

Seals

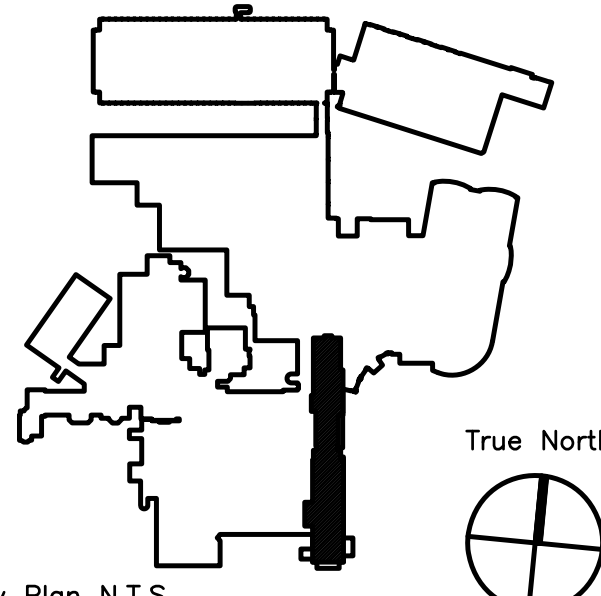
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Key Plan N.T.S. True North

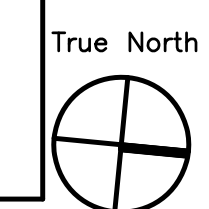
ADDENDUM#1	12/4/09	1
Revision	Date	No



MAINE MEDICAL CENTER
PAVILION 6 RENOVATIONS

MorrisSwitzer Project Number 28034
Date 11/19/09
Scale 1/8" = 1'-0"

SIXTH FLOOR PAVILIONS
"A" & "C" MECHANICAL
NOTES, LEGEND &
ABBREVIATIONS
3M0.0



SST	SATURATED SUCTION TEMPERATURE
TA	TRANSFER AIR
TD	TRANSFER AIR DUCT
TE	TOILET EXHAUST
TEF	TOILET EXHAUST FAN
TG	TRANSFER AIR GRILLE
TSTAT	THERMOSTAT
TYP	TYPICAL
UC	UNDERCUT DOOR
VAV	VARIABLE AIR VOLUME
VB	VACUUM BREAKER
VFD	VARIABLE FREQUENCY DRIVE
WB	WET BULB TEMPERATURE (°F)
WH	WALL HEATER
WM	WIRE MESH SCREEN

GENERAL NOTES

- MECHANICAL WORK IS INDICATED DIAGRAMMATICALLY. EXACT LOCATIONS OF ALL COMPONENTS ARE TO BE DETERMINED IN THE FIELD (SPACING SUBJECT TO ARCHITECT'S REVIEW AND APPROVAL) TO AVOID CONFLICT WITH OTHER TRADES AND EXISTING SITE CONDITIONS.
- THE CONTRACTOR SHALL VISIT AND CAREFULLY EXAMINE THE SITE TO IDENTIFY EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT THE WORK OF THIS SECTION. REPORT IN WRITING TO THE ARCHITECT CONDITIONS WHICH MIGHT ADVERSELY AFFECT WORK. NO EXTRA PAYMENT WILL BE PROVIDED FOR ADDITIONAL WORK CAUSED BY UNFAMILIARITY WITH SITE CONDITIONS THAT ARE VISIBLE OR READILY CONSTRUED BY AN EXPERIENCED OBSERVER.
- WORK REQUIRING INTERRUPTION OF BUILDING SERVICES SHALL BE CAREFULLY REVIEWED AND COORDINATED WITH THE OWNER TO MINIMIZE FREQUENCY AND DURATION OF SERVICE INTERRUPTIONS.
- REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION OF CEILING GRID, DIFFUSERS, AND GRILLES.
- ALL INSTALLATIONS SHALL PERMIT AND PROVIDE ACCESSIBILITY FOR SERVICE AND REPLACEMENT OF ALL NEW EQUIPMENT AND EXISTING EQUIPMENT IMPACTED BY THIS WORK.
- COORDINATE ALL ROOF OPENINGS WITH ARCHITECT AND STRUCTURAL ENGINEER.
- REFER TO STRUCTURAL FRAMING PLANS FOR EXACT LOCATION OF ALL ROOF MOUNTED EQUIPMENT.
- ALL MECHANICAL EQUIPMENT, PIPING, AND DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF GOVERNING LOCAL, STATE, AND FEDERAL SEISMIC CODES. PARTICULAR ATTENTION SHALL BE MADE TO VIBRATION ISOLATION, ANCHORING, AND BALANCING REQUIREMENTS.
- PROVIDE SMOKE DETECTORS AND SMOKE DAMPERS WHERE SHOWN ON THE MECHANICAL DRAWINGS. COORDINATE THE QUANTITY AND EXACT LOCATION WITH ACTUAL SHEET METAL SHOP DRAWINGS. TO BE PRODUCED BY MECHANICAL CONTRACTOR, AND APPROVED BY ENGINEER. PROVIDE SMOKE DETECTORS AND SMOKE DAMPERS IN BOTH SUPPLY AND RETURN DUCTS ON ALL AIR HANDLERS AS SHOWN IN MECHANICAL DRAWINGS.
- ALL DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH CODES AND STANDARDS SET FORTH IN NFPA, SMACNA, AND ASHRAE FOR MEDIUM AND LOW PRESSURE DUCTWORK SYSTEMS.
- PROVIDE MANUAL VOLUME DAMPERS, WITH ACCESS PANELS WHEN LOCATED ABOVE A SECURE CEILING, AT ALL BRANCH DUCTS FOR AIR BALANCING.
- RUN-OUTS TO RETURN AND EXHAUST REGISTERS, OR GRILLES ABOVE GYP BOARD CEILINGS, SHALL BE RIGID DUCTED. NO FLEXIBLE DUCT WORK SHALL BE ALLOWED ON RETURN OR EXHAUST REGISTERS.
- ALL DUCTS, PIPES, AND EQUIPMENT SHALL BE INDEPENDENTLY SUPPORTED FROM THE BUILDING STRUCTURE WITH PROPER ALLOWANCES FOR CONTRACTION, EXPANSION, AND VIBRATION ELIMINATION.
- PROVIDE 12"x10" ACCESS PANELS AT ALL RADIANT PANEL CONTROL VALVES. COORDINATE EXACT LOCATIONS WITH GENERAL CONTRACTOR.
- PROVIDE COPPER 1" RUN-OUTS TO HOT WATER REHEAT COILS UNLESS NOTED OTHERWISE.
- PROVIDE SWING JOINTS AT ALL BRANCH CONNECTIONS TO HYDROVIC EQUIPMENT.
- ROOM THERMOSTATS AND TEMPERATURE SENSORS SHALL BE MOUNTED 4'-6" ABOVE FINISHED FLOOR UNLESS OTHERWISE SHOWN OR DIRECTED.
- REFER TO SPECIFICATIONS FOR TYPE OF VALVE TO BE USED. VALVES ARE SHOWN ON PLANS FOR PLACEMENT ONLY.
- ALL DUCT DIMENSIONS SHOWN ARE INSIDE CLEAR FREE AREA REQUIRED.
- ALL DIFFUSER, REGISTER, AND GRILLE SIZES INDICATED ON FLOOR PLANS ARE NECK SIZE REQUIRED.
- ALL PIPING IS TO BE SLOPED A MINIMUM OF 1/4" PER HUNDRED FEET IN THE DIRECTION OF DRAINAGE.
- NOT ALL SYMBOLS OR ABBREVIATIONS ARE USED ON THIS PROJECT.
- COORDINATE ENTIRE INSTALLATION WITH THE WORK OF ALL OTHER TRADES PRIOR TO ANY FABRICATION OR INSTALLATIONS.

MECHANICAL DRAWING LIST

DRAWING No.	DRAWING TITLE
1M1.0	MECHANICAL PAVILION "A" INTERIM OCCUPANCY PLAN
2M1.0	MECHANICAL PAVILION "C" AND "D" INTERIM OCCUPANCY PLAN
3M0.0	MECHANICAL NOTES, LEGEND & ABBREVIATIONS
3M1.0	MECHANICAL DEMOLITION PLAN
3M1.1	MECHANICAL DEMOLITION ROOF PLAN
3M2.0	MECHANICAL NEW DUCTWORK PLAN
3M2.1	MECHANICAL NEW PIPING PLAN
3M2.2	MECHANICAL NEW WORK ROOF PLAN
3M3.0	MECHANICAL SCHEDULES
3M3.1	MECHANICAL SCHEDULES
3M4.0	MECHANICAL DETAILS I
3M4.1	MECHANICAL DETAILS II
3M4.2	MECHANICAL DETAILS III
3M5.0	MECHANICAL HYDRONIC SCHEMATIC & INTER. 4th/5th FLOOR PLAN

	VARIABLE AIR VOLUME BOX DESIGNATION
	MAXIMUM SUPPLY AIR VOLUME (CFM)
	MINIMUM SUPPLY AIR VOLUME (CFM)
	HEATING SUPPLY AIR VOLUME (CFM)
	HEATING CAPACITY (MBH)
	HEATING FLOW RATE (GPM)
	SUPPLY/RETURN/EXHAUST REGISTER OR GRILLE
	NECK SIZE OR LENGTH IF LINEAR DIFFUSER
	AIR VOLUME (CFM)
	QUANTITY
	SUPPLY DIFFUSER DESIGNATION AND BLOW PATTERN (#)
	NECK SIZE OR LENGTH IF LINEAR DIFFUSER
	AIR VOLUME (CFM)
	QUANTITY
	FIN TUBE RADIATION DESIGNATION
	ELEMENT LENGTH
	HEATING CAPACITY (MBH)
	EQUIPMENT DESIGNATION
	DRAWING REVISION NOTE
	DRAWING WORK NOTE
	DRAWING WORK NOTE
	DRAWING WORK NOTE
	CONNECT TO EXISTING
	CAP EXISTING
	LIMIT OF DEMOLITION
	REVISION CLOUD

EQUIPMENT TAGS

AC	COMPUTER ROOM AIR CONDITIONING UNIT
ACCU	AIR COOLED CONDENSING UNIT
AFS	AIR FLOW STATION
AHU	AIR HANDLING UNIT
ARC	AIR COOLED REFRIGERANT CONDENSER
B	BOILER
CH	CHILLER
EDU	CONDENSATE PUMP
EP	COOLING TOWER
QUH	CABINET UNIT HEATER (STEAM OR WATER)
CV	CONNECTOR
DC	DRY COOLER
DH	DUCT HEATING COIL
EB	ELECTRIC BASEBOARD
EC	EVAPORATIVE COOLER
EG	EXHAUST GRILLE
EH	EXHAUST HOOD
ER	EXHAUST REGISTER
F	FAN (GENERIC)
FB	FILTER BOX
FCU	FAN COIL UNIT
FP	FAN POWERED AIR TERMINAL
FTR	FIN TUBE RADIATION
H	HUMIDIFIER
HP	WATER SOURCE HEAT PUMP
HX	HEAT EXCHANGER
LU	LOUVER
MUA	GAS FIRED MAKE-UP AIR UNIT
P	PUMP
RG	RETURN GRILLE
RR	RETURN REGISTER
RH/H	RELIEF HOOD/INTAKE HOOD
RTU	ROOFTOP UNIT
SA	SOUND ATTENUATOR
SD	SUPPLY DIFFUSER
SG	SUPPLY GRILLE
SR	SUPPLY REGISTER
UH	UNIT HEATER
UV	UNIT VENTILATOR
V	VARIABLE AIR VOLUME BOX
VI	VIBRATION ISOLATION
WFS	WATER FLOW STATION

AIR DEVICE LEGEND

	SG	SIDEWALL SUPPLY REGISTER
	SD	SUPPLY DIFFUSER
	RG	RETURN GRILLE
	EG	EXHAUST REGISTER OR GRILLE
	EG/RG	SIDEWALL EXHAUST/RETURN REGISTER
	SD-7-4	SUPPLY AIR DIFFUSER 4-WAY BLOW
	SD-7-3	SUPPLY AIR DIFFUSER 3-WAY BLOW
	SD-7-2A	SUPPLY AIR DIFFUSER 2-WAY BLOW
	SD-7-2B	SUPPLY AIR DIFFUSER 2-WAY BLOW
	SD/R	SUPPLY DIFFUSER OR REGISTER BELOW DUCT
	RG	RETURN REGISTER OR GRILLE BELOW DUCT
	EG	EXHAUST REGISTER OR GRILLE BELOW DUCT
		SUPPLY AIR
		RETURN OR EXHAUST AIR
		UNDERCUT DOORWAY (BY G.C.)
		DOOR LOUVER (BY G.C.)

	RECTANGULAR DUCTWORK - FIRST DIMENSION IS SIDE SHOWN (N.)
	ROUND DUCTWORK - DIMENSION IS DUCT DIAMETER (N.)
	EXISTING DUCTWORK
	EXISTING DUCTWORK TO BE REMOVED
	RECTANGULAR SUPPLY DUCTWORK UP
	RECTANGULAR SUPPLY DUCTWORK DOWN
	RECTANGULAR RETURN/EXHAUST DUCTWORK UP
	RECTANGULAR RETURN/EXHAUST DUCTWORK DOWN
	ROUND DUCTWORK UP
	ROUND DUCTWORK DOWN
	BEAM PENETRATION BY DUCTWORK
	CAPPED DUCTWORK
	ACOUSTICALLY LINED DUCTWORK
	FLEXIBLE CONNECTION
	RECTANGULAR TRANSITION
	RECTANGULAR TO ROUND DUCTWORK TRANSITION
	MITERED ELBOW WITH TURNING VANES
	CHANGE OF ELEVATION UP IN DIRECTION OF AIRFLOW
	CHANGE OF ELEVATION DOWN IN DIRECTION OF AIRFLOW
	NEW SUPPLY DUCTWORK - SINGLE LINE
	NEW RETURN/EXHAUST DUCTWORK - SINGLE LINE
	EXISTING DUCTWORK - SINGLE LINE
	EXISTING DUCTWORK TO BE REMOVED - SINGLE LINE
	RECTANGULAR SUPPLY DUCTWORK UP - SINGLE LINE
	RECTANGULAR SUPPLY DUCTWORK DOWN - SINGLE LINE
	RECTANGULAR RETURN/EXHAUST DUCTWORK UP - SINGLE LINE
	RECTANGULAR RETURN/EXHAUST DUCTWORK DOWN - SINGLE LINE
	ROUND DUCTWORK UP - SINGLE LINE
	ROUND DUCTWORK DOWN - SINGLE LINE
	FLEXIBLE DUCTWORK - SINGLE LINE (MAX. LENGTH 5'-0")
	DUCTWORK TRANSITION - SINGLE LINE
	ACOUSTICALLY LINED DUCTWORK - SINGLE LINE
	1/2" WIRE MESH SCREEN (ON OPEN END DUCT)

	ACD	MOTORIZED OR AUTOMATIC CONTROL DAMPER
	SD	SMOKE DAMPER
	BD	BACK DRAFT DAMPER
	FD	FIRE DAMPER
	FS	FIRE & SMOKE DAMPER
	VD	VOLUME DAMPER

CONTROL SCHEMATIC LEGEND

	CO	CO SENSOR
	CO2	CO2 SENSOR
	HUM	HUMIDITY SENSOR
	TEMP	TEMPERATURE SENSOR
	SP	STATIC PRESSURE SENSOR
	DP	DIFFERENTIAL PRESSURE SENSOR
	HT/CT	HEAT/COOL THERMOSTAT
	RA	REVERSE ACTING THERMOSTAT
	SC	SWITCH CONTROLLER
	TC	TIME CLOCK CONTROLLER
	HUM	HUMIDITY SENSOR
	TEMP	TEMPERATURE SENSOR
	FS	FLOW SWITCH
	FR	FLOW RATE SENSOR
	DP	DIFFERENTIAL PRESSURE SENSOR
	DP-S	DIFFERENTIAL PRESSURE SWITCH
	HHL	HIGH HUMIDITY LIMIT SWITCH
	HSP	HIGH STATIC PRESSURE SWITCH, MANUAL RESET
	LSP	LOW STATIC PRESSURE SWITCH, MANUAL RESET
	FS	FREEZE STAT
	HLS	HIGH LIMIT THERMOSTAT
	ENT	ENTHALPY CONTROL
	AFF	AIR FLOW MEASURING STATION
	VFD	VARIABLE FREQUENCY DRIVE
	DP	DIFFERENTIAL PRESSURE SENSOR
	DS	DUCT SMOKE DETECTOR
	FS	FREEZE STAT
	FG	FILTER GAUGE
	CT	CAPILLARY TUBE
	NO	NORMALLY OPEN CONTACT
	NC	NORMALLY CLOSED CONTACT
	COOL	COOL
	CL	CONTROL LINE

	LPS	LOW PRESSURE STEAM
	LPC	LOW PRESSURE STEAM CONDENSATE
	MPS	MEDIUM PRESSURE STEAM
	MPC	MEDIUM PRESSURE STEAM CONDENSATE
	HPS	HIGH PRESSURE STEAM
	HPC	HIGH PRESSURE STEAM CONDENSATE
	HCS	HOT/CHILLED WATER SUPPLY
	HCR	HOT/CHILLED WATER RETURN
	HWS	HOT WATER SUPPLY
	HWR	HOT WATER RETURN
	CHS	CHILLED WATER SUPPLY
	CHR	CHILLED WATER RETURN
	CWS	CONDENSER WATER SUPPLY
	CWR	CONDENSER WATER RETURN
	GS	GLYCOL SUPPLY
	GR	GLYCOL RETURN
	RS	REFRIGERANT SUCTION
	RL	REFRIGERANT LIQUID
	RHG	REFRIGERANT HOT GAS
	D	A.C. CONDENSATE DRAIN
	MUW	MAKE UP WATER
	PC	PUMPED CONDENSATE
	CF	CHEMICAL FEED
	FOS	FUEL OIL SUPPLY
	FOR	FUEL OIL RETURN
	FOV	FUEL OIL VENT
	V	VENT
		EXISTING PIPING TO REMAIN
		PIPE OFF BOTTOM
		PIPE OFF TOP
		RUN-OUT OFF TOP
		RUN-OUT OFF BOTTOM
		BRANCH CONNECTION (DIRECTION TO BE FIELD DETERMINED)
		PIPE UP
		PIPE DOWN
		STUB UP TO TERMINAL
		DIRECTION OF FLOW
		PIPE BREAK
		DRAIN PIPE PITCH AND FLOW

VALVE LEGEND

	IS	ISOLATION VALVE REFER TO DETAILS AND SPEC.
	GV	GATE VALVE
	QLV	GLOBE VALVE
	BLV	BALL VALVE
	BFV	BUTTERFLY VALVE
	DV	DRAIN VALVE
	SCV	SWING CHECK VALVE
	LCV	LIFT CHECK VALVE
	BC	BALANCE COCK
	BV	BALANCE VALVE
	PRV	PRESSURE REDUCING VALVE
	RV	RELIEF VALVE
	ACV	TWO WAY AUTOMATIC CONTROL VALVE
	ACV	THREE WAY AUTOMATIC CONTROL VALVE
	SCV	SELF CONTAINED CONTROL VALVE
		UNION
	FLG	FLANGE
	PLS	PIPE LINE STRAINER
	BKS	BASKET STRAINER
	CRD	CONCENTRIC REDUCER (ENLARGER)
	ERD	ECCENTRIC REDUCER (ENLARGER)
	TRM	THERMOMETER
	PG	PRESSURE GAUGE
	FSW	FLOW SWITCH
	AAV	AUTOMATIC AIR VENT
	MAV	MANUAL AIR VENT
	FMS	FLOW MEASURE STATION
	AN	PIPE ANCHOR
	GO	PIPE GUIDE
	EC	EXPANSION COMPENSATOR
	PFC	PIPE FLEXIBLE CONNECTION
	TT	THERMOSTATIC STEAM TRAP
	F&TT	FLOAT & THERMOSTATIC STEAM TRAP
	BT	BUCKET STEAM TRAP
	PT	PRESSURE/TEMPERATURE PLUG
		PIPE CAP
		STRAINER WITH DRAIN VALVE AND CAP