A1 SIZE – 594mm x 841mm

INSTRUMENT FUNCTIONAL DESIGNATIONS

	FIRST LETTER	MODIFIER	SUCCEEDING LETTERS		MODIFIER
A	ANALYSIS		ALARM		
B	BURNER, COMBUSTION				
C	CONDUCTIVITY			CONTROL	CLOSE
D	DENSITY	DIFFERENCE, DIFFERENTIAL			DEVIATION
E	VOLTAGE		SENSOR, PRIMARY ELEMENT		
F	FLOW, FLOW RATE	RATIO			FAILURE/FAULT
G			GLASS, GAUGE VIEWING DEVICE		
H	HAND (MANUAL)				HIGH
I	CURRENT		INDICATE		
J	POWER		SCAN		
K	TIME, SCHEDULE	TIME RATE OF CHANGE		CONTROL STATION	
L	LEVEL		LIGHT		LOW
M	MOISTURE, HUMIDITY				MIDDLE, INTERMEDIATE
N					
O	TORQUE		ORIFICE, RESTRICTION		OPEN
P	PRESSURE		POINT (TEST CONNECTION)		
Q	QUANTITY	INTEGRATE, TOTALIZE	INTEGRATE, TOTALIZE		
R	RADIATION		RECORD		RUN
S	SPEED, FREQUENCY	SAFETY		SWITCH	STOP
T	TEMPERATURE			TRANSMITTER	
U	MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	
V	UNCLASSIFIED			VALVE, DAMPER, LOUVER	
W	WEIGHT, FORCE		WELL, PROBE		
X	UNCLASSIFIED	X AXIS	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
Y	EVENT, STATE, OR PRESENCE	Y AXIS		AUXILIARY DEVICE	
Z	POSITION, DIMENSION	Z AXIS, SAFETY INSTRUMENTED SYSTEM		DRIVER, ACTUATOR, UNCLASSIFIED FINAL CONTROL ELEMENT	

NOTES FOR INSTRUMENT AND DEVICE IDENTIFICATION TABLE:

1. THE LETTER X IS TO BE DEFINED AT THE TIME OF USE, AND MAY BE USED FOR MULTIPLE DEFINITIONS WHERE NO OTHER LETTER IS APPLICABLE.

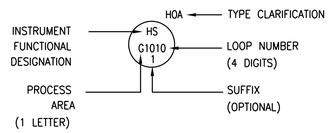
COMMON INSTRUMENT FIELD DEVICE IDENTIFIERS

IDENTIFIER	DEFINITION	IDENTIFIER	DEFINITION
AA	ANALYSIS ALARM	PG	PRESSURE GAUGE
AAH	ANALYSIS ALARM – HIGH	PI	PRESSURE INDICATOR
AAHH	ANALYSIS ALARM – HIGH–HIGH	PIC	PRESSURE INDICATING CONTROLLER
AE	ANALYSIS ELEMENT	PIT	PRESSURE INDICATING TRANSMITTER
AIT	ANALYSIS INDICATING TRANSMITTER (ANALYTIC INST.)	PR	PRESSURE RECORDER
AK	ANALYSIS (AMPLER) CONTROL STATION	PS	PRESSURE SWITCH
ASH	ANALYSIS SWITCH – HIGH	PSH	PRESSURE SWITCH HIGH
ASHH	ANALYSIS SWITCH – HIGH–HIGH	PSHH	PRESSURE SWITCH HIGH (2ND STAGE)
AT	ANALYSIS TRANSMITTER (ANALYTIC INST.)	PSL	PRESSURE SWITCH LOW
BK	BURNER CONTROL STATION	PSV	PRESSURE SAFETY VALVE (RELIEF)
BCS	BURNER FLAME SWITCH	PT	PRESSURE TRANSMITTER
DE	DENSITY ELEMENT	PY	PRESSURE RELAY (I/I CONVERTER)
DR	DENSITY RECORDER	SI	SPEED INDICATOR
DT	DENSITY TRANSMITTER	SK	SPEED CONTROL STATION
DX	DENSITY SOURCE (X = SOURCE)	ST	SPEED/VELOCITY TRANSMITTER
EE	VOLTAGE ELEMENT/TRANSFORMER	TE	TEMPERATURE ELEMENT
EG	VOLTAGE VIEWING DEVICE(CAPACITOR VOLT INDICATOR)	TG	TEMPERATURE GAUGE
EI	VOLTAGE INDICATOR	TI	TEMPERATURE INDICATOR
EL	VOLTAGE LIGHT	TIC	TEMPERATURE INDICATING CONTROLLER
ET	VOLTAGE TRANSMITTER	TIT	TEMPERATURE INDICATING TRANSMITTER
FAL	FLOW ALARM LOW	TR	TEMPERATURE RECORDER
FE	FLOW ELEMENT	TS	TEMPERATURE SWITCH
FI	FLOW INDICATOR	TSH	TEMPERATURE SWITCH HIGH
FIC	FLOW INDICATING CONTROLLER	TSL	TEMPERATURE SWITCH LOW
FIT	FLOW INDICATING TRANSMITTER	TT	TEMPERATURE TRANSMITTER
FQI	FLOW TOTALIZING INDICATOR	TV	TEMPERATURE VALVE
FQY	FLOW TOTALIZING/INTEGRATING RELAY	TW	TEMPERATURE THERMOWELL
FR	FLOW RECORDER	TY	TEMPERATURE RELAY (SOLENOID VALVE OR M/P)
FSL	FLOW SWITCH LOW	VE	VIBRATION ELEMENT
FT	FLOW TRANSMITTER	VI	VIBRATION INDICATOR
FV	FLOW VALVE	VIT	VIBRATION INDICATING TRANSMITTER
FZ	FLOW METER ULTRASONIC GENERATOR	VT	VIBRATION TRANSMITTER
GE	GAS ELEMENT	XV	ON/OFF VALVE (TYPICAL)
GS	GAS SWITCH MODULE	YL	STATE INDICATOR
HK	HAND CONTROL STATION	ZI	POSITION INDICATOR
HS	HAND SWITCH	ZS	POSITION SWITCH
HSR	HAND SWITCH – START/RUN	ZSC	POSITION SWITCH CLOSED (LIMIT SWITCH)
HSS	HAND SWITCH – STOP OR HAND SAFETY SWITCH	ZSO	POSITION SWITCH OPEN (LIMIT SWITCH)
HV	HAND VALVE	ZT	POSITION TRANSMITTER
IS	CURRENT SWITCH		
IE	CURRENT ELEMENT/TRANSFORMER		
II	CURRENT INDICATOR		
IY	CURRENT RELAY		
JIT	POWER INDICATING TRANSMITTER		
KY	TIMER RELAY		
LCV	LEVEL CONTROL VALVE		
LE	LEVEL ELEMENT		
LI	LEVEL INDICATOR		
LIC	LEVEL INDICATING CONTROLLER		
LIT	LEVEL INDICATING TRANSMITTER		
LR	LEVEL RECORDER		
LSL	LEVEL SWITCH LOW		
LSH	LEVEL SWITCH HIGH		
LSHL	LEVEL SWITCH HIGH/LOW		
LT	LEVEL TRANSMITTER		
LV	LEVEL VALVE		
LY	LEVEL RELAY (I/I CONVERTER)		
ME	MOISTURE OR HUMIDITY SENSOR		
MT	MOISTURE OR HUMIDITY		
OSH	TORQUE SWITCH HIGH		
PCV	PRESSURE CONTROL VALVE		
PE	PRESSURE ELEMENT		

NOTES FOR INSTRUMENT FIELD DEVICE IDENTIFIERS:

1. THE LAST IDENTIFIER LETTER IS IN SOME CASES OPTIONAL (EG. FSL)
2. THIS TABLE IS DERIVED FROM THE INSTRUMENT & DEVICE IDENTIFICATION TABLE AND IS NOT EXHAUSTIVE.

INSTRUMENT IDENTIFICATION



INSTRUMENT TYPE CLARIFICATION

IDENTIFIER	DEFINITION
(N)	N MULTIPLE INSTRUMENTS
AA	AUDIBLE ALARM
ACC	ACCELERATION
A/M	AUTO/MANUAL
CAP	CAPACITANEE
CLS	CLOSE
DCS	DISTRIBUTED CONTROL SYSTEM
DO	DISOLVED OXYGEN
DP	DIFFERENTIAL PRESSURE
DS	DECREASE SPEED
E/R	EXTEND/RETRACT
E/S	EMERGENCY STOP
FOR	FORWARD/OFF/REVERSE
H/A	HAND/AUTO
H2S	HYDROGEN SULFIDE
HC	HYDROCARBON
HOA	HAND/OFF/AUTO
HOR	HAND/OFF/REMOTE
HS	HYDROSTATIC
I/D	INCREASE/DECREASE
INT/EXT	INTERNAL/EXTERNAL
IS	INCREASE SPEED
LCP	LOCAL CONTROL PANEL
LD	LOCKABLE DISCONNECT
LJB	LOCAL JUNCTION BOX
L/O	LOCAL/OFF
LOR	LOCAL/OFF/REMOTE
LOS	LOCK OFF STOP
L/R	LOCAL/REMOTE
LSR	LASER
MAG	MAGNETIC
O/A	OFF/AUTO
O/C	OPEN/CLOSE
O/M	OFF/MAINTENANCE
O/O	OFF/ON
O2	OXYGEN GAS
OPN	OPEN
ORP	OXIDIZATION REDUCTION POTENTIAL
PROX	PROXIMITY
RAD	RADAR
RST	RESET
RTD	RESISTIVE TEMPERATURE DEVICE
SEL	SELECTOR
S/F	SLOW/FAST
SOF	SLOW/OFF/FAST
SOL	SOLENOID
SS	SUSPENDED SOLIDS
S/S	START/STOP
S/W	SUMMER/WINTER
TC	THERMOCOUPLE
US	ULTRASONIC
VEL	VELOCITY
ΔT	THERMAL DISPERSION

GENERAL NOTE:

1. THIS IS A STANDARD LEGEND SHEET. THEREFORE, NOT ALL OF THE INFORMATION SHOWN MAY BE USED ON THIS PROJECT.

APEGM Certificate of Authorization
SNC-Lavalin Inc.
No. 4489

NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED FOR CONSTRUCTION – 976–2016	2017/04/05	G.G.	J.C.

CH2MHILL. SNC·LAVALIN KGS GROUP

DESIGNED BY: G. GERMAN	CHECKED BY: M. MONTGOMERY
DRAWN BY: G. GERMAN	APPROVED BY: H.T. FREIHAMMER
SCALE: NTS	ISSUED FOR CONSTRUCTION BY: J. SHUMKA
DATE: 2017/04/05	DATE: 2017/04/05
CONSULTANT NO.: 474248	

ENGINEER'S SEAL
PROVINCE OF MANITOBA
April 5, 2017
F. J. ABSI
Member 36875
REGISTERED PROFESSIONAL ENGINEER
F. J. Absi

Winnipeg
THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

INSTRUMENTATION & CONTROLS
SEWPCC UPGRADING/EXPANSION PROJECT
PROCESS AND INSTRUMENTATION
LEGEND AND GENERAL NOTES (2)

CITY DRAWING NUMBER	SHEET	REV.	SIZE
1–0102–PPID–A001	002	00	A1

PLOT DATE: 2017\03\30
FILE NAME:

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