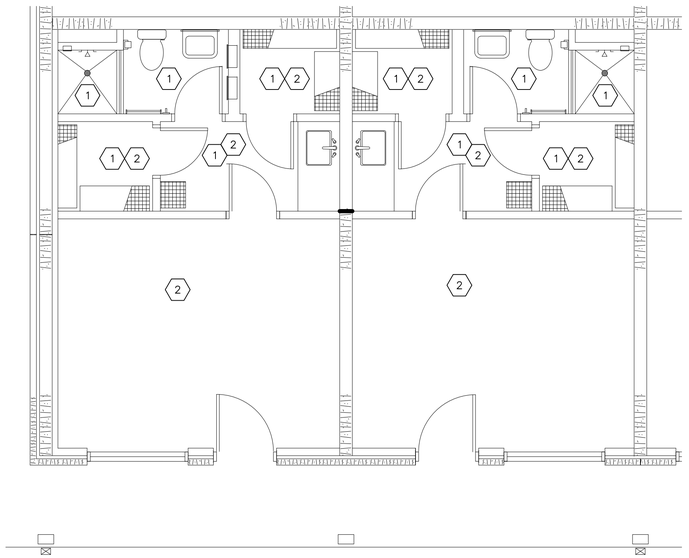
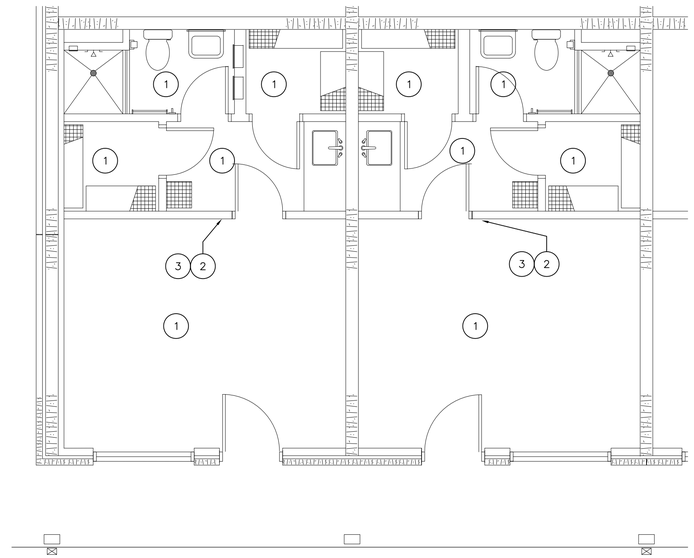
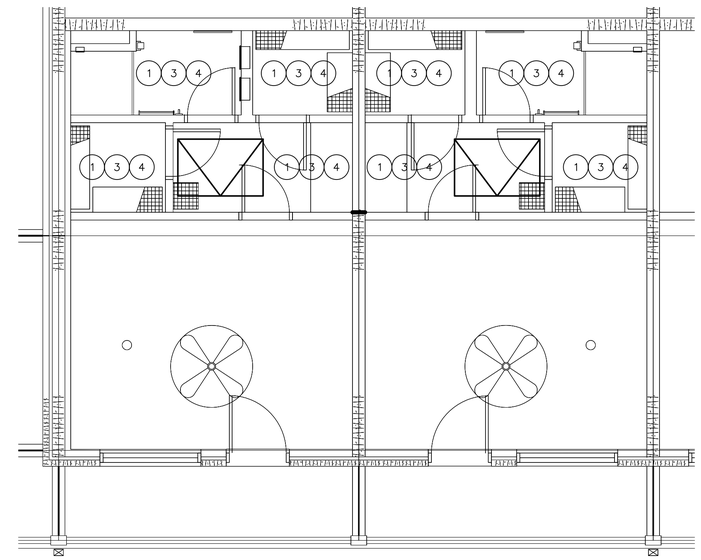


1 DEMOLITION FLOOR PLAN
Scale: 1/4" = 1'-0"



2 FLOOR PLAN
Scale: 1/4" = 1'-0"



3 CEILING PLAN
Scale: 1/4" = 1'-0"

DEMOLITION KEY NOTES

1. REMOVE EXISTING GYPSUM BOARD (GWB) CEILING AND METAL STUD FRAMING SYSTEM.
2. REMOVE EXISTING GWB WHERE MOLD IS PRESENT.

DEMOLITION GENERAL NOTES

D1. DRAIN FIRE PROTECTION PIPING, REMOVE EXISTING SPRINKLER HEADS AND PLUG. (4 CEILING HEADS PER UNIT)

D2. PROTECT EXISTING ADJACENT MATERIALS AND FINISHES WHICH ARE TO REMAIN IN PLACE.

D3. SEE MECHANICAL AND ELECTRICAL DEMOLITION DRAWINGS.

D4. SEE SPECIFICATION SECTION 02 41 00 "DEMOLITION" FOR ADDITIONAL REQUIREMENTS.

D5. STORE AND PROTECT EXISTING LIGHT FIXTURES FOR RE-USE IN NEW CEILINGS. (TWO RECESSED LIGHTS AND ONE SURFACE MOUNTED LIGHT PER UNIT). SEE ELECTRICAL DRAWINGS.

FLOOR PLAN KEY NOTES

1. PROTECT EXISTING FINISHES AND FIXTURES. REPLACE ANY FINISHES DAMAGED DURING DEMOLITION OR CONSTRUCTION.
2. PATCH GWB SOFFIT WHERE REGISTER HAS BEEN REMOVED.
3. REPLACE ⅝" GWB THAT HAS BEEN REMOVED FOR MOLD ABATEMENT. SURFACE OF GWB TO BE FLUSH WITH EXISTING.

FLOOR PLAN GENERAL NOTES

FP1. EXISTING CONSTRUCTION WITHIN EACH UNIT IS METAL FRAME GWB PARTITIONS. THE DEMISING WALLS BETWEEN UNITS ARE CMU.

FP2. CLEAN ALL CONCRETE MASONRY UNIT (CMU) PARTITIONS INSIDE ROOMS.

FP3. PAINT ENTIRE PARTITION THAT HAS BEEN PATCHED.

CEILING PLAN KEY NOTES

1. NEW ½" GWB CEILING ON CEILING SUSPENSION SYSTEM OR METAL STUD FRAMING AT HEIGHT OF EXISTING CEILING +/- 7'-4".
2. INSTALL NEW 36"x54" CEILING ACCESS PANEL. PROVIDE 6" MINIMUM CLEARANCE AT PIPE END. SEE MECHANICAL DRAWINGS. PROVIDE SUPPORTS FOR ACCESS PANEL FRAME.
3. PAINT CEILING WHITE.
4. INSTALL NEW QUICK RESPONSE STANDARD COVERAGE, RECESSED PENDANT SPRINKLER HEADS DESIGNED FOR LIGHT AND ORDINARY HAZARD OCCUPANCIES, K=5.6, ½" NPT.

CEILING PLAN GENERAL NOTES

C1. USE WATER RESISTANT GWB FOR CEILING IN BATHROOM AND SHOWER.

C2. STRUCTURE ABOVE IS PRECAST HOLLOW CORE SLAB. USE APPROVED METHODS FOR SUPPORTING NEW CEILINGS AND EQUIPMENT. ALL CEILING MOUNTED DEVICES (FAN COIL UNITS, PIPING, DUCTWORK, CONDUIT, ACCESS PANELS, FIXTURES, ETC.) SHALL BE ANCHORED INTO THE EXISTING HOLLOW CORE SLABS UTILIZING DROP IN ANCHORS SIZED AND SPACED APPROPRIATELY FOR LOADS. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING HOLLOW CORE PRESTRESS STRANDS FROM DAMAGE DURING ANCHOR INSTALLATION. NO POWDER ACTUATED FASTENERS WILL BE ALLOWED.

GENERAL NOTES

1. PAIR OF UNITS INDICATED ARE TYPICAL FOR EACH. tHERE ARE A TOTAL OF 90 UNITS IN BEQ F, AND 60 UNITS IN BOTHBEQ G AND H. SEE MECHANICAL DRAWINGS FOR OVERALL PLANS.
2. EXAMINE EXISTING CONDITIONS PRIOR TO STARTING WORK. IF CONDITIONS ARE NOT AS INDICATED ON DRAWINGS, NOTIFY THE CONTRACTING OFFICER.
3. EXISTING FLOOR AND WALL ASSEMBLIES BETWEEN UNITS ARE ONE-HOUR FIRE RATED. MAINTAIN THIS RESISTANCE BY PROVIDING FIRE STOPPING AT NEW AND EXISTING PENETRATIONS. SEE SPECIFICATION SECTION 07 84 00 "FIRESTOPPING".
4. PROVIDE AN ALLOWANCE FOR GWB REPLACEMENT DUE TO MOLD. INCLUDE ALL WORK ASSOCIATED WITH REMOVAL, REPLACEMENT, TAPE, FINISH, AND PAINT. FOR PURPOSES OF ALLOWANCE, ASSUME 64 SQUARE FEET PER UNIT.

SYM	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	24NOV09	HMK

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY --

SATISFACTORY TO DATE --

DES -- DRW -- CHK --

PROJECT MANAGER --

IPT TECH. BRANCH HEAD --

CHIEF ENG/ARCH (CORE) --

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH CENTRAL

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

TYPICAL UNIT PLAN

SCALE: SCALE

EPROJECT NO.: --

CONSTR. CONTR. NO. ####

NAVFAC DRAWING NO. ---

SHEET # OF #

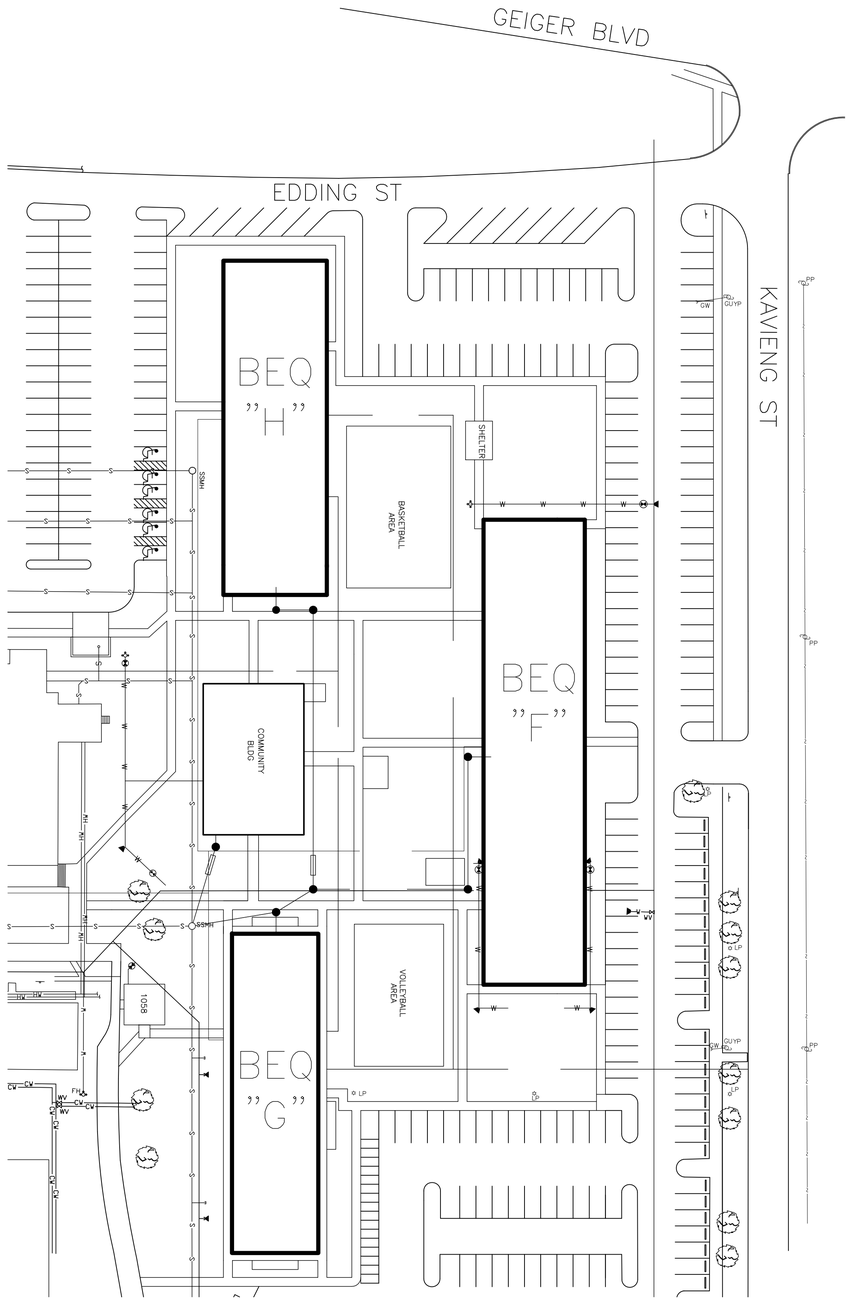
A101

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60169\HVAC study and report-870450\Working Technical Files\CAD Drawings\S60169-A-101.dwg LAYOUT NAME: 60169-A-101 PLOTTED: Tuesday, November 24, 2009 - 5:01pm USER: lisa.goulet

BEQ F, G & H HVAC RENOVATION

MARINE CORPS AIR STATION, BEAUFORT, SC



SITE LAYOUT

NOT TO SCALE

VICINITY MAP

NOT TO SCALE

INDEX OF DRAWINGS

SHEET NO.	REFERENCE NO.	NAVFAC DWG NO.	SHEET TITTLE
1	G100	XXXXXXXX	COVER SHEET, VICINITY MAP & DRAWING INDEX
2	A101	XXXXXXXX	TYPICAL UNIT PLAN
3	A102	XXXXXXXX	ATTIC PLANS – INSULATION
4	M001	XXXXXXXX	SYMBOLS, ABBREVIATIONS AND NOTES
5	MD101	XXXXXXXX	BLDG F – 1ST THRU 3RD FLOOR PLANS – MECH DEMO
6	MD102	XXXXXXXX	BLDGS G & H 1ST THRU 3RD FLOOR PLANS – MECH DEMO
7	MD103	XXXXXXXX	BLDG F – PARTIAL ATTIC PLAN – MECH DEMO
8	MD104	XXXXXXXX	BLDGS G & H – PARTIAL ATTIC PLAN – MECH DEMO
9	M101	XXXXXXXX	BLDG F – 1ST THRU 3RD FLOOR PLANS – DUCTWORK
10	M102	XXXXXXXX	BLDG F – 1ST THRU 3RD FLOOR PLANS – PIPING
11	M103	XXXXXXXX	NOT USED
12	M104	XXXXXXXX	BLDG F – PARTIAL ATTIC PLAN – PIPING
13	M105	XXXXXXXX	BLDG G & H – 1ST THRU 3RD FLOOR PLANS – DUCTWORK
14	M106	XXXXXXXX	BLDG G & H – 1ST THRU 3RD FLOOR PLANS – PIPING
15	M107	XXXXXXXX	BLDG G & H – PARTIAL ATTIC PLAN – PIPING
16	M301	XXXXXXXX	SECTIONS – MECHANICAL
17	M501	XXXXXXXX	MECHANICAL DETAILS
18	M601	XXXXXXXX	MECHANICAL SCHEDULES
19	M701	XXXXXXXX	TEMPERATURE CONTROL DRAWINGS
20	E000	XXXXXXXX	LEGENDS AND SCHEDULES
21	ED100	XXXXXXXX	BUILDING F – 1ST THRU 3RD FLOOR PLAN – POWER & LIGHTING – DEMO
22	ED101	XXXXXXXX	BUILDING F – ATTIC FLOOR PLAN – POWER – DEMO
23	ED102	XXXXXXXX	BUILDING G – 1ST THRU 3RD FLOOR PLAN – POWER & LIGHTING – DEMO
24	ED103	XXXXXXXX	BUILDING G – ATTIC FLOOR PLAN – POWER – DEMO
25	ED104	XXXXXXXX	BUILDING H – 1ST THRU 3RD FLOOR PLAN – POWER & LIGHTING – DEMO
26	ED105	XXXXXXXX	BUILDING H – ATTIC FLOOR PLAN – POWER – DEMO
27	E100	XXXXXXXX	BUILDING F – 1ST THRU 3RD FLOOR PLAN – POWER & LIGHTING
28	E101	XXXXXXXX	BUILDING F – ATTIC FLOOR PLAN – POWER
29	E102	XXXXXXXX	BUILDING G – 1ST THRU 3RD FLOOR PLAN – POWER & LIGHTING
30	E103	XXXXXXXX	BUILDING G – ATTIC FLOOR PLAN – POWER
31	E104	XXXXXXXX	BUILDING H – 1ST THRU 3RD FLOOR PLAN – POWER & LIGHTING
32	E105	XXXXXXXX	BUILDING H – ATTIC FLOOR PLAN – POWER
33	E300	XXXXXXXX	BUILDING F – MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE
34	E301	XXXXXXXX	BUILDING G – MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE
35	E302	XXXXXXXX	BUILDING H – MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE
36	E400	XXXXXXXX	PANELBOARD SCHEDULES
37	E401	XXXXXXXX	PANELBOARD SCHEDULES

PW 18918 -
PW 18954

SYM	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11-24-09	

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES | DRW | CHK

PROJECT MANAGER

IPT TECH. BRANCH HEAD

CHIEF ENG/ARCH (CORE)

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH CENTRAL

NAVAL FACILITIES ENGINEERING COMMAND
NAVAL AIR STATION JACKSONVILLE

MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

COVER SHEET

SCALE: NTS

EPROJECT NO.: --

CONSTR. CONTR. NO. ####

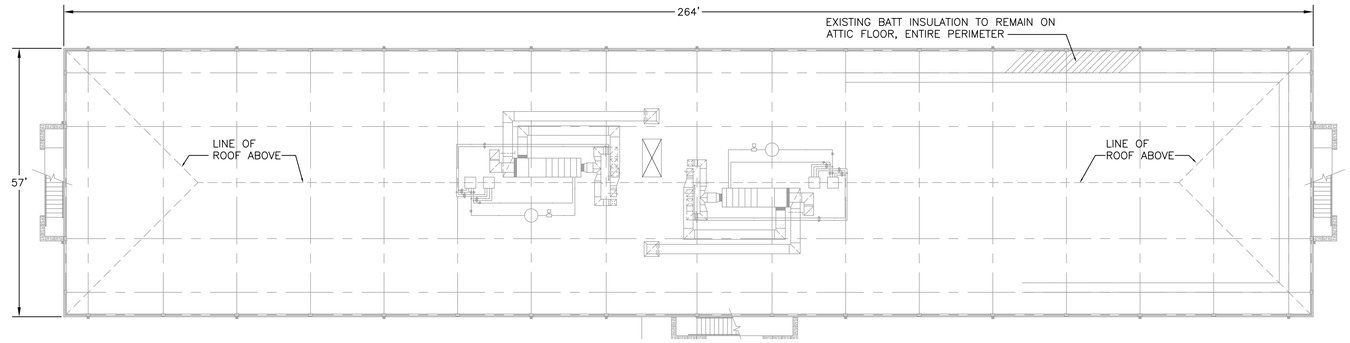
NAVFAC DRAWING NO. --

SHEET 1 OF 37

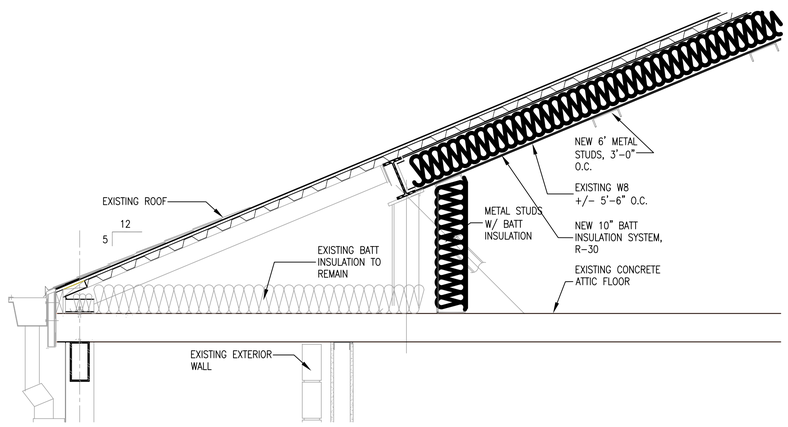
G100

DRAWFORM REVISION: 7 AUGUST 2009

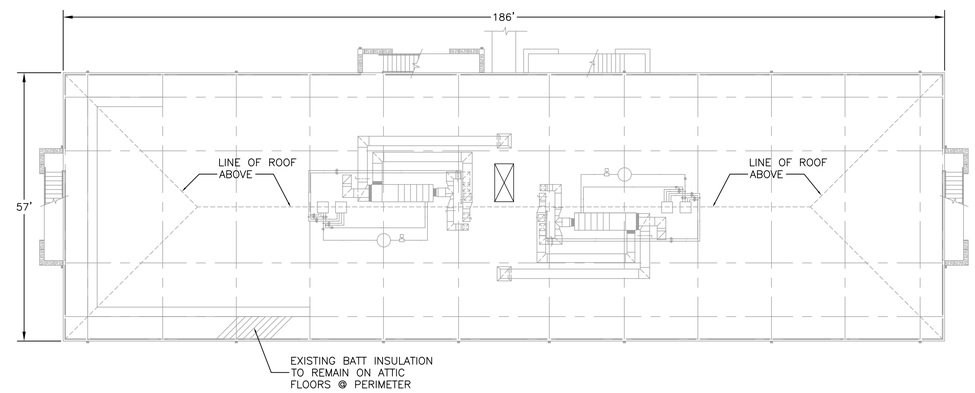
FILE NAME: P:\CIBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60169\HVAC study and report-870450\Working Technical Files\CAD Drawings\S\870450-G-00.dwg LAYOUT NAME: 870450-G-00 PLOTTED: Tuesday, November 24, 2009 - 1:33pm USER: lisa.goulet



1 BLDG F ATTIC PLAN – INSULATION
Scale: 1/16" = 1'-0"



3 INSULATION DETAIL
Scale: 3/4" = 1'-0"



2 BLDG G & H ATTIC PLAN – INSULATION
Scale: 1/16" = 1'-0"

NOTES:

1. REMOVE EXISTING BATT INSULATION ON ATTIC FLOOR. RETAIN INSULATION AT PERIMETER.
2. PROVIDE NEW BATT INSULATION AT UNDERSIDE OF ROOF DECK. UTILIZE METAL STUDS SPANNING BETWEEN EXISTING BEAMS TO SUPPORT INSULATION. TAPE AND SEAL ALL INSULATION SEAMS.

MSM	DESCRIPTION	DATE	APPR
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NAVFAC

PRELIMINARY NOT FOR CONSTRUCTION

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

--

SATISFACTORY TO DATE --

DES -- DRW -- CHK --

PROJECT MANAGER --

IPT TECH. BRANCH HEAD --

CHIEF ENG/ARCH (CORE) --

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH CENTRAL

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

ATTIC PLANS – INSULATION

SCALE: SCALE

EPROJECT NO.: --

CONSTR. CONTR. NO. ####

NAVFAC DRAWING NO. --

SHEET # OF #

A102

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\QBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60169\HVAC study and report-870450\Working Technical Files\CAD Drawings\5k870754-A-102.dwg LAYOUT NAME: 870754-A-102 PLOTTED: Tuesday, November 24, 2009 - 1:35pm USER: lisa.gaulet

HVAC SYMBOLS

- 24"X12" — DUCT SIZE: 1ST FIGURE IS WIDTH, 2ND IS DEPTH. DIMENSIONS ARE INSIDE CLEAR.
- M — FLANGED MOTOR OPERATED DAMPER (MOD)
- SQUARE ELBOW W/DOUBLE THICKNESS TURNING VANES
- RADIUS ELBOW
- MANUAL VOLUME DAMPER
- FIRE DAMPER
- CEILING SUPPLY OUTLET, SIZE & CAPACITY AS INDICATED
- CEILING RETURN OR EXHAUST, SIZE & CAPACITY AS INDICATED
- SIDEWALL SUPPLY OUTLET, SIZE & CAPACITY AS INDICATED
- SIDEWALL RETURN OR EXHAUST, SIZE & CAPACITY AS INDICATED
- ELBOW TURN UP (SUPPLY DUCT SHOWN)
- ELBOW TURN DOWN (SUPPLY DUCT SHOWN)
- DUCT TRANSITION
- CROSS SECTION SUPPLY DUCT
- CROSS SECTION RETURN DUCT OR GRILLE
- CROSS SECTION EXHAUST DUCT OR GRILLE
- Ø — ROUND DUCT
- UP — GRADUAL RISE IN DUCT ELEVATION
- DN — GRADUAL DROP IN DUCT ELEVATION
- T — THERMOSTAT OR TEMPERATURE SENSOR
- H — HUMIDISTAT OR HUMIDITY SENSOR
- CONNECT NEW-TO-EXISTING
- EXISTING-TO-DEMO (DIRECTION)
- HP 2-23 — EQUIPMENT TAG
- A 300 — DIFFUSER, GRILLE & REGISTER TAG
- C 360 — DIFFUSER, GRILLE & REGISTER TAG

PIPING SYMBOLS

- PROCESS OR UTILITY LINE
- FLEXIBLE HOSE
- UNION
- FLANGE
- B.F. — BLIND FLANGE
- PIPING BELOW SLAB
- REDUCER
- CHECK VALVE
- GATE VALVE
- BALL VALVE
- BUTTERFLY VALVE
- CIRCUIT SETTER
- S — SOLENOID VALVE

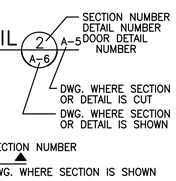
ABBREVIATIONS

ABV	ABOVE
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AP	ACCESS PANEL
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
BDD	BACKDRAFT DAMPER
BFV	BUTTERFLY VALVE
BHP	BRAKE HORSEPOWER
BLDG	BUILDING
BTUH	BRITISH THERMAL UNIT/HOUR
CFM	CUBIC FEET/MINUTE
CHW	CHILLED WATER
CHWS	CHILLED WATER SUPPLY
CHWR	CHILLED WATER RETURN
℄	CENTER LINE
COL	COLUMN
COND	CONDENSATE
CWS/CWR	COOLING WATER SUPPLY/ COOLING WATER RETURN
DB	DRY BULB
DIA	DIAMETER
DN	DOWN
DWG	DRAWING
DX	DIRECT EXPANSION
EA	EACH
EMCS/EMS	ENERGY MANAGEMENT CONTROL SYSTEM/ ENERGY MANAGEMENT SYSTEM
EF	EXHAUST FAN
EL	ELEVATION
ELEC	ELECTRIC
ER	EXHAUST REGISTER
EXH	EXHAUST
EXT	EXTINGUISHER OR EXTERNAL
°F	DEGREES FAHRENHEIT
FPM	FEET PER MINUTE
FT	FOOT/FEET
GA	GAUGE
GOV'T	GOVERNMENT
GPM	GALLONS PER MINUTE
HGT	HEIGHT
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER OR HEAT PUMP
HR	HOUR
HTG	HEATING
HVAC	HEATING,VENT.,& AIR COND.
HZ	HERTZ
IN	INCHES
KW	KILOWATT
KWH	KILOWATT HOUR
LB	POUND
MAU	MAKEUP AIR UNIT
MAX	MAXIMUM
MBH	BTU/HR X 1000
MECH	MECHANICAL
MIN	MINIMUM
MISC	MISCELLANEOUS
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OA	OUTSIDE AIR
P.D.	PRESSURE DROP
PG	PRESSURE GAUGE
PRESS	PRESSURE
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQ. IN. GUAGE
RA	RETURN AIR
RAG	RETURN AIR GRILLE
REQD	REQUIRED
RH	RELATIVE HUMIDITY
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
RR	RETURN REGISTER
SA	SUPPLY AIR/SERVICE AIR
SCHED	SCHEDULE
SENS	SENSIBLE
SF	SUPPLY FAN/SQUARE FOOT
SP	STATIC PRESSURE
SQ	SQUARE
SR	SUPPLY REGISTER
TA	THROW AWAY
TEMP	TEMPERATURE
TYP	TYPICAL
WB	WET BULB
WG	WATER GAUGE
W/	WITH
W/O	WITHOUT

NOTE:
THIS IS A MASTER MECHANICAL SYMBOLS AND ABBREVIATIONS SHEET. ALL ITEMS SHOWN MAY NOT BE APPLICABLE TO THIS PROJECT.

SECTION OR DETAIL

SCALE



1 — DENOTES REVISION FROM LAST ISSUE, ENCIRCLED ITEMS CHANGED. NUMBER IN TRIANGLE INDICATES REVISION NUMBER.

GENERAL NOTES

1. PROVIDE ALL APPROPRIATE LABOR, TOOLS, MATERIALS, FABRICATION, EQUIPMENT, SERVICES, TRAINING, SUPERVISION, AND INCIDENTALS AS REQUIRED TO REMOVE AND REPLACE EXISTING MECHANICAL (HVAC) EQUIPMENT AND SYSTEMS COMPLETE; AS INDICATED AND SPECIFIED ON THE PROJECT DRAWINGS.

2. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL APPROPRIATE AND NECESSARY PERMITS, FEES, TESTS, INSPECTIONS, AND LICENSES.

3. THE MECHANICAL WORK INCLUDES THE REMOVAL OF EXISTING WSHPs, CHILLED AND CONDENSER WATER PIPING, COOLING COIL CONDENSATE PIPING, AND DUCTWORK AS INDICATED ON THE PROJECT DRAWINGS. PROVIDE NEW WSHPs, PIPING, INSULATION, CONTROLS AND DUCTWORK AS INDICATED. PROVIDE MODIFICATIONS TO EXISTING DUCTWORK, GRILLES, REGISTERS, AND DIFFUSERS AS INDICATED ON THE PROJECT DRAWINGS. PROVIDE NEW AIR DISTRIBUTION DEVICES WHERE INDICATED ON THE PROJECT DRAWINGS.

4. PROVIDE TEST, ADJUSTMENT, AND BALANCE OF ALL EXISTING MAUs AND SYSTEMS WHICH WILL BE REUSED. PROVIDE TEST, ADJUSTMENT, AND BALANCE OF ALL NEW HVAC EQUIPMENT AND SYSTEMS.

5. PROVIDE ALL SUPPORTS, CONNECTIONS, CONTROLS, AND ACCESSORIES. PROVIDE ALL VALVES, PIPING, FITTINGS, SPECIALTIES, AND INSULATION FOR A COMPLETE AND OPERABLE SYSTEM.

6. PROVIDE ALL NECESSARY DUCT TRANSITIONS FROM THE INDICATED DUCT SIZE TO THE ACTUAL EQUIPMENT DUCT COLLAR SIZE. TRANSITIONS SHALL BE MADE WITH A MAXIMUM 30-DEGREE INCLUDED ANGLE. ALL EQUIPMENT INDICATED AS CONNECTING TO DUCTWORK SHALL BE SUPPLIED WITH A 2-INCH DUCT COLLAR.

7. DESIGN BASIS: THE MECHANICAL DRAWINGS AND PLANS ARE DIAGRAMMATIC AND ARE BASED ON THE MANUFACTURER AND MODEL NUMBER OF THE MECHANICAL EQUIPMENT AND DEVICES AS SCHEDULED. THE DRAWINGS ARE NOT INTENDED TO SHOW EVERY ITEM IN ITS EXACT LOCATION, THE EXACT DIMENSIONS, OR ALL DETAILS NECESSARY FOR THE EQUIPMENT INSTALLATION. THE CONTRACTOR SHALL VERIFY THE ACTUAL DIMENSIONS OF THE EQUIPMENT PROPOSED TO ENSURE THAT THE EQUIPMENT WILL FIT IN THE AVAILABLE SPACE.

8. THE LOCATION OF THE HVAC EQUIPMENT IS APPROXIMATE. ALL DRAWINGS AND LAYOUTS ARE DIAGRAMMATIC TO SHOW DESIGN INTENT, ONLY. THE CONTRACTOR SHALL COORDINATE ALL HVAC EQUIPMENT AND NEW DUCTWORK WITH ALL OTHER NEW WORK, WITH THE EXISTING CONDITIONS, AND WITH THE WORK OF OTHER TRADES. IF FIELD CONDITIONS DIFFER SIGNIFICANTLY FROM THOSE SHOWN ON THE DRAWINGS AND AFFECT THE MECHANICAL WORK, INFORM THE ENGINEER IMMEDIATELY BEFORE PROCEEDING WITH THE WORK INVOLVED.

9. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL MECHANICAL EQUIPMENT WITH ALL TRADES TO INSURE THAT EQUIPMENT CAN BE SERVICED AS REQUIRED BY THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

10. PRIOR TO ORDERING OR FABRICATING ANY NEW EQUIPMENT, DEVICES, DUCTWORK OR SYSTEMS, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES. EQUIPMENT LOCATIONS AND CONNECTION SIZES SHALL BE DERIVED FROM THE MANUFACTURER'S CERTIFIED DRAWINGS FOR THE SPECIFIC EQUIPMENT WHICH WILL BE SUPPLIED FOR THIS PROJECT. ANY DISCREPANCIES BETWEEN THE PROJECT DRAWINGS AND THE ACTUAL FIELD CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ENGINEER'S ATTENTION.

11. REPAIR THE DAMAGE TO THE EXISTING BUILDING SURFACES AND FINISHES, OR TO THE WORK OF OTHER TRADES CAUSED BY THE INSTALLATION OF THE MECHANICAL (HVAC) WORK. REPAIR THE DAMAGE TO FIREPROOFING CAUSED BY THE INSTALLATION OF THIS WORK.

12. UPON COMPLETION OF THE WORK EACH DAY, THE CONTRACTOR SHALL CLEAN THE PREMISES AND REMOVE AND DISPOSE OF ALL DEBRIS ASSOCIATED WITH HIS WORK. THE JOBSITE AND PROJECT WORK AREAS SHALL BE LEFT IN A CONDITION ACCEPTABLE TO THE OWNER.

13. ALL DUCTWORK SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS.

14. ALL DUCTWORK AND PIPING SHALL BE ROUTED IN A CONCEALED MANNER, ABOVE THE CEILINGS. ALL WORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN PIPING AND DUCTWORK SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

15. ALL SPACE TEMPERATURE AND HUMIDITY SENSORS SHALL BE MOUNTED AT 4'-0" ABOVE FINISHED FLOOR HEIGHT, UNLESS NOTED OTHERWISE ON THE PROJECT DRAWINGS.

16. THE CONTRACTOR SHALL MAINTAIN A RECORD SET OF DRAWINGS ON THE PROJECT SITE AND SHALL MARK THIS SET TO MAKE RECORD OF ALL CHANGES MADE IN THE INSTALLATION OF THE MECHANICAL SYSTEMS.

17. EQUIPMENT, DUCTWORK AND PIPING SYSTEMS SHALL BE SUPPORTED AND RESTRAINED PER SEISMIC ZONE 3 REQUIREMENTS.

18. FOR EXACT LOCATION OF CEILING MOUNTED AIR DIFFUSING EQUIPMENT, SEE ARCHITECTURAL CEILING PLANS.

SYM	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11-24/09	RJO

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

--

SATISFACTORY TO DATE --

DES RJO DRW RJO CHK JEW

PROJECT MANAGER --

IPT TECH. BRANCH HEAD --

CHIEF ENG/ARCH (CORE) --

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH CENTRAL
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

SYMBOLS ABBREVIATIONS AND NOTES

SCALE: NTS

EPROJECT NO.: --

CONSTR. CONTR. NO. ####

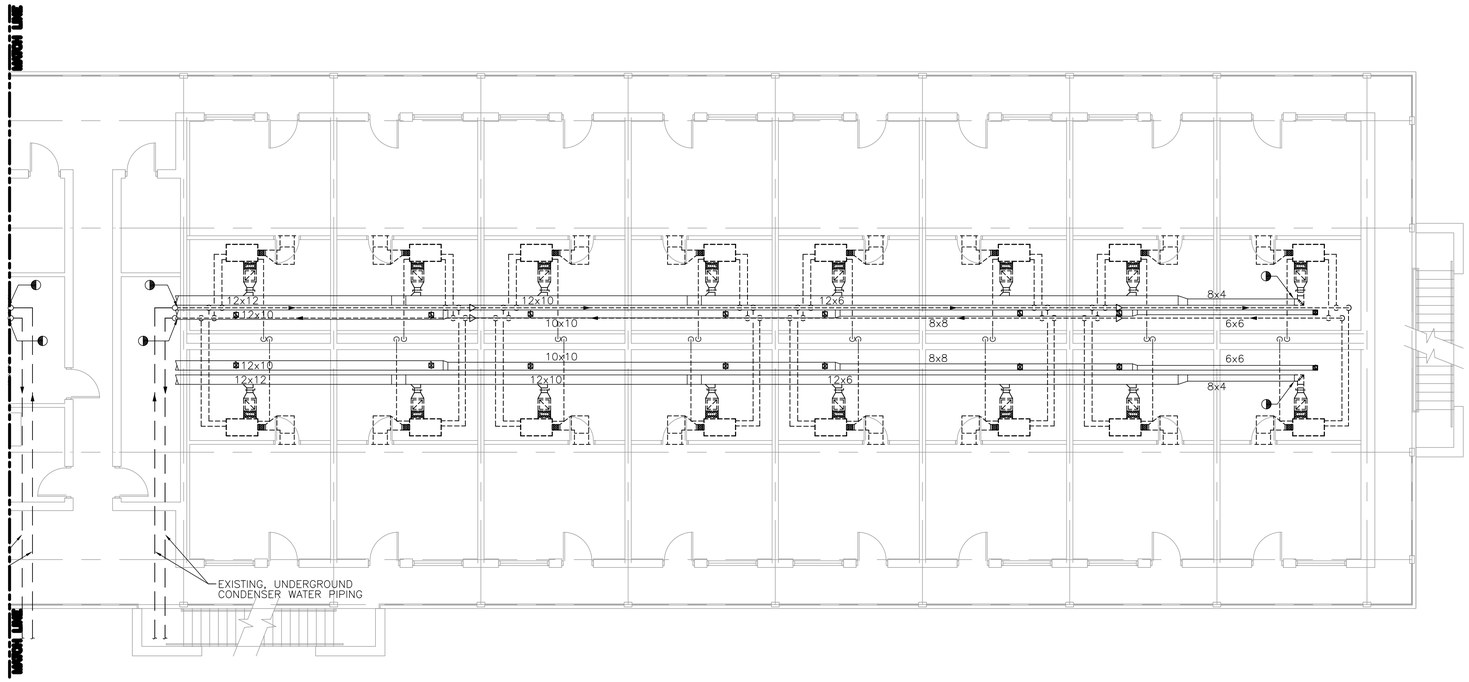
NAVFAC DRAWING NO. --

SHEET 4 OF 37

M001

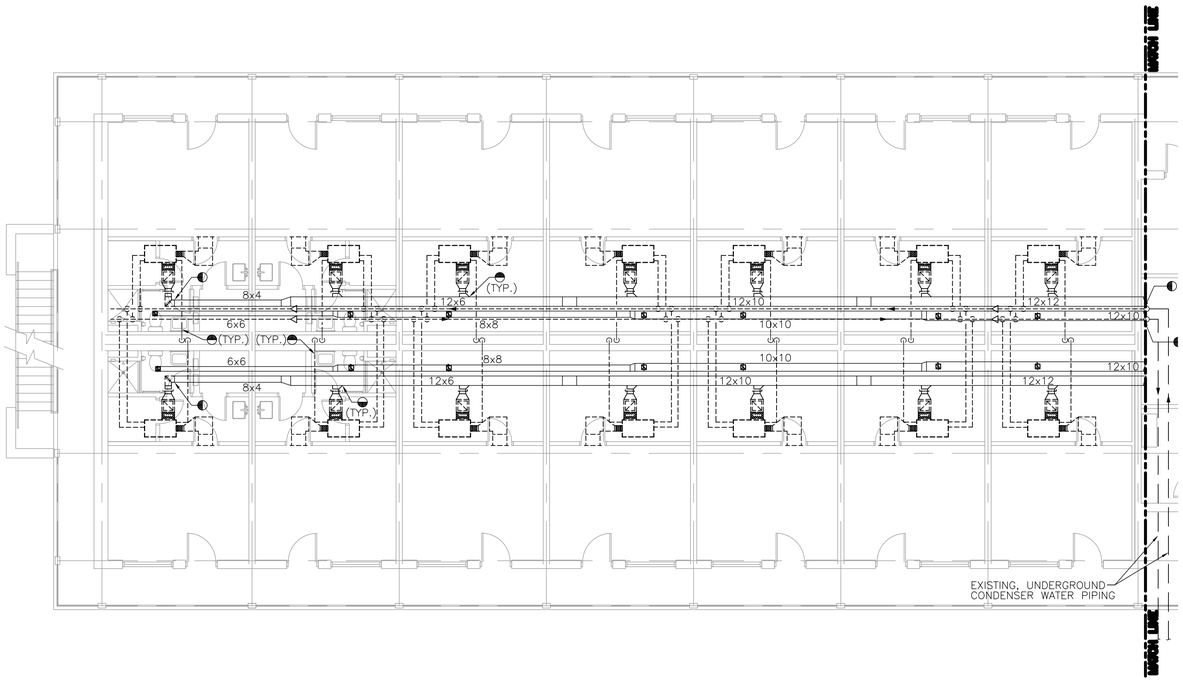
DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60169\HVAC study and report-870450\Working Technical Files\CAD Drawings\870450-M-001.dwg LAYOUT NAME: 870450-M-001 PLOTTED: Tuesday, November 24, 2009 - 12:54pm USER: bob.ogrady



1 BLDG. F - PARTIAL 1ST THRU 3RD FLOOR NORTH PLANS - MECHANICAL DEMO.

Scale: 1/8" = 1'-0"



2 BLDG. F - PARTIAL 1ST THRU 3RD FLOOR SOUTH PLANS - MECHANICAL DEMO.

Scale: 1/8" = 1'-0"

GENERAL NOTES:

1. DRAIN THE HORIZONTAL CONDENSER WATER SUPPLY & RETURN PIPING BACK TO EACH VERTICAL RISER BEFORE COMMENCING WITH THE DEMOLITION WORK.

2. REMOVE ALL DASHED LINE PIPING, DUCTWORK, INSULATION AND EQUIPMENT COMPLETE. INCLUDE ASSOCIATED TEMPERATURE CONTROLS, PIPING, DUCTWORK AND EQUIPMENT SUPPORTS AS A PART OF THE DEMOLITION WORK.

3. REPAIR EXISTING STRUCTURE THAT WAS DAMAGED AS A RESULT OF THE MECHANICAL DEMOLITION WORK TO MATCH EXISTING CONDITIONS.

4. CAP EXISTING PIPING THAT REMAINS FOR FUTURE CONNECTION.

5. EXISTING, VERTICAL CONDENSER WATER RISER PIPING AND UNDERGROUND CONDENSER WATER PIPING TO REMAIN.

6. REMOVE ALL EXISTING SUPPLY, RETURN AND EXHAUST AIR GRILLES AND REGISTERS.

7. REMOVE ALL EXHAUST AIR BALANCING DAMPERS LOCATED IN THE TOILET ROOMS.

1/8"=1'-0" 0' 5' 10' 20' 30'

SYM	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11-24-09	RJO

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

--

SATISFACTORY TO DATE --

DES RJO DRW RJO CHK JEW

PROJECT MANAGER --

IPT TECH. BRANCH HEAD --

CHIEF ENG/ARCH (CORE) --

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH CENTRAL
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

BLDG F-1ST THRU 3RD FLOOR PLANS-MECH DEMO

SCALE: SEE PLANS

EPROJECT NO.: --

CONSTR. CONTR. NO. ####

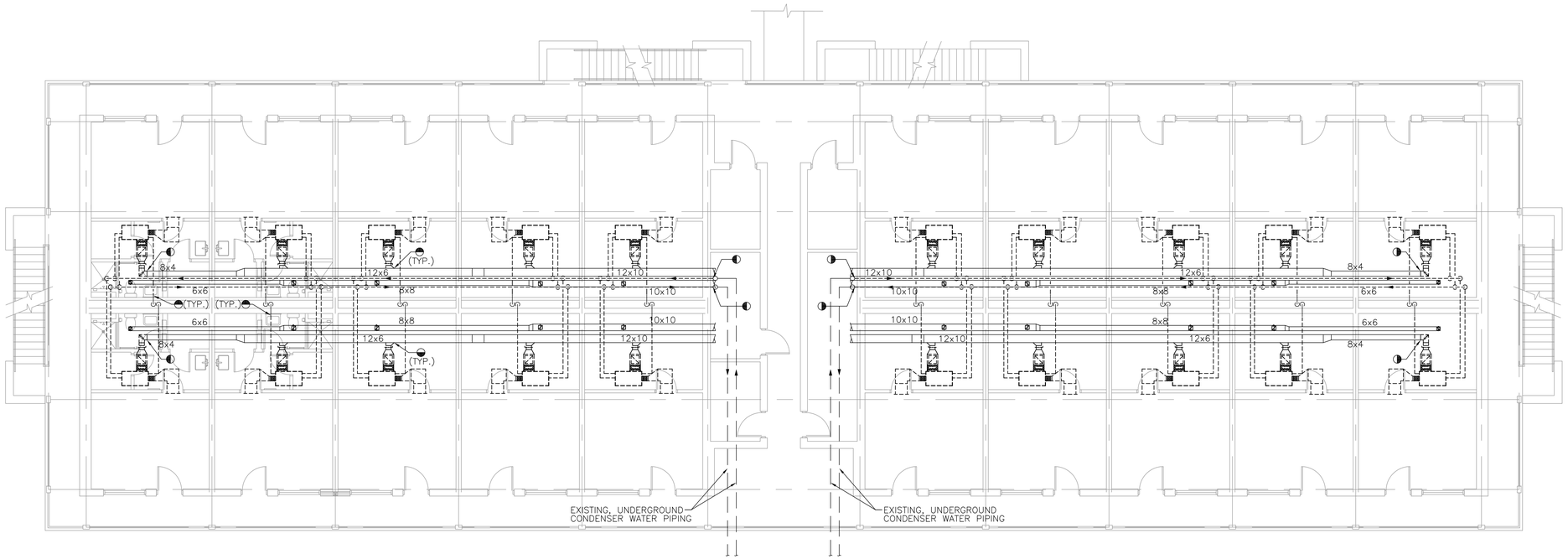
NAVFAC DRAWING NO. --

SHEET 5 OF 37

MD101

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\OBI\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60169\HVAC study and report-870450\Working Technical Files\CAD Drawings\SH870450-MD-101.dwg LAYOUT NAME: 870450-MD-101 PLOTTED: Tuesday, November 24, 2009 - 1:04pm USER: bob.ogrady



1 BLDGS. G & H - 1ST THRU 3RD FLOOR PLANS - MECHANICAL DEMO.

Scale: 1/8" = 1'-0"

GENERAL NOTES:

1. DRAIN THE HORIZONTAL CONDENSER WATER SUPPLY & RETURN PIPING BACK TO EACH VERTICAL RISER BEFORE COMMENCING WITH THE DEMOLITION WORK.

2. REMOVE ALL DASHED LINE PIPING, DUCTWORK, INSULATION AND EQUIPMENT COMPLETE. INCLUDE ASSOCIATED TEMPERATURE CONTROLS, PIPING, DUCTWORK AND EQUIPMENT SUPPORTS AS A PART OF THE DEMOLITION WORK.

3. REPAIR EXISTING STRUCTURE THAT WAS DAMAGED AS A RESULT OF THE MECHANICAL DEMOLITION WORK TO MATCH EXISTING CONDITIONS.

4. CAP EXISTING PIPING THAT REMAINS FOR FUTURE CONNECTION.

5. EXISTING, VERTICAL CONDENSER WATER RISER PIPING AND UNDERGROUND CONDENSER WATER PIPING TO REMAIN.

6. REMOVE ALL EXISTING SUPPLY, RETURN AND EXHAUST AIR GRILLES AND REGISTERS.

7. REMOVE ALL EXHAUST AIR BALANCING DAMPERS LOCATED IN THE TOILET ROOMS.

1/8"=1'-0" 0' 5' 10' 20' 30'

SYM	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11-24-09	RJO

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

--

SATISFACTORY TO DATE --

DES RJO DRW RJO CHK JEW

PROJECT MANAGER --

IPT TECH. BRANCH HEAD --

CHIEF ENG/ARCH (CORE) --

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH CENTRAL
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA
BEQ F, G & H - PHASE IV HVAC RENOVATION
BLDGS G&H-1ST THRU 3RD FLR PLNS-MECH DEMO

SCALE: SEE PLANS

EPROJECT NO.: --

CONSTR. CONTR. NO. ####

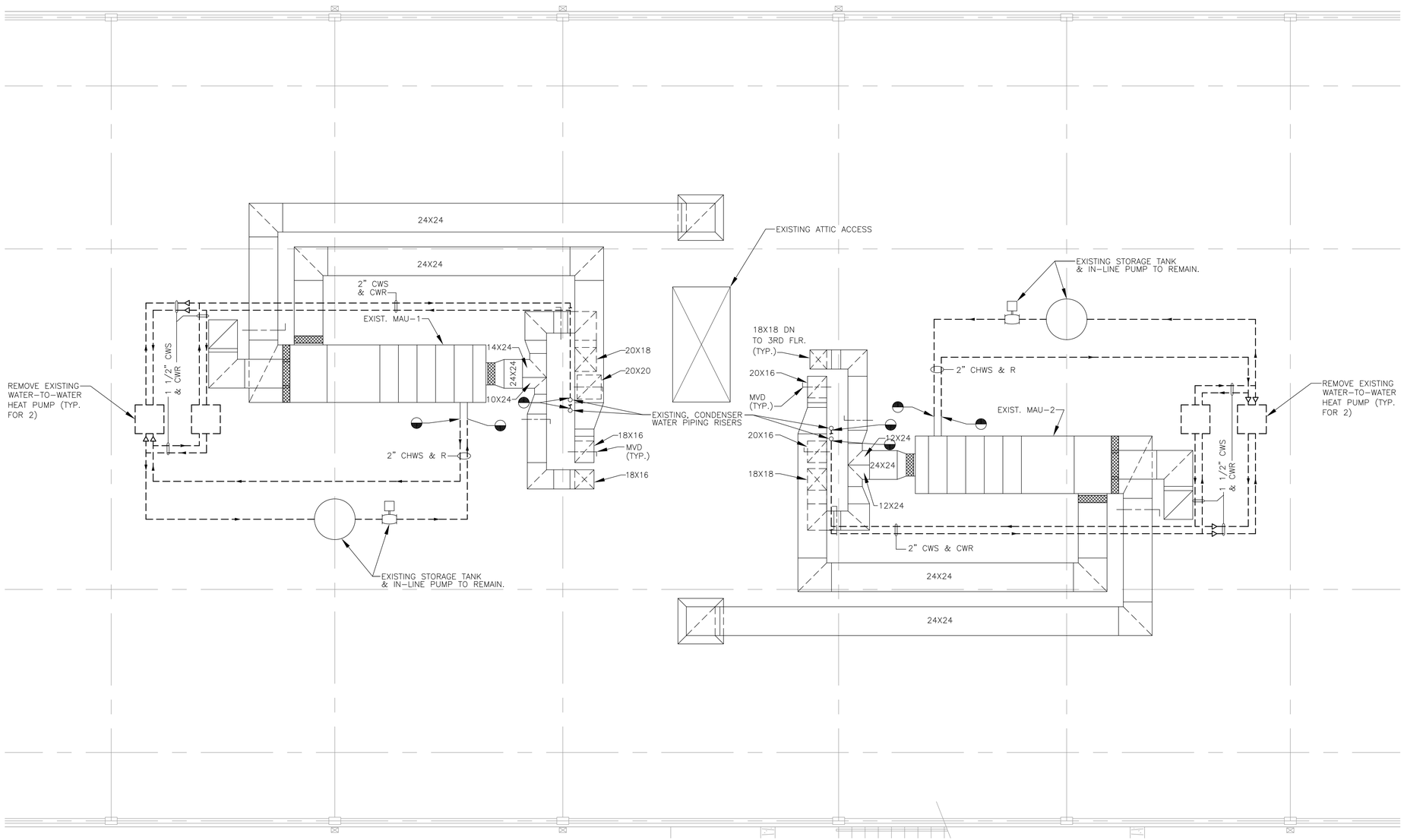
NAVFAC DRAWING NO. --

SHEET 6 OF 37

MD102

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\OBI\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M69169\HVAC study and report-870450\Working Technical Files\CAD Drawings\SH870450-MD-102.dwg LAYOUT NAME: 870450-MD-102 PLOTTED: Tuesday, November 24, 2009 - 1:05pm USER: bob.ogrady



1 BUILDING F - PARTIAL ATTIC PLAN - MECHANICAL DEMO.

Scale: 1/4" = 1'-0"

GENERAL NOTES:

1. DRAIN THE CHILLED AND CONDENSER WATER SUPPLY & RETURN PIPING AS REQUIRED BEFORE COMMENCING WITH THE DEMOLITION WORK.

2. REMOVE ALL DASHED LINE PIPING AND EQUIPMENT COMPLETE. INCLUDE ASSOCIATED TEMPERATURE CONTROLS, PIPING, INSULATION, VALVES AND EQUIPMENT SUPPORTS AS A PART OF THE DEMOLITION WORK. SUPPORT EXISTING EQUIPMENT-TO-REMAIN AS REQUIRED UNTIL NEW CONNECTIONS ARE MADE. RETURN THE WATER-TO-WATER SOURCE HEAT PUMPS TO THE OWNER.

3. REPAIR EXISTING STRUCTURE THAT WAS DAMAGED AS A RESULT OF THE MECHANICAL DEMOLITION WORK TO MATCH EXISTING CONDITIONS.

4. CAP EXISTING PIPING THAT REMAINS FOR FUTURE CONNECTION.

5. ALL DUCTWORK AND AIR HANDLING UNITS ARE EXISTING-TO-REMAIN AND ARE SHOWN FOR CLARITY.

SYM	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11-24-09	RJO

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

--

SATISFACTORY TO DATE --

DES RJO DRW RJO CHK JEW

PROJECT MANAGER --

IPT TECH. BRANCH HEAD --

CHIEF ENG/ARCH (CORE) --

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH CENTRAL
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SOUTH CAROLINA
BEQ F, G & H - PHASE IV HVAC RENOVATION
BLDG F - PARTIAL ATTIC PLAN - MECH DEMO

SCALE: SEE PLANS

EPROJECT NO.: --

CONSTR. CONTR. NO. ####

NAVFAC DRAWING NO. --

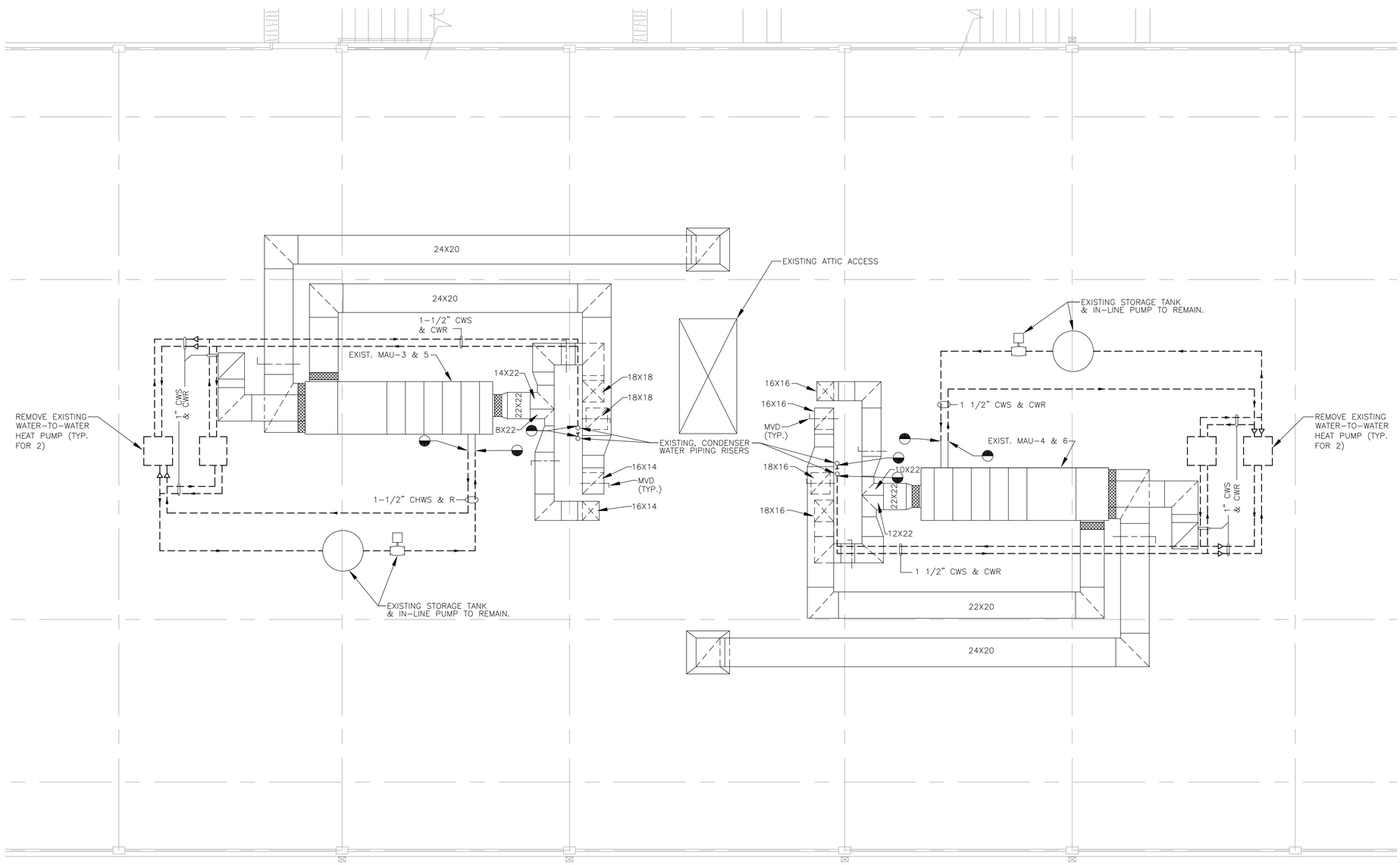
SHEET 7 OF 37

MD103

DRAWFORM REVISION: 7 AUGUST 2009

1/4"=1'-0" 1' 0' 1' 5' 10' 15'

FILE NAME: P:\OBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)(M60)169\HVAC study and report-870450\Working Technical Files\CAD Drawings\SH870450-MD-103.dwg LAYOUT NAME: 870450-MD-103 PLOTTED: Tuesday, November 24, 2009 - 1:07pm USER: bob.ogrady



1 BUILDINGS G & H - PARTIAL ATTIC PLAN - MECHANICAL DEMO.

Scale: 1/4" = 1'-0"

GENERAL NOTES:

1. DRAIN THE CHILLED AND CONDENSER WATER SUPPLY & RETURN PIPING AS REQUIRED BEFORE COMMENCING WITH THE DEMOLITION WORK.

2. REMOVE ALL DASHED LINE PIPING AND EQUIPMENT COMPLETE. INCLUDE ASSOCIATED TEMPERATURE CONTROLS, PIPING, INSULATION, VALVES AND EQUIPMENT SUPPORTS AS A PART OF THE DEMOLITION WORK. SUPPORT EXISTING EQUIPMENT-TO-REMAIN AS REQUIRED UNTIL NEW CONNECTIONS ARE MADE. RETURN THE WATER-TO-WATER SOURCE HEAT PUMPS TO THE OWNER.

3. REPAIR EXISTING STRUCTURE THAT WAS DAMAGED AS A RESULT OF THE MECHANICAL DEMOLITION WORK TO MATCH EXISTING CONDITIONS.

4. CAP EXISTING PIPING THAT REMAINS FOR FUTURE CONNECTION.

5. ALL DUCTWORK AND AIR HANDLING UNITS ARE EXISTING AND ARE SHOWN FOR CLARITY.

SYM	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11-24-09	RJO

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

--

SATISFACTORY TO DATE --

DES RJO DRW RJO CHK JEW

PROJECT MANAGER --

IPT TECH. BRANCH HEAD --

CHIEF ENG/ARCH (CORE) --

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH CENTRAL

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

BLDG G & H – PARTIAL ATTIC PLAN – MECH DEMO

SCALE: SEE PLANS

EPROJECT NO.: --

CONSTR. CONTR. NO. ####

NAVFAC DRAWING NO. --

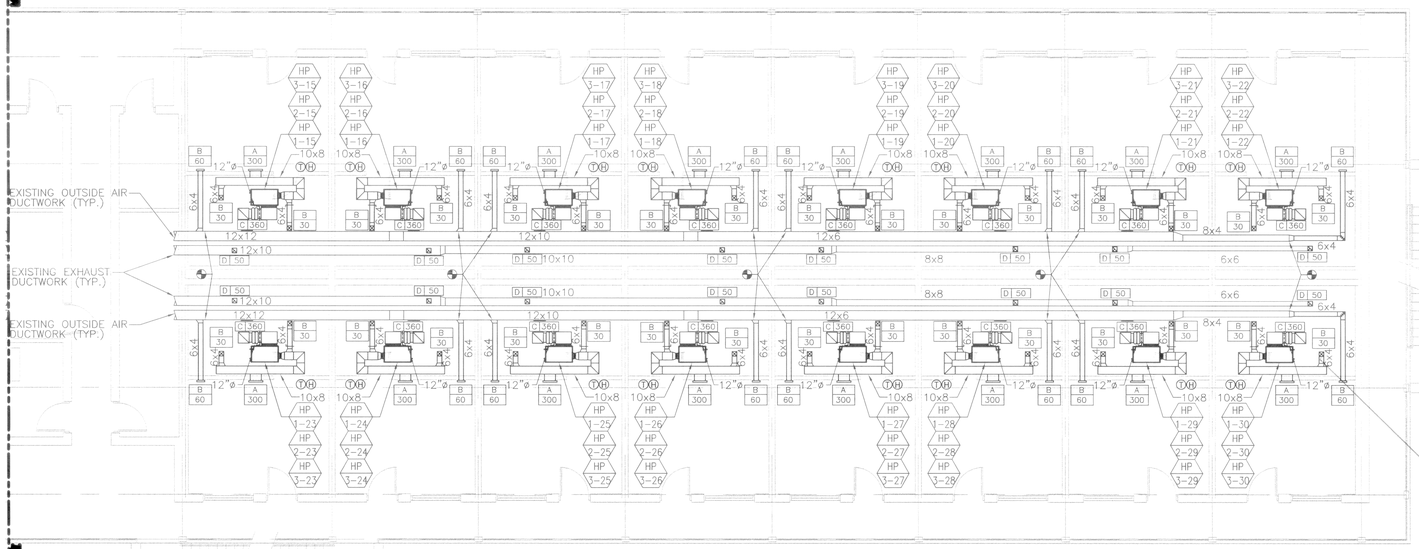
SHEET 8 OF 37

MD104

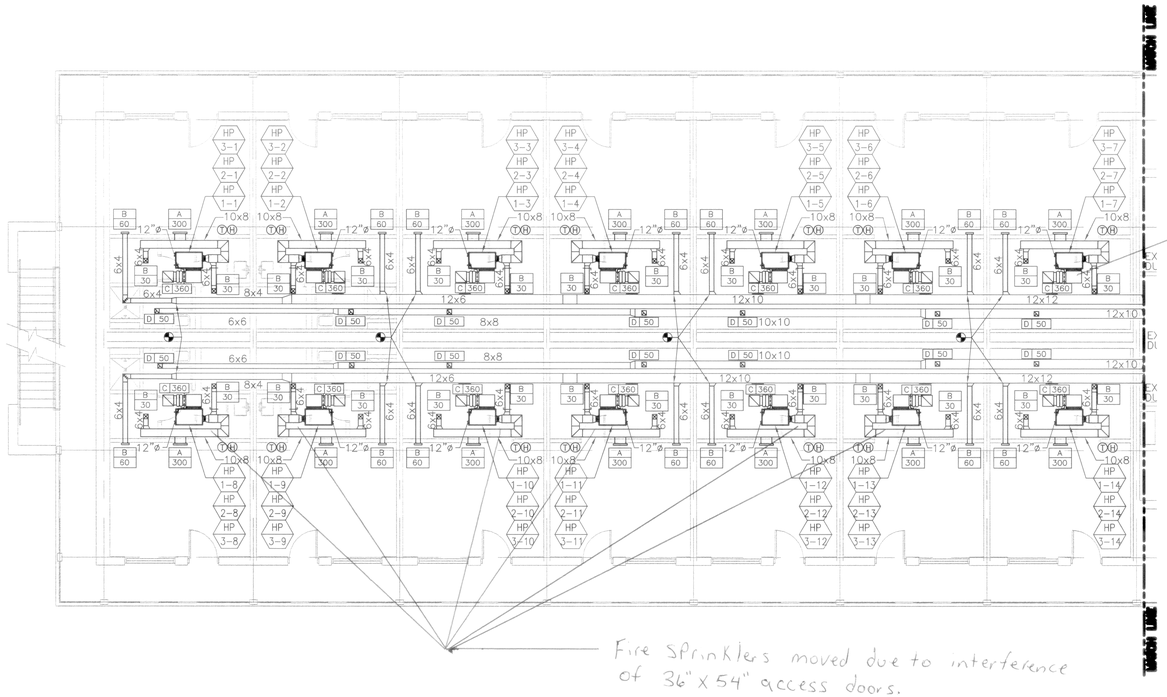
DRAWFORM REVISION: 7 AUGUST 2009

1/4"=1'-0" 1' 0' 1' 5' 10' 15'

FILE NAME: P:\OBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)\M60169\HVAC study and report-870450\Working Technical Files\CAD Drawings\S9870450-MD-104.dwg LAYOUT NAME: 870450-MD-104 PLOTTED: Tuesday, November 24, 2009 - 1:08pm USER: bob.ogrady



1 BLDG F - PARTIAL 1ST THRU 3RD FLOOR PLAN ~~NORTH~~ - DUCTWORK
SOUTH
Scale: 1/8" = 1'-0"



Used 6" diameter rigid in lieu of 6"x4" Rectangular.
Typ. F, G, and H Barracks
RFI #001

Fire Sprinklers moved due to interference of 36"x54" access doors.
RFI #009

2 BLDG. F - PARTIAL 1ST THRU 3RD FLOOR PLANS ~~SOUTH~~ - DUCTWORK
NORTH
Scale: 1/8" = 1'-0"

1/8"=1'-0" 0' 5' 10' 20' 30'

NO	DATE	DESCRIPTION	BY
1	11-24-09	2009 TOP CONSTRUCTION	

NAVFAC

SEAL

A/E INFO

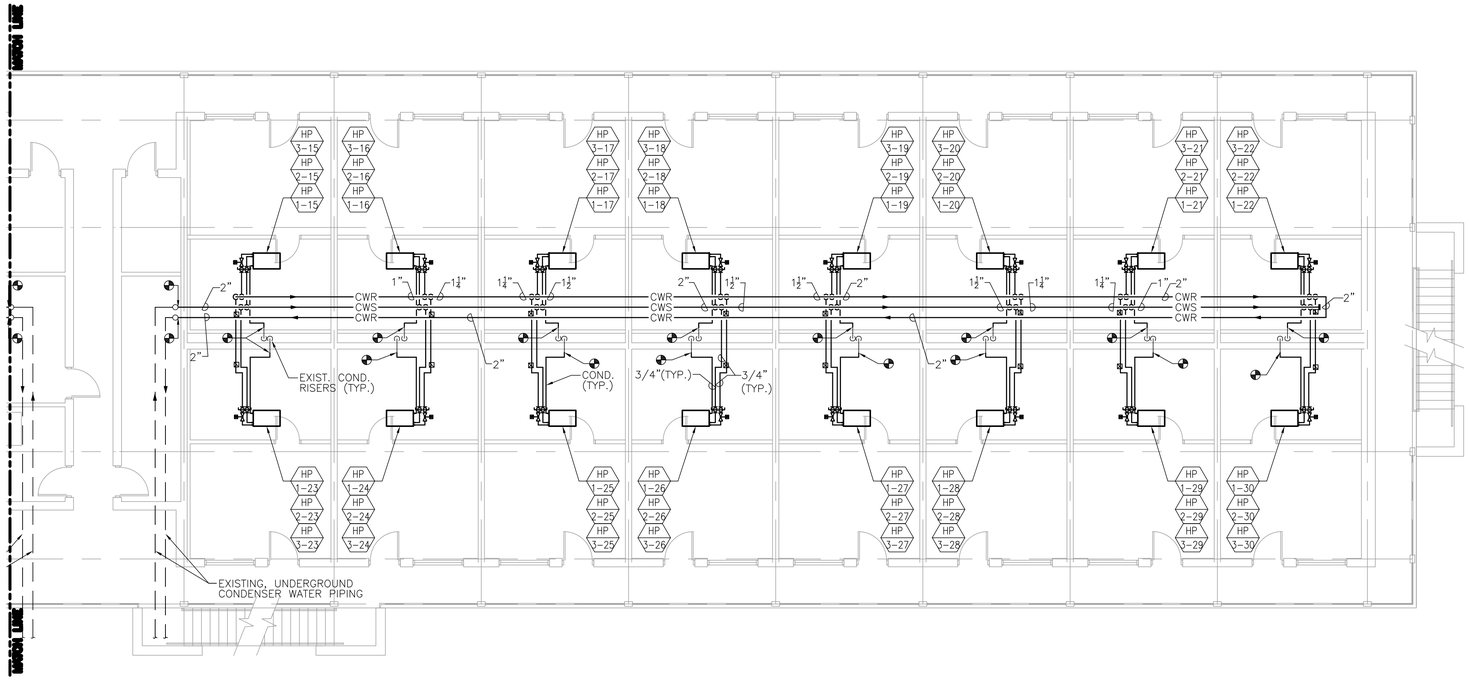
APPROVED
FOR COMMANDER NAVFAC / BLE.L
ACTIVITY ---
SATISFACTORY TO DATE ---
DES RJO DRW RJO CHK JEW
PROJECT MANAGER ---
IPT TECH. BRANCH HEAD ---
CHIEF ENG/ARCH (CORE) ---

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH CENTRAL
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA
BEQ F, G & H - PHASE IV HVAC RENOVATION
BLDG F – 1ST THRU 3RD FLOOR PLANS–DUCTWORK

SCALE: SEE PLANS
EPROJECT NO.: ---
CONSTR. CONTR. NO. ####
NAVFAC DRAWING NO. ---
SHEET 9 OF 37
M101

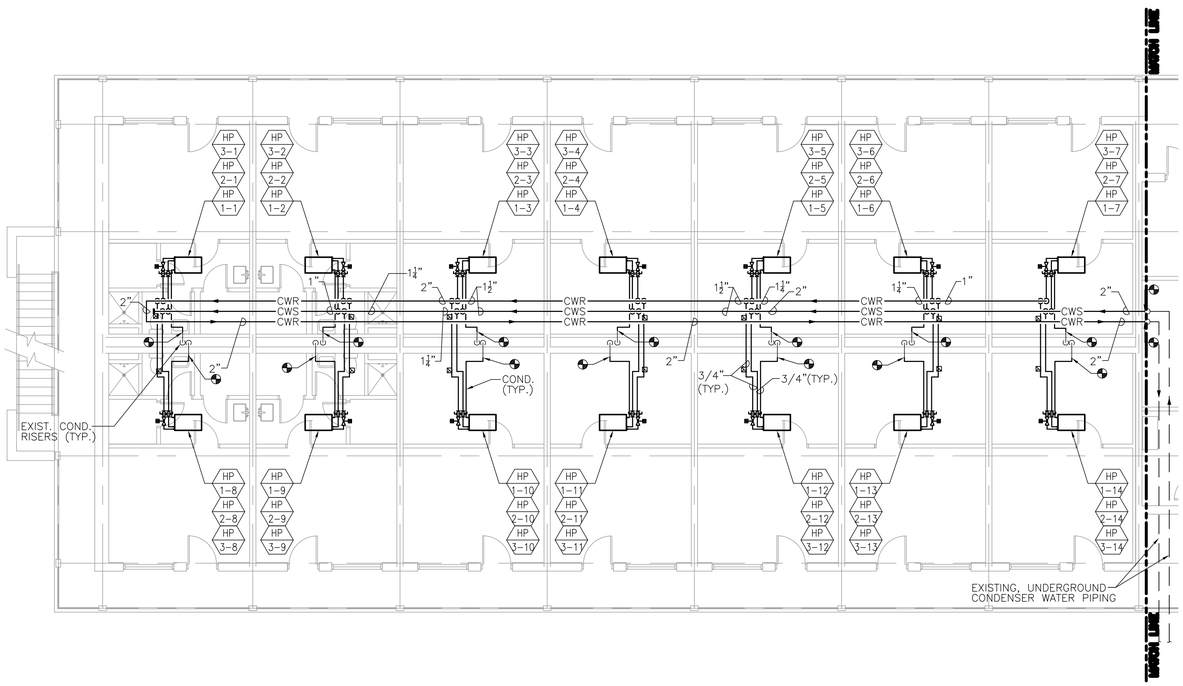
DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(1)\M401169\HVAC study and report-879450\Working Technical Files\CAD Drawings\0879450-M-101.dwg LAYOUT NAME 870450-M-101 PLOTTED: Tuesday, November 24, 2009 - 12:56pm USER bob.coyne



1 BLDG F - PARTIAL 1ST THRU 3RD FLOOR PLANS NORTH - PIPING

Scale: 1/8" = 1'-0"



2 BLDG. F - PARTIAL 1ST THRU 3RD FLOOR PLANS SOUTH - PIPING

Scale: 1/8" = 1'-0"

1/8"=1'-0" 0' 5' 10' 20' 30'

NO.	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11-24-09	RJO

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY --

SATISFACTORY TO DATE --

DES RJO DRW RJO CHK JEW

PROJECT MANAGER --

IPT TECH. BRANCH HEAD --

CHIEF ENG/ARCH (CORE) --

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH CENTRAL

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

BLDG F – 1ST THRU 3RD FLOOR PLANS – PIPING

SCALE: SEE PLANS

EPROJECT NO.: --

CONSTR. CONTR. NO. ####

NAVFAC DRAWING NO. --

SHEET 10 OF 37

M102

DRAWFORM REVISION: 7 AUGUST 2009

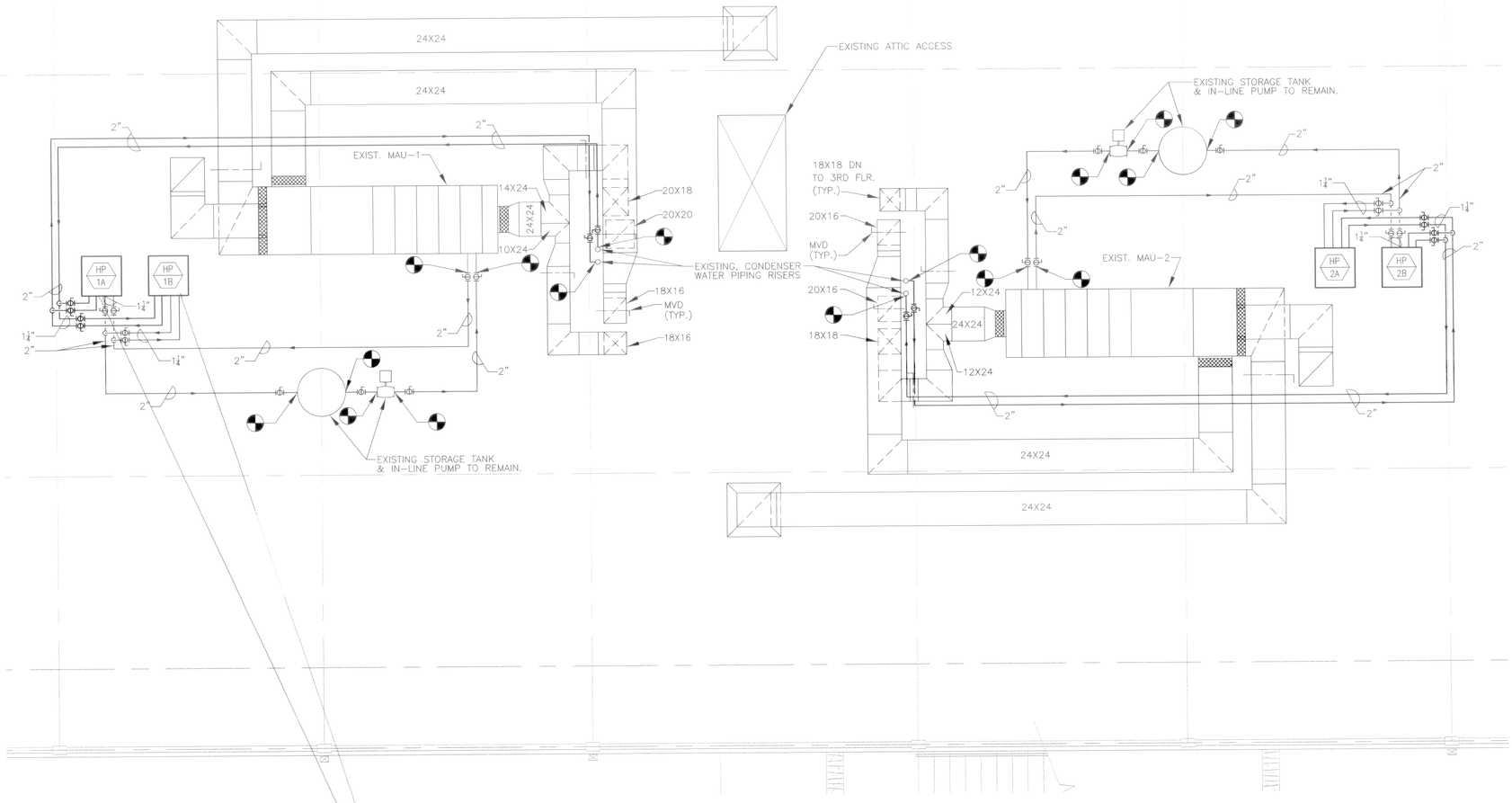
FILE NAME: P:\OBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60169)\HVAC study and report-870450\Working Technical Files\CAD Drawings\SH870450-M-102.dwg LAYOUT NAME: 870450-M-102 PLOTTED: Tuesday, November 24, 2009 – 12:56pm USER: bob.ogrady

GENERAL NOTES:

1. INSTALL THE NEW WATER-TO-WATER SOURCE HEAT PUMPS IN THE SAME LOCATIONS AS THE DEMOLISHED UNITS. INCREASE THE SIZE OF THE EQUIPMENT PADS AS NECESSARY.

2. SUPPORT THE NEW PIPING SIMILAR TO EXISTING CONDITIONS.

3. REINSTALL EXISTING TEMPERATURE CONTROLS THAT WERE REMOVED DURING THE PIPING AND EQUIPMENT DEMOLITION. INSTALL IN APPROXIMATELY THE SAME POSITIONS.



1 BUILDING F – PARTIAL ATTIC PLAN – PIPING
Scale: 1/4" = 1'-0"

Installed "Soft Start" and flex hose connections at all attic pumps. Typ F, G, and H Barracks
RFI #007

1	ISSUED FOR CONSTRUCTION	11-24-09	RJO
NO.	DESCRIPTION	DATE	APPR.

NAVFAC

SEAL

A/E INFO

APPROVED:

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY:

SATISFACTORY TO DATE: ---

DES: RJO DRW: RJO CHK: JEW

PROJECT MANAGER: ---

BFT TECH. BRANCH HEAD: ---

CHIEF ENG/ARCH (CORE): ---

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA
BFT SOUTH CENTRAL

BEQ F, G & H - PHASE IV HVAC RENOVATION

BLDG. F – PARTIAL ATTIC PLAN – PIPING

SCALE: SEE PLANS

EPROJECT NO.: ---

CONSTR. CONTR. NO.: ####

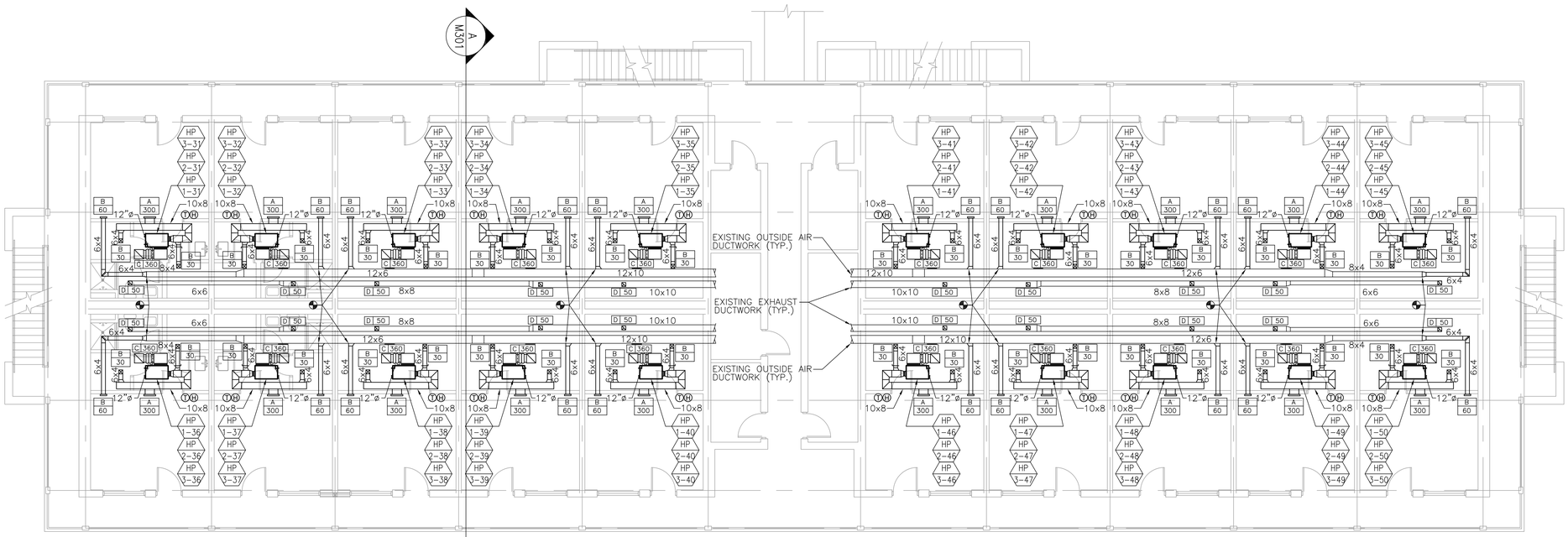
NAVFAC DRAWING NO.: ---

SHEET 12 OF 37

M104

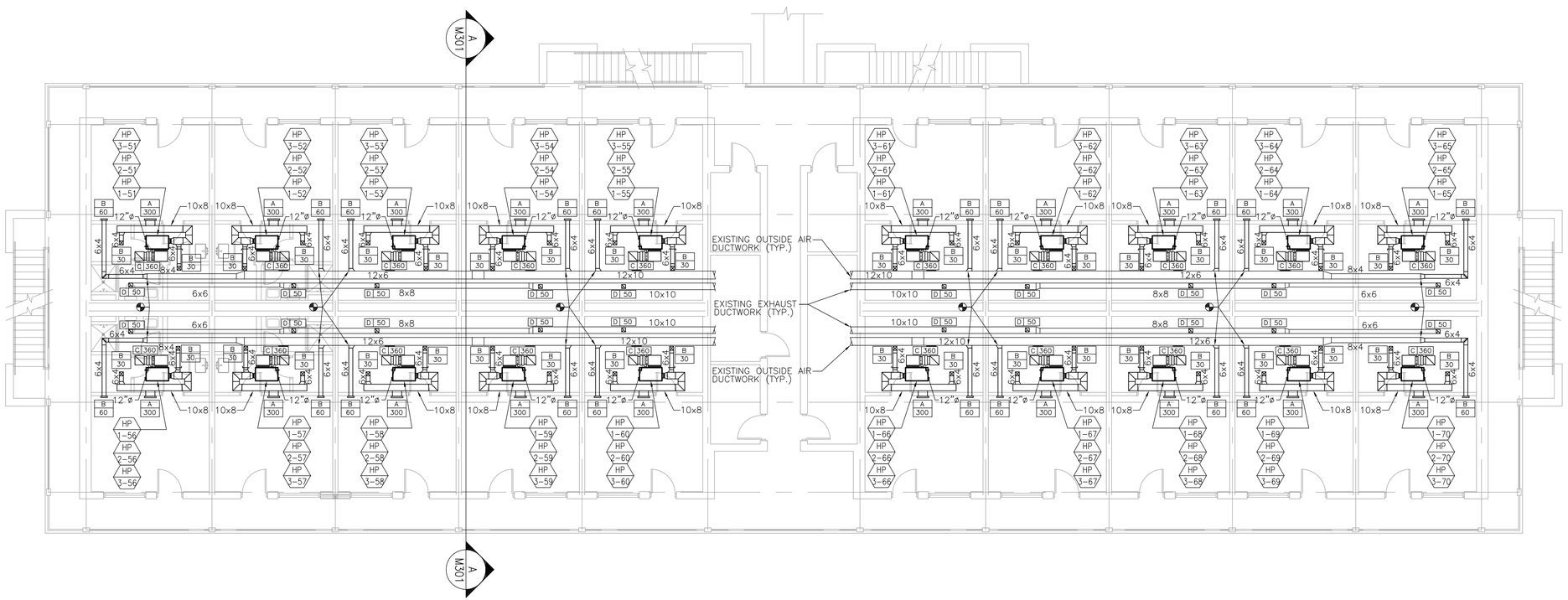
DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CRB\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC\P\M60169\HVAC study and report-8704501\Working Technical Files\CAD Drawings\3-8704501-M-104.dwg LAYOUT NAME: 8704501-M-104 PLOTTED: Tuesday, November 24, 2009 - 12:57pm USER: bct-rjrob



1 BUILDING G - 1ST THRU 3RD FLOOR PLANS - DUCTWORK

Scale: 1/8" = 1'-0"



2 BLDG. H - 1ST THRU 3RD FLOOR PLANS - DUCTWORK

Scale: 1/8" = 1'-0"

1/8"=1'-0" 0' 5' 10' 20' 30'

1	ISSUED FOR CONSTRUCTION	11-24-09	RJO

SYM	DESCRIPTION	DATE	APPR

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY --

SATISFACTORY TO DATE --

DES RJO DRW RJO CHK JEW

PROJECT MANAGER --

IPT TECH. BRANCH HEAD --

CHIEF ENG/ARCH (CORE) --

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH CENTRAL

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

BLDG G&H-1ST THRU 3RD FLR PLANS-DUCTWORK

SCALE: SEE PLANS

EPROJECT NO.: --

CONSTR. CONTR. NO. ####

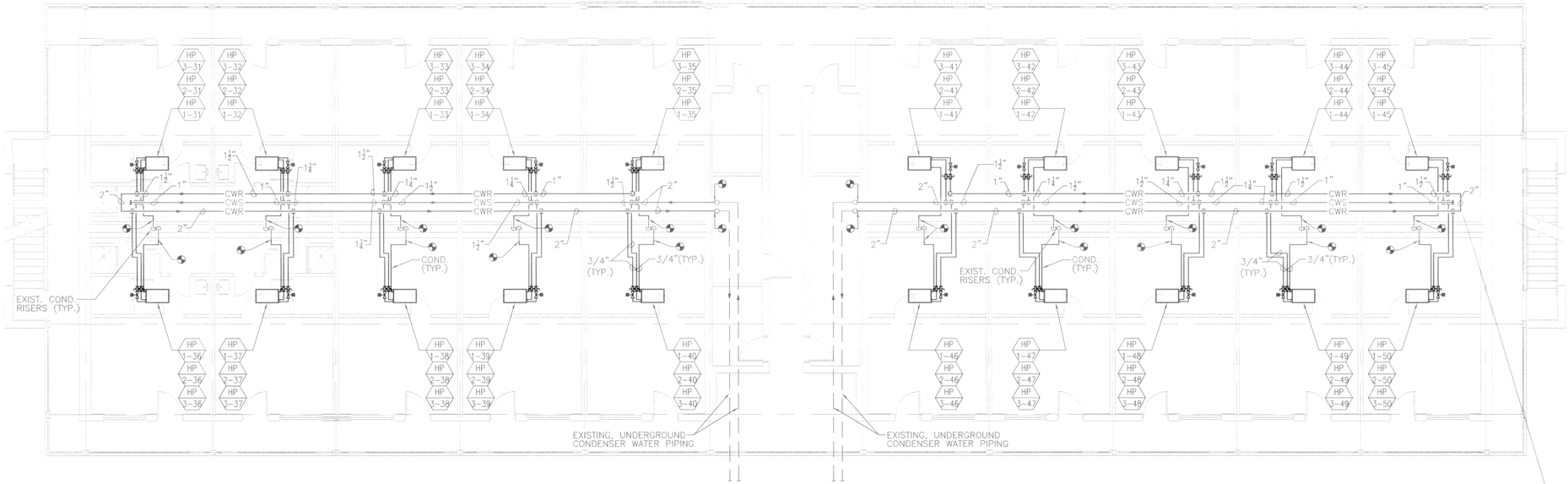
NAVFAC DRAWING NO. --

SHEET 13 OF 37

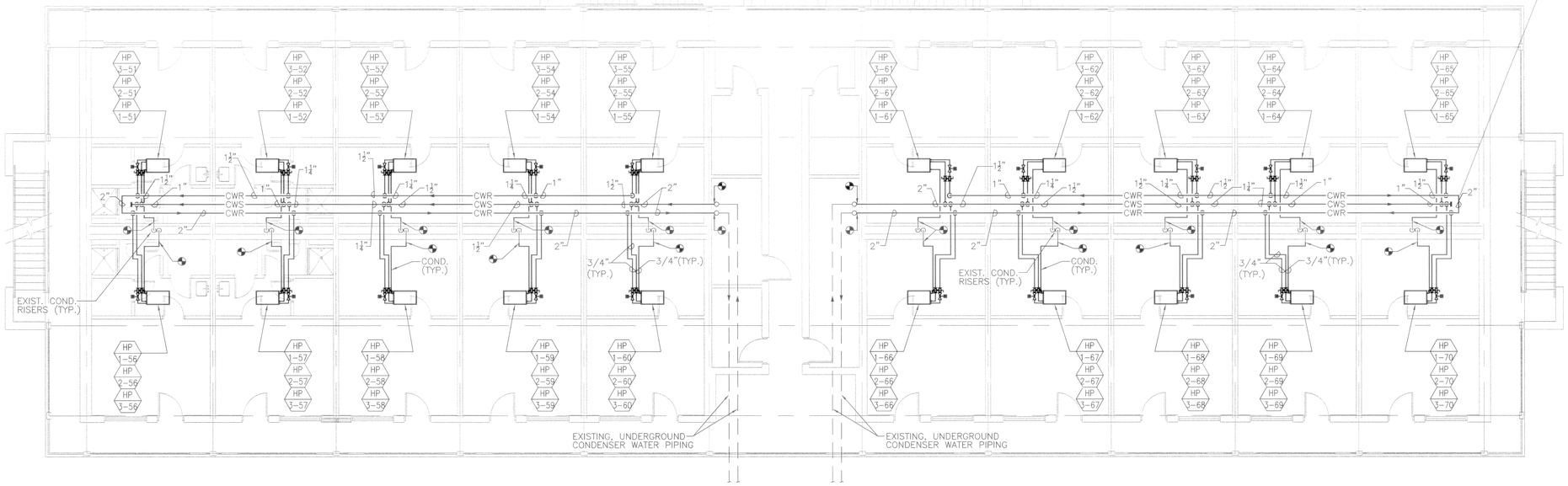
M105

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\OBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60169)\HVAC study and report-#870450\Working Technical Files\CAD Drawings\SH870450-M-105.dwg LAYOUT NAME: 870450-M-105 PLOTTED: Tuesday, November 24, 2009 - 12:58pm USER: bob.ogrody



1 BUILDING G - 1ST THRU 3RD FLOOR PLANS - PIPING
Scale: 1/8" = 1'-0"



2 BUILDING H - 1ST THRU 3RD FLOOR PLANS - PIPING
Scale: 1/8" = 1'-0"

RFI 001
RFV
Changed Pipe Size from 2" to 1½"

1/8"=1'-0" 0' 5' 10' 20' 30'

NO.	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11-24-09	RJO

NAVFAC

SEAL

A/E INFO

APPROVED
FOR COMMANDER NAVFAC / B.L.T.L.
ACTIVITY
--
SATISFACTORY TO DATE ---
DES RJO CHKW RJO CHK JEW
PROJECT MANAGER ---
IPT TECH. BRANCH HEAD ---
CHIEF ENG./ARCH (CORE) ---

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
IPT SOUTH CENTRAL
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA
BEQ F, G & H - PHASE IV HVAC RENOVATION
BLDGS G&H-1ST THRU 3RD FLR PLANS-PIPING

SCALE: SEE PLANS
EPROJECT NO.: ---
CONSTR. CONTR. NO. ####
NAVFAC DRAWING NO. ---
SHEET 14 OF 37
M106
DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)N60169\HVAC study and report-879450\Working Technical Files\CAD Drawings\S0870450-M-106.dwg LAYOUT NAME: 870450-M-106 PLOTTED: Tuesday, November 24, 2009 - 12:59pm USER: bob.ogrodz

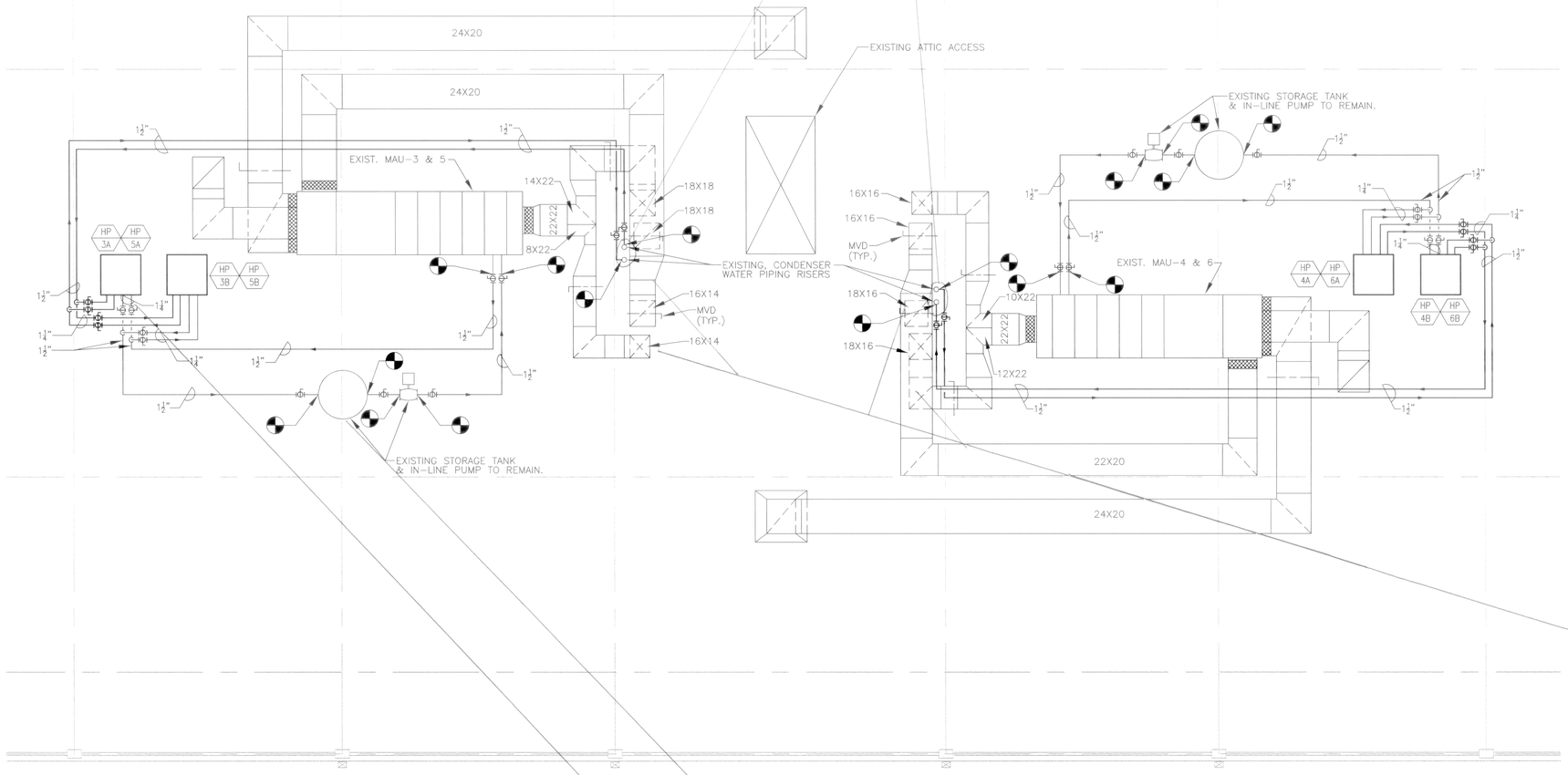
RFI - RFV 005 - Removal of CPVC in attic Spaces
Installed 1½" HDPE to the active system

GENERAL NOTES:

1. INSTALL THE NEW WATER-TO-WATER SOURCE HEAT PUMPS IN THE SAME LOCATIONS AS THE DEMOLISHED UNITS. INCREASE THE SIZE OF THE EQUIPMENT PADS AS NECESSARY.

2. SUPPORT THE NEW PIPING SIMILAR TO EXISTING CONDITIONS.

3. REINSTALL EXISTING TEMPERATURE CONTROLS THAT WERE REMOVED DURING THE PIPING AND EQUIPMENT DEMOLITION. INSTALL IN APPROXIMATELY THE SAME POSITIONS.



Provided insulation around duct.
Typ. F, G, and H Barracks

Installed 2" Insulation around Storage tank. Typ. F, G, and H Barracks

Installed 1½" Insulation around all values and Piping. Typ. F, G, and H Barracks

1 BUILDINGS G & H – PARTIAL ATTIC PLAN – PIPING
Scale: 1/4" = 1'-0"

NO.	DATE	APPR.
1	11-24-09	

ISSUED FOR CONSTRUCTION

SYM	DESCRIPTION

NAVFAC

SIGN

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / BLTL

ACTUARY

--

SATISFACTORY TO DATE --

DES RJO DRW RJO CHK JEW

PROJECT MANAGER --

IPT TECH. BRANCH HEAD --

CHIEF ENG/ARCH (CORE) --

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
IPT SOUTH CENTRAL
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

BLDGS G & H – PARTIAL ATTIC PLAN – PIPING

SCALE: SEE PLANS

EPROJECT NO.: --

CONSTR. CONTR. NO. ####

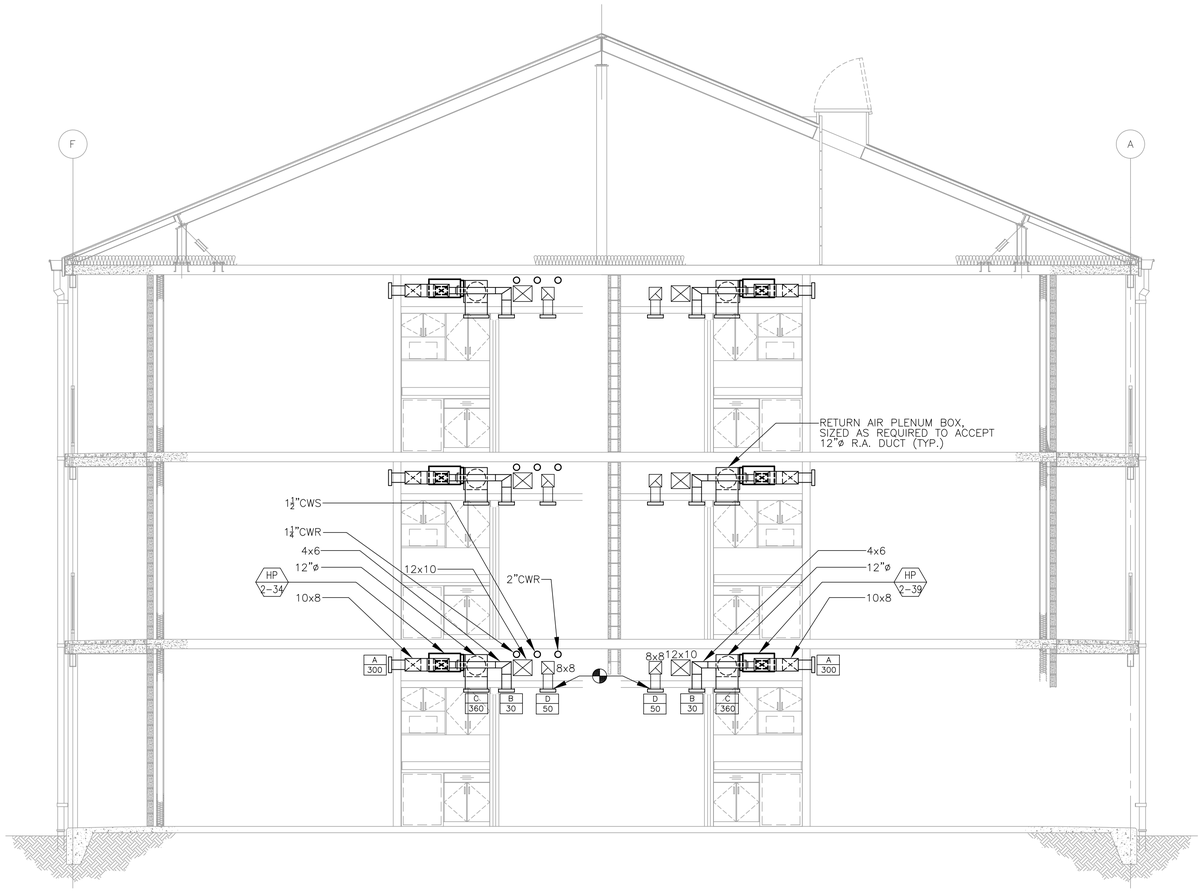
NAVFAC DRAWING NO. --

SHEET 15 OF 37

M107

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SCI\PH0401169\HVAC study and report-870450\Working Technical Files\CAD Drawings\5947H450-M-107.dwg LAYOUT NAME: 870450-M-107 PLOTTED: Tuesday, November 24, 2009 - 1:00pm USER: bob-ogrodz



(A) BEQ G & H BUILDING CROSS SECTION

Scale: 1/4" = 1'-0"

1/4"=1'-0" 1' 0' 1' 5' 10' 15'

1	ISSUED FOR CONSTRUCTION	11-24-09	RJO
SYM	DESCRIPTION	DATE	APPR

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

--

SATISFACTORY TO DATE --

DES RJO DRW RJO CHK JEW

PROJECT MANAGER --

IPT TECH. BRANCH HEAD --

CHIEF ENG/ARCH (CORE) --

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH CENTRAL

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

SECTIONS – MECHANICAL

SCALE: SEE PLANS

EPROJECT NO.: --

CONSTR. CONTR. NO. ####

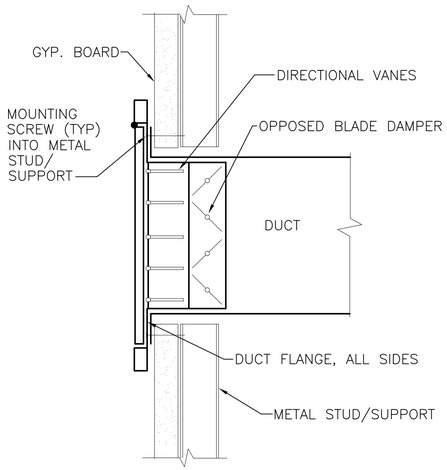
NAVFAC DRAWING NO. --

SHEET 16 OF 37

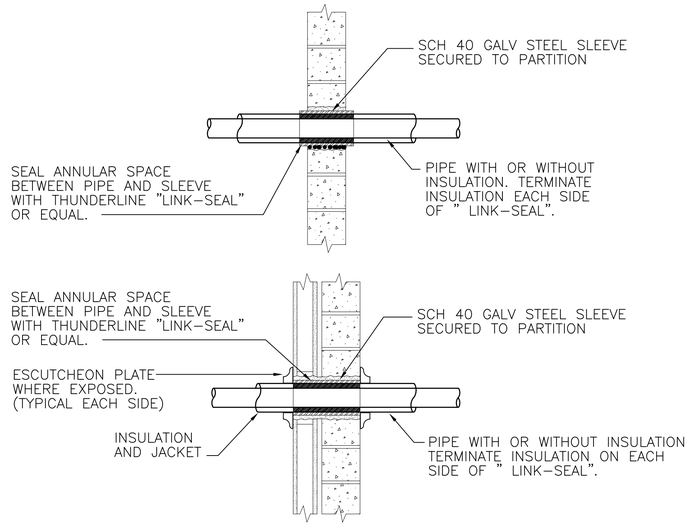
M301

DRAWFORM REVISION: 7 AUGUST 2009

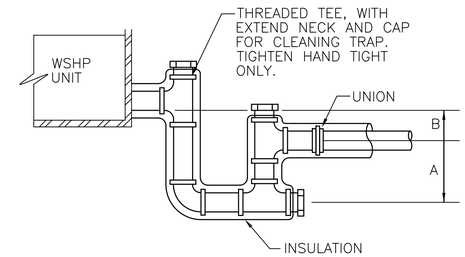
FILE NAME: P:\OBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60169\HVAC study and report-870450\Working Technical Files\CAD Drawings\SH870450-M-301.dwg LAYOUT NAME: 870450-M-301 PLOTTED: Tuesday, November 24, 2009 – 1:01pm USER: bob.ogrady



1 GRILLE AND REGISTER INSTALLATION DETAIL
Scale: NTS



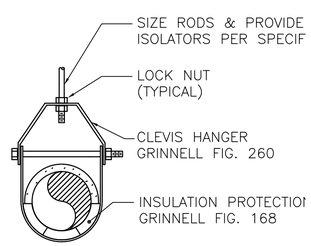
2 PIPE THRU WALL INSTALLATION DETAIL
Scale: NTS



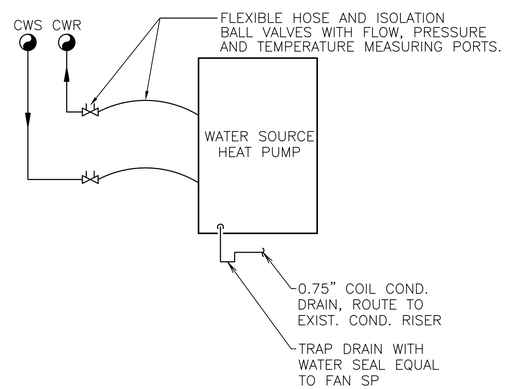
NOTES:

1. PIPE SIZES AS INDICATED ON PLANS. WHERE NOT SHOWN, SIZE SHALL BE FULL SIZE OF DRAIN TAP ON WSHP.
2. SEE SPECIFICATIONS FOR INSULATION REQUIREMENTS.
3. FOR DRAW-THRU UNITS:
   B = FAN INLET PRESSURE IN INCHES W.C. + 1"
   A = 1/2 B
4. PITCH CONDENSATE PIPING @1/8"/FT. IN DIRECTION

3 CONDENSATE PIPING INSTALLATION DETAIL
Scale: NTS



4 PIPING SUPPORT INSTALLATION DETAIL
Scale: NTS



5 WATER SOURCE HEAT PUMP INSTALLATION DETAIL
Scale: 1" = 1'-0"

1	ISSUED FOR CONSTRUCTION	11-24-09	RJO
	DESCRIPTION	DATE	APPR

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY --

SATISFACTORY TO DATE --

DES RJO DRW RJO CHK JEW

PROJECT MANAGER --

IPT TECH. BRANCH HEAD --

CHIEF ENG/ARCH (CORE) --

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH CENTRAL

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

MECHANICAL DETAILS

SCALE: NTS

EPROJECT NO.: --

CONSTR. CONTR. NO. ####

NAVFAC DRAWING NO. --

SHEET 17 OF 37

M501

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\OBJ\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60160\HVAC study and report-870450\Working Technical Files\CAD Drawings\SH870450-M-501.dwg LAYOUT NAME: 870450-M-501 PLOTTED: Tuesday, November 24, 2009 - 1:02pm USER: bob.ogrady

WATER SOURCE HEAT PUMP SCHEDULE

MARK	AREA/UNIT SERVED	DESCRIPTION	FAN DATA S.A. CFM	FAN DATA O.A. CFM	FAN DATA EXT. S.P. IN.	FAN DATA TOTAL S.P. IN.	FAN DATA MOTOR HP	FAN DATA UNIT ELECTRICAL VOLTS/PHASE/HZ (MCA)	FILTER DATA TYPE	FILTER DATA MAX. FACE VELOCITY FPM	COOLING COIL DATA ENT. AIR °F DB	COOLING COIL DATA ENT. AIR °F WB	COOLING COIL DATA LVG. AIR °F DB	COOLING COIL DATA LVG. AIR °F WB	COOLING COIL DATA MAX. FACE VELOCITY FPM	COOLING COIL DATA GPM	COOLING COIL DATA EWT °F	COOLING COIL DATA △T °F	COOLING COIL DATA CAPACITY MBH SENS.	COOLING COIL DATA CAPACITY MBH TOTAL	HEATING COIL DATA ENT. AIR °F	HEATING COIL DATA CAPACITY MBH	HEATING COIL DATA HOT WATER GPM	HEATING COIL DATA HOT WATER △T °F	REFRIG.	UNIT WT. LB.	BASIS OF DESIGN	REMARKS (AS NOTED BELOW)
HP-1-1 THRU HP-3-70	ALL BEQ APARTMENTS	WATER SOURCE HEAT PUMP	360	0	0.25	1.50	1/8	208/1/60 (5.8)	TA	500	75.0	62.5	58.8	54.8	500	2.4	85	6.9	6.3	8.3	70	8.3	2.4	6.9	R410A	130	McQUAY WCCH 009	NOTES 1 THRU 12
(210 HEAT PUMPS TOTAL)																												

NOTES:

1. EXTERNAL STATIC PRESSURE IS FROM AHU DISCHARGE TO RETURN AIR CONNECTION. VENDOR SHALL VERIFY TOTAL S.P. AND HP. ALLOW 0.5" W.G. FOR 30% T.A. FILTERS.
2. PROVIDE FACTORY MOUNTED AND WIRED DISCONNECT SWITCH.
3. PROVIDE MOTOR STARTER.
4. PROVIDE INTERNAL VIBRATION ISOLATION.
5. PROVIDE EXTENDED GREASE FITTINGS.
6. PROVIDE FILTER RACK.
7. MAXIMUM DBA AT 5'-0" FROM UNIT SHALL NOT EXCEED 80 dBA.
8. PROVIDE FACTORY BACNET CONTROLS COMPATIBLE WITH THE BASE AUTOMATED LOGIC CONTROLS SYSTEM.
9. PROVIDE 3/4", 3' LENGTHS OF SUPPLY AND RETURN FLEXIBLE HOSES INCLUDING FLOW MEASURING AND ISOLATION VALVES.
10. PROVIDE MOUNTING KIT WITH RUBBER ISOLATORS.
11. PROVIDE TWO-WAY MOTORIZED ISOLATION VALVE.
12. PROVIDE HOT GAS REHEAT.

WATER-TO-WATER SOURCE HEAT PUMP SCHEDULE

MARK	AREA/UNIT SERVED	DESCRIPTION	COMPRESSOR TYPE	UNIT ELECTRICAL VOLTS/PHASE/HZ (MCA)	COOLING WATER SIDE EWT °F	COOLING WATER SIDE LWT °F	COOLING WATER SIDE GPM	COOLING WATER SIDE P.D. FT WG	COOLING WATER SIDE CAPACITY MBH	CONDENSER WATER SIDE EWT °F	CONDENSER WATER SIDE LWT °F	CONDENSER WATER SIDE GPM	CONDENSER WATER SIDE P.D. FT WG	CONDENSER WATER SIDE HEAT REJ. MBH	HEATING WATER SIDE EWT °F	HEATING WATER SIDE LWT °F	HEATING WATER SIDE GPM	HEATING WATER SIDE P.D. FT WG	HEATING WATER SIDE CAPACITY MBH	CONDENSER WATER SIDE EWT °F	CONDENSER WATER SIDE LWT °F	CONDENSER WATER SIDE GPM	CONDENSER WATER SIDE P.D. FT WG	CONDENSER WATER SIDE HEAT ABS. MBH	UNIT WT. LB.	BASIS OF DESIGN	REMARKS (AS NOTED BELOW)
HP-1A	EXIST. BEQ "F" MAU-1	WATER-TO-WATER WSHP	SCROLL	208/3/60 (25.9)	55.0	47.5	14.2	17.4	53.2	85.0	94.0	14.2	17.4	63.8	100.0	111.8	14.2	17.4	85.8	70.0	60.7	14.2	17.4	66.1	370	McQUAY 6-TON	NOTES 1 THRU 6
HP-1B	EXIST. BEQ "F" MAU-1	WATER-TO-WATER WSHP	SCROLL	208/3/60 (25.9)	55.0	47.5	14.2	17.4	53.2	85.0	94.0	14.2	17.4	63.8	100.0	111.8	14.2	17.4	85.8	70.0	60.7	14.2	17.4	66.1	370	McQUAY 6-TON	NOTES 1 THRU 6
HP-2A	EXIST. BEQ "F" MAU-2	WATER-TO-WATER WSHP	SCROLL	208/3/60 (25.9)	55.0	46.5	14.2	17.4	60.3	85.0	95.2	14.2	17.4	72.4	100.0	111.8	14.2	17.4	85.8	70.0	60.7	14.2	17.4	66.1	370	McQUAY 6-TON	NOTES 1 THRU 6
HP-2B	EXIST. BEQ "F" MAU-2	WATER-TO-WATER WSHP	SCROLL	208/1/60 (25.0)	55.0	48.3	12.0	12.3	40.2	85.0	93.0	12.0	12.3	48.2	100.0	109.6	12.0	12.3	58.2	70.0	62.4	12.0	12.3	47.7	300	McQUAY 4-TON	NOTES 1 THRU 6
HP-3A	EXIST. BEQ "G" MAU-3	WATER-TO-WATER WSHP	SCROLL	208/3/60 (25.9)	55.0	48.1	14.2	17.4	48.7	85.0	93.2	14.2	17.4	58.4	100.0	111.8	14.2	17.4	85.8	70.0	60.7	14.2	17.4	66.1	370	McQUAY 6-TON	NOTES 1 THRU 6
HP-3B	EXIST. BEQ "G" MAU-3	WATER-TO-WATER WSHP	SCROLL	208/1/60 (25.0)	55.0	48.5	12.0	12.3	38.9	85.0	92.8	12.0	12.3	46.7	100.0	109.6	12.0	12.3	58.2	70.0	62.4	12.0	12.3	47.7	300	McQUAY 4-TON	NOTES 1 THRU 6
HP-4A	EXIST. BEQ "G" MAU-4	WATER-TO-WATER WSHP	SCROLL	208/1/60 (25.0)	55.0	48.0	12.0	12.3	42.1	85.0	93.4	12.0	12.3	50.5	100.0	109.6	12.0	12.3	58.2	70.0	62.4	12.0	12.3	47.7	300	McQUAY 4-TON	NOTES 1 THRU 6
HP-4B	EXIST. BEQ "G" MAU-4	WATER-TO-WATER WSHP	SCROLL	208/1/60 (22.4)	55.0	48.0	9.0	16.8	31.5	85.0	93.4	9.0	16.8	37.8	100.0	110.6	9.0	16.8	48.2	70.0	61.6	9.0	16.8	39.3	250	McQUAY 3-TON	NOTES 1 THRU 6
HP-5A	EXIST. BEQ "H" MAU-5	WATER-TO-WATER WSHP	SCROLL	208/3/60 (25.9)	55.0	48.1	14.2	17.4	48.7	85.0	93.2	14.2	17.4	58.4	100.0	111.8	14.2	17.4	85.8	70.0	60.7	14.2	17.4	66.1	370	McQUAY 6-TON	NOTES 1 THRU 6
HP-5B	EXIST. BEQ "H" MAU-5	WATER-TO-WATER WSHP	SCROLL	208/1/60 (25.0)	55.0	48.5	12.0	12.3	38.9	85.0	92.8	12.0	12.3	46.7	100.0	109.6	12.0	12.3	58.2	70.0	62.4	12.0	12.3	47.7	300	McQUAY 4-TON	NOTES 1 THRU 6
HP-6A	EXIST. BEQ "H" MAU-6	WATER-TO-WATER WSHP	SCROLL	208/1/60 (25.0)	55.0	48.0	12.0	12.3	42.1	85.0	93.4	12.0	12.3	50.5	100.0	109.6	12.0	12.3	58.2	70.0	62.4	12.0	12.3	47.7	300	McQUAY 4-TON	NOTES 1 THRU 6
HP-6B	EXIST. BEQ "H" MAU-6	WATER-TO-WATER WSHP	SCROLL	208/1/60 (22.4)	55.0	48.0	9.0	16.8	31.5	85.0	93.4	9.0	16.8	37.8	100.0	110.6	9.0	16.8	48.2	70.0	61.6	9.0	16.8	39.3	250	McQUAY 3-TON	NOTES 1 THRU 6

NOTES:

1. PROVIDE WITH FACTORY STARTER CONTROLS.
2. PROVIDE FACTORY MOUNTED AND WIRED DISCONNECT SWITCH.
3. PROVIDE MOTOR STARTER.
4. PROVIDE INTERNAL VIBRATION ISOLATION.
5. PROVIDE EXTENDED GREASE FITTINGS.
6. PROVIDE FACTORY BACNET CONTROLS COMPATIBLE WITH THE BASE AUTOMATED LOGIC CONTROLS SYSTEM.
6. PROVIDE CUPRO-NICKEL INNER TUBE COAXIAL HEAT EXCHANGER.

AIR DIFFUSER, GRILLE & REGISTER SCHEDULE

SYMBOL	MOUNTING TYPE	NECK SIZE (IN.)	PANEL SIZE (IN.)	SERVICE	THROW PATTERN	REMARKS (AS NOTED BELOW)
A	WALL MOUNT	14x6	16-1/2 X 8-1/2	SUPPLY	-	1, 2, 3, 5
B	CEILING MOUNT	6x6	8-1/2 X 8-1/2	SUPPLY	-	1, 2, 3, 5
C	CEILING MOUNT	14x14	16-1/2 X 16-1/2	RETURN	-	2, 3, 4, 5
D	CEILING MOUNT	6x6	8-1/2 X 8-1/2	EXHAUST	-	2, 3, 4, 5

NOTES:

1. DOUBLE DEFLECTION, FRONT BLADE PARALLEL TO LONG DIMENSION (3/4" BLADE SPACING).
2. WHITE FINISH.
3. ALL ALUMINUM CONSTRUCTION.
4. EGGCRATE GRILLE WITH 1/2" X 1/2" X 1/2" CORE.
5. PROVIDE OPPOSED BLADE DAMPER.

EXISTING MAKEUP AIR HANDLING UNIT SCHEDULE

EQUIPMENT NUMBER	AREA/UNIT SERVED	DESCRIPTION	FAN ORIG. S.A. CFM	FAN NEW S.A. CFM	FAN ORIG. O.A. CFM	FAN NEW O.A. CFM	FAN ORIG. E.A. CFM	FAN NEW E.A. CFM	FAN S.A. EXT. S.P. IN.	FAN S.A. TOTAL S.P. IN.	FAN E.A. EXT. S.P. IN.	FAN MIN. SUPPLY MOTOR HP	FAN MIN. E.A. MOTOR HP	FAN VOLTS/PHASE/HZ (MCA)	FILTERS TYPE	FILTERS MAX. FACE VELOCITY FPM	COOLING ENT. AIR °F DB	COOLING ENT. AIR °F WB	COOLING NEW LVG. AIR °F DB	COOLING NEW LVG. AIR °F WB	COOLING MAX. FACE VELOCITY FPM	COOLING ORIG. GPM	COOLING NEW GPM	COOLING EWT °F	COOLING △T °F	COOLING MBH SENS.	COOLING MBH NEW TOTAL	HEATING ENT. AIR °F	HEATING NEW MBH OUTPUT	HEATING HOT WATER ORIG. GPM	HEATING HOT WATER NEW GPM	HEATING HOT WATER △T °F	MAX. WT. LB.	REMARKS
MAU-1	BEQ "F"	MAKEUP AIR HANDLING UNIT	4,975	3,925	4,975	3,925	4,555	3,505	1.50	2.50	1.50	5	5	208/3/60	TA	500	---	---	65.0	62.0	500	14.6	28.4	47.5	7.5	---	106.4	---	171.6	14.6	28.4	12.1	1620	
MAU-2	BEQ "F"	MAKEUP AIR HANDLING UNIT	5,205	4,005	5,205	4,005	4,725	3,525	1.50	2.50	1.50	5	5	208/3/60	TA	500	---	---	65.0	62.0	500	14.6	26.2	47.4	7.7	---	100.5	---	144.0	14.6	26.2	11.0	1803	
MAU-3 & MAU-5	BEQ "G" & "H"	MAKEUP AIR HANDLING UNIT	3,955	3,205	3,955	3,205	3,655	2,905	1.50	2.50	1.50	5	5	208/3/60	TA	500	---	---	65.0	62.0	500	14.6	26.2	48.3	6.7	---	87.6	---	144.0	14.6	26.2	11.0	1402	
MAU-4 & MAU-6	BEQ "G" & "H"	MAKEUP AIR HANDLING UNIT	3,570	2,820	3,570	2,820	3,270	2,520	1.50	2.50	1.50	3	3	208/3/60	TA	500	---	---	65.0	62.0	500	14.6	21.0	48.0	7.0	---	73.6	---	106.4	14.6	21.0	10.1	1334	

GENERAL NOTES:

1. RE-BALANCE EXISTING MAKEUP AIR HANDLING UNITS TO THE "NEW" VALUES AS SHOWN IN THE EXISTING MAKEUP AIR HANDLING UNIT SCHEDULE.

1	ISSUED FOR CONSTRUCTION	11-24-09	RJO
STM	DESCRIPTION	DATE	APPR

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY --

SATISFACTORY TO DATE --

DES RJO DRW RJO CHK JEW

PROJECT MANAGER --

IPT TECH. BRANCH HEAD --

CHIEF ENG/ARCH (CORE) --

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH CENTRAL

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

MECHANICAL SCHEDULES

SCALE: NTS

EPROJECT NO.: --

CONSTR. CONTR. NO. ####

NAVFAC DRAWING NO. --

SHEET 18 OF 37

M601

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\OBJ\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60169\HVAC study and report-s870450\Working Technical Files\CAD Drawings\Sh870450-M-601.dwg LAYOUT NAME: 870450-M-601 PLOTTED: Tuesday, November 24, 2009 - 11:03pm USER: bob.ogrady

ROOM WSHP SEQUENCE OF OPERATION:

THE AUTOMATED LOGIC CONTROL MODULE PROGRAMMED FOR OPERATION OF EACH ROOM WSHP SHALL MAINTAIN SPACE TEMPERATURE AND HUMIDITY WITHIN ITS OCCUPIED/UNOCCUPIED HEATING & COOLING SETPOINTS IN ACCORDANCE WITH THE OCCUPANTS SCHEDULE. THE AUTOMATED LOGIC SPACE TEMPERATURE & HUMIDITY SENSORS SHALL ALSO PROVIDE SETPOINT ADJUSTMENTS AND LOCAL OVERRIDE INFORMATION TO THE CONTROL MODULE.

MORNING WARM-UP/COOL-DOWN
DURING MORNING WARM-UP/COOL-DOWN THE UNIT FAN SHALL BE ENERGIZED. THE CONDENSER WATER SOLENOID VALVE SHALL OPEN AND ONCE CONDENSER WATER FLOW IS PROVEN, COOLING OR HEATING SHALL BE STAGED AS REQUIRED TO SATISFY THE SPACE TEMPERATURE AND HUMIDITY SETPOINTS (ADJ.) IN TIME FOR THE BEGINNING OF THE OCCUPIED MODE.

OCCUPIED MODE
DURING THE OCCUPIED MODE, THE UNIT FAN SHALL RUN CONTINUOUSLY. THE EXISTING 100% OUTSIDE AIR MAKEUP AIR HANDLING UNIT WILL PROVIDE THE MINIMUM REQUIRED OUTSIDE AIR TO EACH ROOM CONTINUOUSLY, AND THE SAME SYSTEM WILL EXHAUST THE REQUIRED AIR FROM EACH TOILET ROOM.

ON AN INCREASE IN SPACE TEMPERATURE OR HUMIDITY ABOVE THE COOLIING OR HUMIDITY SETPOINTS, THE REVERSING VALVE SHALL BE ENERGIZED AND THE COMPRESSOR SHALL BE ENERGIZED UNTIL THE COOLING SPACE TEMPERATURE AND HUMIDITY SETPOINTS ARE SATISFIED. HOT GAS REHEAT SHALL BE ENERGIZED AS REQUIRED TO MAINTAIN SPACE TEMPERATURE AND PREVENT SUB-COOLING OF THE SPACE.

ON A DECREASE IN SPACE TEMPERATURE BELOW THE HEATING SETPOINT, THE REVERSING VALVE SHALL BE DE-ENERGIZED, AND THE COMPRESSOR SHALL BE ENERGIZED UNTIL THE HEATING SPACE TEMPERATURE SETPOINT IS SATISFIED.

UNOCCUPIED MODE
DURING THE UNOCCUPIED MODE, THE UNIT FAN SHALL BE DE-ENERGIZED.

WHEN SCHEDULED TO CHANGE OVER TO THE UNOCCUPIED MODE, THE MODULE SHALL RAISE THE COOLING SETPOINT AND LOWER THE HEATING SETPOINT (ADJ.) TO OPERATOR-DETERMINED VALUES. IN THE UNOCCUPIED MODE, THE SETPOINT ADJUSTMENT WILL NOT AFFECT UNOCCUPIED COOLING OR HEATING SETPOINTS.

WHEN THE SPACE TEMPERATURE OVERRIDE BUTTON IS PRESSED DURING THE UNOCCUPIED MODE, THE UNIT REVERTS TO AN OCCUPIED MODE FOR AN OPERATOR-DETERMINED PERIOD OF TIME. LOCAL OVERRIDE ENABLES THE SETPOINT ADJUSTMENT, AS IN NORMAL SCHEDULED OCCUPIED MODE.

INPUT/OUTPUT POINTS LIST

BUILDING: BEQs F, G & H

SYSTEMS: ALL ROOM WSHPs

	HARDWARE																						SOFTWARE																											
	OUTPUT									INPUT											ALARMS								APPLICATION PROGRAMS																			
	DIGITAL					ANALOG				DIGITAL						ANALOG																																
GRAPHIC DISPLAY / POINT DESCRIPTION	CONTROL RELAY	SOLENOID	ON/OFF	HAND/OFF/AUTO	OPEN/CLOSED	CONTROL POINT ADJUSTMENT	POSITION ADJUSTMENT	FAN MODULATION	STATUS ON/OFF	DIFF. PRESSURE SWITCH	FLOW SWITCH	AUXILIARY CONTACT (SS)	POSITION	ZERO SPEED SWITCH	TEMPERATURE	% RELATIVE HUMIDITY	PSIG	CFM	STATIC PRESSURE	CONTACT CLOSURE	SENSOR FAIL	FLOW FAIL	HIGH LIMIT	LOW LIMIT			SCHEDULED START/ STOP	OPTIMUM START/ STOP	DUTY CYCLING	DEMAND LIMITING	STATIC PRESSURE CONTROL	BLDG STATIC PRESS. CONTROL	DAY/ NIGHT SETBACK	ECONOMIZER	DISCHARGE AIR TEMPERATURE	RUN TIME										
SUPPLY FAN	●		●							●	●											●					●								●													
SUPPLY AIR															●	●					●		●	●									●			●												
RETURN AIR															●	●					●		●										●															
CONDENSER WATER SOLENOID VALVE		●																																														
SPACE TEMPERATURE						●									●								●	●									●															
SPACE HUMIDITY						●									●								●	●									●															
COMPRESSOR			●						●																																							
REVERSING VALVE														●																																		

MAU WSHP SEQUENCE OF OPERATION:

THE AUTOMATED LOGIC CONTROL MODULE PROGRAMMED FOR OPERATION OF EACH MAU WSHP SHALL MAINTAIN A LEAVING CHILLED/HEATING WATER TEMPERATURE (ADJ.) BASED UPON THE OUTSIDE AIR TEMPERATURE.

COORDINATE WITH THE EXISTING TEMPERATURE RESET SCHEDULE.

INPUT/OUTPUT POINTS LIST

BUILDING: BEQs F, G & H

SYSTEMS: ALL MAU WSHPs

	HARDWARE																						SOFTWARE																											
	OUTPUT									INPUT											ALARMS								APPLICATION PROGRAMS																			
	DIGITAL					ANALOG				DIGITAL						ANALOG																																
GRAPHIC DISPLAY / POINT DESCRIPTION	CONTROL RELAY	SOLENOID	ON/OFF	HAND/OFF/AUTO	OPEN/CLOSED	CONTROL POINT ADJUSTMENT	POSITION ADJUSTMENT	FAN MODULATION	STATUS ON/OFF	DIFF. PRESSURE SWITCH	FLOW SWITCH	AUXILIARY CONTACT (SS)	POSITION	ZERO SPEED SWITCH	TEMPERATURE	% RELATIVE HUMIDITY	PSIG	CFM	STATIC PRESSURE	CONTACT CLOSURE	SENSOR FAIL	FLOW FAIL	HIGH LIMIT	LOW LIMIT			SCHEDULED START/ STOP	OPTIMUM START/ STOP	DUTY CYCLING	DEMAND LIMITING	STATIC PRESSURE CONTROL	BLDG STATIC PRESS. CONTROL	DAY/ NIGHT SETBACK	ECONOMIZER	DISCHARGE AIR TEMPERATURE	RUN TIME										
LOAD SUPPLY & RETURN TEMPERATURES						●									●								●	●																								
SOURCE SUPPLY & RETURN TEMPERATURES						●									●								●	●																								
COMPRESSOR			●						●																																							
REVERSING VALVE														●																																		

1	ISSUED FOR CONSTRUCTION	11-24-09	RJO
SYM	DESCRIPTION	DATE	APPR

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY --

SATISFACTORY TO DATE --

DES RJO DRW RJO CHK JEW

PROJECT MANAGER --

IPT TECH. BRANCH HEAD --

CHIEF ENG/ARCH (CORE) --

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH CENTRAL

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

TEMPERATURE CONTROL DRAWINGS

SCALE: NTS

EPROJECT NO.: --

CONSTR. CONTR. NO. ####

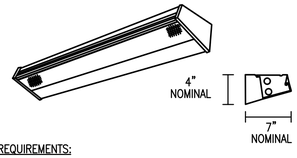
NAVFAC DRAWING NO. --

SHEET 19 OF 37

M701

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIRL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC\H\M60169\HVAC study and report-870450\Working Technical Files\CAD Drawings\Sh870450-M-701.dwg LAYOUT NAME: 870450-M-701 PLOTTED: Tuesday, November 24, 2009 - 11:04pm USER: bob.ogrady

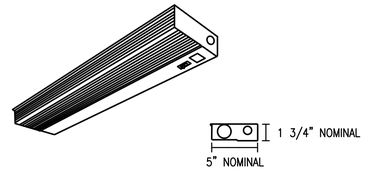


LUMINAIRE REQUIREMENTS:

1. HOUSING – DIE–FORMED, HEAVY–GAUGE, COLD–ROLLED STEEL WITH ENDCAPS MADE FROM THE SAME MATERIAL AS HOUSING.
2. FINISH – MULTI–STAGE PHOSPHATE BONDING TREATMENT FINISHED WITH HIGH REFLECTANCE (MINIMUM 85%), BAKED WHITE ENAMEL FINISH. DARK BRONZE OR BLACK FINISH AVAILABLE. SEE LIGHTING FIXTURE SCHEDULE.
3. LENS – 100% ACRYLIC, HIGH–IMPACT, CLEAR PRISMATIC DIFFUSER.
4. LAMPS – LINEAR FLUORESCENT T8 TYPICALLY, WITH WATTAGES AS INDICATED. SEE LIGHTING FIXTURE SCHEDULE.
5. BALLAST – CLASS P, THERMALLY–PROTECTED, HIGH POWER FACTOR (≥.95), ELECTRONIC TYPE WITH SOUND RATING A. SEE SPECIFICATION OR LIGHTING FIXTURE SCHEDULE FOR BALLAST OPTIONS AND SPECIFICS.
6. CERTIFICATION – UL LISTED AND LABELED.
7. FIXTURE TYPES –
   TYPE B – 2' LENGTH W/ 2–T8 FLUORESCENT LAMPS
8. OPTIONS –
   DOWN LIGHT ONLY WITH SOLID TOP

WALL–MOUNTED FLUORESCENT

REVISED: AUGUST 2004 | LIGHTING PLATE: NL–21

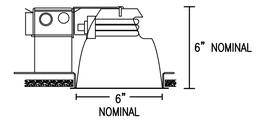


LUMINAIRE REQUIREMENTS:

1. HOUSING – DIE–FORMED, COLD–ROLLED STEEL, WITH REINFORCEMENT RIBS FOR RIGIDITY. ENDCAPS SECURED WITH TABS, SCREWS OR RIVETS.
2. FINISH – MULTI–STAGE PHOSPHATE BONDING TREATMENT FINISHED WITH HIGH REFLECTANCE (MINIMUM 85%), BAKED WHITE ENAMEL FINISH.
3. LENS – 100% ACRYLIC, CLEAR PRISMATIC OR WHITE TRANSLUCENT DIFFUSER WITH LINEAR RIBS FOR EVEN ILLUMINATION.
4. LAMPS – LINEAR FLUORESCENT T8 TYPICALLY, WITH WATTAGES AS INDICATED. SEE LIGHTING FIXTURE SCHEDULE.
5. BALLAST – CLASS P, THERMALLY–PROTECTED, HIGH POWER FACTOR (≥.95), ELECTRONIC TYPE WITH SOUND RATING A. SEE SPECIFICATION OR LIGHTING FIXTURE SCHEDULE FOR BALLAST OPTIONS AND SPECIFICS.
6. CERTIFICATION – UL LISTED AND LABELED.
7. FIXTURE TYPES –
   TYPE U – 2' LENGTH WITH 1–T8 FLUORESCENT LAMP

FLUORESCENT UNDER–CABINET TASK LIGHT

REVISED: AUGUST 2004 | LIGHTING PLATE: NL–25

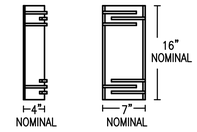


LUMINAIRE REQUIREMENTS:

1. HOUSING – ONE–PIECE, DIE–STAMPED, COLD ROLLED STEEL OR ACRYLIC–ENAMELED ALUMINUM. PROVIDE WITH PRE–WIRED JUNCTION BOX HAVING SNAP–ON ACCESS COVER. ACCESS TO JUNCTION BOX FROM BELOW CEILING SHALL BE PROVIDED THROUGH FIXTURE AFTER REMOVAL OF REFLECTOR.
2. REFLECTOR AND TRIM – ONE–PIECE, CLEAR, SPUN ALUMINUM, IRIDESCENCE–SUPRESSED, WITH PAINTED WHITE SELF TRIM.
3. BALLAST – CLASS P, MULTI–VOLT (120V–277V INPUT), HIGH POWER FACTOR (≥.95), PROGRAMMED RAPID START ELECTRONIC TYPE WITH ≤10% TOTAL HARMONIC DISTORTION. BALLAST SHALL BE CAPABLE OF UNIVERSALLY OPERATING 26W, 32W, OR 42 WATT LAMPS.
4. LAMPS – MULTI–TUBE, COMPACT FLUORESCENT WITH 4–PIN BASE. PROVIDE WITH WATTAGES AS INDICATED. SEE LIGHTING FIXTURE SCHEDULE.
5. CERTIFICATION – UL LISTED AND LABELED.
6. FIXTURE TYPES –
   TYPE D – 6" NOMINAL APERTURE

RECESSED COMPACT FLUORESCENT DOWNLIGHT

REVISED: AUGUST 2004 | LIGHTING PLATE: NL–31



LUMINAIRE REQUIREMENTS:

1. HOUSING/BACKPLATE – DIE–FORMED, COLD–ROLLED STEEL, WITH HIGHLY–REFLECTIVE WHITE ENAMEL FINISH.
2. TRIM – OPTIONS INCLUDE BRUSHED SOLID ALUMINUM, BRASS OR CHROME–PLATED BRASS, SATIN NICKEL, AND OTHERS. FINISH OPTIONS VARY BY MANUFACTURER.
3. DIFFUSER – TRANSLUCENT WHITE ACRYLIC OR WHITE OPAL GLASS.
4. LAMPS – MULTI–TUBE, COMPACT FLUORESCENT WITH 4–PIN BASE OR LONG TWIN TUBE FLUORESCENT T5 TYPE. PROVIDE WITH WATTAGES AS INDICATED. SEE LIGHTING FIXTURE SCHEDULE.
5. BALLAST – CLASS P, MULTI–VOLT (120V–277V INPUT), HIGH POWER FACTOR (≥.95), PROGRAMMED RAPID START FOR CFL, INSTANT START ELECTRONIC TYPE FOR T5, WITH ≤ 10% TOTAL HARMONIC DISTORTION.
6. MOUNTING – FIXTURE SHALL MOUNT DIRECTLY TO 4" OCTAGONAL OUTLET BOX WITH FOUR SEPARATE MOUNTING SCREWS.
7. CERTIFICATION – UL LISTED AND LABELED. ADA COMPLIANT.
8. OPTIONS/OTHER – OPTIONS INCLUDE REMOTE EMERGENCY BATTERY BACK–UP AND VARIOUS OTHER FINISHES.

COMPACT FLUORESCENT WALL SCONCE

REVISED: AUGUST 2004 | LIGHTING PLATE: NL–46

LIGHTING FIXTURE SCHEDULE

MATCH VOLTAGE OF FIXTURES TO CIRCUIT SERVING SAME.

MARK	DESCRIPTION	MOUNTING	LAMPS	VOLTAGE	REMARKS
A	COMPACT FLUORESCENT WALL SCONCE NL–46	WALL AT 6'–0" AFF	2F13 CF	120	MOUNT AT THE SAME HEIGHT AS THE EXISTING WALL SCONCE.
B	WALL–MOUNTED FLUORESCENT NL–21	WALL ABOVE MIRROR	2F17 T8	120	MOUNT AT THE SAME HEIGHT AS THE EXISTING WALL SCONCE.
U	FLUORESCENT UNDER–CABINET TASK LIGHT NL–25	UNDER CABINET	1F17 T8	120	
D	RECESSED COMPACT FLUORESCENT DOWNLIGHT NL–31	RECESSED	32TRT	120	

SYMBOL LEGEND

MOUNTING HEIGHT IS FROM FINISHED FLOOR TO CENTERLINE OF DEVICE OR OUTLET. HEIGHT MAY VARY TO COINCIDE WITH BUILDING CONSTRUCTION

SYMBOL	DESCRIPTION	MOUNTING HEIGHT
AFF	ABOVE FINISHED FLOOR	
WP	WEATHER PROOF	
ACT	ABOVE COUNTER TOP	
	WALL MOUNTED LIGHTING FIXTURE SEE SCHEDULE	AS NOTED
	UNDERCABINET LIGHTING FIXTURE SEE SCHEDULE	AS NOTED
	RECESSED LIGHTING FIXTURE SEE SCHEDULE	CEILING

#	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11/24/09	SWH

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES DAH | DRW DAH | CHK DAH

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
IPT SOUTH CENTRAL
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA
BEQ F, G & H - PHASE IV HVAC RENOVATION
LEGEND AND SCHEDULES

SCALE: AS SHOWN

EPROJECT NO.:

CONSTR. CONTR. NO.

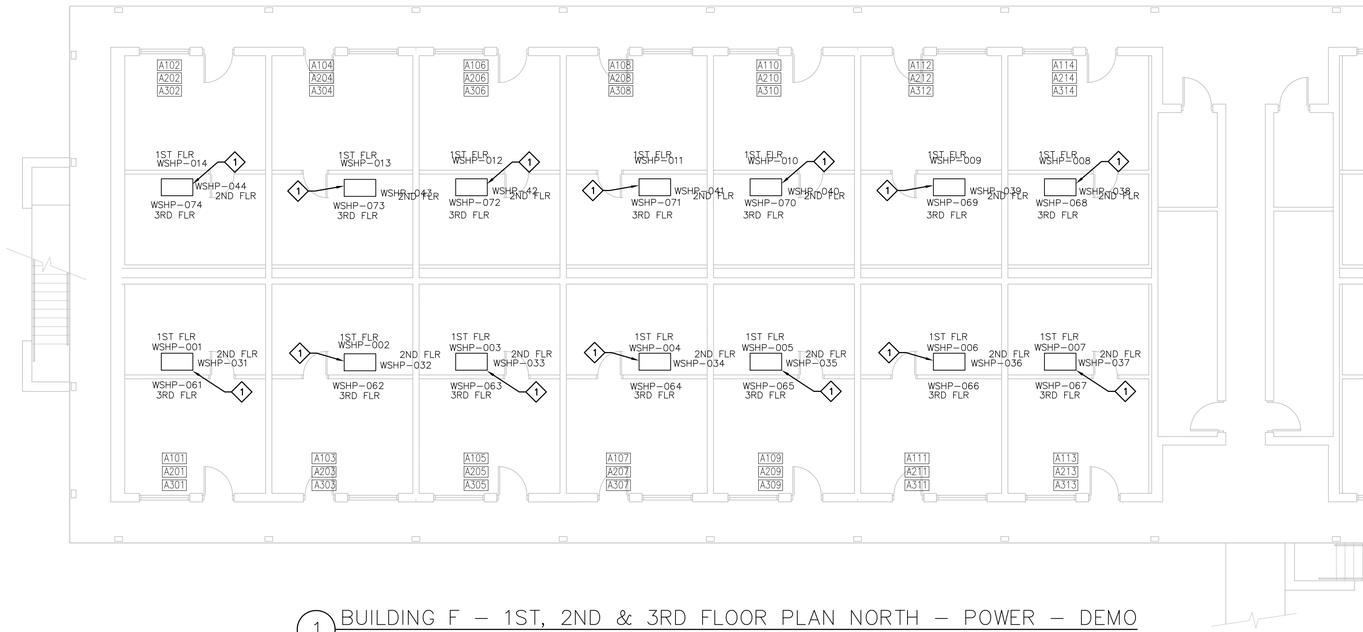
NAVFAC DRAWING NO.

SHEET 20 OF 37

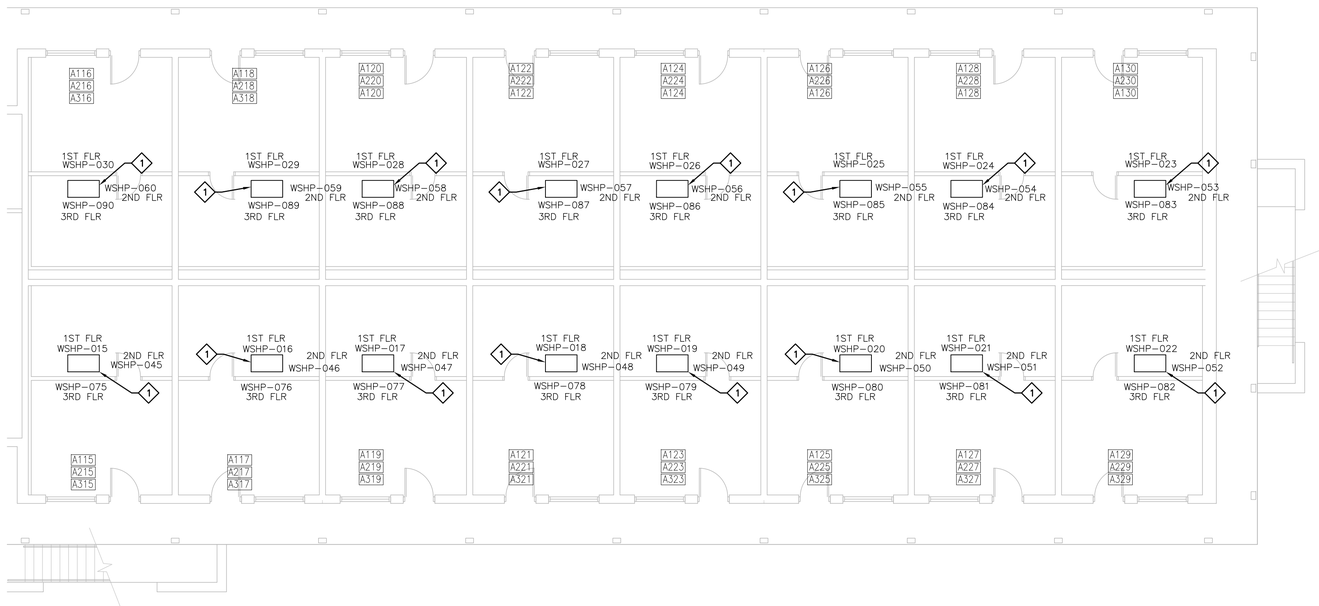
E000

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC[H]M60168\HVAC study and report-870450\Working Technical Files\CAD Drawings\3k870450 E-000 Legends and Schedules.dwg LAYOUT NAME: E000 PLOTTED: Tuesday, November 24, 2009 - 1:27pm USER: douglas.henry1



1 BUILDING F – 1ST, 2ND & 3RD FLOOR PLAN NORTH – POWER – DEMO
Scale:1/8"=1'-0"



2 BUILDING F – 1ST, 2ND & 3RD FLOOR PLAN SOUTH – POWER – DEMO
Scale:1/8"=1'-0"

GENERAL NOTES: (THIS SHEET ONLY)

A. REPLACE DAMAGED LIGHTING FIXTURES, BALLASTS, EMERGENCY BALLASTS, BATTERY PACK, SWITCHES AND/OR CONTROLS WITH NEW EQUIPMENT THAT IS IDENTICAL TO EXISTING.

B. REUSE EXSITING CIRCUITS TO MECHANICAL EQUIPMENT. EXTEND EXISTING CIRCUITS AS NECESSARY TO REACH NEW DISCONNECTS AND MECHANICAL EQUIPMENT. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS.

C. REUSE EXISTING LIGHTING CIRCUITS AND CONTROLS. EXTEND EXISTING CIRCUITS AS NECESSARY TO REACH NEW/REUSED FIXTURES, SWITCHES AND CONTROLS FOR BOTH NORMAL AND EMERGENCY LIGHTING.

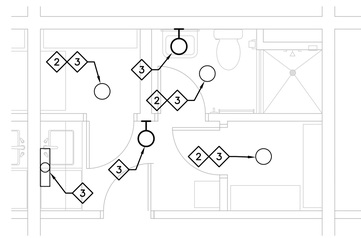
D. EQUIPMENT THAT IS DAMAGED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.

NOTES: (THIS SHEET ONLY)

1. DISCONNECT EXISITNG ELECTRICAL CIRCUIT AND REMOVE THIS EQUIPMENT. SALVAGE EXISTING CIRCUIT FOR USE WITH NEW EQUIPMENT.

2. BASE DESIGN: DISCONNECT EXISTING ELECTRICAL CIRCUIT AND REMOVE AND SALVAGE THIS LIGHTING FIXTURE. TAG SALVAGED FIXTURES FOR IDENTIFICATION, STORAGE. AND PROTECTION FROM DAMAGE. CLEAN AND RELAMP SERVICEABLE FIXTURES. REPLACE UNSERVICEABLE FIXTURES WITH NEW FIXTURES THAT ARE IDENTICAL TO EXISITNG. SALVAGE EXISITNG CIRCUIT, SWITCHES, CONTROLS, ETC. FOR USE WITH NEW/REUSED FIXTURES.

3. ADD-ALTERNATE #1: DISCONNECT EXISTING ELECTRICAL CIRCUIT AND REMOVE THIS LIGHITNG FIXTURE. FIXTURE SHALL BE REPLACED WITH NEW FIXTURE. SEE SHEET E000 AND E100 FOR DETAILS.



3 BUILDING F – 1ST, 2ND & 3RD LEVEL – TYPICAL UNIT LIGHTING – DEMO
Scale:1/4"=1'-0"

1/8"=1'-0" 0' 5' 10' 20' 30'

1/4"=1'-0" 1' 0' 1' 5' 10' 15'

#	DESCRIPTION	DATE	APPR.
1	ISSUED FOR CONSTRUCTION	11/24/09	SWI

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES DAH DRW DAH CHK DAH

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH CENTRAL

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

BLDG F – 1ST THRU 3RD FLOOR PLAN – POWER & LIGHTING – DEMO

SCALE: AS SHOWN

EPROJECT NO.:

CONSTR. CONTR. NO.

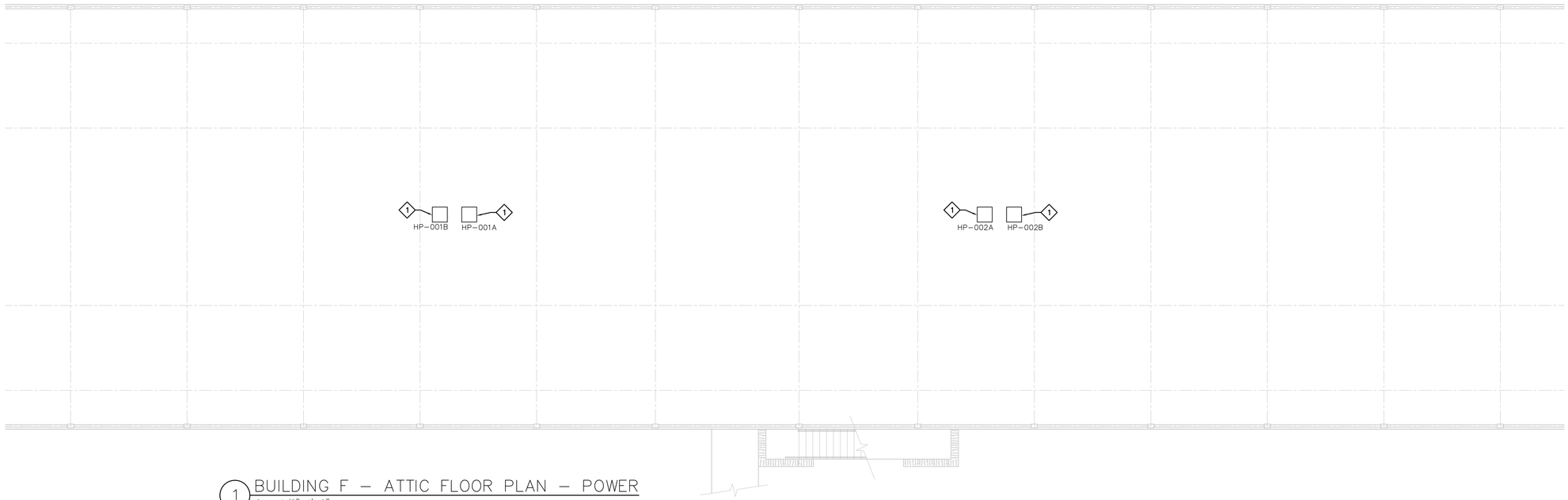
NAVFAC DRAWING NO.

SHEET 21 OF 37

ED100

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60169\HVAC study and report-870450\Working Technical Files\CAD Drawings\3ab870450 ED-100 BEQ F 1st 2nd 3rd Flr Pwr.dwg LAYOUT NAME: ED100 PLOTTED: Tuesday, November 24, 2009 - 2:26pm USER: douglas.henry1



1 BUILDING F – ATTIC FLOOR PLAN – POWER
Scale:1/8"=1'-0"

GENERAL NOTES: (THIS SHEET ONLY)

A EQUIPMENT THAT IS DAMAGED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.

NOTES: (THIS SHEET ONLY)

1 REMOVE EXISTING EQUIPMENT AND CIRCUIT. REMOVE CONDUCTORS AND CONDUIT BACK TO THE PANEL FROM WHICH IT IS SERVED.

1/8"=1'-0" 0' 5' 10' 20' 30'

#	ISSUED FOR CONSTRUCTION	11/24/09	SWH
SYM	DESCRIPTION	DATE	APPR

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

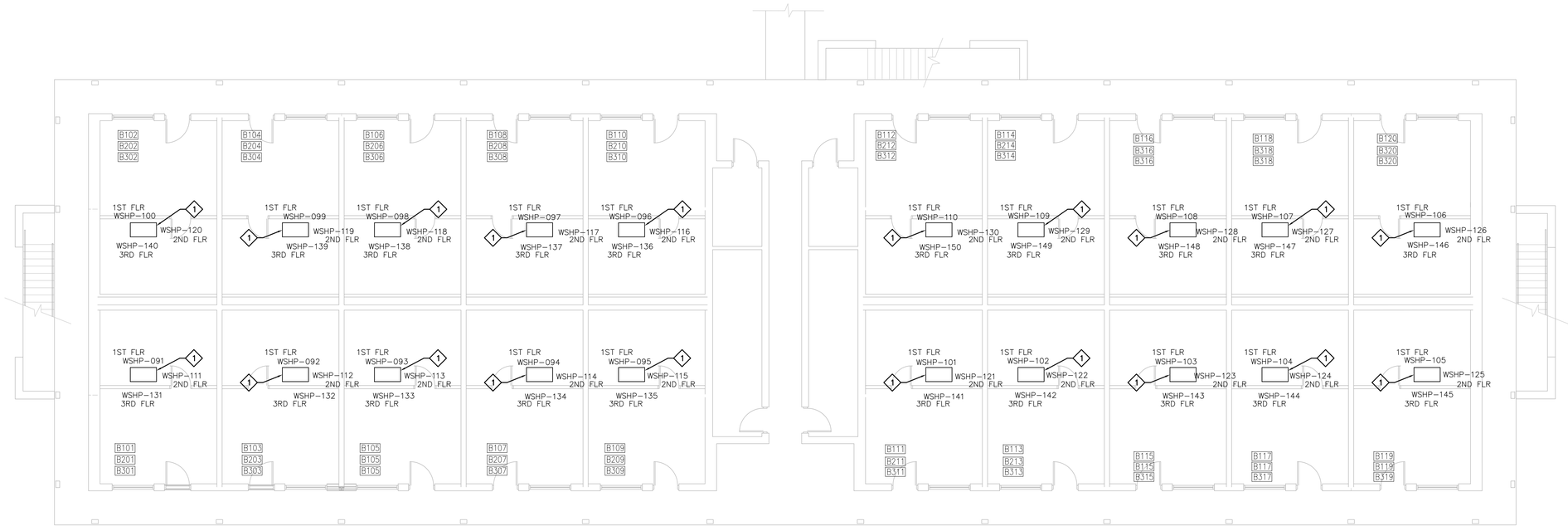
DES DAH DRW DAH CHK DAH

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
PT SOUTH CENTRAL
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA
NAVAL AIR STATION JACKSONVILLE
BEQ F, G & H - PHASE IV HVAC RENOVATION
BLDG F – ATTIC FLOOR PLAN – POWER – DEMO

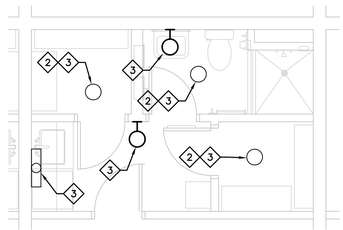
SCALE: AS SHOWN
EPROJECT NO.:
CONSTR. CONTR. NO.
NAVFAC DRAWING NO.
SHEET 22 OF 37
ED101

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60168\HVAC study and report-870450\Working Technical Files\CAD Drawings\3#870450 ED-101 BEQ F Attic Pwr.dwg LAYOUT NAME: ED101 PLOTTED: Tuesday, November 24, 2009 - 2:29pm USER: douglas.henry1



1 BUILDING G – 1ST, 2ND & 3RD FLOOR PLAN – POWER – DEMO
Scale:1/8"=1'-0"



2 BUILDING G – 1ST, 2ND & 3RD LEVEL – TYPICAL UNIT LIGHTING – DEMO
Scale:1/4"=1'-0"

GENERAL NOTES: (THIS SHEET ONLY)

A. REPLACE DAMAGED LIGHTING FIXTURES, BALLASTS, EMERGENCY BALLASTS, BATTERY PACK, SWITCHES AND/OR CONTROLS WITH NEW EQUIPMENT THAT IS IDENTICAL TO EXISTING.

B. REUSE EXSITING CIRCUITS TO MECHANICAL EQUIPMENT. EXTEND EXISTING CIRCUITS AS NECESSARY TO REACH NEW DISCONNECTS AND MECHANICAL EQUIPMENT. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS.

C. REUSE EXISTING LIGHTING CIRCUITS AND CONTROLS. EXTEND EXISTING CIRCUITS AS NECESSARY TO REACH NEW/REUSED FIXTURES, SWITCHES AND CONTROLS FOR BOTH NORMAL AND EMERGENCY LIGHTING.

D. EQUIPMENT THAT IS DAMAGED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.

NOTES: (THIS SHEET ONLY)

1. DISCONNECT EXISITNG ELECTRICAL CIRCUIT AND REMOVE THIS EQUIPMENT. SALVAGE EXISTING CIRCUIT FOR USE WITH NEW EQUIPMENT.

2. BASE DESIGN: DISCONNECT EXISTING ELECTRICAL CIRCUIT AND REMOVE AND SALVAGE THIS LIGHTING FIXTURE. TAG SALVAGED FIXTURES FOR IDENTIFICATION, STORAGE, AND PROTECTION FROM DAMAGE. CLEAN AND RELAMP SERVICEABLE FIXTURES. REPLACE UNSERVICEABLE FIXTURES WITH NEW FIXTURES THAT ARE IDENTICAL TO EXISITNG. SALVAGE EXISITNG CIRCUIT, SWITCHES, CONTROLS, ETC. FOR USE WITH NEW/REUSED FIXTURES.

3. ADD-ALTERNATE #1: DISCONNECT EXISTING ELECTRICAL CIRCUIT AND REMOVE THIS LIGHITNG FIXTURE. FIXTURE SHALL BE REPLACED WITH NEW FIXTURE. SEE SHEET E000 AND E100 FOR DETAILS.

1/8"=1'-0" 0' 5' 10' 20' 30'

1/4"=1'-0" 1' 0' 1' 5' 10' 15'

1	ISSUED FOR CONSTRUCTION	11/24/09	DAH	
SYM	DESCRIPTION	DATE	APPR	

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES DAH DRW DAH CHK DAH

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
BPT SOUTH CENTRAL

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

BLDG G – 1ST THRU 3RD FLOOR PLAN – POWER & LIGHTING – DEMO

SCALE: AS SHOWN

EPROJECT NO.:

CONSTR. CONTR. NO.

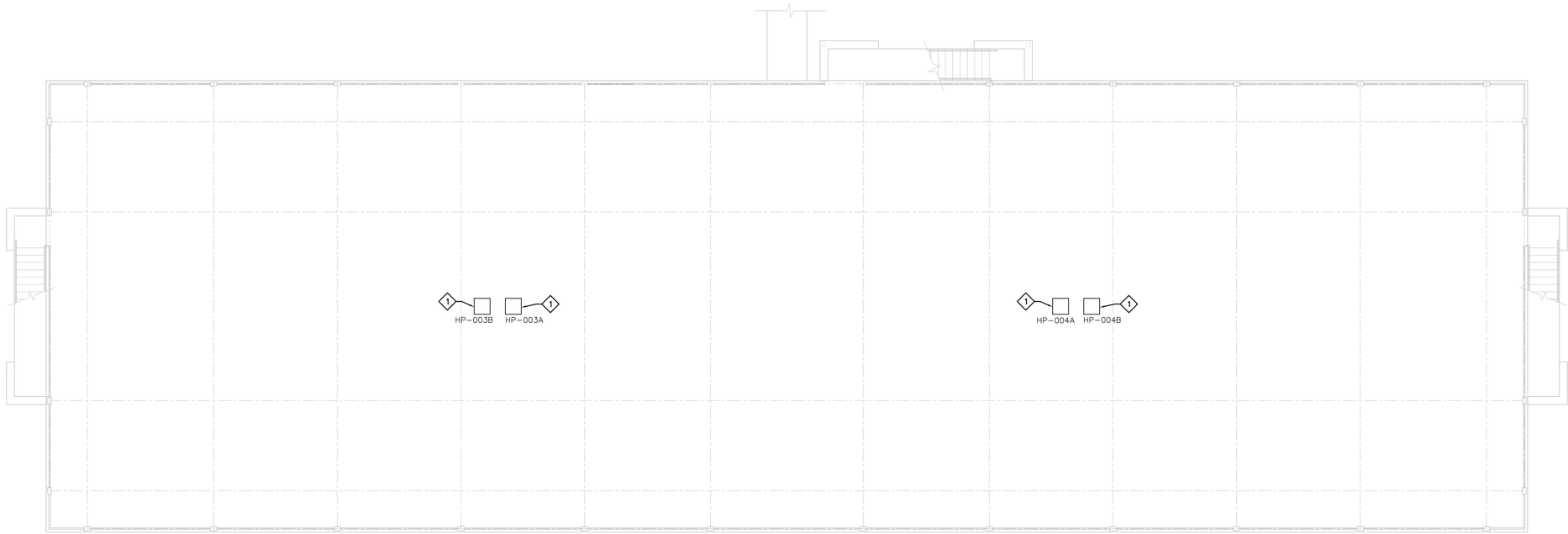
NAVFAC DRAWING NO.

SHEET 23 OF 37

ED102

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60169\HVAC study and report-870450\Working Technical Files\CAD Drawings\3#870450 ED-102 BEQ G 1st 2nd 3rd Flr Pwr.dwg LAYOUT NAME: ED102 PLOTTED: Tuesday, November 24, 2009 - 2:32pm USER: douglas.henry1



1 BUILDING G – ATTIC FLOOR PLAN – POWER – DEMO
Scale:1/8"=1'-0"

GENERAL NOTES: (THIS SHEET ONLY)

A EQUIPMENT THAT IS DAMAGED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.

NOTES: (THIS SHEET ONLY)

1 REMOVE EXISTING EQUIPMENT AND CIRCUIT. REMOVE CONDUCTORS AND CONDUIT BACK TO THE PANEL FROM WHICH IT IS SERVED.

1/8"=1'-0" 0' 5' 10' 20' 30'

1	ISSUED FOR CONSTRUCTION	11/24/09	SWI				
SYM	DESCRIPTION	DATE	APPR				

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES DAH DRW DAH CHK DAH

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
IPT SOUTH CENTRAL
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA
BEQ F, G & H - PHASE IV HVAC RENOVATION
BLDG G – ATTIC FLOOR PLAN – POWER – DEMO

SCALE: AS SHOWN

EPROJECT NO.:

CONSTR. CONTR. NO.

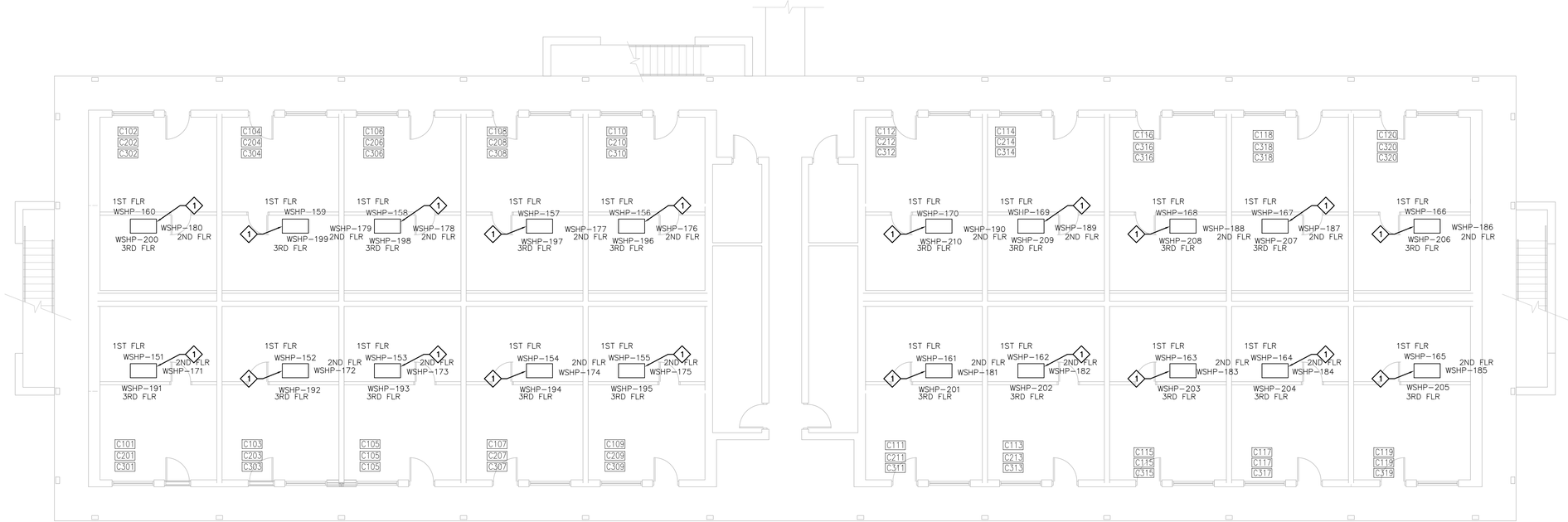
NAVFAC DRAWING NO.

SHEET 24 OF 37

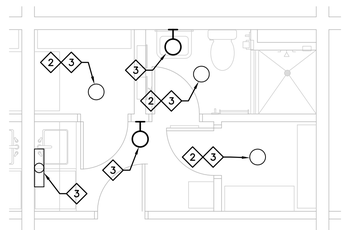
ED103

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60168\HVAC study and report-870450\Working Technical Files\CAD Drawings\3ia870450 ED-103 BEQ G Attic Per.dwg LAYOUT NAME: ED103 PLOTTED: Tuesday, November 24, 2009 - 2:37pm USER: douglas.henry1



1 BUILDING H – 1ST, 2ND & 3RD FLOOR PLAN – POWER – DEMO
Scale:1/8"=1'-0"



2 BUILDING H – 1ST, 2ND & 3RD LEVEL – TYPICAL UNIT LIGHTING – DEMO
Scale:1/4"=1'-0"

GENERAL NOTES: (THIS SHEET ONLY)

A. REPLACE DAMAGED LIGHTING FIXTURES, BALLASTS, EMERGENCY BALLASTS, BATTERY PACK, SWITCHES AND/OR CONTROLS WITH NEW EQUIPMENT THAT IS IDENTICAL TO EXISTING.

B. REUSE EXSITING CIRCUITS TO MECHANICAL EQUIPMENT. EXTEND EXISTING CIRCUITS AS NECESSARY TO REACH NEW DISCONNECTS AND MECHANICAL EQUIPMENT. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS.

C. REUSE EXISTING LIGHTING CIRCUITS AND CONTROLS. EXTEND EXISTING CIRCUITS AS NECESSARY TO REACH NEW/REUSED FIXTURES, SWITCHES AND CONTROLS FOR BOTH NORMAL AND EMERGENCY LIGHTING.

D. EQUIPMENT THAT IS DAMAGED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.

NOTES: (THIS SHEET ONLY)

1. DISCONNECT EXISITNG ELECTRICAL CIRCUIT AND REMOVE THIS EQUIPMENT. SALVAGE EXISTING CIRCUIT FOR USE WITH NEW EQUIPMENT.

2. BASE DESIGN: DISCONNECT EXISTING ELECTRICAL CIRCUIT AND REMOVE AND SALVAGE THIS LIGHTING FIXTURE. TAG SALVAGED FIXTURES FOR IDENTIFICATION, STORAGE, AND PROTECTION FROM DAMAGE. CLEAN AND RELAMP SERVICEABLE FIXTURES. REPLACE UNSERVICEABLE FIXTURES WITH NEW FIXTURES THAT ARE IDENTICAL TO EXISITNG. SALVAGE EXISITNG CIRCUIT, SWITCHES, CONTROLS, ETC. FOR USE WITH NEW/REUSED FIXTURES.

3. ADD-ALTERNATE #1: DISCONNECT EXISTING ELECTRICAL CIRCUIT AND REMOVE THIS LIGHITNG FIXTURE. FIXTURE SHALL BE REPLACED WITH NEW FIXTURE. SEE SHEET E000 AND E100 FOR DETAILS.

1/8"=1'-0" 0' 5' 10' 20' 30'

1/4"=1'-0" 1' 0' 1' 5' 10' 15'

#	DESCRIPTION	DATE	APPR.
1	ISSUED FOR CONSTRUCTION	11/24/09	DAH

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES DAH DRW DAH CHK DAH

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA
IPT SOUTH CENTRAL

BEQ F, G & H - PHASE IV HVAC RENOVATION

BLDG H – 1ST THRU 3RD FLOOR PLAN – POWER & LIGHTING – DEMO

SCALE: AS SHOWN

EPROJECT NO.:

CONSTR. CONTR. NO.

NAVFAC DRAWING NO.

SHEET 25 OF 37

ED104

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60169\HVAC study and report-870450\Working Technical Files\CAD Drawings\3#870450 ED-104 BEQ H 1st 2nd 3rd Flr Pwr.dwg LAYOUT NAME: ED104 PLOTTED: Tuesday, November 24, 2009 - 2:36pm USER: douglas.henry1

1 BUILDING H – ATTIC FLOOR PLAN – POWER – DEMO
Scale:1/8"=1'-0"

GENERAL NOTES: (THIS SHEET ONLY)

A EQUIPMENT THAT IS DAMAGED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.

NOTES: (THIS SHEET ONLY)

1 REMOVE EXISTING EQUIPMENT AND CIRCUIT. REMOVE CONDUCTORS AND CONDUIT BACK TO THE PANEL FROM WHICH IT IS SERVED.

1/8"=1'-0" 0' 5' 10' 20' 30'

1	ISSUED FOR CONSTRUCTION	11/24/09	SWI	
SYM	DESCRIPTION	DATE	APPR	

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES DAH DRW DAH CHK DAH

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
PT SOUTH CENTRAL
NAVAL AIR STATION JACKSONVILLE
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA
BEQ F, G & H - PHASE IV HVAC RENOVATION
BLDG H – ATTIC FLOOR PLAN – POWER – DEMO

SCALE: AS SHOWN

EPROJECT NO.:

CONSTR. CONTR. NO.

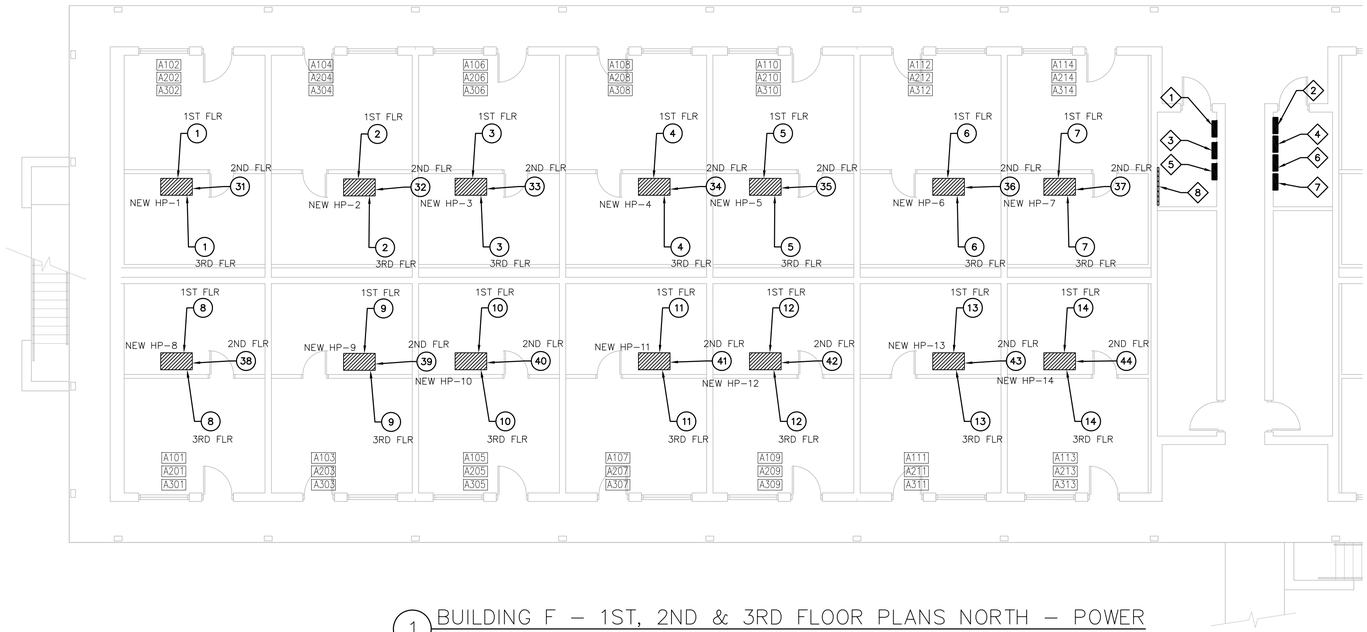
NAVFAC DRAWING NO.

SHEET 26 OF 37

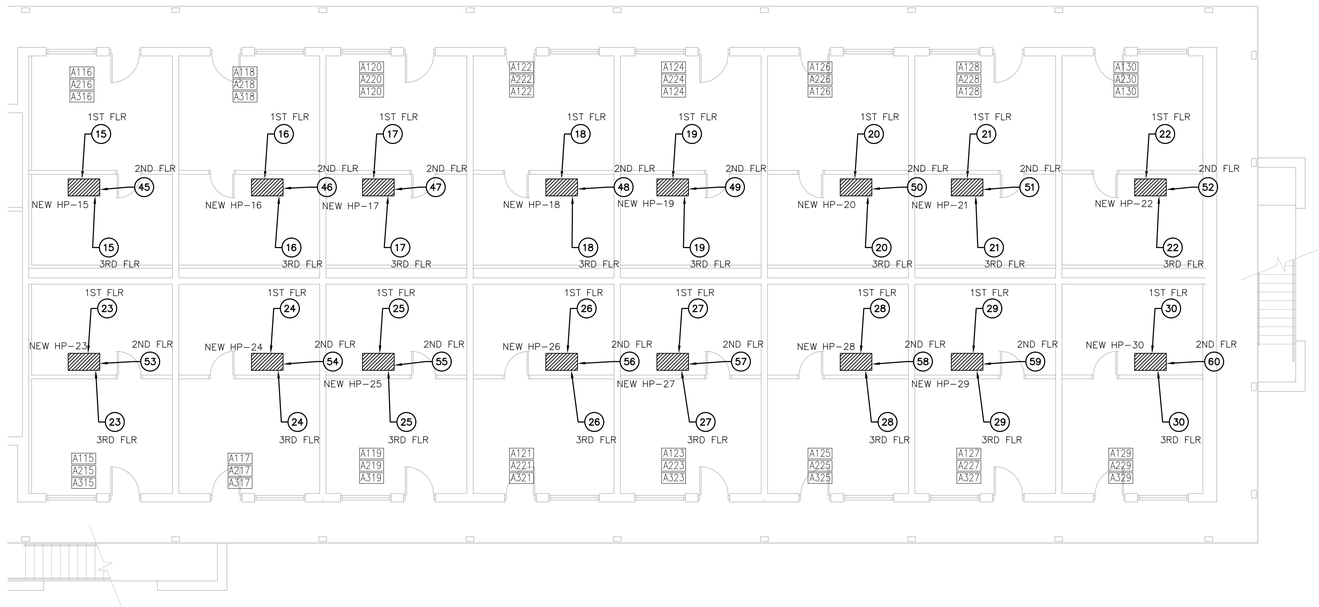
ED105

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60168\HVAC study and report-870450\Working Technical Files\CAD Drawings\3#870450 ED-105 BEQ H Attic Pwr.dwg LAYOUT NAME: ED105 PLOTTED: Tuesday, November 24, 2009 - 2:34pm USER: douglas.henry1



1 BUILDING F – 1ST, 2ND & 3RD FLOOR PLANS NORTH – POWER
Scale:1/8"=1'-0"



2 BUILDING F – 1ST, 2ND & 3RD FLOOR PLANS SOUTH – POWER
Scale:1/8"=1'-0"

GENERAL NOTES: (THIS SHEET ONLY)

A. ALL NEW CIRCUITS SHALL BE 2#12AWG & 1#12G – 1/2"C UNLESS OTHERWISE NOTED OR UNLESS HOMERUN IS GREATER THEN 100' IN LENGTH. IF HOMERUN IS GREATER THAN 100' IN LENGTH, PROVIDE #10AWG CONDUCTORS.

B. REUSE EXSITING CIRCUITS TO MECHANICAL EQUIPMENT. EXTEND EXISTING CIRCUITS AS NECESSARY TO REACH NEW DISCONNECTS AND MECHANICAL EQUIPMENT. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS.

C. REUSE EXSITING LIGHTING CIRCUITS AS SHOWN ON THE LIGHTING CIRCUIT SCHEDULE ON THIS SHEET. REUSE EXISTING LIGHTING FIXTURES, SWITCHES, AND CONTROLS THAT ARE UNDAMAGED FOR BOTH NORMAL AND EMERGENCY LIGHTING. REPLACE DAMAGED EQUIPMENT. RESTORE THE LIGHTING SYSTEM TO A FULLY OPERATIONAL STATE.

D. CIRCLE NOTES (X) REFER TO THE MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE ON SHEET E-300.

E. ALL DISCONNECT SWITCHES SHALL BE LOCKABLE IN THE OPEN POSITION.

F. ELECTRICAL WORK SHALL BE DONE IN COMPLIANCE WITH THE LATEST NATIONAL ELECTRICAL CODE EDITION, UFC-3-500-10 AND UFC-520-01.

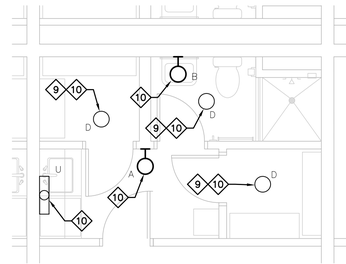
G. WIRING METHOD FOR THIS JOB SHALL MATCH WITH EXISTING IF THIS CONCURS WITH GENERAL NOTE F.

NOTES: (THIS SHEET ONLY)

1. EXISTING PANEL PP1 ON THE FIRST FLOOR. EXISTING PANEL PP3 ON THE SECOND FLOOR AND EXISTING PANEL PP5 ON THE THIRD FLOOR.
2. EXISTING PANEL PP2 ON THE FIRST FLOOR. EXISTING PANEL PP4 ON THE SECOND FLOOR AND EXISTING PANEL PP6 ON THE THIRD FLOOR.
3. EXISTING PANEL SP1 ON THE FIRST FLOOR. EXISTING PANEL SP6 ON THE SECOND FLOOR AND EXISTING PANEL SP11 ON THE THIRD FLOOR.
4. EXISTING PANEL SP3 ON THE FIRST FLOOR. EXISTING PANEL SP8 ON THE SECOND FLOOR AND EXISTING PANEL SP13 ON THE THIRD FLOOR.
5. EXISTING PANEL SP2 ON THE FIRST FLOOR. EXISTING PANEL SP7 ON THE SECOND FLOOR AND EXISTING PANEL SP12 ON THE THIRD FLOOR.
6. EXISTING PANEL SP4 ON THE FIRST FLOOR. EXISTING PANEL SP9 ON THE SECOND FLOOR AND EXISTING PANEL SP14 ON THE THIRD FLOOR.
7. EXISTING PANEL SP5 ON THE FIRST FLOOR. EXISTING PANEL SP10 ON THE SECOND FLOOR AND EXISTING PANEL SP15 ON THE THIRD FLOOR.
8. EXISTING TELE/DATA BACKBOARD.
9. RECONNECT EXISTING LIGHTING CIRCUITS AND FIXTURES.
10. ADD-ALTERNATE #1: REPLACE EXISTING LIGHTING FIXTURES WITH NEW FIXTURES. RECONNECT TO EXISTING LIGHTING CIRCUIT. SEE SHEET E000 FOR FIXTURE TYPE AND SCHEDULE.

LIGHTING CIRCUIT SCHEDULE

ROOM NAME	EXISTING LIGHTING CIRCUIT	NOTES
A101–A106	SP1–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
A107–A112	SP2–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
A113–A118	SP3–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
A119–A124	SP4–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
A124–A130	SP5–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
A201–A206	SP6–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
A207–A212	SP7–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
A213–A218	SP8–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
A219–A224	SP9–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
A224–A230	SP10–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
A301–A306	SP11–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
A307–A312	SP12–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
A313–A318	SP13–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
A319–A324	SP14–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
A324–A330	SP15–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.



3 BUILDING F – 1ST, 2ND & 3RD LEVEL – TYPICAL UNIT LIGHTING
Scale:1/4"=1'-0"

1/8"=1'-0" 0' 5' 10' 20' 30'

1/4"=1'-0" 1' 0' 1' 5' 10' 15'

#	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11/24/09	DAH

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES DAH DRW DAH CHK DAH

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA
IPT SOUTH CENTRAL

BEQ F, G & H - PHASE IV HVAC RENOVATION

BLDG F – 1ST THRU 3RD
FLOOR PLAN – POWER & LIGHTING

SCALE: AS SHOWN

EPROJECT NO.:

CONSTR. CONTR. NO.

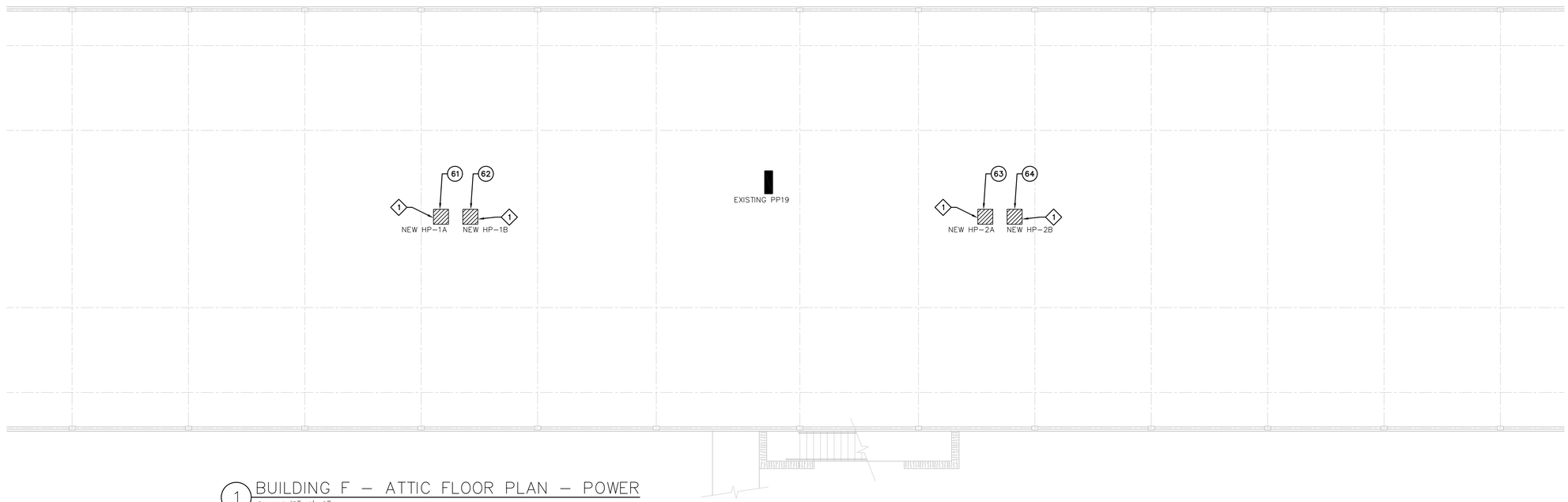
NAVFAC DRAWING NO.

SHEET 27 OF 37

E100

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC\H\M60169\HVAC study and report-870450\Working Technical Files\CAD Drawings\Sha870450 E-100 BEQ F 1st 2nd 3rd Flr Pwr.dwg LAYOUT NAME: E100 PLOTTED: Tuesday, November 24, 2009 – 1:30pm USER: douglas.henry1



1 BUILDING F – ATTIC FLOOR PLAN – POWER

Scale:1/8"=1'-0"

GENERAL NOTES: (THIS SHEET ONLY)

A. CIRCLE NOTES ((X)) REFER TO THE MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE ON SHEET E-300.

B. ALL DISCONNECT SWITCHES SHALL BE LOCKABLE IN THE OPEN POSITION.

C. ELECTRICAL WORK SHALL BE DONE IN COMPLIANCE WITH THE LATEST NATIONAL ELECTRICAL CODE EDITION, UFC-3-500-10 AND UFC-520-01.

D. WIRING METHOD FOR THIS JOB SHALL MATCH WITH EXISTING IF THIS CONCURS WITH GENERAL NOTE C.

NOTES: (THIS SHEET ONLY)

1. PROVIDE NEW CIRCUIT FOR THIS EQUIPMENT, AS SHOWN ON THE MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE.

1/8"=1'-0" 0' 5' 10' 20' 30'

#	ISSUED FOR CONSTRUCTION	11/24/09	SWM
SYM	DESCRIPTION	DATE	APPR

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES DAH DRW DAH CHK DAH

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
IPT SOUTH CENTRAL
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA
NAVAL AIR STATION JACKSONVILLE
BEQ F, G & H - PHASE IV HVAC RENOVATION
BLDG F – ATTIC FLOOR PLAN – POWER

SCALE: AS SHOWN

EPROJECT NO.:

CONSTR. CONTR. NO.

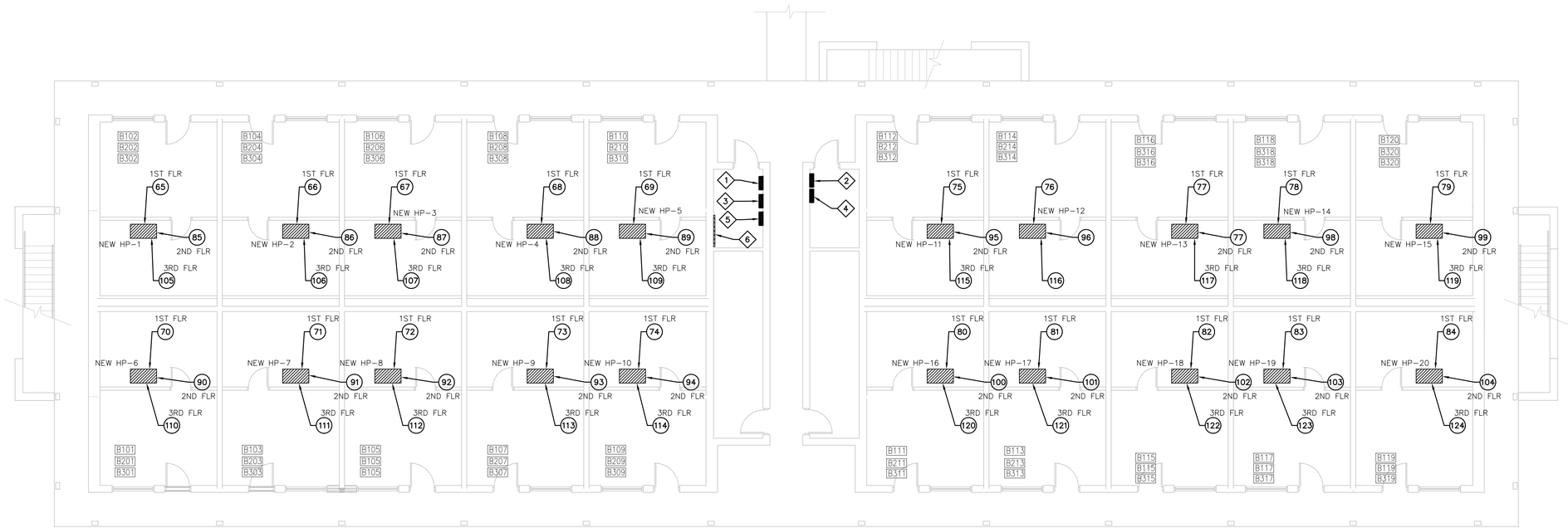
NAVFAC DRAWING NO.

SHEET 28 OF 37

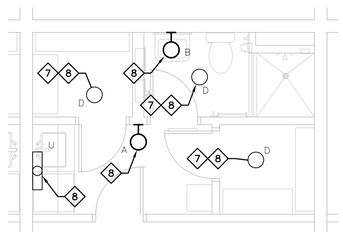
E101

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60168\HVAC study and report-870450\Working Technical Files\CAD Drawings\Sh870450 E-101 BEQ F Attic Pwr.dwg LAYOUT NAME: E101 PLOTTED: Tuesday, November 24, 2009 - 1:31pm USER: douglas.henry1



1 BUILDING G – 1ST, 2ND & 3RD FLOOR PLAN – POWER
Scale:1/8"=1'-0"



2 BUILDING G – 1ST, 2ND & 3RD LEVEL – TYPICAL UNIT LIGHTING
Scale:1/4"=1'-0"

LIGHTING CIRCUIT SCHEDULE

ROOM NAME	EXISTING LIGHTING CIRCUIT	NOTES
B101–B106	SP16–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
B107–B112	SP17–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
B113, B115, B117 & B119	SP18–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
B114, B116, B118 & B120	SP18–42	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
B201–B206	SP19–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
B207–B212	SP20–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
B213, B215, B217 & B219	SP21–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
B214, B216, B218 & B220	SP21–42	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
B301–B306	SP22–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
B307–B312	SP23–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
B313, B315, B317 & B319	SP24–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
B314, B316, B318 & B320	SP24–42	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.

GENERAL NOTES: (THIS SHEET ONLY)

A. ALL NEW CIRCUITS SHALL BE 2#12AWG & 1#12G – 1/2"C UNLESS OTHERWISE NOTED OR UNLESS HOMERUN IS GREATER THEN 100' IN LENGTH. IF HOMERUN IS GREATER THAN 100' IN LENGTH, PROVIDE #10AWG CONDUCTORS.

B. REUSE EXSITING CIRCUITS TO HEAT PUMPS. EXTEND EXISTING CIRCUITS AS NECESSARY TO REACH NEW DISCONNECTS AND HEAT PUMPS. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS.

C. REUSE EXISTING LIGHTING CIRCUITS AS SHOWN ON THE LIGHTING CIRCUIT SCHEDULE ON THIS SHEET. REUSE EXISTING LIGHTING FIXTURES, SWITCHES, AND CONTROLS THAT ARE UNDAMAGED FOR BOTH NORMAL AND EMERGENCY LIGHTING. REPLACE DAMAGED EQUIPMENT. RESTORE THE LIGHTING SYSTEM TO A FULLY OPERATIONAL STATE.

D. CIRCLE NOTES ((X)) REFER TO THE MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE ON SHEET E-301.

E. ALL DISCONNECT SWITCHES SHALL BE LOCKABLE IN THE OPEN POSITION.

F. ELECTRICAL WORK SHALL BE DONE IN COMPLIANCE WITH THE LATEST NATIONAL ELECTRICAL CODE EDITION, UFC-3-500-10 AND UFC-520-01.

G. WIRING METHOD FOR THIS JOB SHALL MATCH WITH EXISTING IF THIS CONCURS WITH GENERAL NOTE F.

NOTES: (THIS SHEET ONLY)

1. EXISTING PANEL PP7 ON THE FIRST FLOOR. EXISTING PANEL PP9 ON THE SECOND FLOOR AND EXISTING PANEL PP11 ON THE THIRD FLOOR.
2. EXISTING PANEL PP8 ON THE FIRST FLOOR. EXISTING PANEL PP10 ON THE SECOND FLOOR AND EXISTING PANEL PP12 ON THE THIRD FLOOR.
3. EXISTING PANEL SP16 ON THE FIRST FLOOR. EXISTING PANEL SP19 ON THE SECOND FLOOR AND EXISTING PANEL SP22 ON THE THIRD FLOOR.
4. EXISTING PANEL SP18 ON THE FIRST FLOOR. EXISTING PANEL SP21 ON THE SECOND FLOOR AND EXISTING PANEL SP24 ON THE THIRD FLOOR.
5. EXISTING PANEL SP17 ON THE FIRST FLOOR. EXISTING PANEL SP20 ON THE SECOND FLOOR AND EXISTING PANEL SP23 ON THE THIRD FLOOR.
6. EXISTING TELE/DATA BACKBOARD.
7. BASE DESIGN: RECONNECT EXISTING LIGHTING CIRCUITS AND FIXTURES.
8. ADD-ALTERNATE #1: REPLACE EXISTING LIGHTING FIXTURES WITH NEW FIXTURES. RECONNECT TO EXISTING LIGHTING CIRCUIT. SEE SHEET E000 FOR FIXTURE TYPE AND SCHEDULE.

1/8"=1'-0" 0' 5' 10' 20' 30'

1/4"=1'-0" 1' 0' 1' 5' 10' 15'

1	ISSUED FOR CONSTRUCTION	11/24/09	DAH	
SYM	DESCRIPTION	DATE	APPR.	

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES DAH DRW DAH CHK DAH

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA
BEQ F, G & H - PHASE IV HVAC RENOVATION
BLDG G – 1ST THRU 3RD FLOOR PLAN – POWER & LIGHTING

SCALE: AS SHOWN

EPROJECT NO.:

CONSTR. CONTR. NO.

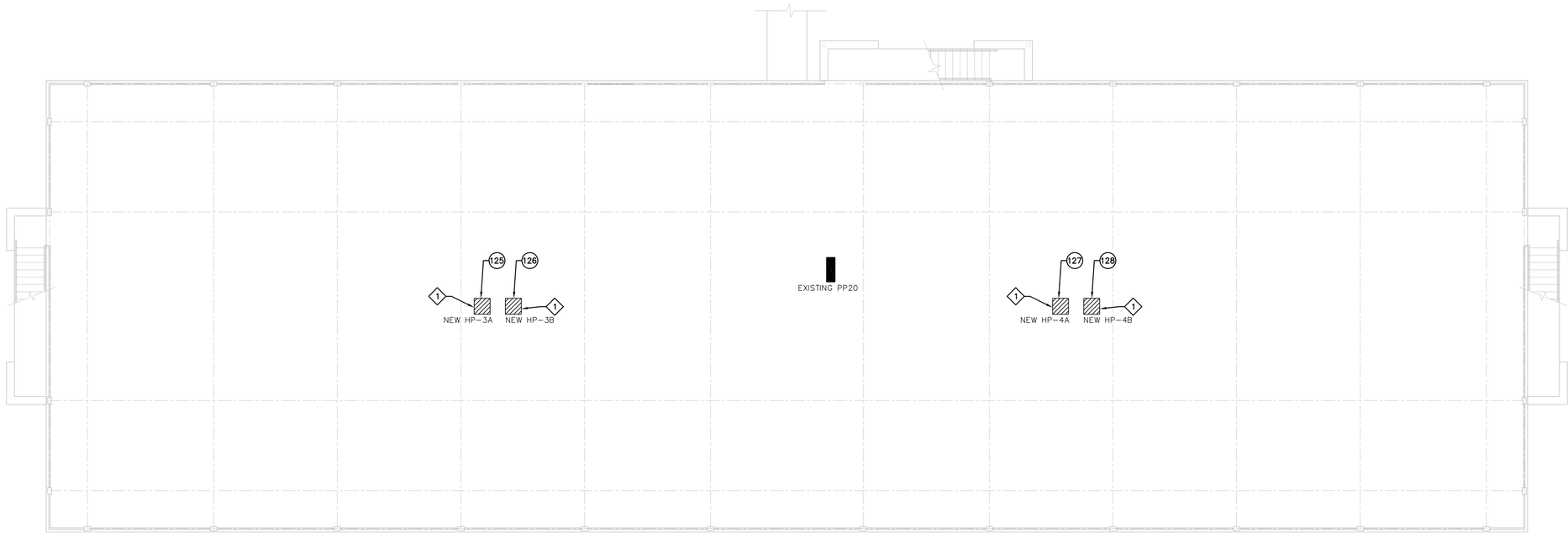
NAVFAC DRAWING NO.

SHEET 29 OF 37

E102

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60169\HVAC study and report-8704450\Working Technical Files\CAD Drawings\3#8704450 E-102 BEQ G 1st 2nd 3rd Flr Pwr.dwg LAYOUT NAME: E102 PLOTTED: Tuesday, November 24, 2009 – 1:32pm USER: douglas.henry1



1 BUILDING G – ATTIC FLOOR PLAN – POWER
Scale:1/8"=1'-0"

GENERAL NOTES: (THIS SHEET ONLY)

A. CIRCLE NOTES ((X)) REFER TO THE MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE ON SHEET E-301.

B. ALL DISCONNECT SWITCHES SHALL BE LOCKABLE IN THE OPEN POSITION.

C. ELECTRICAL WORK SHALL BE DONE IN COMPLIANCE WITH THE LATEST NATIONAL ELECTRICAL CODE EDITION, UFC-3-500-10 AND UFC-520-01.

D. WIRING METHOD FOR THIS JOB SHALL MATCH WITH EXISTING IF THIS CONCURS WITH GENERAL NOTE C.

NOTES: (THIS SHEET ONLY)

1. PROVIDE NEW CIRCUIT FOR THIS EQUIPMENT, AS SHOWN ON THE MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE.

1/8"=1'-0" 0' 5' 10' 20' 30'

SYM	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11/24/09	SWI

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES DAH DRW DAH CHK DAH

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
BFT SOUTH CENTRAL
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA
BEQ F, G & H - PHASE IV HVAC RENOVATION
BLDG G – ATTIC FLOOR PLAN – POWER

SCALE: AS SHOWN

EPROJECT NO.:

CONSTR. CONTR. NO.

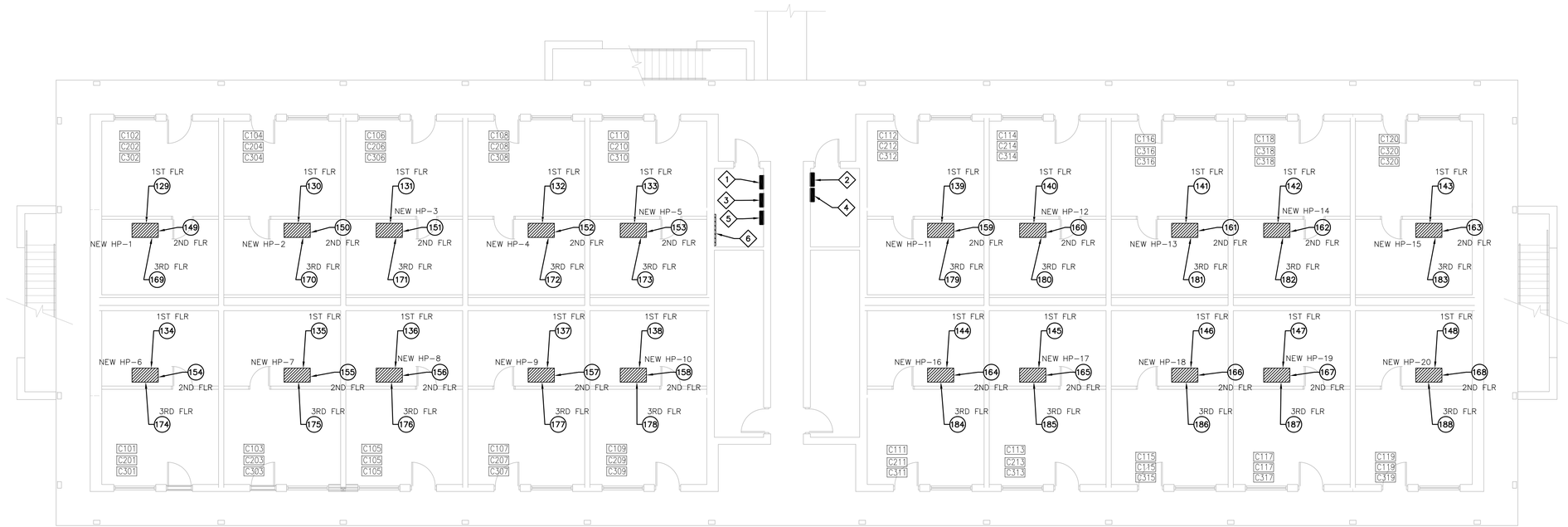
NAVFAC DRAWING NO.

SHEET 30 OF 37

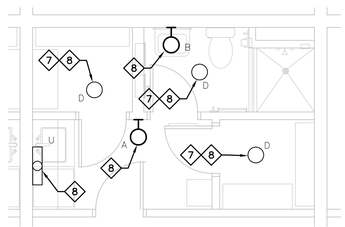
E103

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60168\HVAC study and report-8704450\Working Technical Files\CAD Drawings\3k8704450 E-103 BEQ G Attic Pwr.dwg LAYOUT NAME: E103 PLOTTED: Tuesday, November 24, 2009 - 1:34pm USER: douglas.henry1



1 BUILDING H – 1ST, 2ND & 3RD FLOOR PLAN – POWER
Scale:1/8"–1'–0"



2 BUILDING H – 1ST, 2ND & 3RD LEVEL – TYPICAL UNIT LIGHTING
Scale:1/4"–1'–0"

LIGHTING CIRCUIT SCHEDULE

ROOM NAME	EXISTING LIGHTING CIRCUIT	NOTES
C101–C106	SP25–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
C107–C112	SP26–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
C113, C115, C117 & C119	SP27–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
C114, C116, C118 & C120	SP27–42	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
C201–C206	SP28–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
C207–C212	SP29–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
C213, C215, C217 & C219	SP30–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
C214, C216, C218 & C220	SP30–42	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
C301–C306	SP31–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
C307–C312	SP32–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
C313, C315, C317 & C319	SP33–41	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.
C314, C316, C318 & C320	SP33–42	REUSE EXISTING CIRCUIT AND LIGHTING CONTROLS.

GENERAL NOTES: (THIS SHEET ONLY)

A. ALL NEW CIRCUITS SHALL BE 2#12AWG & 1#12G – 1/2"C UNLESS OTHERWISE NOTED OR UNLESS HOMERUN IS GREATER THEN 100' IN LENGTH. IF HOMERUN IS GREATER THAN 100' IN LENGTH, PROVIDE #10AWG CONDUCTORS.

B. REUSE EXSITING CIRCUITS TO HEAT PUMPS. EXTEND EXISTING CIRCUITS AS NECESSARY TO REACH NEW DISCONNECTS AND HEAT PUMPS. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS.

C. REUSE EXISTING LIGHTING CIRCUITS AS SHOWN ON THE LIGHTING CIRCUIT SCHEDULE ON THIS SHEET. REUSE EXISTING LIGHTING FIXTURES, SWITCHES, AND CONTROLS THAT ARE UNDAMAGED FOR BOTH NORMAL AND EMERGENCY LIGHTING. REPLACE DAMAGED EQUIPMENT. RESTORE THE LIGHTING SYSTEM TO A FULLY OPERATIONAL STATE.

D. CIRCLE NOTES (X) REFER TO THE MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE ON SHEET E–301.

E. ALL DISCONNECT SWITCHES SHALL BE LOCKABLE IN THE OPEN POSITION.

F. ELECTRICAL WORK SHALL BE DONE IN COMPLIANCE WITH THE LATEST NATIONAL ELECTRICAL CODE EDITION, UFC–3–500–10 AND UFC–520–01.

G. WIRING METHOD FOR THIS JOB SHALL MATCH WITH EXISTING IF THIS CONCURS WITH GENERAL NOTE F.

NOTES: (THIS SHEET ONLY)

1. EXISTING PANEL PP13 ON THE FIRST FLOOR. EXISTING PANEL PP15 ON THE SECOND FLOOR AND EXISTING PANEL PP17 ON THE THIRD FLOOR.
2. EXISTING PANEL PP14 ON THE FIRST FLOOR. EXISTING PANEL PP16 ON THE SECOND FLOOR AND EXISTING PANEL PP18 ON THE THIRD FLOOR.
3. EXISTING PANEL SP25 ON THE FIRST FLOOR. EXISTING PANEL SP28 ON THE SECOND FLOOR AND EXISTING PANEL SP31 ON THE THIRD FLOOR.
4. EXISTING PANEL SP27 ON THE FIRST FLOOR. EXISTING PANEL SP30 ON THE SECOND FLOOR AND EXISTING PANEL SP33 ON THE THIRD FLOOR.
5. EXISTING PANEL SP26 ON THE FIRST FLOOR. EXISTING PANEL SP29 ON THE SECOND FLOOR AND EXISTING PANEL SP32 ON THE THIRD FLOOR.
6. EXISTING TELE/DATA BACKBOARD.
7. RECONNECT EXISTING LIGHTING CIRCUITS AND FIXTURES.
8. ADD–ALTERNATE #1: REPLACE EXISTING LIGHTING FIXTURES WITH NEW FIXTURES. RECONNECT TO EXISTING LIGHTING CIRCUIT. SEE SHEET E000 FOR FIXTURE TYPE AND SCHEDULE.

1/8"=1'–0" 0' 5' 10' 20' 30'

1/4"=1'–0" 1' 0' 1' 5' 10' 15'

#	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11/24/09	DAH

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES DAH DRW DAH CHK DAH

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
BT SOUTH CENTRAL
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

BLDG H – 1ST THRU 3RD
FLOOR PLAN – POWER & LIGHTING

SCALE: AS SHOWN

EPROJECT NO.:

CONSTR. CONTR. NO.

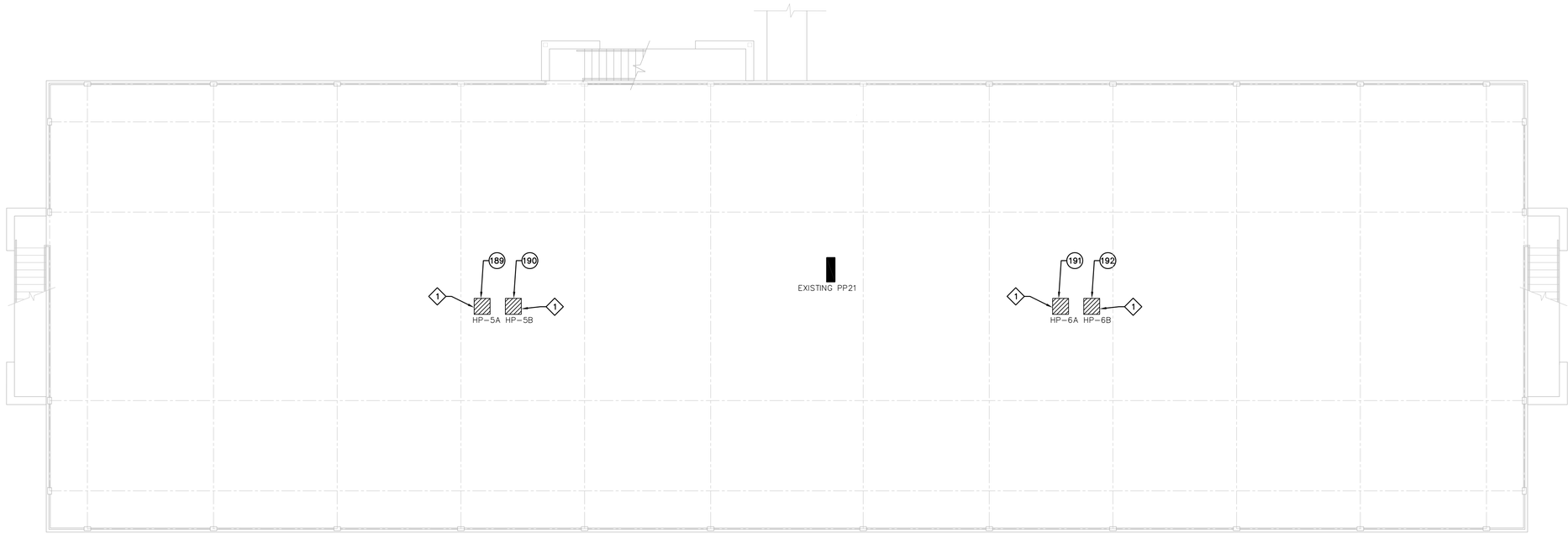
NAVFAC DRAWING NO.

SHEET 31 OF 37

E104

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC\H\M60169\HVAC study and report-870450\Working Technical Files\CAD Drawings\3\e870450 E-104 BEQ H 1st 2nd 3rd Flr Pwr.dwg LAYOUT NAME: E104 PLOTTED: Tuesday, November 24, 2009 – 1:34pm USER: douglas.henry1



1 BUILDING H – ATTIC FLOOR PLAN – POWER
Scale:1/8"=1'-0"

GENERAL NOTES: (THIS SHEET ONLY)

A. CIRCLE NOTES ((X)) REFER TO THE MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE ON SHEET E-300.

B. ALL DISCONNECT SWITCHES SHALL BE LOCKABLE IN THE OPEN POSITION.

C. ELECTRICAL WORK SHALL BE DONE IN COMPLIANCE WITH THE LATEST NATIONAL ELECTRICAL CODE EDITION, UFC-3-500-10 AND UFC-520-01.

D. WIRING METHOD FOR THIS JOB SHALL MATCH WITH EXISTING IF THIS CONCURS WITH GENERAL NOTE C.

NOTES: (THIS SHEET ONLY)

1. PROVIDE NEW CIRCUIT FOR THIS EQUIPMENT, AS SHOWN ON THE MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE.

1/8"=1'-0" 0' 5' 10' 20' 30'

1	ISSUED FOR CONSTRUCTION	11/24/09	SWH
SYM	DESCRIPTION	DATE	APPR

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES DAH DRW DAH CHK DAH

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
PT SOUTH CENTRAL
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA
NAVAL AIR STATION JACKSONVILLE
BEQ F, G & H - PHASE IV HVAC RENOVATION
BLDG H – ATTIC FLOOR PLAN – POWER

SCALE: AS SHOWN
EPROJECT NO.:
CONSTR. CONTR. NO.
NAVFAC DRAWING NO.
SHEET 32 OF 37
E105

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60168\HVAC study and report-8704450\Working Technical Files\CAD Drawings\Sh8704450 E-105 BEQ H Attic Pwr.dwg LAYOUT NAME: E105 PLOTTED: Tuesday, November 24, 2009 - 1:35pm USER: douglas.henry1

MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

ITEM NO.	DESCRIPTION	EQUIPMENT CHARACTERISTICS					CIRCUIT	FEEDER	DISCONNECT SWITCH				REMARKS
		VOLTS	PH	KW	HP	FLA			SIZE	P	FUSE	FEATURES	
1	HP-1 (1ST FLOOR-BUILDING F)	208	1			5.8	PP1-2,4	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP1 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
2	HP-2 (1ST FLOOR-BUILDING F)	208	1			5.8	PP1-6,8	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP1 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
3	HP-3 (1ST FLOOR-BUILDING F)	208	1			5.8	PP1-10,12	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP1 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
4	HP-4 (1ST FLOOR-BUILDING F)	208	1			5.8	PP1-14,16	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP1 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
5	HP-5 (1ST FLOOR-BUILDING F)	208	1			5.8	PP1-18,20	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP1 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
6	HP-6 (1ST FLOOR-BUILDING F)	208	1			5.8	PP1-22,24	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP1 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
7	HP-7 (1ST FLOOR-BUILDING F)	208	1			5.8	PP1-26,28	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP1 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
8	HP-8 (1ST FLOOR-BUILDING F)	208	1			5.8	PP1-1,3	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP1 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
9	HP-9 (1ST FLOOR-BUILDING F)	208	1			5.8	PP1-5,7	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP1 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
10	HP-10 (1ST FLOOR-BUILDING F)	208	1			5.8	PP1-9,11	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP1 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
11	HP-11 (1ST FLOOR-BUILDING F)	208	1			5.8	PP1-13,15	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP1 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
12	HP-12 (1ST FLOOR-BUILDING F)	208	1			5.8	PP1-17,19	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP1 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
13	HP-13 (1ST FLOOR-BUILDING F)	208	1			5.8	PP1-21,23	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP1 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
14	HP-14 (1ST FLOOR-BUILDING F)	208	1			5.8	PP1-25,27	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP1 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
15	HP-15 (1ST FLOOR-BUILDING F)	208	1			5.8	PP2-2,4	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP2 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
16	HP-16 (1ST FLOOR-BUILDING F)	208	1			5.8	PP2-6,8	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP2 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
17	HP-17 (1ST FLOOR-BUILDING F)	208	1			5.8	PP2-10,12	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP2 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
18	HP-18 (1ST FLOOR-BUILDING F)	208	1			5.8	PP2-14,16	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP2 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
19	HP-19 (1ST FLOOR-BUILDING F)	208	1			5.8	PP2-18,20	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP2 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
20	HP-20 (1ST FLOOR-BUILDING F)	208	1			5.8	PP2-22,24	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP2 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
21	HP-21 (1ST FLOOR-BUILDING F)	208	1			5.8	PP2-26,28	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP2 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
22	HP-22 (1ST FLOOR-BUILDING F)	208	1			5.8	PP2-30,32	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP2 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
23	HP-23 (1ST FLOOR-BUILDING F)	208	1			5.8	PP2-1,3	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP2 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
24	HP-24 (1ST FLOOR-BUILDING F)	208	1			5.8	PP2-5,7	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP2 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
25	HP-25 (1ST FLOOR-BUILDING F)	208	1			5.8	PP2-9,11	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP2 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
26	HP-26 (1ST FLOOR-BUILDING F)	208	1			5.8	PP2-13,15	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP2 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
27	HP-27 (1ST FLOOR-BUILDING F)	208	1			5.8	PP2-17,19	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP2 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
28	HP-28 (1ST FLOOR-BUILDING F)	208	1			5.8	PP2-21,23	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP2 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
29	HP-29 (1ST FLOOR-BUILDING F)	208	1			5.8	PP2-25,27	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP2 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
30	HP-30 (1ST FLOOR-BUILDING F)	208	1			5.8	PP2-29,31	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP2 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
31	HP-1 (2ND FLOOR-BUILDING F)	208	1			5.8	PP3-2,4	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP3 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
32	HP-2 (2ND FLOOR-BUILDING F)	208	1			5.8	PP3-6,8	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP3 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
33	HP-3 (2ND FLOOR-BUILDING F)	208	1			5.8	PP3-10,12	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP3 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
34	HP-4 (2ND FLOOR-BUILDING F)	208	1			5.8	PP3-14,16	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP3 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
35	HP-5 (2ND FLOOR-BUILDING F)	208	1			5.8	PP3-18,20	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP3 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
36	HP-6 (2ND FLOOR-BUILDING F)	208	1			5.8	PP3-22,24	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP3 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
37	HP-7 (2ND FLOOR-BUILDING F)	208	1			5.8	PP3-26,28	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP3 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
38	HP-8 (2ND FLOOR-BUILDING F)	208	1			5.8	PP3-1,3	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP3 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
39	HP-9 (2ND FLOOR-BUILDING F)	208	1			5.8	PP3-5,7	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP3 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
40	HP-10 (2ND FLOOR-BUILDING F)	208	1			5.8	PP3-9,11	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP3 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
41	HP-11 (2ND FLOOR-BUILDING F)	208	1			5.8	PP3-13,15	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP3 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
42	HP-12 (2ND FLOOR-BUILDING F)	208	1			5.8	PP3-17,19	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP3 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
43	HP-13 (2ND FLOOR-BUILDING F)	208	1			5.8	PP3-21,23	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP3 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
44	HP-14 (2ND FLOOR-BUILDING F)	208	1			5.8	PP3-25,27	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP3 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.

1 BUILDING F – MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE
Scale:NOT TO SCALE

MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

ITEM NO.	DESCRIPTION	EQUIPMENT CHARACTERISTICS					CIRCUIT	FEEDER	DISCONNECT SWITCH				REMARKS
		VOLTS	PH	KW	HP	FLA			SIZE	P	FUSE	FEATURES	
45	HP-15 (2ND FLOOR-BUILDING F)	208	1			5.8	PP4-2,4	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP4 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
46	HP-16 (2ND FLOOR-BUILDING F)	208	1			5.8	PP4-6,8	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP4 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
47	HP-17 (2ND FLOOR-BUILDING F)	208	1			5.8	PP4-10,12	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP4 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
48	HP-18 (2ND FLOOR-BUILDING F)	208	1			5.8	PP4-14,16	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP4 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
49	HP-19 (2ND FLOOR-BUILDING F)	208	1			5.8	PP4-18,20	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP4 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
50	HP-20 (2ND FLOOR-BUILDING F)	208	1			5.8	PP4-22,24	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP4 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
51	HP-21 (2ND FLOOR-BUILDING F)	208	1			5.8	PP4-26,28	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP4 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
52	HP-22 (2ND FLOOR-BUILDING F)	208	1			5.8	PP4-30,32	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP4 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
53	HP-23 (2ND FLOOR-BUILDING F)	208	1			5.8	PP4-1,3	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP4 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
54	HP-24 (2ND FLOOR-BUILDING F)	208	1			5.8	PP4-5,7	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP4 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
55	HP-25 (2ND FLOOR-BUILDING F)	208	1			5.8	PP4-9,11	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP4 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
56	HP-26 (2ND FLOOR-BUILDING F)	208	1			5.8	PP4-13,15	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP4 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
57	HP-27 (2ND FLOOR-BUILDING F)	208	1			5.8	PP4-17,19	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP4 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
58	HP-28 (2ND FLOOR-BUILDING F)	208	1			5.8	PP4-21,23	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP4 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
59	HP-29 (2ND FLOOR-BUILDING F)	208	1			5.8	PP4-25,27	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP4 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
60	HP-30 (2ND FLOOR-BUILDING F)	208	1			5.8	PP4-29,31	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP4 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
31	HP-1 (3RD FLOOR-BUILDING F)	208	1			5.8	PP5-2,4	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP5 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
32	HP-2 (3RD FLOOR-BUILDING F)	208	1			5.8	PP5-6,8	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP5 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
33	HP-3 (3RD FLOOR-BUILDING F)	208	1			5.8	PP5-10,12	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP5 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
34	HP-4 (3RD FLOOR-BUILDING F)	208	1			5.8	PP5-14,16	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP5 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
35	HP-5 (3RD FLOOR-BUILDING F)	208	1			5.8	PP5-18,20	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP5 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
36	HP-6 (3RD FLOOR-BUILDING F)	208	1			5.8	PP5-22,24	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP5 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
37	HP-7 (3RD FLOOR-BUILDING F)	208	1			5.8	PP5-26,28	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP5 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
38	HP-8 (3RD FLOOR-BUILDING F)	208	1			5.8	PP5-1,3	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP5 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
39	HP-9 (3RD FLOOR-BUILDING F)	208	1			5.8	PP5-5,7	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP5 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
40	HP-10 (3RD FLOOR-BUILDING F)	208	1			5.8	PP5-9,11	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP5 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
41	HP-11 (3RD FLOOR-BUILDING F)	208	1			5.8	PP5-13,15	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP5 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
42	HP-12 (3RD FLOOR-BUILDING F)	208	1			5.8	PP5-17,19	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP5 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
43	HP-13 (3RD FLOOR-BUILDING F)	208	1			5.8	PP5-21,23	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP5 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
44	HP-14 (3RD FLOOR-BUILDING F)	208	1			5.8	PP5-25,27	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP5 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
45	HP-15 (3RD FLOOR-BUILDING F)	208	1			5.8	PP6-2,4	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP6 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
46	HP-16 (3RD FLOOR-BUILDING F)	208	1			5.8	PP6-6,8	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP6 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
47	HP-17 (3RD FLOOR-BUILDING F)	208	1			5.8	PP6-10,12	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP6 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIP

MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

ITEM NO.	DESCRIPTION	EQUIPMENT CHARACTERISTICS					CIRCUIT	FEEDER	DISCONNECT SWITCH				REMARKS
		VOLTS	PH	KW	HP	FLA			SIZE	P	FUSE	FEATURES	
65	HP-1 (1ST FLOOR-BUILDING G)	208	1			5.8	PP7-2,4	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP7 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
66	HP-2 (1ST FLOOR-BUILDING G)	208	1			5.8	PP7-6,8	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP7 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
67	HP-3 (1ST FLOOR-BUILDING G)	208	1			5.8	PP7-10,12	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP7 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
68	HP-4 (1ST FLOOR-BUILDING G)	208	1			5.8	PP7-14,16	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP7 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
69	HP-5 (1ST FLOOR-BUILDING G)	208	1			5.8	PP7-18,20	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP7 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
70	HP-6 (1ST FLOOR-BUILDING G)	208	1			5.8	PP7-1,3	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP7 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
71	HP-7 (1ST FLOOR-BUILDING G)	208	1			5.8	PP7-5,7	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP7 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
72	HP-8 (1ST FLOOR-BUILDING G)	208	1			5.8	PP7-9,11	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP7 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
73	HP-9 (1ST FLOOR-BUILDING G)	208	1			5.8	PP7-13,15	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP7 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
74	HP-10 (1ST FLOOR-BUILDING G)	208	1			5.8	PP7-17,19	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP7 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
75	HP-11 (1ST FLOOR-BUILDING G)	208	1			5.8	PP8-2,4	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP8 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
76	HP-12 (1ST FLOOR-BUILDING G)	208	1			5.8	PP8-6,8	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP8 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
77	HP-13 (1ST FLOOR-BUILDING G)	208	1			5.8	PP8-10,12	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP8 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
78	HP-14 (1ST FLOOR-BUILDING G)	208	1			5.8	PP8-14,16	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP8 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
79	HP-15 (1ST FLOOR-BUILDING G)	208	1			5.8	PP8-18,20	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP8 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
80	HP-16 (1ST FLOOR-BUILDING G)	208	1			5.8	PP8-1,3	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP8 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
81	HP-17 (1ST FLOOR-BUILDING G)	208	1			5.8	PP8-5,7	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP8 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
82	HP-18 (1ST FLOOR-BUILDING G)	208	1			5.8	PP8-9,11	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP8 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
83	HP-19 (1ST FLOOR-BUILDING G)	208	1			5.8	PP8-13,15	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP8 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
84	HP-20 (1ST FLOOR-BUILDING G)	208	1			5.8	PP8-17,19	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP8 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
85	HP-1 (2ND FLOOR-BUILDING G)	208	1			5.8	PP9-2,4	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP9 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
86	HP-2 (2ND FLOOR-BUILDING G)	208	1			5.8	PP9-6,8	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP9 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
87	HP-3 (2ND FLOOR-BUILDING G)	208	1			5.8	PP9-10,12	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP9 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
88	HP-4 (2ND FLOOR-BUILDING G)	208	1			5.8	PP9-14,16	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP9 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
89	HP-5 (2ND FLOOR-BUILDING G)	208	1			5.8	PP9-18,20	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP9 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
90	HP-6 (2ND FLOOR-BUILDING G)	208	1			5.8	PP9-1,3	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP9 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
91	HP-7 (2ND FLOOR-BUILDING G)	208	1			5.8	PP9-5,7	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP9 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
92	HP-8 (2ND FLOOR-BUILDING G)	208	1			5.8	PP9-9,11	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP9 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
93	HP-9 (2ND FLOOR-BUILDING G)	208	1			5.8	PP9-13,15	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP9 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
94	HP-10 (2ND FLOOR-BUILDING G)	208	1			5.8	PP9-17,19	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP9 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
95	HP-11 (2ND FLOOR-BUILDING G)	208	1			5.8	PP10-2,4	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP10 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
96	HP-12 (2ND FLOOR-BUILDING G)	208	1			5.8	PP10-6,8	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP10 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
97	HP-13 (2ND FLOOR-BUILDING G)	208	1			5.8	PP10-10,12	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP10 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
98	HP-14 (2ND FLOOR-BUILDING G)	208	1			5.8	PP10-14,16	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP10 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
99	HP-15 (2ND FLOOR-BUILDING G)	208	1			5.8	PP10-18,20	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP10 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
100	HP-16 (2ND FLOOR-BUILDING G)	208	1			5.8	PP10-1,3	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP10 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
101	HP-17 (2ND FLOOR-BUILDING G)	208	1			5.8	PP10-5,7	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP10 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
102	HP-18 (2ND FLOOR-BUILDING G)	208	1			5.8	PP10-9,11	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP10 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
103	HP-19 (2ND FLOOR-BUILDING G)	208	1			5.8	PP10-13,15	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP10 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
104	HP-20 (2ND FLOOR-BUILDING G)	208	1			5.8	PP10-17,19	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP10 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.

MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

ITEM NO.	DESCRIPTION	EQUIPMENT CHARACTERISTICS					CIRCUIT	FEEDER	DISCONNECT SWITCH				REMARKS
		VOLTS	PH	KW	HP	FLA			SIZE	P	FUSE	FEATURES	
105	HP-1 (3RD FLOOR-BUILDING G)	208	1			5.8	PP11-2,4	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP11 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
106	HP-2 (3RD FLOOR-BUILDING G)	208	1			5.8	PP11-6,8	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP11 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
107	HP-3 (3RD FLOOR-BUILDING G)	208	1			5.8	PP11-10,12	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP11 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
108	HP-4 (3RD FLOOR-BUILDING G)	208	1			5.8	PP11-14,16	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP11 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
109	HP-5 (3RD FLOOR-BUILDING G)	208	1			5.8	PP11-18,20	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP11 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
110	HP-6 (3RD FLOOR-BUILDING G)	208	1			5.8	PP11-1,3	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP11 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
111	HP-7 (3RD FLOOR-BUILDING G)	208	1			5.8	PP11-5,7	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP11 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
112	HP-8 (3RD FLOOR-BUILDING G)	208	1			5.8	PP11-9,11	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP11 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
113	HP-9 (3RD FLOOR-BUILDING G)	208	1			5.8	PP11-13,15	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP11 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
114	HP-10 (3RD FLOOR-BUILDING G)	208	1			5.8	PP11-17,19	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP11 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
115	HP-11 (3RD FLOOR-BUILDING G)	208	1			5.8	PP12-2,4	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP12 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
116	HP-12 (3RD FLOOR-BUILDING G)	208	1			5.8	PP12-6,8	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP12 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
117	HP-13 (3RD FLOOR-BUILDING G)	208	1			5.8	PP12-10,12	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP12 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
118	HP-14 (3RD FLOOR-BUILDING G)	208	1			5.8	PP12-14,16	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP12 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
119	HP-15 (3RD FLOOR-BUILDING G)	208	1			5.8	PP12-18,20	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP12 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
120	HP-16 (3RD FLOOR-BUILDING G)	208	1			5.8	PP12-1,3	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP12 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
121	HP-17 (3RD FLOOR-BUILDING G)	208	1			5.8	PP12-5,7	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP12 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
122	HP-18 (3RD FLOOR-BUILDING G)	208	1			5.8	PP12-9,11	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP12 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
123	HP-19 (3RD FLOOR-BUILDING G)	208	1			5.8	PP12-13,15	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP12 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
124	HP-20 (3RD FLOOR-BUILDING G)	208	1			5.8	PP12-17,19	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP12 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
125	HP-3A (ATTIC-BUILDING G)	208	3			25.9	PP20-31,33,35	3#8AWG & 1#10G – 3/4"C	60	3	NON	NEMA 1	MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
126	HP-3B (ATTIC FLOOR-BUILDING G)	208	1			25.0	PP20-17,19	2#8AWG & 1#10G – 3/4"C	60	2	NON	NEMA 1	MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
127	HP-4A (ATTIC FLOOR-BUILDING G)	208	1			25.0	PP20-18,20	2#8AWG & 1#10G – 3/4"C	60	2	NON	NEMA 1	MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
128	HP-4B (ATTIC FLOOR-BUILDING G)	208	1			22.4	PP20-22,24	2#8AWG & 1#10G – 3/4"C	60	2	NON	NEMA 1	MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.

1 BUILDING G – MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE
Scale:NOT TO SCALE

SYM	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11/24/09	DAH

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES DAH DRW DAH CHK DAH

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
PT SOUTH CENTRAL
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA
BEQ F, G & H - PHASE IV HVAC RENOVATION
BUILDING G – MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

SCALE: NOT TO SCALE
EPROJECT NO.:
CONSTR. CONTR. NO.
NAVFAC DRAWING NO.
SHEET 34 OF 37
E301

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC\H\M60169\HVAC study and report-870465\Working Technical Files\CAD Drawings\Sh870450 E-301 BEQ G Mech Schedules.dwg LAYOUT NAME: E301 PLOTTED: Tuesday, November 24, 2009 - 1:41pm USER: douglas.henry1

MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

ITEM NO.	DESCRIPTION	EQUIPMENT CHARACTERISTICS					CIRCUIT	FEEDER	DISCONNECT SWITCH				REMARKS
		VOLTS	PH	KW	HP	FLA			SIZE	P	FUSE	FEATURES	
129	HP-1 (1ST FLOOR-BUILDING H)	208	1			5.8	PP13-2,4	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP13 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
130	HP-2 (1ST FLOOR-BUILDING H)	208	1			5.8	PP13-6,8	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP13 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
131	HP-3 (1ST FLOOR-BUILDING H)	208	1			5.8	PP13-10,12	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP13 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
132	HP-4 (1ST FLOOR-BUILDING H)	208	1			5.8	PP13-14,16	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP13 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
133	HP-5 (1ST FLOOR-BUILDING H)	208	1			5.8	PP13-18,20	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP13 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
134	HP-6 (1ST FLOOR-BUILDING H)	208	1			5.8	PP13-1,3	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP13 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
135	HP-7 (1ST FLOOR-BUILDING H)	208	1			5.8	PP13-5,7	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP13 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
136	HP-8 (1ST FLOOR-BUILDING H)	208	1			5.8	PP13-9,11	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP13 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
137	HP-9 (1ST FLOOR-BUILDING H)	208	1			5.8	PP13-13,15	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP13 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
138	HP-10 (1ST FLOOR-BUILDING H)	208	1			5.8	PP13-17,19	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP13 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
139	HP-11 (1ST FLOOR-BUILDING H)	208	1			5.8	PP14-2,4	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP14 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
140	HP-12 (1ST FLOOR-BUILDING H)	208	1			5.8	PP14-6,8	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP14 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
141	HP-13 (1ST FLOOR-BUILDING H)	208	1			5.8	PP14-10,12	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP14 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
142	HP-14 (1ST FLOOR-BUILDING H)	208	1			5.8	PP14-14,16	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP14 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
143	HP-15 (1ST FLOOR-BUILDING H)	208	1			5.8	PP14-18,20	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP14 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
144	HP-16 (1ST FLOOR-BUILDING H)	208	1			5.8	PP14-1,3	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP14 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
145	HP-17 (1ST FLOOR-BUILDING H)	208	1			5.8	PP14-5,7	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP14 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
146	HP-18 (1ST FLOOR-BUILDING H)	208	1			5.8	PP14-9,11	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP14 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
147	HP-19 (1ST FLOOR-BUILDING H)	208	1			5.8	PP14-13,15	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP14 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
148	HP-20 (1ST FLOOR-BUILDING H)	208	1			5.8	PP14-17,19	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP14 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
149	HP-1 (2ND FLOOR-BUILDING H)	208	1			5.8	PP15-2,4	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP15 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
150	HP-2 (2ND FLOOR-BUILDING H)	208	1			5.8	PP15-6,8	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP15 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
151	HP-3 (2ND FLOOR-BUILDING H)	208	1			5.8	PP15-10,12	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP15 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
152	HP-4 (2ND FLOOR-BUILDING H)	208	1			5.8	PP15-14,16	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP15 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
153	HP-5 (2ND FLOOR-BUILDING H)	208	1			5.8	PP15-18,20	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP15 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
154	HP-6 (2ND FLOOR-BUILDING H)	208	1			5.8	PP15-1,3	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP15 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
155	HP-7 (2ND FLOOR-BUILDING H)	208	1			5.8	PP15-5,7	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP15 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
156	HP-8 (2ND FLOOR-BUILDING H)	208	1			5.8	PP15-9,11	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP15 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
157	HP-9 (2ND FLOOR-BUILDING H)	208	1			5.8	PP15-13,15	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP15 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
158	HP-10 (2ND FLOOR-BUILDING H)	208	1			5.8	PP15-17,19	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP15 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
159	HP-11 (2ND FLOOR-BUILDING H)	208	1			5.8	PP16-2,4	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP16 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
160	HP-12 (2ND FLOOR-BUILDING H)	208	1			5.8	PP16-6,8	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP16 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
161	HP-13 (2ND FLOOR-BUILDING H)	208	1			5.8	PP16-10,12	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP16 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
162	HP-14 (2ND FLOOR-BUILDING H)	208	1			5.8	PP16-14,16	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP16 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
163	HP-15 (2ND FLOOR-BUILDING H)	208	1			5.8	PP16-18,20	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP16 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
164	HP-16 (2ND FLOOR-BUILDING H)	208	1			5.8	PP16-1,3	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP16 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
165	HP-17 (2ND FLOOR-BUILDING H)	208	1			5.8	PP16-5,7	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP16 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
166	HP-18 (2ND FLOOR-BUILDING H)	208	1			5.8	PP16-9,11	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP16 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
167	HP-19 (2ND FLOOR-BUILDING H)	208	1			5.8	PP16-13,15	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP16 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
168	HP-20 (2ND FLOOR-BUILDING H)	208	1			5.8	PP16-17,19	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP16 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.

MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

ITEM NO.	DESCRIPTION	EQUIPMENT CHARACTERISTICS					CIRCUIT	FEEDER	DISCONNECT SWITCH				REMARKS
		VOLTS	PH	KW	HP	FLA			SIZE	P	FUSE	FEATURES	
169	HP-1 (3RD FLOOR-BUILDING H)	208	1			5.8	PP17-2,4	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP17 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
170	HP-2 (3RD FLOOR-BUILDING H)	208	1			5.8	PP17-6,8	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP17 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
171	HP-3 (3RD FLOOR-BUILDING H)	208	1			5.8	PP17-10,12	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP17 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
172	HP-4 (3RD FLOOR-BUILDING H)	208	1			5.8	PP17-14,16	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP17 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
173	HP-5 (3RD FLOOR-BUILDING H)	208	1			5.8	PP17-18,20	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP17 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
174	HP-6 (3RD FLOOR-BUILDING H)	208	1			5.8	PP17-1,3	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP17 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
175	HP-7 (3RD FLOOR-BUILDING H)	208	1			5.8	PP17-5,7	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP17 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
176	HP-8 (3RD FLOOR-BUILDING H)	208	1			5.8	PP17-9,11	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP17 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
177	HP-9 (3RD FLOOR-BUILDING H)	208	1			5.8	PP17-13,15	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP17 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
178	HP-10 (3RD FLOOR-BUILDING H)	208	1			5.8	PP17-17,19	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP17 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
179	HP-11 (3RD FLOOR-BUILDING H)	208	1			5.8	PP18-2,4	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP18 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
180	HP-12 (3RD FLOOR-BUILDING H)	208	1			5.8	PP18-6,8	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP18 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
181	HP-13 (3RD FLOOR-BUILDING H)	208	1			5.8	PP18-10,12	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP18 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
182	HP-14 (3RD FLOOR-BUILDING H)	208	1			5.8	PP18-14,16	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP18 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
183	HP-15 (3RD FLOOR-BUILDING H)	208	1			5.8	PP18-18,20	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP18 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
184	HP-16 (3RD FLOOR-BUILDING H)	208	1			5.8	PP18-1,3	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP18 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
185	HP-17 (3RD FLOOR-BUILDING H)	208	1			5.8	PP18-5,7	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP18 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
186	HP-18 (3RD FLOOR-BUILDING H)	208	1			5.8	PP18-9,11	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP18 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
187	HP-19 (3RD FLOOR-BUILDING H)	208	1			5.8	PP18-13,15	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP18 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
188	HP-20 (3RD FLOOR-BUILDING H)	208	1			5.8	PP18-17,19	EXISTING	30	2	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP18 TO NEW HEAT PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
189	HP-5A (ATTIC-BUILDING H)	208	3			25.9	PP21-31,33,35	3#8AWG & 1#10G – 3/4"C	60	3	NON	NEMA 1	MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
190	HP-5B (ATTIC-BUILDING H)	208	1			25.0	PP21-17,19	2#8AWG & 1#10G – 3/4"C	60	2	NON	NEMA 1	MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
191	HP-6A (ATTIC-BUILDING H)	208	1			25.0	PP21-18,20	2#8AWG & 1#10G – 3/4"C	60	2	NON	NEMA 1	MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
192	HP-6B (ATTIC-BUILDING H)	208	1			22.4	PP21-22,24	2#8AWG & 1#10G – 3/4"C	60	2	NON	NEMA 1	MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.

1 BUILDING H – MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE
Scale:NOT TO SCALE

#	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11/24/09	DAH

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES DAH DRW DAH CHK DAH

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
BT SOUTH CENTRAL
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

BUILDING H – MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

SCALE: NOT TO SCALE
EPROJECT NO.:
CONSTR. CONTR. NO.
NAVFAC DRAWING NO.
SHEET 35 OF 37

E302

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60169\HVAC study and report-870450\Working Technical Files\CAD Drawings\3%870450 E-302 BEQ H Mech Schedules.dwg LAYOUT NAME: E302 PLOTTED: Tuesday, November 24, 2009 - 1:44pm USER: douglas.henry1

EXISTING PANELBOARD PP1 SCHEDULE

VOLTAGE: 208 V | MAINS: EXISTING 150A/3P MCB | MOUNTING: SURFACE | REMARKS:
BUS SIZE: 150 A | CONNECTED LOAD: 17.4 KVA, DEMAND LOAD: 17.7 KVA | FAULT DUTY: 22,000 A

NO	SERVES	NOTE	LOAD (kVA)	BREAKER TRIP	BREAKER P	PHASE A B C	BREAKER P	BREAKER TRIP	LOAD (kVA)	NOTE	SERVES	NO
1	HP-8	1	0.6	15	2		2	15	0.6	1	HP-1	2
3	———		0.6	———	———		———	———	0.6		———	4
5	HP-9	1	0.6	15	2		2	15	0.6	1	HP-2	6
7	———		0.6	———	———		———	———	0.6		———	8
9	HP-10	1	0.6	15	2		2	15	0.6	1	HP-3	10
11	———		0.6	———	———		———	———	0.6		———	12
13	HP-11	1	0.6	15	2		2	15	0.6	1	HP-4	14
15	———		0.6	———	———		———	———	0.6		———	16
17	HP-12	1	0.6	15	2		2	15	0.6	1	HP-5	18
19	———		0.6	———	———		———	———	0.6		———	20
21	HP-13	1	0.6	15	2		2	15	0.6	1	HP-6	22
23	———		0.6	———	———		———	———	0.6		———	24
25	HP-14	1	0.6	15	2		2	15	0.6	1	HP-7	26
27	———		0.6	———	———		———	———	0.6		———	28
29	SPARE			20	1		1	20			SPARE	30
31	SPARE			20	1		1	20			SPARE	32
33	SPARE			20	1		1	20			SPARE	34
35	SPARE			20	1		1	20			SPARE	36
37	SPARE			20	1		1	20			SPARE	38
39	SPARE			20	1		1	20			SPARE	40
41	RM A131 CIRC PUMP	2	0.6	20	1		1	20			SPARE	42

LOAD SUMMARY
LIGHTING 0.0 KVA, A/C 16.8 KVA
RECEPTACLE 0.0 KVA, HEATING 0.0 KVA
MOTOR 0.6 KVA, MISC 0.0 KVA
CONNECTED CURRENT: 48.2 A.
DEMAND CURRENT: 49.1 A.

NOTES: 1. CONNECT NEW EQUIPMENT TO THIS CIRCUIT. REUSE THIS EXISTING CIRCUIT BREAKER.
2. EXISTING LOAD.

EXISTING PANELBOARD PP2 SCHEDULE

VOLTAGE: 208 V | MAINS: EXISTING 150A/3P MCB | MOUNTING: SURFACE | REMARKS:
BUS SIZE: 150 A | CONNECTED LOAD: 19.8 KVA, DEMAND LOAD: 20.1 KVA | FAULT DUTY: 22,000 A

NO	SERVES	NOTE	LOAD (kVA)	BREAKER TRIP	BREAKER P	PHASE A B C	BREAKER P	BREAKER TRIP	LOAD (kVA)	NOTE	SERVES	NO
1	HP-23	1	0.6	15	2		2	15	0.6	1	HP-15	2
3	———		0.6	———	———		———	———	0.6		———	4
5	HP-24	1	0.6	15	2		2	15	0.6	1	HP-16	6
7	———		0.6	———	———		———	———	0.6		———	8
9	HP-25	1	0.6	15	2		2	15	0.6	1	HP-17	10
11	———		0.6	———	———		———	———	0.6		———	12
13	HP-26	1	0.6	15	2		2	15	0.6	1	HP-18	14
15	———		0.6	———	———		———	———	0.6		———	16
17	HP-27	1	0.6	15	2		2	15	0.6	1	HP-19	18
19	———		0.6	———	———		———	———	0.6		———	20
21	HP-28	1	0.6	15	2		2	15	0.6	1	HP-20	22
23	———		0.6	———	———		———	———	0.6		———	24
25	HP-29	1	0.6	15	2		2	15	0.6	1	HP-21	26
27	———		0.6	———	———		———	———	0.6		———	28
29	HP-30	1	0.6	15	2		2	15	0.6	1	HP-22	30
31	———		0.6	———	———		———	———	0.6		———	32
33	SPARE			20	1		1	20			SPARE	34
35	SPARE			20	1		1	20			SPARE	36
37	SPARE			20	1		1	20			SPARE	38
39	SPARE			20	1		1	20			SPARE	40
41	RM A133 CIRC PUMP	2	0.6	20	1		1	20			SPARE	42

LOAD SUMMARY
LIGHTING 0.0 KVA, A/C 19.2 KVA
RECEPTACLE 0.0 KVA, HEATING 0.0 KVA
MOTOR 0.6 KVA, MISC 0.0 KVA
CONNECTED CURRENT: 54.9 A.
DEMAND CURRENT: 55.7 A.

NOTES: 1. CONNECT NEW EQUIPMENT TO THIS CIRCUIT. REUSE THIS EXISTING CIRCUIT BREAKER.
2. EXISTING LOAD.

EXISTING PANELBOARD PP3 SCHEDULE

VOLTAGE: 208 V | MAINS: EXISTING 150A/3P MCB | MOUNTING: SURFACE | REMARKS:
BUS SIZE: 150 A | CONNECTED LOAD: 16.8 KVA, DEMAND LOAD: 16.8 KVA | FAULT DUTY: 22,000 A

NO	SERVES	NOTE	LOAD (kVA)	BREAKER TRIP	BREAKER P	PHASE A B C	BREAKER P	BREAKER TRIP	LOAD (kVA)	NOTE	SERVES	NO
1	HP-8	1	0.6	15	2		2	15	0.6	1	HP-1	2
3	———		0.6	———	———		———	———	0.6		———	4
5	HP-9	1	0.6	15	2		2	15	0.6	1	HP-2	6
7	———		0.6	———	———		———	———	0.6		———	8
9	HP-10	1	0.6	15	2		2	15	0.6	1	HP-3	10
11	———		0.6	———	———		———	———	0.6		———	12
13	HP-11	1	0.6	15	2		2	15	0.6	1	HP-4	14
15	———		0.6	———	———		———	———	0.6		———	16
17	HP-12	1	0.6	15	2		2	15	0.6	1	HP-5	18
19	———		0.6	———	———		———	———	0.6		———	20
21	HP-13	1	0.6	15	2		2	15	0.6	1	HP-6	22
23	———		0.6	———	———		———	———	0.6		———	24
25	HP-14	1	0.6	15	2		2	15	0.6	1	HP-7	26
27	———		0.6	———	———		———	———	0.6		———	28
29	SPARE			20	1		1	20			SPARE	30
31	SPARE			20	1		1	20			SPARE	32
33	SPARE			20	1		1	20			SPARE	34
35	SPARE			20	1		1	20			SPARE	36
37	SPARE			20	1		1	20			SPARE	38
39	SPARE			20	1		1	20			SPARE	40
41	SPARE			20	1		1	20			SPARE	42

LOAD SUMMARY
LIGHTING 0.0 KVA, A/C 16.8 KVA
RECEPTACLE 0.0 KVA, HEATING 0.0 KVA
MOTOR 0.0 KVA, MISC 0.0 KVA
CONNECTED CURRENT: 46.6 A.
DEMAND CURRENT: 46.6 A.

NOTES: 1. CONNECT NEW EQUIPMENT TO THIS CIRCUIT. REUSE THIS EXISTING CIRCUIT BREAKER.

EXISTING PANELBOARD PP4 SCHEDULE

VOLTAGE: 208 V | MAINS: EXISTING 150A/3P MCB | MOUNTING: SURFACE | REMARKS:
BUS SIZE: 150 A | CONNECTED LOAD: 19.2 KVA, DEMAND LOAD: 19.2 KVA | FAULT DUTY: 22,000 A

NO	SERVES	NOTE	LOAD (kVA)	BREAKER TRIP	BREAKER P	PHASE A B C	BREAKER P	BREAKER TRIP	LOAD (kVA)	NOTE	SERVES	NO
1	HP-23	1	0.6	15	2		2	15	0.6	1	HP-15	2
3	———		0.6	———	———		———	———	0.6		———	4
5	HP-24	1	0.6	15	2		2	15	0.6	1	HP-16	6
7	———		0.6	———	———		———	———	0.6		———	8
9	HP-25	1	0.6	15	2		2	15	0.6	1	HP-17	10
11	———		0.6	———	———		———	———	0.6		———	12
13	HP-26	1	0.6	15	2		2	15	0.6	1	HP-18	14
15	———		0.6	———	———		———	———	0.6		———	16
17	HP-27	1	0.6	15	2		2	15	0.6	1	HP-19	18
19	———		0.6	———	———		———	———	0.6		———	20
21	HP-28	1	0.6	15	2		2	15	0.6	1	HP-20	22
23	———		0.6	———	———		———	———	0.6		———	24
25	HP-29	1	0.6	15	2		2	15	0.6	1	HP-21	26
27	———		0.6	———	———		———	———	0.6		———	28
29	HP-30	1	0.6	15	2		2	15	0.6	1	HP-22	30
31	———		0.6	———	———		———	———	0.6		———	32
33	SPARE			20	1		1	20			SPARE	34
35	SPARE			20	1		1	20			SPARE	36
37	SPARE			20	1		1	20			SPARE	38
39	SPARE			20	1		1	20			SPARE	40
41	SPARE			20	1		1	20			SPARE	42

LOAD SUMMARY
LIGHTING 0.0 KVA, A/C 19.2 KVA
RECEPTACLE 0.0 KVA, HEATING 0.0 KVA
MOTOR 0.0 KVA, MISC 0.0 KVA
CONNECTED CURRENT: 53.2 A.
DEMAND CURRENT: 53.2 A.

NOTES: 1. CONNECT NEW EQUIPMENT TO THIS CIRCUIT. REUSE THIS EXISTING CIRCUIT BREAKER.

EXISTING PANELBOARD PP5 SCHEDULE

VOLTAGE: 208 V | MAINS: EXISTING 150A/3P MCB | MOUNTING: SURFACE | REMARKS:
BUS SIZE: 150 A | CONNECTED LOAD: 16.8 KVA, DEMAND LOAD: 16.8 KVA | FAULT DUTY: 22,000 A

NO	SERVES	NOTE	LOAD (kVA)	BREAKER TRIP	BREAKER P	PHASE A B C	BREAKER P	BREAKER TRIP	LOAD (kVA)	NOTE	SERVES	NO
1	HP-8	1	0.6	15	2		2	15	0.6	1	HP-1	2
3	———		0.6	———	———		———	———	0.6		———	4
5	HP-9	1	0.6	15	2		2	15	0.6	1	HP-2	6
7	———		0.6	———	———		———	———	0.6		———	8
9	HP-10	1	0.6	15	2		2	15	0.6	1	HP-3	10
11	———		0.6	———	———		———	———	0.6		———	12
13	HP-11	1	0.6	15	2		2	15	0.6	1	HP-4	14
15	———		0.6	———	———		———	———	0.6		———	16
17	HP-12	1	0.6	15	2		2	15	0.6	1	HP-5	18
19	———		0.6	———	———		———	———	0.6		———	20
21	HP-13	1	0.6	15	2		2	15	0.6	1	HP-6	22
23	———		0.6	———	———		———	———	0.6		———	24
25	HP-14	1	0.6	15	2		2	15	0.6	1	HP-7	26
27	———		0.6	———	———		———	———	0.6		———	28
29	SPARE			20	1		1	20			SPARE	30
31	**SPARE**			**20**	**1**		**1**	**20**			**SPARE**	**32**
33	**SPARE**			**20**	**1**		**1**	**20**			**SPARE**	**34**
35	SPARE			20	1		1	20			SPARE	36
37	SPARE			20	1		1	20			SPARE	38
39	SPARE			20	1		1	20			SPARE	40
41	SPARE			20	1		1	20			SPARE	42

LOAD SUMMARY
LIGHTING 0.0 KVA, A/C 16.8 KVA
RECEPTACLE 0.0 KVA, HEATING 0.0 KVA
MOTOR 0.0 KVA, MISC 0.0 KVA
CONNECTED CURRENT: 46.6 A.
DEMAND CURRENT: 46.6 A.

NOTES: 1. CONNECT NEW EQUIPMENT TO THIS CIRCUIT. REUSE THIS EXISTING CIRCUIT BREAKER.

EXISTING PANELBOARD PP6 SCHEDULE

VOLTAGE: 208 V | MAINS: EXISTING 150A/3P MCB | MOUNTING: SURFACE | REMARKS:
BUS SIZE: 150 A | CONNECTED LOAD: 19.2 KVA, DEMAND LOAD: 19.2 KVA | FAULT DUTY: 22,000 A

NO	SERVES	NOTE	LOAD (kVA)	BREAKER TRIP	BREAKER P	PHASE A B C	BREAKER P	BREAKER TRIP	LOAD (kVA)	NOTE	SERVES	NO
1	HP-23	1	0.6	15	2		2	15	0.6	1	HP-15	2
3	———		0.6	———	———		———	———	0.6		———	4
5	HP-24	1	0.6	15	2		2	15	0.6	1	HP-16	6
7	———		0.6	———	———		———	———	0.6		———	8
9	HP-25	1	0.6	15	2		2	15	0.6	1	HP-17	10
11	———		0.6	———	———		———	———	0.6		———	12
13	HP-26	1	0.6	15	2		2	15	0.6	1	HP-18	14
15	———		0.6	———	———		———	———	0.6		———	16
17	HP-27	1	0.6	15	2		2	15	0.6	1	HP-19	18
19	———		0.6	———	———		———	———	0.6		———	20
21	HP-28	1	0.6	15	2		2	15	0.6	1	HP-20	22
23	———		0.6	———	———		———	———	0.6		———	24
25	HP-29	1	0.6	15	2		2	15	0.6	1	HP-21	26
27	———		0.6	———	———		———	———	0.6		———	28
29	HP-30	1	0.6	15	2		2	15	0.6	1	HP-22	30
31	**———**		**0.6**	**———**	**———**		**———**	**———**	**0.6**		**———**	**32**
33	**SPARE**			**20**	**1**		**1**	**20**			**SPARE**	**34**
35	SPARE			20	1		1	20			SPARE	36
37	SPARE			20	1		1	20			SPARE	38
39	SPARE			20	1		1	20			SPARE	40
41	SPARE			20	1		1	20			SPARE	42

LOAD SUMMARY
LIGHTING 0.0 KVA, A/C 19.2 KVA
RECEPTACLE 0.0 KVA, HEATING 0.0 KVA
MOTOR 0.0 KVA, MISC 0.0 KVA
CONNECTED CURRENT: 53.2 A.
DEMAND CURRENT: 53.2 A.

NOTES: 1. CONNECT NEW EQUIPMENT TO THIS CIRCUIT. REUSE THIS EXISTING CIRCUIT BREAKER.

EXISTING PANELBOARD PP19 SCHEDULE

VOLTAGE: 208 V | MAINS: EXISTING 500A/3P MCB | MOUNTING: SURFACE | REMARKS:
BUS SIZE: 500 A | CONNECTED LOAD: 85.9 KVA, DEMAND LOAD: 86.4 KVA | FAULT DUTY: 22,000 A

NO	SERVES	NOTE	LOAD (kVA)	BREAKER TRIP	BREAKER P	PHASE A B C	BREAKER P	BREAKER TRIP	LOAD (kVA)	NOTE	SERVES	NO
1	PTHP-001 SUPPLY FAN	4	1.7	30	3		3	30	1.7	4	PTHP-002 SUPPLY FAN	2
3	———		1.7	———	———		———	———	1.7		———	4
5	———		1.7	———	———		———	———	1.7		———	6
7	PTHP-001 EXHAUST FAN	4	1.0	20	3		3	20	0.7	4	PTHP-002 EXHAUST FAN	8
9	———		1.0	———	———		———	———	0.7		———	10
11	———		1.0	———	———		———	———	0.7		———	12
13	PTHP-001 ENRGY WHEEL	4	7.0	60	2		2	60	7.0	4	PTHP-002 ENRGY WHEEL	14
15	———		7.0	———	———		———	———	7.0		———	16
17	SPARE	2		60	2		3	40	3.1	3	HP-2A	18
19	———			———	———		———	———	3.1		———	20
21	SPARE	2		60	2		———	———	3.1		———	22
23	———			———	———		1			3	SPACE	24
25	P-001 WATER PUMP	4	0.7	20	3		3	20	0.7	4	P-002 WATER PUMP	26
27	———		0.7	———	———		———	———	0.7		———	28
29	———		0.7	———	———		———	———	0.7		———	30
31	**HP-1A**	**1**	**3.1**	**40**	**3**		**3**	**20**	**0.5**	**4**	**P-002 WATER PUMP**	**32**
33	**———**		**3.1**	**———**	**———**		**———**	**———**	**0.5**		**———**	**34**
35	———		3.1	———	———		———	———	0.5		———	36
37	HP-2B	1	3.1	40	3		3	40	3.0	1	HP-2B	38
39	———		3.1	———	———		———	———	3.0		———	40
41	———		3.1	———	———		———	———	3.0		———	42

LOAD SUMMARY
LIGHTING 0.0 KVA, A/C 80.2 KVA
RECEPTACLE 0.0 KVA, HEATING 0.0 KVA
MOTOR 5.7 KVA, MISC 0.0 KVA
CONNECTED CURRENT: 238.4 A.
DEMAND CURRENT: 239.8 A.

NOTES: 1. PROVIDE NEW CIRCUIT BREAKER AND NEW CIRCUIT FOR THIS EQUIPMENT.
2. DISCONNECT EXISTING CIRCUIT FROM THIS CIRCUIT BREAKER. RETAIN CIRCUIT BREAKER AS SPARE.
3. REMOVE EXISINT 60A/2P CIRCUIT BREAKERS FROM POSITIONS 18,20 AND 22,24. PROVIDE NEW CIRCUIT BREAKER AS SHOWN. COVER EMPTY SPACE AT POSITION 24.
4. EXISTING LOAD.

EXISTING PANELBOARD PP7 SCHEDULE

VOLTAGE: 208Y/120 V | MAINS: EXISTING 150A/3P MCB | MOUNTING: SURFACE | REMARKS:
BUS SIZE: 150 A | CONNECTED LOAD: 12.6 KVA, DEMAND LOAD: 12.9 KVA | FAULT DUTY: 22,000 A

NO	SERVES	NOTE	LOAD (kVA)	BREAKER TRIP	BREAKER P	PHASE A B C	BREAKER P	BREAKER TRIP	LOAD (kVA)	NOTE	SERVES	NO
1	HP-6	1	0.6	15	2		2	15	0.6	1	HP-1	2
3	———		0.6	———	———		———	———	0.6		———	4
5	HP-7	1	0.6	15	2		2	15	0.6	1	HP-2	6
7	———		0.6	———	———		———	———	0.6		———	8
9	HP-8	1	0.6	15	2		2	15	0.6	1	HP-3	10
11	———		0.6	———	———		———	———	0.6		———	12
13	HP-9	1	0.6	15	2		2	15	0.6	1	HP-4	14
15	———		0.6	———	———		———	———	0.6		———	16
17	HP-10	1	0.6	15	2		2	15	0.6	1	HP-5	18
19	———		0.6	———	———		———	———	0.6		———	20
21	SPARE			20	1		1	20			SPARE	22
23	SPARE			20	1		1	20			SPARE	24
25	SPARE			20	1		1	20			SPARE	26
27	SPARE			20	1		1	20			SPARE	28
29	SPARE			20	1		1	20			SPARE	30
31	SPARE			20	1		1	20			SPARE	32
33	SPARE			20	1		1	20			SPARE	34
35	SPARE			20	1		1	20			SPARE	36
37	SPARE			20	1		1	20			SPARE	38
39	SPARE			20	1		1	20			SPARE	40
41	RM B121 CIRC PUMP	2	0.6	20	1		1	20			SPARE	42

LOAD SUMMARY
LIGHTING 0.0 KVA, A/C 12.0 KVA
RECEPTACLE 0.0 KVA, HEATING 0.0 KVA
MOTOR 0.0 KVA, MISC 0.0 KVA
CONNECTED CURRENT: 34.9 A.
DEMAND CURRENT: 35.8 A.

NOTES: 1. CONNECT NEW EQUIPMENT TO THIS CIRCUIT. REUSE THIS EXISTING CIRCUIT BREAKER.
2. EXISTING LOAD.

EXISTING PANELBOARD PP8 SCHEDULE

VOLTAGE: 208Y/120 V | MAINS: EXISTING 150A/3P MCB | MOUNTING: SURFACE | REMARKS:
BUS SIZE: 150 A | CONNECTED LOAD: 12.6 KVA, DEMAND LOAD: 12.9 KVA | FAULT DUTY: 22,000 A

NO	SERVES	NOTE	LOAD (kVA)	BREAKER TRIP	BREAKER P	PHASE A B C	BREAKER P	BREAKER TRIP	LOAD (kVA)	NOTE	SERVES	NO
1	HP-16	1	0.6	15	2		2	15	0.6	1	HP-11	2
3	———		0.6	———	———		———	———	0.6		———	4
5	HP-17	1	0.6	15	2		2	15	0.6	1	HP-12	6
7	———		0.6	———	———		———	———	0.6		———	8
9	**HP-18**	**1**	**0.6**	**15**	**2**		**2**	**15**	**0.6**	**1**	**HP-13**	**10**
11	———		0.6	———	———		———	———	0.6		———	12
13	HP-19	1	0.6	15	2		2	15	0.6	1	HP-14	14
15	———		0.6	———	———		———	———	0.6		———	16
17	HP-20	1	0.6	15	2		2	15	0.6	1	HP-15	18
19	———		0.6	———	———		———	———	0.6		———	20
21	SPARE			20	1		1	20			SPARE	22
23	SPARE			20	1		1	20			SPARE	24
25	SPARE			20	1		1	20			SPARE	26
27	SPARE			20	1		1	20			SPARE	28
29	SPARE			20	1		1	20			SPARE	30
31	SPARE			20	1		1	20			SPARE	32
33	SPARE			20	1		1	20			SPARE	34
35	**SPARE**			**20**	**1**		**1**	**20**			**SPARE**	**36**
37	**SPARE**			**20**	**1**		**1**	**20**			**SPARE**	**38**
39	SPARE			20	1		1	20			SPARE	40
41	RM B123 CIRC PUMP	2	0.6	20	1		1	20			SPARE	42

LOAD SUMMARY
LIGHTING 0.0 KVA, A/C 12.0 KVA
RECEPTACLE 0.0 KVA, HEATING 0.0 KVA
MOTOR 0.6 KVA, MISC 0.0 KVA
CONNECTED CURRENT: 34.9 A.
DEMAND CURRENT: 35.8 A.

NOTES: 1. CONNECT NEW EQUIPMENT TO THIS CIRCUIT. REUSE THIS EXISTING CIRCUIT BREAKER.
2. EXISTING LOAD.

EXISTING PANELBOARD PP9 SCHEDULE

VOLTAGE: 208Y/120 V | MAINS: EXISTING 150A/3P MCB | MOUNTING: SURFACE | REMARKS:
BUS SIZE: 150 A | CONNECTED LOAD: 12.0 KVA, DEMAND LOAD: 12.0 KVA | FAULT DUTY: 22,000 A

NO	SERVES	NOTE	LOAD (kVA)	BREAKER TRIP	BREAKER P	PHASE A B C	BREAKER P	BREAKER TRIP	LOAD (kVA)	NOTE	SERVES	NO
1	HP-6	1	0.6	15	2		2	15	0.6	1	HP-1	2
3	———		0.6	———	———		———	———	0.6		———	4
5	HP-7	1	0.6	15	2		2	15	0.6	1	HP-2	6
7	———		0.6	———	———		———	———	0.6		———	8
9	HP-8	1	0.6	15	2		2	15	0.6	1	HP-3	10
11	———		0.6	———	———		———	———	0.6		———	12
13	HP-9	1	0.6	15	2		2	15	0.6	1	HP-4	14
15	———		0.6	———	———		———	———	0.6		———	16
17	HP-10	1	0.6	15	2		2	15	0.6	1	HP-5	18
19	———		0.6	———	———		———	———	0.6		———	20
21	SPARE			20	1		1	20			SPARE	22
23	SPARE			20	1		1	20			SPARE	24
25	SPARE			20	1		1	20			SPARE	26
27	SPARE			20	1		1	20			SPARE	28
29	SPARE			20	1		1	20			SPARE	30
31	SPARE			20	1		1	20			SPARE	32
33	SPARE			20	1		1	20			SPARE	34
35	**SPARE**			**20**	**1**		**1**	**20**			**SPARE**	**36**
37	**SPARE**			**20**	**1**		**1**	**20**			**SPARE**	**38**
39	SPARE			20	1		1	20			SPARE	40
41	SPARE			20	1		1	20			SPARE	42

LOAD SUMMARY
LIGHTING 0.0 KVA, A/C 12.0 KVA
RECEPTACLE 0.0 KVA, HEATING 0.0 KVA
MOTOR 0.0 KVA, MISC 0.0 KVA
CONNECTED CURRENT: 33.3 A.
DEMAND CURRENT: 33.3 A.

NOTES: 1. CONNECT NEW EQUIPMENT TO THIS CIRCUIT. REUSE THIS EXISTING CIRCUIT BREAKER.

EXISTING PANELBOARD PP10 SCHEDULE

VOLTAGE: 208Y/120 V | MAINS: EXISTING 150A/3P MCB | MOUNTING: SURFACE | REMARKS:
BUS SIZE: 150 A | CONNECTED LOAD: 12.0 KVA, DEMAND LOAD: 12.0 KVA | FAULT DUTY: 22,000 A

NO	SERVES	NOTE	LOAD (kVA)	BREAKER TRIP	BREAKER P	PHASE A B C	BREAKER P	BREAKER TRIP	LOAD (kVA)	NOTE	SERVES	NO
1	HP-16	1	0.6	15	2		2	15	0.6	1	HP-11	2
3	———		0.6	———	———		———	———	0.6		———	4
5	HP-17	1	0.6	15	2		2	15	0.6	1	HP-12	6
7	———		0.6	———	———		———	———	0.6		———	8
9	HP-18	1	0.6	15	2		2	15	0.6	1	HP-13	10
11	———		0.6	———	———		———	——

EXISTING PANELBOARD PP12 SCHEDULE

VOLTAGE: 208Y/120 V | MAINS: EXISTING 150A/3P MCB | MOUNTING: SURFACE | REMARKS:
BUS SIZE: 150 A | CONNECTED LOAD: 12.0 KVA | DEMAND LOAD: 12.0 KVA | FAULT DUTY: 22,000 A

NO	SERVES	NOTE	LOAD (KVA)	BREAKER TRIP	BREAKER P	PHASE A	PHASE B	PHASE C	BREAKER P	BREAKER TRIP	LOAD (KVA)	NOTE	SERVES	NO
1	HP-16	1	0.6	15	2				2	15	0.6	1	HP-11	2
3	------		0.6	---	--				--	---	0.6		------	4
5	HP-17	1	0.6	15	2				2	15	0.6	1	HP-12	6
7	------		0.6	---	--				--	---	0.6		------	8
9	HP-18	1	0.6	15	2				2	15	0.6	1	HP-13	10
11	------		0.6	---	--				--	---	0.6		------	12
13	HP-19	1	0.6	15	2				2	15	0.6	1	HP-14	14
15	------		0.6	---	--				--	---	0.6		------	16
17	HP-20	1	0.6	15	2				2	15	0.6	1	HP-15	18
19	------		0.6	---	--				--	---	0.6		------	20
21	SPARE			20	1				1	20			SPARE	22
23	SPARE			20	1				1	20			SPARE	24
25	SPARE			20	1				1	20			SPARE	26
27	SPARE			20	1				1	20			SPARE	28
29	SPARE			20	1				1	20			SPARE	30
31	SPARE			20	1				1	20			SPARE	32
33	SPARE			20	1				1	20			SPARE	34
35	SPARE			20	1				1	20			SPARE	36
37	SPARE			20	1				1	20			SPARE	38
39	SPARE			20	1				1	20			SPARE	40
41	SPARE			20	1				1	20			SPARE	42

LOAD SUMMARY

LIGHTING	0.0 KVA	A/C	12.0 KVA
RECEPTACLE	0.0 KVA	HEATING	0.0 KVA
MOTOR	0.0 KVA	MISC	0.0 KVA

CONNECTED CURRENT: 33.3 A.
DEMAND CURRENT: 33.3 A.

NOTES: 1. CONNECT NEW EQUIPMENT TO THIS CIRCUIT. REUSE THIS EXISTING CIRCUIT BREAKER.

EXISTING PANELBOARD PP20 SCHEDULE

VOLTAGE: 208 V | MAINS: EXISTING 500A/3P MCB | MOUNTING: SURFACE | REMARKS:
BUS SIZE: 500 A | CONNECTED LOAD: 68.2 KVA | DEMAND LOAD: 68.7 KVA | FAULT DUTY: 22,000 A

NO	SERVES	NOTE	LOAD (KVA)	BREAKER TRIP	BREAKER P	PHASE A	PHASE B	PHASE C	BREAKER P	BREAKER TRIP	LOAD (KVA)	NOTE	SERVES	NO
1	PTHP-003 SUPPLY FAN	4	1.7	30	3				3	20	0.7	4	PTHP-004 SUPPLY FAN	2
3	------		1.7	---	--				--	---	0.7		------	4
5	------		1.7	---	--				--	---	0.7		------	6
7	PTHP-003 EXHAUST FAN	4	0.7	20	3				3	20	0.5	4	PTHP-004 EXHAUST FAN	8
9	------		0.7	---	--				--	---	0.5		------	10
11	------		0.7	---	--				--	---	0.5		------	12
13	PTHP-003 ENRGY WHEEL	4	7.0	60	2				2	60	7.0	4	PTHP-004 ENRGY WHEEL	14
15	------		7.0	---	--				--	---	7.0		------	16
17	HP-3B	3	2.6	40	2				2	40	2.6	3	HP-4A	18
19	------		2.6	---	--				--	---	2.6		------	20
21	SPARE	2		60	2				2	40	2.3	3	HP-4B	22
23	------			---	--				--	---	2.3		------	24
25	P-003 WATER PUMP	4	0.7	20	3				3	20	0.5	4	P-004 WATER PUMP	26
27	------		0.7	---	--				--	---	0.5		------	28
29	------		0.7	---	--				--	---	0.5		------	30
31	HP-3A	1	3.1	40	3				3	20	0.5	4	P-002 EXHAUST FAN	32
33	------		3.1	---	--				--	---	0.5		------	34
35	------		3.1	---	--				--	---	0.5		------	36
37	SPARE			20	1				1	20			SPARE	38
39	SPARE			20	1				1	20			SPARE	40
41	SPARE			20	1				1	20			SPARE	42

LOAD SUMMARY

LIGHTING	0.0 KVA	A/C	64.6 KVA
RECEPTACLE	0.0 KVA	HEATING	0.0 KVA
MOTOR	3.6 KVA	MISC	0.0 KVA

CONNECTED CURRENT: 189.3 A.
DEMAND CURRENT: 190.6 A.

NOTES: 1. PROVIDE NEW CIRCUIT BREAKER AND NEW CIRCUIT FOR THIS EQUIPMENT.
2. DISCONNECT EXISTING CIRCUIT FROM THIS CIRCUIT BREAKER. RETAIN CIRCUIT BREAKER AS SPARE.
3. REMOVE EXISINT 60A/2P CIRCUIT BREAKERS FROM POSITIONS 17,19; 18,20 AND 22,24. PROVIDE NEW CIRCUIT BREAKERS AS SHOWN.
4. EXISTING LOAD.

EXISTING PANELBOARD PP13 SCHEDULE

VOLTAGE: 208Y/120 V | MAINS: EXISTING 150A/3P MCB | MOUNTING: SURFACE | REMARKS:
BUS SIZE: 150 A | CONNECTED LOAD: 12.6 KVA | DEMAND LOAD: 12.9 KVA | FAULT DUTY: 22,000 A

NO	SERVES	NOTE	LOAD (KVA)	BREAKER TRIP	BREAKER P	PHASE A	PHASE B	PHASE C	BREAKER P	BREAKER TRIP	LOAD (KVA)	NOTE	SERVES	NO
1	HP-6	1	0.6	15	2				2	15	0.6	1	HP-1	2
3	------		0.6	---	--				--	---	0.6		------	4
5	HP-7	1	0.6	15	2				2	15	0.6	1	HP-2	6
7	------		0.6	---	--				--	---	0.6		------	8
9	HP-8	1	0.6	15	2				2	15	0.6	1	HP-3	10
11	------		0.6	---	--				--	---	0.6		------	12
13	HP-9	1	0.6	15	2				2	15	0.6	1	HP-4	14
15	------		0.6	---	--				--	---	0.6		------	16
17	HP-10	1	0.6	15	2				2	15	0.6	1	HP-5	18
19	------		0.6	---	--				--	---	0.6		------	20
21	SPARE			20	1				1	20			SPARE	22
23	SPARE			20	1				1	20			SPARE	24
25	SPARE			20	1				1	20			SPARE	26
27	SPARE			20	1				1	20			SPARE	28
29	SPARE			20	1				1	20			SPARE	30
31	SPARE			20	1				1	20			SPARE	32
33	SPARE			20	1				1	20			SPARE	34
35	SPARE			20	1				1	20			SPARE	36
37	SPARE			20	1				1	20			SPARE	38
39	SPARE			20	1				1	20			SPARE	40
41	RM C121 CIRC PUMP	2	0.6	20	1				1	20			SPARE	42

LOAD SUMMARY

LIGHTING	0.0 KVA	A/C	12.0 KVA
RECEPTACLE	0.0 KVA	HEATING	0.0 KVA
MOTOR	0.6 KVA	MISC	0.0 KVA

CONNECTED CURRENT: 34.9 A.
DEMAND CURRENT: 35.8 A.

NOTES: 1. CONNECT NEW EQUIPMENT TO THIS CIRCUIT. REUSE THIS EXISTING CIRCUIT BREAKER.
2. EXISTING LOAD.

EXISTING PANELBOARD PP14 SCHEDULE

VOLTAGE: 208Y/120 V | MAINS: EXISTING 150A/3P MCB | MOUNTING: SURFACE | REMARKS:
BUS SIZE: 150 A | CONNECTED LOAD: 12.6 KVA | DEMAND LOAD: 12.9 KVA | FAULT DUTY: 22,000 A

NO	SERVES	NOTE	LOAD (KVA)	BREAKER TRIP	BREAKER P	PHASE A	PHASE B	PHASE C	BREAKER P	BREAKER TRIP	LOAD (KVA)	NOTE	SERVES	NO
1	HP-16	1	0.6	15	2				2	15	0.6	1	HP-11	2
3	------		0.6	---	--				--	---	0.6		------	4
5	HP-17	1	0.6	15	2				2	15	0.6	1	HP-12	6
7	------		0.6	---	--				--	---	0.6		------	8
9	HP-18	1	0.6	15	2				2	15	0.6	1	HP-13	10
11	------		0.6	---	--				--	---	0.6		------	12
13	HP-19	1	0.6	15	2				2	15	0.6	1	HP-14	14
15	------		0.6	---	--				--	---	0.6		------	16
17	HP-20	1	0.6	15	2				2	15	0.6	1	HP-15	18
19	------		0.6	---	--				--	---	0.6		------	20
21	SPARE			20	1				1	20			SPARE	22
23	SPARE			20	1				1	20			SPARE	24
25	SPARE			20	1				1	20			SPARE	26
27	SPARE			20	1				1	20			SPARE	28
29	SPARE			20	1				1	20			SPARE	30
31	SPARE			20	1				1	20			SPARE	32
33	SPARE			20	1				1	20			SPARE	34
35	SPARE			20	1				1	20			SPARE	36
37	SPARE			20	1				1	20			SPARE	38
39	SPARE			20	1				1	20			SPARE	40
41	SPARE			20	1				1	20			SPARE	42

LOAD SUMMARY

LIGHTING	0.0 KVA	A/C	12.0 KVA
RECEPTACLE	0.0 KVA	HEATING	0.0 KVA
MOTOR	0.6 KVA	MISC	0.0 KVA

CONNECTED CURRENT: 34.9 A.
DEMAND CURRENT: 35.8 A.

NOTES: 1. CONNECT NEW EQUIPMENT TO THIS CIRCUIT. REUSE THIS EXISTING CIRCUIT BREAKER.
2. EXISTING LOAD.

EXISTING PANELBOARD PP15 SCHEDULE

VOLTAGE: 208Y/120 V | MAINS: EXISTING 150A/3P MCB | MOUNTING: SURFACE | REMARKS:
BUS SIZE: 150 A | CONNECTED LOAD: 12.0 KVA | DEMAND LOAD: 12.0 KVA | FAULT DUTY: 22,000 A

NO	SERVES	NOTE	LOAD (KVA)	BREAKER TRIP	BREAKER P	PHASE A	PHASE B	PHASE C	BREAKER P	BREAKER TRIP	LOAD (KVA)	NOTE	SERVES	NO
1	HP-6	1	0.6	15	2				2	15	0.6	1	HP-1	2
3	------		0.6	---	--				--	---	0.6		------	4
5	HP-7	1	0.6	15	2				2	15	0.6	1	HP-2	6
7	------		0.6	---	--				--	---	0.6		------	8
9	HP-8	1	0.6	15	2				2	15	0.6	1	HP-3	10
11	------		0.6	---	--				--	---	0.6		------	12
13	HP-9	1	0.6	15	2				2	15	0.6	1	HP-4	14
15	------		0.6	---	--				--	---	0.6		------	16
17	HP-10	1	0.6	15	2				2	15	0.6	1	HP-5	18
19	------		0.6	---	--				--	---	0.6		------	20
21	SPARE			20	1				1	20			SPARE	22
23	SPARE			20	1				1	20			SPARE	24
25	SPARE			20	1				1	20			SPARE	26
27	SPARE			20	1				1	20			SPARE	28
29	SPARE			20	1				1	20			SPARE	30
31	SPARE			20	1				1	20			SPARE	32
33	SPARE			20	1				1	20			SPARE	34
35	SPARE			20	1				1	20			SPARE	36
37	SPARE			20	1				1	20			SPARE	38
39	SPARE			20	1				1	20			SPARE	40
41	SPARE			20	1				1	20			SPARE	42

LOAD SUMMARY

LIGHTING	0.0 KVA	A/C	12.0 KVA
RECEPTACLE	0.0 KVA	HEATING	0.0 KVA
MOTOR	0.0 KVA	MISC	0.0 KVA

CONNECTED CURRENT: 33.3 A.
DEMAND CURRENT: 33.3 A.

NOTES: 1. CONNECT NEW EQUIPMENT TO THIS CIRCUIT. REUSE THIS EXISTING CIRCUIT BREAKER.

EXISTING PANELBOARD PP16 SCHEDULE

VOLTAGE: 208Y/120 V | MAINS: EXISTING 150A/3P MCB | MOUNTING: SURFACE | REMARKS:
BUS SIZE: 150 A | CONNECTED LOAD: 12.0 KVA | DEMAND LOAD: 12.0 KVA | FAULT DUTY: 22,000 A

NO	SERVES	NOTE	LOAD (KVA)	BREAKER TRIP	BREAKER P	PHASE A	PHASE B	PHASE C	BREAKER P	BREAKER TRIP	LOAD (KVA)	NOTE	SERVES	NO
1	HP-16	1	0.6	15	2				2	15	0.6	1	HP-11	2
3	------		0.6	---	--				--	---	0.6		------	4
5	HP-17	1	0.6	15	2				2	15	0.6	1	HP-12	6
7	------		0.6	---	--				--	---	0.6		------	8
9	HP-18	1	0.6	15	2				2	15	0.6	1	HP-13	10
11	------		0.6	---	--				--	---	0.6		------	12
13	HP-19	1	0.6	15	2				2	15	0.6	1	HP-14	14
15	------		0.6	---	--				--	---	0.6		------	16
17	HP-20	1	0.6	15	2				2	15	0.6	1	HP-15	18
19	------		0.6	---	--				--	---	0.6		------	20
21	SPARE			20	1				1	20			SPARE	22
23	SPARE			20	1				1	20			SPARE	24
25	SPARE			20	1				1	20			SPARE	26
27	SPARE			20	1				1	20			SPARE	28
29	SPARE			20	1				1	20			SPARE	30
31	SPARE			20	1				1	20			SPARE	32
33	SPARE			20	1				1	20			SPARE	34
35	SPARE			20	1				1	20			SPARE	36
37	SPARE			20	1				1	20			SPARE	38
39	SPARE			20	1				1	20			SPARE	40
41	SPARE			20	1				1	20			SPARE	42

LOAD SUMMARY

LIGHTING	0.0 KVA	A/C	12.0 KVA
RECEPTACLE	0.0 KVA	HEATING	0.0 KVA
MOTOR	0.0 KVA	MISC	0.0 KVA

CONNECTED CURRENT: 33.3 A.
DEMAND CURRENT: 33.3 A.

NOTES: 1. CONNECT NEW EQUIPMENT TO THIS CIRCUIT. REUSE THIS EXISTING CIRCUIT BREAKER.

EXISTING PANELBOARD PP17 SCHEDULE

VOLTAGE: 208Y/120 V | MAINS: EXISTING 150A/3P MCB | MOUNTING: SURFACE | REMARKS:
BUS SIZE: 150 A | CONNECTED LOAD: 12.0 KVA | DEMAND LOAD: 12.0 KVA | FAULT DUTY: 22,000 A

NO	SERVES	NOTE	LOAD (KVA)	BREAKER TRIP	BREAKER P	PHASE A	PHASE B	PHASE C	BREAKER P	BREAKER TRIP	LOAD (KVA)	NOTE	SERVES	NO
1	HP-6	1	0.6	15	2				2	15	0.6	1	HP-1	2
3	------		0.6	---	--				--	---	0.6		------	4
5	HP-7	1	0.6	15	2				2	15	0.6	1	HP-2	6
7	------		0.6	---	--				--	---	0.6		------	8
9	HP-8	1	0.6	15	2				2	15	0.6	1	HP-3	10
11	------		0.6	---	--				--	---	0.6		------	12
13	HP-9	1	0.6	15	2				2	15	0.6	1	HP-4	14
15	------		0.6	---	--				--	---	0.6		------	16
17	HP-10	1	0.6	15	2				2	15	0.6	1	HP-5	18
19	------		0.6	---	--				--	---	0.6		------	20
21	SPARE			20	1				1	20			SPARE	22
23	SPARE			20	1				1	20			SPARE	24
25	SPARE			20	1				1	20			SPARE	26
27	SPARE			20	1				1	20			SPARE	28
29	SPARE			20	1				1	20			SPARE	30
31	SPARE			20	1				1	20			SPARE	32
33	SPARE			20	1				1	20			SPARE	34
35	SPARE			20	1				1	20			SPARE	36
37	SPARE			20	1				1	20			SPARE	38
39	SPARE			20	1				1	20			SPARE	40
41	SPARE			20	1				1	20			SPARE	42

LOAD SUMMARY

LIGHTING	0.0 KVA	A/C	12.0 KVA
RECEPTACLE	0.0 KVA	HEATING	0.0 KVA
MOTOR	0.0 KVA	MISC	0.0 KVA

CONNECTED CURRENT: 33.3 A.
DEMAND CURRENT: 33.3 A.

NOTES: 1. CONNECT NEW EQUIPMENT TO THIS CIRCUIT. REUSE THIS EXISTING CIRCUIT BREAKER.

EXISTING PANELBOARD PP18 SCHEDULE

VOLTAGE: 208Y/120 V | MAINS: EXISTING 150A/3P MCB | MOUNTING: SURFACE | REMARKS:
BUS SIZE: 150 A | CONNECTED LOAD: 12.0 KVA | DEMAND LOAD: 12.0 KVA | FAULT DUTY: 22,000 A

NO	SERVES	NOTE	LOAD (KVA)	BREAKER TRIP	BREAKER P	PHASE A	PHASE B	PHASE C	BREAKER P	BREAKER TRIP	LOAD (KVA)	NOTE	SERVES	NO
1	HP-16	1	0.6	15	2				2	15	0.6	1	HP-11	2
3	------		0.6	---	--				--	---	0.6		------	4
5	HP-17	1	0.6	15	2				2	15	0.6	1	HP-12	6
7	------		0.6	---	--				--	---	0.6		------	8
9	HP-18	1	0.6	15	2				2	15	0.6	1	HP-13	10
11	------		0.6	---	--				--	---	0.6		------	12
13	HP-19	1	0.6	15	2				2	15	0.6	1	HP-14	14
15	------		0.6	---	--				--	---	0.6		------	16
17	HP-20	1	0.6	15	2				2	15	0.6	1	HP-15	18
19	------		0.6	---	--				--	---	0.6		------	20
21	SPARE			20	1				1	20			SPARE	22
23	SPARE			20	1				1	20			SPARE	24
25	SPARE			20	1				1	20			SPARE	26
27	SPARE			20	1				1	20			SPARE	28
29	SPARE			20	1				1	20			SPARE	30
31	SPARE			20	1				1	20			SPARE	32
33	SPARE			20	1				1	20			SPARE	34
35	SPARE			20	1				1	20			SPARE	36
37	SPARE			20	1				1	20			SPARE	38
39	SPARE			20	1				1	20			SPARE	40
41	SPARE			20	1				1	20			SPARE	42

LOAD SUMMARY

LIGHTING	0.0 KVA	A/C	12.0 KVA
RECEPTACLE	0.0 KVA	HEATING	0.0 KVA
MOTOR	0.0 KVA	MISC	0.0 KVA

CONNECTED CURRENT: 33.3 A.
DEMAND CURRENT: 33.3 A.

NOTES: 1. CONNECT NEW EQUIPMENT TO THIS CIRCUIT. REUSE THIS EXISTING CIRCUIT BREAKER.

EXISTING PANELBOARD PP21 SCHEDULE

VOLTAGE: 208 V | MAINS: EXISTING 500A/3P MCB | MOUNTING: SURFACE | REMARKS:
BUS SIZE: 500 A | CONNECTED LOAD: 68.2 KVA | DEMAND LOAD: 68.7 KVA | FAULT DUTY: 22,000 A

NO	SERVES	NOTE	LOAD (KVA)	BREAKER TRIP	BREAKER P	PHASE A	PHASE B	PHASE C	BREAKER P	BREAKER TRIP	LOAD (KVA)	NOTE	SERVES	NO
1	PTHP-005 SUPPLY FAN	4	1.7	30	3				3	20	0.7	4	PTHP-006 SUPPLY FAN	2
3	------		1.7	---	--				--	---	0.7		------	4
5	------		1.7	---	--				--	---	0.7		------	6
7	PTHP-005 EXHAUST FAN	4	0.7	20	3				3	20	0.5	4	PTHP-006 EXHAUST FAN	8
9	------		0.7	---	--				--	---	0.5		------	10
11	------		0.7	---	--				--	---	0.5		------	12
13	PTHP-005 ENRGY WHEEL	4	7.0	60	2				2	60	7.0	4	PTHP-006 ENRGY WHEEL	14
15	------		7.0	---	--				--	---	7.0		------	16
17	HP-5B	3	2.6	40	2				2	40	2.6	3	HP-6A	18
19	------		2.6	---	--				--	---	2.6		------	20
21	SPARE	2		60	2				2	40	2.3	3	HP-6B	22
23	------			---	--				--	---	2.3		------	24
25	P-005 WATER PUMP	4	0.7	20	3				3	20	0.5	4	P-006 WATER PUMP	26
27	------		0.7	---	--				--	---	0.5		------	28
29	------		0.7	---	--				--	---	0.5		------	30
31	HP-5A	1	3.1	40	3				3	20	0.5	4	P-003 EXHAUST FAN	32
33	------		3.1	---	--				--	---	0.5		------	34
35	------		3.1	---	--				--	---	0.5		------	36
37	SPARE			20	1				1	20			SPARE	38
39	SPARE			20	1				1	20			SPARE	40
41	SPARE			20	1				1	20			SPARE	42

LOAD SUMMARY

LIGHTING	0.0 KVA	A/C	64.6 KVA
RECEPTACLE	0.0 KVA	HEATING	0.0 KVA
MOTOR	3.6 KVA	MISC	0.0 KVA

CONNECTED CURRENT: 189.3 A.
DEMAND CURRENT: 190.6 A.

NOTES: 1. PROVIDE NEW CIRCUIT BREAKER AND NEW CIRCUIT FOR THIS EQUIPMENT.
2. DISCONNECT EXISTING CIRCUIT FROM THIS CIRCUIT BREAKER. RETAIN CIRCUIT BREAKER AS SPARE.
3. REMOVE EXISINT 60A/2P CIRCUIT BREAKERS FROM POSITIONS 18,20 AND 22,24. PROVIDE NEW CIRCUIT BREAKERS AS SHOWN.
4. EXISTING LOAD.

ON THIS SHEET:			
PANEL PP12	PANEL PP20	PANEL PP13	PANEL PP14
PANEL PP15	PANEL PP16	PANEL PP17	PANEL PP18
PANEL PP21			

#	DESCRIPTION	DATE	APPR.
1	ISSUED FOR CONSTRUCTION	11/24/09	DAH

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES: DAH DRW: DAH CHK: DAH

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
BFT SOUTH CENTRAL
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

PANELBOARD SCHEDULES

SCALE: NOT TO SCALE
EPROJECT NO.:
CONSTR. CONTR. NO.
NAVFAC DRAWING NO.
SHEET 37 OF 37
E401

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC(H)M60169\HVAC study and report-8704450\Working Technical Files\CAD Drawings\Sh8704450 E-401 Panel Schedules.dwg LAYOUT NAME: E401 PLOTTED: Tuesday, November 24, 2009 - 1:48pm USER: douglas.henry1