



<u>SUBDIVISION SERVICING BYLAW APPROVED PRODUCTS LIST</u> Administrative Procedure No. 23/22

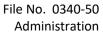
PURPOSE:

To ensure that quality materials are used in the construction of City infrastructure and to ensure that standard equipment is installed for ease of maintenance and to keep the supply of needed replacement/repair parts to a minimum.

PROCEDURE:

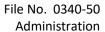
		Item Description	Approved Product	Standard	Comments/Restrictions
1. Waterworks					
1.1 Pipe					
	1.1.1	Polyvinyl Chloride Pipe (PVC)	Ipex Northern Pipe Products Royal Group	CSA B137.3 AWWA C900 DR 25, 18 and 14 AWWA C905 DR 51, 41, 32.5, 25, 21 and 18	C900 Sizes 100 – 300 mm C905 Sizes 350 – 1200 mm
1.2 Fittings					
J	1.2.1	Cast Iron Fittings	McAvity Terminal City Canada Pipe Union Foundry Co.	ASTM C110-82 ASTM B16.1-1975 Epoxy Coating ANSI/AWWA C116/A21.16.03	North American Controlled Manufactured Push on/Hub fittings only 17 pound magnesium anodes
	1.2.2	Ductile Iron Fittings	Terminal City Canada Pipe Union Foundry Co. Star Pipe Products	ASTM C153-84 ASTM B16.1-1975 Epoxy Coating ANSI/AWWA C116/A21.16.03	North American Controlled Manufactured Push on/Hub fittings only 17 pound magnesium anodes
	1.2.3	PVC Extruded Fittings	IPEX Inc. Galaxy Plastics Ltd.	CSA B137.2 and B137.3 AWWA C907 (100-300 mm)	Bends must be long radius type
1.3 Couplings	•	-	•		
	1.3.1	Couplings	Hymax Romac Ind.		Epoxy coated Type 304 SS Bolts Must be manufactured with an anode connection point 17 pound anodes
1.4 Restraining De	vices				
	1.4.1		Must meet standards listed	ASTM A536 Grade 65-45- 12 ANSI/AWWA C111/A21.11 ANSI/AWWA C153/A21.53	Epoxy Coated Type 304 SS Bolts
1.5 Tapping Sleeve			1		
	1.5.1	Tapping Sleeves	Robar Terminal City Hymax	Stainless Steel or Epoxy Coating ANSI/AWWA C116/A21.16.03	

Authorized by the CAO Effective: November 23, 2022 Updated from Procedure Dated: June 1/2022 Page: 1 of 12



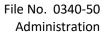


		Item Description	Approved Product	Standard	Comments/Restrictions
1.6 Fire Hydrants			_		
	1.5.1	Fire Hydrant	Terminal City Clow Canada	AWWA C502	Painted Yellow (Hydrant) Compression type 2.75 m Minimum Bury 17 Pound magnesium anodes Plug drain holes No Stainless steel bolts
1.7 Standpipes			1	1	
	1.7.1	50 mm Standpipe	Terminal City Clow Mueller		Compression type 2.75 m Minimum bury 17 pound magnesium anodes
1.8 Valves		T	T .	1	1
	1.8.1	Mainline Gate Valves	Clow Canada Terminal City Mueller	AWWA C509 Interior to AWWA C550 Exterior — Electrostatically applied fusion bonded epoxy coated	Resilient Seat Sizes 100 – 350 mm Push on/Hub connections only 17 pound magnesium anodes Comes with Steel Extension Stem 25 x 25 mm with rock guard altered for steamer hose access
	1.8.2	Nelson Type Valve Boxes	Terminal City Iron Works Star Pipe Products Dobney		Terminal City Nelson Type C900 pipe riser
	1.8.3	Adjustable Valve Box	EJ castings		5-1/4" valve box and lid In asphalt surface only
1.9 Water Service			_		
	1.9.1a	Water Service Pipe 25 mm copper	Noranda Wolverine Hai Liang Great Lakes Copper	ANSI H23.1 ASTM B88 AD WWT-799 ASTM F1281 CSA 137.1 AWWA C901	Type K Soft Copper
	1.9.1b	Water Service Pipe 25 mm PEX (cross link polyethylene)	Polytubes – Series 904 Rehau	AWWA C904 ASTM F876 ASTM F877 ASTM F2023	Copper Tube Size
	1.9.2	Water Service Pipe 50 mm	Polytubes – Series 200 Ipex – Gold901	Can/CSA B137.1	200 PSI HDPE Copper Tube Size
	1.9.3	Compression Coupling	Mueller Cambridge	AWWA C907 CSA B137.2 and B137.3	Compression to Compression
	1.9.4	Water Service Saddles	Robar Mueller	2706 CD2 or SC2	Double Strap Stainless Steel CC Thread Epoxy Coated
	1.9.5	Corporation Stops	Mueller Cambridge		Sizes 19 – 50 mm CC Thread and Compression
	1.9.6	Curb Stop	Mueller Cambridge		Sizes 19 – 50 mm Full Flow, Full Port Compression to Compression



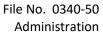


	Item Description	Approved Product	Standard	Comments/Restrictions
1.9.7	Service Box	Mueller	CSB1	2.75 m Bury
		Trojan	A726 and A728	Epoxy Stand Pipe
				Epoxy Coated Boot
				Internal Rod 300 to 600 mm
				below surface



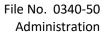


		Item Description	Approved Product	Standard	Comments/Restrictions
2. Sewer					
2.1 Storm Pipe	_	T		T	1
	2.1.1	Concrete Pipe	Ocean Construction Langley Concrete Group Kon Kast	ASTM C14, C76, A443, C655	600 mm and larger Type 50 Cement
	2.1.2	Polyvinyl Chloride Pipe	Ipex Royal Group JM Manufacturing Northern Pipe	CSA B182.2 ASTM D2412 AD NQ3624-060	DR28 100 – 150 mm DR35 200 – 900 mm
	2.1.3	Ultra Rib/Kor Flo	Ipex Royal Group	CSA B182.4 ASTM F794	300 mm and larger
	2.1.4	Perma-Loc Class 5 Kor Flo	Ipex Royal Group	CSA B182.4 ASTM F794	600 mm and larger
	2.1.5	Corrugated High Density Polyethylene Pipe	Armtec – Boss 2000	ASTM D3350 CSA B182.8 ASTMD1248 F667	Bell and spigot with gaskets
	2.1.6	Corrugated Steel Pipe	Armtec (Culverts only with the exception of round Ultra-flo which may be used as strom sewer) Spir-L-Ok (Culverts only)	CSA CAN3-G401, M81	Minimum 2.0 mm thickness Coating as per Canadian Durability Guideline for CSP - CSPI
	2.1.7	Steel Reinforced Polyethylene Pipe	Armtec – Boss 300 Contech – Duromax	CSA B182.14 CSA B182.15 ASTM 2562	900 mm and larger Soil tight or low head joints not approved
	2.1.8	Large Diameter High Density Polyethylene Pipe	KWH – Weholite	ASTM F894	900 mm and larger Thermal fusion welded joints
2.2 Vaults		•			·
	2.2.1	Pre-Cast Reinforced Concrete	Grosso Kemp A & E Kon Kast Ocean Langley Concrete Group	ASTM C478	Pre-cast concrete Minimum 960 opening H2O/CS-600 Loading Type 50 Cement
2.3 Catchbasins					
	2.3.1	Barrels	Grosso Kon Kast Ocean Langley Concrete group	ASTM C478	Pre-cast Concrete 600 mm Diameter 1500 mm Deep H2O/CS-600 Loading Type 50 Cement



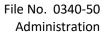


		Item Description	Approved Product	Standard	Comments/Restrictions
	2.3.2	Complete Bases and Lids	Grosso Kemp	ASTM C478	Pre-cast Concrete 360 maximum 640 mm Opening
			Kon Kast		H2O/CS-600 Loading
			Ocean		Type 50 Cement
			Langley Concrete		
	222	Laves Basin	Group		Dahaar B22A systs
	2.3.3	Lawn Basin	Langley Concrete		Dobney B22A grate Type 50 Cement
			Group Ocean		Type 50 Cement
			Le-Ron Plastics Inc.		
	2.3.4	Frame and Grate	Dobney Foundry		Type 1 B23 Grate and 24 Frame
	2.5.4	Traine and Grate	Langley Concrete		LH or RH
			Group		Type B18 Grate and 19 Frame LH
			Norwood Foundry		or RH
			,		Grate to indicate that
					stormwater drains to fish habitat
					or stream
2.4 Headwalls	l.				•
	2.4.1	Pre-Cast concrete	Grosso		Pre-Cast Concrete
			Kemp		Type 50 Cement
			Kon Kast		
			Langley Concrete		
			Group		
			J&J Drainage		
			Products		
2.5 Storm and San 2.5.1 Barrels	itary Manhol	es			
2.5.2 24.7 0.5	2.5.1a	Barrels – Storm	Grosso	ASTM C478	Pre-Cast Concrete
			Kemp		Minimum 1050 mm
			Kon Kast		H2O/CS-600 Loading
			Ocean		Type 50 Cement
			Langley Concrete		''
			Group		
	2.5.1b	Barrels – Sanitary (PVC)	Ipex		1200 mm Diameter
	2.5.1c	Barrels – Sanitary	Grosso	ASTM C478	1200 mm Diameter
		(concrete)	Kemp		Pre-Cast Concrete
			Kon Kast		H2O/CS-600 Loading
			Ocean		Type 50 Cement
			Langley Concrete		Concrete barrels must have an
			Group		approved riser wrap to reduce
					infiltration
	2.5.1d	Riser Wrap – Sanitary	Wrapid Seal		Minimum 300 mm wide
		Manholes	Boa Tape		centered on joints
	252	Company to 11 1 Ct	Riser Wrap	ACTNA C47C	Bus Cost Course
	2.5.2	Concrete Lid-Storm	Grosso	ASTM C478	Pre-Cast Concrete
			Kemp		Minimum 1050 mm
			Kon Kast		H20/CS-600 Loading
			Ocean		Type 50 Cement



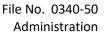


		Item Description	Approved Product	Standard	Comments/Restrictions
2.5.3 Precast Bases					
	2.5.3a	Storm Bases	Grosso Kemp Kon Kast		Type 50 Cement
			Ocean Langley Concrete		
			Group		
	2.5.3b	Sanitary Bases	As per approved Barrels with HDPE liner (Predl)		Lined with HDPE Type 50 Cement
	2.5.4	Frame and cover	Dobney Foundry Langley Concrete Group Norwood Foundry		C18 Frame and Cover C18D Frame and Cover H2)/CS-600 Loading TF-39 Boulevard and landscaped area only
	2.5.5	Adjustable Frame and Cover	EJ Castings	ASTM A536	AJ633ESR In Asphalt surfaces only
2.6 Sanitary Sewer Pi	ipe	·	L	ı	,
·	2.6.1	PVC Pipe	Ipex Northern Pipe Products Royal Group	CSA B182.2 ASTM D2412 and NQ3624-060	DR28 100 – 150 mm DR35 200 – 1050 mm
2.7 Services – Sanitar	y and Stor	rm			
	2.7.1	Sanitary Service (PVC)	Ipex Northern Pipe Products Royal Group	CSA B182.2 ASTM B2413 and NQ3624-060	DR28 100 – 150 mm
	2.7.2	Storm Service (PVC)	Ipex Northern Pipe Products Royal Group	CSA B182.2 ASTM B2413 And NQ3624-060	DR28 100 – 150 mm DR35 150 mm and up
	2.7.3	Service Wyes and Fittings	Ipex Le-Ron Plastics Inc. Galaxy Plastics Ltd.	CSAB182.2 ASTM D3034 and F1336	DR28/35 Bell and Spigot All new main construction
	2.7.4	Saddles	Ipex Le-Ron Plastics Inc. Galaxy Plastics Ltd.	CSAB182.2 ASTM D3034 and F1336	Double strap Wye only on existing mains
2.8 Forces Mains					
	2.8.1	Pvc Pipe and Fittings	Ipex Northern Pipe Products Royal Flex-Loc	CSA B137.3 AWWA C900 DR25, 18 and 14 AWWA C905 DR51, 41, 32.5, 25, 21 and 18	C900 Sizes 100 – 300 mm C905 350 – 1200 mm
	2.8.2	High Density Polyethylene (HDPE) Pipe and Fittings	KWH Pipe Global Poly Systems Inc. Performance Pipe	AWWA C906	DR7.3 to DR32.5



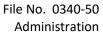


		Item Description	Approved Product	Standard	Comments/Restrictions
	2.8.3	Valves	Clow	Gate Valve to AWWA	Resilient Seat
			Terminal City	C509	Sizes 100 – 350 mm
			Muller		
Ī	2.8.4	Services	See 1.9 Water		
			Services		



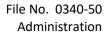


		Item Description	Approved Product	Standard	Comments/Restrictions
3. Street Lighting					
	3.1	Roadway Lighting	NXT Series		NXT – 36s or larger on roadways
	3.2	Poles	Nova Pole	CAN/CSA S6-2006	Hot dipped galvanized steel in
			West Coast	ANS CSA 22.2 No. 206	accordance with SSPC-SP7
			Engineering		
			Or approved equal		
	3.3	Conduit	lpex	CSA C22.2 No.211.1	RPVC as per Canadian Electric
			Or equivalent		Code
	3.4	Fittings	Ipex or equivalent	CSA C22.2 NO. 85	RPVC as per Canadian Electric
					Code
	3.5	Junction Boxes	Nova Pole	Conform to section 201	Large size only
				plastic unction boxes	
	3.6	Service Panel	Valid Manufacturing	CSA type 3R rated	Model# BSD6A24CQ
					Marine grade aluminum
					Pader coated grey
					Wired to MMCD E7.5 40/60 amp
	3.7	Service Base	Nova Pole		Hot dipped galvanized steel in
			West coast		accordance with SSPC-SP7
			Engineering		
	3.8	Conductors		CSA C22.2 NO.38	Single conductor 600V
					Stranded copper with RW90
					polyethylene insulation
					Colour coded per Canadian
					Electric Code
	3.9	Conductor Connectors		Rated 105C as per	Screw on type
				Canadian Electric Code	
	3.10	Fuse Holders	Tron	CSA 6225-01	5 amp fuse with 2 insulating
				UL IZLT2	boots
	3.11	Concrete Bases		As per MMCD drawing	Pre-Cast concrete
				CE1.3	Type C for 9m davit
					Type C1 for 8.1m davit on service
					base





		Item Description	Approved Product	Model Number	Supplier	Comments/Restrictions
4. Furnishings		•				
4.1 Benches						
	4.1.1	Park and Trail Benches	Contemporary 6' Benchport/Surf Mt- Diamond	CN420D Green	Sudden Fun	Includes mounting plate MC104N set of 4
	4.1.2	Woodlawn Cemetery Benches	Green Valley 6' Bench with black recycled plastic lumber Portable/Surface mount	CAN/CSA S6-2006 ANS CSA 22.2 No. 206	Sudden Fun	Colour Cedar with Black Frame
4.2 Garbage Can	s					
	4.2.1	32 Gallon Receptacle	Flare top – Diamond	FR4000D	Sudden Fun	Colour Green – comes with 32 gallon liner # LR310N
	4.2.2	Flat Top Solid Bonnet	Outward opening	SB105N	Sudden Fun	
4.3 Deep Garbag	ge	•	•	-	-	
	4.3.1	Max 30	EQNX 24" x 128"	05-05-0262	Equinox Environment Products	
4.4 Picnic Table				•		
	4.4.1	Signature 6' Table	2 3/8" Legs – Diamond	SG106D	Sudden Fun	
	4.4.2	Surface Mount Package	2 3/8" Legs	SG135N	Sudden Fun	Set of 2



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Approved Plantings for City of Fort St John

Citi	11	T += = ===+
S=sensitive	<i>M</i> =moderate	T=tolerant

		Deciduous			rate r=tolerant
Common Name	Latin Name	Zone	Salt	Wet	Notes
Maple	Acer negundo 'Sensation'	2			Fall Colour
Tartarian Maple	Acer tartaricum spp. Ginnala	3	М		small tree, F.C.
Silver Maple	Acer saccharinum	3	М	М	needs space
Dakota Pinacle Birch	Betula papyrifera 'Dak. Pin.'	3			med. tree, F.C.
Paper Birch	Betula papyrifera 'Snowy'	2	М		white bark
Northern Hackberry	Celtis occidentalis	3	S		large tree
Hawthorn	Crataegus var. 'Snowbird'	3	S		small tree
Foothills Green Ash	Fraxinus 'Foothills Gr. Ash	3			
Black Ash	Fraxinus Nigra	2			
Fall Gold Ash	Fraxinus Nigra 'Fall Gold'	3			
Green Ash	Fraxinus pennsylvanica	3	S		aka Manchurian Ash
Prairie Spire Ash	Frax. Penns. 'Rugby'	2	S		good ground clearance
Patmore Ash	Frax. Penns. 'Patmore'	2			street tree
Northern Treasure	Fraxinus X	2			very tall canopy
Northern Gem Ash	Frax. X 'Northern Gem'	2			tall canopy
Seabuckthorn	Hippophae rhamnoides	3	T		grey colored leaves
Royalty Flow. Crab	Malus 'Royalty'	2			dark purple leaves
Spring Snow Fl. Crab	Malus 'Spring Snow'	2			
Thunderchild Fl. Crab	Malus 'Thunderchild'	3	М		purplish/red leaves
Starlite Flow. Crab	Malus X 'Jeflite'	2			
Okanese Poplar	Populus 'Okanese'	2	М	Т	tolerates drought
Praire Sky Poplar	Populus 'Prairie Sky'	2	T	Т	Interspecific Hybrid
Swedish Aspen	Populus tremula erecta	2		-	columnar
Trembling Aspen	Populus tremuloides	1	Ţ	Т	drought tolerant
Assiniboine Poplar	Populus X Assiniboine	2	М	М	
Tower Poplar	Populus X Canescens	2	T	М	colum., full sun, bigger
Early Gold Pear	Pyrus Ussuriensis 'Early Gold'	2	М		
Bur Oak	Quercus macrocarpa	3	М		
Laurel Leaf Willow	Salix pentandra	3	М		needs space
European Mtn. Ash	Sorbus aucuparia	2		S	small tree, berries
Japanese Tree Lilac	Syringa reticulate	3	Т		sunny location



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Common Name	Latin Name	Zone	Salt	Wet	Notes
Americana Linden	Tilia Americana	3	S		Bee tree
Little Leaf Linden	Tilia cordata 'Little Leaf'	3	М		water if salt (b.tree)
Greenspire Linden	Tilia cordata 'Greenspire'	3			stem girdling (b.tree)
Dropmore Linden	Tilia X flavescens 'Dropmore'	3			Interspecific Hybrid
		Evergreen			
Common Name	Latin Name	Zone	Salt	Wet	Notes
Balsam Fir	Abies Balsamea	3			
Eastern Red Cedar	Juniperus virginiana	3	М		
Tamarack	Larix laricina	2	T	Т	deciduous evergreen
Siberian larch	Larix siberica	2	М		
White Spruce	Picea gaica	2	S		
Colorado Blue Spr	Picea pungens	2	S		
Norway Spruce	Picea p. 'Norway'	2	S	Т	
Lodge pole Pine	Pinus 'Lodgepole'	1			
Red Pine	Pinus 'Red'	1	S		
Scots Pine	Pinus 'Scots'	2	S		
Eastern White Cedar	Thuja occidentalis	3	S		



File No. 0340-50 Administration

Grass Hydroseed Mix

	1
Parks and Greenspaces	
Borealis Lawn Mix	
60% Creeping Red Fescue	Very hardy in northern region
20% Kentucky Bluegrass	Dark color blue-green
20% Perennial Rye Grass	Good for longer dry spells, good for high foot traffic
Boulevards	
For boulevards near salt roads, the grass blend shall include alkaligrass.	
Some of the other grasses may not survive right next to the road	
where there is high pH soil but will support erosion control, and	
help the alkaligrass to establish.	
30% Alkaligrass	For high pH soil
30% Creeping Red Fescue	
20% Kentucky Bluegrass	
20% Perennial Rye grass	
Roadside Allowances	
Roadside allowances (E.g. Alaska highway) and/or MOTI ditches as	
of 2020 uses the following. The City can utilize this blend in specific	
areas. (E.g. Bypass ditches)	
North Fort Consul Mir 250/	
North East General Mix 25%	
Creeping Red Fescue 30%	
Perennial Ryegrass 30%	
Tall Fescue 15%	