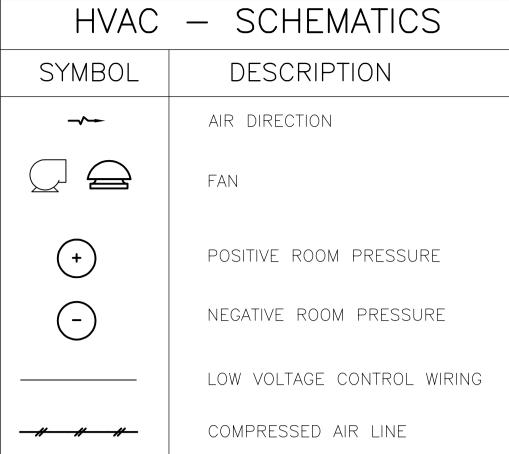
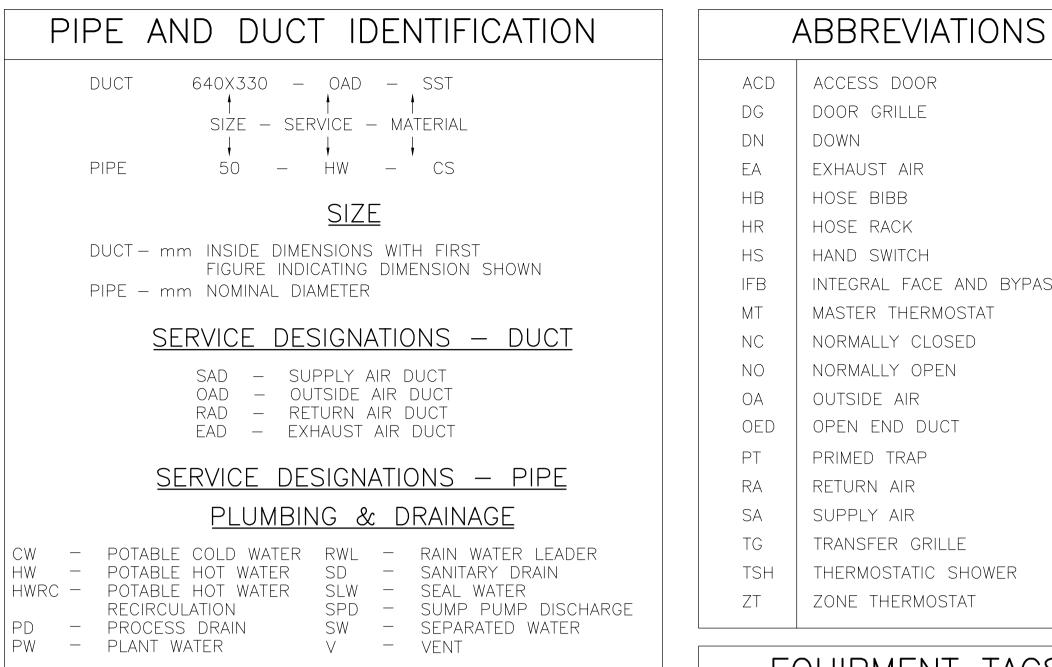


HVAC	- SCHEMATICS
SYMBOL	DESCRIPTION
<b>~</b>	AIR DIRECTION
	FAN
+	POSITIVE ROOM PRESSURE
<u>-</u>	NEGATIVE ROOM PRESSURE
	LOW VOLTAGE CONTROL WIRING
	COMPRESSED AIR LINE

HVAC-F	LANS & SECTIONS
SYMBOL	DESCRIPTION
c/ /c	COOLING COIL
D/X	MECHANICAL COOLING (EVAPORATOR)
H/ C	HEATING COIL
E/C	ELECTRIC HEATING COIL
	HEAT EXCHANGER





LPS - LOW PRESSURE STEAM

MPS - MEDIUM PRESSURE STEAM

(100 kPa)

(700 kPa)

HPEW — HIGH PRESSURE EFFLUENT WATER

FRP – FIBRE REINFORCED PLASTIC

PVC - POLYVINYL CHLORIDE

PE – POLYETHYLENE

REF – ŘEFRIGERÁNT

SYMBOL  DESCRIPTION  ADJUSTABLE FAN DRIVE  ANALOG INPUT  ANALOG OUTPUT  DI DIGITAL INPUT  DO DIGITAL OUTPUT  DP DIFFERTIAL PRESSURE SENSOR  HCP HVAC CONTROL  HS HAND SWITCH  M MOTORIZED DAMPER  M BLOWER MOTOR  SD SMOKE DETECTOR  TEMPERATURE SENSOR	HV	AC — CONTROLS
ANALOG INPUT  ANALOG OUTPUT  DI DIGITAL INPUT  DO DIGITAL OUTPUT  DP DIFFERTIAL PRESSURE SENSOR  HCP HVAC CONTROL  HS HAND SWITCH  M MOTORIZED DAMPER  M BLOWER MOTOR  SD SMOKE DETECTOR	SYMBOL	DESCRIPTION
ANALOG OUTPUT  DI DI DIGITAL INPUT  DO DIGITAL OUTPUT  DP DIFFERTIAL PRESSURE SENSOR  HCP HVAC CONTROL HS HAND SWITCH  MOTORIZED DAMPER  BLOWER MOTOR  SD SMOKE DETECTOR	VFD	ADJUSTABLE FAN DRIVE
DI DIGITAL INPUT  DO DIGITAL OUTPUT  DP DIFFERTIAL PRESSURE SENSOR  HCP HVAC CONTROL  HS HAND SWITCH  M MOTORIZED DAMPER  BLOWER MOTOR  SD SMOKE DETECTOR	Al	ANALOG INPUT
DDD DIGITAL OUTPUT  DP DIFFERTIAL PRESSURE SENSOR  HCP HVAC CONTROL  HS HAND SWITCH  M MOTORIZED DAMPER  M BLOWER MOTOR  SD SMOKE DETECTOR	AO	ANALOG OUTPUT
DP DIFFERTIAL PRESSURE SENSOR  HCP HVAC CONTROL  HS HAND SWITCH  M MOTORIZED DAMPER  BLOWER MOTOR  SD SMOKE DETECTOR	DI	DIGITAL INPUT
HCP HVAC CONTROL  HS) HAND SWITCH  M MOTORIZED DAMPER  BLOWER MOTOR  SD SMOKE DETECTOR	DO	DIGITAL OUTPUT
HS HAND SWITCH  M MOTORIZED DAMPER  BLOWER MOTOR  SD SMOKE DETECTOR	DP	DIFFERTIAL PRESSURE SENSOR
M MOTORIZED DAMPER  BLOWER MOTOR  SD SMOKE DETECTOR	HCP	HVAC CONTROL
BLOWER MOTOR  SD SMOKE DETECTOR	HS	HAND SWITCH
SMOKE DETECTOR	M	MOTORIZED DAMPER
	M	BLOWER MOTOR
TEMPERATURE SENSOR	SD	SMOKE DETECTOR
	T	TEMPERATURE SENSOR

<u>HVAC</u>

MISCELLANEOUS

NG — NATURAL GAS

MATERIAL DESIGNATIONS

| CPP - CONCRETE PRESSURE PIPE GALV - GALVANIZED STEEL

CHWR — CHILLED WATER RETURN HWR — HOT WATER RETURN

CHWS — CHILLED WATER SUPPLY INA — INSTRUMENT AIR

COND - CONDENSATE

CA - COMPRESSED AIR

f – STANDPIPE

AL - ALUMINUM CI – CAST IRON

CU - COPPER

CS - CARBON STEEL

- DUCTILE IRON

HPS - HIGH PRESSURE STEAM

FP - FIRE PROTECTION OIL - OIL

(3500 kPa)

HWS - HOT WATER SUPPLY

ACD	ACCESS DOOR
DG	DOOR GRILLE
DN	DOWN
EA	EXHAUST AIR
НВ	HOSE BIBB
HR	HOSE RACK
HS	HAND SWITCH
IFB	INTEGRAL FACE AND BYPASS DAMPER
MT	MASTER THERMOSTAT
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
OA	OUTSIDE AIR
OED	OPEN END DUCT
PT	PRIMED TRAP
RA	RETURN AIR
SA	SUPPLY AIR
TG	TRANSFER GRILLE
TSH	THERMOSTATIC SHOWER
ZT	ZONE THERMOSTAT

EQUIPMENT TAGS	
ACU	AIR CONDITIONING UNIT
AHU	AIR HANDLING UNIT
CC	COOLING COIL
CWC	CENTRIFUGAL WATER CHILLER
CWP	CHILLED WATER PUMP
DC	DUST COLLECTOR
DHUM	DEHUMIDIFIER
EC	ELECTRIC CONVECTOR
EDH	ELECTRIC DUCT HEATER
EH	ELECTRIC HEATER
EF	EXHAUST FAN
EUH	ELECTRIC HEATER
EWH	ELECTRIC WATER HEATER
GDH	GAS DUCT HEATER
GFP	GLYCOL FEED PUMP
GTP	GLYCOL TRANSFER PUMP
GUH	GAS HEATER
GV	GRAVITY VENTILATOR
НВ	HYDRONIC BOILER
НС	HEATING COIL
HRU	HEAT RECOVERY UNIT
HUM	HUMIDIFIER
HWCP	HOT WATER CIRCULATING PUMP
HWH	HOT WATER HEATER
MAU	MAKE-UP AIR UNIT
MD	MOTORIZED DAMPER
RWC	RECIPROCATING WATER CHILLER
RF	RECIRCULATION FAN
SB	STEAM BOILER
SF	SUPPLY FAN
SIL	SILENCER (DUCT)
SP	SUMP PUMP
UHT	UNIT HEATER
VAV	VARIABLE AIR VOLUME TERMINAL
WFC	WALL FIN CONVECTOR

POSTED TO LBIS Certificate of Authorization CH2M HILL Canada Ltd.

No. 1441 Expiry: April 30, 2008

HOR. SCALE VERTICAL ISSUED FOR TENDER 7/11/28 PK

ENGINEER'S SEAL CH2MHILL ORIGINAL SIGNED BY CHECKED D.CUDDINGTON DRAWN BY E.SHARP P.KWONG 2007/11/28 RELEASED FOR CONSTRUCTION

2007 06 20 DATE 2007/11/29

K. ZUREK

Winnipeg

THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT

NORTH END WATER POLLUTION CONTROL CENTRE

SHEET 11 OF 24 CONSULTANT DRAWING NUMBER M0001

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WET WELL REHABILITATION

PROJECT No.: 358676 LOT DATE: 2007/11/28

D.L.

LE

BUILDING MECHANICAL LEGENDS & NOTES

CITY DRAWING NUMBER

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