

GENERAL LEGEND	
	ELECTRIC BASEBOARD HEATER
	ELECTRIC ENTRANCE HEATER
	ELECTRIC/GAS UNIT HEATER
	UNDERCUT DOOR
	EXISTING
	EXISTING TO BE REMOVED
	GRILLE/DIFFUSER LABEL
	RADIATION LABEL
	EQUIPMENT LABEL
	EQUIPMENT LABEL
	CALLOUT NOTE
	NOTE

VENTILATION LEGEND	
	SQUARE OR RECTANGULAR DUCT
	ROUND OR OVAL DUCT
	ACoustically LINED DUCT
	THERMALLY INSULATED DUCT
	SQUARE TO ROUND TRANSITION
	TRANSITION
	LONG RADIUS ELBOW
	LONG RADIUS ELBOW C/W TURNING VANES
	SQUARE ELBOW C/W TURNING VANES
	SUPPLY DUCT UP
	SUPPLY DUCT DOWN
	RETURN OR TRANSFER DUCT UP
	RETURN OR TRANSFER DUCT DOWN
	EXHAUST DUCT UP
	EXHAUST DUCT DOWN
	OUTSIDE AIR DUCT UP
	OUTSIDE AIR DUCT DOWN
	SIDEWALL SUPPLY AIR GRILLE (TYPE NOTED)
	SIDEWALL EXHAUST, RETURN OR TRANSFER GRILLE (TYPE NOTED)
	EXHAUST WALL CAP
	BALANCING DAMPER
	OPPOSED BLADE DAMPER
	PARALLEL BLADE DAMPER
	BACK DRAFT DAMPER
	FLEXIBLE DUCT CONNECTION
	END CAP
	ACCESS DOOR
	FAN-SYMBOL (TYPE NOTED)

PLUMBING PIPING LEGEND	
	ABOVE GROUND PIPING
	BELOW GROUND PIPING
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	NATURAL GAS
	SANITARY DRAIN
	PUMPED DISCHARGE
	INDIRECT DRAIN
	PLUMBING VENT

CONTROLS LEGEND	
	WALL MOUNTED THERMOSTAT
	WALL MOUNTED TEMPERATURE SENSOR
	WALL MOUNTED HUMIDISTAT
	WALL MOUNTED DE-HUMIDISTAT
	REMOTE BULB SENSOR AND TUBE
	DUCT MOUNTED THERMOSTAT
	DUCT MOUNTED TEMPERATURE SENSOR
	DUCT MOUNTED HUMIDISTAT
	DUCT MOUNTED HUMIDITY SENSOR
	CARBON DIOXIDE SENSOR
	CARBON MONOXIDE SENSOR
	NITROGEN DIOXIDE SENSOR
	MANUAL SWITCH
	DAMPER OR VALVE MOTOR
	ELECTRONIC SPEED CONTROLLER

GENERAL PIPE AND FITTING LEGEND	
	PIPE SLOPE - UP (OR DOWN)
	DIRECTION OF FLOW
	PIPE BREAK FOR CONTINUATION
	VENT THROUGH ROOF
	PIPE DOWN
	PIPE UP
	CAP
	CLEAN OUT
	HOSE BIBB
	UNION
	VALVE - NORMALLY OPEN
	VALVE - NORMALLY CLOSED
	PLUG VALVE
	GLOBE VALVE
	SUPERVISED VALVE
	PRESSURE REGULATING VALVE
	TEMPERATURE/PRESSURE RELIEF VALVE
	CHECK VALVE
	STRAINER
	FLEXIBLE CONNECTOR

HVAC EQUIPMENT SCHEDULE:

F-1, F-2 FURNACES
 LENNOX MODEL EL296UH090XV36C 88,000/84,000 BTU INPUT 57,000/55,000 BTU OUTPUT, 566 L/S @ 124.5 PA (1,200 CFM @ 0.5" S.P.) 96% HIGH EFF. HORIZONTAL FLOW CONFIGURATION, VAV DIRECT DRIVE, 0.37 KW (0.5 HP) MOTOR, 120V 1PH MOCF 15. UNIT COMPLETE WITH CH33-36C-2F CASED EVAPORATOR COIL, X6661 FILTER CABINET AND (2) SETS OF FILTERS, 44W92 VENT KIT (CONCENTRIC), REMOTE OUTDOOR TEMPERATURE SENSOR, CONDENSATE DRAIN HEAT CABLE KIT, HORIZONTAL SUSPENSION KIT, CRAWL SPACE VENT DRAIN KIT, 10F81 ICOMFORT WI-FI THERMOSTAT (WI-FI remote monitoring and adjustment through a home wireless network for desktop PCs, laptops and apps for smartphones or tablets. Service alerts and reminders sent via text message or e-mail. Coordinate with Mechanical Contractor). COORDINATE ELECTRICAL CHARACTERISTICS WITH THE ELECTRICAL CONTRACTOR.

CU-1 CONDENSER UNIT - ACCOMMODATION

LENNOX MODEL XC14-030-230 2.5 TON CONDENSER, 28,000 NET BTUH, 15.5 SEER, 230V 1PH MOCF 25 71(db). EXPANSION VALVE KIT, COMPRESSOR LOW AMBIENT CUT-OFF SWITCH, MOUNTING BASE AND UNIT STAND-OFF KIT. COORDINATE ELECTRICAL CHARACTERISTICS WITH THE ELECTRICAL CONTRACTOR.

CU-2 CONDENSER UNIT - OFFICE

LENNOX MODEL XC14-036-230 3.0 TON CONDENSER, 33,400 NET BTUH, 15.0 SEER, 230V 1PH MOCF 30 70(db). EXPANSION VALVE KIT, COMPRESSOR LOW AMBIENT CUT-OFF SWITCH, MOUNTING BASE AND UNIT STAND-OFF KIT. COORDINATE ELECTRICAL CHARACTERISTICS WITH THE ELECTRICAL CONTRACTOR.

HRV-1, HRV-2 HEAT RECOVERY VENTILATOR

HEALTHY CLIMATE MODEL HRV5-200-TPD HRV SUITABLE FOR 98 L/S @ 50 PA (207 CFM @ 0.2" SP) AT HIGH SPEED, 96W, 120V 1PH, 1/10HP (0.1 KW) MOTOR, C/W SUSPENSION KIT WITH VIBRATION ISOLATORS, LOCAL NON-FUSED DISCONNECT, DRAIN KIT, 115 V SINGLE POINT CONNECTION, EXTRA SET OF FILTERS, CONNECT TO WI-FI THERMOSTAT MONITORING SYSTEM. COORDINATE ELECTRICAL WITH ELECTRICAL CONTRACTOR.

EF-1 EXHAUST FAN - DRYING ROOM

BRAN MODEL 509 UTILITY WALL FAN, 71 L/S @ 25 PA (150 CFM @ 0.1" SP), 120V, 1.5 AMPS @60Hz, 1925 RPM, HORIZONTAL DISCHARGE, C/W DE-HUMIDISTAT CONTROL. COORDINATE ELECTRICAL REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR.

GS-1 GAS STOVE

KITCHEN AID MODEL KFGG500E 85,000 BTUH NATURAL GAS RANGE, 120V, 60 Hz, 15 AMP FUSED ELECTRICAL CIRCUIT IS REQUIRED. C/W TIME-DELAY FUSE OR CIRCUIT BREAKER, DEDICATED CIRCUIT. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS AND LOCAL GAS CODE FOR REQUIREMENTS AND CLEARANCES. COORDINATE ELECTRICAL REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR.

KH-1 KITCHEN HOOD

NUTONE MODEL NTM 302SS 153 L/S @ 175 PA (325 CFM @ 0.7 IN.W.G.) 120V, 60 Hz, 2.0 AMP. C/W ARP6 AIR FLOW REDUCER. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS AND LOCAL GAS CODE FOR REQUIREMENTS AND CLEARANCES. COORDINATE ELECTRICAL REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR.

GUH-1 GAS UNIT HEATER

MODINE MODEL HDS100 100,000 BTUH INPUT/80,000 BTUH OUTPUT, NATURAL GAS SEPARATED COMBUSTION UNIT HEATER. ENTERING AIR FLOW 703 L/s (1490 CFM), 115V, 60 Hz, 4.7 TOTAL UNIT AMPS. C/W CONTROL OPTION 11 SINGLE STAGE COMBINATION GAS CONTROL WITH BUILT IN IGNITION CONTROL, THERMOSTAT. SUSPENDED FROM STRUCTURE. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS AND LOCAL GAS CODE FOR REQUIREMENTS AND CLEARANCES. COORDINATE ELECTRICAL REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR.

GRILLES/REGISTERS

S-1 IMPERIAL MODEL RG FLOOR REGISTER. SIZES ON DRAWING. COORDINATE WITH ARCHITECTURAL AND OWNER.
 R-1 IMPERIAL MODEL RG BASEBOARD RETURN AIR GRILLE. SIZES ON DRAWINGS. COORDINATE WITH ARCHITECTURAL AND OWNER.
 E-1 IMPERIAL MODEL RG SIDEWALL GRILLE. SIZES ON DRAWINGS. COORDINATE WITH ARCHITECTURAL AND OWNER.

PLUMBING EQUIPMENT SCHEDULE:

TWH 1-5 GAS-FIRED TANKLESS WATER HEATERS

BRADFORD WHITE MODEL RTG-199HE-N 199,000 BTU INPUT, 0.95 EF RATING 120V, 75 MM (3") CONCENTRIC VENT. COORDINATE ELECTRICAL CHARACTERISTICS WITH THE ELECTRICAL CONTRACTOR.

SP-1, SP-2 SUMP PUMP

MYERS MODEL MS33 .25 KW AT 2.8 L/s (1/3 HP AT 45 GPM), 7.6 M (25 FOOT) SHUT-OFF HEAD, 3000 RPM, 115V, SINGLE PHASE, 60Hz, FLA=3.9. COORDINATE ELECTRICAL CHARACTERISTICS WITH THE ELECTRICAL CONTRACTOR.

SK-1 LAUNDRY SINK - ACCOMMODATION

COUNTER MOUNTED UNDER COUNTER SINK - SINGLE HANDLE FAUCET POINT OF USE THERMOSTATIC WATER MIXING VALVE KINDRED 'STEEL QUEEN' #05UA1917/8, 'STEEL QUEEN SERIES', UNDER COUNTER SINK. AMERICAN STANDARD #4175.100, 'COLONY SOFT', SINGLE HANDLE FAUCET, 8.3 LPM (2.2 GPM) OUTLET, AMERICAN STANDARD COLONY SOFT #4175.100 SINGLE HANDLE FAUCET, CHROME PLATED FINISH, CENTER HOLE ONLY, WASHERLESS CERAMIC DISC CARTRIDGE, 8.3 LPM (2.2 GPM) OUTLET, SWING SPOUT, 239 MM (9-7/16") PROJECTION REACH, METAL LEVER HANDLE, PULL-OUT SPRAY WITH ADJUSTABLE SPRAY PATTERN. AMERICAN STANDARD #605XTM1070, POINT OF USE THERMOSTATIC WATER MIXING VALVE, BUILT-IN CHECKS. MCGUIRE #LFH165LKN3, POLISHED BRASS FAUCET SUPPLIES. MCGUIRE #8903C, P-TRAP. FAUCET CAN BE MOUNTED WITH OR WITHOUT SUPPLIED ESCUTCHEON OR HANDSPRAY PROVIDE TEE, ADAPTORS AND FLEX. COPPER TUBING TO SUIT INSTALLATION. PROVIDE TEMPERED WATER TO HOT SIDE OF FAUCET.

SK-2 KITCHEN SINK - ACCOMMODATION

COUNTER MOUNTED UNDER COUNTER SINK - SINGLE HANDLE FAUCET POINT OF USE THERMOSTATIC WATER MIXING VALVE KINDRED 'STEEL QUEEN' #KSD1UA/9D, 'STEEL QUEEN SERIES', UNDER COUNTER SINK. AMERICAN STANDARD #4175.100, 'COLONY SOFT', SINGLE HANDLE FAUCET, 8.3 LPM (2.2 GPM) OUTLET, AMERICAN STANDARD COLONY SOFT #4175.100 SINGLE HANDLE FAUCET, CHROME PLATED FINISH, CENTER HOLE ONLY, WASHERLESS CERAMIC DISC CARTRIDGE, 8.3 LPM (2.2 GPM) OUTLET, SWING SPOUT, 239 MM (9-7/16") PROJECTION REACH, METAL LEVER HANDLE, PULL-OUT SPRAY WITH ADJUSTABLE SPRAY PATTERN. AMERICAN STANDARD #605XTM1070, POINT OF USE THERMOSTATIC WATER MIXING VALVE, BUILT-IN CHECKS. MCGUIRE #LFH165LKN3, POLISHED BRASS FAUCET SUPPLIES. MCGUIRE #8903C, P-TRAP. FAUCET CAN BE MOUNTED WITH OR WITHOUT SUPPLIED ESCUTCHEON OR HANDSPRAY PROVIDE TEE, ADAPTORS AND FLEX. COPPER TUBING TO SUIT INSTALLATION. PROVIDE TEMPERED WATER TO HOT SIDE OF FAUCET.

WMB-1 WASHING MACHINE BOX LAUNDRY

QATEY 38478 FIRE RATED WASHING MACHINE BOX, 1/4 TURN STOPS WITH BUILT-IN HAMMER ARRESTORS, 2" (50MM) DRAIN PIECE, FITS 2" (50MM) PVC OR ABS

ACCESSORIES LEGEND	
	PLUMBING FIXTURE (TYPE NOTED)
	SHOWER HEAD (TYPE NOTED)
	SERVICE OUTLET (TYPE NOTED)
	FLOOR DRAIN (TYPE NOTED)
	P-TRAP
	RUNNING TRAP
	WATER HAMMER ARRESTOR
	PRESSURE SWITCH
	GAS METER
	WATER METER
	PRESSURE GAUGE C/W SNUBBER VALVE
	THERMOMETER

161364 DFO GIMLI SEARCH AND RESCUE													ACCOMMODATION																
ASHRAE 62.1-2010 OUTDOOR AIR CALCULATION																													
													Ventilation/ Fresh Air				Exhaust												
													People Outdoor Air Rate, R _p		Area Outdoor Air Rate, R _a		ASHRAE Exhaust Rates												
Space	Area ft ²	Area m ²	# of occupants	Occupancy Density ft ² /occ	Occupancy Density m ² /occ	ASHRAE L/s/person	ASHRAE cfm/person	ASHRAE L/s/m ²	ASHRAE cfm/ft ²	Design cfm	Design L/s	Actual cfm	Actual L/s	cfm/unit	cfm/ft ²	# of units	Design cfm	Design L/s	Actual cfm	Actual L/s									
Bedrooms (4)	564	52.4	4	141.0	13.1	2.5	5.0	0.03	0.06	94	25	54	25																
Hallway	198	14.7						0.03	0.06	9	4	9	4																
Living/Dining	261	24.2	2	130.5	12.1	2.5	5.0	0.03	0.06	26	12	26	12																
Kitchen	118	11.0	2	59.0	5.5	2.5	5.0	0.03	0.06	17	8	17	8	50		1	50	24	50	24									
Utility	32	3.0						0.03	0.06	2	1	2	1	50		1	50	24	50	24									
Laundry	80	7.4						0.03	0.06	5	2	5	2	50		1	50	24	50	24									
Shower/Washroom	160	14.9						0.03	0.06	10	5	10	5	50		1	50	24	50	24									
	1373	sq ft	8	People						122	5	122	5				200	94	200	94									
Total Building O/A ->																													
HVAC EQUIPMENT													S/A	O/A															
F-1													1200	190															
HRV-1														200															
CFM													1200	390															
													Total Building O/A Required ->		122 cfm														
													Total Building E/A ->		200 cfm														
													Total Building O/A Provided ->		390 CFM														

161364 DFO GIMLI SEARCH AND RESCUE													OFFICE																
ASHRAE 62.1-2010 OUTDOOR AIR CALCULATION																													
													Ventilation/ Fresh Air				Exhaust												
													People Outdoor Air Rate, R _p		Area Outdoor Air Rate, R _a		ASHRAE Exhaust Rates												
Space	Area ft ²	Area m ²	# of occupants	Occupancy Density ft ² /occ	Occupancy Density m ² /occ	ASHRAE L/s/person	ASHRAE cfm/person	ASHRAE L/s/m ²	ASHRAE cfm/ft ²	Design cfm	Design L/s	Actual cfm	Actual L/s	cfm/unit	cfm/ft ²	# of units	Design cfm	Design L/s	Actual cfm	Actual L/s									
Offices	231	21.6	6	38.5	3.6	2.5	5.0	0.03	0.06	44	21	44	21																
Corridors	142	13.2						0.03	0.06	9	4	9	4																
Meeting Room	280	26.0	6	46.7	4.3	2.5	5.0	0.03	0.06	47	22	47	22																
Reception	187	17.4	2	93.5	8.7	2.5	5.0	0.03	0.06	21	10	21	10																
Gear Storage	41	3.8	1	41.0	3.8	2.5	5.0	0.06	0.12	10	5	10	5																
Drying Room	64	5.9	1	64.0	5.9	2.5	5.0	0.06	0.12	13	6	13	6	180		1	180	85	180	85									
IT Room	32	3.0						0.30	0.06	2	1	2	1				32	15	32	15									
Electrical Room	40	3.7						0.30	0.06	2	1	2	1				40	19	40	19									
Washroom	48	4.5												50		1	50	24	50	24									
Change Rooms	230	21.4	2	115.0	10.7	2.5	5.0	0.06	0.12	38	18	38	18	25		0.25	58	27	58	27									
Shower/Washroom	71	6.6															28	12	28	12									
	1366	sq ft	16	People						185	20	185	20				385	181	385	182									
Total Building O/A ->																													
HVAC EQUIPMENT													S/A	O/A															
F-2													1200	190															
HRV-2														200															
CFM													1200	390															
													Total Building O/A Required ->		185 cfm														
													Total Building E/A ->		385 cfm														
													Total Building O/A Provided ->		390 CFM														

PLUMBING EQUIPMENT SCHEDULE (CONT.):

SK-3 KITCHEN SINK - OFFICE

COUNTER MOUNTED UNDER COUNTER SINK - SINGLE HANDLE FAUCET POINT OF USE THERMOSTATIC WATER MIXING VALVE KINDRED 'STEEL QUEEN' #05UA1920/8, 'STEEL QUEEN SERIES', UNDER COUNTER SINK. AMERICAN STANDARD #4175.100, 'COLONY SOFT', SINGLE HANDLE FAUCET, 8.3 LPM (2.2 GPM) OUTLET, AMERICAN STANDARD, COLONY SOFT #4175.100 SINGLE HANDLE FAUCET, CHROME PLATED FINISH, CENTER HOLE ONLY, WASHERLESS CERAMIC DISC CARTRIDGE, 8.3 LPM (2.2 GPM) OUTLET, SWING SPOUT, 239 MM (9-7/16") PROJECTION REACH, METAL LEVER HANDLE, PULL-OUT SPRAY WITH ADJUSTABLE SPRAY PATTERN. AMERICAN STANDARD #605XTM1070, POINT OF USE THERMOSTATIC WATER MIXING VALVE, BUILT-IN CHECKS. MCGUIRE #LFH165LKN3, POLISHED BRASS FAUCET SUPPLIES. MCGUIRE #8903C, P-TRAP. FAUCET CAN BE MOUNTED WITH OR WITHOUT SUPPLIED ESCUTCHEON OR HANDSPRAY PROVIDE TEE, AD