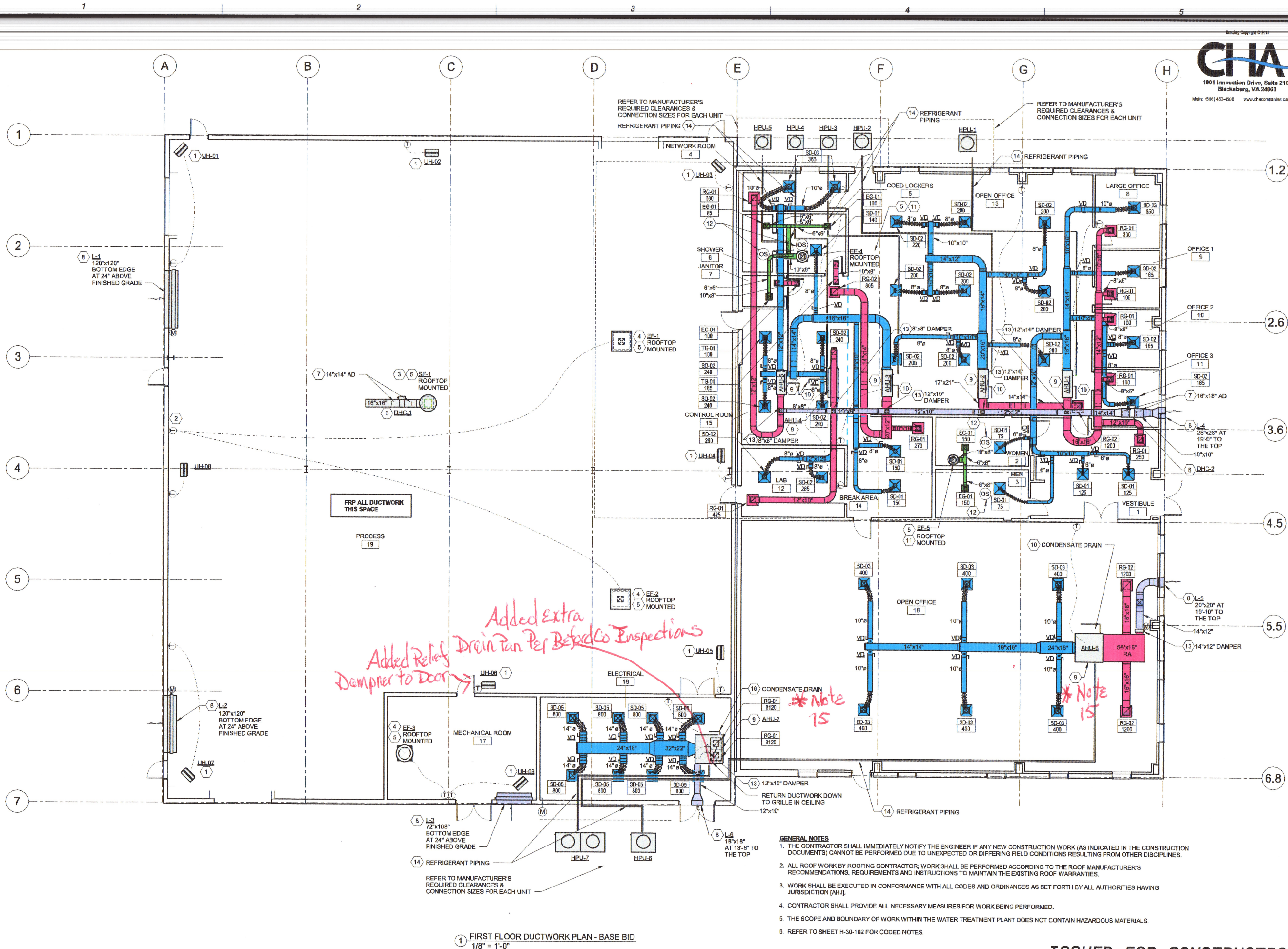






07090



CHA  
1901 Innovation Drive, Suite 2100  
Blacksburg, VA 24060  
Main: (540) 453-4500 www.chacompanies.com

NO.	BY	DATE	DESCRIPTION
0	CH		ISSUED FOR CONSTRUCTION
1	CH	12/29/15	REVISIONS AND RECORD OF ISSUE
2	CH		DATE
3	CH		DATE
4	CH		DATE
5	CH		DATE
6	CH		DATE
7	CH		DATE
8	CH		DATE
9	CH		DATE
10	CH		DATE
11	CH		DATE
12	CH		DATE
13	CH		DATE
14	CH		DATE
15	CH		DATE
16	CH		DATE
17	CH		DATE
18	CH		DATE
19	CH		DATE
20	CH		DATE
21	CH		DATE
22	CH		DATE
23	CH		DATE
24	CH		DATE
25	CH		DATE
26	CH		DATE
27	CH		DATE
28	CH		DATE
29	CH		DATE
30	CH		DATE
31	CH		DATE
32	CH		DATE
33	CH		DATE
34	CH		DATE
35	CH		DATE
36	CH		DATE
37	CH		DATE
38	CH		DATE
39	CH		DATE
40	CH		DATE
41	CH		DATE
42	CH		DATE
43	CH		DATE
44	CH		DATE
45	CH		DATE
46	CH		DATE
47	CH		DATE
48	CH		DATE
49	CH		DATE
50	CH		DATE
51	CH		DATE
52	CH		DATE
53	CH		DATE
54	CH		DATE
55	CH		DATE
56	CH		DATE
57	CH		DATE
58	CH		DATE
59	CH		DATE
60	CH		DATE
61	CH		DATE
62	CH		DATE
63	CH		DATE
64	CH		DATE
65	CH		DATE
66	CH		DATE
67	CH		DATE
68	CH		DATE
69	CH		DATE
70	CH		DATE
71	CH		DATE
72	CH		DATE
73	CH		DATE
74	CH		DATE
75	CH		DATE
76	CH		DATE
77	CH		DATE
78	CH		DATE
79	CH		DATE
80	CH		DATE
81	CH		DATE
82	CH		DATE
83	CH		DATE
84	CH		DATE
85	CH		DATE
86	CH		DATE
87	CH		DATE
88	CH		DATE
89	CH		DATE
90	CH		DATE
91	CH		DATE
92	CH		DATE
93	CH		DATE
94	CH		DATE
95	CH		DATE
96	CH		DATE
97	CH		DATE
98	CH		DATE
99	CH		DATE
100	CH		DATE



**BLACK & VEATCH**  
Building a world of difference  
Black & Veatch Corporation  
Kansas City, Missouri

**BEDFORD REGIONAL WATER AUTHORITY**  
SMITH MOUNTAIN LAKE WTP & LAKES TO  
FOREST WATER LINE EXTENSION  
HVAC - FIRST FLOOR DUCTWORK PLAN -  
BASE BID

DESIGNED: NS  
CHECKED: HZ, POL  
APPROVED: TSM  
DATE: 12/15/2014

0 1/2 1  
IF THIS BAR DOES NOT  
MEASURE 1" THEN DRAWING IS  
NOT TO FULL SCALE

CHA PROJECT NO.  
27872

**H-30-101**  
SHEET  
2 OF 8

- GENERAL NOTES**
1. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IF ANY NEW CONSTRUCTION WORK (AS INDICATED IN THE CONSTRUCTION DOCUMENTS) CANNOT BE PERFORMED DUE TO UNEXPECTED OR DIFFERING FIELD CONDITIONS RESULTING FROM OTHER DISCIPLINES.
  2. ALL ROOF WORK BY ROOFING CONTRACTOR; WORK SHALL BE PERFORMED ACCORDING TO THE ROOF MANUFACTURER'S RECOMMENDATIONS, REQUIREMENTS AND INSTRUCTIONS TO MAINTAIN THE EXISTING ROOF WARRANTIES.
  3. WORK SHALL BE EXECUTED IN CONFORMANCE WITH ALL CODES AND ORDINANCES AS SET FORTH BY ALL AUTHORITIES HAVING JURISDICTION (AHJ).
  4. CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES FOR WORK BEING PERFORMED.
  5. THE SCOPE AND BOUNDARY OF WORK WITHIN THE WATER TREATMENT PLANT DOES NOT CONTAIN HAZARDOUS MATERIALS.
  6. REFER TO SHEET H-30-102 FOR CODED NOTES.

ISSUED FOR CONSTRUCTION



Revised

**H-30-101 CODED NOTES**

- 1 ELECTRIC UNIT HEATER MOUNTED FROM CEILING WITH MANUFACTURER'S WALL-MOUNTED THERMOSTAT. PROVIDE INTEGRAL ON/OFF/FAN SWITCH, AND MANUFACTURER'S BRACKETS AND HARDWARE FOR CEILING MOUNTING. FIELD LOCATE AS NECESSARY MAINTAINING ACCESS CLEARANCES ON ALL SIDES AND COORDINATE WITH PROCESS PIPING. LOCATE WALL-MOUNTED THERMOSTAT AT 52" TO 54" ABOVE FINISHED FLOOR. PROVIDE THERMOSTAT WITH MANUFACTURER'S THERMAL BREAK ACCESSORY.
- 2 PROVIDE WALL MOUNTED THERMOSTAT FOR FAN START/STOP CONTROL. COORDINATE THERMOSTAT VOLTAGE WITH FAN POWER VOLTAGE. PROVIDE CONTROLS TRANSFORMER AS NECESSARY TO COORDINATE DAMPER MOTOR VOLTAGE WITH FAN MOTOR VOLTAGE. INTENT IS FOR FANS TO BE MANUALLY STARTED DURING COOLING SEASON, AND MANUALLY TURNED OFF DURING HEATING SEASON. PROVIDE THERMOSTAT WITH MANUFACTURER'S THERMAL BREAK ACCESSORY.
- 3 ROOFTOP CURB-MOUNTED DOME MINIMUM VENTILATION SUPPLY FAN SF-1 ON FACILITY ROOFTOP WITH 18 5"x18 5" ROOF OPENING. PROVIDE WITH FACTORY MOUNTED INTEGRAL MOTORIZED ISOLATION DAMPER AND FACTORY MOUNTED AND WIRED NEMA-4X INTEGRAL DISCONNECT SWITCH. PROVIDE CORROSION RESISTANT COATING AND ALUMINUM CONSTRUCTION FOR FAN HOUSING, WHEEL AND ISOLATION DAMPER. PROVIDE STAINLESS STEEL MESH INSECT SCREEN. SF-1 FAN SHALL BE HARDWIRE INTERLOCKED WITH EXHAUST FANS EF-1 AND EF-2 WHENEVER THOSE EXHAUST FANS ARE STOPPED OR STOPPED. INTENT IS FOR SF-1 TO PROVIDE MINIMUM REQUIRED VENTILATION.
- 4 ROOFTOP CURB-MOUNTED CENTRIFUGAL HOODED EXHAUST FAN ON FACILITY ROOFTOP WITH 56 5"x56.5" ROOF OPENING. PROVIDE WITH FACTORY MOUNTED INTEGRAL MOTORIZED ISOLATION DAMPER AND FACTORY MOUNTED AND WIRED NEMA-4 INTEGRAL DISCONNECT SWITCH. PROVIDE CORROSION RESISTANT COATING AND ALUMINUM CONSTRUCTION FOR FAN HOUSING, WHEEL AND ISOLATION DAMPER. PROVIDE STAINLESS STEEL MESH INSECT SCREEN.
- 5 PROVIDE FAN MANUFACTURER'S FACTORY FABRICATED ROOF CURB. MINIMUM 24" TALL. COORDINATE FRAMING AND STEEL REQUIREMENTS WITH STRUCTURAL AND PRE-ENGINEERED METAL BUILDING FABRICATION.
- 6 DUCT MOUNTED ELECTRIC HEATING COIL; MAINTAIN ALL REQUIRED ACCESS AND ELECTRICAL CLEARANCES ON ALL SIDES. COIL SIZED FOR FREEZE PROTECTION AT 55°F SETPOINT. PROVIDE DUCT MOUNTED THERMOSTAT MADE BY DUCT HEATING COIL MANUFACTURER; THERMOSTAT SHALL BE LINE VOLTAGE, OR PROVIDE CONTROL TRANSFORMER AS NECESSARY.
- 7 PROVIDE ACCESS DOORS ON BOTH SIDES OF INLINE AND DUCT MOUNTED ELECTRIC HEATING COIL.
- 8 PROVIDE OUTSIDE AIR INTAKE COMBINATION LOUVER/DAMPER WITH MOTORIZED ACTUATOR. COORDINATE WALL OPENING WITH FINAL LOUVER SELECTION, AND WITH BUILDING STRUCTURAL MEMBERS AND ELEMENTS. FOR LOUVERS THAT ARE DUCTED, COORDINATE FINAL ELEVATION WITH DUCT SYSTEMS ON INSIDE OF BUILDING. PROVIDE SHEET METAL PLENUM THRU WALL OPENING; SLOPE BOTTOM TO EXTERIOR FOR DRAINAGE. PROVIDE CORROSION RESISTANT COATING AND ALUMINUM CONSTRUCTION FOR FRAME AND DAMPER BLADES. PROVIDE STAINLESS STEEL MESH INSECT SCREEN FOR L-1 AND L-2. PROVIDE ALUMINUM MESH INSECT SCREEN FOR L-3, L-4, L-5, AND L-6.
- 9 SUSPEND AIR HANDLING UNIT FROM BUILDING STRUCTURE; MAINTAIN ALL REQUIRED ACCESS CLEARANCES (10' - ELECTRICAL, FILTER PULL, ETC.) ABOVE, BELOW, AND AROUND UNIT.
- 10 ROUTE AND SLOPE CONDENSATE DRAIN LINE TO NEAREST FLOOR DRAIN OR TRENCH DRAIN. REFER TO PLUMBING PLAN DRAWINGS FOR DRAIN LOCATIONS.
- 11 ROOFTOP CURB-MOUNTED CENTRIFUGAL DOWNBLAST EXHAUST FAN ON FACILITY ROOFTOP WITH 14 5"x14 5" ROOF OPENING FOR EF-4, AND 12 5"x12 5" ROOF OPENING FOR EF-5. PROVIDE WITH FACTORY MOUNTED INTEGRAL MOTORIZED ISOLATION DAMPER AND FACTORY MOUNTED AND WIRED NEMA-4X INTEGRAL DISCONNECT SWITCH. PROVIDE CORROSION RESISTANT COATING AND ALUMINUM CONSTRUCTION FOR FAN HOUSING, WHEEL AND ISOLATION DAMPER. PROVIDE ALUMINUM MESH INSECT SCREEN. CONNECT EXHAUST AIR DUCT TO EXHAUST FAN AT UNDERSIDE OF ROOFTOP WITH FLEX; PROVIDE 18"x18" ACCESS DOOR IN DUCTWORK.
- 12 PROVIDE OCCUPANCY SENSOR IN TOILETS CEILINGS TO START EXHAUST FAN WHENEVER THEY ARE OCCUPIED; PROVIDE TIME DELAY RELAY TO ALLOW EXHAUST FAN TO CONTINUE TO OPERATE AFTER THERE IS NO OCCUPANCY TO PURGE SPACES.
- 13 PROVIDE MOTORIZED DAMPER IN OUTSIDE AIR DUCT DOWN AND CONNECT TO AIR HANDLER RETURN DUCT.
- 14 ROUTE SPLIT SYSTEM REFRIGERANT LINES TO HEAT PUMP UNITS OUTSIDE ON GRADE. REFRIGERANT LINES SHALL BE SIZED PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. PROVIDE OUTDOOR CONCRETE HOUSEKEEPING PAD UNDERNEATH CONDENSING UNIT. REFER TO DETAIL.

15. DUCT SMOKE DETECTOR SHALL BE FURNISHED BY ELECTRICAL CONTRACTOR FOR INSTALLATION  
A. CONFIGURATION AND INPUT TO FIRE ALARM SYSTEM BY ELECTRIC CONTRACTOR  
B. INPUT TO BAS BY CONTROLS CONTRACTOR  
C. DUCT SMOKE DETECTORS INSTALLED IN SUPPLY AIR AND IN RETURN AIR FOR AHU-6  
D. DUCT SMOKE DETECTOR INSTALLED IN SUPPLY AIR OF ~~6~~ AHU-7.  
A. DUCT TAKE-OFFS SHALL BE 24 INCHES AWAY FROM UNIT CONNECTION TO ALLOW FOR INSTALLATION  
E. UPON DETECTION OF PRODUCTS OF COMBUSTION, FIRE ALARM SYSTEM SHALL STOP THE ASSOCIATED AIR HANDLING UNIT
- ISSUED FOR CONSTRUCTION**

DESIGNED: NS DATE: 12/15/2014		ISSUED FOR CONSTRUCTION NO. BY: CHA APP: 0	
CHECKED: TSW DATE: 12/15/2014		REVISIONS AND RECORD OF ISSUE	
APPROVED: Approver		XREF1: XREF2: XREF3: XREF4:	
DATE: 12/15/2014		SAVED: 11/4/2016 10:54:15 AM PLOTTED: USER:	
CHA PROJECT NO. 27872		DWS VER:	
H-30-102 SHEET 3 OF 8			

BLACK & VEATCH  
Building a world of difference  
Black & Veatch Corporation  
Kansas City, Missouri

BEDFORD REGIONAL WATER AUTHORITY  
SMITH MOUNTAIN LAKE WTP & LAKES TO  
FOREST WATER LINE EXTENSION

HVAC - CODED NOTES



SEE REVISED

**H-30-101 CODED NOTES**

1. ELECTRIC UNIT HEATER MOUNTED FROM CEILING WITH MANUFACTURER'S WALL-MOUNTED THERMOSTAT. PROVIDE INTEGRAL ON/OFF/FAN SWITCH, AND MANUFACTURER'S BRACKETS AND HARDWARE FOR CEILING MOUNTING. FIELD LOCATE AS NECESSARY MAINTAINING ACCESS CLEARANCES ON ALL SIDES AND COORDINATE WITH PROCESS PIPING. LOCATE WALL-MOUNTED THERMOSTAT AT 52" TO 54" ABOVE FINISHED FLOOR. PROVIDE THERMOSTAT WITH MANUFACTURER'S THERMAL BREAK ACCESSORY.
2. PROVIDE WALL MOUNTED THERMOSTAT FOR FAN START/STOP CONTROL. COORDINATE THERMOSTAT VOLTAGE WITH FAN POWER VOLTAGE. PROVIDE CONTROLS TRANSFORMER AS NECESSARY TO COORDINATE DAMPER MOTOR VOLTAGE WITH FAN MOTOR VOLTAGE. INTENT IS FOR FANS TO BE MANUALLY STARTED DURING COOLING SEASON, AND MANUALLY TURNED OFF DURING HEATING SEASON. PROVIDE THERMOSTAT WITH MANUFACTURER'S THERMAL BREAK ACCESSORY.
3. ROOFTOP, CURB-MOUNTED DOME MINIMUM VENTILATION SUPPLY FAN SF-1 ON FACILITY ROOFTOP WITH 18.5"x18.5" ROOF OPENING. PROVIDE WITH FACTORY MOUNTED INTEGRAL MOTORIZED ISOLATION DAMPER AND FACTORY MOUNTED AND WIRED NEMA-4X INTEGRAL DISCONNECT SWITCH. PROVIDE CORROSION RESISTANT COATING AND ALUMINUM CONSTRUCTION FOR FAN HOUSING, WHEEL AND ISOLATION DAMPER. PROVIDE STAINLESS STEEL MESH INSECT SCREEN. SF-1 FAN SHALL BE HARDWARE INTERLOCKED WITH EXHAUST FANS EF-1 AND EF-2 WHENEVER THOSE EXHAUST FANS ARE STOPPED OR STOPPED. INTENT IS FOR SF-1 TO PROVIDE MINIMUM REQUIRED VENTILATION.
4. ROOFTOP, CURB-MOUNTED CENTRIFUGAL HOODED EXHAUST FAN ON FACILITY ROOFTOP WITH 56.5"x56.5" ROOF OPENING. PROVIDE WITH FACTORY MOUNTED INTEGRAL MOTORIZED ISOLATION DAMPER AND FACTORY MOUNTED AND WIRED NEMA-4 INTEGRAL DISCONNECT SWITCH. PROVIDE CORROSION RESISTANT COATING AND ALUMINUM CONSTRUCTION FOR FAN HOUSING, WHEEL AND ISOLATION DAMPER. PROVIDE STAINLESS STEEL MESH INSECT SCREEN.
5. PROVIDE FAN MANUFACTURER'S FACTORY FABRICATED ROOF CURB, MINIMUM 24" TALL. COORDINATE FRAMING AND STEEL REQUIREMENTS WITH STRUCTURAL AND PRE-ENGINEERED METAL BUILDING FABRICATION.
6. DUCT MOUNTED ELECTRIC HEATING COIL; MAINTAIN ALL REQUIRED ACCESS AND ELECTRICAL CLEARANCES ON ALL SIDES. COIL SIZED FOR FREEZE PROTECTION AT 55°F SETPOINT. PROVIDE DUCT MOUNTED THERMOSTAT MADE BY DUCT HEATING COIL MANUFACTURER; THERMOSTAT SHALL BE LINE VOLTAGE, OR PROVIDE CONTROL TRANSFORMER AS NECESSARY.
7. PROVIDE ACCESS DOORS ON BOTH SIDES OF INLINE AND DUCT MOUNTED ELECTRIC HEATING COIL.
8. PROVIDE OUTSIDE AIR INTAKE COMBINATION LOUVER/DAMPER WITH MOTORIZED ACTUATOR. COORDINATE WALL OPENING WITH FINAL LOUVER SELECTION, AND WITH BUILDING STRUCTURAL MEMBERS AND ELEMENTS. FOR LOUVERS THAT ARE DUCTED, COORDINATE FINAL ELEVATION WITH DUCT SYSTEMS ON INSIDE OF BUILDING. PROVIDE SHEET METAL PLENUM THRU WALL OPENING; SLOPE BOTTOM TO EXTERIOR FOR DRAINAGE. PROVIDE CORROSION RESISTANT COATING AND ALUMINUM CONSTRUCTION FOR FRAME AND DAMPER BLADES. PROVIDE STAINLESS STEEL MESH INSECT SCREEN FOR L-1 AND L-2. PROVIDE ALUMINUM MESH INSECT SCREEN FOR L-3, L-4, L-5, AND L-6.
9. SUSPEND AIR HANDLING UNIT FROM BUILDING STRUCTURE; MAINTAIN ALL REQUIRED ACCESS CLEARANCES (i.e. - ELECTRICAL, FILTER PULL, ETC.) ABOVE, BELOW, AND AROUND UNIT.
10. ROUTE AND SLOPE CONDENSATE DRAIN LINE TO NEAREST FLOOR DRAIN OR TRENCH DRAIN. REFER TO PLUMBING PLAN DRAWINGS FOR DRAIN LOCATIONS.
11. ROOFTOP, CURB-MOUNTED CENTRIFUGAL DOWNBLAST EXHAUST FAN ON FACILITY ROOFTOP WITH 14.5"x14.5" ROOF OPENING FOR EF-4, AND 12.5"x12.5" ROOF OPENING FOR EF-5. PROVIDE WITH FACTORY MOUNTED INTEGRAL MOTORIZED ISOLATION DAMPER AND FACTORY MOUNTED AND WIRED NEMA-4X INTEGRAL DISCONNECT SWITCH. PROVIDE CORROSION RESISTANT COATING AND ALUMINUM CONSTRUCTION FOR FAN HOUSING, WHEEL AND ISOLATION DAMPER. PROVIDE ALUMINUM MESH INSECT SCREEN. CONNECT EXHAUST AIR DUCT TO EXHAUST FAN AT UNDERSIDE OF ROOFTOP WITH FLEX; PROVIDE 18"x18" ACCESS DOOR IN DUCTWORK.
12. PROVIDE OCCUPANCY SENSOR IN TOILETS CEILINGS TO START EXHAUST FAN WHENEVER THEY ARE OCCUPIED; PROVIDE TIME DELAY RELAY TO ALLOW EXHAUST FAN TO CONTINUE TO OPERATE AFTER THERE IS NO OCCUPANCY TO PURGE SPACES.
13. PROVIDE MOTORIZED DAMPER IN OUTSIDE AIR DUCT DOWN AND CONNECT TO AIR HANDLER RETURN DUCT.
14. ROUTE SPLIT SYSTEM REFRIGERANT LINES TO HEAT PUMP UNITS OUTSIDE ON GRADE. REFRIGERANT LINES SHALL BE SIZED PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. PROVIDE OUTDOOR CONCRETE HOUSEKEEPING PAD UNDERNEATH CONDENSING UNIT; REFER TO DETAIL.



**BLACK & VEATCH**  
Building a world of difference  
Black & Veatch Corporation  
Kansas City, Missouri

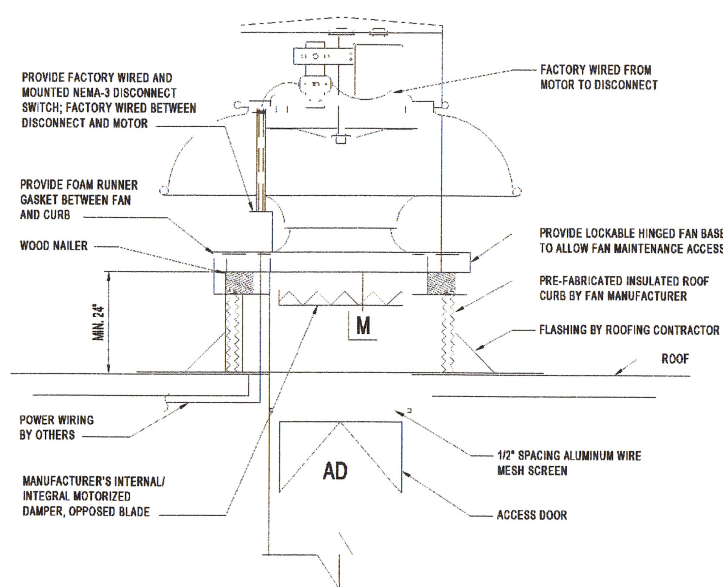
**BEDFORD REGIONAL WATER AUTHORITY**  
**SMITH MOUNTAIN LAKE WTP & LAKES TO**  
**FOREST WATER LINE EXTENSION**

**HVAC - CODED NOTES**

DESIGNED: NS
DETAILED: NZ
CHECKED: TSW
APPROVED: Approver
DATE: 12/15/2014
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE
CHA PROJECT NO. 27872
<b>H-30-102</b>
SHEET 3 OF 8

**ISSUED FOR CONSTRUCTION**

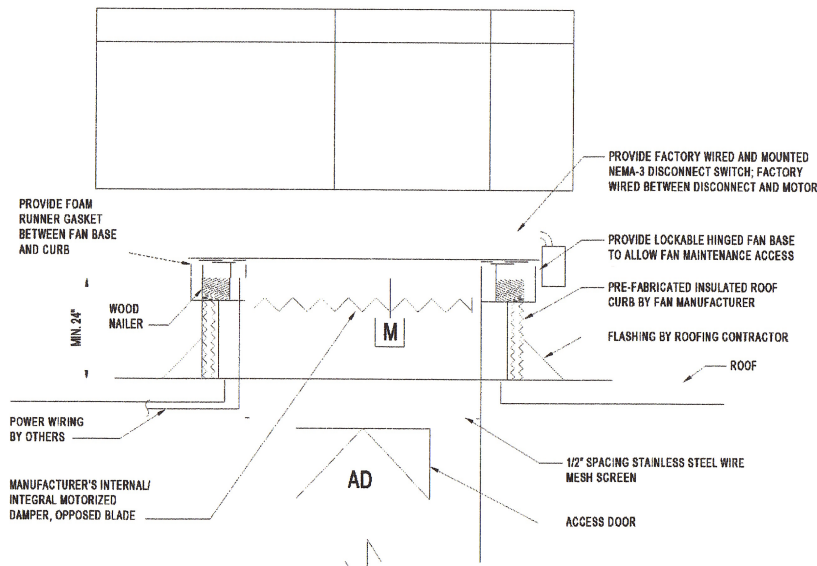




1 CENTRIFUGAL DOWNBLAST EXHAUST FAN DETAIL (EF-4, 5)  
NOT TO SCALE

NOTE:

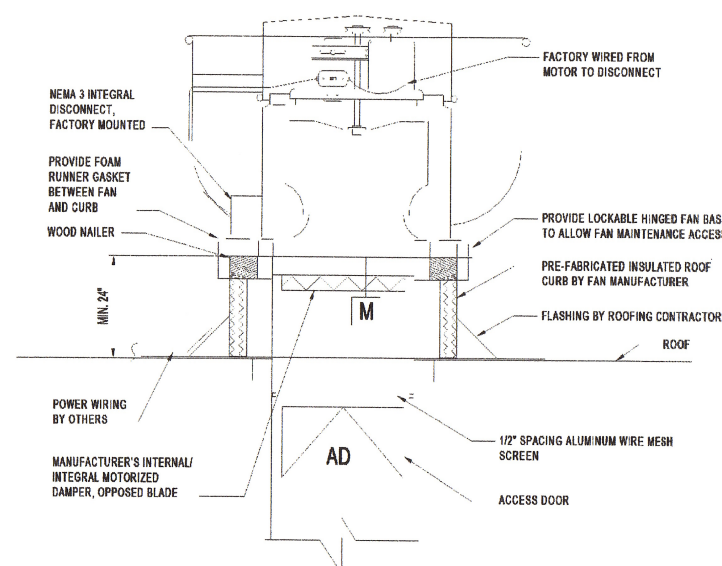
1. ROOF FLASHING SHALL BE BY ROOFING CONTRACTOR; COORDINATE FAN INSTALLATION TO MAINTAIN ALL ROOFING ASSEMBLY REQUIREMENTS AND WARRANTIES.



2 CENTRIFUGAL HOOD EXHAUST FAN DETAIL (EF-1 & 2)  
NOT TO SCALE

NOTE:

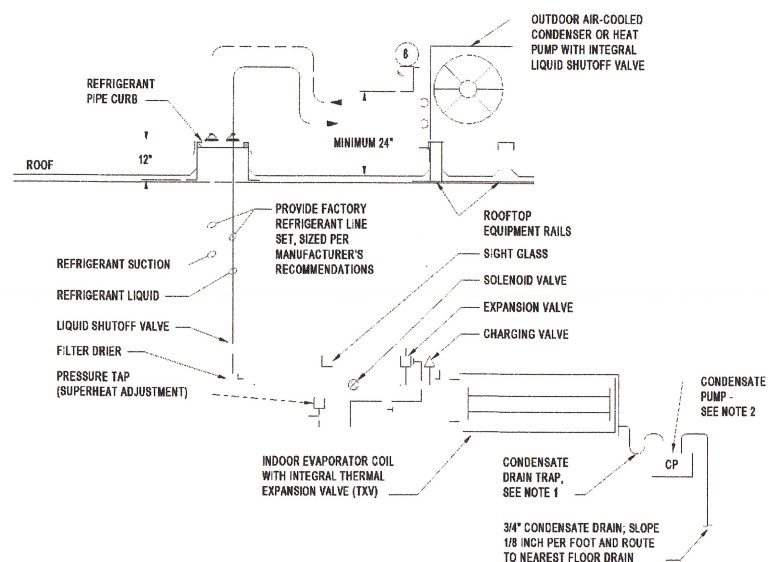
1. ROOF FLASHING SHALL BE BY ROOFING CONTRACTOR; COORDINATE FAN INSTALLATION TO MAINTAIN ALL ROOFING ASSEMBLY REQUIREMENTS AND WARRANTIES.



3 CENTRIFUGAL UPBLAST EXHAUST FAN DETAIL (EF-3)  
NOT TO SCALE

NOTE:

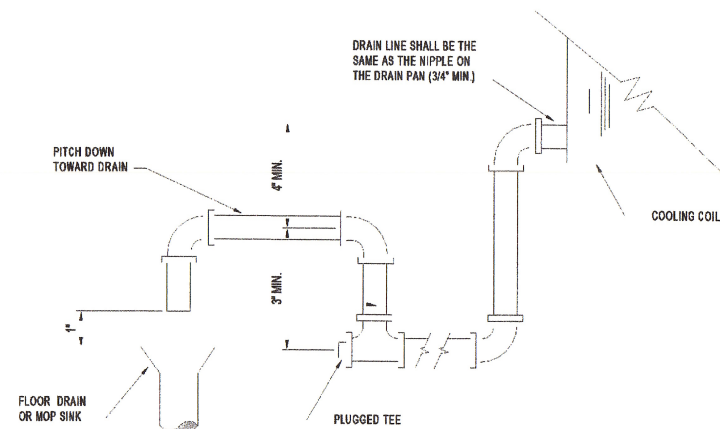
1. FAN AND ALL RELATED ACCESSORIES SHALL BE RATED FOR USE IN A CORROSIVE ENVIRONMENT, INCLUDING BUT NOT LIMITED TO EPOXY COATED FAN HOUSING, TFC MOTOR, STAINLESS STEEL FAN SHAFT, STAINLESS STEEL HARDWARE, NEMA 3 DISCONNECT AND EPOXY COATED CURB.
2. ROOF FLASHING SHALL BE BY ROOFING CONTRACTOR; COORDINATE FAN INSTALLATION TO MAINTAIN ALL ROOFING ASSEMBLY REQUIREMENTS AND WARRANTIES.



4 DX SPLIT SYSTEM CASSETTE SCHEMATIC (AHU-1, 2, 3, 4, 5, 6, 7)  
NOT TO SCALE

NOTES:

1. PROVIDE CONDENSATE DRAIN WITH TRAP HEIGHT PER MANUFACTURER'S INSTALLATION SPECIFICATIONS AND REQUIREMENTS.
2. LITTLE GIANT CONDENSATE PUMP MODEL VCMA-20UL, CAPABLE OF 48 GPH AT 10 FT WC; PROVIDE POWER CONNECTION FOR 1/30 HP AT 120V/1/60HZ.



5 COOLING COIL CONDENSATE TRAP DETAIL  
NOT TO SCALE

BLACK & VEATCH  
Building a world of difference  
Black & Veatch Corporation  
Kansas City, Missouri

BEDFORD REGIONAL WATER AUTHORITY  
SMITH MOUNTAIN LAKE WTP & LAKES TO  
FOREST WATER LINE EXTENSION

HVAC - DETAILS

DESIGNED: NS  
DETAILED: NZ, POL  
CHECKED: TSW  
APPROVED: Approver  
DATE: 12/15/2014

0 1/2 1  
IF THIS BAR DOES NOT  
MEASURE 1" THEN DRAWING IS  
NOT TO FULL SCALE

CHA PROJECT NO.  
27872

H-30-501  
SHEET  
4 OF 8

ISSUED FOR CONSTRUCTION