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| 1 | August 30, 2006 | Approved final document. |
| 2 | September 27, 2007 | Minor revisions by Legal Services |
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| 5 | March 20, 2012 | Addition of References and Replacement Parts sections on this page. |
| 6 | July 5, 2012 | Change tab settings for page 1-7. |
| 7 | August 13, 2013 | Addition of CGL, DFO, GWMP, LSRCA, MNR, OCIP, PTTW |
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**The on-line copy is the current version of the document.**

# General

## Abbreviations Of Specifying Authorities

### When the following abbreviations are used in the Contract Documents, they have the meaning listed.

#### AA Aluminum Association (USA)

#### AAMA American Architectural Manufacturers Association (USA)

#### AASHTO American Association of State Highway and Transportation Officials

#### ABMA American Boiler Manufacturers Association

#### AFBMA American Bearing Manufacturers Association (formally Anti-Friction Bearing Manufacturers Association)

#### ACI American Concrete Institute

#### AGA American Gas Association

#### AHA American Hardboard Association

#### AICS American Institute of Steel Construction

#### AISI American Iron and Steel Institute

#### AITC American Institute of Timber Construction

#### AMCA Air Movement and Control Association Inc.

#### ANSI American National Standards Institute

#### API American Petroleum Institute

#### ARI Air Conditioning and Refrigeration Institute

#### ASHRAE America Society of Heating, Refrigeration and Air Conditioning Engineers

#### ASA Acoustical Society of Americal

#### ASME American Society of Mechanical Engineers

#### ASPE American Society of Plumbing Engineers

#### ASSE American Society of Sanitary Engineering

#### ASTM American Society for Testing & Materials

#### AWCI Association of the Wall and Ceiling Industries

#### AWI Architectural Woodwork Institute (USA)

#### AWMAC Architectural Woodwork Manufacturer's Association of Canada

#### AWS American Welding Society

#### AWWA American Water Works Association

#### BCLMA British Columbia Lumber Manufacturers' Association

#### BHMA Builders Hardware Manufacturers Association

#### CBM Certified Ballast Manufacturer’s Association

#### CCA Canadian Construction Association

#### CCDC Canadian Construction Documents Committee

#### CEC Canadian Electrical Code (published by CSA)

#### CFFM Canadian Forces Fire Marshal

#### CFR Code of Federal Regulations

#### CGA Canadian Gas Association

#### CGL Commercial General Liability

#### CGSB Canadian General Standards Board

#### CISC Canadian Institute of Steel Construction

#### CITC Canadian Institute of Timber Construction

#### CLA Canadian Lumbermen's Association

#### CMB Construction Materials Board,

#### CMHC Canadian Mortgage and Housing Corporation

#### COFI Council of Forest Industries (British Columbia)

#### CPCI Canadian Prestressed Concrete Institute

#### CPMA Canadian Paint Manufacturers Association

#### CRCA Canadian Roofing Contractors' Association

#### CS Commercial Standard (USDC)

#### CSA Canadian Standards Association

#### CSC Construction Specifications Canada

#### CSDFMA Canadian Steel Door and Frame Manufacturers’ Association

#### CSI Construction Specifications Institute (USA)

#### CSPI Corrugated Steel Pipe Institute

#### CSSBI Canadian Sheet Steel Building Institute

#### CWC Canadian Wood Council

#### DIN Deutsches Institut Für Normung

#### DFO Department of Fisheries and Oceans

#### EEMAC Electrical and Electronic Manufacturers' Association of Canada

#### EIA Electrical Industries Alliance

#### EPA Environmental Protection Act

#### ESA Electrical Safety Authority

#### ETA Electronics Technicians Association

#### FCC Fire Commissioner of Canada

#### FDA Food and Drug Administration (USA)

#### FM Factory Mutual

#### FS Federal Specifications and/or Federal Standards (USA)

#### IAPMO International Association of Plumbing and Mechanical Officials

#### ICEA Insulated Cable Engineers Association

#### ICPI Interlocking Concrete Pavement Institute

#### IEC International Electrotechnical Comission

#### IEEE Institute of Electrical and Electronics Engineers

#### IESNA Illuminating Engineering Society of North America

#### ISA Instrumentation, Systems and Automation Society

#### ISO International Organization for Standardization

#### ISTA International Safe Transit Association

#### LSRCA Lake Simcoe and Region Conservation Authority

#### MERV Minimum Efficiency Reporting Value

#### MIL Military Specifications (Naval Publications and Forms Center) (USA)

#### MNRF Ministry of Natural Resources and Forestry (formerly the Ministry of Natural Resources)

#### MOE Ministry of the Environment (now renamed as the Ministry of the Environment and Climate Change (MOECC))

#### MOECC Ministry of the Environment and Climate Change (formerly the Ministry of the Environment (MOE))

#### MOL Ministry of Labour Ontario

#### MTC Ministry of Transportation and Communications (Ontario)

#### MTO Ministry of Transportation Ontario.

#### MSS Manufacturers Standardization Society of the Valve and Fittings Industry

#### NAAMM National Association of Architectural Metal Manufacturers

#### NACE National Association of Corrosion Engineers International

#### NBC National Building Code

#### NBFU National Board of Fire Underwriters (USA)

#### NBS National Bureau of Standards (USDC)

#### NEC National Electrical Code

#### NFC National Fire Code.

#### NEMA National Electrical Manufacturers Association

#### NFPA National Fire Protection Association (USA)

#### NFSA National Fire Sprinkler Association

#### NHLA National Hardwood Lumber Association (USA)

#### NLGA National Lumber Grades Authority

#### NPS National Pipe Straight Thread

#### NPSH National Pipe Straight Hose Thread (Canadian fire hoses)

#### NPT National Pipe Tapered Thread

#### NST National Standard Thread (US fire hoses)

#### NRC National Research Council of Canada

#### NSC National Standards of Canada

#### NSF NSF International (formerly National Sanitation Foundation)

#### OBC Ontario Building Code 'The Building Code', Ontario Regulation, including amendments thereto

#### ODVA [Open DeviceNet Vendors Association](http://en.wikipedia.org/wiki/Open_DeviceNet_Vendors_Association)

#### OESC Ontario Electrical Safety Code

#### OFC Ontario Fire Code, 'The Fire Code', Ontario Regulation, including amendments thereto.

#### OFM Ontario Fire Marshal

#### OLS Ontario Land Survey

#### OIRCA Ontario Industrial Roofing Contractors Association

#### OPCEA Ontario Pollution Control Equipment Association

#### OPSD Ontario Provincial Standard Drawing

#### OPSS Ontario Provincial Standard Specification

#### OSHA Occupational Safety and Health Administration (USA)

#### PCI Prestressed Concrete Institute

#### PDI Plumbing and Drainage Institute

#### PEI Porcelain Enamel Institute (USA)

#### PEO Professional Engineers of Ontario

#### PCI Prestressed Concrete Institute

#### QPL Qualification Program List

#### RoHS Restriction of Hazardous Substances

#### SAE Society of Automotive Engineers

#### SCC Standards Council of Canada

#### SI International System of Units

#### SJI Steel Joist Institute

#### SMACNA Sheet Metal and Air Conditioning Contractors' National Association,

#### SSPC Society for Protective Coatings (formerly Structural Steel Painting Council)

#### TIA

#### TRCA Toronto and Region Conservation Authority

#### TTMAC Terrazzo, Tile and Marble Association of Canada

#### USDC United States Department of Commence

#### UL Underwriters' Laboratories (global)

#### ULC or cUL Underwriters Laboratories of Canada

#### ULI Underwriters Laboratories Inc. (USA)

#### USACE United States Army Corps of Engineers

#### UNS Unified Numbering System for Metals and Alloys (ASTM, SAE)

#### USDC United States Department of Commerce

#### WEAO Water Environment Federation of Ontario

#### WH Warnock Hersey

#### WHSCC Workplace Health, Safety and Compensation Commission (of Newfoundland and Labrador or New Brunswick)

#### WHMIS Workplace Hazardous Materials Information System

#### WPCF Water Pollution Control Federation

#### WSIB Workplace Safety and Insurance Board

## TECHNICAL ABBREVIATIONS

### When the following abbreviations are used in the Contract Documents, they have the meaning listed.

#### 2PDT Two Pole Double Throw

#### 3PDT Triple Pole Double Throw

#### A Ampere (Amp)

#### ABS Acrylonitrile Butadiene Styrene

#### AC Alternating Current

#### AFF Above Finished Floor

#### AI Analog Input

#### Amp Ampere

#### ATS Automatic Transfer Switch

#### AWG American Wire Gauge

#### BAS

#### BIL Basic Input Level

#### BTU British Thermal Unit

#### c/c Centre to Centre

#### CCO Contract Change Order

#### CCS Copper Clad Steel

#### CD Compact Disk

#### CBR California Bearing Ratio

#### CCTV Closed Circuit Television

#### CFM Cubic Feet per Minute

#### CMOS Complementary Metal Oxide Semiconductor

#### CP Control Panel

#### CPM Critical Path Method

#### CPP Concrete Pressure Pipe

#### CPT Control Power Transformer

#### CPVC

#### CS Carbon Steel

#### CT Current Transformer

#### CWP

#### c/w Complete With

#### dB

#### DC Direct Current

#### DDC Direct Digital Control

#### DFT Dry Film Thickness

#### DI Discrete Input

#### DIP Dual In-line Package

#### DPDT Double-Pole/Double-Throw

#### DR Dimension Ratio

#### DVD Digital Versatile Disk

#### DWV

#### ECA Environmental Compliance Approval

#### EGS Emergency Gas Scrubber

#### EIA

#### EMI Electromagnetic Interference

#### EMT Electrical Metal Tubing

#### EPDM Ethylene Propylene Diene Monomer Rubber

#### ESC Engine Start Contacts

#### ESR Elevated Storage Reservoir

#### ET Elevated Tank

#### FAT Factory Acceptance Test

#### FD Floor Drain

#### FEC Front End Communication Controller

#### FFF Front Finished Floor, Finished First Floor

#### FLA

#### FPM

#### FRP Fibre Reinforced Plastic

#### FS F-Series

#### GFI Ground Fault Interrupter

#### GPM Gallons per Minute

#### GPS Global Positioning System

#### GS Galvanized Steel

#### GTF

#### GWMP Ground Water Management Plan

#### HEPA High-Efficiency Particulate Air

#### HHPP Hex Head Pipe Plug

#### HMI Human Machine Interface

#### HP, h.p. Horsepower

#### HRC

#### HVAC Heating, Ventilation and Air Conditioning

#### Hz

#### I/O Input/Output point(s)

#### ID, i.d. Inside Diameter

#### IGBT Insulated Gate Bipolar Transistor

#### IP

#### IPS Iron Pipe Size

#### IPT Iron Pipe Thread

#### IR Voltage (refers to current x resistance)

#### JB Junction Box

#### JC Junction Cabinets

#### kPa

#### kVA

#### kVDC

#### kW

#### kWh

#### L Litre

#### LAN

#### LCD Liquid Crystal Display

#### LED Light Emitting Diode

#### LEL Lower Explosive Limit

#### L/s

#### mA

#### MCC Motor Control Centre

#### MCL Maximum Contaminant Level

#### MGS Magnetic Guidance System

#### MHz

#### MIG Million Imperial Gallons

#### MIGD Million Imperial Gallons per Day

#### MISA Municipal/Industrial Strategy for Abatement

#### mPa

#### MPDD Modified Proctor Dry Density

#### m/a

#### mg/L

#### MSDS Materials Safety Data Sheets

#### MUTCD Manual of Uniform Traffic Control Devices

#### N

#### NEC

#### Nm

#### o.c. On Centre

#### OCIP Owner Controlled Insurance Program

#### OD, o.d. Outside Diameter

#### O&M Operations and Maintenance

#### OIT Operator Interface Terminal

#### OTM Ontario Traffic Manual

#### Pa Pascal

#### PCS Process Control System

#### PE Plant Exerciser

#### PF Power Factor

#### PH or ph Number of phases of AC

#### P&ID Process and Instrumentation Diagram

#### PID Process Identifier

#### PLC Programmable Logic Controller

#### ppm Parts per million

#### PSI Pounds p

#### PT Potential Transformer

#### PTFE Polytetra fluoro-ethylene

#### PTTW Permit to take water

#### PVC Polyvinyl Chloride

#### PVMS Portable Variable Message Signs

#### QA Quality Assurance

#### QC Quality Control

#### QPL Qualification Program List

#### RC Reverse Circulation

#### RCPP Reinforced Concrete Pressure Pipe

#### RF Radio Frequency

#### RFI Request For Information

#### RFQ Request For Quotation

#### RLC Resistor/Inductance/Capacitor (filter)

#### RMS Root Mean Square

#### RPU Remote Processing Unit

#### RTD Resistance Temperature Detector

#### RTU Remote Terminal Unit

#### SAT Site Acceptance Test

#### SCADA Supervisory Control and Data Acquisition

#### SCR Silicon Controlled Rectifier

#### SPDT Single-Pole Double-Throw

#### SPMDD Standard Proctor Maximum Dry Density

#### SS Stainless Steel

#### SWP Steam Working Pressure

#### TAB

#### TCP/IP

#### T/C Thermocouple

#### TDDT Time Delay During Transfer

#### TDEC Time Delay Engine Cool-off

#### TDEN Time Delay Emergency to Normal

#### TDES Time Delay Engine Start

#### TDOE Time Delay On Energizing

#### TDOD Time Delay On De-energizing

#### TDH Total Dynamic Head

#### TDNE Time Delay Normal to Emergency

#### TEW Thermoplastic Equipment Wire

#### TEFC Totally Enclosed Fan Cooled (motor)

#### TGIC

#### THD Total Harmonic Distortion

#### THWN Thermoplastic Heat and Water Resistant Nylon Coated

#### TIA

#### UPS Uninterruptible Power Supply

#### UV Ultraviolet

#### V

#### VA

#### VAC

#### VAR

#### VCP Visual Comfort Probability

#### VDC

#### VFD Variable Frequency Drive

#### VLAN

#### VOC Volatile Organic Compounds

#### W

#### WAN Wide Area Network

#### W/C Water to Cement

#### WG Water Gauge (pressure)

#### W/m

#### WOG Water-Oil-Gas (valves, pressure)

#### YDSS York-Durham Sewage System

## THE INTERNATIONAL SYSTEM OF UNITS (SI)

### SI defined units and symbols are retrievable at <http://www.bipm.org/utils/common/pdf/si_brochure_8_en.pdf>

### The units and symbols defined therein are used in this Contract.

**END OF SECTION**