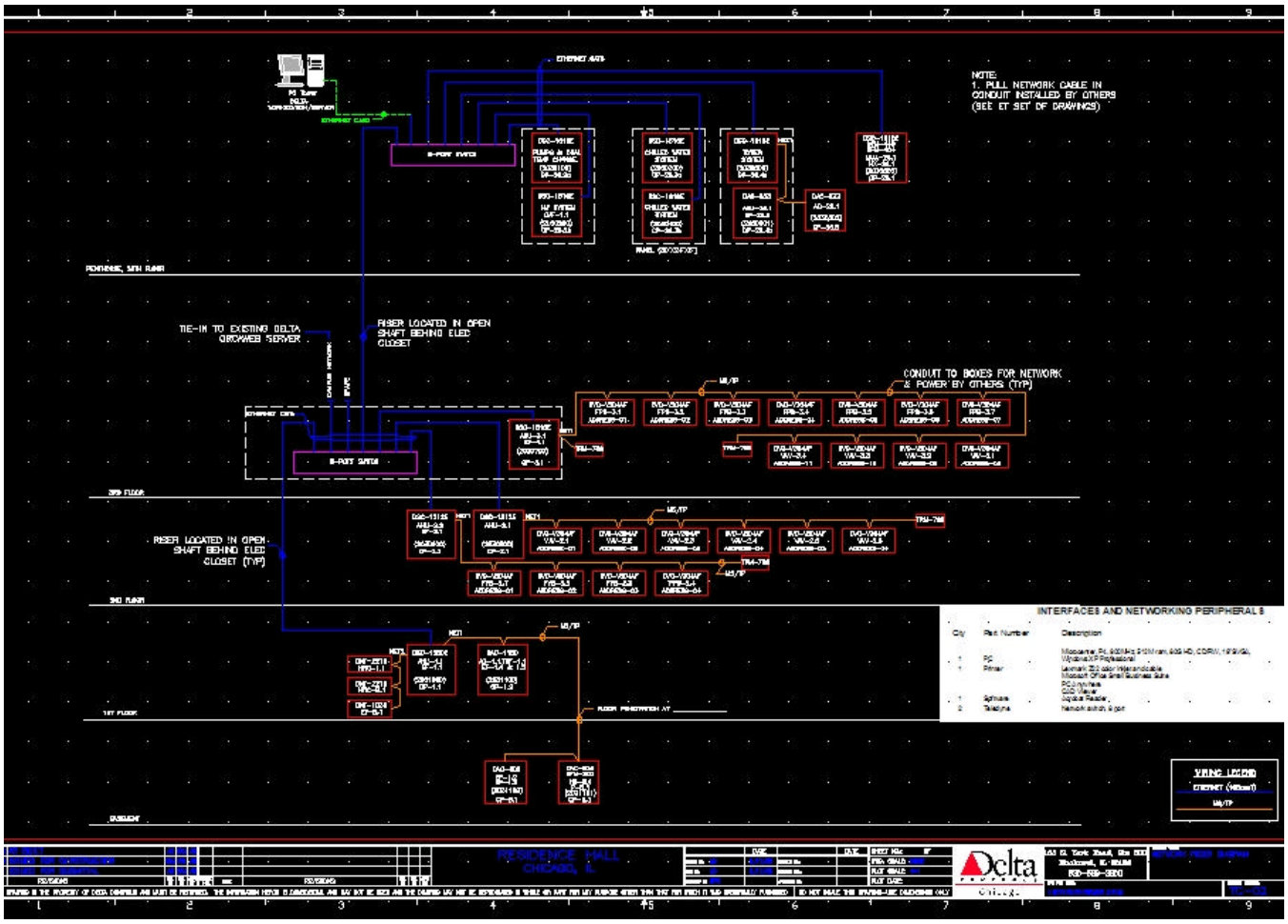
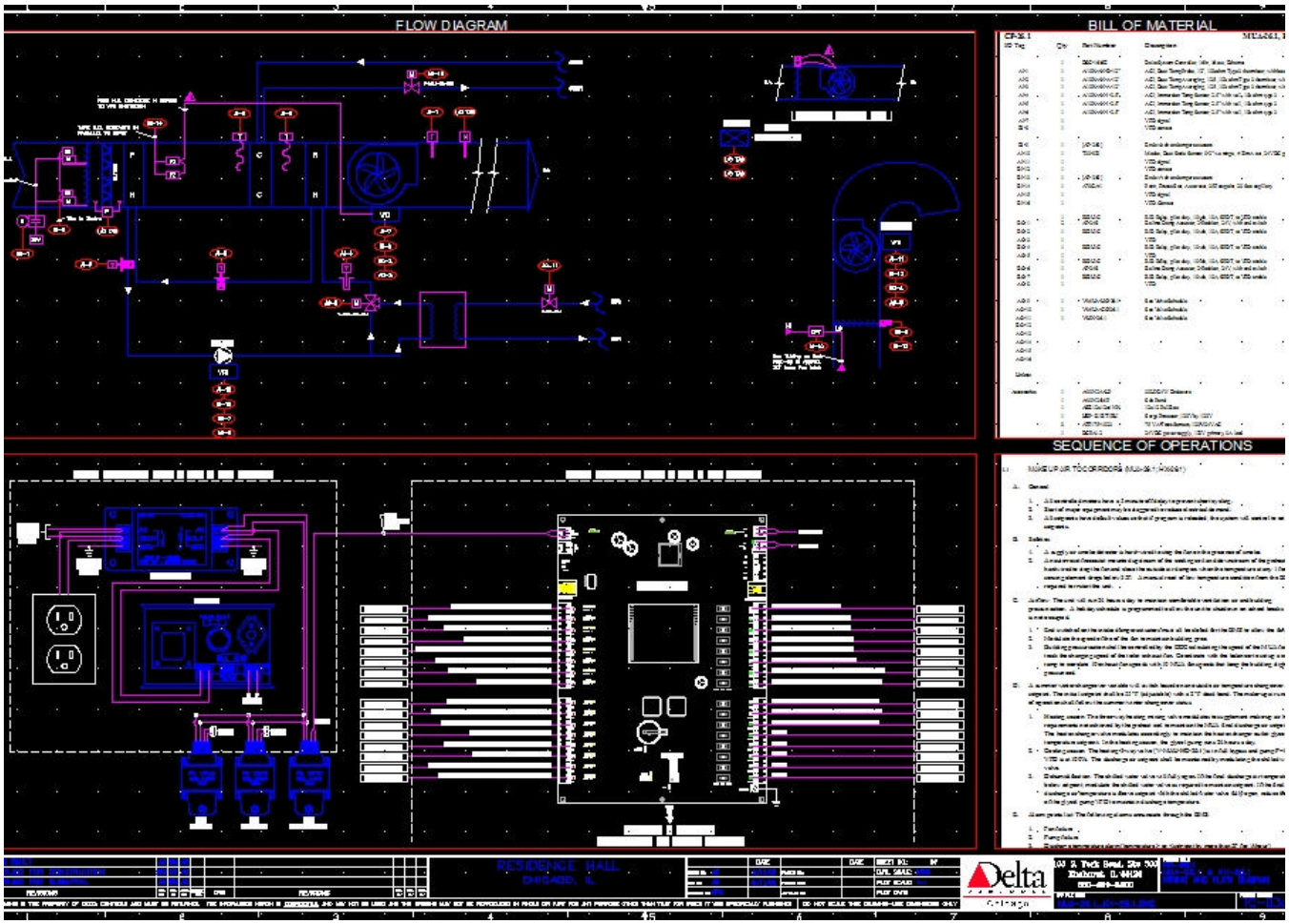
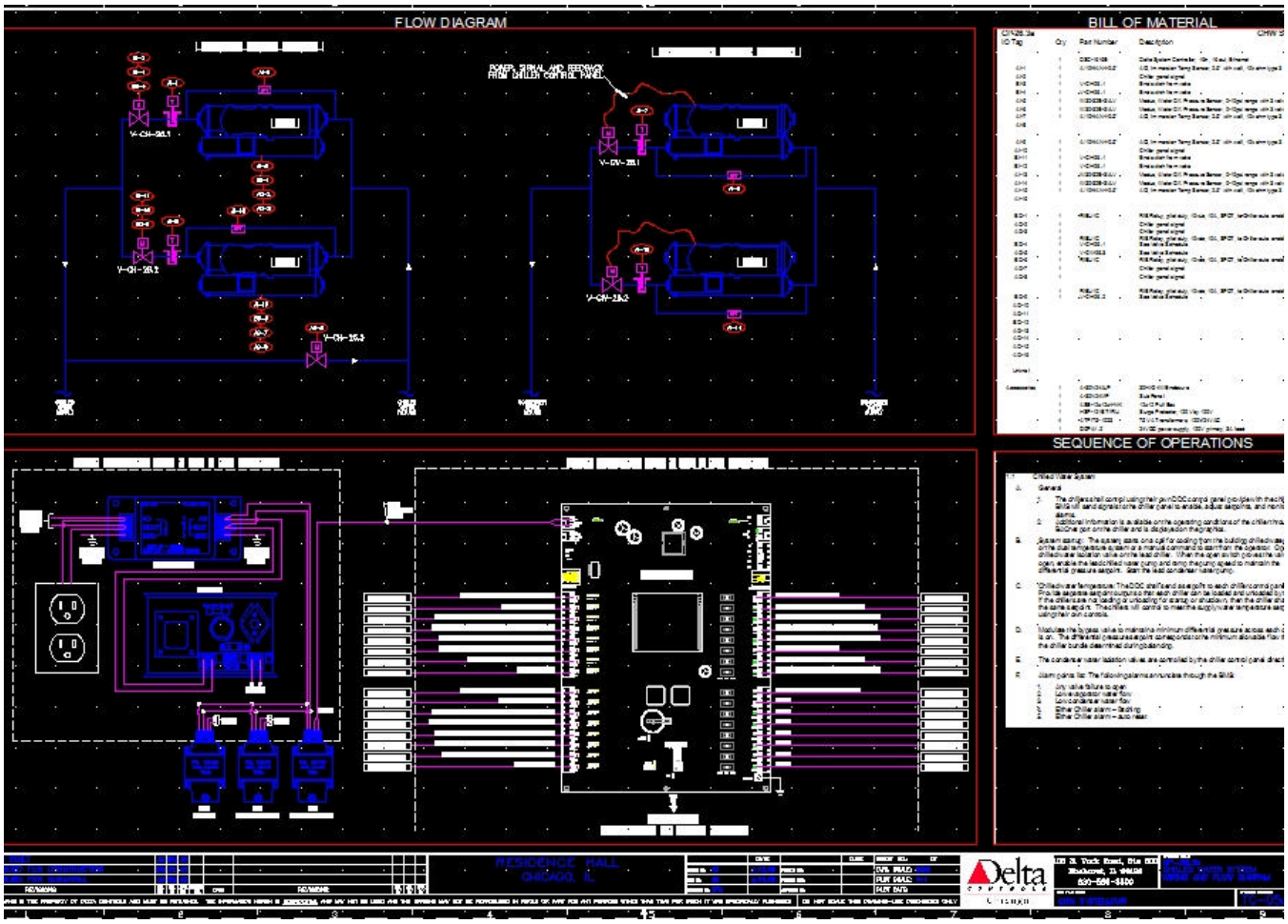
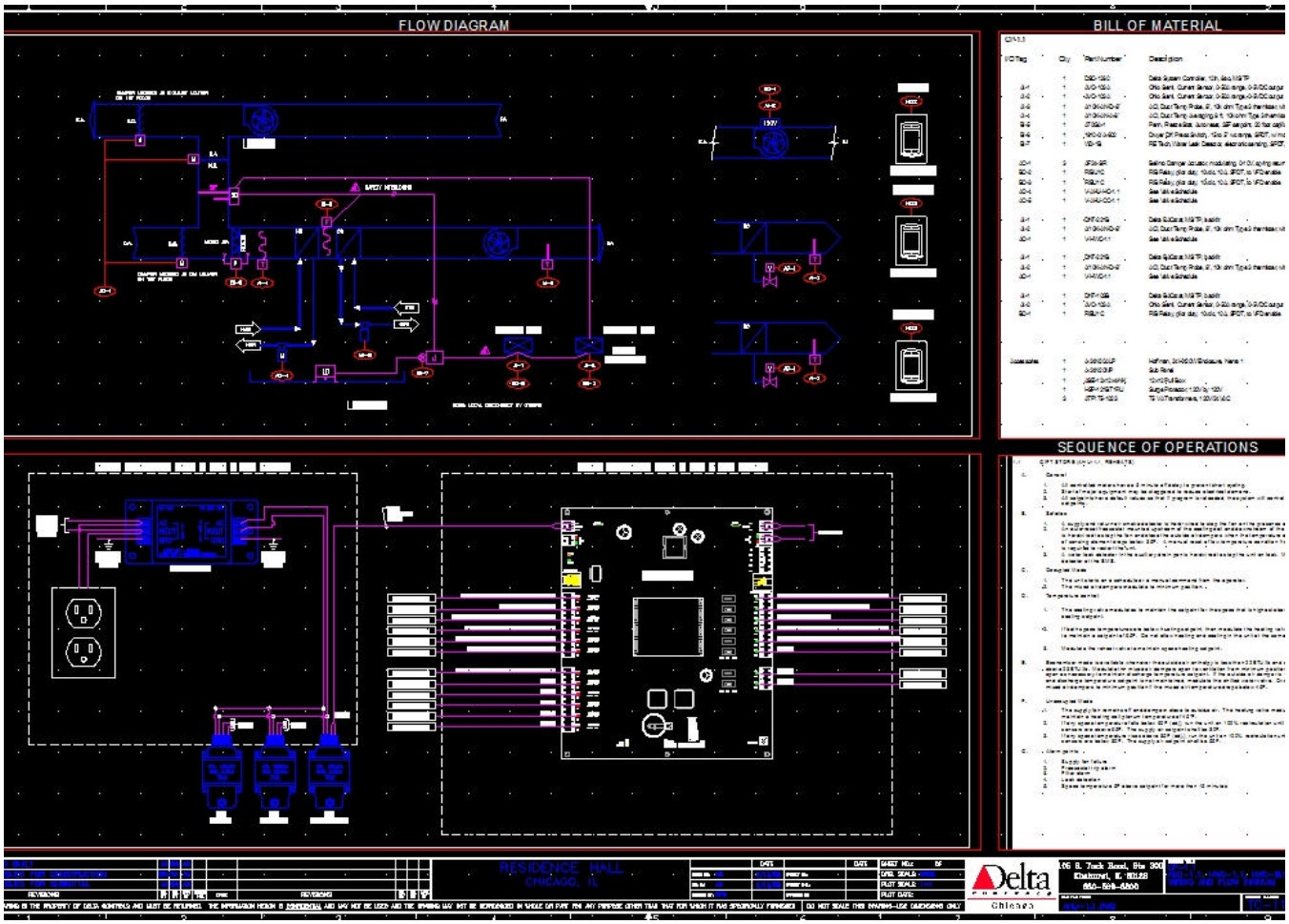

NOTE:
1. PULL NETWORK CABLE IN CONDUIT INSTALLED BY OTHERS (SEE ET SET OF DRAWINGS)
TIE-IN TO EXISTING DELTA GROWNEB SERVER
RISER LOCATED IN OPEN SHAFT BEHIND ELEC CLOSET
CONDUIT TO BOXES FOR NETWORK & POWER BY OTHERS (TYP)
RISER LOCATED IN OPEN SHAFT BEHIND ELEC CLOSET (TYP)
INTERFACES AND NETWORKING PERIPHERALS
WIRING LEGEND
RESIDENCE HALL
CHICAGO, IL
Delta


FLOW DIAGRAM
BILL OF MATERIAL
SEQUENCE OF OPERATIONS
RESIDENCE HALL
CHICAGO, IL
Delta


FLOW DIAGRAM
BILL OF MATERIAL
SEQUENCE OF OPERATIONS
RESIDENCE HALL
CHICAGO, IL
Delta
Chicago


FLOW DIAGRAM
BILL OF MATERIAL
SEQUENCE OF OPERATIONS
RESIDENCE HALL
CHICAGO, IL
Delta
Chicago

Valve Schedule

System							Valve											Actuator					
Tag	Qty	System Served	Flow	Units	Coil P.D. (psi)	Line Size	Design P.D. (psi)	Valve P.D. (psi)	Calc Cv	Valve Cv	Viv Size	Piping Configg	Type	Body Rating(psi)	Pwr Fail Pos.	Connection	Mfgr	Part No.	Mfgr.	Part No.	Signal	Required Close-off (psi)	Actual Close-off (psi)	Voltage
VA1	1	Dual temp changeover	250	gpm	-	5	2.00	0.29	247.49	647	4	2-way	Ball	150	in-place	Flanged	Flowserve	R52A-4	Siemens	6/2/1082-S	0-10VDC	25	50	24V
VA2	1	Dual temp changeover	250	gpm	-	5	2.00	0.29	247.49	647	4	2-way	Ball	150	in-place	Flanged	Flowserve	R52A-4	Siemens	6/2/1082-S	0-10VDC	25	50	24V
VA3	1	HWTemp Reset	250	gpm	-	5	4.00	4.00	17.500	175	3	2-way	Ball	150	in-place	Flanged	Flowserve	R52A-3	Siemens	6/2/1082	0-10VDC	25	50	24V
VCH-26.1	1	Chiller iso	292	gpm	2.60	4	2.00	0.20	206.45	647	4	2-way	Ball	150	in-place	Flanged	Flowserve	R52A-4	Siemens	6/2/1082-S	0-10VDC	25	50	24V
VCH-26.1	1	CHW head pressure	492	gpm	6.70	6	4.00	1.13	246.00	463	4	2-way	Ball	150	in-place	Flanged	Flowserve	R52A-4	Siemens	6/2/1082-P	0-10VDC	25	50	24V
VCH-26.2	1	Chiller iso	292	gpm	2.60	4	2.00	0.20	206.45	647	4	2-way	Ball	150	in-place	Flanged	Flowserve	R52A-4	Siemens	6/2/1082-S	0-10VDC	25	50	24V
VCH-26.2	1	CHW head pressure	492	gpm	6.70	6	4.00	1.13	246.00	463	4	2-way	Ball	150	in-place	Flanged	Flowserve	R52A-4	Siemens	6/2/1082-P	0-10VDC	25	50	24V
VCH-26.3	1	CHW Bypass Valve	292	gpm	2.60	4	4.00	3.33	146.00	160.00	4	2-way	Globe	125	in-place	Flanged	Siemens	GP2A-160	Siemens	6/2/C82.60J	0-10VDC	25	39	24V
VHX-26.1	1	WAU Glycol HX	150	gpm	6.00	3	4.00	5.67	75.00	63	2.5	2-way	Globe	125	Open	Flanged	Siemens	GP2A-63	Siemens	6/5/4202	0-10VDC	25	41	24V
WAUCC-26.1	1	WAU Cooling Coil	153	gpm	1.70	3	4.00	2.34	76.50	100	3	2-way	Globe	125	Closed	Flanged	Siemens	GP2A-100	Siemens	6/5/4202	0-10VDC	25	38	24V
WAUHC-26.1	1	WAU Heating Coil	150	gpm	6.00	3	4.00	5.67	75.00	63	2.5	2-way	Globe	125	Open	Flanged	Siemens	GP2A-63	Siemens	6/5/4202	0-10VDC	25	41	24V
UAHUCC-26.1	1	AHU26.1 Cooling Coil	11	gpm		1.25	4.00	2.21	5.50	7.4	0.75	2-way	Ball CCV	150	in-place	NPT	Belimo	02.150	Belimo	TR24-SR-T	0-10VDC	25	200	24V
UAHUHC-26.1	1	AHU26.1 Heating Coil	10	gpm		1.25	4.00	4.53	5.00	4.7	0.5	2-way	Ball CCV	150	Open	NPT	Belimo	02.120	Belimo	TR24-SR	0-10VDC	25	200	24V
VAC-26.1	1	AC-26.1 Heating Coil	6	gpm		1	4.00	4.00	3.00	3	0.5	2-way	Ball CCV	150	Open	NPT	Belimo	02.120	Belimo	TR24-SR	0-10VDC	25	200	24V
UAHUCC-2.1	1	AHU2.1 Cooling Coil	41	gpm		2	4.00	4.66	20.50	19.00	1	2-way	Ball CCV	150	in-place	NPT	Belimo	02.234	Belimo	LR24-SR	0-10VDC	25	200	24V
VAHUHC-2.1	1	AHU2.1 Heating Coil	22	gpm		1.5	4.00	4.54	11.00	10.00	1	2-way	Ball CCV	150	Open	NPT	Belimo	02.223	Belimo	LR24-SR	0-10VDC	25	200	24V
UAHUCC-2.1	1	AHU2.1 Cooling Coil	41	gpm		2	4.00	4.66	20.50	19.00	1	2-way	Ball CCV	150	in-place	NPT	Belimo	02.234	Belimo	LR24-SR	0-10VDC	25	200	24V
VAHUHC-2.1	1	AHU2.1 Heating Coil	34	gpm		2	4.00	3.20	17.00	19.00	1	2-way	Ball CCV	150	Open	NPT	Belimo	02.234	Belimo	LR24-SR	0-10VDC	25	200	24V
UAHUCC-2.2	1	AHU2.2 Cooling Coil	51	gpm		2	4.00	4.16	25.50	25.00	1.25	2-way	Ball CCV	150	in-place	NPT	Belimo	02.231	Belimo	NVB24-SR	0-10VDC	25	200	24V
VAHUHC-2.2	1	AHU2.2 Heating Coil	19	gpm		1.5	4.00	2.61	9.50	10.00	0.75	2-way	Ball CCV	150	Open	NPT	Belimo	02.192	Belimo	TR24-SR	0-10VDC	25	200	24V
UAHUCC-1.1	1	AHU-1.1 Cooling Coil	11	gpm		1.25	4.00	2.21	5.50	7.4	0.75	2-way	Ball CCV	150	in-place	NPT	Belimo	02.152	Belimo	TR24-SR-T	0-10VDC	25	200	24V
VHWC-1.1	1	1st Floor Gift Shop Reheat	5	gpm		1	4.00	2.75	2.50	3	0.5	2-way	Ball CCV	150	Open	NPT	Belimo	02.120	Belimo	TR24-SR	0-10VDC	25	200	24V
VHWC-B.1	1	Basement Gift Shop Reheat	4	gpm		1	4.00	4.42	2.00	2	0.5	2-way	Ball CCV	150	Open	NPT	Belimo	02.118	Belimo	TR24-SR	0-10VDC	25	200	24V
VAC-1.1	1	AC-1.1 Heating Coil	15	gpm		1.5	4.00	3.24	9.00	10	0.75	2-way	Ball CCV	150	Open	NPT	Belimo	02.192	Belimo	TR24-SR	0-10VDC	25	200	24V
VHXB.1	1	Floor slab HW loop HX	5	gpm		1	4.00	2.90	4.00	4.70	0.5	2-way	Ball CCV	150	Closed	NPT	Belimo	02.120	Belimo	TR24-SR	0-10VDC	25	200	24V
VFPB-XX	5	Refr Powered Bot Reheat Coils	4	gpm	0.50	0.75	2.00	1.75	2.83	3.00	0.5	2-way	Ball CCV	150	in-place	NPT	Belimo	02.120	Belimo	TR24-3-T	Floating	25	200	24V
VRAD-B.1	1	Radiation loop temp control	5	gpm	0.50	1	4.00	2.90	4.00	4.70	0.5	2-way	Ball CCV	150	Open	NPT	Belimo	02.120	Belimo	TR24SR	0-10VDC	25	200	24V
VRAD-1.1 typ	2	1st Floor radiation	5	gpm	0.50	1	4.00	2.75	2.50	3.00	0.5	2-way	Ball CCV	150	Open	NPT	Belimo	02.120	Belimo	TR24SR	0-10VDC	25	200	24V
VUH-26.1	1	Unit Heater	22	gpm	0.50	1.5	2.00	0.92	16.26	24.00	0.75	2-way	Ball	150	Open	NPT	Belimo	02.200	Belimo	TF24	On/Off	25	200	24V
VUH-26.2	1	Unit Heater	5	gpm	0.50	1	2.00	0.25	3.54	10.00	0.5	2-way	Ball	150	Open	NPT	Belimo	02.150	Belimo	TF24	On/Off	25	200	24V
VUH-26.3	1	Unit Heater	5	gpm	0.50	1	2.00	0.25	3.54	10.00	0.5	2-way	Ball	150	Open	NPT	Belimo	02.150	Belimo	TF24	On/Off	25	200	24V
VUH-1.1	1	Unit Heater	5	gpm	0.50	1	2.00	0.25	3.54	10.00	0.5	2-way	Ball	150	Open	NPT	Belimo	02.150	Belimo	TF24	On/Off	25	200	24V
VUH-1.2	1	Unit Heater	5	gpm	0.50	1	2.00	0.25	3.54	10.00	0.5	2-way	Ball	150	Open	NPT	Belimo	02.150	Belimo	TF24	On/Off	25	200	24V
VUH-1.3 to 1.5	6	Unit Heater	10	gpm	0.50	1.25	2.00	0.17	7.07	24.00	0.75	2-way	Ball	150	Open	NPT	Belimo	02.200	Belimo	TF24	On/Off	25	200	24V
VUH-B.1 to B.4	4	Unit Heater	1	gpm	0.50	0.75	2.00	0.01	0.71	10.00	0.5	2-way	Ball	150	Open	NPT	Belimo	02.150	Belimo	TF24	On/Off	25	200	24V

Comes with open and close end switches

Comes with pot on le edback 1000 ohm potentiometer.

Cv shown is at 75% open maximum for modulating control

RESIDENCE HALL
CHICAGO, IL

REVISIONS

Delta Controls

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630-668-8444

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