> <li>Langley Concrete</li> <li>AE Concrete</li> <li>Armtec</li> </ul>	<ul style="list-style-type: none"> <li>Type#66 with cast iron Lid for 25mm</li> <li>5686 with steel lid for 50mm</li> </ul>	Full Circumferential models only.
	<b>Meter Chambers</b>		<ul style="list-style-type: none"> <li>Armtec</li> </ul>	<ul style="list-style-type: none"> <li>2121.5</li> </ul>	With Aluminum spring assisted double lids.
	<b>Casing Spacers</b>	As shown on contract drawings	<ul style="list-style-type: none"> <li>Uniflange</li> <li>Calpico</li> <li>APS</li> </ul>	<ul style="list-style-type: none"> <li>Uniflange</li> <li>Calpico</li> <li>APS Casing Spacers</li> </ul>	Shall be fabricated cast iron or high density polyethylene insulating spacers designed to center main in the carrier pipe
	<b>Pressure Reducing Valve Stations (PRV)</b>	<ul style="list-style-type: none"> <li>PRV Valve</li> <li>Limit Switch Indicator</li> <li>Valve Position Indicator</li> </ul>	<ul style="list-style-type: none"> <li>Singer</li> <li>Singer</li>   <li>Singer</li> </ul>	<ul style="list-style-type: none"> <li>Singer 106-PR</li> <li>Singer X129</li>   <li>Singer X156</li> </ul>	Epoxy coated



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		<ul style="list-style-type: none"> <li>• Strainer</li> <li>• Domestic flow indicator</li> <li>• Pressure Transducer</li> <li>• PLC</li> <li>• HMI</li> <li>• Router</li> </ul>	<ul style="list-style-type: none"> <li>• Singer</li> <li>• Singer</li> <li>• Emerson-Rosemount</li> <li>• Scadapack</li> <li>• Maple Systems, or equivalent</li> <li>• SonicWall</li> </ul>	<ul style="list-style-type: none"> <li>• J1521M Arion Strainer</li> <li>• SPI-MV Flow Meter</li> <li>• 2088</li> <li>• Scadapack 334</li> </ul>	
<b>33 30 01 Sanitary Sewers</b>					
	<b>Concrete</b>				Not permitted
	<b>PVC Pipe, Mainline Smooth Profile</b>	PVC SDR35	<ul style="list-style-type: none"> <li>• IPEX</li> <li>• Royal</li> <li>• Diamond</li> <li>• JM Eagle</li> <li>• Northern Pipe Products</li> </ul>	<ul style="list-style-type: none"> <li>• IPEX Ring-Tite</li> <li>• Royal Seal</li> <li>• Diamon Sani-21</li> </ul>	Sizes > than 750 mm to be approved by the City
	<b>Sanitary Service Connection</b>	PVC SDR35 Min 100mm diameter	<ul style="list-style-type: none"> <li>• IPEX</li> <li>• Royal</li> <li>• Diamond</li> <li>• JM Eagle</li> <li>• Northern Pipe Products</li> </ul>	<ul style="list-style-type: none"> <li>• IPEX Ring-Tite</li> <li>• Royal Seal</li> <li>• Diamon Sani-21</li> </ul>	New PVC main: use manufactured wyes. Existing mains: use manufactured wyes, strap saddles or insertable tees.
	<b>Inspection Chamber</b>	Inspection Chamber	<ul style="list-style-type: none"> <li>• Le-Ron Plastics Inc.</li> <li>• Pro-line</li> <li>• Galaxy Plastics</li> </ul>		
		Inspection Chamber Back-flow check valve	<ul style="list-style-type: none"> <li>• Le-Ron Plastics Inc.</li> <li>• Pro-line</li> <li>• Galaxy Plastics</li> </ul>		
	<b>Service Connection Boxes</b>		<ul style="list-style-type: none"> <li>• Brooks</li> </ul>	<ul style="list-style-type: none"> <li>• Series 37</li> </ul>	Full Circumferential models only.
	<b>Repair Couplers</b>		<ul style="list-style-type: none"> <li>• Rollee, Fernco, Shear Band</li> </ul>	<ul style="list-style-type: none"> <li>• Rollee, Fernco, Shear Band</li> </ul>	Couplers shall have appropriate adaptor gaskets to suit OD of pipe material being coupled
<b>33 34 01 Sewage Forcemains</b>					
	<b>Pipes, Joints and Fittings</b>	Fused PVC	<ul style="list-style-type: none"> <li>• Ipex</li> <li>• Royal</li> </ul>		
		HDPE with fusion welded joints	<ul style="list-style-type: none"> <li>• Sclairpipe</li> <li>• Drisco Pipe</li> <li>• ISCO Pipe</li> </ul>	<ul style="list-style-type: none"> <li>• Sclairpipe</li> <li>• DriscoPlex</li> <li>• WL Plastics</li> </ul>	AWWA C906
	<b>Valves</b>	Air Valves	<ul style="list-style-type: none"> <li>• ARI</li> </ul>		
	<b>Valve Chamber</b>		<ul style="list-style-type: none"> <li>• Dobney</li> </ul>	Dobney C20	
<b>33 40 01 Storm Sewers</b>					



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	<b>Concrete Pipe</b>	Non-reinforced Concrete C14-3 Reinforced Concrete C76-III, IV, and V	<ul style="list-style-type: none"> <li>Langley Concrete and Tiles</li> <li>Ocean Pipe</li> </ul>		PPP or Q-Cast Certified
	<b>PVC Pipe, Mainline Smooth Wall</b>	PVC SDR35	<ul style="list-style-type: none"> <li>IPEX</li> <li>Royal</li> <li>Diamond</li> <li>JM Eagle</li> <li>Northern Pipe</li> </ul>	<ul style="list-style-type: none"> <li>IPEX Ring-Tite</li> <li>Royal Seal</li> <li>Diamond Sani-21</li> </ul>	Sizes > than 750 mm to be approved by the City Engineer
	<b>PVC Pipe, Mainline Profile</b>		<ul style="list-style-type: none"> <li>Ipex</li> <li>Royal</li> </ul>	<ul style="list-style-type: none"> <li>Ipex UltraRib</li> <li>Royal Korflo</li> </ul>	Concentric ribbed pipe only is permitted to 900 mm, No spiral ribbed pipe will be allowed.
	<b>HDPE Pipe, Mainline Open Profile</b>		<ul style="list-style-type: none"> <li>Armtec</li> <li>ADS</li> </ul>	<ul style="list-style-type: none"> <li>Armtec Boss 2000</li> <li>ADS N-12</li> </ul>	
	<b>Service Connection</b>	PVC SDR28 Min 150mm diameter	<ul style="list-style-type: none"> <li>IPEX</li> <li>Royal</li> <li>Diamond</li> <li>JM Eagle</li> <li>Northern Pipe</li> </ul>	<ul style="list-style-type: none"> <li>IPEX Ring-Tite</li> <li>Royal Seal</li> <li>Diamond Sani-21</li> </ul>	New PVC main: use manufactured wyes. New HDPE mains: Use injection molded PVC manufactured wyes New concrete main: use PVC stub with bell, pre-cemented with epoxy resin. Existing PVC and HDPE mains: use manufactured wyes, strap saddles or insertable tees. Existing concrete main: use cored tee
	<b>Inspection Chamber</b>	Inspection Chamber	<ul style="list-style-type: none"> <li>Le-Ron Plastics Inc.</li> <li>Pro-line</li> <li>Galaxy Plastics</li> </ul>		
	<b>Service Connection Boxes</b>		<ul style="list-style-type: none"> <li>Brooks</li> </ul>	<ul style="list-style-type: none"> <li>Series 37</li> </ul>	Full Circumferential models only.
<b>33 42 13</b>	<b>Pipe Culverts</b>				
	<b>End Walls</b>	Concrete	<ul style="list-style-type: none"> <li>Langley Concrete and Tiles</li> <li>Ocean Pipe</li> </ul>		Q-Cast Certified PPP Certified
		Fiberglass Composite	<ul style="list-style-type: none"> <li>CIF Composites</li> </ul>	<ul style="list-style-type: none"> <li>Ecolite</li> </ul>	
		Mechanically Stabilized Earth (MSE)	<ul style="list-style-type: none"> <li>Flex MSE</li> </ul>	<ul style="list-style-type: none"> <li>Flex MSE</li> </ul>	
<b>33 44 01</b>	<b>Manholes and Catchbasins</b>				
	<b>Manhole Frame and Cover</b>	Cast Iron	<ul style="list-style-type: none"> <li>Dobney</li> <li>Westview Sales Ltd.</li> </ul>	<ul style="list-style-type: none"> <li>Dobney</li> <li>Westview Sales Ltd.</li> </ul>	Sanitary Sewer manhole lids shall be marked "SANITARY SEWER"



MMCD Section	Section Description	Product	Manufacturer	Approved Model	Restrictions/Additional Specifications
					Storm Sewer manhole lids shall be marked "STORM SEWER"
	<b>Catch Basin and Other Castings</b>	CB Frame	<ul style="list-style-type: none"> <li>Dobney</li> <li>Westview Sales Ltd.</li> </ul>	<ul style="list-style-type: none"> <li>B50</li> </ul>	
		CB Grate	<ul style="list-style-type: none"> <li>Dobney</li> <li>Westview Sales Ltd.</li> </ul>	<ul style="list-style-type: none"> <li>B50</li> </ul>	
		Lawn Basin Grate (1050mm Barrel)	<ul style="list-style-type: none"> <li>Dobney</li> <li>Westview Sales Ltd.</li> </ul>		
	<b>Hydro-dynamic grit Separator</b>		<ul style="list-style-type: none"> <li>Langley Concrete and Tiles</li> <li>Contech</li> </ul>	<ul style="list-style-type: none"> <li>Stormceptor</li> <li>Vorsentry</li> <li>CDS</li> </ul>	
<b>33 49 23</b>	<b>Storm Drainage Water Retention Systems</b>				
	<b>Polypropylene Arched Chamber</b>		<ul style="list-style-type: none"> <li>ADS</li> </ul>	<ul style="list-style-type: none"> <li>Stormtech</li> </ul>	
	<b>Polyethylene Arched Chamber</b>		<ul style="list-style-type: none"> <li>Contech</li> </ul>	<ul style="list-style-type: none"> <li>Chambremaxx</li> </ul>	
			<ul style="list-style-type: none"> <li>Brentwood Industries</li> </ul>	<ul style="list-style-type: none"> <li>Stormtank</li> </ul>	
<b>34 41 13</b>	<b>Traffic Signals</b>				
		Siren Activated Emergency Pre-emption	<ul style="list-style-type: none"> <li>Traffic Systems LLC</li> </ul>	<ul style="list-style-type: none"> <li>Sonem 2000</li> </ul>	
		Audible Signals	<ul style="list-style-type: none"> <li>Polara Enterprises</li> </ul>	<ul style="list-style-type: none"> <li>Navigator APS</li> </ul>	
		LED Luminaires	<ul style="list-style-type: none"> <li>Philips</li> </ul>	<ul style="list-style-type: none"> <li>Roadfocus</li> </ul>	3000 K, RFS, RFM and RFL Series, as applicable
		Traffic Controllers	<ul style="list-style-type: none"> <li>Econolite</li> </ul>	<ul style="list-style-type: none"> <li>Cobalt</li> </ul>	
	<b>Sanitary Lift Station Components</b>				
	Standards for Sanitary Lift Stations	Submersible Pumps	<ul style="list-style-type: none"> <li>Flygt</li> </ul>		Non-Clogging
		Flush Valve	<ul style="list-style-type: none"> <li>Flygt</li> </ul>	Model 4901	Or Approved Equal
		Wet Well	<ul style="list-style-type: none"> <li>Xylem</li> </ul>		Engineered & Prefabricated
		Portable Lifting Davit	<ul style="list-style-type: none"> <li>DBI SALA</li> </ul>	<ul style="list-style-type: none"> <li>8510311 w/ Davit Arm</li> <li>8517412 including tie off 8516691</li> </ul>	
		HMI	<ul style="list-style-type: none"> <li>To be confirmed by the City</li> </ul>		
		Controller	<ul style="list-style-type: none"> <li>Xylem</li> </ul>	MultiSmart	





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		SCADA	<ul style="list-style-type: none"><li>Flygt / Allied Control Systems</li></ul>		Must be compatible with City Scada system
		Float Switches	<ul style="list-style-type: none"><li>Xylem</li></ul>	tree type (mercury)	Or Approved Equal (must be CSA certified)