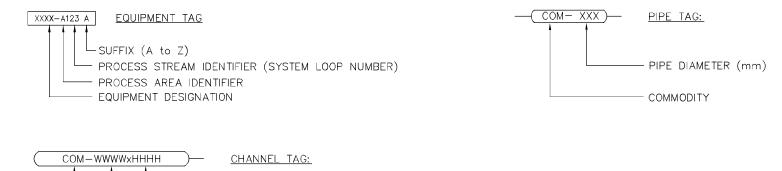
	INSTRUMENT IDEN	NTIFICATION TABL	_E
	FIRST-LETTER	SUCCEEDIN	G-LETTERS
	MEASURED OR INITIATING VARIABLE	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION
А	ANALYSIS (1)	ALARM	
В	BURNER, COMBUSTION	CLOSED	CLOSE
С	CONDUCTIVITY		CONTROL
D	DENSITY	OPEN	OPEN
Е	VOLTAGE	SENSOR (PRIMARY ELEMENT)	
F	FLOW RATE	FAILURE	
G	GAS	GLASS, VIEWING DEVICE	
Н	HAND	HIGH	
1	CURRENT (ELECTRICAL)	INDICATE	
J	POWER		
К	TIME, TIME SCHEDULE		CONTROL STATION
L	LEVEL	LOW, LIGHT	
М	MOTOR	OPERATING OR ON/OFF	
N	MOISTURE		START
0		OVERLOAD	STOP
Р	PRESSURE, VACUUM	POINT (TEST) CONNECTION	
Q	COMMON	QUANTITY	
R	RADIATION	RECORD	
S	SPEED, FREQUENCY		SWITCH
Т	TEMPERATURE		TRANSMIT
U	MULTIVARIABLE	MULTIFUNCTION	MULTIFUNCTION
V	VIBRATION, MECHANICAL ANALYSIS (1)		VALVE DAMPER, LOUVER
W	WEIGHT, FORCE	WELL	
X	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
Υ	EVENT, STATE OR PRESENCE (2)		RELAY, COMPUTE, CONVERT (3)
Z	POSITION, DIMENSION		DRIVER, ACTUATOR UNCLASSIFIED FINAL CONTROL ELEMENT

- 1. IT IS EXPECTED THAT THE TYPE OF ANALYSIS BE DEFINED OUTSIDE THE TAGGING BUBBLE.
- 2. FIRST LETTER Y IS INTENDED FOR USE WHEN CONTROL OR MONITORING RESPONCES ARE EVENT DRIVEN AS OPPOSED TO TIME OR TIME—SCHEDULE DRIVEN. THE LETTER Y, IN THIS POSITION, CAN ALSO SIGNIFY PRESENCE OR STATE.
- 3. IT IS EXPECTED THAT THE FUNCTIONS ASSOCIATED WITH THE USE OF SUCCEEDING LETTER Y WILL BE DEFINED OUTSIDE THE TAGGING BUBBLE. THIS DEFINITION NEED NOT BE MADE WHEN THE FUNCTION IS SELF—EVIDENT, AS FOR A SOLINOID VALVE IN A FLUID SIGNAL LINE.

	COMMON INSTRUMENT	/ DEVICE	IDENTIFIERS
ISA IDENTIFIER	INITIATING VARIABLE AND FUNCTION	ISA IDENTIFIER	INITIATING VARIABLE AND FUNCTION
AS	ANALYSIS SWITCH	PI	PRESSURE INDICATOR
AE	ANALYSIS ELEMENT	PT	PRESSURE TRANSMITTER
АТ	ANALYSIS TRANSMITTER	PIT	PRESSURE INDICATOR TRANSMITTER
CS	CONDUCTIVITY SWITCH	PS	PRESSURE SWITCH
СТ	CONDUCTIVITY TRANSMITTER	SC	SPEED CONTROLLER
DS	DENSITY SWITCH	SI	SPEED INDICATOR
ET	VOLTAGE TRANSMITTER	ST	SPEED TRANSMITTER
FC	FLOW CONTROLLER	TC	TEMPERATURE CONTROLLER
FE	FLOW ELEMENT	TE	TEMPERATURE ELEMENT
FI	FLOW INDICATOR	TI	TEMPERATURE INDICATOR
FS	FLOW SWITCH	TS	TEMPERATURE SWITCH
FT	FLOW TRANSMITTER	TT	TEMPERATURE TRANSMITTER
FY	FLOW RELAY	TY	TEMPERATURE RELAY
FZ	FLOW DRIVE	UR	MULTIVARIABLE RECORDER
HS	HAND SWITCH	VT	VIBRATION TRANSMITTER
IT	CURRENT TRANSMITTER	WE	WEIGHT ELEMENT
JT	POWER TRANSMITTER	WT	WEIGHT TRANSMITTER
KC	TIME CONTROLLER	XX	UNCLASSIFIED
KI	ELAPSED TIME INDICATOR	YC	STATE CONTROL
LE	LEVEL ELEMENT	YN	STATE ON
LI	LEVEL INDICATOR	YY	EVENT RELAY
LS	LEVEL SWITCH	YS	EVENT SWITCH
LT	LEVEL TRANSMITTER	ZS	POSITION SWITCH
LY	LEVEL RELAY	ZT	POSITION TRANSMITTER
PC	PRESSURE CONTROLLER	ZZ	POSITION DRIVE

EQUIPMENT IDENTIFICATION AND TAGGING

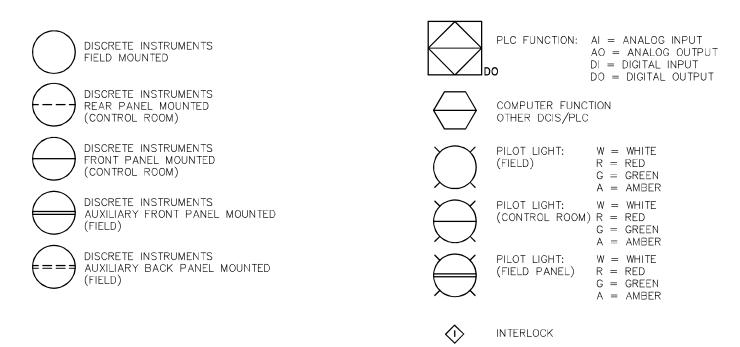


INSTRUMENT SYMBOLS

CHANNEL HEIGHT (mm)

CHANNEL WIDTH (mm)

COMMODITY

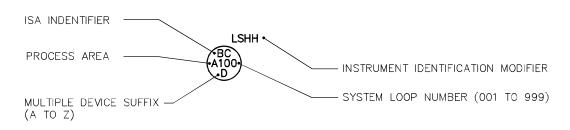


\longrightarrow xxxx

Source or destination

LINE CONTINUATION

INSTRUMENT DESIGNATION NUMBER



P PURGE CONNECTION

POSITION FORMATS

PROCESS AREA IDENTIFIER		PROCESS STREAM IDENTIFIER (LOOP NUMBER)
CHEMICAL FEED DEACON BOOSTER PUMP STATION ELECTRICAL DISTRIBUTION FILTRATION	C D E F	001 - 999 001 - 999 001 - 999 001 - 999
PLANT UTILITIES: AIR PRESSURE HVAC SITE COMMUNICATION FLUSH WATER NATURAL GAS	Н	000 - 100
FIRE PUMPS AUXILLIARY BUILDINGS HVAC BUILDING SAFETY & SECURITY PROCESS SUMPS SANITARY SUMPS POTABLE WATER BULK CHEMICAL BLDG		100 - 199 200 - 299 300 - 299 400 - 499 500 - 599 700 - 799 800 - 839
ELEVATED BRIDGE HYPOCHLORITE BLDG LINK BLDG		840 - 849 850 - 889 890 - 899
INLET WORKS & RAW WATER FREEZE THAW POND GENERAL SITE SERVICES/ MISCELLANEOUS:	I L M	001 - 999 001 - 999 001 - 999
YARD PIPING AND VALVE CHAMBERS SURGE TOWERS YARD PIPING YARD LIGHTING	Y Y Y	001 - 099 100 - 199 200 - 299
OZONE FLOCULATION AND DAF RESIDUALS HANDLING BULK CHEMICAL STORAGE TREATED WATER STORAGE & HANDLING (CLEARWELL) ULTRAVIOLET LIGHT DISINFECTION ON—SITE HYPOCHLORITE GENERATION	O P R S T U J	001 - 999 001 - 999 001 - 999 001 - 999 001 - 999 001 - 999 001 - 999

INSTRUMENT IDENTIFICATION MODIFIER

LSH LEVEL SWITCH HIGH

CONDUCTIVITY ALARM HIGH

COH	COMPUTER/OFF/HAND	LSL	LEVEL SWITCH LOW
DO	DISSOLVED OXYGEN	MCC	MOTOR CONTROL CENTRE
D/P	DIFFERENTIAL PRESSURE	0/L	OVERLOAD
FAH	FLOW ALARM HIGH	PAH	PRESSURE ALARM HIGH
FAL	FLOW ALARM LOW	PAL	PRESSURE ALARM LOW
FSH	FLOW SWITCH HIGH	рН	рН
FSL	FLOW SWITCH LOW	PSH	PRESSURE SWITCH HIGH
H/A	HAND / AUTO	PSL	PRESSURE SWITCH LOW
HOA	HAND / OFF / AUTO	RTD	RESISTIVE TEMPERATURE DEVIC
1/1	CURRENT / CURRENT ISOLATOR	s/s	START / STOP
I/P	CURRENT / PRESSURE CONVERTER	SEL	SELECTOR
IAH	CURRENT ALARM HIGH	SOL	SOLENOID
LAH	LEVEL ALARM HIGH	T/C	THERMOCOUPLE
LAL	LEVEL ALARM LOW	TAH	TEMPERATURE ALARM HIGH
		TAL	TEMPERATURE ALARM LOW
		TSH	TEMPERATURE SWITCH HIGH
L/L	LEAD / LAG	TSL	TEMPERATURE SWITCH LOW
LOS	LOCK-OFF-STOP	WDG	WINDING
L/R	LOCAL / REMOTE		

PROCESS LINE CODES

COMMODITY

AA	AQUA AMMONIA	GOX	GASEOUS OXYGEN
	·		
AGA	ATOMIZING AIR	HCO	HYDRAULIC OIL
AS	AIR SCOUR (FILTERS)	HFS	HYDROFLUOSILICIC ACID
AHP	AIR HIGH PRESSURE (OZONE)	HP	HYDROGEN PEROXIDE
ALP	AIR LOW PRESSURE (OZONE)	HST	12% HYPOCHLORITE SOLUTION
BS	BRINE SOLUTION	HYP	0.8% HYPOCHLORITE SOLUTION
BWS	BACKWASH SUPPLY WATER	ITA	INSTRUMENT AIR
BWW	BACKWASH WASTE WATER	LGO	LUBRICATING OIL
CA	COMPRESSED AIR (DAF)	LOX	LIQUID OXYGEN
CCW	CIRCULATING COOLING WATER	NG	GAS
CL2	CHLORINE	OF	OVERFLOW
CLG	CHLORINE GAS	OZG	OZONE OFF GAS
CLS	CHLORINE SOLUTION	OZO	OZONATED OXYGEN
CO2	CARBON DIOXIDE	OZW	OZONATED WATER
CRW	CLARIFIER DISCHARGE WATER	PEF	PHOSPHATE FEED
CS	CAUSTIC SODA	PLD	DRY POLYMER
CWR	COOLING WATER RETURN	PLS	POLYMER SOLUTION
CWS	COOLING WATER SUPPLY	PSW	PLANT SERVICE WATER

PW

SCA

SHC

STD

SDR

SLO

SLU

POTABLE WATER

SANITARY DRAINAGE

SODIUM BISULPHITE

SODIUM HYPOCHLORITE

SULPHURIC ACID

ROOF DRAIN

RAW WATER

DRY SALT

SEAL OIL

SLUDGE

DAF RECYCLE

SUPERNATANT

DSW DISTILLED WATER DEACON UV (PRE UV) ENGINE EXHAUST

DEACON SUCTION

DEACON EFFLUENT (POST UV)

DEMINERALIZED WATER

DIESEL FUEL RETURN

DIESEL FUEL SUPPLY

DOMESTIC HOT WATER

DISOLVED OXYGEN

DRAINAGE (FLOORS)

DRAINS, CLEAN DRAINS

DILUTE ACID

DAF FLOAT

SUBDRAIN

DILUTE CAUSTIC

DEA

DEC

DFR

DFS

DHW

DRN

DRS

SWD STORMWATER DRAINAGE SEAL WATER TRW TREATED WATER TDW TREATED WATER ELC ELECTRIC CONDUIT VA VACUUM LABORATORY FILTER MEDIA EDUCTION FILTER INFLUENT VTA VENT TO ATMOSPHERE WS SOFTENED WATER FIRE PROTECTION WATER FTR FILTER-TO-RECYCLE FW FILTERED WATER

PIPE EXPOSURE

BUR	BURIED	SUB	SUBMERGED
EXP	EXPOSED	ENC	CONCRETE ENCASED

PIPE MATERIAL

CISP	CAST IRON SOIL PIPE	PCCP	PRESTRESSED CONCRETE CYLINDE
CLDI	CEMENT LINED DUCTILE IRON	PSTL	PVDF LINED STEEL
CMP	CORRUGATED METAL PIPE	PVC	POLYVINYL CHLORIDE
COP	COPPER	PVDF	POLYVINYLIDENE FLOURIDE
CPVC	CHLORINATED PVC	RCP	REINFORCED CONCRETE PIPE
DI	DUCTILE IRON	RSTL	RUBBER LINED STEEL
FRPX	FIBERGLASS REINFORCED PLASTIC	SST	STAINLESS STEEL
GLDI	GLASS LINED DUCTILE IRON	STL	STEEL
GSP	GALVANISED STEEL PIPE	VC	VITRIFIED CLAY PIPE
HDPE	HIGH DENSITY POLYETHYLENE		

PRESSURE TESTING

Н	HYDROSTATIC	Р	PNEUMATIC
1	IN SERVICE	NA	NOT APPLICABLE

ABBREVIATIONS

O/A

0/C

ODE

PO

PSD

PΥ

NORMALLY OPEN

OUTSIDE AIR

OPEN/CLOSED

POWER FACTOR

PLANT SHUTDOWN

PROCESS VARIABLE

PUMP OUT

WINDING

OPPOSITE DRIVE END

ACK ACKNOWLEDGE

ALARM

BEARING

CURRENT

DECREASE

DRIVE END

NORMALLY NO FLOW

AUTO/MANUAL

AIR SUPPLY

ALM

A/M

BRG

DEC

CURR

E/A	EXHAUST AIR	PWR	POWER
E/S	ELECTRICAL SUPPLY	RSP	REMOTE SET POINT
ESD	EMERGENCY SHUTDOWN	RST	RESET
FCL	FAIL CLOSE	SP	SAMPLE POINT or SET POI
FOP	FAIL OPEN		(Depending on Application)
F/R	FORWARD or REVERSE	STN	STATION
HI	HIGH	SPD	SPEED
HP	HORSE POWER (kW)	STDBY	STANDBY
kW	KILOWATT	STP	STOP
HVAC	HEATING/VENTILATION/AIR CONDITIONING	STR	START
INC	INCREASE	STS	STATUS
INJ	INJECTOR	TST	TEST
LO	LOW	TYP	TYPICAL
LOS	LOCAL/OFF/STOP	UV	ULTRA-VIOLET LIGHT
L/R	LOCAL/REMOTE	U/S	UNDER SIDE
MLD	MEGALITERS PER DAY	VAC	VACUUM
NC	NORMALLY CLOSED	VIB	VIBRATION
NLL	NORMALLY LIQUID LEVEL	W/S	WATER SUPPLY

FOLIDMENT DECIONATIONS

	EQUIPMENT DESIGNATIONS					
ARV	AIR RELEASE VALVE	LJB	LOCAL JUNCTION BOX			
4CU	AIR CONDITIONING UNIT	LOP	LUBE OIL PUMP			
A CR	ACCESS CARD READER	LV	LEVEL CONTROL VALVE (OPEN/CLOSE)			
4D	AIR DRYER	М	MOTOR			
UHA	AIR HANDLING UNIT	MAU	MAKE-UP AIR UNIT			
ATS	AUTOMATIC TRANSFER SWITCH	MCC	MOTOR CONTROL CENTRE			
ВАТ	BATTERY	MD	MOTION DETECTOR			
3B	BASEBOARD HEATER	MDV	MUD VALVE			
3FP	BACK FLOW PREVENTER	MP	METERING PUMP			
3PV	BACK-PRESSURE VALVE	MXR	MIXER			
3KR	BREAKER	OP	ORIFICE PLATE			
BLR	BOILER	P	PUMP			
3LW	BLOWER	PCT	PARTICLE COUNTER			
CAL	CALIBRATION COLUMN	PCU	POLYMER BULK BAG UNLOADER			
CC	COOLING COIL	PCV	PRESSURE CONTROL VALVE			
CCTV	CLOSED CIRCUIT TELEVISION	PFC	POWER FACTOR CORRECTION			
CDR	CONDENSER	PFLT	POWER FILTER (LINE REACTOR, ETC)			
CDU	CATALYTIC DESTRUCT UNIT	PNL	PANEL BOARD			
CE	CENTRIFUGE	PLC	PROGRAMMABLE LOGIC CONTROLLER			
CFR	CHEMICAL FEEDER (POLYMER, CHLORINATOR, ETC.)	PPU	POLYMER PREPARATION UNIT			
CHLR	CHILLER	PRV	PRESSURE REGULATING / REDUCING VALV			
CHR	BATTERY CHARGER	PSU	POWER SUPPLY UNIT			
CMP	COMPRESSOR	PSV	PRESSURE / VACUUM RELIEF VALVE			
CON	CONVEYOR	PV	PRESSURE VESSEL			
CP	PLC CONTROL PANEL	RV	RELIEF VALVE / RUPTURE DISC			
CPU	COMPUTER	SOL	SOLENOID ACTUATOR			
CRN	CRANE OR HOIST	SCRB	SCRUBBER			
CTS	CATHODIC TEST STATION	SE	SAMPLER ELEMENT			
CV	CHECK VALVE	SF	SUPPLY FAN			
DC	DOOR CONTACT	SP	SAMPLE PUMP			
		SLG	SLUICE GATE			
DEM	DEMISTER DESIGNATE DRIVER	SLR	SILENCER			
DES	DESICCANT DRYER	SMP	SUMP PUMP			
DF DE	DAF SKIMMER	SPS	SUPERNATANT PUMP STATION			
DIF Se	DIFFUSER	STA	STATIC MIXER			
DS -	DISCONNECT SWITCH ENGINE	STR	STRAINER			
<u>-</u>	EXHAUST FAN	SUB	SUBSTATION			
EF EL	ELECTROLYTIC CELL	SWGR	SWITCHGEAR			
	EVAPORATOR	SWP	SWASH PLATE			
EPR ETM		T	TRAP			
ETM	ELAPSED TIME METER	TCV	TEMPERATURE CONTROL VALVE			
ETNK -	EXPANSION TANK	TNK	TANK			
- 4 0	FAN	TOTE	TOTE TANK			
FAP	FIRE ALARM ANNUNICATOR PANEL	TV	TEMPERATURE / VIBRATION MONITOR			
-C	FLOCCULATION CHAMBER	UH	UNIT HEATER ELECTRIC AND NON-ELECTRI			
FCV	FLOW CONTROL VALVE	UPS	UNINTERRUPTIBLE POWER SUPPLY			
F	FORCE FLOW HEATER	UVR	ULTRA-VIOLET LIGHT REACTOR			
-G	FLAP GATE	VFD	VARIABLE FREQUENCY DRIVE			
FLC	FLOCCULATOR					
-LT	FILTER	VSD V	VARIABLE SPEED DRIVE			
- V	FLOW CONTROL VALVE (OPEN/CLOSE)		VALVE			
GF 	GAS FILTER	VP WD	VAPOURIZER			
GEN	GENERATOR	WP	WELL PUMP			
GV	GATE VALVE	W	WEIR			
GP	GLYCOL PUMP	WRT	WASHWATER RECOVERY TANK			
GΤ	GRAVITY THICKENER	WSF	WATER SOFTENER			
HC	HEAT COIL	XFMR	TRANSFORMER			
HEX	HEAT EXCHANGER	86	EQUIPMENT LOCKOUT RELAY			
HWH	HOT WATER HEATER					
HRC	HEAT RECOVERY COIL					
HTR	ELECTRIC HEATER					
١٧	HAND VALVE					
HWP	HOT WATER PUMP					
MP	INSTRUMENT MARSHALLING PANEL					
K P	KEY PAD					
CD	LOCAL CONTROL DANIEL					

ISSUED WITH BID OPPORTUNITY 35-2006 ADDENDUM 2 DATE: JULY 31, 2007

		APEGN		
	Cert	ificate of Authorization		
	Earth Tech Canada Inc.			
П	No. 730	Expiry: April 30, 2007		

	B.M ELE				9	H2N
7					Freder	ickson
	0.4	LOCUED FOR CONCERNATION	07 /05 /05		DESIGNED BY	٨
	04	ISSUED FOR CONSTRUCTION 792-2006 ISSUED FOR TENDER	07/05/25 07/02/15		DRAWN BY	L
	02	TAG NUMBERS REVISED	06/12/11	LAE	00415	
_	01	ISSUED FOR CONSTRUCTION	06/07/28	JBC	SCALE:	N
	00	ISSUED FOR TENDER	06/03/29	LAE		
	NO.	REVISIONS	DATE	BY	DATE	2005/

	Frederickson Cooper		EarthTech A Tyco International Ltd. Company		ENGINEER'S SEAL ORIGINAL		
						SIGNED BY	
LAE	DESIGNED BY	NT	CHECKED BY	SRB	S.	R. BILEVICIUS	
LAE	DRAWN BY	LAE	APPROVED BY	AHL	2	2006/03/29	
JBC LAE	SCALE:	NONE	RELEASED FOR CONSTRUCTION BY: R. SOROKOWSKI		CONSULTANT DRAWING N	ILTANT DRAWING NO.	
BY	DATE	2005/12/21	DATE 2	006/03/29	WM-P0001		

LCP LOCAL CONTROL PANEL LCV LEVEL CONTROL VALVE

> THE CITY WITTERING DIVISION THE CITY OF WINNIPEG Winnipeg ENGINEERING DIVISION CITY FILE NUMBER WATER TREATMENT PLANT

GENERAL PLANT SERVICES MECHANICAL AND ELECTRICAL CITY DRAWING NUMBER CONSTRUCTION STANDARDS PROCESS AND INSTRUMENTATION

1-0601M-D-P0001-001-04D

IDENTIFICATION