

APPENDIX 1: LOCATION AND BRIEF DESCRIPTION OF CONTROLS, EXCLUDING BUILDING 200

LOCATION	EQUIPMENT	CONTROLS
BLDG 1, Veterinary Medical Unit A411. A411 (Supply)/ A403 (Exhaust)	100% OA Trane split DX Steam preheat F&B HW reheat; RH coils for zoning Humidification HW generator	JCI DDC Control Air compressor & air dryer in 411
BLDG 1, Veterinary Medical Unit A432. A432 (Supply)/ A440 (Exhaust)	Same as 411, except pkg McQuay chiller outside.	JCI DDC
BLDG 1, Veterinary Medical Unit B404. B404 (Supply)/ B405 (Exhaust)	Same as 411, except Trane air cooled chiller with remote bundle in room. Glycol heat recovery. Steam preheat, HW converter for RH zones.	JCI DDC
BLDG 1, Veterinary Medical Unit Cage washer / tunnel washer room	Dampers for tunnel washer are in ceiling, control air from A411-1 compressor - these are in contract and interlocked with the washer.	Pneumatics
BLDG 1, Veterinary Medical Unit B416	100%OA AHU, HW preheat, HW RH, Glycol CHW tapped off of B404 Chiller.	Pneumatics. One stat in office B429
BLDG 1, Veterinary Medical Unit C400A	100%OA Steam preheat F&B Steam Reheat. Trane chiller on ground, glycol CHW. EF for this system is in attic.4 rooms w/ electric duct heaters, Pneumatic stats: B444, B452, C409 (elec stat), B454A	JCI DDC Control air compressor (no dryer), No zone control, 9 averaging temp sensors. Several pneumatic t-stats that control steam radiators
BLDG 1, Veterinary Medical Unit	Remote PC workstations for Veterinary Medical Unit are located in B425-1 (w/printer), Bldg. 200, room C017, & Bldg. 2 AC Shop (w/printer).	These PCs are in contract
BLDG. 1, Research C436/C439	100%OA, Run around loop heat recovery Humidifier 2CHW, 2HW, 1 Heat Recovery Pumps HW HX Pneumatic VAV boxes	VFDs on supply and Exhaust. JCI DDC. Air Compressor / dryer
BLDG. 1, ROOM E156 (Telecommunications AHU)	Split DX AHU, hot/cold deck, 2 humidifiers	Barber Coleman DDC, 1 stat in F107, 2 stats in F204.

BLDG. 1, ROOM F254 (Microbiology)	Split DX AHU, steam reheat, return fan in room, 100% OA	JCI DDC, 3 zone reheats: F257, F246, F264
BLDG. 1, Room F456	Carrier VVT system, split DX, no heat	5 zones - F440(2 stats), F450 (master & stat), F440A
BLDG. 1, Room G146	Split DX Carrier VVT system, steam heat, humidifier	JCI DDC and VVT zones. Controller Zones - 142B (master), 140, 138, 137, 136, 133
BLDG. 1, ROOM G210 (Nuclear Medicine)	Pkg chiller on ground level. 100%OA AHU, steam F&B preheat. HW generator for reheats. EF in room.	Honeywell DDC 3 RH zones:G201, G206, G201B 2 VFDs – manual adjustment only.
BLDG. 1, ROOM G235	Split DX VAV AHU, steam heat, humidifier	JCI DDC. VFD. 5 zones - G228, G225, G223, G221, G220B (outside hall)
BLDG. 1, Room G421	VVT system, split DX, no heat	4 zones - G425(master), G415, G431, G435
BLDG. 1, Room G414	VVT system, split DX, no heat	6 zones - 414(master), 405, 408, 408E, 408G, 421
BLDG. 1, OUTPATIENT MODULES 1&2 D108A-1	In D108A-1. 2 AHU's, chw, reheat, glycol preheat. Hot/cold deck (only large AHU) 2 chillers, 1 cooling tower w/JCI DDC controls, AHU preheat glycol loop, reheat HW loop.	3 Pneumatic control panels for AHU's. 1-JCI DDC panel and associated controls included in this contract for cooling tower on lower roof. 1 Pneumatic control panel for HX loops. Air compressor and dryer.
BLDG. 1, OUTPATIENT MODULES 3&4 E112A-1	In E112A. 2 AHU's (Identical to Mod 1&2)	3 Pneumatic control panels
BLDG. 12 Basement	3 heat pumps, All JCI controls.	JCI DDC Controls
BLDG. 12 1st floor Mechanical Room	1 st . floor gym (1-AHU), Atrium (2-AHU's), All JCI DDC Controls and 1-VFD.	JCI DDC Controls
BLDG. 12 Attic Mechanical Room	2-AHU's, 4-VFD's, All JCI DDC Controls, VAV boxes.	JCI DDC Controls
BLDG. 13 Basement	4-heat Pumps, All JCI DDC Controls, AHU w/heat pump for elevator room.	JCI DDC Controls

BLDG. 13 1 st . floor Atrium	2-AHU's w/heat pumps, all JCI DDC Controls	JCI DDC Controls
BLDG.13 Attic	2-AHU's with DX, 4-VFD's, 1 AHU w/heat pump, all JCI DDC Controls.	JCI DDC Controls
BLDG. 217 Rm 1A132 Rm 1A121 Rm 1A114 Rm 2A24 Rm 2A20 Rm 2A5 Roof	1 Kitchen MAU 1 Glycol HX sys, 2 pumps Primary HW heating - HW baseboard – 2 pumps 2 chillers / 3 pumps 1 AHU 1 AHU 1 AHU 1 AHU 2 chillers, remote condensers / compressors HW HX - primary, 2nd, glycol - 2 pumps each 3 chw pumps 3 RTUs, each w/ pump doghouse and air cooled chiller, steam heat.	JCI DDC Controls Pneumatic controls 2 Pneumatic control panels 2 Pneumatic control panels Controls compressor and dryer 2 Pneumatic control panels Controls compressor and dryer 2 Pneumatic control panels 2 Pneumatic control panels Controls compressor and dryer Automated logic DDC control panel fro (2) RTUs serving Atriums PC workstation. VFDs on RTUs in contract
BUILDING 220	2 AHUs w/ VFDs serve 1 st /2 nd floors. Chiller rm, HW HX. Cooling tower on roof w/VFD. In warehouse, 2 heating only AHUs, plus 1 AHU by dock. (1) Packaged DX for Atrium on roof. wall stat, no heat.	Pneumatics/JCI/ – Robert Shaw. Air compressor / dryer in 2nd floor machine room
Building 221, 2nd floor penthouse	2 AHUs w/ 2 VFDs each. Carrier air cooled Chiller. Building has VAV boxes, baseboard heat.	American Auto Matrix DDC w/ PC workstation 1 Pneumatic control panel. Pneumatic controls for baseboards and VAVs.
Building 221, room C104	Control air compressor and dryer	Air compressor and dryer in C104
Building 113 Blind Rehab	Mech rm in PH - 1 AHU DX VAV. These ACCU's are in contract.	JCI DDC

Building 128 SCI	Mech rm in PH - 1 AHU DX VAV. These ACCU's are in the contract.	JCI DDC
Building 228 Psych	2 AHUs in bsmt, 2 in PH, Cooling tower, Radiant heat /cool panels, VAV boxes throughout.	American Automatrix/ JCI 2 VFD's per AHU, plus 1 for CH pumps = 9 total. Control air compressor + dryer in bsmt. VAV and rad panels are pneumatic 1
Bldg 229 - Veterinary Medical Unit (Quarantine building)	McQuay Chiller w/ glycol. 100%OA, steam preheat F&B. HW Reheat, radiant panel HW system. CHW pump in mech room. EF on roof. (Very similar to A432-1)	JCI DDC
Bldg. 1, room C400A	Pneumatic control air compressor and dryer	Pneumatic control air compressor and dryer for controls
Bldg. 1, room A411	Pneumatic control air compressor and dryer	Pneumatic control air compressor and dryer for controls in B416-1 and small surgery rooms
Bldg. 1, room C436	Pneumatic control air compressor and dryer	Pneumatic control air compressor and dryer for controls
Bldg. 1, room D108A	Pneumatic control air compressor and dryer	Pneumatic control air compressor and dryer for controls
Bldg. 217, room 1A114	Pneumatic control air compressor and dryer	Pneumatic control air compressor and dryer for controls
Bldg. 217, room 2A5	Pneumatic control air compressor and dryer	Pneumatic control air compressor and dryer for controls
Bldg. 220, room 211	Pneumatic control air compressor and dryer	Pneumatic control air compressor and dryer for controls
Bldg. 221, room C104	Pneumatic control air compressor and dryer	Pneumatic control air compressor and dryer for controls