

List of Approved Materials and Products

Alternates to the items in this list require the approval of the Mgr. Capital Projects & Inspections

		<i>Product</i>	<i>Manufacturer</i>	<i>Approved Model</i>	<i>Restrictions/Additional Specifications</i>
26 56 01	Roadway Lighting				
		Cobra Head Style Luminaires	<ul style="list-style-type: none"> LED Roadway Lighting (LRL) American Electrical Lighting (AEL) 	NXT Series Autobahn Series <ul style="list-style-type: none"> ATB2 ATBO 	<ul style="list-style-type: none"> LED 3000K - Local Roads (bus routes are 4000k) 4000k - Collector and Arterial Roads 7 pin PEC connector Shorting cap Field Adjustable Driver required for Cobra Head style fixtures (Or decorative fixtures where adjustable drivers come as an option) Wattages per design 2 Tenon adaptors required for post top poles using Cobra Head Luminaires – <ul style="list-style-type: none"> a) LRL Part# (FP-FTP-NXT-GY-06-LF) b) Valmont WCE Part# (WCE TEN-3.5-FIT-PC) RAL7035
		Decorative Roadway Luminaires	<ul style="list-style-type: none"> Phillips Lumec Lumenpulse 	<ul style="list-style-type: none"> TR20 Capella Domus CAND 1 / CAND 2 Pure 100 	<ul style="list-style-type: none"> Wattages per design 2 Tenon adaptors required for post top poles using Cobra Head Luminaires – <ul style="list-style-type: none"> a) LRL Part# (FP-FTP-NXT-GY-06-LF) b) Valmont WCE Part# (WCE TEN-3.5-FIT-PC) RAL7035
		Pathway / MUP Lighting	<ul style="list-style-type: none"> Lumenpulse LED Roadway Lighting (LRL) Phillips Lumec 	<ul style="list-style-type: none"> Pure 100 NXT-S series TR20 Capella Domus CAND 1 / CAND 2 	<ul style="list-style-type: none"> LED 4000K Confirm with City 7 pin PEC connector Shorting cap Wattages per design plans
		Photocell / Shorting Caps	<ul style="list-style-type: none"> DTL (Dark to Light) Intermatic 	<ul style="list-style-type: none"> DE 120 for 102V DE 124 for 120/240V DE 347 for 347V DE 480 for 480V P/N LED45652 	<ul style="list-style-type: none"> Electronic c/w relay contacts
		Poly/Conc Junction Boxes	<ul style="list-style-type: none"> CIF Composites Inc Duralite 	Sizes: <ul style="list-style-type: none"> 11 x 18 17 x 30 24 x 36 	<ul style="list-style-type: none"> 2 Sections max Plastic Junction Boxes Will Not Be Accepted Round Junction Boxes

		<i>Product</i>	<i>Manufacturer</i>	<i>Approved Model</i>	<i>Restrictions/Additional Specifications</i>
					will not be Accepted
		Concrete Junction Boxes	<ul style="list-style-type: none"> • AE Concrete 	<ul style="list-style-type: none"> • TYPE 66 = T266 • TYPE 37 = B937 • TYPE C = 5686 	
		Poles / Arms	<ul style="list-style-type: none"> • Valmont West Coast Engineering • Nova Pole • Lumec 		<ul style="list-style-type: none"> • Galvanized and Powder Coated. • As per Design Drawings or Local Neighborhood Design Guidelines
		Concrete Bases	<ul style="list-style-type: none"> • AE Concrete • Langley Concrete 		<ul style="list-style-type: none"> • Per MMCD / Refer to Supplementary Drawing SS-E7.3
		Service Bases	<ul style="list-style-type: none"> • Valmont West Coast Engineering • Nova Pole 		<ul style="list-style-type: none"> • PER MMCD / Refer to Supplementary Drawing SS-E7.3 • Galvanized and Powder Coated • Robust Tab For Padlock
		Service / Electrical Panels	<ul style="list-style-type: none"> • West Coast Electric • Valid 	<ul style="list-style-type: none"> • Aluminum or Stainless Steel 	<ul style="list-style-type: none"> • Refer to Supplementary Drawing SS-E7.3 and SS-E7.4 • Surge Protection Device required for primary service. I_{max} 50, 20kA, 120/240V, 50/60Hz. Must be installed within panel.
		Conductor Tags	<ul style="list-style-type: none"> • Panduit 	<ul style="list-style-type: none"> • MP250-C TAGS 	<ul style="list-style-type: none"> • On All Cables and individual conductors (Black Indelible Marker Pen)
		Individual Conductor	<ul style="list-style-type: none"> • Texcan 	<ul style="list-style-type: none"> • RW90 Stranded Copper 	Size and Color as per Plans
		Conduit	<ul style="list-style-type: none"> • Various 	<ul style="list-style-type: none"> • CSA C22.2 No. 211.2 	<ul style="list-style-type: none"> • RPVC • DBII will not be accepted
		Hydro Dip Service (RPVC Straps / Lag Bolts / Conduit Guard)	<ul style="list-style-type: none"> • Various 	<ul style="list-style-type: none"> • MMCD 	
		Fuse Holders (<u>Pole Hand Holes</u>)	<ul style="list-style-type: none"> • Tron 	<ul style="list-style-type: none"> • Tron HEB-AA c/w 2 L-Type Insulating Boots 	
		Fuse Holders (<u>Junction Boxes</u>)	<ul style="list-style-type: none"> • Ideal • Buchanan 	<ul style="list-style-type: none"> • 65 KIT Water Proof 	
		Fuses	<ul style="list-style-type: none"> • Bussman • Mersen 	<ul style="list-style-type: none"> • 10-A KTK • 10-A ATM 	
		Receptacles	<ul style="list-style-type: none"> • Leviton 	<ul style="list-style-type: none"> • Leviton Smartlock Pro Slim (WR) 	<ul style="list-style-type: none"> • Or City Approved Corrosion Resistant Alternate

		Product	Manufacturer	Approved Model	Restrictions/Additional Specifications
				GFCI	
		Cable Lubricant	• Ideal	<ul style="list-style-type: none"> • Poly Water Dyna-Blue • Poly Water Aqua-Gel II 	
		Paint Color RAL Codes			<ul style="list-style-type: none"> • Coquitlam Green-RAL 6028 • Coquitlam Black-RAL 9005 • Mallardville Grey-RAL 7024
Irrigation System					
2.1	Irrigation Pipe – PVC			<ul style="list-style-type: none"> • CSA Series 160 >50mm • CSA Series 200 <50mm 	Comply with CSA B137.3
	Irrigation Pipe - HDPE			<ul style="list-style-type: none"> • SDR 17 >50mm • SDR 11 <=50mm 	Comply with ASTM D-1248 as a Type III, Class C, Category 5, Grade P34 material and with ASTM D-3350 as a 345434C cell material.
2.2	Backflow Prevention Device		• Watts	• Model 007-QT	
2.3	Water Meter		<ul style="list-style-type: none"> • Sensus • Neptune 	<ul style="list-style-type: none"> • Touch Read • Pro Read 	See City Website for Water Meter Specifications
2.4	Water Meter Box		<ul style="list-style-type: none"> • Carson Series • AE Concrete 	<ul style="list-style-type: none"> • 1419 • Model 5686 	See City Website for Water Meter Specifications
2.5	Electronic Control Valves		• Toro		24 VAC Solenoid Actuated Globe Pattern
2.6	Master Valve		• Toro	• 220 Series	
2.7	Pressure Regulating Modules		• Rain Bird	• PRS-Dial	
2.8	Automatic Controllers		• Toro	• Sentinel Satellite Controller	
2.9	Control Wire	Wire	• Paige Wire	• P7079D	Common Wire to be 12-gauge Master Valve Wire to be 14-gauge
		Flow / pulse transmitter wiring	• Belden	• PE39	8mm Aluminum Polyester Shield Black HDPE Jacket
		Wire splice	• 3M	• DBY connector	

		<i>Product</i>	<i>Manufacturer</i>	<i>Approved Model</i>	<i>Restrictions/Additional Specifications</i>
32 91 21S	• Topsoil and Finish Grading				
2.5	Growing Medium		<ul style="list-style-type: none"> • Fraser Richmond Bio-Cycle • BC Eco Soil Recycling Corp • YardWorks • Denbow 		
2.7	Bark Mulch		Answer Garden Products	• Nutri-Mulch	
2.9	Misc. Products	Root Barrier	Deep Root	• LB12-2	
		Adhesive	OSI Sealants	PL 200	
		Drain Mat	Nilex Geotextile	Nudrain WD/15	
		Filter Fabric	Nilex Geotextile	Nilex 4545	
2.9	Structural Soil	Soil	Answer Garden Products	Humus Builder	
		Structural Geotextile	Nilex Geotextile	Nilex 4553	
32 92 19S	Hydraulic Seeding				
2.2	Seed Mix	Perennial Rye		<ul style="list-style-type: none"> • Elka II • Gator 3 • Top Hat • Charismatic • All Star • Derby Supreme 	
		Fescues		<ul style="list-style-type: none"> • Cindy • Longfellow II • Cindy Lou • Quatro • Shademaster II 	
		Kentucky Bluegrass		<ul style="list-style-type: none"> • Shamrock • Boardway • Midnight • Julius • Allure 	
3.5.3	Fertilizer			• Evergrow 28-3-8	
32 92 20	Seeding				
2.1.2	Seed Mix	Perennial Rye		<ul style="list-style-type: none"> • Elka II • Gator 3 • Top Hat • Charismatic • All Star • Derby Supreme 	
		Fescues		<ul style="list-style-type: none"> • Cindy • Longfellow II • Cindy Lou • Quatro • Shademaster II 	

		Product	Manufacturer	Approved Model	Restrictions/Additional Specifications
		Kentucky Bluegrass		<ul style="list-style-type: none"> • Shamrock • Boardway • Midnight • Julius • Allure 	
32 93 01S	Planting of Trees, Shrubs and Ground Covers				
2.3		Fertilizer	<ul style="list-style-type: none"> • Agrico 	<ul style="list-style-type: none"> • Evergro Tabs 	
2.4		Mulch	<ul style="list-style-type: none"> • Yard Works • Eco-Soil • Fraser Richmond Bio-cycle 		Composted
2.8		Guying Wire	<ul style="list-style-type: none"> • Tree Guy Systems 	<ul style="list-style-type: none"> • Arrow Anchor 	
2.11		Anti-desiccant	<ul style="list-style-type: none"> • GSI Horticultural 	<ul style="list-style-type: none"> • Moisturin 	
2.12		Flagging Tape		<ul style="list-style-type: none"> • Indenti-Tape 	
2.13		Tree Trunk Protection	<ul style="list-style-type: none"> • Deep Roots Products 	<ul style="list-style-type: none"> • Arborgard 	
2.16		Tree Ties	<ul style="list-style-type: none"> • Deep Roots Products 	<ul style="list-style-type: none"> • Arbor Tie 	
33 11 01	Waterworks				
2.2.1	Water Main Ductile Iron	Ductile Iron	<ul style="list-style-type: none"> • McWane Group • US Pipe • Canada Pipe 		CL 50 for all mains less than 400mm dia. and Pressure Class 350 for all mains 400mm dia or larger
2.2.2	Water Main PVC	PVC (C900) PVCO (C909)	<ul style="list-style-type: none"> • Ipex Royal Pipe Systems • Ipex 	<ul style="list-style-type: none"> • Blue Brute • Bionax 	To AWWA C900 / C 905/ C 909 – 100 mm to 300 mm diameter DR18 min. Compliance with MMCD updated Section 33 11 01 2.2.2.2S for thickened bell and spigot pipe All PVC/PVCO mains shall be pigmented blue. Nitro gasket shall be used when hydro carbon is encountered in surrounding soil. PVC/PVCO to be used only where shown on approved construction drawings.
2.2.3	Water Main HDPE	HDPE	<ul style="list-style-type: none"> • KWH Pipe • Performance Pipe 	<ul style="list-style-type: none"> • Sclairpipe • DriscoPlex 	HDPE to be used only where shown on approved construction drawings.

		<i>Product</i>	<i>Manufacturer</i>	<i>Approved Model</i>	<i>Restrictions/Additional Specifications</i>
2.2.4.2/3	Water Main Fitting Ductile Iron	Ductile Iron Compact Ductile Iron	<ul style="list-style-type: none"> Terminal City Iron Works Norwood Foundry Sigma Products Star Pipe Products 		<p>AWWA C 153 & C110, cement mortar lined.</p> <p>Cast iron fittings are not acceptable</p>
2.2.10	Tie Rod, Bolts/Nuts				Type 304 Grade A stainless steel for all hardware
2.2.12	Couplings and Flange Coupling Adapters	Plain End Coupler	<ul style="list-style-type: none"> Robar Smith-Blair Romac Mueller Ford EBBA Iron 	<ul style="list-style-type: none"> Robar 1508 Smith-Blair441 Romac 501 Mueller MRC Ford FC1 EBBA 3800 	<p>Type 304 Grade A stainless steel for all hardware</p> <p>All couplings and flange adapters are to have a fusion epoxy coating.</p>
		Flanged Adapter	<ul style="list-style-type: none"> Robar Smith-Blair Romac Mueller EBAA Clow Star Pipe Products Sigma 	<ul style="list-style-type: none"> Robar 7504/7506 Smith-Blair912 Romac FCG Mueller EBAA Iron 1000 Clow Series 40, DI Clow Series 90, PVC Star Series 400 Sigmaflange 	<p>Type 304 Grade A stainless steel required for all hardware.</p> <p>All couplings and flange adapters are to have a fusion epoxy coating.</p>
		Restrained Flange Adaptors	<ul style="list-style-type: none"> Romac Uniflange EBAA Star Pipe Products 	<ul style="list-style-type: none"> Romac RFCA Uniflange RFAP EBAA 2100 Super Flange Series 7200 	<p>Type 304 Grade A stainless steel required for all hardware.</p> <p>All restrained flange adapters are to have a fusion epoxy coating.</p>
		Repair Clamps	<ul style="list-style-type: none"> Canpac Mueller Robar Clow Romac Cambridge Brass 	<ul style="list-style-type: none"> Canpac CR-2 Mueller 510 Robar 5626 Clow 200 Romac SS2 Teck Series 425, 825, 1625 	<p>Repair clamps shall be stainless steel.</p> <p>Type 304 Grade A stainless steel required for all hardware.</p>

		<i>Product</i>	<i>Manufacturer</i>	<i>Approved Model</i>	<i>Restrictions/Additional Specifications</i>
2.2.13	Joint Restraint Ductile Iron Mains		<ul style="list-style-type: none"> UniFlange Series 1400 EBAA Iron Clow Star Pipe Products 	<ul style="list-style-type: none"> UniFlange Series 1400 EBAA Iron 1100 Clow Tufgrip TDG Split Stargrip Series 3100 	<p>All joint restraints shall have a pressure rating equal to the mainline pipe.</p> <p>All joint restraints are to have a fusion epoxy coating.</p> <p>Type 304 Grade A stainless steel required for all hardware.</p>
	Joint Restraint PVC / PVCO Mains		<ul style="list-style-type: none"> UniFlange EBAA Iron Star Pipe Products 	<ul style="list-style-type: none"> UniFlange Series 1300 UniFlange Series 1500 EBAA 1500 EBAA 1900 PVC Stargrip Series 4100 	<p>No wedge action type for PVC or PVCO pipes.</p> <p>Restraint systems for PVC or PVCO pipe shall be approved by the pipe manufacturer to not reduce the pipe recommended working pressure.</p> <p>All joint restraints are to have a fusion epoxy coating.</p> <p>Type 304 Grade A stainless steel required for all hardware.</p>
	Restrained Joint Pipe Systems (PVC)		<ul style="list-style-type: none"> Ipex Royal 	<ul style="list-style-type: none"> Ipex Terrabrute Royal Bulldog Royal Cobra Lock 	Restrained pipe joint systems to be approved prior to use.
	Restrained Joint Pipe Systems (DI)		<ul style="list-style-type: none"> US Pipe McWane 	<ul style="list-style-type: none"> Field Lok Gasket SureStop Gasket 	Restrained pipe joint systems to be approved prior to use.
2.3	Valves and Valve Boxes	50mm – 300mm Resilient-seated Mainline Gate Valve	<ul style="list-style-type: none"> Mueller Clow Canada AVK American Flow Control Terminal City 	<ul style="list-style-type: none"> Mueller A2362 Clow 2639 AVK AFC Series 2500 IBBM 	All valves shall have epoxy coated ductile iron body to AWWA C 509.
		375mm or greater Mainline Butterfly Valve	<ul style="list-style-type: none"> Pratt Mueller 	<ul style="list-style-type: none"> Pratt Groundhog Mueller Lionseal 	AWWA C 504 Class 150B
2.3.5	Air Valve		<ul style="list-style-type: none"> Apco Val-Matic Pratt Crispin 	<ul style="list-style-type: none"> APCO 140C Val-Matic 201C Pratt UL Crispin UL 	
2.3.6	Water Valve	Nelson Box,	<ul style="list-style-type: none"> Terminal City 		Cover shall be marked

		<i>Product</i>	<i>Manufacturer</i>	<i>Approved Model</i>	<i>Restrictions/Additional Specifications</i>
	Box	450mm length 150mm riser pipe with circular box	<ul style="list-style-type: none"> • Dobney • Westview • Trojan 		with "Water".
2.3.7	Curb Stop Box		<ul style="list-style-type: none"> • Terminal City • Dobney • Westview • Trojan 		Per Supplementary Specification Dwg. COQ-W2b
2.5	Water Service Connection	Type K Copper – 19mm to 75mm			ASTM B88M
2.5.3.2	Saddles for Ductile Iron Mains		<ul style="list-style-type: none"> • Robar • Smith Blair • Mueller • Romac • Cambridge Brass 	<ul style="list-style-type: none"> • Robar 2506 • Smith Blair 317 • Mueller DR2S • Romac 202NS • Teck Series 840X 	<p>Saddles required for service installation on all ductile iron mains.</p> <p>All saddles are to have a fusion epoxy coating.</p> <p>Type 304 Grade A stainless steel required for all hardware.</p>
2.5.3.3	Saddles for PVC / PVCO Mains		<ul style="list-style-type: none"> • Canpac • Robar • Cambridge Brass • Mueller 	<ul style="list-style-type: none"> • Canpac SC2 • Robar 2506 • Teck Series 840X • Mueller DR2S 	<p>Saddles required for service installation on all PVC / PVCO mains.</p> <p>All saddles are to have a fusion epoxy coating.</p> <p>Type 304 Grade A stainless steel required for all hardware.</p>
2.6	Hydrant		<ul style="list-style-type: none"> • Terminal City • Canada Valve • Clow Canada • Mueller 	<ul style="list-style-type: none"> • TC C71P, TC-1, TC-20P • "Century" • M93 Brigadier • Centurion 	<p>Must have Storz fitting on pumper port</p> <p>Refer to Supplementary Specifications for paint colors</p>
2.7	Corporation Stop		<ul style="list-style-type: none"> • Cambridge • Ford • Mueller • AY-MacDonald 	<ul style="list-style-type: none"> • Cambridge 311 • Ford B1000 • Mueller B2500800N • MacDonald 74700 	<p>Shall be full-port ball valve to 38 mm only.</p> <p>Shall be 300psi working pressure.</p> <p>Shall have large tee head.</p> <p>Use mainline gate valve for sizes >38 mm</p>
2.7	Curb Stop		<ul style="list-style-type: none"> • Cambridge • Ford • Mueller 	<ul style="list-style-type: none"> • Cambridge 202 • Ford B44-343G • Mueller 	<p>Shall be full-port ball valve to 50 mm with 90° turn stop.</p> <p>Use mainline gate valve for larger sizes > 50mm</p>

		<i>Product</i>	<i>Manufacturer</i>	<i>Approved Model</i>	<i>Restrictions/Additional Specifications</i>
			<ul style="list-style-type: none"> • AY-MacDonald 	B25209 <ul style="list-style-type: none"> • MacDonald 76100 	
33 30 01	<i>Sanitary Sewers</i>				
2.1	Concrete				Not allowed
2.2	PVC Pipe, Mainline Smooth Profile	PVC SDR35	<ul style="list-style-type: none"> • IPEX • Royal • JM Eagle 		Sizes > than 600 mm to be approved by the Engineer
2.3	Sanitary Service Connection	PVC SDR28	<ul style="list-style-type: none"> • IPEX • Royal • JM Eagle 		Minimum size shall be 100mm
	Inspection Chamber	Inspection Chamber	<ul style="list-style-type: none"> • Le-Ron • Pro-Line Fittings • Galaxy Plastics 		IC's shall have locking lid with gasket
	Tees and Wyes	PVC SDR35	<ul style="list-style-type: none"> • IPEX • Royal • Galaxy Plastics • GPK Products 		Manufactured wye fitting shall be used for all connections on new mains.
	Sewer Couplers PVC – Other Other – Other		<ul style="list-style-type: none"> • Rollee • Fernco 	<ul style="list-style-type: none"> • Rollee • Fernco 	Couplers (Shear band type) shall have appropriate adaptor gaskets to suit OD of pipe material being coupled
	Sewer Couplers PVC – PVC		<ul style="list-style-type: none"> • Royal/Le-Ron • Pro-Line Fittings • Galaxy Plastics 		To be gasketed push on type
33 34 01	<i>Sewage Forcemains</i>				
2.2.4	Low-pressure Sewage Forcemains	HDPE with fusion welded joints	<ul style="list-style-type: none"> • KWH • Performance Pipe 	<ul style="list-style-type: none"> • Sclairpipe • DriscoPlex 	AWWA C906
	Service Connections	Wyes and Tees			Manufactured fitting shall be used for all connections on new mains.
33 40 01	<i>Storm Sewers</i>				
2.1	Concrete Pipe	Non-reinforced and Reinforced Concrete	<ul style="list-style-type: none"> • Langley Concrete • Ocean Pipe 		
2.2	PVC Pipe, Mainline	PVC SDR35	<ul style="list-style-type: none"> • IPEX • Royal 		Sizes > than 600 mm to be approved by the Engineer.

		<i>Product</i>	<i>Manufacturer</i>	<i>Approved Model</i>	<i>Restrictions/Additional Specifications</i>
	<i>Smooth Wall</i>		<ul style="list-style-type: none"> • JM Eagle 		
2.4	<i>HDPE Pipe, Mainline Open Profile</i>		<ul style="list-style-type: none"> • Armtec • Hancor 	<ul style="list-style-type: none"> • Armtec Boss 2000 • Hancor Blue Seal 	Allowed on a case by case basis as approved by the Engineer.
2.6	<i>Service Connections</i>	PVC SDR28	<ul style="list-style-type: none"> • IPEX • Royal • JM Eagle 		Minimum size shall be 150mm.
	<i>Tees and Wyes</i>	PVC SDR35	<ul style="list-style-type: none"> • IPEX • Royal • Galaxy Plastics • GPK Products 		Manufactured wye fitting shall be used for all connections on new mains.
		Insertable Tee	<ul style="list-style-type: none"> • Inserta Tee 		Insertable tee only permitted for connections to existing PVC and Concrete mains which are 375mm mains or larger.
	<i>Inspection Chamber</i>	Inspection Chamber	<ul style="list-style-type: none"> • Le-Ron • Pro-Line Fittings • Galaxy Plastics 		IC's shall have locking lid with gasket
33 44 01	<i>Manholes and Catchbasins</i>				
2.1	<i>Precast Manhole Sections</i>	Manhole base and riser section	<ul style="list-style-type: none"> • Langley Concrete • Ocean Pipe • Diamond Concrete 		
2.1.7	<i>Manhole Frames and Covers</i>	Ductile Iron for Arterial Roads	<ul style="list-style-type: none"> • Westview Sales • Dobney 	<ul style="list-style-type: none"> • TR 724 • C Series 	Manhole frame shall be secured to the concrete manhole lid with 3 12 mm diameter redi-rods and appropriate Hilti anchors and nuts No cast or ductile iron adjusting grade rings permitted
2.1.7	<i>Manhole Frame and Cover</i>	Cast Iron per MMCD for Non-arterial Roads	<ul style="list-style-type: none"> • Dobney Foundry • Westview Sales Ltd. 	<ul style="list-style-type: none"> • C Series • TR18 	Refer to Supplementary Standard Drawing COQ-S16 for required lettering on Manhole Covers for sanitary and storm sewers, including in fish habitat areas. Shall be compatible and interchangeable with existing City of Coquitlam castings.
2.1.7	<i>Low-profile Frame and Covers</i>				Use of 100mm low profile frames and cover to be approved by the Engineer

		Product	Manufacturer	Approved Model	Restrictions/Additional Specifications
	2.1.13 Catch Basin and Other Castings	CB Frame	<ul style="list-style-type: none"> • Dobney Foundry • Westview Sales Ltd. 	<ul style="list-style-type: none"> • B24 • TR24 	Top Inlet Catch Basin – MMCD Standard Drawing S11
		CB Grate	<ul style="list-style-type: none"> • Dobney Foundry • Westview Sales Ltd. 	<ul style="list-style-type: none"> • B23 • TR23R&L 	Top Inlet Catch Basin – MMCD Standard Drawing S11
		CB Frame – Side Inlet Assembly	<ul style="list-style-type: none"> • Dobney Foundry • Westview Sales Ltd. 	<ul style="list-style-type: none"> • B39A • TR39A 	Refer to Supplementary Standard Drawings COQ-S11A – Side Inlet Catch Basin Assembly
		CB Grate – Side Inlet Assembly	<ul style="list-style-type: none"> • Dobney Foundry • Westview Sales Ltd. 	<ul style="list-style-type: none"> • B39 • TR39 	Refer to Supplementary Standard Drawings COQ-S11A – Side Inlet Catch Basin Assembly
		Curb Inlet	<ul style="list-style-type: none"> • Dobney Foundry • Westview Sales Ltd. 	<ul style="list-style-type: none"> • B24FTH • TR24C 	
		Lawn Basin Grate (600mm Barrel)	<ul style="list-style-type: none"> • Dobney Foundry • Westview Sales Ltd. 	<ul style="list-style-type: none"> • B22A • TR22 	Lawn Drains – MMCD Standard Drawing S12
		Lawn Basin Grate (300mm Barrel)	<ul style="list-style-type: none"> • Dobney Foundry • Westview Sales Ltd. 	<ul style="list-style-type: none"> • D2A • TR12 	Lawn Drains – MMCD Standard Drawing S12
03 30 20	Concrete Walks, Curbs and Gutter				
		Cast-in-Place Tactile panel	<ul style="list-style-type: none"> • Access Tile • Amor-Tile 	<ul style="list-style-type: none"> • ACC-R-2x4 • ADA-C-2448 	See Supplementary Drawing COQ-C9E
34 41 13	Traffic Signal				
		Polymer Concrete Junction Boxes	<ul style="list-style-type: none"> • CIF Composites Inc • Duralite 	Sizes: <ul style="list-style-type: none"> • 11 x 18 • 17 x 30 • 24 x 36 	2 Sections max Plastic Junction Boxes Will Not Be Accepted Round Junction Boxes Will Not Be Accepted
		Concrete Junction Boxes/Vaults	<ul style="list-style-type: none"> • AE Concrete 	<ul style="list-style-type: none"> • SP635-1.3.3 (4040 Service Box) • Type 66=T266 • Type 37=B937 • Type C =5686 	Refer to Supplementary Drawing SS-E2.5
		Poles / Arms	<ul style="list-style-type: none"> • Valmont West Coast Engineering • Nova Pole 		Galvanized and Powder Coated (See Roadway Lighting Section for Paint Codes)
		Concrete Bases	<ul style="list-style-type: none"> • AE Concrete • Langley Concrete 		For Concrete service bases refer to Supplemental Drawing SS-

		Product	Manufacturer	Approved Model	Restrictions/Additional Specifications
					E7.3
		Service Bases	<ul style="list-style-type: none"> Valmont West Coast Engineering Nova Pole 		Refer to Supplemental Drawings SS-E7.3 and SS-E7.4 Robust Tab for Padlock
		Service / Electrical Panels	<ul style="list-style-type: none"> West Coast Electric Valid 	Aluminum or Stainless Steel.	Refer to Supplemental Drawing SS-E7.3 Surge Protection Device required for primary service. I _{max} 50, 20kA, 120/240V, 50/60Hz. Must be installed within panel.
		Vehicle Signal Heads	<ul style="list-style-type: none"> Econolite 	<ul style="list-style-type: none"> Polycarbonate Yellow Body Colour 	C/W Cowl Visors or as indicated on Contract Dwgs.
		Backboards	<ul style="list-style-type: none"> Econolite 	<ul style="list-style-type: none"> Aluminum, Yellow Powder Coat 	All Primary Vehicle Signal Heads Front Face with 3M Diamond Grade as indicated on Contract Drawings Optional for Secondary Signal, as indicated on contract drawings.
		Pedestrian & Countdown Signal Heads	<ul style="list-style-type: none"> Econolite Eagle 		MoT Specifications (Aluminum) <ul style="list-style-type: none"> 300mm Square c/w Aluminum Peak Visors Color of Heads, Visors and Brackets to Match Pole
		Vehicle LED Signals	<ul style="list-style-type: none"> Dialight 	Dialight P/N: <ul style="list-style-type: none"> Red P/N: 433-1210-003XL15 Yellow P/N: 433-3230-901XL15 Green P/N: 433-2220-001XL15 	300mm Round Color Tinted Lens. Clear lens required for bi-modal signal modules P/N: 4306370-001
		Pedestrian LED Signals	<ul style="list-style-type: none"> Dialight Top Section – Walk /Don’t Walk Bottom Section – Countdown 	Dialight P/N: <ul style="list-style-type: none"> P/N: 430-6772-001X P/N: 430-7773-001X 	ITE Specifications 300mm Square
		Photocells / Shorting Caps			See Roadway Lighting Section
		Cobra Head Style Luminaires (LED)	<ul style="list-style-type: none"> LED Roadway Lighting (LRL) 	<ul style="list-style-type: none"> NXT Series 	<ul style="list-style-type: none"> LED 4000k 7 pin PEC connector Shorting cap Wattages per design
			<ul style="list-style-type: none"> American Electrical Lighting (AEL) 	<ul style="list-style-type: none"> Autobahn Series ATB2 	

		Product	Manufacturer	Approved Model	Restrictions/Additional Specifications
				<ul style="list-style-type: none"> • ATBO 	plans
		Advanced Accessible Pedestrian Station (AAPS)	<ul style="list-style-type: none"> • Polara 	<ul style="list-style-type: none"> • ICCU-S2 • IDS2 Ped Buttons • SDLC "Y" Cable Required 	Supplied by City at Developer's expense.
		Audible Pedestrian Signals (APS)	<ul style="list-style-type: none"> • Novax 	<ul style="list-style-type: none"> • DS102A-3W APS P/N: PLS001188 	Enclosure to match pole colour
		Pedestrian or Cyclist Push Button	<ul style="list-style-type: none"> • Polara 	<ul style="list-style-type: none"> • BDSPO14-Y-CE0063 	2 wire system
		PED Push Button Plate	<ul style="list-style-type: none"> • Greenlite Traffic 	<ul style="list-style-type: none"> • GEL239 (R or L) 	Black Symbol on White Background
		Cyclist Push Button Plate	<ul style="list-style-type: none"> • Greenlite Traffic 	<ul style="list-style-type: none"> • GEL240 (R or L) 	Black Symbol on White Background
		Cyclist / Ped Combo Sign Unit	<ul style="list-style-type: none"> • Greenlite Traffic 		Black Symbol on White Background
		Signal Cable	<ul style="list-style-type: none"> • Texcan 	<ul style="list-style-type: none"> • IMSA 7C, 12C, 19C & 25C No. 14 Stranded Copper 	
		Signal Detector Loop Homerun Cable	<ul style="list-style-type: none"> • Texcan 	<ul style="list-style-type: none"> • IMSA Spec. 50-2 2C No. 14 Stranded Copper 	
		Individual Conductor	<ul style="list-style-type: none"> • Texcan 	<ul style="list-style-type: none"> • RW90 Stranded Copper 	Size and Color as per Plans
		Cable Lubricant	<ul style="list-style-type: none"> • IDEAL 	<ul style="list-style-type: none"> • Poly Water Dyna-Blue • Poly Water Aqua-Gel II 	
		Conduit	<ul style="list-style-type: none"> • Various 	<ul style="list-style-type: none"> • CSA C22.2 NO. 211.2 	RPVC
		Conductor Tags	<ul style="list-style-type: none"> • Panduit 	<ul style="list-style-type: none"> • MP250-C Tags 	On All Cables and individual conductors (Black Indelible Marker Pen)
		Fuse Holders (Pole Hand Holes)	<ul style="list-style-type: none"> • Tron 	Tron Heb-AA c/w 2 L-type Insulating Boots	
		Fuse Holders (Junction Boxes)	<ul style="list-style-type: none"> • Ideal • Buchanan 	<ul style="list-style-type: none"> • 65 KIT Water Proof 	
		Fuses	<ul style="list-style-type: none"> • Bussman • Mersen 	<ul style="list-style-type: none"> • 10-A KTK • 10-A ATM 	
		Hydro Dip Service (RPVC Straps, Lag	<ul style="list-style-type: none"> • Various 	<ul style="list-style-type: none"> • MMCD 	

		Product	Manufacturer	Approved Model	Restrictions/Additional Specifications
		Bolts & Conduit Guard)			
		Overhead Adjustable Bracket	<ul style="list-style-type: none"> Olson Aluminum Castings 	<ul style="list-style-type: none"> Sky-Bracket 	C/W Stainless Steel Hardware
		Side Mount Brackets	<ul style="list-style-type: none"> Greenlite Traffic 	<ul style="list-style-type: none"> GEL 189G 	C/W Stainless Steel Hardware
		Illuminated Street Name Signs	<ul style="list-style-type: none"> Greentop Lighting Image Signs 	<ul style="list-style-type: none"> Housing size 72" x 20" Clear Lexan Panels 3M 4090T – sheeting (translucent) 3M ElectroCut 1175 blue film 9" letter height (suffix 4") Clearview font - 4W Upper and lower case lettering 	Mounting hardware: CANBRAC for vertical installation or PELCO for hanger assembly SE-5015-42-PNC
		Illuminated Pedestrian Signs	<ul style="list-style-type: none"> Greentop Lighting Valid 	<ul style="list-style-type: none"> MMCD E5.15 	<ul style="list-style-type: none"> Optional 300mm yellow LED signals and enclosures, as indicated on contract drawings. Provided with Signal mounting hardware.
		Traffic Controller	<ul style="list-style-type: none"> Econolite 	<ul style="list-style-type: none"> Cobalt 	Contact/confirm City staff regarding latest spec.
		Traffic Cabinet	<ul style="list-style-type: none"> Econolite 	<ul style="list-style-type: none"> P44DD MSX 	Contact/confirm City staff regarding latest spec.
		Uninterruptable Power Supply (UPS)	<ul style="list-style-type: none"> Alpha Technologies 	<ul style="list-style-type: none"> FXM HP 1100 	Contact/confirm City staff regarding latest spec.
		Battery Monitoring Device	<ul style="list-style-type: none"> Alpha Technologies 	<ul style="list-style-type: none"> Remote Battery Management System (RBMS) 	Contact/confirm City staff regarding latest spec.
		UPS Cabinet	<ul style="list-style-type: none"> Valid 	<ul style="list-style-type: none"> KSDA481716P G-CQ 	Coquitlam Spec - c/w <ul style="list-style-type: none"> UATS & UGTS Battery harness Y Connector AlphaCell 195 XTB Batteries Interconnect Cables
		UPS Indicator Light	<ul style="list-style-type: none"> RAB Design Lighting 	<ul style="list-style-type: none"> Model No. DVBKS100CG LED Fixture 	Refer to Supplemental Drawings SS-E7.3

		Product	Manufacturer	Approved Model	Restrictions/Additional Specifications
		Fire Hall Controller	<ul style="list-style-type: none"> Novax 	<ul style="list-style-type: none"> PLS000874 / PLS000877 	Contact/confirm City staff regarding latest spec.
		Special Crosswalk Controller	<ul style="list-style-type: none"> Novax 	<ul style="list-style-type: none"> PLS 000635 / PLS 000859 	Contact/confirm City staff regarding latest spec.
		Traffic Video Detection System	<ul style="list-style-type: none"> Miovision 	<ul style="list-style-type: none"> Traffic Link Detection 	Contact/confirm City staff regarding latest spec.
		PTZ Cameras	<ul style="list-style-type: none"> Pelco 	<ul style="list-style-type: none"> Spectra Enhanced IP HPOE CAT5e Ethernet cable Mounting Hardware Surge Protection Product Registration 	<ul style="list-style-type: none"> Contact/confirm City staff regarding latest spec. Contact/confirm City staff regarding latest spec. Cat5e as required by selected camera Confirm with City regarding mount type: <ul style="list-style-type: none"> Paramount PP350 OR: <ul style="list-style-type: none"> 2 piece mount – PA402 and IWM Series. Sky-Bracket (if required) DITEK Corp. (Product code DTK-PVPIP) Registration Update code for Camera Addition – DS Control Point
		EV Pre-emption System	<ul style="list-style-type: none"> Emtrac 	<ul style="list-style-type: none"> Priority Detector Card – ST 9283 Antenna Antenna Cable (LMR240DB) Mounting Bracket BNC Connectors 	Contact/confirm with City staff regarding latest spec.
		Radio Communication Equipment	<ul style="list-style-type: none"> Encom 	<ul style="list-style-type: none"> Commpak BB 5.8 Cable – CAT5e 	
		Paint Color RAL Codes			<ul style="list-style-type: none"> Coquitlam Green-RAL 6028 Coquitlam Black-RAL 9005 Mallardville Grey-RAL 7024 Or as directed by City Staff