



## Contract Change Order Summary

Contract No.: ADSP015-090249

Change Order No.: Nine (9)

Date: May 20, 2016

State of Arizona  
State Procurement Office  
100 N. 15<sup>TH</sup> Avenue, Suite 201  
Phoenix, AZ 85007

### HVAC Maintenance, Repair and Emergency Services

1. In accordance with the Special Terms and Conditions, Section 5. Contract, 5.4 Term of Contract, the Contract's term is hereby extended for one (1) year from May 22, 2016 to May 21, 2017 with extended savings.
2. Pricing shall be changed to the following:

ITEM	LOCATION	PAST ANNUAL COST	NEW ANNUAL COST
4	Heating, Air Conditioning, and Ventilation Maintenance and Repair Services, Mechanical Equipment Maintenance for the <b>Arizona Exposition and State Fair in Phoenix, AZ</b>	\$ 87,386.14	<b>\$ 80,688.96</b>
5	Heating, Air Conditioning, and Ventilation Maintenance and Repair Services, Mechanical Equipment Maintenance for the <b>Industrial Commission of Arizona in Phoenix, AZ</b>	\$ 95,208.7	<b>\$ 93,346</b>
6	Heating, Air Conditioning, and Ventilation Maintenance and Repair Services, Mechanical Equipment Maintenance for the <b>Various State buildings in the capitol mall, Phoenix, AZ</b>	\$ 867,917.33	<b>\$ 760,400</b>
7	Heating, Air Conditioning, and Ventilation Maintenance and Repair Services, Mechanical Equipment Maintenance for the <b>Arizona State Health Lab in Phoenix, AZ</b>	\$ 122,458.97	<b>\$ 113,073.84</b>

3. Attachment A, Tab A, Equipment List, shall be amended to exclude the following line items of attached Attachment A: 14-15, 64-76, 103-104, 179, 321-322, 384-392, 405-407, 412-417, 485-488, 569-570, 658, 665-669, 719-724, 793-801, 822-826, 839-842, 945-948, 952, 984-1000, 1005, 1020-1027, 1034-1043, 1053-1056, 1074-1078, 1082, 1089-1090, 1094-1098, 1119-1122, 1162-1166, 1170-1194, 1200-1201, 1243-1257.
4. Attachment A, Tab F, Air moving Equipment shall be amended to exclude the following line items of attached Attachment A: 1-13, 26-27, 39, 44, 50-51, 62-63, 68-76, 87-89, 94-99, 104, 109-112, 117-118, 130, 135-136, 149-157, 163-167, 173-176, 191-194, 198, 203-206, 211-215, 222-226, 280-294.

**ALL OTHER REQUIREMENTS, SPECIFICATIONS, TERMS AND CONDITIONS REMAIN UNCHANGED.**

#### ACKNOWLEDGEMENT

**THIS CHANGE ORDER WAS PROCESSED AS A BILATERAL CHANGE ORDER. ALL CONTRACT SPECIFICATIONS, TERMS AND CONDITIONS, AND REQUIREMENTS REMAIN UNCHANGED. THIS DOCUMENT IS FOR INFORMATIONAL PURPOSES.**

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
	<b>001</b>	<b>1600 W Monroe Department of Revenue</b>						
		<b>CHILLERS</b>						
1	CH001B201	# 2	CENTRIFUGAL WATER CHILLER	YORK		B2 BASEMENT	-	-
2	CH001B202	#1	CENTRIFUGAL WATER CHILLER	YORK		B2 BASEMENT	-	-
3		<b>CHILLER PUMPS</b>						
4	CP001B201	# 1	B-2 CHILLER PUMP 1			B2 BASEMENT	-	-
5	CP001B202	# 2	B-2 CHILLER PUMP 2			B2 BASEMENT	-	-
6	CP001B203	# 3	B-2 BUILDING PUMP 3			B2 BASEMENT	-	-
7	CP001B204	# 4	B-2 BUILDING PUMP 4			B2 BASEMENT	-	-
8		<b>CONDENSER PUMPS</b>						
9	1510BFW10	#5	B-2 Condesnser Pump 5	Bell & Gossett	CO36512-02-A70	B2 BASEMENT	-	-
10	1510BFW10	#6	B-2 Condesnser Pump 6	Bell & Gossett	CO36512-01-A70	B2 BASEMENT	-	-
11		<b>COOLING TOWER</b>						
12	CT001B101		COOLING TOWER	CERAMIC	CT 1247	B1 BASEMENT	-	-
13		<b>COOLING TOWER FANS</b>						
14	FN001CT01	#1	FAN & MOTOR			-	-	-
15	FN001CT02	# 2	FAN & MOTOR			-	-	-
16		<b>ISOLATION VALVES</b>						
17	IV001CR01	CHWS	CHILLER # 1 ISOLATION VALVE - CHWS			B2 BASEMENT	EQUIPMENT ROOM	@ CHILLER
18	IV001CR02	CHWR	CHILLER # 1 ISOLATION VALVE - CHWR			B2 BASEMENT	EQUIPMENT ROOM	@ CHILLER
19	IV001CR03	CDWS	CHILLER # 1 ISOLATION VALVE - CDWS			B2 BASEMENT	EQUIPMENT ROOM	@ CHILLER
20	IV001CR04	CDWR	CHILLER # 1 ISOLATION VALVE - CDWR			B2 BASEMENT	EQUIPMENT ROOM	@ CHILLER
21	IV001CR05	CHWS	CHILLER # 2 ISOLATION VALVE - CHWS			B2 BASEMENT	EQUIPMENT ROOM	@ CHILLER
22	IV001CR06	CHWR	CHILLER # 2 ISOLATION VALVE - CHWR			B2 BASEMENT	EQUIPMENT ROOM	@ CHILLER
23	IV001CR07	CDWS	CHILLER # 2 ISOLATION VALVE - CDWS			B2 BASEMENT	EQUIPMENT ROOM	@ CHILLER
24	IV001CR08	CDWR	CHILLER # 2 ISOLATION VALVE - CDWR			B2 BASEMENT	EQUIPMENT ROOM	@ CHILLER
25	IV001CR09	CHW	CHW PUMP #1 ISOLATION VALVE - SUCTION			B2 BASEMENT	EQUIPMENT ROOM	@ PUMP
26	IV001CR10	CHW	CHW PUMP # 1 ISOLATION VALVE - DISCHARGE			B2 BASEMENT	EQUIPMENT ROOM	@ PUMP
27	IV001CR11	CHW	CHW PUMP #2 ISOLATION VALVE - SUCTION			B2 BASEMENT	EQUIPMENT ROOM	@ PUMP
28	IV001CR12	CHW	CHW PUMP #2 ISOLATION VALVE - DISCHARGE			B2 BASEMENT	EQUIPMENT ROOM	@ PUMP
29	IV001CR13	CHW	CHW PUMP #3 ISOLATION VALVE - SUCTION			B2 BASEMENT	EQUIPMENT ROOM	@ PUMP
30	IV001CR14	CHW	CHW PUMP #3 ISOLATION VALVE - DISCHARGE			B2 BASEMENT	EQUIPMENT ROOM	@ PUMP
31	IV001CR15	CHW	CHW PUMP #4 ISOLATION VALVE - SUCTION			B2 BASEMENT	EQUIPMENT ROOM	@ PUMP
32	IV001CR16	CHW	CHW PUMP #4 ISOLATION VALVE - DISCHARGE			B2 BASEMENT	EQUIPMENT ROOM	@ PUMP
33	IV001CR17	CDW	CDW PUMP #1 ISOLATION VALVE - SUCTION			B2 BASEMENT	EQUIPMENT ROOM	@ PUMP
34	IV001CR18	CDW	CDW PUMP #1 ISOLATION VALVE - DISCHARGE			B2 BASEMENT	EQUIPMENT ROOM	@ PUMP
35	IV001CR19	CDW	CDW PUMP #2 ISOLATION VALVE - SUCTION			B2 BASEMENT	EQUIPMENT ROOM	@ PUMP

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
36	IV001CR20	CDW	CDW PUMP #2 ISOLATION VALVE - DISCHARGE			B2 BASEMENT	EQUIPMENT ROOM	@ PUMP
37	IV001CR21	CDW	CDW PUMP #3 ISOLATION VALVE - SUCTION			B2 BASEMENT	EQUIPMENT ROOM	@ PUMP
38	IV001CR22	CDW	CDW PUMP #3 ISOLATION VALVE - DISCHARGE			B2 BASEMENT	EQUIPMENT ROOM	@ PUMP
39	IV001CR23	CDW	CDW PUMP #4 ISOLATION VALVE - SUCTION			B2 BASEMENT	EQUIPMENT ROOM	@ PUMP
40	IV001CR24	CDW	CDW PUMP #4 ISOLATION VALVE - DISCHARGE			B2 BASEMENT	EQUIPMENT ROOM	@ PUMP
41	IV001HX01	HX # 1	HX #1 ISOLATION VALVE - CHILLED WATER IN			B2 BASEMENT	EQUIPMENT ROOM	@ FLAT PLATE
42	IV001HX02	HX # 1	HX #1 ISOLATION VALVE - CHILLED WATER OUT			B2 BASEMENT	EQUIPMENT ROOM	@ FLAT PLATE
43	IV001HX03	HX # 2	HX #2 ISOLATION VALVE - CONDENSER WATER			B2 BASEMENT	EQUIPMENT ROOM	@ FLAT PLATE
44	IV001HX04	HX # 2	HX #2 ISOLATION VALVE - CONDENSER WATER			B2 BASEMENT	EQUIPMENT ROOM	@ FLAT PLATE
45	IV001HX05	HX # 2	HX #2 ISOLATION VALVE - CONDENSER WATER			B2 BASEMENT	EQUIPMENT ROOM	@ FLAT PLATE
46	IV001HX06	HX # 2	HX #2 ISOLATION VALVE - CONDENSER WATER			B2 BASEMENT	EQUIPMENT ROOM	@ FLAT PLATE
47			<b>FLAT PLATE HEAT EXCHANGERS</b>					
48	PF001B201		PLATE & FRAME HEAT EXCHANGER - BLDG	ALFA-LAVAL	30100-68448	B2 BASEMENT	-	-
49			<b>FLOW VALVES</b>					
50	FV009CT01		WATER LEVEL MAKE-UP VALVE	TOWER FLOW		RF ROOF	EAST	
51	FV009CT02		WATER LEVEL MAKE-UP VALVE	TOWER FLOW		RF ROOF	WEST	
52			<b>PNEUMATIC VALVES</b>					
53	PV001B201	# 9	FOR CLG TWR FAN #1			B2 BASEMENT	RM WEST OF CH RM	-
54	PV001B202	# 10	FOR CLG TWR FAN #2			B2 BASEMENT	RM WEST OF CH RM	-
55	PV001CH01	# 1	PNEUMATIC VALVES CHILLER #1 CHWR			B2 BASEMENT	-	-
56	PV001CH02	# 2	PNEUMATIC VALVES CHILLER #1 CDWS			B2 BASEMENT	-	-
57	PV001CH03	# 3	PNEUMATIC VALVES CHILLER #2 CHWR			B2 BASEMENT	-	-
58	PV001CH04	# 4	PNEUMATIC VALVES CHILLER #2 CDWS			B2 BASEMENT	-	-
59	PV001HX01	# 5	HX # 1 SYSTEM SELECT - CHWS (ABOVE CH 2)			B2 BASEMENT	-	-
60	PV001HX02	# 6	HX # 1 SYSTEM SELECT - CDWS (@ HX ABOVE PUMPS)			B2 BASEMENT	-	-
61	PV001HX03	# 7	HX # 2 CLNG WTR FROM COMP.RM (ABOVE PUMPS)			B2 BASEMENT	-	-
62	PV001HX04	# 8	HX # 2 CDW PUMPS SELECT (ABOVE PUMPS)			B2 BASEMENT	-	-
63			<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
64	VD0010101	# 4	VARIABLE FREQUENCY DRIVE - AHU #1	PARAMETRICS	8721 1053	01 FIRST FLOOR	-	-
65	VD0010201	# 5	VARIABLE FREQUENCY DRIVE - AHU #2	PARAMETRICS	8721 1053	02 SECOND FLOOR	-	-
66	VD0010301	# 6	VARIABLE FREQUENCY DRIVE - AHU #3	PARAMETRICS		03 THIRD FLOOR	-	-
67	VD0010401	# 7	VARIABLE FREQUENCY DRIVE - AHU #4	PARAMETRICS		04 FOURTH FLOOR	-	-
68	VD0010501	# 8	VARIABLE FREQUENCY DRIVE - AHU #5	PARAMETRICS		05 FIFTH FLOOR	-	-
69	VD0010601	# 9	VARIABLE FREQUENCY DRIVE - AHU #6	PARAMETRICS		06 SIXTH FLOOR	-	-
70	VD0010701	# 10	VARIABLE FREQUENCY DRIVE - AHU #7	PARAMETRICS		07 SEVENTH FLOOR	-	-
71	VD0010801	# 11	VARIABLE FREQUENCY DRIVE - AHU #8	PARAMETRICS		08 EIGHTH FLOOR	-	-

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
72	VD0010802	# 13	VARIABLE FREQUENCY DRIVE - MAKEUP AIR	ABB		08 EIGHTH FLOOR	-	-
73	VD0010901	# 12	VARIABLE FREQUENCY DRIVE - AHU #9	PARAMETRICS	8720 1034	09 NINTH FLOOR	-	-
74	VD0010902	# 14	VARIABLE FREQUENCY DRIVE - BOLD EXHAUST FAN	PARAMETRICS	8720 1034	09 NINTH FLOOR	-	-
75	VD001B201	# 2	VARIABLE FREQUENCY DRIVE - AHU B-1	PARAMETRICS	8721 1046	B2 BASEMENT	-	-
76	VD001B202	# 3	VARIABLE FREQUENCY DRIVE - AHU B-2	PARAMETRICS		B2 BASEMENT	-	-
77	VD001B203		VARIABLE FREQUENCY DRIVE - CHILLER PUMP 1	ABB	5063700550	B2 BASEMENT	-	-
78	VD001B204		VARIABLE FREQUENCY DRIVE - CHILLER PUMP 2	ABB	5063700539	B2 BASEMENT	-	-
79	VD001B205		VARIABLE FREQUENCY DRIVE - BLDG PUMP 3	ABB	2069100240	B2 BASEMENT	-	-
80	VD001B206		VARIABLE FREQUENCY DRIVE - BLDG PUMP 4	ABB	2070100414	B2 BASEMENT	-	-
81	VD001B207		VARIABLE FREQUENCY DRIVE - CONDENSOR PUMP 5	ABB	2065102633	B2 BASEMENT	-	-
82	VD001B208		VARIABLE FREQUENCY DRIVE - CONDENSOR PUMP 6	ABB	2070100462	B2 BASEMENT	-	-
83	ACH550-BCR-031A-4+B058		VFD E.TOWER FAN	ABB	2111500225	B2 BASEMENT		
84	ACH550-BCR-031A-4+B058		VFD W.TOWER FAN	ABB	2111500306	B2 BASEMENT		
85		<u>WATER TREATMENT</u>						
86	WT001CR01		WATER TREATMENT FOR COOLING TOWER			-	-	-
87	WT001CR02		WATER TREATMENT FOR CLOSED LOOP SYSTEM			-	-	-
88	WT001CRBM		CHEMICAL SYSTEM BLEED-OFF METER		46299994	-	-	-
89	WT001CRIM		CITY WATER INJECTION METER		45329885	-	-	-
90								
91	<b>002</b>	<b><u>1818 W Adams DHS Vital Records</u></b>						
92								
93		<u>CHILLERS</u>						
94	CH0020101		AIR COOLED CHILLER	YORK		OS OUTSIDE	-	-
95		<u>CHILLER PUMPS</u>						
96	CP0020101		CHILL WATER PUMP & MOTOR	BELL&GOSSETT	UNAVAILABLE	01 FIRST FLOOR	-	-
97		<u>ISOLATION VALVES</u>						
98	IV002CH01	CHWS	CHILLER ISOLATION VALVE - CHWS - (OUT)			OS OUTSIDE	@ CHILLER	-
99								
100	<b>003</b>	<b><u>1740 W Adams Department of Health Services</u></b>						
101								
102		<u>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</u>						
103	ACH550-BCR-157A-4		VFD SUPPLY FAN	ABB	2094800983	PENTHOUSE		
104	ACH550-VCR-072A-4		VFD RETURN FAN	ABB	2094902462	PENTHOUSE		
105								
106	<b>004</b>	<b><u>1740M West Adams Health Services Mechanical Building</u></b>						
107								
108		<u>CHILLERS</u>						
109	CH0040101	# 1	TRANE-ROTARY-SCREW	TRANE	V95A05482	01 FIRST FLOOR	-	-
110	CH0040102	# 2	TRANE-ROTARY-SCREW	TRANE	V95A05481	01 FIRST FLOOR	-	-
111		<u>CHILLER PUMPS</u>						

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
112	CP0040101	MAIN CHW	CHILLED WATER PUMP & MOTOR (PRIMARY)	NONE	NONE	01 FIRST FLOOR	-	-
113	CP0040102	H.S. CHW	CHILLED WATER PUMP & MOTOR (SECONDARY)	NONE	NONE	01 FIRST FLOOR	-	-
114	CP0040103	W.A. CHW	CHILLED WATER PUMP & MOTOR (SECONDARY)	BELL&GOSSETT	1764754	01 FIRST FLOOR	-	-
115	CP0040104	E.A. CHW	CHILLED WATER PUMP & MOTOR (SECONDARY)	PACIFIC PUMP	GNT01087F	01 FIRST FLOOR	-	-
116			<b>COOLING TOWERS</b>					
117	CT0040101	# 1	COOLING TOWER - EAST	CERAMIC	NONE	RF ROOF	-	-
118	CT0040102	# 2	COOLING TOWER -WEST	CERAMIC	NONE	01 FIRST FLOOR	ENGINE ROOM	WEST
119			<b>CONDENSER PUMPS</b>					
120	DP004CT01	# 1	CONDENSOR PUMP-EAST TOWER	GE	RPD9183MN013	-	-	-
121	DP004CT02	# 2	CONDENSOR PUMP-WEST TOWER	GE	RPP9183MN013	-	-	-
122			<b>COOLING TOWER FAN &amp; MOTOR</b>					
123	FN004CT01	# 1	FAN & MOTOR			01 FIRST FLOOR	-	-
124	FN004CT02	# 2	FAN & MOTOR			01 FIRST FLOOR	-	-
125			<b>FLOW VALVES</b>					
126	FV004CT01		WATER LEVEL MAKE-UP VALVE	TOWER FLOW		-	-	-
127	FV004CT02		WATER LEVEL MAKE-UP VALVE	TOWER FLOW		-	-	-
128			<b>ISOLATION VALVES</b>					
129	IV004CR01	CHWS	CHILLER # 1 ISOLATION VALVE - CHWS - 1ST VALVE			01 FIRST FLOOR	CEILING	-
130	IV004CR02	CHWR	CHILLER # 1 ISOLATION VALVE - CHWR			01 FIRST FLOOR	@ CHILLER	-
131	IV004CR03	CDWS	CHILLER # 1 ISOLATION VALVE - CDWS			01 FIRST FLOOR	@ CHILLER	-
132	IV004CR04	CDWR	CHILLER # 1 ISOLATION VALVE - CDWR			01 FIRST FLOOR	@ CHILLER	-
133	IV004CR05	CHWS	CHILLER # 2 ISOLATION VALVE - CHWS			01 FIRST FLOOR	@ CHILLER	-
134	IV004CR06	CDWR	CHILLER # 1 ISOLATION VALVE - CDWR			01 FIRST FLOOR	@ CHILLER	-
135	IV004CR07	CDWS	CHILLER # 2 ISOLATION VALVE - CDWS			01 FIRST FLOOR	@ CHILLER	-
136	IV004CR08	CDWR	CHILLER # 2 ISOLATION VALVE - CDWR			01 FIRST FLOOR	@ CHILLER	-
137	IV004CR09	CHWR	CH 1 & 2 CHWR TIE - CHAIN PULL OPERATED			01 FIRST FLOOR	CEILING	-
138	IV004CR10	CHW	MAIN CH PUMP ISOLATION VALVE - SUCTION			01 FIRST FLOOR	@ PUMP	-
139	IV004CR11	CHW	MAIN CH PUMP ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	@ PUMP	-
140	IV004CR12	CDW	CDW PUMP # 1 ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	@ PUMP	-
141	IV004CR13	CDW	CDW PUMP #2 ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	@ PUMP	@ COOLING TOWER
142	IV004CR14	CHW HEALTH SERV BLD	CHW PUMP #2 ISOLATION VALVE - SUCTION			01 FIRST FLOOR	@ PUMP	-
143	IV004CR15	CHW	CHW PUMP #2 ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	@ PUMP	-
144	IV004CR16	CHW WEST ANNEX BLD	CHW PUMP #3 ISOLATION VALVE - SUCTION			01 FIRST FLOOR	@ PUMP	-
145	IV004CR17	CHW	CHW PUMP #3 ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	@ PUMP	-

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
146	IV004CR18	CHW EAST ANNEX BLD	CHW PUMP #4 ISOLATION VALVE - SUCTION			01 FIRST FLOOR	@ PUMP	-
147	IV004CR19	CHW	CHW PUMP #4 ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	@ PUMP	-
148	IV004HX01	HX	HX ISOLATION VALVE - CHWS (HS OUT)			01 FIRST FLOOR	CEILING	BETWEEN CH#1 & #2
149	IV004HX02	HX	HX ISOLATION VALVE - CHWR (HS IN)			01 FIRST FLOOR	CEILING	@WEST WALL
150	IV004HX03	HX	HX ISOLATION VALVE - CDWS (HS OUT)			01 FIRST FLOOR	WEST WALL	-
151	IV004HX04	HX	HX ISOLATION VALVE - CDWR (HS IN)			01 FIRST FLOOR	WEST WALL	-
152			<b>FLAT PLATE HEAT EXCHANGERS</b>					
153	PF0040101	HX-3	PLATE & FRAME	MUELLER	N/A	01 FIRST FLOOR	-	-
154			<b>PNEUMATIC VALVES</b>					
155	PV004CH01	# 1	PNEUMATIC VALVES CHILLER #1 CHWR			-	-	-
156	PV004CH02	# 2	PNEUMATIC VALVES CHILLER #1 CDWR			-	-	-
157	PV004CH03	# 3	PNEUMATIC VALVES CHILLER #2 CHWR			01 FIRST FLOOR	CEILING	BETWEEN CH#1 & #2
158	PV004CH04	# 4	PNEUMATIC VALVES CHILLER #2 CDWR			-	-	-
159	PV004HX01	# 5	HX SYSTEM SELECT - CHW			01 FIRST FLOOR	CEILING	BETWEEN CH#1 & #2
160	PV004HX02	# 6	HX SYSTEM SELECT - CDW			01 FIRST FLOOR	WEST WALL	-
161			<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
162	ACH501-02004-00P2		VFD W. TOWER FAN	ABB	290513	CHILLER ROOM		
163	ACH501-02004-00P2		VFD E. TOWER FAN	ABB	290514	CHILLER ROOM		
164			<b>WATER TREATMENT</b>					
165	WT004CR01	CDW	WATER TREATMENT FOR COOLING TOWER #1			01 FIRST FLOOR	EAST WALL	-
166	WT004CR02	CDW	WATER TREATMENT FOR COOLING TOWER #2			01 FIRST FLOOR	WEST WALL	-
167	WT004CR03	CHILLED WATER	WATER TREATMENT FOR CLOSED LOOP SYSTEM			-	-	-
168	WT004CRBM		CHEMICAL SYSTEM BLEED-OFF METER		46299995	-	-	-
169	WT004CRIM		CITY WATER INJECTION METER		46250053	-	-	-
170								
171	<b>006</b>		<b>1688 W Adams Department of Agriculture</b>					
172								
173			<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
174	VD006B101		VSD CONTROLLER/INVERTER FOR BLDG AHU FAN	ABB		B1 BASEMENT	AIR HANDLER ROOM	-
175								
176	<b>007</b>		<b>1624 W Adams Department of Juvenile Corrections</b>					
177								
178			<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
179	VD007RF01		VSD CONTROLLER/INVERTER FOR BLDG AHU FAN	ABB		RF ROOF	-	-
180								
181	<b>008</b>		<b>1616 W Adams State Land Department</b>					
182								
183			<b>CHILLERS</b>					
184	CH0080101		SCROLL CHILLER	YORK	RLSM020742	01 FIRST FLOOR	EAST MECH RM	-
185	CH008B101	# 1	ROTARY CHILLER -CENTRAVAC SERIES R	TRANE	U95A05475	B1 BASEMENT	EQUIPMENT RM	-
186		# 2	ROTARY CHILLER -CENTRAVAC SERIES R	TRANE	U13E062326	B1 BASEMENT	EQUIPMENT RM	-
187			<b>CHILLER PUMPS</b>					
188	CP0080101		CHILLED WATER PUMP & MOTOR	ARMSTRONG	92749	01 FIRST FLOOR	EAST MECH RM	-
189	CP008B101		CHILLED WATER PUMP & MOTOR	PACIFIC PUMP	SRP10184-4-7	B1 BASEMENT	-	-

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
190		<b>COOLING TOWERS</b>						
191	CT0080501		COOLING TOWER #1	B.A.C.	U013372901MAD	PH PENTHOUSE	-	-
192	CT008RF01		COOLING TOWER #2 (EAST TOWER)	EVAPCO	8340998	RF ROOF	LOWER ROOF	NORTH SIDE
193		<b>CONDENSER PUMPS</b>						
194	DP0080101		CONDENSER WATER PUMP & MOTOR	ARMSTRONG	105440	01 FIRST FLOOR	EAST MECH RM	-
195	DP008B101		CONDENSER WATER PUMP & MOTOR	AURORA PUMP	N/A	B1 BASEMENT	-	-
196		<b>COOLING TOWER FAN &amp; MOTOR</b>						
197	FN008CT01	# 1	FAN & MOTOR	B.A.C.		PH PENTHOUSE	-	-
198	FN008CT02	# 2	FAN & MOTOR			RF ROOF	LOWER ROOF	NORTH SIDE
199		<b>FLOW VALVES</b>						
200	FV008CT01		WATER LEVEL MAKE-UP VALVE			RF ROOF	LOWER ROOF	NORTH SIDE
201	FV008CT02		WATER LEVEL MAKE-UP VALVE			PH PENTHOUSE	-	-
202		<b>ISOLATION VALVES</b>						
203	IV008CH01	CHWS	CHILLER ISOLATION VALVE - CHWS			01 FIRST FLOOR	EAST MECH RM	@ CHILLER
204	IV008CH02	CHWR	CHILLER ISOLATION VALVE - CHWR			01 FIRST FLOOR	EAST MECH RM	@ CHILLER
205	IV008CH03	CDWS	CHILLER ISOLATION VALVE			01 FIRST FLOOR	EAST MECH RM	@ CHILLER
206	IV008CH04	CDWR	CHILLER ISOLATION VALVE			01 FIRST FLOOR	EAST MECH RM	@ CHILLER
207	IV008CH05	CHW	CHW PUMP ISOLATION VALVE - SUCTION			01 FIRST FLOOR	EAST MECH RM	@ PUMP
208	IV008CH06	CHW	CHW PUMP ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	EAST MECH RM	@ PUMP
209	IV008CH07	CDW	CDW PUMP ISOLATION VALVE - SUCTION			01 FIRST FLOOR	EAST MECH RM	@ PUMP
210	IV008CH08		CDW PUMP ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	EAST MECH RM	@ PUMP
211	IV008CR01	CHWS	CHILLER #1 ISOLATION VALVE			B1 BASEMENT	EQUIPMENT RM	@ CHILLER #1
212	IV008CR02	CHWR	CHILLER #1 ISOLATION VALVE			B1 BASEMENT	EQUIPMENT RM	@ CHILLER #1
213	IV008CR03	CDWS	CHILLER #1 ISOLATION VALVE			B1 BASEMENT	EQUIPMENT RM	@ CHILLER #1
214	IV008CR04	CDWR	CHILLER #1 ISOLATION VALVE			B1 BASEMENT	EQUIPMENT RM	@ CHILLER #1
215	IV008CR05	CHW	CHW PUMP #1 ISOLATION VALVE - SUCTION			B1 BASEMENT	EQUIPMENT RM	@ PUMP
216	IV008CR06	CHW	CHW PUMP #1 ISOLATION VALVE - DISCHARGE			B1 BASEMENT	EQUIPMENT RM	@ PUMP
217	IV008CR07	CDW	CDW PUMP #1 ISOLATION VALVE - SUCTION			B1 BASEMENT	EQUIPMENT RM	@ PUMP
218	IV008CR08	CDW	CDW PUMP #1 ISOLATION VALVE - DISCHARGE			B1 BASEMENT	EQUIPMENT RM	@ PUMP
219		<b>FLAT PLATE HEAT EXCHANGERS</b>						
220	PF008B101		PLATE & FRAME EXCHANGER	APV CREPACO	76062	B1 BASEMENT	EQUIPMENT RM	-
221		<b>PNEUMATIC VALVES</b>						
222	PV008CH01	# 1	CHILLER #1 PNEUMATIC VALVE - CHWS	TRANE		B1 BASEMENT	EQUIPMENT RM	@ CHILLER #1
223	PV008CH02	# 2	CHILLER #1 PNEUMATIC VALVE - CHWR	TRANE		B1 BASEMENT	EQUIPMENT RM	@ CHILLER #1
224	PV008CH03	# 3	CHILLER #1 PNEUMATIC VALVE - CDWS	TRANE		B1 BASEMENT	EQUIPMENT RM	@ CHILLER #1
225	PV008CH04	# 4	CHILLER #1 PNEUMATIC VALVE - CDWR	TRANE		B1 BASEMENT	EQUIPMENT RM	@ CHILLER #1
226	PV008CH05	# 5	CHILLER #2 PNEUMATIC VALVE - CHWS	YORK		B1 BASEMENT	EQUIPMENT RM	@ CHILLER #2
227	PV008CH06	# 6	CHILLER #2 PNEUMATIC VALVE - CHWR	YORK		B1 BASEMENT	EQUIPMENT RM	@ CHILLER #2
228	PV008CH07	# 7	CHILLER #2 PNEUMATIC VALVE - CDWS	YORK		B1 BASEMENT	EQUIPMENT RM	@ CHILLER #2
229	PV008CH08	# 8	CHILLER #2 PNEUMATIC VALVE - CDWR	YORK		B1 BASEMENT	EQUIPMENT RM	@ CHILLER #2
230	PV008HX01	# 9	HX PNEUMATIC VALVE - CHWS			B1 BASEMENT	EQUIPMENT RM	@ HEAT EXCHANGER
231	PV008HX02	# 10	HX PNEUMATIC VALVE - CDWS			B1 BASEMENT	EQUIPMENT RM	@ HEAT EXCHANGER
232		<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>						
233	ACH550-VCR-023A-4		VFD TOWER FAN	ABB	2081801010	LOWER ROOF		
234	ACH550-VCR-015A-4		VFD RETURN FAN	ABB	2131902832	E. SIDE CHILLER ROOM		
235	ACH550-VCR-031A-4		VFD SUPPLY FAN	ABB	2131903771	E. SIDE CHILLER ROOM		
236		<b>WATER TREATMENT</b>						
237	WT008CR01	CDW	WATER TREATMENT FOR COOLING TOWER (EAST)			-	-	-
238	WT008CR02	CHILLED WATER	WATER TREATMENT FOR CLOSED LOOP			-	-	-
239	WT008CRBM		CHEMICAL SYSTEM BLEED-OFF METER		46299996	-	-	-
240	WT008CRIM		CITY WATER INJECTION METER		46299984	-	-	-

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
241	WT008CT03	CDW	WATER TREATMENT FOR COLING TOWER (WEST)			-	-	-
242	WT008CT04	CHILLED WATER	WATER TREATMENT FOR CLOSED LOOP			-	-	-
243	WT008CTBM		CHEMICAL SYSTEM BLEED-OFF METER		46299997	-	-	-
244	WT008CTIM		CITY WATER INJECTION METER		1404076	-	-	-
245								
246	<b>009</b>	<b>1510M W Adams Data Mechanical Building</b>						
247								
248		<b>CHILLERS</b>						
249	CH0090101	# 1	TRANE-ROTARY-SCREW	TRANE	U95A05474 V00U	01 FIRST FLOOR	-	-
250	CH0090102	# 2	TRANE- ROTARY-SCREW	TRANE	U95A05473 V00U	01 FIRST FLOOR	-	-
251		<b>CHILLER PUMPS</b>						
252	CP0090101	CHILLER # 1 PUMP	CHILLED WATER PUMP & MOTOR (EAST)	AURORA	N/A	01 FIRST FLOOR	-	-
253	CP0090102	CHILLER # 2 PUMP	CHILLED WATER PUMP & MOTOR (WEST)	AURORA		01 FIRST FLOOR	-	-
254	CP0090103	CHW BUILDING PUMP	CHILLED WATER PUMP & MOTOR (EAST)	AURORA		01 FIRST FLOOR	-	-
255	CP0090104	CHW BUILDING PUMP	CHILLED WATER PUMP & MOTOR (WEST)	AURORA		01 FIRST FLOOR	-	-
256	CP0090105	CHW BUILDING PUMP	CHILLED WATER PUMP & MOTOR (CENTER)	AURORA		01 FIRST FLOOR	-	-
257	CP009HX06		HX CHILLED WATER PUMP & MOTOR	AURORA		01 FIRST FLOOR	-	-
258		<b>COOLING TOWERS</b>						
259	CT009RF01	# 1	COOLING TOWER - EAST	CERAMIC	N/A	RF ROOF	EAST	-
260	CT009RF02	# 2	COOLING TOWER - WEST	CERAMIC	N/A	RF ROOF	WEST	-
261		<b>CONDENSER PUMPS</b>						
262	DP0090101	CHILLER #1 CDW PUMP	CONDENSER WATER PUMP & MOTOR (EAST)	AURORA		01 FIRST FLOOR	-	-
263	DP0090102	CHILLER #2 CDW PUMP	CONDENSER WATER PUMP & MOTOR (WEST)	AURORA		01 FIRST FLOOR	-	-
264	DP0090103		CONDENSER WATER PUMP & MOTOR	BELL&GOSSETT	1065231	01 FIRST FLOOR	-	-
265		<b>COOLING TOWER FAN &amp; MOTOR</b>						
266	FN009CT01	# 1	COOLING TOWER FAN & MOTOR			RF ROOF	EAST	-
267	FN009CT02	# 2	COOLING TOWER FAN & MOTOR			RF ROOF	WEST	-
268		<b>FLOW VALVES</b>						
269	FV009CT01		WATER LEVEL MAKE-UP VALVE	TOWER FLOW		RF ROOF	EAST	-
270	FV009CT02		WATER LEVEL MAKE-UP VALVE	TOWER FLOW		RF ROOF	WEST	-
271		<b>ISOLATION VALVES</b>						
272	IV009CR01	CHWS	CHILLER #1 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #1
273	IV009CR02	CHWR	CHILLER #1 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #1
274	IV009CR03	CDWS	CHILLER #1 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #1
275	IV009CR04	CDWR	CHILLER #1 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #1
276	IV009CR05	CHWS	CHILLER #2 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #2
277	IV009CR06	CHWR	CHILLER #2 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #2
278	IV009CR07	CDWS	CHILLER #2 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #2
279	IV009CR08	CDWR	CHILLER #2 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #2
280	IV009CR09	CHW	CHW PUMP #1 ISOLATION VALVE - SUCTION			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #1



## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
281	IV009CR10	CHW	CHW PUMP #1 ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #1
282	IV009CR11	CHW	CHW PUMP #2 ISOLATION VALVE - SUCTION			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #2
283	IV009CR12	CHW	CHW PUMP #2 ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #2
284	IV009CR13	CHW	BLDG PUMP #3 ISOLATION VALVE - SUCTION			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #3
285	IV009CR14	CHW	BLDG PUMP #3 ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #3
286	IV009CR15	CHW	BLDG PUMP #4 ISOLATION VALVE - SUCTION			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #4
287	IV009CR16	CHW	BLDG PUMP #4 ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #4
288	IV009CR17	CHW	BLDG PUMP #5 ISOLATION VALVE - SUCTION			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #5
289	IV009CR18	CHW	BLDG PUMP #5 ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #5
290	IV009CR19	CHW	HX PUMP ISOLATION VALVE - SUCTION			01 FIRST FLOOR	EQUIPMENT ROOM	@ HX PUMP
291	IV009CR20	CHW	HX PUMP ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	EQUIPMENT ROOM	@ HX PUMP
292	IV009CR21	CDW	CDW PUMP #1 ISOLATION VALVE - SUCTION			01 FIRST FLOOR	EQUIPMENT ROOM	@ CDW PUMP #1
293	IV009CR22	CDW	CDW PUMP #1 ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CDW PUMP #1
294	IV009CR23	CDW	CDW PUMP #2 ISOLATION VALVE - SUCTION			01 FIRST FLOOR	EQUIPMENT ROOM	@ CDW PUMP #2
295	IV009CR24	CDW	CDW PUMP #2 ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CDW PUMP #2
296			<b>FLAT PLATE HEAT EXCHANGERS</b>					
297	PF0090101		PLATE & FRAME EXCHANGER			01 FIRST FLOOR	-	-
298			<b>PNEUMATIC VALVES</b>					
299	PV009CH01	CHWR	CHILLER #1 PNEUMATIC VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #1
300	PV009CH02	CDWR	CHILLER #1 PNEUMATIC VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #1
301	PV009CH03	CHWR	CHILLER #2 PNEUMATIC VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #2
302	PV009CH04	CDWR	CHILLER #2 PNEUMATIC VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #2
303	PV009HX01	CDWS	HX SYSTEM SELECT PNEUMATIC VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CDW PUMP #2
304	PV009HX02	CH 2 BYPASS	HX SYSTEM PNEUMATIC VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CDW PUMP #2
305			<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
306	VD0090101	# 1	VFD FOR COOLING TOWER	ABB		01 FIRST FLOOR	-	-
307	VD0090102	# 2	VFD FOR COOLING TOWER	ABB		01 FIRST FLOOR	-	-
308			<b>WATER TREATMENT</b>					
309	WT009CR01	CDW	WATER TREATMENT FOR COOLING TOWER #1			01 FIRST FLOOR	-	-
310	WT009CR02	CDW	WATER TREATMENT FOR COOLING TOWER #2			01 FIRST FLOOR	-	-
311	WT009CR03	CHILLED WATER	WATER TREATMENT FOR CLOSED LOOP			01 FIRST FLOOR	-	-
312	WT009CRBM		CHEMICAL SYSTEM BLEED-OFF METER		46299998	-	-	-
313	WT009CRIM		CITY WATER INJECTION METER		46329861	-	-	-
314								
315	<b>010</b>		<b>1520 W Adams Department of Water Resources (Agriculture)</b>					
316								
317			<b>BOILERS</b>					
318	M4P-3500	#1	STEAM BOILER #1	CLEAVER BROOKS	4G01-8884	PENTHOUSE	EQUIPMENT ROOM	
319	P75	#2	STEAM BOILER #2	RITE	24685	PENTHOUSE	EQUIPMENT ROOM	
320			<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
321	ACH550-VCR-072A-4		VFD A/H #1	ABB	2131904614	EQUIPMENT ROOM		
322	ACH550-VCR-072A-4		VFD A/H #2	ABB	2131904621	EQUIPMENT ROOM		
323			<b>WATER TREATMENT</b>					
324			WATER TREATMENT FOR CLOSED LOOP					
325			CHEMICAL SYSTEM BLEED-OFF METER					
326			CITY WATER INJECTION METER					
327								
328	<b>011</b>		<b>1700 W Washington Executive Tower</b>					
329								
330			<b>CHILLERS</b>					
331	CH011B101	# 1	TRANE-ROTARY-SCREW	TRANE	U95A05480	B1 BASEMENT	MECHANICAL ROOM	-

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
332	CH011B102	# 2	TRANE-ROTARY-SCREW	TRANE	U95A05479	B1 BASEMENT	MECHANICAL ROOM	-
333			<b>CHILLER PUMPS</b>					
334	CP011B101	# 1	CHILLED WATER PUMP & MOTOR (EAST)			B1 BASEMENT	MECHANICAL ROOM	-
335	CP011B102	# 3	CHILLED WATER PUMP & MOTOR (WEST)			B1 BASEMENT	MECHANICAL ROOM	-
336	CP011B1HX	HX	HX CHILLED WATER PUMP A& MOTOR			B1 BASEMENT	MECHANICAL ROOM	-
337			<b>COOLING TOWERS</b>					
338	CT0110101	# 1	COOLING TOWER - WEST SIDE	CERAMIC	NONE	OS OUTSIDE	COOLING TOWER BLDG	-
339			<b>CONDENSER PUMPS</b>					
340	DP011CT01	# 1 NW	COND WATER PUMP	AMER TRBN CO	N/A	OS OUTSIDE	COOLING TOWER BLDG	-
341	DP011CT02	# 2 SW	COND WATER PUMP	AMER TRBN CO	10329	OS OUTSIDE	COOLING TOWER BLDG	-
342			<b>COOLING TOWER FAN MOTORS</b>					
343	FM011CT01	# 1 NW	COOLING TOWER FAN MOTOR	STERLING		OS OUTSIDE	COOLING TOWER BLDG	-
344	FM011CT02	# 2 SW	COOLING TOWER FAN MOTOR	US ELEC MOTR		OS OUTSIDE	COOLING TOWER BLDG	-
345			<b>COOLING TOWER FANS</b>					
346	FN011CT01	# 1 NW	COOLING TOWER FAN	LUFKIN	N/A	OS OUTSIDE	COOLING TOWER BLDG	-
347	FN011CT02	# 2 SW	COOLING TOWER FAN	LUFKIN	N/A	OS OUTSIDE	COOLING TOWER BLDG	-
348			<b>FLOW VALVES</b>					
349	FV011CT01		BASIN WATER LEVEL MAKE-UP VALVE			01 FIRST FLOOR	-	-
350			<b>ISOLATION VALVES</b>					
351	IV011CR01	CHWS	CHILLER #1 ISOLATION VALVE			B1 BASEMENT	MECHANICAL ROOM	@ CHILLER #1
352	IV011CR02	CDWS	CHILLER #1 ISOLATION VALVE			B1 BASEMENT	MECHANICAL ROOM	@ CHILLER #1
353	IV011CR03	CHWS	CHILLER #2 ISOLATION VALVE			B1 BASEMENT	MECHANICAL ROOM	@ CHILLER #2
354	IV011CR04	CDWS	CHILLER #2 ISOLATION VALVE			B1 BASEMENT	MECHANICAL ROOM	@ CHILLER #2
355	IV011CR17	V-1	X-OVER SYSTEM CHWS TIE VALVE - CHAIN PULL OPERATED			B1 BASEMENT	MECHANICAL ROOM	@ CEILING, ABOVE CH CHW PUMPS
356	IV011CR18	V-2	X-OVER SYSTEM CHWS TIE VALVE - CHAIN PULL OPERATED			B1 BASEMENT	MECHANICAL ROOM	@ CEILING, ABOVE MCC-1&SWITCHGE
357	IV011CR19	V-3	X-OVER SYSTEM CHWS TIE VALVE - CHAIN PULL OPERATED			B1 BASEMENT	MECHANICAL ROOM	@ CEILING, ABOVE MCC-1&SWITCHGE
358	IV011CR20	V-4	X-OVER SYSTEM CHWS TIE VALVE - CHAIN PULL OPERATED			B1 BASEMENT	MECHANICAL ROOM	@ CEILING, ABOVE MCC-1&SWITCHGE
359	IV011CR21	CHW	CHW PUMP #1 ISOLATION VALVE - SUCTION			B1 BASEMENT	MECHANICAL ROOM	@ CHW PUMP #1
360	IV011CR22	CHW	CHW PUMP #1 ISOLATION VALVE - DISCHARGE			B1 BASEMENT	MECHANICAL ROOM	@ CHW PUMP #1
361	IV011CR23	CHW	CHW PUMP #2 ISOLATION VALVE - SUCTION			B1 BASEMENT	MECHANICAL ROOM	@ CHW PUMP #2
362	IV011CR24	CHW	CHW PUMP #2 ISOLATION VALVE - DISCHARGE			B1 BASEMENT	MECHANICAL ROOM	@ CHW PUMP #2
363	IV011CT27	CDW	CDW PUMP #1 ISOLATION VALVE - DISCHARGE			OS OUTSIDE	COOLING TOWER BLDG	@ CDW PUMP #1
364	IV011CT28	CDW	CDW PUMP #2 ISOLATION VALVE - DISCHARGE			OS OUTSIDE	COOLING TOWER BLDG	@ CDW PUMP #2
365	IV011CT29	CDW	COOLING TOWER MAKE-UP WATER ISOLATION VALVE			OS OUTSIDE	COOLING TOWER BLDG	WEST WALL
366	IV011CT30	CDW	COOLING TOWER MAKE-UP WATER ISOLATION VALVE			OS OUTSIDE	COOLING TOWER BLDG	@ MAKE-UP STATION
367	IV011HX01	HX	HX ISOLATION VALVE - CHILLED WATER IN			B1 BASEMENT	MECHANICAL ROOM	@ FLAT PLATE
368	IV011HX02	HX	HX ISOLATION VALVE - CHILLED WATER OUT			B1 BASEMENT	MECHANICAL ROOM	@ FLAT PLATE

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
369	IV011HX03	HX	HX ISOLATION VALVE - CONDENSER WATER IN			B1 BASEMENT	MECHANICAL ROOM	@ FLAT PLATE
370	IV011HX04	HX	HX ISOLATION VALVE - CONDENSER WATER OUT			B1 BASEMENT	MECHANICAL ROOM	@ FLAT PLATE
371		<b>FLAT PLATE HEAT EXCHANGERS</b>						
372	PF011B101	HX	PLATE & FRAME EXCHANGER	MUELLER	136788-1	B1 BASEMENT	MECHANICAL ROOM	-
373		<b>PACKAGE UNIT</b>						
374	PU011RF04		60 TON PACKAGE UNIT	MCQUAY	35L00667 02	RF ROOF	WEST SIDE	
375		<b>PNEUMATIC VALVES</b>						
376	PV011CH01	# 1	CHILLER #1 PNEUMATIC VALVE - CHWR - EAST			B1 BASEMENT	MECHANICAL ROOM	-
377	PV011CH02	# 2	CHILLER #1 PNEUMATIC VALVE - CDWS - EAST			B1 BASEMENT	MECHANICAL ROOM	-
378	PV011CH03	# 3	CHILLER #2 PNEUMATIC VALVE - CHWR - WEST			B1 BASEMENT	MECHANICAL ROOM	-
379	PV011CH04	# 4	CHILLER #2 PNEUMATIC VALVE - CDWS - WEST			B1 BASEMENT	MECHANICAL ROOM	-
380	PV011HX01	# 5	HX SELECT (TAGGED #3) -CDWR			B1 BASEMENT	MECHANICAL ROOM	CEILING, BETWEEN CH2 & GEN
381		<b>SUBMERGED PUMP</b>						
382	SP011CT01		SUBMERGED PUMP - FOR WEST BASIN ONLY			OS OUTSIDE	COOLING TOWER BLDG	-
383		<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>						
384	VD011B101	AHU 1	VSD FOR BLDG AHU #1	ABB		B1 BASEMENT	-	-
385	VD011B102	AHU 2	VSD FOR BLDG AHU #2	ABB	140807	B1 BASEMENT	-	-
386	VD011B103	AHU 3	VSD FOR BLDG AHU #3	ABB		B1 BASEMENT	-	-
387	VD011B104	AHU 4	VSD FOR BLDG AHU #4	ABB		B1 BASEMENT	-	-
388		<b>BUILDING FANS</b>						
389	VF011B101	AHU 1	IN LINE AXIAL VANE FAN, MOTOR & CONTROL	JOY	SF 31424-1	B1 BASEMENT	-	-
390	VF011B102	AHU 2	IN LINE AXIAL VANE FAN, MOTOR & CONTROL	JOY	SF 31424	B1 BASEMENT	-	-
391	VF011B103	AHU 3	IN LINE AXIAL VANE FAN, MOTOR & CONTROL	JOY	SF 31424-2	B1 BASEMENT	-	-
392	VF011B104	AHU 4	IN LINE AXIAL VANE FAN, MOTOR & CONTROL	JOY	SF 31424-3	B1 BASEMENT	-	-
393		<b>EQUIPMENT ROOM</b>						
394	ACH550-BCR-031A-4+B058		VFD TOWER FAN #1	ABB	2111500249	EQUIPMENT ROOM		
395	ACH550-BCR-031A-4+B058		VFD TOWER FAN #2	ABB	2111500211	EQUIPMENT ROOM		
396	ACH550-BCR-031A-4+B058		VFD TOWER FAN #3	ABB	2111500168	EQUIPMENT ROOM		
397	ACH550-BCR-031A-4+B058		VFD TOWER FAN #4	ABB	2111500194	EQUIPMENT ROOM		
398		<b>WATER TREATMENT</b>						
399	WT011CR01	CHILLED WATER	WATER TREATMENT FOR CLOSED LOOP SYSTEM			OS OUTSIDE	COOLING TOWER BLDG	-
400	WT011CT01	CDW	WATER TREATMENT FOR COOLING TOWER			OS OUTSIDE	COOLING TOWER BLDG	-
401								
402	<b>012</b>	<b><u>1700L W Washington 1938/1919 Capitol Additions</u></b>						
403								
404		<b>BUILDING FANS</b>						
405	VF012B101		IN LINE AXIAL VANE FAN, MOTOR & CONTROL	CARRIER		B1 BASEMENT	-	-
406	VF012RF02		IN LINE AXIAL VANE FAN, MOTOR & CONTROL	CARRIER	794997218	RF ROOF	-	-
407	VF012RF03		IN LINE AXIAL VANE FAN, MOTOR & CONTROL	CARRIER		RF ROOF	-	-
408								
409	<b>013</b>	<b><u>1700H W Washington House</u></b>						
410								

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
411		<b>VFD - BUILDING FANS</b>						
412	ACH550-VCR-08A8-4		VFD RETURN FAN A/H #2	ABB	2134503539	ROOF		
413	ACH550-VCR-045A-4		VFD COLD DECK FAN A/H #2	ABB	2134503358	ROOF		
414	ACH550-VCR-031A-4		VFD HOT DECK FAN A/H #2	ABB	2134503532	ROOF		
415	ACH550-VCR-08A8-4		VFD RETURN FAN A/H #3	ABB	2132304104	ROOF		
416	ACH550-VCR-045A-4		VFD COLD DECK FAN A/H #3	ABB	2132304097	ROOF		
417	ACH550-VCR-031A-4		VFD HOT DECK FAN A/H #3	ABB	2132303458	ROOF		
418								
419	<b>014</b>	<b>1700S W Washington Senate</b>						
420								
421		<b>CHILLERS</b>						
422	CH014B101	# 1	TRANE CENTRIFUGAL CHILLER	TRANE	L94L11275	B1 BASEMENT	SOUTH EQUIPMENT	-
423	CH014B102	# 2	TRANE CENTRIFUGAL CHILLER	TRANE	L94L11600	B1 BASEMENT	SOUTH EQUIPMENT	-
424		<b>CHILLER PUMPS</b>						
425	CP014B101	# 3	CHILLED WATER PUMP AND MOTOR (X-OVER PUMP)	AURORA	137185 (GPM=1500)	B1 BASEMENT	-	-
426	CP014B102	# 2	CHILLED WATER PUMP & MOTOR (EAST)	AURORA	UNREADABLE	B1 BASEMENT	-	-
427	CP014B103	# 1	CHILLED WATER PUMP (WEST)	AURORA	UNREADABLE	B1 BASEMENT	-	-
428		<b>COOLING TOWERS</b>						
429	CT0140101	# 2	COOLING TOWER	CERAMIC		OS OUTSIDE	COOLING TOWER BLDG	EAST
430		<b>CONDENSER PUMPS</b>						
431	DP014CT01	# 1NE	CONDENSER WATER PUMP AND MOTOR	GE		OS OUTSIDE	COOLING TOWER BLDG	@ COOLING TOWER
432	DP014CT02	# 2SE	CONDENSER WATER PUMP AND MOTOR	ALLIS CHAMBE		OS OUTSIDE	COOLING TOWER BLDG	@ COOLING TOWER
433		<b>COOLING TOWER FAN MOTORS</b>						
434	FM014CT01	# 1NE	COOLING TOWER FAN MOTOR	US ELEC MOTR		OS OUTSIDE	COOLING TOWER BLDG	@ COOLING TOWER
435	FM014CT02	# 2SE	COOLING TOWER FAN MOTOR	US ELEC MOTR		OS OUTSIDE	COOLING TOWER BLDG	@ COOLING TOWER
436		<b>COOLING TOWER FANS</b>						
437	FN014CT01	# 1NE	COOLING TOWER FAN -	LUFKIN		OS OUTSIDE	COOLING TOWER BLDG	@ COOLING TOWER
438	FN014CT02	# 2SE	COOLING TOWER FAN	LUFKIN	NO NUMBER	OS OUTSIDE	COOLING TOWER BLDG	@ COOLING TOWER
439		<b>FLOW VALVE</b>						
440	FV014CT01		WATER LEVEL MAKE-UP VALVE			01 FIRST FLOOR	EAST	-
441		<b>ISOLATION VALVES</b>						
442	IV014CR01	CHWS	CHILLER # 1 - ISOLATION VALVE			B1 BASEMENT	SOUTH EQUIPMENT	@ CHILLER #1
443	IV014CR02	CHWR	CHILLER # 1 - ISOLATION VALVE			B1 BASEMENT	SOUTH EQUIPMENT	@ CHILLER #1
444	IV014CR03	CDWS	CHILLER # 1 - ISOLATION VALVE			B1 BASEMENT	SOUTH EQUIPMENT	@ CHILLER #1
445	IV014CR04	CDWR	CHILLER # 1 - ISOLATION VALVE			B1 BASEMENT	SOUTH EQUIPMENT	@ CHILLER #1
446	IV014CR05	CHWS	CHILLER # 2 - ISOLATION VALVE			B1 BASEMENT	SOUTH EQUIPMENT	@ CHILLER #2
447	IV014CR06	CHWR	CHILLER # 2 - ISOLATION VALVE			B1 BASEMENT	SOUTH EQUIPMENT	@ CHILLER #2
448	IV014CR07	CDWS	CHILLER # 2 - ISOLATION VALVE			B1 BASEMENT	SOUTH EQUIPMENT	@ CHILLER #2
449	IV014CR08	CDWR	CHILLER # 2 - ISOLATION VALVE			B1 BASEMENT	SOUTH EQUIPMENT	@ CHILLER #2
450	IV014CR09	CHW	CHW PUMP # 1 ISOLATION VALVE - SUCTION			B1 BASEMENT	SOUTH EQUIPMENT	@ CHW PUMP #1
451	IV014CR10	CHW	CHW PUMP # 1 ISOLATION VALVE - DISCHARGE			B1 BASEMENT	SOUTH EQUIPMENT	@ CHW PUMP #1
452	IV014CR11	CHW	CHW PUMP # 2 ISOLATION VALVE - SUCTION			B1 BASEMENT	SOUTH EQUIPMENT	@ CHW PUMP #2
453	IV014CR12	CHW	CHW PUMP # 2 ISOLATION VALVE - DISCHARGE			B1 BASEMENT	SOUTH EQUIPMENT	@ CHW PUMP #2
454	IV014CR13	CHW	X-OVER CHW PUMP ISOLATION VALVE - DISCHARGE			B1 BASEMENT	SOUTH EQUIPMENT	@ CHW PUMP #2

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
455	IV014CR14	V-1	X-OVER SYSTEM CHWS TIE VALVE (CHAIN PULL)			B1 BASEMENT	SOUTH EQUIPMENT	@ CEILING ABOVE CHW PUMPS
456	IV014CR15	V-2	X-OVER SYSTEM CHWR TIE VALVE (CHAIN PULL)			B1 BASEMENT	ABOVE SWITCHGEAR RM	-
457	IV014CR16	V-3	X-OVER SYSTEM CHWS TIE VALVE (CHAIN PULL)			B1 BASEMENT	SOUTH EQUIPMENT	@ CEILING ABOVE CHW PUMPS
458	IV014CR17	V-4	X-OVER SYSTEM CHWR TIE VALVE (CHAIN PULL)			B1 BASEMENT	ABOVE SWITCHGEAR RM	-
459	IV014CT01	CDW	CDW PUMP # 1 ISOLATION VALVE - DISCHARGE			OS OUTSIDE	COOLING TOWER BLDG	@ CDW PUMP #1 (NE)
460	IV014CT02	CDW	CDW PUMP # 1 ISOLATION VALVE - DISCHARGE			OS OUTSIDE	COOLING TOWER BLDG	@ CDW PUMP #2 (SE)
461	IV014HX01	HX	HX ISOLATION VALVE - CHILLED WATER IN			B1 BASEMENT	SOUTH EQUIPMENT	@CEILING ABOVE FLAT PLATE
462	IV014HX02	HX	HX ISOLATION VALVE - CHILLED WATER OUT			B1 BASEMENT	SOUTH EQUIPMENT	@ FLAT PLATE
463	IV014HX03	HX	HX ISOLATION VALVE - CONDENSER WATER IN			B1 BASEMENT	SOUTH EQUIPMENT	@CEILING ABOVE CH #2
464	IV014HX04	HX	HX ISOLATION VALVE - CONDENSER WATER OUT			B1 BASEMENT	SOUTH EQUIPMENT	@ CEILING BETWEEN CH1&2
465			<b>FLAT PLATE HEAT EXCHANGERS</b>					
466	PF014B101	HX	PLATE & FRAME EXCHANGER	MUELLER	136788-2	B1 BASEMENT	SOUTH EQUIPMENT	-
467			<b>PNEUMATIC VALVES</b>					
468	PV014CH01	# 1	CHILLER # 1 - PNEUMATIC VALVE - CHWR			B1 BASEMENT	SOUTH EQUIPMENT	@ CHILLER #1
469	PV014CH02	# 2	CHILLER # 1 - PNEUMATIC VALVE - CDWR			B1 BASEMENT	SOUTH EQUIPMENT	@ CHILLER #1
470	PV014CH03	# 3	CHILLER # 2 - PNEUMATIC VALVE - CHWR			B1 BASEMENT	SOUTH EQUIPMENT	@ CHILLER #2
471	PV014CH04	# 3	CHILLER # 2 - PNEUMATIC VALVE - CDWR			B1 BASEMENT	SOUTH EQUIPMENT	@ CHILLER #2
472	PV014HX01	# 5	HX SELECT - CHWR			B1 BASEMENT	SOUTH EQUIPMENT	@ FLAT PLATE
473	PV014HX02	# 6	HX SELECT - CDWR			B1 BASEMENT	SOUTH EQUIPMENT	@ CEILING BETWEEN CH1&2
474			<b>SUBMERGED PUMP</b>					
475	SP014CT01		SUBMERGED PUMP			OS OUTSIDE	COOLING TOWER BLDG	EAST
476			<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
477	VD014B101		VFD DRIVE FOR AHU #1	ABB		B1 BASEMENT	-	-
478			<b>WATER TREATMENT</b>					
479	WT014CR01	CDW	WATER TREATMENT FOR CLOSED LOOP SYSTEM			-	-	-
480	WT014CT01	CHILLED WATER	WATER TREATMENT FOR COOLING TOWER			OS OUTSIDE	COOLING TOWER BLDG	-
481								
482	<b>015</b>		<b>1400 W Washington Boards and Commissions</b>					
483								
484			<b>BUILDING FANS</b>					
485	VF015B101	# 1SA	SUPPLY AIR FAN, MOTOR & CONTROL	FLAKT-AXICO	1100082	B1 BASEMENT	-	-
486	VF015B102	# 2SA	SUPPLY AIR FAN, MOTOR & CONTROL	FLAKT-AXICO	1100081	B1 BASEMENT	-	-
487	VF015B103	# 1RA	RETURN AIR FAN, MOTOR & CONTROL	FLAKT-AXICO	1100083	B1 BASEMENT	-	-
488	VF015B104	# 2RA	RETURN AIR FAN, MOTOR & CONTROL	FLAKT-AXICO	1100084	B1 BASEMENT	-	-
489								
490	<b>016</b>		<b>1400M W Washington 1300/1400 Mechanical Building</b>					
491								
492			<b>CHILLERS</b>					
493	CH0160101		TRANE-ROTARY-SCREW	TRANE	U95A05471	01 FIRST FLOOR	-	-

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
494	CH0160102		TRANE-ROTARY-SCREW	TRANE	U95A05472	01 FIRST FLOOR	-	-
495	CH0160103		TRANE-ROTARY-SCREW	TRANE	U95A05470	01 FIRST FLOOR	-	-
496		<b>CHILLER PUMPS</b>						
497	CP0160101	# 1	CHILLED WATER PUMP			01 FIRST FLOOR	EQUIPMENT ROOM	-
498	CP0160102	# 2	CHILLED WATER PUMP			01 FIRST FLOOR	EQUIPMENT ROOM	-
499	CP0160103	# 3	CHILLED WATER PUMP			01 FIRST FLOOR	EQUIPMENT ROOM	-
500		<b>COOLING TOWERS</b>						
501	CT0160101	# 1	COOLING TOWER	CERAMIC		01 FIRST FLOOR	EQUIPMENT ROOM	CENTER
502	CT0160102	# 2	COOLING TOWER	CERAMIC		01 FIRST FLOOR	EQUIPMENT ROOM	WEST
503	CT0160103	# 3	COOLING TOWER	CERAMIC		01 FIRST FLOOR	EQUIPMENT ROOM	EAST
504		<b>CONDENSER PUMPS</b>						
505	DP0160101	# 1	CONDENSER WATER PUMP		NOT READABLE	01 FIRST FLOOR	EQUIPMENT ROOM	-
506	DP0160102	# 2	CONDENSER WATER PUMP			01 FIRST FLOOR	EQUIPMENT ROOM	-
507		<b>COOLING TOWER FAN MOTORS</b>						
508	FM016CT01	# 1	COOLING TOWER FAN MOTOR		DDH132060034	01 FIRST FLOOR	EQUIPMENT ROOM	COOLING TOWER #2
509	FM016CT02	# 2	COOLING TOWER FAN MOTOR		DDH132060034	RF ROOF	-	-
510	FM016CT03	# 3	COOLING TOWER FAN MOTOR		DDH132060034	01 FIRST FLOOR	EQUIPMENT ROOM	COOLING TOWER #3
511		<b>COOLING TOWER FANS</b>						
512	FN016CT01	# 1	COOLING TOWER FAN	TECO		01 FIRST FLOOR	EQUIPMENT ROOM	COOLING TOWER #1
513	FN016CT02	# 2	COOLING TOWER FAN	TECO		01 FIRST FLOOR	EQUIPMENT ROOM	COOLING TOWER #2
514	FN016CT03	# 3	COOLING TOWER FAN	TECO		01 FIRST FLOOR	EQUIPMENT ROOM	COOLING TOWER #3
515		<b>FLOW VALVES</b>						
516	FV016CT01		BASIN WATER LEVEL MAKE-UP VALVE	TOWER FLOW		01 FIRST FLOOR	EQUIPMENT ROOM	CENTER
517	FV016CT02		BASIN WATER LEVEL MAKE-UP VALVE	TOWER FLOW		01 FIRST FLOOR	EQUIPMENT ROOM	WEST
518	FV016CT03		BASIN WATER LEVEL MAKE-UP VALVE	TOWER FLOW		01 FIRST FLOOR	EQUIPMENT ROOM	EAST
519		<b>ISOLATION VALVES</b>						
520	IV016CR01	CHWR	CHILLER # 1 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #1
521	IV016CR02	CDWR	CHILLER # 1 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #1
522	IV016CR03	CHWR	CHILLER # 2 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #2
523	IV016CR04	CDWR	CHILLER # 2 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #2
524	IV016CR05	CHWR	CHILLER # 3 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #3
525	IV016CR06	CDWR	CHILLER # 3 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #3
526	IV016CR07	CHW	CHW PUMP # 1 ISOLATION VALVE - SUCTION			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #1
527	IV016CR08	CHW	CHW PUMP # 1 ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #1
528	IV016CR09	CHW	CHW PUMP # 2 ISOLATION VALVE - SUCTION			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #2
529	IV016CR10	CHW	CHW PUMP # 2 ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #2
530	IV016CR11	CHW	CHW PUMP # 3 ISOLATION VALVE - SUCTION			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #3
531	IV016CR12	CHW	CHW PUMP # 3 ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #3
532	IV016HX01	HX	CHWR ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	CEILING BETWEEN HX & CH1
533	IV016HX02	HX	CHWS ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	CEILING BETWEEN HX & CH1
534	IV016HX03	HX	CDWR ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	CEILING ABOVE HX
535	IV016HX04	HX	CDWS ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CEILING ABOVE CH 1
536	IV016HX05	HX	CDWR ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CEILING ABOVE CH 2
537	IV016HX06	HX	CDWS ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CEILING ABOVE CH 3

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
538	IV016HX07	HX	CDWR ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CEILING ABOVE CH 3
539	IV016HX08	HX	CDWS ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CEILING ABOVE CH 2
540			<b>FLAT PLATE HEAT EXCHANGERS</b>					
541	PF0160101		PLATE & FRAME - ACCULHERM	MUELLER	136788-5	01 FIRST FLOOR	-	-
542			<b>PUMP MOTORS</b>					
543	PM0160101	# 1	CHILLED WATER PUMP MOTOR	US ELEC MOTR	X07X122R27 8F	01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #1
544	PM0160102	# 2	CHILLED WATER PUMP MOTOR	US ELEC MOTR	X07X122R22 8F	01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #2
545	PM0160103	# 3	CHILLED WATER PUMP MOTOR	US ELEC MOTR	X07X122R22 8F	01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #3
546	PM0160104	# 1	CONDENSER WATER PUMP MOTOR	MARATHON	NONE	01 FIRST FLOOR	EQUIPMENT ROOM	@ CDW PUMP #1
547	PM0160105	# 2	CONDENSER WATER PUMP MOTOR	MARATHON	859101	01 FIRST FLOOR	EQUIPMENT ROOM	@ CDW PUMP #2
548	PM0160106	# 3	CONDENSER WATER PUMP MOTOR	MARATHON	13348009	01 FIRST FLOOR	EQUIPMENT ROOM	@ CDW PUMP #3
549			<b>PNEUMATIC VALVES</b>					
550	PV016CH01	# 1	CHILLER #1 PNEUMATIC VALVE - CHWR			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #1
551	PV016CH02	# 2	CHILLER #1 PNEUMATIC VALVE - CDWS			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #1
552	PV016CH03	# 3	CHILLER #2 PNEUMATIC VALVE - CHWR			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #2
553	PV016CH04	# 4	CHILLER #2 PNEUMATIC VALVE - CDWS			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #2
554	PV016CH05	# 5	CHILLER #3 PNEUMATIC VALVE - CHWR			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #3
555	PV016CH06	# 6	CHILLER #3 PNEUMATIC VALVE - CDWS			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #3
556	PV016HX01	# 7	HX SYSTEM SELECT			01 FIRST FLOOR	EQUIPMENT ROOM	@ CEILING ABOVE HX
557	PV016HX02	# 8	CH 2 BYPASS - CDWR TO TWR			01 FIRST FLOOR	EQUIPMENT ROOM	CEILING WEST OF CH 2
558	PV016HX03	# 9	CH 2 BYPASS - CDWR TO TWR			01 FIRST FLOOR	EQUIPMENT ROOM	CEILING WEST OF CH 3
559	PV016HX04	# 10	HX SYSTEM SELECT - CHWR			01 FIRST FLOOR	EQUIPMENT ROOM	@ HX
560			<b>WATER TREATMENT</b>					
561	WT016CR01	CDW	WATER TREATMENT FOR COOLING TOWER #1	CERAMIC		-	-	-
562	WT016CR02	CDW	WATER TREATMENT FOR COOLING TOWER #2	CERAMIC		-	-	-
563	WT016CR03	CDW	WATER TREATMENT FOR COOLING TOWER #3	CERAMIC		-	-	-
564	WT016CR04	CHILLED WATER	WATER TREATMENT FOR CLOSED LOOP	CERAMIC		-	-	-
565								
566	<b>017</b>		<b>1300 W Washington State Parks</b>					
567								
568			<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
569	VD017B101	AHU 1	VSD FOR BLDG AHU #1 SUPPLY AIR FAN	ABB	B00577	B1 BASEMENT	-	-
570	VD017B102	AHU 1	VSD FOR BLDG AHU #1 RETURN AIR FAN	ABB	116911	B1 BASEMENT	-	-
571								
572	<b>018</b>		<b>1200 M W Washington 1200 Mechanical Building</b>					
573								
574			<b>CHILLERS</b>					
575	CH0180101	# 1	TRANE-ROTARY-SCREW	TRANE	U95A05469	01 FIRST FLOOR	-	-
576	CH0180102	# 2	TRANE-ROTARY-SCREW	TRANE	495A05468	01 FIRST FLOOR	-	-
577	CH0180103	# 3	TRANE-ROTARY- SCREW	TRANE	V94M05467	01 FIRST FLOOR	-	-
578			<b>CHILLER PUMPS</b>					
579	CP0180101	# 1	CHILLED WATER PUMP	AURORA		01 FIRST FLOOR	-	-
580	CP0180102	# 2	CHILLED WATER PUMP	AURORA		01 FIRST FLOOR	-	-
581	CP0180103	# 3	CHILLED WATER PUMP	AURORA		01 FIRST FLOOR	-	-
582			<b>COOLING TOWERS</b>					
583	CT0180101	# 1	COOLING TOWER #1 (CENTER)	CERAMIC		01 FIRST FLOOR	CENTER	-
584	CT0180102	# 2	COOLING TOWER #2 (WEST)	CERAMIC		01 FIRST FLOOR	WEST	-
585	CT0180103	# 3	COOLING TOWER #3 (EAST)	CERAMIC		01 FIRST FLOOR	EAST	-
586			<b>CONDENSER PUMPS</b>					

## Attachment "A"

### Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
587	DP0180101	# 1	CONDENSED WATER PUMP	MARATHON		01 FIRST FLOOR	EQUIPMENT ROOM	-
588	DP0180102	# 2	CONDENSED WATER PUMP	MARATHON		01 FIRST FLOOR	EQUIPMENT ROOM	-
589	DP0180103	# 3	CONDENSED WATER PUMP			01 FIRST FLOOR	EQUIPMENT ROOM	-
590			<b>COOLING TOWER FAN MOTORS</b>					
591	FM018CT01		COOLING TOWER FAN MOTOR	RELIANCE MTR		RF ROOF	CENTER	-
592	FM018CT02	# 2	COOLING TOWER FAN MOTOR	US ELEC MOTR		RF ROOF	WEST	-
593	FM018CT03		COOLING TOWER FAN MOTOR	RELIANCE MTR		RF ROOF	EAST	-
594			<b>COOLING TOWER FANS</b>					
595	FN018CT01	# 1	COOLING TOWER FAN			RF ROOF	CENTER	-
596	FN018CT02	# 2	COOLING TOWER FAN	US ELEC MOTR	NO NUMBER	RF ROOF	WEST	-
597	FN018CT03	# 3	COOLING TOWER FAN	RELIANCE MTR	NO NUMBER	01 FIRST FLOOR	EAST	-
598			<b>FLOW VALVES</b>					
599	FV018CT01		BASIN WATER LEVEL MAKE-UP VALVE	TOWER FLOW		01 FIRST FLOOR	CENTER	-
600	FV018CT02		BASIN WATER LEVEL MAKE-UP VALVE	TOWER FLOW		01 FIRST FLOOR	WEST	-
601	FV018CT03		BASIN WATER LEVEL MAKE-UP VALVE	TOWER FLOW		01 FIRST FLOOR	EAST	-
602			<b>ISOLATION VALVES</b>					
603	IV018CR01	CHWR	CHILLER # 1 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #1
604	IV018CR02	CDWS	CHILLER # 1 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #1
605	IV018CR03	CDWR	CHILLER # 1 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #1
606	IV018CR04	CHWR	CHILLER # 2 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #2
607	IV018CR05	CDWS	CHILLER # 2 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #2
608	IV018CR06	CDWR	CHILLER # 2 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #2
609	IV018CR07	CHWR	CHILLER # 3 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #3
610	IV018CR08	CDWS	CHILLER # 3 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #3
611	IV018CR09	CDWR	CHILLER # 3 ISOLATION VALVE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #3
612	IV018CR10	CHW	CHW PUMP # 1 ISOLATION VALVE - SUCTION			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #1
613	IV018CR11	CHW	CHW PUMP # 1 ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #1
614	IV018CR12	CHW	CHW PUMP # 2 ISOLATION VALVE - SUCTION			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #2
615	IV018CR13	CHW	CHW PUMP # 2 ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #2
616	IV018CR14	CHW	CHW PUMP # 3 ISOLATION VALVE - SUCTION			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #3
617	IV018CR15	CHW	CHW PUMP # 3 ISOLATION VALVE - DISCHARGE			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #3
618	IV018HX01	HX	HX SYSTEM SELECT ISOLATION VALVE CHWR (HX IN)			01 FIRST FLOOR	EQUIPMENT ROOM	BETWEEN CH1 & HX ON CHWS
619	IV018HX02	HX	HX ISOLATION VALVE CHWS (HX OUT)			01 FIRST FLOOR	EQUIPMENT ROOM	@ HX
620	IV018HX03	HX	HX ISOLATION VALVE CHWR (HX IN)			01 FIRST FLOOR	EQUIPMENT ROOM	@ HX
621	IV018HX04	HX	HX ISOLATION VALVE CDWS (HX IN)			01 FIRST FLOOR	EQUIPMENT ROOM	@ HX
622	IV018HX05	HX	HX ISOLATION VALVE CDWR (HX OUT)			01 FIRST FLOOR	EQUIPMENT ROOM	@ HX
623	IV018HX06	HX	HX CDWR TO CLG TWR #2 & #3 TIE			01 FIRST FLOOR	EQUIPMENT ROOM	@ HX
624			<b>FLAT PLATE HEAT EXCHANGERS</b>					
625	PFO180101	HX	HEAT CHANGER PLATE AND FRAME	TRANTOR	P-40243-H	01 FIRST FLOOR	-	-
626			<b>PUMP MOTORS</b>					
627	PM0180101	# 1	CHILLED WATER PUMP MOTOR	LINGGUARD	128504	01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #1
628	PM0180102	# 2	CHILLED WATER PUMP MOTOR	US ELEC MOTR		01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #2
629	PM0180103	# 3	CHILLED WATER PUMP MOTOR	US ELEC MOTR		01 FIRST FLOOR	EQUIPMENT ROOM	@ CHW PUMP #3
630	PM0180104	# 1	CONDENSER WATER PUMP MOTOR	MARATHON		01 FIRST FLOOR	EQUIPMENT ROOM	@ CDW PUMP #1
631	PM0180105	# 2	CONDENSER WATER PUMP MOTOR	MARATHON		01 FIRST FLOOR	EQUIPMENT ROOM	@CDW PUMP #2



## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
632	PM0180106	# 3	CONDENSER WATER PUMP MOTOR	MARATHON		01 FIRST FLOOR	EQUIPMENT ROOM	@ CDW PUMP #3
633			<b><u>PNEUMATIC VALVES</u></b>					
634	PV018CH01	# 1	PNEUMATIC VALVE CH #1 CHWS			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #1
635	PV018CH02	# 2	PNEUMATIC VALVE CH #1 CDWS			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #1
636	PV018CH03	# 3	PNEUMATIC VALVE CH #2 CHWS			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #2
637	PV018CH04	# 4	PNEUMATIC VALVE CH #2 CDWS			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #2
638	PV018CH05	# 5	PNEUMATIC VALVE CH #3 CHWS			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #3
639	PV018CH06	# 6	PNEUMATIC VALVE CH #3 CDWS			01 FIRST FLOOR	EQUIPMENT ROOM	@ CHILLER #3
640	PV018HX01	# 7	HX SYSTEM SELECT - CHWR			01 FIRST FLOOR	EQUIPMENT ROOM	@ CEILING ABOVE CH 1
641	PV018HX02	# 8	MASTER - HX CH 2 CDWS BYPASS TO HX			01 FIRST FLOOR	EQUIPMENT ROOM	@ HX
642	PV018HX03	# 9	SLAVE - HX CH 2 CDWS BYPASS TO HX			01 FIRST FLOOR	EQUIPMENT ROOM	@ HX
643	PV018HX04	# 10	MASTER - HX CH 3 CDWS BYPASS TO HX			01 FIRST FLOOR	EQUIPMENT ROOM	@ HX
644	PV018HX05	# 11	SLAVE - HX CH 3 CDWS BYPASS TO HX			01 FIRST FLOOR	EQUIPMENT ROOM	@ HX
645			<b><u>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</u></b>					
646	ACH550-BCR-015-4+B055		VFD TOWER FAN #1	ABB	2111500370	CHILLER ROOM		
647	ACH550-BCR-015-4+B055		VFD TOWER FAN #2	ABB	2111500383	CHILLER ROOM		
648	ACH550-BCR-015-4+B055		VFD TOWER FAN #3	ABB	2111500360	CHILLER ROOM		
649			<b><u>WATER TREATMENT</u></b>					
650	WT018CR01	CDW	WATER TREATMENT FOR COOLING TOWER #1			-	-	-
651	WT018CR02	CDW	WATER TREATMENT FOR COOLING TOWER #2			-	-	-
652	WT018CR03	CDW	WATER TREATMENT FOR COOLING TOWER #3			-	-	-
653	WT018CR04	CHILLED WATER	WATER TREATMENT FOR CLOSED LOOP			-	-	-
654								
655	<b><u>019</u></b>		<b><u>1200 W Washington Corporation Commission</u></b>					
656								
657			<b><u>BUILDING FANS</u></b>					
658	VF019RF01	AHU #1	AHU 1 FAN, MOTOR & CONTROL	RELIANCE ELE	SF43468	RF ROOF	-	-
659								
660								
661								
662	<b><u>022</u></b>		<b><u>1275 W Washington Attorney General</u></b>					
663								
664			<b><u>BUILDING FANS</u></b>					
665	VF0220101	# 1	IN LINE AXIAL VANE FAN, MOTOR & CONTROL	JOY	SF43468	-	-	-
666	VF0220102	# 2	IN LINE AXIAL VANE FAN, MOTOR & CONTROL	JOY	SF46044	-	-	-
667			<b><u>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</u></b>					
668	ACH550-BCR-072A-4+B055		VFD A/H #1	ABB	2111500322	1ST FLOOR E. SIDE		
669	ACH550-BCR-097A-4+B055		VFD A/H #2	ABB	2111404181	1ST FLOOR W. SIDE		
670								
671	<b><u>023</u></b>		<b><u>1101 W Washington Hall of Fame Museum</u></b>					
672								
673			<b><u>COOLING TOWERS</u></b>					
674	CT0230101		COOLING TOWER	EVAPCO	936721-W	CLG TWR BLDG	-	-
675			<b><u>CONDENSER PUMPS</u></b>					
676	DP0230101	# 1	CONDENSER WATER PUMP	BELL & GOSS	1330645	CLG TWR BLDG	-	-
677	DP0230102	# 2	BUILDING CONDENSER WATER PUMP	CENTURY		CLG TWR BLDG	-	-
678			<b><u>COOLING TOWER FAN MOTORS</u></b>					
679	FM023CT01		COOLING TOWER FAN MOTOR			-	-	-
680			<b><u>COOLING TOWER FANS</u></b>					
681	FN023CT01		COOLING TOWER FAN			-	-	-

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
682		<b>FLOW VALVES</b>						
683	FV023CT01		BASIN WATER LEVEL MAKE-UP VALVE			-	-	-
684		<b>ISOLATION VALVES</b>						
685	IV023CR01	# 1	BLDG PUMP #1 ISOLATION VALVE - SUCTION			CLG TWR BLDG	@ BLDG PUMP #1	-
686	IV023CR02	# 1	BLDG PUMP #1 ISOLATION VALVE - DISCHARGE			CLG TWR BLDG	@ BLDG PUMP #1	-
687	IV023CR03	# 2	BLDG PUMP #2 ISOLATION VALVE - SUCTION			CLG TWR BLDG	@ BLDG PUMP #2	-
688	IV023CR04	# 2	BLDG PUMP #2 ISOLATION VALVE - DISCHARGE			CLG TWR BLDG	@ BLDG PUMP #2	-
689	IV023CT01	CDWR	COOLING TOWER ISOLATION VALVE (TOWER IN)			CLG TWR BLDG	@ COOLING TOWER	WEST
690	IV023CT02	CDWR	COOLING TOWER ISOLATION VALVE (TOWER IN)			CLG TWR BLDG	@ COOLING TOWER	EAST
691	IV023CT03	CDWS	COOLING TOWER ISOLATION VALVE (TOWER OUT)			CLG TWR BLDG	@ COOLING TOWER	-
692	IV023CT04	CDWS/R	CDW SUPPLY/RETURN HEADERS TIE VALVE			CLG TWR BLDG	@ COOLING TOWER	-
693	IV023CT05	CITY	CITY WATER TO SYSTEM - ROOT VALVE			CLG TWR BLDG	@ COOLING TOWER	NW SIDE @ GROUND
694		<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>			<b>ADD TO CONTRACT</b>			
695	VD023CT01		VFD FOR COOLING TOWER					
696		<b>WATER TREATMENT</b>						
697	WT023CT01	CDW	WATER TREATMENT FOR COOLING TOWER			CLG TWR BLDG	-	-
698								
699	<b>027</b>	<b>1789 W Jefferson Department of Economic Security</b>						
700								
701		<b>CHILLERS</b>						
702	CH027CR01	# 1	CENTRIFUGAL CHILLER	TRANE	LO9A00005	CHILLER ROOM	-	-
703	CH027CR02	# 2	CENTRIFUGAL CHILLER	TRANE	LO9A00004	CHILLER ROOM	-	-
704		<b>CHILLER PUMPS</b>						
705	CP027CR01	# 1	CHILLED WATER PUMP	PACO		CHILLER ROOM	-	-
706	CP027CR02	# 2	CHILLED WATER PUMP	PACO		CHILLER ROOM	-	-
707	CP027CR03	# 3	CHILLED WATER PUMP	PACO		CHILLER ROOM	-	-
708	CP027CR04	# 4	CHILLED WATER PUMP	PACO		CHILLER ROOM	-	-
709	CP027CR05	# 5	CHILLED WATER PUMP	PACO		CHILLER ROOM	-	-
710	CP027CR06	# 1	CHILLED WATER PUMP	PACO		CHILLER ROOM	-	-
711	CP027CR07	GLYCOL INJECTION	CENTRIFUGAL PUMP -GLYCOL MAKE-UP			CHILLER ROOM	-	-
712		<b>COOLING TOWERS</b>						
713	CT0270101		COOLING TOWER	CERAMIC		-	-	-
714		<b>CONDENSER PUMPS</b>						
715	DP027CR01	# 7	CONDENSER WATER PUMP	PEERLESS	8943328 C	CHILLER ROOM	-	-
716	DP027CR02	# 8	CONDENSER WATER PUMP	PEERLESS	8943328 B	CHILLER ROOM	-	-
717	DP027CR09	# 9	CONDENSER WATER PUMP	PEERLESS	8943328 A	CHILLER ROOM	-	-
718		<b>FAN MOTORS</b>						
719	FM027CT01	# 1	COOLING TOWER FAN MOTOR	SIEMENS		COOLING TOWER	-	-
720	FM027CT02	# 2	COOLING TOWER FAN MOTOR	SIEMENS		COOLING TOWER	-	-
721	FM027RF01	SA-1	MOTOR FOR EAST AIR HANDLER SA FAN#1			RF ROOF	SOUTH EAST	-
722	FM027RF02	SA-2	MOTOR FOR EAST AIR HANDLER SA FAN#2			RF ROOF	SOUTH EAST	-
723	FM027RF03	SA-1	MOTOR FOR WEST AIR HANDLER SA FAN#1			RF ROOF	NORTH WEST	-
724	FM027RF04		MOTOR FOR WEST AIR HANDLER SA FAN#2			RF ROOF	NORTH WEST	-

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
<b>725</b>		<b>COOLING TOWER FANS</b>						
<b>726</b>	FN027CT01	# 1	COOLING TOWER FAN	AMARILLO		COOLING TOWER	-	-
<b>727</b>	FN027CT02	# 2	COOLING TOWER FAN	AMARILLO		COOLING TOWER	-	-
<b>728</b>		<b>FLOW VALVES</b>						
<b>729</b>	FV027CT01		BASIN WATER LEVEL MAKE-UP VALVE			-	-	-
<b>730</b>								
<b>731</b>		<b>ISOLATION VALVES</b>						
<b>732</b>	IV027CR01	CHWS	ISOLATION VALVE CH#1			CHILLER ROOM	CHILLER #1	-
<b>733</b>	IV027CR02	CHWR	ISOLATION VALVE CH#1			CHILLER ROOM	CHILLER #1	-
<b>734</b>	IV027CR03	CDWS	ISOLATION VALVE CH#1			CHILLER ROOM	CHILLER #1	-
<b>735</b>	IV027CR04	CDWR	ISOLATION VALVE CH#1			CHILLER ROOM	CHILLER #1	-
<b>736</b>	IV027CR05	CHWS	ISOLATION VALVE CH#2			CHILLER ROOM	CHILLER #2	-
<b>737</b>	IV027CR06	CHWR	ISOLATION VALVE CH#2			CHILLER ROOM	CHILLER #2	-
<b>738</b>	IV027CR07	CDWS	ISOLATION VALVE CH#2			CHILLER ROOM	CHILLER #2	-
<b>739</b>	IV027CR08	CDWR	ISOLATION VALVE CH#2			CHILLER ROOM	CHILLER #2	-
<b>740</b>	IV027CR09	CHW	CHW PUMP #1 ISOLATION VALVE - SUCTION			CHILLER ROOM	@ CHW PUMP #1	-
<b>741</b>	IV027CR10	CHW	CHW PUMP #1 ISOLATION VALVE - DISCHARGE			CHILLER ROOM	@ CHW PUMP #1	-
<b>742</b>	IV027CR11	CHW	CHW PUMP #2 ISOLATION VALVE - SUCTION			CHILLER ROOM	@ CHW PUMP #2	-
<b>743</b>	IV027CR12	CHW	CHW PUMP #2 ISOLATION VALVE - DISCHARGE			CHILLER ROOM	@ CHW PUMP #2	-
<b>744</b>	IV027CR13	CHW	CHW PUMP #3 ISOLATION VALVE - SUCTION			CHILLER ROOM	@ CHW PUMP #3	-
<b>745</b>	IV027CR14	CHW	CHW PUMP #3 ISOLATION VALVE - DISCHARGE			CHILLER ROOM	@ CHW PUMP #3	-
<b>746</b>	IV027CR15	CHW	CHW PUMP #4 ISOLATION VALVE - SUCTION			CHILLER ROOM	@ CHW PUMP #4	-
<b>747</b>	IV027CR16	CHW	CHW PUMP #4 ISOLATION VALVE - DISCHARGE			CHILLER ROOM	@ CHW PUMP #4	-
<b>748</b>	IV027CR17	CHW	CHW PUMP #5 ISOLATION VALVE - SUCTION			CHILLER ROOM	@ CHW PUMP #5	-
<b>749</b>	IV027CR18	CHW	CHW PUMP #5 ISOLATION VALVE - DISCHARGE			CHILLER ROOM	@ CHW PUMP #5	-
<b>750</b>	IV027CR19	CHW	CHW PUMP #6 ISOLATION VALVE - SUCTION			CHILLER ROOM	@ CHW PUMP #6	-
<b>751</b>	IV027CR20	CHW	CHW PUMP #6 ISOLATION VALVE - DISCHARGE			CHILLER ROOM	@ CHW PUMP #6	-
<b>752</b>	IV027CR21	CDW	CDW PUMP #7 ISOLATION VALVE - DISCHARGE			CHILLER ROOM	@ CDW PUMP #7	-
<b>753</b>	IV027CR22	CDW	CDW PUMP #8 ISOLATION VALVE - DISCHARGE			CHILLER ROOM	@ CDW PUMP #8	-
<b>754</b>	IV027CR23	CDW	CDW PUMP #9 ISOLATION VALVE - DISCHARGE			CHILLER ROOM	@ CDW PUMP #9	-
<b>755</b>	IV027CR24	CITY WATER	CITY WATER ROOT VALVE TO CENTRAL PLANT			CHILLER ROOM	@ CHW PUMP #6	@ WEST WALL
<b>756</b>	IV027CR25	CITY WATER	GLYCOL SYSTEM H2O MAKE-UP VALVE			CHILLER ROOM	@ CHW PUMP #4	INJECTION POINT
<b>757</b>	IV027CT01	CDW	EAST COOLING TOWER ISOLATION VALVE			COOLING TOWER	EAST	-
<b>758</b>	IV027CT02	CDW	WEST COOLING TOWER ISOLATION VALVE			COOLING TOWER	WEST	-
<b>759</b>	IV027CT03	CDW	EAST COOLING TOWER MAKE-UP VALVE			COOLING TOWER	WEST WALL	-
<b>760</b>		<b>BASIN LEVEL CONTROL</b>						

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
761	LC027CT01		BASIN WATER LEVEL CONTROL AND TRANSMITTER			-	-	-
762		<b>PUMP MOTORS</b>						
763	PM027CR01	# 1	CHILLED WATER PUMP MOTOR			CHILLER ROOM	@ CHW PUMP #1	-
764	PM027CR02	# 2	CHILLED WATER PUMP MOTOR			CHILLER ROOM	@ CHW PUMP #2	-
765	PM027CR03	# 1	CHILLED WATER PUMP MOTOR			CHILLER ROOM	@ CHW PUMP #3	-
766	PM027CR04	# 4	CHILLED WATER PUMP MOTOR			CHILLER ROOM	@ CHW PUMP #4	-
767	PM027CR05	# 5	CHILLED WATER PUMP MOTOR			CHILLER ROOM	@ CHW PUMP #5	-
768	PM027CR06	# 6	CHILLED WATER PUMP MOTOR			CHILLER ROOM	@ CHW PUMP #6	-
769	PM027CR07	GLYCOL INJECTION	CENTRIFUGAL PUMP MOTOR- GLYCOL MAKE-UP			CHILLER ROOM	@ GLYCOL PUMP	-
770	PM027DP01	# 7	CONDENSER WATER PUMP MOTOR			CHILLER ROOM	@ CDW PUMP #7	-
771	PM027DP02	# 8	CONDENSER WATER PUMP MOTOR			CHILLER ROOM	@ CDW PUMP #8	-
772	PM027DP03	# 9	CONDENSER WATER PUMP MOTOR			CHILLER ROOM	@ CDW PUMP #9	-
773		<b>PNEUMATIC VALVES</b>						
774	PV027CH01	V3a	PNEUMATIC VALVE CH#1 CHWR			CHILLER ROOM	CHILLER #1	-
775	PV027CH02	V5	PNEUMATIC VALVE CH#1 CDWR			CHILLER ROOM	CHILLER #1	-
776	PV027CH03	V3b	PNEUMATIC VALVE CH#2 CHWR			CHILLER ROOM	CHILLER #2	-
777	PV027CH04	V5b	PNEUMATIC VALVE CH#2 CHWR			CHILLER ROOM	CHILLER #2	-
778	PV027CR01	V1	MODULATING CONTROL VALVE WITH CONTROLLER	AUTOMAX		CHILLER ROOM	CHW LINE S OF PUMP	-
779	PV027CR02	V2	ICE BANK SELECTION VALVE (OPEN/CLOSED ONLY)	AUTOMAX		CHILLER ROOM	ICE BANK SP/LY/RTRN LINE	NORTH OF CHILLERS
780	PV027CR03	V4	MODULATING CONTROL VALVE WITH CONTROLLER	AUTOMAX		CHILLER ROOM	BLDG CHWR LINE	ABOVE BLDG CHWS PUMPS
781	PV027CT01	V6a	CDWR-PNEUMATIC VALVE			COOLING TOWER	EAST	-
782	PV027CT02	V6b	CDWR-PNEUMATIC VALVE			COOLING TOWER	WEST	-
783		<b>REFRIGERANT</b>						
784	RS027CR01		REFRIGERANT RECYCLE/RECOVERY SYSTEM	TRANE	L90K04271	CHILLER ROOM	-	-
785	RS027CR02	CH1	REFRIGERANT PRESSURE CONTROLLER	PREVAC		CHILLER ROOM	CHILLER #1	-
786	RS027CR03	CH2	REFRIGERANT PRESSURE CONTROLLER	PREVAC		CHILLER ROOM	CHILLER #2	-
787	SR027CT01	CDW	LIQUID/SOLID-SEPARATOR/PURGE SYSTEM	LAKOS	CLG TWR "BLOWDOWN"	COOLING TOWER	WEST WALL	-
788		<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>						
789	SS027CT01	# 1	SOFT START UNIT FOR CLG TWR FAN			COOLING TOWER	TWR FAN #1	-
790	SS027CT02	# 2	SOFT START UNIT FOR CLG TWR FAN			COOLING TOWER	TWR FAN #2	-
791	VD027CR04	# 4	VFD FOR CHILLED WATER PUMP # 4	ABB		CHILLER ROOM	@ CHW PUMP #4	-
792	VD027CR05	# 5	VFD FOR CHILLED WATER PUMP # 5	ABB		CHILLER ROOM	@ CHW PUMP #5	-
793	VD027RF01	SA-1	VFD FOR EAST AIR HANDLER SA FAN#1			RF ROOF	SOUTH EAST	-
794	VD027RF02	SA-2	VFD FOR EAST AIR HANDLER SA FAN#2			RF ROOF	SOUTH EAST	-
795	VD027RF03		VFD FOR WEST AIR HANDLER SA FAN#1			RF ROOF	NORTH WEST	-
796	VD027RF04		VFD FOR WEST AIR HANDLER SA FAN#2			RF ROOF	NORTH WEST	-
797		<b>BUILDING FANS</b>						
798	VF027RF01	SA-1	EAST AIR HANDLER SA FAN#1	JOY		RF ROOF	SOUTH EAST	-
799	VF027RF02	SA-2	EAST AIR HANDLER SA FAN#2	JOY		RF ROOF	SOUTH EAST	-
800	VF027RF03		WEST AIR HANDLER SA FAN#1	JOY		RF ROOF	NORTH WEST	-
801	VF027RF04		WEST AIR HANDLER SA FAN#2	JOY		RF ROOF	NORTH WEST	-
802		<b>WATER TREATMENT</b>						
803	WT027CR01	CDW	WATER TREATMENT FOR COOLING TOWERS			COOLING TOWER	-	-
804	WT027CR02	CHW/GLYCOL	WATER TREATMENT FOR CLOSED LOOP (WITH GLYCOL)			COOLING TOWER	-	-
805	WT027CRBM		CHEMICAL SYSTEM BLEED-OFF METER		46299988	COOLING TOWER	-	-

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
806	WT027CRIM		CITY WATER INJECTION METER		46329864	COOLING TOWER	-	-
807	WT027SHIM		CHW SYSTEM H2O INJECTION METER		46299981	COOLING TOWER	-	-
808								
809	<b>028</b>	<b><u>1645 W Jefferson Corrections</u></b>						
810								
811			<b>CHILLER PUMP</b>					
812	CP028B101	OLB	HVAC CHILLER BOOSTER PUMP	BELL & GOSS	665765	B1 BASEMENT	EQUIPMENT ROOM	-
813								
814								
815			<b>ISOLATION VALVES</b>					
816	IV028B101	CHW #1	CHW PUMP ISOLATION VALVE-SUCTION			B1 BASEMENT	EQUIPMENT ROOM	@ CHW PUMP
817	IV028B102	CHW #2	CHW PUMP ISOLATION VALVE-DISCHARGE			B1 BASEMENT	EQUIPMENT ROOM	@ CHW PUMP
818			<b>PUMP MOTORS</b>					
819	PM028B101	OLB	HVAC CHILLER BOOSTER PUMP MOTOR	US ELEC MOTR	45BC03JPP3	B1 BASEMENT	-	-
820			<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
821	VD028B101		VARIABLE FREQUENCY DRIVE - BOOSTER PUMP	ABB	2040700299	B1 BASEMENT	-	-
822	VD028RF01	RA	VARIABLE FREQUENCY DRIVE - ROOF RETURN FAN	ABB	2040700307	PENTHOUSE	-	-
823	VD028RF02	SA	VARIABLE FREQUENCY DRIVE - ROOF SUPPLY FAN	ABB	2040601423	PENTHOUSE	-	-
824			<b>BUILDING FANS</b>					
825	VF028RF01	RA	IN LINE AXIAL VANE FAN - RA			PENTHOUSE	-	-
826	VF028RF02	SA	IN LINE AXIAL VANE FAN - SA			RF ROOF	-	-
827								
828	<b>029</b>	<b><u>1601 W Jefferson Corrections</u></b>						
829								
830			<b>CHILLER PUMP</b>					
831	CP029B101	DOC	HVAC CHILLER BOOSTER PUMP	BELL & GOSS	638825 JK	B1 BASEMENT	-	-
832			<b>ISOLATION VALVES</b>					
833	IV029B101	CHW #1	CHW PUMP ISOLATION VALVE-SUCTION			B1 BASEMENT	EQUIPMENT ROOM	@CHW PUMP #1
834	IV029B102	CHW #2	CHW PUMP ISOLATION VALVE-DISCHARGE			B1 BASEMENT	EQUIPMENT ROOM	@CHW PUMP #1
835			<b>PUMP MOTORS</b>					
836	PM029B101	DOC	HVAC CHILLER BOOSTER PUMP MOTOR	US ELEC MOTR	W07W147R082	B1 BASEMENT	-	-
837			<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
838	VD029B101		VARIABLE FREQUENCY DRIVE FOR BOOSTER PUMP	ABB	2040700302	B1 BASEMENT	-	-
839	VD029RF01	# 1 SA	VARIABLE FREQUENCY DRIVE FOR A/H 1 SUPPLY FAN	ABB	2040700305	RF ROOF	-	-
840	VD029RF02	# 2 SA	VARIABLE FREQUENCY DRIVE FOR A/H 2 SUPPLY FAN	ABB	2040700303	RF ROOF	-	-
841	VD029RF03	# 1 RA	VARIABLE FREQUENCY DRIVE FOR A/H 1 RETURN FAN	ABB	2050201054	RF ROOF	-	-
842	VD029RF04	# 2 RA	VARIABLE FREQUENCY DRIVE FOR A/H 2 RETURN FAN	ABB	2050201052	RF ROOF	-	-
843								
844	<b>030</b>	<b><u>1601M W Jefferson 1601 Mechanical Building</u></b>						
845								
846			<b>CHILLERS</b>					
847	CH0300101	NE #1	ROTARY CHILLER UNIT	TRANE	U95A05478	01 FIRST FLOOR	-	-

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
848	CH0300102	NW #2	ROTARY CHILLER UNIT	TRANE	U95A05477	01 FIRST FLOOR	-	-
849	CH0300103	SO #3	ROTARYCHILLER UNIT	TRANE	U95A05476	01 FIRST FLOOR	-	-
850			<b>CHILLER PUMPS</b>					
851	CP0300101	# 1	CHILLED WATER PUMP	EMERSON	W09W209R87F	01 FIRST FLOOR	-	-
852	CP0300102	# 2	CHILLED WATER PUMP	EMERSON	W07W147R082F	01 FIRST FLOOR	-	-
853	CP0300103	# 3	CHILLED WATER PUMP	EMERSON	A441AW06W104	01 FIRST FLOOR	-	-
854			<b>COOLING TOWERS</b>					
855	CT0300101	# 1	COOLING TOWER # 1	CERAMIC	N/A	01 FIRST FLOOR	CENTER	-
856	CT0300102	# 2	COOLING TOWER # 2	CERAMIC	N/A	01 FIRST FLOOR	NORTH	-
857	CT0300103	# 3	COOLING TOWER # 3	CERAMIC	N/A	01 FIRST FLOOR	SOUTH	-
858			<b>CONDENSER PUMPS</b>					
859	DP0300101	# 1	CONDENSER WATER PUMP	EMERSON	W07W14R082F	01 FIRST FLOOR	-	-
860	DP0300102	# 2	CONDENSER WATER PUMP	EMERSON	W09W209R187F	01 FIRST FLOOR	-	-
861	DP0300103	# 3	CONDENSER WATER PUMP	EMERSON	W09W209R187F	01 FIRST FLOOR	-	-
862			<b>COOLING TOWER FAN MOTORS</b>					
863	FM030CT01	# 1	COOLING TOWER FAN MOTOR	UNICLOSED	45C03	-	-	-
864	FM030CT02	# 2	COOLING TOWER FAN MOTOR	US ELEC MOTR		-	-	-
865	FM030CT03	# 3	COOLING TOWER FAN MOTOR	SPARTAN	CJFP	-	-	-
866			<b>COOLING TOWER FANS</b>					
867	FN030CT01	# 1	COOLING TOWER FAN			-	-	-
868	FN030CT02	# 2	COOLING TOWER FAN		9200386-740	-	-	-
869	FN030CT03	# 3	COOLING TOWER FAN			-	-	-
870			<b>FLOW VALVES</b>					
871	FV030CT01		BASIN WATER LEVEL MAKE-UP VALVE	TOWER FLOW		01 FIRST FLOOR	CENTER	-
872	FV030CT02		BASIN WATER LEVEL MAKE-UP VALVE	TOWER FLOW		01 FIRST FLOOR	NORTH	-
873	FV030CT03		BASIN WATER LEVEL MAKE-UP VALVE	TOWER FLOW		01 FIRST FLOOR	SOUTH	-
874			<b>ISOLATION VALVES</b>					
875	IV030CR01	CHWS	CH #1 ISOLATION VALVE			01 FIRST FLOOR	@ CHILLER #1	-
876	IV030CR02	CHWR	CH #1 ISOLATION VALVE			01 FIRST FLOOR	@ CHILLER #1	-
877	IV030CR03	CHWS #3	CH #1 ISOLATION VALVE			01 FIRST FLOOR	@ CHILLER #1	-
878	IV030CR04	CHWS #4	CH #1 ISOLATION VALVE			01 FIRST FLOOR	@ CHILLER #1	-
879	IV030CR05	CHWS	CH #2 ISOLATION VALVE			01 FIRST FLOOR	@ CHILLER #2	-
880	IV030CR06	CHWR	CH #2 ISOLATION VALVE			01 FIRST FLOOR	@ CHILLER #2	-
881	IV030CR07	CDWS	CH #2 ISOLATION VALVE			01 FIRST FLOOR	@ CHILLER #2	-
882	IV030CR08	CDWR	CH #2 ISOLATION VALVE			01 FIRST FLOOR	@ CHILLER #2	-
883	IV030CR09	CHWS	CH #3 ISOLATION VALVE			01 FIRST FLOOR	@ CHILLER #3	-
884	IV030CR10	CHWR	CH #3 ISOLATION VALVE			01 FIRST FLOOR	@ CHILLER #3	-
885	IV030CR11	CDWS	CH #3 ISOLATION VALVE			01 FIRST FLOOR	@ CHILLER #3	-
886	IV030CR12	CDWR	CH #3 ISOLATION VALVE			01 FIRST FLOOR	@ CHILLER #3	-
887	IV030CR13	CHW	CHW PUMP #1 ISOLATION VALVE-SUCTION			01 FIRST FLOOR	@ CHW PUMP #1	-
888	IV030CR14	CHW	CHW PUMP #1 ISOLATION VALVE-DISCHARGE			01 FIRST FLOOR	@ CHW PUMP #1	-
889	IV030CR15	CDW	CDW PUMP #1 ISOLATION VALVE-SUCTION			01 FIRST FLOOR	@ CDW PUMP #1	-
890	IV030CR16	CDW	CDW PUMP #1 ISOLATION VALVE-DISCHARGE			01 FIRST FLOOR	@ CDW PUMP #1	-
891	IV030CR17	CHW	CHW PUMP #2 ISOLATION VALVE-SUCTION			01 FIRST FLOOR	@ CHW PUMP #2	-
892	IV030CR18	CHW	CHW PUMP #2 ISOLATION VALVE-DISCHARGE			01 FIRST FLOOR	@ CHW PUMP #2	-

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
893	IV030CR19	CDW	CDW PUMP #2 ISOLATION VALVE-SUCTION			01 FIRST FLOOR	@ CDW PUMP #2	-
894	IV030CR20	CDW	CDW PUMP #2 ISOLATION VALVE-DISCHARGE			01 FIRST FLOOR	@ CDW PUMP #2	-
895	IV030CR21	CHW	CHW PUMP #3 ISOLATION VALVE-SUCTION			01 FIRST FLOOR	@ CHW PUMP #3	-
896	IV030CR22	CHW	CHW PUMP #3 ISOLATION VALVE-DISCHARGE			01 FIRST FLOOR	@ CHW PUMP #3	-
897	IV030CR23	CDW	CDW PUMP #3 ISOLATION VALVE-SUCTION			01 FIRST FLOOR	@ CDW PUMP #3	-
898	IV030CR24	CDW	CDW PUMP #3 ISOLATION VALVE-DISCHARGE			01 FIRST FLOOR	@ CDW PUMP #3	-
899	IV030HX01	HX	HX ISOLATION VALVE-CHILLED WATER IN			01 FIRST FLOOR	@ HEAT EXCHANGER	-
900	IV030HX02	HX	HX ISOLATION VALVE-CHILLED WATER OUT			01 FIRST FLOOR	@ HEAT EXCHANGER	-
901	IV030HX03	HX	HX ISOLATION VALVE-CONDENSER WATER IN			01 FIRST FLOOR	@ HEAT EXCHANGER	-
902	IV030HX04	HX	HX ISOLATION VALVE-CONDENSER WATER OUT			01 FIRST FLOOR	@ HEAT EXCHANGER	-
903			<b>FLAT PLATE HEAT EXCHANGERS</b>					
904	PF0300101	HX	PLATE AND FRAME HEAT EXCHANGER	TRANTOR	SC6506	01 FIRST FLOOR	-	-
905			<b>PUMP MOTORS</b>					
906	PM0300101	# 1	CHILLED WATER PUMP MOTOR	US ELEC MOTR		01 FIRST FLOOR	-	-
907	PM0300102	# 2	CHILLED WATER PUMP MOTOR	US ELEC MOTR		01 FIRST FLOOR	-	-
908	PM0300103	# 3	CHILLED WATER PUMP MOTOR	US ELEC MOTR		01 FIRST FLOOR	-	-
909	PM0300104	# 1	CONDENSOR PUMP MOTOR	US ELEC MOTR		01 FIRST FLOOR	-	-
910	PM0300105	# 2	CONDENSOR PUMP	US ELEC MOTR		01 FIRST FLOOR	-	-
911	PM0300106	# 3	CONDENSOR WATER PUMP MOTOR	US ELEC MOTR		01 FIRST FLOOR	-	-
912			<b>PNEUMATIC VALVES</b>					
913	PV030CH01	# 1	PNEUMATIC VALVE - CH #1 - CHWR			01 FIRST FLOOR	@ CHILLER #1	-
914	PV030CH02	# 2	PNEUMATIC VALVE - CDWS & CH BYPASS TO HX			01 FIRST FLOOR	@ CHILLER #1	-
915	PV030CH03	# 3	PNEUMATIC VALVE - CH #2 - CHWR			01 FIRST FLOOR	@ CHILLER #2	-
916	PV030CH04	# 4	PNEUMATIC VALVE - CH #2 - CDWS			01 FIRST FLOOR	@ CHILLER #2	-
917	PV030CH05	# 5	PNEUMATIC VALVE - CH #3 - CHWS			01 FIRST FLOOR	@ CHILLER #3	-
918	PV030CH06	# 6	PNEUMATIC VALVE - CH #3 - CDWS			01 FIRST FLOOR	@ CHILLER #3	-
919	PV030CH07	# 7	PNEUMATIC VALVE-CDWR TIE BETWEEN CH #2/HX/CH #1			01 FIRST FLOOR	@ CHILLER #2	-
920	PV030CH08	# 8	PNEUMATIC VALVE-CDWS TO HX			01 FIRST FLOOR	@ CHILLER #2	-
921	PV030HX01	# 9	PNEUMATIC VALVE-HX CHWS			01 FIRST FLOOR	@ HEAT EXCHANGER	-
922	PV030HX02	# 10	PNEUMATIC VALVE-HX CDWS			01 FIRST FLOOR	@ HEAT EXCHANGER	-
923			<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
924	VD030CR01	# 1	VSD FOR COOLING TOWER FAN #1	ABB		-	-	-
925	VD030CR02	# 2	VSD FOR COOLING TOWER FAN #2	ABB		-	-	-
926	ACH550-VCR-023	# 3	VSD FOR COOLING TOWER FAN #3	ABB	2094801625			
927			<b>WATER TREATMENT</b>					
928	WT030CR01	CDW	WATER TREATMENT FOR COOLING TOWER #1			-	-	-
929	WT030CR02	CDW	WATER TREATMENT FOR COOLING TOWER #2			-	-	-
930	WT030CR03	CDW	WATER TREATMENT FOR COOLING TOWER #3			-	-	-
931	WT030CR04	CHILLED WATER	WATER TREATMENT FOR CLOSED LOOP 1&2			-	-	-
932	WT030CR05	CHILLED WATER	WATER TREATMENT FOR CLOSED LOOP 3			-	-	-

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
933								
934	<b>031</b>	<b><u>1535 W Jefferson Department of Education</u></b>						
935								
936			<b>CHILLER PUMPS</b>					
937	CP031B101	ED	HVAC CHILLER BOOSTER PUMP	BELL & GOSS		B1 BASEMENT	-	-
938			<b>ISOLATION VALVES</b>					
939	IV031B101	CHW #1	CHW PUMP ISOLATION VALVE-SUCTION			B1 BASEMENT	EQUIPMENT ROOM	@ CHW PUMP
940	IV031B102	CHW #2	CHW PUMP ISOLATION VALVE-DISCHARGE			B1 BASEMENT	EQUIPMENT ROOM	@ CHW PUMP
941			<b>PUMP MOTORS</b>					
942	PM031B101	ED	HVAC CHILLER BOOSTER PUMP MOTOR	US ELEC MOTR	W09W209R187F	B1 BASEMENT	-	-
943			<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
944	VD031B101		VARIABLE FREQUENCY DRIVE FOR HVAC BOOSTER PUMP	ABB	2040700311	B1 BASEMENT	-	-
945	VD031RF01		VARIABLE FREQUENCY DRIVE FOR A/H 1 SUPPLY FAN	ABB	2040700434	RF ROOF	-	-
946	VD031RF02		VARIABLE FREQUENCY DRIVE FOR A/H 1 RETURN FAN	ABB	2050201056	RF ROOF	-	-
947	VD031RF03		VARIABLE FREQUENCY DRIVE FOR A/H 2 SUPPLY FAN	ABB	2040700439	RF ROOF	-	-
948	VD031RF04		VARIABLE FREQUENCY DRIVE FOR A/H 2 RETURN FAN	ABB	2050201055	RF ROOF	-	-
949								
950	<b>038</b>	<b><u>1510 W Adams DataCenter</u></b>						
951			<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
952	ACH550-VCR-072A-4		VARIABLE FREQUENCY DRIVE FOR A/H 1 SUPPLY FAN	ABB	213904632			
953								
954	<b>021</b>	<b><u>15 S 15th Avenue Attorney General</u></b>						
955								
956			<b>COOLING TOWER</b>					
957	CT021P501	# 1	PREFABRICATED METAL COOLING TOWER	BALTIMORE AI	86-1560	05 LEVEL 5	EQUIPMENT CAGE	SOUTH
958	CT021P502	# 2	PREFABRICATED METAL COOLING TOWER	BALTIMORE AI	86156	05 LEVEL 5	EQUIPMENT CAGE	NORTH
959			<b>CONDENSER PUMPS</b>					
960	DP021CT01	# 1	COOLING TOWERS FILTER PUMP			05 LEVEL 5	EQUIPMENT CAGE	BETWEEN CT1 & CT2
961	DP021P501	# 1	CONDENSER WATER PUMP			05 LEVEL 5	EQUIPMENT CAGE	EAST
962	DP021P502	# 2	CONDENSER WATER PUMP	GE		05 LEVEL 5	EQUIPMENT CAGE	WEST
963			<b>FLOW VALVES</b>					
964	FV040CT01		BASIN WATER LEVEL MAKE-UP VALVE			05 LEVEL 5	EQUIPMENT CAGE	SOUTH
965	FV040CT02		BASIN WATER LEVEL MAKE-UP VALVE			05 LEVEL 5	EQUIPMENT CAGE	NORTH
966			<b>ISOLATION VALVES</b>					
967	IV021CT01	# 5	COOLING TOWER MAKE-UP WATER ISOLATION VALVE			05 LEVEL 5	EQUIPMENT CAGE	@ CLG TWR #1
968	IV021CT02	# 6	COOLING TOWER MAKE-UP WATER ISOLATION VALVE			05 LEVEL 5	EQUIPMENT CAGE	@ CLG TWR #2
969	IV021CT03	# 7	ROOT VALVE-CITY WATER MAKE-UP BOTH TWRS			05 LEVEL 5	EQUIPMENT CAGE	@ CLG TWR #1
970	IV021P501	# 1	BLDG PUMP # 1 ISOLATION VALVE - SUCTION			05 LEVEL 5	EQUIPMENT CAGE	@ CDW PUMP #1
971	IV021P502	# 2	BLDG PUMP # 1 ISOLATION VALVE - DISCHARGE			05 LEVEL 5	EQUIPMENT CAGE	@ CDW PUMP #1



## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
972	IV021P503	# 3	BLDG PUMP # 2 ISOLATION VALVE - SUCTION			05 LEVEL 5	EQUIPMENT CAGE	@ CDW PUMP #2
973	IV021P504	# 4	BLDG PUMP # 2 ISOLATION VALVE - DISCHARGE			05 LEVEL 5	EQUIPMENT CAGE	@ CDW PUMP #2
974								
975								
976		<b>WATER TREATMENT</b>						
977	WT021CT01	CDW	WATER TREATMENT FOR SOUTH COOLING TOWER			05 LEVEL 5	EQUIPMENT CAGE	SOUTH
978	WT021CT02	CDW	WATER TREATMENT FOR NORTH COOLING TOWER			05 LEVEL 5	EQUIPMENT CAGE	NORTH
979	WT021CT03	CDW	WATER TREATMENT FOR BUILDING LOOP			05 LEVEL 5	EQUIPMENT CAGE	NORTH
980								
981	<b>052</b>	<b>416 W Congress Tucson Office Building (West)</b>						
982								
983		<b>AIR DRYER</b>						
984	AD052CR01		AIR DRYER	HANKISON COR	0302A-1-0479-750N	CR CHILLER ROOM	-	-
985		<b>FAN MOTORS</b>						
986	FM052AH01	AHU #1	SUPPLY AIR FAN MOTOR AHU #1			-	-	-
987	FM052AH02	AHU #2	SUPPLY AIR FAN MOTOR AHU #2			-	-	-
988		<b>ISOLATION VALVES</b>						
989	IV052AH01	AHU #1	ISOLATION VALVES FOR AHU #1			-	-	-
990	IV052AH02	AHU #2	ISOLATION VALVES FOR AHU #2			-	-	-
991		<b>COMPRESSOR</b>						
992	PC052LE01		PNEUMATIC COMPRESSOR	CHAMPION PNE	BV 38526SR	LE LOWER LEVEL EAST	EQUIPMENT ROOM	-
993		<b>PNEUMATIC VALVES</b>						
994	PV052AH01	AHU #1	PNEUMATIC CONTROL VALVES HOT & COLD DECK AHU #1			-	-	-
995	PV052AH02	AHU #2	PNEUMATIC CONTROL VALVES HOT & COLD DECK AHU #2			-	-	-
996		<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>						
997	VD052LE01		VFD FOR AHU #1 25 HP	ABB	176240	LE LOWER LEVEL EAST	EQUIPMENT ROOM	-
998		<b>BUILDING FANS</b>						
999	VF052AH01	AHU #1	SUPPLY AIR FAN FOR AHU #1			-	-	-
1000	VF052AH02	AHU #2	SUPPLY AIR FAN FOR AHU #2			-	-	-
1001								
1002	<b>053</b>	<b>402 W Congress Tucson Office Building (South)</b>						
1003								
1004		<b>AIR DRYER</b>						
1005	AD053CR01		AIR DRYER	HANKISON	0302A-1-0479-750N	CR CHILLER ROOM	-	-
1006		<b>BOILERS</b>						
1007	BL053CR01		BOILER	PEERLESS	211-3588	BR BOILER ROOM		
1008		<b>CHILLERS</b>						
1009	CH053CR01	# 1	RECIPROCATING CHILLER	BOHN	JEH0034	CR CHILLER ROOM	-	-
1010	CH053CR02	# 2	RECIPROCATING CHILLER	BOHN	JEH0035	CR CHILLER ROOM	-	-
1011		<b>CHILLER PUMPS</b>						
1012	CP053CR01	# 1	CHILLED WATER PUMP	AURORA	#78-03860-1 SIZE 2.5X	CR CHILLER ROOM	-	-
1013		<b>COOLING TOWERS</b>						
1014	CT053OS01	# 1	COOLING TOWER	CERAMIC	UNKNOWN	CT COOLING TOWER	-	-
1015	CT053OS02	# 2	COOLING TOWER	CERAMIC	UNKNOWN	CT COOLING TOWER	-	-
1016		<b>CONDENSER PUMPS</b>						

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
1017	DP053OS01	# 1	CONDENSOR WATER PUMP	AURORA	3R8-70874	OS OUTSIDE	-	-
1018	DP053OS02	# 2	CONDENSOR WATER PUMP	AURORA	3R8-70874	OS OUTSIDE	-	-
1019		<b>FAN MOTORS</b>						
1020	FM053AH01	AHU #1	SUPPLY AIR FAN MOTOR AHU #1			-	-	-
1021	FM053AH02	AHU #2	SUPPLY AIR FAN MOTOR AHU #2			-	-	-
1022		<b>ISOLATION VALVES</b>						
1023	IV053AH01	AHU #1	ISOLATION VALVES FOR AHU #1			-	-	-
1024	IV053AH02	AHU #2	ISOLATION VALVES FOR AHU #2			-	-	-
1025								
1026		<b>COMPRESSOR</b>						
1027	PC053CR01		PNEUMATIC COMPRESSOR	QUINCY	6197300	CR CHILLER ROOM	-	-
1028		<b>PUMP MOTORS</b>						
1029	PM053CR01	# 1	CHILLED WATER PUMP MOTOR	CENTURY		CR CHILLER ROOM	@ CHW PUMP #1	-
1030	PM053CR02	# 1	CHILLED WATER PUMP MOTOR	CENTURY		CR CHILLER ROOM	@ CHW PUMP #2	-
1031	PM053OS01	# 1	CONDENSOR WATER PUMP MOTOR	US ELEC MOTR		OS OUTSIDE	-	-
1032	PM053OS02	# 2	CONDENSOR WATER PUMP MOTOR	US ELEC MOTR		OS OUTSIDE	-	-
1033		<b>PNEUMATIC VALVES</b>						
1034	PV053AH01	AHU #1	PNEUMATIC CONTROL VALVES HOT & COLD DECK AHU #1			-	-	-
1035	PV053AH02	AHU #2	PNEUMATIC CONTROL VALVES HOT & COLD DECK AHU #2			-	-	-
1036	PV053CR01		PNEUMATIC VALVE	JOHNSON CONT	009613	CR CHILLER ROOM	-	-
1037		<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>						
1038	VD053B101	AHU #1	VARIABLE SPEED DRIVE VD-1 40 HP	ABB	173762	B1 BASEMENT	MR MECHANICAL ROOM	-
1039	VD053B102	AHU #2	VARIABLE SPEED DRIVE VD-2 40 HP	ABB	173763	B1 BASEMENT	MR MECHANICAL ROOM	-
1040								
1041		<b>BUILDING FANS</b>						
1042	VF053AH01	AHU #1	SUPPLY AIR FAN FOR AHU #1			-	-	-
1043	VF053AH02	AHU #2	SUPPLY AIR FAN FOR AHU #2			-	-	-
1044		<b>WATER TREATMENT</b>						
1045	WT0530101	CDW	WATER TREATMENT FOR COOLING TOWER	LAKEWOOD	IE50628	CR CHILLER ROOM	-	-
1046	WT0530102	CHILLED WATER	WATER TREATMENT FOR CLOSED LOOP			CR CHILLER ROOM	-	-
1047		<b>EXPANSION TANK</b>						
1048	XT053AH01		EXPANSION TANK FOR AHU #1			-	-	-
1049								
1050	<b>054</b>	<b>400 W Congress Tucson Office Building (North)</b>						
1051								
1052		<b>AIR DRYER</b>						
1053	AD054CR01		AIR DRYER	HANKISON		-	-	-
1054		<b>AIR HANDLERS</b>						
1055	AH054PH01	# 1	AIR HANDLER	BAYLEY	QC-4504 ORD. # 558220-00	PH PENTHOUSE	-	-
1056	AH054PH02	# 2	AIR HANDLER	BAYLEY	QC-4506 ORD. # 558220-00	PH PENTHOUSE	-	-
1057		<b>BOILERS</b>						
1058	BL054L201		BOILER	WEIL-MCLAIN	CP2174371	L2 LOWER LEVEL TWO	BOILER ROOM	
1059		<b>BOILER PUMPS</b>						
1060	BP054L201		BOILER PUMP			L2 LOWER LEVEL TWO	BOILER ROOM	-
1061		<b>CHILLERS</b>						
1062	CH054L101	# 1	CENTRIFUGAL CHILLER	MCQUAY	5VK0103200	L1 LOWER LEVEL ONE	CHILLER ROOM	-
1063	CH054L102	# 2	CENTRIFUGAL CHILLER	MCQUAY	5VK0103000	L1 LOWER LEVEL ONE	CHILLER ROOM	-

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
1064			<b>CHILLER PUMPS</b>					
1065	CP054L201	# 1	CHILLED WATER PUMP	AURORA	#90-02930-1 SIZE 4X5X11A	L2 LOWER LEVEL TWO	PUMP ROOM	-
1066	CP054L202	# 2	CHILLED WATER PUMP	AURORA	#90-02930-1 SIZE 4X5X11A	L2 LOWER LEVEL TWO	PUMP ROOM	-
1067			<b>COOLING TOWERS</b>					
1068	CT054OS01	# 1	COOLING TOWER	EVAPCO	904544	CT COOLING TOWER	-	-
1069	CT054OS02	# 2	COOLING TOWER	EVAPCO	904545	CT COOLING TOWER	-	-
1070			<b>CONDENSER PUMPS</b>					
1071	DP054L201	# 1	CONDENSER WATER PUMP	AURORA PUMP	#90-02929-2 SIZE 4X5X11	L2 LOWER LEVEL TWO	PUMP ROOM	-
1072	DP054L202	#2	CONDENSER WATER PUMP	AURORA	#90-02929-1 SIZE 4X5X11	L2 LOWER LEVEL TWO	PUMP ROOM	-
1073			<b>FAN MOTORS</b>					
1074	FM054AH01	AHU #1	SUPPLY AIR FAN MOTOR AHU #1			-	-	-
1075	FM054AH02	AHU #2	SUPPLY AIR FAN MOTOR AHU #2			-	-	-
1076			<b>ISOLATION VALVES</b>					
1077	IV054AH01	AHU #1	ISOLATION VALVES FOR AHU #1			-	-	-
1078	IV054AH02	AHU #2	ISOLATION VALVES FOR AHU #2			-	-	-
1079	IV054CP01	CHW	CHILLED WATER PUMP ISOLATION VALVES			L2 LOWER LEVEL TWO	PUMP ROOM	-
1080	IV054DP01	CDW	CONDENSOR WATER PUMP ISOLATION VALVES			L2 LOWER LEVEL TWO	PUMP ROOM	-
1081			<b>COMPRESSOR</b>					
1082	PC0540101		PNEUMATIC AIR COMPRESSOR			-	-	-
1083			<b>PUMP MOTORS</b>					
1084	PM054L201	# 1	CHILLED WATER PUMP MOTOR	US ELEC MOTR		L2 LOWER LEVEL TWO	CHILLER ROOM	@ CHW PUMP #1
1085	PM054L202	# 2	CHILLED WATER PUMP MOTOR	US ELEC MOTR		L2 LOWER LEVEL TWO	CHILLER ROOM	@ CHW PUMP #2
1086	PM054L203	# 1	CONDENSOR WATER PUMP MOTOR	US ELEC MOTR		L2 LOWER LEVEL TWO	PUMP ROOM	@ CDW PUMP #1
1087	PM054L204	# 2	CONDENSOR WATER PUMP MOTOR	US ELEC MOTR		L2 LOWER LEVEL TWO	PUMP ROOM	@ CDW PUMP #2
1088			<b>PNEUMATIC VALVES</b>					
1089	PV054AH01	AHU #1	PNEUMATIC CONTROL VALVES HOT & COLD DECK AHU #1			-	-	-
1090	PV054AH02	AHU #2	PNEUMATIC CONTROL VALVES HOT & COLD DECK AHU #2			-	-	-
1091			<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
1092	VD054CR01		VARIABLE SPEED CONTROLLER VFD-3 TOWER 25 HP	ABB	174802	CR CHILLER ROOM	-	-
1093	VD054CR02		VARIABLE SPEED CONTROLLER VFD-4 TOWER 25 HP	ABB	174804	CR CHILLER ROOM	-	-
1094	VD054PH01	# 1	VARIABLE FREQUENCY DRIVE VFD-1 AHU #1 125 HP	ROBICON	A090900-001	PH PENTHOUSE	-	-
1095	VD054PH02	# 2	VARIABLE FREQUENCY DRIVE VFD-2 AHU#2 125 HP	ABB	00071	PH PENTHOUSE	-	-
1096			<b>BUILDING FANS</b>					
1097	VF054AH01	AHU #1	SUPPLY AIR FAN FOR AHU #1			-	-	-
1098	VF054AH02	AHU #2	SUPPLY AIR FAN FOR AHU #2			-	-	-
1099			<b>WATER TREATMENT</b>					
1100	WT0540101	CDW	TOWER WATER TREATMENT	LAKEWOOD	3K63876	CR CHILLER ROOM	-	-
1101	WT0540102	CHILLED WATER	TOWER WATER TREATMENT FOR CLOSED LOOP SYSTEM	LAKEWOOD	3K63877	CR CHILLER ROOM	-	-
1102			<b>EXPANSION TANK</b>					
1103	XT054AH01		EXPANSION TANK FOR AHU #1			-	-	-

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
1104								
1105	<b>078</b>	<b>2910 N 44th Street Sunstate Office Building</b>						
1106								
1107	CT078RF01		COOLING TOWER	BALTIMORE AI	U013537901MAD	RF ROOF	-	-
1108	DP078RF01		CONDENSER WATER PUMP	MAGNETEK	BU04	RF ROOF	-	-
1109	DP078RF02		CONDENSER WATER PUMP	MAGNETEK	BT8	RF ROOF	-	-
1110	DP078RF03		CONDENSOR PUMP (SPRAY PUMP)	BALTIMORE AI	ZRM121500D	RF ROOF	-	-
1111	FM078CT01		COOLING TOWER FAN MOTOR			RF ROOF	-	-
1112	FN078CT01		COOLING TOWER FAN			RF ROOF	-	-
1113	WT078CT01		COOLING TOWER WATER TREATMENT			RF ROOF	-	-
1114								
1115								
1116		<b>134 250 N 17th Avenue State Health Laboratory</b>						
1117								
1118		<b>AIR DRYERS</b>						
1119	AD1340101		AIR DRYER AD-1	INGERSO-RAND	42496281	01 FIRST FLOOR	1040A.1 MECHANICAL RM	-
1120	AD134PH01		AIR SEPARATOR	TACO		PH PENTHOUSE	WEST END	-
1121		<b>AIR HANDLER</b>						
1122	AH1340201		HUMIDIFIER	PH	H2-1	02 SECOND FLOOR	FREEZER FARM	-
1123		<b>BOILERS</b>						
1124	BL134PH01		WATER HEATING BOILER	RBI	040331711	PH PENTHOUSE	WEST END	4000F.1 BOILER ROOM
1125	BL134PH02		WATER HEATING BOILER	RBI	040331710	PH PENTHOUSE	WEST END	4000F.1 BOILER ROOM
1126	BL134PH03		WATER HEATING BOILER	RBI	060332097	PH PENTHOUSE	WEST END	4000F.1 BOILER ROOM
1127	BL134PH04		WATER HEATING BOILER	RBI	060332096	PH PENTHOUSE	WEST END	4000F.1 BOILER ROOM
1128	BL134PH05		WATER HEATING BOILER	RBI	050331794	PH PENTHOUSE	WEST END	4000F.1 BOILER ROOM
1129	BP134PH01		PRIMARY BOILER PUMP	BELL&GOSSETT	PBP-1	PH PENTHOUSE	WEST END	4000F.1 BOILER ROOM
1130	BP134PH02		PRIMARY BOILER PUMP	BELL&GOSSETT	PBP-2	PH PENTHOUSE	WEST END	4000F.1 BOILER ROOM
1131	BP134PH03		PRIMARY BOILER PUMP	BELL&GOSSETT	PBP-3	PH PENTHOUSE	WEST END	4000F.1 BOILER ROOM
1132	BP134PH04		PRIMARY BOILER PUMP	BELL&GOSSETT	PBP-4	PH PENTHOUSE	WEST END	4000F.1 BOILER ROOM
1133	BP134PH05		PRIMARY BOILER PUMP	BELL&GOSSETT	PBP-5	PH PENTHOUSE	WEST END	4000F.1 BOILER ROOM
1134	BP134PH06		SECONDARY BOILER PUMP	BELL&GOSSETT	SBP1	PH PENTHOUSE	WEST END	4000F.1 BOILER ROOM
1135	BP134PH07		SECONDARY BOILER PUMP	BELL&GOSSETT	SBP2	PH PENTHOUSE	WEST END	4000F.1 BOILER ROOM
1136	BP134PH08		SECONDARY BOILER PUMP	BELL&GOSSETT	SBP3	PH PENTHOUSE	WEST END	4000F.1 BOILER ROOM
1137		<b>CHILLERS</b>						
1138	CH1340101		WATER CHILLER	TRANE	CH-1	01 FIRST FLOOR	1040A.1 MECHANICAL RM	-
1139	CH1340102		WATER CHILLER	TRANE	CH-2	01 FIRST FLOOR	1040A.1 MECHANICAL RM	-
1140	CH1340103		WATER CHILLER	TRANE	CH-3	01 FIRST FLOOR	1040A.1 MECHANICAL RM	-
1141	CH1340104		CHILLER REFRIGERANT MONITOR	GENESIS	03J-404-00453B	01 FIRST FLOOR	1040A.1 MECHANICAL RM	-
1142		<b>CHILLER PUMPS</b>						
1143	CP1340101		PRIMARY CHILLED WATER PUMP	BELL&GOSSETT	PCHWP1	01 FIRST FLOOR	1040A.1 MECHANICAL RM	-
1144	CP1340102		PRIMARY CHILLED WATER PUMP	BELL&GOSSETT	PCHWP2	01 FIRST FLOOR	1040A.1 MECHANICAL RM	-
1145	CP1340103		PRIMARY CHILLED WATER PUMP	BELL&GOSSETT	PCHWP3	01 FIRST FLOOR	1040A.1 MECHANICAL RM	-
1146	CP1340104		SECONDARY CHILLED WATER PUMP	BELL&GOSSETT	SCHWP1	01 FIRST FLOOR	1040A.1 MECHANICAL RM	-
1147	CP1340105		SECONDARY CHILLED WATER PUMP	BELL&GOSSETT	SCHWP2	01 FIRST FLOOR	1040A.1 MECHANICAL RM	-
1148	CP1340106		SECONDARY CHILLED WATER PUMP	BELL&GOSSETT	SCHWP3	01 FIRST FLOOR	1040A.1 MECHANICAL RM	-
1149		<b>COOLING TOWERS</b>						
1150	CT134RF01		COOLING TOWER	EVAPCO	CT1	RF ROOF	1ST FLOOR ROOF	-
1151	CT134RF02		COOLING TOWER	EVAPCO	CT-2	RF ROOF	1ST FLOOR ROOF	-
1152	CT134RF03		COOLING TOWER	EVAPCO	CT-3	RF ROOF	1ST FLOOR ROOF	-
1153	CT134RF04		COOLING TOWER SEPARATOR	GRISWOLD	CSR251	RF ROOF	1ST FLOOR ROOF	-
1154		<b>CONDENSERS</b>						

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
1155	CU134PH01		COMPUTER ROOM A/C CONDENSING UNIT	LIEBERT	CRAC 2-1B	PH PENTHOUSE	-	-
1156	CU134PH02		COMPUTER ROOM A/C CONDENSING UNIT	LIEBERT	CRAC 3-1B	PH PENTHOUSE	-	-
1157	CU134RF01		COMPUTER ROOM A/C CONDENSING UNIT	LIEBERT	CRAC 1-1B	RF ROOF	1ST FLOOR ROOF	EAST ROOF
1158	CU134RF02		COMPUTER ROOM A/C CONDENSING UNIT	LIEBERT	CRAC 1-2B	RF ROOF	1ST FLOOR ROOF	EAST ROOF
1159	CU134RF03		COMPUTER ROOM A/C CONDENSING UNIT	LIEBERT	CRAC1-3B	RF ROOF	1ST FLOOR ROOF	EAST ROOF
1160	CU134RF04		CONDENSING UNIT	TRANE	CU-1	RF ROOF	3RD FLOOR ROOF	-
1161		<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>						
1162	DC1340108		VARIABLE FREQUENCY DRIVE FOR AHU8	ABB	VFD-8	01 FIRST FLOOR	-	-
1163	DC1340109		VARIABLE FREQUENCY DRIVE FOR AHU9	ABB	VFD-9	01 FIRST FLOOR	-	-
1164	DC1340110		VARIABLE FREQUENCY DRIVE FOR SCHUP-1	ABB	VFD-10	01 FIRST FLOOR	1040B.1 ELECTRICAL RM	-
1165	DC1340111		VARIABLE FREQUENCY DRIVE FOR SCHWP-2	ABB	VFD-11	01 FIRST FLOOR	1040B.1 ELECTRICAL RM	-
1166	DC1340112		VARIABLE FREQUENCY DRIVE FOR SCHWP-3	ABB	VFD-12	01 FIRST FLOOR	1040B.1 ELECTRICAL RM	-
1167	DC1340116		VARIABLE FREQUENCY DRIVE FOR CT-1	ABB	VFD-16	01 FIRST FLOOR	1040B.1 ELECTRICAL RM	-
1168	DC1340117		VARIABLE FREQUENCY DRIVE FOR CT-2	ABB	VFD-17	01 FIRST FLOOR	1040B.1 ELECTRICAL RM	-
1169	DC1340118		VARIABLE FREQUENCY DRIVE FOR CT-3	ABB	VFD-18	01 FIRST FLOOR	1040B.1 ELECTRICAL RM	-
1170	DC1340131		VARIABLE FREQUENCY DRIVE	RELIANCE ELE	VFD-31	01 FIRST FLOOR	1040B.1 ELECTRICAL RM	-
1171	DC1340132		VARIABLE FREQUENCY DRIVE	RELIANCE ELE	VFD-32	01 FIRST FLOOR	1040B.1 ELECTRICAL RM	-
1172	DC134PH01		VARIABLE FREQUENCY DRIVE FOR AHU1	ABB	VFD-1	PH PENTHOUSE	WEST END	-
1173	DC134PH03		VARIABLE FREQUENCY DRIVE FOR AHU3	ABB	VFD-3	PH PENTHOUSE	WEST END	-
1174	DC134PH04		VARIABLE FREQUENCY DRIVE FOR AHU4	ABB	VFD-4	PH PENTHOUSE	CENTER	-
1175	DC134PH05		VARIABLE FREQUENCY DRIVE FOR AHU5	ABB	VFD-5	PH PENTHOUSE	CENTER	-
1176	DC134PH06		VARIABLE FREQUENCY DRIVE FOR AHU6	ABB	VFD-6	PH PENTHOUSE	CENTER	-
1177	DC134PH07		VARIABLE FREQUENCY DRIVE FOR AHU7	ABB	VFD-7	PH PENTHOUSE	CENTER	-
1178	DC134PH13		VARIABLE FREQUENCY DRIVE FOR SBP-1	ABB	VFD-13	PH PENTHOUSE	WEST END	-
1179	DC134PH14		VARIABLE FREQUENCY DRIVE FOR SBP-2	ABB	VFD-14	PH PENTHOUSE	WEST END	-
1180	DC134PH15		VARIABLE FREQUENCY DRIVE FOR SBP-3	ABB	VFD-15	PH PENTHOUSE	WEST END	-
1181	DC134PH19		VARIABLE FREQUENCY DRIVE FOR EF-1	ABB	VFD-19	PH PENTHOUSE	-	-
1182	DC134PH20		VARIABLE FREQUENCY DRIVE FOR EF-1A	ABB	VFD-20	PH PENTHOUSE	-	-
1183	DC134PH21		VARIABLE FREQUENCY DRIVE FOR EF-2	ABB	VFD-21	PH PENTHOUSE	-	-
1184	DC134PH22		VARIABLE FREQUENCY DRIVE FOR EF-2A	ABB	VFD-22	PH PENTHOUSE	-	-
1185	DC134PH23		VARIABLE FREQUENCY DRIVE FOR EF-3	ABB	VFD-23	PH PENTHOUSE	CENTER	-
1186	DC134PH24		VARIABLE FREQUENCY DRIVE FOR EF-3A	ABB	VFD-24	PH PENTHOUSE	CENTER	-
1187	DC134PH25		VARIABLE FREQUENCY DRIVE FOR EF-4	ABB	VFD-25	PH PENTHOUSE	CENTER	-
1188	DC134PH26		VARIABLE FREQUENCY DRIVE FOR EF-4A	ABB	VFD-26	PH PENTHOUSE	CENTER	-
1189	DC134PH27		VARIABLE FREQUENCY DRIVE FOR EF-5	ABB	VFD-27	PH PENTHOUSE	CENTER	-
1190	DC134PH28		VARIABLE FREQUENCY DRIVE FOR EF-5A	ABB	VFD-28	PH PENTHOUSE	CENTER	-
1191	DC134PH29		VARIABLE FREQUENCY DRIVE FOR EF-7	ABB	VFD-29	PH PENTHOUSE	WEST END	-
1192	DC134PH2A		VARIABLE FREQUENCY DRIVE FOR AHU2	ABB	VFD-2A	PH PENTHOUSE	EAST END	-
1193	DC134PH2B		VARIABLE FREQUENCY DRIVE FOR AHU2	ABB	VFD-2B	PH PENTHOUSE	EAST END	-
1194	DC134PH30		VARIABLE FREQUENCY DRIVE FOR EF-8	ABB	VFD-30	PH PENTHOUSE	CENTER	-
1195		<b>CONDENSER PUMPS</b>						
1196	DP1340101		CONDENSING WATER PUMP	BELL&GOSSETT	CWP-1	01 FIRST FLOOR	1040A.1 MECHANICAL RM	-
1197	DP1340102		CONDENSING WATER PUMP	BELL&GOSSETT	CWP-2	01 FIRST FLOOR	1040A.1 MECHANICAL RM	-
1198	DP1340103		CONDENSING WATER PUMP	BELL&GOSSETT	CWP-3	01 FIRST FLOOR	1040A.1 MECHANICAL RM	-
1199		<b>EXHAUST FANS</b>						
1200	EF134PH07		EXHAUST FAN-GENERAL EXHAUST	COOK	EF-4	PH PENTHOUSE	-	-
1201	EF134PH08		EXHAUST FAN -GENERAL EXHAUST	COOK	EF-4A	PH PENTHOUSE	-	-
1202		<b>INDOOR UNITS</b>						
1203	IU1340101		COMPUTER ROOM A/C INDOOR UNIT	LIEBERT	CRAC 1-1A	03 THIRD FLOOR	3105.1 TELECOM MDF	-
1204	IU1340102		COMPUTER ROOM A/C INDOOR UNIT	LIEBERT	CRAC 1-2A	01 FIRST FLOOR	1052.1 W TELECOM MDF	-
1205	IU1340103		COMPUTER ROOM A/C INDOOR UNIT	LIEBERT	CRAC1-3A	01 FIRST FLOOR	1052.1 W TELECOM MDF	-
1206	IU1340201		COMPUTER ROOM A/C INDOOR UNIT	LIEBERT	CRAC2-1A	01 FIRST FLOOR	1105.1 E TELECOM MDF	-

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
1207	IU1340301		COMPUTER ROOM A/C INDOOR UNIT	LIEBERT	CRAC 3-1A	01 FIRST FLOOR	1105.1 E TELECOM MDF	-
1208		<b>COMPRESSOR</b>						
1209	PC1340101		PNEUMATIC AIR COMPRESSOR	INGERSO-RAND	0306050151	01 FIRST FLOOR	1040A.1 MECHANICAL RM	-
1210		<b>WATER PUMPS</b>						
1211	WP134PH01		HOT WATER PUMP - DOMESTIC		15X15X8 4380	PH PENTHOUSE	EAST END	WATER HEATER RM
1212	WP134PH02		HOT WATER PUMP - LAB			PH PENTHOUSE	EAST END	WATER HEATER RM
1213		<b>EXPANSION TANKS</b>						
1214	XT1340101		EXPANSION TANK	TACO	EX-1	01 FIRST FLOOR	1040A.1 MECHANICAL RM	-
1215	XT134PH02		EXPANSION TANK	TACO	EX-2	PH PENTHOUSE	WEST END	4000F.1 BOILER RM
1216	XT134PH03		EXPANSION TANK	TACO	EX-3	PH PENTHOUSE	EAST END	WATER HEATER RM
1217	XT134PH04		EXPANSION TANK	TACO	EX-4	PH PENTHOUSE	EAST END	WATER HEATER RM
1218								
1219	<b>140</b>		<b><u>1901 W Madison Polly Rosenbaum Building</u></b>					
1220								
1221		<b>BOILERS</b>						
1222	BL1400201	B-1	WEST HEATING WATER BOILER	LAARS	A07185038	BOILER	02 SECOND FLOOR	230 MECHANICAL ROOM
1223	BL1400202	B-2	EAST HEATING WATER BOILER	LAARS	A07185039	BOILER	02 SECOND FLOOR	230 MECHANICAL ROOM
1224	BL1400203	SB-1	WEST STEAM BOILER	PARKER	58144	BOILER	02 SECOND FLOOR	230 MECHANICAL ROOM
1225	BL1400204	SB-2	EAST STEAM BOILER	PARKER	58143	BOILER	02 SECOND FLOOR	230 MECHANICAL ROOM
1226		<b>CHILLERS</b>						
1227	CH1400101	CH-1	EAST CHILLER	TRANE		01 FIRST FLOOR	130 MECHANICAL ROOM	EAST
1228	CH1400102	CH-2	WEST CHILLER	TRANE		01 FIRST FLOOR	130 MECHANICAL ROOM	WEST
1229		<b>CHILLER PUMPS</b>						
1230	CP1400101	CHP-1	PRIMARY CHILLED WATER PUMP	ARMSTRNG		01 FIRST FLOOR	130 MECHANICAL RM	SOUTHEAST
1231	CP1400102	CHP-2	PRIMARY CHILLED WATER PUMP	ARMSTRNG		01 FIRST FLOOR	130 MECHANICAL RM	SOUTHEAST
1232	CP1400103	CHP-3	PRIMARY CHILLED WATER PUMP	ARMSTRNG		01 FIRST FLOOR	130 MECHANICAL RM	SOUTHEAST
1233	CP1400104	CHP-4	SECONDARY CHILLED WATER PUMP	ARMSTRNG		01 FIRST FLOOR	130 MECHANICAL RM	NORTHEAST
1234	CP1400105	CHP-5	SECONDARY CHILLED WATER PUMP	ARMSTRNG		01 FIRST FLOOR	130 MECHANICAL RM	NORTHEAST
1235		<b>COOLING TOWERS</b>						
1236	CT1400S01	CT-1	WEST COLING TOWER	EVAPCO		OUTSIDE	REAR YARD	EQUIPMENT YARD
1237	CT1400S02	CT-2	EAST COLING TOWER	EVAPCO		OUTSIDE	REAR YARD	-
1238		<b>CONDENSER PUMPS</b>						
1239	DP1400101	CP-1	CONDENSER WATER PUMP	ARMSTRNG		01 FIRST FLOOR	130 MECHANICAL RM	WEST
1240	DP1400102	CP-2	CONDENSER WATER PUMP	ARMSTRNG		01 FIRST FLOOR	130 MECHANICAL RM	WEST
1241	DP1400103	CP-1	CONDENSER WATER PUMP	ARMSTRNG		01 FIRST FLOOR	130 MECHANICAL RM	WEST
1242		<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>						
1243	VD1400101	VFD1	VFD 1 FOR AHU 1			01 FIRST FLOOR	126 MECH RM TWO	
1244	VD1400102	VFD2	VFD 2 FOR AHU 1			01 FIRST FLOOR	126 MECH RM TWO	
1245	VD1400103	VFD 1	VFD 1 FOR AHU 2			01 FIRST FLOOR	126 MECH RM TWO	
1246	VD1400104	VFD 2	VFD 2 FOR AHU 2			01 FIRST FLOOR	126 MECH RM TWO	
1247	VD1400201	VFD1	VFD 1 FOR AHU 3			02 SECOND FLR	225 FAN RM ONE	
1248	VD1400202	VFD2	VFD 2 FOR AHU 3			02 SECOND FLR	225 FAN RM ONE	
1249	VD1400203	VFD1	VFD 1 FOR AHU 4			02 SECOND FLR	225 FAN RM ONE	
1250	VD1400204	VFD2	VFD 2 FOR AHU 4			02 SECOND FLR	225 FAN RM ONE	
1251	VD1400205	VFD1	VFD 1 FOR AHU 5			02 SECOND FLR	231 FAN RM TWO	
1252	VD1400206	VFD2	VFD 2 FOR AHU 5			02 SECOND FLR	231 FAN RM TWO	
1253	DC1400201	RF 2-1	E7 DRIVE FOR RELEIF AIR FAN	YASKAWA		02 SECOND FLR	225 FAN RM ONE	
1254	DC1400202	HWP 4	E7 DRIVE FOR HWP 4	YASKAWA		02 SECOND FLR	230 MECH RM THREE	

## Attachment "A" Equipment List

	Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
1255	DC1400203	HWP 5	E7 DRIVE FOR HWP 5	YASKAWA		02 SECOND FLR	230 MECH RM THREE	
1256	DC1400204	CHP 4	E7 DRIVE FOR CHP4	YASKAWA		02 SECOND FLR	130 MECH RM ONE	
1257	DC1400205	CHP 5	E7 DRIVE FOR CHP 5	YASKAWA		02 SECOND FLR	130 MECH RM ONE	
1258		<u>WATER PUMPS</u>						
1259	WP1400201	HWP-1	PRIMARY HEATING WATER PUMP	ARMSTRNG		02 SECOND FLR	230 MECHANICAL RM	SOUTHWEST
1260	WP1400202	HWP-2	PRIMARY HEATING WATER PUMP	ARMSTRNG		02 SECOND FLR	230 MECHANICAL RM	SOUTHWEST
1261	WP1400203	HWP-3	PRIMARY HEATING WATER PUMP	ARMSTRNG		02 SECOND FLR	230 MECHANICAL RM	SOUTHWEST
1262	WP1400204	HWP-4	SECONDARY HEATING WATER PUMP	ARMSTRNG		02 SECOND FLR	230 MECHANICAL RM	SOUTHWEST
1263	WP1400205	HWP-5	SECONDARY HEATING WATER PUMP	ARMSTRNG		02 SECOND FLR	230 MECHANICAL RM	SOUTHWEST
1264		<u>WATER TREATMENT</u>						

# Air Moving Equipment

Equipment No.	Notes	Description	Manufacturer	Serial No.	Sub-location 1	Sub-location 2	Sub-location 3
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**001**                      **1600 W Monroe Department of Revenue**

**VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS**

1	VD0010101	# 4	VARIABLE FREQUENCY DRIVE - AHU #1	PARAMETRICS	8721 1053	01 FIRST FLOOR		
2	VD0010201	# 5	VARIABLE FREQUENCY DRIVE - AHU #2	PARAMETRICS	8721 1053	02 SECOND FLOOR		
3	VD0010301	# 6	VARIABLE FREQUENCY DRIVE - AHU #3	PARAMETRICS		03 THIRD FLOOR		
4	VD0010401	# 7	VARIABLE FREQUENCY DRIVE - AHU #4	PARAMETRICS		04 FOURTH FLOOR		
5	VD0010501	# 8	VARIABLE FREQUENCY DRIVE - AHU #5	PARAMETRICS		05 FIFTH FLOOR		
6	VD0010601	# 9	VARIABLE FREQUENCY DRIVE - AHU #6	PARAMETRICS		06 SIXTH FLOOR		
7	VD0010701	# 10	VARIABLE FREQUENCY DRIVE - AHU #7	PARAMETRICS		07 SEVENTH FLOOR		
8	VD0010801	# 11	VARIABLE FREQUENCY DRIVE - AHU #8	PARAMETRICS		08 EIGHTH FLOOR		
9	VD0010802	# 13	VARIABLE FREQUENCY DRIVE -MAKEUP AIR	ABB		08 EIGHTH FLOOR		
10	VD0010901	# 12	VARIABLE FREQUENCY DRIVE - AHU #9	PARAMETRICS	8720 1034	09 NINTH FLOOR		
11	VD0010902	# 14	VARIABLE FREQUENCY DRIVE - BOLD EXHAUST FAN	PARAMETRICS	8720 1034	09 NINTH FLOOR		
12	VD001B201	# 2	VARIABLE FREQUENCY DRIVE - AHU B-1	PARAMETRICS	8721 1046	B2 BASEMENT		
13	VD001B202	# 3	VARIABLE FREQUENCY DRIVE - AHU B-2	PARAMETRICS		B2 BASEMENT		
14	VD001B203		VARIABLE FREQUENCY DRIVE - CHILLER PUMP 1	ABB	5063700550	B2 BASEMENT		
15	VD001B204		VARIABLE FREQUENCY DRIVE - CHILLER PUMP 2	ABB	5063700539	B2 BASEMENT		
16	VD001B205		VARIABLE FREQUENCY DRIVE - BLDG PUMP 3	ABB	2069100240	B2 BASEMENT		
17	VD001B206		VARIABLE FREQUENCY DRIVE - BLDG PUMP 4	ABB	2070100414	B2 BASEMENT		
18	VD001B207		VARIABLE FREQUENCY DRIVE - CONDENSOR PUMP 5	ABB	2065102633	B2 BASEMENT		
19	VD001B208		VARIABLE FREQUENCY DRIVE - CONDENSOR PUMP 6	ABB	2070100462	B2 BASEMENT		
20	ACH550-BCR-031A-4+B058		VFD E.TOWER FAN	ABB	2111500225	B2 BASEMENT		
21	ACH550-BCR-031A-4+B058		VFD W.TOWER FAN	ABB	2111500306	B2 BASEMENT		

**003**                      **1740 W Adams Department of Health Services**

**VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS**

26	ACH550-BCR-157A-4		VFD SUPPLY FAN	ABB	2094800983	PENTHOUSE		
27	ACH550-VCR-072A-4		VFD RETURN FAN	ABB	2094902462	PENTHOUSE		

**004**                      **1740 W Adams Department of Health Services**

**VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS**

32	ACH501-02004-00P2		VFD W. TOWER FAN	ABB	290513	CHILLER ROOM		
33	ACH501-02004-00P2		VFD E. TOWER FAN	ABB	290514	CHILLER ROOM		

**006**                      **1688 W Adams Department of Agriculture**

**VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS**

39	VD006B101		VSD CONTROLLER/INVERTER FOR BLDG AHU FAN	ABB		B1 BASEMENT	AIR HANDLER ROOM	
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**007**                      **1624 W Adams Department of Juvenile Corrections**



# Air Moving Equipment

<u>Equipment No.</u>	<u>Notes</u>	<u>Description</u>	<u>Manufacturer</u>	<u>Serial No.</u>	<u>Sub-location 1</u>	<u>Sub-location 2</u>	<u>Sub-location 3</u>
VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS							
VD007RF01		VSD CONTROLLER/INVERTER FOR BLDG AHU FAN	ABB		RF ROOF		
0081616 W Adams Department of Land							
VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS							
ACH550-VCR-023A-4		VFD TOWER FAN	ABB	2081801010	LOWER ROOF		
ACH550-VCR-015A-4		VFD RETURN FAN	ABB	2131902832	E. SIDE CHILLER ROOM		
ACH550-VCR-031A-4		VFD SUPPLY FAN	ABB	2131903771	E. SIDE CHILLER ROOM		
0091510M W Adams Data Mechanical Building							
VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS							
VD0090101	# 1	VFD FOR COOLING TOWER	ABB		01 FIRST FLOOR		
VD0090102	# 2	VFD FOR COOLING TOWER	ABB		01 FIRST FLOOR		
0101520 W Adams Department of Water Resources (Agriculture)							
VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS							
ACH550-VCR-072A-4		VFD A/H #1	ABB	2131904614	EQUIPMENT ROOM		
ACH550-VCR-072A-4		VFD A/H #2	ABB	2131904621	EQUIPMENT ROOM		
0111700 W Washington Executive Tower							
VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS							
VD011B101	AHU 1	VSD FOR BLDG AHU #1	ABB		B1 BASEMENT		
VD011B102	AHU 2	VSD FOR BLDG AHU #2	ABB	140807	B1 BASEMENT		
VD011B103	AHU 3	VSD FOR BLDG AHU #3	ABB		B1 BASEMENT		
VD011B104	AHU 4	VSD FOR BLDG AHU #4	ABB		B1 BASEMENT		
BUILDING FANS							
VF011B101	AHU 1	IN LINE AXIAL VANE FAN, MOTOR & CONTROL	JOY	SF 31424-1	B1 BASEMENT		
VF011B102	AHU 2	IN LINE AXIAL VANE FAN, MOTOR & CONTROL	JOY	SF 31424	B1 BASEMENT		
VF011B103	AHU 3	IN LINE AXIAL VANE FAN, MOTOR & CONTROL	JOY	SF 31424-2	B1 BASEMENT		
VF011B104	AHU 4	IN LINE AXIAL VANE FAN, MOTOR & CONTROL	JOY	SF 31424-3	B1 BASEMENT		
EQUIPMENT ROOM							
ACH550-BCR-031A-4+B058		VFD TOWER FAN #1	ABB	2111500249	EQUIPMENT ROOM		
ACH550-BCR-031A-4+B058		VFD TOWER FAN #2	ABB	2111500211	EQUIPMENT ROOM		
ACH550-BCR-031A-4+B058		VFD TOWER FAN #3	ABB	2111500168	EQUIPMENT ROOM		
ACH550-BCR-031A-4+B058		VFD TOWER FAN #4	ABB	2111500194	EQUIPMENT ROOM		
0121700L W Washington 1938/1919 Capitol Additions							
BUILDING FANS							
VF012B101		IN LINE AXIAL VANE FAN, MOTOR & CONTROL	CARRIER		B1 BASEMENT		
VF012RF02		IN LINE AXIAL VANE FAN, MOTOR & CONTROL	CARRIER	794997218	RF ROOF		
VF012RF03		IN LINE AXIAL VANE FAN, MOTOR & CONTROL	CARRIER		RF ROOF		
0131700H W Washington House							

# Air Moving Equipment

<u>Equipment No.</u>	<u>Notes</u>	<u>Description</u>	<u>Manufacturer</u>	<u>Serial No.</u>	<u>Sub-location 1</u>	<u>Sub-location 2</u>	<u>Sub-location 3</u>
92							
93		<b>BUILDING FANS</b>					
94		ACH550-VCR-08A8-4	VFD RETURN FAN A/H #2	ABB	2134503539	ROOF	
95		ACH550-VCR-045A-4	VFD COLD DECK FAN A/H #2	ABB	2134503358	ROOF	
96		ACH550-VCR-031A-4	VFD HOT DECK FAN A/H #2	ABB	2134503532	ROOF	
97		ACH550-VCR-08A8-4	VFD RETURN FAN A/H #3	ABB	2132304104	ROOF	
98		ACH550-VCR-045A-4	VFD COLD DECK FAN A/H #3	ABB	2132304097	ROOF	
99		ACH550-VCR-031A-4	VFD HOT DECK FAN A/H #3	ABB	2132303458	ROOF	
100							
101							
102	<b>014</b>	<b>1700S W Washington Senate</b>					
103							
104		VD014B101	VFD DRIVE FOR AHU #1	ABB		B1 BASEMENT	
105							
106	<b>015</b>	<b>1400 W Washington Boards and Commissions</b>					
107							
108		<b>BUILDING FANS</b>					
109		VF015B101	# 1SA SUPPLY AIR FAN, MOTOR & CONTROL	FLAKT-AXICO	1100082	B1 BASEMENT	
110		VF015B102	# 2SA SUPPLY AIR FAN, MOTOR & CONTROL	FLAKT-AXICO	1100081	B1 BASEMENT	
111		VF015B103	# 1RA RETURN AIR FAN, MOTOR & CONTROL	FLAKT-AXICO	1100083	B1 BASEMENT	
112		VF015B104	# 2RA RETURN AIR FAN, MOTOR & CONTROL	FLAKT-AXICO	1100084	B1 BASEMENT	
113							
114	<b>017</b>	<b>1300 W Washington State Parks</b>					
115							
116		<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
117		VD017B101	AHU 1 VSD FOR BLDG AHU #1 SUPPLY AIR FAN	ABB	B00577	B1 BASEMENT	
118		VD017B102	AHU 1 VSD FOR BLDG AHU #1 RETURN AIR FAN	ABB	116911	B1 BASEMENT	
119							
120	<b>018</b>	<b>1200 W Washington Corporation Commission</b>					
121							
122		<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
123		ACH550-BCR-015-4+B055	VFD TOWER FAN #1	ABB	2111500370	CHILLER ROOM	
124		ACH550-BCR-015-4+B055	VFD TOWER FAN #2	ABB	2111500383	CHILLER ROOM	
125		ACH550-BCR-015-4+B055	VFD TOWER FAN #3	ABB	2111500360	CHILLER ROOM	
126							
127	<b>019</b>	<b>1200 W Washington Corporation Commission</b>					
128							
129		<b>BUILDING FANS</b>					
130		VF019RF01	AHU #1 AHU 1 FAN, MOTOR & CONTROL	RELIANCE ELE	SF43468	RF ROOF	
131							
132	<b>022</b>	<b>1275 W Washington Attorney General</b>					
133							
134		<b>BUILDING FANS</b>					
135		ACH550-BCR-072A-4+B055	VFD A/H #1	ABB	2111500322	1ST FLOOR E. SIDE	
136		ACH550-BCR-097A-4+B055	VFD A/H #2	ABB	2111404181	1ST FLOOR W. SIDE	
137							
138	<b>023</b>	<b>1101 W Washington Hall of Hame Museum</b>					
139		<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
140		VD023CT01	VFD FOR COOLING TOWER				
141							
142	<b>027</b>	<b>1789 W Jefferson Department of Economic Security</b>					

# Air Moving Equipment

<u>Equipment No.</u>	<u>Notes</u>	<u>Description</u>	<u>Manufacturer</u>	<u>Serial No.</u>	<u>Sub-location 1</u>	<u>Sub-location 2</u>	<u>Sub-location 3</u>
<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>							
SS027CT01	# 1	SOFT START UNIT FOR CLG TWR FAN			COOLING TOWER	TWR FAN #1	
SS027CT02	# 2	SOFT START UNIT FOR CLG TWR FAN			COOLING TOWER	TWR FAN #2	
VD027CR04	# 4	VFD FOR CHILLED WATER PUMP # 4	ABB		CHILLER ROOM	@ CHW PUMP #4	
VD027CR05	# 5	VFD FOR CHILLED WATER PUMP # 5	ABB		CHILLER ROOM	@ CHW PUMP #5	
VD027RF01	SA-1	VFD FOR EAST AIR HANDLER SA FAN#1			RF ROOF	SOUTH EAST	
VD027RF02	SA-2	VFD FOR EAST AIR HANDLER SA FAN#2			RF ROOF	SOUTH EAST	
VD027RF03		VFD FOR WEST AIR HANDLER SA FAN#1			RF ROOF	NORTH WEST	
VD027RF04		VFD FOR WEST AIR HANDLER SA FAN#2			RF ROOF	NORTH WEST	
<b>BUILDING FANS</b>							
VF027RF01	SA-1	EAST AIR HANDLER SA FAN#1	JOY		RF ROOF	SOUTH EAST	
VF027RF02	SA-2	EAST AIR HANDLER SA FAN#2	JOY		RF ROOF	SOUTH EAST	
VF027RF03		WEST AIR HANDLER SA FAN#1	JOY		RF ROOF	NORTH WEST	
VF027RF04		WEST AIR HANDLER SA FAN#2	JOY		RF ROOF	NORTH WEST	
<b>028 1645 W Jefferson Corrections</b>							
<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>							
VD028B101		VARIABLE FREQUENCY DRIVE - BOOSTER PUMP	ABB	2040700299	B1 BASEMENT		
VD028RF01	RA	VARIABLE FREQUENCY DRIVE - ROOF RETURN FAN	ABB	2040700307	PENTHOUSE		
VD028RF02	SA	VARIABLE FREQUENCY DRIVE - ROOF SUPPLY FAN	ABB	2040601423	PENTHOUSE		
<b>BUILDING FANS</b>							
VF028RF01	RA	IN LINE AXIAL VANE FAN - RA			PENTHOUSE		
VF028RF02	SA	IN LINE AXIAL VANE FAN - SA			RF ROOF		
<b>029 1601 W Jefferson Corrections</b>							
<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>							
VD029B101		VARIABLE FREQUENCY DRIVE FOR BOOSTER PUMP	ABB	2040700302	B1 BASEMENT		
VD029RF01	# 1 SA	VARIABLE FREQUENCY DRIVE FOR A/H 1 SUPPLY FAN	ABB	2040700305	RF ROOF		
VD029RF02	# 2 SA	VARIABLE FREQUENCY DRIVE FOR A/H 2 SUPPLY FAN	ABB	2040700303	RF ROOF		
VD029RF03	# 1 RA	VARIABLE FREQUENCY DRIVE FOR A/H 1 RETURN FAN	ABB	2050201054	RF ROOF		
VD029RF04	# 2 RA	VARIABLE FREQUENCY DRIVE FOR A/H 2 RETURN FAN	ABB	2050201052	RF ROOF		
<b>030 1601M W Jefferson 1601 Mechanical Building</b>							
<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>							
VD030CR01	# 1	VSD FOR COOLING TOWER FAN #1	ABB				
VD030CR02	# 2	VSD FOR COOLING TOWER FAN #2	ABB				
ACH550-VCR-023A-4	# 3	VSD FOR COOLING TOWER FAN #3	ABB	2094801625			

# Air Moving Equipment

<u>Equipment No.</u>	<u>Notes</u>	<u>Description</u>	<u>Manufacturer</u>	<u>Serial No.</u>	<u>Sub-location 1</u>	<u>Sub-location 2</u>	<u>Sub-location 3</u>
186							
187	<b>031</b>	<b>1535 W Jefferson Department of Education</b>					
188							
189		<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
190		VD031B101	ABB	2040700311	B1 BASEMENT		
191		VD031RF01	ABB	2040700434	RF ROOF		
192		VD031RF02	ABB	2050201056	RF ROOF		
193		VD031RF03	ABB	2040700439	RF ROOF		
194		VD031RF04	ABB	2050201055	RF ROOF		
195							
196	<b>038</b>	<b>1510 W Adams DataCenter</b>					
197		<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
198		ACH550-VCR-072A-4	ABB	213904632			
199							
200	<b>052</b>	<b>416 W Congress Tucson Office Building (West)</b>					
201							
202		<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
203		VD052LE01	ABB	176240	LE LOWER LEVEL EAST	EQUIPMENT ROOM	
204		<b>BUILDING FANS</b>					
205		VF052AH01					
206		VF052AH02					
207							
208	<b>053</b>	<b>402 W Congress Tucson Office Building (South)</b>					
209							
210		<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
211		VD053B101	ABB	173762	B1 BASEMENT	MR MECHANICAL ROOM	
212		VD053B102	ABB	173763	B1 BASEMENT	MR MECHANICAL ROOM	
213		<b>BUILDING FANS</b>					
214		VF053AH01					
215		VF053AH02					
216							
217	<b>054</b>	<b>400 W Congress Tucson Office Building (North)</b>					
218							
219		<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
220		VD054CR01	ABB	174802	CR CHILLER ROOM		
221		VD054CR02	ABB	174804	CR CHILLER ROOM		
222		VD054PH01	ROBICON	A090900-001	PH PENTHOUSE		
223		VD054PH02	ABB	00071	PH PENTHOUSE		
224		<b>BUILDING FANS</b>					
225		VF054AH01					
226		VF054AH02					

# Air Moving Equipment

<u>Equipment No.</u>	<u>Notes</u>	<u>Description</u>	<u>Manufacturer</u>	<u>Serial No.</u>	<u>Sub-location 1</u>	<u>Sub-location 2</u>	<u>Sub-location 3</u>
227							
228							
229		<b>134 250 N 17th Avenue State Health Laboratory</b>					
230							
231		<b>AIR HANDLER</b>					
232		AH1340201					
233							
234		<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
235		DC1340108					
236		DC1340109					
237		DC1340110					
238		DC1340111					
239		DC1340112					
240		DC1340116					
241		DC1340117					
242		DC1340118					
243		DC1340131					
244		DC1340132					
245		DC134PH01					
246		DC134PH03					
247		DC134PH04					
248		DC134PH05					
249		DC134PH06					
250		DC134PH07					
251		DC134PH13					
252		DC134PH14					
253		DC134PH15					
254		DC134PH19					
255		DC134PH20					
256		DC134PH21					
257		DC134PH22					
258		DC134PH23					
259		DC134PH24					
260		DC134PH25					
261		DC134PH26					
262		DC134PH27					
263		DC134PH28					
264		DC134PH29					
265		DC134PH2A					
266		DC134PH2B					
267		DC134PH30					
268		<b>EXHAUST FANS</b>					
269		EF134PH07					
270		EF134PH08					
271		<b>INDOOR UNITS</b>					
272		IU1340101					
273		IU1340102					
274		IU1340103					
275		IU1340201					
276		IU1340301					

# Air Moving Equipment

277 Equipment      Notes      Description      Manufacturer      Serial No.      Sub-location 1      Sub-location 2      Sub-location 3  
 278 No.  
 279 140      1901 W Madison Polly Rosenbaum Building

278

279

	<b>VARIABLE SPEED/FREQUENCY DRIVE CONTROLLERS</b>					
280	VD1400101	VFD1	VFD 1 FOR AHU 1		01 FIRST FLOOR	126 MECH RM TWO
281	VD1400102	VFD2	VFD 2 FOR AHU 1		01 FIRST FLOOR	126 MECH RM TWO
282	VD1400103	VFD 1	VFD 1 FOR AHU 2		01 FIRST FLOOR	126 MECH RM TWO
283	VD1400104	VFD 2	VFD 2 FOR AHU 2		01 FIRST FLOOR	126 MECH RM TWO
284	VD1400201	VFD1	VFD 1 FOR AHU 3		02 SECOND FLR	225 FAN RM ONE
285	VD1400202	VFD2	VFD 2 FOR AHU 3		02 SECOND FLR	225 FAN RM ONE
286	VD1400203	VFD1	VFD 1 FOR AHU 4		02 SECOND FLR	225 FAN RM ONE
287	VD1400204	VFD2	VFD 2 FOR AHU 4		02 SECOND FLR	225 FAN RM ONE
288	VD1400205	VFD1	VFD 1 FOR AHU 5		02 SECOND FLR	231 FAN RM TWO
289	VD1400206	VFD2	VFD 2 FOR AHU 5		02 SECOND FLR	231 FAN RM TWO
290	DC1400201	RF 2-1	E7 DRIVE FOR RELEIF AIR FAN	YASKAWA	02 SECOND FLR	225 FAN RM ONE
291	DC1400202	HWP 4	E7 DRIVE FOR HWP 4	YASKAWA	02 SECOND FLR	230 MECH RM THREE
292	DC1400203	HWP 5	E7 DRIVE FOR HWP 5	YASKAWA	02 SECOND FLR	230 MECH RM THREE
293	DC1400204	CHP 4	E7 DRIVE FOR CHP4	YASKAWA	02 SECOND FLR	130 MECH RM ONE
294	DC1400205	CHP 5	E7 DRIVE FOR CHP 5	YASKAWA	02 SECOND FLR	130 MECH RM ONE

295

296

297

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301

<u>In Line Axial Vane Fan(s), Motor(s) &amp; Control(s)</u>		
<u>Task No.</u>	<u>Description of Work Performed</u>	<u>Frequency</u>
303	1 Where the specified maintenance requirements differ from the equipment manufacturer's recommendations, the manufacturer's recommended maintenance procedures shall take precedence.	
304	2 Observe that fan is operating properly without unusual noise, heat or vibration. Correct any problem(s)	M
305	3 Check and adjust belt tension (where applicable) Look for wear and replace if cracked, frayed, or hardened	M
306	4 Check fan bearing to make sure it is not running hot	M
307	5 Wipe down motor and base	M
308	6 Clean fan vents	Q
309	7 Lube flush fan bearings, wipe grease off fittings	Q
310	8 Clean motor vents	SA
311	9 Megger motor windings	A
312	10 Dynamic balance and tune	A

313 D-Daily W-Weekly M-Monthly Q-Quarterly SA-Semi-annually A-Annually

314

315

<u>Variable Speed / Frequency Drives</u>		
<u>Task No.</u>	<u>Description of Work Performed</u>	<u>Frequency</u>
317	1 Where the specified maintenance requirements differ from the equipment manufacturer's recommendations, the manufacturer's recommended maintenance procedures shall take precedence.	
318	2 Maintenance shall include PROM Chip, Wiring, Microprocessors, Integrated Circuits, and all Electrical Components	M
319	3 Check fan bearing to make sure it is not running hot	M
320	4 Wipe down motor and base	M
321	5 Clean fan vents	Q
322	6 Lube flush fan bearings, wipe grease off fittings	Q
323	7 Clean motor vents	SA
324	8 Megger motor windings	A

## Air Moving Equipment

<u>Equipment</u>	<u>Notes</u>	<u>Description</u>	<u>Manufacturer</u>	<u>Serial No.</u>	<u>Sub-location 1</u>	<u>Sub-location 2</u>	<u>Sub-location 3</u>
<b>No.</b>							
325	9	Dynamic balance and tune				A	
326	D-Daily W-Weekly M-Monthly Q-Quarterly SA-Semi-annually A-Annually						
327							
328		<b>Exhaust Fans</b>					
329		<b>Description of Work Performed</b>				<b>Frequency</b>	
330	1	All maintenance should be per manufacturer's latest recommended procedures for Cook series CIC fans: 490 CIC CFE					
331	2	Check Motor and amp draw				Q	
332	3	Grease motor Bearings				3 YR	
333	4	Check Fan Bearings					
334	5	Grease Fan Bearings				Q	
335	6	Inspect belts for wear and alignment				Q	
336	7	Inspect variable inlet vanes				Q	
337	8	Inspect for cleanliness				Q	
338	9	Check electrical connections in disconnect				Q	
339	10	Vibration analysis on 4 & 4A				A	
340	D-Daily W-Weekly M-Monthly Q-Quarterly SA-Semi-annually A-Annually						



## PLANNED SERVICE RENEWAL

5/12/2016

Dawn Slater  
State Of Arizona Dept Of Revenue  
1600 W Monroe St  
Phoenix AZ 85007-2612

State Of Arizona ADOA 2016



Dear Dawn:

Thank you for choosing Johnson Controls to provide the maintenance solution for your facility. We appreciate your business and look forward to continuing as your building technology services partner.

Your current service agreement (1-19590959568) will expire on 05/20/2016. We are pleased to offer a one year continuation of your current agreement for the annual sum of \$760,400.00, to be paid monthly. The scope will remain the same and the term of this contract will be 05/21/2016 to 05/20/2017. Invoices will be sent to:

Arizona Department Of Administration  
100 N 15th Ave  
Suite 202  
Phoenix AZ 85007

To continue service without interruption, please sign below and return to me by 4/20/2016. If you require us to reference a requisition or purchase order on our invoices, please provide a copy of that document when you return this signed notice.

As a manufacturer of mechanical, controls, security and fire systems, we have the expertise and resources to provide proper maintenance and repair services for your facility. With planned service you're getting a solution that can help optimize your building's performance, provide dependability, sustainability and energy efficiency. Your service is delivered with the attention of a local service company backed by the resources of a global organization.

Again, thank you for your business and we look forward to serving you in the coming year. Please do not hesitate to call if I can assist you in any way.

Sincerely,  
Johnson Controls

Customer Signature: \_\_\_\_\_

Robert Maroni  
JOHNSON CONTROLS PHOENIX AZ CB -  
0N0J  
2032 W 4th St  
Tempe AZ 85281-7206  
Robert.J.Maroni@JCI.com  
Phone: 480-446-2619

Customer Name: \_\_\_\_\_

Customer Title: \_\_\_\_\_

PO/Requisition #: \_\_\_\_\_





## PLANNED SERVICE RENEWAL

5/6/2016

Dawn Slater  
State Of Arizona Dept Of Revenue  
1600 W Monroe St  
Phoenix AZ 85007-2612

State Of Arizona State Fair Grounds 2016-17



Dear Dawn:

Thank you for choosing Johnson Controls to provide the maintenance solution for your facility. We appreciate your business and look forward to continuing as your building technology services partner.

Your current service agreement (1-19590789268) will expire on 05/20/2016. We are pleased to offer a one year continuation of your current agreement for the annual sum of \$80,688.96, to be paid monthly. The scope will remain the same and the term of this contract will be 05/21/2016 to 05/20/2017. Invoices will be sent to:

State of Arizona State Fair Grounds  
1826 W. McDowell RD  
Phoenix, AZ 85007

To continue service without interruption, please sign below and return to me by 4/20/2016. If you require us to reference a requisition or purchase order on our invoices, please provide a copy of that document when you return this signed notice.

As a manufacturer of mechanical, controls, security and fire systems, we have the expertise and resources to provide proper maintenance and repair services for your facility. With planned service you're getting a solution that can help optimize your building's performance, provide dependability, sustainability and energy efficiency. Your service is delivered with the attention of a local service company backed by the resources of a global organization.

Again, thank you for your business and we look forward to serving you in the coming year. Please do not hesitate to call if I can assist you in any way.

Sincerely,  
Johnson Controls

Customer Signature: \_\_\_\_\_

Robert Maroni  
JOHNSON CONTROLS PHOENIX AZ CB -  
0N0J  
2032 W 4th St  
Tempe AZ 85281-7206  
Robert.J.Maroni@jci.com  
Phone: (480)446-2619

Customer Name: \_\_\_\_\_

Customer Title: \_\_\_\_\_

PO/Requisition #: \_\_\_\_\_



## PLANNED SERVICE RENEWAL

5/6/2016

Dawn Slater  
State Of Arizona Industrial Commission  
800 W Washington St  
Phoenix AZ 85007-2934

State Of Arizona Industrial Commission 2016-17



Dear Dawn:

Thank you for choosing Johnson Controls to provide the maintenance solution for your facility. We appreciate your business and look forward to continuing as your building technology services partner.

Your current service agreement (1-19590586902) will expire on 05/20/2016. We are pleased to offer a one year continuation of your current agreement for the annual sum of \$93,346.00, to be paid monthly. The scope will remain the same and the term of this contract will be 05/21/2016 to 05/20/2017. Invoices will be sent to:

Arizona Department Of Administration  
100 N 15th Ave  
Suite 202  
Phoenix AZ 85007

To continue service without interruption, please sign below and return to me by 4/20/2016. If you require us to reference a requisition or purchase order on our invoices, please provide a copy of that document when you return this signed notice.

As a manufacturer of mechanical, controls, security and fire systems, we have the expertise and resources to provide proper maintenance and repair services for your facility. With planned service you're getting a solution that can help optimize your building's performance, provide dependability, sustainability and energy efficiency. Your service is delivered with the attention of a local service company backed by the resources of a global organization.

Again, thank you for your business and we look forward to serving you in the coming year. Please do not hesitate to call if I can assist you in any way.

Sincerely,  
Johnson Controls

Customer Signature: \_\_\_\_\_

Robert Maroni  
JOHNSON CONTROLS PHOENIX AZ CB -  
0N0J  
2032 W 4th St  
Tempe AZ 85281-7206  
Robert.J.Maroni@jci.com  
Phone: (480)446-2619

Customer Name: \_\_\_\_\_

Customer Title: \_\_\_\_\_

PO/Requisition #: \_\_\_\_\_



## PLANNED SERVICE RENEWAL

5/6/2016

Dawn Slater  
State Of Arizona State Health Lab  
250 N 17th Ave  
Phoenix AZ 85007-3231

State Of Arizona State Health Lab 2016-17



Dear Dawn:

Thank you for choosing Johnson Controls to provide the maintenance solution for your facility. We appreciate your business and look forward to continuing as your building technology services partner.

Your current service agreement (1-19593438745) will expire on 05/20/2016. We are pleased to offer a one year continuation of your current agreement for the annual sum of \$113,073.84, to be paid monthly. The scope will remain the same and the term of this contract will be 05/21/2016 to 05/20/2017. Invoices will be sent to:

Arizona Department Of Administration  
100 N 15th Ave  
Suite 202  
Phoenix AZ 85007

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