4. CONSTRUCTION SPECIFICATIONS

4.1 <u>Master Municipal Construction Document (MMCD)</u>

4.1.1 All construction of works and services shall be in accordance with the MMCD unless noted otherwise in these Construction Specifications.

4.2 Supplementary Specifications

4.2.1 The following sections of the MMCD are to be amended as indicated:

MMCD Section	Subsectio n	Title	Supplementary Specification
2221 Rock Removal	1.7	Seismic Survey and Monitoring	Delete wording in Clause 1.7.1, "Contract Administrator", and replace with, "Contractor"
	1.7	Seismic Survey and Monitoring	Delete wording in Clause 1.7.2, "Owner", and replace with, "Contractor, unless otherwise indicated."
	1.1	Permits and Approvals	Add Clause 1.10.1, Comply with General Conditions, Clause 20, Laws, Notices, Permits and Fees.
	3.1	Blasting and Vibration Control	Add Clause 3.1.5, "Contractor will be responsible for any and all damages resulting from blasting operations."
2223 Excavation, Trenching and Backfilling	3.6	Surface Restoration	Add Clause 3.6.10 "Sprinkler Restoration Restore and test all sprinkler systems damaged during construction."
2512 Hot-Mix Asphalt Concrete Paving	3.1	Finished Tolerances	Delete Clause 3.10.4 and replace with: "Against concrete gutter, finished asphalt surface to be higher than the gutter by at least 5mm and not more than 10mm."
2666 Waterworks	2.3	Valves and Valve Boxes	Delete wording in Clause 2.3.2.6, "50mm operating nut", and replace with, "32 mm operating nut opening clockwise."

2666 Waterworks (cont)	2.5	Service Connections, Pipe Joints and Fittings	Delete wording in Clause 2.5.1, and replace with, "Pipe diameter 19mm to 25mm water service tubing shall be Polyethylene to AWWA C901, Pressure class 160 tubing certified to CSA B137.1. Pipe diameter 38mm to 50mm water service tubing shall be Type K annealed copper, to ASTM B88M.
	2.6	Hydrants	Delete wording in Clause 2.6.1.5, ":pump nozzles to be 100mm nominal diameter.", and replace with, ":pump nozzles to be 148mm nominal diameter."
	2.6	Hydrants	Delete wording in Clause 2.6.1.6, "Pump nozzles to be 117.475mm outside diameter and 6 threads per 25.4mm." And replace with, "Pump nozzles to be 148mm outside diameter and 8 threads per 25.4mm."
	2.6	Hydrants	Delete wording in Clause 2.6.1.8, "counterclockwise", and replace with "clockwise."
	2.7	Underground Service Line Valves and Fittings	Delete Clause 2.7.3.2, and replace with, "38mm and 50mm to be ductile iron body and bronze stem to ASTM B 62, ball or cylinder type construction utilizing rubber o-ring seals."
	3.1	Service Connection Installation	Delete wording in Clause 3.10.7 "W2a and W2b" with "W2aSS".
	3.1	Service Connection Installation	Delete Clauses 3.10.11 and 3.10.12 and replace with, "Install services to Standard Detail Drawing W2aSS and W2dSS."
	3.14	Corrosion Protection	Add Clause 3.14.2 "Wrap all mechanical joints and bolts with petrolatum tape (Densyl Tape or equivalent) to manufacturers specifications."
	3.21	Disinfection and Flushing Procedures	Delete all clauses and replace with: "1. Provide assistance to Municipal crews to undertake disinfection and flushing.

2721	2.5.8.1	Service Connections	Insert the following: ' with approved
Storm Sewers			PVC saddle OR INSERTABLE TEE installed to"
	2.5.8.2	Service Connections	Add sentence " Hole to be machine cut, not by hand saw."
	3.12	Video Inspection	The video inspection report shall be to WrC standards.
2731 Sanitary Sewers	2.3.8.1	Service Connections	Insert the following: ' with approved PVC saddle OR INSERTABLE TEE installed to"
	2.3.8.2	Service Connections	Add sentence " Hole to be machine cut, not by hand saw."
	3.8	Connections to Existing Mainline Pipes	Delete Clause 3.8.1,
			and replace with "All connections to all live sanitary sewer mains to be performed by Municipality."
	3.12	Leakage Testing	The method of testing shall be a Low Pressure Air Test.
	3.18	Video Inspection	The video inspection report shall be to WrC standards, and shall illustrate flow through the pipe for all design grades less than 2%.
16550 Electrical	1.4	Electrical Energy Supply	Add Clause 1.4.4, "Municipal electrical crews and/or certified electrician to complete connections to supply as required."