ROOM FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR	BASE	WALLS NORTH	WALLS EAST	WALLS SOUTH	WALLS WEST	CEILING	WINDOW TREATMENTS	REMARKS
001	STAIRS	RBRF/	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
002	DATA	VCT-1	RB-1	PT	PT	PT	PT	EXISTING	--	
003	MECHANICAL	VCT-1	RB-1	PT	PT	PT	PT	EXISTING	--	
004	ELEC. ROOM	VCT-1	RB-1	PT	PT	PT	PT	EXPOSED	--	
005	WOMEN'S TLT	VCT-1	RB-1	PT	PT	PT	PT	EXISTING	--	
006	MEN'S TLT	VCT-1	RB-1	PT	PT	PT	PT	EXISTING	--	
007	HSK	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	EXISTING	--	3' - 9" TILE WAINSCOT
008	DATA	VCT-1	RB-1	PT	PT	PT	PT	EXISTING	--	
009	MECH	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	--	
010	ELEV. MECH.	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	--	
011	ELEV. MECH.	EXISTING	EXISTING	EXPOSED	EXPOSED	EXPOSED	EXPOSED	EXPOSED	--	
012	ELEVATOR MECH. RM	EXPOSED CONCRETE		PT	PT	PT	PT	EXPOSED	--	
013	CRAWL SPACE									
101	LOBBY	LVT- 1/LVT-2	RB-1 / MTLB-1	PT / WD-1	PT	PT	PT	GYP BD/PT/ACT- 1	--	MTLB-1 @ COLUMNS
102	OFFICE/ PSYCH NP	LVT- 1	RB-1	PT	PT	PT-3	PT	ACT	--	
103	EDUCATION/ CONFERENCE	CPT- 1	RB-1	PT	PT	PT-6	PT	ACT	--	
104	EDUCATION/ CONFERENCE	CPT- 1	RB-1	PT	PT	PT-6	PT	ACT	--	
106	STAIRS	EXISTING	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
107	EDUCATION/ CONFERENCE	CPT- 1	RB-1	PT-6	PT	PT	PT	ACT	--	
108	TOILET	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	PRV	PROVIDE PRIVACY GLASS
109	TOILET	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	PRV	PROVIDE PRIVACY GLASS
110	LAUNDRY	SV- 1	RB-1	PT	PT	PT	PT	GYP BD/PT	--	SOFFIT ABOVE CABINETS
111	ELEC.	VCT- 1	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
111A	IT CLOSET	VCT- 1	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
112	VENDING	LVT- 1	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
113	MED. WAITING	LVT- 1	RB-1	PT	PT	PT	D-1	ACT	--	
114	CONCIERGE	LVT- 1	RB-1	PT	PT/PL-2	PT	PT	GYP BD/PT	--	
115	MED. ROOM	LVT- 1	RB-1	PT-4	PT	PT	PT	ACT	--	
116	SOILED UTILITY	SV- 1	RB-1	PT	PT	PT	PT	ACT	--	
116A	TOILET	PCT- 1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
117	RN TEAM LEADER	LVT- 1	RB-1	PT-3	PT	PT-3	PT	ACT	--	
117A	HOUSEKEEPING	PCT- 1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	3' - 9" TILE WAINSCOT
118	LOADING DOCK	FLRCTNG	RB-1	PT	PT	PT	PT	EXPOSED	--	
119	STAIRS	RBRF/	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
120	OFFICE/ SHELTER	LVT- 1	RB-1	PT	PT	PT-3	PT	ACT	--	
121	OFFICE/ HOMELESS	LVT- 1	RB-1	PT	PT	PT-3	PT	ACT	--	
122	OFFICE/ HUD VASH	LVT- 1	RB-1	PT	PT	PT-3	PT	ACT	--	
123	EXAM	LVT- 1	RB-1	PT	PT	PT-4	PT	GYP BD/PT	--	
125	CLEAN SUPPLY	SV- 1	RB-1	PT	PT	PT	PT	ACT	--	
126	TECHNICIAN	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT/ACT	--	
126A	TOILET	PCT- 1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
127	RESIDENT	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
127A	BATH	PCT- 1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
128	RESIDENT	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
128A	BATH	PCT- 1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
129	ACCESSIBLE SEMI PRIVATE RESIDENT	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
129A	BATH	PCT- 1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
129B	WARDROBE	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
130	STAIRS	RBRF/	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
131	SEMI PRIVATE RESIDENT	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
131A	BATH	PCT- 1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
131B	WARDROBE	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
132	SEMI PRIVATE RESIDENT	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
132A	BATH	PCT- 1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
132B	WARDROBE	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
133	RESIDENT	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
133A	BATH	PCT- 1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
134	RESIDENT	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
134A	BATH	PCT- 1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
135	RESIDENT	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
135A	BATH	PCT- 1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
136	RESIDENT	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
136A	BATH	PCT- 1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
137	RESIDENT	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
137A	BATH	PCT- 1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
138	RESIDENT	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
138A	BATH	PCT- 1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
139	SEMI PRIVATE RESIDENT	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
139A	BATH	PCT- 1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
139B	WARDROBE	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
140	SEMI PRIVATE RESIDENT	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
140A	BATH	PCT- 1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
140B	WARDROBE	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
141	STAIRS	RBRF/	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
142	ACCESSIBLE SEMI PRIVATE RESIDENT	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
142A	BATH	PCT- 1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
143	RESIDENT	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
143A	BATH	PCT-1/PCT-2/PCT-3	PCT-1	PCT-1/PCT-2/PCT-3	PCT-1/PCT-2/PCT-3	PCT-1/PCT-2/PCT-3	PCT- 1/PCT-2/PCT-3	GYP BD/PT	--	
144	RESIDENT	LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
144A	BATH	PCT- 1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
145	CRASH CART	VCT- 1	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
146	MED GAS	VCT- 1	RB-1	PT	PT	PT	PT	ACT	--	
146A	CLOSET	VCT- 1	RB-1	PT	PT	PT	PAT	GYP BD/PT		
147	RESIDENTS' LOBBY	LVT- 1/LVT-2	RB-1	PT	PT	PT	PT	ACT	--	
149	CLOSET	VCT- 1	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
150	QUIET AREA	LVT- 1/LVT-2	RB-1	PT-6	PT	PT	PT-6	GYP BD/PT/ACT	--	
151	CLOSET	VCT- 1	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
152	TV LOUNGE	LVT- 1/LVT-2	RB-1	PT	STV-1/PT	PT	PT	GYP BD/PT/ACT- 2	--	TV ALCOVE WALL PT
153	TRAINING KITCHEN	LVT- 1	RB-1	PCT- 3/PT	PCT-3/PT	PCT- 3/PT	PCT- 3/PT-4	GYP BD/PT	--	
155	CLOSET	VCT- 1	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
156	CLOSET	VCT- 1	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
157	QUIET AREA	LVT- 1/LVT-2/LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT/ACT	--	

ROOM FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR	BASE	WALLS NORTH	WALLS EAST	WALLS SOUTH	WALLS WEST	CEILING	WINDOW TREATMENTS	REMARKS
200	STAIRS	RBRF/	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
202	EQUIP / STORAGE	VCT-1	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
203	STAFF LOUNGE	VCT-2	RB-1	PT-4	PT	PT	PT	ACT	--	
203B	STAFF TLT	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	PRV	
204	STORAGE	VCT-1	RB-1	PT	PT	PT	PT	ACT	--	
205	BED BUG OVEN	VCT-1	RB-1	PT	PT	PT	PT	ACT	--	
207	MECHANICAL	EXPOSED CONCRETE	RB-1	PT	PT	PT	PT	EXPOSED	--	
208	STAIRS	RBRF/	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
209	IT CLOSET	VCT-1	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
210	RESIDENTS' LOBBY	LVT-1/LVT-2	RB-1	PT	PT	PT	PT	ACT	--	
211	RESIDENT	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
211A	BATH	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
212	TECHNICIAN	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
212A	HSK	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GWB/PT	--	
213	RESIDENT	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
213A	BATH	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
214	RESIDENT	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
214A	BATH	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
214B	ELEC. CLOSET	VCT-1	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
215	ACCESSIBLE SEMI PRIVATE RESIDENT	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
215A	BATH	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
215B	WARDROBE								--	
216	STAIRS	RBRF/	RB-2	PT	PT	PT	PT	GYP BD/PT	--	
217	SEMI PRIVATE RESIDENT	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
217A	BATH	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
217B	WARDROBE	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
218	SEMI PRIVATE RESIDENT	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
218A	BATH	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
218B	WARDROBE	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
219	RESIDENT	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
219A	BATH	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
220	RESIDENT	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
220A	BATH	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
221	RESIDENT	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
221A	BATH	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
222	RESIDENT	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
222A	BATH	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
223	RESIDENT	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
223A	BATH	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
224	RESIDENT	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
224A	BATH	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
225	SEMI PRIVATE RESIDENT	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
225A	BATH	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
223B	WARDROBE	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
226	SEMI PRIVATE RESIDENT	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
226A	BATH	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
226B	WARDROBE	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
227	STAIRS	RBRF/CONC.	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
228	SEMI PRIVATE RESIDENT	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
228A	BATH	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
228B	WARDROBE	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
229	RESIDENT	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
229A	BATH	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
230	RESIDENT	LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
230A	BATH	PCT-1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	
231	LAUNDRY	SV- 1	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
233	SOILED LINEN	SV- 1	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
234	CLOSET	VCT- 1	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
235	QUIET AREA	LVT- 1/LVT-2/LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT/ACT	--	
236	CLOSET	VCT- 1	RBB-1	PT	PT	PT	PT	GYP BD/PT	--	
237	TV LOUNGE	LVT- 1/LVT-2	RB-1	PT	PT/STV-1	PT	PT	GYP BD/PT/ACT- 2	--	TV ALCOVE WALL PT
239	LINEN	SV- 1	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
240	CLOSET	VCT- 1	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
241	QUIET AREA	LVT- 1/LVT-2/LVT- 3	RB-1	PT	PT	PT	PT	GYP BD/PT/ACT	--	

ROOM FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR	BASE	WALLS NORTH	WALLS EAST	WALLS SOUTH	WALLS WEST	CEILING	WINDOW TREATMENTS	REMARKS
300	STAIRS	RBRF/	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
301B	ELE.C. CLOSET	VCT- 1	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
303	OFFICE	LVT- 1	RB-1	PT-3	PT	PT	PT	ACT	--	
304	OFFICE	LVT- 1	RB-1	PT-3	PT	PT	PT	ACT	--	
305	OFFICE	LVT- 1	RB-1	PT-3	PT	PT	PT	ACT	--	
306	OFFICE	LVT- 1	RB-1	PT-3	PT	PT	PT	ACT	--	
307	CLASSROOM	LVT- 1	RB-1	PT-4	PT	PT	PT	ACT	--	
308	CLASSROOM	LVT- 1	RB-1	PT-4	PT	PT	PT	ACT	--	
309	OFFICE	LVT- 1	RB-1	PT-3	PT	PT	PT	ACT	--	
310	TOILET	PCT- 1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	PRV	PROVIDE PRIVACY GLASS
311	TOILET	PCT- 1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	PRV	PROVIDE PRIVACY GLASS
312	DCHV OFFICE	LVT- 1	RB-1	PT-3	PT	PT	PT	ACT	--	
313	STAIRS	RBRF/ CONC.	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
314	OFFICE	LVT- 1	RB-1	PT	PT	PT-3	PT	ACT	--	
315	OFFICE	LVT- 1	RB-1	PT	PT	PT-3	PT	ACT	--	
316	OFFICE	LVT- 1	RB-1	PT	PT	PT-3	PT	ACT	--	
317	OFFICE	LVT- 1	RB-1	PT	PT	PT-3	PT	ACT	--	
318	OFFICE	LVT- 1	RB-1	PT	PT	PT-3	PT	ACT	--	
319	CLASSROOM	LVT- 1	RB-1	PT	PT	PT-4	PT	ACT	--	
320	OFFICE	LVT- 1	RB-1	PT	PT	PT-3	PT	ACT	--	
321	OFFICE	LVT- 1	RB-1	PT	PT	PT-3	PT	ACT	--	
322	OFFICE	LVT- 1	RB-1	PT	PT	PT-3	PT	ACT	--	
323	OFFICE	LVT- 1	RB-1	PT	PT	PT-3	PT	ACT	--	
324	HOUSEKEEPING	PCT- 1	PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	PT/PCT-2	GYP BD/PT	--	3' - 9" TILE WAINSCOT
325	IT CLOSET	VCT- 1	RB-1	PT	PT	PT	PT	GYP BD/PT	--	

ROOM FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR	BASE	WALLS NORTH	WALLS EAST	WALLS SOUTH	WALLS WEST	CEILING	WINDOW TREATMENTS	REMARKS
C105	CORRIDOR	LVT-1/LVT-2/LVT-3	RB-1	PT	PT	PT	PT	ACT	--	
C124	CORRIDOR	LVT-1/LVT-2/LVT-3	RB-1	PT	PT	PT	PT	ACT	--	
C148	CORRIDOR	LVT-1/LVT-2/LVT-3	RB-1	PT	PT	PT	PT	ACT	--	
C154	CORRIDOR	LVT-1	RB-1	PT	PT	PT	PT	ACT	--	
C201	CORRIDOR	LVT-1/LVT-2	RB-1	PT	PT	PT	PT	ACT	--	
C206	CORRIDOR	EXPOSED CONCRETE	RB-1	PT	PT	PT	PT	EXPOSED	--	
C232	CORRIDOR	LVT-1/LVT-2	RB-1	PT	PT	PT	PT	ACT	--	
C238	CORRIDOR	LVT-1/LVT-2/LVT-3	RB-1	PT	PT	PT	PT	GYP BD/PT	--	
C301	CORRIDOR	LVT-1/LVT-2	RB-1	PT	PT	PT	PT	ACT	--	

ROOM FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR	BASE	WALLS NORTH	WALLS EAST	WALLS SOUTH	WALLS WEST	CEILING	WINDOW TREATMENTS	REMARKS
P001	PORCH 'F'	EXPOSED CONCRETE	--	TRIM / EPT-1	TRIM / EPT-1	TRIM / EPT-1	TRIM / EPT-1	PRE-FAB MTL SOFFIT / EPT-1	--	COLUMN COVER ASSEMBLY AND PVC TRIM TO BE EPT-1
P002	PORCH 'E'	EXPOSED CONCRETE	--	TRIM / EPT-1	TRIM / EPT-1	TRIM / EPT-1	TRIM / EPT-1	PRE-FAB MTL SOFFIT / EPT-1	--	COLUMN COVER ASSEMBLY AND PVC TRIM TO BE EPT-1
P003	PORCH 'D'	EXPOSED CONCRETE	--	TRIM / EPT-1	TRIM / EPT-1	TRIM / EPT-1	TRIM / EPT-1	PRE-FAB MTL SOFFIT / EPT-1	--	COLUMN COVER ASSEMBLY AND PVC TRIM TO BE EPT-1

GENERAL SHEET NOTES

1. REFER TO THE REFLECTED CEILING PLANS FOR COMBINATION CEILING (SUSPENDED ACOUSTICAL CEILINGS SYSTEMS AND GYPSUM BOARD OR OTHER COMBINATIONS) AND CEILING HEIGHTS.
2. WHERE ONE FLOORING MATERIAL MEETS ANOTHER FLOORING MATERIAL PROVIDE TRANSITION STRIP, ALIGN STRIP UNDER CENTER OF DOOR.
3. COLOR AND LOCATION OF ACCENT WALLS TO BE COORDINATED WITH VA.
4. IN HOUSEKEEPING CLOSETS, TOILETS AND RESIDENT BATHROOMS, PROVIDE 3' - 9" TILE WAINSCOT.
5. ALL GYPSUM BOARD CEILINGS AND SOFFITS SHALL RECEIVE FINISH.
6. PAINT COLORS REFER TO SHEET 1-AS-631.
7. MANUFACTURER'S TRADE NAMES AND NUMBERS USED HEREIN ARE ONLY TO IDENTIFY COLORS, FINISHES, TEXTURES AND PATTERNS. PRODUCTS OF OTHER MANUFACTURERS EQUIVALENT TO COLORS, FINISHES, TEXTURES AND PATTERNS OF MANUFACTURERS LISTED THAT MEET REQUIREMENTS OF TECHNICAL SPECIFICATIONS WILL BE ACCEPTABLE, UPON APPROVAL IN WRITING, BY THE COR FOR FINISH REQUIREMENTS.
8. FOR THE FINISH LOCATION INFORMATION REFER TO THE FINISH SCHEDULE DRAWINGS.
9. FOR CASEWORK AND MILLWORK SCHEDULES AND KEY TO FINISHES REFER TO THE FINISH SCHEDULE DRAWINGS
10. ALL WINDOW SILLS TO BE P-LAM, REFER TO THE FINISH SCHEDULE DRAWINGS.
11. EXCEPT FOR PRE-FINISHED ITEMS, PAINT ALL EXPOSED INTERIOR SURFACES AND TRIM.
12. IN RESIDENT ROOM BATHROOMS, PROVIDE FULL HEIGHT SOLID SURFACE WALL PANELS IN SHOWER AREAS ONLY. PROVIDE 3' - 9" TILE WAINSCOT OUTSIDE OF SHOWER AREA.
13. SEE DIMENSION PLAN SHEETS FOR ACTUAL LOCATION OF CORNER GUARDS.
14. ANCHORING AND UTILITIES FOR EQUIPMENT WILL REQUIRE DRILLING THROUGH NEWLY INSTALLED FLOORING SYSTEMS. CONTRACTOR SHALL PATCH AND SEAL ANY PENETRATING WITH SAME MATERIAL AND SHALL CONTINUE TO PROVIDE WARRANTY PER EACH RESPECTIVE FLOORING SPEC.
15. ALL GYPSUM BOARD TO BE MOLD RESISTANT
16. ALL TILE WAINSCOT TO BE 3' - 9' IN HEIGHT WITH 6" COVE BASE TILE AND 3" BULLNOSE TILE.

EQUIPMENT ITEMS

INSTALLED ITEM	OWNER FURNISHED CONTRACTOR INSTALLED	OWNER FURNISHED OWNER INSTALLED	CONTRACTOR FURNISHED CONTRACTOR INSTALLED	COMMENT
SOAP DISPENSERS	X			
HAND SANITIZER DISPENSERS		X		
LOTION DISPENSERS		X		
PAPER TOWEL DISPENSERS	X			
TV WALL MOUNTS	X			
MARKERBOARDS			X	
DISHWASHER		X		
OVEN	X			
COOKTOP	X			
MICROWAVE		X		
WASHING MACHINES		X		
DRYERS		X		
BED BUG OVEN		X		
REFRIGERATORS, FULL SIZE		X		
REFRIGERATORS, COMPACT		X		
TOWEL HOOKS			X	
TOILET PAPER DISPENSERS			X	
BABY CHANGING STATIONS			X	
MIRRORS			X	

BUILDING IS FULLY SPRINKLERED

Revisions: Date

13 MAR. 2015

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Approved: Chief of MH	Approved: Chief of RMS
Date:	Date:
Approved: Director	Approved: Assoc. Director
Date:	Date:

Drawing Title: ROOM FINISH SCHEDULE

Project Name: EXPAND DOMICILIARY BUILDING 64

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number: 64 | Checked: RHC | Drawn: MAG

Project Number: 666-309

Date: 13 MAR. 2015

Drawing Number: 1-AS-630

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Office of Construction and Facilities Management

VA FORM 08-6231

MATERIAL FINISH LEGEND

FLOOR FINISH LEGEND

FINISH CODE	MATERIAL	BASIS OF DESIGN	MANUFACTURER NO.	PATTERN	COLOR	EDGE	SIZE	SURFACE	GROUT	REMARKS
SV-1	SHEET VINYL FLOORING	JOHNSONITE	3024	ACCZENT WOOD	WENGE	---	---	---	---	SUBSTITUTE FOR LVT-3
LVT-1	VINYL COMPOSITION TILE	JOHNSONITE	CG404	AZROCK	PUMICE	---	12"X12"	---	---	---
LVT-2	VINYL COMPOSITION TILE	JOHNSONITE	CG510	AZROCK	GRILL GREY	---	12"X12"	---	---	---
VCT-1	VINYL COMPOSITION TILE	JOHNSONITE	CE104	AZROCK	WARM & FUZZY	---	12"X12"	---	---	---
CPT-1	CARPET	MOHAWK BIGELOW	BT225	CITY BY CITY / DELHI TILE	CHOCOLATE 7685	---	24"X24"	---	---	---
FLRCTRG	H.D. URETHANE	SHERWIN WILLIAMS	B65400	---	SANDSTONE	---	---	---	---	---
RBRF	RUBBER FLOORING	JOHNSONITE	VIHMT	HAMMERED TEXTURE W/ GRIT INSERT	FAWN	---	---	---	---	WITHOUT RISER

BASE FINISH LEGEND

FINISH CODE	MATERIAL	BASIS OF DESIGN	MANUFACTURER NO.	PATTERN	COLOR	SIZE	BASE GROUT KEY	REMARKS
RB-1	VINYL BASE	JOHNSONITE	80	---	FAWN 80	4"	---	USE THROUGHOUT
MTLB-1	METAL BASE	PIONITE	FA006-G	---	BRUSHED ALUMINUM	4"	---	GLOSS

TILE FINISH LEGEND

FINISH CODE	MATERIAL	BASIS OF DESIGN	MANUFACTURER NO.	PATTERN	COLOR	SIZE	BASE GROUT KEY	REMARKS
PCT-1	PORCELAIN TILE	DALTILE	ID01	INVOKE	SHEER GLOW	12"X24"	GT-2	USED ON FLOOR
PCT-2	PORCELAIN TILE	DALTILE	EV04	- -	ROCK	12"X24"	GT-1	3' - 9" WAINSCOT, UNPOLISHED & TEXTURED, 3"X24" BULLNOSE, 6"X12" COVE BASE

CEILING FINISH LEGEND

FINISH CODE	MATERIAL	BASIS OF DESIGN	MANUFACTURER NO.	PATTERN	COLOR	SIZE	EDGE	GRID	FINISH REMARKS
GYP BD	GYPSUM BOARD	- -	---	---	---	---	---	---	---
ACT	ACOUSTICAL CEILING TILE	ARMSTRONG	---	- -	WHITE	---	---	---	---
ACT-1	ACOUSTICAL CEILING TILE	HUNTERDOUGLAS	---	NATURA TRADITIONAL	MAPLE 9102	24"X48"	SQUARE	BLACK	---
ACT-2	ACOUSTICAL CEILING TILE	HUNTERDOUGLAS	---	NATURA TRADITIONAL	MAPLE 9102	24"X24"	SQUARE	BLACK	

WALL FINISH LEGEND

FINISH CODE	MATERIAL	BASIS OF DESIGN	MANUFACTURER NO.	FINISH	COLOR	SIZE	GROUT	REMARKS
PT	PAINT	SHERWIN WILLIAMS	7042	PTS	SHOJI	---	---	---
PT-1	PAINT	SHERWIN WILLIAMS	6140	PTS	MODERATE WHITE	---	---	---
PT-2	PAINT	SHERWIN WILLIAMS	6141	PTS	SOFTER TAN	---	---	---
PT-3	PAINT	SHERWIN WILLIAMS	7038	PTS	MACADAMIA	---	---	---
PT-4	PAINT	SHERWIN WILLIAMS	7546	PTS	PRAIRIE GRASS	---	---	---
PT-5	PAINT	SHERWIN WILLIAMS	2844	PTS	ROYCROFT MIST GRAY	---	---	---
PT-6	PAINT	SHERWIN WILLIAMS	2835	PTS	CRAFTSMAN BROWN	---	---	---
WD-1	WOOD PANEL	HUNTERDOUGLAS	TRADITIONAL WALL PANEL	PLAIN NATURA	MAPLE 9102	2'-0" X 6'-0"	---	---

PTE - EGGSHELL FINISH PTF - FLAT FINISH PTS - SATIN FINISH

WALLCOVERING

FINISH CODE	MATERIAL	BASIS OF DESIGN	STYLE	MANUFACTURER NO.	PATTERN	COLOR	SIZE	GROUT	REMARKS
STV-1	STONE VENEER	SURFACE ART	- -	---	LEDGER STACKED STONE	BEACHWALK QUARTZ	---	---	---
WC-1	WALL COVERING	NATIONAL WALL COVERING	---	Y46293P V	PAVE	FINIAL BRONZE	---	---	PROVIDE MATERIAL TRANSITION STRIP AT WAINSCOT

WALL PROTECTION LEGEND

FINISH CODE	MATERIAL	BASIS OF DESIGN	STYLE	MANUFACTURER NO.	PATTERN	COLOR	SIZE	GROUT	REMARKS
CG-1	RIGID VINYL	INPRO	150F	0104	---	ANTIQUE WHITE	FLOOR TO CEILING	---	---

MISCELLANEOUS FINISH LEGEND

FINISH CODE	MATERIAL	MANUFACTURER NO.	BASIS OF DESIGN	PATTERN	COLOR	SIZE	REMARKS
PL-1	PLASTIC LAMINATE	7935K-07	WILSONART	---	SHAKER CHERRY	---	---
PL-2	PLASTIC LAMINATE	7943K-07	WILSONART	---	COLOMBIAN WALNUT	---	---
GT-1	GROUT	915	TEC POWER GROUT	---	LIGHT SMOKE	---	USED ON WALL TILE
GT-2	GROUT	945	TEC POWER GROUT	---	LIGHT BUFF	---	USED ON FLOOR TILE
D-1	DECORATIVE RESIN	- -	LUMICOR	SPRINGZITO LIGHT	---	---	---

EXTERIOR FINISH LEGEND

FINISH CODE	MATERIAL	BASIS OF DESIGN	MANUFACTURER NO.	FINISH	COLOR	SIZE	REMARKS
EPT-1	EXTERIOR PAINT	SHERWIN WILLIAMS	6404-13761	SATIN FINISH	EXTRA WHITE	---	SUPER PAINT EXTERIOR ACRYLIC LATEX, GUTTERS, PVC TRIM, COLUMN COVERS
EPT-2	EXTERIOR PAINT	SHERWIN WILLIAMS	0040	SATIN FINISH	ROYCROFT ADOBE	---	STAIRWELL DOOR FRAMES IN NEW EXPANSION, LOUVERS FOR MECHANICAL ROOM 307
BRICK	BRICK	- -	---	---	MATCH EXISTING	MATCH EXISTING	- -
BRICK MORTAR	BRICK MORTAR	- -	---	---	MATCH EXISTING	MATCH EXISTING	- -
ROOF	ASPHALT SHINGLE	- -	---	---	MATCH EXISTING	MATCH EXISTING	- -
MARKER-BOARD	MARKERBOARD	CLARIDGE	75 LCS-11	LOW GLOSS	WHITE	---	3/8" FACE MITERED CORNERS, POWDER COAT ALUMINUM FRAME
LOUVERS, VENTS	LOUVERS & VENTS	---	---	---	MATCH ADJACENT	---	- -
SPANDREL	SPANDREL GLASS	VIRACON VIROSPAN	V1090	---	SPICE	- -	- -

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

13 MAR. 2015

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Approved: Chief of MH	Approved: Chief of RMS
Date:	Date:
Approved: Director	Approved: Assoc. Director
Date:	Date:

Drawing Title: **MATERIAL FINISH LEGEND**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Location: **VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801**

Building Number: 64 | Checked: RHC | Drawn: MAG

Project Number: **666-309**

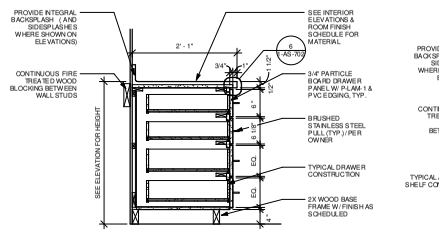
Date: 13 MAR. 2015

Drawing Number: **1-AS-631**

Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



1 **BASE CABINET W/ 4 DRAWER - TYPICAL**
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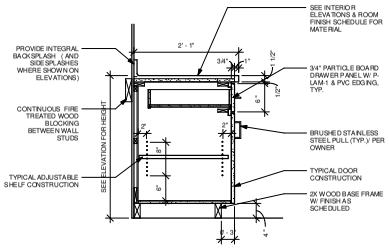

2 **BASE CABINET W/DRAWER AND DOOR - TYPICAL**
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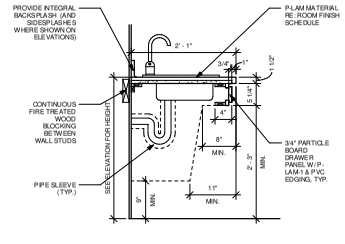

3 **BASE CABINET W/ ADA SINK - TYPICAL**
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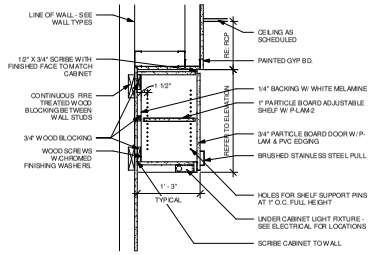

4 **UPPER CABINET W/ DOOR - TYPICAL**
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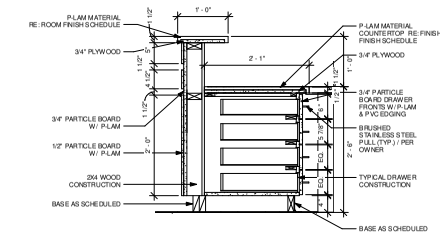

7 **BASE CABINET W/ 4 DRAWERS**
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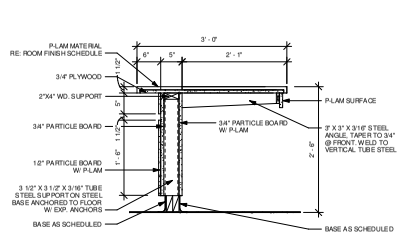

6 **MILLWORK @ WORK STATION**
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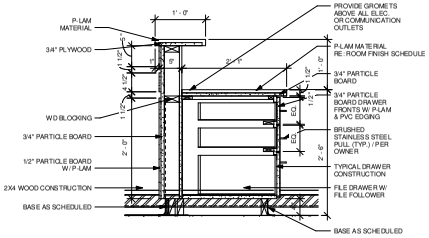

5 **BASE CABINET W/ 3 DRAWERS**
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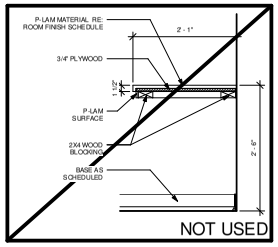

8 **MILLWORK @ RESIDENT DESK**
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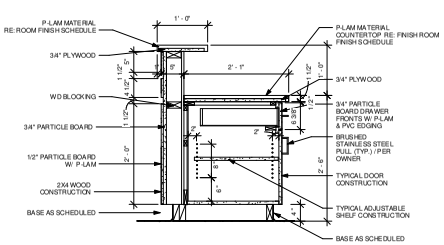

9 **BASE CABINET W/ DRAWER AND DOOR**
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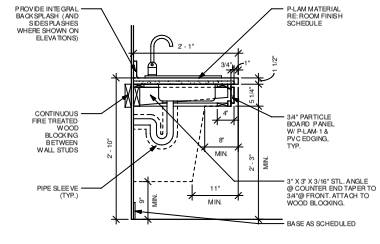

10 **BASE CABINET W/ ADA SINK - RESTROOM**
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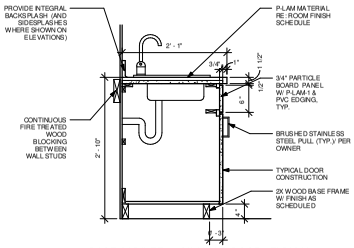

11 **BASE CABINET W/ SINK AND DOOR - TYPICAL**
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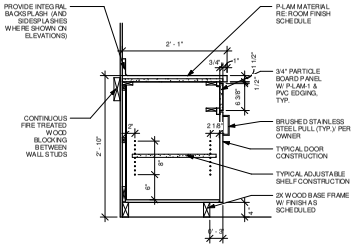

12 **BASE CABINET W/ PANEL AND DOOR - TYPICAL**
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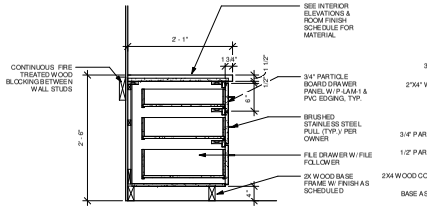

13 **BASE CABINET W/ 3 DRAWER - RESIDENT**
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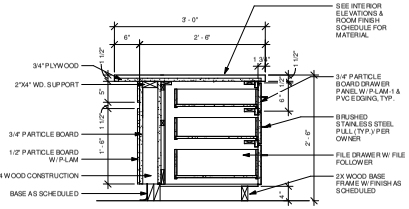
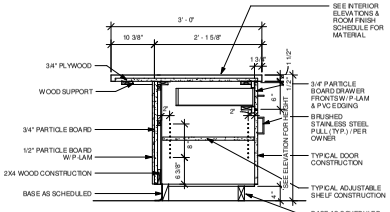
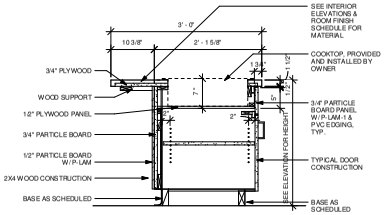


14 **BASE CABINET W/ 3 DRAWER**
SCALE: 1" = 1'-0"



15 **BASE CABINET W/ DRAWER AND DOOR**
SCALE: 1" = 1'-0"



16 **BASE CABINET W/ PANEL AND DOOR**
SCALE: 1" = 1'-0"

GENERAL SHEET NOTES

1. ALL MILLWORK TO USE PLASTIC LAMINATE
2. PLASTIC LAMINATE TO MEET NEMA LD-3 STANDARDS
3. EXPOSED DECORATIVE SURFACES INCLUDING BOTH SIDES AND EDGES OF CABINET DOORS SHALL BE FURNISHED IN (P-LAM-1)
4. CABINET INTERIORS INCLUDING SHELVING SHALL BE FURNISHED IN (P-LAM)
5. USE PLASTIC LAMINATE CLAD PARTICLE BOARD FOR ALL MILLWORK
6. PARTICLE BOARD TO COMPLY WITH CPA A208.1, TYPE 1, GRADE 1-M-3
7. PROVIDE 4" RUBBER BASE OVER MILLWORK KICKPLATE. SEE ROOM FINISH SCHEDULE
8. EACH DOOR SHALL HAVE TWO DOOR HINGES WITH A MINIMUM THICKNESS OF 3MM. DOORS SHALL CLOSE AGAINST TWO RUBBER BUMPERS.
9. HINGES SHALL BE FIVE KNUCKLE W/ HOSPITAL TYPE TIPS.
10. FRICTION OR MAGNETIC TYPE DOOR CATCHES, FABRICATED WITH METAL HOUSING
11. DOORS AND DRAWERS SHALL HAVE STAINLESS STEEL PULLS, EQUIVALENT TO HAFELE
12. DRAWER SLIDES SHALL BE FULL EXTENSION STEEL SLIDES WITH NYLON BALL-BEARING ROLLERS WITH A POSITIVE STOP
13. PROVIDE 18 GAGE STAINLESS STEEL SLOPING TOPS FOR MILLWORK
14. PROVIDE GROMETS ABOVE ALL ELEC. OR COMMUNICATION OUTLETS.
15. SUBMIT COMPLETE SHOP DRAWINGS AND MATERIAL SAMPLES FOR REVIEW
16. ALL MILLWORK TO HAVE LOCKABLE HARDWARE WITH UNIVERSAL KEY.

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

13 MAR. 2015

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Approved: Chief of MH	Approved: Chief of RMS
Date:	Date:
Approved: Director	Approved: Assoc. Director
Date:	Date:

Drawing Title: **MILLWORK SECTIONS & DETAILS**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Project Number: **666-309**

Date: 13 MAR. 2015

Drawing Number: **1-AS-701**

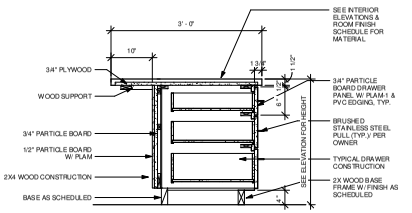
Dwg. of

Location: **VAMC SHERIDAN WY, 1898 FORT ROAD, SHERIDAN, WY 82801**

Building Number	Checked	Drawn
64	RHC	MAG

Office of Construction and Facilities Management

VA FORM 08-6231



1 **BASE CABINET W/ 3 DRAWER - KITCHEN**
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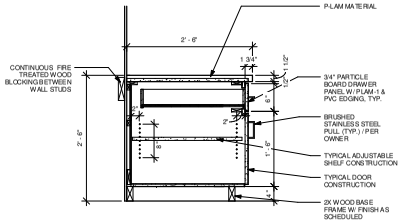

2 **BASE CABINET W/ DRAWER AND DOOR 30"**
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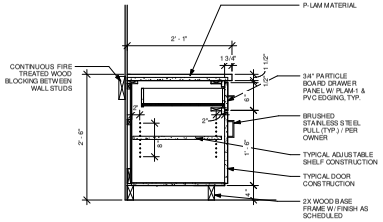
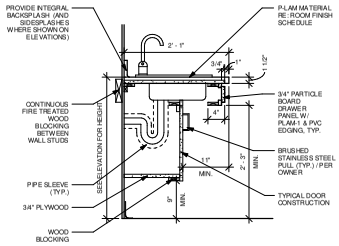
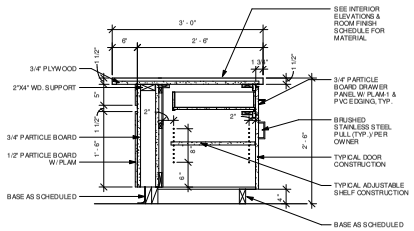


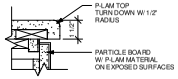
3 **BASE CABINET W/ DRAWER AND DOOR**
SCALE: 1" = 1'-0"



4 **BASE CABINET SINK BOTTOM STORAGE**
SCALE: 1" = 1'-0"



5 **BASE CABINET W/ DRAWER AND DOOR**
SCALE: 1" = 1'-0"



6 **MILLWORK EDGE DETAIL - TYPICAL**
SCALE: 3" = 1'-0"

GENERAL SHEET NOTES

1. ALL MILLWORK TO USE PLASTIC LAMINATE
2. PLASTIC LAMINATE TO MEET NEMA LD-3 STANDARDS
3. EXPOSED DECORATIVE SURFACES INCLUDING BOTH SIDES AND EDGES OF CABINET DOORS SHALL BE FURNISHED IN (P-LAM-1)
4. CABINET INTERIORS INCLUDING SHELVING SHALL BE FURNISHED IN (P-LAM)
5. USE PLASTIC LAMINATE CLAD PARTICLE BOARD FOR ALL MILLWORK
6. PARTICLEBOARD TO COMPLY WITH CP A A208.1, TYPE 1, GRADE 1-M-3
7. PROVIDE 4" RUBBER BASE OVER MILLWORK KICKPLATE, SEE ROOM FINISH SCHEDULE
8. EACH DOOR SHALL HAVE TWO DOOR HINGES WITH A MINIMUM THICKNESS OF 2MM. DOORS SHALL CLOSE AGAINST TWO RUBBER BUMPERS.
9. HINGES SHALL BE RIVEKNUCKEL W/ HOSPITAL TYPE TIPS.
10. FRICTION OR MAGNETIC TYPE DOOR CATCHES, FABRICATED WITH METAL HOUSING
11. DOORS AND DRAWERS SHALL HAVE STAINLESS STEEL PULLS, EQUIVALENT TO HAFELE
12. DRAWER SLIDES SHALL BE FULL EXTENSION STEEL SLIDES WITH NYLON BALL-BEARING ROLLERS WITH A POSITIVE STOP
13. PROVIDE 18 GAGE STAINLESS STEEL SLOPING TOPS FOR MILLWORK
14. PROVIDE GROMETS ABOVE ALL ELEC. OR COMMUNICATION OUTLETS.
15. SUBMIT COMPLETE SHOP DRAWINGS AND MATERIAL SAMPLES FOR REVIEW
16. ALL MILLWORK TO HAVE LOCKABLE HARDWARE WITH UNIVERSAL KEY.

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

13 MAR. 2015

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Approved: Chief of MH	Approved: Chief of RMS
Date:	Date:
Approved: Director	Approved: Assoc. Director
Date:	Date:

Drawing Title: **MILLWORK SECTIONS & DETAILS**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Project Number: **666-309**

Date: 13 MAR. 2015

Location: **VAMC SHERIDAN WY, 1898 FORT ROAD, SHERIDAN, WY 82801**

Building Number: 64 | Checked: RHC | Drawn: MAG

Drawing Number: **1-AS-702**

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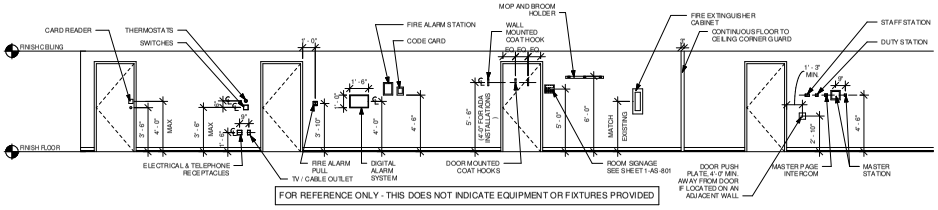


1 **TYPICAL CORRIDOR MOUNTING HEIGHTS**
SCALE: 1/4" = 1'-0"

SIGNAGE SCHEDULE

SIGN TYPE	ROOM TYPE	SIGNAGE
A1	RESIDENT ROOM	—
A	OFFICE / CONFERENCE ROOM	—
B	TOILET	—
A	RESIDENT SUPPORT AREA	—
A	ADMIN. / SERVICE AREA	—
C	COMMON AREA	SINGLE
D	STAIRS	—
E	ELEVATOR	—
E.1	ELEVATOR	—

NOTES:

VERIFY ALL SIGNAGE VERBIAGE WITH VA PRIOR TO FABRICATION.

ALL SIGNS SHALL BE AS MANUFACTURED BY 2/90 SIGN SYSTEMS, OR APPROVED EQUAL.

SIGNS SHALL BE EQUAL TO 2/90 MODULAR THIN SIGNS OR 2/90 PLAQUE PLUS SIGNS AS NOTED.

FIXED AND TAMPER-RESISTANT END CAP STYLE SHALL BE SLIMLINE.

ALL 2/90 PLAQUES PLUS SIGNS SHALL BE INSTALLED WITH MANUFACTURER'S STANDARD TAPE MOUNT WITH OPTIONAL SILASTIC BONDING.

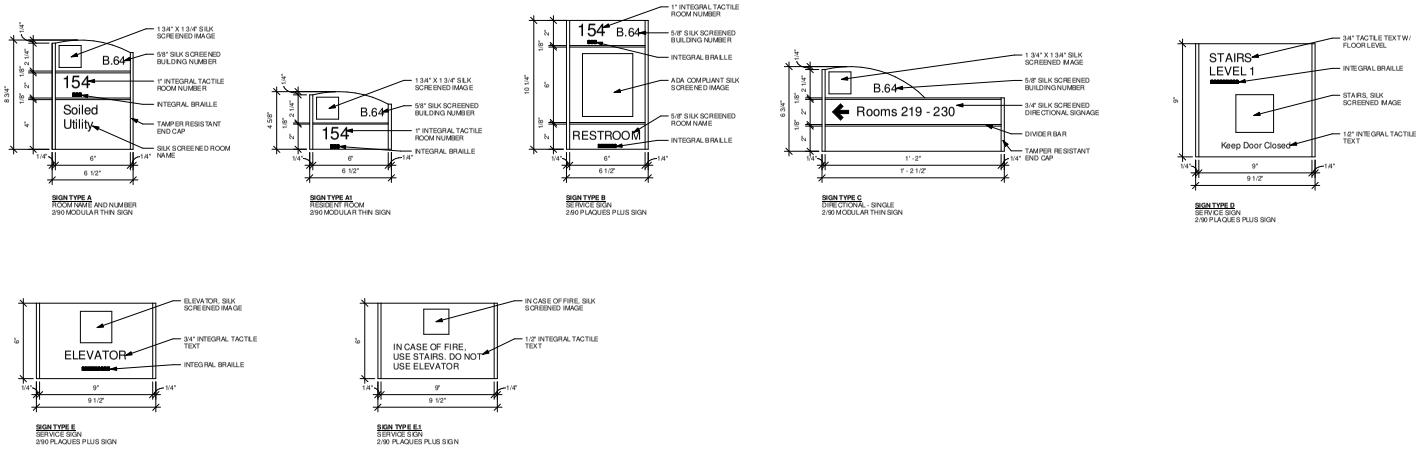
ALL 2/90 MODULAR THIN SIGNS SHALL BE PROVIDED WITH MANUFACTURERS OPTIONAL TAMPER-RESISTANT END CAPS AND SHALL BE INSTALLED WITH MANUFACTURER'S STANDARD SCREW MOUNT.

ALL FIXED END CAPS, TAMPER-RESISTANT END CAPS AND DIVIDER BARS SHALL BE 2/90 COLOR #150 SILVER.

ALL RAISED COPY ROOM NUMBERS, BRAILLE AND DIRECT-TO-SUBSTRATE ROOM NAMES SHALL BE 2/90 COLOR #184 CHARCOAL METALLIC.

ALL CURVED TOP OF SIGN INSERTS SHALL BE 2/90 COLOR #157 LEAD.

ALL REMAINING INSERTS SHALL BE 2/90 COLOR #221 LINEN.



2 **SIGNAGE TYPES**
SCALE: 3" = 1'-0"

GENERAL SHEET NOTES

1. ALL WORK SHALL BE IN CONFORMANCE WITH THE VA ENVIRONMENTAL GRAPHIC DESIGN PROGRAM GUIDE FOR FONT SIZE, SPACING AND STYLE.
2. CONTRACTOR SHALL IDETIFY EACH FIRE/SMOKE RATED WALL AND EACH FIRESTOPPING SYSTEM ON FIRE RATED PENETRATIONS WITH LABELS.
3. CONTRACTOR SHALL PREPARE A SIGN LOCATION PLAN AND SIGN TECT SCHEDULES BASED ON THE SIGN SCHEDULE AND TEXT INFORMATION FROM THE VA.
4. CORDINATE ALL WAYFINDING WITH:

   2/90 SIGN SYSTEMS
   5350 CORPORATE GROVE BLVD SE
   GRAND RAPIDS, MI 49512

BUILDING IS FULLY SPRINKLERED

Revisions: | Date

13 MAR. 2015

CONSULTANTS:

Terracon — Consulting Engineers & Scientists
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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: Assoc. Director
Date:	Date:

Drawing Title: **SIGNAGE SCHEDULE AND DETAILS**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Location: **VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801**

Building Number: 64 | Checked: RHC | Drawn: MAG

Project Number: **666-309**
Date: 13 MAR. 2015
Drawing Number: **1-AS-801**
Dwg. of

Office of Construction and Facilities Management

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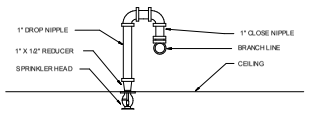

PER N.F.P.A. PAMPHLET 13, 3-8.4, "RETURN BENDS" FIGURE "B"

1 DETAIL - TYPICAL SPRINKLER DROP
1/8" = 1'-0"

AUTOMATIC SPRINKLER DESIGN SCHEDULE

GENERAL NOTES

1. HYDRAULIC CALCULATIONS TO INCLUDE 100 GPM HOSE ALLOWANCE FOR LIGHT HAZARD OCCUPANCIES, AND 250 FOR ORDINARY HAZARD OCCUPANCIES.
2. AUTOMATIC SPRINKLER ZONES PROVIDING PROTECTION IN AREAS WITH SMOKE EVACUATION SHALL BE INTERLOCKED TO INITIATE THE SMOKE EVACUATION SEQUENCE UPON DETECTION OF FLOW.
3. HYDRAULIC CALCULATIONS SHALL BE IN ACCORDANCE WITH NFPA 13 GUIDELINES.

OCCUPANCY DESCRIPTION	HAZARD CLASSIFICATION	HYDRAULIC DENSITY OVER THE MOST REMOTE AREA	MAXIMUM AREA OF PROTECTION PER AUTOMATIC SPRINKLER HEAD
FINISHED AND SHELL OFFICE SPACES	LIGHT HAZARD	0. 10 GPM/1500 SQ. FT.	225 SQ. FT.
TOILETS AND LOCKER ROOMS	LIGHT HAZARD	0. 10 GPM/1500 SQ. FT.	225 SQ. FT.
RESIDENTIAL AREAS	LIGHT HAZARD	0. 10 GPM/1500 SQ. FT.	225 SQ. FT.
CLASSROOMS	LIGHT HAZARD	0. 10 GPM/1500 SQ. FT.	225 SQ. FT.
KITCHEN/BREAK ROOM	LIGHT HAZARD	0. 10 GPM/1500 SQ. FT.	225 SQ. FT.
MECHANICAL/ELECTRICAL EQUIPMENT ROOMS	ORDINARY GROUP 1	0. 15 GPM/2000 SQ. FT.	130 SQ. FT.
GENERAL STORAGE ROOMS	ORDINARY GROUP 1	0. 15 GPM/2000 SQ. FT.	130 SQ. FT.
TRASH ROOMS	ORDINARY GROUP 2	0. 20 GPM/2000 SQ. FT.	130 SQ. FT.
LOADING DOCK	ORDINARY GROUP 2	0. 20 GPM/2000 SQ. FT.	130 SQ. FT.

FIRE PROTECTION GENERAL NOTES

1. ALL WORK ON DESIGNATED SPRINKLER/STANDPIPE SYSTEMS SHALL PERFORMED BY A STATE QUALIFIED FIRE SPRINKLER CONTRACTOR.
2. THIS BUILDING SHALL BE FULLY SPRINKLED. THE FIRE SPRINKLER SYSTEM SHALL BE DESIGNED IN FULL ACCORDANCE WITH NFPA 13/14 AND THE SHERIDAN VAHCS SAFETY OFFICE.
3. THE REMODELED AREA OF EXISTING BUILDING 64 IS TO BE FULLY SPRINKLED. THE CONTRACTOR SHALL RELOCATE EXISTING SPRINKLER HEADS AND PROVIDE NEW SPRINKLER HEADS AND PIPING IN REMODELED AREAS TO ACCOMMODATE NEW AND REVISED PARTITIONS AND CEILINGS. SYSTEM SHALL BE DESIGNED IN FULL ACCORDANCE WITH NFPA 13 AND 14 AND VA DESIGN MANUAL REQUIREMENTS. CONTRACTOR SHALL MATCH EXISTING PIPING MATERIAL AND SPRINKLER HEADS.
4. THE FIRE SPRINKLER SYSTEM SHALL BE HYDRAULICALLY CALCULATED, SIZED AND DESIGNED BY THE FIRE PROTECTION CONTRACTOR. INFORMATION INCLUDED IN THESE CONSTRUCTION DOCUMENTS IS PROVIDED AS GENERAL DESIGN GUIDELINES.
5. THE EXISTING FIRE SPRINKLER SYSTEM SHALL BE MODIFIED TO ACCOMMODATE THE REMODEL AREA AND THE NEW ADDITION.
6. ALL SPRINKLERS IN FINISHED AREAS SHALL BE QUICK RESPONSE CONCEALED TYPE, UNLESS NOTED OTHERWISE.
7. ALL SPRINKLERS SHALL BE INSTALLED SYMMETRICALLY WHERE POSSIBLE. INSTALL SPRINKLERS IN THE CENTER POINT OF ALL 2 X 2 CEILING TILES, OR CENTERED IN THE NARROW DIRECTION AND EITHER AT THE CENTER OR QUARTER POINT OF THE LONG DIRECTION OF ALL 2 X 4 CEILING TILES.
8. PROVIDE AUTOMATIC SPRINKLERS BELOW ALL DUCTWORK OR OTHER OBSTRUCTIONS AS REQUIRED BY NFPA 13. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR APPLICABLE LOCATIONS. COORDINATE PLACEMENT WITH ACTUAL INSTALLATION.
9. THE FIRE PROTECTION CONTRACTOR SHALL CONTACT THE SHERIDAN VAHCS SAFETY OFFICER HAVING JURISDICTION, ARCHITECT/ENGINEER AND THE COR TO WITNESS THE FINAL ACCEPTANCE TESTING OF ALL SYSTEMS.

CODE SUMMARY

CODES	INTERNATIONAL BUILDING CODE 2012 NFPA 101 LIFE SAFETY CODE (LSC) 2012 INTERNATIONAL MECHANICAL CODE 2012 NATIONAL ELECTRICAL CODE 2011 UNIFORM PLUMBING CODE 2012 INTERNATIONAL ENERGY CONSERVATION CODE 2012
OCCUPANCY:	NATIONAL FIRE CODE 2012 FIRE PROTECTION DESIGN GUIDES, USDVA 2011
TYPES OF CONSTRUCTION:	GROUP I-1 UNPROTECTED, TYPE I-332 FULLY SPRINKLERED
PROJECT AREA:	BUILDING 64 EXISTING: 21,135 GSF BUILDING 64 EXPANSION: 15,000 GSF
CONSTRUCTION TYPE	IIA

FIRE PROTECTION SHEET INDEX	
SHEET	DESCRIPTION
1-FP-001	FIRE PROTECTION GENERAL NOTES, SHEET INDEX AND DETAIL
1-FP-100	FIRE PROTECTION SITE PLAN
1-FP-200	FIRE PROTECTION SITE PLAN & BASEMENT FIRE PROTECTION PLAN
1-FP-201	FIRST FLOOR FIRE PROTECTION PLAN
1-FP-202	SECOND FLOOR FIRE PROTECTION PLAN
1-FP-203	THIRD FLOOR FIRE PROTECTION PLAN
1-FP-204	ATTIC FIRE PROTECTION PLANS
Grand total: 7	

BUILDING IS FULLY SPRINKLERED

Revisions: Date

COLORADO LICENSED DONALD AARON BERGLIE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: FIRE PROTECTION GENERAL NOTES, SHEET INDEX AND DETAIL

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Project Name: EXPAND DOMICILIARY BUILDING 64

Building Number: 64 | Checked: DAR | Drawn: RLS

Project Number: 666-309

Date: 13 MAR 2015

Drawing Number: 1-FP-001

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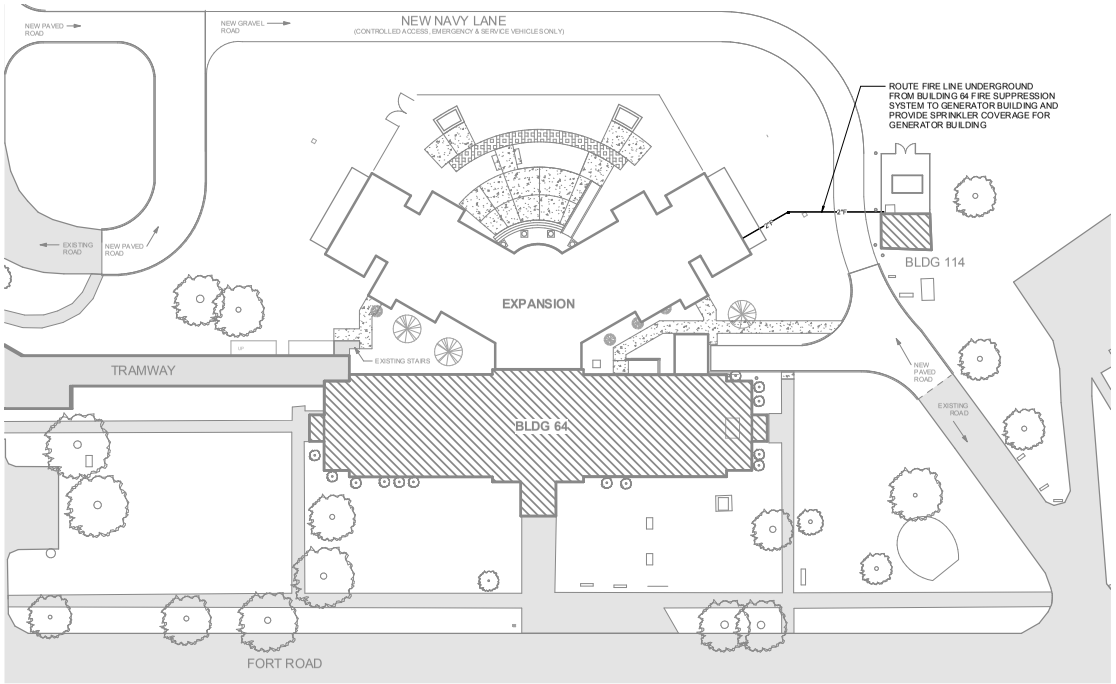
VA FORM 08-6231



1 FIRE PROTECTION SITE PLAN
1" = 20'-0"

BUILDING IS FULLY SPRINKLERED

Revisions: Date

COLORADO LICENSED DONALD AARON BERGLE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
FIRE PROTECTION SITE PLAN

Location
VAMC SHERIDAN WY
1898 FORT ROAD
SHERIDAN, WY 82801

Project Name
EXPAND DOMICILIARY BUILDING 64

Building Number: 64
Checked: DAR
Drawn: RLS

Project Number: **666-309**
Date: 13 MAR 2015
Drawing Number: **1-FP-100**
Dwg. of

Office of Construction and Facilities Management

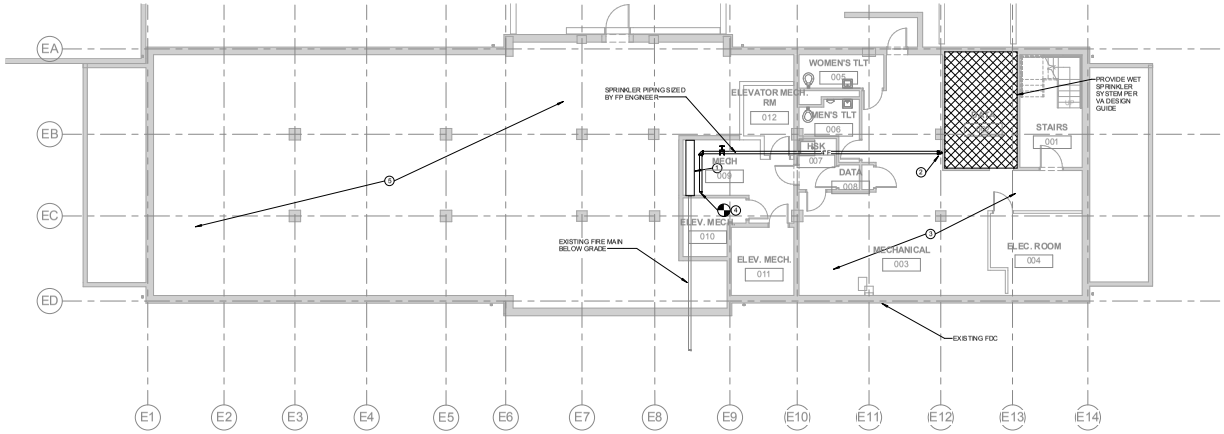
VA FORM 08-6231

KEYED NOTES

1. EXISTING FIRE PROTECTION MANIFOLD, PIPING AND ZONE VALVES TO REMAIN AND REMAIN IN SERVICE.
2. FIRE MAIN UP. REFER TO FIRE PROTECTION ENGINEER/CONTRACTOR FOR SIZE.
3. EXISTING FIRE SPRINKLER SYSTEM TO REMAIN.
4. CONNECT NEW FIRE MAIN TO EXISTING. REFER TO FIRE PROTECTION ENGINEER/CONTRACTOR FOR SIZE.
5. EXISTING FIRE SPRINKLER SYSTEM IN CRAWL SPACE AREA TO REMAIN.

RENOVATION LEGEND

SYMBOL	DESCRIPTION
	NEW CONSTRUCTION
	EXISTING TO REMAIN
	CONNECT TO EXISTING AT THIS POINT



2 BASEMENT FIRE PROTECTION PLAN
1/8" = 1'-0"

BUILDING IS FULLY SPRINKLERED

Revisions: Date

COLORADO LICENSED DONALD AARON BERGLIE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
FIRE PROTECTION SITE PLAN & BASEMENT FIRE PROTECTION PLAN

Location
VAMC SHERIDAN WY
1898 FORT ROAD
SHERIDAN, WY 82801

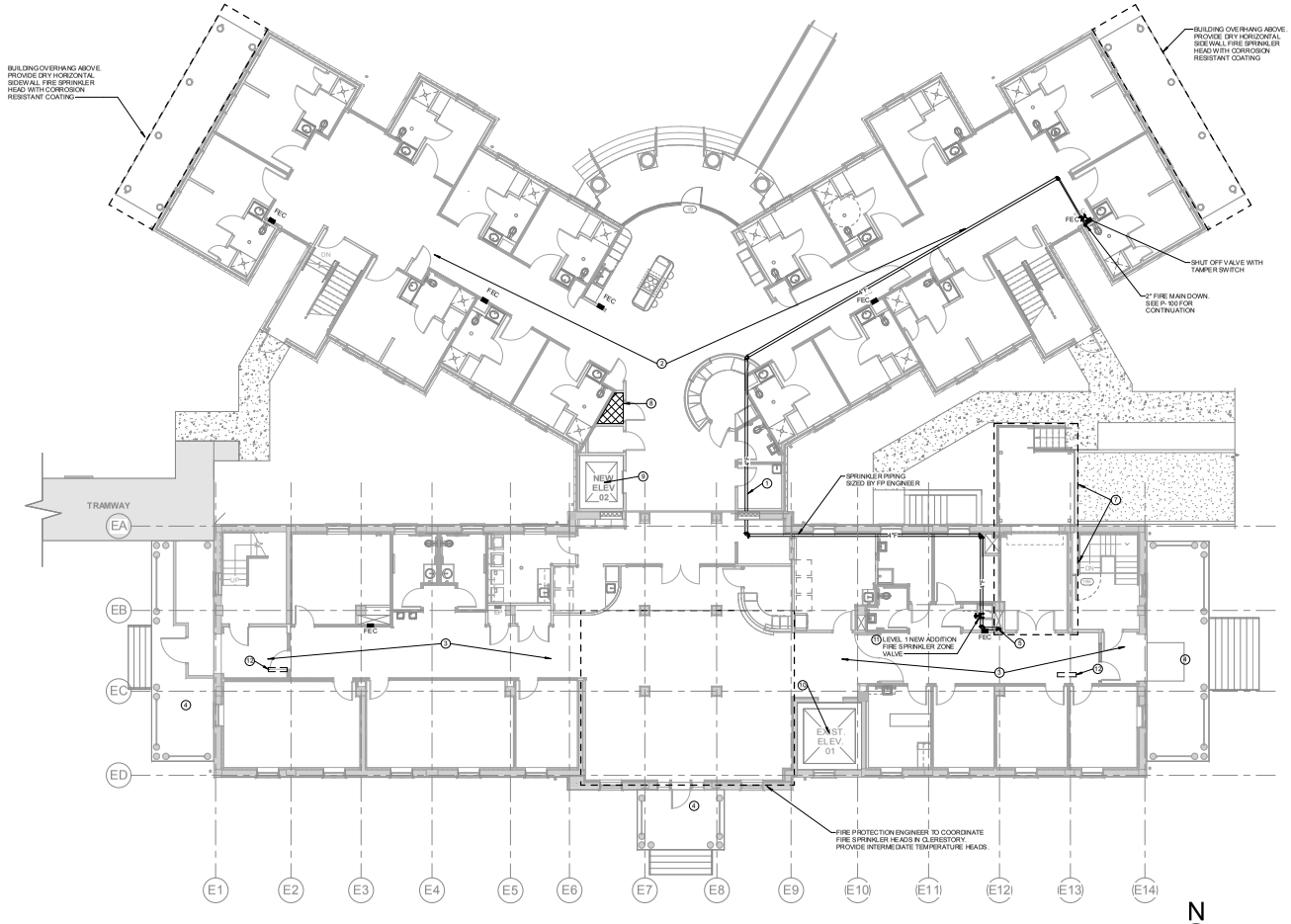
Project Name
EXPAND DOMICILIARY BUILDING 64

Building Number: 64
Checked: DAR
Drawn: RLS

Project Number: **666-309**
Date: 13 MAR 2015
Drawing Number: **1-FP-200**
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



1 FIRST FLOOR FIRE PROTECTION PLAN
1/8" = 1'-0"

KEYED NOTES

1. ROUTE TO NEW FIRE SPRINKLER SYSTEM THROUGHOUT NEW ADDITION. REFER TO FIRE SPRINKLER DRAWINGS FROM FIRE PROTECTION ENGINEER/CONTRACTOR.
2. NEW ADDITION SHALL BE FULLY SPRINKLED. THE FIRE SPRINKLER SYSTEM SHALL BE DESIGNED IN FULL ACCORDANCE WITH NFPA 13/14 AND THE SHERIDAN VAHCS SAFETY OFFICE.
3. THE REMODELED AREA OF BLDG. 64 IS TO BE FULLY SPRINKLED. THE CONTRACTOR SHALL RELOCATE EXISTING SPRINKLER HEADS AND PROVIDE NEW SPRINKLER HEADS AND PIPING IN REMODELED AREAS TO ACCOMMODATE NEW AND REVISED PARTITIONS. SYSTEM SHALL BE DESIGNED IN FULL ACCORDANCE WITH NFPA 13/14 AND VA DESIGN MANUAL REQUIREMENTS. CONTRACTOR SHALL MATCH EXISTING PIPING MATERIAL AND SPRINKLER HEADS.
4. EXISTING SPRINKLER HEADS TO REMAIN IN EXISTING OVERHEAD CANOPY.
5. FIRE MAIN FROM BELOW. REFER TO FIRE PROTECTION ENGINEER/CONTRACTOR FOR SIZE.
6. FIRE MAIN UP. REFER TO FIRE PROTECTION ENGINEER/CONTRACTOR FOR SIZE.
7. GLYCOL SYSTEM SERVING EXISTING LOADING DOCK SHALL BE REMOVED AND DRY TYPE HEADS PROVIDED TO SERVE THE EXTERIOR CANOPY AREA.
8. ORDINARY HAZARD GROUP II.
9. PROVIDE FIRE SPRINKLER HEAD AT BOTTOM OF ELEVATOR HOISTWAY PER NFPA 13.
10. VERIFY LOCATION OF EXISTING FIRE SPRINKLER HEAD IN THE EXISTING ELEVATOR HOISTWAY. IF SPRINKLER HEAD IS NOT FOUND PROVIDE NEW FIRE SPRINKLER HEAD AT BOTTOM OF ELEVATOR HOISTWAY PER NFPA 13 AND CONNECT TO EXISTING FIRE PROTECTION SYSTEM.
11. ROUTE DRAIN OVER AND DISCHARGE TO THE EXTERIOR ABOVE GRADE.
12. EXISTING FIRE PROTECTION HOSE CABINET AND ASSOCIATED PIPING TO BE REMOVED. CAP EXISTING PIPING WATER TIGHT AT LEVEL BELOW.

RENOVATION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	NEW CONSTRUCTION
	CONNECT TO EXISTING AT THIS POINT

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON BERGLIE 48052 PROFESSIONAL ENGINEER

CONSULTANTS:

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: FIRST FLOOR FIRE PROTECTION PLAN

Project Name: EXPAND DOMICILIARY BUILDING 64

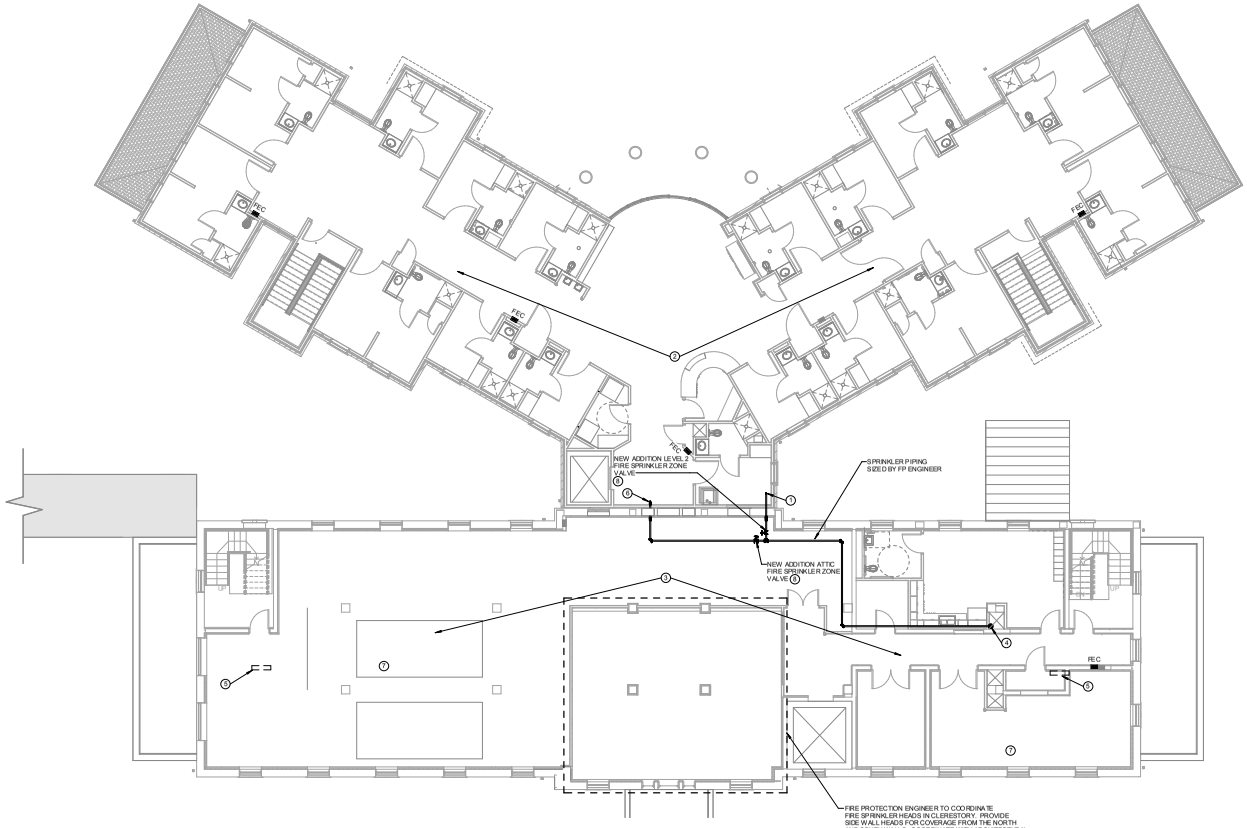
Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number	Checked	Drawn
64	DAR	RLS

Project Number: 666-309
Date: 13 MAR 2015
Drawing Number: 1-FP-201
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



SECOND FLOOR FIRE PROTECTION PLAN
1/8" = 1'-0"

N

KEYED NOTES

1. ROUTE TO NEW FIRE SPRINKLER SYSTEM THROUGHOUT NEW ADDITION SECOND FLOOR.
2. NEW ADDITION SHALL BE FULLY SPRINKLED. THE FIRE SPRINKLER SYSTEM SHALL BE DESIGNED IN FULL ACCORDANCE WITH NFPA 13/14 AND THE SHERIDAN VAMCS SAFETY OFFICE.
3. THE REMODELED AREA OF BLDG. 64 IS TO BE FULLY SPRINKLED. THE CONTRACTOR SHALL RELOCATE EXISTING SPRINKLER HEADS AND PROVIDE NEW SPRINKLER HEADS AND PIPING IN REMODELED AREAS TO ACCOMMODATE NEW AND REVISED PARTITIONS. SYSTEM SHALL BE DESIGNED IN FULL ACCORDANCE WITH NFPA 13/14 AND VA DESIGN MANUAL REQUIREMENTS. CONTRACTOR SHALL MATCH EXISTING PIPING MATERIAL AND SPRINKLER HEADS.
4. FIRE MAIN FROM BELOW. REFER TO FIRE PROTECTION ENGINEER/CONTRACTOR FOR SIZE.
5. EXISTING FIRE PROTECTION HOSE CABINET AND ASSOCIATED PIPING TO BE REMOVED. CAP EXISTING PIPING WATER TIGHT AT LEVEL BELOW.
6. FIRE SPRINKLER PIPE UP TO SERVE NEW FIRE PROTECTION SYSTEM IN ATTIC SPACE.
7. ORDINARY HAZARD GROUP I.
8. ROUTE DRAIN DOWN TO FIRST LEVEL AND DISCHARGE TO THE EXTERIOR ABOVE GRADE.

RENOVATION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	NEW CONSTRUCTION
	CONNECT TO EXISTING AT THIS POINT

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON BERGLE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: SECOND FLOOR FIRE PROTECTION PLAN

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Project Name: EXPAND DOMICILIARY BUILDING 64

Building Number: 64 | Checked: DAR | Drawn: RLS

Project Number: 666-309
Date: 13 MAR 2015
Drawing Number: 1-FP-202
Dwg. of

Office of Construction and Facilities Management

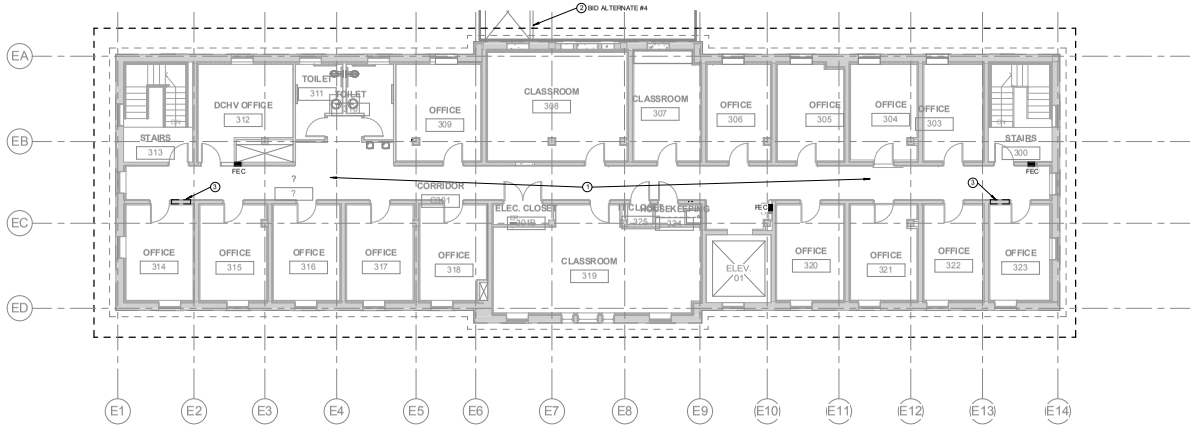
VA FORM 08-6231

KEYED NOTES

1. THE REMODELED AREA OF BLDG. 64 IS TO BE FULLY SPRINKLED. THE CONTRACTOR SHALL RELOCATE EXISTING SPRINKLER HEADS AND PROVIDE NEW SPRINKLER HEADS AND PIPING IN REMODELED AREAS TO ACCOMMODATE NEW AND REVISED PARTITIONS. SYSTEM SHALL BE DESIGNED IN FULL ACCORDANCE WITH NFPA 13/14 AND SHERIDAN VAHCS SAFETY OFFICE REQUIREMENTS. CONTRACTOR SHALL MATCH EXISTING PIPING MATERIAL AND SPRINKLER HEADS.
2. REVISED FIRE PROTECTION SYSTEM TO BE REMOVED IN ALTERNATE #13. EXISTING FIRE PROTECTION SYSTEM TO REMAIN.
3. EXISTING FIRE PROTECTION HOSE CABINET AND ASSOCIATED PIPING TO BE REMOVED.

RENOVATION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	NEW CONSTRUCTION
	CONNECT TO EXISTING AT THIS POINT



1 THIRD FLOOR FIRE PROTECTION PLAN
1/8" = 1'-0"

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON BERGLIE 48052 PROFESSIONAL ENGINEER

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Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
THIRD FLOOR FIRE PROTECTION PLAN

Location
VAMC SHERIDAN WY
1898 FORT ROAD
SHERIDAN, WY 82801

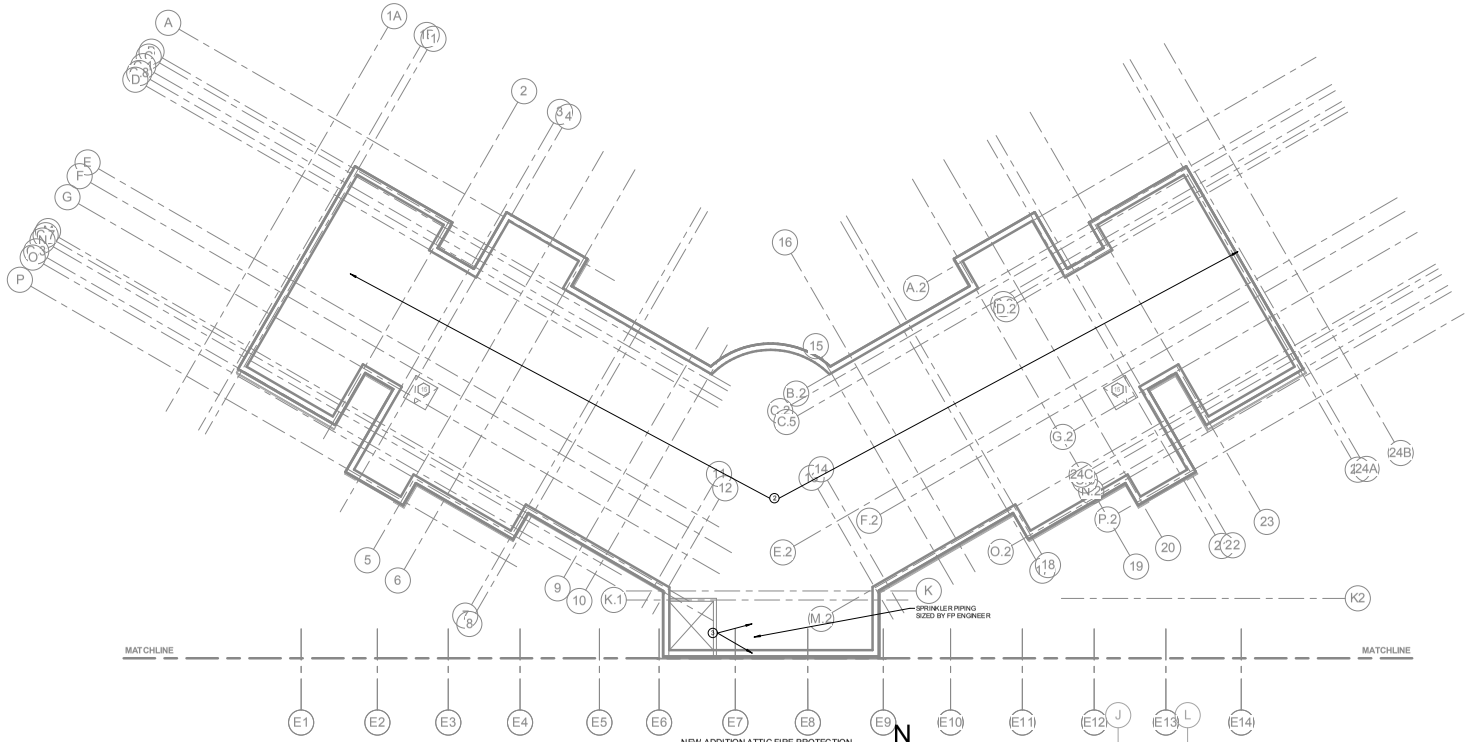
Project Name
EXPAND DOMICILIARY BUILDING 64

Building Number	Checked	Drawn
64	DAR	RLS

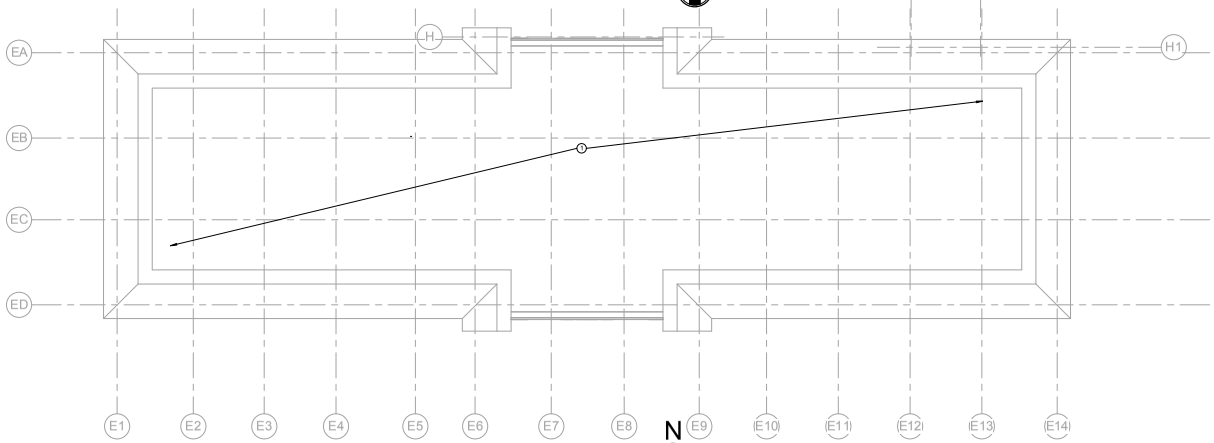
Project Number **666-309**
Date 13 MAR 2015
Drawing Number **1-FP-203**
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



1 NEW ADDITION ATTIC FIRE PROTECTION PLAN
1/8" = 1'-0"



2 ATTIC FIRE PROTECTION PLAN
1/8" = 1'-0"

KEYED NOTES

1. ALL EXISTING FIRE PROTECTION SPRINKLER PIPING AND HEADS IN EXISTING ATTIC AREA TO REMAIN AND REMAIN ACTIVE.
2. NEW ATTIC ADDITION SHALL BE FULLY SPRINKLED WITH WET SYSTEM. THE FIRE SPRINKLERS SHALL BE DESIGNED IN FULL ACCORDANCE WITH NFPA 13/14 AND THE SHERIDAN VACS SAFETY OFFICE.
3. FIRE SPRINKLER PIPE FROM BELOW. ROUTE TO NEW WET FIRE SPRINKLER SYSTEM THROUGHOUT NEW ATTIC ADDITION.

RENOVATION LEGEND

SYMBOL	DESCRIPTION
	NEW CONSTRUCTION
	EXISTING TO REMAIN
	CONNECT TO EXISTING AT THIS POINT

BUILDING IS FULLY SPRINKLERED

Revisions: Date

COLORADO LICENSED DONALD AARON BERGLE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: ATTIC FIRE PROTECTION PLANS

Project Name: EXPAND DOMICILIARY BUILDING 64

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number: 64 | Checked: DAR | Drawn: RLS

Project Number: 666-309

Date: 13 MAR 2015

Drawing Number: 1-FP-204

Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

PLUMBING GENERAL NOTES

1. CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE PROJECT SCOPE, UTILITY CONNECTIONS AND ALL BUILDING SERVICES.
2. CONTRACTOR SHALL COORDINATE EQUIPMENT CONNECTIONS WITH SUPPLIER AND INSTALLATION DRAWINGS. INSTALL EQUIPMENT AND MAKE FINAL CONNECTIONS, FURNISHING CUTOFF VALVES, P-TRAPS, PRVS AND PIPING AS REQUIRED.
3. COORDINATE WATER, WASTE AND VENT WITH OTHER TRADES TO AVOID SPACING AND ROUTING PROBLEMS
4. FIXTURES, EQUIPMENT, CONNECTIONS AND PIPING SHALL BE FURNISHED AND INSTALLED TO MEET OR EXCEED STATE AND LOCAL CODES AND REQUIREMENTS.
5. FURNISH AND INSTALL SHOCK ARRESTORS IN COLD WATER LINES AT CONNECTIONS TO FLUSH VALVES AND QUICK CLOSING VALVES AND AT EACH HOT AND COLD WATER CONNECTION TO FIXTURES.
6. PLUMBING VENTS AND STACKS THROUGH ROOF SHALL BE INSTALLED A MINIMUM OF 10 FEET CLEAR OF OUTSIDE AIR INTAKES AND ANY OPERABLE WINDOW OR BUILDING OPENING.
7. INSTALL A WATERPROOFING MEMBRANE AT EACH FLOOR DRAIN AND NON PREFABRICATED SHOWER LOCATED ABOVE SLAB ON GRADE AS SPECIFIED. CONTRACTOR SHALL COORDINATE THE WORK TO AVOID CONFLICT BETWEEN WATERPROOFING MEMBRANE INSTALLATION AND STRUCTURAL COMPONENT INSTALLATION.
8. VENT AND WASTE STACKS LESS THAN THREE INCHES IN DIAMETER SHALL NOT ROUTE THROUGH THE ROOF. PROVIDE INCREASERS ON PIPING BELOW ROOF.
9. PENETRATIONS THROUGH WALLS AND FLOORS SHALL BE SLEEVED, SEALED AND FIRESAFED TO MAINTAIN THE INTEGRITY OF THE WALL AND FLOOR UL FIRE RESISTANCE RATING.
10. DRAWINGS ARE SCHEMATIC IN NATURE AND SHALL NOT BE SCALED. CONTRACTOR IS RESPONSIBLE FOR COORDINATING EXACT ROUTING OF ALL SERVICES WITH EXISTING CONDITIONS AND WITH ALL OTHER TRADES.
11. ORIENT FLUSH VALVE HANDLES ASSOCIATED WITH BARRIER-FREE WATER CLOSETS ON WIDE SIDE OF STALL TO COMPLY WITH ADA REQUIREMENTS.
12. FLUSH VALVE CONTROLS FOR WATER CLOSETS SHALL BE LOCATED NO HIGHER THAN 44" ABOVE FINISHED FLOOR.
13. FLUSH VALVE HANDLES FOR URINALS SHALL BE MOUNTED BETWEEN 28" AND 44" ABOVE FINISHED FLOOR.
14. PROVIDE INSULATION KIT FOR SUPPLIES, TRAP AND DRAIN PIPING FOR ALL HANDICAP ACCESSIBLE LAVATORIES AND SINKS. INSULATION KIT SHALL BE TRUEBRO MODEL 103 (WHITE) OR EQUAL. INSULATION OF PIPING IS NOT REQUIRED WHERE PROTECTIVE SKIRT IS PROVIDED BELOW FIXTURE.
15. SUPPORTS, ANCHOR BOLTS AND HANGERS FOR ALL EQUIPMENT SPECIFIED IN DIVISION 21 AND 22 SHALL CONFORM TO THE SPECIFICATIONS. MISCELLANEOUS STEEL BRACING SUPPORTS AND REINFORCING STEEL NEEDED TO SUPPORT EQUIPMENT AND PIPING SYSTEMS SPECIFIED IN DIVISION 21 AND 22 SHALL BE FURNISHED AND INSTALLED AS PART OF THE WORK OF DIVISION 21 AND 22.
16. MAINTAIN ACCESSIBILITY OF ALL EQUIPMENT AND VALVES. PROVIDE ACCESS PANELS AS REQUIRED. COORDINATE PLACEMENT WITH THE ARCHITECT PRIOR TO INSTALLATION.
17. INSTALL EXTERIOR WALL HYDRANTS AT 18" ABOVE FINISHED GRADE.
18. CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT PRIOR TO CUTTING ANY OPENING IN THE STRUCTURE. COORDINATE SLEEVING OF BEAMS AND CORING OF STRUCTURE WITH STRUCTURAL DRAWINGS AND DETAILS PRIOR TO INSTALLATION.
19. CONTRACTOR SHALL PROVIDE TRAP PRIMERS ON ALL FLOOR DRAINS NOT RECEIVING CONSTANT DISCHARGE FROM FIXTURES AND/OR EQUIPMENT AND AS REQUIRED BY STATE AND LOCAL CODES.
20. ALL SANITARY AND STORM WATER PIPING BELOW GRADE OUTSIDE OF BUILDING WITH LESS THAN TWO FEET OF EARTH COVER SHALL BE DUCTILE IRON.
21. PROVIDE PIPING EXPANSION JOINTS AT EACH PIPE CROSSING AN INTERIOR BUILDING EXPANSION JOINT.

PLUMBING DEMOLITION NOTES

1. CONTRACTOR SHALL REMOVE EXISTING SERVICES SUCH AS WATER, WASTE AND VENT PIPING SERVING FIXTURES AND/OR CONNECTIONS TO EQUIPMENT WHICH ARE SHOWN ON THE DRAWINGS TO BE REMOVED OR RELOCATED. PERMANENTLY SEAL AND CAP SERVICES NEXT TO MAIN SERVICE LINES ABOVE CEILINGS, IN WALLS OR BELOW FLOORS. EXISTING PLUMBING FIXTURES AND RELATED ITEMS WHICH ARE TO BE REMOVED SHALL BE SUBMITTED TO THE OWNER. ITEMS THE OWNER WISHES TO RETAIN SHALL BE STORED BY THE CONTRACTOR WHERE DIRECTED BY THE OWNER. ALL OTHER ITEMS NOT RETAINED BY THE OWNER SHALL BE LEGALLY DISPOSED.
2. DRAWINGS SHOW KNOWN EXISTING SERVICES IN REASONABLE PROXIMITY. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS. NOTE DISCREPANCIES AND BRING TO THE ARCHITECT'S ATTENTION.
3. EXISTING FIXTURES, EQUIPMENT, SERVICES AND CONNECTIONS WHICH ARE DAMAGED DURING CONSTRUCTION SHALL BE REWORKED OR REPLACED AS REQUIRED TO PROVIDE ORIGINAL CONDITION AND OPERATION.
4. PENETRATIONS THROUGH EXISTING WALLS AND FLOORS SHALL BE SLEEVED, PATCHED AND SEALED/FIRESAFED TO MAINTAIN THE INTEGRITY OF EXISTING WALL AND FLOOR UL FIRE RESISTANCE RATING.
5. EXISITING PLUMBING SERVICES NOT SHOWN ON THE DRAWINGS SHALL REMAIN AS IS, UNLESS NOTED OTHERWISE.
6. CONTRACTOR SHALL COORDINATE THE INTERRUPTION OF EXISTING SERVICES WITH THE OWNER PRIOR TO DEMOLITION OR CONSTRUCTION. PROVIDE A MINIMUM OF 48 HOURS WRITTEN NOTICE WITH ANTICIPATED DURATION OF OUTAGE. ALL WORK SHALL BE PERFORMED TO FIT THE OPERATIONAL SCHEDULE OF THE FACILITY.
7. EXISTING FIXTURES, EQUIPMENT CONNECTIONS AND SERVICE LINES SHALL BE FIELD VERIFIED FOR EXACT LOCATION AND SIZE. NOTE DISCREPANCIES AND DEVIATIONS AND BRING TO THE ARCHITECT'S ATTENTION.

PLUMBING SHEET INDEX

SHEET	DESCRIPTION
1-P-001	PLUMBING LEGENDS AND NOTES
1-P-002	PLUMBING SCHEDULES
1-PD-100	BASEMENT AND FIRST FLOOR PLUMBING DEMOLITION PLANS
1-PD-101	SECOND AND THIRD FLOOR PLUMBING DEMOLITION PLANS
1-P-100	PLUMBING SITE PLAN
1-P-200	BASEMENT AND UNDERFLOOR PLUMBING PLAN
1-P-201	FIRST FLOOR PLUMBING PLAN
1-P-202	SECOND FLOOR PLUMBING PLAN
1-P-203	THIRD FLOOR PLUMBING PLAN
1-P-401	ENLARGED PLUMBING PLANS AND RISER DIAGRAMS
1-P-501	PLUMBING DETAILS
Grand total: 11	

PLUMBING LEGEND

NOT ALL SYMBOLS MAY BE USED

SYMBOL	ABB.	DESCRIPTION	SYMBOL	ABB.	DESCRIPTION
	VTR	VENT THRU ROOF			PIPE TURN DOWN
	BFP	BACKFLOW PREVENTER			PIPE TURN UP
	AFF	ABOVE FINISHED FLOOR			BALL VALVE FRONT VIEW
	AFG	ABOVE FINISHED GRADE			BALL VALVE TOP VIEW
	CO	CLEANOUT			GATE VALVE FRONT VIEW
					GATE VALVE TOP VIEW
CW	CW	DOMESTIC COLD WATER			CHECK VALVE FRONT VIEW
CW	CW	DOM. COLD WATER (BELOW GROUND)			CHECK VALVE TOP VIEW
HW	HW	DOMESTIC HOT WATER SUPPLY			BALANCING VALVE
HWR	HWR	DOMESTIC HOT WATER RETURN		PRV	PRESSURE REDUCING VALVE FRONT VIEW
180 SHW	180 SHW	DOMESTIC HOT WATER 180 SUPPLY		PRV	PRESSURE REDUCING VALVE TOP VIEW
180 SHWR	180 SHWR	DOMESTIC HOT WATER 180 RETURN			SOLENOID VALVE
HW	HW	DOMESTIC HOT WATER — SUPPLY			STRAINER
HWR	HWR	DOMESTIC HOT WATER — RETURN			REDUCER
					GAGE
W	W	SANITARY WASTE (ABOVE GROUND)			THERMOMETER
S	S	SANITARY WASTE (BELOW GROUND)			CAP/PLUG
V	V	SANITARY VENT			CLEANOUT (ABOVE CEILING)
SD	SD	STORM DRAIN			UNION
SW	SW	STORM WATER (BELOW GROUND)			
OD	OD	OVERFLOW DRAIN	F	F	FIRE MAIN
G	G	NATURAL GAS			
D	D	GRAVITY DRAIN			
1		RISER DIAGRAM DESIGNATION			

BUILDING IS FULLY SPRINKLERED

Revisions: Date

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **PLUMBING LEGENDS AND NOTES**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Project Number: **666-309**

Date: 13 MAR 2015

Location: **VAMC SHERIDAN WY, 1898 FORT ROAD, SHERIDAN, WY 82801**

Building Number: 64 | Checked: DAR | Drawn: RLS

Drawing Number: **1-P-001**

Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

DOMESTIC HOT WATER HEAT EXCHANGER SCHEDULE

DESIGNATION	SERVICE	MANUFACTURER	MODEL NUMBER	STEAM PRESSURE	STEAM USE - LB/HR	EWT °F	LWT °F	RECOVERY GPM	REMARKS
WH-1	DOMESTIC HOT WATER	---	---	70 PSI	1320	40	140	25	1. LOW PRESSURE

1. SEMI-INSTANTANEOUS HEATER. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. LESLIE LES PACKAGE WATER HEATER MODEL BASIS OF DESIGN

PUMP SCHEDULE

DESIGNATION	SERVICE	TYPE	MANUFACTURER	MODEL NUMBER	GPM	HEAD FEET	MOTOR/PUMP RPM	MOTOR HP	ELECTRICAL	ACCESSORIES / REMARKS
CP-1	HOT WATER RETURN	IN-LINE	---	---	5.0	15	1725	1/6	120V/1	ALL BRONZE CONSTRUCTION DESIGN BASED ON B&G

DOMESTIC HOT WATER MIXING VALVE SCHEDULE

DESIGNATION	SERVICE	MANUFACTURER	MODEL NUMBER	DELIVERY TEMP.	MINIMUM FLOW - GPM	P.D. PSI/GPM	SIZE	ACCESSORIES	REMARKS
TMV-1	---	---	---	120	1	30/68	---	WALL MOUNTED CABINET	DESIGN BASED ON LEONARD MIXING VALVE TM-186-820-LF-EXP

1. PROVIDE INLET AND OUTLET TEMPERATURE GAUGES.

DOMESTIC HOT WATER EXPANSION TANK SCHEDULE

DESIGNATION	SERVICE	MANUFACTURER	MODEL NUMBER	TANK VOLUME - GALLONS	CONSTRUCTION PRESSURE	SYSTEM OPERATING PRESSURE	SYSTEM CONN. SIZE	REMARKS
ET-1	DOMESTIC HOT WATER	---	---	6.4	---	175	2 1/2"	

1. ASME RATED

PLUMBING FIXTURE CONNECTION SCHEDULE

MARK	FIXTURE DESCRIPTION	COLD WATER	HOT WATER	DRAIN	VENT
P-101	WATER CLOSET - FLOOR MTD., MANUAL FLUSH VALVE - ADA HEIGHT	1 1/4"	---	4"	2"
P-101A	WATER CLOSET - FLOOR MTD., SENSOR FLUSH VALVE - ADA HEIGHT	1 1/4"	---	4"	2"
P-401	LAVATORY - WALL HUNG	1/2"	1/2"	2"	2"
P-420	LAVATORY - COUNTER MOUNT - SENSOR OPERATED	1/2"	1/2"	2"	2"
P-502	JANITORS CLOSET	1/2"	1/2"	2"	2"
P-505	CLINICAL SINK	1 1/4"	---	4"	2"
P-524	SINK -TWO COMPARTMENT - COUNTER TOP	1/2"	1/2"	2"	2"
P-528	SINK - SINGLE COMPARTMENT - COUNTER TOP	1/2"	1/2"	2"	2"
P-604	ELECTRIC WATER COOLER	1/2"	---	2"	2"
P-702	SHOWER FIXTURE - WALL MOUNTED	1/2"	1/2"	2"	2"
P-801	WALL HYDRANT	3/4"	---	---	---
P-808	WASHING MACHINE SUPPLY AND DRAIN BOX	1/2"	1/2"	2"	2"

SHOCK ARRESTOR SCHEDULE

P.D.I. SYMBOL	FIXTURE UNITS	SIZE	MANUFACTURER	MODEL NUMBER
A	1-11	1/2" NPT	PPP	SC-500
B	12-32	3/4" NPT	PPP	SC-750
C	33-60	1" NPT	PPP	SC-1000
D	61-113	1 1/4" NPT	PPP	SC-1250
E	114-154	1 1/2" NPT	PPP	SC-1500
F	155-330	2" NPT	PPP	SC-2000

NOTE : ALL ARRESTORS SHALL BE TYPE "A" UNLESS NOTED OTHERWISE.

BUILDING IS FULLY SPRINKLERED

Revisions: Date

COLORADO LICENSED DONALD AARON BERGLE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: PLUMBING SCHEDULES

Project Name: EXPAND DOMICILIARY BUILDING 64

Location: VAMC SHERIDAN WY
1898 FORT ROAD
SHERIDAN, WY 82801

Building Number: 64 | Checked: DAR | Drawn: RLS

Project Number: 666-309

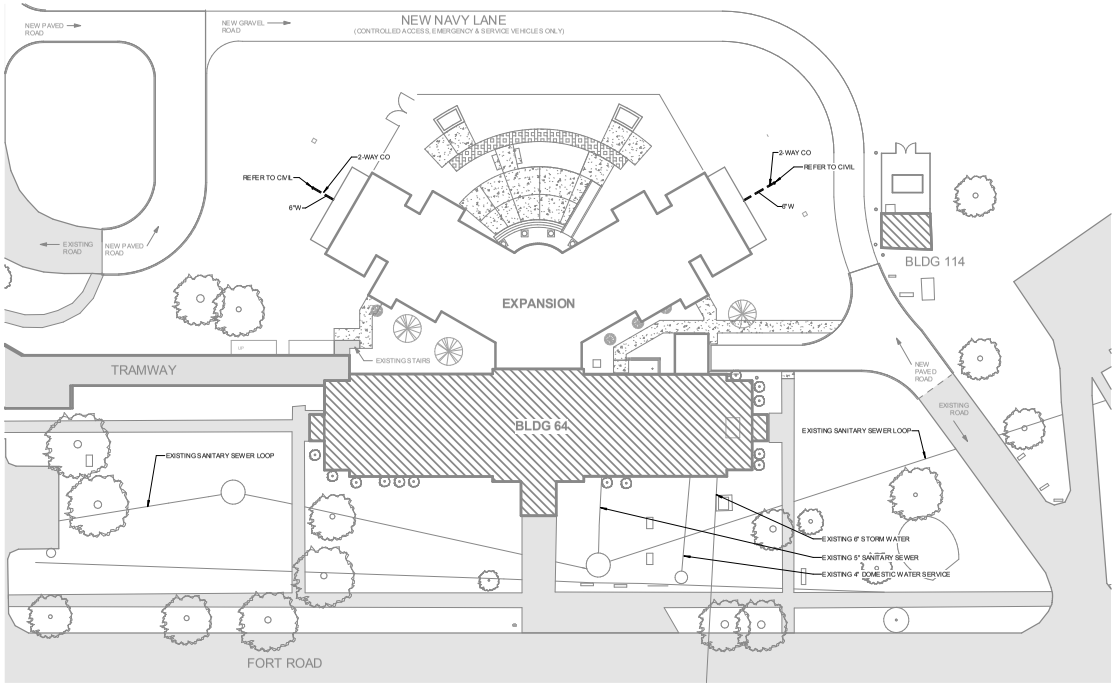
Date: 13 MAR 2015

Drawing Number: 1-P-002

Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



1 PLUMBING SITE PLAN
1" = 20'-0"

RENOVATION LEGEND

SYMBOL	DESCRIPTION
	NEW CONSTRUCTION
	EXISTING TO REMAIN
	CONNECT TO EXISTING AT THIS POINT

Revisions: Date

COLORADO LICENSED DONALD AARON RENICK 48052 3/27/15 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: PLUMBING SITE PLAN

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Project Name: EXPAND DOMICILIARY BUILDING 64

Building Number: 64 | Checked: DAR | Drawn: RLS

Project Number: 666-309

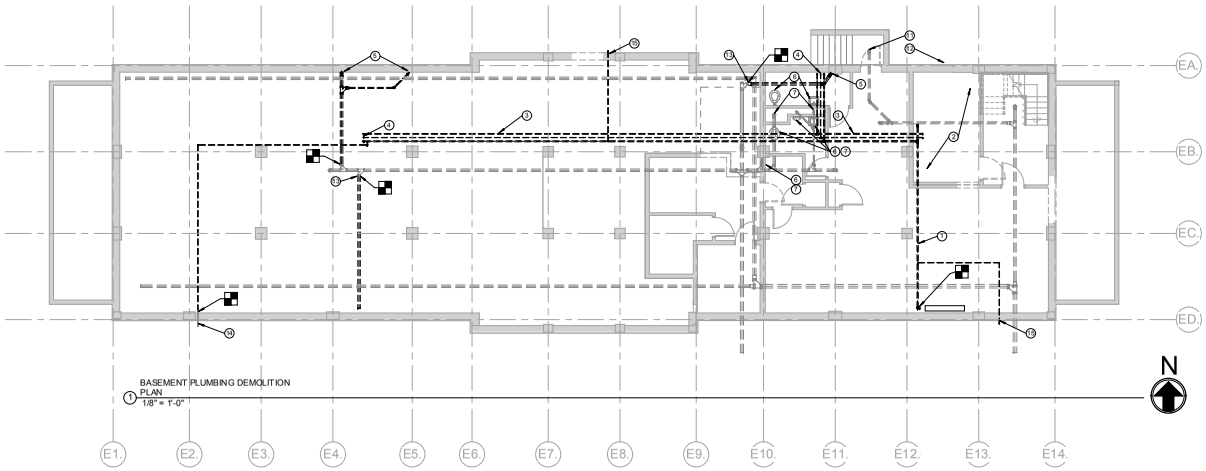
Date: 13 MAR 2015

Drawing Number: 1-P-100

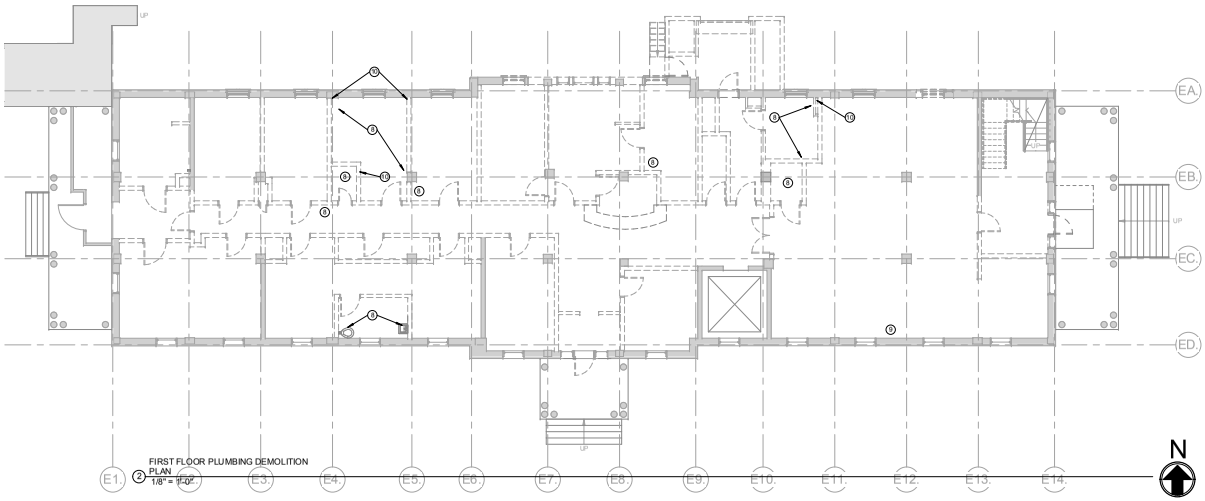
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



BASEMENT PLUMBING DEMOLITION PLAN
1/8" = 1'-0"



FIRST FLOOR PLUMBING DEMOLITION PLAN
1/8" = 1'-0"

KEYED NOTES

1. REMOVE EXISTING COLD WATER PIPING BACK TO POINT OF DISCONNECT.
2. REMOVE EXISTING STEAM WATER HEAT EXCHANGER AND ALL ASSOCIATED STEAM AND DOMESTIC WATER PIPING. RETURN EXISTING HEAT EXCHANGER TO OWNER.
3. REMOVE EXISTING COLD WATER, HOT WATER AND HOT WATER RETURN PIPING.
4. REMOVE EXISTING DOMESTIC WATER RISER PIPING.
5. REMOVE EXISTING SANITARY WASTE RISER PIPING BACK TO POINT OF DISCONNECT.
6. EXISTING PLUMBING FIXTURE(S) TO REMAIN. CONTRACTOR TO INSPECT CONDITION OF EXISTING FIXTURE(S). IF AFTER INSPECTION OF FIXTURES, DAMAGE OR NOT OPERATING PROPERLY, CONTRACTOR TO INFORM ARCHITECT ABOUT REPLACING FIXTURE(S).
7. EXISTING SANITARY WASTE PIPING SERVING EXISTING PLUMBING FIXTURES TO REMAIN AND REMAIN CONNECTED. DOMESTIC WATER AND VENT PIPING TO REMAIN AND DISCONNECT ABOVE CEILING. REFER TO NEW WORK PLUMBING PLAN FOR NEW DOMESTIC WATER AND VENT CONNECTION TO EXISTING.
8. REMOVE EXISTING PLUMBING FIXTURE(S) AND ALL ASSOCIATED SANITARY WASTE AND DOMESTIC WATER PIPING. RETURN EXISTING PLUMBING FIXTURE TO OWNER.
9. REMOVE EXISTING ICE MACHINE AND ASSOCIATED DRAIN AND COLD WATER PIPING.
10. REMOVE ALL EXISTING SANITARY WASTE AND DOMESTIC WATER RISER PIPING.
11. EXISTING AREA DRAIN LOCATED IN THE STAIR WELL TO REMAIN AND CONNECTED TO EXISTING STORM DRAIN PIPING. VERIFY CONDITION OF DRAIN AND PIPING. CLEAN AS NECESSARY. NOTIFY ARCH./OWNER IF REPAIRS OF DRAIN AND PIPING ARE REQUIRED, BEFORE PROCEEDING WITH WORK.
12. REMOVE EXISTING AREA DRAIN AND ASSOCIATED PIPING ON LIGHT WELL.
13. CAP EXISTING WASTE PIPING AIR TIGHT.
14. EXISTING EXTERIOR HOSE BIBB TO REMAIN.
15. EXISTING EXTERIOR HOSE BIBB TO BE REMOVED IN IT'S ENTIRELY. PATCH WALL AS NECESSARY.

DEMOLITION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	EXISTING TO BE REMOVED
	DEMO TO THIS POINT

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON BERGLIE 48052 PROFESSIONAL ENGINEER

CONSULTANTS:

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
BASEMENT AND FIRST FLOOR PLUMBING DEMOLITION PLANS

Project Name
EXPAND DOMICILIARY BUILDING 64

Location
VAMC SHERIDAN WY
1898 FORT ROAD
SHERIDAN, WY 82801

Building Number	Checked	Drawn
64	DAR	RLS

Project Number **666-309**
Date 13 MAR 2015
Drawing Number **1-PD-100**
Dwg. of

Office of Construction and Facilities Management

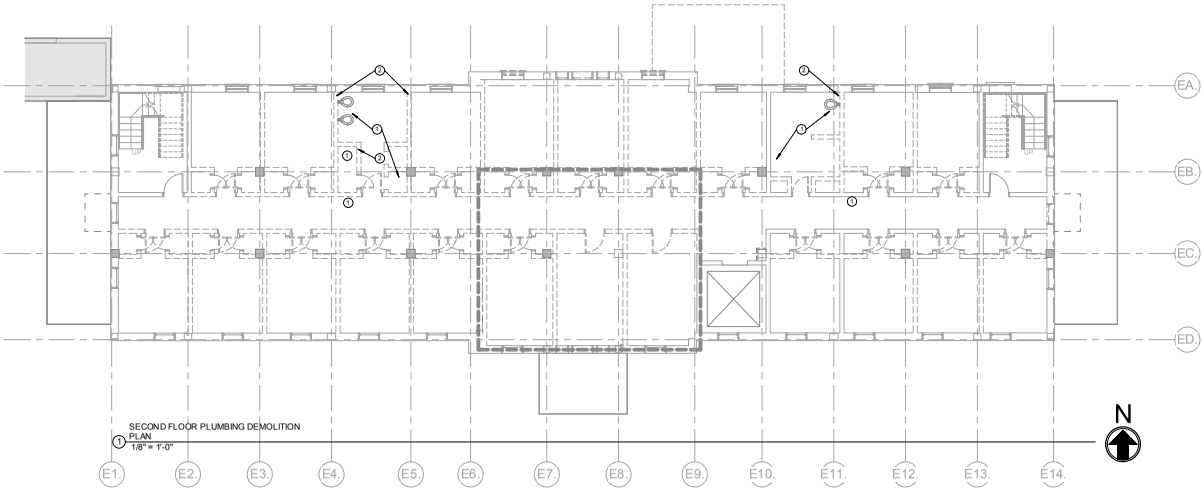
VA FORM 08-6231

KEYED NOTES

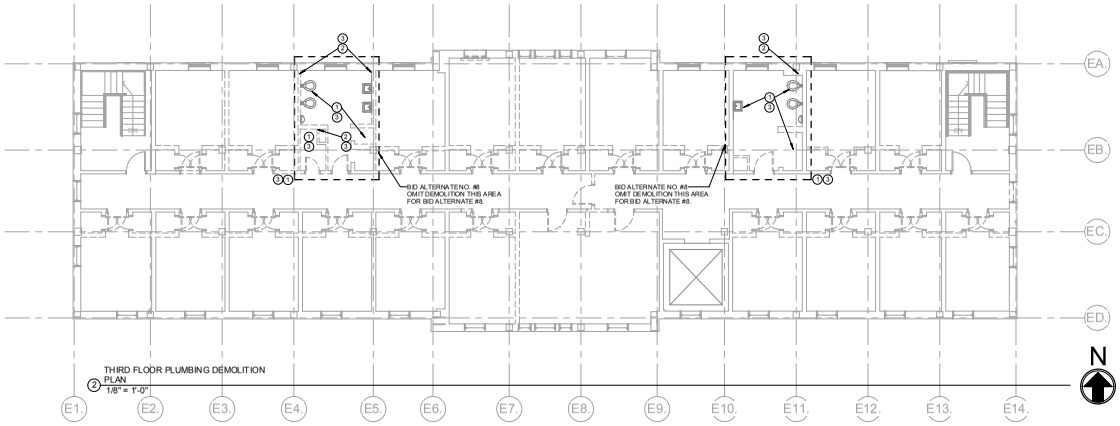
1. REMOVE EXISTING PLUMBING FIXTURE (S) AND ALL ASSOCIATED SANITARY WASTE AND DOMESTIC WATER PIPING. RETURN EXISTING PLUMBING FIXTURES TO OWNER.
2. REMOVE ALL EXISTING SANITARY WASTE AND DOMESTIC WATER RISER PIPING.
3. CAP EXISTING VENT PIPING AIR TIGHT IN ATTIC SPACE.

DEMOLITION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	EXISTING TO BE REMOVED
	DEMO TO THIS POINT



1 SECOND FLOOR PLUMBING DEMOLITION PLAN
1/8" = 1'-0"



2 THIRD FLOOR PLUMBING DEMOLITION PLAN
1/8" = 1'-0"

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON BERGLUND 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
SECOND AND THIRD FLOOR PLUMBING DEMOLITION PLANS

Location
VAMC SHERIDAN WY
1898 FORT ROAD
SHERIDAN, WY 82801

Project Name
EXPAND DOMICILIARY BUILDING 64

Building Number	Checked	Drawn
64	DAR	RLS

Project Number
666-309

Date
13 MAR 2015

Drawing Number
1-PD-101

Dwg. of

Office of Construction and Facilities Management

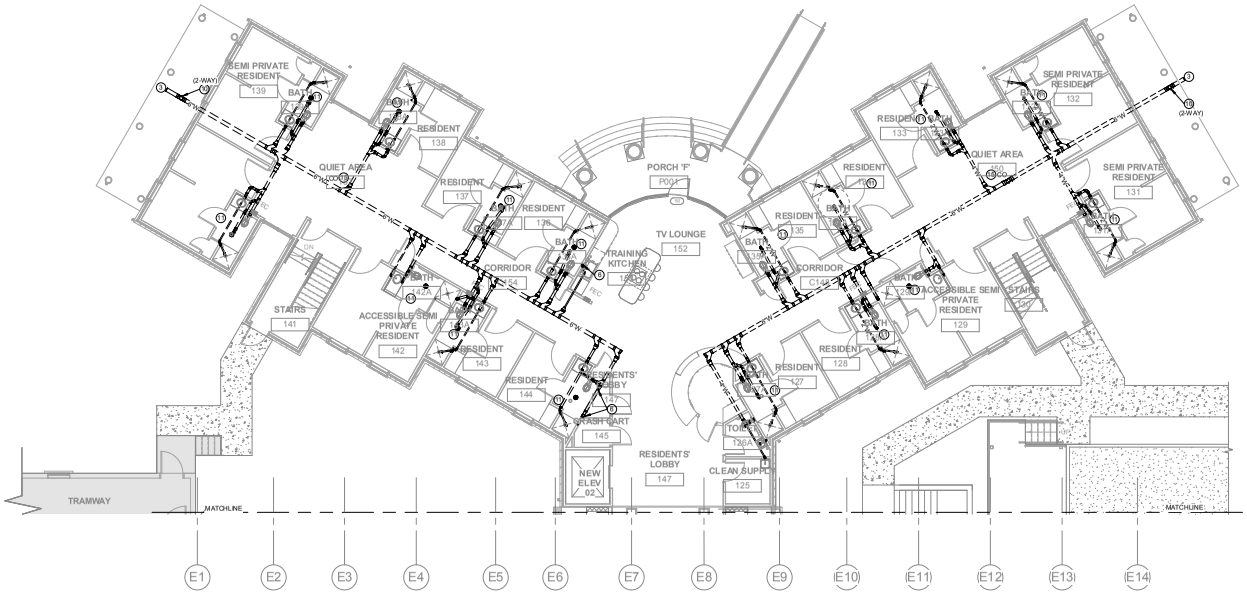
VA FORM 08-6231

KEYED NOTES

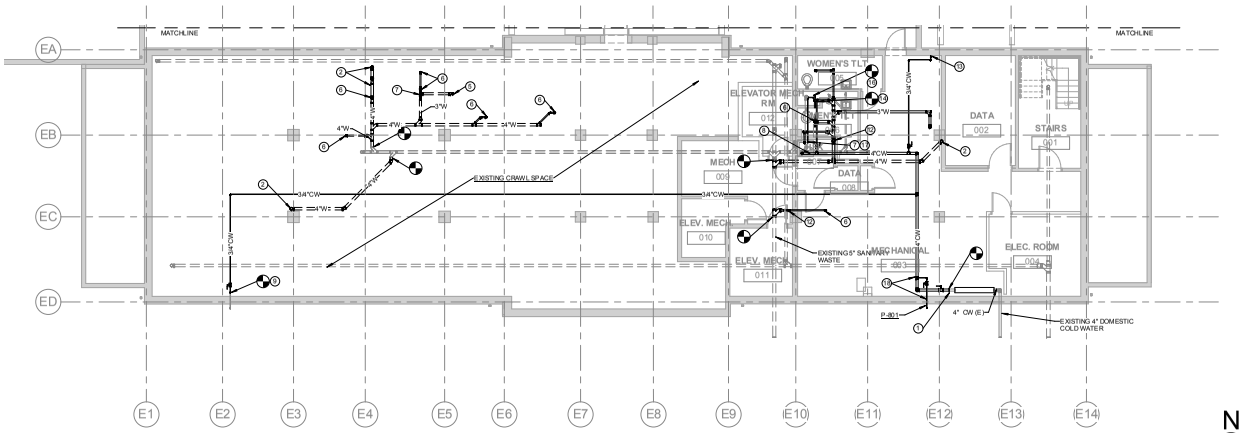
1. CONNECT NEW 4" DOMESTIC COLD WATER TO EXISTING REDUCE PRESSURE BACKFLOW PREVENTER.
2. 4" WASTE FROM ABOVE.
3. REFER TO CIVIL FOR CONTINUATION.
4. FLOOR DRAIN, FD-C, AND ASSOCIATED WASTE AND VENT PIPING TO BE REMOVED IN BID ALTERNATE #4. TYPICAL ALL RESIDENCE ROOMS.
5. 3" WASTE FROM ABOVE.
6. 2" WASTE FROM ABOVE.
7. 2" VENT UP.
8. 4" COLD WATER UP.
9. CONNECT NEW 3/4" CW TO EXISTING HOSE BIBB PIPING.
10. WASTE UP TO 4" CLEANOUT.
11. REFER TO TYPICAL RESIDENCE WASTE RISER DIAGRAMS FOR PIPE SIZES.
12. 2" WASTE DOWN.
13. 3/4" CW UP.
14. CONNECT TO EXISTING CW PIPING SERVING EXISTING TOILET ROOMS.
15. LOCATE CLEANOUT IN CRAWL SPACE.
16. CONNECT NEW 2" VENT AND 3/4" HW TO EXISTING VENT AND HW PIPING SERVING EXISTING PLUMBING FIXTURES.
17. 3/4" HW FROM ABOVE.
18. RISE 3/4" CW UP AND EXTEND THROUGH EXTERIOR WALL TO P-801. LOCATE MIN. 18" A.F.G.

RENOVATION LEGEND

SYMBOL	DESCRIPTION
	NEW CONSTRUCTION
	EXISTING TO REMAIN
	CONNECT TO EXISTING AT THIS POINT



1 UNDERFLOOR PLUMBING PLAN
1/8" = 1'-0"



2 BASEMENT PLUMBING PLAN
1/8" = 1'-0"

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON BERGLE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: BASEMENT AND UNDERFLOOR PLUMBING PLAN

Project Name: EXPAND DOMICILIARY BUILDING 64

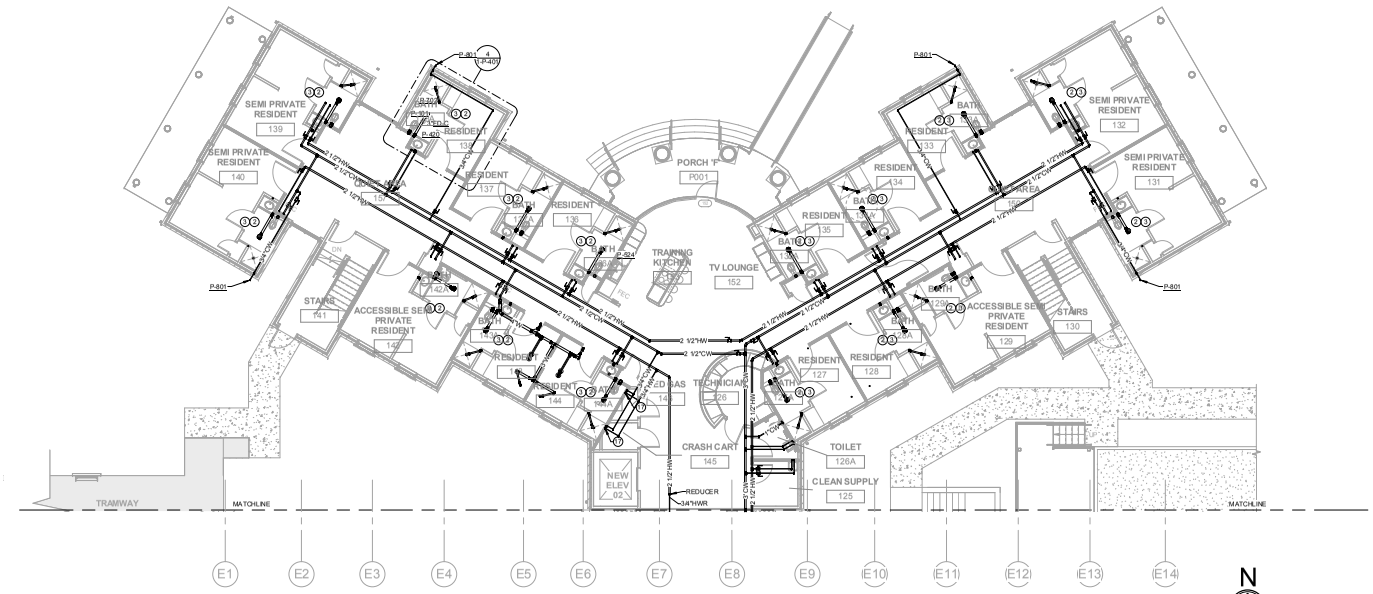
Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number	Checked	Drawn
64	DAR	RLS

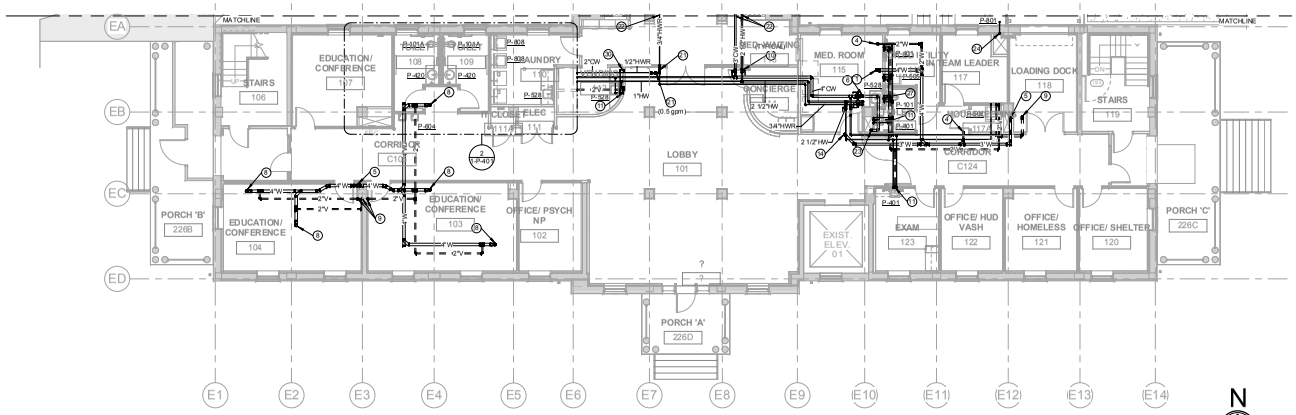
Project Number: 666-309
Date: 13 MAR 2015
Drawing Number: 1-P-200
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



1 FIRST FLOOR PLUMBING PLAN
1/8" = 1'-0"



2 FIRST FLOOR PLUMBING PLAN
1/8" = 1'-0"

KEYED NOTES

1. 4" WASTE FROM ABOVE.
2. REFER TO TYPICAL RESIDENCE RISER DIAGRAM, SHT. 1-P-401.
3. REFER TO ENLARGED PLUMBING PLAN - TYP. LEVEL 1 RESIDENCE., SHT. 1-P-401.
4. 2" WASTE FROM ABOVE.
5. 4" WASTE DOWN.
6. 2 1/2" CW UP. 2 1/2" HW AND 3/4" HWR FROM ABOVE.
7. FLOOR DRAIN, FD-C, AND ASSOCIATED WASTE AND VENT PIPING TO BE REMOVED IN BID ALTERNATE #18. TYPICAL ALL RESIDENCE ROOMS.
8. 4" WASTE WITH P-TRAP FROM ABOVE.
9. 3" VENT UP.
10. ISOLATION SHUT-OFF VALVE.
11. 2" WASTE DOWN, 2" VENT UP, 1/2" HW AND 1/2" CW DOWN TO SERVE FIXTURE.
12. 2" WASTE DOWN.
13. 2" WASTE WITH P-TRAP FROM ABOVE.
14. 3" WASTE WITH P-TRAP FROM ABOVE.
15. 1/2" HW AND 1/2" CW UP TO SERVE FIXTURE.
16. 1 1/4" CW UP TO SERVE FIXTURE.
17. 2" WASTE FROM ABOVE AND DOWN. 1/2" HW AND 1/2" CW UP.
18. 3/4" CW DOWN.
19. 3" WASTE DOWN.
20. ROUTE WASTE, VENT, HOT WATER AND COLD WATER PIPING IN CASEWORK TO FIXTURE.
21. HWR BALANCING VALVE. SET AT INDICATED GPM.
22. PROVIDE APPROVED FLEXIBLE PIPING AT BUILDING EXPANSION JOINT.
23. 4" CW FROM BELOW.
24. 3/4" CW FROM BELOW.
25. PROVIDE DISHWASHER CONNECTION, HOSE AND CLAMP-SLIP JOINT, 17 GAUGE BRANCH TAILPIECE FOR DISHWASHER CONNECTION.
26. PROVIDE 2" INSULATION WITH METAL PROTECTIVE JACKET FOR SANITARY WASTE PIPING LOCATED IN LOADING DOCK AREA.
27. 2" VENT FROM BELOW AND UP.
28. 3/4" HW DOWN.
29. 1/2" CW UP.
30. 1/2" CW DOWN TO ICE MAKER.

RENOVATION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	NEW CONSTRUCTION
	CONNECT TO EXISTING AT THIS POINT

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON BERGLE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: FIRST FLOOR PLUMBING PLAN

Project Name: EXPAND DOMICILIARY BUILDING 64

Project Number: 666-309

Date: 13 MAR 2015

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number	Checked	Drawn
64	DAR	RLS

Drawing Number: 1-P-201

Dwg. of

Office of Construction and Facilities Management

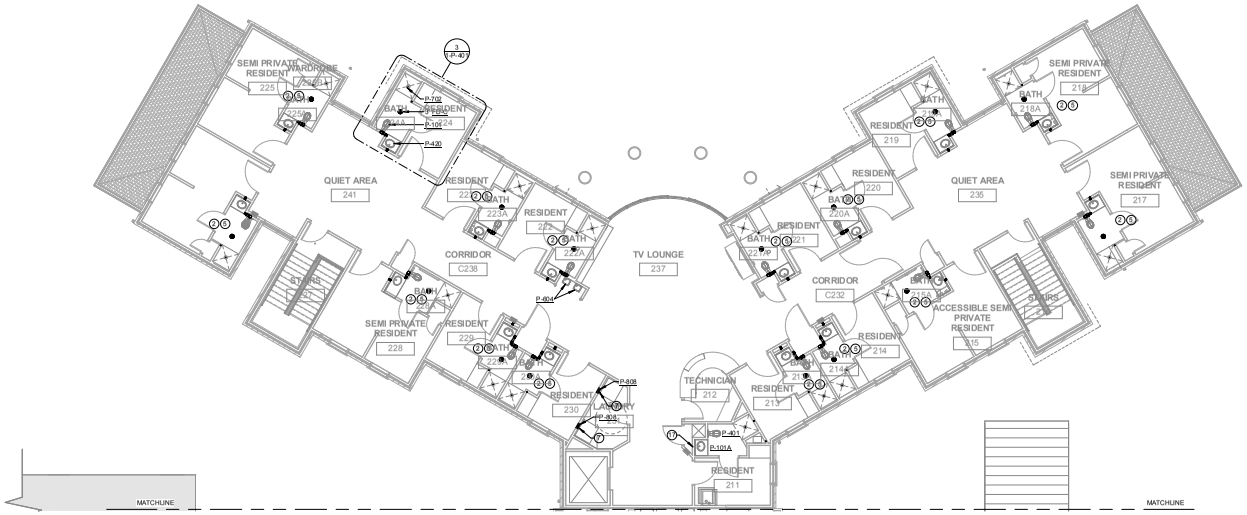
VA FORM 08-6231

KEYED NOTES

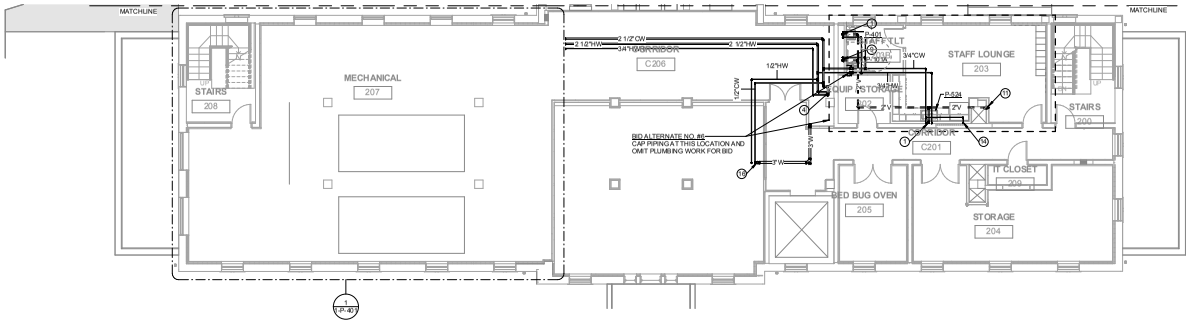
1. 2" WASTE DOWN, 2" VENT UP, 1/2" HW AND 1/2"CW DOWN TO FIXTURE.
2. REFER TO ENLARGED PLUMBING PLAN - TYP. LEVEL 2 RESIDENCE, SHT. 1-P-401.
3. FLOOR DRAIN, FD-C, AND ASSOCIATED WASTE AND VENT PIPING TO BE REMOVED IN ALTERNATE # 18. TYPICAL ALL RESIDENCE ROOMS.
4. 2 1/2" CW, 2 1/2" HW FROM BELOW, 3/4" HWR DOWN.
5. REFER TO TYPICAL RESIDENCE RISER DIAGRAM, SHT. 1-P-401.
6. 4" WASTE DOWN, 2" VENT UP, 1 1/4" CW FROM BELOW TO FIXTURE.
7. 2" WASTE DOWN, 2" VENT UP, 1/2" HW AND 1/2"CW FROM BELOW TO FIXTURE.
8. 2" WASTE DOWN, 2" VENT UP, 1/2" CW FROM BELOW TO FIXTURE.
9. 4" WASTE DOWN, 2" VENT UP, 1 1/4" CW DOWN TO FIXTURE.
10. 2" VENT FROM BELOW AND UP AND UP TO 3" V.T.R.
11. 3" VENT FROM BELOW AND UP.
12. BARIATRIC RESIDENCE ROOM TO USE PLUMBING FIXTURE P-114 AND WALL CARRIER FOR LAVATORY RATED AT 1000 lbs. INSTALL FIXTURES FOR BARIATRIC REQUIREMENTS.
13. 2" VENT FROM BELOW AND UP.
14. ROUTE 1/2" CW DOWN IN WALL TO ICE MAKER SUPPLY BOX. PROVIDE 20 GAUGE STAINLESS STEEL BOX WITH QUARTER TURN SWEAT VALVE.
15. 2" VENT FROM BELOW.
16. 3" WASTE FROM ABOVE. 1/2" COLD AND HOT WATER UP.
17. 1/2" COLD AND HOT WATER FROM BELOW.

RENOVATION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	NEW CONSTRUCTION
	CONNECT TO EXISTING AT THIS POINT



2 SECOND FLOOR PLUMBING PLAN
1/8" = 1'-0"



1 SECOND FLOOR PLUMBING PLAN
1/8" = 1'-0"

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON BERGLE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
SECOND FLOOR PLUMBING PLAN

Project Name
EXPAND DOMICILIARY BUILDING 64

Project Number
666-309

Date
13 MAR 2015

Drawing Number
1-P-202

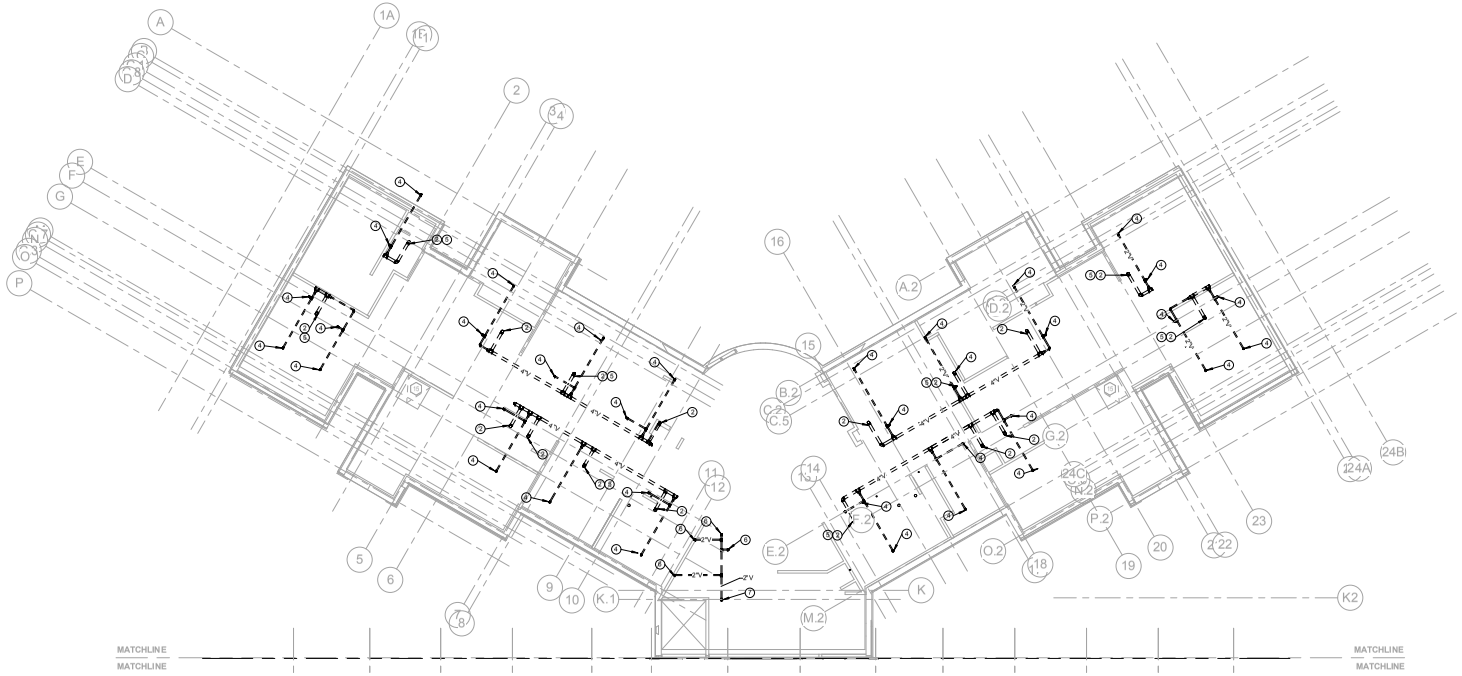
Dwg. of

Location
VAMC SHERIDAN WY
1898 FORT ROAD
SHERIDAN, WY 82801

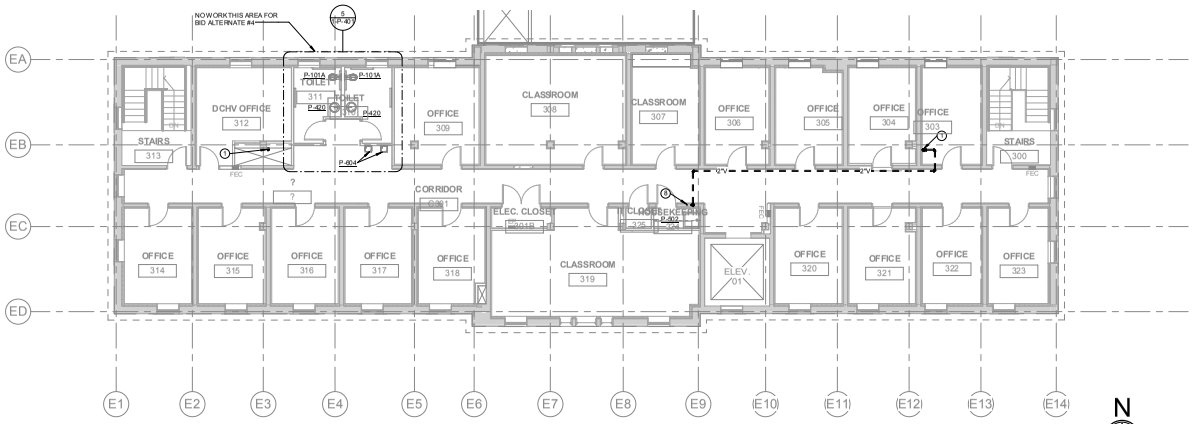
Building Number	Checked	Drawn
64	DAR	RLS

Office of Construction and Facilities Management

VA FORM 08-6231



ATTIC PLUMBING PLAN
NTS



THIRD FLOOR PLUMBING PLAN
NTS

KEYED NOTES

1. 3" VENT FROM BELOW AND UP AND 3" V.T.R.
2. 4" VENT FROM VENT/WASTE STACK FROM BELOW.
3. 2 1/2" VENT FROM VENT/WASTE STACK FROM BELOW.
4. 2" VENT FROM VENT/WASTE STACK FROM BELOW.
5. 4" VENT UP AND V.T.R.
6. 2" VENT FROM BELOW.
7. 2" VENT FROM BELOW, UP AND 3" V.T.R.
8. 1/2" COLD AND HOT WATER FROM BELOW.

RENOVATION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	NEW CONSTRUCTION
	CONNECT TO EXISTING AT THIS POINT

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON BERGLE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **THIRD FLOOR PLUMBING PLAN**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

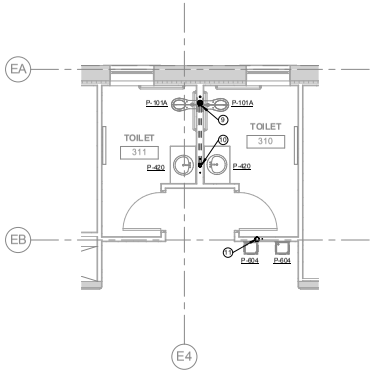
Location: **VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801**

Building Number: 64 | Checked: DAR | Drawn: RLS

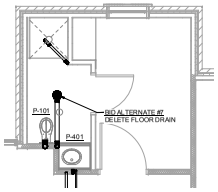
Project Number: **666-309**
Date: 13 MAR 2015
Drawing Number: **1-P-203**
Dwg. of

Office of Construction and Facilities Management

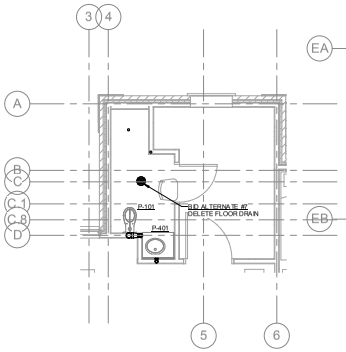
VA FORM 08-6231



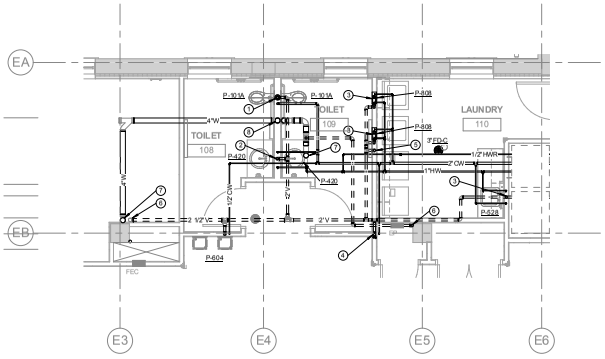
ENLARGED PLUMBING PLAN - LEVEL 3
WOMENS TOILET ROOM
5 1/4" = 1'-0"



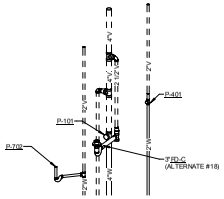
ENLARGED PLUMBING PLAN - TYP.
4 LEVEL 1 RESIDENCE
1/4" = 1'-0"



ENLARGED PLUMBING PLAN - TYP.
3 LEVEL 2 RESIDENCE
1/4" = 1'-0"

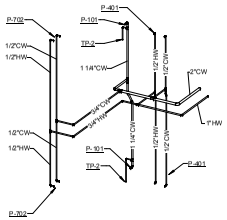


ENLARGED PLUMBING PLAN - LEVEL 1
2 TOILET RM.
1/4" = 1'-0"



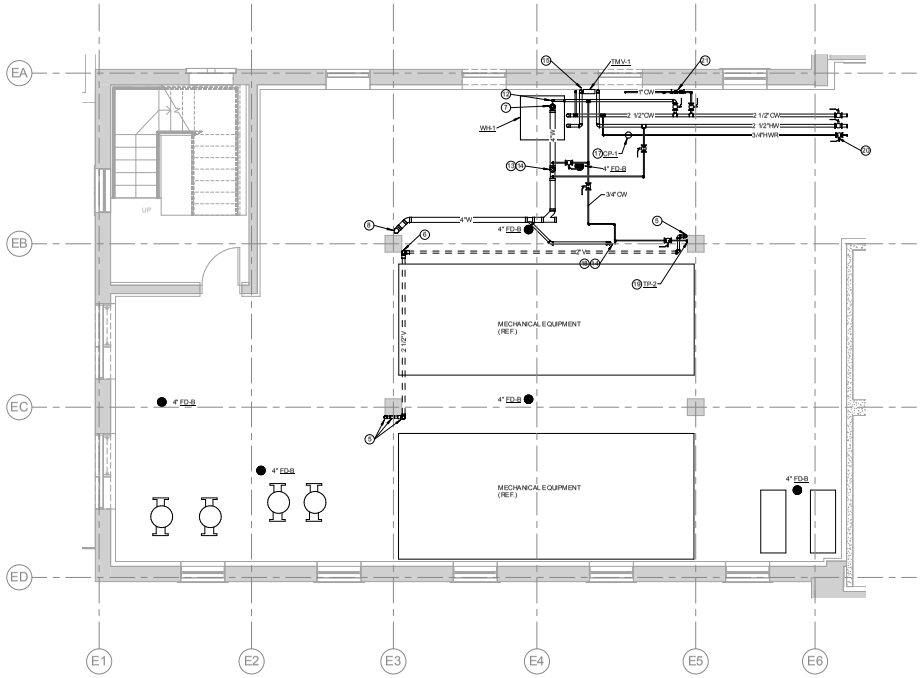
TYPICAL RESIDENCE WASTE RISER DIAGRAM

NO SCALE



TYPICAL RESIDENCE DOMESTIC WATER RISER DIAGRAM

NO SCALE



ENLARGED PLUMBING PLAN -
1 MECHANICAL ROOM
1/4" = 1'-0"

KEYED NOTES

1. 4" WASTE DOWN, 2" VENT UP, 1 1/2" CW DOWN TO SERVE FIXTURE.
2. 2" WASTE DOWN, 2" VENT UP, 3/4" HW AND 3/4" CW DOWN TO SERVE FIXTURE.
3. 2" WASTE DOWN, 2" VENT UP, 1/2" HW AND 1/2" CW DOWN TO SERVE FIXTURE.
4. 2" WASTE DOWN, 2" VENT UP, 1/2" CW DOWN TO SERVE FIXTURE.
5. 2" VENT FROM BELOW.
6. 2 1/2" VENT UP.
7. 4" WASTE FROM ABOVE.
8. 4" WASTE DOWN.
9. 4" WASTE DOWN, 2" VENT UP, 1 1/4" CW FROM BELOW TO SERVE FIXTURE.
10. 2" WASTE DOWN, 2" VENT UP, 3/4" HW AND 3/4" CW FROM BELOW TO SERVE FIXTURE.
11. 2" WASTE DOWN, 2" VENT UP AND 3" V.T.R., 1/2" CW FROM BELOW TO SERVE FIXTURE.
12. 1 1/2" CW UP.
13. 3/4" HW AND 3/4" CW UP.
14. 2" WASTE FROM ABOVE.
15. 1" CW, 2 1/2" HW (140 deg) DOWN, 2 1/2" HW (120 deg) UP. (TMV- 1) REFER TO DETAIL 5/1-P-501.
16. REFER TO TYPICAL RESIDENCE WASTE AND DOMESTIC WATER RISER DIAGRAMS FOR PIPE ROUTING AND SIZING.
17. REFER TO DETAIL 1/1-P-501.
18. 1/2" CW UP.
19. 1/2" CW DOWN TO TRAP PRIMER, TP-2. ROUTE TRAP PRIMER SUPPLY LINE TO AND CONNECT TO EACH FLOOR DRAIN(S). REFER TO DETAIL 6/1-P-501.
20. PROVIDE SHUT-OFF VALVES, ALL PIPES.
21. 1" CW DOWN TO RPBP MOUNTED ON WALL. ROUTE 1" TO MECHANICAL EQUIPMENT. COORDINATE WITH DIV 23 FOR EXACT CONNECTION LOCATION.

BUILDING IS
FULLY
SPRINKLERED

Revisions:	Date

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
ENLARGED PLUMBING PLANS AND RISER DIAGRAMS

Project Name
EXPAND DOMICILIARY BUILDING 64

Project Number
666-309

Date
13 MAR 2015

Drawing Number
1-P-401

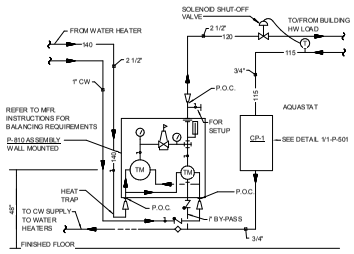
Dwg. of

Location
VAMC SHERIDAN WY
1898 FORT ROAD
SHERIDAN, WY 82801

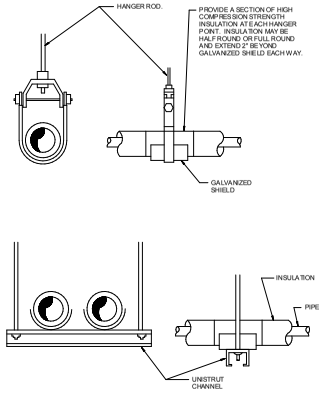
Building Number	Checked	Drawn
64	DAR	RLS

Office of
Construction
and Facilities
Management

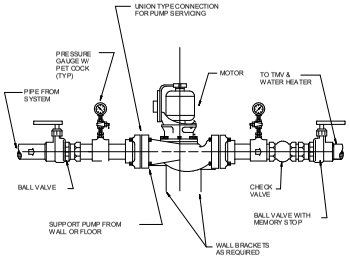
VA FORM 08-6231



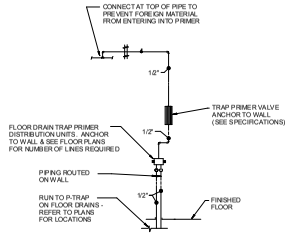
5 DETAIL - THERMOSTATIC MIXING VALVE
NOT TO SCALE



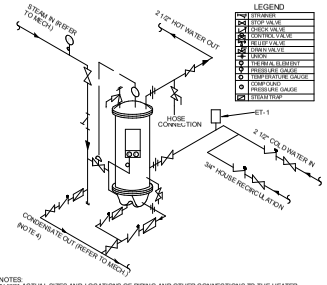
3 DETAIL - WATER PIPING HANGER
NOT TO SCALE



1 DETAIL - DOMESTIC WATER CIRCULATION PUMP
NOT TO SCALE

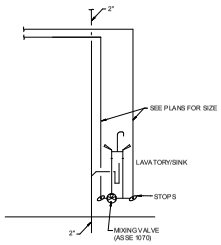


6 DETAIL - TRAP PRIMER DISTRIBUTION
NOT TO SCALE



NOTES:
1) FOR ACTUAL SIZES AND LOCATIONS OF PIPING AND OTHER CONNECTIONS TO THE HEATER, SEE DIMENSIONAL DRAWING.
2) PIPING TO THE UPPER HEATER HEAD SHOULD BE PROVIDED WITH UNIONS OR FLANGES WHICH ARE LOCATED BEYOND THE OUTSIDE DIAMETER OF THE HEAD TO PERMIT REMOVAL OF THE HEAD AND SHELL.
3) REDUCERS, ON THE WATER INLET SIDE, SHOULD BE LOCATED ADJACENT TO THE HEATER. EXPANSION FITTINGS, ON THE WATER INLET SIDE, SHOULD BE LOCATED AS FAR AS POSSIBLE FROM THE HEATER.
4) CONDENSATE DISCHARGE PIPING FROM HEATER AND STEAM TRAPS MUST BE ARRANGED TO PERMIT THE CONDENSATE TO DRAIN FREELY BY GRAVITY DOWNHILL TO ATMOSPHERE OR VENTED RECEIVER. DO NOT DRAIN TO CONDENSATE RETURN SYSTEM OR ANY SYSTEM THAT WILL CAUSE LIFT BACK PRESSURE.
5) DRAIN VALVE SHOULD BE PIPED DIRECTLY TO A FLOOR DRAIN. RELIEF VALVE & OVER-TEMP SOLENOID VALVE SHOULD BE PIPED VERTICALLY TO A HEIGHT 18" ABOVE THE FLOOR.

4 DETAIL - STEAM TO WATER HEAT EXCHANGER
NOT TO SCALE



ALL EXPOSED PIPE AND FITTING BELOW LAVATORY TO BE INSULATED. TRUEBRO LAV GUARD 2, OR EQUAL. INSTALL NEATLY WITH NO GAPS OR TWISTS.

2 DETAIL - TYPICAL LAVATORY/SINK PIPING
NOT TO SCALE

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: PLUMBING DETAILS

Project Name: EXPAND DOMICILIARY BUILDING 64

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number	Checked	Drawn
64	DAR	RLS

Project Number: 666-309
Date: 13 MAR 2015
Drawing Number: 1-P-501
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

MECHANICAL LEGEND

(NOT ALL SYMBOLS MAY BE USED)

DUCTWORK

SYMBOL	ABB.	DESCRIPTION
SA	SA	SUPPLY DUCT - UP
SA	SA	SUPPLY DUCT - DOWN
RA	RA	RETURN DUCT - UP
RA	RA	RETURN DUCT - DOWN
EA	EA	EXHAUST DUCT - UP
EA	EA	EXHAUST DUCT - DOWN
IE	IE	ISOLATION EXHAUST
LE	LE	LAB EXHAUST
		LOW PRESSURE SUPPLY
FD	FD	FIRE DAMPER
SD	SD	SMOKE DAMPER
FSD	FSD	FIRE/SMOKE DAMPER
MVD		MANUAL VOLUME DAMPER
M M		MOTORIZED DAMPER
A A		AIR FLOW MONITORING STATION
DP DP		DIFFERENTIAL PRESSURE SENSOR
SP SP		STATIC PRESSURE SENSOR
SD SD		SMOKE DETECTOR
CO CO		CARBON DIOXIDE DIETECTOR
H-XX H-XX		HUMIDIFIER WITH IDENTIFICATION
		TRANSITION
		RADIUS ELBOW
		SQUARE THROAT ELBOW WITH TURNING VANWES
		BRANCH DUCT CONNECTION RECTANGULAR OR ROUND BRANCH. RECTANGULAR TRUNK. MVD REQUIRED TO AIR DEVICES
R/D R/D		RISE/DROP IN ELEVATION
X X		SPLITTER WITH SPLIT SIZE SHOWN
X X		SPLITTER WITH SPLIT SIZES SHOWN
		BRANCH DUCT CONNECTION CONICAL TEE AND TAP ROUND TRUNK.
		BRANCH DUCT CONNECTION BELVED TEE. ROUND TRUNK. MVD REQUIRED TO AIR DEVICES.

SYMBOL	ABB.	DESCRIPTION
12"X12" FACE / 24"X24" FACE		SUPPLY DIFFUSER AND AIR QUANTITY. BLANK OUTS INDICATE THROW IN THIS DIRECTION
		RETURN GRILLE AND AIR QUANTITY
		EXHAUST GRILLE AND AIR QUANTITY
100		LINEAR FLOW SUPPLY DIFFUSER AND AIR QUANTITY
100		LINEAR DIFFUSER AND AIR QUANTITY
T		LINE VOLTAGE THERMOSTAT OR TEMP SENSOR WITH NO LOGICAL ADJUSTMENT
T S		TEMPERATURE SENSOR ONLY
T S		SENSOR W/ SETPOINT ADJUSTMENT & LED DISPLAY
T O		SENSOR W/ SETPOINT ADJUSTMENT, OCCUPANCY OVERRIDE & LED DISPLAY
T L		TEMP SENSOR WITH LCD DISPLAY AND LOCAL ADJUSTMENT
T L		TEMP SENSOR WITH LCD DISPLAY AND LOCAL ADJUSTMENT WITH SEPERATE OCCUPANCY CONTROL
H		HUMIDSTAT OR HUMIDITY SENSOR
P M		MANUAL PRESSURE MONITOR
P E		ELECTRICAL PRESSURE MONITOR
AMPM-1		MULTI-POINT MONITOR - (TYPE 1)
XXX		REHEAT COIL WITH IDENT.
X.XX-X XXX		VARIABLE VOLUME BOX WITH IDENT. & MAX CFM
XXX-X XXX		DUAL DUCT BOX WITH IDENT., MIN AND MAX CFM
		3/4" UNDERCUT AT DOOR
CFM		AIR FLOW RATE AT DOOR UNDERCUT
	AD	ACCESS DOOR
	AFF	ABOVE FINISHED FLOOR
	ATC	AUTOMATIC TEMPERATURE CONTROL PANEL
	BDD	BACKDRAFT DAMPER
	BOD	BOTTOM OF DUCT
	BOP	BOTTOM OF PIPE
	CB	CIRCUIT BREAKER
	CCT	CONTROL CIRCUIT TRANSFORMER
	DDC	DIRECT DIGITAL CONTROL
	EXH	EXHAUST
	ML	MARINE LIGHT
	MVD	MANUAL VOLUME DAMPER
	OA	OUTSIDE AIR
	OBD	OPPOSED BLADE DAMPER
	RA	RETURN AIR
	SA	SUPPLY AIR
	SWR	SIDEWALL REGISTER
	SWG	SIDEWALL GRILLE
	UNO	UNLESS NOTED OTHERWISE
	VFD	VARIABLE FREQUENCY DRIVE

MECHANICAL LEGEND

(NOT ALL SYMBOLS MAY BE USED)

PIPING

SYMBOL	ABB.	DESCRIPTION
CHR	CHR	CHILLED WATER RETURN
CHS	CHS	CHILLED WATER SUPPLY
PCHR	PCHR	PRIMARY CHILLED WATER RETURN
PCHS	PCHS	PRIMARY CHILLED WATER SUPPLY
CD	CD	CONDENSATE DRAIN
HWR	HWR	HEATING WATER RETURN
HWS	HWS	HEATING WATER SUPPLY
D	D	DRAIN LINE
HPS	HPS	HIGH PRESSURE STEAM
HPR	HPR	HIGH PRESSURE CONDENSATE RETURN
MPS	MPS	MEDIUM PRESSURE STEAM
MPR	MPR	MED. PRESSURE CONDENSATE RETURN
LPS	LPS	LOW PRESSURE STEAM
LPR	LPR	LOW PRESSURE CONDENSATE RETURN
CR	CR	STEAM CONDENSATE RETURN
PCR	PCR	PUMPED CONDENSATE RETURN
GCHS	GCHS	GLYCOL CHILL WATER SUPPLY
GCHR	GCHR	GLYCOL CHILL WATER RETURN
GCHS	GCHS	GLYCOL HEATING WATER SUPPLY
GCHR	GCHR	GLYCOL HEATING WATER RETURN
RD	RD	REFRIGERANT DISCHARGE
RL	RL	REFRIGERANT LIQUID
RS	RS	REFRIGERANT SUCTION
RV	RV	RELIEF VENT
		DIRECTION OF FLOW
		REDUCER
		SLOPE PIPE IN THIS DIRECTION
		ELBOW UP
		ELBOW DOWN
TEE TAKEOFF		BRANCH PIPE CONNECTION
		TEE - OUTLET DOWN
		TEE - OUTLET UP

SYMBOL	ABB.	DESCRIPTION
		GATE VALVE
		BALL VALVE
		BUTTERFLY VALVE
		CONTROL VALVE, 2 WAY
		CONTROL VALVE, 3 WAY
		CHECK VALVE
		STRAINER
		STRAINER & BLOWDOWN VALVE
		CIRCUIT SETTER
	PRV	PRESSURE REDUCING VALVE
		OS & Y VALVE
		COMPANION FLANGE
		UNION
		PIPE GUIDE
		ANCHOR
		FLEXIBLE CONNECTOR
		THERMOMETER WELL
		PETE'S PLUG
		VALVE WITH BLIND FLANGE
		CAP/PLUG
T		STEAM TRAP
T EOM	EOM	END OF MAIN DRIP
PRV	PRV	PRESSURE REDUCING VALVE
		PRESSURE GAGE
		THERMOMETER

MECHANICAL GENERAL NOTES

1. CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE PROJECT SCOPE, UTILITY CONNECTIONS, AND ALL BUILDING SERVICES.
2. HOUSEKEEPING PAD SIZE AND FLOOR DRAIN LOCATIONS SHALL BE COORDINATED WITH THE SIZE AND LOCATION OF EXACT EQUIPMENT TO BE INSTALLED.
3. STANDARD DETAILS ILLUSTRATED ON THE DRAWINGS SHALL BE APPLIED IN ALL CASES WHERE THE FEATURE OCCURS IN THE SYSTEM DESIGN.
4. ALL DUCTWORK SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS IN INCHES . REFER TO SPECIFICATION SECTION 15250 FOR INSULATION REQUIREMENTS.
5. MAJOR EQUIPMENT SHOWN ON THE PLANS AND ELEVATIONS ILLUSTRATE THE GENERAL ARRANGEMENT AND SPACE ALLOCATIONS . THE CONTRACTOR SHALL VERIFY THE SPACE REQUIREMENTS FOR EACH SYSTEM COMPONENT USING MANUFACTURER CERTIFIED SHOP DRAWINGS AND MAKE THE NECESSARY ADJUSTMENTS IN EQUIPMENT PLACEMENT AND CONNECTION IN ORDER TO ACCOMODATE THE EXACT EQUIPMENT TO BE INSTALLED.
6. SUPPORTS, ANCHOR BOLTS, AND HANGERS FOR ALL EQUIPMENT SPECIFIED IN DIVISION 15 SHALL CONFORM TO THE SPECIFICATIONS. MISCELLANEOUS STEEL BRACING SUPPORTS AND REINFORCING STEEL NEEDED TO SUPPORT EQUIPMENT SPECIFIED IN DIVISION 15 SHALL BE FURNISHED AS PART OF SCOPE OF WORK OF DIVISION 15.
7. DIFFUSERS, REGISTERS, AND GRILLES SHOWN ON THE MECHANICAL DRAWINGS SHALL BE IN ACCORDANCE WITH THE DIFFUSER AND GRILLE SCHEDULE. BRANCH DUCTS TO AIR DEVICES SHALL BE IN ACCORDANCE WITH THE SCHEDULE UNLESS NOTED OTHERWISE.
8. FIRE/SMOKE DAMPERS SHALL BE INSTALLED IN ALL DUCTWORK PENETRATIONS THROUGH FIRE/SMOKE WALLS, FLOORS, AND MECHANICAL FIRE RATED CHASES. DAMPERS SHALL MEET THE REQUIREMENTS OF THE FIRE/SMOKE WALL RATING AND BE "U.L" LABELED. REFER TO ARCHITECTURAL DRAWINGS FOR THE LOCATIONS OF ALL FIRE AND SMOKE WALLS.
9. SMOKE DETECTORS SHALL BE LOCATED AS INDICATED ON THE MECHANICAL PLANS AND IN CONFORMANCE WITH NFPA 90A AND LOCAL CODES.
10. CEILING DIFFUSER LOCATIONS SHALL BE AS SHOWN ON THE ARCHITECTURAL REFLECTED CEILING PLANS.
11. LINEAR DIFFUSERS, REGISTERS, GRILLES, AND CEILING DIFFUSERS SHALL BE FURNISHED WITH MOUNTING FRAMES AND FEATURES IN ACCORDANCE WITH THE CEILING TYPE.
12. PIPING CONNECTIONS TO AIR HANDLING UNIT COILS AND MAJOR EQUIPMENT SHALL BE FABRICATED WITH ISOLATION VALVES, FLANGES, AND/OR UNIONS POSITIONED TO ALLOW REMOVAL AND SERVICE OF THE COMPONENT PARTS.
13. THERMOMETER WELLS SHALL BE INSTALLED ON TOP OR SIDE OF HORIZONTAL PIPING IN ORDER TO RETAIN GAUGE FLUID AND SO AS TO BE EASILY READ FROM THE FLOOR.
14. PRESSURE GAUGES SHALL BE INSTALLED ON THE TOP OR SIDE OF HORIZONTAL PIPING SO AS TO BE EASILY READ FROM THE FLOOR.
15. CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT PRIOR TO CUTTING ANY OPENING IN THE STRUCTURE.
16. DRAWINGS ARE SCHEMATIC IN NATURE AND SHALL NOT BE SCALED. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING EXACT ROUTING OF ALL SERVICES WITH EXISTING CONDITIONS AND WITH ALL OTHER TRADES. REFER TO SPECIFICATIONS FOR SERVICE PRIORITY.
17. COORDINATE ANY DEVICE REQUIRING AN ACCESS PANEL WITH THE ARCHITECT.
18. WHERE WORK IN RENOVATED AREAS AFFECTS SYSTEMS IN OTHER AREAS OF THE HOSPITAL, THE CONTRACTOR SHALL COORDINATE THIS WORK WITH THE OWNER. THIS WORK SHALL BE DONE TO FIT HOSPITAL OPERATIONAL SCHEDULE AND MINIMIZE DISRUPTIONS/DISCOMFORT TO OCCUPIED AREAS. PROVIDE 48 HOURS WRITTEN NOTICE WITH ANTICIPATED DURATION OF OUTAGE.
19. ALL PENETRATIONS THROUGH RATED WALLS, FLOORS AND PARTITIONS MUST BE INSTALLED AND FIRESAFED TO MEET UL FIRE RESISTANCE LISTING DETAILS FOR THE PENETRATION.
20. COORDINATE WITH ALL TRADES FOR REQUIRED CEILING REMOVAL IN EXISTING BUILDING. NOTIFY THE ARCHITECT AND OWNER PRIOR TO COMMENCING REMOVAL. REMOVE ONLY THAT PORTION OF CEILING NECESSARY TO ACCESS AND COMPLETE THE NEW WORK. UPON COMPLETION OF THE ABOVE CEILING WORK, CEILING IS TO BE REINSTALLED. REPLACE ANY DAMAGED CEILING TILES WITH NEW TILES TO MATCH EXISTING.
21. UNLESS OTHERWISE NOTED ON PLANS, LOW RETURN AIR AND LOW EXHAUST AIR REGISTERS SHALL BE MOUNTED 8" ABOVE FINISHED FLOOR TO BOTTOM OF REGISTER.
22. AIR INTAKE THROUGH ROOF SHALL BE A MINIMUM OF 25 FEET FROM EXHAUST FAN OUTLETS AND PLUMBING VENTS THROUGH ROOF.
23. IN CENTRAL PLANTS AND MECHANICAL ROOMS, MAINTAIN A MINIMUM OF 6'-6" VERTICAL CLEARANCE IN AISLEWAYS, AND WALKWAYS TO OVERHEAD EQUIPMENT, PIPING, DUCTWORK, CONDUIT, ETC., WHEN POSSIBLE.

MECHANICALS SHEET INDEX

SHEET	DESCRIPTION
1-M-502	MECHANICAL CONTROLS DIAGRAM
1-M-503	MECHANICAL CONTROLS DIAGRAM
1-M-001	MECHANICAL LEGENDS AND GENERAL NOTES
1-M-002	MECHANICAL SCHEDULES
1-M-003	MECHANICAL SCHEDULES
1-M-004	MECHANICAL SCHEDULES
1-MSD-100	MECHANICAL DEMOLITION SITE PLAN
1-MS-100	MECHANICAL SITE PLAN
1-MD-100	BASEMENT AND FIRST FLOOR MECHANICAL DEMOLITION PLANS
1-MD-101	SECOND AND THIRD FLOOR MECHANICAL DEMOLITION PLANS
1-MD-102	ATTIC MECHANICAL DEMOLITION PLAN
1-M-200	BASEMENT MECHANICAL DUCTWORK PLAN
1-M-201	FIRST FLOOR MECHANICAL DUCTWORK PLAN
1-M-202	SECOND FLOOR MECHANICAL DUCTWORK PLAN
1-M-203	THIRD FLOOR - MECHANICAL DUCTWORK PLAN
1-M-204	MECHANICAL ATTIC PLAN
1-M-300	BASEMENT MECHANICAL HVAC PIPING PLAN
1-M-301	FIRST FLOOR MECHANICAL HVAC PIPING PLAN
1-M-302	SECOND FLOOR MECHANICAL HVAC PIPING PLAN
1-M-303	THIRD FLOOR MECHANICAL HVAC PIPING PLAN
1-M-400	ENLARGED MECHANICAL PIPING ROOM PLAN
1-M-401	ENLARGED MECHANICAL HVAC ROOM PLAN
1-M-402	ENLARGED MECHANICAL ROOM PLAN
1-M-500	MECHANICAL CONTROLS DIAGRAM
1-M-501	MECHANICAL CONTROLS DIAGRAM
1-M-600	MECHANICAL DETAILS
1-M-601	MECHANICAL DETAILS
1-M-602	MECHANICAL DETAILS
1-M-603	MECHANICAL DETAILS
1-M-604	MECHANICAL DETAILS

BUILDING IS FULLY SPRINKLERED

Revisions: Date

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **MECHANICAL LEGENDS AND GENERAL NOTES**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Project Number: **666-309**

Date: 13 MARCH 2015

Location: **VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801**

Building Number: 64 | Checked: DAR | Drawn: SOH

Drawing Number: **1-M-001**

Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

AIR HANDLER UNIT SCHEDULE

SYMBOL	SERVES	MFR	MODEL	SUPPLY FAN DATA: CFM TOTAL @ 3750'	CFM OA @ 3750'	ESP IN WC @ 3750'	TSP IN WC @ 3750'	NO FAN WHEELS	FAN WHEEL DIA/TYPE	APPROX FAN RPM	BHP (EA)	MIN HP (EA)	COIL DATA: SERVICE	FACE AREA	COIL CFM @ 3750'	AIR PD IN WC @ 3750'	ENTERING AIR TEMP: F DB	F WB	LEAVING AIR TEMP: F DB	F WB	SENS. MBH @ 3750'	TOTAL MBH @ 3750'	GPM (FPH)	WATER PD FT WC	ROW-FPI	STEAM HUMIDIFIER: MARK	CAPACITY LB/HR	ABSORPTION DISTANCE (INCHES)	UNIT ELECTICAL: FAN STARTERS	FAN VOLTAGE	CONTROL AND LIGHTING VOLTAGE	UNIT WEIGHT (LBS)	REMARKS
AHU-1	RESIDENCE AREAS	DAIKIN (OR EQUAL)	CAH035GDGC	15800	3700	3.9"	5.3"	1.0	30" AF	1665	20.72	25	HEATING	-	12.750	0.4"	29	-	60	-	375	375	25.0	8'	-	-	-	-	VFDs UNIT MNTD	480.0/60	24V	6580#	(01) THRU (16)
													COOLING	38.6	15,800	1.0"	79.6	63.2	54.9	53.4	353	426	80.0	10'	6/10								
AHU-2	OFFICE AREAS	DAIKIN (OR EQUAL)	CAH040GDGC	17200	6000	3.9"	5.3"	1.0	30" AF	1670	20.55	25	HEATING	-	11,025	0.4"	26	-	60	-	535	535	35.0	8'	-	-	-	-	VFDs UNIT MNTD	480.0/60	24V	7740#	(01) THRU (15)
													COOLING	38.6	17,200	0.55"	85.6	64.8	52.7	51.9	504	603	108.0	10'	6/10								

(01) EXTERNAL STATIC PRESSURE DOES NOT INCLUDE LOSSES FOR UNIT CASING OR COILS. IT DOES NOT INCLUDE FILTER LOSSES.
(02) TOTAL STATIC PRESSURE INCLUDES ALL UNIT PRESSURE DROPS.
(03) HEATING COIL CAPACITY BASED ON 15 PSIG STEAM.
(04) COOLING COIL BASED ON 44 F/58 F EW TL WT.
(05) PROVIDE VARIABLE FREQUENCY DRIVE ON SUPPLY FANS.
(06) UNIT SHALL BE PAINTED STANDARD COLOR FINISH.
(07) UNIT SHALL BE CAPABLE OF RUNNING AT 100% OUTSIDE AIR AND RELIEVING 100% OF THE RETURN AIR
(08) PROVIDE AIR BLENDER IN ECONOMIZER SECTION
(09) PROVIDE UNIT WITH CONDENSATE DRAIN PAN IN MIXED AIR SECTION.
(10) HUMIDIFIER IS FACTORY INSTALLED IN UNIT. STEAM HEAT EXCHANGER SHALL BE FIELD INSTALLED.
(11) HUMIDIFIER DISPERSION TUBE MODEL ULTRA-SORB L.V. X" HEADER, X" TUBE CENTER. PROVIDE DRAINE-KOOLER, WALL MOUNT.
(12) PROVIDE BACNET INTERFACE CARD WITH VFD.
(13) 40% PROPYLENE GLYCOL FOR PREHEAT COILS
(14) PROVIDE VERTICALLY SPLIT COIL SECTIONS FOR 50% WIDTH COIL SECTIONS, TO ACCOMMODATE LIMITED COIL PULL SPACE.
(15) INCLUDE SECTION FOR FUTURE HUMIDIFIER
(16) UNIT BECOMES 208W/3PH AS PART OF DEDUCT BID ALTERNATE NO. 2.

AIR COOLED CHILLER SCHEDULE

(01) = CHILLED WATER THERMOSTAT.
(02) = CHILLED WATER FLOW SWITCH.
(03) = ACROSS THE LINE STARTER
(04) = SEPARATE 120v CONTROL CIRCUIT.
(05) = POWER FACTOR CORRECTION CAPACITORS.
(06) = R-134A REFRIGERANT

MCA = MINIMUM CIRCUIT AMPS

NO.	TYPE	MANUFACTURER	MODEL NO.	REFRIG. CAPACITY (TONS)	COOLER: GPM	E.W.T.	L.W.T.	FOULING FACTOR	MAX. WTR P.D.	CONDENSER: E.A.T.	FANS: QTY	KW	UNIT: MAX. OVERCURRENT PROTECTION	MCA	ELECTRICAL	COMPRESSOR MOTOR: QTY	L.R.A.(EACH)	R.L.A.(EACH)	CHILLER STARTER: TYPE	LOCATION	DISC TYPE	ACCESSORIES	CHILLER OPER. WT.	REMARKS
CH-1	SCROLL	DAIKIN	AGZ-D-080D	81.1	195	54	44	0.0001	10	95	6	1.5	200	171	480/3/60	4.0	2 @ 229 2 @ 320	2 @ 30.8 2 @ 39.0	-	UNIT MOUNTED	NON-FUSED	-	5365 LBS	(01) TO (04)

ELECTRIC UNIT HEATER SCHEDULE

(A) = PROVIDE UNIT MOUNTED THERMOSTAT
(B) = MANUAL RESET INTERNAL THERMAL OVERLOAD TO DISCONNECT MOTOR AND ELEMENT
(C) = PROVIDE UNIT MOUNTED DISCONNECTING MEANS

P.S.C. = PERMANENT SPLIT CAPACITOR

IDENT.	SYSTEM	MANUFACTURER	MODEL NO.	TYPE	KW	VOLTAGE	CONTROL VOLTAGE	OPERATING WEIGHT (LBS)	REMARKS
EUH-1	ENTRY HEAT	TRANE	UHAA021	RECESSED WALL MOUNTED	2	277/1/60	24V	22#	(A)(B)(C)
EUH-2	ENTRY HEAT	TRANE	UHAA021	RECESSED WALL MOUNTED	2	277/1/60	24V	22#	(A)(B)(C)
EUH-3	LOADING DOCK	TRANE	SERIES 50 UHWA	WALL SURFACE MOUNTED	3	277/1/60	24V	24#	(A)(B)(C)

SPLIT DX SYSTEM SCHEDULE

(01) - WALL MTD T-STAT
(02) - PROVIDE LOW AMBIENT KIT, DOWN TO 0°F

IDENT.	SYSTEM	MANUFACTURER	INDOOR UNIT: MODEL NO.	INDOOR DB / WB	TOTAL MBH	CFM	WEIGHT LBS	ELECTRICAL INFO: MOCP	MCA	OUTDOOR CONDENSING UNIT: IDENT.	MODEL NO.	TOTAL CAPACITY MBH	AMBIENT DESIGN DB	MINIMUM AMBIENT DB	REFRIG.	WEIGHT LBS	ELECTRICAL INFO: MOCP	MCA	REMARKS
AC-1	SERVER ROOM	DAIKIN	FBQ-36	75/61	36	--	110#	15	2.4	CU-1	RZR-36	36	105F	0F	R-410A	285#	30	27	

FAN SCHEDULE

GENERAL

PRE = POWER ROOF EXHAUSTER
PRS = POWER ROOF SUPPLY FAN
SWSI = SINGLE WIDTH, SINGLE INLET
DWDI = DOUBLE WIDTH, DOUBLE INLET
BVS = BISLTED VENT SET
C.T. = CONTROL TRANSFORMER
E.P. = EMERGENCY POWER
EXP = EXPLOSION PROOF MOTOR & NON-SPARKING WHEEL

(1) - PREMIUM EFFICIENCY MOTOR (SEE SPECS.)

FAN ACCESSORIES

(01) = BELT GUARD
(02) = FIRESTAT
(03) = INERTIA BASE
(04) = ALUMINUM HOUSING
(05) = OUTLET SCREEN
(06) = INLET SCREEN
(07) = WEATHERPROOF HOUSING
(08) = MOTORIZED INLET DAMPERS
(09) = OUTLET GRAVITY DAMPERS
(10) = MOTORIZED INLET VANES
(11) = INLET GRAVITY DAMPERS
(12) = BACKDRAFT DAMPERS
(13) = 18" HIGH ROOF CURB
(14) = ACCESS DOOR & DRAIN
(15) = COMBO STARTER/DISCONNECT BY DIV. 26
(16) = PREWIRED DISCONNECT SWITCH IN FAN HOUSING
(17) = NFPA 96 VENTED CURB FOR 40" DBOH. HGT.
(18) = GREASE TRAP KIT
(19) = MOTOR COVER
(20) = HANGING BRACKETS
(21) = WALL HOUSING & GUARD
(22) = 2" DISPOSABLE FILTER
(23) = 1" WASHABLE ALUMINUM FILTERS
(24) = DUCT ADAPTORS
(25) = FAN SPEED CONTROLLER
(26) = HINGED BASE
(27) = INLET & OUTLET DUCT FLANGES
(28) = FAN HINGING KIT
(29) = DRAINABLE CASE
(50) = VFD WITH BACNET INTERFACE CARD
(51) = UNIT BECOMES 208V/3PH AS PART OF DEDUCT BID ALTERNATE NO. 2.

IDENT.	SYSTEM	FAN IN SERVICE AND INTERLOCKED WITH NOTED AHU	TYPE	MANUFACTURER	MODEL NO.	CFM	S.P. (IN WC)	MIN. STATIC EFF.	MOTOR (1): BHP	MIN HP	RPM	ELECT.	FAN ACCESSORIES	ISOLATORS	MAX. dBA @ 5FT	OPERATING WEIGHT (LBS)	REMARKS
RF-1	RETURN FAN	AHU-1	INLINE	LORENCOOK	245QMX	11000	1"	60%	3.04	5	1750	480/3/60	(05)(06)(30)(51)	SEE SPECS	71	650#	--
RF-2	RETURN FAN	AHU-2	INLINE	LORENCOOK	330QMX	15000	1"	68%	3.56	5	1750	480/3/60	(05)(06)(30)	SEE SPECS	65	1400#	--
EF-1-1	RESIDENT TOILETS	AHU-1	INLINE	LORENCOOK	165SQN	2000	1"	50%	0.682	1	1750	480/3/60	(05)(06)(19)	SEE SPECS	62	170#	--
EF-1-2	RESIDENT TOILETS	AHU-1	INLINE	LORENCOOK	165SQN	2000	1"	50%	0.682	1	1750	480/3/60	(05)(06)(19)	SEE SPECS	62	170#	--
EF-1-3	MED GAS	CONTINUOUSLY	INLINE	LORENCOOK	GN-162	80	0.375"	-	-	1/4	890	120/1/60	(05)(06)(24)	SEE SPECS	-	-	--
EF-2-1	TOILETS	AHU-2	INLINE	LORENCOOK	135SQN	1005	1"	51%	0.375	1/2	1750	120/1/60	(05)(06)(19)	SEE SPECS	65	135#	--
EF-2-2	TOILETS	AHU-2	INLINE	LORENCOOK	70SQN	200	0.375"	18%	0.075	1/8	1750	120/1/60	(05)(06)(19)	SEE SPECS	58	100#	--

HOT WATER UNIT HEATER SCHEDULE

(1) = PREWIRED DISCONNECT SWITCH IN FAN HOUSING
(2) = INLET BACK STAMPED LOUVER, OUTLET BOTTOM STAMPED LOUVER CONFIGURATION
(3) = INLET FRONT STAMPED LOUVER, OUTLET FRONT STAMPED LOUVER CONFIGURATION
(4) = 1" THROW AWAY FILTER TYPE
(5) = Y-SPLITTER DISCHARGE NOZZLE
(6) = INSTALL NO GREATER THAN 84" A.F.F.

SIZING BASED ON 180 DEG EWT AND 20 DEG WATER DROP

IDENT	SERVED	TYPE	MANUFACTURER & MODEL #	HEATING CAPACITY BTU/HR	FAN CFM	GPM/WPD	# ROWS	ELECT: VOLTAGE	MOTOR	REMARKS
UH-1	CRAWL SPACE	HORIZONTAL	TRANE S-36	26,400	550	2.7/1	-	120/1/60	25W	(1)(2)(4)
UH-2	CRAWL SPACE	HORIZONTAL	TRANE S-60	43,600	900	4.4/1	-	120/1/60	1/20 HP	(1)(2)(4)
UH-3	CRAWL SPACE	HORIZONTAL	TRANE S-60	43,600	900	4.4/1	-	120/1/60	1/20 HP	(1)(2)(4)
UH-4	CRAWL SPACE	HORIZONTAL	TRANE S-60	43,600	900	4.4/1	-	120/1/60	1/20 HP	(1)(2)(4)(5)
UH-5	CRAWL SPACE	HORIZONTAL	TRANE S-60	43,600	900	4.4/1	-	120/1/60	1/20 HP	(1)(2)(4)

WATER-WATER HEAT EXCHANGER SCHEDULE

(01) SYSTEM IS BASED ON 40% GLYCOL PRIMARY AND 50% GLYCOL SECONDARY
(02) PLATE AND FRAME HEAT EXCHANGER

ALTERNATE NO. #15 ELIMINATE SNOW MELT SYSTEM

IDENT.	SYSTEM	PRIMARY: GPM	EWT	LWT	SECONDARY: GPM	EWT	LWT	HEATING CAPACITY MBH	# OF PASSES	SCALE FACTOR	REMARKS
HX-3	SNOW MELT	20	180	150	20	105	130	250	N/A	0.0005	(01)(02)

AIR DISTRIBUTION DEVICE SCHEDULE

(1)=SIZES ARE BY THIS SCHEDULE UNLESS NOTED OTHERWISE.

(2)=CEILING DIFFUSERS ARE 4-WAY THROW UNLESS NOTED AS 3 OR 2-WAY. PROVIDE BLANK OFF AS SPECIFIED. INCREASE NECK SIZE ONE STEP FOR 2-WAY THROW.

(3)=REFER TO SPECIFICATION SECTION 233300 AND PLANS FOR TYPES OF AIR DEVICES USED.

(4)=REFER TO SYMBOLS LEGEND FOR IDENTIFICATION OF 12" x 12" AND 24" x 24" FACE AIR DEVICES.

(5)=ALL DIFFUSERS, GRILLES & REGISTERS SHALL HAVE OBD'S WHEN TAPS ARE MOUNTED ABOVE NON-ACCESSIBLE CEILINGS.

(6)=BRANCH DUCT SIZES ARE BY THIS SCHEDULE UNLESS NOTED OTHERWISE.

(7)=ALL VISIBLE SURFACES OF THE RETURN/EXHAUST PLENUM AND DUCT CONNECTION SHALL BE PAINTED FLAT BLACK.

(8)=SCHEDULE IS APPLICABLE FOR BOTH LAY-IN AND SURFACE MOUNTED AIR DEVICES.

(9)=AIR DEVICE FRAME STYLE SHALL MATCH THE CEILING TYPE. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLAN.

24" x 24" SQUARE PANEL FACE DIFFUSERS (SUPPLY): CFM RANGE	BRANCH DUCT SIZE: RECTANGULAR	ROUND	NECK SIZE
UP TO 120	8" x 6"	6"	6"
121 TO 210	10" x 6"	8"	8"
211 TO 330	12" x 8"	10"	10"
331 TO 470	14" x 8"	12"	12"
471 TO 640	16" x 10"	14"	14"
12" x 12" SQUARE PANEL FACE DIFFUSERS (SUPPLY)			
UP TO 120	8" x 6"	6"	6"
121 TO 180	10" x 6"	8"	8"

24" x 24" - 1/2 " EGG CRATE RETURN/EXHAUST REGISTERS & GRILLES: CFM RANGE	BRANCH DUCT SIZE: RECTANGULAR	ROUND	NECK SIZE
0 TO 80	8" x 6"	6"	22" x 22"
81 TO 160	10" x 6"	8"	22" x 22"
161 TO 300	12" x 8"	10"	22" x 22"
301 TO 470	14" x 10"	12"	22" x 22"
471 TO 640	16" x 10"	14"	22" x 22"
641 TO 770	20" x 10"	- ---	22" x 22"
771 TO 950	20" x 12"	- ---	22" x 22"
951 TO 1200	20" x 14"	- ---	22" x 22"
12" x 12" - 1/2 " EGG CRATE RETURN/EXHAUST REGISTERS & GRILLES			
0 TO 80	8" x 6"	6"	10" x 10"
81 TO 160	10" x 6"	8"	10" x 10"

SIDEWALL SUPPLY, RETURN, OR EXHAUST REGISTERS: CFM RANGE	DUCT NOMINAL NECK SIZE (1)
UP TO 120	6" x 6"
121 TO 240	10" x 6"
241 TO 300	12" x 6"
301 TO 400	12" x 8"
401 TO 500	12" x 10"
501 TO 620	18" x 10"
621 TO 780	18" x 12"
780 TO 1500	24" x 14"

ACCEPTABLE MANUFACTURER

LISTED MANUFACTURERS AND MODEL IS FOR BASIS OF DESIGN ONLY. SEE SPECIFICATIONS FOR OTHER ACCEPTABLE MANUFACTURER.

BUILDING IS FULLY SPRINKLERED

Revisions: Date

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Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **MECHANICAL SCHEDULES**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Project Number: **666-309**

Date: 13 MARCH 2015

Location: **VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801**

Building Number: 64 | Checked: DAR | Drawn: SOH

Drawing Number: **1-M-002**

Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

FAN COIL UNIT SCHEDULE

ALTERNATE #0 - SEE NOTE 6

PSC = PERMANENT OPERT. CAPACITOR MOTOR
SP = SHADED POLE MOTOR
FC = FORWARD CURVED FAN WHEEL

1. = PREWIRED DISCONNECT SWITCH
2. = 1" THROWAWAY FILTER TYPE
3. =SIZING BASED ON 150 DEG EWT AND 20 DEG WATER DROP
4. = EXTEND CABINET TO CONCEAL VALVES, CONTROLS, AND CONDENSATE PUMP
5. =FLOAT SWITCH IN MAIN CONDENSATE PAN.
6. = ALTERNATE #3 - OMIT COOLING, PROVIDE HEATING ONLY.

IDENT.	AREA SERVED	TYPE	MANUFACTURER MODEL NO.	FAN CFM	FAN EXT. S.P.	MINIMUM OUTSIDE AIR	FILTERS	HEATING COIL HOT WATER FLOW (GPM)	HEATING COIL CAPACITY (MBTU/HR)	HEATING COIL E.W.T.	HEATING COIL E.A.D.B.	HEATING COIL ROWS	HEATING COIL BRANCH PIPE SIZE	HEATING COIL MAX WTR PR. DROP	COOLING COIL CHILLED WATER FLOW (GPM)	COOLING COIL E.W.T.	COOLING COIL E.A.D.B.	COOLING COIL E.A.W.B.	COOLING COIL SENSIBLE CAPACITY (MBTU/HR)	COOLING COIL TOTAL CAPACITY (MBTU/HR)	COOLING COIL ROWS	COOLING COIL BRANCH PIPE SIZE	COOLING COIL MAX WTR PR. DROP	FAN W	FAN TYPE	FAN ELEC.	ACCESSORIES	REMARKS
FCU-1-1	STAIRWELL	FLOOR MNTD	McQUAY FCVS-04	354	-	0	1"	1.8	16.9	180	70	1	3/4"	2.0	-	-	-	-	-	-	-	-	-	71	PSC	120/1/60	1 2 3 4 5	6
FCU-1-2	STAIRWELL	FLOOR MNTD	McQUAY FCVS-04	354	-	0	1"	1.8	16.9	180	70	1	3/4"	2.0	-	-	-	-	-	-	-	-	-	71	PSC	120/1/60	1 2 3 4 5	6
FCU-1-3	STAIRWELL	FLOOR MNTD	McQUAY FCVS-02	201	-	0	1"	0.9	8.4	180	70	1	3/4"	1.0	-	-	-	-	-	-	-	-	-	53	PSC	120/1/60	1 2 3 4 5	6
FCU-1-4	STAIRWELL	FLOOR MNTD	McQUAY FCVS-02	201	-	0	1"	0.9	8.4	180	70	1	3/4"	1.0	-	-	-	-	-	-	-	-	-	53	PSC	120/1/60	1 2 3 4 5	6
FCU-2-1	STAIRWELL	FLOOR MNTD	McQUAY FCVS-02	201	-	0	1"	0.9	8.4	180	70	1	3/4"	1.0	-	-	-	-	-	-	-	-	-	53	PSC	120/1/60	1 2 3 4 5	6
FCU-2-2	STAIRWELL	FLOOR MNTD	McQUAY FCVS-02	201	-	0	1"	0.9	8.4	180	70	1	3/4"	1.0	-	-	-	-	-	-	-	-	-	53	PSC	120/1/60	1 2 3 4 5	6
FCU-3-1	STAIRWELL	FLOOR MNTD	McQUAY FCVS-04	374	-	0	1"	1.7	16.4	180	70	1	3/4"	3.0	-	-	-	-	-	-	-	-	-	71	PSC	120/1/60	1 2 3 4 5	6
FCU-3-2	STAIRWELL	FLOOR MNTD	McQUAY FCVS-04	374	-	0	1"	1.7	16.4	180	70	1	3/4"	3.0	-	-	-	-	-	-	-	-	-	71	PSC	120/1/60	1 2 3 4 5	6

STEAM TO WATER CONVERTOR SCHEDULE

STEAM PRESSURES: PSI AT CONVERTOR PSI AT CONTROL VALVE

1. = PROVIDE PSI W. P. TRAPS, 1/2" PSI PD
2. = 40% PROPYLENE GLYCOL ON FLUID SIDE

IDENT.	SYSTEM	GPM	E.W.T.	L.W.T.	HEATING CAPACITY BTU/HR	STEAM CONS. P/H	STEAM PRESS.	MAX. WATER P.D.	CONN. SIZE STM.	CONN. SIZE COND.	TRAP SIZE & NO.	SCALE FACTOR	REMARKS
HX-1	PREHEAT & SNOW MELT	60	150	180	900,000	927	70	10'					2
HX-2	REHEAT HOT WATER	60	150	180	900,000	927	70	10'					

PUMP SCHEDULE

01. IF ANY POINT ON PUMP CURVE EXCEEDS THIS H.P. GO TO NEXT LARGER SIZE MOTOR AND INCLUDE IN PUMP. MOTOR MAY BE SMALLER IF IT IS NON-OVERLOADING. QUOTE ALL CHANGES TO SWITCHES & ELECTRICAL WORK.
02. PROVIDE PUMP WITH INLET SUCTION DIFFUSER
03. =UNIT BECOMES 208V.3/PH. AS PART OF DEDUCT BID. ALTERNATE NO. 2.

A. VFD WITH BACNET INTERFACE CARD PROVIDED BY DIV. 26.
B. COMBO MOTOR STARTER AND DISCONNECT WITH HOA BY EC

E.P. = EMERGENCY POWER

IDENT.	SYSTEM	TYPE	MANUFACTURER	MODEL NO.	GPM	FEET HEAD	MOTOR MIN. H.P.	MOTOR RPM	MOTOR ELEC.	STARTER TYPE	STARTER LOCATION	STARTER DISC. TYPE	REMARKS
PHP-1	PREHEAT HOT WATER	INLINE	BELL & GOSSETT	SERIES 80 SC 1.5x1.5x9.5	60	65	3.0	1750	480/3/60	A	MECHANICAL ROOM	SEE ELEC	01 02 03
PHP-2	PREHEAT HOW WATER	INLINE	BELL & GOSSETT	SERIES 80 SC 1.5x1.5x9.5	60	65	3.0	1750	480/3/60	A	MECHANICAL ROOM	SEE ELEC	01 02 03
RHP-1	REHEAT HOT WATER	INLINE	BELL & GOSSETT	SERIES 80 SC 1.5x1.5x9.5	60	80	5.0	1750	480/3/60	A	MECHANICAL ROOM	SEE ELEC	01 02 03
RHP-2	REHEAT HOT WATER	INLINE	BELL & GOSSETT	SERIES 80 SC 1.5x1.5x9.5	60	80	5.0	1750	480/3/60	A	MECHANICAL ROOM	SEE ELEC	01 02 03
PRP-1	PREHEAT COIL RECIRC	INLINE	BELL & GOSSETT	SERIES 80 SC 1.5x1.5x7.5	35	18	3/4	1150	480/3/60	B	MECHANICAL ROOM	SEE ELEC	01 03
PRP-2	PREHEAT COIL RECIRC	INLINE	BELL & GOSSETT	SERIES 80 SC 2.5x2.5x7	50	18	3/4	1150	480/3/60	B	MECHANICAL ROOM	SEE ELEC	01 03
CHP-1	CHILLED WATER	END SUCTION	BELL & GOSSETT	1510 2E B	195	90	7.5	1750	480/3/60	A	MECHANICAL ROOM	SEE ELEC	01 02
CHP-2	CHILLED WATER	END SUCTION	BELL & GOSSETT	1510 2E B	195	90	7.5	1750	480/3/60	A	MECHANICAL ROOM	SEE ELEC	01 02
SMP-1	SNOW MELT SYSTEM	INLINE	BELL & GOSSETT	SERIES 80 SC 1.5x1.5x7.5	25	35	1.0	1150	277/1/60	A	MECHANICAL ROOM	SEE ELEC	01

STEAM P.R.V. SCHEDULE

STA. NO.	LOCATION	TOTAL # STM./HR.	NO. OF STAGES	NO. OF VALVES /STAGE	ENT. PSI	LVG. PSI	PIPE SIZES "A"	PIPE SIZES "B"	PIPE SIZES "C"	PIPE SIZES "D"	PIPE SIZES "E"	RELIEF VALVE SETTING	VALVE SIZE	REMARKS
S-1	MECH ROOM 208	3/100	1	1	70	15						100#		

FILTER SCHEDULE

01. = FILTERS 90% EFFICIENT AND BELOW SHALL BE RATED IN ACCORDANCE WITH ASHRAE 52-76. FILTERS 95% EFFICIENT AND ABOVE SHALL BE RATED IN ACCORDANCE WITH IES RP1 "LEAK-FREE SCAN" STANDARD.
02. = FURNISH FINAL FILTER CURB WITH FRONT/ TOP LOADING HEPA FILTER FRAME.
03. = FURNISH WITH UNIVERSAL TYPE 8 HOLDING FRAMES.
04. = PROVIDE ONE DWYER MAGNEHELIC GAUGE (PROVIDE TWO GAUGES FOR FILTERS IN TANDEM).
05. = COORDINATE WITH UNIT MANUFACTURER.

NOTE: SP RATINGS AT 500 FPM

SYSTEM	TYPE	MANUFACTURER	CFM	MAX.FACE VELOCITY FPM	MERV RATING	INITIAL S.P. " W.G.	FINAL S.P. " W.G.	QUANTITY	SIZE (W"x H"x D")	REMARKS
AHU-1	PRE	AMERICAN AIR FILTER	15800	500	7	0.30	1.0	05	05	01 04 05
AHU-1	MAIN	AMERICAN AIR FILTER	15800	500	13	0.65	1.5	05	05	01 03 04 05
AHU-2	PRE	AMERICAN AIR FILTER	17200	500	7	0.30	1.0	05	05	01 04 05
AHU-2	MAIN	AMERICAN AIR FILTER	17200	500	13	0.65	1.5	05	05	01 03 04 05

LOUVER SCHEDULE

A. = PROVIDE BIRD SCREEN
B. = PROVIDE GRAVITY DAMPER
C. = PROVIDE MOTORIZED DAMPER
D. = REFER TO ARCHITECTURAL DRAWING FOR TRIANGLE SHAPE LOUVER

NOTE: COORDINATE WITH ARCHITECTURAL AND STRUCTURAL TO VERIFY SIZES INDICATED

IDENT	SERVICE	MFR	MODEL	SIZE, IN W	SIZE, IN H	MATERIAL	% FREE AREA	REMARKS
L-1	OUTSIDE AIR	RUSKIN	ELF-375D	72	78	ALUMINUM	56%	A
L-2	OUTSIDE AIR	RUSKIN	ELF-375D	72	78	ALUMINUM	56%	A
L-3	RELIEF AIR	RUSKIN	ELF-375D	42	62	ALUMINUM	56%	A
L-4	RELIEF AIR	RUSKIN	ELF-375D	42	62	ALUMINUM	56%	A
L-5	EXHAUST AIR	RUSKIN	ELF-375D	42	62	ALUMINUM	56%	A
L-6	RELIEF AIR	RUSKIN	ELF-375D	2'-8"	4'-4"	ALUMINUM	56%	A
L-7	RELIEF AIR	RUSKIN	ELF-375D	2'-8"	4'-4"	ALUMINUM	56%	A
L-8	RELIEF AIR	RUSKIN	ELF-375D	2'-8"	4'-4"	ALUMINUM	56%	A
L-9	RELIEF AIR	RUSKIN	ELF-375D	2'-8"	4'-4"	ALUMINUM	56%	A
L-10	EXHAUST AIR	RUSKIN	ELF-375D	D	D	ALUMINUM	56%	A MIN. 2.5 SF FREE AREA
L-11	EXHAUST AIR	RUSKIN	ELF-375D	D	D	ALUMINUM	56%	A MIN. 2.5 SF FREE AREA
L-12	EXHAUST AIR	RUSKIN	ELF-375D	12	12	ALUMINUM	56%	A
L-13	EXHAUST AIR	RUSKIN	ELF-375D	8	8	ALUMINUM	56%	A
L-14	EXHAUST AIR	RUSKIN	ELF-375D	16	16	ALUMINUM	56%	A

BASE BOARD HEATER SCHEDULE

A. = COLOR SELECTED BY ARCHITECT
B. = COORDINATE LENGTH OF FINTUBE PRIOR TO ORDERING.

IDENT.	MODEL	MANUFACTURER	BTU/H OUTPUT PER FT	AVERAGE WATER TEMP.	DIMENSIONS W	DIMENSIONS H	DIMENSIONS L	NUMBER OF PASSES	REMARKS
BBH-1	UFLT-2	RUNTAL	410	135	3"	8-5/8"	5'-0"	3	A B
BBH-2	UFLT-2	RUNTAL	410	135	3"	8-5/8"	5'-0"	3	A B

AIR SEPARATOR SCHEDULE

01. RATED FOR 150 PSI @ 270 DEG
02. COMBINATION AIR/DIRT SEPARATOR

IDENT	MFR	MODEL	SYSTEM	TYPE	GPM	INLET/ OUTLET SIZE (IN)	MAX P.D. (FT)	OPER. WEIGHT (LBS)	REMARKS
AS-1	SPIROTHERM	VDN250	REHEAT WATER	COALESCING	80	2.5"/2.5"	2'-0"	150#	01 02
AS-2	SPIROTHERM	VDN400	CHILLED WATER	COALESCING	195	4"/4"	2'-0"	250#	01 02
AS-3	SPIROTHERM	VDN200	PREHEAT WATER	COALESCING	47	2"/2"	2'-0"	110#	01 02
AS-4	SPIROTHERM	VDN200	SNOW MELT	COALESCING	16	2"/2"	2'-0"	110#	01 02

EXPANSION TANK SCHEDULE

IDENT	MFR	MODEL	SYSTEM	TANK SIZE (GAL.)	PRESSURE REDUCING VALVE SETTING (PSI)	RELIEF VALVE SETTING (PSI)	INITIAL CHARGE (PSI)
ET-1	TACO	-	REHEAT WATER	120	-	-	-
ET-2	TACO	-	CHILLED WATER	80	-	-	-
ET-3	TACO	-	PREHEAT WATER	90	-	-	-
ET-4	TACO	-	SNOW MELT	30	-	-	-

ACCEPTABLE MANUFACTURER

LISTED MANUFACTURERS AND MODEL IS FOR BASIS OF DESIGN ONLY. SEE SPECIFICATIONS FOR OTHER ACCEPTABLE MANUFACTURER.

BUILDING IS FULLY SPRINKLERED

Revisions: Date

COLORADO LICENSED DONALD AARON HEARNE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH | Approved: Chief of FMS
Date: | Date:
Approved: Director | Approved: VA Energy Engineer
Date: | Date:

Drawing Title: MECHANICAL SCHEDULES

Project Name: EXPAND DOMICILIARY BUILDING 64

Project Number: 666-309

Date: 13 MARCH 2015

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number: 64 | Checked: DAR | Drawn: SOH

Drawing Number: 1-M-003

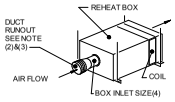
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

VARIABLE VOLUME REHEAT BOX SCHEDULE

(1)=BOXES SHALL BE PRESSURE INDEPENDENT. (REFER TO SPECIFICATIONS & CONTROL DRAWINGS FOR CONTROL TYPES)
(2)=TRANSITION AT BOX FROM DUCT RUNOUT SIZE SHOWN TO BOX INLET SIZE. (SEE DETAIL AT RIGHT).
(3)=IF DUCT RUNOUT EXCEEDS 12 FEET IN LENGTH, INCREASE RUNOUT DIAMETER 2" AND BY 4" IF LONGER THAN 25 FEET.
(4)=MINIMUM INLET STATIC PRESSURE REQUIRED TO OPERATE BOX SHALL NOT EXCEED THIS VALUE.
(5)=HEATING CAPACITIES ARE BASED THE MAXIMUM HEATING CFM SHOWN FOR THAT BOX.
(6)=MAXIMUM WATER PRESSURE DROP=5 FT.
(7)=N.C. LEVELS ARE FOR BOXES WITH NO EXPOSED SOUND LINER AT MAXIMUM CFM SHOWN.
(8)=MAXIMUM INLET S.P. = 2.5"
(9)=MAXIMUM UNIT AIR P.D. = 0.75" S.P.



IDENT.	BOX INLET SIZE	MAX SUPPLY CFM	MIN SUPPLY CFM	MAX HEATING CFM	MIN. INLET S.P.(4)	HEATING COIL						MAXIMUM HEIGHT	MAXIMUM N.C. (7)	
						E.A.T.	L.A.T.	BTU/HR (5)	GPM 150°F HOT WTR. (6)	WATER TEMP. DROP	BRANCH PIPE SIZE		DISCHARGE	RADIATED
V-1-1	6"	175	105	105	1.0	55 °F	95 °F	3970	0.5	28 °F	1/2" O.D.	1 2.5"	25	35
V-1-2	6"	175	105	105	1.0	55 °F	95 °F	3970	0.5	28 °F	1/2" O.D.	1 2.5"	25	35
V-1-3	6"	175	105	105	1.0	55 °F	95 °F	3970	0.5	28 °F	1/2" O.D.	1 2.5"	25	35
V-1-4	6"	300	120	120	1.0	55 °F	95 °F	4540	0.5	28 °F	1/2" O.D.	1 2.5"	25	35
V-1-5	6"	300	120	120	1.0	55 °F	95 °F	4540	0.5	28 °F	1/2" O.D.	1 2.5"	25	35
V-1-6	8"	600	420	420	1.0	55 °F	95 °F	15880	1.5	20 °F	1/2" O.D.	12.5"	25	35
V-1-7	6"	175	105	105	1.0	55 °F	95 °F	3970	0.5	28 °F	1/2" O.D.	1 2.5"	25	35
V-1-8	6"	175	105	105	1.0	55 °F	95 °F	3970	0.5	28 °F	1/2" O.D.	1 2.5"	25	35
V-1-9	6"	175	105	105	1.0	55 °F	95 °F	3970	0.5	28 °F	1/2" O.D.	1 2.5"	25	35
V-1-10	1' - 2"	2250	1505	1505	1.0	55 °F	100 °F	56890	4.0	20 ° F	3/4" O.D.	21"	33	35
V-1-11	6"	175	105	105	1.0	55 °F	95 °F	3970	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-12	6"	175	105	105	1.0	55 °F	95 °F	3970	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-13	6"	175	105	105	1.0	55 °F	95 °F	3970	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-14	8"	600	420	420	1.0	55 °F	95 °F	15880	1.5	20 °F	1/2" O.D .	12.5"	25	35
V-1-15	6"	300	105	105	1.0	55 °F	95 °F	4540	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-16	6"	300	105	105	1.0	55 °F	95 °F	3970	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-17	6"	300	105	105	1.0	55 °F	95 °F	3970	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-18	6"	175	105	105	1.0	55 °F	95 °F	3970	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-19	6"	175	105	105	1.0	55 °F	95 °F	3970	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-20	6"	175	120	120	1.0	55 °F	95 °F	4540	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-21	6"	175	120	120	1.0	55 °F	95 °F	4540	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-22	6"	300	120	120	1.0	55 °F	95 °F	4540	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-23	6"	300	140	140	1.0	55 °F	95 °F	5295	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-24	6"	300	140	140	1.0	55 °F	95 °F	5295	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-25	8"	600	420	420	1.0	55 °F	95 °F	15880	1.5	20 °F	1/2" O.D.	12.5"	25	35
V-1-26	6"	175	120	120	1.0	55 °F	95 °F	4540	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-27	6"	175	120	120	1.0	55 °F	95 °F	4540	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-28	6"	175	120	120	1.0	55 °F	95 °F	4540	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-29	10"	720	505	505	1.0	55 °F	90 °F	19090	1.5	20 °F	1/2" O. D.	16"	33	35
V-1-30	6"	175	120	120	1.0	55 °F	95 °F	4540	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-31	6"	175	120	120	1.0	55 °F	95 °F	4540	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-32	6"	175	120	120	1.0	55 °F	95 °F	4540	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-33	8"	600	420	420	1.0	55 °F	95 °F	15880	1.5	20 °F	1/2" O.D .	12.5"	25	35
V-1-34	6"	300	140	140	1.0	55 °F	95 °F	5295	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-35	6"	300	140	140	1.0	55 °F	95 °F	5295	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-36	6"	300	100	100	1.0	55 °F	95 °F	5295	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-37	6"	175	100	100	1.0	55 °F	95 °F	4540	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-38	6"	175	100	100	1.0	55 °F	95 °F	4540	0.5	28 °F	1/2" O.D.	12.5"	25	35
V-1-39	8"	850	600	600	1.0	55 °F	95 °F	22680	1.5	20 °F	1/2" O.D .	12.5"	25	35
V-1-40	8"	450	315	315	1.0	55 °F	95 °F	11910	1.0	20 °F	1/2" O.D .	12.5"	25	35
V-1-41	8"	175	315	315	1.0	55 °F	95 °F	11910	1.0	20 °F	1/2" O.D .	12.5"	25	35
V-2-1	1' - 0"	0	1135	1135	1.0	55 °F	90 °F	42905	3.0	20 °F	3/4" O.D.	17	33	35
V-2-2	8"	500	350	350	1.0	55 °F	95 °F	13230	1.0	20 °F	1/2" O.D.	12.5"	25	35

VARIABLE VOLUME REHEAT BOX SCHEDULE

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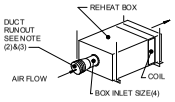

IDENT.	BOX INLET SIZE	MAX SUPPLY CFM	MIN SUPPLY CFM	MAX HEATING CFM	MIN. INLET S.P.(4)	HEATING COIL						MAXIMUM HEIGHT	MAXIMUM N.C. (7)	
						E.A.T.	L.A.T.	BTU/HR (5)	GPM 150°F HOT WTR. (6)	WATER TEMP. DROP	BRANCH PIPE SIZE		DISCHARGE	RADIATED
V-2-3	10"	750	525	525	1.0	55 °F	90 °F	19845	1.5	20 °F	1/2" O.D .	16"	33	35
V-2-4	10"	750	525	525	1.0	55 °F	90 °F	19845	1.5	20 °F	1/2" O.D .	16"	33	35
V-2-5	6"	200	140	140	1.0	55 °F	95 °F	5295	0.5	20 °F	1/2" O.D.	1 2.5"	25	35
V-2-6	6"	400	280	280	1.0	55 °F	95 °F	10585	1.0	20 °F	1/2" O.D.	12.5"	25	35
V-2-7	10"	300	210	210	1.0	55 °F	90 °F	7940	0.5	20 °F	1/2" O.D.	16"	33	35
V-2-8	10"	0	325	325	1.0	55 °F	90 °F	12285	1.0	20 °F	1/2" O.D.	1 6"	33	35
V-2-9	6"	0	280	280	1.0	55 °F	95 °F	10585	1.0	20 °F	1/2" O.D.	12 .5"	25	35
V-2-10	10"	0	680	680	1.0	55 °F	90 °F	25705	2.0	20 °F	1/2" O.D.	16"	33	35
V-2-11	10"	0	280	280	1.0	55 °F	90 °F	10585	1.0	20 °F	1/2" O.D.	16"	33	35
V-2-12	6"	0	260	260	1.0	55 °F	95 °F	9830	1.0	28 °F	1/2" O.D.	12 .5"	25	35
V-2-13	6"	0	395	395	1.0	55 °F	95 °F	14935	1.0	28 °F	1/2" O.D.	1 2.5"	25	35
V-2-14	10"	600	420	420	1.0	55 °F	90 °F	15880	1.5	20 °F	1/2" O. D.	16"	33	35
V-2-15	10"	600	420	420	1.0	55 °F	90 °F	15880	1.5	20 °F	1/2" O. D.	16"	33	35
V-2-16	6"	360	250	250	1.0	55 °F	95 °F	9450	1.0	20 °F	1/2" O.D.	12.5"	25	35
V-2-17	6"	465	325	325	1.0	55 °F	95 °F	12285	1.0	29 °F	1/2" O.D.	12.5"	25	35
V-2-18	6"	200	140	140	1.0	55 °F	95 °F	5295	0.5	29 °F	1/2" O.D.	12.5"	25	35
V-2-19	6"	530	370	370	1.0	55 °F	95 °F	13990	1.0	29 °F	1/2" O.D.	12.5"	25	35
V-2-20	6"	200	140	140	1.0	55 °F	95 °F	5295	0.5	29 °F	1/2" O.D.	12.5"	25	35
V-2-21	8"	600	420	420	1.0	55 °F	95 °F	15880	1.5	29 °F	1/2" O.D .	12.5"	25	35
V-2-22	8"	585	410	410	1.0	55 °F	95 °F	15550	1.0	30 °F	1/2" O.D .	12.5"	25	35
V-2-23	10"	1065	745	745	1.0	55 °F	90 °F	28165	2.0	20 °F	1/2" O D.	16"	33	35
V-2-24	8"	440	305	305	1.0	55 °F	95 °F	11530	1.0	20 °F	1/2" O.D .	12.5"	25	35
V-2-25	10"	690	210	210	1.0	55 °F	90 °F	7940	1.0	20 °F	1/2" O.D .	16"	33	35
V-2-26	6"	200	140	140	1.0	55 °F	95 °F	5295	1.0	20 °F	1/2" O.D.	12.5"	25	35
V-2-27	6"	350	245	245	1.0	55 °F	95 °F	9260	1.0	29 °F	1/2" O.D.	12.5"	25	35
V-2-28	10"	600	420	420	1.0	55 °F	90 °F	15880	1.5	20 °F	1/2" O. D.	16"	33	35
V-2-29	10"	0	385	385	1.0	55 °F	90 °F	14555	1.0	33 °F	1/2" O.D.	16"	33	35
V-2-30	10"	0	365	365	1.0	55 °F	90 °F	13800	1.0	33 °F	1/2" O.D.	16"	33	35
V-2-31	10"	600	600	600	1.0	55 °F	90 °F	22680	1.5	29 °F	1/2" O. D.	16"	33	35
V-2-32	6"	0	200	200	1.0	55 °F	95 °F	7560	1.0	33 °F	1/2" O.D.	12 .5"	25	35

ACOUSTICAL SILENCERS SCHEDULE

(A) = RETANGULAR SILENCER WITH MYLAR LINER

IDENT.	SYSTEM	MANUFACTURER	MODEL NO.	FACE DIMENSIONS		LENGTH (IN)	VELOCITY (FPM)	CFM	SILENCER PD (IN WG)	DYNAMIC INSERTION LOSS (db)							REMARKS
				W (IN)	H (IN)					63	125	250	500	1000	2000	4000	8000	
SA-1	AHU-1 SUPPLY	VIBRO-ACOUSTICS	RFL-HV	48	24	96	2000	13,405	0.35	8	8	13	17	25	23	23	8	(A)
SA-2	AHU-2 SUPPLY	VIBRO-ACOUSTICS	RFL-HV	50	20	96	2000	17,200	0.35	8	8	13	17	25	23	23	8	(A)
SA-3	AHU-1 SUPPLY	VIBRO-ACOUSTICS	RFL-HV	18	12	96	2000	2,395	0.35	8	8	13	17	25	23	23	8	(A)

NOTE: SNOW MELT LOOP PIPING UTILIZES 50% PROPYLENE GLYCOL SOLUTION

SNOW MELT / RADIANT FLOOR SCHEDULE

ALTERNATE #15
ELIMINATE SNOW MELT FOR EXTERIOR PATIO AND LOADING DOCK AREA

IDENT.	SERVED	MANIFOLD #	AREA S.F.	OUTDOOR TEMP.	TOTAL LOAD (BTU/HSF)	TOTAL LOAD (BTUH)	SURFACE TEMPERATURE	TUBING SIZE	TUBING AMOUNT	WATER DIFFER.	TUBING O.C.	SUPPLY TEMP.	NUMBER LOOPS	ACTIVE LOOP LENGTH	LEADER LENGTH	TOTAL LOOP LENGTH	GLYCOL %	FLOW LINEAR FT. GPM	LOOP FLOW GPM	TOTAL FLOW GPM	PRESSURE DROP (LINEAR FT.)	PRESSURE DROP (FT.)	REMARKS
SM-1	BACK PATIO	-	500	-10	185	92,500	38 DEG	5/8"	1000	25	6	130	6	166.70	10	186.70	50	0.0127	2.37	14.22	0.067	12.49	
SM-2	LOAD DOCK	-	200.0	-10	185	118,984	38 DEG	5/8"	400	25	6	130	3	133.35	25	183.33	50	0.0127	2.33	6.99	0.061	11.24	

ACCEPTABLE MANUFACTURER

LISTED MANUFACTURERS AND MODEL IS FOR BASIS OF DESIGN ONLY. SEE SPECIFICATIONS FOR OTHER ACCEPTABLE MANUFACTURER.

BUILDING IS FULLY SPRINKLERED

Revisions: Date

COLORADO LICENSED DONALD AARON HEARNE 48052 PROFESSIONAL ENGINEER

CONSULTANTS:

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Peaks to Plains Design
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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
MECHANICAL SCHEDULES

Project Name
EXPAND DOMICILIARY BUILDING 64

Project Number
666-309

Date
13 MARCH 2015

Location
VAMC SHERIDAN WY 1898
FORT ROAD
SHERIDAN, WY 82801

Building Number: 64
Checked: DAR
Drawn: SOH

Drawing Number
1-M-004
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

GENERAL NOTES

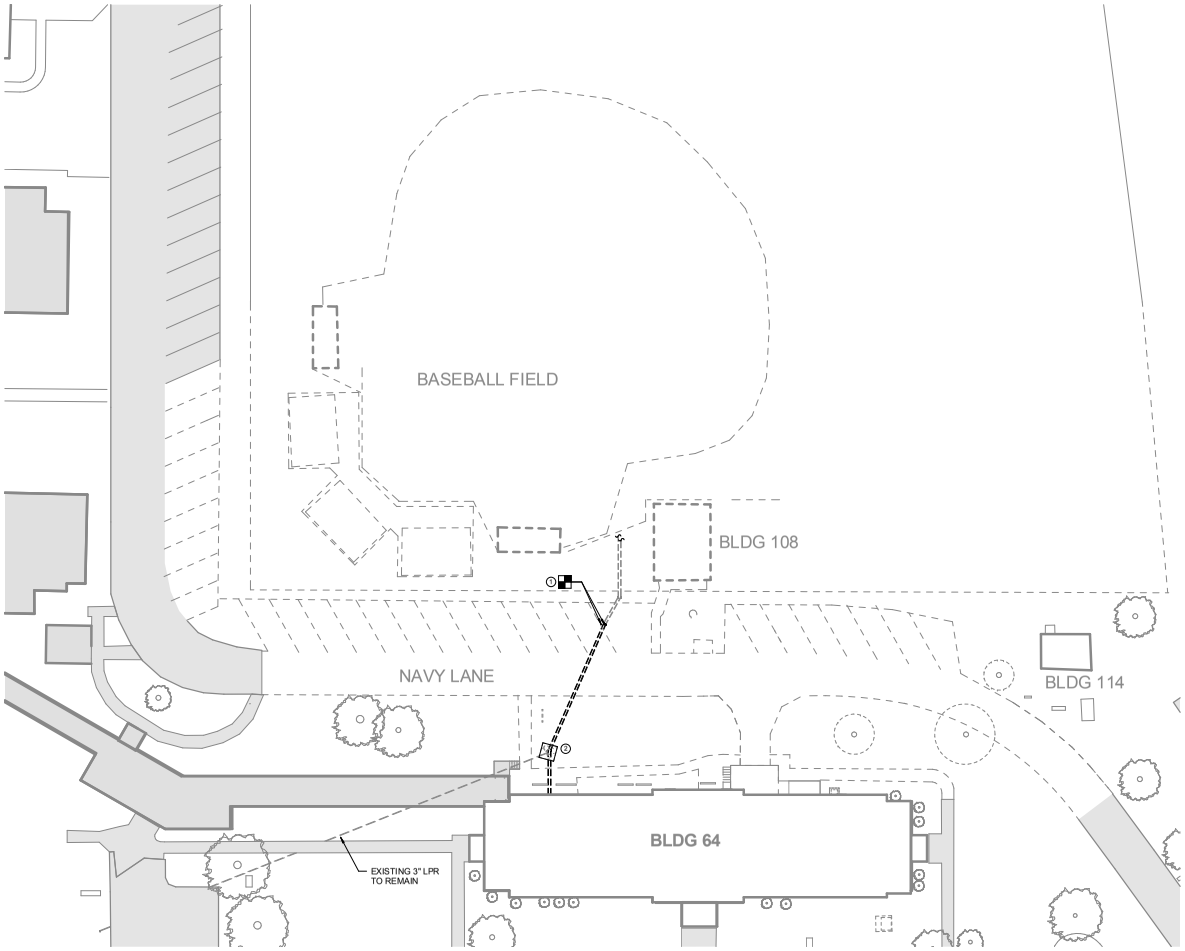
1. SEE SHEET 1-M-001 FOR MECHANICAL LEGENDS AND SYMBOLS.

KEYED NOTES

1. DEMO EXISTING BELOW GRADE STEAM PIPING AND CONDENSATE PIPING BACK TO THIS LOCATION. REFER TO CIVIL DRAWINGS FOR REQUIREMENTS. SIZES AND APPROXIMATE ROUTING SHOWN HERE FOR REFERENCE ONLY.
2. EXISTING VALVE VAULT TO DEMOLISH.

DEMOLITION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	EXISTING TO BE REMOVED
	DEMO TO THIS POINT



1 **Demo Site Plan**
SCALE: 1" = 20'-0"

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON HEARNE 48052 PROFESSIONAL ENGINEER

CONSULTANTS:

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
MECHANICAL DEMOLITION SITE PLAN

Location
VAMC SHERIDAN WY 1898
FORT ROAD
SHERIDAN, WY 82801

Project Name
EXPAND DOMICILIARY BUILDING 64

Building Number	Checked	Drawn
64	DAR	SOH

Project Number **666-309**
Date 13 MARCH 2015
Drawing Number **1-MSD-100**
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

GENERAL NOTES

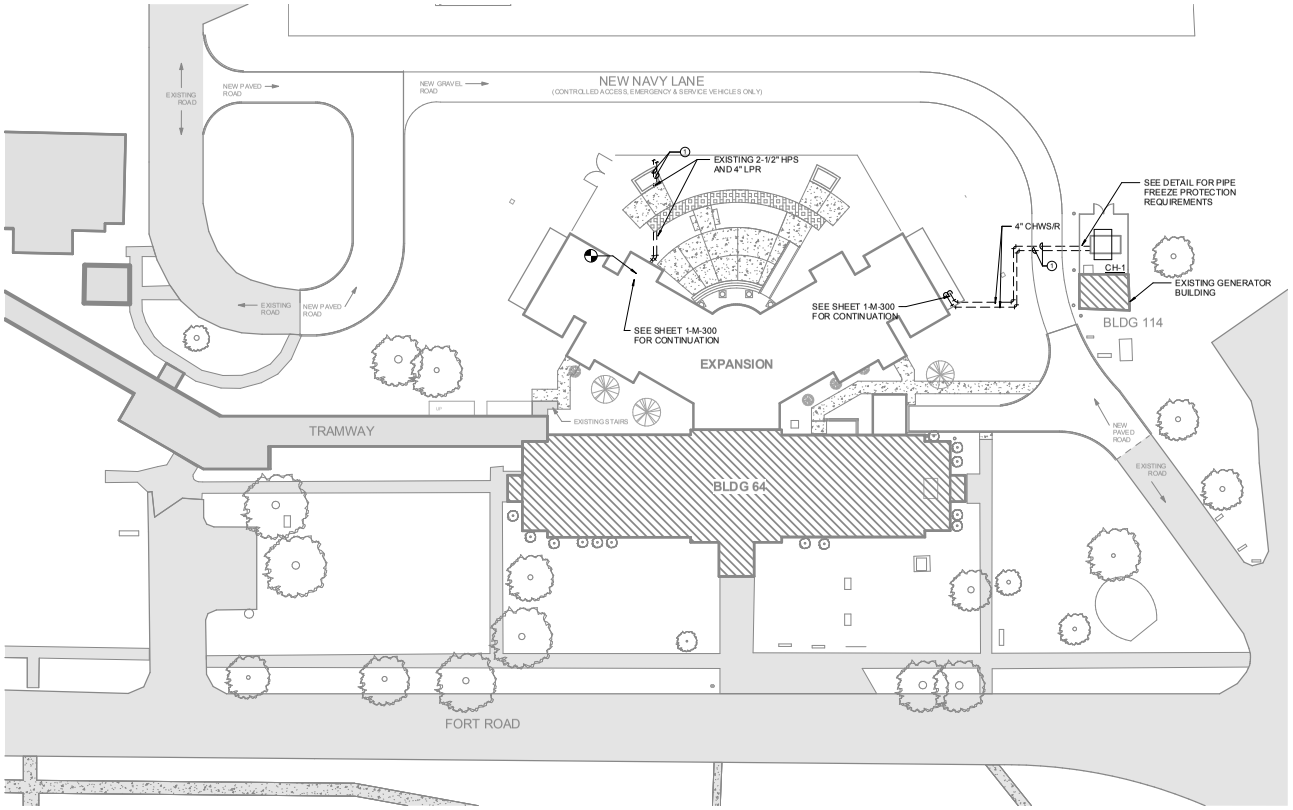
1. SEE SHEET 1-M-001 FOR MECHANICAL LEGENDS AND SYMBOLS.

KEYED NOTES

1. PIPING BELOW GRADE. REFER TO CIVIL DRAWINGS FOR REQUIREMENTS. SIZES AND APPROXIMATE ROUTING SHOWN HERE FOR REFERENCE ONLY.

RENOVATION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	NEW CONSTRUCTION
	CONNECT TO EXISTING AT THIS POINT



1 **MECHANICAL SITE PLAN**
SCALE: 1" = 20'-0"

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON HEARLE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **MECHANICAL SITE PLAN**

Location: **VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801**

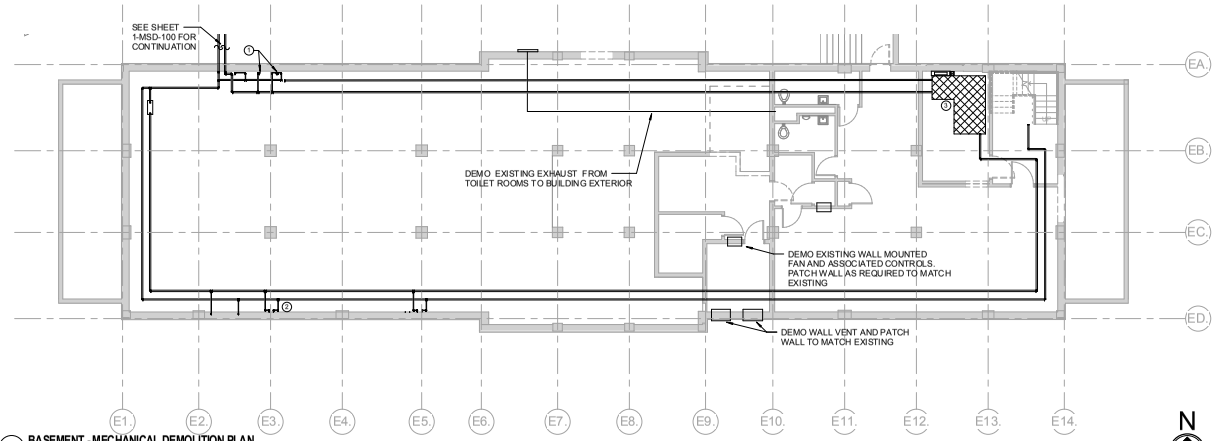
Project Name: **EXPAND DOMICILIARY BUILDING 64**

Building Number: 64 | Checked: DAR | Drawn: SOH

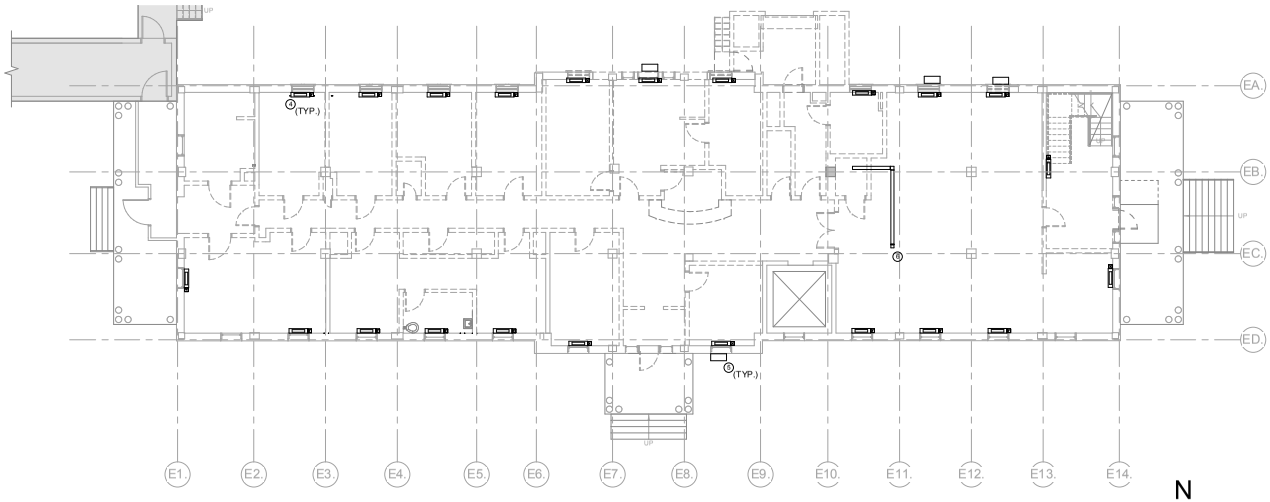
Project Number: **666-309**
Date: 13 MARCH 2015
Drawing Number: **1-MS-100**
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



1 **BASEMENT - MECHANICAL DEMOLITION PLAN**
SCALE: 1/8" = 1'-0"



2 **FIRST FLOOR - MECHANICAL DEMOLITION PLAN**
SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. SEE SHEET 1-M-001 FOR MECHANICAL LEGENDS AND SYMBOLS.
2. DETAIL OF ALL NECESSARY DEMOLITION IS NOT SHOWN ON THESE PLANS. THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INTENDED TO CONVEY THE SYSTEMS AND AREA OF DEMOLITION REQUIRED, BUT ARE NOT ALL INCLUSIVE OF EQUIPMENT AND RELATED SYSTEMS.

KEYED NOTES

1. DEMO STEAM PIPING RISER AND CONDENSATE RISER FROM FLOORS ABOVE (TYP.)
2. DEMO STEAM PIPING AND CONDENSATE PIPING BACK TO POINT OF ORIGIN.
3. ALL ASSOCIATED PIPING SHALL BE DEMO AND DISPOSED OF OFF-SITE IN THIS AREA.
4. DEMO AND REMOVE EXISTING STEAM RADIATOR AND ASSOCIATED PIPING AND DISPOSE OF OFF-SITE.
5. DEMO AND REMOVE EXISTING WINDOW A/C UNIT AND RETURN TO OWNER.
6. DEMO AND REMOVE EXISTING EXHAUST DUCTWORK AND ASSOCIATED FAN AND DISPOSE OF OFF-SITE.

DEMOLITION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	EXISTING TO BE REMOVED
	DEMO TO THIS POINT

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON HEARNE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
BASEMENT AND FIRST FLOOR MECHANICAL DEMOLITION PLANS

Project Name
EXPAND DOMICILIARY BUILDING 64

Location
VAMC SHERIDAN WY 1898
FORT ROAD
SHERIDAN, WY 82801

Building Number	Checked	Drawn
64	DAR	SOH

Project Number **666-309**
Date 13 MARCH 2015
Drawing Number **1-MD-100**
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

GENERAL NOTES

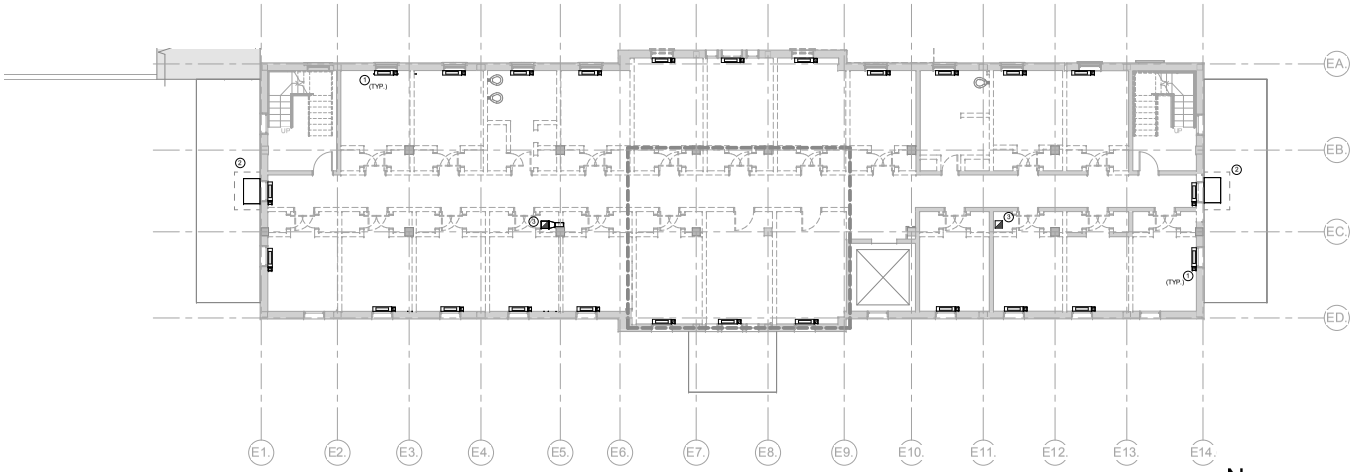
1. SEE SHEET 1-M-001 FOR MECHANICAL LEGENDS AND SYMBOLS.
2. DETAIL OF ALL NECESSARY DEMOLITION IS NOT SHOWN ON THESE PLANS. THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INTENDED TO CONVEY THE SYSTEMS AND AREA OF DEMOLITION REQUIRED, BUT ARE NOT ALL INCLUSIVE OF EQUIPMENT AND RELATED SYSTEMS.

KEYED NOTES

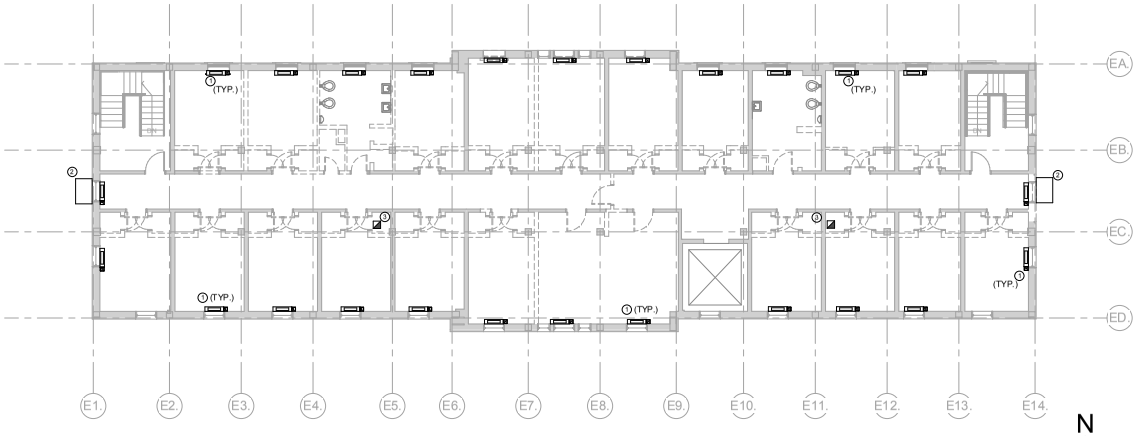
1. DEMO AND REMOVE EXISTING STEAM RADIATOR AND ASSOCIATED PIPING AND CONTROLS AND DISPOSED OF OFF-SITE.
2. DEMO AND REMOVE EXISTING EVAPORATIVE COOLING UNITS AND ASSOCIATED PIPINGS AND CONTROLS AND DISPOSED OF OFF-SITE.
3. DEMO AND REMOVE EXISTING EXHAUST DUCTWORK AND DISPOSED OF OFF-SITE.

DEMOLITION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	EXISTING TO BE REMOVED
	DEMO TO THIS POINT



1 SECOND FLOOR - MECHANICAL DEMOLITION PLAN
SCALE: 1/8" = 1'-0"



2 THIRD FLOOR - MECHANICAL DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON HEARLE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: SECOND AND THIRD FLOOR MECHANICAL DEMOLITION PLANS

Project Name: EXPAND DOMICILIARY BUILDING 64

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number: 64 | Checked: DAR | Drawn: SOH

Project Number: 666-309

Date: 13 MARCH 2015

Drawing Number: 1-MD-101

Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

GENERAL NOTES

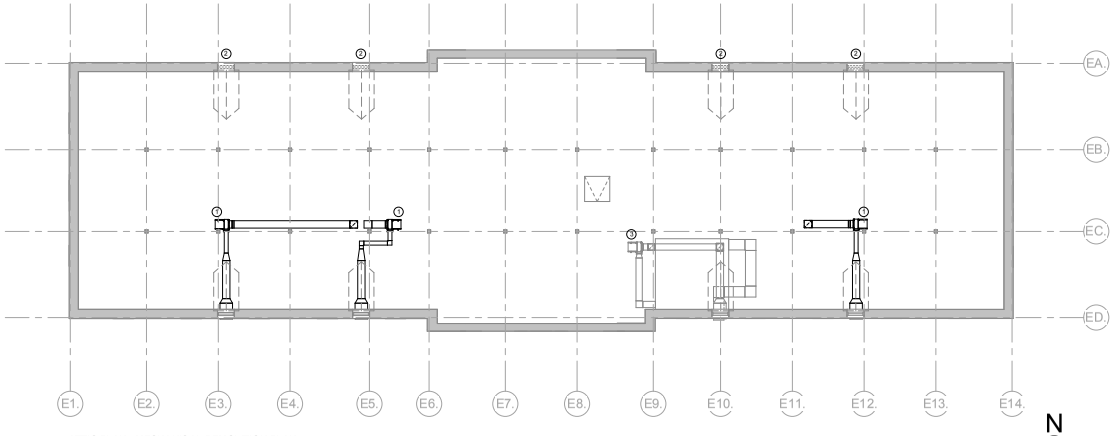
1. SEE SHEET 1-M-001 FOR MECHANICAL LEGENDS AND SYMBOLS.
2. DETAIL OF ALL NECESSARY DEMOLITION IS NOT SHOWN ON THESE PLANS. THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INTENDED TO CONVEY THE SYSTEMS AND AREA OF DEMOLITION REQUIRED, BUT ARE NOT ALL INCLUSIVE OF EQUIPMENT AND RELATED SYSTEMS.

KEYED NOTES

1. DEMO AND REMOVE EXHAUST FAN AND ASSOCIATED DUCTWORK AND DISPOSED OF OFF-SITE.
2. EXISTING LOUVER TO BE REMOVED. COORDINATE WITH ARCHITECTURAL.
3. EXISTING ELEVATOR SHAFT EXHAUST AND DUCTWORK TO REMAIN.

DEMOLITION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	EXISTING TO BE REMOVED
	DEMO TO THIS POINT



1 ATTIC PLAN - MECHANICAL DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

BUILDING IS FULLY SPRINKLERED

Revisions: Date

COLORADO LICENSED DONALD AARON HEARLE 48052 PROFESSIONAL ENGINEER

CONSULTANTS:

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: ATTIC MECHANICAL DEMOLITION PLAN

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Project Name: EXPAND DOMICILIARY BUILDING 64

Building Number: 64 | Checked: DAR | Drawn: SOH

Project Number: 666-309
Date: 13 MARCH 2015
Drawing Number: 1-MD-102
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

GENERAL NOTES

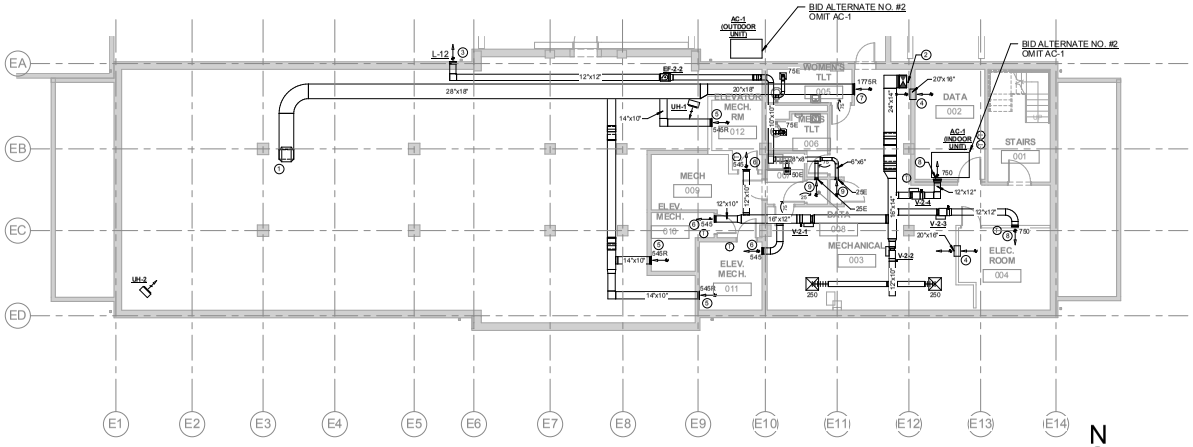
1. SEE SHEET 1-M-001 FOR MECHANICAL LEGENDS AND SYMBOLS.

KEYED NOTES

1. 28x18 RETURN DUCT UP TO ABOVE WITH FIRE DAMPER AT FLOOR PENETRATION.
2. 24x14 SUPPLY DUCT FROM ABOVE WITH FIRE DAMPER AT FLOOR PENETRATION.
3. 12x12 EXHAUST LOUVER. MOUNT LOUVER 1'-0" ABOVE GRADE.
4. 20x16 SIDEWALL TRANSFER GRILLE, TITUS MODEL 350-RL (OR EQUAL). BALANCE TO 750 CFM. MOUNT GRILLE ON BOTH SIDE 7'-8" A.F.F.
5. 14x10 SIDEWALL RETURN GRILLE, TITUS MODEL 350-RL (OR EQUAL). BALANCE TO 545 CFM.
6. 12x10 SIDEWALL SUPPLY GRILLE, TITUS MODEL 350-RS (OR EQUAL). BALANCE TO 545 CFM.
7. 20x18 SIDEWALL RETURN GRILLE, TITUS MODEL 350-RL (OR EQUAL). BALANCE TO 1775 CFM. MOUNT RETURN GRILL 7'-6" A.F.F.
8. 12x12 SIDEWALL SUPPLY GRILLE, TITUS MODEL 350-RL (OR EQUAL). BALANCE TO 750 CFM.
9. 6x6 SIDEWALL EXHAUST GRILLE, TITUS MODEL 350RL (OR EQUAL). BALANCE TO 25 CFM. MOUNT GRILLE 6'-0" A.F.F.

RENOVATION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	NEW CONSTRUCTION
	CONNECT TO EXISTING AT THIS POINT



1 BASEMENT - MECHANICAL DUCTWORK PLAN
SCALE: 1/8" = 1'-0"

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON HEARNE 48052 PROFESSIONAL ENGINEER

CONSULTANTS:

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: BASEMENT MECHANICAL DUCTWORK PLAN

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Project Name: EXPAND DOMICILIARY BUILDING 64

Building Number	Checked	Drawn
64	DAR	SOH

Project Number: 666-309

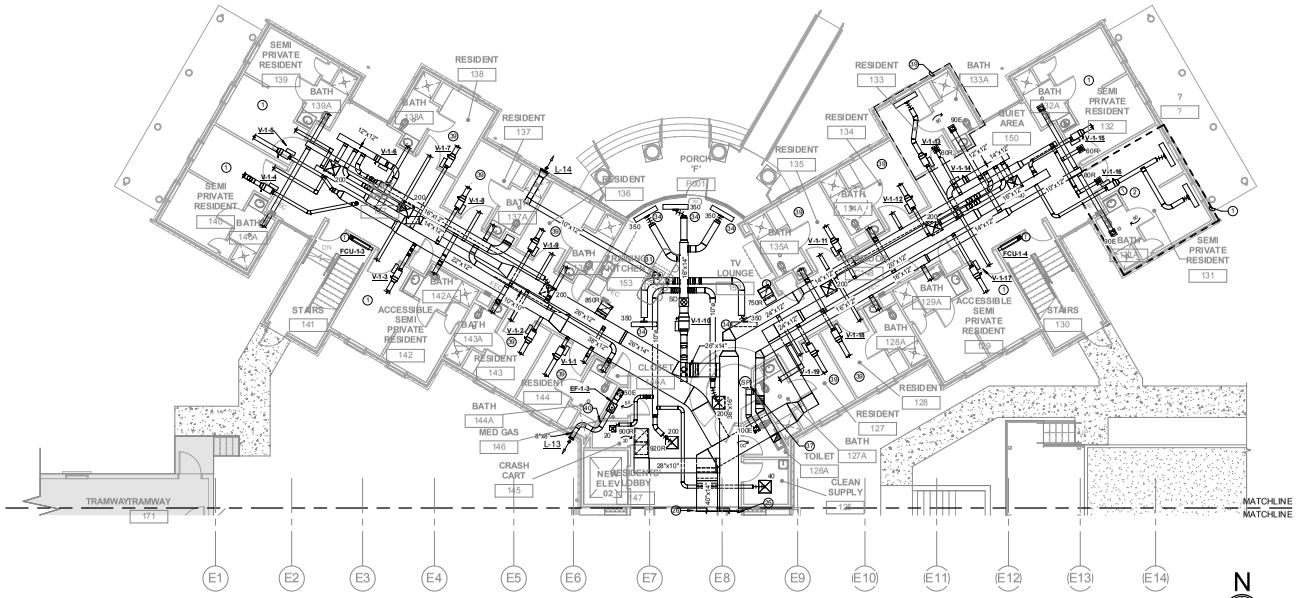
Date: 13 MARCH 2015

Drawing Number: 1-M-200

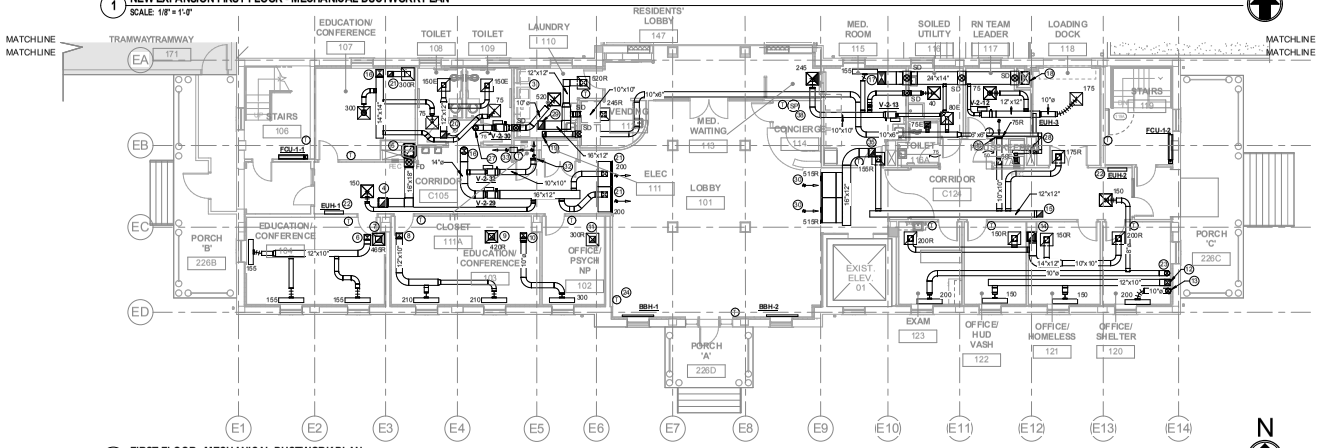
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



1 NEW EXPANSION FIRST FLOOR - MECHANICAL DUCTWORK PLAN
SCALE: 1/8" = 1'-0"



2 FIRST FLOOR - MECHANICAL DUCTWORK PLAN
SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. SEE SHEET 1-M-001 FOR MECHANICAL LEGENDS AND SYMBOLS.
2. TYPICAL - COORDINATE BOX LOCATION FOR ALL RESIDENT ROOMS WITH LOCATION OF CEILING MOUNTED ACCESS PANEL AND REFLECTED CEILING PLAN. BOX SHALL BE LOCATED SUCH THAT VALVES AND CONTROLS ARE ACCESSIBLE FROM CEILING MOUNTED ACCESS PANEL.

KEYED NOTES

1. TYPICAL ROOM LAYOUT FOR RESIDENT ROOMS, UNLESS NOTED OTHERWISE. SEE VAV SCHEDULES FOR AIRFLOWS.
2. PROVIDE LOCKABLE ACCESS DOOR IN DRYWALL CEILING.
3. PROVIDE 8" DRYER VENT FROM EACH OF 2 DRYER UNITS TO WALL VENT.
4. RETURN DUCT UP TO MECHANICAL ROOM ON SECOND FLOOR WITH FIRE DAMPER AT FLOOR PENETRATION.
5. RETURN DUCT FROM CRAWL SPACE BELOW.
6. 12x10 SUPPLY DUCT DOWN FROM SECOND FLOOR FIRE DAMPER AT FLOOR PENETRATION.
7. 12x12 RETURN DUCT UP TO ABOVE SECOND FLOOR FIRE DAMPER AT FLOOR PENETRATION.
8. 12x10 SUPPLY DUCT DOWN FROM SECOND FLOOR FIRE DAMPER AT FLOOR PENETRATION.
9. 12x12 RETURN DUCT UP TO ABOVE SECOND FLOOR FIRE DAMPER AT FLOOR PENETRATION.
10. 12x10 SUPPLY DUCT DOWN FROM SECOND FLOOR FIRE DAMPER AT FLOOR PENETRATION.
11. 12x12 RETURN DUCT UP TO ABOVE SECOND FLOOR FIRE DAMPER AT FLOOR PENETRATION.
12. 12x10 SUPPLY DUCT DOWN FROM SECOND FLOOR FIRE DAMPER AT FLOOR PENETRATION.
13. 10"ø SUPPLY DUCT DOWN FROM SECOND FLOOR FIRE DAMPER AT FLOOR PENETRATION.
14. 14x12 RETURN DUCT UP TO ABOVE SECOND FLOOR FIRE DAMPER AT FLOOR PENETRATION.
15. 12x12 RETURN DUCT UP TO ABOVE SECOND FLOOR FIRE DAMPER AT FLOOR PENETRATION.
16. 14"ø SUPPLY DUCT DOWN FROM SECOND FLOOR WITH FIRE DAMPER AT FLOOR PENETRATION.
17. 24x14 SUPPLY DUCT DOWN FROM SECOND FLOOR WITH FIRE DAMPER AT FLOOR PENETRATION.
18. 24x14 SUPPLY DUCT DOWN TO BASEMENT LEVEL IN CHASE.
19. 10x8 EXHAUST DUCT UP TO ABOVE SECOND FLOOR WITH FIRE DAMPER AT FLOOR PENETRATION.
20. 12x12 EXHAUST DUCT UP TO ABOVE SECOND FLOOR WITH FIRE DAMPER AT FLOOR PENETRATION.
21. LINEAR SIDEWALL SUPPLY GRILLE, TITUS MODEL ML-38 (OR EQUAL). 2-3/4" SLOTS, INSULATED BACKING PLENUM. 4'-0" LENGTH x 0'-6" HIGH MAX., 200 CFM.
22. MOUNT EUH 12" A.F.F. EUH SHALL BE RECESSED IN WALL.
23. 10"ø SUPPLY DUCT DOWN FROM SECOND FLOOR WITH FIRE DAMPER AT FLOOR PENETRATION.
24. THERMOSTAT FOR VAV-2-18 LOCATED IN SECOND LEVEL MECHANICAL ROOM.
25. 36x16 RETURN DUCT UP TO MECHANICAL ROOM. SEE SHEET 1-M-401 FOR CONFIGURATION OF DUCTWORK PENETRATION INTO EXISTING MECHANICL ROOM. PROVIDE FIRE DAMPER IN DUCT PENETRATING MECHANICAL CHASE FROM EXISTING BUILDING.
26. 40x14 SUPPLY DUCT FROM MECHANICAL ROOM. SEE SHEET 1-M-401 FOR CONFIGURATION OF DUCTWORK ROUTING INTO EXISTING MECHANICAL. PROVIDE FIRE DAMPER IN DUCT PENETRATING MECHANICAL CHASE FROM EXISTING BUILDING.
27. 10"ø SUPPLY DUCT UP TO SECOND FLOOR MECHANICAL ROOM.
28. 6x6 EXHAUST DUCT UP TO SECOND FLOOR.
29. 16x12 RETURN DUCT UP TO SECOND FLOOR MECHANICAL ROOM.
30. LINEAR SIDEWALL RETURN GRILLE, TITUS MODEL MLR-38 (OR EQUAL). 2-3/4" SLOTS, INSULATED BACKING PLENU. 4'-0" LENGTH x0-6" HIGH MAX., 515CFM.
31. 10x12 EXHAUST DUCT FROM KITCHEN HOOD CONNECTION TO 18x16 DISCHARGE LOUVER
32. 10x10 SUPPLY GRILLE, TITUS MODEL 350-RS (OR EQUAL). BALANCE TO 200 CFM.
33. 10x10 TRANSFER DUCT.
34. LINEAR SUPPLY DIFFUSER, TITUS MODEL ML-38 (OR EQUAL). 2-3/4" SLOTS, INSULATED BACKING PLENUM. 4'-0" LENGTH x 0'-6" HIGH MAX., 350 CFM.
35. 16x12 RETURN DUCT UP TO SECOND FLOOR MECHANICAL ROOM.
36. 10x10 RETURN GRILLE, TITUS MODEL 350-RL (OR EQUAL). BALANCE TO 75 CFM.
37. AHU-2 SPACE STATIC PRESSURE SYMBOL.
38. AHU-1 SPACE STATIC PRESSURE SYMBOL.
39. TYPICAL ROOM LAYOUT FOR RESIDENT ROOMS, UNLESS NOTED OTHERWISE. SEE VAV SCHEDULES FOR AIRFLOWS.
40. DUCT PENETRATION OUT OF MED GAS WALL SHALL BE 1-HOUR RATED FIRE WRAP DUCT.

RENOVATION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	NEW CONSTRUCTION
	CONNECT TO EXISTING AT THIS POINT

BUILDING IS FULLY SPRINKLERED

Revisions: Date

COLORADO LICENSED DONALD AARON HEARNE 48052 PROFESSIONAL ENGINEER

CONSULTANTS:

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: FIRST FLOOR MECHANICAL DUCTWORK PLAN

Project Name: EXPAND DOMICILIARY BUILDING 64

Project Number: 666-309

Date: 13 MARCH 2015

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

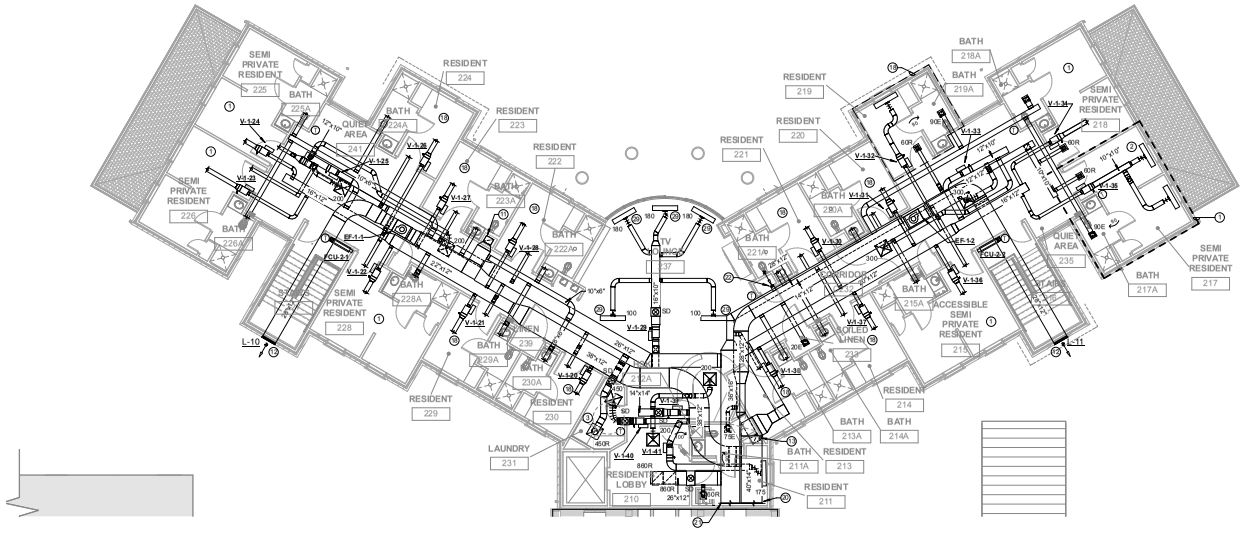
Building Number: 64 | Checked: DAR | Drawn: SOH

Drawing Number: 1-M-201

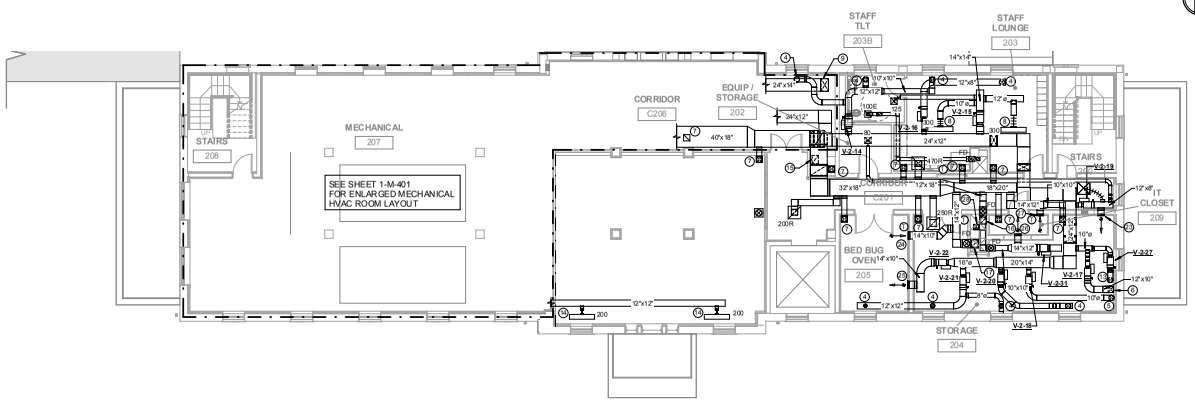
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



1 NEW EXPANSION SECOND FLOOR - MECHANICAL DUCTWORK PLAN
SCALE: 1/8" = 1'-0"



2 SECOND FLOOR - MECHANICAL DUCTWORK PLAN
SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. SEE SHEET 1-M-001 FOR MECHANICAL LEGENDS AND SYMBOLS.
2. TYPICAL - COORDINATE BOX LOCATION FOR ALL RESIDENT ROOMS WITH LOCATION OF CEILING MOUNTED ACCESS PANEL AND REFLECTED CEILING PLAN. BOX SHALL BE LOCATED SUCH THAT VALVES AND CONTROLS ARE ACCESSIBLE FROM CEILING MOUNTED ACCESS PANEL.

KEYED NOTES

1. TYPICAL ROOM LAYOUT FOR RESIDENT ROOMS, UNLESS NOTED OTHERWISE. SEE VAV SCHEDULE FOR AIRFLOWS.
2. PROVIDE LOCKABLE ACCESS DOOR IN DRYWALL CEILING.
3. PROVIDE 8" DRYER VENT FROM EACH OF 2 DRYER UNITS TO WALL VENT. COORDINATE WALL VENT LOCATION WITH ARCHITECT.
4. 8"ø SUPPLY DUCT UP TO LINEAR SLOT DIFFUSER LOCATED ON THIRD FLOOR WITH FIRE DAMPER AT FLOOR PENETRATION.
5. 10"ø SUPPLY DUCT DOWN TO FIRST FLOOR CEILING WITH FIRE DAMPER AT FLOOR PENETRATION.
6. 12x10 SUPPLY DUCT DOWN TO FIRST FLOOR CEILING WITH FIRE DAMPER AT FLOOR PENETRATION.
7. 10x10 RETURN DOWN FROM THIRD FLOOR WITH FIRE DAMPER AT FLOOR PENETRATION.
8. LINEAR SIDEWALL SUPPLY GRILLE. TITUS MODEL ML-38 (OR EQUAL). 2-3/4" SLOTS. INSULATED BACKING PLENUM. 4'-0" LENGTH x0'-6" HIGH MAX. BALANC CFM TO 300 CFM.
9. 24x14 SUPPLY DUCT DOWN TO FIRST FLOOR CEILING WITH FIRE DAMPER AT FLOOR PENETRATION.
10. NOT USED.
11. 16x12 EXHAUST DUCT FROM FIRST FLOOR CEILING BELOW WITH FIRE DAMPER AT FLOOR PENETRATION.
12. DISCHARGE EXHAUST DUCT AT GABLE LOUVER ABOVE STAIRWELL. DUCT SHALL PASS OVER TOP OF STAIRWELL.
13. 16x12 EXHAUST DUCT DOWN TO FIRST FLOOR CEILING WITH FIRE DAMPER AT FLOOR PENETRATION.
14. LINEAR CEILING DIFFUSER. TITUS MODEL ML-38 (OR EQUAL). 2-3/4" SLOTS. INSULATED BACKING PLENUM WITH 10" DIA. INLET AND RUNOUT DUCT. 4'-0" LENGTH. MAX. 200 CFM. ADJUST DISCHARGE OF AIR FOR VERTICAL THROW.
15. 16x12 RETURN DUCT DOWN TO FIRST FLOOR CEILING.
16. 12x8 RETURN DUCT DOWN TO FIRST FLOOR CEILING BELOW.
17. 14x12 RETURN DUCT DOWN TO FIRST FLOOR CEILING BELOW.
18. TYPICAL ROOM LAYOUT FOR RESIDENT ROOMS, UNLESS NOTED OTHERWISE. SEE VAV SCHEDULE FOR AIRFLOWS.
19. NOT USED.
20. 40x14 SUPPLY DUCT FROM MECHANICAL ROOM. SEE SHEET 1-M-401 FOR CONFIGURATION OF DUCTWORK ROUTING INTO MECHANICAL ROOM. DUCTWORK SHALL RUN FROM SECOND FLOOR CEILING INTO THIRD FLOOR ARCHITECTURAL CHASE AND TURN DOWN INTO MECHANICAL ROOM BELOW. PROVIDE FIRE DAMPER IN DUCT PENETRATING MECHANICAL CHASE FROM EXISTING BUILDING.
21. 36x16 RETURN DUCT FROM MECHANICAL ROOM. SEE SHEET 1-M-401 FOR CONFIGURATION OF DUCTWORK ROUTING INTO MECHANICAL ROOM. DUCTWORK SHALL RUN FROM SECOND FLOOR CEILING INTO THIRD FLOOR ARCHITECTURAL CHASE AND TURN DOWN INTO MECHANICAL ROOM BELOW. PROVIDE FIRE DAMPER IN DUCT PENETRATING MECHANICAL CHASE FROM EXISTING BUILDING.
22. 6x6 EXHAUST GRILLE, TITUS MODEL 350RL (OR EQUAL). BALANCE TO 20 CFM.
23. 12x6 SUPPLY GRILLE, TITUS MODEL 350RS (OR EQUAL). BALANCE TO 250 CFM.
24. 14x10 RETURN GRILLE, TITUS MODEL 350-RL (OR EQUAL). BALANCE TO 585 CFM.
25. 14x10 SUPPLY GRILLE, TITUS MODEL 350-RS (OR EQUAL). BALANCE TO 585 CFM.
26. 12x10 SUPPLY GRILLE, TITUS MODEL 350-RS (OR EQUAL). BALANCE TO 400 CFM.
27. 12x10 RETURN GRILLE, TITUS MODEL 350-RL (OR EQUAL). BALANCE TO 400 CFM
28. 10x10 SUPPLY DUCT UP TO THIRD FLOOR.
29. LINEAR SUPPLY DIFFUSER. TITUS MODEL M-L-38 (OR EQUAL). 2-3/4" SLOTS. INSULATED BACKING PLENUM. 4'-0" LENGTH x0'-6" HIGH MAX.

RENOVATION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	NEW CONSTRUCTION
	CONNECT TO EXISTING AT THIS POINT

BUILDING IS FULLY SPRINKLERED

Revisions: Date

COLORADO LICENSED DONALD AARON HEARNE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: SECOND FLOOR MECHANICAL DUCTWORK PLAN

Project Name: EXPAND DOMICILIARY BUILDING 64

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number: 64 | Checked: DAR | Drawn: SOH

Project Number: 666-309

Date: 13 MARCH 2015

Drawing Number: 1-M-202

Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

GENERAL NOTES

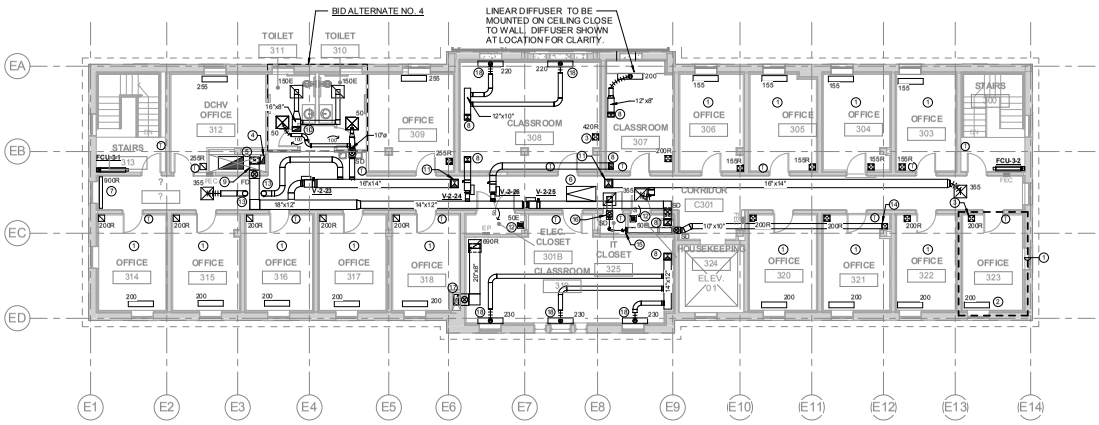
1. SEE SHEET 1-M-001 FOR MECHANICAL LEGENDS AND SYMBOLS.

KEYED NOTES

1. TYPICAL ROOM LAYOUT FOR OFFICE, UNLESS OTHERWISE NOTED.
2. 1'-6"x6" FLOOR MOUNTED LINEAR SUPPLY, TITUS MODEL CT-PP-3 (OR EQUAL.) PEINCIL PROOF LINEAR BAR. ROUTE DUCTS FROM FLOOR BELOW. VAV SHALL BE LOCATED ON 2ND FLOOR CEILING SPACE. (TYP.)
3. 1'-6"x6" FLOOR MOUNTED RETURN GRILLE, TITUS MODEL CT-RP-3 (OR EQUAL.) PEINCIL PROOF LINEAR BAR. ROUTE 10x10 DUCTS FROM FLOOR BELOW.
4. 16x8 EXHAUST DUCT DOWN TO MECHANICAL ROOM LOCATED BELOW.
5. 24x48 RETURN DUCT UP TO ATTIC ABOVE.
6. ATTIC ACCESS.
7. 5'x6" LINEAR RETURN REGISTER. ROUTE 10x20 DUCT DOWN TO MECHANICAL ROOM LOCATED BELOW.
8. ROUTE DUCTWORK UP INTO ATTIC SPACE ABOVE BEAM.
9. 18x12 SUPPLY DUCT DOWN TO MECHANICAL ROOM LOCATED BELOW.
10. 10x8 EXHAUST DUCT DOWN FROM ATTIC ABOVE.
11. ROUTE SUPPLY DUCTWORK UP INTO ATTIC SPACE TO AVOID VAV BOXES.
12. 6x6 EXHAUST DUCT UP TO ATTIC WITH FIRE DAMPER AT SLAB PENETRATION.
13. 10"ø SUPPLY DUCT UP INTO ATTIC SPACE TO AVOID CROSSING OF 18x12 DUCT.
14. 10x10 SUPPLY DUCT UP FROM SECOND FLOOR.
15. 10x10 SUPPLY GRILLE, TITUS MODEL 350-RS (OR EQUAL.). BALANCE TO 200 CFM. MOUNT 6" BELOW CEILING.
16. 10x10 TRANSFER GRILLE, TITUS MODEL 350-RL (OR EQUAL). BALANCE TO 200 CFM. MOUNT 6" BELOW CEILING.
17. 20x8 RETURN DUCT DOWN TO MECHANICAL ROOM LOCATED BELOW.
18. LINEAR SUPPLY DIFFUSERS, TITUS MODEL ML-38 (OR EQUAL). 2-3/4" SLOTS, INSULATED BACKING PLENUM. 4'-0" LENGTH x 0'-6" HIGH MAX.

RENOVATION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	NEW CONSTRUCTION
	CONNECT TO EXISTING AT THIS POINT



1 THIRD FLOOR - MECHANICAL DUCTWORK PLAN
SCALE: 1/8" = 1'-0"

N

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON HEARNE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: THIRD FLOOR - MECHANICAL DUCTWORK PLAN

Project Name: EXPAND DOMICILIARY BUILDING 64

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number: 64 | Checked: DAR | Drawn: SOH

Project Number: 666-309
Date: 13 MARCH 2015
Drawing Number: 1-M-203
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

GENERAL NOTES

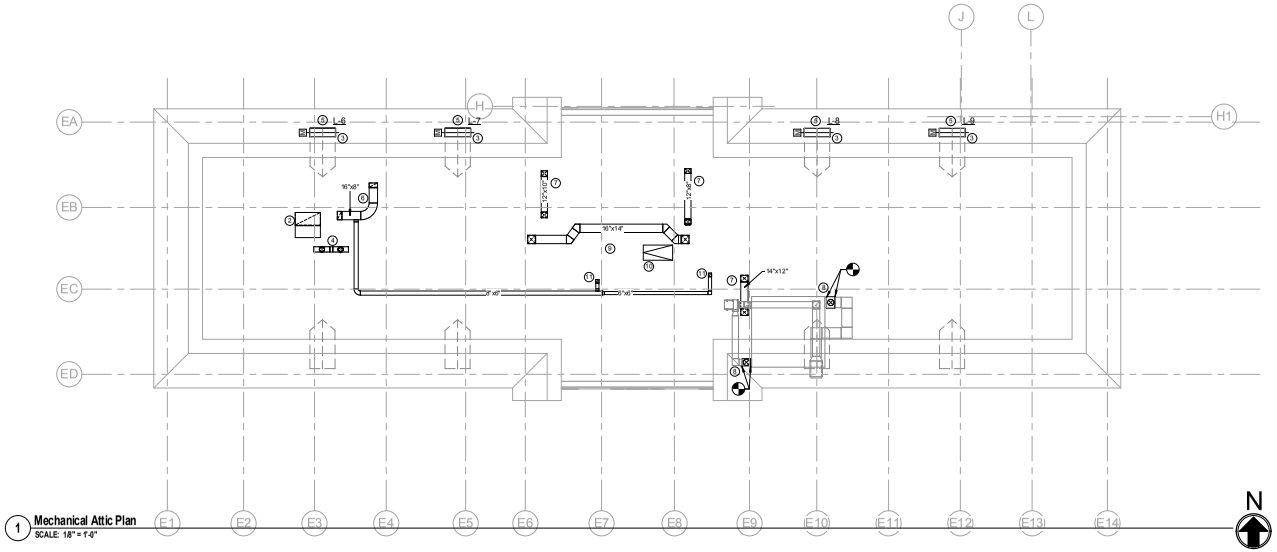
1. SEE SHEET 1-M-001 FOR MECHANICAL LEGENDS AND SYMBOLS.

KEYED NOTES

1. CH-1 LOCATED ON ROOF.
2. 24x48 RELIEF DUCT FROM MECHANICAL ROOM LOCATED ON SECOND FLOOR. RELIEF DUCT TO BE OPEN-END DUCT. COVER END WITH HARDWARE CLOTH.
3. MOTORIZED RELIEF DAMPER INSTALL BEHIND LOUVER AT DORMER.
4. 10"ø SUPPLY DUCT DOWN TO THIRD FLOOR.
5. 2'-8"x4'-4" LOUVER INSTALL AT DORMER.
6. ROUTE EXHAUST DUCT UP FROM 3RD FLOOR INTO ATTIC SPACE TO AVOID EXISTING STRUCTURAL BEAM.
7. ROUTE SUPPLY DUCT UP FROM 3RD FLOOR INTO ATTIC SPACE TO AVOID EXISTING STRUCTURAL BEAM.
8. PROVIDE NEW FIRE SMOKE DAMPER IN EXHAUST DUCT SHOWN ON PLAN.
9. ROUTE SUPPLY DUCT UP FROM 3RD FLOOR INTO ATTIC SPACE TO AVOID VAV BOXES.
10. ATTIC ACCESS.
11. 6x6 EXHAUST DUCT DOWN TO THIRD FLOOR WITH FIRE DAMPER AT SLAB PENETRATION.

RENOVATION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	NEW CONSTRUCTION
	CONNECT TO EXISTING AT THIS POINT



1 **Mechanical Attic Plan**
SCALE: 1/8" = 1'-0"

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

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Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **MECHANICAL ATTIC PLAN**

Location: **VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Building Number	Checked	Drawn
64	DAR	SOH

Project Number: **666-309**

Date: 13 MARCH 2015

Drawing Number: **1-M-204**

Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

GENERAL NOTES

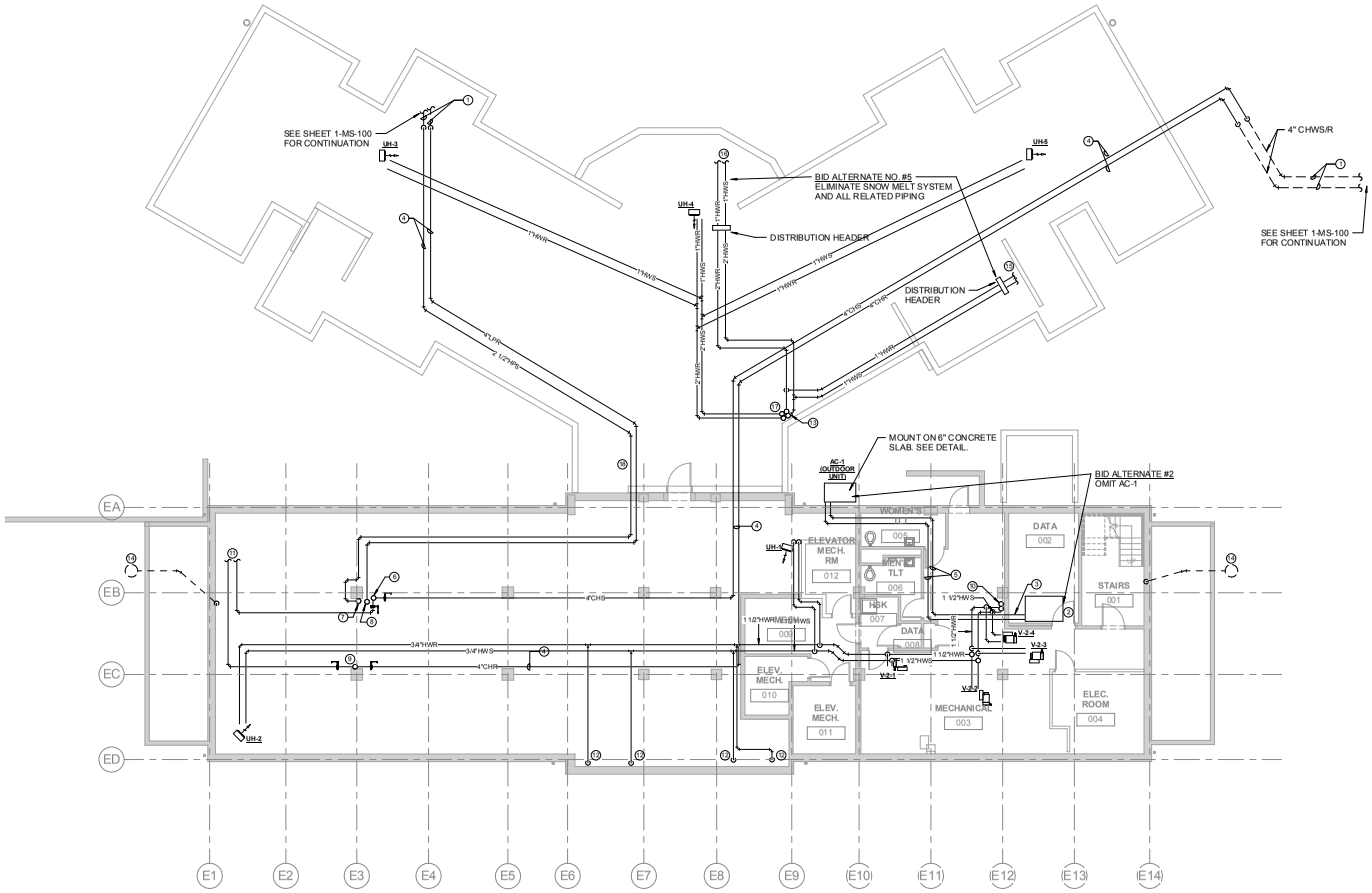
1. SEE SHEET 1-M-001 FOR MECHANICAL LEGENDS AND SYMBOLS.

KEYED NOTES

1. PIPING BELOW GRADE.
2. ROUTE CONDENSATE PIPE ABOVE CEILING FROM THIS SPACE TO HOUSEKEEPING ROOM ON THIS LEVEL AND DROP TO JANITOR SINK. COORDINATE WITH LAYOUT OF EQUIPMENT IN THIS SPACE AND DO NOT ROUTE PIPING ABOVE I.T. EQUIPMENT ROOM.
3. REFRIGERANT PIPING, COORDINATE WITH LAYOUT OF EQUIPMENT IN THIS SPACE AND DO NOT ROUTE PIPING ABOVE I.T. EQUIPMENT.
4. ROUTE PIPING THROUGH CRAWL SPACE, SUPPORT TIGHT TO STRUCTURE ABOVE.
5. REFRIGERANT PIPING, SIZED PER MANUFACTURER'S RECOMMENDATIONS.
6. 4" CHS UP TO MECHANICAL ROOM LOCATED ON SECOND FLOOR.
7. 4" HPS UP TO MECHANICAL ROOM LOCATED ON SECOND FLOOR.
8. 4" CONDENSATE RETURN DOWN FROM MECHANICAL ROOM LOCATED ON SECOND FLOOR.
9. 4" CHR DOWN FROM MECHANICAL ROOM LOCATED ON SECOND FLOOR.
10. 2" HWS/R UP TO SECOND FLOOR.
11. CAP 4" PIPING FOR FUTURE CONNECTION TO CAMPUS CHILLED WATER LOOP.
12. 3/4" HWS/R UP TO BASEBOARD ON FIRST FLOOR.
13. 2" HWS/R UP TO SECOND FLOOR FIRST FLOOR CEILING FOR SNOWMELT SYSTEM.
14. ROUTE 3/4" CONDENSATE DRAIN PIPE FROM CONDENSATE PUMP OUT TO CONDENSATE PIT LOCATE OUTSIDE OF EXTERIOR. SEE DETAIL.
15. PROVIDE DISTIBUTION HEADER, AND ROUTE LOOP PIPING FROM HERE UNDERGROUND TO THE LOADING DOCK SNOW MELT ZONE. SEE SHEET 1-M-301 FOR SNOW MELT ZONE BOUNDARY.
16. PROVIDE DISTIBUTION HEADER, AND ROUTE LOOP PIPING FROM HERE TO THE ADJACENT SNOW MELT ZONE. SEE SHEET 1-M-301 FOR SNOW MELT ZONE BOUNDARY.
17. 2" HWS/R UP TO FIRST FLOOR CEILING.
18. COORDINATE ROUTING OF LPR AND HPS WITH ELEVATOR SUMP AND SUMP ACCESS.

RENOVATION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	NEW CONSTRUCTION
	CONNECT TO EXISTING AT THIS POINT



1 **BASEMENT - MECHANICAL HVAC PIPING PLAN**
SCALE: 1/8" = 1'-0"

N

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON HEARNE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **BASEMENT MECHANICAL HVAC PIPING PLAN**

Location: **VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Building Number: 64 | Checked: DAR | Drawn: SOH

Project Number: **666-309**
Date: 13 MARCH 2015
Drawing Number: **1-M-300**
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

GENERAL NOTES

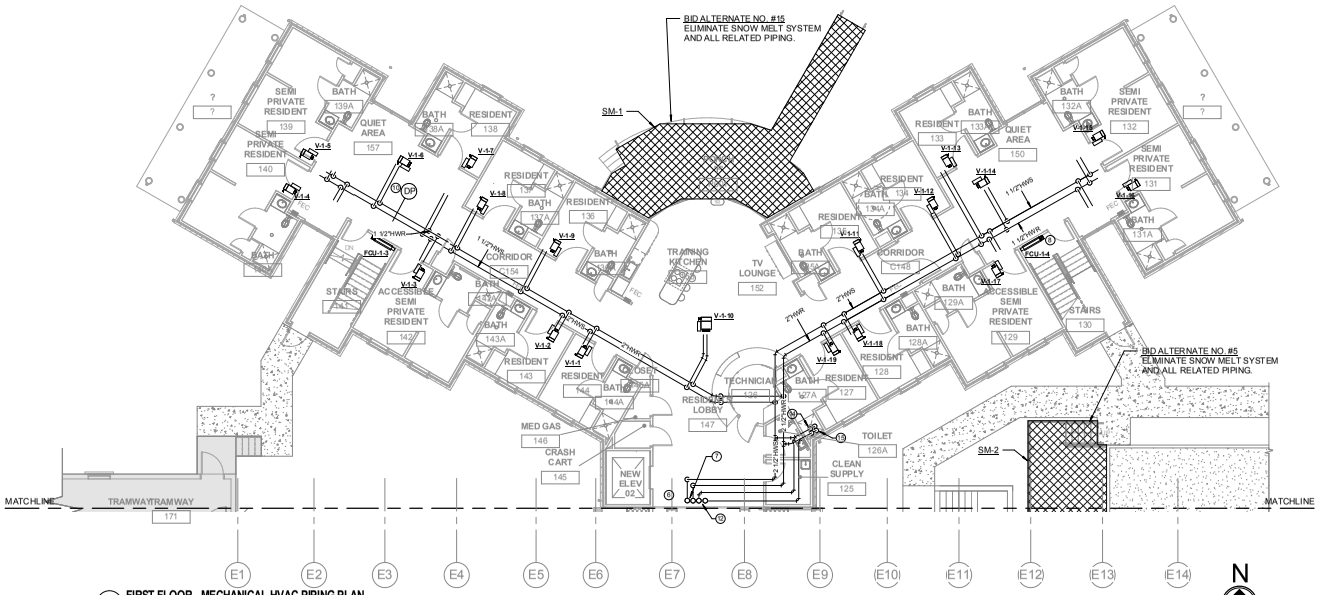
1. SEE SHEET 1-M-001 FOR MECHANICAL LEGENDS AND SYMBOLS.

KEYED NOTES

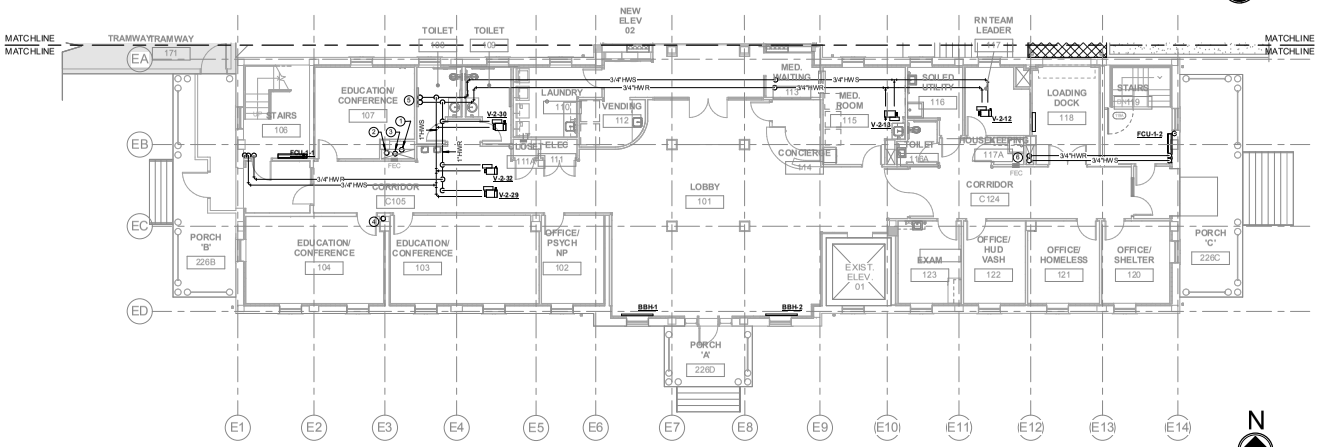
1. 4" CHS UP TO MECHANICAL ROOM LOCATED ON SECOND FLOOR.
2. 2-1/2" HPS UP TO MECHANICAL RO OM LOCATED ON SECOND FLOOR.
3. 4" CONDENSATE RETURN DOWN FROM MECHANICAL ROOM LOCATED ON SECOND FLOOR.
4. 4" CHR DOWN FROM MECHANICAL ROOM LOCATED ON SECOND FLOOR.
5. 1-1/2" HWS/R UP TO MECHANICAL LOCATED ON SECOND FLOOR.
6. 3/4" HWS/R UP TO SECOND FLOOR.
7. 2-1/2" HWS/R UP TO SECOND FLOOR.
8. NOT USED.
9. NOT USED.
10. DIFFERENTIAL PRESSURE SENSOR FOR RHP-1 AND RHP-2 HARD WIRE DIRECTLY TO PANEL IN MECHANICAL ROOM.
11. NOT USED.
12. 2" HWS/HWR FOR SNOWMELT DOWN FROM SECOND FLOOR. ROUTE PIPING DOWN TO A PIPING CHASE DOWN TO BASEMENT CRAWL SPACE. SEE SHEET 1-M-300 FOR CONTINUATION TO SNOWMELT ZONES.
13. NOT USED.
14. 2" HWS/R DOWN TO BASEMENT CRAWLSPACE.
15. 2" HWS/R DOWN TO BASEMENT CRAWLSPACE FOR SNOWMELT.

RENOVATION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	NEW CONSTRUCTION
	CONNECT TO EXISTING AT THIS POINT



1 FIRST FLOOR - MECHANICAL HVAC PIPING PLAN
SCALE: 1/8" = 1'-0"



2 FIRST FLOOR - MECHANICAL HVAC PIPING PLAN
SCALE: 1/8" = 1'-0"

BUILDING IS FULLY SPRINKLERED

Revisions: Date

COLORADO LICENSED DONALD AARON HEARLE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: FIRST FLOOR MECHANICAL HVAC PIPING PLAN

Project Name: EXPAND DOMICILIARY BUILDING 64

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number: 64 | Checked: DAR | Drawn: SOH

Project Number: 666-309
Date: 13 MARCH 2015
Drawing Number: 1-M-301
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

GENERAL NOTES

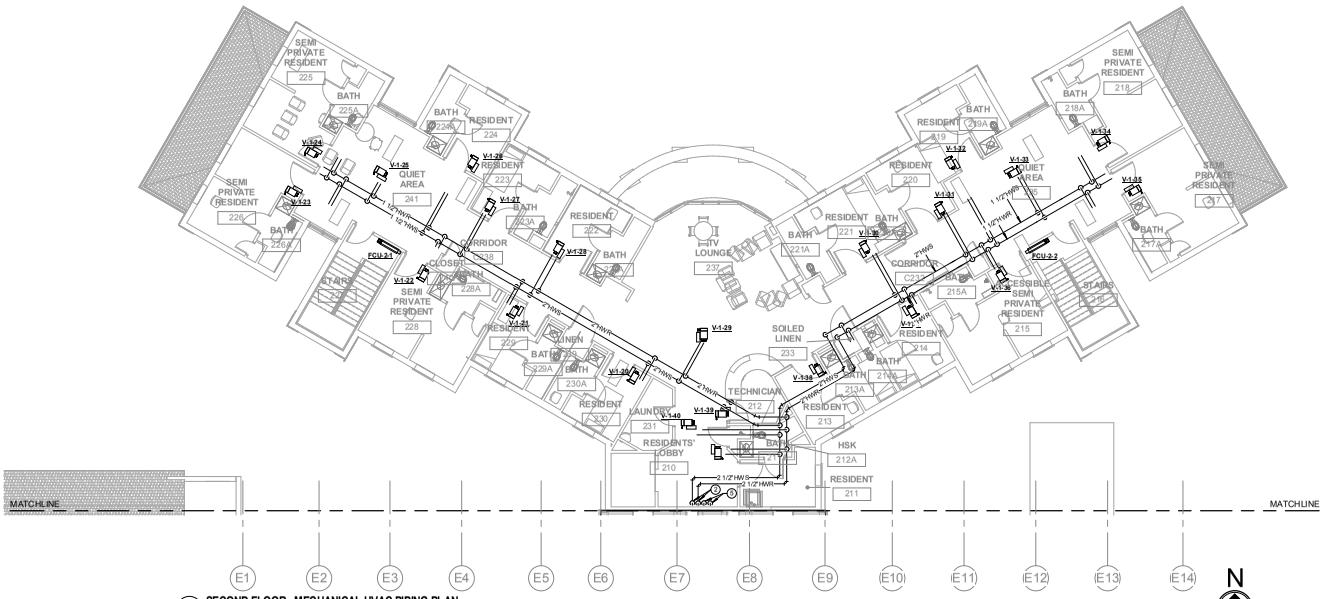
1. SEE SHEET 1-M-001 FOR MECHANICAL LEGENDS AND SYMBOLS.

KEYED NOTES

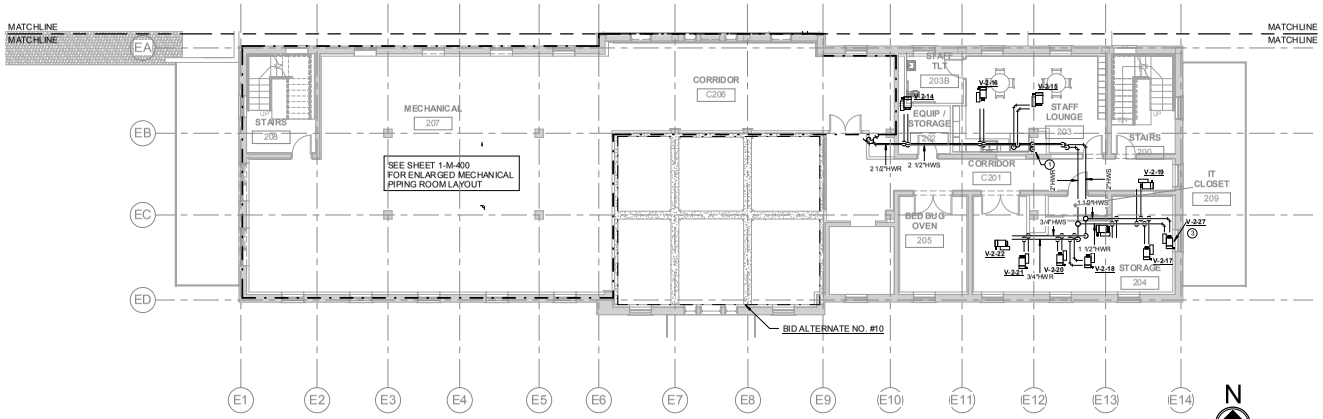
1. NOT USED.
2. 2-1/2" HW S/R DOWN TO FIRST FLOOR.
3. PROVIDE 3-WAY CONTROL VALVE.
4. NOT USED.
5. 2" HW S/R PIPING FROM THIRD FLOOR. ROUTE PIPING DOWN TO FIRST FLOOR CEILING. SEE SHEET 1-M-300 FOR CONTINUATION TO SNOWMELT REGION.

RENOVATION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	NEW CONSTRUCTION
	CONNECT TO EXISTING AT THIS POINT



1 SECOND FLOOR - MECHANICAL HVAC PIPING PLAN
SCALE: 1/8" = 1'-0"



2 SECOND FLOOR - MECHANICAL HVAC PIPING PLAN
SCALE: 1/8" = 1'-0"

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON HEARNE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
SECOND FLOOR MECHANICAL HVAC PIPING PLAN

Project Name
EXPAND DOMICILIARY BUILDING 64

Location
VAMC SHERIDAN WY 1898
FORT ROAD
SHERIDAN, WY 82801

Building Number	Checked	Drawn
64	DAR	SOH

Project Number **666-309**
Date 13 MARCH 2015
Drawing Number **1-M-302**
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

GENERAL NOTES

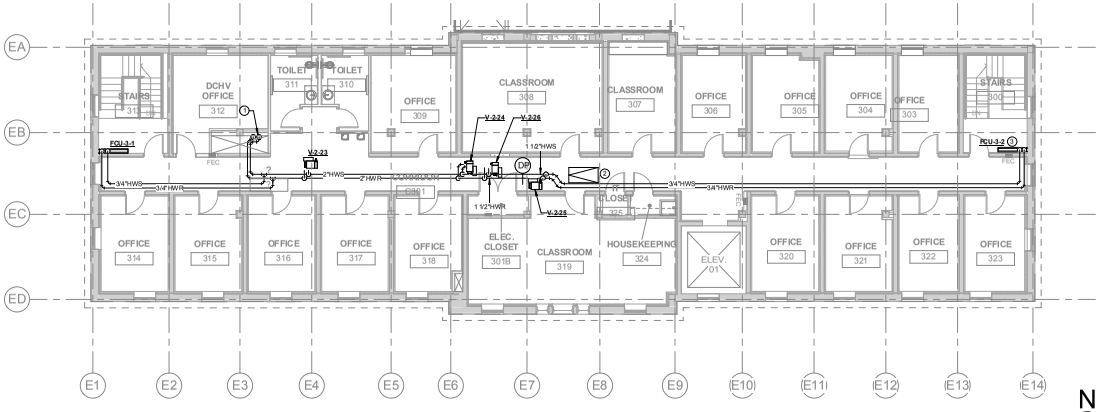
1. SEE SHEET 1-M-001 FOR MECHANICAL LEGENDS AND SYMBOLS.

KEYED NOTES

1. 2" HWS/R DOWN TO SECOND FLOOR MECHANICAL ROOM.
2. ATTIC ACCESS
3. PROVIDE 3-WAY CONTROL VALVE FOR HOT WATER AND CHILLED WATER.
4. NOT USED.

RENOVATION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	NEW CONSTRUCTION
	CONNECT TO EXISTING AT THIS POINT



1 THIRD FLOOR - MECHANICAL HVAC PIPING PLAN
SCALE: 1/8" = 1'-0"

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON HEARLE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: THIRD FLOOR MECHANICAL HVAC PIPING PLAN

Project Name: EXPAND DOMICILIARY BUILDING 64

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number	Checked	Drawn
64	DAR	SOH

Project Number: 666-309

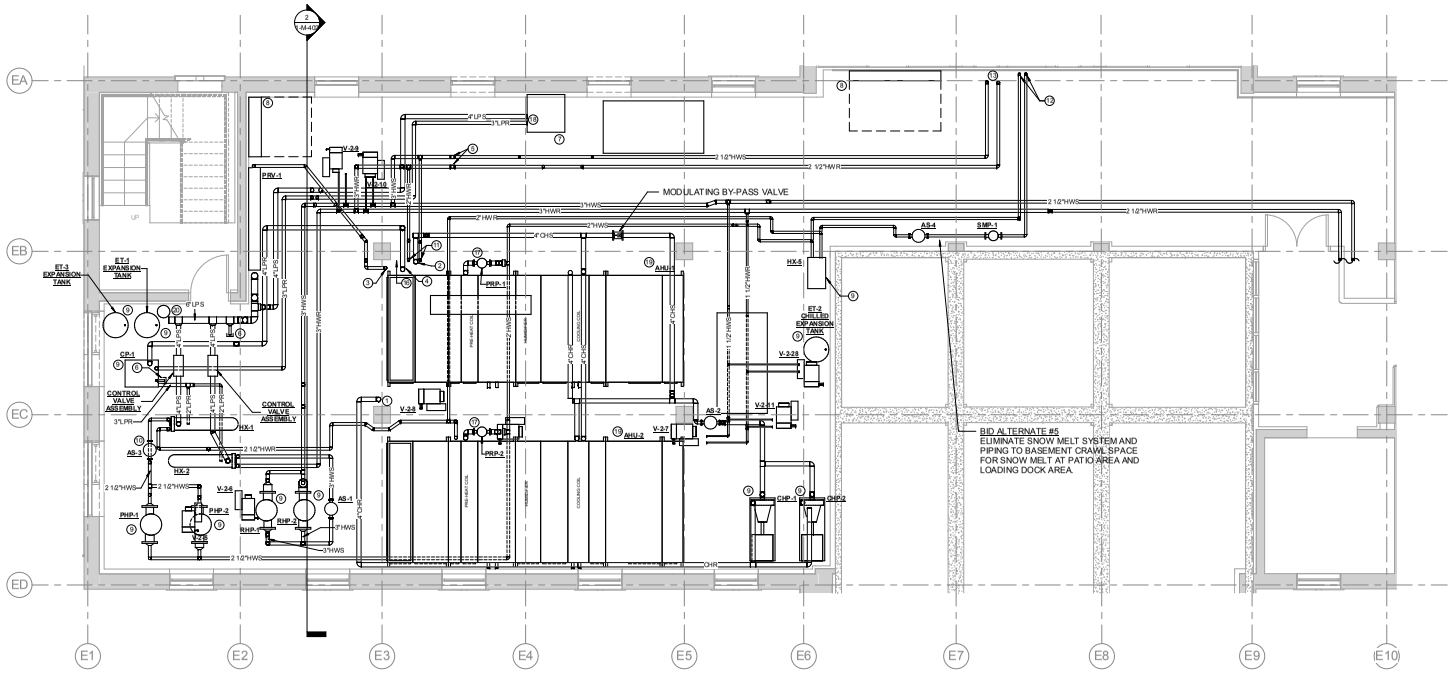
Date: 13 MARCH 2015

Drawing Number: 1-M-303

Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



1 **Enlarged Level 2 Mechanical Piping Room Plan**
SCALE: 1/4" = 1'-0"

GENERAL NOTES

1. SEE SHEET 1-M-001 FOR MECHANICAL LEGENDS AND SYMBOLS.

KEYED NOTES

1. 4" CHR PIPING DOWN TO BASEMENT LEVEL. SEE SHEET 1-M-300 FOR CONTINUATION TO CHILLER.
2. 4" CHS PIPING UP FROM BASEMENT LEVEL. SEE SHEET 1-M-300 FOR CONTINUATION FROM CHILLER.
3. 2-1/2" HPS PIPING UP FROM BASEMENT LEVEL. SEE SHEET 1-M-300 FOR CONTINUATION FROM EXISTING.
4. 4" LPR PIPING DOWN TO BASEMENT LEVEL. SEE SHEET 1-M-300 FOR CONTINUATION TO EXISTING.
5. 1-1/2" HWS/R PIPING TO FIRST FLOOR.
6. VALVE AND CAP FOR FUTURE HUMIDIFIER.
7. WATER HEATER LOCATION. OBSERVE ALL REQUIRED CLEARANCES AND REFER TO PLUMBING DRAWINGS FOR ADDITIONAL COORDINATION.
8. ELECTRICAL PANELS. COORDINATE CLEARANCES FOR ELECTRICAL PANEL WITH ELECTRICAL DRAWINGS. PROVIDE 48" CLEARANCE OF SPACE IN FRONT OF PANELS.
9. MOUNT ON 4" CONCRETE HOUSEKEEPING PAD.
10. PROVIDE UNISTRUT RACK ON 4" HOUSEKEEPING PAD TO SUPPORT HEAT EXCHANGERS. MOUNT HEAT EXCHANGERS AT APPROXIMATELY 36" A.F.F.
11. 2" HWS/R UP TO THIRD FLOOR.
12. 2" HWS/R UP TO THIRD FLOOR CHASE. ROUTE PIPING UP CHASE TO NEW EXPANSION SECOND FLOOR CEILING. SEE SHEET 1-M-301 FOR CONTINUATION OF PIPE TO CRAWL SPACE.
13. 2-1/2" HWS/R UP TO THIRD FLOOR CHASE. ROUTE PIPING UP CHASE TO NEW EXPANSION SECOND FLOOR CEILING.
14. NOT USED.
15. NOT USED.
16. NOT USED.
17. SEE DETAIL FOR PIPING CONFIGURATION.
18. CONNECT WATER HEATER. SEE PLUMBING DRAWINGS FOR CONNECTION.
19. MOUNT AHU ON HOUSEKEEPING CURB, HEIGHT SUFFICIENT TO ACHIEVE P-TRAP HEIGHT.
20. STEAM FLASH TANK. SEE DETAIL FOR PIPING CONFIGURATION.

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **ENLARGED MECHANICAL PIPING ROOM PLAN**

Location: **VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Building Number	Checked	Drawn
64	DAR	SOH

Project Number: **666-309**
Date: 13 MARCH 2015
Drawing Number: **1-M-400**
Dwg. of

Office of Construction and Facilities Management

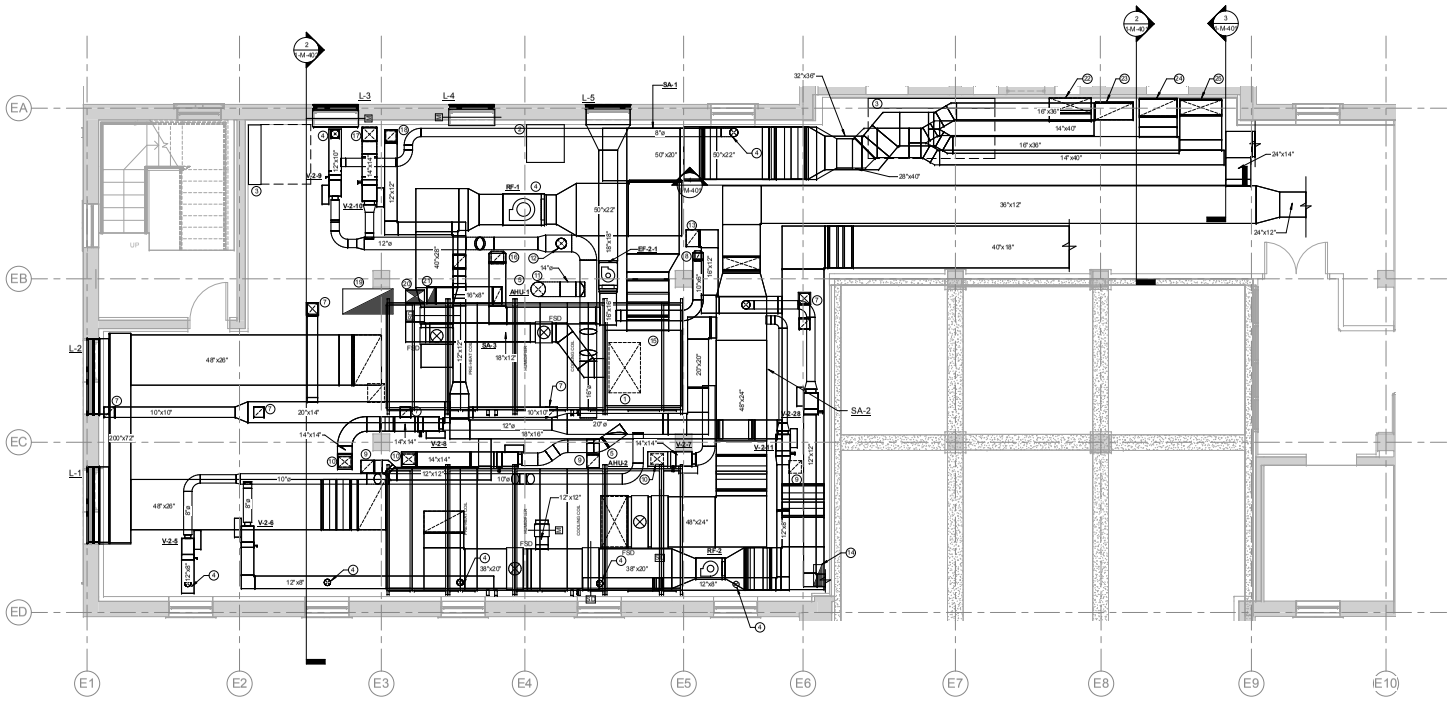
VA FORM 08-6231

GENERAL NOTES

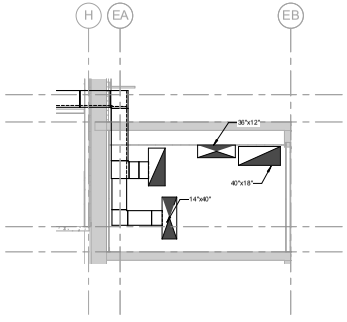
1. SEE SHEET 1-M-001 FOR MECHANICAL LEGENDS AND SYMBOLS.

KEYED NOTES

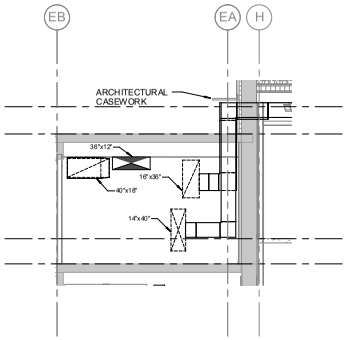
1. SMOKE DETECTOR INSTALL IN VERTICAL DUCT.
2. WATER HEATER LOCATION. OBSERVE ALL REQUIRED CLEARANCES AND REFER TO PLUMBING DRAWINGS FOR ADDITIONAL COORDINATION.
3. ELECTRICAL PANELS. COORDINATE CLEARANCES FOR ELECTRICAL PANEL WITH ELECTRICAL DRAWINGS. PROVIDE 48" CLEARANCE OF SPACE IN FRONT OF PANELS.
4. 8"ø SUPPLY DUCT UP TO LINEAR SLOT DIFFUSER LOCATED ON THIRD FLOOR WITH FIRE DAMPER AT FLOOR PENETRATION.
5. FAN SHALL BE SUPPORTED FROM STRUCTURE ABOVE AS HIGH AS POSSIBLE. SEE DETAIL FOR ADDITIONAL REQUIREMENTS.
6. MOUNT AHU ON MINIMUM 6" TALL CONCRETE HOUSEKEEPING CURB. COORDINATE REQUIRED HEIGHT OF CURB TO ACHIEVE CLEARANCE FOR REQUIRED CONDENSATE TRAP HEIGHT.
7. 10x10 RETURN DOWN FROM THIRD FLOOR WITH FIRE DAMPER AT FLOOR PENETRATION.
8. 10ø8 EXHAUST DUCT DOWN TO FIRST FLOOR.
9. 12x12 RETURN DUCT UP FROM FIRST FLOOR WITH FIRE DAMPER AT FLOOR PENETRATION.
10. 12x10 SUPPLY DUCT DOWN TO FIRST FLOOR WITH FIRE DAMPER AT FLOOR PENETRATION.
11. 14"ø SUPPLY DUCT DOWN TO FIRST FLOOR WITH FIRE DAMPER AT FLOOR PENETRATION.
12. 10"ø SUPPLY DUCT DOWN TO FIRST FLOOR WITH FIRE DAMPER AT FLOOR PENETRATION.
13. 16x12 RETURN DUCT DOWN TO FIRST FLOOR WITH FIRE DAMPET AT FLOOR PENETRATION.
14. 20ø8 RETURN DUCT DOWN FROM THIRD FLOOR WITH FIRE DAMPER FLOOR PENETRATION.
15. 72"W x 72"L x 30" H SUPPLY PLENUM.
16. 12x12 EXHAUST DUCT DOWN TO FIRST FLOOR WITH FIRE DAMPER AT FLOOR PENETRATION.
17. 14x14 SUPPLY DUCT DOWN TO FIRST FLOOR WITH FIRE DAMPER AT FLOOR PENETRATION.
18. 12x12 RETURN DUCT UP FROM FIRST FLOOR WITH FIRE DAMPER AT FLOOR PENETRATION.
19. 48x24 RETURN DUCT DOWN FROM ATTIC SPACE
20. 18x12 SUPPLY DUCT UP TO THIRD FLOOR.
21. 16ø8 EXHAUST DUCT DOWN FROM THIRD FLOOR.
22. 40x14 SUPPLY DUCT ROUTED INTO FIRST FLOOR EXPANSION CEILING.
23. 36x16 RETURN DUCT ROUTED INTO FIRST FLOOR EXPANSION CEILING SPACE.
24. 36x16 RETURN DUCT ROUTED UP INTO THIRD FLOOR ARCHITECTURAL CASEWORK AND INTO SECOND FLOOR EXPANSION CEILING SPACE.
25. 40x14 SUPPLY DUCT ROUTED UP INTO THIRD FLOOR ARCHITECTURAL CASEWORK AND INTO SECOND FLOOR EXPANSION CEILING SPACE.



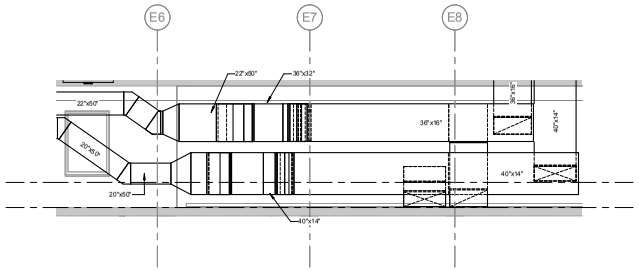
1 **Enlarged Level 2 Mechanical Room Ductwork Plan**
SCALE: 1/4" = 1'-0"



2 **MECHANICAL RETURN DUCTWORK TO EXPANSION BUILDING**
SCALE: 1/4" = 1'-0" RE:1 /1-M-401



3 **MECHANICAL SUPPLY DUCTWORK TO EXPANSION BUILDING**
SCALE: 1/4" = 1'-0" RE:1 /1-M-401



4 **MECHANICAL HVAC SECTION CHASE CONFIGURATION**
SCALE: 1/4" = 1'-0" RE:1 /1-M-401

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **ENLARGED MECHANICAL HVAC ROOM PLAN**

Location: **VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801**

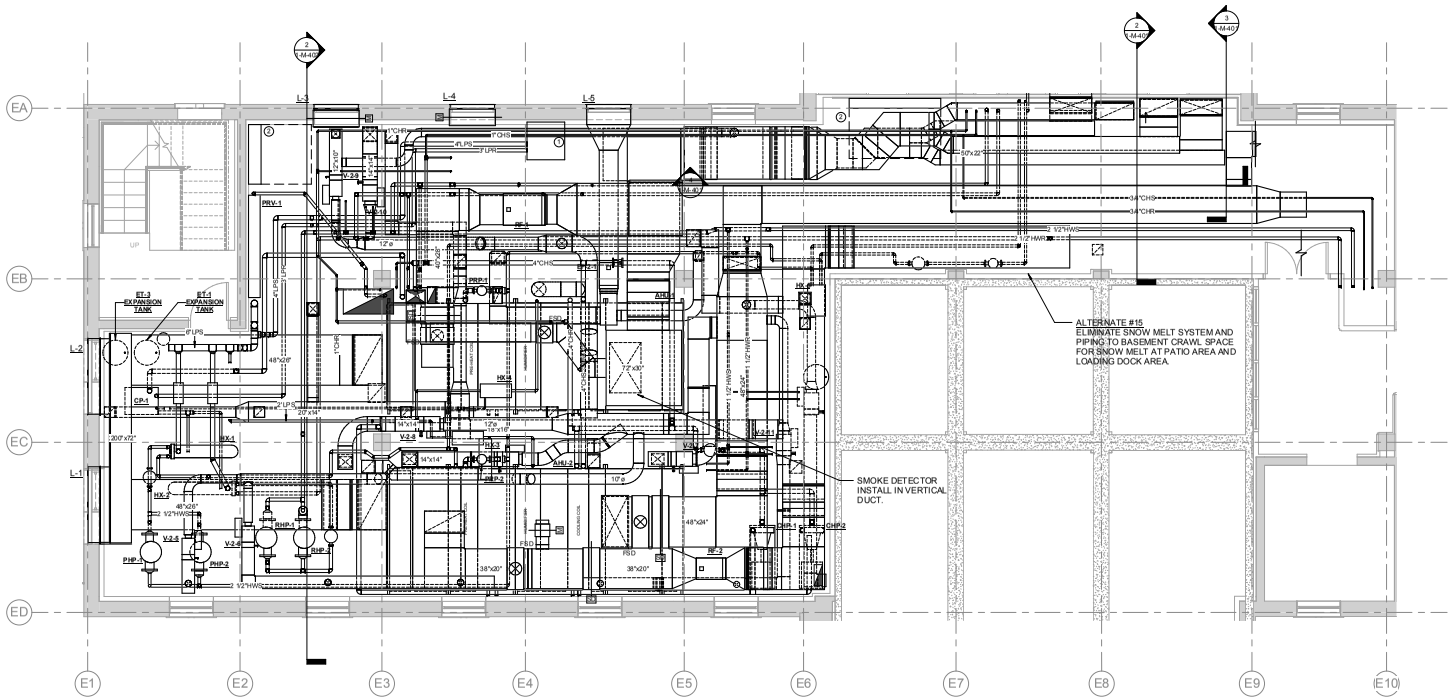
Project Name: **EXPAND DOMICILIARY BUILDING 64**

Building Number	Checked	Drawn
64	DAR	SOH

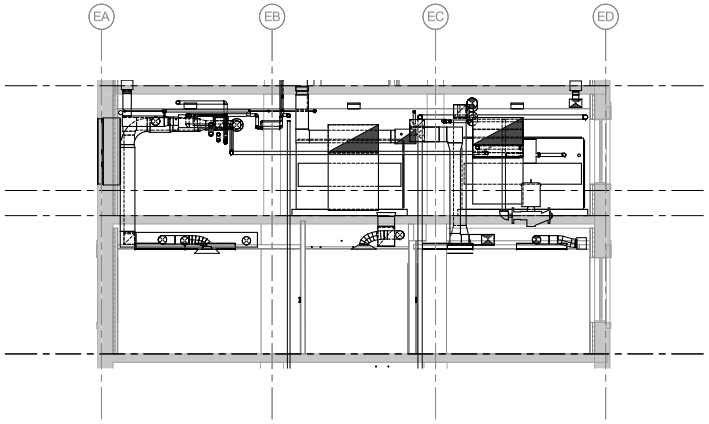
Project Number: **666-309**
Date: 13 MARCH 2015
Drawing Number: **1-M-401**
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



1 **Enlarged Level 2 Mechanical Room HVAC Plan**
SCALE: 1/4" = 1'-0"



2 **MECHANICAL ROOM SECTION**
SCALE: 1/4" = 1'-0" RE:1 /1-M-400

GENERAL NOTES

1. SEE SHEET 1-M-001 FOR MECHANICAL LEGENDS AND SYMBOLS.

KEYED NOTES

1. WATER HEATER LOCATION. OBSERVE ALL REQUIRED CLEARANCES AND REFER TO PLUMBING DRAWINGS FOR ADDITIONAL COORDINATION.
2. ELECTRICAL PANELS. COORDINATE CLEARANCES FOR ELECTRICAL PANEL WITH ELECTRICAL DRAWINGS.

BUILDING IS FULLY SPRINKLERED

Revisions: Date

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **ENLARGED MECHANICAL ROOM PLAN**

Location: **VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Building Number: 64 | Checked: DAR | Drawn: SOH

Project Number: **666-309**
Date: 13 MARCH 2015
Drawing Number: **1-M-402**
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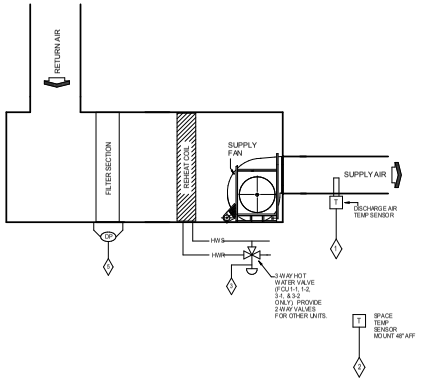
Office of Construction and Facilities Management

VA FORM 08-6231

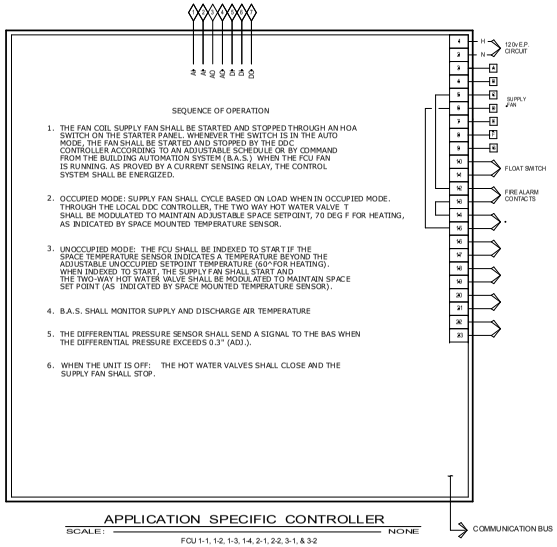


HVAC CONTROL SYMBOLS LEGEND

- HAND-OFF-AUTO SWITCH
- MANUAL MOTOR STARTER WITHERMAL OVERLOAD
- START STOP PUSH BUTTON (S.S.P.B.)
- ON-OFF SWITCH
- TOGGLE SWITCH
- DOUBLE POLE SINGLE THROW SWITCH
- N.C. AUX. CONTACTOR
- N.O. AUX CONTACTOR
- FREEZESTAT
- FRESTAT
- PILOT LIGHT ON STARTER COVER
- TEMPERATURE CONTROLLER (T'STAT)
- REMOTE TEMPERATURE SENSOR
- REMOTE FULL TEMPERATURE SENSOR
- AVERAGING TYPE TEMPERATURE SENSOR
- DAMPERS AND MOTOR
- HOLDING COIL
- HOLDING COIL
- MOTOR
- BUZZER OR BELL
- BUILDING AUTOMATION SYSTEM
- ROOM OR SPACE T'STAT
- FLOAT SWITCH
- BALL SWITCH
- 7 DAY TIME CLOCK
- PILOT LIGHT (MOUNT IN STARTER COVER)
- MOTOR
- PRESSURE GAUGE
- TEMPERATURE GAUGE
- MOUNT IN LOCAL CONTROL PANEL
- MOUNT IN COVER OF LOCAL CONTROL PANEL
- TEMPERTURE SENSOR
- HUMIDITY SENSOR
- DIFFERENTIAL PRESSURE TRANSMITTER
- CURRENT SENSING RELAY
- ELECTRIC RELAY
- PRESSURE SELECTOR
- CHANGEOVER SWITCH
- AIR FLOW MEASURING DEVICE (A.F.M.S.)
- DUCT MOUNTED SMOKE DETECTOR
- 2-WAY VALVE W ELECTRIC ACTUATOR
- RESET CONTROLLER
- WATER PUMP
- BULB SENSOR
- GAUGE SYMBOL
- CURRENT SENSOR RELAY

CONTROL ABBREVIATIONS

SYMBOL	DEFINITION
T.O.L.	THERMAL OVERLOAD
O.L.	OVERLOAD
C.C.T.	CONTROL CIRCUIT TRANSFORMER
M.M.S.	MANUAL MOTOR STARTER
OWS	OPERATOR WORKSTATION
BAS	BUILDING AUTOMATION SYSTEM
H.O.A.	HAND OFF AUTOMATIC
A.F.M.S.	WIRE THRU AUX. CONTACT ON FAN MOTOR STARTER
A.P.M.S.	WIRE THRU AUX. CONTACT ON PUMP MOTOR STARTER
N.O.	NORMALLY OPEN
N.C.	NORMALLY CLOSED
AO	ANALOG OUTPUT
AI	ANALOG INPUT
DO	DIGITAL OUTPUT
DI	DIGITAL INPUT



SEQUENCE OF OPERATION

1. THE FAN COIL SUPPLY FAN SHALL BE STARTED AND STOPPED THROUGH AN HOA SWITCH ON THE STARTER PANEL. WHENEVER THE SWITCH IS IN THE AUTO MODE, THE FAN SHALL BE STARTED AND STOPPED BY THE DDC CONTROLLER ACCORDING TO AN ADJUSTABLE SCHEDULE OR BY COMMAND FROM THE BUILDING AUTOMATION SYSTEM (B.A.S.) WHEN THE FCU FAN IS RUNNING, AS PROVED BY A CURRENT SENSING RELAY, THE CONTROL SYSTEM SHALL BE ENERGIZED.

2. OCCUPIED MODE: SUPPLY FAN SHALL CYCLE BASED ON LOAD WHEN IN OCCUPIED MODE. THROUGH THE LOCAL DDC CONTROLLER, THE TWO WAY HOT WATER VALVE T SHALL BE MODULATED TO MAINTAIN ADJUSTABLE SPACE SETPOINT, 70 DEG F FOR HEATING, AS INDICATED BY SPACE MOUNTED TEMPERATURE SENSOR.

3. UNOCCUPIED MODE: THE FCU SHALL BE INDEXED TO START IF THE SPACE TEMPERATURE SENSOR INDICATES A TEMPERATURE BEYOND THE ADJUSTABLE UNOCCUPIED SETPOINT TEMPERATURE (60°FOR HEATING). WHEN INDEXED TO START, THE SUPPLY FAN SHALL START AND THE TWO-WAY HOT WATER VALVE SHALL BE MODULATED TO MAINTAIN SPACE SET POINT (AS INDICATED BY SPACE MOUNTED TEMPERATURE SENSOR).

4. B.A.S. SHALL MONITOR SUPPLY AND DISCHARGE AIR TEMPERATURE

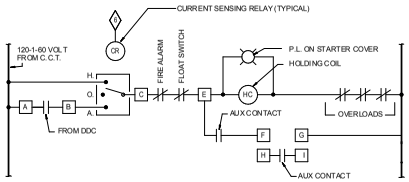
5. THE DIFFERENTIAL PRESSURE SENSOR SHALL SEND A SIGNAL TO THE BAS WHEN THE DIFFERENTIAL PRESSURE EXCEEDS 0.3" (ADJ.).

6. WHEN THE UNIT IS OFF: THE HOT WATER VALVES SHALL CLOSE AND THE SUPPLY FAN SHALL STOP.

APPLICATION SPECIFIC CONTROLLER

SCALE: NONE

FCU 1-1, 1-2, 1-3, 1-4, 2-1, 2-2, 3-1, & 3-2



SUPPLY FAN CONTROL

FCU 1-1, 1-2, 1-3, 1-4, 2-1, 2-2, 3-1, & 3-2

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: MECHANICAL CONTROLS DIAGRAM

Project Name: EXPAND DOMICILIARY BUILDING 64

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number	Checked	Drawn
64	DAR	SOH

Project Number: 666-309

Date: 13 MARCH 2015

Drawing Number: 1-M-500

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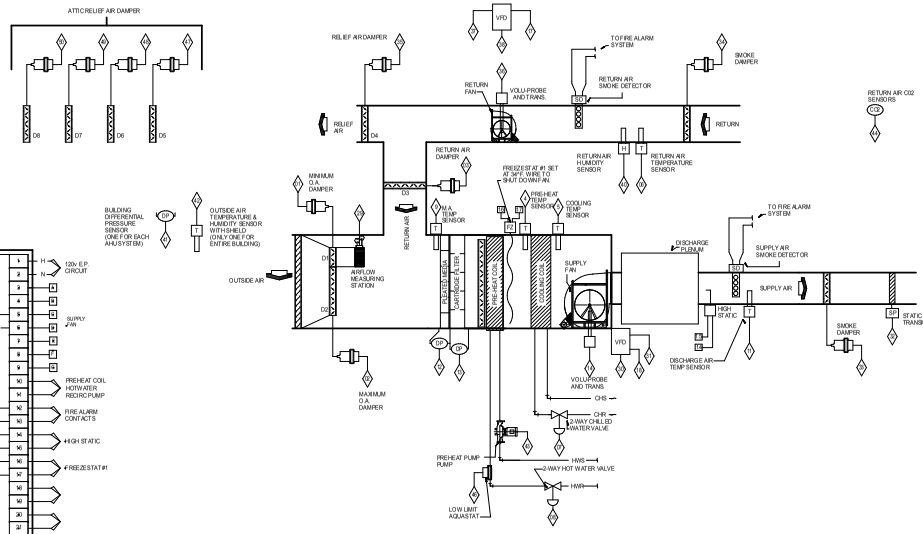
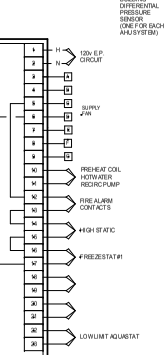
VA FORM 08-6231





SEQUENCE OF OPERATION

1. THE AHU SUPPLY FAN SHALL BE STARTED AND STOPPED THROUGH A HAND-OFF-AUTO SWITCH ON THE VFD. WHEN INDEXED TO START, THE CONTROL SYSTEM SHALL BE ACTIVATED AND THE RETURN, RELIEF, AND OUTSIDE AIR DAMPERS SHALL OPEN AS REQUIRED. WHEN THE DAMPERS ARE OPENED AS PROVED BY DAMPER END SWITCHES, THE SUPPLY FAN WILL BE ALLOWED TO START. WHENEVER THE SWITCH IS IN THE AUTO MODE, THE AHU SHALL BE STARTED AND STOPPED BY THE BAS ACCORDING TO A PREDETERMINED ADJUSTABLE TIME SCHEDULE. WHENEVER THE AHU IS OPERATIONAL, AS PROVED BY THE CURRENT SENSING RELAY, THE CONTROL SYSTEM SHALL BE ENERGIZED. ALL INTERLOCKED FANS SHALL ALSO BE ENERGIZED.

2. A SIGNAL SHALL BE SENT TO THE OUTSIDE AIR CONTROLLER TO OPEN THE MINIMUM OUTSIDE AIR DAMPER. THE CONTROLLER SHALL MODULATE THE MINIMUM OUTSIDE AIR DAMPER TO MAINTAIN THE MINIMUM OUTSIDE AIRFLOW AS SCHEDULED PER THE CONTRACT DRAWINGS. THE REQUIRED OUTSIDE AIR VOLUME SHALL BE MAINTAINED BY A DIRECT READING OF THE OUTSIDE AIR FLOWRATE (AS DETERMINED BY THE O.A. FLOW MEASURING STATION). THE CONTROLLER SHALL MODULATE THE MINIMUM OUTSIDE AIR DAMPER POSITION TO MAINTAIN THE DESIGN OUTSIDE AIR FLOWRATE. THE CONTROLLER SHALL REPORT THE ACTUAL CFM MEASURED AT THE OUTSIDE AIR DAMPER TO THE BAS.

3. THE ASSOCIATED RETURN AIR FAN SHALL BE ENERGIZED THROUGH ACTION OF THE HOA SWITCH HAND POSITION LOCATED ON THE VFD OR VIA THE BUILDING AUTOMATION SYSTEM WHEN IN THE AUTO POSITION.

4. THE BAS SHALL COMPARE THE RETURN AIR AND OUTSIDE AIR TEMPERATURES. THE CONTROLLER SHALL UTILIZE OUTDOOR AIR WHEN FREE COOLING CONDITION EXISTS (ECONOMIZER MODE). THE ECONOMIZER "ON POINT" SHALL BE ADJUSTABLE AND SHALL VARY ACCORDING TO THE SPACE TEMPERATURE SETBACK SCHEDULE. WHEN IN AIR-SIDE ECONOMIZER MODE, THE CONTROLLER SHALL MODULATE THE MAXIMUM OUTSIDE AIR DAMPER, RETURN AIR DAMPER, AND RELIEF AIR DAMPER IN SEQUENCE TO MAINTAIN DISCHARGE AIR TEMPERATURE. THE MIXED AIR TEMPERATURE SENSOR SHALL MONITOR MIXED AIR TEMPERATURE AND SEND SIGNAL TO BAS IN THE EVENT THAT ABNORMALLY LOW AIR TEMPERATURE IS FOUND ENTERING THE COIL.

5. RETURN AND RELIEF DAMPERS SHALL OPEN TO A PRESET POSITION.

6. INTERLOCKED EXHAUST FANS SHALL BE STARTED. IF INTERLOCKED FANS FAIL TO START AS INDICATED BY CURRENT SENSING RELAY, AN ALARM SHALL BE INDICATED TO THE BAS.

7. A DISCHARGE AIR TEMPERATURE SENSOR SHALL MODULATE THE AHU COOLING COIL CONTROL VALVE AS REQUIRED TO MAINTAIN 53 DEGREES F. (ADJ.) SUPPLY AIR TO THE SYSTEM VAV TERMINAL UNITS FOR AHU-2 AND TO 55° F. (ADJ.) FOR AHU-1.

8. SUPPLY DUCT STATIC PRESSURE, AS SENSED FROM DUCT STATIC PRESSURE SENSOR LOCATED 2/3 DOWNSTREAM OF FAN, SHALL BE MAINTAINED BY MODULATING SUPPLY FAN VFD STATIC PRESSURE SHALL BE MAINTAINED AT SETPOINT OF 1.5" (ADJ.) SEE PLANS FOR LOCATION. HIGH STATIC LIMIT SENSOR SHALL LIMIT VFD SPEED TO PREVENT OVER-PRESSURIZATION OF SUPPLY DUCTWORK ABOVE SETPOINT OF 4.0" (ADJ.).

9. THE RETURN FAN SPEED SHALL BE MODULATED BY ITS RESPECTIVE VFD TO MAINTAIN THE DIFFERENTIAL AIRFLOW BETWEEN THE SUPPLY AIR VOLUME AND THE OUTSIDE AIR VOLUME (RA = SA - OA). THE BUILDING DIFFERENTIAL PRESSURE SENSOR SHALL SEND A SIGNAL TO THE BAS TO MODULATE THE RELIEF AIR DAMPER TO MAINTAIN A POSITIVE BUILDING STATIC PRESSURE OF 0.05" (ADJ.). WHEN IN ECONOMIZER MODE, THE RELIEF DAMPER WILL MODULATE IN SEQUENCE WITH THE OUTSIDE AIR AND RETURN AIR DAMPERS, BUT SHALL BE SET TO MAINTAIN POSITIVE BUILDING STATIC PRESSURE. FOR AHU-2, TWO-POSITION ATTIC DAMPERS D5, D6, D7, AND D8 SHALL BE STAGED IN SEQUENCE BASED ON THE POSITION OF RELIEF AIR DAMPER D4. DAMPER AS LOUVER L-9 SHALL OPEN FIRST, THEN DAMPER AT LOUVER L-8 SHALL OPEN WHEN RELIEF DAMPER D4 REACHES 25% OPEN. DAMPER AT L-7 SHALL OPEN WHEN D4 REACHES 50%, AND DAMPER AT L-6 SHALL OPEN WHEN D4 REACHES 75% OPEN. DAMPERS SHALL CLOSE IN THE REVERSE ORDER DEPENDING ON D4 POSITION.

10. THE BAS SHALL UTILIZE A VENTILATION RESET STRATEGY FOR REDUCING THE TOTAL AMOUNT OF OUTSIDE AIR REQUIRED AT EACH OPERATING AIR HANDLER. THE BAS SHALL RESET THE OUTSIDE AIR VOLUME IN RESPONSE TO VARIATIONS IN THE SYSTEM VENTILATION EFFICIENCY. AS EACH VAV BOX CONTROLLER SENSES THE CURRENT PRIMARY AIRFLOW AND CALCULATES ITS SPECIFIC OUTDOOR AIR FRACTION (SEE VAV BOX SCHEDULE FOR THE OUTDOOR AIR VOLUME REQUIRED AT EACH ZONE TO BE USED IN THE OUTDOOR AIR FRACTION CALCULATION), THE BAS SHALL TOTAL THE PRIMARY AIRFLOWS AND THE OUTDOOR AIRFLOWS FROM EACH BOX AND DETERMINE THE HIGHEST OUTDOOR AIR FRACTION REPORTED. THE BAS SHALL THEN SOLVE FOR THE SYSTEM VENTILATION EFFICIENCY AND THE SYSTEM LEVEL INTAKE FLOW OF OUTDOOR AIR THAT IS REQUIRED AT THE CURRENT OPERATING CONDITION. THE NEW OUTDOOR AIR FLOWRATE SETPOINT SHALL BE COMMUNICATED TO THE AIR HANDLER CONTROLLER THAT WILL, IN TURN, MODULATE THE MINIMUM OUTSIDE AIR DAMPER TO BRING IN THE CALCULATED QUANTITY OF OUTDOOR AIR BASED ON THE DIRECT MEASUREMENT OF THE OUTSIDE AIR VOLUME AS REPORTED BY THE MINIMUM OUTSIDE AIRFLOW MEASURING STATION.

11. THE DEMAND BASED VENTILATION STRATEGY SHALL BE USER SELECTABLE TO BE ACTIVE OR INACTIVE. THE BAS SHALL UTILIZE A CARBON DIOXIDE BASED DEMAND CONTROLLED VENTILATION STRATEGY FOR REDUCING THE TOTAL AMOUNT OF OUTSIDE AIR REQUIRED. THE CARBON DIOXIDE SENSORS WILL BE LOCATED IN THE RETURN AIR STREAM IN THE MECHANICAL ROOM. THE MAXIMUM OUTSIDE AIR FLOWRATE IS GIVEN IN THE VAV BOX SCHEDULE. THE MINIMUM OUTSIDE AIR FLOW WILL BE SET BY READING THE AMBIENT CO2 LEVEL IN THE SPACE WHEN UNOCCUPIED. THE CO2 SENSOR WILL PROVIDE A LINEAR OUTPUT TO THE BAS BASED ON THE CONCENTRATION LEVEL IN THE SPACE THAT WILL SET THE REQUIRED VENTILATION RATE TO THE ZONE. CLASSROOMS WILL BE DEEMED UNOCCUPIED AND THUS NOT REQUIRING VENTILATION BASED ON FEEDBACK FROM THE SPACE MOUNTED OCCUPANCE SENSOR. THE REMAINING ZONES WILL MAINTAIN THE DESIGN OUTDOOR AIR FLOWRATE AS INDICATED ON THE VAV BOX SCHEDULE.

12. THE BAS SHALL MONITOR THE DAMPER POSITION OF ALL VAV TERMINAL UNITS AND DETERMINE VAV AHU'S CRITICAL ZONE (CZ). THE CRITICAL ZONE (CZ) IS THE VAV TERMINAL UNIT WITH THE WIDEST OPEN DAMPER POSITION. WHEN THE CZ IS MORE THAN 95% OPEN, THE SUPPLY FAN DISCHARGE STATIC PRESSURE SETPOINT SHALL BE RESET DOWNWARD BY 10% OF THE PREVIOUS SETPOINT AT A FREQUENCY OF 10 MINUTES UNTIL THE CZ IS MORE THAN 97% OPEN OR UNTIL THE STATIC PRESSURE SETPOINT REACHES ITS MINIMUM VALUE OF 0.75" W.C. (ADJ.) OR THE MINIMUM VALUE OF THE VFD IS REACHED.

13. WHEN THE CZ IS LESS THAN 95% OPEN AND THE SUPPLY DUCT STATIC PRESSURE SETPOINT IS AT THE MINIMUM SETTING, THE DISCHARGE AIR TEMPERATURE SETPOINT SHALL BE RESET UPWARD IN INCREMENTS OF 0.5 DEGREES F AT A FREQUENCY OF 10 MINUTES WHILE THE CZ SETPOINT IS HELD CONSTANT UNTIL THE CZ IS MORE THAN 97% OPEN OR THE DISCHARGE AIR TEMPERATURE IS RESET TO ITS MAXIMUM SETPOINT OF 59 DEGREES F (ADJ.). IF THE AVERAGE RETURN AIR HUMIDITY LEVEL EXCEEDS 60% FOR MORE THAN 10 MINUTES, THE TEMPERATURE RESET SCHEDULE WILL BE OVERRIDDED UNTIL THE AVERAGE RETURN AIR HUMIDITY FALLS BELOW 59% FOR MORE THAN 15 MINUTES.

14. THE SUPPLY FAN SHALL RUN CONTINUOUSLY WHENEVER THE AHU HAS BEEN SCHEDULED TO RUN.

15. A MANUAL RESET FREEZESTAT (FZ#1) LOCATED ON THE ENTERING SIDE OF THE CHILLED WATER COIL SHALL STOP THE AHU ANY TIME THE TEMPERATURE OF THE MIXED AIR DROPS BELOW THE SETPOINT OF 34 DEGREES F (ADJ.). AND AN ALARM SHALL BE INITIATED TO THE BAS. PROVIDE SUFFICIENT QUANTITY OF DEVICES TO ADEQUATELY COVER THE ENTIRE FACE OF THE COIL.

16. WHEN THE MIXED AIR TEMPERATURE DETECTS A TEMPERATURE BELOW 50 DEG. F, THE PRE-HEAT HOT WATER VALVE SHALL MODULATE TO MAINTAIN A MINIMUM 50 DEG. F (ADJ.) DISCHARGE AIR TEMPERATURE. THE PRE-HEAT COIL PUMP SHALL ALSO ENERGIZE AND CIRCULATE HOT WATER WHEN THE OA TEMPERATURE IS LESS THAN 45 DEG. F (ADJ).

17. PRE AND FINAL FILTER EXCESSIVE PRESSURE DROP SHALL ALARM THE BAS.

18. UPON ALARM IN THE FIRE ALARM ZONE SERVED BY THE AHU (INCLUDING SUPPLY AIR DUCT DETECTORS), AHU SUPPLY FAN SHALL STOP, THE RETURN FAN SHALL STOP, AND THE OUTSIDE AIR, RETURN AIR, AND RELIEF AIR DAMPERS SHALL CLOSE. INTERLOCKED EXHAUST FANS SHALL CONTINUE TO RUN.

19. WHENEVER THE UNIT IS OFF, THE FOLLOWING SHALL OCCUR:

    A. SUPPLY FAN, RETURN FAN, AND INTERLOCKED EXHAUST FANS SHALL STOP.
    B. OUTSIDE AIR, RETURN AIR, AND RELIEF AIR DAMPERS SHALL CLOSE.
    C. CHILLED WATER AND HOT WATER VALVE SHALL CLOSE.
    D. SMOKE DAMPERS SHALL CLOSE.
    E. CONTROL SYSTEM SHALL BE DE-ENERGIZED.

20. AIR SUPPLIED TO INDIVIDUAL SPACES IS ZONED BY VARIABLE/CONSTANT VOLUME BOXES WITH LOW PRESSURE DUCTWORK. CONTROL TO BE AS FOLLOWS

    A. ON A RISE IN SPACE TEMPERATURE ABOVE THERMOSTAT SETPOINT, HOT WATER CONTROL VALVE WILL MODULATE TO A CLOSED POSITION. ON A FURTHER RISE IN SPACE TEMPERATURE, THE VAV BOX WILL MODULATE TO THE MAXIMUM AIRFLOW SETTING AS SCHEDULED ON THE DRAWINGS.

    B. ON A DROP IN SPACE TEMPERATURE BELOW THERMOSTAT SETPOINT, THE VAV BOX WILL MODULATE TO THE MINIMUM AIRFLOW SETTING AS SCHEDULED ON THE DRAWINGS. ON A FURTHER DROP IN SPACE TEMPERATURE, THE HOT WATER CONTROL VAVLE WILL MODULATE TO AN OPEN POSITION.

    C. VAV BOXES SERVING ZONES CONTROLLED BY OCCUPANCY SENSORS SHALL BE CAPABLE OF MODULATING DOWN TO 0% AIRFLOW WHEN THE ZONE IS UNOCCUPIED. DURING UNOCCUPIED PERIODS, THE SPACE TEMPERATURE SENSOR WILL OVERRIDE THE SIGNAL FROM THE OCCUPANCY SENSOR TO MAINTAIN SPACE TEMPERATURE.

    D. VAV BOX CONTROLLER SHALL BE CAPABLE OF MEASURING AND REPORTING AIRFLOWS TO THE BAS PER THE VENTILATION RESET STRATEGY LISTED ABOVE.

    E. EACH VAV BOX SHALL REPORT LEAVING AIR TEMPERATURE TO THE BAS.

21. I.T. ROOM TEMPERATURE CONTROL

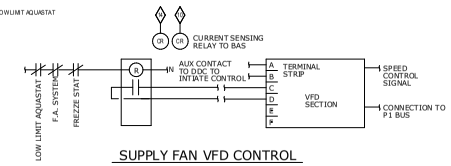
    A. VAV BOX SHALL MAINTAIN TEMPERATURE AT SETPOINT OF 68 DEGREE F (ADJ.) IF SPACE TEMPERATURE CANNOT BE MAINTAINED VIA HOUSE HVAC SYSTEM, VAV BOX SHALL CLOSE, ALARM SHALL BE INDICATED TO THE BAS, AND AC-1 SHALL MAINTAIN TEMPERATURE.

22. AC-1 TEMPERATURE CONTROL

    A. SPACE MOUNTED TEMPERATURE SENSOR THERMOSTAT SHALL BE SET TO MAINTAIN SPACE TEMPERATURE OF 72 DEG F (ADJ.). ALARM SHALL BE INDICATED TO THE BAS IF SPACE TEMPERATURE RISES ABOVE 74 DEG F (ADJ.).

APPLICATION SPECIFIC CONTROLLER

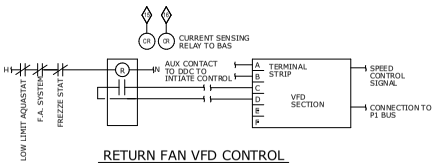
SCALE: AHU-1 & AHU-2 NONE



SUPPLY FAN VFD CONTROL

AHU-1 AND AHU-2

THE BAS SHALL BE CAPABLE OF MONITORING AND CONTROLLING ALL POINTS FROM THE VFD. VIA BACNET INTERFACE CARD PROVIDED WITH VFD. COORDINATE.



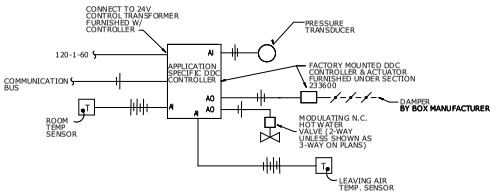
RETURN FAN VFD CONTROL

RF-1 AND RF-2

THE BAS SHALL BE CAPABLE OF MONITORING AND CONTROLLING ALL POINTS FROM THE VFD. VIA BACNET INTERFACE CARD PROVIDED WITH VFD. COORDINATE.

PREHEAT PUMP CONTROL

PRP-1 AND PRP-2



TYPICAL DDC VAV BOX CONTROL

NOTES:

1. 120 VOLT POWER WIRING FOR EACH VAV BOX SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
2. UNIT TRANSFORMER TO BE PROVIDED BY THE MANUFACTURER.
3. VAV HOT WATER CONTROL VALVE TO BE 2-WAY UNLESS NOTED AS 3-WAY ON DRAWINGS.

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

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Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: MECHANICAL CONTROLS DIAGRAM

Project Name: EXPAND DOMICILIARY BUILDING 64

Project Number: 666-309

Date: 13 MARCH 2015

Location: VAMC SHERIDAN WY 1898, FORT ROAD, SHERIDAN, WY 82801

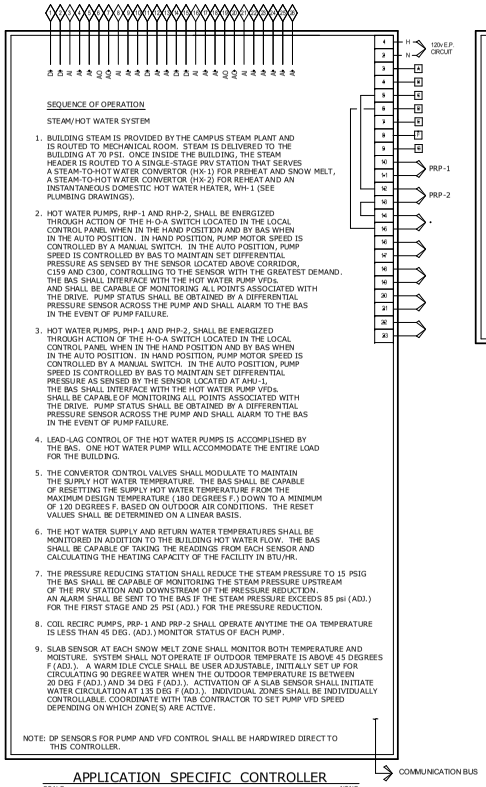
Building Number: 64 | Checked: DAR | Drawn: SOH

Drawing Number: 1-M-501

Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



SEQUENCE OF OPERATION

STEAM/HOT WATER SYSTEM

1. BUILDING STEAM IS PROVIDED BY THE CAMPUS STEAM PLANT AND IS ROUTED TO MECHANICAL ROOM. STEAM IS DELIVERED TO THE BUILDING AT 70 PSI. ONCE INSIDE THE BUILDING, THE STEAM HEADER IS ROUTED TO A SINGLE-STAGE PRV STATION THAT SERVES A STEAM-TO-HOT WATER CONVERTOR (HX-1) FOR PREHEAT AND SNOW MELT, A STEAM-TO-HOT WATER CONVERTOR (HX-2) FOR REHEAT AND AN INSTANTANEOUS DOMESTIC HOT WATER HEATER, WH-1 (SEE PLUMBING DRAWINGS).

2. HOT WATER PUMPS, RHP-1 AND RHP-2, SHALL BE ENERGIZED THROUGH ACTION OF THE H-O-A SWITCH LOCATED IN THE LOCAL CONTROL PANEL WHEN IN THE HAND POSITION AND BY BAS WHEN IN THE AUTO POSITION. IN HAND POSITION, PUMP MOTOR SPEED IS CONTROLLED BY A MANUAL SWITCH. IN THE AUTO POSITION, PUMP SPEED IS CONTROLLED BY BAS TO MAINTAIN SET DIFFERENTIAL PRESSURE AS SENSED BY THE SENSOR LOCATED ABOVE CORRIDOR, C159 AND C300, CONTROLLING TO THE SENSOR WITH THE GREATEST DEMAND. THE BAS SHALL INTERFACE WITH THE HOT WATER PUMP VFDs. AND SHALL BE CAPABLE OF MONITORING ALL POINTS ASSOCIATED WITH THE DRIVE. PUMP STATUS SHALL BE OBTAINED BY A DIFFERENTIAL PRESSURE SENSOR ACROSS THE PUMP AND SHALL ALARM TO THE BAS IN THE EVENT OF PUMP FAILURE.

3. HOT WATER PUMPS, PHP-1 AND PHP-2, SHALL BE ENERGIZED THROUGH ACTION OF THE H-O-A SWITCH LOCATED IN THE LOCAL CONTROL PANEL WHEN IN THE HAND POSITION AND BY BAS WHEN IN THE AUTO POSITION. IN HAND POSITION, PUMP MOTOR SPEED IS CONTROLLED BY A MANUAL SWITCH. IN THE AUTO POSITION, PUMP SPEED IS CONTROLLED BY BAS TO MAINTAIN SET DIFFERENTIAL PRESSURE AS SENSED BY THE SENSOR LOCATED AT AHU-1, THE BAS SHALL INTERFACE WITH THE HOT WATER PUMP VFDs. SHALL BE CAPABLE OF MONITORING ALL POINTS ASSOCIATED WITH THE DRIVE. PUMP STATUS SHALL BE OBTAINED BY A DIFFERENTIAL PRESSURE SENSOR ACROSS THE PUMP AND SHALL ALARM TO THE BAS IN THE EVENT OF PUMP FAILURE.

4. LEAD-LAG CONTROL OF THE HOT WATER PUMPS IS ACCOMPLISHED BY THE BAS. ONE HOT WATER PUMP WILL ACCOMMODATE THE ENTIRE LOAD FOR THE BUILDING.

5. THE CONVERTOR CONTROL VALVES SHALL MODULATE TO MAINTAIN THE SUPPLY HOT WATER TEMPERATURE. THE BAS SHALL BE CAPABLE OF RESETTING THE SUPPLY HOT WATER TEMPERATURE FROM THE MAXIMUM DESIGN TEMPERATURE (180 DEGREES F.) DOWN TO A MINIMUM OF 120 DEGREES F. BASED ON OUTDOOR AIR CONDITIONS. THE RESET VALUES SHALL BE DETERMINED ON A LINEAR BASIS.

6. THE HOT WATER SUPPLY AND RETURN WATER TEMPERATURES SHALL BE MONITORED IN ADDITION TO THE BUILDING HOT WATER FLOW. THE BAS SHALL BE CAPABLE OF TAKING THE READINGS FROM EACH SENSOR AND CALCULATING THE HEATING CAPACITY OF THE FACILITY IN BTU/HR.

7. THE PRESSURE REDUCING STATION SHALL REDUCE THE STEAM PRESSURE TO 15 PSIG THE BAS SHALL BE CAPABLE OF MONITORING THE STEAM PRESSURE UPSTREAM OF THE PRV STATION AND DOWNSTREAM OF THE PRESSURE REDUCTION. AN ALARM SHALL BE SENT TO THE BAS IF THE STEAM PRESSURE EXCEEDS 85 psi (ADJ.) FOR THE FIRST STAGE AND 25 PSI (ADJ.) FOR THE PRESSURE REDUCTION.

8. COIL RECIRC PUMPS, PRP-1 AND PRP-2 SHALL OPERATE ANYTIME THE OA TEMPERATURE IS LESS THAN 45 DEG. (ADJ.) MONITOR STATUS OF EACH PUMP.

9. SLAB SENSOR AT EACH SNOW MELT ZONE SHALL MONITOR BOTH TEMPERATURE AND MOISTURE. SYSTEM SHALL NOT OPERATE IF OUTDOOR TEMPERATE IS ABOVE 45 DEGREES F (ADJ.). A WARM IDLE CYCLE SHALL BE USER ADJUSTABLE, INITIALLY SET UP FOR CIRCULATING 90 DEGREE WATER WHEN THE OUTDOOR TEMPERATURE IS BETWEEN 20 DEG F (ADJ.) AND 34 DEG F (ADJ.). ACTIVATION OF A SLAB SENSOR SHALL INITIATE WATER CIRCULATION AT 135 DEG F (ADJ.). INDIVIDUAL ZONES SHALL BE INDIVIDUALLY CONTROLLABLE. COORDINATE WITH TAB CONTRACTOR TO SET PUMP VFD SPEED DEPENDING ON WHICH ZONE(S) ARE ACTIVE.

NOTE: DP SENSORS FOR PUMP AND VFD CONTROL SHALL BE HARDWIRED DIRECT TO THIS CONTROLLER.

APPLICATION SPECIFIC CONTROLLER

SCALE: NONE

STEAM AND HOT WATER SYSTEM

THE BAS SHALL BE CAPABLE OF TRENDING DATA (TRENDING RATE TO BE ADJUSTABLE) TO ACCOMMODATE THE FOLLOWING ENERGY CONSUMPTION SUMMARY PLOTTED VERSUS TIME:

1. COOLING SYSTEM:

   COOLING BTU/HR
   TONS
   TON-HOURS
   BTU/S.F. (USE 86,747 S.F.)
   TONS/S.F. (USE 86,747 S.F.)

2. HEATING SYSTEM:

   HEATING BTU/HR
   BTU/S.F. (USE 86,747 S.F.)
   THERMS
   DECATHERMS

3. ELECTRICAL SYSTEM:

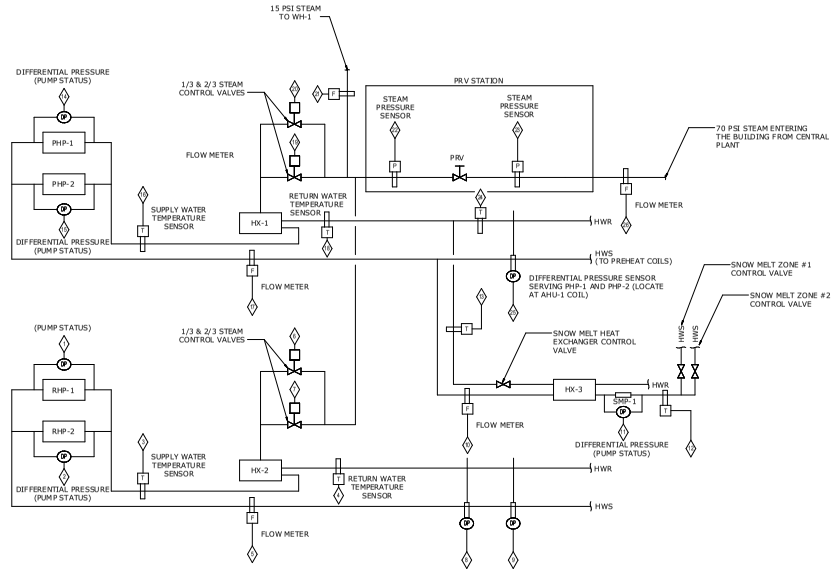
   KW
   KWH
   KVA
   KVAR
   POWER FACTOR
   LOAD FACTOR

AT THE END OF EACH REPORT (TO BE CONVERTABLE TO AN EXCEL COMPATIBLE FILE), THE DATA SHOULD INCLUDE THE DAILY, WEEKLY, AND MONTHLY TOTAL OF EACH DATA POINT. THE HIGH, LOW, AND AVERAGE DATA POINT SHALL BE INCLUDED AS WELL AS THE TIME OF THE OCCURANCE FOR THE HIGH, LOW, AND AVERAGE DATA POINT.

ENERGY CONSUMPTION SUMMARY

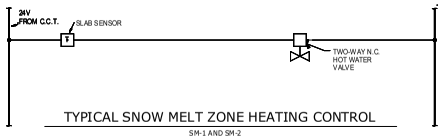
SCALE: NONE

COOLING, HEATING, AND ELECTRICAL SYSTEMS



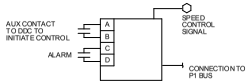
HOT WATER SYSTEM

SCALE: NONE



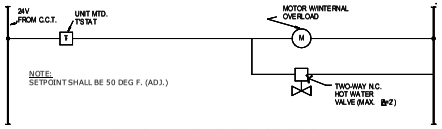
TYPICAL SNOW MELT ZONE HEATING CONTROL

SM-1 AND SM-2



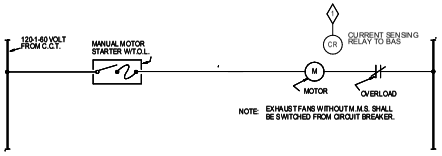
HOT WATER PUMP VARIABLE SPEED DRIVE CONTROL

PHP-1, PHP-2, RHP-1, RHP-2, & SMP-1



TYPICAL UNIT HEATER CONTROL

UH-1, UH-2, UH-3, UH-4, & UH-5



SINGLE PHASE EXHAUST FAN

SEE SCHEDULE FOR INTERLOCK REQUIREMENTS.

BUILDING IS FULLY SPRINKLERED

Revisions: Date

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Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: MECHANICAL CONTROLS DIAGRAM

Project Name: EXPAND DOMICILIARY BUILDING 64

Project Number: 666-309

Date: 13 MARCH 2015

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number: 64 | Checked: DAR | Drawn: SOH

Drawing Number: 1-M-502

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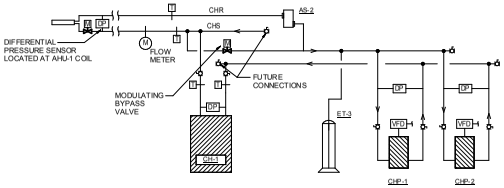
CHILLED WATER CONTROL SEQUENCE AND FLOW DIAGRAM



SEQUENCE OF OPERATION FOR CHILLED WATER SYSTEM - CH-1.

THE CHILLED WATER SYSTEM SHALL BE ENABLED OR DISABLED FROM THE BUILDING AUTOMATION SYSTEM (BAS).

UPON A SIGNAL FROM THE BAS, THE RESPECTIVE CHILLED WATER PUMP SHALL START. ONCE ADEQUATE FLOW THROUGH CHILLER IS INDICATED BY THE BAS, THE RESPECTIVE CHILLER WILL BE ENERGIZED. IF CHILLED WATER PUMP FAILURE OCCURS, THE LAG PUMP SHALL AUTOMATICALLY START. FAULT ALARMS SHALL BE INDICATED AT THE BAS. ONCE OPERATIONAL, THE CHILLER'S INTERNAL CONTROLS SHALL MODULATE THE COMPRESSORS TO ACCOMMODATE THE LOAD.

THE TEMPERATURE CONTROLLER ON THE CHILLER SHALL MAINTAIN LEAVING WATER TEMPERATURE AT A SETPOINT OF 44F (ADJ.).

THE 2-WAY MODULATING CHILLED WATER BYPASS VALVE SHALL BE USED TO MAINTAIN THE MINIMUM FLOW THROUGH THE CHILLER'S EVAPORATOR AS INDICATED BY DIFFERENTIAL PRESSURE ACROSS CHILLER EVAPORATOR. COORDINATE THIS MINIMUM FLOW SETPOINT WITH THE SUCCESSFUL CHILLER VENDOR.

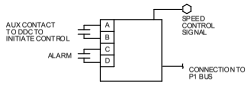
CHILLED WATER PUMP SPEED SHALL BE CONTROLLED BY A DIFFERENTIAL PRESSURE SENSOR AT AHU-1. DP SENSOR SHALL BE HARDWIRED DIRECTLY TO THE CHILLER ROOM CONTROL PANEL.

PROVIDE USER ADJUSTABLE SEQUENCE FOR CYCLING CHILLED WATER PUMPS TO CIRCULATE WATER AT OUTDOOR TEMPERATURES BELOW 32 DEGREES F (ADJ.) BAS SHALL CYCLE ON PUMPS FOR A 5 MINUTE INTERVAL (ADJ.) EVERY 30 MINUTS (ADJ.) WHEN THE OUTDOOR TEMPERATURE IS LESS THAN 32 DEGREES (ADJ.). THIS SEQUENCE SHALL BE USER SELECTABLE TO BE ACTIVATED OR DEACTIVATED. THIS IS A FREEZE PREVENTION MEASURE FOR EXTERIOR CHILLED WATER PIPING.

THE BAS SEQUENCES SHALL INCLUDE ADJUSTABLE MINIMUM-RUN TIMERS TO PREVENT EXCESSIVE STARTING AND STOPPING OF CHILLERS AND PUMPS.

BAS SHALL MONITOR THE FOLLOWING STATUS AND ALARM POINTS:
- SUPPLY AND RETURN WATER TEMPERATURES AT SENSORS SHOWN ON SCHEMATIC
- CHILLED WATER FLOW RATE
- STATUS OF EACH PUMP DIFFERENTIAL PRESSURE SENSOR
  ALARM SIGNAL FROM EACH PUMP VFD
  BACNET INTERFACE TO EACH CHILLER PANEL EQUIPMENT INTEGRATOR
- BAS SHALL ALARM IF CHILLED WATER SUPPLY OR RETURN TEMPERATURE DROPS BELOW 36 DEGREE F (ADJ.)

GRAPHIC DISPLAY:
A DYNAMIC COLOR GRAPHIC DISPLAY OF THE CHILLED WATER SYSTEMS, PUMPS, AND CHILLER SHALL BE CREATED FOR MONITORING AND CONTROL PURPOSES. GRAPHIC DISPLAY SHALL INDICATE CRITICAL ALARMS, VALVE POSITION, TEMPERATURES, FLOWS AND OTHER NECESSARY INFORMATION TO MANAGE THE SYSTEMS.



CHILLED WATER PUMP VARIABLE SPEED DRIVE CONTROL

CHP-1 & CHP-2

POWER METERING

1. THE BUILDING AUTOMATION SYSTEM SHALL BE FULLY INTEGRATED WITH THE BUILDING POWER METER VIA RS 485 MODBUS LINK. THE BAS SHALL BE CAPABLE OF GATHERING AND TRENDING DATA AS LISTED IN THE ENERGY CONSUMPTION SUMMARY SHOWN ON SHEET M4.4.

EMERGENCY GENERATOR

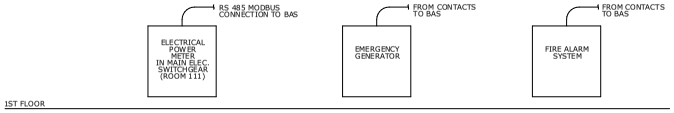
1. THE BUILDING AUTOMATION SYSTEM SHALL BE CAPABLE OF THE FOLLOWING VIA CONTACT CLOSURE:
   a. START/STOP
   b. LOW FUEL INDICATION
   c. STATUS
   d. RUN TIME

FIRE ALARM PANEL

1. THE BUILDING AUTOMATION SYSTEM SHALL BE CAPABLE OF THE FOLLOWING VIA CONTACT CLOSURE:
   a. ACTIVE ALARM STATUS
   b. SPRINKLER FLOW
   c. SPRINKLER TAMPER

FACILITY ELECTRICAL COMPONENTS

SCALE: NONE



BAS INTERFACE WITH FACILILTY ELECTRICAL COMPONENTS

NOTES:

1. THE ELECTRICAL POWER METER SHALL BE PROVIDED BY THE SWITCHGEAR VENDOR. THE SWITCHGEAR VENDOR SHALL COORDINATE WITH THE BAS VENDOR TO PROVIDE MODBUS POINT MAP INFORMATION FOR INTEGRATION WITH THE BUILDING AUTOMATION SYSTEM.
2. THE EMERGENCY GENERATOR, FIRE PUMP, AND FIRE ALARM PANEL SHALL BE PROVIDED BY THE RESPECTIVE VENDOR. EACH RESPECTIVE VENDOR SHALL COORDINATE WITH THE BAS VENDOR TO PROVIDE THE REQUIRED NUMBER OF CONTACTS.

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON HEARNE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **MECHANICAL CONTROLS DIAGRAM**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Location: **VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801**

Building Number	Checked	Drawn
64	DAR	SOH

Project Number: **666-309**

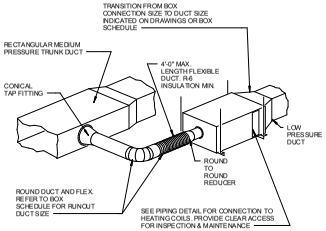
Date: 13 MARCH 2015

Drawing Number: **1-M-503**

Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



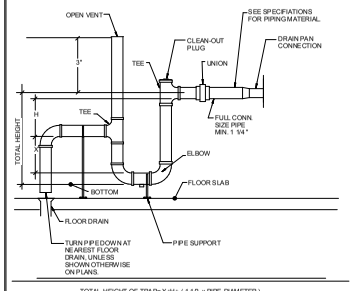
NOTES:

1. THIS DETAIL REFERS TO VAV AND CONSTANT VOLUME HOT WATER REHEAT BOXES AND VAV BOXES WITHOUT REHEAT.
2. FLEX DUCT TO ALLOW ONE BEND WITH CENTERLINE RADIUS NOT LESS THAN 1 1/2. DUCT DIAMETERS.
3. TAP FITTING TO RECTANGULAR MEDIUM PRESSURE DUCT MAY ALSO BE RECTANGULAR 45° ENTRY, SIZED PER SMACNA RECOMMENDATIONS, AND THEN TRANSITIONING TO ROUND.
4. MEDIUM PRESSURE ROUND TRUNK DUCT TO HAVE CONICAL TEE FITTING, WITH OTHER REQUIREMENTS AS SHOWN.
5. BOXES 1,400 CFM OR LESS TO BE SUPPORTED WITH 1"x18 GA. GALVANIZED BAND IRON ON FOUR CORNERS. BOXES GREATER THAN 1,400 CFM SHALL HAVE TRAPEZE SUPPORT OF REINFORCING ANGLE WITH 3/8" GALVANIZED ALL THREAD ROD HANGERS.
6. COORDINATE REQUIREMENT FOR CEILING ACCESS PANELS WITH DIVISION 8.

AIR TERMINAL UNIT (HOT WATER REHEAT BOX) — 5

NOTE:

ELEVATE A/C UNIT SUFFICIENT DISTANCE ABOVE FLOOR OR ROOF TO ALLOW FOR INSTALLATION OF TRAP WITH ADEQUATE DIMENSIONS TO WITHSTAND SYSTEM OPERATING PRESSURE. COORDINATE WITH DETAIL FOR A UNIT MOUNTING.

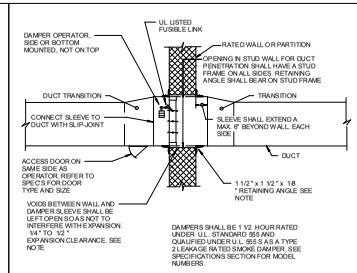


TOTAL HEIGHT OF TRAP= X +H+ (1 1/2 x PIPE DIAMETER)

FOR DRAW THRU UNITS
X= MIN. 1/2 H (PREFERRED X=H)
H= NEGATIVE STATIC PRESSURE +1"

FOR BLOW THRU UNITS
X= FAN STATIC PRESSURE +1"
H= MIN. 1"

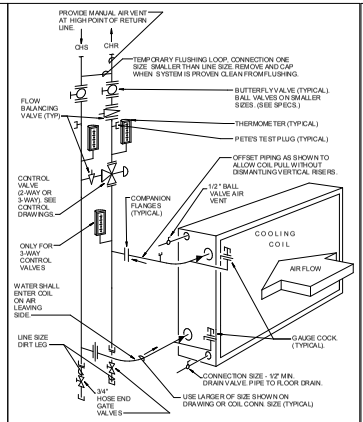
COOLING COIL CONDENSATE DRAIN — 4



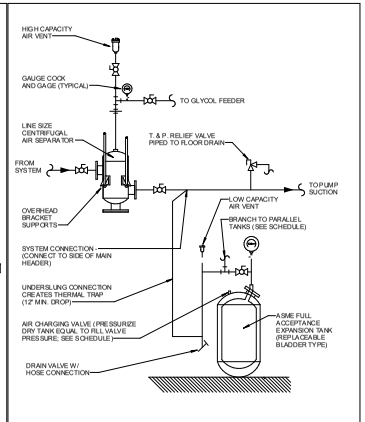
NOTES:

1. PROVIDE U.L. LISTED DAMPER, SLEEVE & OPERATOR ASSEMBLY IN ACCORDANCE WITH U.L. 555.
2. INSTALL DAMPER AND SLEEVE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS NOT TO VOID U.L. LISTING.
3. EXTEND SLEEVE BEYOND WALL A MAX. 6 INCHES AND MOUNT OPERATOR ON SLEEVE.
4. PROVIDE EXPANSION SPACE PER MANUFACTURER'S INSTRUCTION, BUT NOT LESS THAN 1/8 " PER LINEAR FOOT.
5. PROVIDE MINIMUM 1 1/2 " x 1 1/2 " x 1/8 " RETAINING ANGLE ON TOP, BOTTOM & SIDES. ATTACH ANGLES TO SLEEVE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. DAMPER SHALL BE SELF SUPPORTING, INDEPENDENT OF DUCTWORK, ANGLES SHALL OVERLAP WALL A MINIMUM OF ONE INCH.

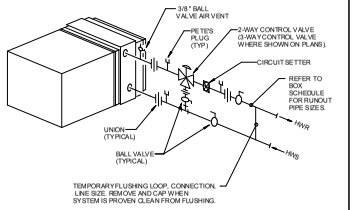
COMBINATION FIRE/SMOKE DAMPER AT RATED WALL — 3



CHILLED WATER PIPING AT SINGLE COOLING COIL — 2



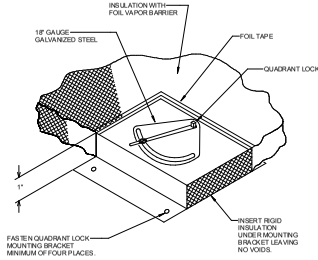
AIR SEPARATOR AND EXPANSION TANK DETAIL (VERTICAL FLOOR MOUNTED - BLADDER TYPE) — 1



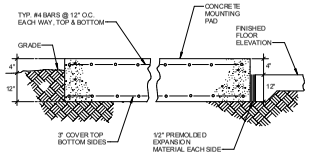
NOTE:

PIPING SAME FOR HEATING COIL IN HOT WATER REHEAT TERMINAL BOXES AND FOR DUCT MOUNTED HOT WATER HEATING COILS AND FAN COIL UNITS.

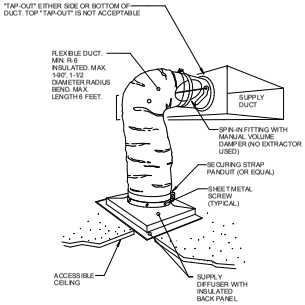
PIPING AT REHEAT COIL — 10



QUADRANT LOCK DETAIL — 9



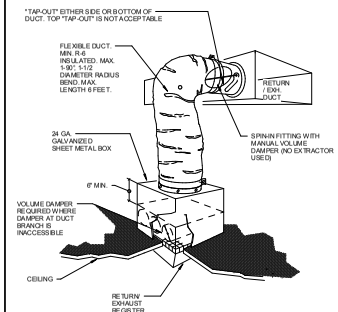
EXTERIOR EQUIPMENT MOUNTING PAD — 8



NOTE:

FOLLOW MFR'S INSTRUCTIONS FOR INSTALLATION OF SUPPLY DIFFUSER IN CEILING

DUCTWORK CONNECTION TO SUPPLY DIFFUSER (FLEX DUCT) — 7



DUCTWORK CONNECTION TO RETURN/EXHAUST GRILLE (FLEX DUCT) — 6

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON HEARLE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **MECHANICAL DETAILS**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Project Number: **666-309**

Date: 13 MARCH 2015

Location: **VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801**

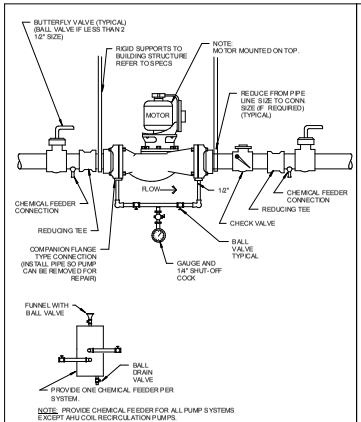
Building Number	Checked	Drawn
64	DAR	SOH

Drawing Number: **1-M-600**

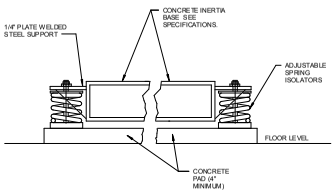
Dwg. of

Office of Construction and Facilities Management

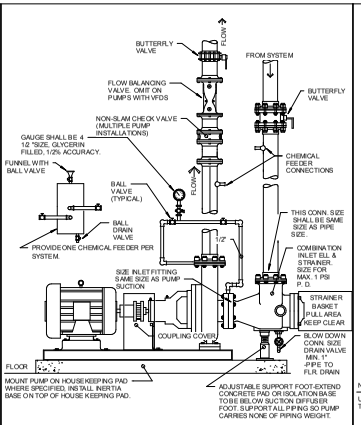
VA FORM 08-6231



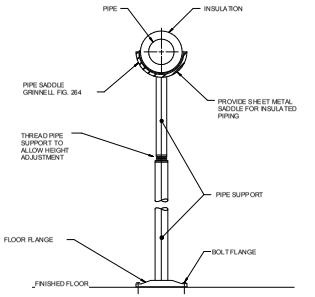
IN-LINE CIRCULATING PUMP | 5



INERTIA BASE | 4

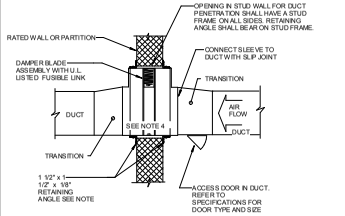


END SUCTION WATER PUMP | 3



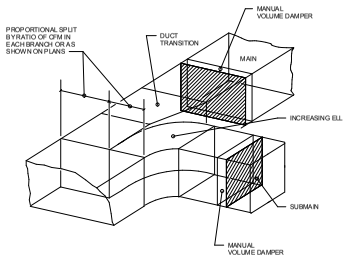
NOTE:
USE WHERE SHOWN ON PLANS AND WHERE REQUIRED FOR SUPPORT IN ADDITION TO PIPE HANGERS. EQUIPMENT SHALL BEAR NO WEIGHT OF PIPING.

FLOOR MOUNTED PIPE STAND | 2

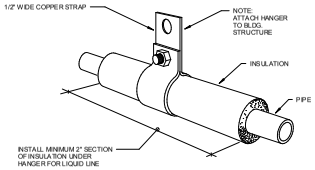


NOTES:
1. PROVIDE U.L. LISTED DAMPER AND SLEEVE IN ACCORDANCE WITH U.L. 555.
2. INSTALL DAMPER AND SLEEVE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS NOT TO VOID U.L. LISTING.
3. EXTEND SLEEVE BEYOND WALL MAX. 6 INCHES.
4. PROVIDE EXPANSION SPACE PER MANUFACTURER'S INSTRUCTION, BUT NOT LESS THAN 1/8" PER LINEAR FOOT, BOTH DIRECTIONS.
5. PROVIDE MINIMUM 1 1/2" x 1 1/2" x 1/8" RETAINING ANGLE ON TOP, BOTTOM, AND SIDES. ATTACH ANGLE TO SLEEVE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. DAMPER SHALL BE SELF SUPPORTING, INDEPENDENT OF DUCTWORK. ANGLES SHALL OVERLAP WALL. A MINIMUM OF ONE INCH.

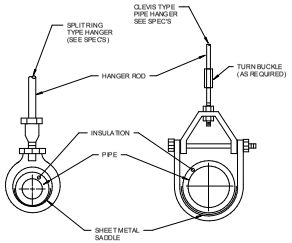
FIRE DAMPER AT RATED WALL | 1



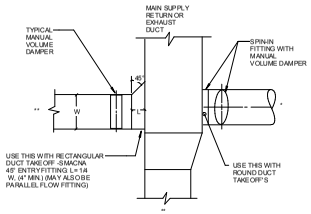
RECTANGULAR WYE FOR LOW PRESSURE DUCTWORK | 10



REFRIGERANT PIPING HANGER | 9



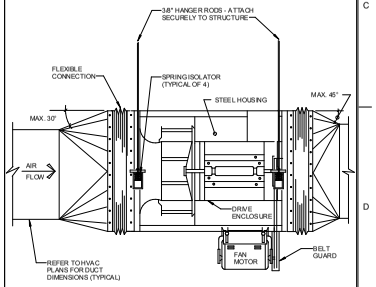
PIPE HANGER SUPPORTS | 8



* = BRANCH TO INDIVIDUAL DIFFUSER OR GRILLE

** = SUBMAIN, BRANCH MAIN, OR BRANCH.

LOW PRESSURE DUCT VOLUME DAMPER REQUIREMENTS | 7



IN-LINE FAN | 6

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON HEARLE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: MECHANICAL DETAILS

Project Name: EXPAND DOMICILIARY BUILDING 64

Project Number: 666-309

Date: 13 MARCH 2015

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number	Checked	Drawn
64	DAR	SOH

Drawing Number: 1-M-601

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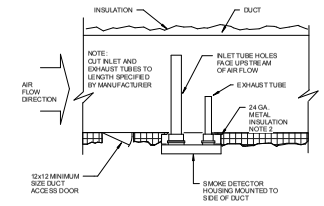
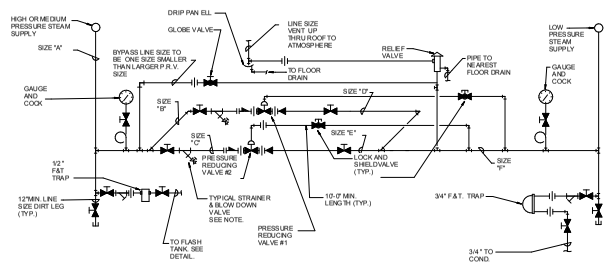
Office of Construction and Facilities Management

VA FORM 08-6231



NOTES:
1. DETAIL SHOWS GENERAL INSTALLATION METHODS. REFER TO INDIVIDUAL MANUFACTURER FOR THEIR SPECIFIC INSTALLATION AND LOCATION INSTRUCTIONS.
2. STANDOFF BRACKET NOT REQUIRED ON NON-INSULATED DUCT.

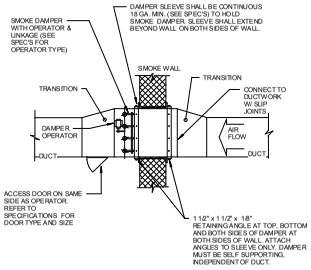
DUCT MOUNTED SMOKE DETECTOR | 3



PRESSURE REDUCING VALVE SCHEDULE													
STA. NO.	MFR. & MODEL	P.R.V. NO.	VALVE SIZE	P.S.I. IN	LBS./HR.	SIZE "A"	SIZE "B"	SIZE "C"	NO. OF VALVES	P.S.I. OUT	SIZE "D"	SIZE "E"	SIZE "F"	RELIEF VALVE SETTING	SERVICE
	SPIRAX 25P	1		70	3323				1	15					
		2		70	1660				1	15					

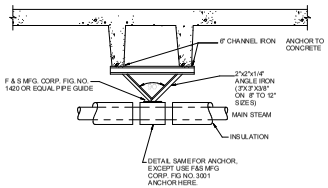
NOTE:
"INSTALL "Y" STRAINERS WITH BASKETS HORIZONTAL (POINTING OUT NOT DOWN)

SINGLE STAGE PRESSURE REDUCING STATION | 2

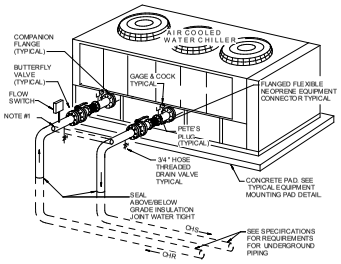


NOTES:
1. SMOKE DAMPER MUST BE INSTALLED IN SLEEVE AS CLOSE TO WALL AS POSSIBLE. BUT NOT TO EXCEED 18" FROM WALL.
2. LOCATE OPERATOR OUT OF AIR STREAM ON BOTTOM OR EITHER SIDE OF DUCT, BUT NOT ON TOP OF DUCT.
3. DAMPER, SLEEVE AND OPERATOR SHALL BE U.L. LISTED AS AN ASSEMBLY PER U.L. 555.
4. DAMPER SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS NOT TO VOID U.L. LISTING.

SMOKE DAMPER AT SMOKE WALL | 1



STEEL STRUCTURE STEAM MAIN PIPE GUIDE AND ANCHOR | 6

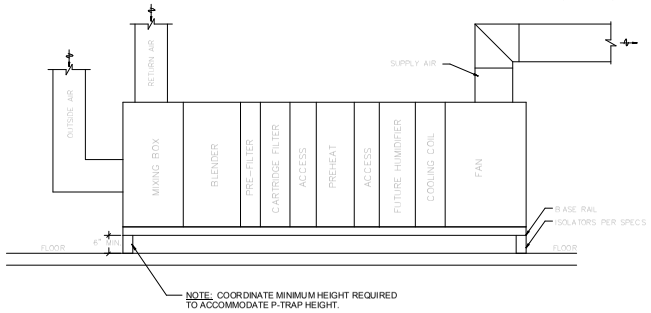


NOTES:
1. TEMPORARY FLUSHING LOOP. CONNECTION ONE SIZE SMALLER THAN LINE SIZE. REMOVE AND CAP WHEN SYSTEM IS PROVEN CLEAN FROM FLUSHING.
2. CONNECT CHILLED WATER PIPING TO COOLER WITH FLANGES OR UNIONS TO ALLOW CLEANING OR REMOVAL OF COOLER WITHOUT NEED TO REMOVE PIPING.
3. FOAMGLAS INSULATION COVERED WITH ALUMINUM JACKET PER SPECIFICATION SECTION 15250 FOR ABOVE GRADE PIPING. HEAT TRACE CHILLED WATER PIPING ABOVE GRADE AT 10 WATTS PER LINEAR FT. INSULATE TO 18" BELOW GRADE, AND INCREASE INSULATION THICKNESS BY 1" ABOVE WHAT IS SPECIFIED FOR CHILLED WATER PIPING OF THIS SIZE.

CHILLED WATER PIPING AT AIR COOLED WATER CHILLER | 5

NOTE: PROVIDE FLEX CONNECTIONS AT DUCT WORK CONNECTIONS TO UNIT IF NOT PROVIDED INTERNAL TO UNIT.

NOTE: PROVIDE ACCESS DOORS ON BOTH SIDES OF AHU-1 AND ONLY IN ON THE ACCESSIBLE SIDE OF AHU-2 (SEE PLANS)



INDOOR AHU DETAIL | 4

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

COLORADO LICENSED DONALD AARON HEARNE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: MECHANICAL DETAILS

Project Name: EXPAND DOMICILIARY BUILDING 64

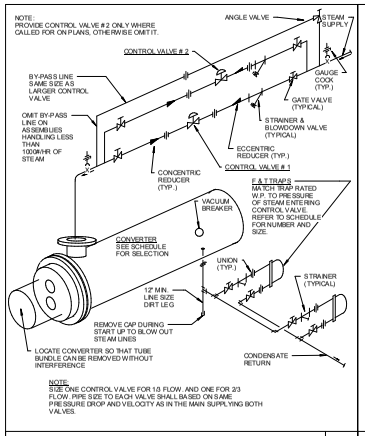
Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number	Checked	Drawn
64	DAR	SOH

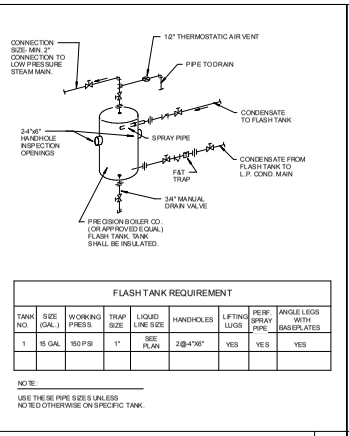
Project Number: 666-309
Date: 13 MARCH 2015
Drawing Number: 1-M-602
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



STEAM PIPING AT CONVERTER | 5

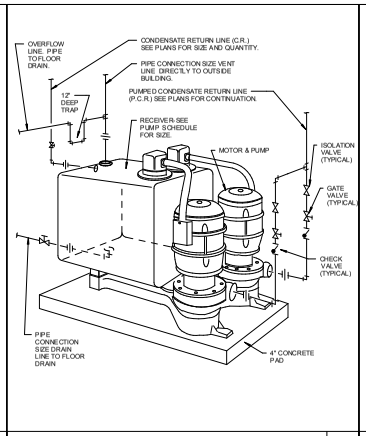


FLASH TANK REQUIREMENT

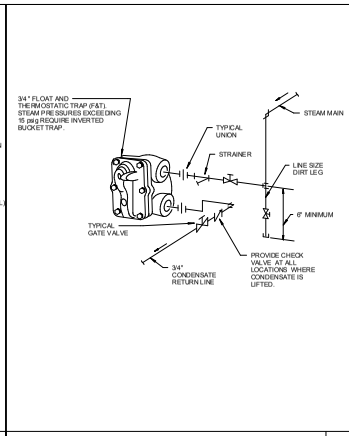
TANK NO.	SIZE (GAL.)	WORKING PRESS.	TRAP SIZE	LIQUID LINE SIZE	HANDHOLES	LIFTING LUGS	PERF. SPRAY PIPE	ANGLE LEGS WITH BASEPLATES
1	15 GAL.	150 PSI	1"	SEE PLAN	2@4"X6"	YES	YES	YES

NOTE:
USE THESE PIPE SIZES UNLESS NOTED OTHERWISE ON SPECIFIC TANK.

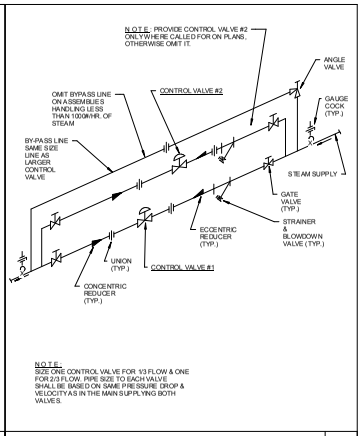
STEAM FLASH TANK | 4



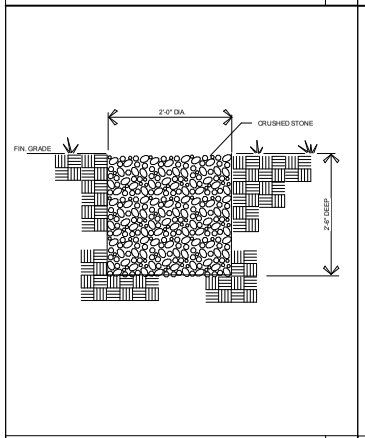
PIPING AT ABOVE FLOOR TYPE CONDENSATE PUMP | 3



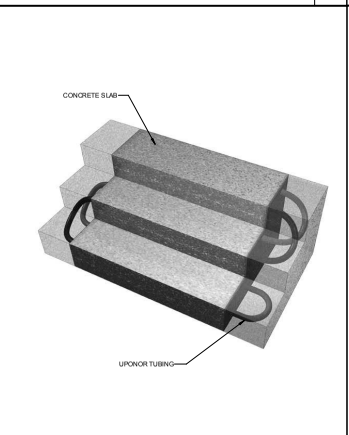
END OF MAIN DRIP | 2



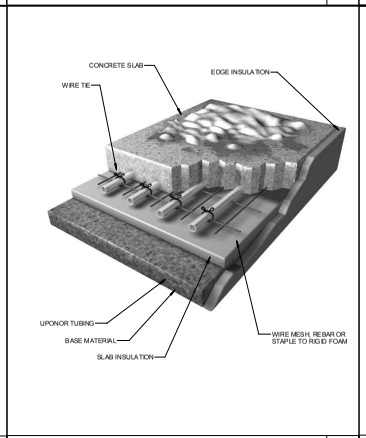
AUTOMATIC STEAM CONTROL VALVE ASSEMBLY (PARALLEL CONTROL VALVES) | 1



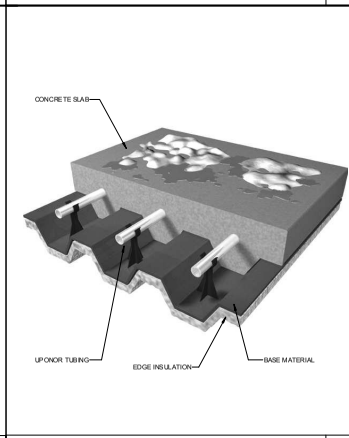
CONDENSATE PIT DETAIL | 10



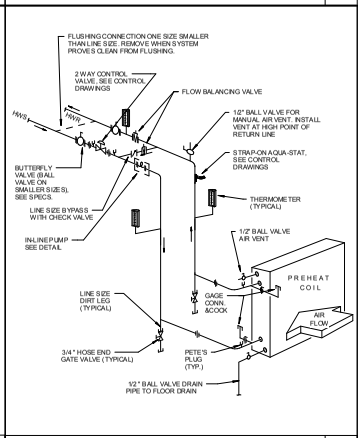
SNOWMELT AT STAIRS | 9



SNOW MELT | 8



SNOWMELT ON GRADE | 7



HOT WATER PIPING AT PREHEAT COIL | 6

BUILDING IS FULLY SPRINKLERED

Revisions: | Date

COLORADO LICENSED DONALD AARON HEARNE 48052 PROFESSIONAL ENGINEER

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
MECHANICAL DETAILS

Location
VAMC SHERIDAN WY 1898
FORT ROAD
SHERIDAN, WY 82801

Project Name
EXPAND DOMICILIARY BUILDING 64

Building Number	Checked	Drawn
64	DAR	SOH

Project Number
666-309

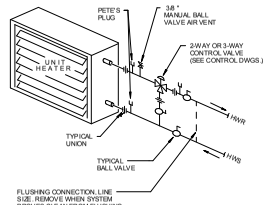
Date
13 MARCH 2015

Drawing Number
1-M-603

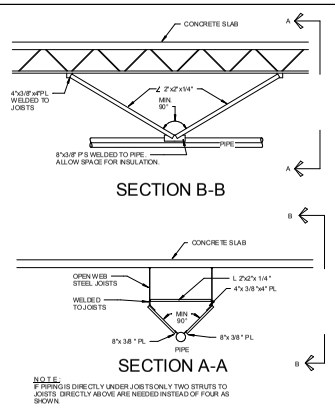
Dwg. of

Office of Construction and Facilities Management

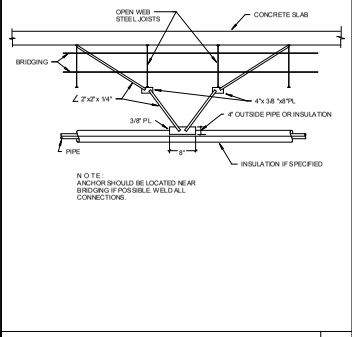
VA FORM 08-6231



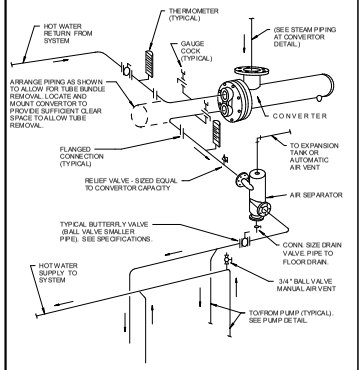
HOT WATER PIPING AT UNIT HEATER | 4



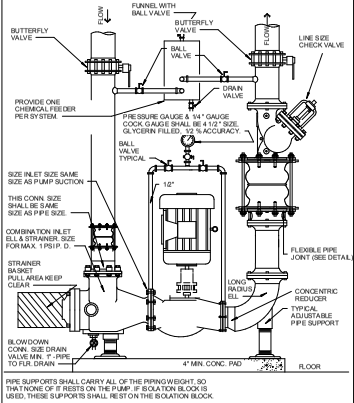
STEAM ANCHOR WITH JOISTS PARALLEL TO PIPE RUN | 3



STEAM ANCHOR WITH JOISTS PERPENDICULAR TO PIPE RUN | 2



HOT WATER PIPING AT CONVERTER | 1



PREHEAT AND REHEAT HOT WATER PUMPS | 6

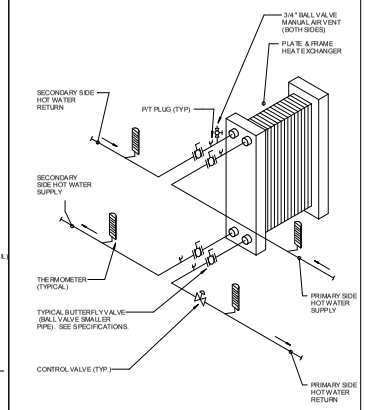


PLATE AND FRAME EXCHANGER DETAIL | 5

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

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Drawing Title
MECHANICAL DETAILS

Location
VAMC SHERIDAN WY 1898
FORT ROAD
SHERIDAN, WY 82801

Project Name
EXPAND DOMICILIARY BUILDING 64

Building Number	Checked	Drawn
64	DAR	SOH

Project Number
666-309

Date
13 MARCH 2015

Drawing Number
1-M-604

Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

LEGEND

SYMBOL	DESCRIPTION	MOUNTING HEIGHT
	LIGHTING	
S	DESIGNATES FIXTURE TYPE - SEE LIGHTING FIXTURE SCHEDULE	
	ALL FIXTURES IN THIS SPACE SHALL BE THE SAME TYPE INDICATED	
	NORMAL BRANCH SURFACE OR RECESSED FLUORESCENT FIXTURE (TYPE DETERMINES MOUNTING)	
	CRITICAL OR EQUIPMENT BRANCH SURFACE OR RECESSED FLUORESCENT FIXTURE (TYPE DETERMINES MOUNTING)	
	LIFE-SAFETY BRANCH SURFACE OR RECESSED FLUORESCENT FIXTURE (TYPE DETERMINES MOUNTING)	
	NORMAL BRANCH SURFACE OR RECESSED FIXTURE (TYPE DETERMINES MOUNTING)	
	CRITICAL OR EQUIPMENT BRANCH SURFACE OR RECESSED FIXTURE (TYPE DETERMINES MOUNTING)	
	LIFE-SAFETY BRANCH SURFACE OR RECESSED FIXTURE (TYPE DETERMINES MOUNTING)	
	NORMAL BRANCH SURFACE OR SUSPENDED FLUORESCENT FIXTURE (TYPE DETERMINES MOUNTING)	
	CRITICAL OR EQUIPMENT BRANCH SURFACE OR SUSPENDED FLUORESCENT FIXTURE (TYPE DETERMINES MOUNTING)	
	LIFE-SAFETY BRANCH SURFACE OR SUSPENDED FLUORESCENT FIXTURE (TYPE DETERMINES MOUNTING)	
	NORMAL BRANCH WALL BRACKET FIXTURE	
	CRITICAL OR EQUIPMENT BRANCH WALL BRACKET FIXTURE	
	LIFE-SAFETY BRANCH WALL BRACKET FIXTURE	
	EXIT LIGHT, PROVIDE DIRECTIONAL ARROWS AS INDICATED ON PLANS	
	BATTERY POWERED EMERGENCY LIGHT	
	TRACK LIGHTING	
	GROUND AND POLE MOUNTED SITE FIXTURES	
	SWITCHES	
NORMAL / EMERG		
S / $	SINGLE POLE SWITCH	3'-10" AFF TO CL
$_2$ / $_2$	DOUBLE POLE SWITCH - CENTER OFF	3'-10" AFF TO CL
$_3$ / $_3$	THREE WAY SWITCH	3'-10" AFF TO CL
$_4$ / $_4$	FOUR WAY SWITCH	3'-10" AFF TO CL
$_K$ / $_K$	SINGLE POLE SWITCH - KEY OPERATED	3'-10" AFF TO CL
$_D$ / $_D$	DIMMER SWITCH	3'-10" AFF TO CL
$_V$ / $_V$	VARIABLE INTENSITY CONTROL	3'-10" AFF TO CL
$_{IT}$ / $_{IT}$	INTERVAL TIMER CONTROL SWITCH	3'-10" AFF TO CL
$_P$ / $_P$	SINGLE POLE SWITCH WITH PILOT LIGHT	3'-10" AFF TO CL
$_{OC}$ / $_{OC}$	OCCUPANCY SENSOR SWITCH	3'-10" AFF TO CL
$_J$ / $_J$	JOG SWITCH	3'-10" AFF TO CL
$_M$ / $_M$	MOTOR RATED SWITCH WITH THERMAL OVERLOAD	3'-10" AFF TO CL
	PUSH BUTTON SWITCH (MUSHROOM BUTTON)	3'-10" AFF TO CL
	POWER - RECEPTACLES	
	120V. DUPLEX RECEPTACLE	1'-6" AFF TO CL.
	120V. DUPLEX RECEPTACLE - SPECIAL MOUNTING HEIGHT (REFER TO RECEPTACLE ABBREVIATIONS FOR EXCEPTIONS)	AS NOTED OR SEE SPECS
	120V. DOUBLE-DUPLEX RECEPTACLE	1'-6" AFF TO CL.
	120V. DOUBLE-DUPLEX - SPECIAL MOUNTING HEIGHT (REFER TO RECEPTACLE ABBREVIATIONS FOR EXCEPTIONS)	AS NOTED OR SEE SPECS
	120V. GFCI RECEPTACLE	1'-6" AFF TO CL.
	120V. GFCI RECEPTACLE - SPECIAL MOUNTING HEIGHT	AS NOTED OR SEE SPECS
	120V. DUPLEX RECEPTACLE - EMERGENCY	1'-6" AFF TO CL.
	120V. DUPLEX RECEPTACLE - EMERGENCY - SPECIAL MOUNTING HEIGHT (REFER TO RECEPTACLE ABBREVIATIONS FOR EXCEPTIONS)	AS NOTED OR SEE SPECS
	120V. DOUBLE-DUPLEX RECEPTACLE - EMERGENCY	1'-6" AFF TO CL.
	120V. DOUBLE-DUPLEX RECEPTACLE - EMERGENCY - SPECIAL MOUNTING HEIGHT (REFER TO RECEPTACLE ABBREVIATIONS FOR EXCEPTIONS)	AS NOTED OR SEE SPECS
	120V. GFCI RECEPTACLE - EMERGENCY	1'-6" AFF TO CL.
	120V. GFCI RECEPTACLE - EMERGENCY - SPECIAL MOUNTING HEIGHT	AS NOTED OR SEE SPECS
	SPECIAL CONFIGURATION RECEPTACLE (TYPE AS NOTED ON PLANS) (REFER TO RECEPTACLE ABBREVIATIONS FOR EXCEPTIONS)	1'-6" AFF TO CL.
	SPECIAL CONFIGURATION RECEPTACLE - EMERGENCY (TYPE AS NOTED ON PLANS) (REFER TO RECEPTACLE ABBREVIATIONS FOR EXCEPTIONS)	1'-6" AFF TO CL.
	120V. FLOOR MOUNTED RECEPTACLE - (TYPE AS NOTED ON PLANS)	
	120V. FLOOR MOUNTED RECEPTACLE - EMERGENCY (TYPE AS NOTED ON PLANS)	
	SURFACE METAL RACEWAY OR MULTI-OUTLET ASSEMBLY	

LEGEND

SYMBOL	DESCRIPTION	MOUNTING HEIGHT
	MISCELLANEOUS	
	NON-FUSIBLE SAFETY SWITCH, SIZE AS NOTED (AMP RATING/POLES)	
	FUSIBLE SAFETY SWITCH, SIZE AS NOTED (AMP RATING/POLES)	
	COMBINATION MOTOR STARTER	
	FACTORY WIRED CONTROLLER OR EQUIPMENT	
	MOTOR CONNECTION	
	DUCT HEATER CONNECTION	
	JUNCTION BOX	
	BRANCH CIRCUIT PANELBOARD - MOUNTING AS NOTED	
RIX	X-RAY ISOLATION PANEL LINE ISOLATION MONITOR	AS NOTED
IM	ISOLATION PANEL LINE ISOLATION MONITOR	AS NOTED
C	CLOCK, SINGLE FACE - CLOCK AND RECEPTACLE AS SPECIFIED	7'-0" AFF TO CL
C	CLOCK, DOUBLE FACE - CLOCK AND RECEPTACLE AS SPECIFIED	7'-0" AFF TO CL
C IT	INTERVAL TIMER	7'-0" AFF TO CL
MGAP	MEDICAL GAS ALARM PANEL	
SP	SECURITY SYSTEM CONTROL PANEL	
DS	DOOR SWITCH MOUNTED IN DOOR JAMB	6'-6" TO CENTERLINE
DR	DOOR RELEASE PUSH BUTTON	
CR	CARD READER	
KP	ELECTRONIC KEY PAD	
DS	DOOR SWITCH (CONNECTED TO X-RAY EQUIPMENT FOR SHUT-DOWN)	
PC	PHOTOCELL	
OS	OCCUPANCY SENSOR - CEILING MOUNT	
VFD	VARIABLE FREQUENCY DRIVE	
	FIRE ALARM	
	FIRE ALARM VISUAL STATION - LIGHT ONLY	
	FIRE ALARM AUDIO DEVICE	
	FIRE ALARM AUDIO DEVICE WITH STROBE	
	FIRE ALARM HORN	
	FIRE ALARM HORN WITH STROBE	
FS	FIRE ALARM CEILING MOUNT SPEAKER	
F	FIRE ALARM MANUAL PULL STATION	
S	FIRE ALARM SMOKE DETECTOR	
FS	HEAT DETECTOR	
FS X	FIRE ALARM DUCT SMOKE DETECTOR SUBSCRIPT A S FOLLOWS: S=SUPPLY, R=RETURN	
G	GAS DETECTOR	
F	FLAME DETECTOR	
FS X	BEAM DETECTOR SUBSCRIPT A S FOLLOWS: T=TRANSMITTER; R=RECEIVER	
CM	FIRE ALARM CONTROL MODULE	
IM	FIRE ALARM MONTIOR MODULE	
F	FLOW SWITCH	
T	TAMPER SWITCH	
F	FIRE FIGHTER'S TELEPHONE JACK	
	MAGNETIC DOOR HOLDER	
FS	SMOKE DETECTOR REMOTE INDICATOR / TEST SWITCH	
FACP	FIRE ALARM CONTROL PANEL	
FAAP	FIRE ALARM ANNUNCIATOR PANEL	
FEP	FIRE ALARM EXTENDER PANEL	
FADT	FIRE ALARM DIALER	
SCPS	SMOKE CONTROL AND PRESSURE PANEL	

LEGEND

SYMBOL	DESCRIPTION	MOUNTING HEIGHT
	ABBREVIATIONS	
ABC	ABOVE COUNTER - MOUNT HORIZONTALLY 8" ABOVE COUNTER SURFACE	
ADO	AUTOMATIC DOOR OPENER	
AFF	ABOVE FINISHED FLOOR	
AFG	ABOVE FINISHED GRADE	
COF	COFFEE MACHINE	
CLG	CEILING	
EWB	ELECTRONIC WHITE BOARD	
EQ	EQUIPMENT SYSTEM	
EWC	ELECTRIC WATER COOLER	
FBO	FURNISHED BY OTHERS	
FI	FILM ILLUMINATOR (VIEW BOX)	
FLR	RECESSED FLUSH IN THE FLOOR	
ICE	ICE MACHINE/MAKER	
IG	ISOLATED GROUND	
LS	LIFE SAFETY BRANCH	
C	CRITICAL BRANCH	
MW	MICROWAVE	
REF	REFRIGERATOR	
S	SAFETY TYPE	
SH	SPECIAL MOUNTING HEIGHT - COORDINATE EXACT HEIGHT WITH EQUIP. SERVED	
SMTO	MOTOR SWITCH WITH THERMAL OVERLOAD	
TC	TIME CLOCK	
TR	TAMPER RESISTENT	
TV	TELEVISION - COORDINATE EXACT MOUNTING HEIGHT WITH TV BRACKET	
UR	UNDERCOUNTER REFRIGERATOR	
VFD	VARIABLE FREQUENCY DRIVE	
WP	WEATHERPROOF	
	ONE-LINE	
	BRANCH CIRCUIT PANEL	
	DRY TYPE TRANSFORMER	
	TRANSFER SWITCH	
	METER	
	BREAKER; * ST* INDICATES SHUNT TRIP , *K* INDICATES KEY INTERLOCK	
#	FEEDER TAG	
S P D	SURGE PROTECTION DEVICE	
	GROUNDING ELECTRODE	
	RACEWAY	
	CONDUIT & BRANCH CIRCUIT WIRING	
	BRANCH CIRCUIT OR FEEDER CONCEALED IN OR BELOW FLOOR SLAB OR BELOW GRADE	
	RACEWAY TURNING UP AS VIEWED FROM THE LOAD	
	RACEWAY TURNING DOWN AS VIEWED FROM THE LOAD	
	RACEWAY VERTICAL RISER WITH HORIZONTAL CONTINUATION AT TWO LEVELS SHOWN	
	CAPPED RACEWAY	
	CIRCUIT CONTINUATION	
	HOMERUN TO PANELBOARD - NUMBER OF ARROWHEADS INDICATES NUMBER OF CIRCUITS. REFER TO SPECIFICATIONS FOR MINIMUM CONDUIT SIZES. NOTES: 1. ALL BRANCH CIRCUITS SHALL BE #12 AWG MINIMUM. REFER TO THE SPECIFICATIONS FOR UPSIZING REQUIREMENTS DUE TO VOLTAGE DROP OR OTHER PURPOSES. 2. ALL BRANCH CIRCUITS SHALL CONTAIN A SEPARATE GREEN INSULATED GROUNDING CONDUCTOR, #12 AWG MINIMUM, OR OTHERWISE AS NOTED. 3. ALL 120V AND 277V BRANCH CIRCUITS SHALL UTILIZE A SEPARATE DEDICATED NEUTRAL UNLESS OTHERWISE NOTED.	
	PARTIAL CIRCUIT	

ELECTRICAL SHEET INDEX

SHEET	DESCRIPTION
1-E-001	ELECTRICAL LEGENDS AND GENERAL NOTES
1-E-002	ELECTRICAL SCHEDULES
1-ED-001	ELECTRICAL SITE DEMOLITION PLAN
1-ED-100	BASEMENT AND FIRST FLOOR ELECTRICAL LIGHTING DEMOLITION PLANS
1-ED-101	SECOND AND THIRD FLOOR ELECTRICAL LIGHTING DEMOLITION PLANS
1-ED-102	BASEMENT AND FIRST FLOOR ELECTRICAL POWER DEMOLITION
1-ED-103	SECOND AND THIRD FLOOR ELECTRICAL POWER DEMOLITION PLANS
1-E-100	ELECTRICAL SITE PLAN
1-E-200	BASEMENT ELECTRICAL LIGHTING PLAN
1-E-201	FIRST FLOOR ELECTRICAL LIGHTING PLAN
1-E-202	SECOND FLOOR ELECTRICAL LIGHTING PLAN
1-E-203	THIRD FLOOR - ELECTRICAL LIGHTING PLAN
1-E-300	BASEMENT ELECTRICAL POWER PLAN
1-E-301	FIRST FLOOR ELECTRICAL POWER PLAN
1-E-302	SECOND FLOOR ELECTRICAL POWER PLAN
1-E-303	THIRD FLOOR ELECTRICAL POWER PLAN
1-E-400	BASEMENT FIRE ALARM PLAN
1-E-401	FIRST FLOOR FIRE ALARM PLAN
1-E-402	SECOND FLOOR FIRE ALARM PLANS
1-E-403	THIRD FLOOR FIRE ALARM PLAN
1-E-501	ELECTRICAL DETAILS
1-E-601	ELECTRICAL ONE-LINE DEMOLITION
1-E-602	ELECTRICAL ONE-LINE DIAGRAM - BASE BID
1-E-603	ELECTRICAL ONE-LINE DIAGRAM - BID ALTERNATE #2
1-E-701	ENLARGED ELECTRICAL PLANS
1-E-801	ELECTRICAL PANEL SCHEDULES
1-E-802	ELECTRICAL PANEL SCHEDULES

ELECTRICAL GENERAL NOTES

1. DRAWINGS ARE SCHEMATIC IN NATURE AND MAY NOT BE DRAWN EXACTLY TO SCALE. CONTRACTOR IS RESPONSIBLE FOR COORDINATING EXACT ROUTING OF ALL SERVICES WITH EXISTING CONDITIONS AND WITH ALL OTHER TRADES.

2. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR CEILING TYPES AND EXACT LOCATION OF ALL FIXTURES. VERIFY CEILING TYPES WITH ARCHITECT PRIOR TO ORDERING LIGHT FIXTURES TO ENSURE COMPATIBLE FIXTURE TRIMS AND MOUNTING HARDWARE.

3. ALL CIRCUITS SHALL INCLUDE A GREEN GROUND CONDUCTOR SIZED IN ACCORDANCE WITH NEC SECTION 250, OR LARGER IF NOTED.

4. EXIT SIGNS AND LIFE SAFETY LUMINAIRES ARE UNSWITCHED UNLESS OTHERWISE INDICATED.

5. ALL PENETRATIONS OF FIRE RATED PARTITIONS DUE TO THE INSTALLATION OF ELECTRICAL SYSTEMS SHALL BE SEALED TO MAINTAIN THE FIRE RATING OF THE WALL.

6. ALL VFDS SHOWN ON THE DRAWINGS ARE PROVIDED BY DIVISION 26. E.C. TO PROVIDE CIRCUITRY BETWEEN VFD AND MECHANICAL EQUIPMENT.

7. PROVIDE 120V CIRCUIT(S) AS REQUIRED FOR FIRE ALARM POWER SUPPLIES.

8. REFER TO ARCHITECTURAL DETAILS AND ELEVATIONS FOR EXACT RECEPTACLE AND SPECIAL SYSTEMS DEVICE LOCATIONS AND MOUNTING HEIGHTS. COORDINATE ALL REQUIREMENTS.

9. INSTALL CONDUIT CONCEALED IN FINISHED AREAS UNLESS OTHERWISE NOTED. PAINT EXPOSED CONDUIT TO MATCH FINISHES WITHIN THE SURROUNDING AREA.

10. DO NOT ROUTE CONDUIT WITHIN STRUCTURAL OR TOPPING SLABS OF FLOORS UNLESS SPECIFICALLY NOTED OTHERWISE AND WRITTEN APPROVAL IS OBTAINED FROM THE STRUCTURAL ENGINEER.

11. COORDINATE EXACT REQUIREMENTS AND LOCATIONS OF MECHANICAL EQUIPMENT WITH MECHANICAL AND PLUMBING DRAWINGS AND MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.

12. FIELD LOCATE EXISTING UNDERGROUND PUBLIC AND OWNER UTILITIES OF ALL TRADES PRIOR TO ANY EXCAVATION. CONTRACTOR IS RESPONSIBLE FOR REPAIRING AND/OR REPLACING ANY DAMAGE TO EXISTING UNDERGROUND UTILITIES TO ORIGINAL CONDITION.

13. NOT ALL SYMBOLS INDICATED IN ELECTRICAL LEGENDS ARE USED FOR THIS PROJECT.

14. ELECTRICAL CABLE AND WIRE JACKETING, CONDUIT, AND BOXES SHALL NOT USE MATERIALS CONTAINING VIRGIN OR RECYCLED CHLORINATED COMPOUNDS.

15. CIRCULAR FLUORESCENT LAMPS AND NON-PULSE START METAL HALIDE LAMPS ARE NOT ALLOWED TO BE USED ON THIS PROJECT.

16. RECEPTACLES IN PUBLIC AREAS (CORRIDORS, LOBBIES, ETC.), IN RESIDENT ROOMS, AND IN CLASSROOM AREAS SHALL BE TAMPER RESISTENT.

17. REFER TO THE PROJECT MANUAL AND OTHER TRADES DRAWINGS FOR INFORMATION REGARDING BID/DEDUCT ALTERNATES.

FIRE ALARM GENERAL NOTES

1. MAINTAIN FIRE ALARM DEVICES REMOVED IN DEMOLITION FOR POSSIBLE REUSE. PROVIDE NEW DEVICES (SMOKE DETECTORS, NOTIFICATION APPLIANCES, MANUAL PULL STATIONS, MAGNETIC HOLD-OPENS, DUCT DETECTORS, ETC) TO MATCH AS REQUIRED TO MEET THE LAYOUT SHOWN.

2. PROVIDE POWER SUPPLY AS REQUIRED TO SUPPORT NEW NOTIFICATION APPLIANCES INDICATED. PROVIDE BRANCH CIRCUIT CONNECTION TO POWER SUPPLY FROM SPARE 20/1 BRANCH CIRCUIT BREAKER IN NEAREST AVAILABLE EMERGENCY PANELBOARD AS REQUIRED.

3. PROVIDE DUCT SMOKE DETECTORS WITHIN 5'-0" OF EACH FIRE/SMOKE DAMPER INSTALLED ON THE PROJECT. REFER TO THE MECHANICAL DRAWINGS FOR QUANTITIES AND LOCATIONS OF FIRE/SMOKE DAMPERS.

4. REVISE GRAPHIC BUILDING MAPS AND FIRE ALARM SYSTEM ANNUNCIATORS AS NECESSARY TO DEPICT FACILITY RECONFIGURATION.

5. NEW FIRE ALARM DEVICES SHALL BE TOTALLY COMPATIBLE WITH NEW NOTIFIER FIRE ALARM CONTROL PANEL. PROVIDE SYSTEM PROGRAMMING AS REQUIRED TO PROPERLY INCORPORATE NEW DEVICES INTO EXISTING SYSTEM. PROVIDE APPURTENANCES AS REQUIRED TO PROVIDE A FULLY FUNCTIONAL SYSTEM CONFORMING TO THE APPLICABLE CODES AND REQUIREMENTS OF THE VA.

6. NEW WIRING SHALL MATCH EXISTING CAMPUS STANDARD AND BE INSTALLED IN CONDUIT WHEN LOCATED ABOVE INACCESSIBLE CEILINGS. FIRE ALARM CABLING MAY BE RUN IN J-HOOKS OR D-RINGS ELSEWHERE. ALL WIRING RUN IN WALLS SHALL BE IN CONDUIT (3/4" MINIMUM).

7. FIRE ALARM DEVICE LAYOUT SHOWN ON THE DRAWINGS IS PROVIDED FOR INFORMATION ONLY. PROVIDE FIRE ALARM SHOP DRAWINGS PREPARED BY A NICET LICENSED FIRE ALARM ENGINEER FOR REVIEW. REFERENCE THE SPECIFICATIONS FOR FIRE ALARM AND DETECTION SYSTEM REQUIREMENTS.

BUILDING IS FULLY SPRINKLERED

Revisions: Date

Professional Engineer (Electrical) Registered Wyoming 10299 Date 4-13-15

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: ELECTRICAL LEGENDS AND GENERAL NOTES

Project Name: EXPAND DOMICILIARY BUILDING 64

Project Number: 666-309

Date: 13 MAR 2015

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number	Checked	Drawn
64	TWL	TAH

Drawing Number: 1-E-001

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Office of Construction and Facilities Management

VA FORM 08-6231

LUMINAIRE SCHEDULE							
TYPE	LUMINAIRE DESCRIPTION	QTY	LAMP	VOLTS	NOTES	MANUFACTURER	CATALOG NUMBER
Downlight Fixtures							
PA	5" RECESSED LED DOWNLIGHT WITH CLEAR ALZAK REFLECTOR, 900 LUMEN, 3500K LED LIGHT ENGINE	1	LED INCLUDED	277		PHILIPS/LIGHTOLIER	105LRN0609D2-1050LRN0935-1050LRNDLCDP
PB	4" RECESSED LED DOWNLIGHT WITH SPECULAR CLEAR ALZAK REFLECTOR	1	LED INCLUDED	UNIV		PHILIPS/LIGHTOLIER	C4L10NUVB-Z10V-C4L10DL35KCLPVB
PC	4" RECESSED LED LENSED WALLWASH	1	LED INCLUDED	UNIV		PHILIPS/LIGHTOLIER	C4L10NUVB-Z10V-C4L-10LW35KCLPVB
Exit Signs							
XA	DIE-CAST ALUMINUM LED EXIT SIGN	1	LED INCLUDED	UNIV		PHILIPS/CHLORIDE	55L3R
XB	DIE-CAST ALUMINUM LED EXIT SIGN	1	LED INCLUDED	UNIV		PHILIPS/CHLORIDE	55L3R
Exterior Fixtures							
AC	DECORATIVE WALL MOUNTED LED WALL "LANTERN" FIXTURE	1	LED INCLUDED	UNIV	1	PHILIPS/HADCO	B4101LED *** B 3K
AD	EXTERIOR LED WALL FIXTURE WITH CUTOFF OPTICS AND INTEGRAL PHOTOCELL	1	LED INCLUDED	UNIV	1	EELP LIGHTING	WP40-C-30L-QT-PC1
AG	DECORATIVE SURFACE MOUNTED LED "LANTERN" FIXTURE	1	LED INCLUDED	UNIV	1	PHILIPS/HADCO	B4121LED *** B 3K
AH	DECORATIVE CHANG HUNG LED "LANTERN" LED FIXTURE	1	LED INCLUDED	UNIV	1,4,5	PHILIPS/HADCO	B5520LED *** B 3K
Flanged Fixtures							
FB	2'x4' (3 LAMP) FLANGED TROFFER WITH 0.125 PRISMATIC ACRYLIC LENS	3	F32T8/28W	UNIV		PHILIPS/DAY-BRITE	2DPF332-FS12UNV
FD	2'x2' FLANGED LED DIRECT/INDIRECT WITH DIFFUSE LENS	1	LED INCLUDED	UNIV		PHILIPS/DAY-BRITE	2DLG27L835-2-D-UNV-DIM-FMA22
FF	2'x4' (2 LAMP) FLANGED TROFFER DIRECT/INDIRECT WITH ACRYLIC CENTER DIFFUSER	2	F32T8/28W	UNIV		PHILIPS/DAY-BRITE	2AVG232-ACR-UNV-1/2-FMA24
Grid Lay-In Fixtures							
GC	2'x4' (2 LAMP) GRID TROFFER WITH 0.125 PRISMATIC ACRYLIC LENS	2	F32T8/28W	UNIV		PHILIPS/DAY-BRITE	2TG8232-12-UNV
GF	2'x4' (2 LAMP) GRID LAY-IN TROFFER DIRECT/INDIRECT WITH ACRYLIC CENTER DIFFUSER	2	F32T8/28W	UNIV		PHILIPS/DAY-BRITE	2AVG232-ACR-UNV-1/2
GJ	2'x2' (2 LAMP) GRID LAY-IN TROFFER DIRECT/INDIRECT WITH ACRYLIC CENTER DIFFUSER	2	F17T8	UNIV		PHILIPS/DAY-BRITE	2AVG217-ACR-UNV-1/2
Specialty Fixtures							
NL	DECORATIVE LED NIGHTLIGHT WITH INTEGRAL PHOTOCELL	1	LED INCLUDED	120		PHILIPS/DAY-BRITE	WG1H-1-120-SWH-PCC
UC	24" FLUORESCENT UNDERCOUNTER LIGHT	1	F17T8	UNIV		PHILIPS/DAY-BRITE	8UC117-W-UNV
Surface and Suspended Fixtures							
SC	4'-0" INDIRECT COVE FIXTURE	1	F28T5	277		PHILIPS/LEDALITE	3808-F01-E-N-**-1-2-E-W
SD	4'-0" SURFACE MOUNTED MODULAR WITH 0.125" PRISMATIC ACRYLIC LENS	2	F32T8/28W	UNIV		PHILIPS/DAY-BRITE	1SMR232-FA12-UNV 1/2
SK	4'-0" STRIPLIGHT WITH WIRE GUARD	2	F32T8/28W	UNIV		PHILIPS/DAY-BRITE	HDS232-UNV-1/2 CG-4
Wall Mounted Fixtures							
WB	4' (2 LAMP) WALL BRACKET WITH UP AND DOWN LIGHT AND INTEGRAL MOTION SENSOR	2	F32T8/28W	UNIV		PHILIPS/DAY-BRITE	STWW232-VW0-UNV-1/2-TR
WC	2' (2 LAMP) DECORATIVE FLUORESCENT WALL BRACKET	2	F14T5	UNIV	1	OCL	H01-S1SA-24-MW-PTD-2LF14-277
WE	ROUGH SERVICE CFL VAPORTITE UTILITY LIGHT	1	F32TRT	277		PHILIPS/STONCO	VWXL-32-HFL-4

LUMINAIRE SCHEDULE NOTES

GENERAL NOTES:
A. LUMINAIRE SCHEDULE CONTAINS PARTIAL INFORMATION REGARDING LUMINAIRES. REFER TO SPECIFICATIONS FOR INFORMATIONREGARDING FLUORESCENT LAMPS, EMERGENCY AND DIMMING BALLASTS AND OTHER LAMP, BALLAST AND LUMINAIRE REQUIREMENTS.
B. THE MANUFACTURER LISTED IN THE LUMINAIRE SCHEDULE IS THE PRIMARY BASE SPECIFICATION. REFER TO PROJECT SPECIFICATIONS FOR SUBSTITUTION AND PRE-APPROVAL REQUIREMENTS.
C. AS STATED IN SPECIFICATIONS, COMPLETE LIGHTING SUBMITTALS ARE REQUIRED, INCLUDING FIXTURE MODEL NUMBER AND ACCESSORIES, LAMP CUTSHEET, BALLAST CUTSHEET, ETC. PARTIAL SUBMITTALS WILL NOT BE ACCEPTED.
D. LENSES ON RECESSED FLUORESCENT FIXTURES SHALL BE 0.125" VIRGIN ACRYLIC UNLESS SPECIFICALLY INDICATED OTHERWISE.
E. FLUORESCENT TROFFERS SHALL BE PAINTED AFTER FABRICATION.
F. ORIENT LUMINAIRES SUCH THAT LAMPS ARE ALL IN THE SAME DIRECTION IN A GIVEN SPACE.
G. LINEAR AND COMPACT FLUORESCENT LAMPS ON OCCUPANCY SENSOR OR DIMMING BALLAST CONTROL SHALL BE BURNED IN AT FULL LIGHT OUTPUT FOR A MINIMUM OF 12 HOURS OR OVERNIGHT PRIOR TO CONNECTION TO OCCUPANCY SENSOR OR DIMMING BALLAST CONTROLS.
H. PROVIDE EXIT SIGNS WITH MOUNTING AND DIRECTION INDICATORS AS SHOWN ON THE DRAWINGS. DIRECTIONAL INDICATORS SHALL BE THE CHEVRON TYPE.
I. AS PART OF BID ALTERNATE #9, FIXTURES CONNECTED TO EMERGENCY/EGRESS LIGHTING CIRCUITS SHALL BE PROVIDED WITH MULTI-VOLT BALLAST OR MULTI-VOLT DRIVERS (120/277), OR PROVIDED AT 120V. REFER TO LIGHTING PLANS FOR FIXTURE TYPES CONNECTED TO EMERGENCY/EGRESS LIGHTING CIRCUITS.

KEYED NOTES:
1. FINISHES SELECTED BY ARCHITECT. CONFIRM PRIOR TO ORDERING.

2. COORDINATE PENDANT LENGTH AND OVERALL FIXTURE HEIGHT WITH ARCHITECT PRIOR TO ORDERING.

3. PROVIDE TENON AS REQUIRED ON TOP OF PRECAST/BRICK COLUMN TO MOUNT FIXTURE. COORDINATE WITH ARCHITECT.

4. PROVIDE GUY WIRES TO PREVENT FIXTURES FROM SWINGING. COORDINATE WITH ARCHITECT AND FIXTURE MANUFACTURER.

5. PROVIDE 6'-0" CHAIN

OCCUPANCY SENSOR SCHEDULE

SYMBOL	DESCRIPTION	MANUFACTURER	MODEL
S_{OC} $\$_{OC}$	WALLBOX OCCUPANCY SENSOR/SWITCH, DUAL TECHNOLOGY, SELF-ADAPTIVE TECHNOLOGY	WATTSTOPPER OR APPROVED EQUIVALENT	DSW-100-W
OS	CEILING MOUNTED OCCUPANCY SENSOR, DUAL TECHNOLOGY, SELF-ADAPTIVE TECHNOLOGY	WATTSTOPPER OR APPROVED EQUIVALENT	DT-300

OCC SENSOR GENERAL NOTES

1. PRODUCT SUBMITTALS SHALL, AS A MINIMUM, INCLUDE:

   A. CATALOG LITERATURE ON EACH COMPONENT OF EQUIPMENT REQUIRED.
   B. LIGHTING PLANS MARKED WITH PROPER PRODUCTS (INCLUDING POWER PACKS, SLAVE PACKS, MOUNTING HARDWARE, AND ACCESSORIES), LOCATION AND ORIENTATIONS OF EACH SENSOR.
   C. INTERCONNECTION AND WIRING DIAGRAMS.
   D. MANUFACTURER LISTED IS PRIMARY BASE SPECIFICATION. APPROVED EQUALS ARE ALSO ALLOWED.

2. PROVIDE POWER PACKS, SLAVE PACKS, MOUNTING HARDWARE, WIRING, AND REQUIRED ACCESSORIES AS NEEDED.

3. UPON COMPLETION OF INSTALLATION, VERIFY ADJUSTMENTS, AIMING, AND SENSOR PLACEMENTS TO ENSURE A TROUBLE-FREEOCCUPANCY-BASED LIGHTING CONTROL SYSTEM.

5. PRODUCTS SHALL HAVE A 5 YEAR WARRANTY.

6. VERIFY DEVICE COLORS WITH ARCHITECT PRIOR TO SUBMITTAL.

7. DO NOT INSTALL CEILING SENSORS WITHIN 6 FEET OF A SUPPLY AIR DEVICES.

8. CEILING MOUNTED OCCUPANCY SENSORS SHALL HAVE A SEAPARTE SET OF CONTACTS/RELAY FOR CONNECTION TO THE BAS SYSTEM.

MECHANICAL EQUIPMENT SCHEDULE

KEY	DESCRIPTION	VOLT	PH	LOAD	WIRING	DISC RATING	FUSE	STARTER	REMARKS	NOTES
CH-1	AIR COOLED CHILLER	480	3	171 MCA	(3#4/0, 1#4G)2-1/2"C.	200	200	-		
CWP-1	CHILLED WATER PUMP	480	3	7.5HP	(3#12, 1#12G)3/4"C.	VFD	-	-		
CWP-2	CHILLED WATER PUMP	480	3	7.5HP	(3#12, 1#12G)3/4"C.	VFD	-	-		
AHU-1	AIR HANDLING UNIT	480	3	25HP	(3#6, 1#10G)1"C.	VFD	-	-		1
AHU-2	AIR HANDLING UNIT	480	3	25HP	(3#6, 1#10G)1"C.	VFD	-	-		
RF-1	RETURN FAN	480	3	5HP	(3#12, 1#12G)3/4"C.	VFD	-	-		1
RF-2	RETURN FAN	480	3	5HP	(3#12, 1#12G)3/4"C.	VFD	-	-		
RHP-1	HEATING WATER PUMP	480	3	5HP	(3#12, 1#12G)3/4"C.	VFD	-	-		1
RHP-2	HEATING WATER PUMP	480	3	5HP	(3#12, 1#12G)3/4"C.	VFD	-	-		1
PHP-1	PREHEAT WATER PUMP	480	3	3HP	(3#12, 1#12G)3/4"C.	VFD	-	-		1
PHP-2	PREHEAT WATER PUMP	480	3	3HP	(3#12, 1#12G)3/4"C.	VFD	-	-		1
PRP-1	COIL RECIRC PUMP	480	3	3/4HP	(3#12, 1#12G)3/4"C.	30A3P	-	00	COMBO DISC/STARTER	1
PRP-2	COIL RECIRC PUMP	480	3	3/4HP	(3#12, 1#12G)3/4"C.	30A3P	-	00	COMBO DISC/STARTER	1
SMP-1	SNOW MELT WATER PUMP	480	3	1HP	(3#12, 1#12G)3/4"C.	VFD	-	-		
EF-1-1	EXHAUST FAN	480	3	1HP	(3#12, 1#12G)3/4"C.	30A3P	-	00	COMBO DISC/STARTER	
EF-1-2	EXHAUST FAN	480	3	1HP	(3#12, 1#12G)3/4"C.	30A3P	-	00	COMBO DISC/STARTER	
EF-1-3	EXHAUST FAN	120	1	1/4HP	(2#12, 1#12G)3/4"C.	SMTO	-	-		
EF-2-1	EXHAUST FAN	120	1	1/4HP	(2#12, 1#12G)3/4"C.	SMTO	-	-		
EF-2-2	EXHAUST FAN	120	1	1/4HP	(2#12, 1#12G)3/4"C.	SMTO	-	-		
FCU-*-*	FAN COIL UNITS	120	1	1/20HP	(2#12, 1#12G)3/4"C.	SMTO	-	-		
CP-1	CIRC. PUMP	120	1	1/4HP	(2#12, 1#12G)3/4"C.	SMTO	-	-		
AC-1	INDOOR FAN COIL UNIT	208	1	2.4	(2#12, 1#12G)3/4"C.	30A/2P	15	-		
AC-1	OUTDOOR COND. UNIT	208	1	22.9	(2#10, 1#10G)3/4"C.	30A/2P	30	-		
UH-*	UNIT HEATERS	120	1	1/20HP	(2#12, 1#12G)3/4"C.	SMTO	-	-		
EUH-1	ELECTRIC CABINET UNIT HEATER	277	1	2KW	(2#12, 1#12G)3/4"C.	20A1P	-	-	DISC. FURNISHED WITH UNIT	
EUH-2	ELECTRIC CABINET UNIT HEATER	277	1	2KW	(2#12, 1#12G)3/4"C.	20A1P	-	-	DISC. FURNISHED WITH UNIT	
EUH-3	ELECTRIC CABINET UNIT HEATER	277	1	3KW	(2#12, 1#12G)3/4"C.	20A1P	-	-	DISC. FURNISHED WITH UNIT	

NOTES:

1. AS PART OF DEDUCT ALTERNATE #9, UNIT BECOMES 208V, 3PH. CONNECT TO PANEL '64EL2A'

MECHANICAL EQUIPMENT SCHEDULE - BID ALTERNATE #2

KEY	DESCRIPTION	VOLT	PH	LOAD	WIRING	DISC RATING	FUSE	STARTER	REMARKS	NOTES
AHU-1	AIR HANDLING UNIT	208	3	25HP	(3#1, 1#6G)1-1/2"C.	VFD	-	-	125A/3P BREAKER	1
RF-1	RETURN FAN	208	3	5HP	(3#10, 1#10G)3/4"C.	VFD	-	-	30A/3P BREAKER	1
RHP-1	HEATING WATER PUMP	208	3	5HP	(3#10, 1#10G)3/4"C.	VFD	-	-	30A/3P BREAKER	1
RHP-2	HEATING WATER PUMP	208	3	5HP	(3#10, 1#10G)3/4"C.	VFD	-	-	30A/3P BREAKER	1
PHP-1	PREHEAT WATER PUMP	208	3	3HP	(3#12, 1#12G)3/4"C.	VFD	-	-	20A/3P BREAKER	1
PHP-2	PREHEAT WATER PUMP	208	3	3HP	(3#12, 1#12G)3/4"C.	VFD	-	-	20A/3P BREAKER	1
PRP-1	COIL RECIRC PUMP	208	3	3/4HP	(3#12, 1#12G)3/4"C.	30A3P	-	00	COMBO DISC/STARTER	1
PRP-2	COIL RECIRC PUMP	208	3	3/4HP	(3#12, 1#12G)3/4"C.	30A3P	-	00	COMBO DISC/STARTER	1

NOTES:

1. AS PART OF DEDUCT ALTERNATE #9, UNIT BECOMES 208V, 3PH. CONNECT TO PANEL '64EL2A'

RELAY PANEL SCHEDULE 64RP1

RELAY	AREA CONTROLLED	CIRCUIT	OVERRIDE
1	CORRIDORS, MAIN LOBBY	64H1A-2	g
2	CORRIDORS, TV LOUNGE	64H1A-2	h
3	EXTERIOR PORCH LIGHTING	64H1A-3	–
4	EXTERIOR FAÇADE LIGHTING	64H1A-3	–
5	FLAGPOLE, STATUE	64L1A-67	–
6	SPARE		
7	SPARE		
8	SPARE		

RELAY PANEL SCHEDULE 64RP2

RELAY	AREA CONTROLLED	CIRCUIT	OVERRIDE
1	SECOND FLOOR CORRIDOR	64H2A-1	j
2	SECOND FLOOR CORRIDOR	64H2A-2	k
3	THIRD FLOOR CORRIDOR	64H2A-6	m
4	SPARE		
5	SPARE		
6	SPARE		
7	SPARE		
8	SPARE		

BUILDING IS FULLY SPRINKLERED

Revisions: | Date

Professional Engineer (Electrical) TRENTON W. KINGSLEY 10595 WYOMING Date

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Approved: Chief of MH | Approved: Chief of FMS | Date: | Date: | Approved: Director | Approved: VA Energy Engineer | Date: | Date:

Drawing Title: ELECTRICAL SCHEDULES
Location: VAMC SHERIDAN WY, 1898 FORT ROAD, SHERIDAN, WY 82801
Project Name: EXPAND DOMICILIARY BUILDING 64
Building Number: 64 | Checked: TWL | Drawn: TAH
Project Number: 666-309
Date: 13 MAR 2015
Drawing Number: 1-E-002
Dwg. of
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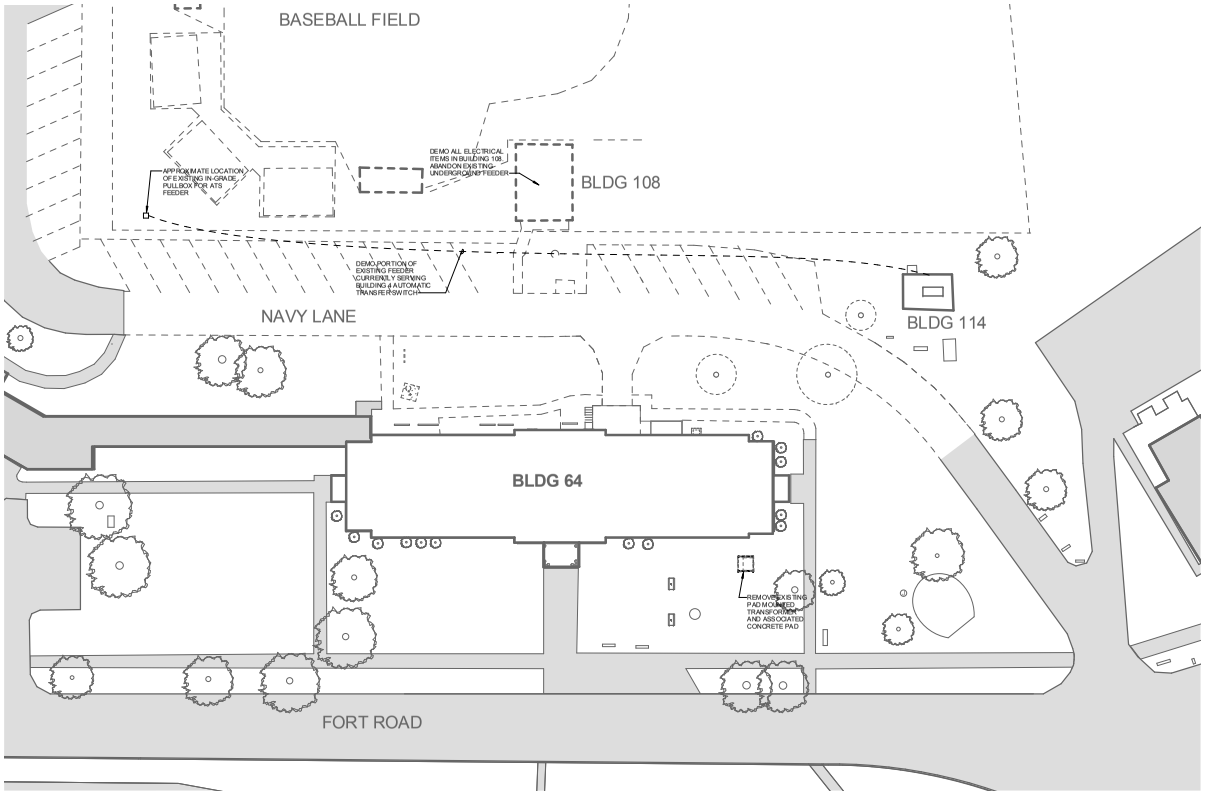
VA FORM 08-6231



1 **ELECTRICAL SITE PLAN - DEMOLITION**
SCALE: 1" = 20'-0"

N

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

Professional Engineer (Electrical) Richard W. Cox 10595 Date 3-13-15 WYOMING

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
ELECTRICAL SITE DEMOLITION PLAN

Location
VAMC SHERIDAN WY
1898 FORT ROAD
SHERIDAN, WY 82801

Project Name
EXPAND DOMICILIARY BUILDING 64

Building Number	Checked	Drawn
64	TWL	TAH

Project Number
666-309

Date
13 MAR 2015

Drawing Number
1-ED-001

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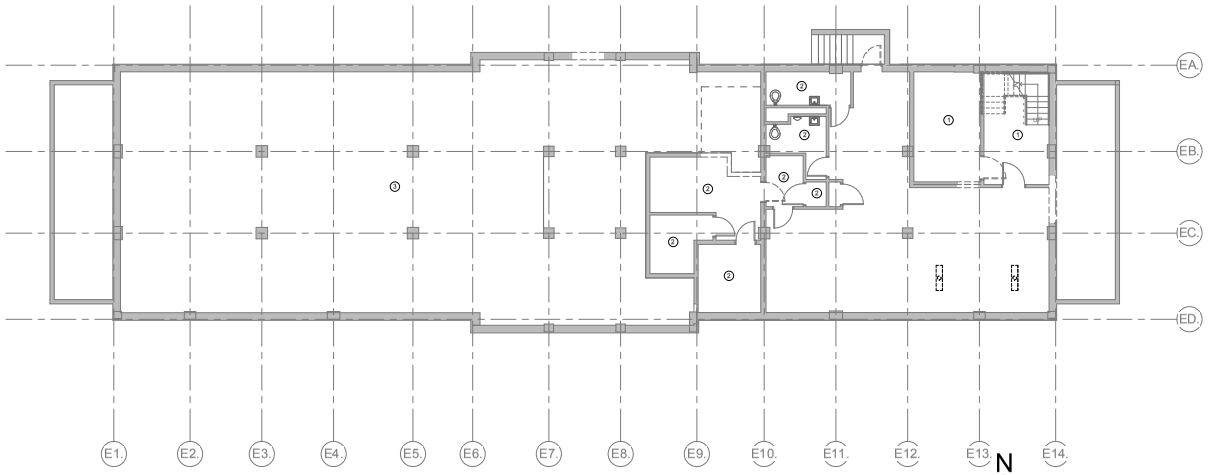
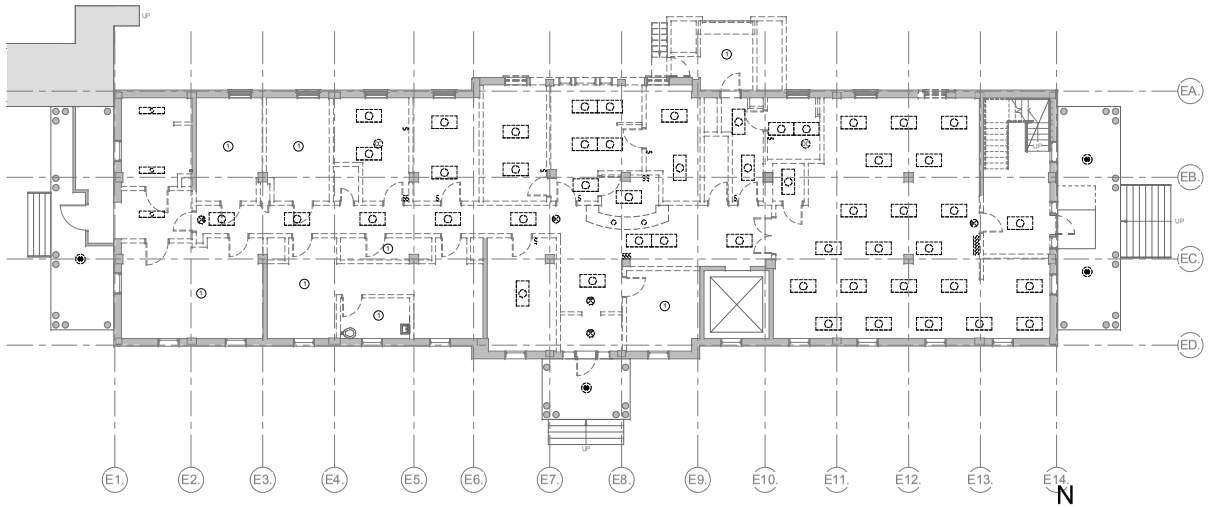
Office of Construction and Facilities Management

VA FORM 08-6231



1 BASEMENT - ELECTRICAL LIGHTING DEMOLITION PLAN
SCALE: 1/8" = 1'-0"



2 FIRST FLOOR - ELECTRICAL LIGHTING DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

ELECTRICAL DEMOLITION NOTES

1. ALL EXISTING DEVICES AND EQUIPMENT TO BE DEMOLISHED MAY NOT BE SHOWN ON THESE ELECTRICAL DEMOLITION PLANS. CONTRACTOR SHALL VISIT THE SITE BEFORE SUBMITTING BID TO OBSERVE EXISTING CONDITIONS.

2. WHERE COMPLETE CIRCUITS ARE DEMOLISHED, THE WIRING SHALL BE DEMOLISHED BACK TO THE BRANCH CIRCUIT PANELBOARD. RACEWAYS MAY REMAIN AND BE REUSED WHERE APPLICABLE. RACEWAYS NOT REUSED FOR NEW CONSTRUCTION SHALL BE COMPLETELY DEMOLISHED.

3. WALL BOXES IN EXISTING WALLS TO REMAIN SHALL BE MAINTAINED. REUSE OF THESE BOXES IS PERMITTED FOR NEW WIRING DEVICES AS LONG AS THE BOX IS WITHIN 12-INCHES LATERALLY OF NEW DEVICE AND AT THE SAME MOUNTING HEIGHT. PROVIDE BLANK COVERPLATES FOR EXISTING BOXES NOT REUSED FOR NEW DEVICES.

4. WIRING AND RACEWAY SHALL BE PROVIDED AS NECESSARY TO RE-ENERGIZE EXISTING OUTLETS TO REMAIN WHEN POWER TO SUCH OUTLETS IS INTERRUPTED DUE TO DEMOLITION OF OTHER DEVICES ON THE SAME CIRCUIT.

5. CONTRACTOR SHALL USE CARE IN REMOVING DEVICES AND FIXTURES AND SHALL MAKE THEM AVAILABLE TO THE OWNER FOR FUTURE USE. ALL DEVICES AND FIXTURES NOT RETAINED BY THE OWNER SHALL BE DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH THE OWNER'S INSTRUCTIONS.

6. ALL PENETRATIONS OF FIRE RATED PARTITIONS DUE TO THE REMOVAL OF ELECTRICAL SYSTEMS SHALL BE SEALED TO MAINTAIN THE FIRE RATING OF THE WALL.

7. REFER TO MECHANICAL DEMOLITION DRAWINGS FOR MECHANICAL EQUIPMENT TO BE DEMOLISHED. DISCONNECT AND REMOVE ANY ELECTRICAL CONNECTIONS AND EQUIPMENT ASSOCIATED WITH THIS EQUIPMENT.

8. FIRE ALARM SYSTEM DEVICES REMOVED FROM AREA OF RENOVATION SHALL BE SALVAGED FOR POSSIBLE RE-USE. COORDINATE REUSE OF ANY FIRE ALARM DEVICES WITH HOSPITAL'S FIRE ALARM VENDOR AND OWNER.

SHEET KEY NOTES

1. DEMOLISH ALL LIGHTING FIXTURES, DEVICES, AND ASSOCIATED BRANCH WIRING THIS ROOM UNLESS OTHERWISE NOTED.
2. EXISTING LIGHTING THIS ROOM TO REMAIN AS-IS. INTERCEPT, EXTEND, AND RECONNECT TO NEW PANEL '64LBA'
3. EXISTING CRAWLSPACE LIGHTING TO REMAIN AS-IS. INTERCEPT, EXTEND, AND RECONNECT TO NEW PANEL '64LBA'

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

Professional Engineer (Electrical) Richard W. Kaiser 10595 Date 3-13-15 WYOMING

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: BASEMENT AND FIRST FLOOR ELECTRICAL LIGHTING DEMOLITION PLANS

Project Name: EXPAND DOMICILIARY BUILDING 64

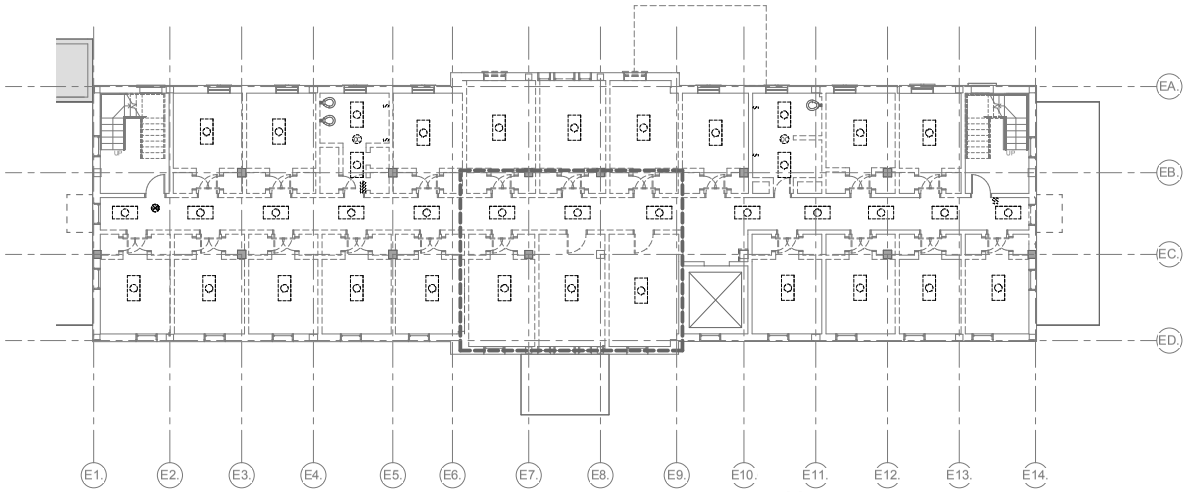
Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number	Checked	Drawn
64	TWL	TAH

Project Number: 666-309
Date: 13 MAR 2015
Drawing Number: 1-ED-100
Dwg. of

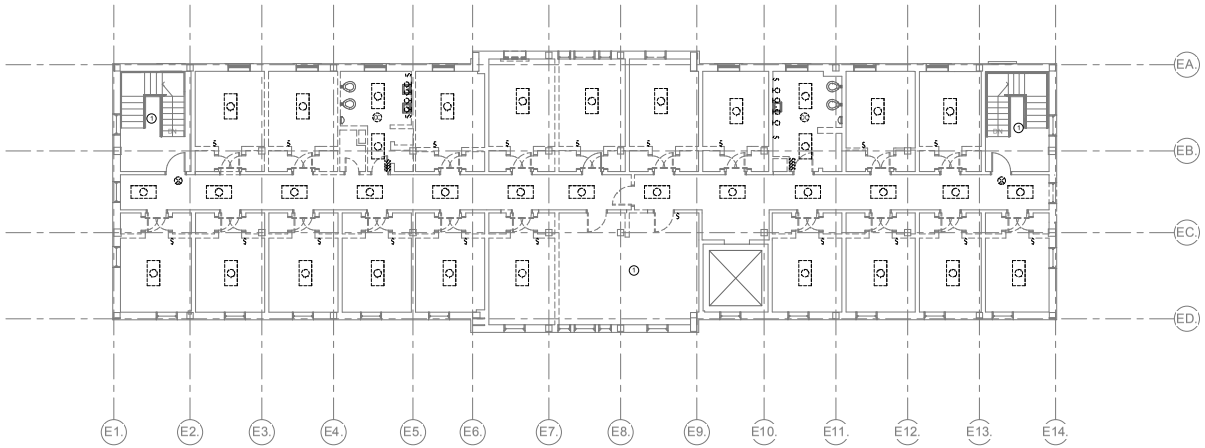
Office of Construction and Facilities Management

VA FORM 08-6231



1 **SECOND FLOOR - ELECTRICAL LIGHTING DEMOLITION PLAN**
SCALE: 1/8" = 1'-0"

N



2 **THIRD FLOOR - ELECTRICAL LIGHTING DEMOLITION PLAN**
SCALE: 1/8" = 1'-0"

N

ELECTRICAL DEMOLITION NOTES

1. ALL EXISTING DEVICES AND EQUIPMENT TO BE DEMOLISHED MAY NOT BE SHOWN ON THESE ELECTRICAL DEMOLITION PLANS. CONTRACTOR SHALL VISIT THE SITE BEFORE SUBMITTING BID TO OBSERVE EXISTING CONDITIONS.

2. WHERE COMPLETE CIRCUITS ARE DEMOLISHED, THE WIRING SHALL BE DEMOLISHED BACK TO THE BRANCH CIRCUIT PANELBOARD. RACEWAYS MAY REMAIN AND BE REUSED WHERE APPLICABLE. RACEWAYS NOT REUSED FOR NEW CONSTRUCTION SHALL BE COMPLETELY DEMOLISHED.

3. WALL BOXES IN EXISTING WALLS TO REMAIN SHALL BE MAINTAINED. REUSE OF THESE BOXES IS PERMITTED FOR NEW WIRING DEVICE AS LONG AS THE BOX IS WITHIN 12-INCHES LATERALLY OF NEW DEVICE AND AT THE SAME MOUNTING HEIGHT. PROVIDE BLANK COVERPLATES FOR EXISTING BOXES NOT REUSED FOR NEW DEVICES.

4. WIRING AND RACEWAYS SHALL BE PROVIDED AS NECESSARY TO RE-ENERGIZE EXISTING OUTLETS TO REMAIN WHEN POWER TO SUCH OUTLETS IS INTERRUPTED DUE TO DEMOLITION OF OTHER DEVICES ON THE SAME CIRCUIT.

5. CONTRACTOR SHALL USE CARE IN REMOVING DEVICES AND FIXTURES AND SHALL MAKE THEM AVAILABLE TO THE OWNER FOR FUTURE USE. ALL DEVICES AND FIXTURES NOT RETAINED BY THE OWNER SHALL BE DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH THE OWNER'S INSTRUCTIONS.

6. ALL PENETRATIONS OF FIRE RATED PARTITIONS DUE TO THE REMOVAL OF ELECTRICAL SYSTEMS SHALL BE SEALED TO MAINTAIN THE FIRE RATING OF THE WALL.

7. REFER TO MECHANICAL DEMOLITION DRAWINGS FOR MECHANICAL EQUIPMENT TO BE DEMOLISHED. DISCONNECT AND REMOVE ANY ELECTRICAL CONNECTIONS AND EQUIPMENT ASSOCIATED WITH THIS EQUIPMENT.

8. FIRE ALARM SYSTEM DEVICES REMOVED FROM AREA OF RENOVATION SHALL BE SALVAGED FOR POSSIBLE RE-USE. COORDINATE REUSE OF ANY FIRE ALARM DEVICES WITH HOSPITAL'S FIRE ALARM VENDOR AND OWNER.

BID ALTERNATE #4

ALL EXISTING LIGHTING TO BE REMOVED ON THIRD FLOOR. MAINTAIN EXISTING WIRING AND SWITCH LOCATIONS FOR REUSE.

SHEET KEY NOTES

1. DEMOLISH ALL LIGHTING FIXTURES, DEVICES, AND ASSOCIATED BRANCH WIRING THIS ROOM UNLESS OTHERWISE NOTED.

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

Professional Engineer (Electrical) Richard W. Cook 10595 Date 15 WYOMING

CONSULTANTS:

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **SECOND AND THIRD FLOOR ELECTRICAL LIGHTING DEMOLITION PLANS**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Location: **VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801**

Building Number	Checked	Drawn
64	TWL	TAH

Project Number: **666-309**
Date: 13 MAR 2015
Drawing Number: **1-ED-101**
Dwg. of

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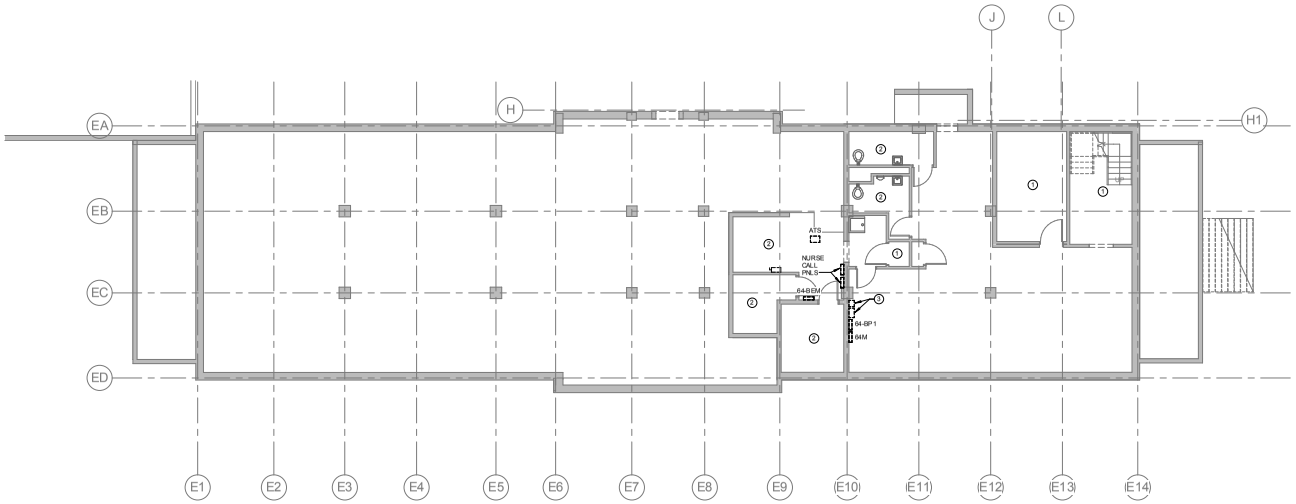
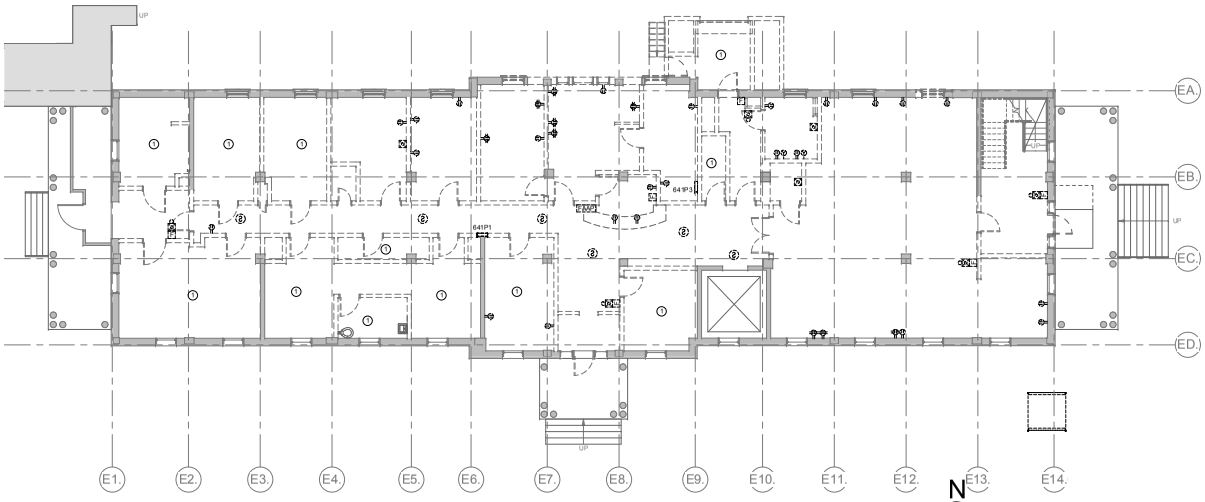
VA FORM 08-6231



1 BASEMENT - ELECTRICAL POWER DEMOLITION PLAN
SCALE: 1/8" = 1'-0"



2 FIRST FLOOR - ELECTRICAL POWER DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

SHEET KEY NOTES

1. DEMOLISH ALL POWER DEVICES, EQUIPMENT, AND ASSOCIATED BRANCH WIRING THIS ROOM UNLESS OTHERWISE NOTED.
2. EXISTING POWER ITEMS THIS ROOM/AREA TO REMAIN AS-IS.
3. REMOVE AND SALVAGE EXISTING METERING EQUIPMENT FOR REUSE.

BUILDING IS FULLY SPRINKLERED

Revisions: Date

CONSULTANTS:

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Approved: Chief of MH | Approved: Chief of FMS
Date: | Date:
Approved: Director | Approved: VA Energy Engineer
Date: | Date:

Drawing Title: BASEMENT AND FIRST FLOOR ELECTRICAL POWER DEMOLITION

Project Name: EXPAND DOMICILIARY BUILDING 64

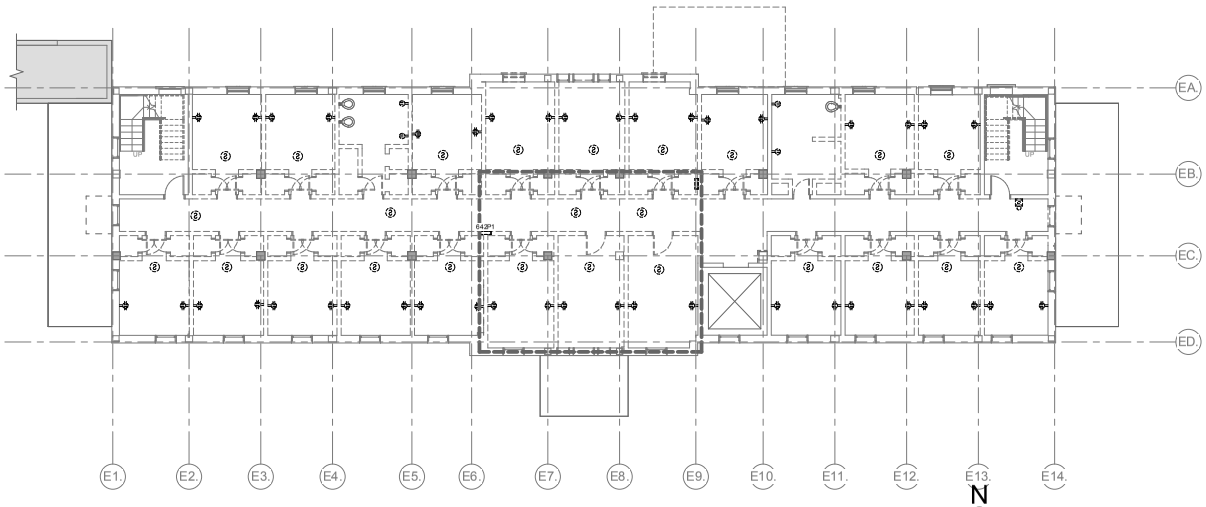
Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number: 64 | Checked: TWL | Drawn: TAH

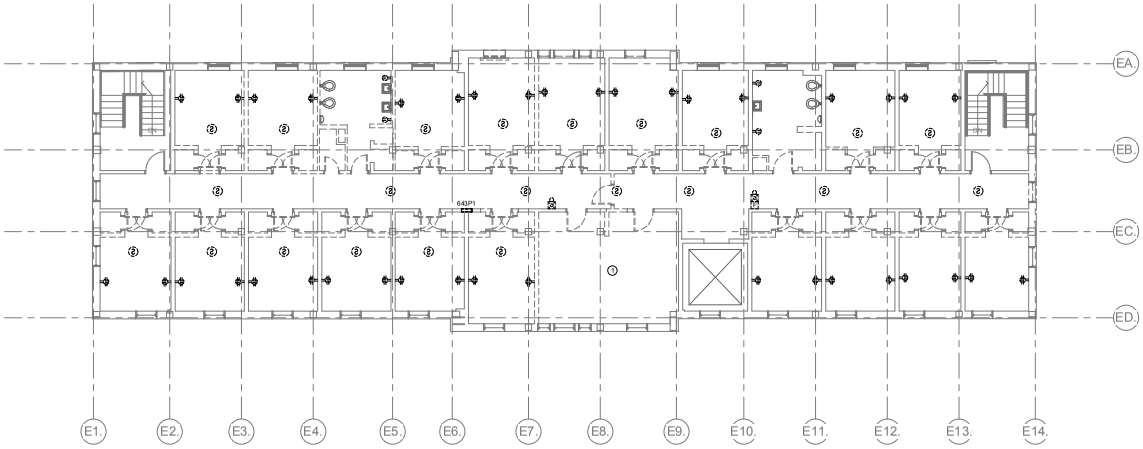
Project Number: 666-309
Date: 13 MAR 2015
Drawing Number: 1-ED-102
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



1 SECOND FLOOR - ELECTRICAL POWER DEMOLITION PLAN
SCALE: 1/8" = 1'-0"



2 THIRD FLOOR - ELECTRICAL POWER DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

ELECTRICAL DEMOLITION NOTES

1. ALL EXISTING DEVICES AND EQUIPMENT TO BE DEMOLISHED MAY NOT BE SHOWN ON THESE ELECTRICAL DEMOLITION PLANS. CONTRACTOR SHALL VISIT THE SITE BEFORE SUBMITTING BID TO OBSERVE EXISTING CONDITIONS.

2. WHERE COMPLETE CIRCUITS ARE DEMOLISHED, THE WIRING SHALL BE DEMOLISHED BACK TO THE BRANCH CIRCUIT PANELBOARD. RACEWAYS MAY REMAIN AND BE REUSED WHERE APPLICABLE. RACEWAYS NOT REUSED FOR NEW CONSTRUCTION SHALL BE COMPLETELY DEMOLISHED.

3. WALL BOXES IN EXISTING WALLS TO REMAIN SHALL BE MAINTAINED. REUSE OF THESE BOXES IS PERMITTED FOR NEW WIRING DEVICES AS LONG AS THE BOX IS WITHIN 12-INCHES LATERALLY OF NEW DEVICE AND AT THE SAME MOUNTING HEIGHT. PROVIDE BLANK COVERPLATES FOR EXISTING BOXES NOT REUSED FOR NEW DEVICES.

4. WIRING AND RACEWAY SHALL BE PROVIDED AS NECESSARY TO RE-ENERGIZE EXISTING OUTLETS TO REMAIN WHEN POWER TO SUCH OUTLETS IS INTERRUPTED DUE TO DEMOLITION OF OTHER DEVICES ON THE SAME CIRCUIT.

5. CONTRACTOR SHALL USE CARE IN REMOVING DEVICES AND FIXTURES AND SHALL MAKE THEM AVAILABLE TO THE OWNER FOR FUTURE USE. ALL DEVICES AND FIXTURES NOT RETAINED BY THE OWNER SHALL BE DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH THE OWNER'S INSTRUCTIONS.

6. ALL PENETRATIONS OF FIRE RATED PARTITIONS DUE TO THE REMOVAL OF ELECTRICAL SYSTEMS SHALL BE SEALED TO MAINTAIN THE FIRE RATING OF THE WALL.

7. REFER TO MECHANICAL DEMOLITION DRAWINGS FOR MECHANICAL EQUIPMENT TO BE DEMOLISHED. DISCONNECT AND REMOVE ANY ELECTRICAL CONNECTIONS AND EQUIPMENT ASSOCIATED WITH THIS EQUIPMENT.

8. FIRE ALARM SYSTEM DEVICES REMOVED FROM AREA OF RENOVATION SHALL BE SALVAGED FOR POSSIBLE RE-USE. COORDINATE REUSE OF ANY FIRE ALARM DEVICES WITH HOSPITAL'S FIRE ALARM VENDOR AND OWNER.

SHEET KEY NOTES

1. AS PART OF BASE BID, DEMOLISH ALL POWER DEVICES, EQUIPMENT, AND ASSOCIATED BRANCH WIRING THIS ROOM UNLESS OTHERWISE NOTED.

BID ALTERNATE #4

ALL EXISTING POWER AND SPECIAL SYSTEM ITEMS TO REMAIN AS-IS ON THIRD FLOOR

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

Professional Engineer (Electrical) Richard W. Kroeker 10595 Date 3-13-15 WYOMING

CONSULTANTS:

Terracon Consulting Engineers & Scientists

Peaks to Plains Design

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: SECOND AND THIRD FLOOR ELECTRICAL POWER DEMOLITION PLANS

Project Name: EXPAND DOMICILIARY BUILDING 64

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number	Checked	Drawn
64	TWL	TAH

Project Number: 666-309

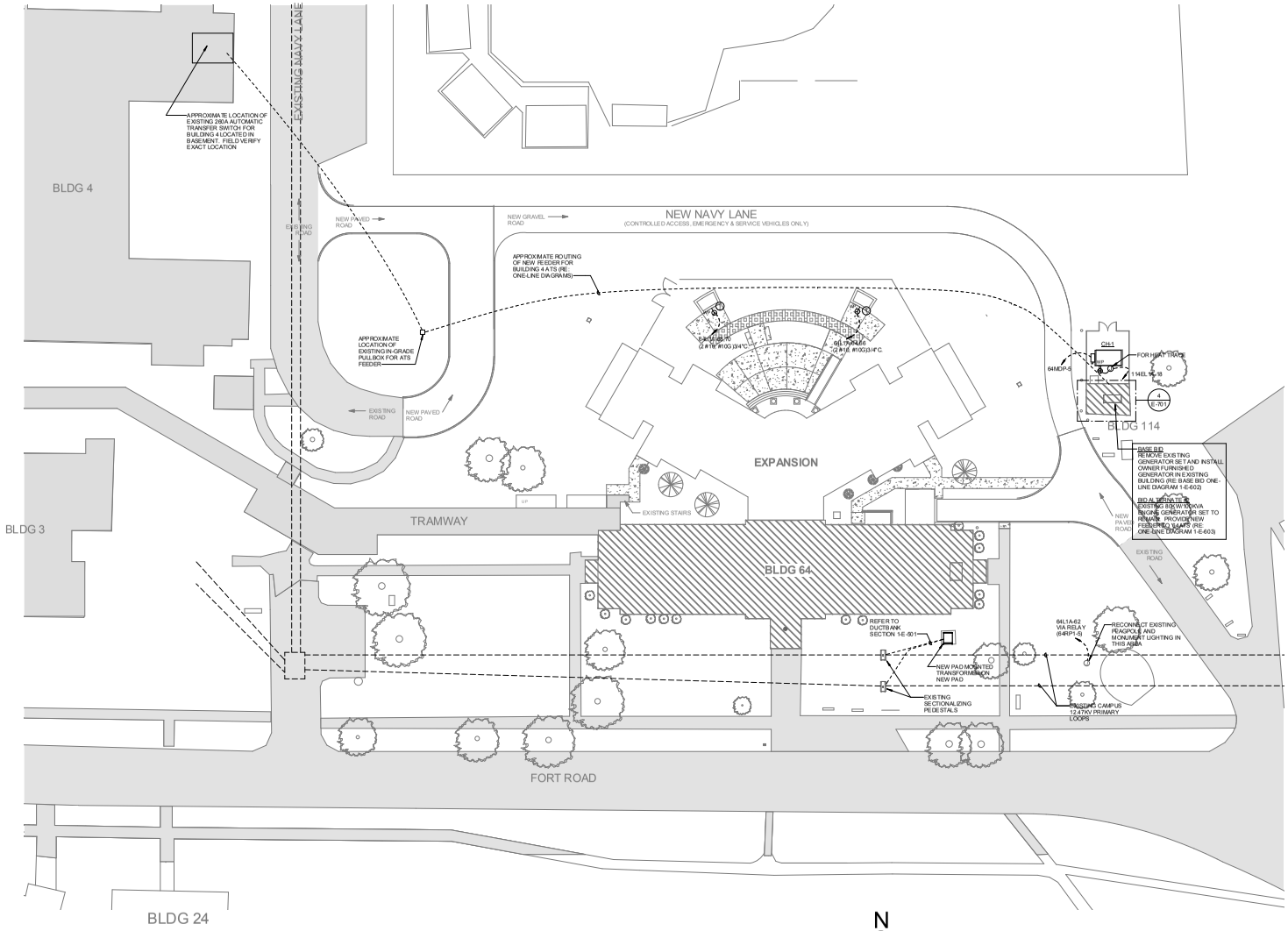
Date: 13 MAR 2015

Drawing Number: 1-ED-103

Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



1 **SITE ELECTRICAL PLAN**
SCALE: 1" = 20'-0"

SHEET KEY NOTES

1. 20A, 250V NEMA 6-20R RECEPTACLE IN WEATHERPROOF WHILE IN USE HOUSING FOR ELECTRIC GRILL. COORDINATE RECEPTACLE REQUIREMENTS WITH OWNER SUPPLIED EQUIPMENT PRIOR TO ROUGH-IN.

BUILDING IS FULLY SPRINKLERED

Revisions: | Date

Professional Engineer (Electrical) Registered Engineer 10595 Date 3-13-15 WYOMING

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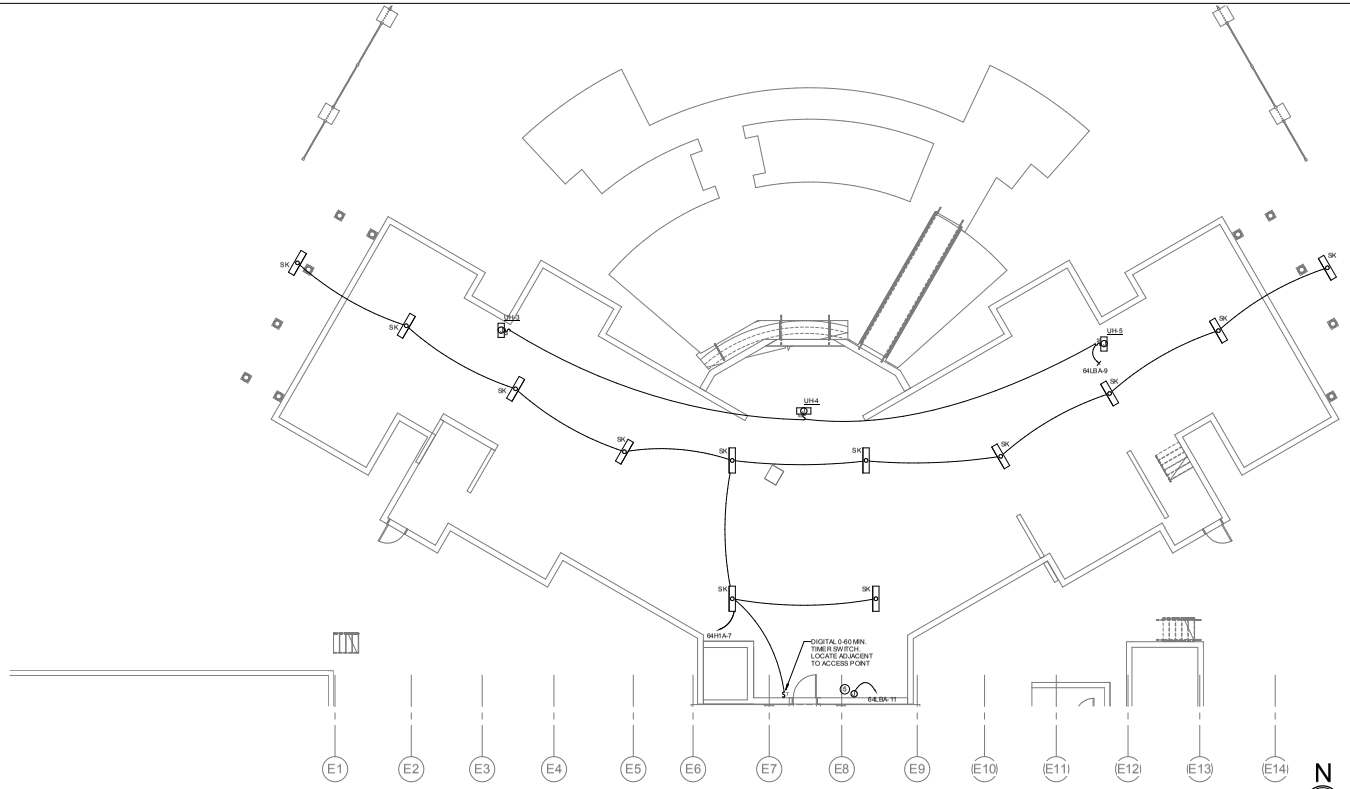
Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

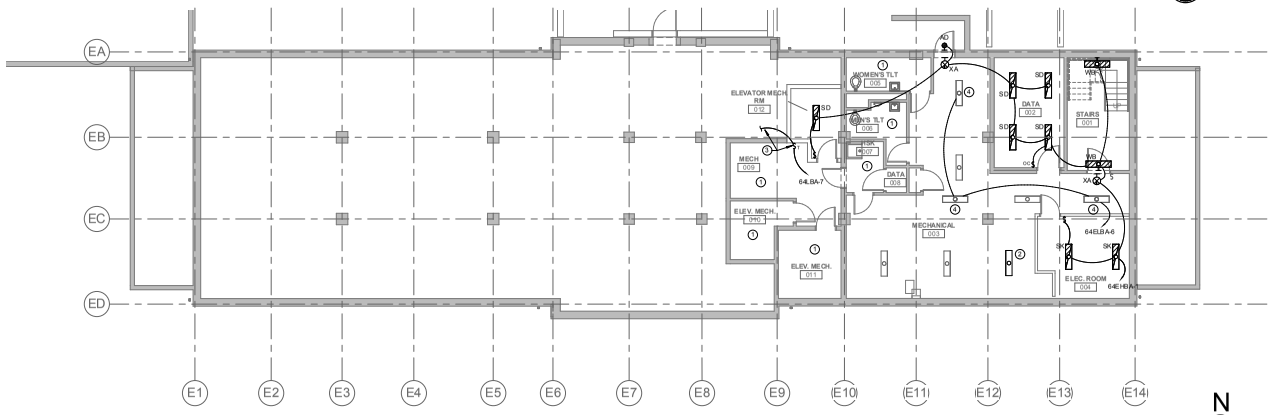
Drawing Title: **ELECTRICAL SITE PLAN**
Project Name: **EXPAND DOMICILIARY BUILDING 64**
Location: **VAMC SHERIDAN WY, 1898 FORT ROAD, SHERIDAN, WY 82801**
Building Number: 64 | Checked: TWL | Drawn: TAH
Project Number: **666-309**
Date: 13 MAR 2015
Drawing Number: **1-E-100**
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



2 EXPANSION CRAWLSPACE ELECTRICAL
SCALE: 1/8" = 1'-0"



1 BASEMENT - ELECTRICAL LIGHTING PLAN
SCALE: 1/8" = 1'-0"

SHEET KEY NOTES

1. EXISTING LIGHTING THIS ROOM/AREA TO REMAIN AS-IS. INTERCEPT, EXTEND, AND RECONNECT EXISTING 120V CIRCUITS TO NEW PANEL 64LBA.
2. RELOCATE EXISTING SURFACE MOUNTED T5 FIXTURE IN BASEMENT TO NEW LOCATION SHOWN. EXTEND AND RECONNECT TO EXISTING 120V LIGHTING CIRCUIT AND CONTROLS.
3. PROVIDE NEW 0-60 MINUTE TIMER SWITCH AND CONNECT TO EXISTING CRAWLSPACE LIGHTING TO REMAIN.
4. CONNECT EXISTING FIXTURE TO EMERGENCY/EGRESS LIGHTING CIRCUIT.
5. J-BOX AND 120V POWER FOR SNOW MELT CONTROLS. COORDINATE CONNECTIONS WITH DIVISION 23 CONTRACTOR.

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

Professional Engineer (Electrical) Thomas W. Hoffman 10595 Date 3-13-15 WYOMING

CONSULTANTS:

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: BASEMENT ELECTRICAL LIGHTING PLAN

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Project Name: EXPAND DOMICILIARY BUILDING 64

Building Number	Checked	Drawn
64	TWL	TAH

Project Number: 666-309
Date: 13 MAR 2015
Drawing Number: 1-E-200
Dwg. of

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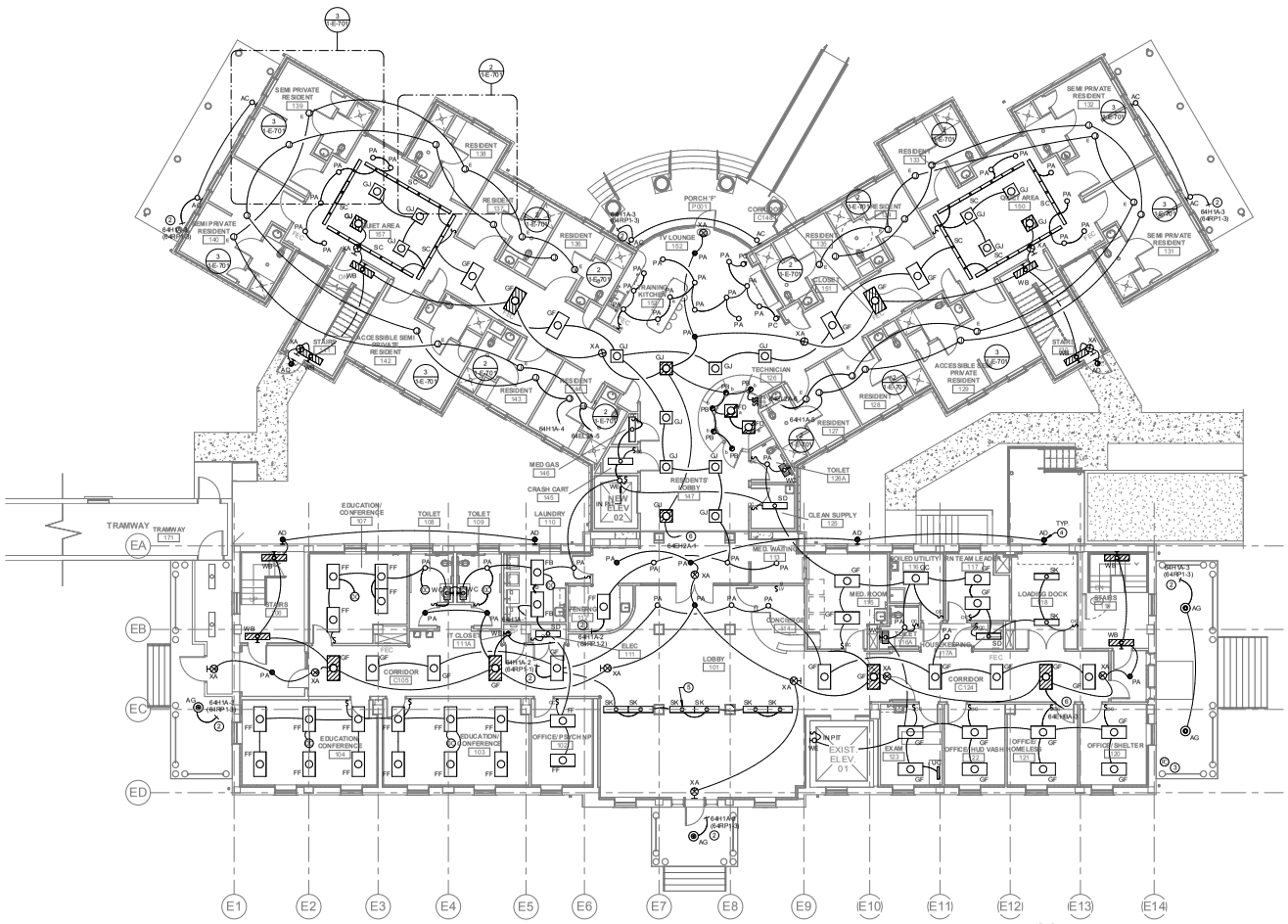

1 **FIRST FLOOR - LIGHTING PLAN**
SCALE: 1/8" = 1'-0"

SHEET KEY NOTES

1. NOT USED
2. HOMERUN VIA LIGHTING CONTROL RELAY. REFER TO RELAY PANEL SCHEDULES FOR ADDITIONAL INFORMATION.
3. LOW VOLTAGE PHOTOCELL FOR CONTROLLING EXTERIOR LIGHTING CIRCUITS/RELAYS. CONNECT TO RELAY PANEL '64RP1' PER MANUFACTURER'S RECOMMENDATIONS.
4. COORDINATE MOUNTING HEIGHT AND LOCATION WITH ARCHITECTURAL ELEVATIONS AND DETAILS (TYPICAL).
5. MOUNT FIXTURES ON TOP OF BEAM. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS.
6. AS PART OF BID ALTERNATE #2, WIRE EMERGENCY/EGRESS LIGHTING CIRCUIT AT 120V TO PANEL '64ELBA'

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

CONSULTANTS:

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **FIRST FLOOR ELECTRICAL LIGHTING PLAN**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Project Number: **666-309**

Date: 13 MAR 2015

Location: **VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801**

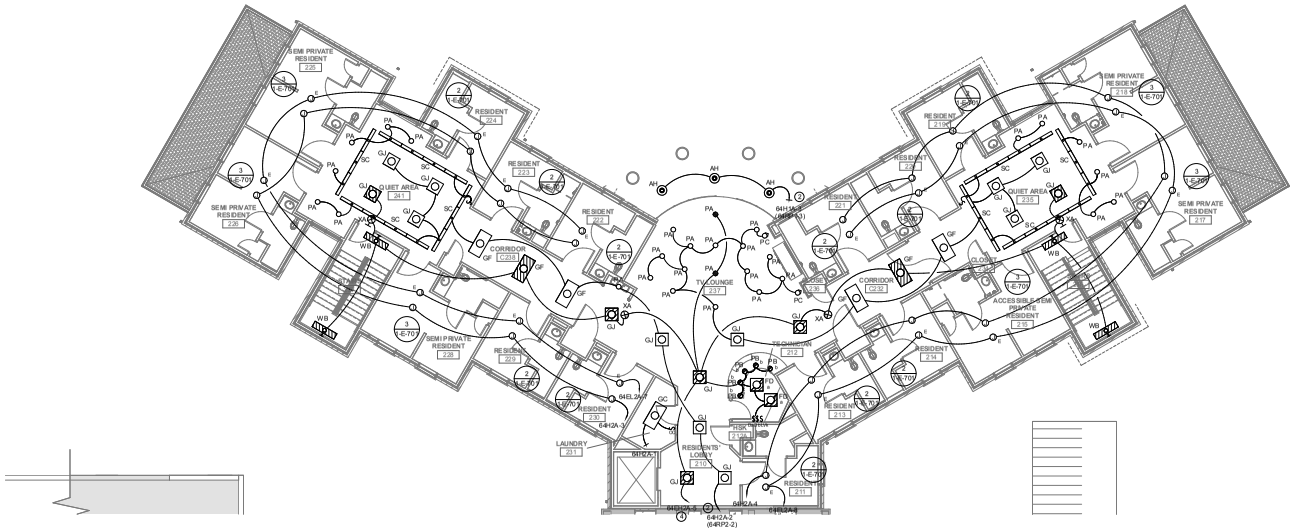
Building Number	Checked	Drawn
64	TWL	TAH

Drawing Number: **1-E-201**

Dwg. of

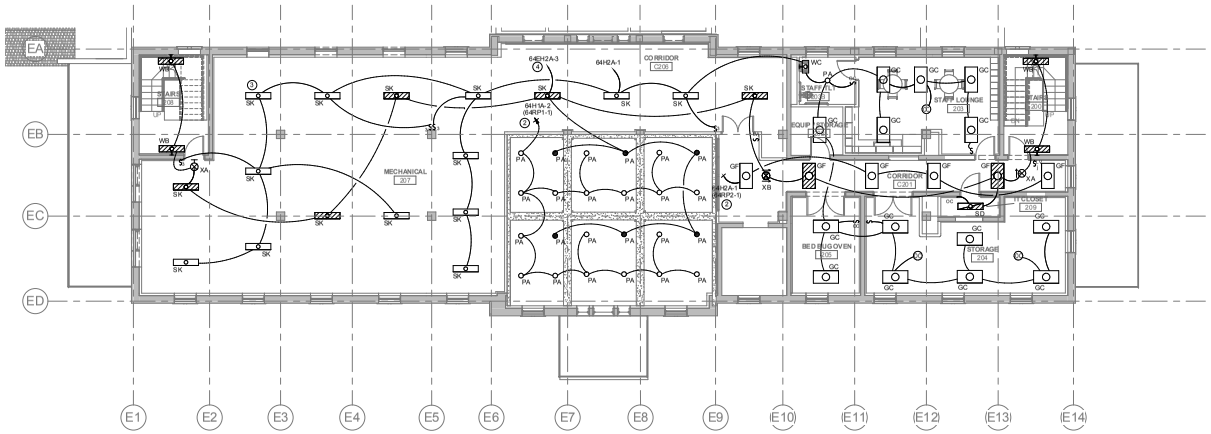
Office of Construction and Facilities Management

VA FORM 08-6231



1 **SECOND FLOOR - ELECTRICAL LIGHTING PLAN**
SCALE: 1/8" = 1'-0"

N



2 **SECOND FLOOR - ELECTRICAL LIGHTING PLAN**
SCALE: 1/8" = 1'-0"

N

SHEET KEY NOTES

1. NOT USED
2. HOMERUN VIA LIGHTING CONTROL RELAY. REFER TO RELAY PANEL SCHEDULES FOR ADDITIONAL INFORMATION.
3. COORDINATE MOUNTING OF FIXTURES IN MECHANICAL ROOM WITH DUCTWORK AND PIPING. LOCATE FIXTURES FOR BEST POSSIBLE ILLUMINATION.
4. AS PART OF BID ALTERNATE #2, WIRE EMERGENCY/EGRESS LIGHTING CIRCUIT AT 120V TO PANEL '64EL2A'

BUILDING IS FULLY SPRINKLERED

Revisions: | Date

CONSULTANTS:

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GreatWest engineering
H2B, INC. — Texas Firm Registration No. 8856, 1225 N Loop W, Suite 900, HOUSTON, TX 77008, 713.864.2900
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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **SECOND FLOOR ELECTRICAL LIGHTING PLAN**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

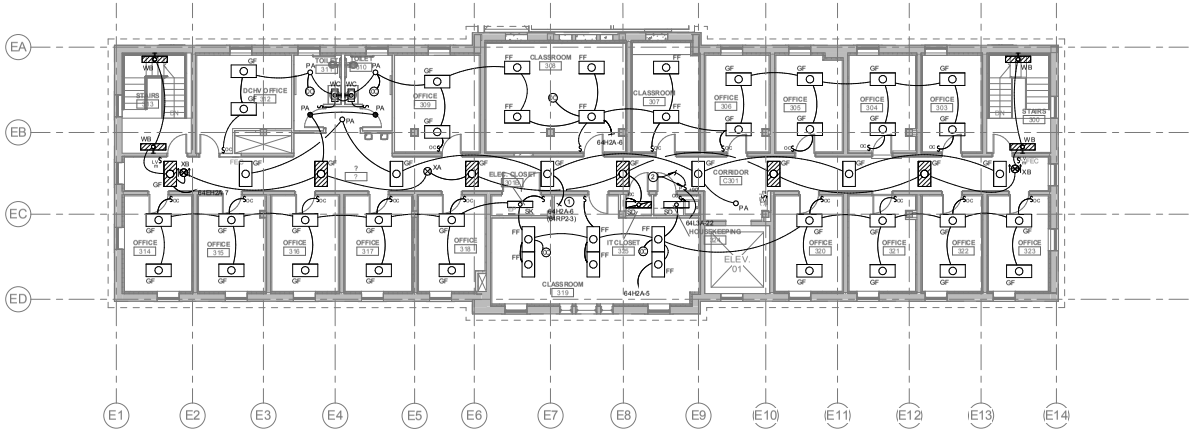
Location: **VAMC SHERIDAN WY, 1898 FORT ROAD, SHERIDAN, WY 82801**

Building Number: 64 | Checked: TWL | Drawn: TAH

Project Number: **666-309**
Date: 13 MAR 2015
Drawing Number: **1-E-202**
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



1 THIRD FLOOR - ELECTRICAL LIGHTING PLAN
SCALE: 1/8" = 1'-0"

N

SHEET KEY NOTES

1. HOMERUN VIA LIGHTING CONTROL RELAY. REFER TO RELAY PANEL SCHEDULES FOR ADDITIONAL INFORMATION.
2. PROVIDE NEW PILOT LIGHT SWITCH HIGH ON WALL ADJACENT TO ATTIC ACCESS. LABEL SWITCH "ATTIC LIGHTS". EXTEND AND RECONNECT TO EXISTING ATTIC LIGHTS.

BID ALTERNATE #4

REPLACE ALL LIGHTING ON THIRD FLOOR WITH NEW AS SHOWN FOR THE BASE BID. REUSE EXISTING WIRING AS MUCH AS POSSIBLE. REPLACE EXISTING SWITCHES WITH OCCUPANCY SENSORS AS SHOWN.

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

Professional Engineer (Electrical) Richard W. Cockrell 10595 Date 12-15-14 WYOMING

CONSULTANTS:

Terracon Consulting Engineers & Scientists
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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: THIRD FLOOR - ELECTRICAL LIGHTING PLAN

Location: VAMC SHERIDAN WY
1898 FORT ROAD
SHERIDAN, WY 82801

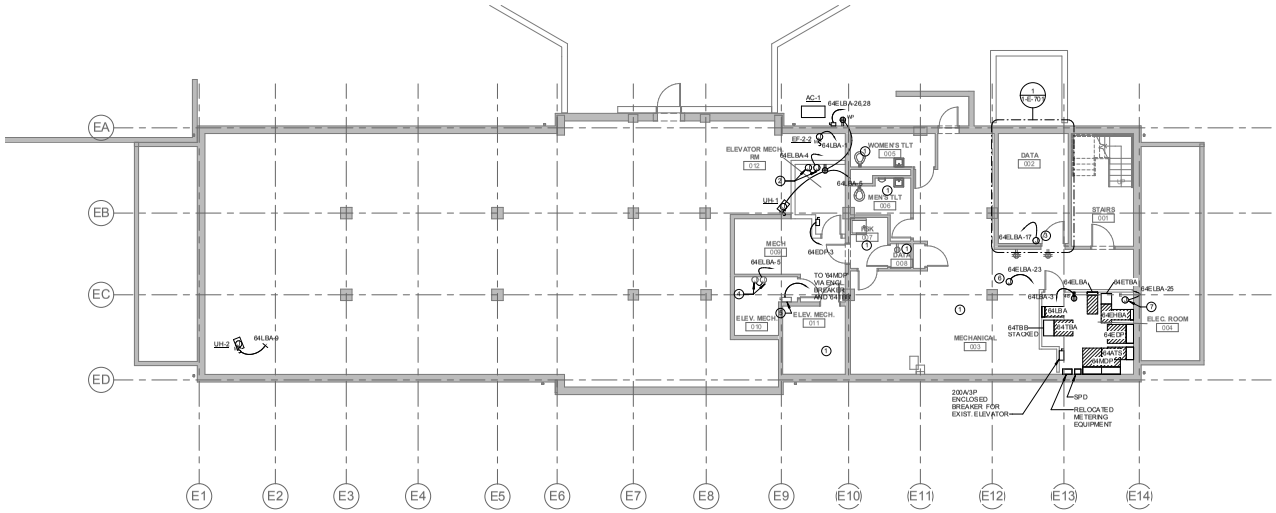
Project Name: EXPAND DOMICILIARY BUILDING 64

Building Number	Checked	Drawn
64	TWL	TAH

Project Number: 666-309
Date: 13 MAR 2015
Drawing Number: 1-E-203
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



1 **BASEMENT - ELECTRICAL POWER PLAN**
SCALE: 1/8" = 1'-0"

N

SHEET KEY NOTES

1. EXISTING POWER ITEMS THIS ROOM/AREA TO REMAIN AS-IS. INTERCEPT, EXTEND, AND RECONNECT ACTIVE 120V CIRCUITS TO NEW PANEL '64LBA'.
2. 120V POWER FOR ELEVATOR CAB LIGHTS AND FAN.
3. PROVIDE 120V EMERGENCY POWER TO NEW FIRE ALARM CONTROL PANEL.
4. RECONNECT EXISTING ELEVATOR 120V CIRCUITS FOR CAR LIGHTS, FAN, AND CONTROLS.
5. EXISTING ELEVATOR DISCONNECT TO REMAIN.
6. 120V POWER FOR VAV BOXES. ROUTE POWER TO EACH VAV BOX. COORDINATE CONNECTIONS WITH DIVISION 23 CONTRACTOR.
7. 120V POWER FOR ELEVATOR SHUNT TRIP. MONITOR VIA FIRE ALARM SYSTEM

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

Professional Engineer (Electrical) Registered Thomas W. Lockhart 10595 Date 3-13-15 WYOMING

CONSULTANTS:

Terracon Consulting Engineers & Scientists
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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **BASEMENT ELECTRICAL POWER PLAN**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

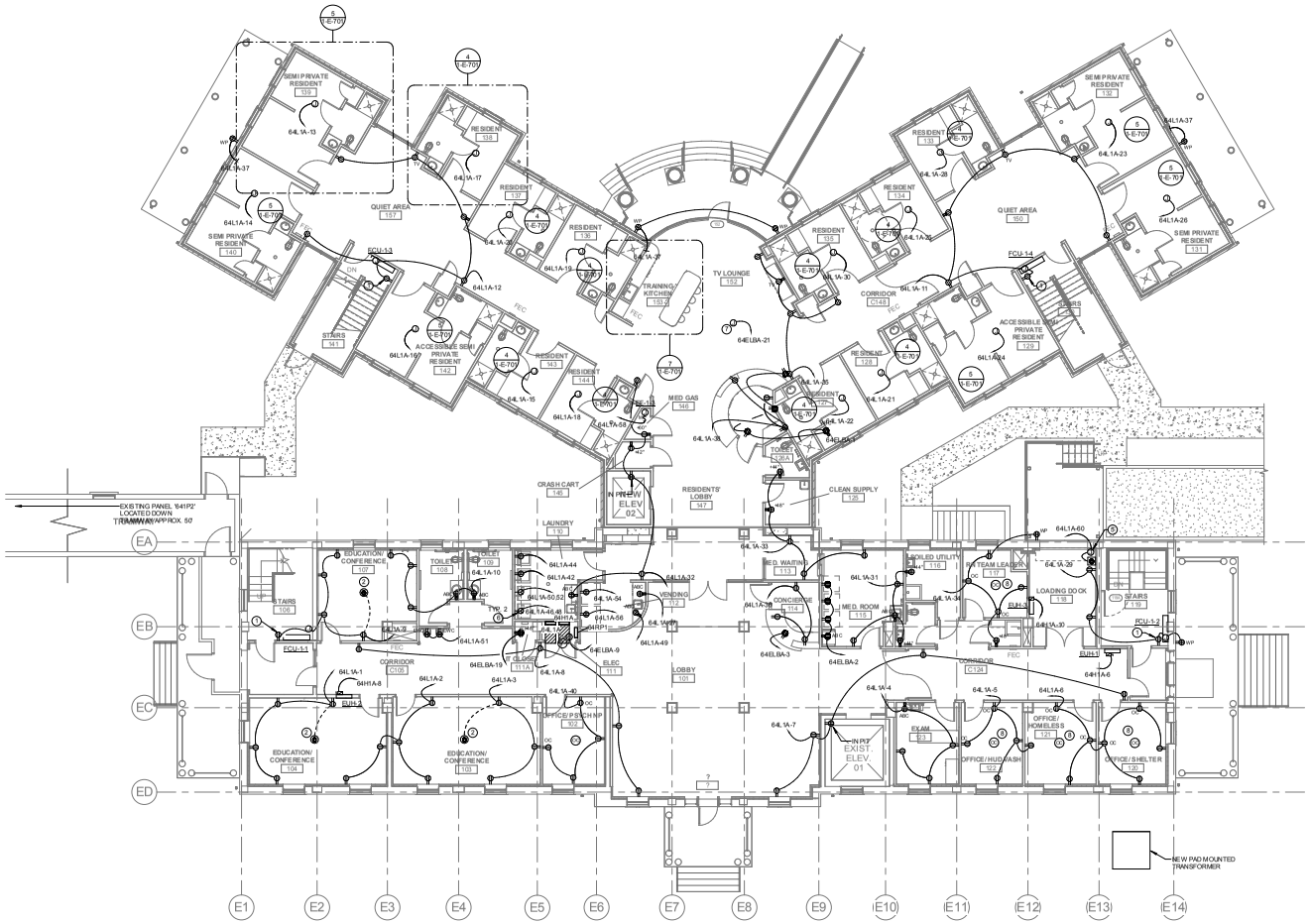
Location: **VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801**

Building Number	Checked	Drawn
64	TWL	TAH

Project Number: **666-309**
Date: 13 MAR 2015
Drawing Number: **1-E-300**
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



1 **FIRST FLOOR - ELECTRICAL POWER PLAN**
SCALE: 1/8" = 1'-0"

N

SHEET KEY NOTES

1. PROVIDE DUPLEX RECEPTACLE FOR CONDENSATE PUMP. COORDINATE LOCATION WITH DIVISION 23 CONTRACTOR.
2. FIRE RATED POKE-THRU DEVICE WITH DUPLEX RECEPTACLE AND PROVISIONS FOR A/V,D JACKS - WIREMOLD AVO SERIES OR EQUIVALENT. COORDINATE FINISHES AND FINAL LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN.
3. 50 AMP, 125/250V, GROUNDING TYPE RECEPTACLE FOR RESIDENTIAL ELECTRIC RANGE (3 #6, #8G) 1"C. COORDINATE RECEPTACLE REQUIREMENTS WITH EQUIPMENT SUPPLIED.
4. PROVIDE 4" SQ. DEVICE BOX AND (1) 1"C. HOMERUN TO PANEL '64L1A' FOR FUTURE 220V COMMERCIAL DISHWASHER.
5. J-BOX AND 120V POWER FOR COILING OVERHEAD DOOR. INSTALL PUSHBUTTON CONTROL STATION SUPPLIED WITH DOOR PER MANUFACTURER'S INSTRUCTIONS.
6. 30 AMP, 125/250V, GROUNDING TYPE RECEPTACLE FOR ELECTRIC DRYER. (3 #10, # 10G) 1"C. COORDINATE RECEPTACLE REQUIREMENTS WITH EQUIPMENT SUPPLIED.
7. 120V POWER FOR VAV BOXES. ROUTE POWER TO EACH VAV BOX. COORDINATE CONNECTIONS WITH DIVISION 23 CONTRACTOR.
8. PROVIDE CEILING OCCUPANCY SENSOR SWITCH IN OFFICE. RECEPTACLES DESIGNATED "OC" SHALL BE SWITCHED VIA OCCUPANCY SENSOR.

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

CONSULTANTS:

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **FIRST FLOOR ELECTRICAL POWER PLAN**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

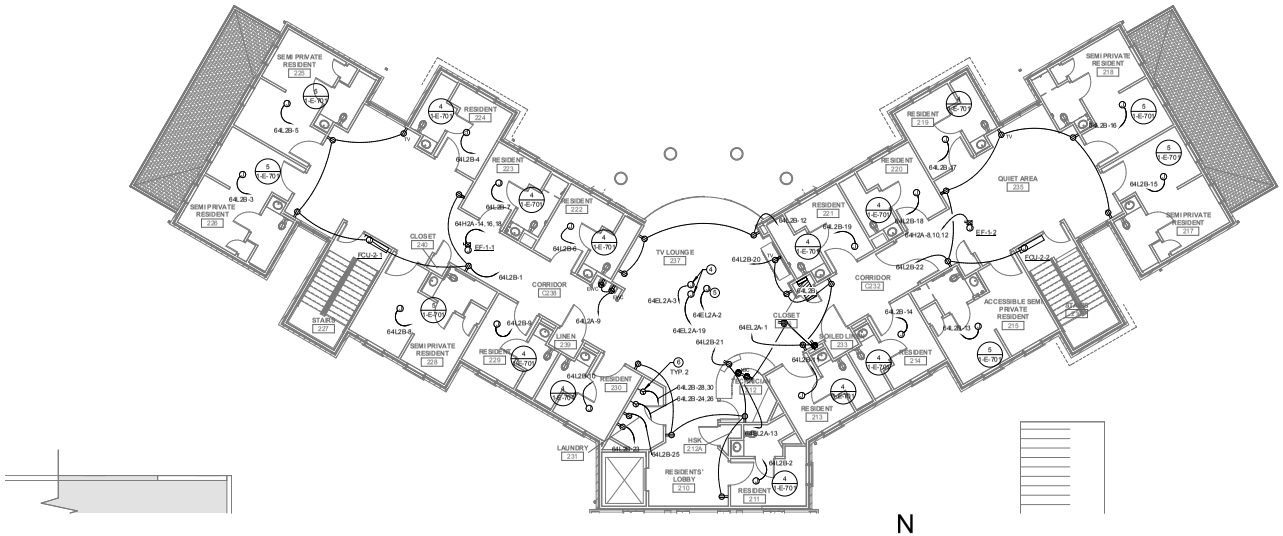
Location: **VAMC SHERIDAN WY, 1898 FORT ROAD, SHERIDAN, WY 82801**

Building Number	Checked	Drawn
64	TWL	TAH

Project Number: **666-309**
Date: 13 MAR 2015
Drawing Number: **1-E-301**
Dwg. of

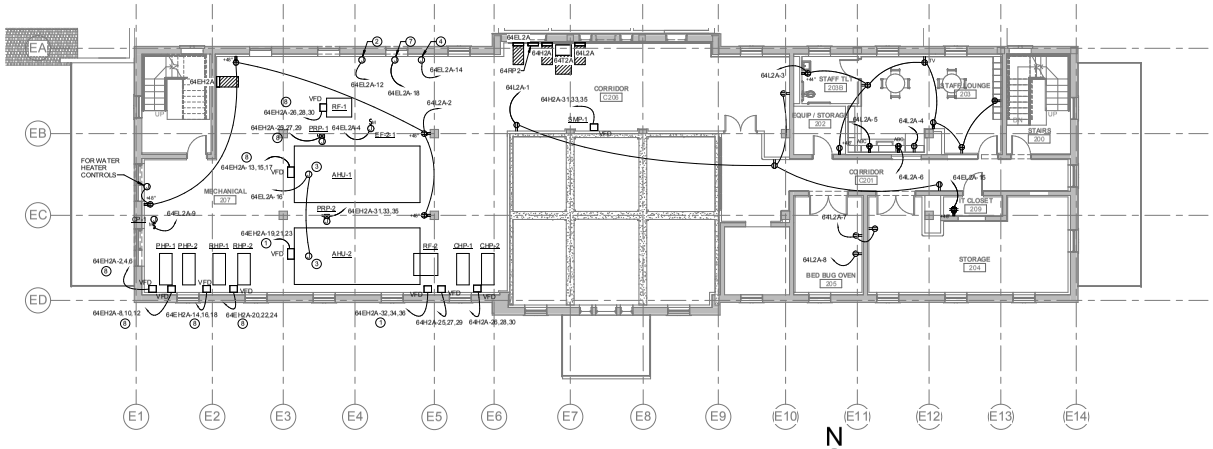
Office of Construction and Facilities Management

VA FORM 08-6231



1 SECOND FLOOR - ELECTRICAL POWER PLAN
SCALE: 1/8" = 1'-0"

N



2 SECOND FLOOR - ELECTRICAL POWER PLAN
SCALE: 1/8" = 1'-0"

N

SHEET KEY NOTES

1. AS PART OF DEDUCT ALTERNATE #2, HOMERUN TO PANEL '64H2A'
2. 120V POWER FOR TEMPERATURE CONTROL BAS PANEL. COORDINATE LOCATION WITH MECHANICAL CONTRACTOR.
3. 120V POWER FOR AHU LIGHTS AND CONTROLS.
4. 120V POWER FOR VAV BOXES. ROUTE POWER TO EACH VAV BOX. COORDINATE CONNECTIONS WITH DIVISION 23 CONTRACTOR.
5. 120V POWER FOR FIRE ALARM.
6. 30 AMP, 125/250V, GROUNDING TYPE RECEPTACLE FOR ELECTRIC DRYER (3 #10, #10G)1"C.. COORDINATE RECEPTACLE REQUIREMENTS WITH EQUIPMENT SUPPLIED.
7. 120V POWER FOR FIRE/SMOKE DAMPERS. COORDINATE CONNECTIONS WITH DIVISION 23 CONTRACTOR.
8. AS PART OF BID ALTERNATE #2, UNIT BECOMES 208V. HOMERUN TO PANEL '64EL2A'

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

Professional Engineer (Electrical) Richard W. Cooper 10595 Date 4-15 WYOMING

CONSULTANTS:

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
SECOND FLOOR ELECTRICAL POWER PLAN

Project Name
EXPAND DOMICILIARY BUILDING 64

Project Number
666-309

Date
13 MAR 2015

Drawing Number
1-E-302

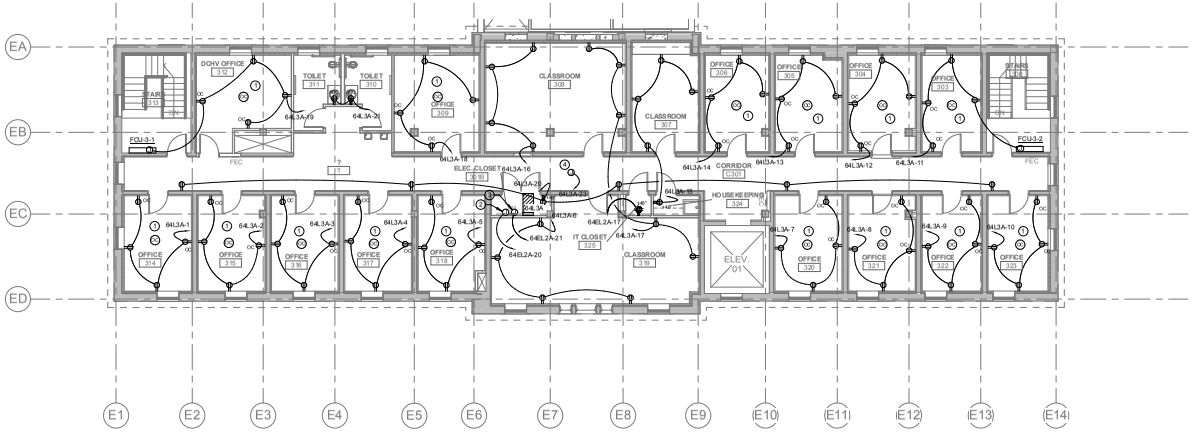
Dwg. of

Location
VAMC SHERIDAN WY
1898 FORT ROAD
SHERIDAN, WY 82801

Building Number	Checked	Drawn
64	TWL	SOH

Office of Construction and Facilities Management

VA FORM 08-6231



1 **THIRD FLOOR - ELECTRICAL POWER PLAN**
SCALE: 1/8"= 1'-0"

N

BID ALTERNATE #4
ALL EXISTING POWER AND SPECIAL SYSTEM ITEMS TO REMAIN AS-IS ON THIRD FLOOR

SHEET KEY NOTES

1. PROVIDE CEILING OCCUPANCY SENSOR SWITCH IN OFFICE. RECEPTACLES DESIGNATED "OC" SHALL BE SWITCHED VIA OCCUPANCY SENSOR.
2. 120V POWER FOR VAV BOXES. ROUTE POWER TO EACH VAV BOX. COORDINATE CONNECTIONS WITH DIVISION 23 CONTRACTOR.
3. 120V POWER FOR FIRE/SMOKE DAMPERS. COORDINATE CONNECTIONS WITH DIVISION 23 CONTRACTOR.
4. J-BOX AND 120V CONNECTION IN ATTIC FOR DORMER LOUVERS. COORDINATE CONNECTIONS WITH DIVISION 23 CONTRACTOR.

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

Professional Engineer (Electrical) Registered Professional Engineer 10595 Date 3-13-15 WYOMING

CONSULTANTS:

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **THIRD FLOOR ELECTRICAL POWER PLAN**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Location: **VAMC SHERIDAN WY**
1898 FORT ROAD
SHERIDAN, WY 82801

Building Number	Checked	Drawn
64	TWL	TAH

Project Number: **666-309**
Date: 13 MAR 2015
Drawing Number: **1-E-303**
Dwg. of

Office of Construction and Facilities Management

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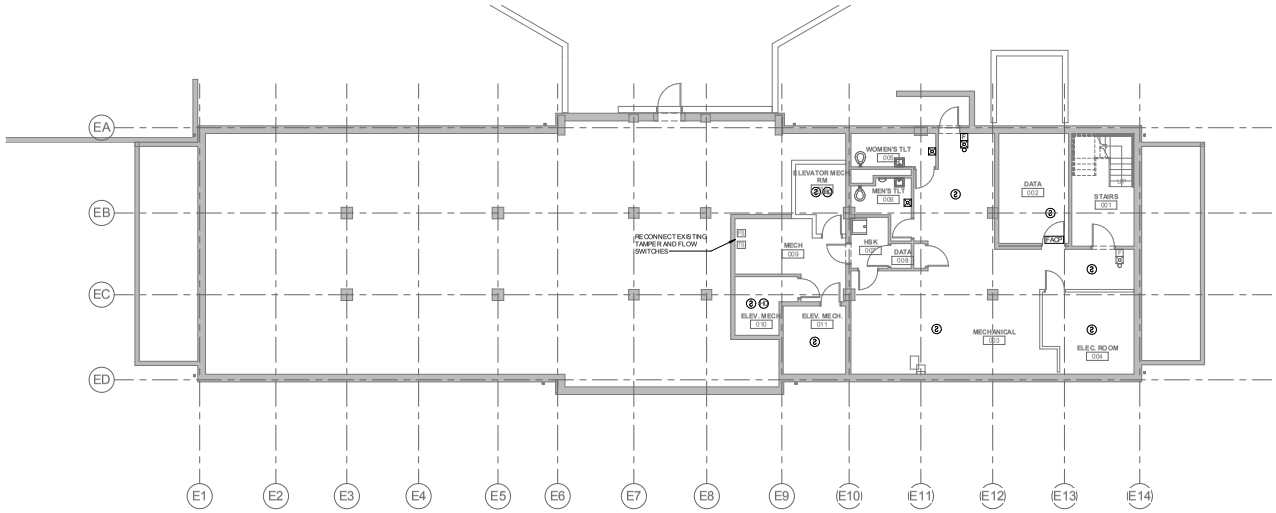

1 **BASEMENT - FIRE ALARM PLAN**
SCALE: 1/8" = 1'-0"

BUILDING IS FULLY SPRINKLERED

Revisions: Date

Professional Engineer (Electrical) Registration No. 10595 Date 3-13-15 WYOMING

CONSULTANTS:

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
BASEMENT FIRE ALARM PLAN

Location
VAMC SHERIDAN WY
1898 FORT ROAD
SHERIDAN, WY 82801

Project Name
EXPAND DOMICILIARY BUILDING 64

Building Number: 64
Checked: TWL
Drawn: TAH

Project Number: **666-309**
Date: 13 MAR 2015
Drawing Number: **1-E-400**
Dwg. of

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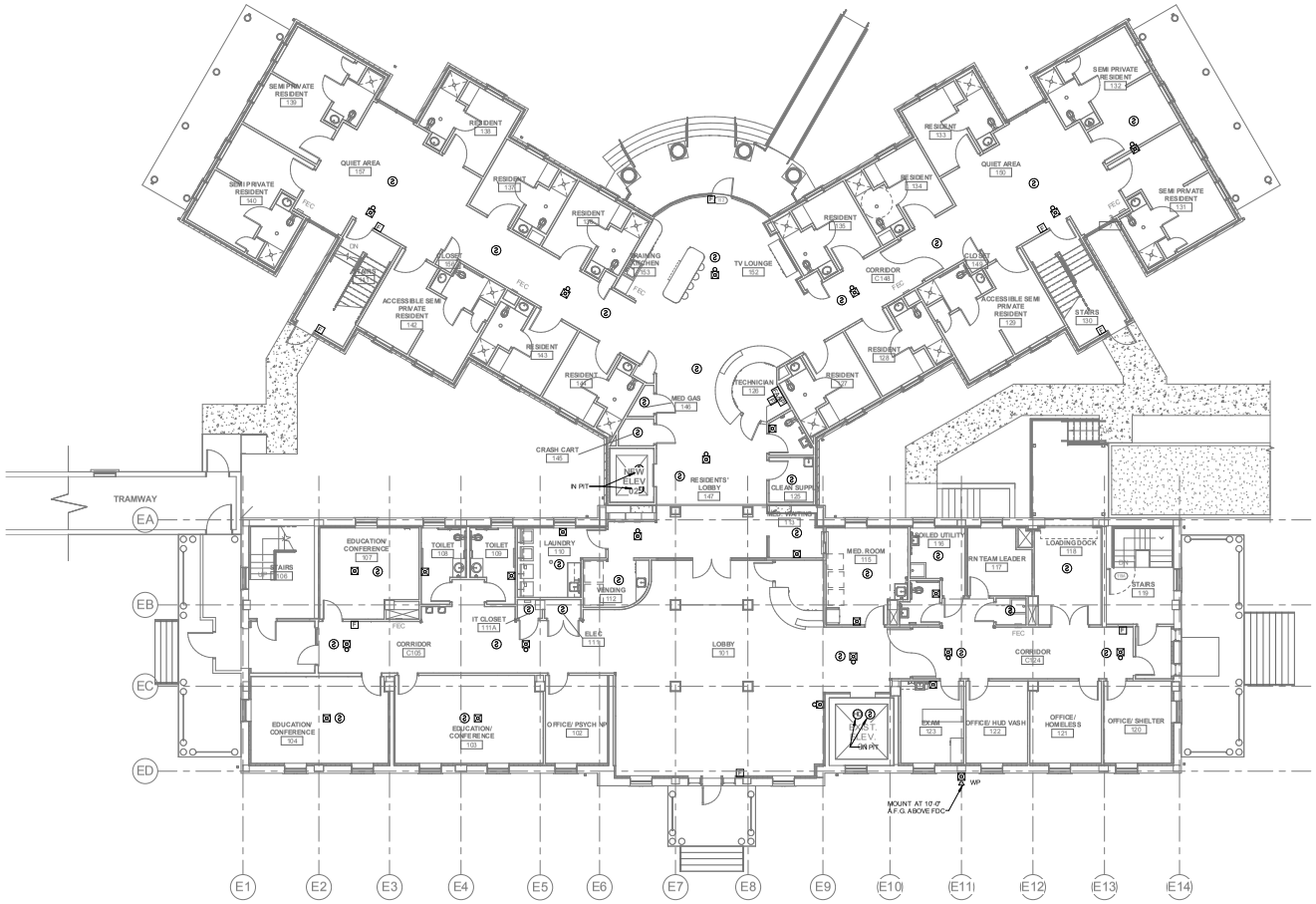
VA FORM 08-6231



1 **FIRST FLOOR - FIRE ALARM PLAN**
SCALE: 1/8" = 1'-0"

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

Professional Engineer (Electrical) Richard W. Eckert 10595 Date 3-13-15 WYOMING

CONSULTANTS:

Terracon Consulting Engineers & Scientists

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
FIRST FLOOR FIRE ALARM PLAN

Location
VAMC SHERIDAN WY
1898 FORT ROAD
SHERIDAN, WY 82801

Project Name
EXPAND DOMICILIARY BUILDING 64

Building Number	Checked	Drawn
64	TWL	TAH

Project Number
666-309

Date
13 MAR 2015

Drawing Number
1-E-401

Dwg. of

Office of Construction and Facilities Management

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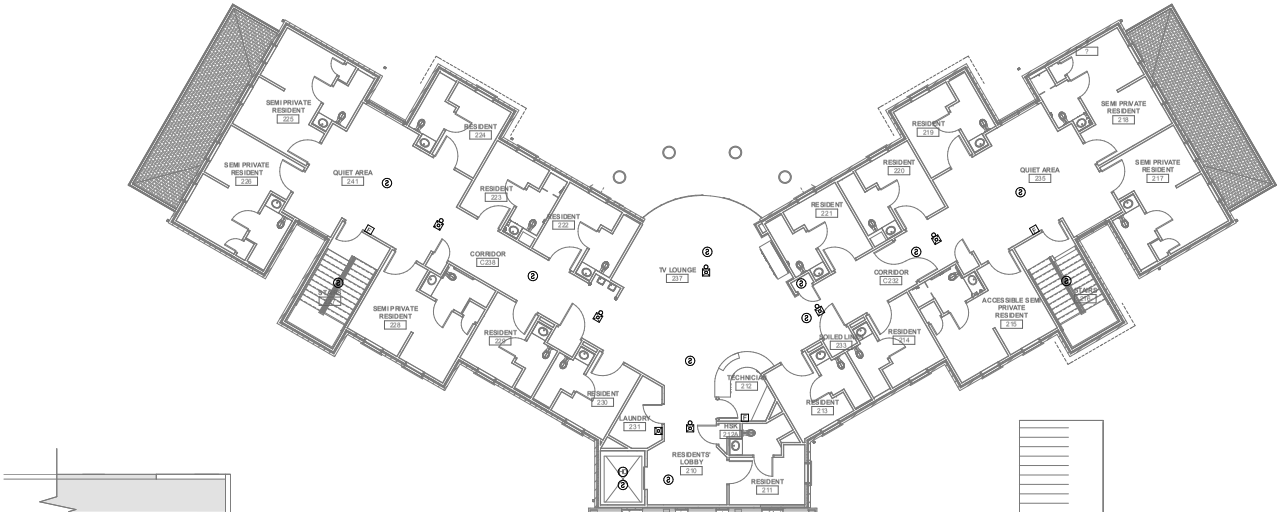
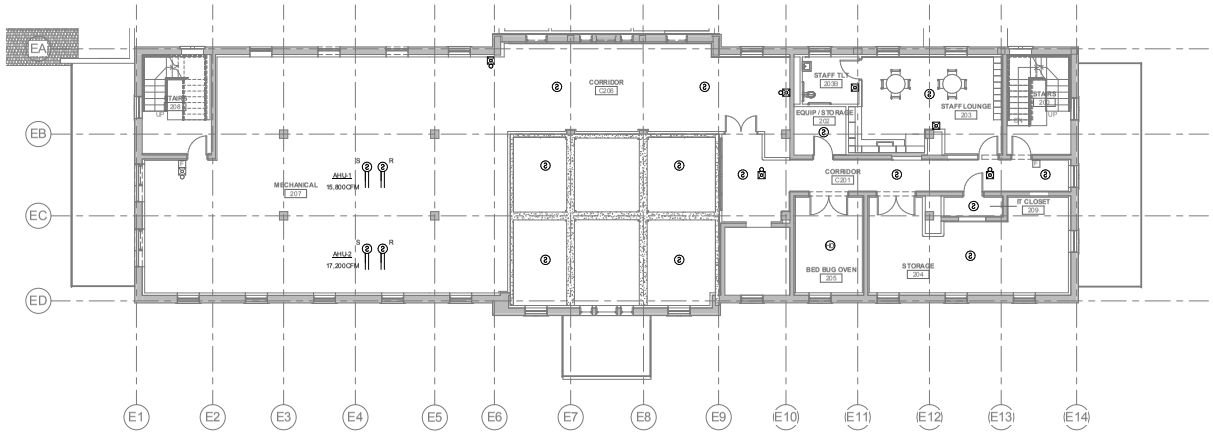


2 SECOND FLOOR - FIRE ALARM PLAN
SCALE: 1/8" = 1'-0"



1 SECOND FLOOR - FIRE ALARM PLAN
SCALE: 1/8" = 1'-0"

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

CONSULTANTS:

Terracon — Consulting Engineers & Scientists
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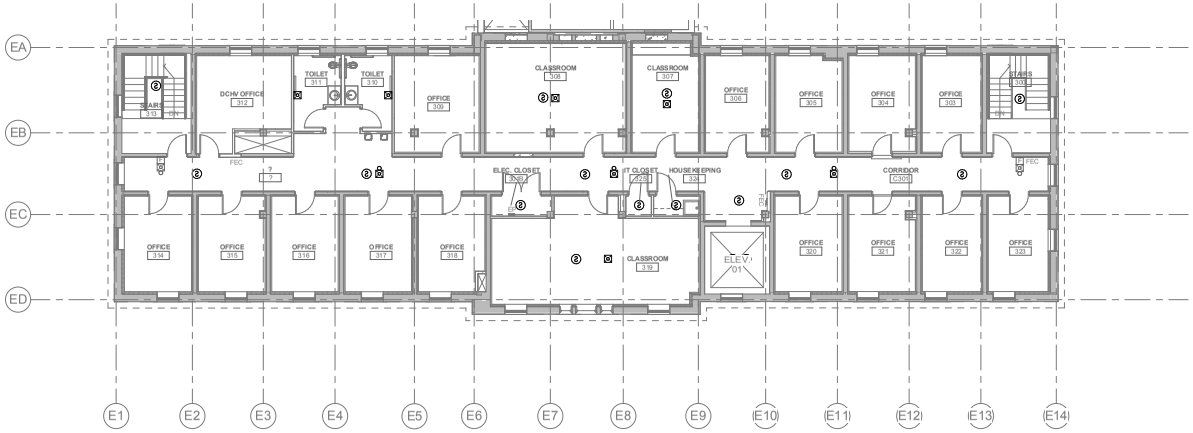
Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: SECOND FLOOR FIRE ALARM PLANS
Project Name: EXPAND DOMICILIARY BUILDING 64
Location: VAMC SHERIDAN WY, 1898 FORT ROAD, SHERIDAN, WY 82801
Building Number: 64 | Checked: TWL | Drawn: TAH
Project Number: 666-309
Date: 13 MAR 2015
Drawing Number: 1-E-402
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



1 **THIRD FLOOR - FIRE ALARM PLAN**
SCALE: 1/8" = 1'-0"

BID ALTERNATE #4

ALL EXISTING FIRE ALARM ITEMS TO REMAIN AS-IS ON THIRD FLOOR. EXTEND NEW ADDRESSIBLE LOOP AS REQUIRED TO THIRD FLOOR FROM NEW FIRE ALARM SYSTEM.

BUILDING IS FULLY SPRINKLERED

Revisions: Date

Professional Engineer (Electrical) Registration No. 10595 Date 3-13-15 WYOMING

CONSULTANTS:

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GreatWest engineering
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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **THIRD FLOOR FIRE ALARM PLAN**

Location: **VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Building Number: 64 | Checked: TWL | Drawn: TAH

Project Number: **666-309**

Date: 13 MAR 2015

Drawing Number: **1-E-403**

Dwg. of

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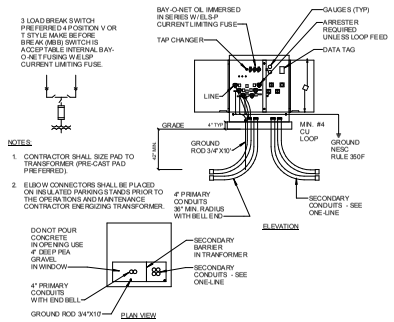
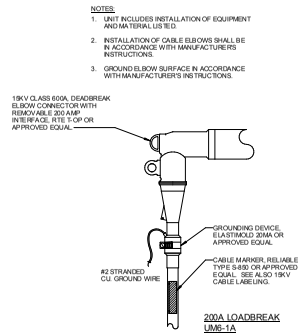
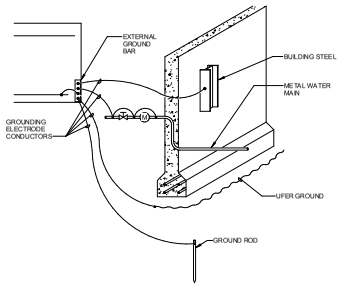
VA FORM 08-6231



3-PHASE PAD MOUNTED TRANSFORMER AND PAD
NTS

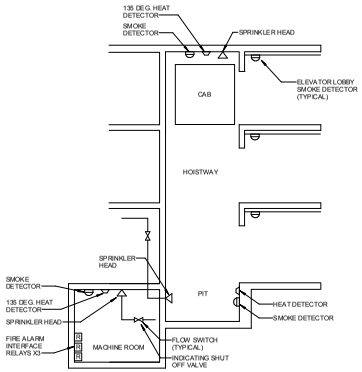


DETAIL - 15KV LOADBREAK ELBOW
NTS

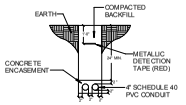


NOTE:
REFER TO NEC 250-52.

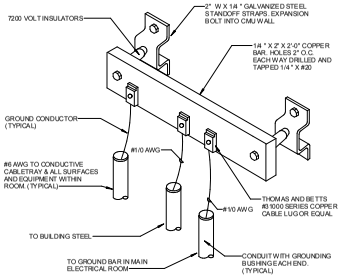
DETAIL - GROUNDING ELECTRODE
NTS



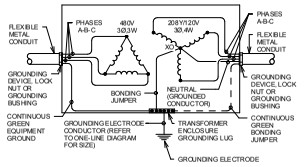
ELEVATOR FIRE ALARM INTERCONNECTION DIAGRAM
NTS



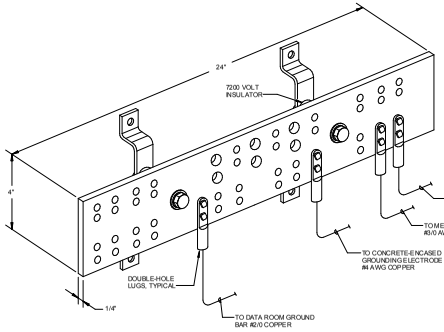
DETAIL - MEDIUM VOLTAGE FEEDER DUCTBANK
NTS



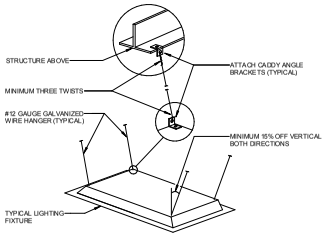
DETAIL - DATA ROOM GROUND BUS DETAIL
NTS



DETAIL - TRANSFORMER GROUNDING
NTS



DETAIL - GROUND BAR
NTS



FIXTURE SUPPRORT NOTES:

1. ATTACH ALL LIGHT FIXTURES TO THE CEILING GRID RUNNERS TO RESIST A HORIZONTAL FORCE EQUAL TO THE WEIGHT OF THE FIXTURES.
2. ALL FLUSH OR RECESSED LIGHT FIXTURES WEIGHING LESS THAN 56 POUNDS SHALL BE SUPPORTED DIRECTLY ON THE RUNNERS OF A HEAVY DUTY GRID SYSTEM AND THEY MUST HAVE A MINIMUM OF TWO #12 GAUGE SLACK SAFETY WIRES ATTACHED AT DIAGONAL CORNERS AND ANCHORED TO THE STRUCTURE ABOVE.
3. ALL FIXTURES SUPPORTED ON INTERMEDIATE DUTY GRID SYSTEMS MUST BE INDEPENDENTLY SUPPORTED BY NOT LESS THAN FOUR TAUT #12 GAUGE WIRES ATTACHED TO THE STRUCTURE ABOVE.
4. ALL FLUSH OR RECESSED LIGHT FIXTURES WEIGHING MORE THAN 56 POUNDS MUST BE INDEPENDENTLY SUPPORTED BY NOT LESS THAN FOUR #12 GAUGE TAUT WIRES ATTACHED TO THE STRUCTURE ABOVE REGARDLESS OF THE TYPE OF CEILING GRID SYSTEM USED.
5. THE FOUR TAUT #12 GAUGE WIRES INCLUDING THEIR ATTACHMENT TO THE STRUCTURE ABOVE MUST BE CAPABLE OF SUPPORTING FOUR TIMES THE WEIGHT OF THE UNIT.

DETAIL - GRID FIXTURE SUPPORT
NTS

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

Professional Engineer (Electrical) Registered Thomas W. Eck 16899 Date 13 MAR 2015 WYOMING

CONSULTANTS:

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **ELECTRICAL DETAILS**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Location: **VAMC SHERIDAN WY, 1898 FORT ROAD, SHERIDAN, WY 82801**

Building Number	Checked	Drawn
64	TWL	TAH

Project Number: **666-309**
Date: 13 MAR 2015
Drawing Number: **1-E-501**
Dwg. of

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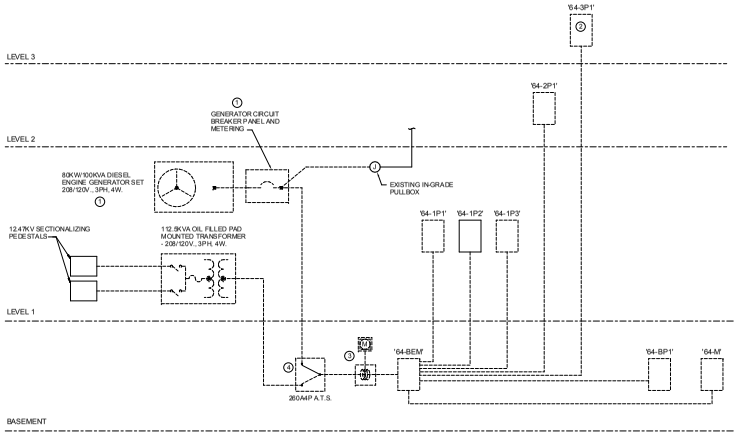
SHEET KEY NOTES

1. EXISTING GENERATOR AND BREAKER PANEL REMAIN AS PART OF BID ALTERNATE #2
2. EXISTING PANEL 64LP3 REMAINS AS PART OF BID ALTERNATE #4
3. SALVAGE METERING EQUIPMENT FOR REUSE.
4. SALVAGE A.T.S. FOR REUSE AS PART OF BID ALTERNATE #2



ELECTRICAL ONE-LINE DIAGRAM - DEMOLITION

NTS

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

CONSULTANTS:

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **ELECTRICAL ONE-LINE DEMOLITION**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Location: **VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801**

Building Number	Checked	Drawn
64	TWL	TAH

Project Number: **666-309**

Date: 13 MAR 2015

Drawing Number: **1-E-601**

Dwg. of

Office of Construction and Facilities Management

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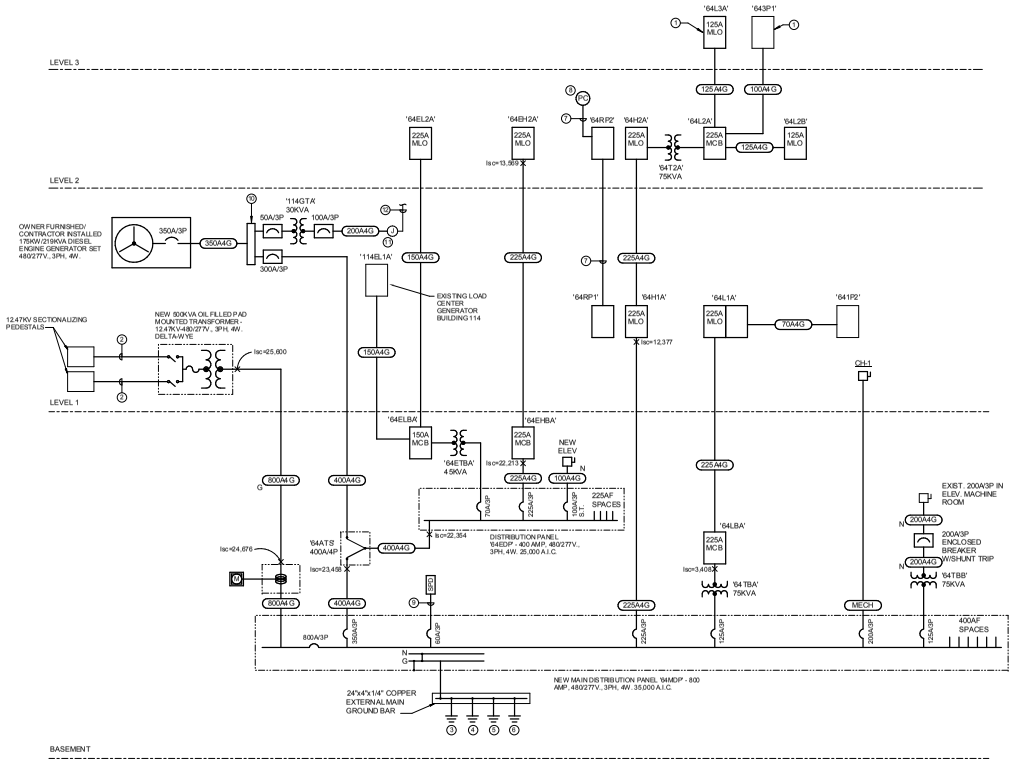

1 **ELECTRICAL ONE-LINE DIAGRAM - BASE BID**
SCALE: 1/8" = 1'-0"

TRANSFORMER SCHEDULE

PRIMARY VOLTAGE - 480V DELTA				SECONDARY VOLTAGE - 120/208V WYE			GROUNDING ELECTRODE CONDUCTOR
FEEDER BREAKER	PRIMARY FEEDER	FLA	XFMR KVA	FLA	SECONDARY FEEDER	TERMINAL BREAKER	
30A/3P	30A/4G N	18	15	42	60A/4G	60A/3P	#8
50A/3P	50A/4G N	36	30	83	100A/4G	100A/3P	#8
70A/3P	70A/4G N	54	45	125	150A/4G	150A/3P	#6
125A/3P	125A/4G N	90	75	208	225A/4G	225A/3P	#2
175A/3P	175A/4G N	136	112.5	313	400A/4G	400A/3P	#1/0
225A/3P	225A/4G N	181	150	417	600A/4G	600A/3P	#2/0

FEEDER SCHEDULE

TAG	SETS	PHASE/NEU CONDUCTOR	GROUND CONDUCTOR	CONDUIT (NOTE 3)
20A/4G	1	#12	#12	3/4"
30A/4G	1	#10	#10	3/4"
40A/4G	1	#8	#10	1"
50A/4G	1	#6	#10	1"
60A/4G	1	#4	#10	1"
70A/4G	1	#4	#8	1- 1/4"
100A/4G	1	#2	#8	1- 1/4"
125A4G	1	#1	#6	1- 1/2"
150A4G	1	#1/0	#6	2"
175A4G	1	#2/0	#6	2"
200A4G	1	#3/0	#6	2"
225A4G	1	#4/0	#4	2- 1/2"
250A4G	1	250 KCMIL	#4	2- 1/2"
300A4G	1	350 KCMIL	#4	3"
350A4G	2	#2/0	#3	2"
400A4G	2	#3/0	#2	2"
500A4G	2	250 KCMIL	#2	2- 1/2"
600A4G	2	350 KCMIL	#1	3"
800A4G	2	500 KCMIL	#1/0	3- 1/2"
1000A4G	3	500 KCMIL	#2/0	3- 1/2"
1200A4G	4	350 KCMIL	#3/0	3"
1600A4G	5	500 KCMIL	#4/0	3- 1/2"
2000A4G	6	500 KCMIL	250 KCMIL	3- 1/2"
2500A4G	7	500 KCMIL	350 KCMIL	3- 1/2"
3000A4G	8	500 KCMIL	400 KCMIL	4"
4000A4G	11	500 KCMIL	500 KCMIL	4"
MECH	SEE MECHANICAL EQUIPMENT SCHEDULE			

1. REFER TO SPECIFICATIONS FOR INSULATION TYPE.
2. A "N" MODIFIER ADJACENT TO THE FEEDER TAG INDICATES FEEDER CONTAINS NO NEUTRAL CONDUCTOR. A "G" MODIFIER INDICATES FEEDER CONTAINS NO GROUNDING CONDUCTOR. ALL OTHER FEEDERS CONTAIN (3) PHASE CONDUCTORS, (1) NEUTRAL CONDUCTOR, AND (1) GROUND CONDUCTOR PER CONDUIT.
3. BASED ON EMT CONDUIT. REFER TO NEC ANNEX C TABLES FOR OTHER CONDUIT TYPES.
4. ALL FEEDERS SHALL BE COPPER.
5. NOT ALL FEEDERS ARE USED - REFER TO ONE-LINE DIAGRAM

SHEET KEY NOTES

1. AS PART OF BID ALTERNATE #4: PANEL '64L3A' IS NOT INSTALLED. EXISTING PANEL '64P3' T REMAINS AS-IS AND IS RE-FED FROM 2ND FLOOR PANEL AS SHOWN.
2. NEW (3) #1 CU 15KV MV-105, 133% BEL) 4"C.
3. (1) #3/0 CU GND.) 1"C. TO COLD WATER SERVICE ENTRANCE PIPE.
4. (1) #3/0 CU GND.) 1"C. TO BUILDING STEEL
5. (1) #4 CU GND.)3/4"C. TO UFER GROUND.
6. (1) #2/0 CU GND.) 1"C. TO I.T. GROUND BAR
7. LOW VOLTAGE CABLING PER MANUFACTURER'S REQUIREMENTS IN 3/4" CONDUIT.
8. LOW VOLTAGE PHOTOCELL MOUNTED ON ROOF PER LIGHTING CONTROL MANUFACTURER'S REQUIREMENTS.
9. (4) #6, 1) #6 GND.)1"C.
10. PROVIDE NEW 8"x8"x LENGTH AS REQUIRED NEMA-1 WIREWAY WITH SCREW COVER.
11. EXISTING IN-GRADE PULLBOX. REFER TO SITE PLAN SHEET 1-E-100 FOR APPROXIMATE LOCATION. SPLICE NEW FEEDER CONDUTORS TO EXISTING IN THIS BOX.
12. EXISTING (4 - 350 KCMIL CU) FEEDER TO BUILDING 4 ATS TO REMAIN AND BE REUSED.

BUILDING IS FULLY SPRINKLERED

Revisions: Date

CONSULTANTS:

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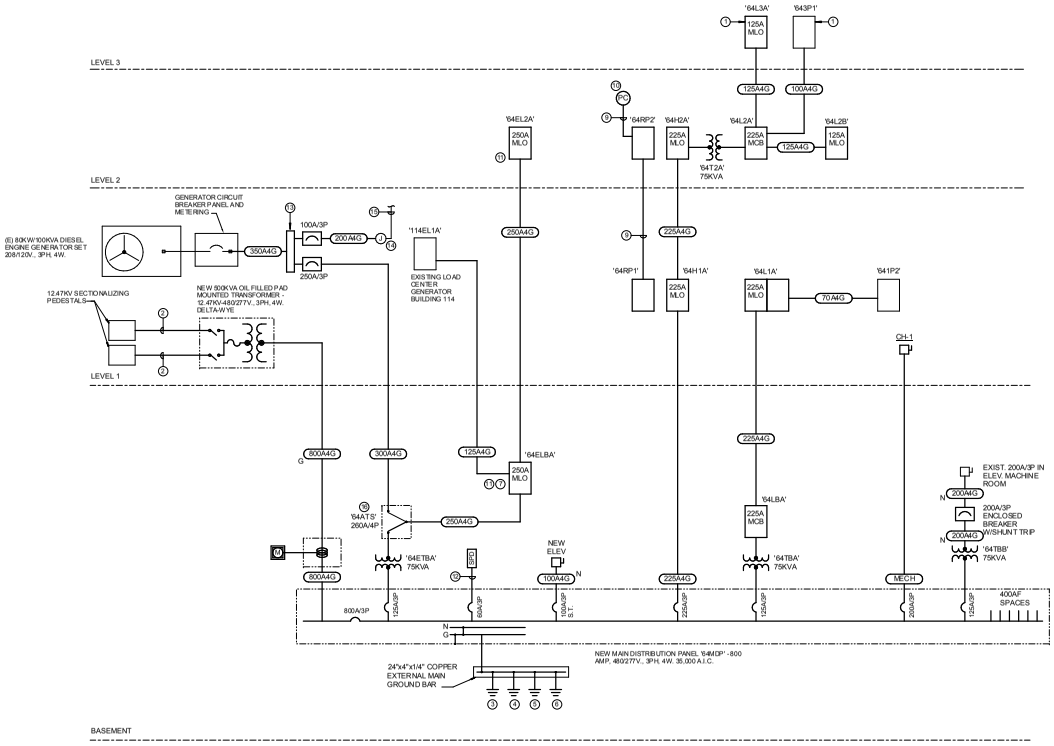
Approved: Chief of MH | Approved: Chief of FMS
Approved: Director | Approved: VA Energy Engineer

Drawing Title: ELECTRICAL ONE-LINE DIAGRAM - BASE BID
Project Name: EXPAND DOMICILIARY BUILDING 64
Project Number: 666-309
Date: 13 MAR 2015
Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801
Building Number: 64 | Checked: TWL | Drawn: TAH
Drawing Number: 1-E-602
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



1 **ELECTRICAL ONE-LINE DIAGRAM - BID ALTERNATE #2**
SCALE: 1/8" = 1'-0"

SHEET KEY NOTES

1. AS PART OF DEDUCT ALTERNATE #4: PANEL '64L3A' IS NOT INSTALLED. EXISTING PANEL '643P1' REMAINS AS-IS AND IS RE-FED FROM 2ND FLOOR PANEL AS SHOWN.
2. NEW (3 #1 CU 15KV MV-105, 133% BIL) 4"C.
3. (1 #3/0 CU GND.)1"C. TO COLD WATER SERVICE ENTRANCE PIPE.
4. (1 #3/0 CU GND.) 1"C. TO BUILDING STEEL
5. (1 #4 CU GND.)3/4"C. TO UFER GROUND.
6. (1 #2/0 CU GND.) 1"C. TO I.T. GROUND BAR
7. AS PART OF DEDUCT ALTERNATE #2, PANEL '64ELBA' BECOMES 250A MLO, 42-CIRCUIT, 10,000 A.I.C. PROVIDE 100A/3P SUB-FEED BREAKER FOR PANEL '114EL1A' AND FEED-THRU LUGS FOR PANEL '64EL2A'.
8. NOT USED
9. LOW VOLTAGE CABLING PER MANUFACTURER'S REQUIREMENTS IN 3/4" CONDUIT.
10. LOW VOLTAGE PHOTOCELL MOUNTED ON ROOF PER LIGHTING CONTROL MANUFACTURER'S REQUIREMENTS.
11. AS PART OF DEDUCT ALTERNATE #2, EMERGENCY/EGRESS LIGHTING CIRCUITS SHALL BE SERVED FROM PANELS '64ELBA' AND '64EL2A'. REFER TO LIGHTING PLANS FOR CIRCUIT QUANTITIES.
12. (4 #6, 1 #6 GND.)1"C.
13. PROVIDE NEW 8"x8"x LENGTH AS REQUIRED NEMA-1 WIREWAY WITH SCREW COVER.
14. EXISTING IN-GRADE PULLBOX. REFER TO SITE PLAN SHEET 1-E-100 FOR APPROXIMATE LOCATION. SPLICE NEW FEEDER CONDUTORS TO EXISTING IN THIS BOX.
15. EXISTING (4 - 350 KCMIL CU) FEEDER TO BUILDING 4 ATS TO REMAIN AND BE REUSED.
16. AS PART OF DEDUCT ALTERNATE #2, RELOCATE AND REUSE EXISTING 260A AUTOMATIC TRANSFER SWITCH.

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

CONSULTANTS:

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **ELECTRICAL ONE-LINE DIAGRAM - BID ALTERNATE #2**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Project Number: **666-309**

Date: 13 MAR 2015

Location: **VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801**

Building Number: 64 | Checked: TWL | Drawn: TAH

Drawing Number: **1-E-603**

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Office of Construction and Facilities Management

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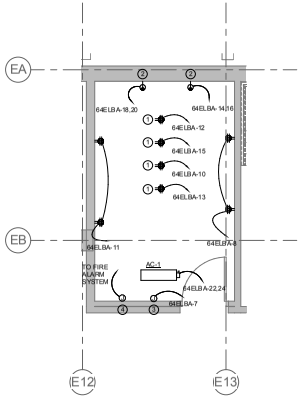
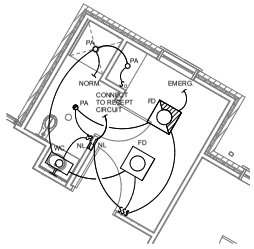
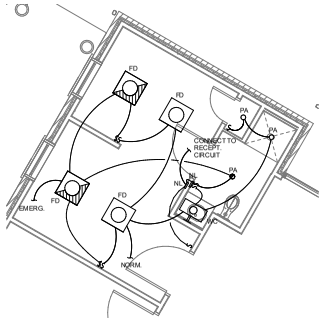


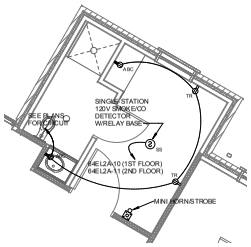
1 **ENLARGED I.T. ROOM POWER PLAN**
SCALE: 1/4" = 1'-0" RE:1 /1-E-300



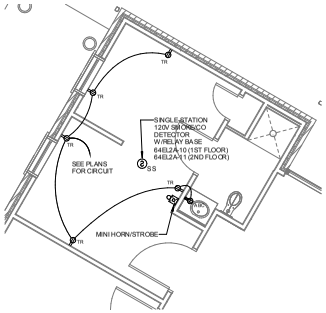
2 **TYPICAL PRIVATE RESIDENT ROOM LIGHTING**
SCALE: 1/4" = 1'-0" RE:1 /1-E-201



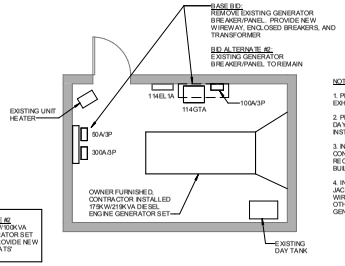
3 **TYPICAL SEMI-PRIAVATE RESIDENT ROOM LIGHTING**
SCALE: 1/4" = 1'-0" RE:1 /1-E-201



4 **TYPICAL RESIDENT ROOM POWER**
SCALE: 1/4" = 1'-0" RE:1 /1-E-301



5 **TYPICAL SEMI-PRIVATE RESIDENT ROOM POWER**
SCALE: 1/4" = 1'-0" RE:1 /1-E-301



NOTES:

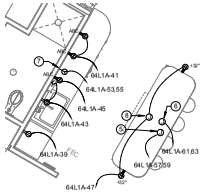
1. PROVIDE NEW CRITICAL GRADE MUFFLER AND EXHAUST PIPING AS PART OF INSTALLATION.

2. PROVIDE FUEL OIL CONNECTIONS TO EXISTING DAY TANK AND UNDERGROUND TANK AS PART OF INSTALLATION.

3. INCLUDE 2" CONDUIT WITH NEW FEEDER FOR CONTROL WIRING TO ATS-64. INCLUDE RECONNECTION OF CONTROL WIRING TO EXISTING BUILDING 4 ATS.

4. INCLUDE CONNECTIONS OF BATTERY CHARGER, JACKET WATER HEATER, LOUVER INTERLOCK WIRING, RADIATOR SHEET METAL PLENUM, AND OTHER MISCELLANEOUS ITEMS FOR A COMPLETE GENERATOR SET INSTALLATION.

6 **EXISTING GENERATOR BUILDING 114**
SCALE: 1/4" = 1'-0"



7 **ENLARGED TRAINING KITCHEN POWER**
SCALE: 1/4" = 1'-0" RE:1 /1-E-301

SHEET KEY NOTES

1. DOUBLE-DUPLEX RECEPTACLE MOUNTED AT BOTTOM OF RACK (TYPICAL FOR 4)
2. NEMA L6-30R RECEPTACLE FOR I.T. EQUIPMENT.
3. 120V POWER FOR NURSE CALL SYSTEM PANEL
4. INTERFACE FIRE ALARM SYSTEM WITH ACCESS CONTROL TO SYSTEM FOR STAIRWELL DOORS DELAYED EGRESS. DOORS TO RELEASE UPON GENERAL FIRE ALARM.
5. J-BOX BELOW COUNTERTOP FOR HARDWIRED CONNECTION TO RESIDENTIAL ELECTRIC COOKTOP. COORDINATE ROUGH-IN WITH EQUIPMENT INSTALLATION INSTRUCTIONS. PROVIDE (3 #8, #10G) 1"C. HOMERUN.
6. J-BOX IN CABINET FOR HARDWIRED CONNECTION TO RESIDENTIAL ELECTRIC WALL OVEN. COORDINATE ROUGH-IN WITH EQUIPMENT INSTALLATION INSTRUCTIONS. PROVIDE (3 #12, #12G) 3/4"C. HOMERUN.
7. NEMA 14-50R 125/250V GROUNDING TYPE RECEPTACLE FOR DISHWASHER (3 #8, #10G) 3/4"C. PROVIDE CORD AND MATCHING PLUG ON UNIT AS REQUIRED.
8. PROVIDE HARDWIRED CONNECTION FOR ISLAND HOOD. COORDINATE ROUGH-IN REQUIREMENTS WITH EQUIPMENT.

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **ENLARGED ELECTRICAL PLANS**
Project Name: **EXPAND DOMICILIARY BUILDING 64**
Project Number: **666-309**
Date: 13 MAR 2015
Location: **VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801**
Building Number: 64 | Checked: TWL | Drawn: TAH
Drawing Number: **1-E-701**
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

Name: 64MDP

Location: ELEC. ROOM 004 | Volts: 480/277 Wye | A.I.C. Rating: 65,000
Supply From: | Phases: 3 | Mains Type: MCB
Mounting: Surface | Wires: 4 | Mains Rating: 800 A
Enclosure: Type 1 | MCB Rating: 800 A

Notes:

CKT	Circuit Description	# of Poles	Breaker	Load	Remarks
1	64ATS	3	350 A	193739 VA	
2	64H1A	3	225 A	104879 VA	
3	64TB A	3	125 A	88118 VA	
4	64TBB	3	125 A	86400 VA	
5	CH-1	3	200 A	120786 VA	
6	Space	--	--	0 VA	--
7	SPD	3	60 A	0 VA	--
8	Space	--	--	0 VA	--
9	Space	--	--	0 VA	--
10	Space	--	--	0 VA	--
11	Space	--	--	0 VA	--
12	Space	--	--	0 VA	--
13	Space	--	--	0 VA	--
14					
15					
16					
17					
18					
19					
20					
				594267 VA	
				715 A	

Load Classification	Connected Load	Demand Factor	Demand Load	Panel Totals	
Lighting	24941 VA	125.00%	31177 VA		
Motor	268620 VA	105.03%	282124 VA	Total Conn. Load:	594267 VA
Other	133736 VA	100.00%	133736 VA	Total Demand Load:	563267 VA
Receptacle	92980 VA	55.38%	51485 VA	Total Conn. Current:	715 A
Electric Clothes Dryer	16000 VA	100.00%	16000 VA	Total Demand Current:	678 A
Heating	16900 VA	100.00%	16900 VA		
Kitchen Equipment	32400 VA	65.00%	21073 VA		
Ltg	84610 VA	125.00%	105763 VA		

Notes:

Name: 64EDP

Location: ELEC. ROOM 004 | Volts: 480/277 Wye | A.I.C. Rating: 25,000
Supply From: 64ATS | Phases: 3 | Mains Type: MCB
Mounting: Surface | Wires: 4 | Mains Rating: 400 A
Enclosure: Type 1 | MCB Rating:

Notes:

CKT	Circuit Description	# of Poles	Breaker	Load	Remarks
1	64EHBA	3	225 A	95673 VA	
2	64ETBA	3	70 A	44057 VA	
3	NEW ELEVATOR	3	100 A	94015 VA	
4	Space	--	--	0 VA	--
5	Space	--	--	0 VA	--
6	Space	--	--	0 VA	--
7	Space	--	--	0 VA	--
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
				194219 VA	
				234 A	

Load Classification	Connected Load	Demand Factor	Demand Load	Panel Totals	
Lighting	6019 VA	125.00%	7523 VA		
Motor	153442 VA	108.80%	166946 VA	Total Conn. Load:	184219 VA
Other	10600 VA	100.00%	10600 VA	Total Demand Load:	209134 VA
Receptacle	11460 VA	93.63%	10730 VA	Total Conn. Current:	234 A
Heating	9500 VA	100.00%	9500 VA	Total Demand Current:	252 A
Ltg	2548 VA	125.00%	3185 VA		

Notes:

Name: 64LBA

Location: ELEC. ROOM 004 | Volts: 120/208 Wye | A.I.C. Rating: 10,000
Supply From: 64TBA | Phases: 3 | Mains Type: MCB
Mounting: Surface | Wires: 4 | Mains Rating: 225 A
Enclosure: Type 1 | MCB Rating: 225 A
Notes:

CKT	Circuit Description	Notes	Trip	Poles	A		B		C		Poles	Trip	Notes	Circuit Description	CKT
1	EF-2-2		20	1	696	0					1	20		EXIST. BBMNT CIRC	2
3	ELEC ROOM		20	1			180	0			1	20		EXIST. BBMNT CIRC	4
5	ELEV. MCHN RM		20	1					480	0	1	20		EXIST. BBMNT CIRC	6
7	CRAWLSPACE LTG		20	1	0	0					1	20		EXIST. BBMNT CIRC	8
9	UNIT HEATERS		20	1			360	0			1	20		EXIST. BBMNT CIRC	10
11	SNOW MELT CONTROLS		20	1					300	0	1	20		EXIST. BBMNT CIRC	12
13	Spare		20	1	0	0					1	20		EXIST. BBMNT CIRC	14
15	Spare		20	1			0	0			1	20		EXIST. BBMNT CIRC	16
17	Spare		20	1					0	0	1	20		EXIST. BBMNT CIRC	18
19	Spare		20	1	0	0					1	20		EXIST. BBMNT CIRC	20
21	Spare		20	1			0	0			1	20		Spare	22
23	Spare		20	1					0	0	1	20		Spare	24
25	Spare		20	1	0	0					1	20		Spare	26
27	Spare		20	1			0	0			1	20		Spare	28
29	Space		--	--					0	0	--	--		Space	30
31	Space		--	--	0	0					--	--		Space	32
33	Space		--	--			0	0			--	--		Space	34
35	Space		--	--					0	0	--	--		Space	36
37	Space		--	--	0	0					--	--		Space	38
39	Space		--	--			0	0			--	--		Space	40
41	Space		--	--					0	0	--	--		Space	42
43	64L1A (FEED-THRU)		225	3	28188										44
45	--		--	--			29440								46
47	--		--	--					29469						48
				Total Load:	28884 VA		29986 VA		29248 VA						
				Total...	241 A		250 A		244 A						

Load Classification	Connected Load	Demand Factor	Demand Load	Panel Totals	
Lighting	4600 VA	125.00%	5750 VA		
Motor	4628 VA	106.49%	4928 VA	Total Conn. Load:	88118 VA
Other	300 VA	100.00%	300 VA	Total Demand Load:	83967 VA
Receptacle	41690 VA	61.99%	25845 VA	Total Conn. Current:	245 A
Electric Clothes Dryer	8000 VA	100.00%	8000 VA	Total Demand Current:	176 A
Kitchen Equipment	23000 VA	65.00%	18850 VA		

Notes:

Name: 114EL1A

Location: | Volts: 120/208 Wye | A.I.C. Rating: 10,000
Supply From: 64ELBA | Phases: 3 | Mains Type: MLO
Mounting: Surface | Wires: 4 | Mains Rating: 100 A
Enclosure: Type 1 | MCB Rating:
Notes:

CKT	Circuit Description	Notes	Trip	Poles	A		B		C		Poles	Trip	Notes	Circuit Description	CKT
1	LIGHTS		20	1	360	720					1	20		RECEPTS	2
3	GEN BATT CHARGER		20	1			360	1500			1	20		GEN OIL HTR	4
5	Spare		20	2					0	1500	2	30		UNIT HEATER	6
7	--		--	--	0	1500					--	--			8
9	GEN JACKET HTR		30	2			2250	600			1	20		EXHAUST FAN	10
11	--		--	--					2250	200	1	20		LOUVERS	12
13	SCORE BOARD		20	2	600	300					1	20		VEIDEROOT	14
15	--		--	--			600	100			1	20		OVERRILL ALARMS	16
17	Space		--	--					0	660	1	20	1	RECEPT	18
19	Space		--	--	0	0					1	20		Spare	20
21	Space		--	--			0	0			1	20		Spare	22
23	Space		--	--					0	0	1	20		Spare	24
				Total Load:	3470 VA		5466 VA		4680 VA						
				Total...	29 A		47 A		41 A						

Load Classification	Connected Load	Demand Factor	Demand Load	Panel Totals	
Lighting	390 VA	125.00%	488 VA		
Motor	696 VA	125.00%	870 VA	Total Conn. Load:	13646 VA
Other	2200 VA	100.00%	2200 VA	Total Demand Load:	13098 VA
Receptacle	900 VA	100.00%	900 VA	Total Conn. Current:	38 A
Heating	9500 VA	100.00%	9500 VA	Total Demand Current:	39 A

Notes:
1. UTILIZE EXISTING SPARE BREAKER

Name: 64EHBA

Location: ELEC. ROOM 004 | Volts: 480/277 Wye | A.I.C. Rating: 25,000
Supply From: 64EDP | Phases: 3 | Mains Type: MLO
Mounting: Surface | Wires: 4 | Mains Rating: 225 A
Enclosure: Type 1 | MCB Rating:
Notes: PROVIDE WITH FEED-THRU LUGS

CKT	Circuit Description	Notes	Trip	Pol...	A		B		C		Poles	Trip	Notes	Circuit Description	CKT
1	BASEMENT LIGHTING		20	1	604	0					1	20		Spare	2
3	FIRST FLOOR LTG		20	1			721	0			1	20		Spare	4
5	Spare		20	1					0	0	1	20		Spare	6
7	Spare		20	1	0	0					1	20		Spare	8
9	Spare		20	1			0	0			1	20		Spare	10
11	Space		--	--					0	0	--	--		Space	12
13	Space		--	--	0	0					--	--		Space	14
15	Space		--	--			0	0			--	--		Space	16
17	Space		--	--					0	0	--	--		Space	18
19	Space		--	--	0	0					--	--		Space	20
21	Space		--	--			0	0			--	--		Space	22
23	Space		--	--					0	0	--	--		Space	24
25	64EH2A (FEED-THRU)		225	3	31918										26
27	--		--	--			31233								28
29	--		--	--					31268						30
				Total...	32452 VA		31954 VA		31268 VA						
				Total...	118 A		116 A		113 A						

Load Classification	Connected Load	Demand Factor	Demand Load	Panel Totals	
Lighting	4071 VA	125.00%	5088 VA		
Motor	92076 VA	107.67%	99140 VA	Total Conn. Load:	96147 VA
				Total Demand Load:	104228 VA
				Total Conn. Current:	116 A
				Total Demand Current:	125 A

Notes:

Name: 64ELBA

Location: ELEC. ROOM 004 | Volts: 120/208 Wye | A.I.C. Rating: 10,000
Supply From: 64ETBA | Phases: 3 | Mains Type: MCB
Mounting: Surface | Wires: 4 | Mains Rating: 225 A
Enclosure: Type 1 | MCB Rating: 150 A
Notes: THIS PANEL BECOMES 250A MCB AS PART OF DEDUCT ALTERNATE #9

CKT	Circuit Description	Notes	Trip	Poles	A		B		C		Poles	Trip	Notes	Circuit Description	CKT
1	1ST FL TECH		20	1	720	720					1	20		PYXIS	2
3	CONCIERGE		20	1			180	600			1	20		ELEV CAR LTS, FAN	4
5	ELEV CAR LTS, FAN		20	1					600	168	1	20		BSMNT LIGHTING	6
7	NURSE CALL		20	1	600	720					1	20		I.T. ROOM	8
9	VAV XFMRS		20	1			600	720			1	20		I.T. RACK	10
11	I.T. ROOM		20	1					720	720	1	20		I.T. RACK	12
13	I.T. RACK		20	1	720	750					2	30		I.T. ROOM	14
15	I.T. RACK		20	1			720	750			--	--		--	16
17	I.T. ROOM	1	20	1					750	750	2	30		I.T. ROOM	18
19	I.T. ROOM		20	1	360	750					--	--		--	20
21	VAV CONTROLS		20	1			600	250			2	15		AC-1 (INDOOR UNIT)	22
23	VAV CONTROLS		20	1					600	250	--	--		--	24
25	ELEV SHUNT POWER		20	1	100	2362					2	30		AC-1 (OUTDOOR UNIT)	26
27	Spare		20	1			0	2362			--	--		--	28
29	Spare		20	1					0	0	1	20		Spare	30
31	Spare		20	1	0	0					1	20		Spare	32
33	Space		--	--			0	0			1	20		Spare	34
35	Space		--	--					0	0	1	20		Spare	36
37	Space		--	--	0	3470					3	100		114EL1A	38
39	Space		--	--			0	5496			--	--		--	40
41	Space		--	--					0	4693	--	--		--	42
43	64EL2A (FEED-THRU)		150	3	5058										44
45	--		--	--			3352								46
47	--		--	--					3220						48
				Total Load:	16250 VA		15460 VA		12358 VA						
				Total...	139 A		133 A		103 A						

Load Classification	Connected Load	Demand Factor	Demand Load	Panel Totals	
Lighting	1948 VA	125.00%	2435 VA		
Motor	7351 VA	116.20%	8542 VA	Total Conn. Load:	44057 VA
Other	10600 VA	100.00%	10600 VA	Total Demand Load:	45642 VA
Receptacle	11460 VA	93.63%	10730 VA	Total Conn. Current:	122 A
Heating	9500 VA	100.00%	9500 VA	Total Demand Current:	127 A
Ltg	2548 VA	125.00%	3185 VA		

Notes:
1. PROVIDE BREAKER WITH LOCK-ON DEVICE

Name: 64EL2A

Location: CORRIDOR C206 | Volts: 120/208 Wye | A.I.C. Rating: 10,000
Supply From: 64ELBA | Phases: 3 | Mains Type: MLO
Mounting: Surface | Wires: 4 | Mains Rating: 225 A
Enclosure: Type 1 | MCB Rating:
Notes:

CKT	Circuit Description	Notes	Trip	Poles	A		B		C		Poles	Trip	Notes	Circuit Description	CKT
1	TECHNICIAN		20	1	540	900					1	20		FIRE ALARM	2
3	VAV CONTROLS		20	1			500	696			1	20		EF-2-1	4
5	RES. ROOMS LTG		20	1					600	600	1	20		RES. ROOMS LTG	6
7	RESIDENT ROOMS		20	1	830	888					1	20		RESIDENT ROOMS	8
9	CP-1		20	1			696	200			1	20		RES. ROOM SMOKES	10
11	RES. ROOM SMOKES		20	1					200	500	1	20		BAS CTRL PANEL	12
13	U.C REFRIG.		20	1	660	650					1	20		VAV CONTROLS	14
15	E.T. ROOM		20	1			360	400			1	20		AHU LIGHTS/CONTROLS	16
17	E.T. ROOM		20	1					360	500	1	20		RRE/SMOKE DMPRS	18
19	VAV CONTROLS		20	1	500	500					1	20		VAV CONTROLS	20
21	FIRE/SMOKE DMPRS		20	1			500	0			1	20		Spare	22
23	Spare		20	1					0	0	1	20		Spare	24
25	Spare		20	1	0	0					1	20		Spare	26
27	Spare		20	1			0	0			1	20		Spare	28
29	Spare		20	1					0	0	1	20		Spare	30
31	Spare		20	1	0	0					1	20		Spare	32
33	Space		--	--			0	0			--	--		Space	34
35	Space		--	--					0	0	--	--		Space	36
37	Space		--	--	0	0					--	--		Space	38
39	Space		--	--			0	0			--	--		Space	40
41	Space		--	--					0	0	--	--		Space	42
				Total Load:	5058 VA		3352 VA		3220 VA						
				Total...	42 A		28 A		27 A						

Load Classification	Connected Load	Demand Factor	Demand Load	Panel Totals	
Lighting	830 VA	125.00%	1038 VA		
Motor	1392 VA	112.50%	1566 VA	Total Conn. Load:	11630 VA
Other	4950 VA	100.00%	4950 VA	Total Demand Load:	10649 VA
Receptacle	1260 VA	100.00%	1260 VA	Total Conn. Current:	32 A
Ltg	2548 VA	125.00%	3185 VA	Total Demand Current:	35 A

Notes:

Name: 64EH2A

Location: MECHANICAL 207 | Volts: 480/277 Wye | A.I.C. Rating: 14,000
Supply From: 64EHBA | Phases: 3 | Mains Type: MLO
Mounting: Surface | Wires: 4 | Mains Rating: 225 A
Enclosure: Type 1 | MCB Rating:
Notes:

CKT	Circuit Description	Notes	Trip	Poles	A		B		C		Poles	Trip	Notes	Circuit Description	CKT
1	FIRST FLOOR LTG		20	1	722	1330					3	15		RHP-1	2
3	SECOND FLOOR LTG		20	1			693	1330			--	--		--	4
5	SECOND FLOOR LTG		20	1					726	1330	--	--		--	6
7	THIRD FLOOR LTG		20	1	656	1330					3	15		PHP-2	8
9	Spare		20	1			0	1330			--	--		--	10
11	Spare		20	1					0	1330	--	--		--	12
13	AHU-1		60	3	9418	2105					3	20		RHP-1	14
15	--		--	--			9418	2105			--	--		--	16
17	--		--	--					9418	2105	--	--		--	18
19	AHU-2		60	3	9418	2105					3	15		RHP-2	20
21	--		--	--			9418	2105			--	--		--	22
23	--		--	--					9418	2105	--	--		--	24
25	PRP-1		15	3	388	2105					3	15		RF-1	26
27	--		--	--			388	2105			--	--		--	28
29	--		--	--					388	2105	--	--		--	30
31	PRP-2		15	3	388	2105					3	15		RF-2	32
33	--		--	--			388	2105			--	--		--	34
35	--		--	--					388	2105	--	--		--	36
37	Space		--	--	0	0					--	--		Space	38
39	Space		--	--			0	0			--	--		Space	40
41	Space		--	--					0	0	--	--		Space	42
				Total Load:	32069 VA		31385 VA		31420 VA						
				Total...	116 A		113 A		113 A						

Load Classification	Connected Load	Demand Factor	Demand Load	Panel Totals	
Lighting	2811 VA	125.00%	3513 VA		
Motor	92076 VA	107.67%	99140 VA	Total Conn. Load:	94837 VA
				Total Demand Load:	102653 VA
				Total Conn. Current:	114 A
				Total Demand Current:	123 A

Notes:

Name: 64H1A

Location: ELEC 111 | Volts: 480/277 Wye | A.I.C. Rating: 14,000
Supply From: 64MDP | Phases: 3 | Mains Type: MLO
Mounting: Surface | Wires: 4 | Mains Rating: 225 A
Enclosure: Type 1 | MCB Rating:
Notes:

CKT	Circuit Description	Notes	Trip	Pol...	A		B		C		Poles	Trip	Notes	Circuit Description	CKT
1	FIRST FLOOR LTG		20	1	3079	2921					1	20		1ST FL CORRIDOR LTG	2
3	EXTERIOR LIGHTING		20	1			696	1428			1	20		RESIDENT ROOMS	4
5	RESIDENT ROOMS		20	1					1428	2000	1	20		EUH-1	6
7	CRAWLSPACE LIGHTING		20	1	672	2000					1	20		EUH-2	8
9	Spare		20	1			0	3000			1	20		EUH-3	10
11	Spare		20	1					0	0	1	20		Spare	12
13	Space		--	--	0	0					--	--		Space	14
15	Space		--	--			0	0			--	--		Space	16
17	Space		--	--					0	0	--	--		Space	18
19	Space		--	--	0	0					--	--		Space	20
21	Space		--	--			0	0			--	--		Space	22
23	Space		--	--					0	0	--	--		Space	24
25	64H2A (FEED-THRU)		225	3	30732										26
27	--		--	--			28103								28
29	--		--	--					28047						30
				Total...	30404 VA		32127 VA		31475 VA						
				Total...	143 A		121 A		114 A						

Load Classification	Connected Load	Demand Factor	Demand Load	Panel Totals	
Lighting	14328 VA	125.00%	17904 VA		
Motor	24280 VA	109.42%	26535 VA	Total Conn. Load:	104745 VA
Other	2050 VA	100.00%	2050 VA	Total Demand Load:	99814 VA
Receptacle	39840 VA	62.58%	24920 VA	Total Conn. Current:	126 A
Electric Clothes Dryer	8000 VA	100.00%	8000 VA	Total Demand Current:	116 A
Heating	7000 VA	100.00%	7000 VA		
Kitchen Equipment	3420 VA	90.00%	3078 VA		
Ltg	5862 VA	125.00%	7328 VA		

Notes:

Name: 64H2A

Location: CORRIDOR C206 | Volts: 480/277 Wye | A.I.C. Rating: 14,000
Supply From: 64H1A | Phases: 3 | Mains Type: MLO
Mounting: Surface | Wires: 4 | Mains Rating: 225 A
Enclosure: Type 1 | MCB Rating:
Notes:

CKT	Circuit Description	Notes	Trip	Poles	A		B		C		Poles	Trip	Notes	Circuit Description	CKT
1	SECOND FLOOR LTG		20	1	1783	1897					1	20		SECOND FLOOR LTG	2
3	RESIDENT ROOMS		20	1			1428	1578			1	20		RESIDENT ROOMS	4
5	THIRD FLOOR LTG		20	1					1600	1620	1	20		THIRD FLOOR LTG	6
7	Spare		20	1	0	499					3	20		EF-1-2	8
9	Spare		20	1			0	499			--	--		--	10
11	Spare		20	1					0	499	--	--		--	12
13	Space		--	--	0	499					3	20		EF-1-1	14
15	Space		--	--			0	499			--	--		--	16
17	Space		--	--					0	499	--	--		--	18
19	Space		--	--	19660						3	125		64T2A	20
21	Space		--	--			0	17700			--	--		--	22
23	Space		--	--					0	17430	--	--		--	24
25	OWP-1		20	3	3047	3047					3	20		CWP-2	26
27	--		--	--			3047	3047			--	--		--	28
29	--		--	--					3047	3047	--	--		--	30
31	SWP-1		15	3	499	0					--	--		Space	32
33	--		--	--			499	0			--	--		Space	34
35	--		--	--					499	0	--	--		Space	36
37	Space		--	--	0	0					--	--		Space	38
39	Space		--	--			0	0			--	--		Space	40
41	Space		--	--					0	0	--	--		Space	42
				Total Load:	30930 VA		28266 VA		28240 VA						
				Total...	112 A		102 A		102 A						

Load Classification	Connected Load	Demand Factor	Demand Load	Panel Totals	
Lighting	6825 VA	125.00%	8531 VA		
Motor	24250 VA	109.42%	26535 VA	Total Conn. Load:	87491 VA
Other	2050 VA	100.00%	2050 VA	Total Demand Load:	78998 VA
Receptacle	39840 VA	62.58%	24920 VA	Total Conn. Current:	316 A
Electric Clothes Dryer	8000 VA	100.00%	8000 VA	Total Demand Current:	285 A
Kitchen Equipment	3420 VA	90.00%	3078 VA		
Ltg	3006 VA	125.00%	3758 VA		

Notes:

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

VA FORM 08-6231

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: ELECTRICAL PANEL SCHEDULES
Project Name: EXPAND DOMICILIARY BUILDING 64
Project Number: 666-309
Date: 13 MAR 2015
Drawing Number: 1-E-801
Location: VAMC SHERIDAN WY, 1898 FORT ROAD, SHERIDAN, WY 82801
Building Number: 64 | Checked: TWL | Drawn: TAH
Dwg. of

Office of Construction and Facilities Management

Name: 64L1A

Location: ELEC 111 | Supply From: 64LBA | Mounting: Surface | Enclosure: Type 1 | Notes: SINGLE SECTION 84-CIRCUIT PANELBOARD

Volts: 120/208 Wye | Phases: 3 | Wires: 4

A.I.C. Rating: 10,000 | Mains Type: MLO | Mains Rating: 225 A | MCB Rating:

CKT	Circuit Description	Notes	Trip	Poles	A		B		C		Poles	Trip	Notes	Circuit Description	CKT
1	ED/CONFERENCE		20	1	900	900					1	20		ED/CONFERENCE	2
3	ED/CONFERENCE		20	1			720	720			1	20		EXAM	4
5	OFFICE		20	1					900	1260	1	20		OFFICE	6
7	CORRIDOR		20	1	900	720					1	20		CORRIDOR	8
9	ED/CONFERENCE		20	1			1070	900			1	20		CONF, TOILET	10
11	CORRIDOR		20	1					1070	1070	1	20		CORRIDOR	12
13	RESIDENT ROOM		20	1	1080	1080					1	20		RESIDENT ROOM	14
15	RESIDENT ROOM		20	1			900	900			1	20		RESIDENT ROOM	16
17	RESIDENT ROOM		20	1					900	900	1	20		RESIDENT ROOM	18
19	RESIDENT ROOM		20	1	900	900					1	20		RESIDENT ROOM	20
21	RESIDENT ROOM		20	1			900	900			1	20		RESIDENT ROOM	22
23	RESIDENT ROOM		20	1					1080	1080	1	20		RESIDENT ROOM	24
25	RESIDENT ROOM		20	1	900	1080					1	20		RESIDENT ROOM	26
27	ICE MAKER		20	1			750	900			1	20		RESIDENT ROOM	28
29	OFFICE, DOCK		20	1					710	900	1	20		RESIDENT ROOM	30
31	MED ROOM		20	1	900	1080					1	20		ELEC, LAUNDRY	32
33	MED ROOM, WTG		20	1			900	1080			1	20		OFFICE, STOR	34
35	LOUNGE, CORRIDOR		20	1					900	540	1	20		CONCIERGE	36
37	PORCHES		20	1	720	540					1	20		TECHNICIAN	38
39	REFRIGERATOR		20	1			900	720			1	20		OFFICE	40
41	KITCHEN		20	1					1500	750	1	20		WASHER	42
43	DISPOSER		20	1	1176	750					1	20		WASHER	44
45	COFFEE		20	1			1440	2000			2	30		DRYER	46
47	KITCHEN ISLAND		20	1					660	2000	--	--		--	48
49	COFFEE		20	1	1440	2000					2	30		DRYER	50
51	DRINKING FOUNTAINS		20	1			1000	2000			--	--		--	52
53	DISHWASHER		40	2					3172	900	1	20		VENDING	54
55	--		--	--	3172	900					1	20		VENDING	56
57	COOKTOP		40	2			3950	696			1	20		EF-1-3	58
59	--		--	--					3950	1176	1	20		COILING DOOR	60
61	WALL OVEN		20	2	1500	1000					1	20		FLAG, STATUE LTG.	62
63	--		--	--			1500	1250			2	20		OUTDOOR GRILL	64
65	Spare		20	1					0	1250	--	--		--	66
67	Spare		20	1	0	1250					2	20		OUTDOOR GRILL	68
69	Spare		20	1			0	1250			--	--		--	70
71	Spare		20	1					0	0	1	20		Spare	72
73	Spare		20	1	0	0					1	20		Spare	74
75	Spare		20	1			0	0			1	20		Spare	76
77	Spare		20	1					0	0	1	20		Spare	78
79	Spare		20	1	0	2400					3	70		641P2	80
81	Spare		20	1			0	2100			--	--		--	82
83	Spare		20	1					0	1800	--	--		--	84
			Total Load:		28188 VA		29446 VA		28468 VA						
			Total...		235 A		246 A		238 A						

Load Classification	Connected Load	Demand Factor	Demand Load	Panel Totals	
Lighting	4600 VA	125.00%	5750 VA		
Motor	3352 VA	108.77%	3646 VA	Total Conn. Load:	86102 VA
Receptacle	41150 VA	62.15%	25575 VA	Total Demand Load:	61821 VA
Electric Clothes Dryer	8000 VA	100.00%	8000 VA	Total Conn. Current:	239 A
Kitchen Equipment	29000 VA	65.00%	18850 VA	Total Demand Current:	172 A

Notes:

Name: 64L2A

Location: CORRIDOR C206 | Supply From: 64T2A | Mounting: Surface | Enclosure: Type 1 | Notes:

Volts: 120/208 Wye | Phases: 3 | Wires: 4

A.I.C. Rating: 10,000 | Mains Type: MCB | Mains Rating: 225 A | MCB Rating: 225 A

CKT	Circuit Description	Notes	Trip	Poles	A		B		C		Poles	Trip	Notes	Circuit Description	CKT
1	CORRIDOR RECEPTS.		20	1	720	770					1	20		MECH ROOM	2
3	STAFF LOUNGE		20	1			1260	900			1	20		REFRIGERATOR	4
5	STAFF LOUNGE		20	1					1260	1260	1	20		STAFF LOUNGE	6
7	STORAGE, BB OVEN RM.		20	1	360	1500					1	20		BED BUG OVEN	8
9	DRINKING FOUNTAINS		20	1			1000	0			1	20		Spare	10
11	Spare		20	1					0	0	1	20		Spare	12
13	Spare		20	1	0	0					1	20		Spare	14
15	Spare		20	1			0	0			1	20		Spare	16
17	Spare		20	1					0	0	1	20		Spare	18
19	Spare		20	1	0	0					1	20		Spare	20
21	Spare		20	1			0	0			1	20		Spare	22
23	Spare		20	1					0	0	1	20		Spare	24
25	Spare		20	1	0	0					1	20		Spare	26
27	Space		--	--			0	0			--	--		Space	28
29	Space		--	--					0	0	--	--		Space	30
31	Space		--	--	0	0					3	100	1	64P31	32
33	Space		--	--			0	0			--	--		--	34
35	Space		--	--					0	0	--	--		--	36
37	64L3A	1	125	3	6240	10070					3	125		64L2B	38
39	--		--	--			4860	9680			--	--		--	40
41	--		--	--					5120	9790	--	--		--	42
			Total Load:		19660 VA		17700 VA		17430 VA						
			Total...		164 A		148 A		145 A						

Load Classification	Connected Load	Demand Factor	Demand Load	Panel Totals	
Lighting	0 VA	0.00%	0 VA		
Motor	1480 VA	108.45%	1605 VA	Total Conn. Load:	54790 VA
Other	2050 VA	100.00%	2050 VA	Total Demand Load:	39653 VA
Receptacle	39840 VA	62.55%	24920 VA	Total Conn. Current:	152 A
Electric Clothes Dryer	8000 VA	100.00%	8000 VA	Total Demand Current:	110 A
Kitchen Equipment	3420 VA	90.00%	3078 VA		

Notes:

1. RE-FEED EXISTING PANEL '64P31' AS PART OF DEDUCT ALTERNATE #13. PANEL '64L3A' IS NOT INSTALLED

Name: 64L2B

Location: | Supply From: 64L2A | Mounting: Flush | Enclosure: Type 1 | Notes:

Volts: 120/208 Wye | Phases: 3 | Wires: 4

A.I.C. Rating: 10,000 | Mains Type: MLO | Mains Rating: 125 A | MCB Rating:

CKT	Circuit Description	Notes	Trip	Poles	A		B		C		Poles	Trip	Notes	Circuit Description	CKT
1	CORRIDOR		20	1	1020	900					1	20		RESIDENT ROOM	2
3	RESIDENT ROOM		20	1			900	900			1	20		RESIDENT ROOM	4
5	RESIDENT ROOM		20	1					900	900	1	20		RESIDENT ROOM	6
7	RESIDENT ROOM		20	1	900	900					1	20		RESIDENT ROOM	8
9	RESIDENT ROOM		20	1			900	900			1	20		RESIDENT ROOM	10
11	RESIDENT ROOM		20	1					900	540	1	20		LOUNGE, ELEC	12
13	RESIDENT ROOM		20	1	1080	900					1	20		RESIDENT ROOM	14
15	RESIDENT ROOM		20	1			1080	1080			1	20		RESIDENT ROOM	16
17	RESIDENT ROOM		20	1					900	900	1	20		RESIDENT ROOM	18
19	RESIDENT ROOM		20	1	900	720					1	20		LOUNGE, HALL	20
21	TECHNICIAN		20	1			900	1020			1	20		CORRIDOR	22
23	WASHER		20	1					750	2000	2	30		DRYER	24
25	WASHER		20	1	750	2000					--	--		--	26
27	Spare		20	1			0	2000			2	30		DRYER	28
29	Spare		20	1					0	2000	--	--		--	30
31	Spare		20	1	0	0					1	20		Spare	32
33	Spare		20	1			0	0			1	20		Spare	34
35	Spare		20	1					0	0	1	20		Spare	36
37	Spare		20	1	0	0					1	20		Spare	38
39	Spare		20	1			0	0			1	20		Spare	40
41	Spare		20	1					0	0	1	20		Spare	42
			Total Load:		10070 VA		9680 VA		9790 VA						
			Total...		84 A		81 A		82 A						

Load Classification	Connected Load	Demand Factor	Demand Load	Panel Totals	
Motor	240 VA	112.50%	270 VA		
Receptacle	21300 VA	73.47%	15650 VA	Total Conn. Load:	29540 VA
Electric Clothes Dryer	8000 VA	100.00%	8000 VA	Total Demand Load:	23920 VA
				Total Conn. Current:	82 A
				Total Demand Current:	66 A

Notes:

Name: 64L3A

Location: ELEC. CLOSET 301B | Supply From: 64L2A | Mounting: Surface | Enclosure: Type 1 | Notes:

Volts: 120/208 Wye | Phases: 3 | Wires: 4

A.I.C. Rating: 10,000 | Mains Type: MLO | Mains Rating: 125 A | MCB Rating:

CKT	Circuit Description	Notes	Trip	Poles	A		B		C		Poles	Trip	Notes	Circuit Description	CKT
1	OFFICE		20	1	720	720					1	20		OFFICE	2
3	OFFICE		20	1			720	720			1	20		OFFICE	4
5	OFFICE		20	1					720	720	1	20		CLASSROOM	6
7	OFFICE		20	1	720	720					1	20		OFFICE	8
9	OFFICE		20	1			720	720			1	20		OFFICE	10
11	OFFICE		20	1					840	720	1	20		OFFICE	12
13	OFFICE		20	1	720	720					1	20		OFFICE	14
15	CLASSROOM		20	1			900	720			1	20		CLASSROOM	16
17	CLASSROOM		20	1					900	720	1	20		OFFICE	18
19	OFFICE		20	1	840	1080					1	20		CORRIDOR	20
21	TOILETS		20	1			360	0			1	20		ATTIC LIGHTING	22
23	ATTIC LOUVERS		20	1					500	0	1	20		Spare	24
25	Spare		20	1	0	0					1	20		Spare	26
27	Spare		20	1			0	0			1	20		Spare	28
29	Spare		20	1					0	0	1	20		Spare	30
31	Spare		20	1	0	0					1	20		Spare	32
33	Spare		20	1			0	0			1	20		Spare	34
35	Spare		20	1					0	0	1	20		Spare	36
37	Space		--	--	0	0					--	--		Space	38
39	Space		--	--			0	0			--	--		Space	40
41	Space		--	--					0	0	--	--		Space	42
			Total Load:		6240 VA		4860 VA		5120 VA						
			Total...		52 A		41 A		43 A						

Load Classification	Connected Load	Demand Factor	Demand Load	Panel Totals	
Lighting	0 VA	0.00%	0 VA		
Motor	240 VA	112.50%	270 VA	Total Conn. Load:	16220 VA
Other	500 VA	100.00%	500 VA	Total Demand Load:	13510 VA
Receptacle	15480 VA	82.30%	12740 VA	Total Conn. Current:	45 A
				Total Demand Current:	38 A

Notes:

BUILDING IS FULLY SPRINKLERED

Revisions: | Date

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **ELECTRICAL PANEL SCHEDULES**

Location: **VAMC SHERIDAN WY**
1898 FORT ROAD
SHERIDAN, WY 82801

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Building Number: 64 | Checked: TWL | Drawn: TAH

Project Number: **666-309**

Date: 13 MAR 2015

Drawing Number: **1-E-802**

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VA FORM 08-6231

*VOICE/DATA

SYMBOL	DESCRIPTION	MOUNTING HEIGHT TO CENTER LINE
X	DATA OUTLET (SUB-SCRIPT REPRESENTS NUMBER OF OUTLETS IN FACEPLATE)	18" AFF OR MATCH POWER OUTLET
X	VOICE / DATA OUTLET (SUB-SCRIPT REPRESENTS NUMBER OF OUTLETS IN FACEPLATE)	18" AFF OR MATCH POWER OUTLET
X	DATA OUTLET (SPECIAL MOUNTING HEIGHT) (SUB-SCRIPT REPRESENTS NUMBER OF OUTLETS IN FACEPLATE)	SMH AS NOTED, OR PER ARCH. ELEVATIONS
X	VOICE / DATA OUTLET (SPECIAL MOUNTING HEIGHT) (SUB-SCRIPT REPRESENTS NUMBER OF OUTLETS IN FACEPLATE)	SMH AS NOTED, OR PER ARCH. ELEVATIONS
X	DATA OUTLET (FLOOR - FLUSH OR BELOW FLOOR) (SUB-SCRIPT REPRESENTS NUMBER OF OUTLETS IN FACEPLATE)	FLUSH FLOOR OR SURFACE MOUNT BOX
X	DATA OUTLET (CEILING - FLUSH OR ABOVE CEILING) (SUB-SCRIPT REPRESENTS NUMBER OF OUTLETS IN FACEPLATE)	FLUSH CEILING OR ABOVE CEILING (AC)
	WIRELESS ACCESS POINT CONNECTION	WALL, CEILING OR ABOVE CEILING
D	DIRECTIONAL ANTENNA	WALL, CEILING OR ABOVE CEILING
O	OMNI-DIRECTIONAL ANTENNA - PURPLE CABLING	WALL, CEILING OR ABOVE CEILING
T	TELEMETRY ANTENNA	CEILING OR ABOVE CEILING
W	WALL PHONE VOICE OUTLET	+54" AFF OR PER ARCH. ELEVATIONS
TGB	TELECOMMUNICATIONS GROUNDING BAR (ELEVATION VIEW)	WALL MOUNTED OR AS VENDOR SPECIFIED
TA	DATA OUTLET (SPECIAL MOUNTING HEIGHT) (TIME AND ATTENDANCE)	SMH AS NOTED, OR PER ARCH. ELEVATIONS
D	DICTATION OUTLET - SMH	SMH AS NOTED, OR PER ARCH. ELEVATIONS
D	DICTATION OUTLET	18" AFF OR MATCH POWER OUTLET
EWB	ELECTRONIC WHITE BOARD	SMH AS NOTED, OR PER ARCH. ELEVATIONS

*CLOCKS

SYMBOL	DESCRIPTION	MOUNTING HEIGHT TO CENTER LINE
C IT	INTERVAL TIMER	CEILING OR WALL;PER ARCH. ELEVATIONS
C DM	DIGITAL MASTER CLOCK SINGLE FACE	CEILING OR WALL;PER ARCH. ELEVATIONS
C AM	ANALOG MASTER CLOCK SINGLE FACE	CEILING OR WALL;PER ARCH. ELEVATIONS
C MM	MILITARY MASTER CLOCK SINGLE FACE	CEILING OR WALL;PER ARCH. ELEVATIONS
C2 DM	DIGITAL MASTER CLOCK DOUBLE FACE	CEILING OR WALL;PER ARCH. ELEVATIONS
C2 AM	ANALOG MASTER CLOCK DOUBLE FACE	CEILING OR WALL;PER ARCH. ELEVATIONS
C2 MM	MILITARY MASTER CLOCK DOUBLE FACE	CEILING OR WALL;PER ARCH. ELEVATIONS
ET	ELAPSED TIMER CONTROL	WALL MOUNTED AT 48"

*AUDIO/VISUAL

SYMBOL	DESCRIPTION	MOUNTING HEIGHT TO CENTER LINE
AP	AMPLIFIER	SHELF OR RACK MOUNTED
AV	AUDIO/VISUAL WALL INTERFACE (CONFIGURATION DETERMINED BY OWNER)	WALL OR FLOOR
DV	DVD PLAYER	SHELF OR AS SPECIFIED
M	MICROPHONE JACK	WALL, CEILING, OR AS SPECIFIED
MS	MUSIC SOURCE INTERFACE	WALL OR PER OWNER DIRECTION
P	OVERHEAD PROJECTOR	CEILING
RA	REGISTRAR AVAILABLE ANNUNCIATOR	DESK OR WALL
RB	REGISTRAR AVAILABLE PUSHBUTTON	DESK OR WALL
S	MUSIC/LOCAL SPEAKER	CEILING OR WALL
	SATELLITE ANTENNA	ROOF
SM	COMBINATION SPEAKER/MICROPHONE	CEILING OR WALL
V	VOLUME CONTROL	46" AFF OR PER ARCHITECT WALL ELEVATION
MC	MEDIA CONTROLLER	WALL

*TELEVISION

SYMBOL	DESCRIPTION	MOUNTING HEIGHT TO CENTER LINE
TV	TV OUTLET	+18" AFF, MATCH POWER, OR PER ARCH. ELEVATIONS
TV D	COMBINATION TV / DATA OUTLET	+18" AFF, MATCH POWER, OR PER ARCH. ELEVATIONS
TV ND	COMBINATION TV / DATA / NURSE CALL INTERFACE OUTLET	+18" AFF, MATCH POWER, OR PER ARCH. ELEVATIONS
•TV	TV OUTLET (SMH)	SMH AS NOTED OR PER ARCH. ELEVATIONS
•TV D	COMBINATION TV / DATA OUTLET (SMH)	SMH AS NOTED OR PER ARCH. ELEVATIONS
•TV ND	COMBINATION TV / DATA / NURSE CALL INTERFACE OUTLET (SMH)	SMH AS NOTED OR PER ARCH. ELEVATIONS

*NOT ALL SYMBOLS USED

*PATHWAY

SYMBOL	DESCRIPTION	MOUNTING HEIGHT TO CENTER LINE
J	COMMUNICATIONS JUNCTION BOX	18" AFF, ABOVE CEILING (AC), OR AS NOTED
•J	COMMUNICATIONS JUNCTION BOX - WALL MOUNTED	SMH AS NOTED OR PER ARCH. ELEVATIONS
	1 1" CONDUIT SLEEVE	ABOVE CEILING THRU WALL
	2 2" CONDUIT SLEEVE	ABOVE CEILING THRU WALL
	3 3" CONDUIT SLEEVE	ABOVE CEILING THRU WALL
	4 4" CONDUIT SLEEVE	ABOVE CEILING THRU WALL
	2 2" MANUFACTURED SLEEVE (ROUND OR SQUARE)	
	4 4" MANUFACTURED SLEEVE (ROUND OR SQUARE)	
	MAIN WIRE MANAGEMENT PATHWAY	AS NOTED OR SEE SPECIFICATIONS
○	CONDUIT UP	————
●	CONDUIT DOWN	————
	CABLING ENCLOSED IN CONDUIT IN WALL OR CEILING	————
	CABLING ENCLOSED IN CONDUIT IN SLAB OR BELOW GRADE	————

*INTERCOM

SYMBOL	DESCRIPTION	MOUNTING HEIGHT TO CENTER LINE
ID	INTERCOM MASTER STATION (DESK OR WALL)	DESK OR WALL
ID V	INTERCOM MASTER WITH VIDEO (DESK OR WALL)	DESK OR WALL
ID VR	INTERCOM MASTER WITH VIDEO AND DOOR RELEASE (DESK OR WALL)	DESK OR WALL
IF	INTERCOM STATION	54" AFF FLUSH IN WALL
IF V	INTERCOM STATION WITH VIDEO	54" AFF FLUSH IN WALL
IW	INTERCOM STATION	54" SURFACE MOUNT ON WALL
IW V	INTERCOM STATION WITH VIDEO	54" SURFACE MOUNT ON WALL

*NOT ALL SYMBOLS USED

*PAGING SYSTEM

SYMBOL	DESCRIPTION	MOUNTING HEIGHT TO CENTER LINE
PS	PAGING SPEAKER	CEILING
V	VOLUME CONTROL	46" AFF OR PER ARCHITECT WALL ELEVATION
H	PAGING HORN	WALL MOUNTED

*SECURITY

SYMBOL	DESCRIPTION	MOUNTING HEIGHT TO CENTER LINE
CR	SECURITY CARD READER	42" AFF OR PER ARCH. WALL ELEVATION
KP	SECURITY KEY PAD	42" AFF OR PER ARCH. WALL ELEVATION
EC	EMERGENCY CALL PHONE	PER VENDOR SHOP DRAWINGS
DR	SECURITY DOOR RELEASE BUTTON	WALL OR CASEWORK, OWNER DIRECTION
DC	SECURITY DOOR CONTACT	IN DOOR FRAME
BR	BIOMETRIC READER	42" AFF OR PER ARCH. WALL ELEVATION
WS	WINDOW POSITION SENSOR	PER MANUFACTURER SPECIFICATIONS
PB	SECURITY PANIC BUTTON	WALL OR CASEWORK, OWNER DIRECTION
PA	PANIC BUTTON ANNUNCIATOR	PER MANUFACTURER SPECIFICATIONS
SP	SECURITY CONTROL PANEL	42" AFF OR PER ARCH. WALL ELEVATION
AA	AUDIBLE ALARM	42" AFF OR PER ARCH. WALL ELEVATION
BC	BELL CHIME	42" AFF OR PER ARCH. WALL ELEVATION
CK	CARD READER / KEY PAD	42" AFF OR PER ARCH. WALL ELEVATION
DB	DOORBELL PUSH BUTTON	42" AFF OR PER ARCH. WALL ELEVATION
EE	EMERGENCY EXIT BUTTON	42" AFF OR PER ARCH. WALL ELEVATION
GB	GLASS BREAK SENSOR	42" AFF OR PER ARCH. WALL ELEVATION
KS	CARD READER KEY SWITCH	42" AFF OR PER ARCH. WALL ELEVATION
MD	MOTION DETECTOR	42" AFF OR PER ARCH. WALL ELEVATION
ND	INFANT PROTECTION DETECTOR	CEILING MOUNTED
NI	INFANT PROTECTION INTERFACE	CEILING MOUNTED
NU	INFANT PROTECTION CONTROL UNIT	18" AFF OR PER ARCH. WALL ELEVATION
RX	REQUEST-TO-EXIT BUTTON	42" AFF OR PER ARCH. WALL ELEVATION
SM	SECURITY MONITOR	DESK OR WALL
C	SECURITY CCTV CAMERA - PAN / TILT / ZOOM - CEILING MOUNT	CEILING MOUNTED
W	SECURITY CCTV CAMERA - PAN / TILT / ZOOM - WALL MOUNT	WALL MOUNTED
WP	SECURITY CCTV CAMERA - PAN / TILT / ZOOM, WEATHER PROOF	WALL, POLE, OR PARAPET
C	SECURITY CCTV CAMERA - FIXED - CEILING MOUNT	CEILING MOUNTED
W	SECURITY CCTV CAMERA - FIXED - WALL MOUNT	WALL MOUNTED
WP	SECURITY CCTV CAMERA - FIXED, WEATHER PROOF	WALL, POLE, OR PARAPET
	SECURITY CCTV CAMERA	WALL, POLE, PARAPET, OR CEILING

ABBREVIATIONS

SYMBOL	DESCRIPTION	
ABC	ABOVE COUNTER	————
AC	ABOVE CEILING	————
AFF	ABOVE FINISHED FLOOR	————
CLG	FLUSH CEILING	————
FBO	FURNISHED BY OTHERS	————
FLR	FLOOR	————
MF	MODULAR FURNITURE	————
OC	ON CENTER	————
PACS	PICTURE ARCHIVE AND COMMUNICATION SYSTEM	————
PTZ	PAN, TILT, ZOOM	————
RIO	ROUGH IN ONLY	————
SMH	SPECIAL MOUNTING HEIGHT	————
TA	TIME AND ATTENDANCE CLOCK	————
UON	UNLESS OTHERWISE NOTED	————
W	WALL MOUNTED	————
WP	WEATHER PROOF (EXTERIOR APPLICATION)	————
+72"	NUMBER DENOTES MOUNTING HEIGHT ABOVE FINISHED FLOOR TO CENTER LINE	————

*NOT ALL SYMBOLS USED

TELECOMMUNICATIONS / LOW VOLTAGE SYSTEMS GENERAL CONSTRUCTION NOTES

G1. COORDINATE LOCATION AND MOUNTING REQUIREMENTS OF ALL CEILING MOUNTED OR ABOVE CEILING MOUNTED DEVICES WITH REFLECTED CEILING PLAN, LIGHTING LAYOUT, AND OTHER CEILING OR ABOVE CEILING MOUNTED EQUIPMENT.

G2. ALL ABOVE CEILING WORK IN EXISTING FACILITY IS TO BE CONDUCTED IN ACCORDANCE WITH FACILITY I.C.R.A. POLICIES.

G3. REFER TO SHEET 1-T-101 FOR ALL FACE PLATE, BACK BOX, AND CONDUIT SIZE REQUIREMENTS.

G4. PATIENT ROOM HEADWALL DEVICES - PRIOR TO ROUGH-IN, COORDINATE EXACT DEVICE LOCATIONS, BACKBOX, AND CONDUIT REQUIREMENTS WITH ARCHITECTURAL HEADWALL ELEVATIONS AND OWNER FURNISHED PRE-FABRICATED HEADWALL REQUIREMENTS.

G5. DEVICES MOUNTED IN/ADJACENT TO CASEWORK - PRIOR TO ROUGH-IN, COORDINATE EXACT DEVICE LOCATIONS WITH ARCHITECTURAL CASEWORK ELEVATIONS. COORDINATE WITH CASEWORK SHOP DRAWINGS FOR CABLING PATHWAY AND ROUGH-IN REQUIREMENTS.

G6. TELEVISION OUTLETS - COORDINATE EXACT DEVICE LOCATION WITH TV BRACKET/MOUNTING LOCATION AND ADJACENT TO POWER OUTLET AS INDICATED ON ARCHITECTURAL FLOOR PLANS, ARCHITECTURAL WALL ELEVATIONS, AND ELECTRICAL POWER DRAWINGS.

G7. DRAWINGS ARE SCHEMATIC IN NATURE AND ARE NOT DRAWN TO SCALE. CONTRACTOR IS RESPONSIBLE FOR COORDINATING EXACT ROUTING OF ALL SERVICES AND DISTANCES WITH EXISTING CONDITIONS AND WITH ALL OTHER TRADES.

G8. CONDUITS ARE TO HAVE A MAXIMUM 40% FILL RATIO.

G9. IN THE INSTALLATION OF THIS WORK, THE CONTRACTOR IS TO COMPLY WITH THE REQUIREMENTS OF LOCAL LAWS AND ORDINANCES, THE LAWS OF THE STATE OF WYOMING, THE NATIONAL BOARD OF FIRE UNDERWRITERS, AND THE NATIONAL ELECTRIC CODE.

G10. CAREFULLY EXAMINE THE PREMISES TO DETERMINE THE EXTENT OF WORK AND THE CONDITION UNDER WHICH IT MUST BE DONE. IF THERE ARE ANY QUESTIONS REGARDING THE PROJECT, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING CLARIFICATIONS FROM THE ENGINEER OR DESIGNATED REPRESENTATIVE BEFORE PROCEEDING WITH WORK OR RELATED WORK IN QUESTION.

G11. ANY DISCREPANCIES BETWEEN THE PLANS AND ACTUAL FIELD CONDITIONS MUST BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OR DESIGNATED REPRESENTATIVE FOR CLARIFICATION.

G12. ALL WORK IS TO BE DONE IN A THOROUGH AND PROFESSIONAL MANNER ACCORDING TO INDUSTRY AND MANUFACTURERS' STANDARDS AND WILL BE SUBJECT TO INSPECTION AND ACCEPTANCE. WORK THAT IS DEEMED SUB-STANDARD WILL BE SUBJECT TO REPLACEMENT OR REPAIR AT NO ADDITIONAL COST TO THE OWNER OR GENERAL CONTRACTOR.

G13. THE CONTRACTOR IS REQUIRED TO PROPERLY FIRE-STOP ANY WALL OR FLOOR PENETRATIONS UTILIZED FOR THE PLACEMENT OF COMMUNICATIONS CABLING WITH APPROVED FIRE-STOPPING COMPOUND AND ACCORDING TO LOCAL AND NATIONAL CODES.

G14. ANY DISCREPANCIES BETWEEN THE PLANS AND ACTUAL PROJECT SPECIFICATIONS MUST BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OR DESIGNATED REPRESENTATIVE FOR CLARIFICATION.

G15. ALL PENETRATED STRUCTURES ARE TO BE RETURNED TO ORIGINAL CONDITION AND FIRE RATING.

G16. REPRESENTATION OF OUTSIDE PLANT CABLE, PATHWAY, AND FACILITIES IS APPROXIMATE AND SCHEMATIC IN NATURE. DO NOT RELY ON PLANS FOR DETERMINATION AND COORDINATION OF EXACT LOCATIONS. VERIFY ALL PERTINENT CONDITIONS AND LOCATIONS WITH THE CIVIL ENGINEER AND UTILITY LOCATION SERVICES PRIOR TO PERFORMING WORK.

TELECOMMUNICATIONS / LOW VOLTAGE SYSTEMS GENERAL DEMOLITION NOTES

D1. DEMOLITION REQUIREMENTS INCLUDE ONLY THE SCOPE OF COMMUNICATION/ LOW VOLTAGE WORK ON THESE DRAWINGS. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL COMMUNICATIONS/LOW VOLTAGE DEMOLITION REQUIREMENTS.

D2. BEFORE DEMOLITION OF ANY CONDUIT OR CABLING, VERIFY ALL DEVICES AND SYSTEMS BEING SERVED OUTSIDE CONSTRUCTION AREA. VERIFY WITH OWNER OR DEPARTMENT SUPERVISOR BEFORE DISRUPTING ANY SERVICES AFFECTED OUTSIDE THE CONSTRUCTION AREA. ANY EXISTING DEVICES AND SYSTEMS DISRUPTED BY DEMOLITION ARE TO BE RESTORED TO OPERATION IMMEDIATELY OR WITHIN TIME AGREED UPON WITH OWNER.

D3. ALL DEVICES LOCATED IN WALLS, CEILINGS, AND ON OR IN FURNITURE INDICATED BY THE ARCHITECT TO BE REMOVED ARE LIKEWISE TO BE REMOVED. REMOVE ALL CABLING BACK TO POINT OF ORIGIN. REMOVED DEVICES ARE TO BE OFFERED FIRST TO OWNER PRIOR TO DISPOSAL. CONSULT WITH OWNER FOR STORAGE LOCATION AND REQUIREMENTS OF DEVICES RETAINED FOR FUTURE USE.

D4. EXISTING DEVICES TO REMAIN OR TO BE REUSED ARE TO BE THOROUGHLY CLEANED AND TESTED FOR PROPER OPERATION.

D5. EXISTING CONDUITS TO BE REUSED ARE TO BE CLEANED OUT BEFORE INSTALLATION OF NEW CABLING.

D6. AREAS WHERE LOW VOLTAGE DEVICES OR CONDUITS ARE REMOVED ARE TO BE REPAIRED TO MATCH EXISTING FINISHES. CONSULT WITH GENERAL CONTRACTOR FOR REPAIRS TO BE MADE BY APPROPRIATE TRADES.

D7. ALL EXISTING LOW VOLTAGE CABLING IS TO BE INDEPENDENTLY SUSPENDED ABOVE NEW CEILING IN ACCORDANCE WITH INDUSTRY STANDARDS AND CLEARANCES. NO CABLING IS TO BE TIED TO STRUCTURE, CONDUITS, PIPING, DUCTS, OR ANY ABOVE CEILING EQUIPMENT.

D8. ALL LOW VOLTAGE CABLING QUANTIFIED IN DRAWING ARE APPROXIMATE. EXACT QUANTITIES, POINT OF ORIGIN AND TERMINATION ARE TO BE FIELD VERIFIED. COORDINATE WITH OWNER BEFORE CUTTING, REPLACING OR REROUTING ANY LOW VOLTAGE CABLING.

D9. ALL ABANDONED LOW VOLTAGE CABLING IS TO BE REMOVED.

TECHNOLOGY SHEET INDEX	
SHEET	DESCRIPTION
1-T-100	TECHNOLOGY LEGEND, GENERAL NOTES, AND SHEET INDEX
1-T-101	TECHNOLOGY FACE PLATE, BACK BOX, CONDUIT
1-T-102	TECHNOLOGY DETAILS
1-TD-100	BASEMENT AND FIRST FLOOR TECHNOLOGY DEMOLITION PLAN
1-TD-101	SECOND AND THIRD FLOOR TECHNOLOGY DEMOLITION PLANS
1-T-200	BASEMENT AND FIRST FLOOR TECHNOLOGY CABLE PATHWAY PLANS
1-T-201	SECOND AND THIRD FLOOR TECHNOLOGY CABLE PATHWAY PLANS
1-T-300	BASEMENT TECHNOLOGY PLAN
1-T-301	FIRST FLOOR TECHNOLOGY PLAN
1-T-302	SECOND FLOOR TECHNOLOGY PLAN
1-T-303	THIRD FLOOR TECHNOLOGY PLAN
1-T-401	TECHNOLOGY ENLARGED PLANS
1-T-501	TECHNOLOGY RISER DIAGRAM

BUILDING IS FULLY SPRINKLERED

Revisions: | Date

Professional Engineer (Electrical) 10595 WYOMING

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **TECHNOLOGY LEGEND, GENERAL NOTES, AND SHEET INDEX**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Project Number: **666-309**

Date: 13 MAR 2015

Location: **VAMC SHERIDAN WY, 1898 FORT ROAD, SHERIDAN, WY 82801**

Building Number: 64 | Checked: MTB | Drawn: SOH

Drawing Number: **1-T-100**

Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

VOICE/DATA BACK BOX & CONDUIT REQUIREMENTS

SYMBOL	BACK BOX AND PLASTER RING SIZE	CONDUIT SIZE
X	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
X	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
X	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
X	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
	4" x 4" x 2 1/2" IF WALL MOUNTED	1" IF WALL MOUNTED
D	4" x 4" x 2 1/2" IF WALL MOUNTED	1" IF WALL MOUNTED
O	4" x 4" x 2 1/2" IF WALL MOUNTED	1" IF WALL MOUNTED
T	N/A	N/A
W	4" x 4" x 2 1/2"	1"
TGB	N/A	N/A
TA	4" x 4" x 2 1/2"	1"
D	4" x 4" x 2 1/2"	1"
D	4" x 4" x 2 1/2"	1"
EWB	4" x 4" x 2 1/2"	1"

PATIENT MONITORING BACK BOX & CONDUIT REQUIREMENTS

SYMBOL	BACK BOX AND PLASTER RING SIZE	CONDUIT SIZE
PM	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
FM	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
CM	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"

AUDIO / VISUAL BACK BOX & CONDUIT REQUIREMENTS

SYMBOL	BACK BOX AND PLASTER RING SIZE	CONDUIT SIZE
AP	N/A	N/A
AV	3 GANG	1 1/4"
DV	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1 1/4"
M	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
MS	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
P	N/A	N/A
RA	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
RB	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
S	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING IF WALL MOUNTED	1" IF WALL MOUNTED
	N/A	1"
SM	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING IF WALL MOUNTED	1" IF WALL MOUNTED
V	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"

INTERCOM BACK BOX & CONDUIT REQUIREMENTS

SYMBOL	BACK BOX AND PLASTER RING SIZE	CONDUIT SIZE
ID	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
ID V	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
ID VR	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
IF	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
IF V	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
IW	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
IW V	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"

TELEVISION BACK BOX & CONDUIT REQUIREMENTS

SYMBOL	BACK BOX AND PLASTER RING SIZE	CONDUIT SIZE
TV	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
TV D	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
TV ND	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
TV	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
TV D	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"

PATHWAY BACK BOX & CONDUIT REQUIREMENTS

SYMBOL	BACK BOX AND PLASTER RING SIZE	CONDUIT SIZE
J	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	N/A
J	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"

PAGING SYSTEM BACK BOX & CONDUIT REQUIREMENTS

SYMBOL	BACK BOX AND PLASTER RING SIZE	CONDUIT SIZE
PS	VENDOR PROVIDED	N/A
V	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
H	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"

RADIO BACK BOX & CONDUIT REQUIREMENTS

SYMBOL	DESCRIPTION	MOUNTING HEIGHT TO CENTER LINE
EMS	4" x 4" x 2 1/2" WITH SINGLE GANG MUD BOX	1"
HAM	4" x 4" x 2 1/2" WITH SINGLE GANG MUD BOX	1"

FACE PLATE, BACK BOX, & CONDUIT REQUIREMENTS

TV

INITIAL CAPACITY: 1 CATV CONNECTION;

QTY	DESCRIPTION
1	RG6 COAX OUTLET
1	1 PORT COVER PLATE

1 UL LISTED COAX CABLE PULLED TO EACH COAX OUTLET FROM TELECOM ROOM FOR CATV TERMINATION. TO BE INSTALLED BY CATV CONTRACTOR.

TV D

CAPACITY: 1 CATV CONNECTION; 1 DATA CONNECTION

QTY	DESCRIPTION
1	RG6 COAX OUTLET
1	CAT 6 OUTLET
1	2 PORT COVER PLATE (PROVIDED BY CATV VENDOR)

1 UL LISTED CATEGORY 6, 24AWG, 4PR CABLE, PULLED TO EACH DATA OUTLET FROM TELECOM ROOM FOR DATA TERMINATION. TO BE INSTALLED BY VOICE/DATA CONTRACTOR.

1 UL LISTED COAX CABLE PULLED TO EACH COAX OUTLET FROM TELECOM ROOM FOR CATV TERMINATION. TO BE INSTALLED BY CATV CONTRACTOR.

ALL JACKS SHALL BE 568B PIN CONFIGURATION.

* COORDINATE ALL DEVICE MOUNTING HEIGHTS WITH ARCHITECTURAL WALL ELEVATIONS AND POWER MOUNTING HEIGHTS ON ELECTRICAL DRAWINGS. REFER TO "MOUNTING HEIGHT TO CENTER LINE" DETAIL, SHEET 1-T-102.

SECURITY BACK BOX & CONDUIT REQUIREMENTS

SYMBOL	BACK BOX AND PLASTER RING SIZE	CONDUIT SIZE
CR	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
KP	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
EC	PER VENDOR SHOP DRAWINGS	2 - 1"
DR	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
DC	N/A	N/A
BR	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
WS	N/A	N/A
PB	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
PA	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
SP	N/A	N/A
AA	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
BC	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
CK	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
DB	N/A	1"
EE	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
GB	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
KS	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
MD	N/A	N/A
ND	N/A	N/A
NI	N/A	N/A
NU	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
RX	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
SM	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
PC C	N/A	N/A
PC W	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
PC WP	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
FC C	N/A	N/A
FC W	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
FC WP	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"
C	4" x 4" x 2 1/2" WITH SINGLE GANG MUD RING	1"

FACE PLATE, BACK BOX, & CONDUIT REQUIREMENTS

4 / 4 / 4 / * SMH 4

INITIAL CAPACITY: 4 CONNECTIONS
MAXIMUM CAPACITY: 4 CONNECTIONS

QTY	DESCRIPTION
4	CAT 6 OUTLET
1	4 PORT COVER PLATE

1 UL LISTED CATEGORY 6, 4PR CABLE, PULLED FROM EACH OUTLET TO TELECOM ROOM FOR TERMINATION.

ALL JACKS SHALL BE 568B PIN CONFIGURATION.

3 / 3 / 3 / * SMH 3

INITIAL CAPACITY: 3 CONNECTIONS
MAXIMUM CAPACITY: 4 CONNECTIONS

QTY	DESCRIPTION
3	CAT 6 OUTLET
1	4 PORT COVER PLATE (BLANKS SHALL BE INSTALLED IN UNUSED OUTLET PORTS)

1 UL LISTED CATEGORY 6, 4PR CABLE, PULLED FROM EACH OUTLET TO TELECOM ROOM FOR TERMINATION.

ALL JACKS SHALL BE 568B PIN CONFIGURATION.

2 / 2 / 2 / * SMH 2

INITIAL CAPACITY: 2 CONNECTIONS
MAXIMUM CAPACITY: 4 CONNECTIONS

QTY	DESCRIPTION
2	CAT 6 OUTLET
1	4 PORT COVER PLATE (BLANKS SHALL BE INSTALLED IN UNUSED OUTLET PORTS)

1 UL LISTED CATEGORY 6, 4PR CABLE, PULLED FROM EACH OUTLET TO TELECOM ROOM FOR TERMINATION.

ALL JACKS SHALL BE 568B PIN CONFIGURATION.

1 / 1 / 1 / * SMH 1 / PM / TA / EWB

INITIAL CAPACITY: 1 CONNECTION
MAXIMUM CAPACITY: 4 CONNECTIONS

QTY	DESCRIPTION
1	CAT 6 OUTLET
1	4 PORT COVER PLATE (BLANKS SHALL BE INSTALLED IN UNUSED OUTLET PORTS)

1 UL LISTED CATEGORY 6, 4PR CABLE, PULLED FROM EACH OUTLET TO TELECOM ROOM FOR TERMINATION.

ALL JACKS SHALL BE 568B PIN CONFIGURATION.

W

MAXIMUM CAPACITY: 1 CONNECTION

QTY	DESCRIPTION
1	CAT 6 OUTLET
1	1 PORT COVER PLATE

1 UL LISTED CATEGORY 6, 4PR CABLE, PULLED FROM EACH OUTLET TO TELECOM ROOM FOR TERMINATION.

ALL JACKS SHALL BE 568B PIN CONFIGURATION.

* COORDINATE ALL VOICE/DATA LOCATIONS, SPECIAL MOUNTING HEIGHT (SMH) DEVICES WITH ARCHITECTURAL WALL ELEVATIONS AND/OR MOUNTING HEIGHTS OF POWER DEVICES ON ELECTRICAL DRAWINGS. REFER TO "MOUNTING HEIGHT TO CENTER LINE", SHEET 1-T-102.

FACE PLATE, BACK BOX, & CONDUIT REQUIREMENTS

QTY	DESCRIPTION
1	CAT 6 OUTLET 1 DATA SURFACE MOUNT HOUSING

1 UL LISTED CATEGORY 6, 4PR CABLE, PULLED FROM EACH OUTLET TO TELECOM ROOM FOR TERMINATION.

ALL JACKS SHALL BE 568B PIN CONFIGURATION.

FC / C / PC

INITIAL CAPACITY: 1 CONNECTION

QTY	DESCRIPTION
1	CAT 6 OUTLET 1 DATA SURFACE MOUNT HOUSING

1 UL LISTED CATEGORY 6, 4PR CABLE, PULLED FROM EACH OUTLET TO TELECOM ROOM FOR TERMINATION.

ALL JACKS SHALL BE 568B PIN CONFIGURATION.

BUILDING IS FULLY SPRINKLERED

Revisions: | Date

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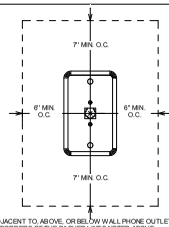
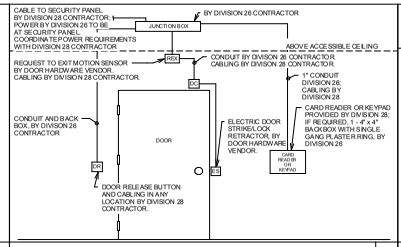
Approved: Chief of MH | Approved: Chief of FMS
Date: | Date:
Approved: Director | Approved: VA Energy Engineer
Date: | Date:

Drawing Title: TECHNOLOGY FACE PLATE, BACK BOX, CONDUIT
Location: VAMC SHERIDAN WY, 1898 FORT ROAD, SHERIDAN, WY 82801
Project Name: EXPAND DOMICILIARY BUILDING 64
Building Number: 64 | Checked: MTB | Drawn: SOH
Project Number: 666-309
Date: 13 MARCH 2015
Drawing Number: 1-T-101
Dwg. of
Office of Construction and Facilities Management
VA FORM 08-6231

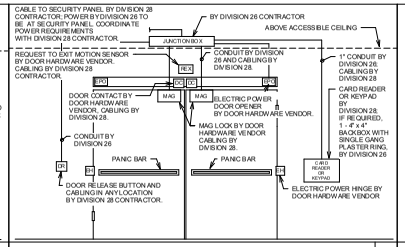


GENERAL NOTE:
G1. ANY DEVICE MOUNTED ADJACENT TO, ABOVE, OR BELOW WALL PHONE OUTLET, IS NOT TO INFRINGE WITHIN THE BORDERS OF THE DASHED LINES NOTED ABOVE. COORDINATE WITH ARCHITECTURAL ELEVATIONS AND OTHER WALL MOUNTED DEVICES.

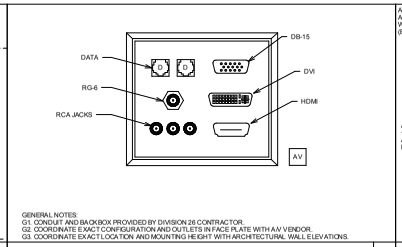
WALL PHONE CLEARANCE REQUIREMENTS 05



DOOR ACCESS CONTROL DETAIL - SINGLE DOOR 04

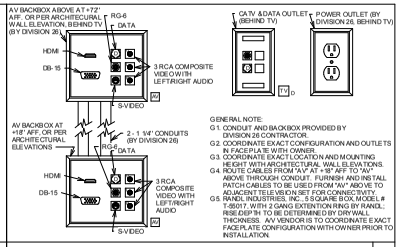


DOOR ACCESS CONTROL DETAIL - DOUBLE DOOR 03



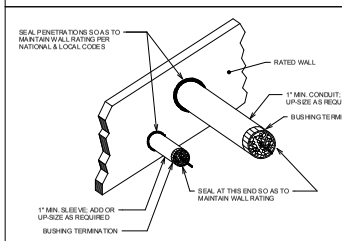
GENERAL NOTES:
G1. CONDUIT AND BACKBOX PROVIDED BY DIVISION 26 CONTRACTOR.
G2. COORDINATE EXACT CONFIGURATION AND OUTLETS IN FACE PLATE WITH A/V VENDOR.
G3. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL WALL ELEVATIONS.

AUDIO/VISUAL FACE PLATE DETAIL 02

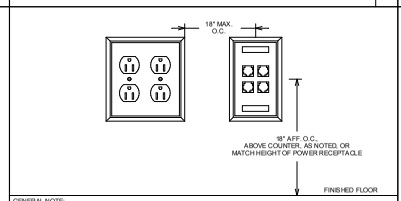


GENERAL NOTE:
G1. CONDUIT AND BACKBOX PROVIDED BY DIVISION 26 CONTRACTOR.
G2. COORDINATE EXACT CONFIGURATION AND OUTLETS IN FACE PLATE WITH OWNER.
G3. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL WALL ELEVATIONS.
G4. ROUTE CABLES FROM "AA" AT +18" AFF TO "AV" ABOVE THROUGH CONDUIT. FURNISH AND INSTALL PATCH CABLES TO BE USED FROM "AV" ABOVE TO ADJACENT TELEVISION SET FOR CONNECTIVITY.
G5. RANDL INDUSTRIES, INC., 5 SQUARE BOX, MODEL # T-S5017, WITH 2 GANG EXTENTION RING BY RANDL; RISE/DISP IN TO BE DETERMINED BY DRY WALL THICKNESS. A/V VENDOR IS TO COORDINATE EXACT FACE PLATE CONFIGURATION WITH OWNER PRIOR TO INSTALLATION.

AUDIO/VISUAL FACE PLATE CONFIGURATION DETAIL 01

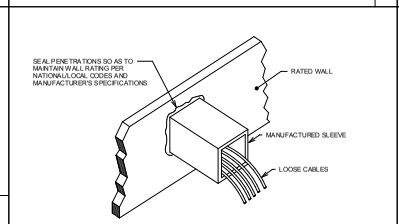


RATED WALL CONDUIT AND SLEEVE PENETRATIONS 10

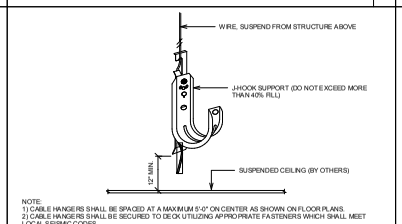


GENERAL NOTE:
G1. VOICE/DATA OUTLETS TO BE MOUNTED ADJACENT TO POWER OUTLETS WHERE APPLICABLE. COORDINATE ALL MOUNTING HEIGHTS WITH ARCHITECTURAL WALL ELEVATIONS, ELECTRICAL DRAWINGS, AND EQUIPMENT VENDOR DRAWINGS.

POWER OUTLET COORDINATION REQUIREMENTS 09

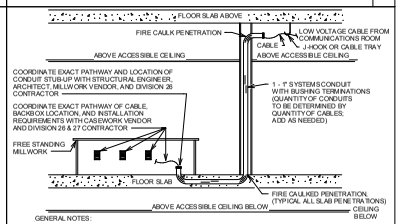


MANUFACTURED SLEEVE WALL PENETRATION 08



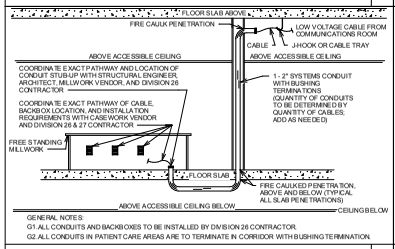
NOTE:
1) CABLE HANGERS SHALL BE SPACED AT A MAXIMUM 5'-0" ON CENTER AS SHOWN ON FLOOR PLANS.
2) CABLE HANGERS SHALL BE SECURED TO DECK UTILIZING APPROPRIATE FASTENERS WHICH SHALL MEET LOCAL SEISMIC CODES.
3) REFER TO ARCHITECTURAL DRAWINGS FOR DECK AND SUSPENDED CEILING TYPE. DETAILS SHOWN FOR CLARITY ONLY.

J-HOOK DETAIL 07



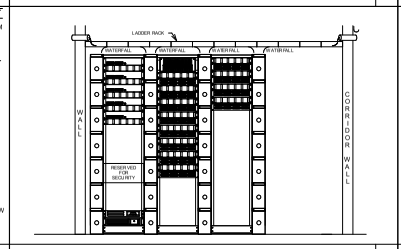
GENERAL NOTES:
G1. ALL CONDUITS AND BACKBOXES TO BE INSTALLED BY DIVISION 26 CONTRACTOR.
G2. ALL CONDUITS IN PATIENT CARE AREAS ARE TO TERMINATE IN CORRIDOR WITH BUSHING TERMINATION.

INSLAB TO FREE STANDING WORKSTATION 06

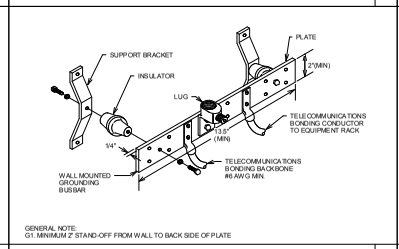


GENERAL NOTES:
G1. ALL CONDUITS AND BACKBOXES TO BE INSTALLED BY DIVISION 26 CONTRACTOR.
G2. ALL CONDUITS IN PATIENT CARE AREAS ARE TO TERMINATE IN CORRIDOR WITH BUSHING TERMINATION.

UNDER SLAB FREE STANDING WORKSTATION 15

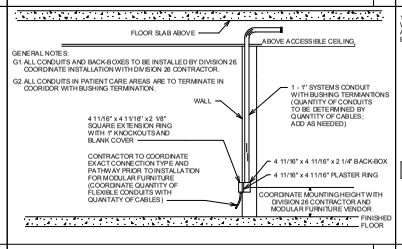


TYPICAL IDF RACK ELEVATION - 3 RACKS 14



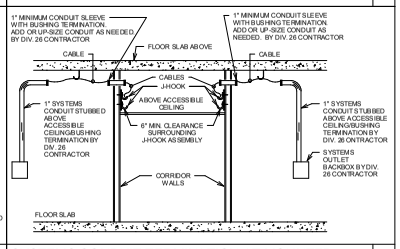
GENERAL NOTE:
G1. MINIMUM 2" STAND-OFF FROM WALL TO BACK SIDE OF PLATE

TELECOMMUNICATIONS GROUNDING BUS BAR (TGB) 13

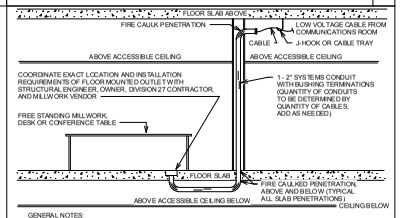


GENERAL NOTES:
G1. ALL CONDUITS AND BACKBOXES TO BE INSTALLED BY DIVISION 26 CONTRACTOR. COORDINATE INSTALLATION WITH DIVISION 26 CONTRACTOR.
G2. ALL CONDUITS IN PATIENT CARE AREAS ARE TO TERMINATE IN CORRIDOR WITH BUSHING TERMINATION.

SYSTEMS MODULAR FURNITURE CONNECTION 12



SYSTEMS CONDUIT TERMINATION AT MOUNTED J-HOOK DETAIL 11



GENERAL NOTES:
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UNDER SLAB TO FLUSH MOUNTED FLOOR BOX 16

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

Professional Engineer (Electrical) REGISTRATION NUMBER 10598 STATE OF WYOMING

CONSULTANTS:

Terracon — Consulting Engineers & Scientists
Peaks to Plains Design
GreatWest engineering
H2B, INC. — Texas Firm Registration No. 8856, 1225 N Loop W, Suite 900, HOUSTON, TX 77008, 713.864.2900
SSR Smith Seckman Reid, Inc. — 7995 East Prentice Avenue, Suite 104-E, Greenwood Village, CO 80111, (303) 779-1222, FAX: (303) 694-9144, www.ssr-inc.com

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Chicago: 345 N. Canal St. Suite 701, Chicago, IL 60605, T:312 - 698 - 3880, F:312 - 454 - 9439, bcox@coxltd.com

Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: TECHNOLOGY DETAILS

Project Name: EXPAND DOMICILIARY BUILDING 64

Location: VAMC SHERIDAN WY, 1898 FORT ROAD, SHERIDAN, WY 82801

Building Number	Checked	Drawn
64	MTB	SOH

Project Number: 666-309
Date: 13 MARCH 2015
Drawing Number: 1-T-102
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

GENERAL NOTES

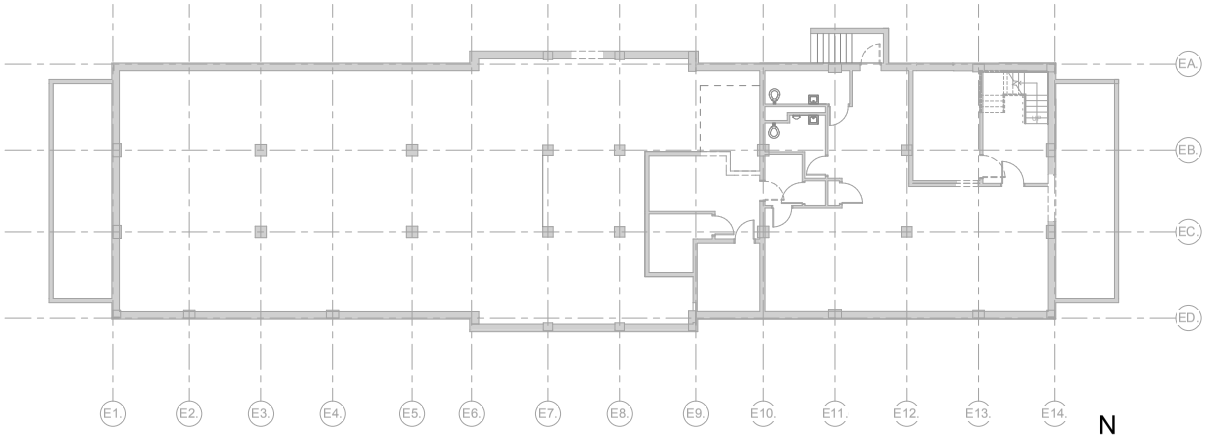
1. SEE SHEET 1-T-100 FOR TECHNOLOGY LEGENDS AND SYMBOLS.

KEYED NOTES

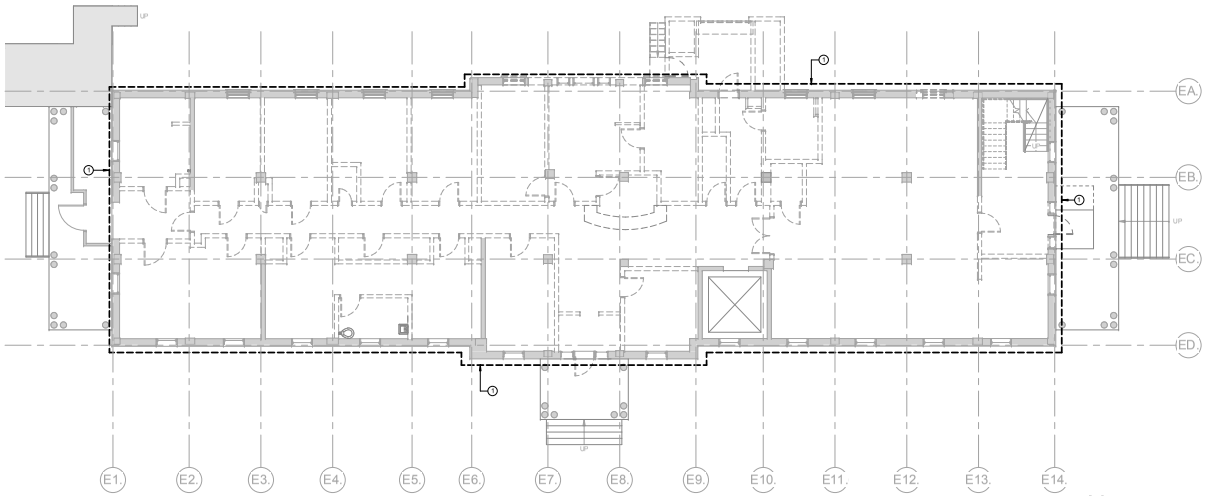
1. DIVISION 27 CONTRACTORS SHALL DEMO ALL LOW-VOLTAGE CABLING AND DEVICES BACK TO POINT OF ORIGIN.

DEMOLITION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	EXISTING TO BE REMOVED
	DEMO TO THIS POINT



1 BASEMENT - TECHNOLOGY DEMOLITION PLAN
SCALE: 1/8" = 1'-0"



2 FIRST FLOOR - TECHNOLOGY DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

BUILDING IS FULLY SPRINKLERED

Revisions: Date

Professional Engineer (Electrical) REGISTRATION No. 10598 WYOMING

CONSULTANTS:

Terracon Consulting Engineers & Scientists

Peaks to Plains Design

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bcox@coxltd.com

Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
BASEMENT AND FIRST FLOOR TECHNOLOGY DEMOLITION PLAN

Project Name
EXPAND DOMICILIARY BUILDING 64

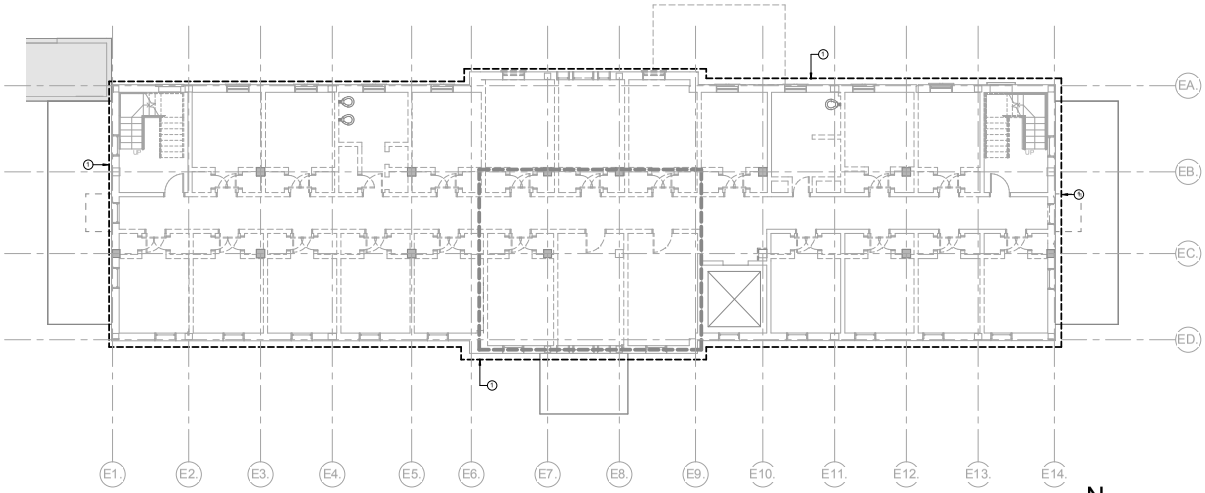
Location
VAMC SHERIDAN WY
1898 FORT ROAD
SHERIDAN, WY 82801

Building Number	Checked	Drawn
64	MTB	SOH

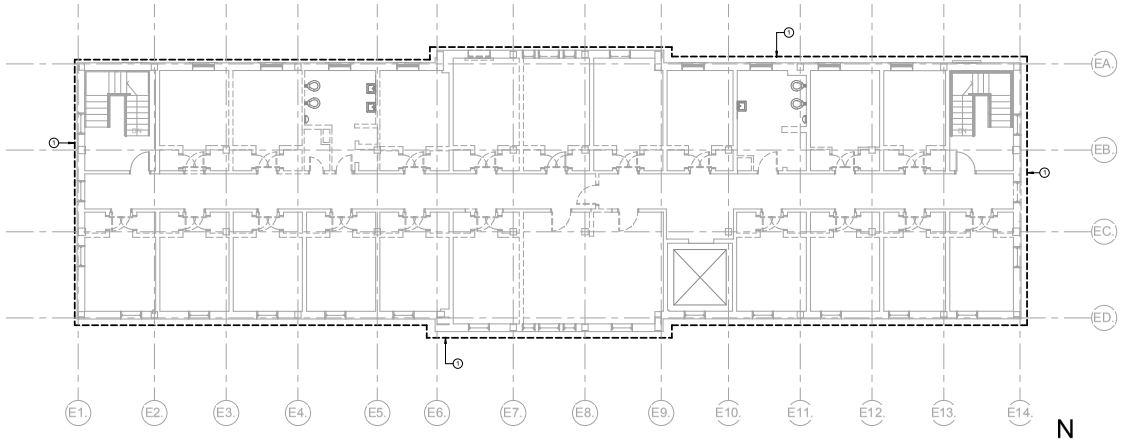
Project Number **666-309**
Date 10 DEC. 2014
Drawing Number **1-TD-100**
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



1 SECOND FLOOR - TECHNOLOGY DEMOLITION PLAN
SCALE: 1/8" = 1'-0"



2 THIRD FLOOR - TECHNOLOGY DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. SEE SHEET 1-T-100 FOR TECHNOLOGY LEGENDS AND SYMBOLS.

KEYED NOTES

1. DIVISION 27 CONTRACTORS SHALL DEMO ALL LOW-VOLTAGE CABLING AND DEVICES BACK TO POINT OF ORIGIN.

DEMOLITION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TO REMAIN
	EXISTING TO BE REMOVED
	DEMO TO THIS POINT

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

Professional Engineer (Electrical) REGISTRATION NO. 10598 DATE 3-17-15 WYOMING

CONSULTANTS:

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bcox@coxltd.com

Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
SECOND AND THIRD FLOOR TECHNOLOGY DEMOLITION PLANS

Location
VAMC SHERIDAN WY
1898 FORT ROAD
SHERIDAN, WY 82801

Project Name
EXPAND DOMICILIARY BUILDING 64

Building Number	Checked	Drawn
64	MTB	SOH

Project Number **666-309**

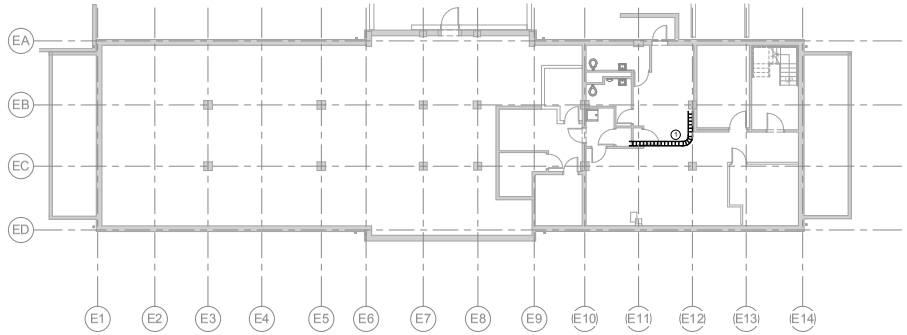
Date 13 MARCH 2015

Drawing Number **1-TD-101**

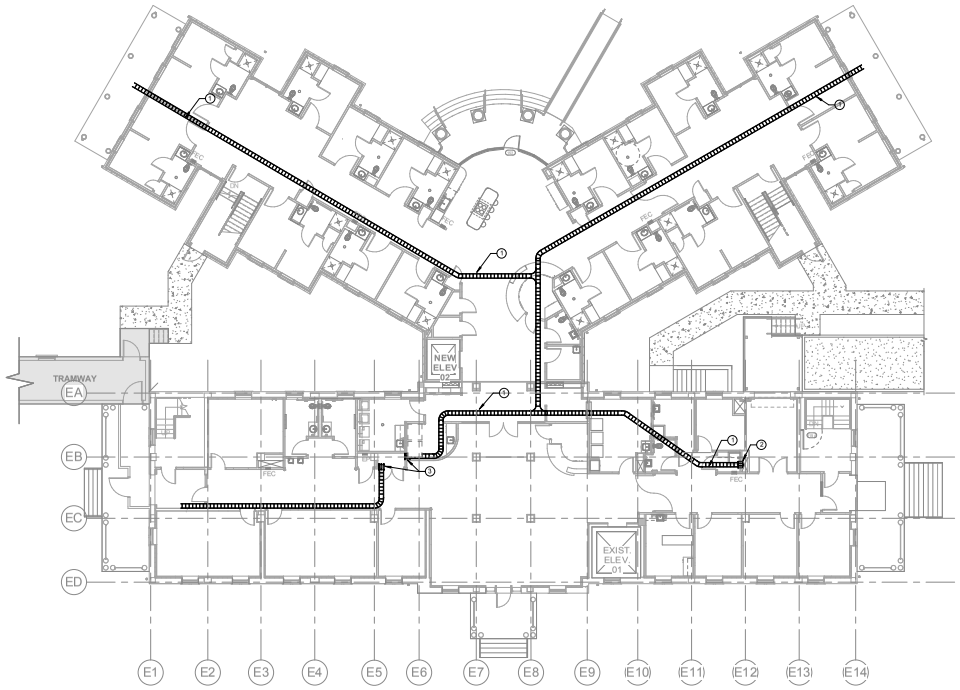
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



1 **BASEMENT - CABLE PATHWAY PLAN**
SCALE: 3/32" = 1'-0"



2 **FIRST FLOOR - CABLE PATHWAY PLAN**
SCALE: 3/32" = 1'-0"

GENERAL NOTES

1. GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL LOW-VOLTAGE SYSTEMS AS OUTLINED ON DRAWINGS AND SPECIFICATIONS. DIVISION 27 AND PORTIONS OF DIVISION 28 SPECIFICATIONS DIRECT THE TECHNOLOGY AND LOW-VOLTAGE SCOPE OF WORK.

2. DIVISION 26 CONTRACTOR TO PROCURE AND INSTALL ALL NECESSARY LOW-VOLTAGE PATHWAYS INCLUDING CONDUIT, BACK-BOX, PATHWAYS FROM CORRIDORS TO ROOMS, J-HOOKS AND CABLE TRAY. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ALL NECESSARY MANUFACTURED SLEEVES FOR FIRE-RATED WALL PENETRATIONS.

3. GENERAL CONTRACTOR TO COORDINATE ALL ELEVATED LOW-VOLTAGE DEVICES WITH ARCHITECTURAL BACKGROUNDS FOR EXACT MOUNTING REQUIREMENTS.

4. GENERAL CONTRACTOR SHALL CONTACT SMITH SEKMAN REID, INC. TO DISCUSS ANY INCONSISTENCIES PRIOR TO PROCURING AND INSTALLING LOW-VOLTAGE SYSTEMS.

KEYED NOTES

1. CABLE PATHWAYS DRAWINGS INDICATE THE RECOMMENDED PATHWAY TO DISTRIBUTE HORIZONTAL CABLING. J-HOOK OR CABLE STRAPPING SYSTEM SHALL BE USED IN LIEU OF WIRE-BASKET CABLE TRAY. DIVISION 26 AND DIVISION 27 CONTRACTORS TO COORDINATE ABOVE CEILING PATHWAY.
2. (3) 4" CABLING SLEEVES WITH APPROPRIATE FIRE PROTECTION TO BE PROVIDED AND INSTALLED BY DIVISION 26 CONTRACTOR FOR CABLING EXITING THE LOW-VOLTAGE CHASE FROM BASEMENT. THE CHASE SIDE OF THE CONDUIT SHALL HAVE A CABLE SHOE TO ASSIST IN THE SUPPORT OF THE CATEGORY 6 CABLE.
3. (3) 2" CABLING SLEEVES WITH APPROPRIATE FIRE PROTECTION TO BE PROVIDED AND INSTALLED BY DIVISION CONTRACTOR.

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

Professional Engineer (Electrical) REGISTRATION NO. 10598 WYOMING

CONSULTANTS:

Terracon Consulting Engineers & Scientists

Peaks to Plains Design

GreatWest engineering

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bcox@coxltd.com

Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
BASEMENT AND FIRST FLOOR TECHNOLOGY CABLE PATHWAY PLANS

Location
VAMC SHERIDAN WY
1898 FORT ROAD
SHERIDAN, WY 82801

Project Name
EXPAND DOMICILIARY BUILDING 64

Building Number	Checked	Drawn
64	MTB	SOH

Project Number **666-309**
Date 13 MARCH 2015
Drawing Number **1-T-200**
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

GENERAL NOTES

1. GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL LOW-VOLTAGE SYSTEMS AS OUTLINED ON DRAWINGS AND SPECIFICATIONS. DIVISION 27 AND PORTIONS OF DIVISION 28 SPECIFICATIONS DIRECT THE TECHNOLOGY AND LOW-VOLTAGE SCOPE OF WORK.

2. DIVISION 26 CONTRACTOR TO PROCURE AND INSTALL ALL NECESSARY LOW-VOLTAGE PATHWAYS INCLUDING CONDUIT, BACK-BOX, PATHWAYS FROM CORRIDORS TO ROOMS, J-HOOKS AND CABLE TRAY. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ALL NECESSARY MANUFACTURED SLEEVES FOR FIRE-RATED WALL PENETRATIONS.

3. GENERAL CONTRACTOR TO COORDINATE ALL ELEVATED LOW-VOLTAGE DEVICES WITH ARCHITECTURAL BACKGROUNDS FOR EXACT MOUNTING REQUIREMENTS.

4. GENERAL CONTRACTOR SHALL CONTACT SMITH SECKMAN REID, INC. TO DISCUSS ANY INCONSISTENCIES PRIOR TO PROCURING AND INSTALLING LOW-VOLTAGE SYSTEMS.

KEYED NOTES

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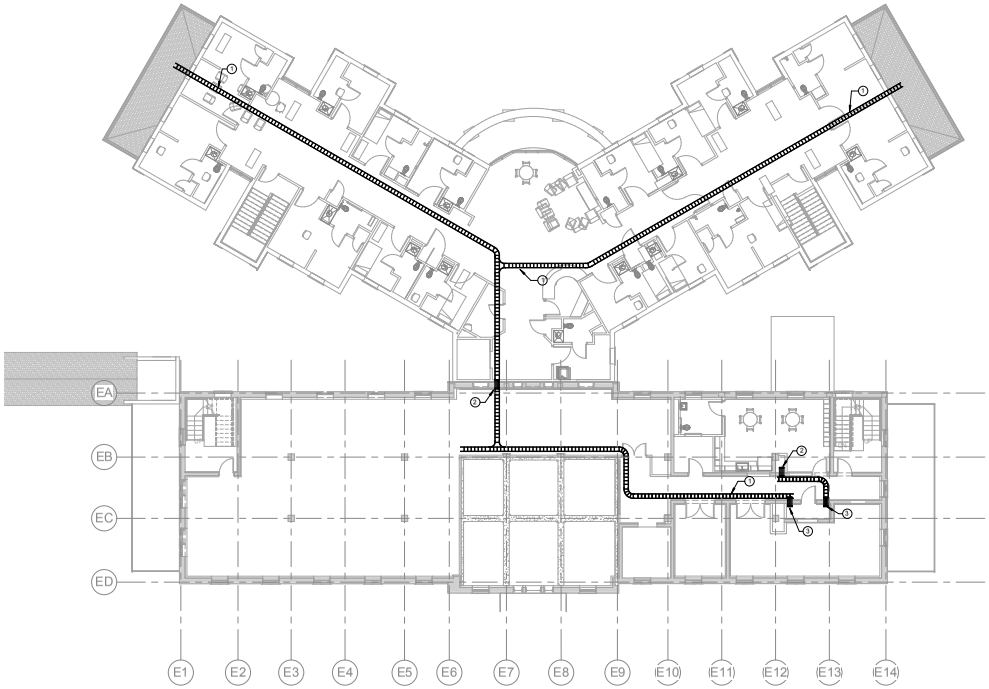
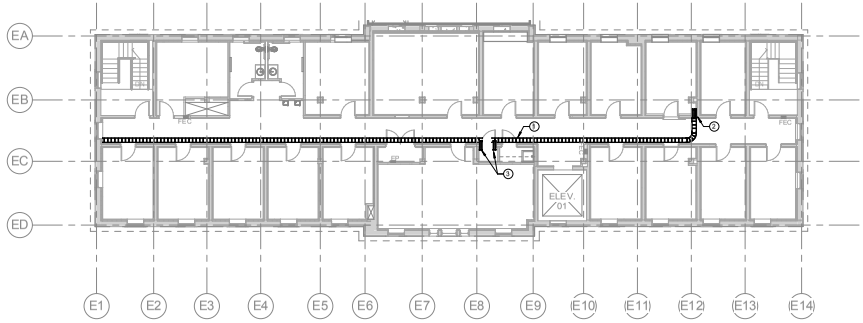


1 SECOND FLOOR - CABLE PATHWAY PLAN
SCALE: 3/32" = 1'-0"



2 THIRD FLOOR - CABLE PATHWAY PLAN
SCALE: 3/32" = 1'-0"

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

Professional Engineer (Electrical) REGISTRATION NO. 10598 WYOMING

CONSULTANTS:

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
SECOND AND THIRD FLOOR TECHNOLOGY CABLE PATHWAY PLANS

Location
VAMC SHERIDAN WY
1898 FORT ROAD
SHERIDAN, WY 82801

Project Name
EXPAND DOMICILIARY BUILDING 64

Building Number	Checked	Drawn
64	MTB	SOH

Project Number **666-309**

Date 13 MARCH 2015

Drawing Number **1-T-201**

Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

GENERAL NOTES

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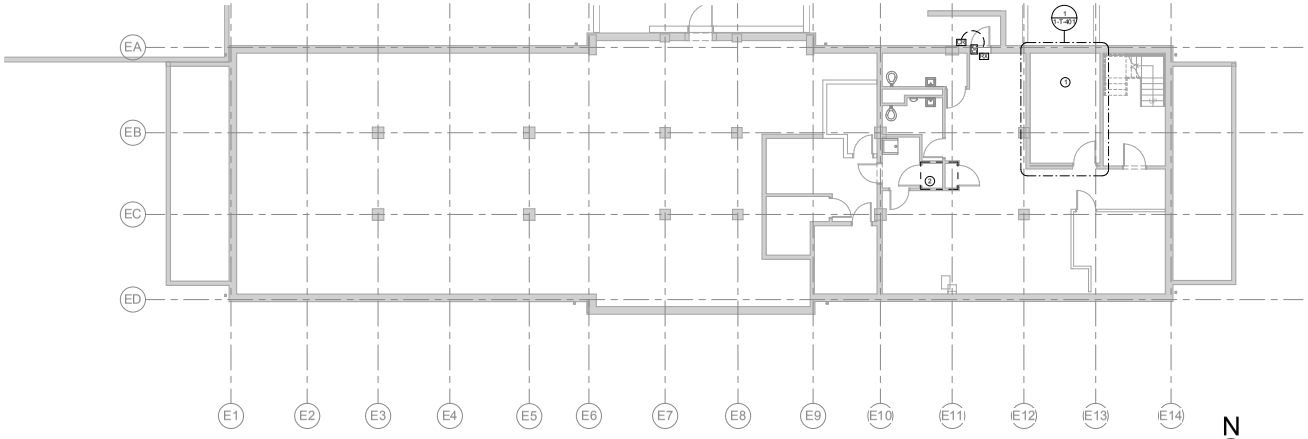
4. GENERAL CONTRACTOR SHALL CONTACT SMITH SECKMAN REID, INC. TO DISCUSS ANY INCONSISTENCIES PRIOR TO PROCURING AND INSTALLING LOW-VOLTAGE SYSTEMS.

5. CARD READER ACCESS - PROVIDE ONLY ROUGH-IN FOR CARD READER ACCESS LOCATIONS SHOWN. CARD READER WILL BE OWNER PROVIDED AT A FUTURE TIME.

KEYED NOTES

1. REFER TO 1-T-401 FOR MDF ENLARGED PLANS.
2. EXISTING DEMARC/MDF DIVISION 27 CONTRACTOR TO PULL COPPER TIE CABLE AND EXTEND FIBER TO DATA 002 FROM THIS LOCATION.



1 BASEMENT - TECHNOLOGY PLAN
SCALE: 1/8" = 1'-0"

BUILDING IS FULLY SPRINKLERED

Revisions: | Date

Professional Engineer (Electrical) REGISTRATION NO. 10598 WYOMING

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: BASEMENT TECHNOLOGY PLAN

Location: VAMC SHERIDAN WY
1898 FORT ROAD
SHERIDAN, WY 82801

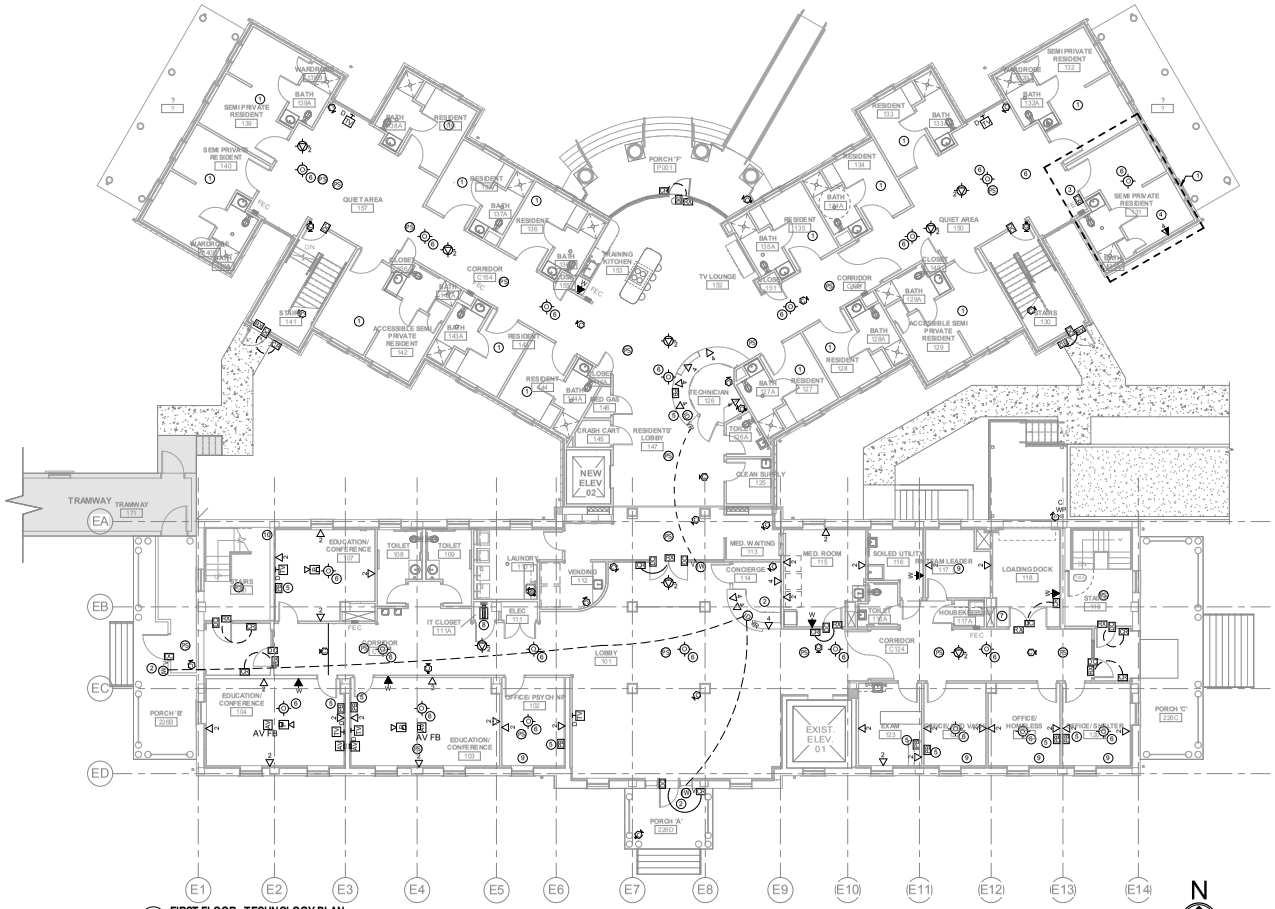
Project Name: EXPAND DOMICILIARY BUILDING 64

Building Number: 64 | Checked: MTB | Drawn: SOH

Project Number: 666-309
Date: 13 MARCH 2015
Drawing Number: 1-T-300
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231



1 FIRST FLOOR - TECHNOLOGY PLAN
SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL LOW-VOLTAGE SYSTEMS AS OUTLINED ON DRAWINGS AND SPECIFICATIONS. DIVISION 27 AND PORTIONS OF DIVISION 28 SPECIFICATIONS DIRECT THE TECHNOLOGY AND LOW-VOLTAGE SCOPE OF WORK.

2. DIVISION 26 CONTRACTOR TO PROCURE AND INSTALL ALL NECESSARY LOW-VOLTAGE PATHWAYS INCLUDING CONDUIT, BACK-BOX, PATHWAYS FROM CORRIDORS TO ROOMS, J-HOOKS AND CABLE TRAY. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ALL NECESSARY MANUFACTURED SLEEVES FOR FIRE-RATED WALL PENETRATIONS.

3. GENERAL CONTRACTOR TO COORDINATE ALL ELEVATED LOW-VOLTAGE DEVICES WITH ARCHITECTURAL BACKGROUNDS FOR EXACT MOUNTING REQUIREMENTS.

4. GENERAL CONTRACTOR SHALL CONTACT SMITH SECKMAN REID, INC. TO DISCUSS ANY INCONSISTENCIES PRIOR TO PROCURING AND INSTALLING LOW-VOLTAGE SYSTEMS.

5. LOCATION OF PANIC BUTTONS SHALL BE COORDINATED WITH AND APPROVED BY V.A. PERSONNEL PRIOR TO INSTALLATION.

6. CARD READER ACCESS - PROVIDE ONLY ROUGH-IN FOR CARD READER ACCESS LOCATIONS SHOWN. CARD READER WILL BE OWNER PROVIDED AT A FUTURE TIME.

KEYED NOTES

1. TYPICAL RESIDENT ROOM UNLESS NOTED OTHERWISE. PLEASE SEE ALTERNATES # 12 AND ALTERNATES # 19 THAT ARE ASSOCIATED WITH THE TYPICAL RESIDENT ROOM.
2. RECEPTION STATION WILL HAVE MASTER INTERCOM STATION THAT ALLOWS AUDIO/VISUAL IDENTIFICATION WITH ABILITY TO REMOTE RELEASE SECURED DOOR.
3. PROVIDE CARD READER ACCESS TO EACH RESIDENT ROOM.
4. PROVIDE DATA DROP AT EACH DESK LOCATION.
5. DIVISION 28 SECURITY CONTRACTOR TO PROVIDE AND INSTALL COMPLETE DURESS SYSTEM THAT INCLUDES HARD-WIRED PANIC BUTTONS AS WELL AS MOBILE DURESS PENDANTS THAT ALERT SECURITY AND POLICE TO EXACT LOCATION OF INCIDENT.
6. DIVISION 28 CONTRACTOR TO PROVIDE AND INSTALL DURESS WIRELESS POINTS FOR INCIDENT LOCATION SERVICES.
7. GENERAL CONTRACTOR TO PROVIDE 3'x2' ACCESS PANEL ON CHASE FOR FUTURE LOW-VOLTAGE CABLE PULLS.
8. PROVIDE 26" W x 7' H EQUIPMENT RACK AND 8" VERTICAL WIRE MANAGER.
9. TYPICAL ALL DATA TDROPS IN OFFICES, PROVIDE SERVICE LOOP COIL OF CABLE ABOVE CEILING TO ALLOW FOR POTENTIAL FUTURE RELOCATION OF DATA DROP TO FURTHEST POINT ON FURTHEST WALL FROM CORRIDOR.

BUILDING IS FULLY SPRINKLERED

Revisions: Date

Professional Engineer (Electrical) REGISTRATION NUMBER 10598 WYOMING

CONSULTANTS:

Terracon Consulting Engineers & Scientists

Peaks to Plains Design

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
FIRST FLOOR TECHNOLOGY PLAN

Project Name
EXPAND DOMICILIARY BUILDING 64

Project Number
666-309

Date
13 MARCH 2015

Location
VAMC SHERIDAN WY
1898 FORT ROAD
SHERIDAN, WY 82801

Building Number	Checked	Drawn
64	MTB	SOH

Drawing Number
1-T-301

Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

GENERAL NOTES

1. GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL LOW-VOLTAGE SYSTEMS AS OUTLINED ON DRAWINGS AND SPECIFICATIONS. DIVISION 27 AND PORTIONS OF DIVISION 28 SPECIFICATIONS DIRECT THE TECHNOLOGY AND LOW-VOLTAGE SCOPE OF WORK.

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3. GENERAL CONTRACTOR TO COORDINATE ALL ELEVATED LOW-VOLTAGE DEVICES WITH ARCHITECTURAL BACKGROUNDS FOR EXACT MOUNTING REQUIREMENTS.

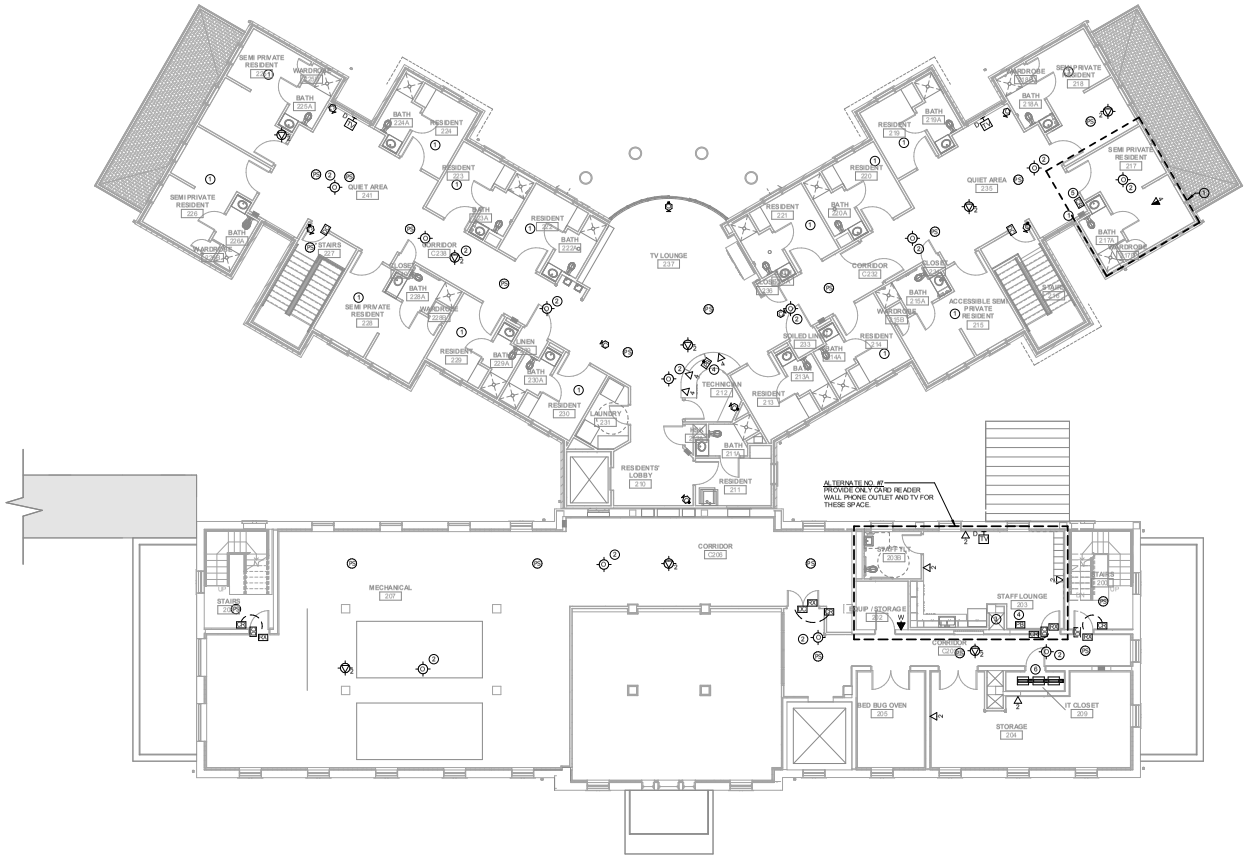
4. GENERAL CONTRACTOR SHALL CONTACT SMITH SEICKMAN REID, INC. TO DISCUSS ANY INCONSISTENCIES PRIOR TO PROCURING AND INSTALLING LOW-VOLTAGE SYSTEMS.

5. LOCATION OF PANIC BUTTONS SHALL BE COORDINATED WITH AND APPROVED BY V.A. PERSONNEL PRIOR TO INSTALLATION.

6. CARD READER ACCESS - PROVIDE ONLY ROUGH-IN FOR CARD READER ACCESS LOCATIONS SHOWN. CARD READER WILL BE OWNER PROVIDED AT A FUTURE TIME.

KEYED NOTES

1. TYPICAL RESIDENT ROOM UNLESS NOTED OTHERWISE. PLEASE SEE ALTERNATES # 1/2 AND ALTERNATES # 19 THAT ARE ASSOCIATED WITH THE TYPICAL RESIDENT ROOM.
2. DIVISION 28 CONTRACTOR TO PROVIDE AND INSTALL DURESS WIRELESS POINTS FOR INCIDENT LOCATION SERVICES.
3. GENERAL CONTRACTOR TO PROVIDE 3'x3' ACCESS PANEL ON CHASE FOR FUTURE LOW-VOLTAGE CABLE PULLS.
4. DIVISION 28 SECURITY CONTRACTOR TO PROVIDE AND INSTALL COMPLETE DURESS SYSTEM THAT INCLUDES HARD-WIRED PANIC BUTTONS AS WELL AS MOBILE DURESS PENDANTS THAT ALERT SECURITY AND POLICE TO EXACT LOCATION OF INCIDENT.
5. PROVIDE CARD READER ACCESS TO EACH RESIDENT ROOM.
6. PROVIDE 26"W x 7'H EQUIPMENT RACK AND 8" VERTICAL WIRE MANAGER. 12"W x 4"H CABLE RUNWAY TO BE ROUTED ABOVE EQUIPMENT RACKS.



1 **SECOND FLOOR - TECHNOLOGY PLAN**
SCALE: 1/8" = 1'-0"

N

BUILDING IS FULLY SPRINKLERED

Revisions:	Date

CONSULTANTS:

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: **SECOND FLOOR TECHNOLOGY PLAN**

Location: **VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801**

Project Name: **EXPAND DOMICILIARY BUILDING 64**

Building Number	Checked	Drawn
64	MTB	SOH

Project Number: **666-309**
Date: 13 MARCH 2015
Drawing Number: **1-T-302**
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

GENERAL NOTES

1. GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL LOW-VOLTAGE SYSTEMS AS OUTLINED ON DRAWINGS AND SPECIFICATIONS. DIVISION 27 AND PORTIONS OF DIVISION 28 SPECIFICATIONS DIRECT THE TECHNOLOGY AND LOW-VOLTAGE SCOPE OF WORK.

2. DIVISION 26 CONTRACTOR TO PROCURE AND INSTALL ALL NECESSARY LOW-VOLTAGE PATHWAYS INCLUDING CONDUIT, BACK-BOX, PATHWAYS FROM CORRIDORS TO ROOMS, J-HOOKS AND CABLE TRAY. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ALL NECESSARY MANUFACTURED SLEEVES FOR FIRE-RATED WALL PENETRATIONS.

3. GENERAL CONTRACTOR TO COORDINATE ALL ELEVATED LOW-VOLTAGE DEVICES WITH ARCHITECTURAL BACKGROUNDS FOR EXACT MOUNTING REQUIREMENTS.

4. GENERAL CONTRACTOR SHALL CONTACT SMITH SECKMAN REID, INC. TO DISCUSS ANY INCONSISTENCIES PRIOR TO PROCURING AND INSTALLING LOW-VOLTAGE SYSTEMS.

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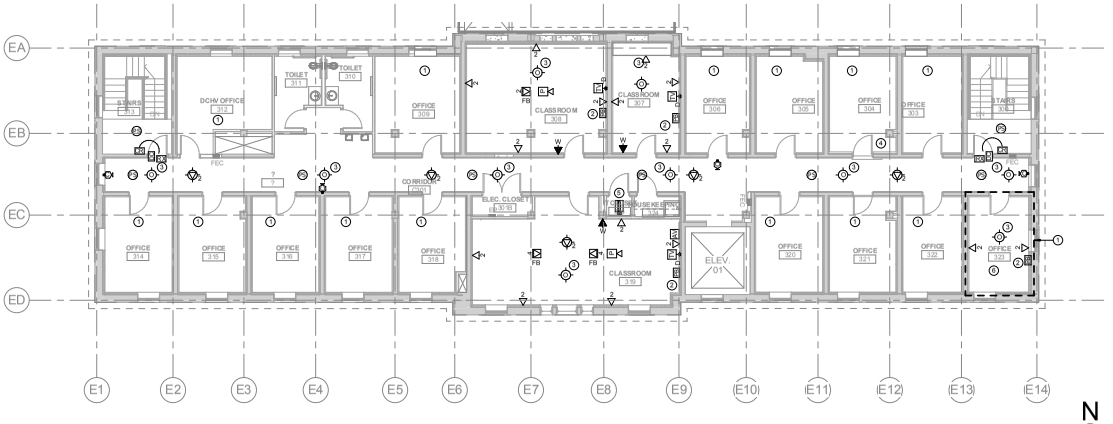
6. CARD READER ACCESS - PROVIDE ONLY ROUGH-IN FOR CARD READER ACCESS LOCATIONS SHOWN. CARD READER WILL BE OWNER PROVIDED AT A FUTURE TIME.

KEYED NOTES

1. TYPICAL OFFICE LAYOUT UNLESS NOTED OTHERWISE. PLEASE SEE ALTERNATE # 15 THAT IS ASSOCIATED WITH THIS TYPICAL OFFICE.
2. DIVISION 28 SECURITY CONTRACTOR TO PROVIDE AND INSTALL COMPLETE DURESS SYSTEM THAT INCLUDES HARD-WIRED PANIC BUTTONS AS WELL AS MOBILE DURESS PENDANTS THAT ALERT SECURITY AND POLICE TO EXACT LOCATION OF INCIDENT.
3. DIVISION 28 CONTRACTOR TO PROVIDE AND INSTALL DURESS WIRELESS POINTS FOR INCIDENT LOCATION SERVICES.
4. GENERAL CONTRACTOR TO PROVIDE 3'x3' ACCESS PANEL ON CHASE FOR FUTURE LOW-VOLTAGE CABLE PULLS.
5. PROVIDE 26" W x 7' H EQUIPMENT RACK AND 8" VERTICAL WIRE MANAGER.
6. TYPICAL ALL DATAT DROPS IN OFFICES, PROVIDE SERVICE LOOP COIL OF CABLE ABOVE CEILING TO ALLOW FOR POTENTIAL FUTURE RELOCATION OF DATA DROP TO FURTHEST POINT ON FURTHEST WALL FROM CORRIDOR.



1 THIRD FLOOR - TECHNOLOGY PLAN
SCALE: 1/8" = 1'-0"

N

BUILDING IS FULLY SPRINKLERED

Revisions: Date

Professional Engineer (Electrical) REGISTRATION NO. 10598 WYOMING

CONSULTANTS:

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title
THIRD FLOOR TECHNOLOGY PLAN

Project Name
EXPAND DOMICILIARY BUILDING 64

Project Number
666-309

Date
13 MARCH 2015

Location
VAMC SHERIDAN WY
1898 FORT ROAD
SHERIDAN, WY 82801

Building Number	Checked	Drawn
64	MTB	SOH

Drawing Number
1-T-303

Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231

GENERAL NOTES

1. GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL LOW-VOLTAGE SYSTEMS AS OUTLINED ON DRAWINGS AND SPECIFICATIONS. DIVISION 27 AND PORTIONS OF DIVISION 28 SPECIFICATIONS DIRECT THE TECHNOLOGY AND LOW-VOLTAGE SCOPE OF WORK.

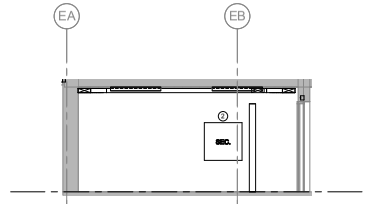
2. DIVISION 26 CONTRACTOR TO PROCURE AND INSTALL ALL NECESSARY LOW-VOLTAGE PATHWAYS INCLUDING CONDUIT, BACK-BOX, PATHWAYS FROM CORRIDORS TO ROOMS, J-HOOKS AND CABLE TRAY. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ALL NECESSARY MANUFACTURED SLEEVES FOR FIRE-RATED WALL PENETRATIONS.

3. GENERAL CONTRACTOR TO COORDINATE ALL ELEVATED LOW-VOLTAGE DEVICES WITH ARCHITECTURAL BACKGROUNDS FOR EXACT MOUNTING REQUIREMENTS.

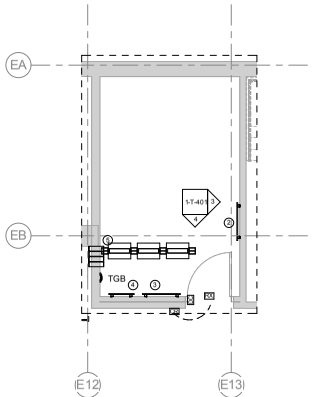
4. GENERAL CONTRACTOR SHALL CONTACT SMITH SECKMAN REID, INC. TO DISCUSS ANY INCONSISTENCIES PRIOR TO PROCURING AND INSTALLING LOW-VOLTAGE SYSTEMS.

KEYED NOTES

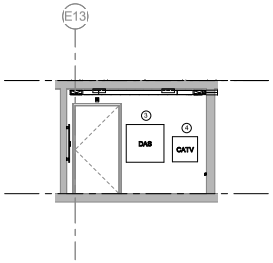
1. NOT USED.
2. 30"X30" WALL SPACE ALLOCATION FOR SECURITY SYSTEM IF NOT RACK MOUNTED. PREFERENCE IS RACK MOUNTED LOW-VOLTAGE SYSTEMS.
3. 30"X30" WALL SPACE ALLOCATION FOR DAS SYSTEM IF NOT RACK MOUNTED. PREFERENCE IS RACK MOUNTED LOW-VOLTAGE SYSTEMS.
4. 20"X30" WALL SPACE ALLOCATION FOR CATV SYSTEM IF NOT RACK MOUNTED. PREFERENCE IS RACK MOUNTED LOW-VOLTAGE SYSTEMS.
5. CABLE-SHOE ON EACH 4" CONDUIT SLEEVE FOR CABLING INTO CHASE.



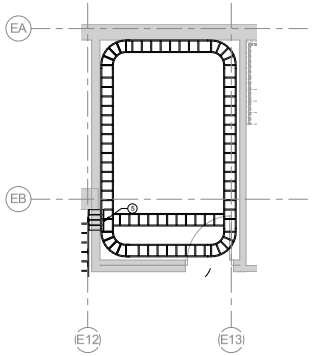
3 IDF ROOM - EAST WALL
SCALE: 1/4" = 1'-0" RE:1 /1-T-401



1 ENLARGED DATAT ROOM 002 TELECOM
SCALE: 1/4" = 1'-0" RE:1 /1-T-300



4 IDF ROOM - SOUTH WALL
SCALE: 1/4" = 1'-0" RE:1 /1-T-401



2 ENLARGED DATA ROOM 002 TELECOM LADDER RACK
SCALE: 1/4" = 1'-0" RE:1 /1-T-401

BUILDING IS FULLY SPRINKLERED

Revisions: Date

Professional Engineer (Electrical) REGISTRATION NO. 10598 WYOMING

CONSULTANTS:

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: TECHNOLOGY ENLARGED PLANS

Project Name: EXPAND DOMICILIARY BUILDING 64

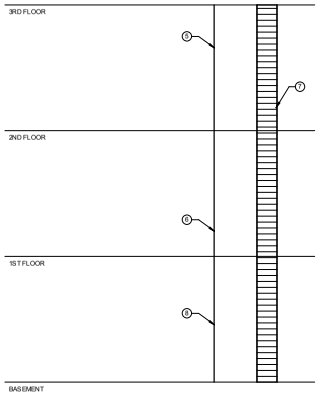
Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number: 64 | Checked: MTB | Drawn: SOH

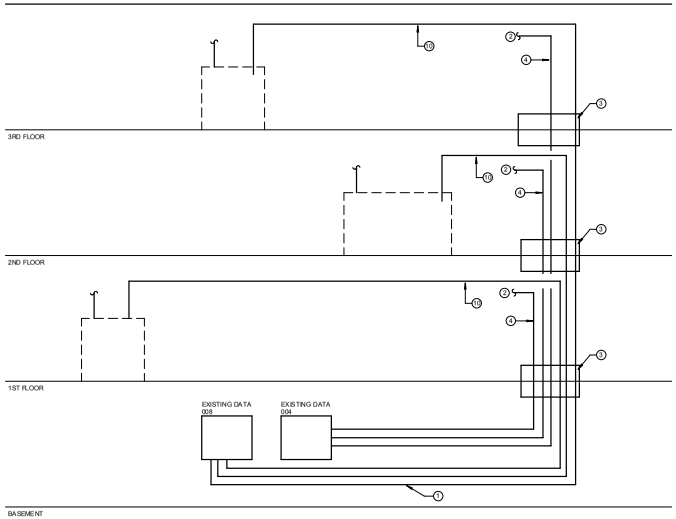
Project Number: 666-309
Date: 13 MARCH 2015
Drawing Number: 1-T-401
Dwg. of

Office of Construction and Facilities Management

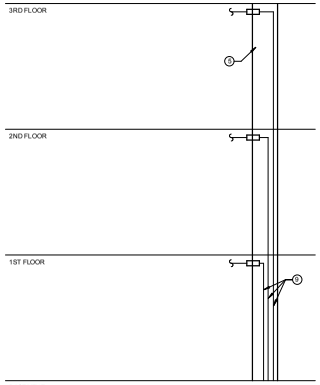
VA FORM 08-6231



2 TECHNOLOGY CABLE CHASE - VERTICAL LADDER
SCALE: 12" = 1'-0"



1 TECHNOLOGY RISER DIAGRAM
SCALE: 12" = 1'-0"



3 TECHNOLOGY CABLE LAYOUT
SCALE: 12" = 1'-0"

GENERAL NOTES

1. GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL LOW-VOLTAGE SYSTEMS AS OUTLINED ON DRAWINGS AND SPECIFICATIONS. DIVISION 27 AND PORTIONS OF DIVISION 28 SPECIFICATIONS DIRECT THE TECHNOLOGY AND LOW-VOLTAGE SCOPE OF WORK.

2. DIVISION 26 CONTRACTOR TO PROCURE AND INSTALL ALL NECESSARY LOW-VOLTAGE PATHWAYS INCLUDING CONDUIT, BACK-BOX, PATHWAYS FROM CORRIDORS TO ROOMS, J-HOOKS AND CABLE TRAY. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ALL NECESSARY MANUFACTURED SLEEVES FOR FIRE-RATED WALL PENETRATIONS.

3. GENERAL CONTRACTOR TO COORDINATE ALL ELEVATED LOW-VOLTAGE DEVICES WITH ARCHITECTURAL BACKGROUNDS FOR EXACT MOUNTING REQUIREMENTS.

4. GENERAL CONTRACTOR SHALL CONTACT SMITH SECKMAN REID, INC. TO DISCUSS ANY INCONSISTENCIES PRIOR TO PROCURING AND INSTALLING LOW-VOLTAGE SYSTEMS.

KEYED NOTES

1. PROVIDE TIE CABLE FOR COPPER, 300 PAIR CABLE EXTEND TO MDF.
2. PROVIDE TWELVE (12) STRANDS SM, TWELVE (12) STRANDS MM FIBER FOR NEW SWITCHES.
3. COLUMN CHASE.
4. ALL CAT6 HORIZONTAL WILL ORIGINATE FROM EXISTING DEMARC ROOM AND HOME-RUN TO EACH IT ROOM. PLENUM RISER RATED CAT6 REQUIRED AND NO SPLICE-POINTS WILL BE ACCEPTED.
5. CHASE FROM BASEMENT TO 3RD FLOOR.
6. REMOVE FRONT SIDE CHASE DURING RENOVATION.
7. INSTALL VERTICAL LADDER RACK AS SUPPORT FOR HORIZONTAL RISER CABLE FROM BASEMENT TO 3RD FLOOR.
8. REINSTALL FRONT SIDE CHASE INSTALLING A 3'x3' ACCESS PANEL ON EACH FLOOR TO ACCESS CABLES FOR FUTURE INSTALLS.
9. CABLE RISES UP EAST WALL OF CHASE ATTACHED TO VERTICAL LADDER RACK, THEN ENTERING FLOOR VIA CABLE-SHOE AND SLEEVES.
10. PROVIDE (36) STRANDS SM, (36) STRANDS MM FIBER FOR NEW SWITCHES.

BUILDING IS FULLY SPRINKLERED

Revisions: | Date

Professional Engineer (Electrical) REGISTERED MICHAEL T. BOCKELMAN 10598 WYOMING Date: 3-13-15

CONSULTANTS:

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Approved: Chief of MH	Approved: Chief of FMS
Date:	Date:
Approved: Director	Approved: VA Energy Engineer
Date:	Date:

Drawing Title: TECHNOLOGY RISER DIAGRAM

Project Name: EXPAND DOMICILIARY BUILDING 64

Location: VAMC SHERIDAN WY 1898 FORT ROAD SHERIDAN, WY 82801

Building Number: 64 | Checked: MTB | Drawn: SOH

Project Number: 666-309
Date: 13 MARCH 2015
Drawing Number: 1-T-501
Dwg. of

Office of Construction and Facilities Management

VA FORM 08-6231