

**SPH Operating Room HVAC System  
Facility Assessment and Inventory Survey  
Home, Alaska**

**Construction Cost Estimate  
Concept Estimate  
October 24, 2016**



1225 E. International Airport Road, Suite 205  
Anchorage, Alaska 99518  
907.561.0790

**Prepared for:**

**RSA Engineering**  
670 W. Fireweed Lane Suite 200  
Anchorage, Alaska 99503  
907.276.0521



**Documents**

SPH Operating Roof HVAC System  
Assessment and Inventory Survey Report      17-Oct-16

**Notes and Assumptions**

- 1 Based on 2017 procurement/2017 construction.
- 2 Labor rates based on Davis Bacon, 50 hours/week.
- 3 Assumes open competitive bid procurement.
- 4 Materials storage area will be designated near the building.

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Description	Estimated Cost	Estimated Cost plus Contingency & Escalation	
		Option 1	Option 2
<b>Basic Bid</b>			
A1.1 Operating Room Corridor Width	\$145,838	\$172,097	-----
A1.2 Operating Room Corridor Width	\$160,914	-----	\$189,887
A2 Elevator Equipment Room	\$9,934	\$11,722	\$11,722
A3 Not Used	-----	-----	-----
A4 Replace Operating Room Ceiling	\$25,104	\$29,624	\$29,624
A5 Medgas Outlets - Addressed in P4	-----	-----	-----
A6 Additional OR Requirements - Addressed in Mechanical and Electrical Items	-----	-----	-----
A7 Roof	\$40,225	\$47,467	\$47,467
P1 Upgrade Plumbing	\$81,754	\$96,474	\$96,474
P2 Roof Drainage	\$7,517	\$8,871	\$8,871
P3 Reroute Plumbing Vent near AC-1,2	\$4,415	\$5,210	\$5,210
P4 Increase Qty of Operating Room Medgas Connections	\$40,415	\$47,691	\$47,691
M1.1 Upgrades Operating Room HVAC System	\$723,794	\$854,118	-----
M1.2 Upgrades Operating Room HVAC System	\$729,014	-----	\$860,278
M2 Reconfigure Nure Sation and Triage Supply Air	\$103,432	\$122,056	\$122,056
M3 Condensing Units Equipment Guard	\$6,414	\$7,569	\$7,569
E1.1 Upgrade Critical Equipment Branch to Serve New Mech Equipment	\$56,389	\$66,542	-----
E1.2 Upgrade Critical Equipment Branch to Serve New Mech Equipment	\$62,890	-----	\$74,213
E2 Upgrade Electrical Equip Serving Operating Rm 1	\$21,370	\$25,217	\$25,217
E3 Add Receptacles Serving Operating Room 2	\$7,039	\$8,306	\$8,306
E4 Provide Proper Color Coding and Labeling Receptacles	\$6,222	\$7,342	\$7,342
E5 Repair Conduit above Ceiling in Operating Room 1	\$672	\$793	\$793
E6 Lighting Changes to Accommodate HVAC Upgrades	\$43,374	\$51,184	\$51,184
E7 Upgrade Exit and Emergency Lighting	\$6,065	\$7,157	\$7,157
E8 Upgrade Lighting to LED in Work Areas to Save Energy	\$16,948	\$19,999	\$19,999
E9 Special System Changes to Accommodate HVAC Upgrades	\$14,993	\$17,692	\$17,692
E10 Upgrade Fire Alarm Devices	\$17,849	\$21,063	\$21,063
E11 Add Intercom Speakers	\$2,089	\$2,466	\$2,466
E12 Renovate Special System to support Architectural Remodel	\$1,178	\$1,390	\$1,390
<b>Total Estimated Cost - Basic Bid:</b>	<b>\$2,335,845</b>	<b>\$1,632,052</b>	<b>\$1,663,673</b>

Estimating Contingency: 15.0%  
Escalation For Inflation: 9 Mths @ 3.5% 2.6%

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Line No.	Description	Qty	UNITS	Material Costs		Labor Hours		Labor Cost	Equip Cost	Total Cost	Total Cost w/ OH & P
				Unit	Total	Units	Totals			Cost	
1	<b>A1.1 Operating Room Corridor Width</b>										
2											
3	Demo Partitions	99	LF			0.600	59.4	\$5,230		\$5,230	\$5,230
4	Demo Doors	3	EA			1.500	4.5	\$396		\$396	\$396
5	Demo casework	10	LF			0.400	4.0	\$352		\$352	\$352
6	Demo Floorings	3,168	SF			0.019	60.2	\$5,301		\$5,301	\$5,301
7	Demo Coved Base	561	LF			0.029	16.3	\$1,435		\$1,435	\$1,435
8	Hazmat Abatement, Assume ACM	1	LS	\$25,000.00	\$25,000					\$25,000	\$25,000
9											
10	Partitions	826	SF	\$2.43	\$2,007	0.135	111.5	\$9,818		\$11,825	\$14,781
11	Paint	590	SF	\$0.20	\$118	0.021	12.4	\$1,000		\$1,118	\$1,398
12	Doors, Frames, Hardware	1	EA	\$1,480.00	\$1,480	6.000	6.0	\$528		\$2,008	\$2,008
13	Flooring, Soiled Room, Corridor	1,868	SF	\$6.50	\$12,142	0.034	63.5	\$4,478		\$16,620	\$20,775
14	Flooring, OR	1,862	SF	\$6.50	\$12,103	0.034	63.3	\$4,464		\$16,567	\$20,709
15	Ceilings, Soiled Room, Corridors	1,548	SF	\$4.50	\$6,966	0.029	44.9	\$4,393		\$11,359	\$11,359
16	Casework, Base Cabinet	10	LF	\$220.00	\$2,200	0.400	4.0	\$352		\$2,552	\$2,552
17	Casework, Countertop, Solid Surfaces	20	SF	\$75.00	\$1,500					\$1,500	\$1,500
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29	<b>General Requirements</b>	19%									\$21,431
30	<b>General Contractor Overhead &amp; Profit</b>	6%									\$8,054
31	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$3,557
32											
33	<b>Subtotal: A1.1 Operating Room Corridor Width</b>				\$63,516		450.0	\$37,747		\$101,263	<b>\$145,838</b>
34											
35											

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Line No.	Description	Qty	UNITS	Material Costs		Labor Hours		Labor Cost	Equip Cost	Total Cost	Total Cost w/ OH & P
				Unit	Total	Units	Totals				
36											
37	<b>A1.2 Operating Room Corridor Width</b>										
38											
39	Demo Partitions	112	LF			0.600	67.2	\$5,917		\$5,917	\$5,917
40	Demo Doors	4	EA			1.500	6.0	\$528		\$528	\$528
41	Demo Floorings	3,417	SF			0.019	64.9	\$5,715		\$5,715	\$5,715
42	Demo Coved Base	636	LF			0.029	18.4	\$1,620		\$1,620	\$1,620
43	Hazmat Abatement, Assume ACM	1	LS	\$25,000.00	\$25,000					\$25,000	\$25,000
44											
45	Partitions	1,092	SF	\$2.43	\$2,654	0.135	147.4	\$12,979		\$15,633	\$19,541
46	Paint	780	SF	\$0.20	\$156	0.021	16.4	\$1,322		\$1,478	\$1,848
47	Doors, Frames, Hardware	3	EA	\$1,480.00	\$4,440	6.000	18.0	\$1,585		\$6,025	\$6,025
48	Flooring, Men's Locker, Soiled Room, Corridor	2,191	SF	\$6.50	\$14,242	0.034	74.5	\$5,253		\$19,495	\$24,369
49	Flooring, OR	1,862	SF	\$6.50	\$12,103	0.034	63.3	\$4,464		\$16,567	\$20,709
50	Ceilings, Men's Locker, Soiled Room, Corridors	1,797	SF	\$4.50	\$8,087	0.029	52.1	\$5,097		\$13,184	\$13,184
51											
52											
53											
54											
55											
56											
57											
58											
59											
60											
61											
62	<b>General Requirements</b>	19%									\$23,647
63	<b>General Contractor Overhead &amp; Profit</b>	6%									\$8,886
64	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$3,925
65											
66	<b>Subtotal: A1.2 Operating Room Corridor Width</b>				\$66,682		528.2	\$44,480		\$111,162	<b>\$160,914</b>
67											
68											

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				Unit	Total	Units	Totals				
69											
70	<b>A2 Elevator Equipment Room</b>										
71											
72	Partitions	280	SF	\$2.43	\$680	0.135	37.8	\$3,328		\$4,008	\$5,010
73	Paint	280	SF	\$0.20	\$56	0.021	5.9	\$476		\$532	\$665
74	Doors, Frames, Hardware	1	EA	\$1,480.00	\$1,480	6.000	6.0	\$528		\$2,008	\$2,008
75											
76											
77											
78											
79	<b>General Requirements</b>	19%									\$1,460
80	<b>General Contractor Overhead &amp; Profit</b>	6%									\$549
81	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$242
82											
83	<b>Subtotal: A2 Elevator Equipment Room</b>				\$2,216		49.7	\$4,332		\$6,548	<b>\$9,934</b>
84											
85											
86											
87	<b>A4 Replace Operating Room Ceiling</b>										
88											
89	Demo OR Ceilings	1,620	SF			0.013	21.1	\$1,858		\$1,858	\$1,858
90	OR Ceilings	1,620	SF	\$8.00	\$12,960	0.029	47.0	\$4,598		\$17,558	\$17,558
91	Remove/Replace Ceiling Mounted equipment included in mechanical and electrical items below										
92											
93											
94											
95	<b>General Requirements</b>	19%									\$3,689
96	<b>General Contractor Overhead &amp; Profit</b>	6%									\$1,386
97	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$612
98											
99	<b>Subtotal: A4 Replace Operating Room Ceiling</b>				\$12,960		68.1	\$6,456		\$19,416	<b>\$25,104</b>
100											
101											

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102											
103	<b>A5 Medgas Outlets - Addressed in P4</b>										
104											
105											
106											
107											
108											
109	<b>Subtotal: A5 Medgas Outlets - Addressed in P4</b>										
110											
111											
112											
113	<b>A6 Additional OR Requirements - Addressed in Mechanical and I</b>										
114											
115											
116											
117											
118	<b>Subtotal: A6 Additional OR Requirements - Addressed in Mechanical and I</b>										
119											
120											
121											
122	<b>A7 Roof</b>										
123											
124	Roof Demolition	1,000	SF			0.029	29.0	\$2,489		\$2,489	\$3,111
125	New EDPM Roofing	1,000	SF	\$28.00	\$28,000					\$28,000	\$28,000
126											
127											
128											
129											
130	<b>General Requirements</b>		19%								\$5,911
131	<b>General Contractor Overhead &amp; Profit</b>		6%								\$2,221
132	<b>General Contractor Bond &amp; Insurance</b>		2.5%								\$981
133											
134	<b>Subtotal: A7 Roof</b>				\$28,000		29.0	\$2,489		\$30,489	<b>\$40,225</b>
135											
136											

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				Unit	Total	Units	Totals				
137											
138	<b>P1 Upgrade Plumbing</b>										
139											
140	Remove Fixtures	4	EA			1.500	6.0	\$537		\$537	\$725
141	Floor Penetrations	4	EA	\$150.00	\$600					\$600	\$810
142	Patch Floor Penetrations	4	EA	\$150.00	\$600	4.000	16.0	\$1,432		\$2,032	\$2,743
143											
144	Water Closets	2	EA	\$800.00	\$1,600	4.000	8.0	\$716		\$2,316	\$3,127
145	Lavatories	2	EA	\$600.00	\$1,200	4.000	8.0	\$716		\$1,916	\$2,587
146	Shower	2	EA	\$1,600.00	\$3,200	12.000	24.0	\$2,148		\$5,348	\$7,220
147											
148	Floor Sink - Relocate	1	EA	\$50.00	\$50	4.000	4.0	\$358		\$408	\$551
149	Hand Sink - Relocate	1	EA	\$50.00	\$50	4.000	4.0	\$358		\$408	\$551
150	Dump Sink - Relocate	1	EA	\$50.00	\$50	4.000	4.0	\$358		\$408	\$551
151	Scrub Sink - Relocate	1	EA	\$50.00	\$50	6.000	6.0	\$537		\$587	\$792
152											
153	Roughin for Fixtures	10		\$50.00	\$500	2.000	20.0	\$1,790		\$2,290	\$3,092
154	Extend DWV for Fixtures	350		\$20.55	\$7,193	0.266	93.1	\$8,331		\$15,524	\$20,957
155	Extended HW/CW/HWR	600		\$7.55	\$4,530	0.185	111.0	\$9,933		\$14,463	\$19,525
156											
157											
158											
159											
160											
161											
162											
163											
164											
165	<b>General Requirements</b>	19%									\$12,014
166	<b>General Contractor Overhead &amp; Profit</b>	6%									\$4,515
167	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$1,994
168											
169	<b>Subtotal: P1 Upgrade Plumbing</b>				\$19,623		304.1	\$27,214		\$46,837	<b>\$81,754</b>
170											
171											

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172											
173	<b>P2 Roof Drainage</b>										
174											
175	Overflow Roof Drain	1	EA	\$400.00	\$400	3.000	3.0	\$264		\$664	\$664
176	Rain Leader	50	LF	\$14.00	\$700	0.500	25.0	\$2,201		\$2,901	\$2,901
177	Modify Rain Leader at Roof Drain	1	EA	\$140.00	\$140	16.000	16.0	\$1,409		\$1,549	\$1,549
178	Roof Repairs	1	EA	\$700.00	\$700					\$700	\$700
179											
180											
181											
182											
183	<b>General Requirements</b>	19%									\$1,105
184	<b>General Contractor Overhead &amp; Profit</b>	6%									\$415
185	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$183
186											
187	<b>Subtotal: P2 Roof Drainage</b>				\$1,940		44.0	\$3,874		\$5,814	\$7,517
188											
189											
190											
191	<b>P3 Reroute Plumbing Vent near AC-1,2</b>										
192											
193	Reroute Plumbing Vent	30	LF	\$14.00	\$420	0.500	15.0	\$1,342		\$1,762	\$2,379
194	New VTR	1	EA	\$70.00	\$70	2.000	2.0	\$179		\$249	\$336
195	Roof Repairs	1	EA	\$700.00	\$700					\$700	\$700
196											
197											
198											
199											
200	<b>General Requirements</b>	19%									\$649
201	<b>General Contractor Overhead &amp; Profit</b>	6%									\$244
202	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$108
203											
204	<b>Subtotal: P3 Reroute Plumbing Vent near AC-1,2</b>				\$1,190		17.0	\$1,521		\$2,711	\$4,415
205											
206											

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				Unit	Total	Units	Totals				
207											
208	<b>P4 Increase Qty of Operating Room Medgas Connections</b>										
209											
210	Med Gas Piping - Clean Copper Using 1" avg, assume average of 40' per outlet	520	LF	\$10.63	\$5,528	0.192	99.8	\$8,931		\$14,459	\$19,520
211	Med Gas Certification	1	LS	\$5,000.00	\$5,000					\$5,000	\$6,750
212	Med Gas Outlets	13	EA	\$150.00	\$1,950	1.500	19.5	\$1,745		\$3,695	\$4,988
213	O2	5	EA								
214	VAC	7	EA								
215	WAGD	1	EA								
216											
217											
218											
219											
220											
221											
222											
223											
224											
225											
226											
227											
228											
229											
230											
231											
232											
233	<b>General Requirements</b>	19%									\$5,939
234	<b>General Contractor Overhead &amp; Profit</b>	6%									\$2,232
235	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$986
236											
237	<b>Subtotal: P4 Increase Qty of Operating Room Medgas Connections</b>				\$12,478		119.3	\$10,676		\$23,154	<b>\$40,415</b>
238											
239											
240											

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				Unit	Total	Units	Totals				
241	<b>M1.1 Upgrades Operating Room HVAC System</b>										
242											
243	<b>Operating Room</b>										
244	Demo Area Ductwork System	1,500	SF			0.057	85.5	\$7,657		\$7,657	\$10,337
245	New Ductwork	2,250	LBS	\$5.36	\$12,060	0.077	173.3	\$15,519		\$27,579	\$37,232
246	VAV Boxes	2	EA	\$600.00	\$1,200	4.000	8.0	\$716		\$1,916	\$2,587
247	Heating Piping to VAV's	80	LF	\$10.66	\$853	0.210	16.8	\$1,504		\$2,357	\$3,182
248	Heat Zoning on VAV Boxes	2	EA	\$200.00	\$400	2.000	4.0	\$358		\$758	\$1,023
249	Controls	4	PT	\$1,200.00	\$4,800					\$4,800	\$6,480
250	Insulation	563	SF	\$12.00	\$6,750					\$6,750	\$9,113
251	Diffusers	8	EA	\$150.00	\$1,200	1.000	8.0	\$716		\$1,916	\$2,587
252	Duct Mounted Steam Humidifiers	2	EA	\$1,500.00	\$3,000	12.000	24.0	\$2,149		\$5,149	\$6,951
253											
254	<b>Women's Locker Room</b>										
255	Demo Area Ductwork System	195	SF			0.021	4.1	\$367		\$367	\$495
256	New Ductwork	137	LBS	\$5.36	\$732	0.077	10.5	\$940		\$1,672	\$2,257
257	Duct Insulation	34	SF	\$12.00	\$410					\$410	\$554
258	Diffusers	2	EA	\$150.00	\$300	1.000	2.0	\$179		\$479	\$647
259											
260	<b>Nurses Station/Triage</b>										
261	Demo Area Ductwork System	2,114	SF			0.021	44.4	\$3,976		\$3,976	\$5,368
262	New Ductwork	1,057	LBS	\$5.36	\$5,666	0.077	81.4	\$7,289		\$12,955	\$17,489
263	Duct Insulation	264	SF	\$12.00	\$3,171					\$3,171	\$4,281
264	Diffusers	14	EA	\$150.00	\$2,100	1.000	14.0	\$1,254		\$3,354	\$4,528
265											
266	<b>Doctor's Lounge</b>										
267	Demo Area Ductwork System	142	SF			0.021	3.0	\$269		\$269	\$363
268	New Ductwork	99	LBS	\$5.36	\$533	0.077	7.7	\$690		\$1,223	\$1,651
269	Duct Insulation	25	SF	\$12.00	\$298					\$298	\$402
270	Diffusers	1	EA	\$150.00	\$150	1.000	1.0	\$90		\$240	\$324
271											
272											
273											
274											
275											

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				Unit	Total	Units	Totals				
276	<b>X-Ray</b>										
277	Demo Area Ductwork System	600	SF			0.021	12.6	\$1,128		\$1,128	\$1,523
278	New Ductwork	420	LBS	\$5.36	\$2,251	0.077	32.3	\$2,892		\$5,143	\$6,943
279	Duct Insulation	105	SF	\$12.00	\$1,260					\$1,260	\$1,701
280	Diffusers	14	EA	\$150.00	\$2,055	1.000	13.7	\$1,227		\$3,282	\$4,431
281											
282	<b>Sterile Storage</b>										
283	Demo Area Ductwork System	1,315	SF			0.021	27.6	\$2,472		\$2,472	\$3,337
284	New Ductwork	921	LBS	\$5.36	\$4,934	0.077	70.9	\$6,349		\$11,283	\$15,232
285	VAV Boxes	1	EA	\$350.00	\$350	2.000	2.0	\$179		\$529	\$714
286	Heating Piping to VAV's	40	LF	\$10.66	\$426	0.210	8.4	\$752		\$1,178	\$1,590
287	Heat Zoning on VAV Boxes	1	EA	\$200.00	\$200	2.000	2.0	\$179		\$379	\$512
288	Controls	2	PT	\$1,200.00	\$2,400					\$2,400	\$3,240
289	Duct Insulation	230	SF	\$12.00	\$2,762					\$2,762	\$3,729
290	Diffusers	14	EA	\$150.00	\$2,055	1.000	13.7	\$1,227		\$3,282	\$4,431
291											
292	<b>Operating Room Hallway</b>										
293	Demo Area Ductwork System	610	SF			0.021	12.8	\$1,146		\$1,146	\$1,547
294	New Ductwork	427	LBS	\$5.36	\$2,289	0.077	32.9	\$2,946		\$5,235	\$7,067
295	VAV Boxes	1	EA	\$350.00	\$350	2.000	2.0	\$179		\$529	\$714
296	Heating Piping to VAV's	40	LF	\$10.66	\$426	0.210	8.4	\$752		\$1,178	\$1,590
297	Heat Zoning on VAV Boxes	1	EA	\$200.00	\$200	2.000	2.0	\$179		\$379	\$512
298	Controls	2	PT	\$1,200.00	\$2,400					\$2,400	\$3,240
299	Duct Insulation	107	SF	\$12.00	\$1,281					\$1,281	\$1,729
300	Diffusers	4	EA	\$150.00	\$600	1.000	4.0	\$358		\$958	\$1,293
301											
302	<b>Men's Locker Room</b>										
303	Demo Area Ductwork System	78	SF			0.021	1.6	\$143		\$143	\$193
304	New Ductwork	55	LBS	\$5.36	\$293	0.077	4.2	\$376		\$669	\$903
305	Duct Insulation	14	SF	\$12.00	\$164					\$164	\$221
306	Diffusers	1	EA	\$150.00	\$150	1.000	1.0	\$90		\$240	\$324
307											
308											
309											
310											

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Line No.	Description	Qty	UNITS	Material Costs		Labor Hours		Labor Cost	Equip Cost	Total Cost	Total Cost w/ OH & P
				Unit	Total	Units	Totals			Cost	
311	<b>Replace AC-2</b>										
312	Remove AC-2	1	EA			40.000	40.0	\$3,582		\$3,582	\$4,836
313	New AHU VAV, 6000 CFM, Merv 14 Filters, Humidifier Section	1	EA	\$48,000.00	\$48,000	120.000	120.0	\$10,746	\$4,000	\$62,746	\$84,707
314	Chiller, 20 Ton, Air Cooled	1	EA	\$87,600.00	\$87,600	60.000	60.0	\$5,373	\$2,500	\$95,473	\$128,889
315	Piping 2.5"	300	LF	\$21.54	\$6,462	0.764	229.2	\$20,525		\$26,987	\$36,432
316	Insulation	300	LF	\$14.00	\$4,200					\$4,200	\$5,670
317	Metal Jacketing	75	SF	\$1.00	\$75	0.086	6.5	\$582		\$657	\$887
318	Ductwork Modifications	1	EA	\$1,500.00	\$1,500	20.000	20.0	\$1,791		\$3,291	\$4,443
319	Fire Smoke Damper	1	EA	\$1,500.00	\$1,500	8.000	8.0	\$716		\$2,216	\$2,992
320	Steam Piping Stainless 316L	50	LF	\$26.00	\$1,300	0.178	8.9	\$797		\$2,097	\$2,831
321	Insulation	50	LF	\$2.00	\$100	0.086	4.3	\$385		\$485	\$655
322	Controls on AHU	30	PT	\$1,500.00	\$45,000					\$45,000	\$60,750
323	Roof Support										
324	Structural Steel	5,590	LBS	\$1.65	\$9,224	0.014	78.3	\$7,671	\$5,590	\$22,485	\$28,106
325	Moment Develop Posts	6	EA	\$250.00	\$1,500	12.000	72.0	\$7,054		\$8,554	\$10,693
326	Decking	550	SF	\$3.00	\$1,650	0.019	10.5	\$1,029		\$2,679	\$3,349
327											
328											
329											
330											
331											
332											
333											
334											
335											
336											
337											
338	<b>General Requirements</b>	19%									\$106,363
339	<b>General Contractor Overhead &amp; Profit</b>	6%									\$39,970
340	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$17,654
341											
342	<b>Subtotal: M1.1 Upgrades Operating Room HVAC System</b>				\$278,580		1,397.5	\$126,498	\$12,090	\$417,168	<b>\$723,794</b>
343											
344											

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Line No.	Description	Qty	UNITS	Material Costs		Labor Hours		Labor Cost	Equip Cost	Total Cost	Total Cost w/ OH & P
				Unit	Total	Units	Totals				
345											
346	<b>M1.2 Upgrades Operating Room HVAC System</b>										
347	<b>Operating Room</b>										
348	Demo Area Ductwork System	1,500	SF			0.057	85.5	\$7,657		\$7,657	\$10,337
349	New Ductwork	2,250	LBS	\$5.36	\$12,060	0.077	173.3	\$15,519		\$27,579	\$37,232
350	VAV Boxes	2	EA	\$600.00	\$1,200	4.000	8.0	\$716		\$1,916	\$2,587
351	Heating Piping to VAV's	80	LF	\$10.66	\$853	0.210	16.8	\$1,504		\$2,357	\$3,182
352	Heat Zoning on VAV Boxes	2	EA	\$200.00	\$400	2.000	4.0	\$358		\$758	\$1,023
353	Controls	4	PT	\$1,200.00	\$4,800					\$4,800	\$6,480
354	Insulation	563	SF	\$12.00	\$6,750					\$6,750	\$9,113
355	Diffusers	8	EA	\$150.00	\$1,200	1.000	8.0	\$716		\$1,916	\$2,587
356	Duct Mounted Steam Humidifiers	2	EA	\$1,500.00	\$3,000	12.000	24.0	\$2,149		\$5,149	\$6,951
357											
358	<b>Women's Locker Room</b>										
359	Demo Area Ductwork System	195	SF			0.021	4.1	\$367		\$367	\$495
360	New Ductwork	137	LBS	\$5.36	\$732	0.077	10.5	\$940		\$1,672	\$2,257
361	Duct Insulation	34	SF	\$12.00	\$410					\$410	\$554
362	Diffusers	2	EA	\$150.00	\$300	1.000	2.0	\$179		\$479	\$647
363											
364	<b>Nurses Station/Triage</b>										
365	Demo Area Ductwork System	2,114	SF			0.021	44.4	\$3,976		\$3,976	\$5,368
366	New Ductwork	1,057	LBS	\$5.36	\$5,666	0.077	81.4	\$7,289		\$12,955	\$17,489
367	Duct Insulation	264	SF	\$12.00	\$3,171					\$3,171	\$4,281
368	Diffusers	14	EA	\$150.00	\$2,100	1.000	14.0	\$1,254		\$3,354	\$4,528
369											
370	<b>Doctor's Lounge</b>										
371	Demo Area Ductwork System	142	SF			0.021	3.0	\$269		\$269	\$363
372	New Ductwork	99	LBS	\$5.36	\$533	0.077	7.7	\$690		\$1,223	\$1,651
373	Duct Insulation	25	SF	\$12.00	\$298					\$298	\$402
374	Diffusers	1	EA	\$150.00	\$150	1.000	1.0	\$90		\$240	\$324
375											
376											
377											
378											
379											

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Line No.	Description	Qty	UNITS	Material Costs		Labor Hours		Labor Cost	Equip Cost	Total Cost	Total Cost w/ OH & P
				Unit	Total	Units	Totals				
380	<b>X-Ray</b>										
381	Demo Area Ductwork System	600	SF			0.021	12.6	\$1,128		\$1,128	\$1,523
382	New Ductwork	420	LBS	\$5.36	\$2,251	0.077	32.3	\$2,892		\$5,143	\$6,943
383	Duct Insulation	105	SF	\$12.00	\$1,260					\$1,260	\$1,701
384	Diffusers	14	EA	\$150.00	\$2,055	1.000	13.7	\$1,227		\$3,282	\$4,431
385											
386	<b>Sterile Storage</b>										
387	Demo Area Ductwork System	1,315	SF			0.021	27.6	\$2,472		\$2,472	\$3,337
388	New Ductwork	921	LBS	\$5.36	\$4,934	0.077	70.9	\$6,349		\$11,283	\$15,232
389	VAV Boxes	1	EA	\$350.00	\$350	2.000	2.0	\$179		\$529	\$714
390	Heating Piping to VAV's	40	LF	\$10.66	\$426	0.210	8.4	\$752		\$1,178	\$1,590
391	Heat Zoning on VAV Boxes	1	EA	\$200.00	\$200	2.000	2.0	\$179		\$379	\$512
392	Controls	2	PT	\$1,200.00	\$2,400					\$2,400	\$3,240
393	Duct Insulation	230	SF	\$12.00	\$2,762					\$2,762	\$3,729
394	Diffusers	14	EA	\$150.00	\$2,055	1.000	13.7	\$1,227		\$3,282	\$4,431
395											
396	<b>Operating Room Hallway</b>										
397	Demo Area Ductwork System	610	SF			0.021	12.8	\$1,146		\$1,146	\$1,547
398	New Ductwork	427	LBS	\$5.36	\$2,289	0.077	32.9	\$2,946		\$5,235	\$7,067
399	VAV Boxes	1	EA	\$350.00	\$350	2.000	2.0	\$179		\$529	\$714
400	Heating Piping to VAV's	40	LF	\$10.66	\$426	0.210	8.4	\$752		\$1,178	\$1,590
401	Heat Zoning on VAV Boxes	1	EA	\$200.00	\$200	2.000	2.0	\$179		\$379	\$512
402	Controls	2	PT	\$1,200.00	\$2,400					\$2,400	\$3,240
403	Duct Insulation	107	SF	\$12.00	\$1,281					\$1,281	\$1,729
404	Diffusers	4	EA	\$150.00	\$600	1.000	4.0	\$358		\$958	\$1,293
405											
406	<b>Men's Locker Room</b>										
407	Demo Area Ductwork System	78	SF			0.021	1.6	\$143		\$143	\$193
408	New Ductwork	55	LBS	\$5.36	\$293	0.077	4.2	\$376		\$669	\$903
409	Duct Insulation	14	SF	\$12.00	\$164					\$164	\$221
410	Diffusers	1	EA	\$150.00	\$150	1.000	1.0	\$90		\$240	\$324
411											
412											
413											
414											

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Line No.	Description	Qty	UNITS	Material Costs		Labor Hours		Labor Cost	Equip Cost	Total Cost	Total Cost w/ OH & P
				Unit	Total	Units	Totals				
415	<b>Replace AC-2</b>										
416	Remove AC-2	1	EA			40.000	40.0	\$3,582		\$3,582	\$4,836
417	New AHU VAV, 6000 CFM, Merv 14 Filters, Humidifier Section, In A Penthouse Enclosure	1	EA	\$72,000.00	\$72,000	60.000	60.0	\$5,373	\$15,000	\$92,373	\$124,704
418	New Roof Curb	1	EA	\$3,500.00	\$3,500					\$3,500	\$4,725
419	Chiller, 20 Ton, Air Cooled	1	EA	\$87,600.00	\$87,600	60.000	60.0	\$5,373	\$2,500	\$95,473	\$128,889
420	Piping 2.5"	100	LF	\$21.54	\$2,154	0.764	76.4	\$6,842		\$8,996	\$12,145
421	Insulation	100	LF	\$14.00	\$1,400					\$1,400	\$1,890
422	Metal Jacketing	75	SF	\$1.00	\$75	0.086	6.5	\$582		\$657	\$887
423	Ductwork Modifications	1	EA	\$1,500.00	\$1,500	20.000	20.0	\$1,791		\$3,291	\$4,443
424	Steam Piping Stainless 316L	100	LF	\$26.00	\$2,600	0.178	17.8	\$1,594		\$4,194	\$5,662
425	Insulation	100	LF	\$2.00	\$200	0.086	8.6	\$770		\$970	\$1,310
426	Controls on AHU	30	PT	\$1,500.00	\$45,000					\$45,000	\$60,750
427	Brazed Plate Heat Exchanger	1	EA	\$1,100.00	\$1,100	4.000	4.0	\$358		\$1,458	\$1,968
428	Pump	1	EA	\$700.00	\$700	2.000	2.0	\$179		\$879	\$1,187
429	Glycol Tank	1	EA	\$700.00	\$700	4.000	4.0	\$358		\$1,058	\$1,428
323	Roof Support										
324	Structural Steel	3,115	LBS	\$1.65	\$5,139	0.014	43.6	\$4,271	\$3,115	\$12,525	\$15,656
325	Moment Develop Posts	4	EA	\$250.00	\$1,000	12.000	48.0	\$4,703		\$5,703	\$7,129
326	Decking	275	SF	\$3.00	\$825	0.019	5.2	\$509		\$1,334	\$1,668
434											
435											
436											
437											
438											
439											
440											
441	<b>General Requirements</b>	19%									\$107,130
442	<b>General Contractor Overhead &amp; Profit</b>	6%									\$40,258
443	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$17,781
444											
445	<b>Subtotal: M1.2 Upgrades Operating Room HVAC System</b>				\$295,962		1,135.9	\$102,532	\$20,615	\$419,109	<b>\$729,014</b>
446											
447											

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Line No.	Description	Qty	UNITS	Material Costs		Labor Hours		Labor Cost	Equip Cost	Total Cost	Total Cost w/ OH & P
				Unit	Total	Units	Totals			Cost	
448											
449	<b>M2 Reconfigure Nure Sation and Triage Supply Air</b>										
450											
451	Duct Demolition	2,740	SF			0.014	38.4	\$3,439		\$3,439	\$4,643
452	Allow for Asbestos	2,740	SF	\$10.00	\$27,400					\$27,400	\$34,250
453	Reconfigure Supply and Return Ductwork	1,781	LBS	\$5.36	\$9,546	0.077	137.1	\$12,277		\$21,823	\$29,461
454	Insulation	445	SF	\$12.00	\$5,343					\$5,343	\$7,213
455	Diffusers	14	EA	\$150.00	\$2,055	1.000	13.7	\$1,227		\$3,282	\$4,431
456											
457											
458											
459											
460											
461	<b>General Requirements</b>	19%									\$15,200
462	<b>General Contractor Overhead &amp; Profit</b>	6%									\$5,712
463	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$2,523
464											
465	<b>Subtotal: M2 Reconfigure Nure Sation and Triage Supply Air</b>				\$44,344		189.2	\$16,943		\$61,287	<b>\$103,432</b>
466											
467											
468											
469	<b>M3 Condensing Units Equipment Guard</b>										
470											
471	Fall Protection System	40	LF	\$80.00	\$3,200	0.500	20.0	\$1,761		\$4,961	\$4,961
472											
473											
474											
475											
476	<b>General Requirements</b>	19%									\$943
477	<b>General Contractor Overhead &amp; Profit</b>	6%									\$354
478	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$156
479											
480	<b>Subtotal: M3 Condensing Units Equipment Guard</b>				\$3,200		20.0	\$1,761		\$4,961	<b>\$6,414</b>
481											
482											

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Line No.	Description	Qty	UNITS	Material Costs		Labor Hours		Labor Cost	Equip Cost	Total Cost	Total Cost w/ OH & P
				Unit	Total	Units	Totals				
483											
484	<b>E1.1 Upgrade Critical Equipment Branch to Serve New Mech Equipment</b>										
485											
486	Power Monitoring	1	EA	\$3,500.00	\$3,500	20.000	20.0	\$1,824		\$5,324	\$7,187
487											
488	New 150A/3P Breaker in Switchboard	1	EA	\$2,000.00	\$2,000	2.000	2.0	\$182		\$2,182	\$2,946
489											
490	Coordination Study	1	EA	\$10,000.00	\$10,000					\$10,000	\$10,000
491											
492	ELE2 Panelboard 225A, 480V 3 Phase 3W	1	EA	\$3,400.00	\$3,400	12.000	12.0	\$1,094		\$4,494	\$6,067
493	2"C 3#4/0, 1#6G	100	LF	\$12.13	\$1,213	0.332	33.2	\$3,027		\$4,240	\$5,724
494	Allow for Access	100	LF	\$1.00	\$100	0.100	10.0	\$912		\$1,012	\$1,366
495											
496	HVAC Option 1										
497	Circuit Breakers 25A/3P in ELE	2	EA	\$90.00	\$180	1.000	2.0	\$182		\$362	\$489
498	25A Circuit	200	LF	\$1.17	\$234	0.091	18.2	\$1,660		\$1,894	\$2,557
499	Circuit Breakers 15A/3P in ELE	2	EA	\$50.00	\$100	1.000	2.0	\$182		\$282	\$381
500	15A Circuit	200	LF	\$1.17	\$234	0.091	18.2	\$1,660		\$1,894	\$2,557
501	Circuit Breakers 40A/3P in ELE	2	EA	\$190.00	\$380	1.000	2.0	\$182		\$562	\$759
502	40A Circuit	200	LF	\$2.50	\$500	0.118	23.6	\$2,152		\$2,652	\$3,580
503											
504											
505											
506											
507											
508											
509											
510											
511	<b>General Requirements</b>	19%									\$8,286
512	<b>General Contractor Overhead &amp; Profit</b>	6%									\$3,114
513	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$1,375
514											
515	<b>Subtotal: E1.1 Upgrade Critical Equipment Branch to Serve New Mech Equ</b>				\$21,841		143.2	\$13,057		\$34,898	<b>\$56,389</b>
516											
517											

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Line No.	Description	Qty	UNITS	Material Costs		Labor Hours		Labor Cost	Equip Cost	Total Cost	Total Cost w/ OH & P
				Unit	Total	Units	Totals				
518											
519	<b>E1.2 Upgrade Critical Equipment Branch to Serve New Mech Equipment</b>										
520											
521	Power Monitoring	1	EA	\$3,500.00	\$3,500	20.000	20.0	\$1,824		\$5,324	\$7,187
522											
523	New 150A/3P Breaker in Switchboard	1	EA	\$2,000.00	\$2,000	2.000	2.0	\$182		\$2,182	\$2,946
524											
525	Coordination Study	1	EA	\$10,000.00	\$10,000					\$10,000	\$10,000
526											
527	ELE2 Panelboard 225A, 480V 3 Phase 3W	1	EA	\$3,400.00	\$3,400	12.000	12.0	\$1,094		\$4,494	\$6,067
528	2"C 3#4/0, 1#6G	200	LF	\$12.13	\$2,426	0.332	66.4	\$6,055		\$8,481	\$11,449
529	Allow for Access	200	LF	\$1.00	\$200	0.100	20.0	\$1,824		\$2,024	\$2,732
530											
531	HVAC Option 2										
532	Circuit Breakers 25A/3P in ELE	4	EA	\$90.00	\$360	1.000	4.0	\$365		\$725	\$979
533	25A Circuit	400	LF	\$1.17	\$468	0.091	36.4	\$3,319		\$3,787	\$5,112
534	Circuit Breakers 40A/3P in ELE	1	EA	\$190.00	\$190	1.000	1.0	\$91		\$281	\$379
535	40A Circuit	100	LF	\$2.50	\$250	0.118	11.8	\$1,076		\$1,326	\$1,790
536											
537											
538											
539											
540											
541											
542											
543											
544											
545											
546	<b>General Requirements</b>	19%									\$9,242
547	<b>General Contractor Overhead &amp; Profit</b>	6%									\$3,473
548	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$1,534
549											
550	<b>Subtotal: E1.2 Upgrade Critical Equipment Branch to Serve New Mech Equ</b>										
551					\$22,794		173.6	\$15,830		\$38,624	\$62,890
552											

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Line No.	Description	Qty	UNITS	Material Costs		Labor Hours		Labor Cost	Equip Cost	Total Cost	Total Cost w/ OH & P
				Unit	Total	Units	Totals				
553											
554	<b>E2 Upgrade Electrical Equip Serving Operating Rm 1</b>										
555											
556	Demo Panelboard I1					3.000					
557	Panelboard 100A, 208V, 1phase 3W, 18 spa	1	EA	\$700.00	\$700	6.000	6.0	\$547		\$1,247	\$1,683
558	Reconnect Circuits	18	EA			1.000	18.0	\$1,641		\$1,641	\$2,215
559											
560	40A/2P Breaker in Panel ELC	1	EA	\$160.00	\$160	1.000	1.0	\$91		\$251	\$339
561											
562	Circuit 2#8,1#10 in Extg 3/4C	100	LF	\$0.66	\$66	0.036	3.6	\$328		\$394	\$532
563											
564	#10 Ground Wire	100	LF	\$0.30	\$30	0.036	3.6	\$328		\$358	\$483
565											
566	Circuit from Panel 2NB										
567	20A/1P Circuit Breaker	2	EA	\$50.00	\$100	1.000	2.0	\$182		\$282	\$381
568	20A Circuit 3/4"C 3#10,G	290	LF	\$1.90	\$551	0.111	32.2	\$2,936		\$3,487	\$4,707
569	New Receptacles, Hospital Grade	12	EA	\$35.00	\$420	1.000	12.0	\$1,094		\$1,514	\$2,044
570											
571	Circuit from Panel I1										
572	20A/1P Circuit Breaker	2	EA	\$50.00	\$100	1.000	2.0	\$182		\$282	\$381
573	20A Circuit 3/4"C 3#10,G	150	LF	\$1.90	\$285	0.111	16.7	\$1,523		\$1,808	\$2,441
574	New Receptacles, Hospital Grade	5	EA	\$35.00	\$175	1.000	5.0	\$456		\$631	\$852
575											
576	#12 Ground Wire	100	LF	\$0.20	\$20	0.036	3.6	\$328		\$348	\$470
577											
578											
579											
580											
581	<b>General Requirements</b>	19%									\$3,140
582	<b>General Contractor Overhead &amp; Profit</b>	6%									\$1,180
583	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$521
584											
585	<b>Subtotal: E2 Upgrade Electrical Equip Serving Operating Rm 1</b>				\$2,607		105.7	\$9,636		\$12,243	\$21,370
586											
587											

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Line No.	Description	Qty	UNITS	Material Costs		Labor Hours		Labor Cost	Equip Cost	Total Cost	Total Cost w/ OH & P
				Unit	Total	Units	Totals				
588											
589	<b>E3 Add Receptacles Serving Operating Room 2</b>										
590											
591	20A/1P Circuit Breaker	1	EA	\$50.00	\$50	1.000	1.0	\$91		\$141	\$190
592	20A Circuit 3/4"C 3#10,G	210	LF	\$1.90	\$399	0.111	23.3	\$2,125		\$2,524	\$3,407
593	New Receptacles, Hospital Grade	8	EA	\$35.00	\$280	1.000	8.0	\$730		\$1,010	\$1,364
594	#10 Ground Wire	100	LF	\$0.30	\$30	0.036	3.6	\$328		\$358	\$483
595											
596											
597											
598											
599	<b>General Requirements</b>	19%									\$1,034
600	<b>General Contractor Overhead &amp; Profit</b>	6%									\$389
601	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$172
602											
603	<b>Subtotal: E3 Add Receptacles Serving Operating Room 2</b>				\$759		35.9	\$3,274		\$4,033	<b>\$7,039</b>
604											
605											
606											
607	<b>E4 Provide Proper Color Coding and Labeling Receptacles</b>										
608											
609	Replace Receptacles & Plates, Hosp. Grade, Color Coded	20	EA	\$25.00	\$500	1.500	30.0	\$2,736		\$3,236	\$4,369
610	Labeling	20	EA	\$5.00	\$100	0.125	2.5	\$228		\$328	\$443
611											
612											
613											
614											
615	<b>General Requirements</b>	19%									\$914
616	<b>General Contractor Overhead &amp; Profit</b>	6%									\$344
617	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$152
618											
619	<b>Subtotal: E4 Provide Proper Color Coding and Labeling Receptacles</b>				\$600		32.5	\$2,964		\$3,564	<b>\$6,222</b>
620											
621											

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Line No.	Description	Qty	UNITS	Material Costs		Labor Hours		Labor Cost	Equip Cost	Total Cost	Total Cost w/ OH & P
				Unit	Total	Units	Totals				
622											
623	<b>E5 Repair Conduit above Ceiling in Operating Room 1</b>										
624											
625	Inspect and Repair Broken Circuit	1	EA	\$20.00	\$20	4.000	4.0	\$365		\$385	\$520
626											
627											
628											
629											
630	<b>General Requirements</b>	19%									\$99
631	<b>General Contractor Overhead &amp; Profit</b>	6%									\$37
632	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$16
633											
634	<b>Subtotal: E5 Repair Conduit above Ceiling in Operating Room 1</b>				\$20		4.0	\$365		\$385	<b>\$672</b>
635											
636											
637											
638	<b>E6 Lighting Changes to Accommodate HVAC Upgrades</b>										
639											
640	Demo Fixtures, OR 1	30	EA			2.000	60.0	\$5,471		\$5,471	\$7,386
641	Demo Fixtures, OR 2	30	EA			2.000	60.0	\$5,471		\$5,471	\$7,386
642											
643	LED Fixtures, OR 1, Reinstall	30	EA	\$20.00	\$600	2.000	60.0	\$5,471		\$6,071	\$8,196
644	LED Fixtures, OR 2, Reinstall	30	EA	\$20.00	\$600	2.000	60.0	\$5,471		\$6,071	\$8,196
645	Replace 2 Lightin OR2	2	EA	\$700.00	\$1,400	2.000	4.0	\$365		\$1,765	\$2,383
646											
647											
648											
649											
650	<b>General Requirements</b>	19%									\$6,374
651	<b>General Contractor Overhead &amp; Profit</b>	6%									\$2,395
652	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$1,058
653											
654	<b>Subtotal: E6 Lighting Changes to Accommodate HVAC Upgrades</b>				\$2,600		244.0	\$22,249		\$24,849	<b>\$43,374</b>
655											
656											

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Line No.	Description	Qty	UNITS	Material Costs		Labor Hours		Labor Cost	Equip Cost	Total Cost	Total Cost w/ OH & P
				Unit	Total	Units	Totals				
657											
658	<b>E7 Upgrade Exit and Emergency Lighting</b>										
659											
660	Demo Emergency lights, Exit Signs	5	EA			1.000	5.0	\$456		\$456	\$616
661											
662	LED Exit Signs	5	EA	\$125.00	\$625	1.000	5.0	\$456		\$1,081	\$1,459
663	Battery Emergency Light	1	EA	\$170.00	\$170	1.500	1.5	\$137		\$307	\$414
664											
665	New Circuits	5	EA	\$52.50	\$263	3.000	15.0	\$1,368		\$1,631	\$2,202
666											
667	<b>General Requirements</b>	19%									\$891
668	<b>General Contractor Overhead &amp; Profit</b>	6%									\$335
669	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$148
670											
671	<b>Subtotal: E7 Upgrade Exit and Emergency Lighting</b>				\$1,058		26.5	\$2,417		\$3,475	<b>\$6,065</b>
672											
673											
674											
675	<b>E8 Upgrade Lighting to LED in Work Areas to Save Energy</b>										
676	Demo Fixtures, Corridors	12	EA			1.000	12.0	\$1,094		\$1,094	\$1,477
677	Demo Fixtures, Utility Area	4	EA			1.000	4.0	\$365		\$365	\$493
678											
679	LED Fixtures, Corridors	12	EA	\$350.00	\$4,200	1.250	15.0	\$1,368		\$5,568	\$7,517
680	LED Fixtures, Utility Area	4	EA	\$250.00	\$1,000	1.250	5.0	\$456		\$1,456	\$1,966
681											
682	Occupancy Sensor	1	EA	\$156.00	\$156	1.000	1.0	\$91		\$247	\$333
683	New Circuits to 20%	3	EA	\$52.50	\$158	3.000	9.0	\$821		\$979	\$1,322
684											
685	<b>General Requirements</b>	19%									\$2,491
686	<b>General Contractor Overhead &amp; Profit</b>	6%									\$936
687	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$413
688											
689	<b>Subtotal: E8 Upgrade Lighting to LED in Work Areas to Save Energy</b>				\$5,514		46.0	\$4,195		\$9,709	<b>\$16,948</b>
690											
691											

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Line No.	Description	Qty	UNITS	Material Costs		Labor Hours		Labor Cost	Equip Cost	Total Cost	Total Cost w/ OH & P
				Unit	Total	Units	Totals				
692											
693	<b>E9 Special System Changes to Accommodate HVAC Upgrades</b>										
694											
695	Demo FA Devices	8	EA			0.500	4.0	\$365		\$365	\$493
696	New FA Devices	8	EA	\$150.00	\$1,200	1.000	8.0	\$730		\$1,930	\$2,606
697	FA Wiring 2 Conductors	320	LF	\$0.50	\$160	0.036	11.5	\$1,049		\$1,209	\$1,632
698	Conduit 1/2"	320	LF	\$0.60	\$192	0.057	18.2	\$1,660		\$1,852	\$2,500
699											
700	Remove/Reinstall Speakers	8	EA	\$120.00	\$960	1.000	8.0	\$730		\$1,690	\$2,282
701	Wiring 2 Conductors	50	LF	\$0.50	\$25	0.036	1.8	\$164		\$189	\$255
702	Conduit 1/2"	50	LF	\$0.60	\$30	0.057	2.9	\$264		\$294	\$397
703											
704	Remove/Reinstall Nurse Call	6	EA	\$5.00	\$30	1.000	6.0	\$547		\$577	\$779
705	Wiring 2 Conductors	50	LF	\$0.50	\$25	0.036	1.8	\$164		\$189	\$255
706	Conduit 1/2"	50	LF	\$0.60	\$30	0.057	2.9	\$264		\$294	\$397
707											
708											
709											
710											
711											
712											
713											
714											
715											
716											
717											
718											
719											
720	<b>General Requirements</b>	19%									\$2,203
721	<b>General Contractor Overhead &amp; Profit</b>	6%									\$828
722	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$366
723											
724	<b>Subtotal: E9 Special System Changes to Accommodate HVAC Upgrades</b>				\$2,652		65.1	\$5,937		\$8,589	<b>\$14,993</b>
725											
726											

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Line No.	Description	Qty	UNITS	Material Costs		Labor Hours		Labor Cost	Equip Cost	Total Cost	Total Cost w/ OH & P
				Unit	Total	Units	Totals				
727											
728	<b>E10 Upgrade Fire Alarm Devices</b>										
729											
730	<b>28 31 00 Fire Detection &amp; Alarm</b>										
731	FACP modifications, Engineering and Testing	1	EA	\$3,000.00	\$3,000					\$3,000	\$4,050
732	Horn/Strobe	6	EA	\$150.00	\$900	1.000	6.0	\$547		\$1,447	\$1,953
733	Smoke Detector	6	EA	\$150.00	\$900	1.000	6.0	\$547		\$1,447	\$1,953
734	DD: Duct Smoke Sensor/Detector	2	EA	\$350.00	\$700	1.000	2.0	\$182		\$882	\$1,191
735											
736	FA Wiring 2 Conductors	360	LF	\$0.50	\$180	0.036	13.0	\$1,185		\$1,365	\$1,843
737	Conduit 1/2"	360	LF	\$0.60	\$216	0.057	20.5	\$1,869		\$2,085	\$2,815
738											
739											
740	<b>General Requirements</b>	19%									\$2,623
741	<b>General Contractor Overhead &amp; Profit</b>	6%									\$986
742	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$435
743											
744	<b>Subtotal: E10 Upgrade Fire Alarm Devices</b>				\$5,896		47.5	\$4,330		\$10,226	<b>\$17,849</b>
745											
746											
747											
748	<b>E11 Add Intercom Speakers</b>										
749											
750	Speaker	2	EA	\$120.00	\$240	2.607	5.2	\$474		\$714	\$964
751	Wiring 2 Conductors	50	LF	\$0.50	\$25	0.036	1.8	\$164		\$189	\$255
752	Conduit 1/2"	50	LF	\$0.60	\$30	0.057	2.9	\$264		\$294	\$397
753											
754	<b>General Requirements</b>	19%									\$307
755	<b>General Contractor Overhead &amp; Profit</b>	6%									\$115
756	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$51
757											
758	<b>Subtotal: E11 Add Intercom Speakers</b>				\$295		9.9	\$902		\$1,197	<b>\$2,089</b>
759											
760											

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Line No.	Description	Qty	UNITS	Material Costs Unit	Material Costs Total	Labor Hours Units	Labor Hours Totals	Labor Cost	Equip Cost	Total Cost	Total Cost w/ OH & P
761											
762	<b>E12 Renovate Special System to support Architectural Remodel</b>										
763											
764	Remove and Relocate Devices	2	EA	\$5.00	\$10	1.000	2.0	\$182		\$192	\$259
765	Wiring 2 Conductors	50	LF	\$0.50	\$25	0.036	1.8	\$164		\$189	\$255
766	Conduit 1/2"	50	LF	\$0.60	\$30	0.057	2.9	\$264		\$294	\$397
767											
768	<b>General Requirements</b>	19%									\$173
769	<b>General Contractor Overhead &amp; Profit</b>	6%									\$65
770	<b>General Contractor Bond &amp; Insurance</b>	2.5%									\$29
771											
772	<b>Subtotal: E12 Renovate Special System to support Architectural Remodel</b>				\$65		6.7	\$610		\$675	\$1,178
773											
774											