

Approved Material List

Note: Must use suggested product manufacturer or approved equivalent

Service	Product	Certification	Material	Specification	Manufacturer	Comments
Fencing						
Acoustical Fencing	PVC Acoustic Fence	AASHTO "Guide Specifications for Structural Design of Sound Barriers"	PVC		Atlantic Industries Limited (AIL)	
	Noise walls	CSA A23.1 and A23.4 35 Mpa at 28 days (min)	Precast concrete		International Fence, Durisol Vinyl Fence	
	Noise walls composite System		Concrete/ Wood Chip		Durisol Incorporated	
	Infill	MOE (minimum Surface density requirement on 20kg/m ²)		57mm x 130mm T&G, with gaps not exceeding 6mm		
	Horizontal Members			not exceeding 38mm x 140mm		
	Posts			140mm x 140mm structural post and timber		
	Stain			Latex solid stain, minimum of two coats on dry wood, applied during appared temperatures		
	Fasteners		Hot Dipped Galvanised steel	Adrox Nails, Bolts, Nuts, Washers, Anchors		
Chain Link Fencing	Fabric and Wire		Steel wire hot dipped galvanized weaving, or electro galvanized	Minimum requirement for zinc coating 0.5kg/m ² with 38mm wire mesh and 3.4mm steel wire fabric		
	Post and Rails	ASTM Designation A120	Galvanized Steel	Schedule 40 pipe conforming to current specifications for black, hot dipped and zinc coated, welded and seamless pipe		
	Fittings and Hardware	ASTM Designation A152	Aluminum Alloy or Steel DuCille Iron	Frames, braces, cast fitting and other fittings		
Privacy Fence	Wood		Construction Grade Ceder or Approved Pressure Treated	Nails must be Twisted Steel and Zinc Coated		
Parks and Landscaping						
Ground Material	Fibre		Engineered wood fibres minimum 300mm (12") deep		Certified Providers	
	Rubber		rubber		Certified Providers	

Playground Equipment	Junior Play Structure	CAN/ CSA Standards Z614- Childrens Playspaces and Equipment (most current edition), Accessibility for Ontarians with disabilities act, 2005 and Ontarians with Disabilities Act 2001	Multiple	Neighbourhood Park: 2-3 decks with min. 1 roof, transfer station & stairs, 2 plastic slides – single and dual track, climber, tunnel or bridge between decks, 3-4 activity panels, and talk tube or alternate Community Park: 2-3 decks with min. 1 roof, transfer station & stairs, 2 plastic slides single and dual track, climber, tunnel or bridge between decks, 3-4 activity panels, and tal tube or alternate	Certified Playground Supplier or ABC Inc., PlayPower, Open Space Solutions	
	Senior Play Structure	CAN/CSA Standards Z614 – Children’s Playspaces and Equipment (latest edition) Accessibility for Ontarians with Disabilities Act, 2005 and Ontarians with Disabilities Act, 2001	Multiple	Neighbourhood Park: 3-6 decks with min. 1 roof, transfer station with stairs, accessibility ramp, 2 plastic slides – straight and spiral both open, 3 climbers, rock wall or similar activity, 4-5 activity panels, and sliding pole Community Park: 5-7 decks with min. 1 roof, transfer station with stairs, accessibility ramp, 2-3 plastic slides – straight and spiral both open, 3-4 climbers, rock wall or similar activity, 5-7 activity panels, and sliding pole	Certified Playground Supplier or ABC Inc., PlayPower, Open Space Solutions	
	Activity Panels	CAN/CSA Standards Z614 – Children’s Playspaces and Equipment (latest edition) Accessibility for Ontarians with Disabilities Act, 2005 and Ontarians with Disabilities Act, 2001		Steel bars at ends of ramps, Mix up steel bars, poly windows, activity panels - Provide 40% of activity panels on ground level for wheelchair users, Percussion musical panels permitted in low vandalized areas, (Tic tac toe, Mirror, Little Tikes 7 station panel, Poly windows, Steering wheel)	Certified Playground Supplier or ABC Inc., PlayPower, Open Space Solutions	
	Climbers	CAN/CSA Standards Z614 – Children’s Playspaces and Equipment (latest edition) Accessibility for Ontarians with Disabilities Act, 2005 and Ontarians with Disabilities Act, 2001		All Nets must have a one piece coupling or nut and bolt coupling, Screw couplings are not permitted. All hardware must be have a zinc bath finish or polyester powder coat.	Certified Playground Supplier or ABC Inc., PlayPower, Open Space Solutions	

	Decks	CAN/CSA Standards Z614 – Children’s Playspaces and Equipment (latest edition) Accessibility for Ontarians with Disabilities Act, 2005 and Ontarians with Disabilities Act, 2001	Steel with plasticol coating	Others upon township approval.		
	Slides	CAN/CSA Standards Z614 – Children’s Playspaces and Equipment (latest edition) Accessibility for Ontarians with Disabilities Act, 2005 and Ontarians with Disabilities Act, 2001	poly	Must be attached to play structure, Poly slide are preferred, Slide tube are not acceptable.	Certified Playground Supplier or ABC Inc., PlayPower, Open Space Solutions	
	Spring/ Spinning Toy	CAN/CSA Standards Z614 – Children’s Playspaces and Equipment (latest edition) Accessibility for Ontarians with Disabilities Act, 2005 and Ontarians with Disabilities Act, 2001		Neighbourhood parks: require minimum of 2 units. Community park: minimum of 4 units. Shop drawings should be submitted for township approval.	Certified Playground Supplier or ABC Inc., PlayPower, Open Space Solutions	
	Swings	CAN/CSA Standards Z614 – Children’s Playspaces and Equipment (latest edition) Accessibility for Ontarians with Disabilities Act, 2005 and Ontarians with Disabilities Act, 2001	rubber	Neighbourhood Parks: minimum of 2 toddler seats, 4 youth seats and 1 accessible seat. Cummunity Park: 5 todder seats, 6 youth seats and 1 accessible seat. All must be rubber unless otherwise approved by township. All swings must be install per manufactor specifications.	Certified Playground Supplier or ABC Inc., PlayPower, Open Space Solutions	
Sanitary						
Sanitary Sewer	Sewer main	CSA B182.2	PVC	DR 35, Rubber gasket in integral bell and spigot joints, green in colour and Knor-n-seal gaskets on all manholes	IPEX, Royal Pipe, NAPCO, Rehau, Diamond Pipe	
	Connection tees	CSA B182.2	PVC	DR28, Injection molded or factory- fabricated gasket tees	IPEX, Royal Pipe, NAPCO, Rehau, Diamond Pipe	
	Service Laterials	CSA B182.2	PVC	DR28, green in colour with rubber gasket in integral bell and spogot joints	IPEX, Royal Pipe, NAPCO, Rehau, Diamond Pipe	
	Test Fittings	CSA B182.2 or CSA B70	PVC or Cast Iron	Straight test fitting at property Line	IPEX or Crowie	
	Verical Risers	CSA B182.2	PVC	For use with sewer main	NAPCO	
	Service Saddles			For use as a new service conection to an existing municipal sewer only		

	Maintenance Holes	CSA A257.4	Concrete	Rubber Gaskets type joints certified to CSA A257.3, "Kor-n-seal" gaskets on all pipes entering manholes, Frame and grate as per OPSD- 4001.010 (Closed Cover) with the date cast into the cover and Precast concrete gradeadjustments units with Moduloc tape between layers or Self leveling cast iron riser rings for final adjustment.	Decast	
Seed Mixes and Tree Species						
Seed	undeveloped lands			45% Creeping Red fescue, 30% kentucky Blue Grass and 15% Perennial Rye Grass and 10% wildflower mix		
	Stormwater Ponds			Stormwater Pond Native Seed Mixture	OSC	
	Creek Banks			Creek Banks Native Seed mixture (Wet Meadow Type)	OSC	
Trees	Boulevard Trees			Silver Maple, Red Maple, Sugar Maple, Burr Oak, Red Oak, Scarlet Oak, White Oak, Pin Oak, Linden and Honey Locust		

	Park Trees/ Bushes			Alternative Leaf Dogwood, American Beech, American Chestnut, American Elm, American Mountain Ash, Balsam Fir, Balsam Poplar, Basswood, Bitternut Hickory, Black Ash, Black Cherry, Black Maple, Black Oak, Black Spruce, Black Walnut, Black Willow, Blue Beech, Bur Oak, Butternut, Chinquapin Oak, Chokecherry, Eastern Flowering Dogwood, Eastern Hemlock, Eastern Redcedar, Eastern White cedar, Eastern white pine, Gray Birch, Green/red Ash, Hawthorns, Iron Wood, Jack pine, Largetooth Aspen, Manitoba Maple, Northern hackberry, Peachleaf willow, Pin cherry, Pin oak, Red maple, Red mulberry, Red oak, Red pine, Red spruce, Rock elm, Sassafras, Serviceberries, Shagbark hickory, Showy mountain-ash, Silver maple, Slippery elm, Striped maple, Sugar maple, Swamp White oak, Sycamore, Tamarack, Trembling aspen, White ash, White Birch, White oak, White spruce, Yellow birch		
Signage						
	Street Name Signs	Ontario Traffic Manual Book 2		Green sign with white lettering	Ceder Signs Inc.	
	Traffic Signs	Ontario Traffic Manual Book 2		Per MTO guidelines	Ceder Signs Inc.	
	Posts	Ontario Traffic Manual Book 2	Galvanized Steel Posts	"u-channel", embedded 0.9m in the ground, two piece break away		
Stormwater						
Stormwater system	Sewer main	CSA B182.2	PVC (300mm to 450mm)	DR35, Rubber gasket in integral bell and spigot, Green in colour	IPEX, NAPCO Royal Pipe & Fittings, Diamond Plastics	Do we need more detail here?
		CSAA257.2	Concrete	Rubber gasket type joints certified to CSA A257.3	OCPA Plant Prequalified Member	
		CSA B182.4	PVC	PVC ProfilePipe	NAPCO, Royal Pipe & Fittings, IPEX	
		CSAB182.13	SaniTite HP pipe	ASTM F2764, dual gaskets, compatible with INSERTA TEE connections	ADS	

		CSA B182.6-02	HDPE(300mm to 600mm)	320 kPa pipe stiffness, Rubber gasket in integral bell and spigot joints	Armtec	
	Connection tees	CSA B182.2	PVC	DR28, Injection molded (100mm Dia. to 300mm Dia) or factory fabricated gasketed tee (375mm dia. And larger)	IPEX, NAPCO Royal Pipe & Fittings	
		CSA A257.2,3	Concrete	Factory-fabricated tee	OCPA Plant Prequalified Member	
		CSA B182.4	PVC	PVC Profile Fittings	NAPCO Royal Pipe & Fittings	
		CSA B182.6-02	HDPE(300mm to 600mm)	Injection molded or factory-fabricated gasketed tee		
	Service Laterals	CSA B182.2	PVC	DR28, Rubber gasket in integral bell and spigot joints, White or Grey in colour	IPEX, NAPCO Royal Pipe & Fittings, Diamond Plastics, Rehau	
	Test Fittings	CSA B182.2	PVC	Bootjack fitting for double connections and Straight test fitting at property line	IPEX	
		CSAB70	Cast Iron	Bootjack fitting for double connections and Straight test fitting at property line	Crowle	
	Catchbasin Leads	CSA A257.2	Concrete	Rubber gasket type joints certified to CSA A257.3	OCPA Plant Prequalified Member	
		CSA B182.2	PVC	DR 35, Rubber gasket in integral bell and spigot joints		
		CSA B182.6-02	HDPE	320 kPa pipe stiffness, Perforated, with Geo-textiles sock filter	Armtec	
		CSA B182.4	PVC	PVC Profile Fittings	NAPCO Royal Pipe & Fittings, IPEX	
	Subdrains	OPSS 1840	HDPE	210 kPa pipe stiffness, perforated, with Geo-textile sock filter	Armtec	
		ASTMF405,AASHTO-252, BNQ3624-115, ASTM F667, AASHTO M294	Corrigated High Density Polyethylene		ADS/ Hancor, Soleno Inc, DMX Flextube	
		ASTM F405	Polyethlyene Pipe	100mm to 600mm	DMX Plastics	
	Maintenance Holes	CSA A257.4, ASTM C-478, OPSS 1351, OPSD	Concrete	Rubber gasket type joints certified to CSA A257.3, use precast concrete grade adjustment, units with Moduloc tape between layers or self-leveling cast iron riser rings for final adjustment	OCPA Plant Prequalified Member	

		CSA A257.4, ASTM C-478, OPSS 1351	Prebenched Concrete	for 200mm and 250mm inlet and outlet pipes only	Con Cast Pipe	
	Frames and Grates	OPSS1850, OPSD 401.01- Type A- no lugs	Cast iron	Storm grate as per OPSD 401.010(closed cover) with date and "STORM" cast into the cover	Bibby-Ste-Croix Star Pipe Canada Inc.	
		OPSS1850	Ductile Iron	Adjustable/Autostable Frame -C50M-ONT-SELFLEVEL-MC401010243	Bibby-Ste-Croix Star Pipe Canada Inc.	
	Catchbasins	OPSS 1351, OPSD 702.040, CSA A257.4	Concrete	Use Precast concrete grade adjustment units with Moduloc tape between layers, frame &Grate as per OPSD 400.020 or 400.1000, Rear yard catchbasin frame & grate as per OPSD 400.120	OCPA Plant Prequalified Member or IPEX	
	Safety Platform	OPSD 404.020		Must be installed in any maintenance hole greater than 5 meters in depth		
	Culverts	CSA A257.2	Concrete		OCPA Plant Prequalified Member	
		CSA G401	CSP	Galvanized, Wall thickness as recommended by supplier to meet H2O loading requirement, Must meet for exceed 2mm for all road crossings and 1.6mm for entrances		
		ASTM F894, ASTM D3350/AASHTOM294, CSA B182.6-02	High Density Polyethylene (HDPE)	Minimum requirement of 320 kPa Pipe stiffness, Smooth interior Wall	Infra Pipe Solutions, Armtec, Soleno Inc, ADS/Hancor	
	Headwall and End wall			Upon Approval by the township	OCPA Plant Prequalified Contractor	
	Adjustment Units	CSA A257.4, OPSS 1853	Concrete	Precast concrete grade adjustment units with Moduloc Tape between layer	OCPA Plant Prequalified Contractor,	
			Ductile	Riser Rings(only to be used upon township approval)		
		OPSD 704.011	HDPE	IPEX Lifesaver Adjustemnt Units	IPEX	
	Adaptor couplings				Rollee, Mission Rubber Co., Preper-PLS	Per recomondation
	Repair Clamps	CSA B602			Rollee, Mission Rubber Co., Preper-PLS, Cambridge Brass	
Street Lights						

Road Illumination	Street Light	DLC qualified, IDA compliant		Arch-N Archeon Nano, colour: Grey, other Colours may be approved upon request.	Cooper	
Traffic Signals						
		CSA Standards, MTO Book 12				Traffic signal submissions must be made to the Township for approval on a case-by-case basis and must adhere to the latest Ministry of Transportation Ontario (MTO) standards, TAC standards
Water Distribution						
	Watermain	AWWA C900 (Pipe 100mm to 300mm), AWWA C905(>=350mm), CSAB137.3	PVC Pipe	DR18, Class 150, Rubber Gasket in integral bell and Spigot joints, must be Blue in Colour, 6m pipe length, CI OD	IPEX, Royal Pipe, NAPCO, Rehau, Diamond Pipe, National Pipe	
		AWWA C906, CSA B137.1	Polyethylene	DR17, Class 100, Therma butt fusion jointing of pipe, CI OD	KWH Pipe	
		AWWA C909, CSAB137.3.1	Molecularly Oriented Polyvinyl Chloride (PVCo)	Push-on joint, Colour: BLUE, 6.1m pipe length	IPEX, Westlake pipe& fittings	
	Water Services	AWWA C901-78, CSA B137.6	Polyethylene	Series 160	IPEX	
		ASTM B88-88	Copper	Type K, Heavy wall, Soft copper, Horizontal Gooseneck	Great Lakes Inc.	
		AWWA C904, ASTM F876/F877, ASTM F2080, CSA B137.5, NSF-14, NSF 372	Cross-Linked Polyethylene	Cross linked Ployethylene (PEX) tubing, Municipex valves and fittings conform with AWWA C800.	Rehau	
	Watermain Fittings	AWWA C110/A21.10, AWWA C153/A21.53, AWWA C111/A21.11, ASTM A536, NSF 61, NSF 372, AWWA C115/ A21.15, ANSI B16.1, AWWA C104/A21.4	Ductile Iron + PVC	Glands cement lined seal coat to AWWA C104/A21.4	Tyler Union/ Bidby, Sigma, Star	
		AWWA C900, AWWA C907, AWWA C905, NSF-61, CSA 137.2 & 137.3, ASTM D1784, ASTM F477, ASTM D3139	Polyvinyl Chloride (PVC)	Push on Joint CSA B137.2 (100mm to 200mm only), must have integral joint restraint capable, Blue Brute Fitting (100mm to 300mm), Ipex Centurion Fitting (350mm to 600mm), Injection molded	IPEX, Westlake pipe& fittings, Harrington Corp, Utility Supply Corporation	
		AWWA C219, AWWA C111/A21.11, AWWA C153/A21.53, ASTM F1476, AWWA C227	All Pipe Material	Multi/joint to connect different pipe materials together with similar OD ranges	George Fischer, Romac, Smith-Blair, Ford, Mueller	

		AWWA C800-05, AWWAc800-12, AWWA C800-21	Underground Water service lines and valves, Philmac Compression Fittings	12mm to 50mm	IPEX, Cambridge Brass, Ford, Mueller, Romac, McDonald MFG	
Watermain Valves	Gate Valve	AWWA C509, AWWA C515, AWWA C111/A21.11, ASTM A536, AWWA C550, ASTM A126, NSF-61	Gate Valves (Resilient Seated Gate Valve M.J. x M.J.)	Non-rising stem and 50mm square operating nut, Open counter clockwise, Resilient seat gate, Epoxy coating internal and exterior per AWWA C550, Mechanical Joints with Restrainers, Bond breaker between concrete support and valve body, Bond breaker between concrete support and valve body, Stainless steel bolts	Mueller, AVK, McWade	
	Tapping Valve	C509, ASTM A536	Resilient Seated Valves Tapping	Flange x M.J. 150mm to 300mm, open counter clockwise, 52mm Square nut, Epoxy coated	Mueller, AVK, McWade	
	Butterfly Valve	AWWA C504, AWWA C516, NSF 61, NSF-372		Greater than or equal to 750mm only	Pratt, Crispin Valve	
	Air Release Valve	AWWA C512, ASTM A126 Class B, ASTM D429, AWWA C515, AWWA C550, ASTM A126, AWWA C606, NSF 61	Air Release Valve combination/ Direct Bury	I.P. Thread x I.P. Thread (ball type) 150mm Cover	Cla-Val, Val-Matic, A.R.I, APCO	All air valves are required to be installed in vaults to facilitate ease of service, unless an alternative arrangement is approved by the Township
	Pressure Reducing	AWWA C510, AWWA C530, ASTM A216, ASTM A536, ASTM B148, ASTM B62, NSF-61	Pressure Reducing and Check Valve	Flange x Flange, Epoxy Coating internal and external as per AWWA C116/A21.16	Cla-Val, Singer	All air valves are required to be installed in vaults to facilitate ease of service, unless an alternative arrangement is approved by the Township
	Backflow Prevention	AWWA C511, CSA B64.4	Reduced Pressure Principle Back Flow Preventer		Watts, Val-Matic	The selection of backflow preventers must be determined on a case-by-case basis and requires Township approval prior to installation. In certain instances, a Double Check Valve Assembly may be approved.
	Swing Valve	AWWA C508	Swing Check Valve	Gravity operated, broze or stainless steel disc facing, stainless-steel bolts, epoxy coated interior and exterior	Muller, Clow, Val-Matic	
	Valve Stem Extension		Valve Stem Extensions	Required for additional; depth over 1.7M; 52mm top operation c/w set screw;	Bibby-Ste-Croix, Concord/Diagle, Mueller Canada	

Fire Hydrants	Hydrant	AWWA C502, AWWA C509-01, ASME B16.1 OPSS 44, CAN/ULC-S520-07		1.98m barrel length, Post type dry barrel compression shutoff with ball valve closing with flow, opening counter clockwise, M.J. elbow, 125mm valve ball, 2 side outlets with 2.5" CSA standard hose nozzle threads, 1-4' Storz pumper nozzle outlet, Breakaway flange, Self draining, PVC DR18 Hydrant laterials, Bond breaker between concrete support and fittings, Hydrant colour shall be Yellow. Top and side nozzle caps shall be painted based on hydrant flows or Hydrant Flow Idenitification disks are to be attached on both caps. (Front storz nozzle to remain black), Anti tamper device	Mueller, Tremclad- Benjamin Moore Paint	
	Hydrant Marker			48" in height flourescent yellow, installed on the side port		Installed on side port or affixed to rear bolt of traffic flange