ABBREVIATIONS

AIR CONDITIONING

DESIGNATION	DESCRIPTION
AC	AIR CONDITIONING UNIT
ACC	AIR COOLED CHILLER
AFS	AIR FLOW MEASURING STATION
AS	AIR SEPARATOR
AD	ACCESS DOOR
AHU	AIR HANDLING UNIT
AP	ACCESS PANEL
B	BOILER
BD	BALANCING DAMPER
BDD	BACK DRAFT DAMPER
BPB	BYPASS BOX
CB	CHILLED BEAM
CC	COOLING COIL
CCT	CONDENSATE COOLER TANK
CRAC	COMPUTER ROOM AIR CONDITIONER
CT	COOLING TOWER
CU	CONDENSING UNIT
DC	DRY COOLER
DCV	DEMAND CONTROL VENTILATION
DG	DOOR GRILLE
EA	EXHAUST AIR
EF	EXHAUST AIR FAN
EG	EXHAUST AIR GRILLE
ERV	ENERGY RECOVERY VENTILATOR
ET	EXPANSION TANK
FCU	FAN COIL UNIT
FD	FIRE DAMPER
FPB	FAN POWERED BOX
FSD	FIRE & SMOKE DAMPER
H	HUMIDIFIER
HE	HEAT EXCHANGER
HRV	HEAT RECOVERY VENTILATOR
MAU	MAKEUP AIR UNIT
MCD	MOTORIZED CONTROL DAMPER
MD	MANUAL DAMPER
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
OA	OUTSIDE AIR
OED	OPEN END DUCT
RA	RETURN AIR
RF	RETURN AIR FAN
RG	RETURN AIR GRILLE
RR	RETURN AIR REGISTER
SA	SUPPLY AIR
SD	SMOKE DAMPER
SEA	SANITARY EXHAUST AIR
SF	SUPPLY AIR FAN
SL	SILENCER
SR	SUPPLY AIR REGISTER
TA	TRANSFER AIR
VAV	VARIABLE VOLUME BOX
VFD	VARIABLE FREQUENCY DRIVE

ABBREVIATIONS

HEATING / COOLING

DESIGNATION	DESCRIPTION
BBH	BASEBOARD HEATER
CH	CABINET HEATER
CBV	CIRCUIT BALANCING VALVE
EDH	ELECTRIC DUCT HEATER
FFH	FORCED FLOW HEATER
HC	HEATING COIL
HP	HEAT PUMP
P	PUMP
PH	PREHEAT COIL
PRV	PRESSURE REDUCING VALVE
RH	REHEAT COIL
UH	UNIT HEATER
VB	VACUUM BREAKER
WF	WALL FIN
WH	WATER HEATER
HRCH	HEAT RECOVERY CHILLER
DCV	DEMAND CONTROL VENTILATION

ABBREVIATIONS

PLUMBING / FIRE PROTECTION

DESIGNATION	DESCRIPTION
AD	AREA DRAIN
BFP	BACKFLOW PREVENTER
BWV	BACKWATER VALVE
CB	CATCH BASIN
CO	CLEAN OUT
CTE	CONNECT TO EXISTING
C/W	COMPLETE WITH
DCW	DOMESTIC COLD WATER
DF	DRINKING FOUNTAIN
DHW	DOMESTIC HOT WATER
DHWR	DOMESTIC HOT WATER RECIRCULATION
DN	DOWN
ELEV	ELEVATION
EEW	EMERGENCY EYE WASH
FA	FROM ABOVE
FB	FROM BELOW
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FFD	FUNNEL FLOOR DRAIN
FHC	FIRE HOSE CABINET
FS	FLOW SWITCH
FFE	FINISHED FLOOR ELEVATION
HB	HOSE BIBB
HD	HUB DRAIN
INV	INVERT
JS	JANITOR SINK
L	LAVATORY
MS	MOP SINK

ABBREVIATIONS

PLUMBING / FIRE PROTECTION

DESIGNATION	DESCRIPTION
NFWH	NON FREEZE WALL HYDRANT
RD	ROOF DRAIN
RWL	RAIN WATER LEADER
S	SINK
SD	SCUPPER DRAIN
SH	SHOWER
SRV	SAFETY RELIEF VALVE
SS	SERVICE SINK
STV	STACK VENT
SV	SUPERVISED VALVE
TA	TO ABOVE
TB	TO BELOW
TMV	THERMOSTATIC MIXING VALVE
U	URINAL
U/C	UNDER CUT
V	VENT PIPE
VSD	VARIABLE SPEED DRIVE
VST	VENT STACK
VTR	VENT THROUGH ROOF
WC	WASHER CLOSET
WFS	WATER FLOW SWITCH
WM	WATER METER
WPAV	WET PIPE ALARM VALVE
WS	WATER SOFTENER
DB	DRAIN BOX
BFL	BOTTLE FILLER

ABBREVIATIONS

CONTROLS

DESIGNATION	DESCRIPTION
EMCS	ENERGY MANAGEMENT AND CONTROL SYSTEM
DPS	DIFFERENTIAL PRESSURE SWITCH
EP	ELECTRO-PNEUMATIC SWITCH
HU	HUMIDISTAT
AI	ANALOG INPUT
AO	ANALOG OUTPUT
DI	DIGITAL INPUT
DO	DIGITAL OUTPUT
DP	DIFFERENTIAL PRESSURE SENSOR
FAS	FIRE ALARM SENSOR

DUCTWORK SYMBOLS

SYMBOL	DESCRIPTION
100x100 SA	NEW DUCTWORK
I00xI00 SA	EXISTING DUCTWORK
	FLEXIBLE DUCT CONNECTION
R	RISE IN DUCT
D	DROP IN DUCT
	ACOUSTICAL DUCT LINING
	DUCT SILENCER
	TURNING VANES
CAP	DUCT CAPPED CONNECTION
	OPEN ENDED DUCT WITH WIRE MESH SCREEN
	FLEXIBLE PIPE/DUCT
	REHEAT COIL
	SUPPLY DUCT UP
	SUPPLY DUCT DN
	RETURN DUCT UP
	RETURN DUCT DN
	EXHAUST DUCT UP
	EXHAUST DUCT DN
FD	FIRE DAMPER
M	MOTORIZED CONTROL DAMPER (MCD)
BD	BALANCING DAMPER
SD	SMOKE DAMPER
	SUPPLY AIR LINEAR SLOT PLENUM AND DIFFUSER
	SUPPLY AIR DIFFUSERS
	RETURN OR EXHAUST AIR GRILLE OR REGISTER
H	HUMISTAT OR HUMIDITY SENSOR
T T	THERMOSTAT OR TEMPERATURE SENSOR
T	THERMOSTAT ON INSULATED PAD
	EQUIPMENT SWITCH
TX	CONTROL TRANSFORMER AND LOW V WIRE
CO	CO SENSOR
CO_2	CO_2 SENSOR
NOX	NITROGEN OXIDE SENSOR
3	T., H, CO2 SENSORS
	DCV BOX C/W ATTENUATOR
	FAN POWERED BOX C/W DISCHARGE AND RETURN AIR ATTENUATOR
100x100 SA	REMOVE EXISTING DUCT
	TRANSFER AIR DUCT
R	REFRIGERANT LEAK DETECTOR SENSOR
PB	PUSH BUTTON
OS	OCCUPANCY SENSOR
	OPEN-ENDED DUCT TERMINATED WITH BELL MOUTH
SD	SMOKE DECTECTOR

EQUIPMENT SYMBOLS

SYMBOL	DESCRIPTION
A - 100 L/s 100Ø	DIFFUSER/REGISTER TYPE AIRFLOW (L/s) NECK SIZE / GRILLE SIZE
	EQUIPMENT TAG (REFER TO SCHEDULES) EQUIPMENT NUMBER
	POINT TYPE CONTROLLED PARAMETER
RAD - - W - L/s	RADIATOR TAG (No.) RADIATOR CAPACITY (Watts) FLOW (L/s)
X MXX-XX-XX	DETAIL NO. DRAWING NO.
CB - XXX 125Ø - YYY	CHILLED BEAM NO. PRIMARY AIRFLOW (L/s) NECK SIZE
	UNIT HEATER HORIZONTAL
C C H C	HEATING OR COOLING COIL
CB XXX YYY ZZZ	CHILLED BEAM NO. COOLING CAPACITY (W) WATER FLOW RATE (L/s)
DCV- X-Y Z	FLOOR NUMBER DCV NUMBER DCV SIZE

PIPING SYMBOLS

SYMBOL	DESCRIPTION
	SHUT-OFF VALVE (GENERIC)
	BALL VALVE
HB	HOSE BIBB
	BUTTERFLY VALVE
	PLUG VALVE
	2-WAY CONTROL VALVE
	CHECK VALVE
	PRESSURE REDUCING VALVE
	3-WAY CONTROL VALVE
CBV	CIRCUIT BALANCING VALVE
M	MOTORIZED VALVE
	RELIEF VALVE
AAV	AUTOMATIC AIR VENT
VB	VACUUM BREAKER
	VALVE ACTUATOR (PNEUMATIC OR ELECTRIC)
	ELECTRIC VALVE OR DAMPER ACTUATOR
	UNION
	CAPPPED CONNECTION
	EXPANSION JOINT
	ANCHOR POINT
	PIPE GUIDE
	ECCENTRIC FITTING
	CONCENTRIC FITTING
PC	PRESSURE GAUGE WITH GAUGE COCK
	THERMOMETER
	STRAINER
	PIPE DN
	PIPE UP
RD UHC	ROOF DRAIN OR PLUMBING FIXTURE ON LEVEL ABOVE
BWV	BACK WATER VALVE
FD OR GD	FLOOR DRAIN GARAGE DRAIN

PIPING SYMBOLS

SYMBOL	DESCRIPTION
FFD	FUNNEL FLOOR DRAIN
GM	GAS METER
WM	WATER METER
BTU	BTU METER
	HOSE END DRAIN VALVE
TC	TEST COCK
CO	CLEANOUT ABOVE GRADE OR FLOOR
CO	CLEANOUT TURNED UP THROUGH FLOOR
BFP	BACKFLOW PREVENTOR
	WALL CLEANOUT
NFWH	NON FREEZE WALL HYDRANT
	HEAT TRACING
	PUMP
FHV	FIRE HOSE VALVE
FD	FIRE HOSE REEL
FH	FIRE HYDRANT
	FIRE DEPARTMENT SIAMESE CONNECTION
	FIRE DEPARTMENT TEST CONNECTION
S	SUPERVISED VALVE
	SPRINKLER ALARM CHECK WET VALVE
D	SPRINKLER DRY ALARM CHECK VALVE
PR	PREACTION SPR. ALARM VALVE
P	PRESSURE SWITCH
FS	WATER FLOW SWITCH
	WET VACUUM OUTLET
F	FLOW METER
BFPD	BACKFLOW PREVENTER DETECTOR
HD	HUB DRAIN
RD	ROOF DRAIN
	P-TRAP
	BALL VALVE
ABV	AUTOMATIC BALANCING VALVE

PIPING LEGEND

PLUMBING & DRAINAGE / HVAC PIPING

SYMBOL	DESCRIPTION
TW	TEMPERED WATER
NG	NATURAL GAS
SAN	SANITARY ABOVE GRADE OR FLOOR
SAN	SANITARY BELOW GRADE OR FLOOR
ST	STORM ABOVE GRADE OR FLOOR
ST	STORM BELOW GRADE OR FLOOR
D	DRAIN
PD	PUMPED DRAIN
V	VENT
FOS	FUEL OIL SUPPLY
FOR	FUEL OIL RETURN

PIPING LEGEND

PLUMBING & DRAINAGE / HVAC PIPING

SYMBOL	DESCRIPTION
FOF	FUEL OIL FILL
FOV	FUEL OIL VENT
EX_CHWS	EXISTING PIPE (SERVICE)
CHWS LT	CHILLED WATER SUPPLY LOW TEMPERATURE
CHWR LT	CHILLED WATER RETURN LOW TEMPERATURE
CHWS	CHILLED WATER SUPPLY
CHWR	CHILLED WATER RETURN
GLS	GLYCOL WATER SUPPLY
GLR	GLYCOL WATER RETURN
CS	CONDENSER WATER SUPPLY
CR	CONDENSER WATER RETURN
DTS	DUAL TEMPERATURE SUPPLY
GTS	GEO THERMAL WATER SUPPLY
GTR	GEO THERMAL WATER RETURN
HWS	HEATING WATER SUPPLY
HWR	HEATING WATER RETURN
C	CONDENSATE
CD	CONDENSATE DRAIN
PC	PUMPED CONDENSATE
	REMOVE EXISTING PIPE
	DIRECTION OF FLOW
	PIPE BREAK
P-SAN	PUMPED SANITARY
SP	COMBINED SPRINKLER AND STANDPIPE SYSTEM
SD	STANDPIPE DRAIN
DRY	DRY SPRINKLER SYSTEM

PIPING LEGEND / SYMBOLS

FIRE PROTECTION

SYMBOL	DESCRIPTION
F	FIRE LINE
SD	SPRINKLER / STANDPIPE DRAIN
DRY	DRY LINE
PRE	PRE-ACTION LINE
FSP	FIRE STAND PIPE
SP	COMBINED SPRINKLER AND STANDPIPE SYSTEM
DRY	DRY SPRINKLER SYSTEM
	SIDEWALL SPRINKLER HEAD
	UPRIGHT SPRINKLER HEAD
	PENDENT SPRINKLER HEAD
	CONCEALED SPRINKLER HEAD
HT	UPRIGHT SPRINKLER HEAD HIGH TEMPERATURE RATED
FE	PORTABLE FIRE EXTINGUISHER
	EXISTING SPRINKLER HEAD TO BE REMOVED

MECHANICAL DRAWING LIST

Sheet No.	SHEET NAME	Sheet Issue Date
M01-00	MECHANICAL LEGEND	2020-8-31
M02-01	MECHANICAL SCHEDULES 1	2020-8-31
M02-02	MECHANICAL SCHEDULES 2	2021-8-11
M02-03	MECHANICAL SCHEDULES 3	2021-11-8
M02-04	MECHANICAL SCHEDULES 4	2021-11-8
M03-01	DETAILS SHEET 1	2020-8-31
M03-02	DETAILS SHEET 2	2020-8-31
M03-03	DETAILS SHEET 3	2021-9-31
M03-04	DETAILS SHEET 4	2021-12-17
M03-05	DETAILS SHEET 5	2021-12-17
M20-00	DRAINAGE - UNDERSLAB NEW WORK	2020-8-31
M20-01	PLUMBING & DRAINAGE - PARKING LEVEL NEW WORK	2020-8-31
M20-02	PLUMBING & DRAINAGE - MAIN FLOOR NEW WORK	2020-8-31
M20-03	PLUMBING & DRAINAGE - SECOND FLOOR NEW WORK	2020-8-31
M20-04	PLUMBING & DRAINAGE - THIRD FLOOR NEW WORK	2020-8-31
M20-05	PLUMBING & DRAINAGE - FOURTH FLOOR NEW WORK	2020-8-31
M20-06	PLUMBING & DRAINAGE - FIFTH FLOOR NEW WORK	2020-8-31
M20-07	PLUMBING & DRAINAGE - PENTHOUSE FLOOR NEW WORK	2020-8-31
M40-00	FIRE PROTECTION - PARKING LEVEL NEW WORK	2020-8-31
M40-01	FIRE PROTECTION - MAIN FLOOR NEW WORK	2020-8-31
M40-02	FIRE PROTECTION - SECOND FLOOR NEW WORK	2020-8-31
M40-03	FIRE PROTECTION - THIRD FLOOR NEW WORK	2020-8-31
M40-04	FIRE PROTECTION - FOURTH FLOOR NEW WORK	2020-8-31
M40-05	FIRE PROTECTION - FIFTH FLOOR NEW WORK	2020-8-31
M40-06	FIRE PROTECTION - PENTHOUSE FLOOR NEW WORK AND FIRE PUMP ROOM LAYOUT PARKING LEVEL	2020-8-31
M50-00	HVAC - PARKING LEVEL NEW WORK	2020-8-31
M50-01	HVAC - MAIN FLOOR NEW WORK	2020-8-31
M50-02	HVAC - SECOND FLOOR NEW WORK	2020-8-31
M50-03	HVAC - THIRD FLOOR NEW WORK	2020-8-31
M50-04	HVAC - FOURTH FLOOR NEW WORK	2020-8-31
M50-05	HVAC - FIFTH FLOOR NEW WORK	2020-8-31
M50-06	HVAC - PENTHOUSE FLOOR AND ROOF NEW WORK	2020-8-31
M53-00	HYDRONIC - PARKING LEVEL NEW WORK	2020-8-31
M53-01	HYDRONIC - MAIN FLOOR NEW WORK	2020-8-31
M53-02	HYDRONIC - SECOND FLOOR NEW WORK	2020-8-31
M53-03	HYDRONIC - THIRD FLOOR NEW WORK	2020-8-31
M53-04	HYDRONIC - FOURTH FLOOR NEW WORK	2020-8-31
M53-05	HYDRONIC - FIFTH FLOOR NEW WORK	2020-8-31
M53-06	HYDRONIC - PENTHOUSE FLOOR NEW WORK	2020-8-31
M60-01	MECHANICAL RISER DETAILS PART PLANS	2020-8-31
M60-02	PLUMBING & DRAINAGE - WASHROOM PART PLANS	2020-11-4
M60-03	PARKING LEVEL PART PLAN MECHANICAL ROOM HVAC PIPING	2021-3-16
M60-04	MECHANICAL SECTIONS	2021-2-5
M60-05	MECHANICAL ROOM 3D VIEW	2021-12-13
M60-06	PARKING LEVEL PART PLAN MECHANICAL ROOM PLUMBING & DRAINAGE	2021-11-30
M60-07	GEOTHERMAL FIELD PIPING LAYOUT	2021-6-10
M70-01	DOMESTIC WATER SCHEMATIC	2020-8-31
M72-01	FIRE PROTECTION SCHEMATIC	2020-8-31
M73-01	HYDRONIC HEATING & COOLING SCHEMATIC	2020-8-31
M73-02	HYDRONIC DISTRIBUTION - HEATING	2020-8-31
M73-03	HYDRONIC DISTRIBUTION - COOLING	2020-12-4
M73-04	AIRFLOW SCHEMATIC	2020-11-6
M73-05	GROUND LOOP SCHEMATIC	2021-6-14
M74-01	CONTROLS SCHEMATIC	2021-6-1
M74-02	CONTROLS SCHEMATIC 2	2021-12-17
M82-00	UNDERGROUND DRAINAGE DEMOLITION	2021-3-2
M82-01	PLUMBING & DRAINAGE - PARKING LEVEL DEMOLITION	2020-8-31
M82-02	PLUMBING & DRAINAGE - MAIN FLOOR DEMOLITION	2020-8-31
M82-03	PLUMBING & DRAINAGE - SECOND FLOOR DEMOLITION	2020-8-31
M82-04	PLUMBING & DRAINAGE - THIRD FLOOR DEMOLITION	2020-8-31
M82-05	PLUMBING & DRAINAGE - FOURTH FLOOR DEMOLITION	2020-8-31
M82-06	PLUMBING & DRAINAGE FIFTH FLOOR, PENTHOUSE DEMOLITION	2021-4-26
M84-00	FIRE PROTECTION - PARKING LEVEL DEMOLITION	2020-8-31
M84-01	FIRE PROTECTION - MAIN FLOOR DEMOLITION	2020-8-31
M84-02	FIRE PROTECTION - SECOND FLOOR DEMOLITION	2020-8-31
M84-03	FIRE PROTECTION - THIRD FLOOR DEMOLITION	2020-8-31
M84-04	FIRE PROTECTION - FOURTH FLOOR DEMOLITION	2020-8-31
M84-05	FIRE PROTECTION - FIFTH FLOOR DEMOLITION	2020-8-31
M84-06	FIRE PROTECTION - PENTHOUSE FLOOR DEMOLITION	2020-8-31
M85-00	HVAC - PARKING LEVEL DEMOLITION	2020-8-31
M85-01	HVAC - MAIN FLOOR DEMOLITION	2020-8-31
M85-02	HVAC - SECOND FLOOR DEMOLITION	2020-8-31
M85-03	HVAC - THIRD FLOOR DEMOLITION	2020-8-31
M85-04	HVAC - FOURTH FLOOR DEMOLITION	2020-8-31
M85-05	HVAC - FIFTH FLOOR DEMOLITION	2020-8-31
M85-06	HVAC - PENTHOUSE FLOOR DEMOLITION	2020-8-31
M86-01	HYDRONIC - MAIN FLOOR DEMOLITION	2020-8-31
M86-02	HYDRONIC - SECOND FLOOR DEMOLITION	2020-8-31
M86-03	HYDRONIC - THIRD FLOOR DEMOLITION	2020-8-31
M86-04	HYDRONIC - FOURTH FLOOR DEMOLITION	2020-8-31
M86-05	HYDRONIC - FIFTH FLOOR DEMOLITION	2020-8-31
M86-06	HYDRONIC - PENTHOUSE FLOOR DEMOLITION	2020-8-31
M87-01	FUEL OIL SYSTEM DEMO SCHEMATIC	2020-8-31

TOTAL No. of SHEETS IN THIS SET: 83

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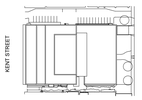
key plan



project and true North

project legend

THE ASSOCIATION OF PROFESSIONAL ENGINEER OF THE PROVINCE OF PRINCE EDWARD ISLAND
VALID FOR THE YEAR 2022

P.N. Frasie
No. 2553
DATE: 27 MAY, 2022

LICENSED PROFESSIONAL ENGINEER
PROVINCE OF PRINCE EDWARD ISLAND

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drawing / dessin

MECHANICAL LEGEND

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