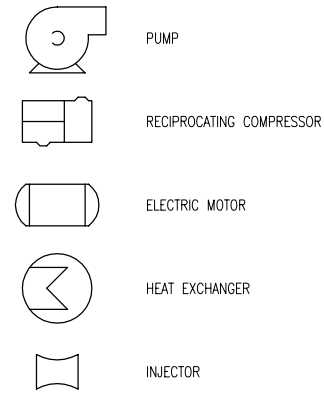
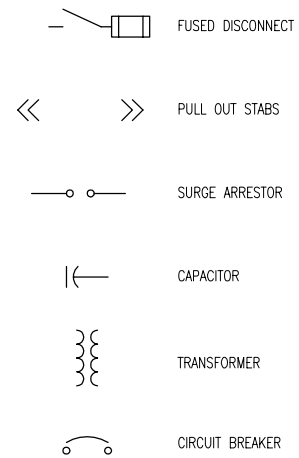


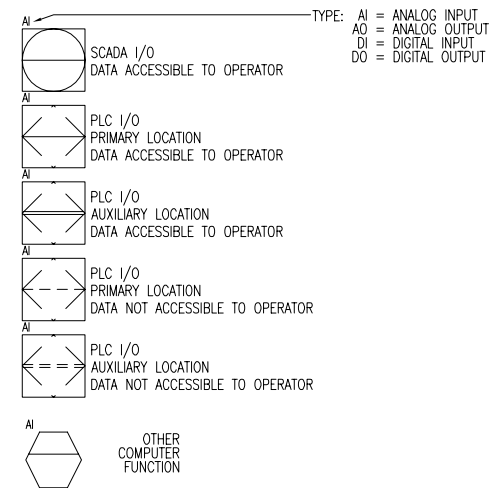
EQUIPMENT SYMBOLS



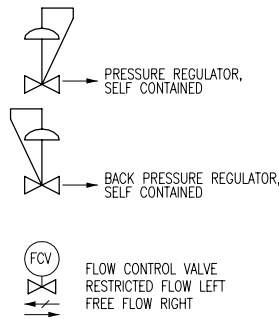
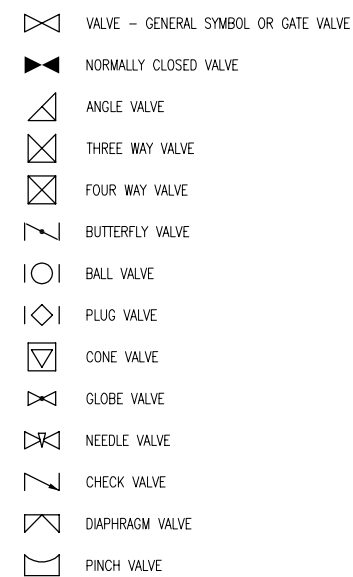
ELECTRICAL SYMBOLS



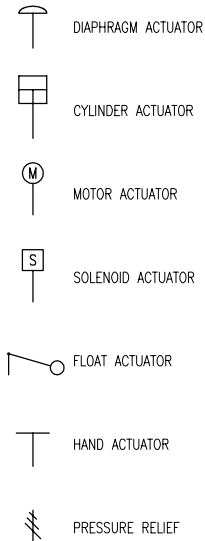
I/O TAGS



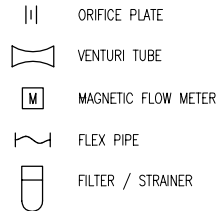
VALVE SYMBOLS



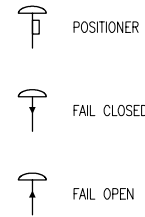
ACTUATOR SYMBOLS



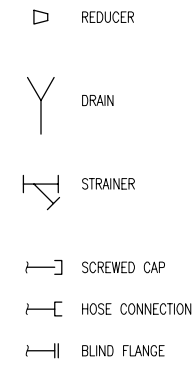
ACCESSORY DEVICE SYMBOLS



ACTUATOR DETAIL SYMBOLS



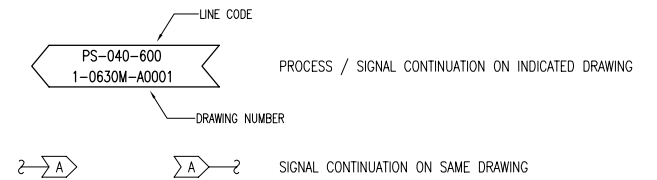
PIPING DETAIL SYMBOLS



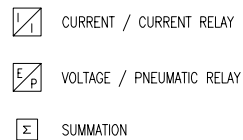
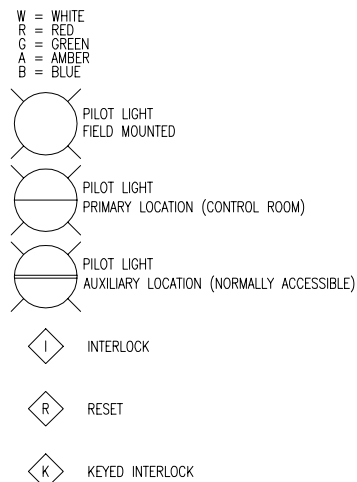
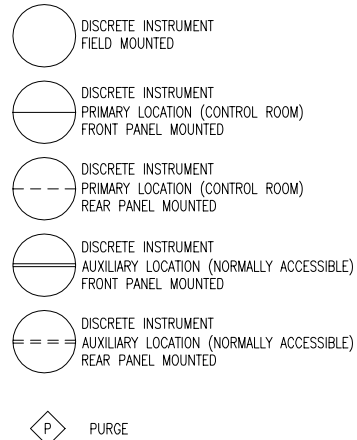
PID STANDARDS

- DRAWINGS UTILIZE CITY OF WINNIPEG STANDARDS FOR BORDER AND TITLE BLOCK. ALL DRAWINGS ARE PRODUCED ON AUTOCAD (LATEST REV., R2000 OR LATER).
- ALL UNITS ARE IN METRIC, EXCEPT AS NOTED OTHERWISE. ALL DIMENSIONS SHOWN ARE IN MILLIMETERS (mm).
- DRAWING CONTENT GENERALLY CONFORMS WITH ISA-5.1 STANDARD. AN EXCEPTION REGARDING EQUIPMENT TAGGING HAS BEEN MADE TO ALLOW CONFORMITY WITH EXISTING NAMING CONVENTIONS.
- PID'S INDICATE MAJOR PROCESS PIPING AND EQUIPMENT AND ASSOCIATED LOCAL INSTRUMENTATION, SCADA PLC AND OTHER PROCESS I/O.
- EQUIPMENT INCLUDING VESSELS, DRUMS, EXCHANGERS, HEATERS, PUMPS, COMPRESSORS, ETC. ARE ARRANGED IN SEQUENCE WITH PRINCIPLE FUNCTIONS AND FLOWS.
- ALL MAJOR EQUIPMENT INCLUDING PUMPS, COMPRESSORS, TANKS, ETC. ARE LABELED AS TO FUNCTION WITH DESIGN SIZES AND RATINGS.
- ALL PROCESS LINES ARE LABELED ACCORDING TO FUNCTION AND SIZE UTILIZING SYSTEM CODES DEFINED HEREIN.
- EACH SYSTEM INTERCONNECTION POINT BETWEEN DRAWINGS IS LABELED WITH A SOURCE DRAWING NUMBER OR DESTINATION DRAWING NUMBER. ARROWS ON PROCESS PIPING INDICATE DIRECTION OF FLOW BETWEEN DRAWINGS.

CONNECTING ARROWS



INSTRUMENT SYMBOLS



DRAWING NUMBER	REFERENCE DRAWINGS
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B.M. ELEV.	FIELD BOOK #:	SNC-LAVALIN INC. 148 Nature Park Way Winnipeg, MB, Canada R3P 0X7 204-786-8080	ENGINEER'S SEAL	THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT MACLEAN PUMPING STATION PROCESS & INSTRUMENTATION DIAGRAMS LEGEND & DETAILS
POSTED TO LBIS			DESIGNED BY: EXISTING CHECKED BY: CJR DRAWN BY: CJR APPROVED BY: CJR HOR. SCALE: NTS VERTICAL: NTS RELEASED FOR CONSTRUCTION DATE: 2005/09/19 DATE:	
01 REVISED DRAWING NUMBER	2008/02/13 AEO			
00 ISSUED FOR CITY USE	2007/08/28 Y.M			
NO. REVISIONS	DATE	BY	FILENAME: 1-0630M-A0001-001-01.dwg	