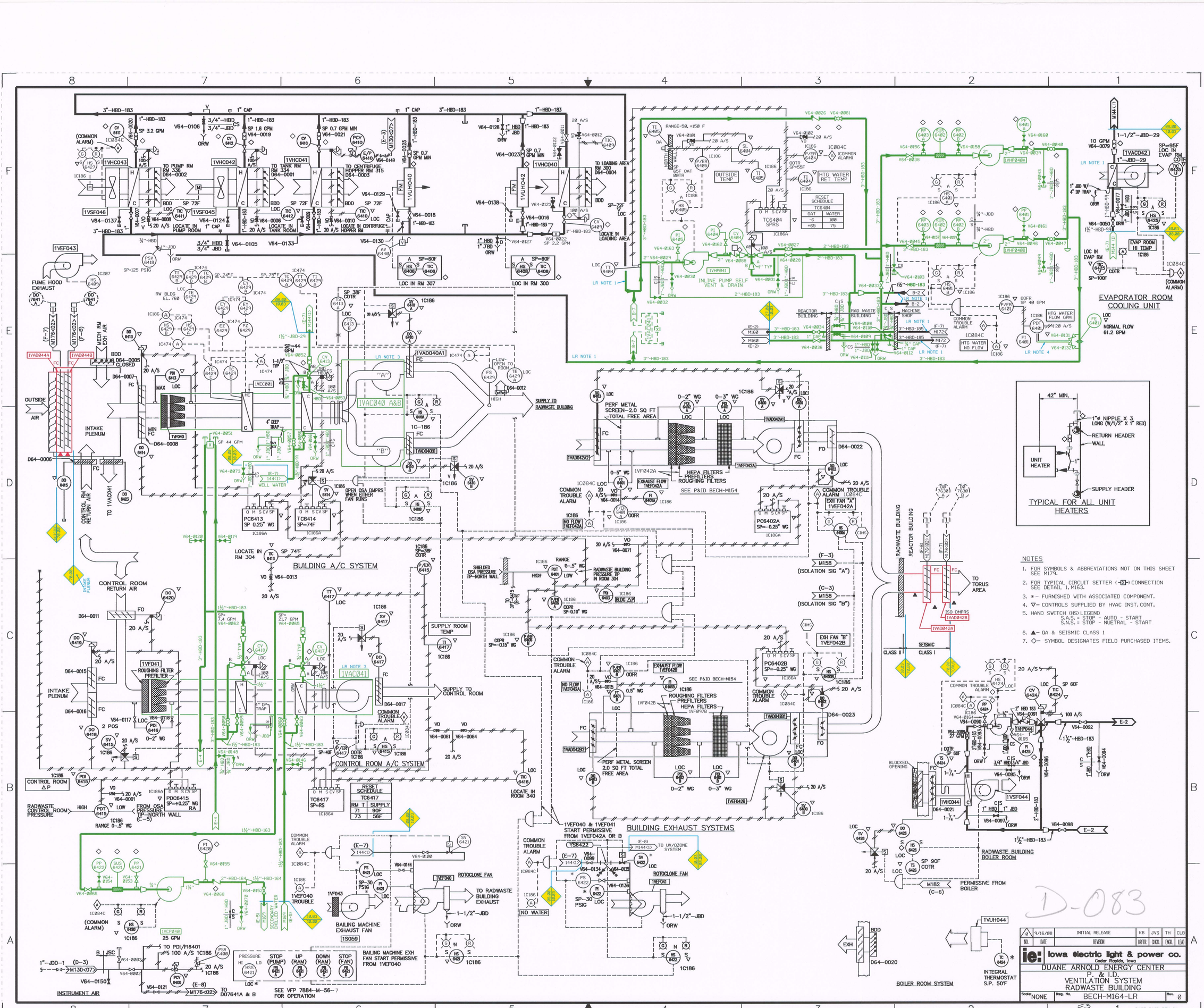
BUILDING A/C SYSTEM
CONTROL ROOM A/C SYSTEM
BUILDING EXHAUST SYSTEMS
EVAPORATOR ROOM COOLING UNIT
TYPICAL FOR ALL UNIT HEATERS
INLINE PUMP SELF VENT & DRAIN
OUTSIDE AIR
INTAKE PLENUM
MIN OA
MAX OA
MECH RM EXH AIR
FUME HOOD EXHAUST
CONTROL ROOM RETURN AIR
RW BLDG EL. 760
SUPPLY TO RADWASTE BUILDING
SUPPLY TO CONTROL ROOM
TO TORUS AREA
TO RADWASTE BUILDING EXHAUST
BAILING MACHINE EXHAUST FAN
ROTOCLONE FAN
PERF METAL SCREEN–2.0 SQ FT TOTAL FREE AREA
HEPA FILTERS PREFILTERS ROUGHING FILTERS
ROUGHING FILTERS PREFILTERS HEPA FILTERS
PERF METAL SCREEN 2.0 SQ FT TOTAL FREE AREA
1VAC040 A&B
1VAC041
1VAC042
1VHC040
1VHC041
1VHC042
1VHC043
1VHP040A
1VHP040B
1VHP041
1VHP044
1VEF040
1VEF041
1VEF042A
1VEF042B
1VEF043
1VAD040A1
1VAD040B1
1VAD042A1
1VAD042B1
1VAD042A2
1VAD042B2
1VAD044A
1VAD044B
1VEC001
1VSF045
1VSF046
1VHU040
1VHU042
1VHC044
1VSF044
1VUH044
OPEN OSA DMPRS WHEN EITHER FAN RUNS
SHIELDED OSA PRESSURE TIP–NORTH WALL
RADWASTE BUILDING PRESSURE TIP IN ROOM 304
COMMON TROUBLE ALARM
OUTSIDE TEMP
HTG WATER RET TEMP
HTG WATER FLOW GPM
HTG WATER NO FLOW
RESET SCHEDULE
TC6404
OAT | WATER
-6 | 100
+65 | 75
TC6417
RM T | SUPPLY
71 | 90F
73 | 56F
SEE P&ID BECH-M154
SEE VFP 7884–M–56–7 FOR OPERATION
LOCATE IN RM 304
LOCATE IN RM 307
LOCATE IN RM 300
LOCATE IN LOADING AREA
LOCATE IN TANK ROOM
LOCATE IN HOPPER RM
LOCATE IN CENTRIFUGE
LOCATE IN CONTROL ROOM
LOCATE IN ROOM 340
BOILER ROOM SYSTEM
INTEGRAL THERMOSTAT S.P. 50°F
PERMISSIVE FROM BOILER
RADWASTE BUILDING BOILER ROOM
EXH FAN "A" 1VEF042A
EXH FAN "B" 1VEF042B
EVAP ROOM HI TEMP
HS 6425
1C186
NOTES
1. FOR SYMBOLS & ABBREVIATIONS NOT ON THIS SHEET SEE M179.
2. FOR TYPICAL CIRCUIT SETTER (-⊠-) CONNECTION SEE DETAIL 1, M163.
3. *– FURNISHED WITH ASSOCIATED COMPONENT.
4. ▽– CONTROLS SUPPLIED BY HVAC INST. CONT.
5. HAND SWITCH (HS) LEGEND S.A.S. = STOP – AUTO – START S.N.S. = STOP – NUETRAL – START
6. ▲– QA & SEISMIC CLASS 1
7. ◇– SYMBOL DESIGNATES FIELD PURCHASED ITEMS.
LR NOTES:
1. ONLY COMPONENTS IN THE HEAT AND VENTILATION ROOM IN THE RADWASTE BUILDING ARE IN SCOPE FOR CRITERION (a)(2).
2. ALL EXPOSED DRAIN PIPING AND FUNNELS IN THE HEAT AND VENTILATION ROOM IN THE RADWASTE BUILDING ARE IN SCOPE.
3. ONLY THE HOUSINGS OF 1VAC040A & B AND 1VAC041 ARE IN SCOPE FOR CRITERION (a)(2), THE COOLING AND HEATING COILS ARE INTERNAL TO THE UNIT AND NOT IN SCOPE FOR CRITERION (a)(2).
4. THE TUBING IS ONLY IN SCOPE IN THE HVAC ROOM, ONCE THE TUBING LEAVES THE HVAC EQUIPMENT ROOM TO PANEL 1C186 IT IS NOT IN SCOPE.
LR LEGEND:
COMPONENTS IN SCOPE PER 10CFR54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 54.21
COMPONENTS NOT SUBJECT TO AMR
COMPONENTS IN SCOPE PER 10CFR54.4(a)(2) AND SUBJECT TO AMR PER 54.21
SYSTEM BOUNDARY INTERFACE
00.00 WELL WATER
10.03 PLANT VENTILATION
27.00 AUXILIARY HEATING SYSTEM BOILER
30.00 CONTROL BUILDING HVAC
70.00 STANDBY GAS TREATMENT
D-083
9/16/08 INITIAL RELEASE KB JVS TH CLB
NO. DATE REVISION DRFTR. CHKD. ENGR. LEAD
iowa electric light & power co.
Cedar Rapids, Iowa
DUANE ARNOLD ENERGY CENTER
P. & I.D.
VENTILATION SYSTEM
RADWASTE BUILDING
Scale NONE Dwg. No. BECH-M164-LR Rev. 0
BASE P&ID REV 34