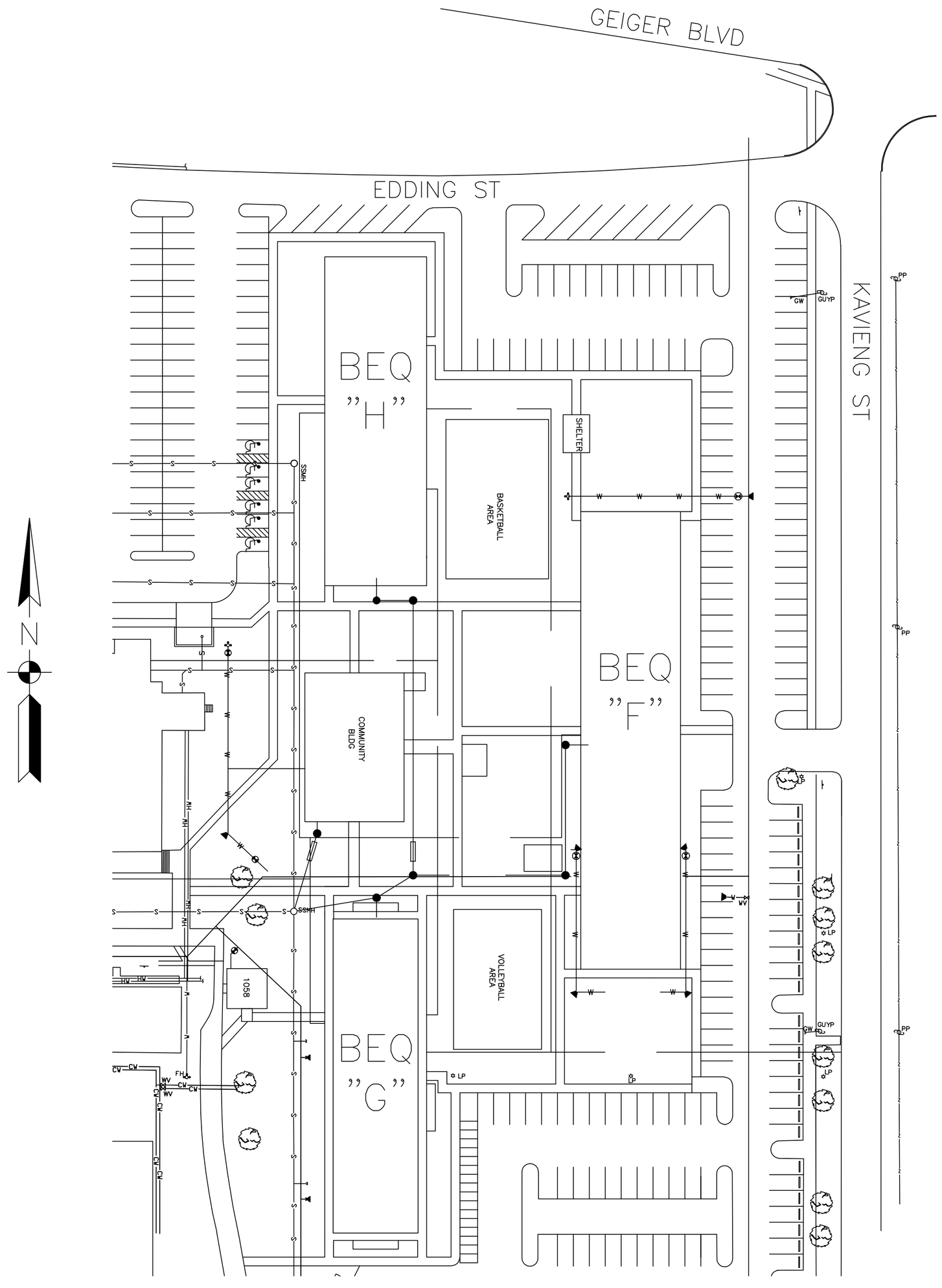
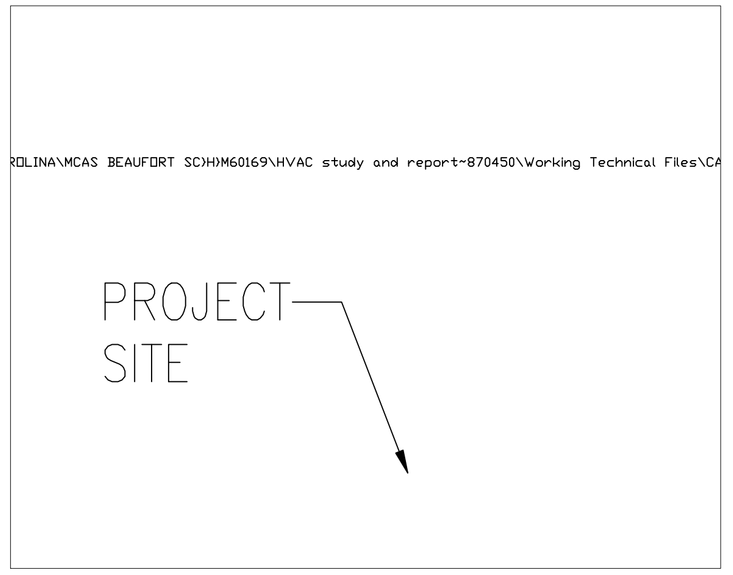
BEQ F, G & H HVAC RENOVATION

MARINE CORPS AIR STATION, BEAUFORT, SC



SITE LAYOUT

NOT TO SCALE



VICINITY MAP

NOT TO SCALE

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22	ED101	15032803	BUILDING F – ATTIC FLOOR PLAN – POWER – DEMO
23	ED102	15032804	BUILDING G – 1ST THRU 3RD FLOOR PLAN – POWER & LIGHTING – DEMO
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33	E300	15032814	BUILDING F – MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE
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PW 18918–18954

DRAWFORM REVISION: 7 AUGUST 2009

P.W. DWG. NO. 18918

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

NAVFAC

SEAL

A/E INFO

APPROVED

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

ACTIVITY

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SATISFACTORY TO DATE --

DES -- | DRW -- | CHK --

PROJECT MANAGER --

IPT TECH. BRANCH HEAD --

CHIEF ENG/ARCH (CORE) --

---- .

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVFAC SOUTHEAST
IPT SOUTH CENTRAL

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

BEQ F, G & H - PHASE IV HVAC RENOVATION

MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

COVER SHEET

SCALE:	NTS
EPROJECT NO.:	--
CONSTR. CONTR. NO.	####
NAVFAC DRAWING NO.	15032782
SHEET	1 OF 37

G100

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18918.dwg LAYOUT NAME: 870450-G-00 PLOTTED: Friday, January 27, 2012 - 7:05am USER: elisabeth.hammitt

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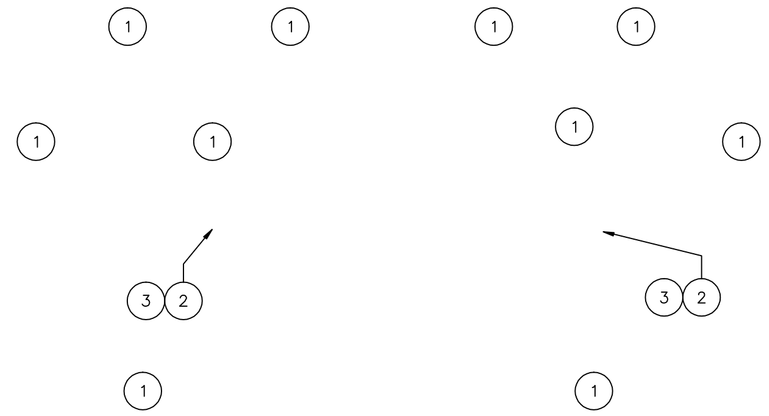
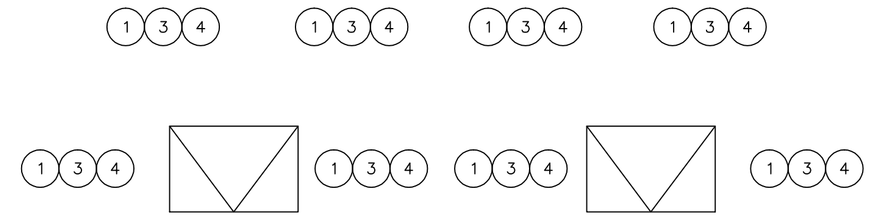


1 DEMOLITION FLOOR PLAN
Scale: 1/4" = 1'-0"

\CIBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC}H}M60169\HVAC study and repor

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

\CIBL\Project_Files\SOUTH CAROLINA\MCAS BEAUFORT SC}H}M60169\HVAC study and repor



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

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 200 S.F. OF GWB REPLACEMENT DUE TO MOLD. INCLUDE ALL WORK ASSOCIATED WITH REMOVAL, REPLACEMENT, TAPE, FINISH, AND PAINT. ALSO, PROVIDE A UNIT COST PER S.F. OF GWB FOR REPLACEMENT PURPOSES.

2

P.W. DWG. NO. 18919

SYM	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	24NOV09	HMK
2	ADDENDUM #1	12-11-09	HMK

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L

ACTIVITY

--

SATISFACTORY TO DATE --

DES	HMK	DRW	LAG	CHK	HMK

PROJECT MANAGER --

IPT TECH. BRANCH HEAD --

CHIEF ENG/ARCH (CORE) --

---- .

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

BEQ F, G & H - PHASE IV HVAC RENOVATION

TYPICAL UNIT PLAN

SCALE: SEE PLANS

EPROJECT NO.: --

CONSTR. CONTR. NO. ####

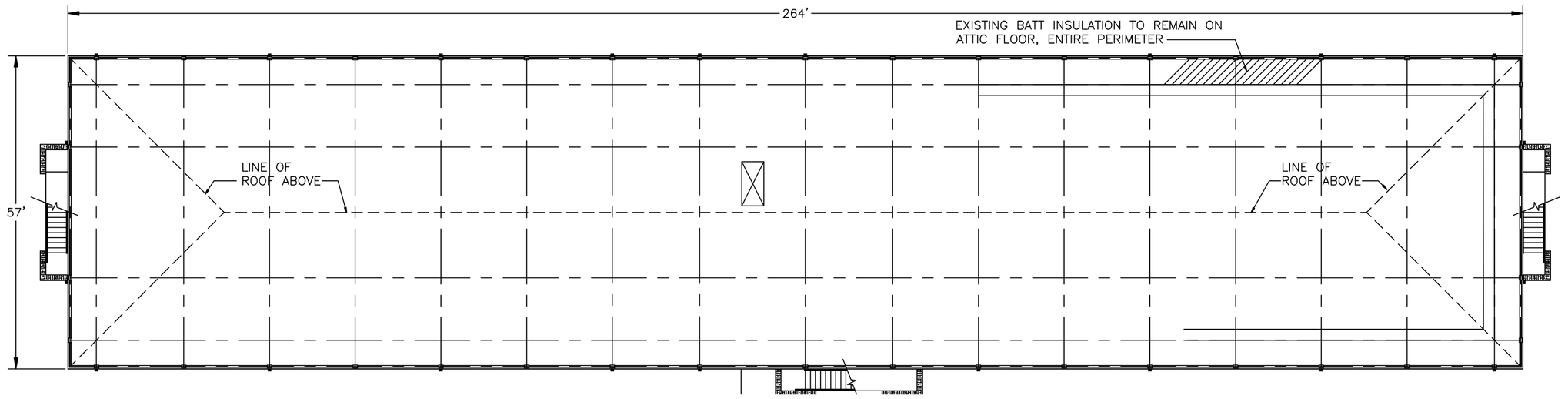
NAVFAC DRAWING NO. 15032783

SHEET # OF #

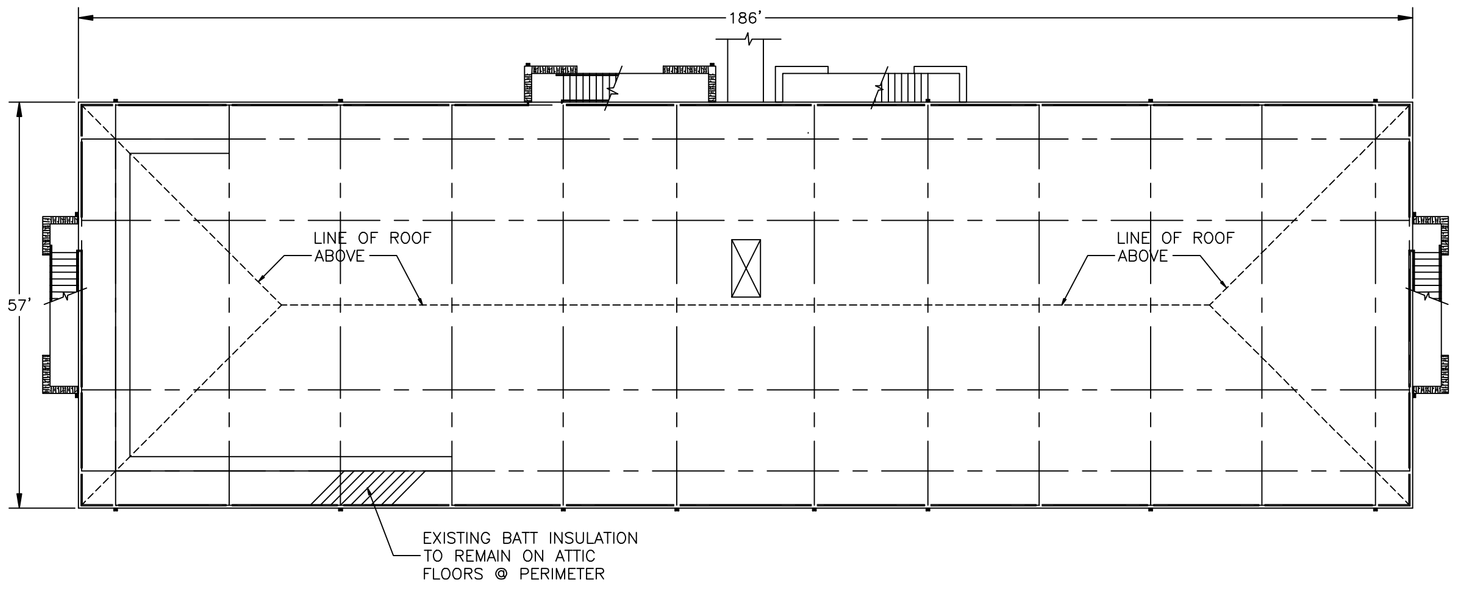
A101

DRAWFORM REVISION: 7 AUGUST 2009

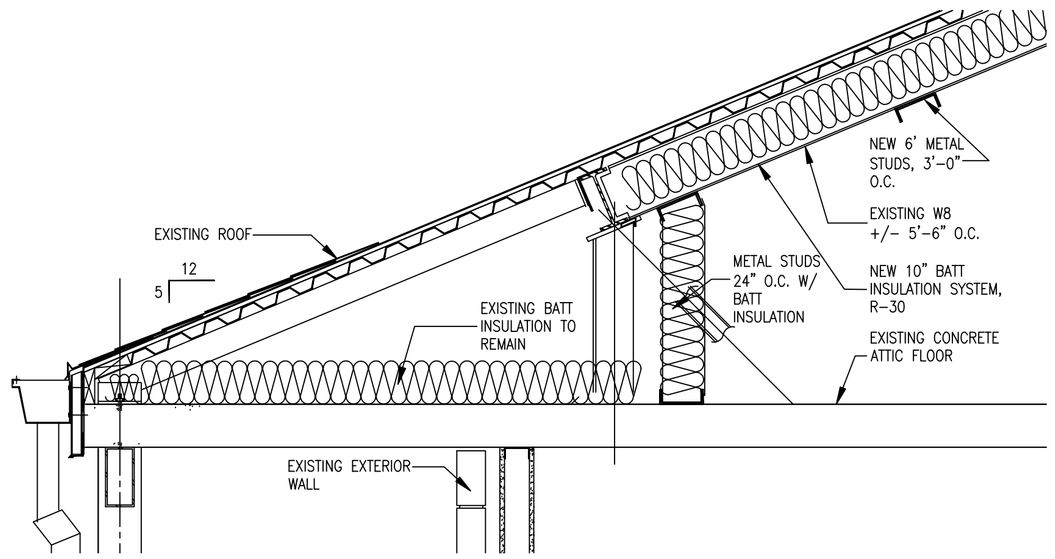
FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18919.dwg LAYOUT NAME: 870450-A-101 PLOTTED: Friday, January 27, 2012 - 7:11am USER: elisabeth.hammitt



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



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



3 INSULATION DETAIL
Scale: 3/4" = 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.

SYM	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	24NOV09	HMK

NAVFAC

SEAL

A/E INFO

APPROVED

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

ACTIVITY

--

SATISFACTORY TO DATE --

DES	HMK	DRW	LAQ	CHK	HMK

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: SEE PLANS

EPROJECT NO.: --

CONSTR. CONTR. NO. ####

NAVFAC DRAWING NO. 15032784

SHEET # OF #

A102

DRAWFORM REVISION: 7 AUGUST 2009

P.W. DWG. NO. 18920

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18920.dwg LAYOUT NAME: 87054-A-102 PLOTTED: Friday, January 27, 2012 - 7:12am USER: elisabeth.hammitt

HVAC SYMBOLS

- DUCT SIZE: 1ST FIGURE IS WIDTH, 2ND IS DEPTH. DIMENSIONS ARE INSIDE CLEAR. (24"X12")
- FLANGED MOTOR OPERATED DAMPER (MOD) (M)
- 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
- ROUND DUCT (Ø)
- GRADUAL RISE IN DUCT ELEVATION (UP)
- GRADUAL DROP IN DUCT ELEVATION (DN)
- THERMOSTAT OR TEMPERATURE SENSOR (T)
- HUMIDISTAT OR HUMIDITY SENSOR (H)
- CONNECT NEW-TO-EXISTING
- EXISTING-TO-DEMO (DIRECTION)
- EQUIPMENT TAG (HP 2-23)
- DIFFUSER, GRILLE & REGISTER TAG (A 300)
- DIFFUSER, GRILLE & REGISTER TAG (C 360)

PIPING SYMBOLS

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

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

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

SECTION OR DETAIL

SCALE

2 / A-5 — SECTION NUMBER, DETAIL NUMBER, DOOR DETAIL NUMBER

A-6 — DWG. WHERE SECTION OR DETAIL IS CUT

DWG. WHERE SECTION OR DETAIL IS SHOWN

2 / A-6 — SECTION NUMBER, DWG. WHERE SECTION IS SHOWN

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.

P.W. DWG. NO. 18921

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 SOUTHEAST
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

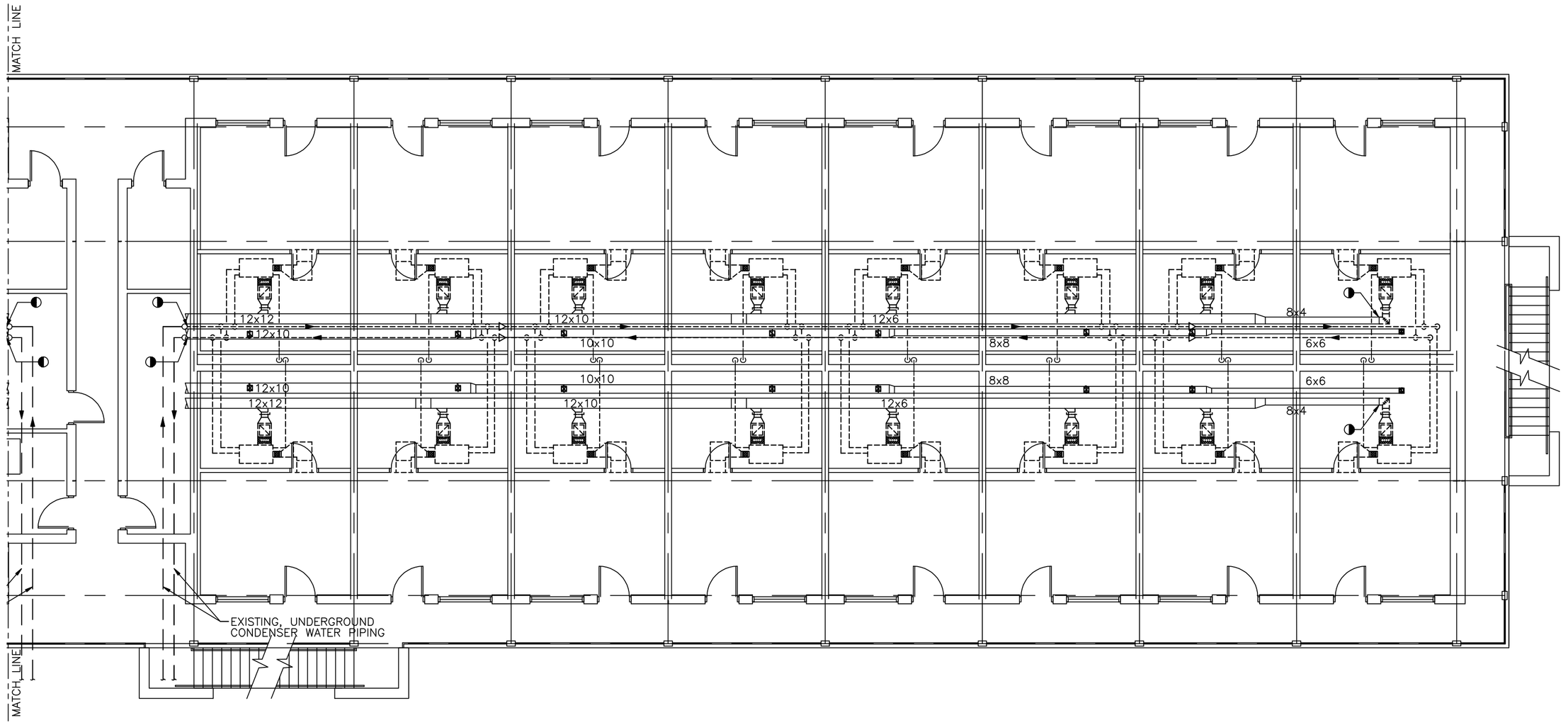
SYMBOLS ABBREVIATIONS AND NOTES

SCALE: NTS
EPROJECT NO.: --
CONSTR. CONTR. NO. ####
NAVFAC DRAWING NO. 15032785
SHEET 4 OF 37

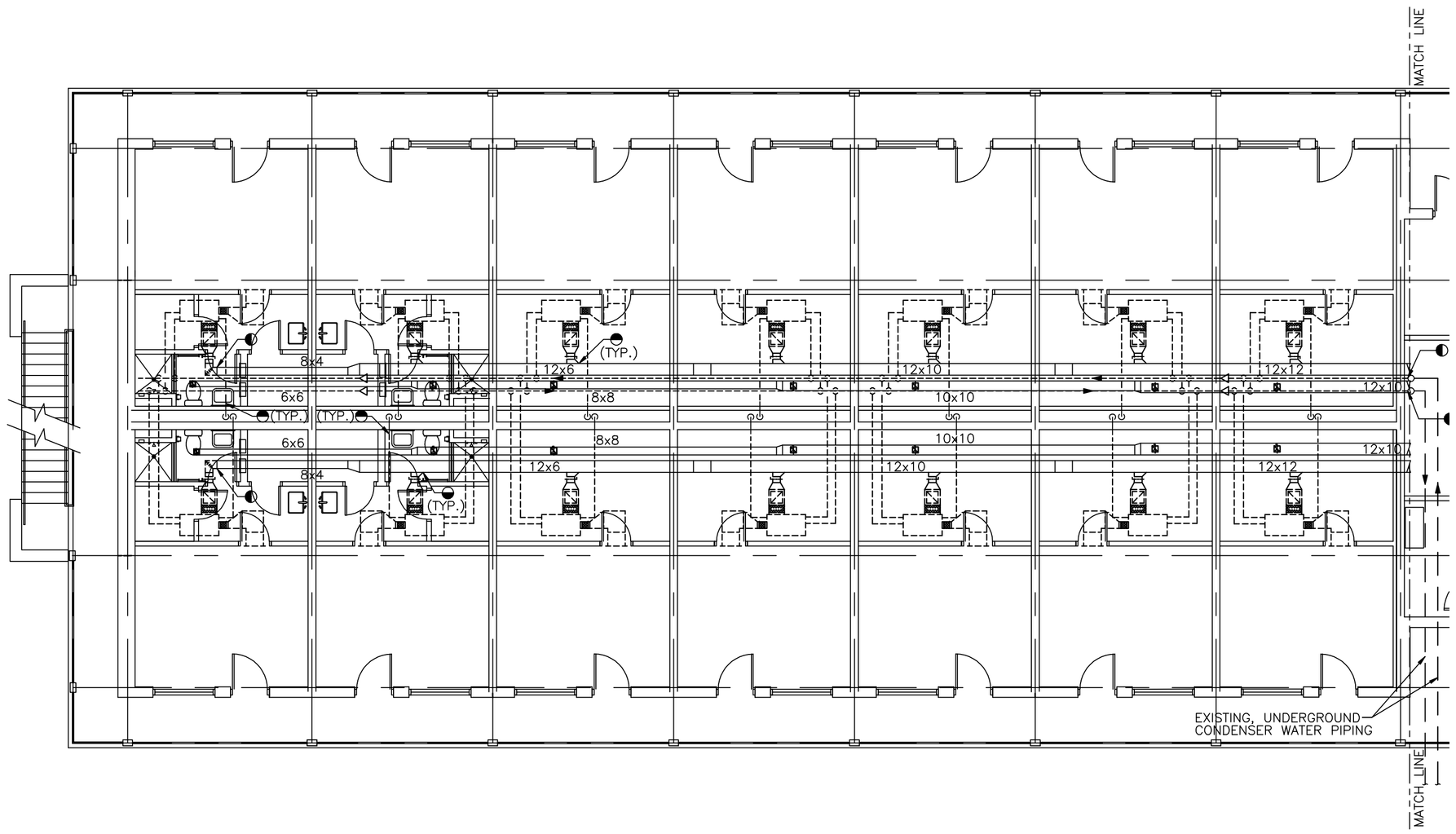
M001

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18921.dwg LAYOUT NAME: 870450-M-001 PLOTTED: Friday, January 27, 2012 - 7:13am USER: elisabeth.hommitt



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'

P.W. DWG. NO. 18922

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

BEQ F, G & H - PHASE IV HVAC RENOVATION

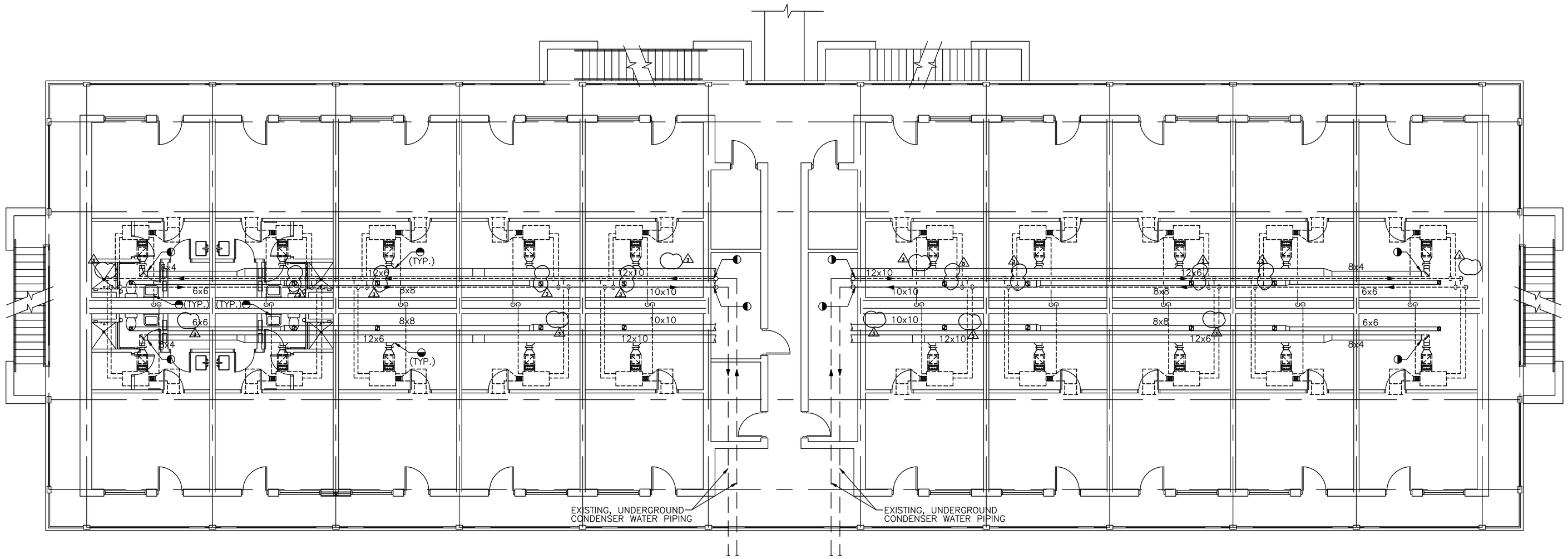
BLDG F-1ST THRU 3RD FLOOR PLANS-MECH DEMO

SCALE: SEE PLANS
EPROJECT NO.: --
CONSTR. CONTR. NO. ####
NAVFAC DRAWING NO. 15032786
SHEET 5 OF 37

MD101

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18922.dwg LAYOUT NAME: 870450-MD-101 PLOTTED: Friday, January 27, 2012 - 7:13am USER: elisabeth.hammitt



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'

P.W. DWG. NO. 18923

	DATE	DESCRIPTION	BY	APPR
1	11-24-09	ISSUED FOR CONSTRUCTION	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 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 PLNS–MECH DEMO

SCALE: SEE PLANS

EPROJECT NO.: --

CONSTR. CONTR. NO. ###

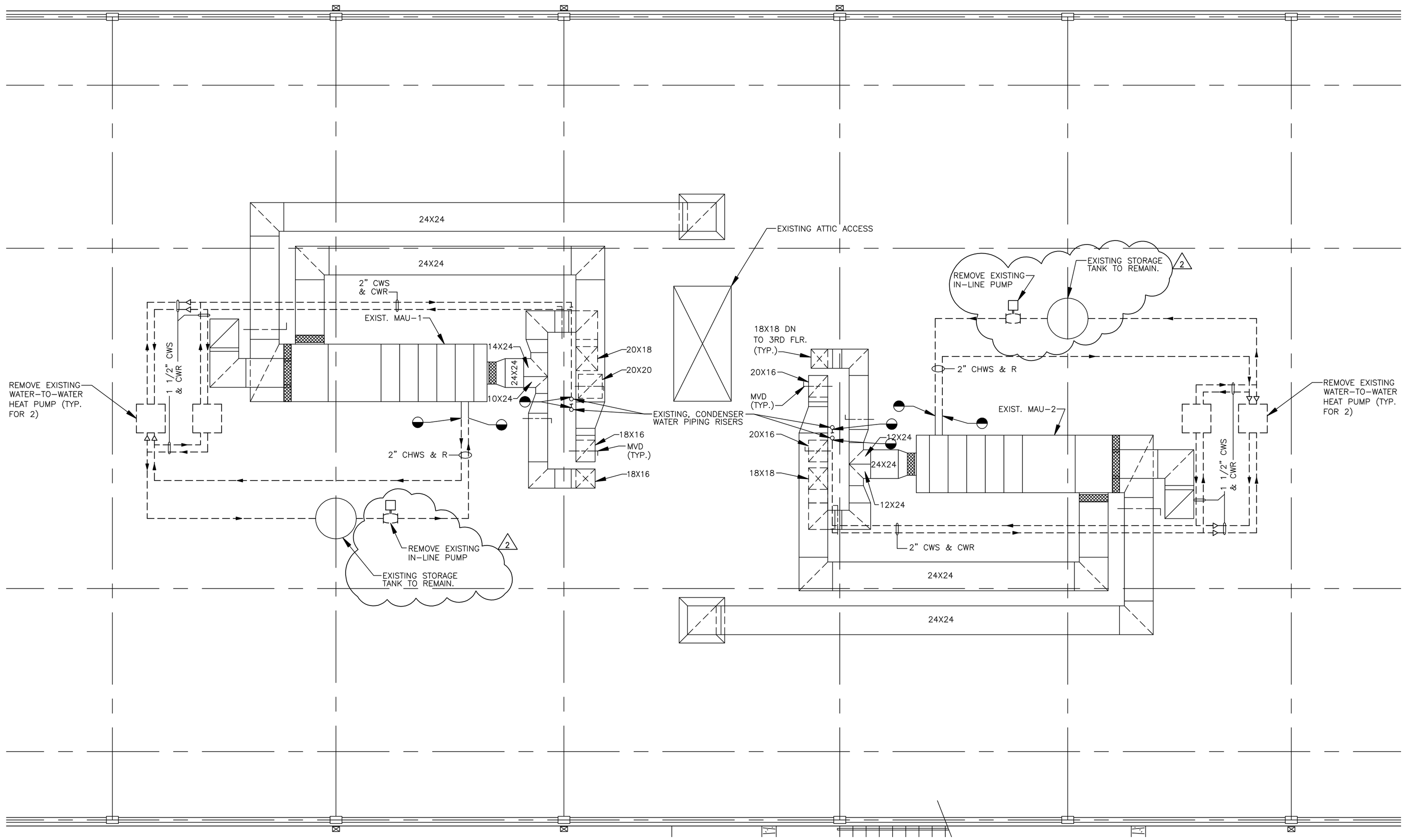
NAVFAC DRAWING NO. 15032787

SHEET 6 OF 37

MD102

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18923.dwg LAYOUT NAME: 870450-MD-102 PLOTTED: Friday, January 27, 2012 - 7:14am USER: elisabeth.hammitt



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.

1	ISSUED FOR CONSTRUCTION	11-24-09	RJO
2	ADDENDUM #1	12-11-09	RJO

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

P.W. DWG. NO. 18924

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

BEQ F, G & H - PHASE IV HVAC RENOVATION

BLDG F – PARTIAL ATTIC PLAN – MECH DEMO

SEAL

A/E INFO

APPROVED

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

ACTIVITY

--

SATISFACTORY TO DATE --

DES	RJO	DRW	RJO	CHK	JEW

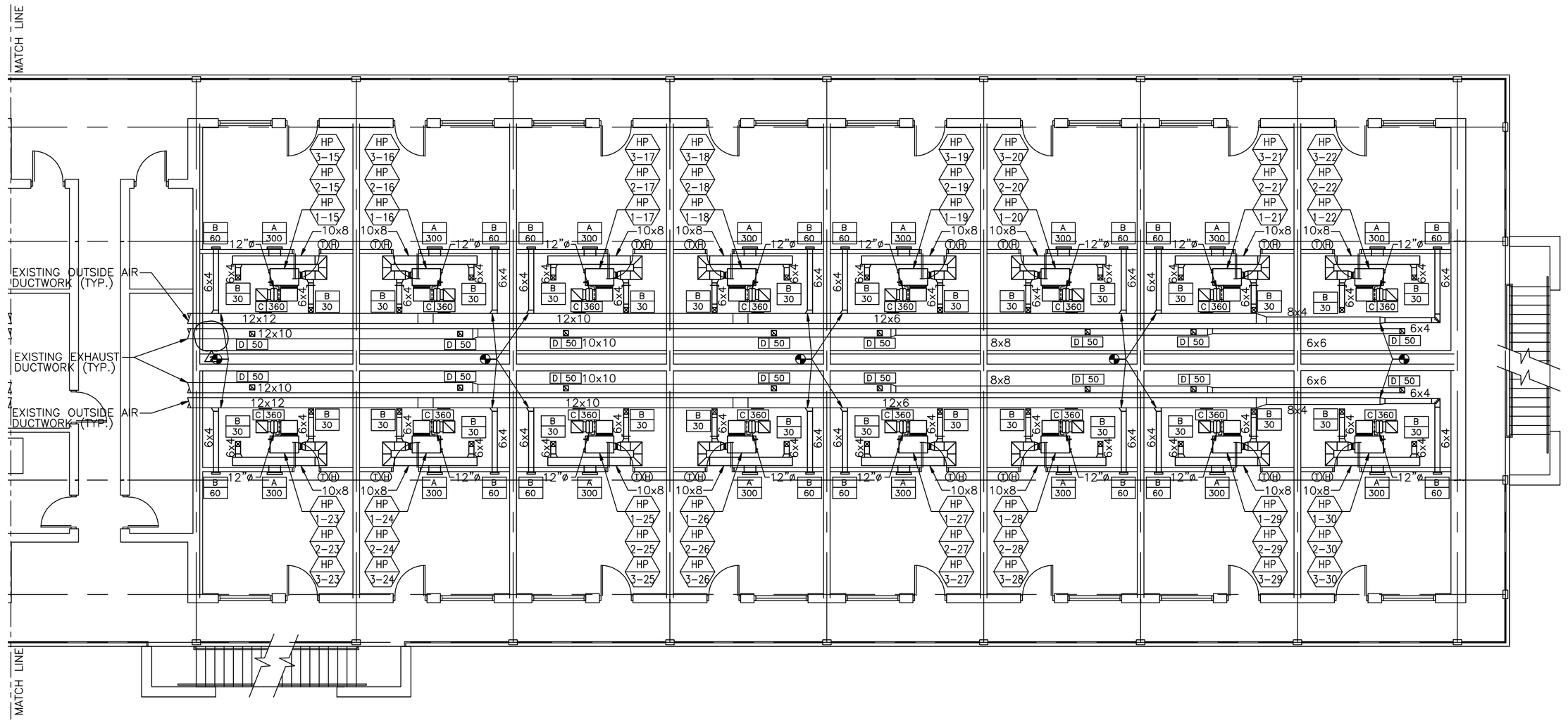
PROJECT MANAGER --
IPT TECH. BRANCH HEAD --
CHIEF ENG/ARCH (CORE) --

SCALE: SEE PLANS
EPROJECT NO.: --
CONSTR. CONTR. NO. ####
NAVFAC DRAWING NO. 15032788
SHEET 7 OF 37

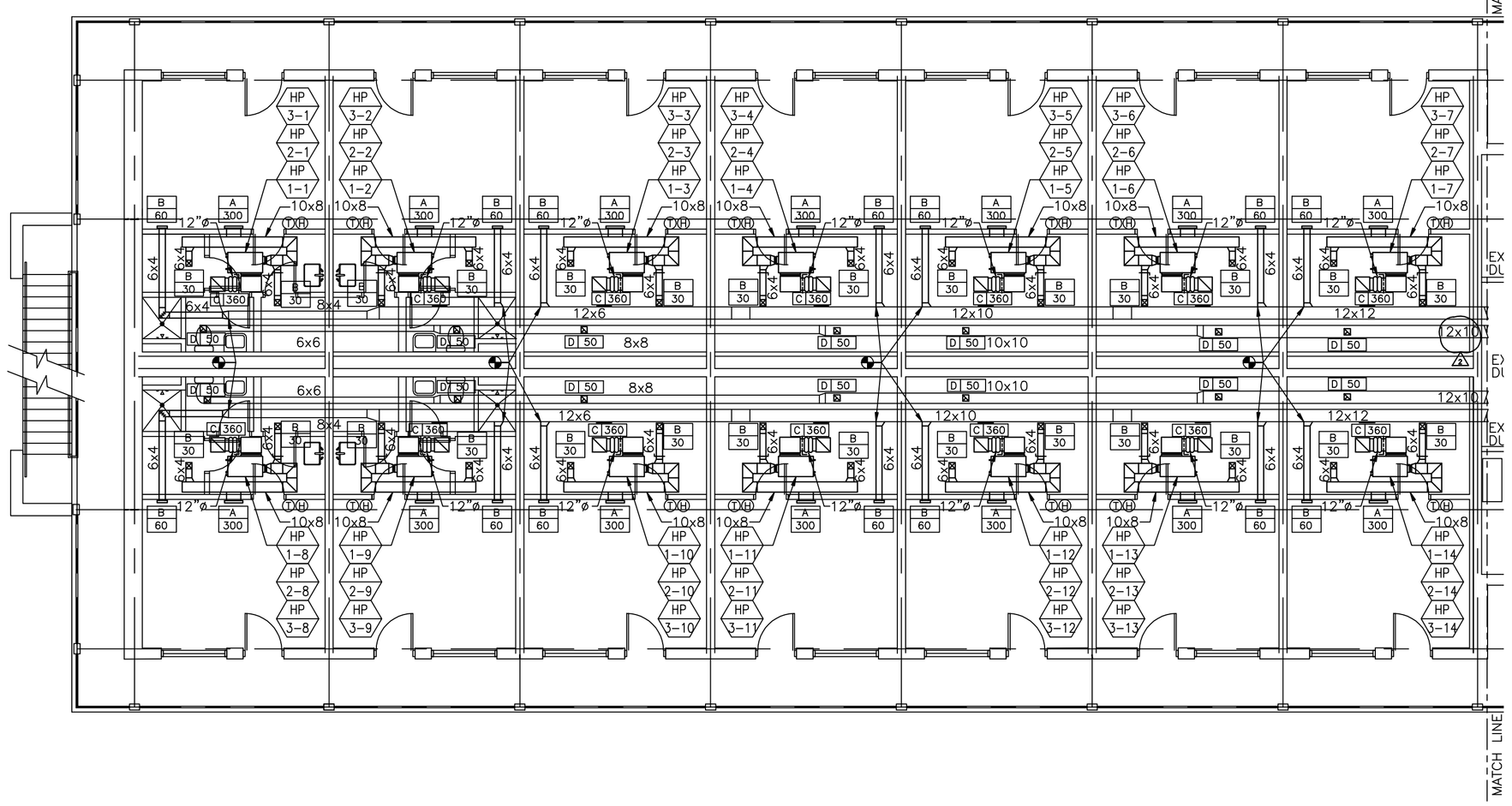
MD103

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18924.dwg LAYOUT NAME: 8704SO-MD-103 PLOTTED: Friday, January 27, 2012 - 7:14am USER: elisabeth.hammitt



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



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

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

P.W. DWG. NO. 18926

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 SOUTHEAST
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

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

SCALE: SEE PLANS

EPROJECT NO.: --

CONSTR. CONTR. NO. ####

NAVFAC DRAWING NO. 15032790

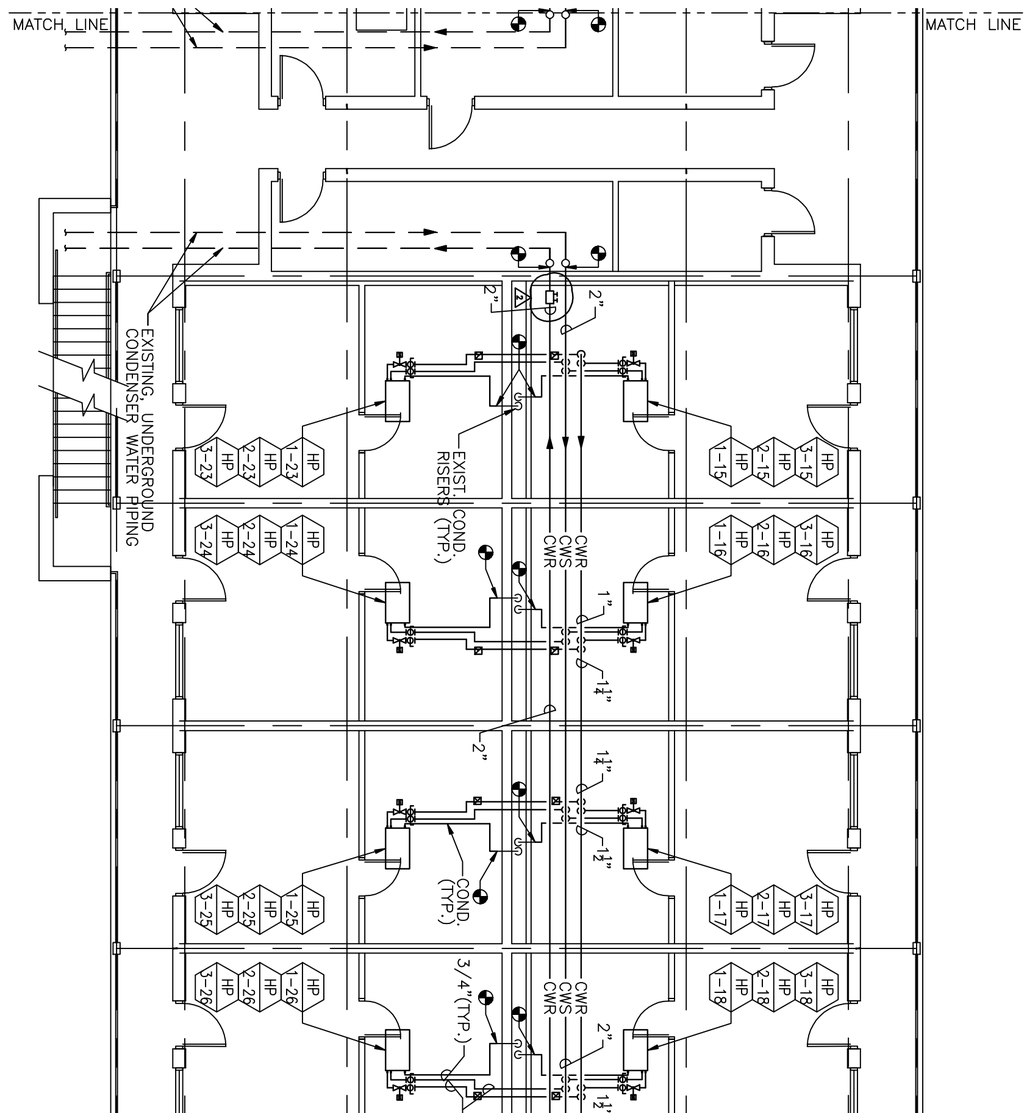
SHEET 9 OF 37

M101

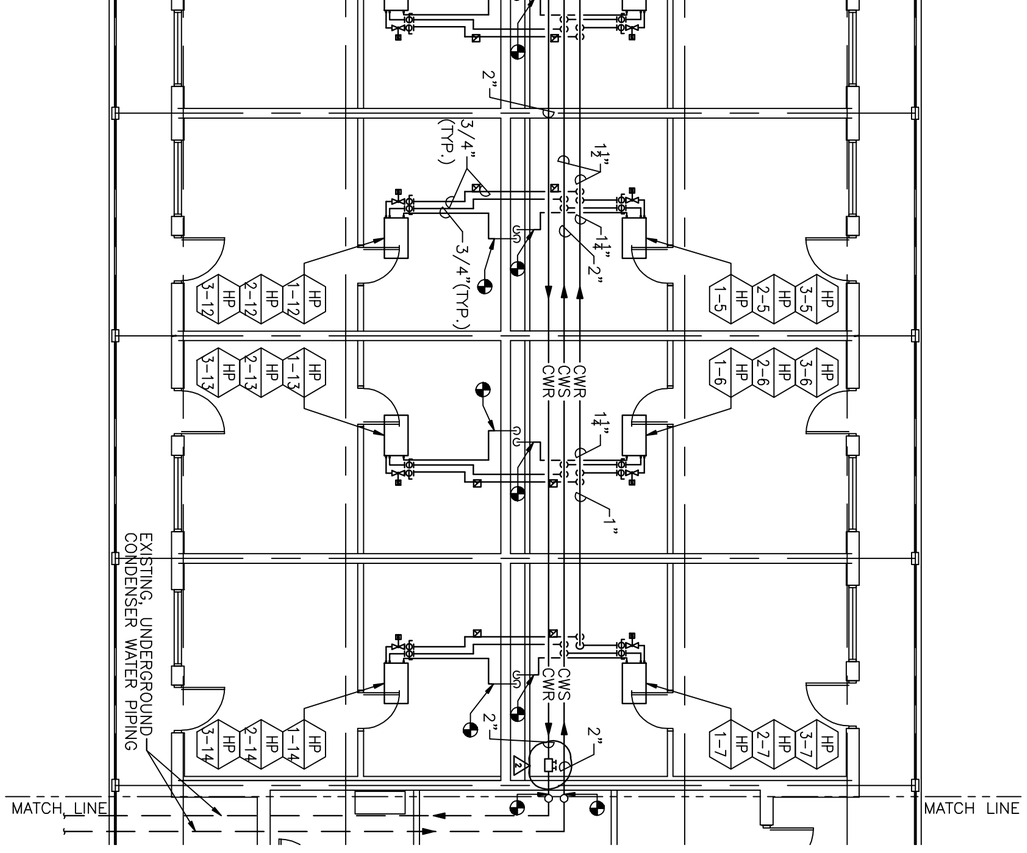
DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18926.dwg LAYOUT NAME: 870450-M-101 PLOTTED: Friday, January 27, 2012 - 7:15am USER: elisabeth.hammitt

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18927.dwg LAYOUT NAME: 870450-M-102 PLOTTED: Friday, January 27, 2012 - 7:16am USER: elisabeth.hammitt



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"

GENERAL NOTES:
2
1. BALANCE THE RETURN CONDENSER WATER FLOW FOR 2.4 GPM TIMES THE NUMBER OF WSHPs PER BRANCH. (TYPICAL FOR EACH FLOOR).

SYM	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11-24-09	RJO
2	ADDENDUM #1	12-11-09	RJO
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NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / BLT'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

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST

IPT SOUTH CENTRAL 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. 15032791

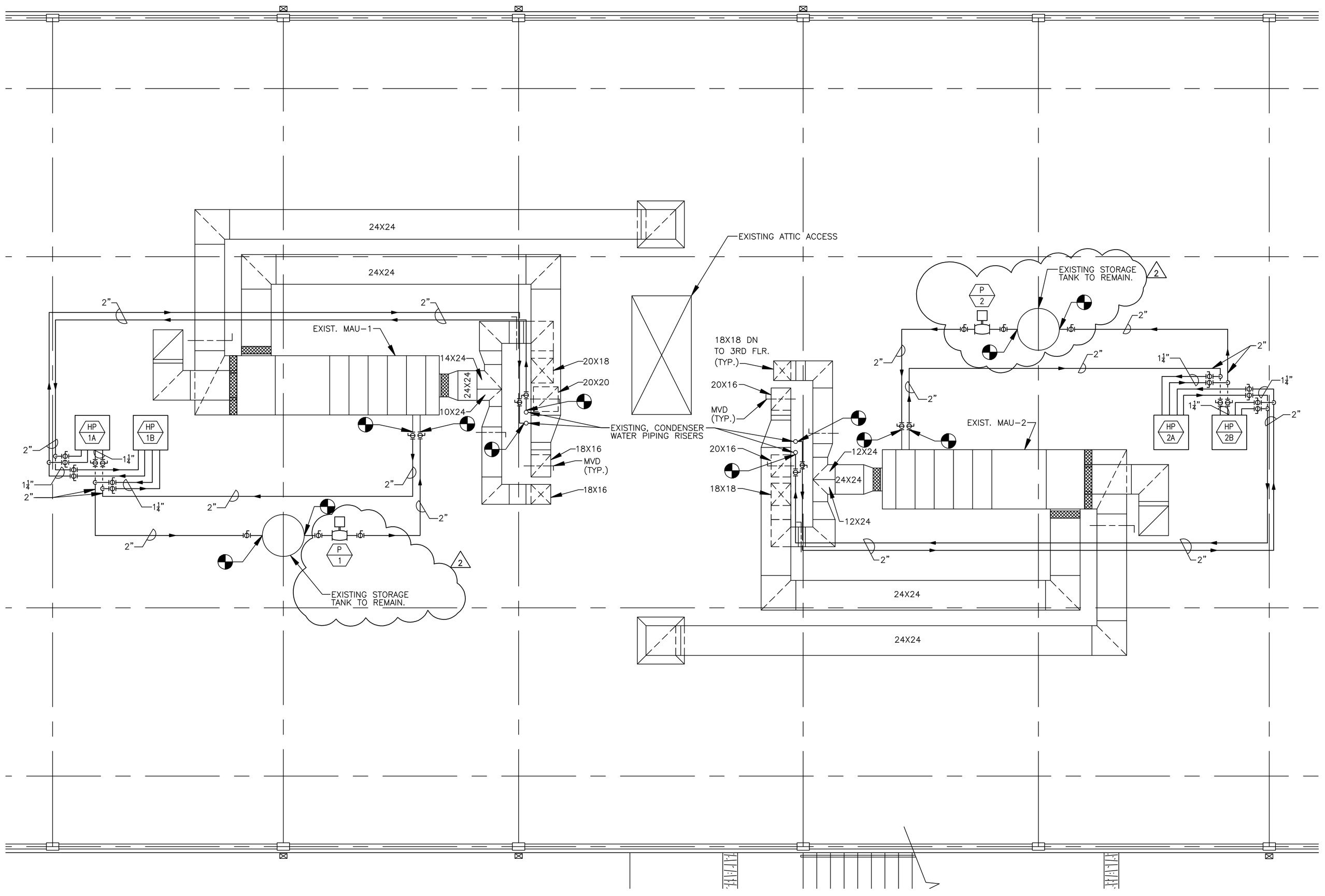
SHEET 10 OF 37

M102

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

P.W. DWG. NO. 18927

DRAWFORM REVISION: 7 AUGUST 2009



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

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.

2 4. INSULATE DUAL TEMPERATURE PIPING, IN-LINE PUMPS AND THE EXISTING STORAGE TANK PER THE REQUIREMENTS NOTED IN THE SPECIFICATIONS.

NO.	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11-24-09	RJO
2	ADDENDUM #1	12-11-09	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 SOUTHEAST
IPT SOUTH CENTRAL

NAVAL FACILITIES ENGINEERING COMMAND
NAVAL AIR STATION JACKSONVILLE

BEQ F, G & H - PHASE IV HVAC RENOVATION

MARINE CORPS AIR STATION BEAUFORT, BEAUFORT, SOUTH CAROLINA

BLDG. F – PARTIAL ATTIC PLAN – PIPING

SCALE: SEE PLANS

EPROJECT NO.: --

CONSTR. CONTR. NO. ####

NAVFAC DRAWING NO. 15032793

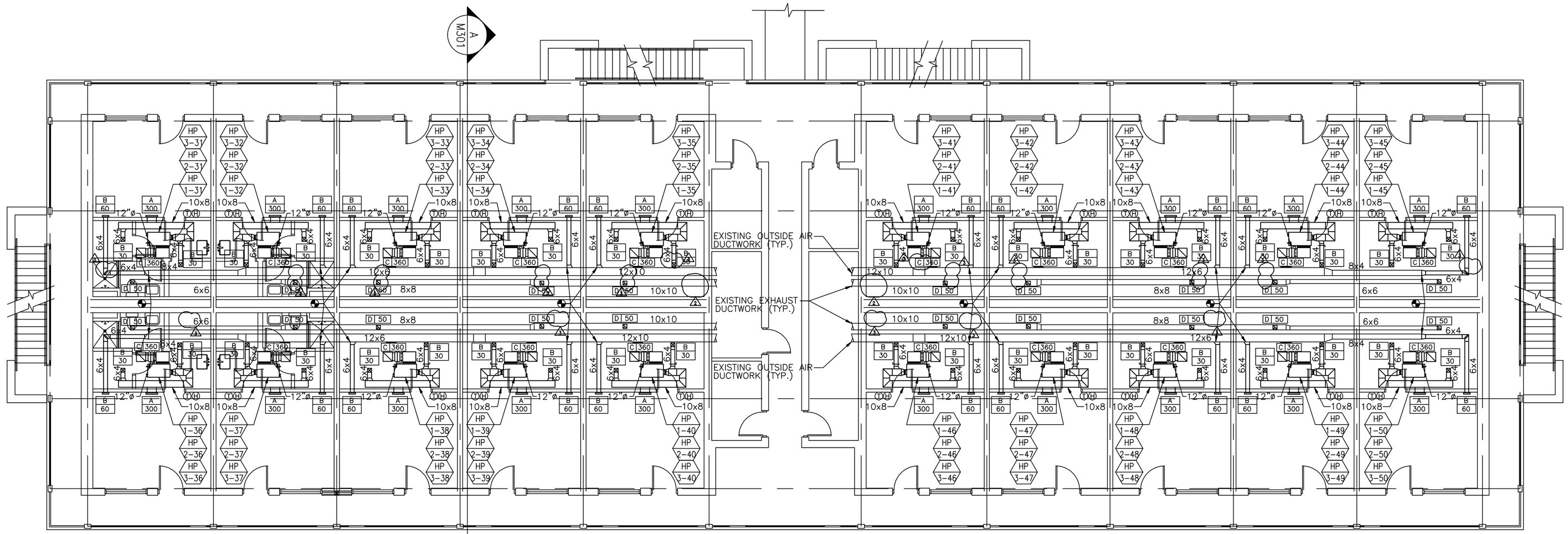
SHEET 12 OF 37

M104

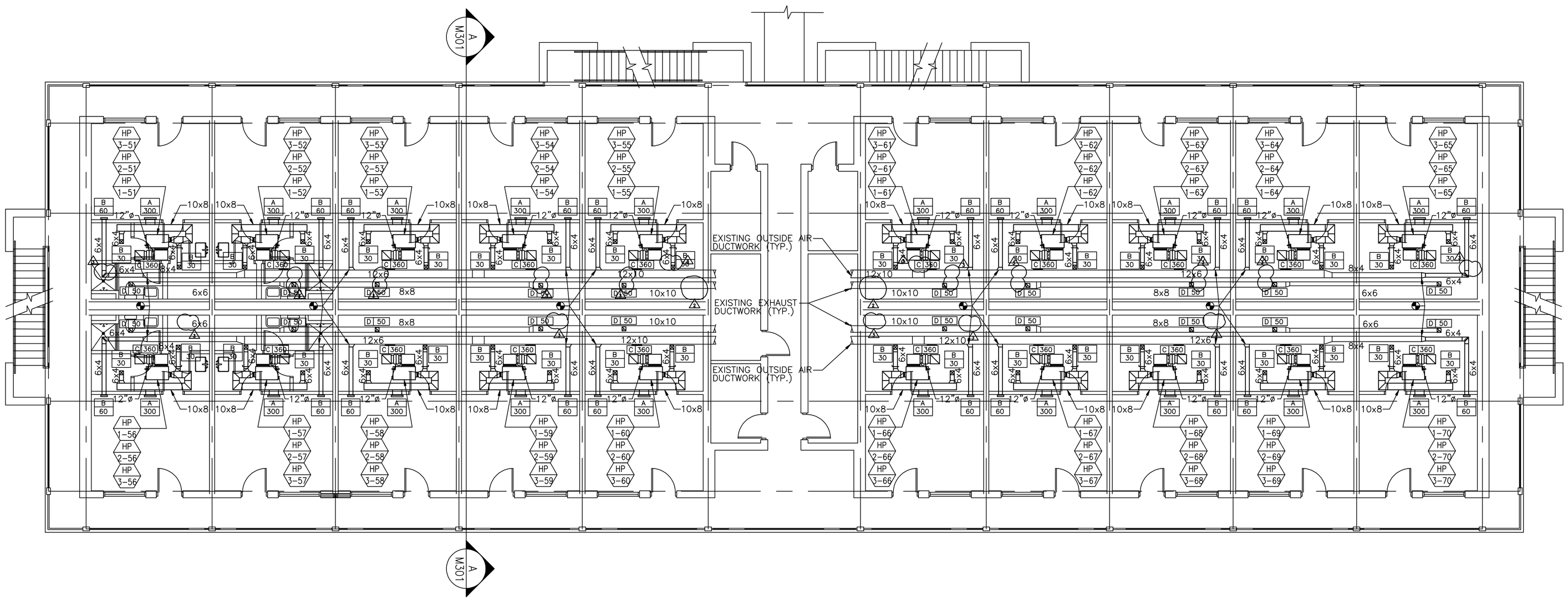
DRAWFORM REVISION: 7 AUGUST 2009

P.W. DWG. NO. 18929

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #'s\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18929.dwg LAYOUT NAME: 8704S0-M-104 PLOTTED: Friday, January 27, 2012 - 7:16am USER: elisabeth.hammitt



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'

P.W. DWG. NO. 18930

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 --

EFT. TECH. BRANCH HEAD --

CHIEF ENG/ARCH (CORE) --

---- .

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
EFT SOUTH CENTROL

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. ####

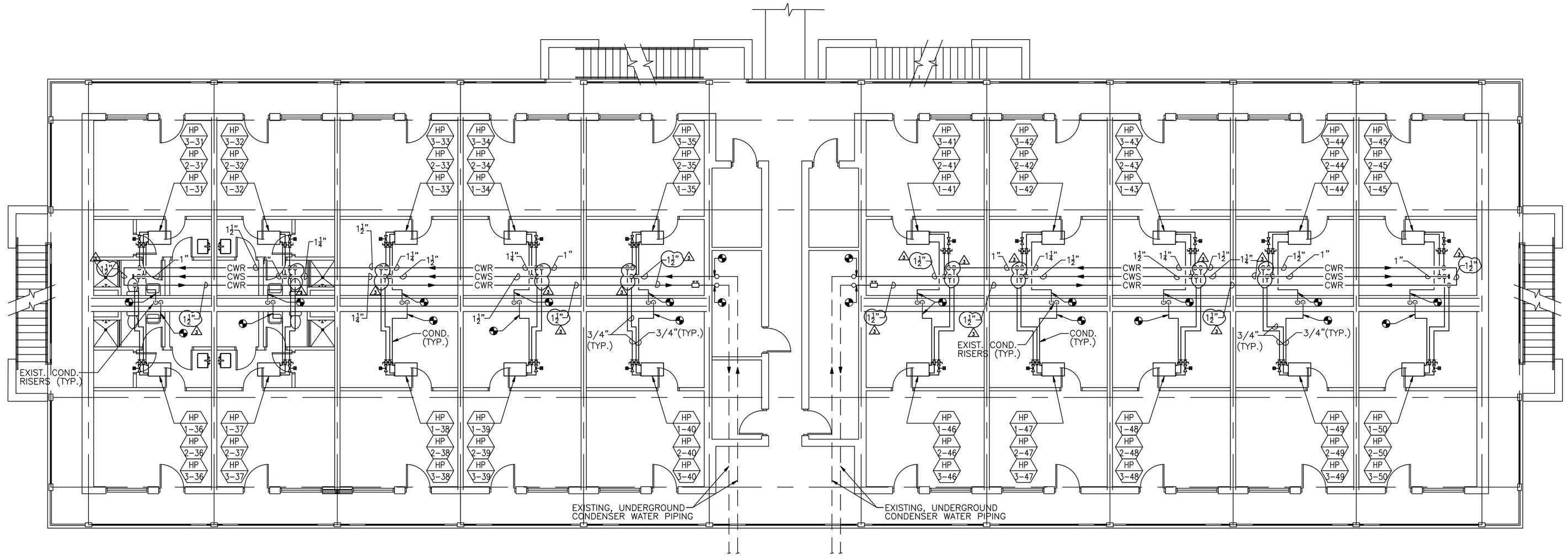
NAVFAC DRAWING NO. 15032794

SHEET 13 OF 37

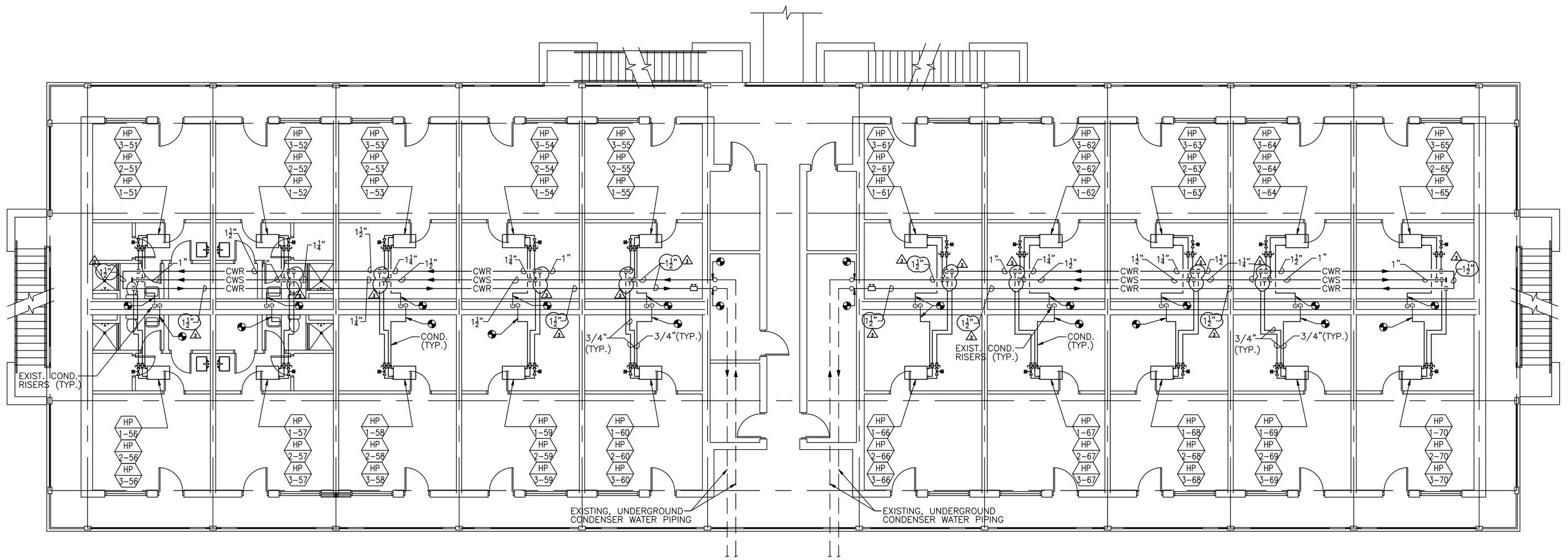
M105

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: F:\BounceBack_Express\Bi-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18930.dwg LAYOUT NAME: 870450-M-105 PLOTTED: Friday, January 27, 2012 - 7:17am USER: elisabeth.hammitt



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"

GENERAL NOTES:

1. BALANCE THE RETURN CONDENSER WATER FLOW FOR 2.4 GPM TIMES THE NUMBER OF WSHPs PER BRANCH. (TYPICAL FOR EACH FLOOR).

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

P.W. DWG. NO. 18931

	DATE	APPR
1	ISSUED FOR CONSTRUCTION 11-24-09	RJO
2	ADDENDUM #1 12-11-09	RJO
3	PIPING CLARIFICATION 02-01-10	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

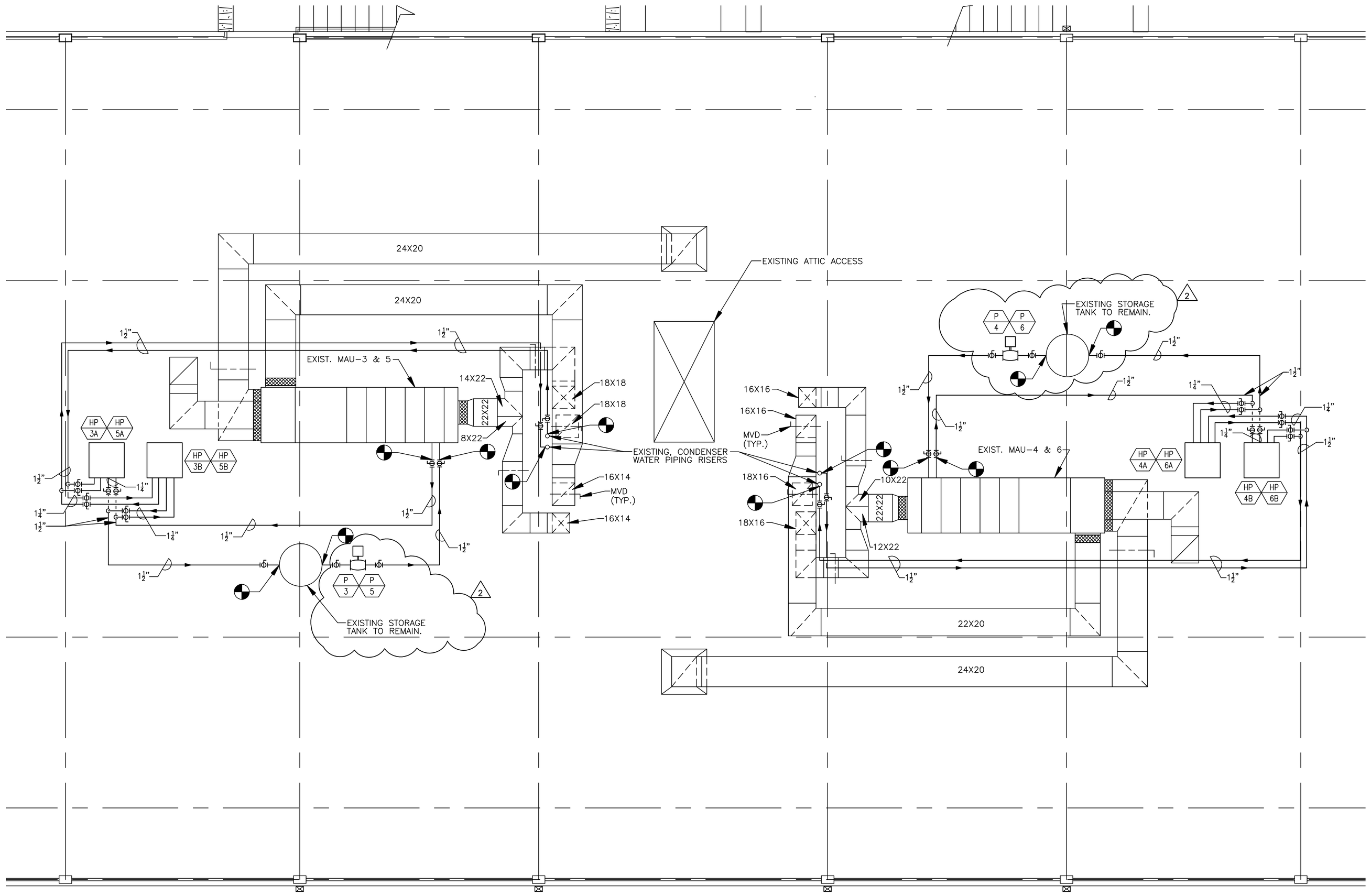
BLDGS G&H-1ST THRU 3RD FLR PLANS-PIPING

SCALE: SEE PLANS
EPROJECT NO.: --
CONSTR. CONTR. NO. ####
NAVFAC DRAWING NO. 15032795
SHEET 14 OF 37

M106

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18931.dwg LAYOUT NAME: 870450-M-106 PLOTTED: Friday, January 27, 2012 - 7:18am USER: elisabeth.hammitt



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

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.

2 4. INSULATE DUAL TEMPERATURE PIPING, IN-LINE PUMPS AND THE EXISTING STORAGE TANK PER THE REQUIREMENTS NOTED IN THE SPECIFICATIONS.

SYM	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11-24-09	RJO
2	ADDENDUM #1	12-11-09	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 – PARTIAL ATTIC PLAN – PIPING

SCALE: SEE PLANS

EPROJECT NO.: --

CONSTR. CONTR. NO. ####

NAVFAC DRAWING NO. 15032796

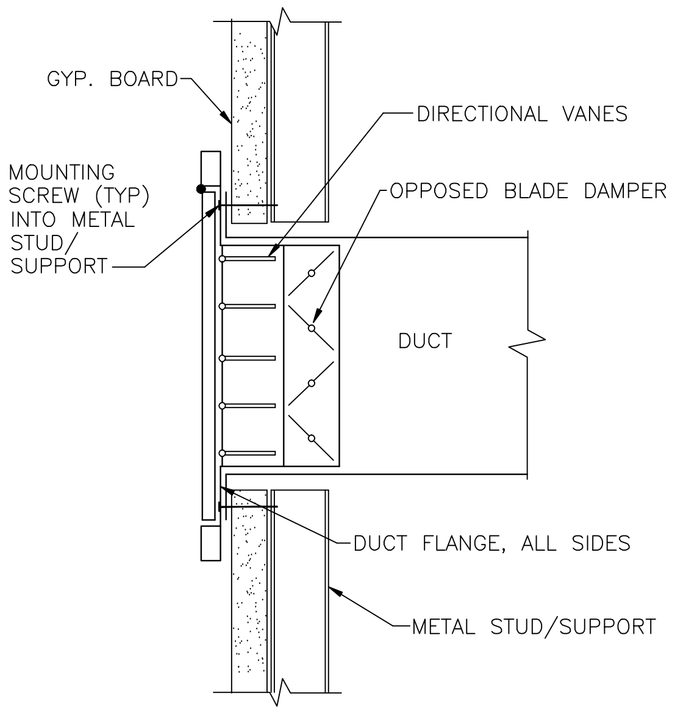
SHEET 15 OF 37

M107

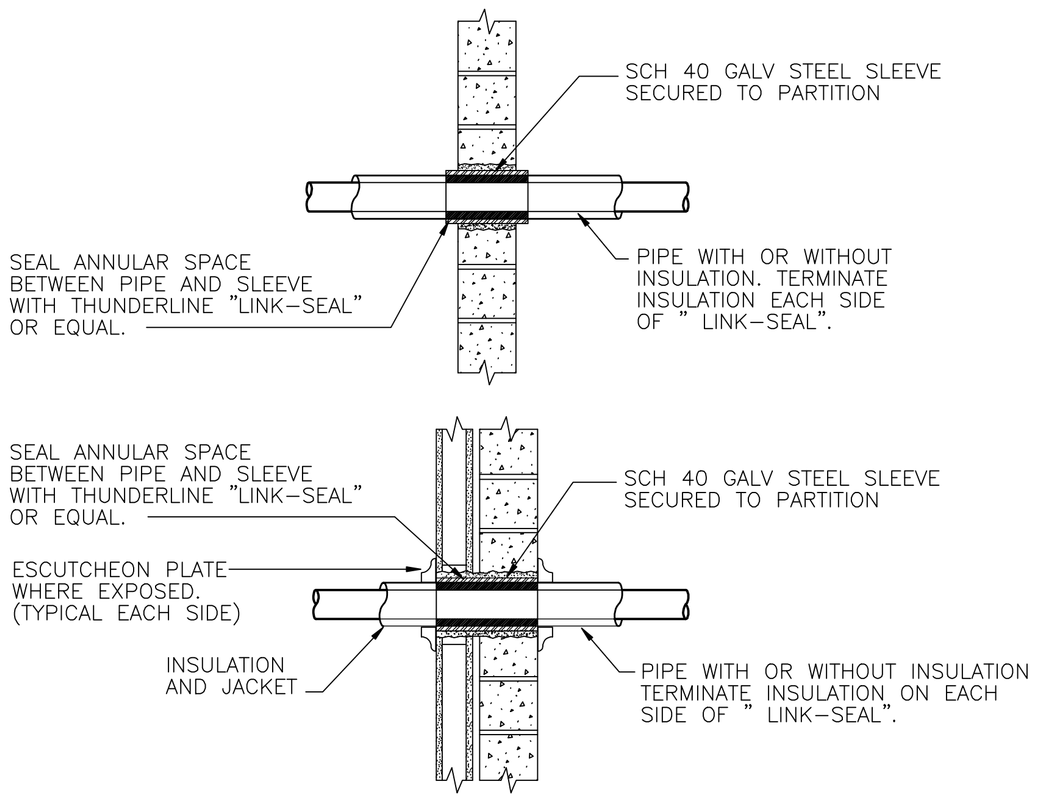
DRAWFORM REVISION: 7 AUGUST 2009

P.W. DWG. NO. 18932

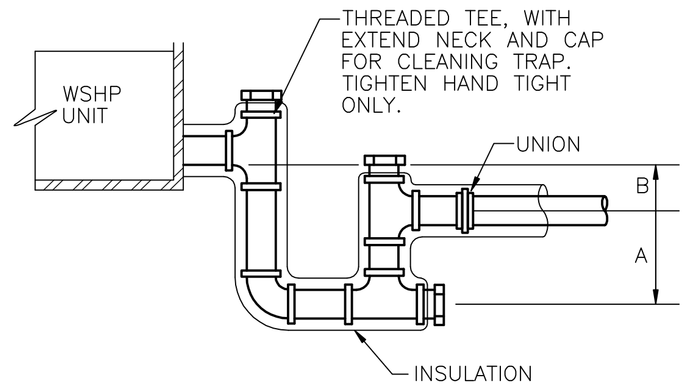
FILE NAME: F:\BounceBack_Express\18-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18932.dwg LAYOUT NAME: 870450-M-107 PLOTTED: Friday, January 27, 2012 - 7:19am USER: elisabeth.hammitt



1 GRILLE AND REGISTER INSTALLATION DETAIL
Scale: NTS



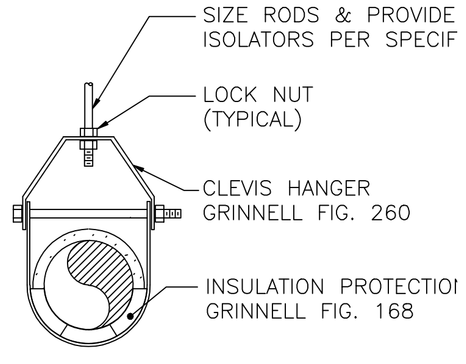
2 PIPE THRU WALL INSTALLATION DETAIL
Scale: NTS



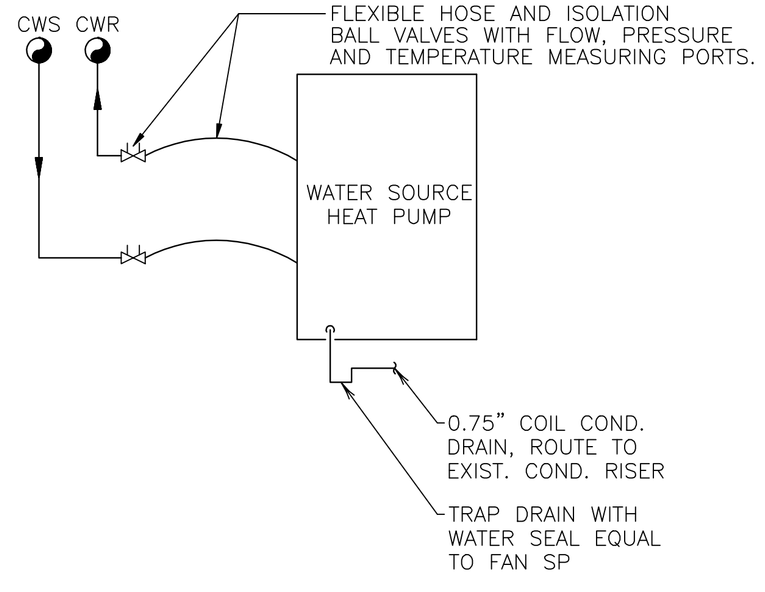
NOTES:

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"

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 SOUTHEAST
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

MECHANICAL DETAILS

SCALE: NTS

EPROJECT NO.: --

CONSTR. CONTR. NO.
####

NAVFAC DRAWING NO.
15032798

SHEET 17 OF 37

M501

P.W. DWG. NO. 18934

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\HVAC\18934.dwg LAYOUT NAME: 870450-M-501 PLOTTED: Friday, January 27, 2012 - 7:24am USER: elisabeth.hammitt

WATER SOURCE HEAT PUMP SCHEDULE

MARK	AREA/UNIT SERVED	DESCRIPTION	FAN DATA						FILTER DATA		COOLING COIL DATA										HEATING COIL DATA					REFRIG.	UNIT WT. LB.	BASIS OF DESIGN	REMARKS (AS NOTED BELOW)
			S.A. CFM	O.A. CFM	EXT. S.P. IN.	TOTAL S.P. IN.	MOTOR HP	UNIT ELECTRICAL VOLTS/PHASE/HZ (MCA)	TYPE	MAX. FACE VELOCITY FPM	ENT. AIR °F		LVG. AIR °F		MAX. FACE VELOCITY FPM	GPM	EWT °F	△T °F	CAPACITY MBH		ENT. AIR °F	CAPACITY MBH	HOT WATER					
											DB	WB	DB	WB					SENS.	TOTAL			GPM	△T °F				
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)	WATER-TO-WATER DATA																		UNIT WT. LB.	BASIS OF DESIGN	REMARKS (AS NOTED BELOW)
					COOLING WATER SIDE					CONDENSER WATER SIDE					HEATING WATER SIDE					CONDENSER WATER SIDE							
					EWT °F	LWT °F	GPM	P.D. FT WG	CAPACITY MBH	EWT °F	LWT °F	GPM	P.D. FT WG	HEAT REJ. MBH	EWT °F	LWT °F	GPM	P.D. FT WG	CAPACITY MBH	EWT °F	LWT °F	GPM	P.D. FT WG	HEAT ABS. MBH			
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. (2)

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.

PUMP SCHEDULE (2)

MARK	DESCRIPTION	TYPE	GPM	TOTAL HEAD FT.	NPSH REQ'D FT.	RPM	HP	ELECTRICAL VOLTS/PHASE/HZ	BASIS OF DESIGN	REMARKS
P-1	BEQ F, MAU-1	IN-LINE CENTRIFUGAL	28.4	30	6.7	1750	1	208/3/60	B & G 60-1-1/2x6-1/4	
P-2	BEQ F, MAU-2	IN-LINE CENTRIFUGAL	26.2	30	6.6	1750	1	208/3/60	B & G 60-1-1/2x6-1/4	
P-3	BEQ G, MAU-3	IN-LINE CENTRIFUGAL	26.2	30	6.6	1750	1	208/3/60	B & G 60-1-1/2x6-1/4	
P-4	BEQ-G, MAU-4	IN-LINE CENTRIFUGAL	21.0	30	6.5	1750	1	208/3/60	B & G 60-1-1/2x6-1/4	
P-5	BEQ H, MAU-5	IN-LINE CENTRIFUGAL	26.2	30	6.6	1750	1	208/3/60	B & G 60-1-1/2x6-1/4	
P-6	BEQ-H, MAU-6	IN-LINE CENTRIFUGAL	21.0	30	6.5	1750	1	208/3/60	B & G 60-1-1/2x6-1/4	

EXISTING MAKEUP AIR HANDLING UNIT SCHEDULE

EQUIPMENT NUMBER	AREA/UNIT SERVED	DESCRIPTION	FAN											FILTERS		COOLING											HEATING					MAX. WT. LB.	REMARKS
			ORIG. S.A. CFM	NEW S.A. CFM	ORIG. O.A. CFM	NEW O.A. CFM	ORIG. E.A. CFM	NEW E.A. CFM	S.A. EXT. S.P. IN.	S.A. TOTAL S.P. IN.	E.A. EXT. S.P. IN.	MIN. SUPPLY MOTOR HP	MIN. E.A. MOTOR HP	VOLTS/PHASE/HZ (MCA)	TYPE	MAX. FACE VELOCITY FPM	ENT. AIR °F		NEW LVG. AIR °F		MAX. FACE VELOCITY FPM	ORIG. GPM	NEW GPM	EWT °F	△T °F	MBH		ENT. AIR °F	NEW MBH OUTPUT	HOT WATER				
																	DB	WB	DB	WB					SENS.	NEW TOTAL			ORIG. GPM	NEW GPM	△T °F		
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.

SYM	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11-24-09	RJO
2	ADDENDUM #1	12-11-09	RJO

NAVFAC

SEAL

A/E INFO

APPROVED

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

ACTIVITY

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SATISFACTORY TO DATE --

DES	RJO	DRW	RJO	CHK	JEW

PROJECT MANAGER --

IPT TECH. BRANCH HEAD --

CHIEF ENG/ARCH (CORE) --

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DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
IPT SOUTH CONTROL
NAVAL FACILITIES ENGINEERING COMMAND
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. 15032799

SHEET 18 OF 37

M601

DRAWFORM REVISION: 7 AUGUST 2009

P.W. DWG. NO. 18935

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18935.dwg LAYOUT NAME: 870450-M-601 PLOTTED: Friday, January 27, 2012 - 7:25am USER: elisabeth.hammitt

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

GRAPHIC DISPLAY	HARDWARE: OUTPUT / DIGITAL: CONTROL RELAY	SOLENOID	ON/OFF	HAND/OFF/AUTO	OPEN/CLOSED	OUTPUT / ANALOG: CONTROL POINT ADJUSTMENT	POSITION ADJUSTMENT	FAN MODULATION	INPUT / DIGITAL: STATUS ON/OFF	DIFF. PRESSURE SWITCH	FLOW SWITCH	AUXILIARY CONTACT (SD)	POSITION	ZERO SPEED SWITCH	INPUT / ANALOG: TEMPERATURE	% RELATIVE HUMIDITY	PSIG	CFM	STATIC PRESSURE	CONTACT CLOSURE	SOFTWARE: ALARMS: SENSOR FAIL	FLOW FAIL	HIGH LIMIT	LOW LIMIT	APPLICATION PROGRAMS: 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
POINT DESCRIPTION	●																																	
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

GRAPHIC DISPLAY	HARDWARE: OUTPUT / DIGITAL: CONTROL RELAY	SOLENOID	ON/OFF	HAND/OFF/AUTO	OPEN/CLOSED	OUTPUT / ANALOG: CONTROL POINT ADJUSTMENT	POSITION ADJUSTMENT	FAN MODULATION	INPUT / DIGITAL: STATUS ON/OFF	DIFF. PRESSURE SWITCH	FLOW SWITCH	AUXILIARY CONTACT (SD)	POSITION	ZERO SPEED SWITCH	INPUT / ANALOG: TEMPERATURE	% RELATIVE HUMIDITY	PSIG	CFM	STATIC PRESSURE	CONTACT CLOSURE	SOFTWARE: ALARMS: SENSOR FAIL	FLOW FAIL	HIGH LIMIT	LOW LIMIT	APPLICATION PROGRAMS: 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
POINT DESCRIPTION	●																																	
LOAD SUPPLY & RETURN TEMPERATURES						●									●								●	●										
SOURCE SUPPLY & RETURN TEMPERATURES						●									●								●	●										
COMPRESSOR			●						●																									
REVERSING VALVE													●																					

P.W. DWG. NO. 18936

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

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

BEQ F, G & H - PHASE IV HVAC RENOVATION

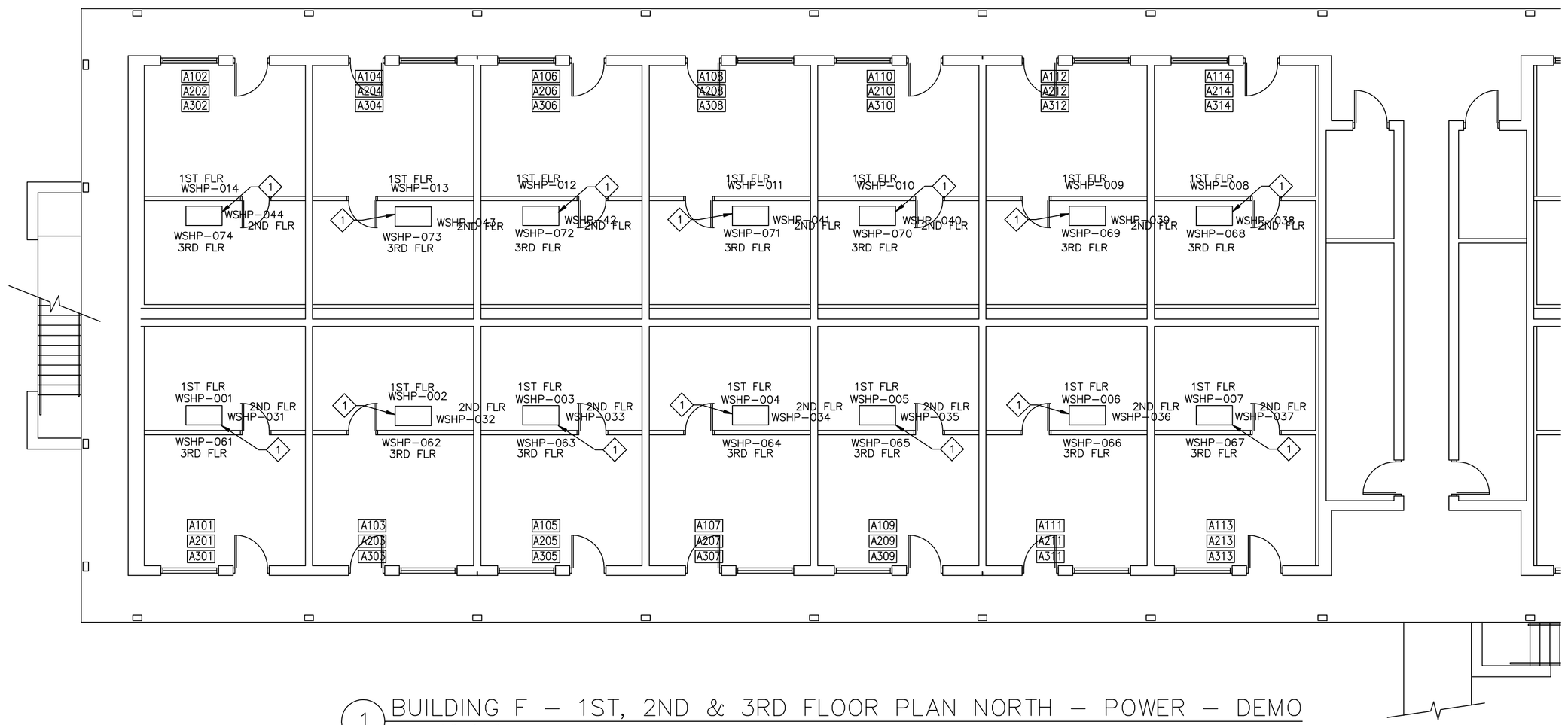
TEMPERATURE CONTROL DRAWINGS

SCALE:	NTS
EPROJECT NO.:	--
CONSTR. CONTR. NO.	####
NAVFAC DRAWING NO.	15032800
SHEET	19 OF 37

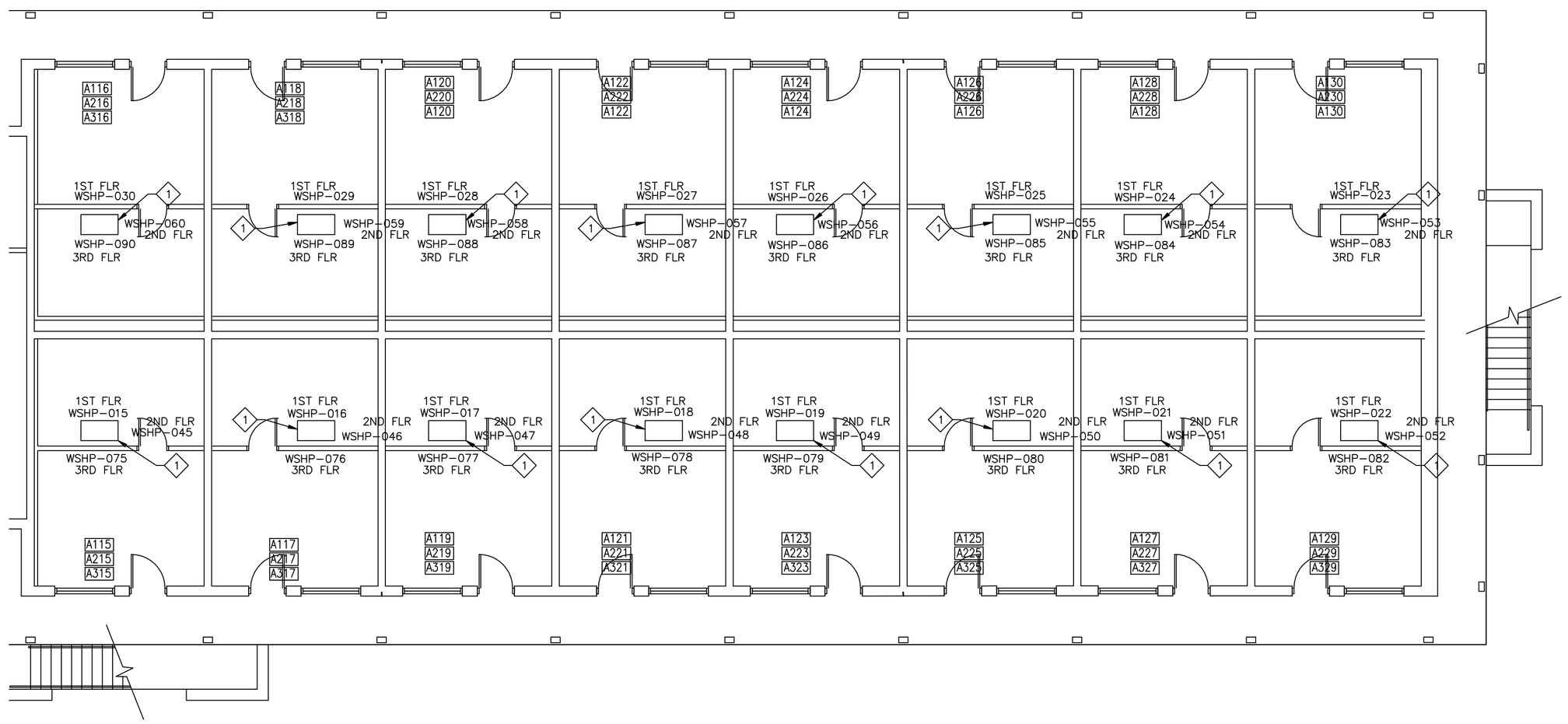
M701

DRAWFORM REVISION: 7 AUGUST 2009

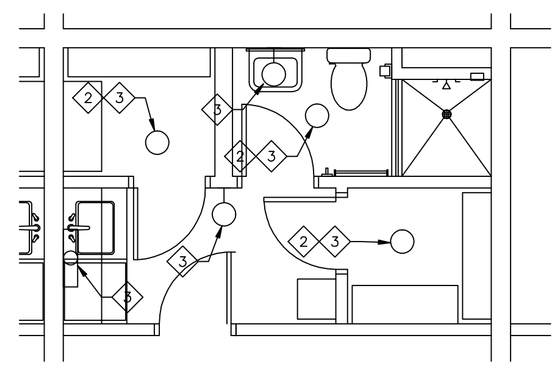
FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18936.dwg LAYOUT NAME: 870450-M-701 PLOTTED: Friday, January 27, 2012 - 7:25am USER: elisabeth.hommitt



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"



3 BUILDING F – 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'

P.W. DWG. NO. 18937

NO.	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11-24-09	DAH
2	ADDENDUM #1	12-11-09	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 SOUTHEAST
NPT 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

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

SCALE: AS SHOWN
EPROJECT NO.:
CONSTR. CONTR. NO.
NAVFAC DRAWING NO. 15032802
SHEET 21 OF 37

ED100

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: F:\BounceBack_Express\Bounce Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 – PW 18999\PW 18918 BEQ HVAC\DWG\18937.dwg LAYOUT NAME: ED100 PLOTTED: Friday, January 27, 2012 – 7:26am USER: elisabeth.hammitt

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18938.dwg LAYOUT NAME: ED101 PLOTTED: Friday, January 27, 2012 - 7:26am USER: elisabeth.hammitt

P.W. DWG. NO. 18938

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

GENERAL NOTES: (THIS SHEET ONLY)

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

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

2

NOTES: (THIS SHEET ONLY)

1. REMOVE EXISTING EQUIPMENT AND CIRCUIT. REMOVE CONDUCTORS AND CONDUIT BACK TO THE PANEL FROM WHICH IT IS SERVED.
2. DISCONNECT EXISTING ELECTRICAL CIRCUIT AND REMOVE THIS EQUIPMENT. SALVAGE EXISTING CIRCUIT FOR USE WITH NEW EQUIPMENT.

2

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

HP-001B HP-001A P-001 HP-002A HP-002B P-002

APPR	DAH	DATE	11-24-09	STM	1	ISSUED FOR CONSTRUCTION		
					2	ADDENDUM #1		
			12-11-09					

DESCRIPTION

DES DAH	DRW DAH	CHK DAH

SATISFACTORY TO DATE

ACTIVITY

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

APPROVED

A/E INFO

SEAL

NAVFAC

NAVAL FACILITIES ENGINEERING COMMAND

DEPARTMENT OF THE NAVY

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 - ATTIC FLOOR PLAN - POWER - DEMO

SCALE: AS SHOWN

EFPROJECT NO.:

CONSTR. CONTR. NO.

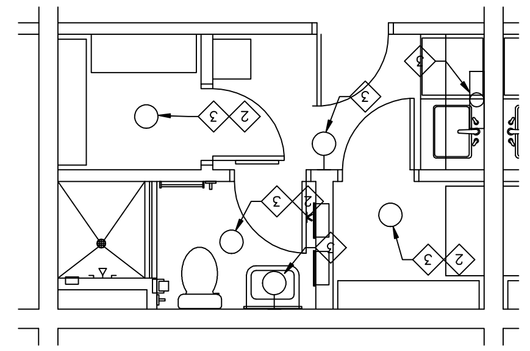
NAVFAC DRAWING NO.
1503280 3

SHEET 22 OF 37

ED101

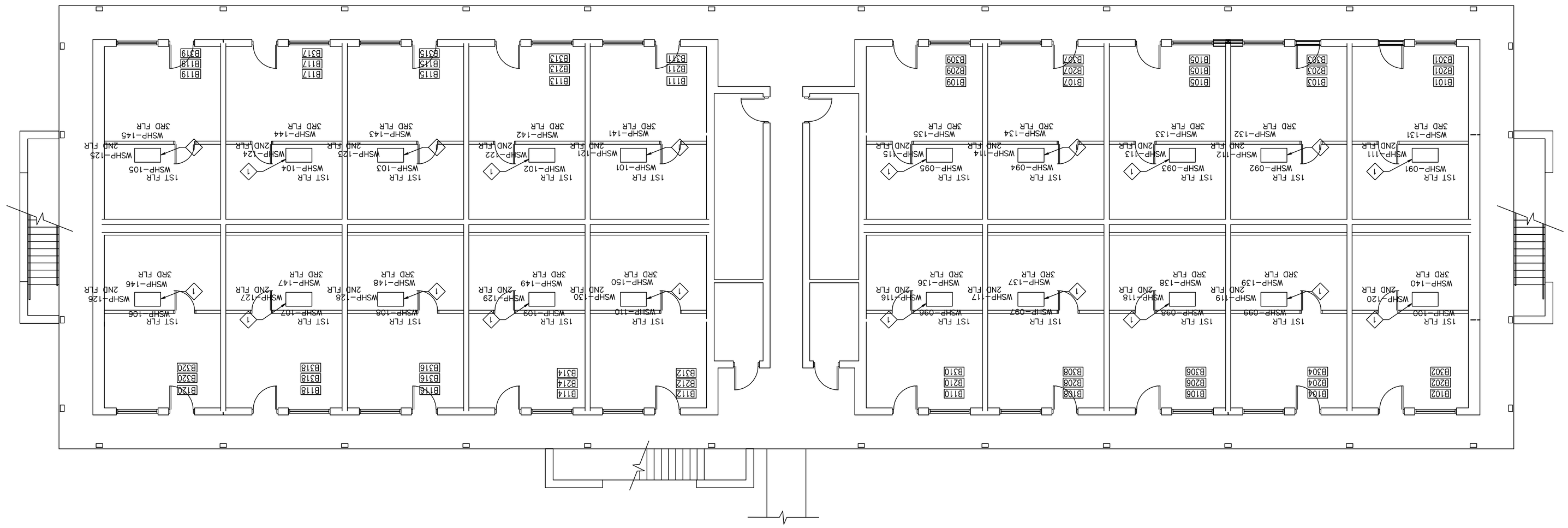
DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18939.dwg LAYOUT NAME: ED102 PLOTTED: Friday, January 27, 2012 - 7:27am USER: elisabeth.hamm1t



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

1 BUILDING G – 1ST, 2ND & 3RD FLOOR PLAN – 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 EXSIITNG 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 EXISTING 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 EXISTING. SALVAGE EXISTING CIRCUIT, SWITCHES, CONTROLS, ETC. FOR USE WITH NEW/REUSED FIXTURES.

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

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

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

P.W. DWG. NO. 18939

DRAWFORM REVISION: 7 AUGUST 2009

ED102

SHEET 23 OF 37

NAVFAC DRAWING NO. 1503280 4

CONSTR. CONTR. NO.

EFBO.JECT NO.:

SCALE: AS SHOWN

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

DES DAH	DRW DAH	CHK DAH

SATISFACTORY TO DATE

ACTIVITY

FOR COMMANDER NAVFAC / BLT'L.

APPROVED

A/E INFO

SEAL

NAVFAC

NO.	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11-24-09	DAH
2	ADDENDUM #1	12-11-09	DAH

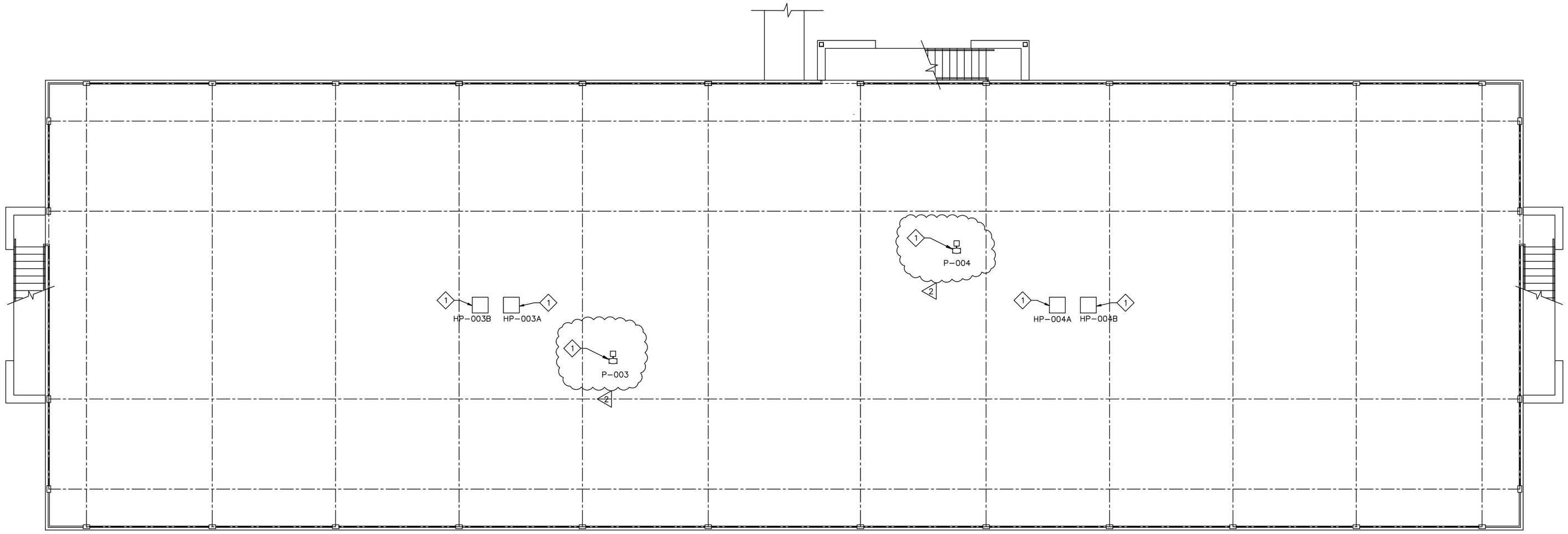
A

B

C

D

1 2 3 4 5



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.

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.

2

NOTES: (THIS SHEET ONLY)

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

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

2

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

P.W. DWG. NO. 18940

1	ISSUED FOR CONSTRUCTION	11-14-09	DAH					
2	ADDENDUM #1	12-11-09	DAH					
STM	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
PT. SOUTH CENTRAL

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 – ATTIC FLOOR PLAN – POWER – DEMO

SCALE: AS SHOWN
EPROJECT NO.:
CONSTR. CONTR. NO.
NAVFAC DRAWING NO. 15032805
SHEET 24 OF 37

ED103

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18940.dwg LAYOUT NAME: ED103 PLOTTED: Friday, January 27, 2012 - 7:27am USER: elisabeth.hammitt

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18941.dwg LAYOUT NAME: ED104 PLOTTED: Friday, January 27, 2012 - 7:28am USER: elisabeth.hornmitt

1 BUILDING H – 1ST, 2ND & 3RD FLOOR PLAN – 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.

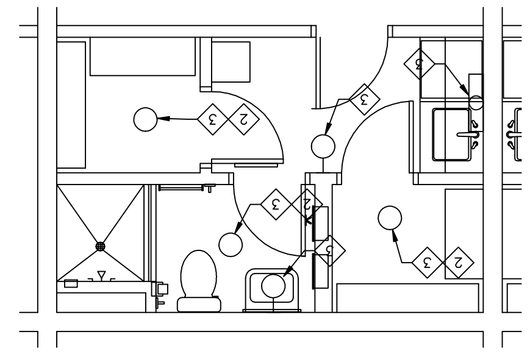
D. EQUIPMENT THAT IS DAMAGED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.

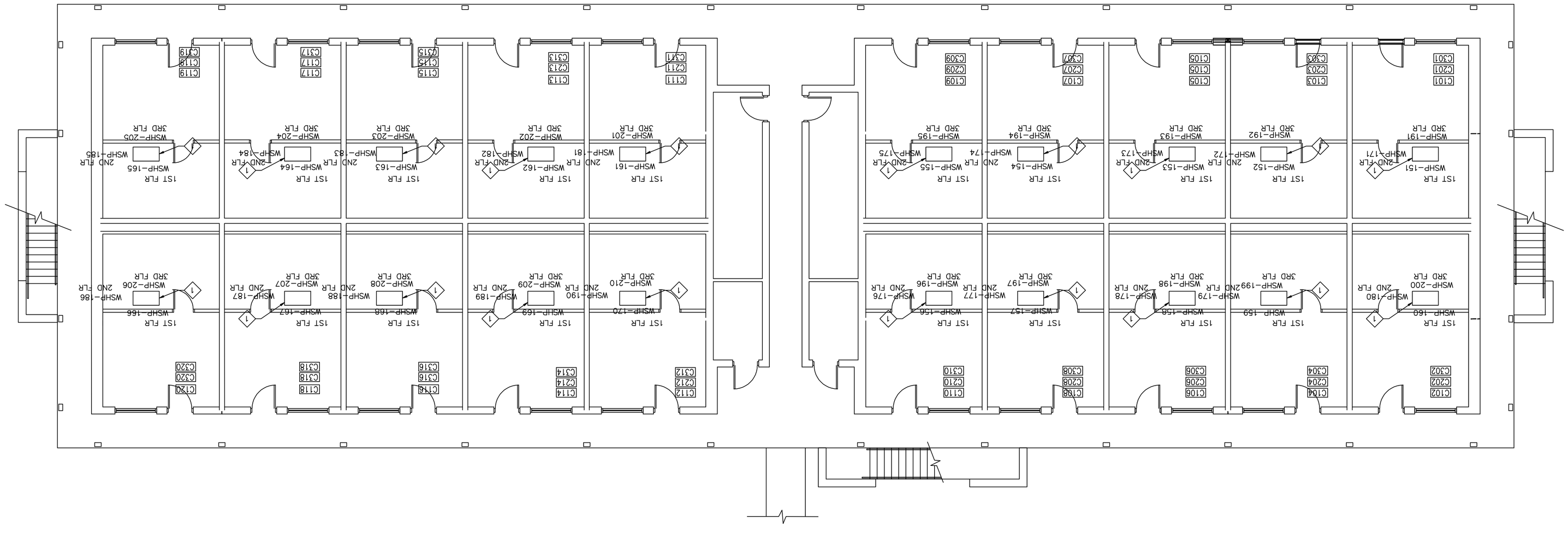
NOTES: (THIS SHEET ONLY)

1. DISCONNECT EXISTING 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 EXISTING. SALVAGE EXISTING CIRCUIT, SWITCHES, CONTROLS, ETC. FOR USE WITH NEW/REUSED FIXTURES.
3. ADD-ALTERNATE #1: DISCONNECT EXISTING ELECTRICAL CIRCUIT AND REMOVE THIS LIGHTING FIXTURE. FIXTURE SHALL BE REPLACED WITH NEW FIXTURE. SEE SHEET E000 AND E100 FOR DETAILS.

2 BUILDING H – 1ST, 2ND & 3RD LEVEL – TYPICAL UNIT LIGHTING – DEMO

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





P.W. DWG. NO. 18941

DRAWFORM REVISION: 7 AUGUST 2009

ED104

SHEET 25 OF 37

NAVFAC DRAWING NO.
1503280G

CONSTR. CONTR. NO.

PROJECT NO.:

SCALE: AS SHOWN

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

BEQ F, G & H - PHASE IV HVAC RENOVATION

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

DES DAH	DRW DAH	CHK DAH

SATISFACTORY TO DATE

ACTIVITY

FOR COMMANDER NAVFAC / B.T.L.

APPROVED

A/E INFO

SEAL

NAVFAC

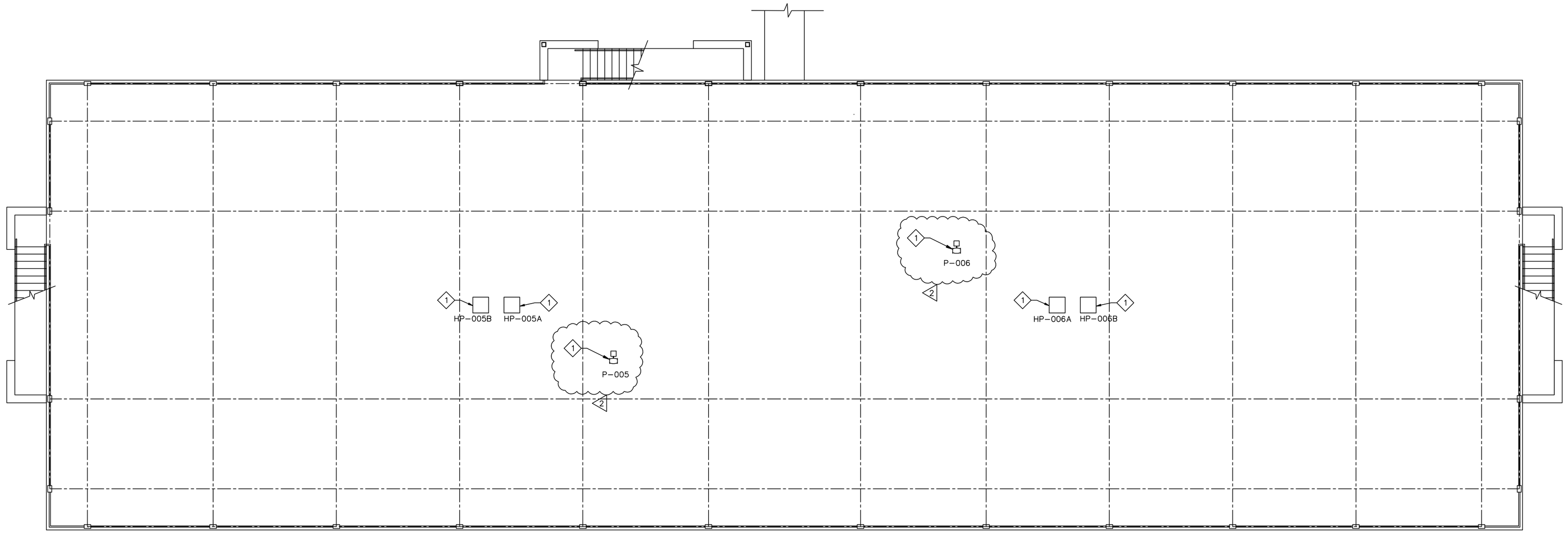
NUM	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11-24-09	DAH
2	ADDENDUM #1	12-11-09	DAH

A

D

C

1 2 3 4 5



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.

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.

NOTES: (THIS SHEET ONLY)

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

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

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

P.W. DWG. NO. 18942

1	ISSUED FOR CONSTRUCTION		11-24-09	DAH	APPR
2	ADDENDUM #1		12-11-09	DAH	DATE
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 SOUTHEAST
NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA
PT SOUTH CENTRAL
NAVAL AIR STATION JACKSONVILLE

BEQ F, G & H - PHASE IV HVAC RENOVATION

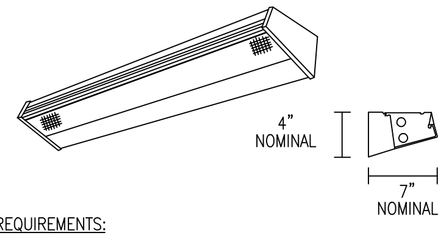
BLDG H – ATTIC FLOOR PLAN – POWER – DEMO

SCALE: AS SHOWN
E/PROJECT NO.:
CONSTR. CONTR. NO.
NAVFAC DRAWING NO. 15032807
SHEET 26 OF 37

ED105

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME= F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18942.dwg LAYOUT NAME: ED105 PLOTTED: Friday, January 27, 2012 - 7:28am USER: elisabeth.hammitt



LUMINAIRE REQUIREMENTS:

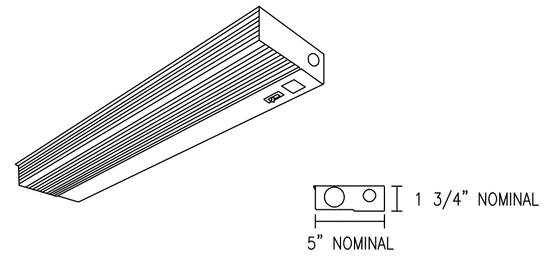
1. HOUSING – DIE–FORMED, HEAVY–GAUGE, COLD–ROLLED STEEL WITH ENDCAPS MADE FROM THE SAME MATERIAL AS HOUSING.
2. FINISH – MULTI–STAGE PHOSPHATE BONDING TREATMENT FINISHED WITH HIGH REFLECTANCE (MINIMUM 85%), BAKED WHITE ENAMEL FINISH. DARK BRONZE OR BLACK FINISH AVAILABLE. SEE LIGHTING FIXTURE SCHEDULE.
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



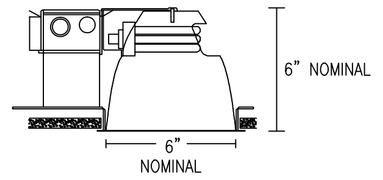
LUMINAIRE REQUIREMENTS:

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



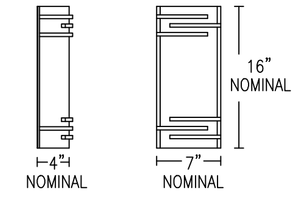
LUMINAIRE REQUIREMENTS:

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 T15 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 T15, 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

P.W. DWG. NO. 18943

SYM	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11-24-09	DAH
2	ADDENDUM #1	12-11-09	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 SOUTHEAST
NAVAL FACILITIES ENGINEERING COMMAND
EFT SOUTH CENTRAL
NAVAL AIR STATION JACKSONVILLE

MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

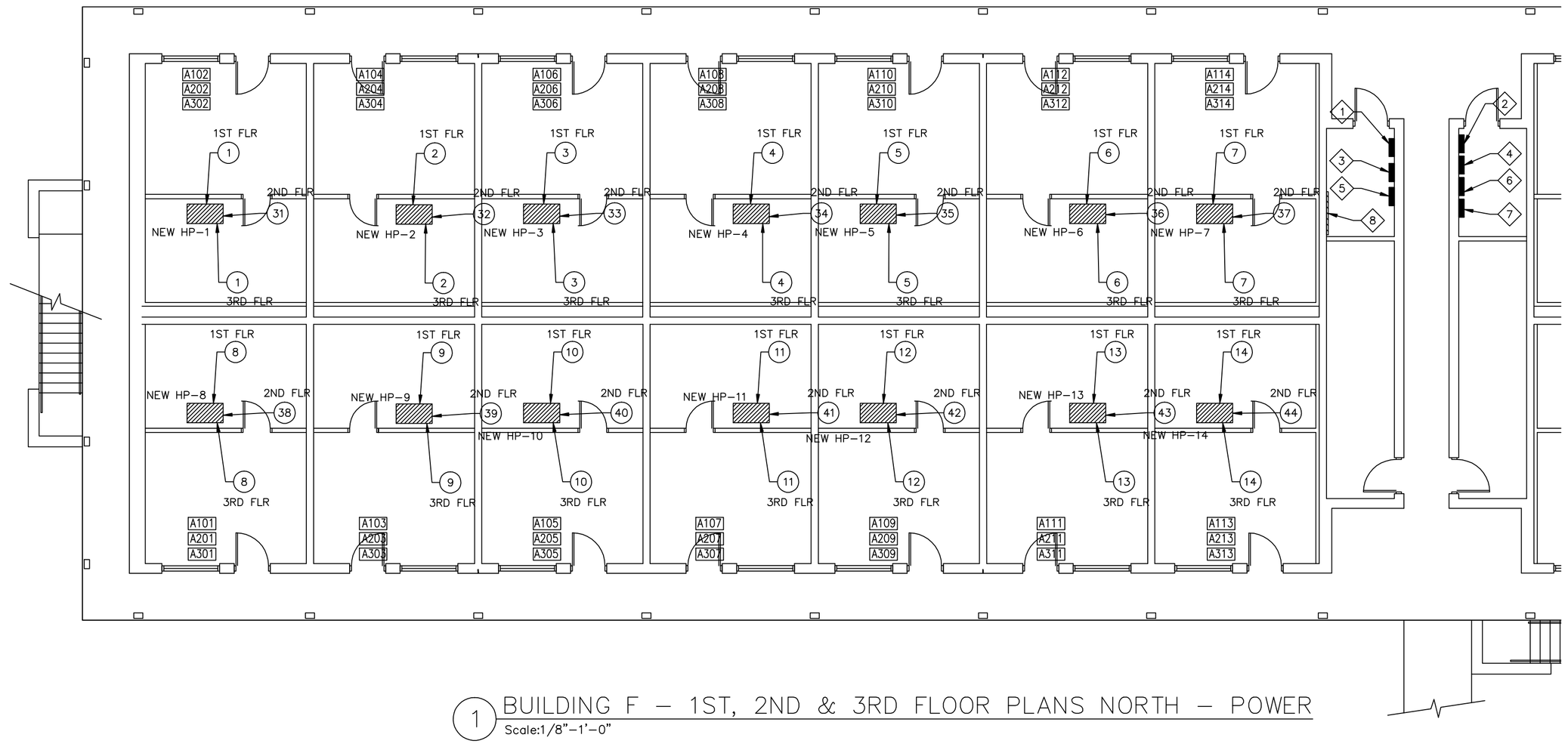
LEGEND AND SCHEDULES

SCALE:	AS SHOWN
EPROJECT NO.:	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO.	15032801
SHEET	20 OF 37

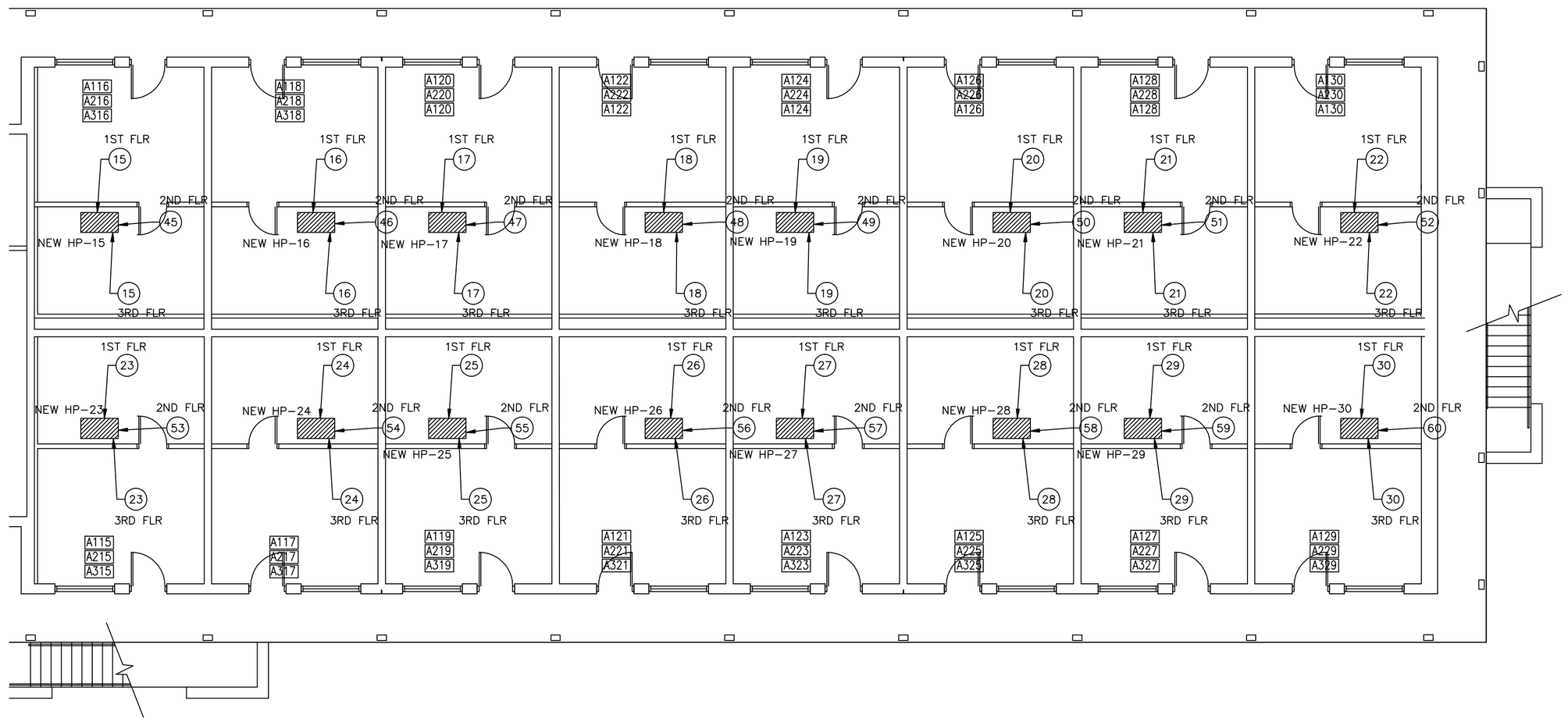
E000

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 – PW 18999\PW 18918 BEQ HVAC\DWG\18943.dwg LAYOUT NAME: E000 PLOTTED: Friday, January 27, 2012 – 7:29am USER: elisabeth.hammitt



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 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–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.

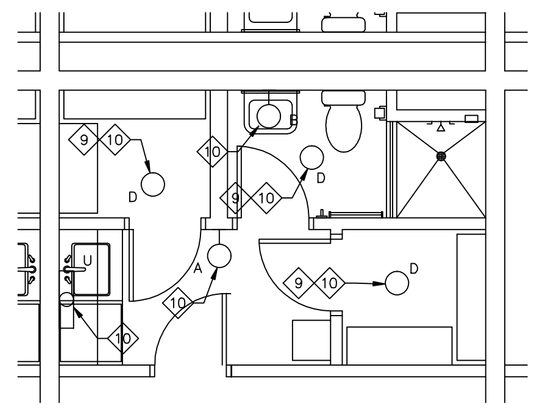
G. WIRING METHOD FOR THIS JOB SHALL MATCH WITH EXISTING IF THIS CONCURS WITH GENERAL NOTE F.

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'

P.W. DWG. NO. 18944

SYM	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11-24-09	DAH
2	ADDENDUM #1	12-11-09	DAH

NAVFAC

SEAL

A/E INFO

APPROVED

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

ACTIVITY

SATISFACTORY TO DATE

DES	DRW	CHK
DAH	DAH	DAH

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

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

SCALE:	AS SHOWN
EPROJECT NO.:	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO.	15032808
SHEET	27 OF 37

E100

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 – PW 18999\PW 18918 BEQ HVAC\DWG\18944.dwg LAYOUT NAME: E100 PLOTTED: Friday, January 27, 2012 – 7:30am USER: elisabeth.hammitt

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\worked by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18945.dwg LAYOUT NAME: E101 PLOTTED: Friday, January 27, 2012 - 7:30am USER: elisabeth.hammitt

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.

2 REUSE EXISTING CIRCUITS FOR THIS EQUIPMENT. EXTEND EXISTING CIRCUITS AS NECESSARY TO REACH NEW STARTER/DISCONNECTS AND MECHANICAL EQUIPMENT. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS.

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

P.W. DWG. NO. 18945

DRAWFORM REVISION: 7 AUGUST 2009

E101

SHEET 28 OF 37

NAVFAC DRAWING NO. 1503280 9

CONSTR. CONTR. NO.

EFD/PROJECT NO.:

SCALE: AS SHOWN

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

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST

MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

BLDG F - ATTIC FLOOR PLAN - POWER

DES	DAH	DRW	DAH	CHK	DAH

SATISFACTORY TO DATE

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

ACTIVITY

APPROVED

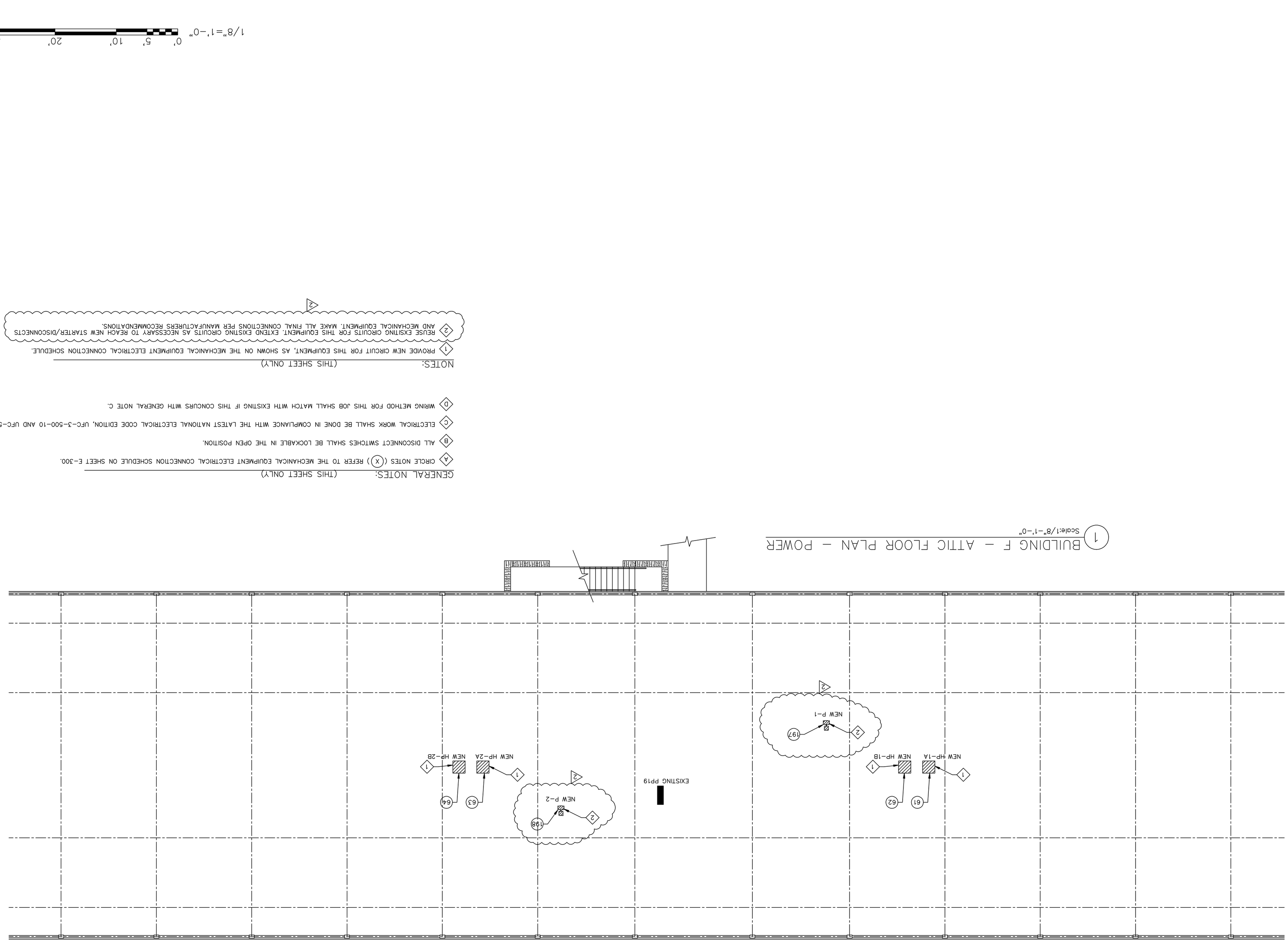
A/E INFO

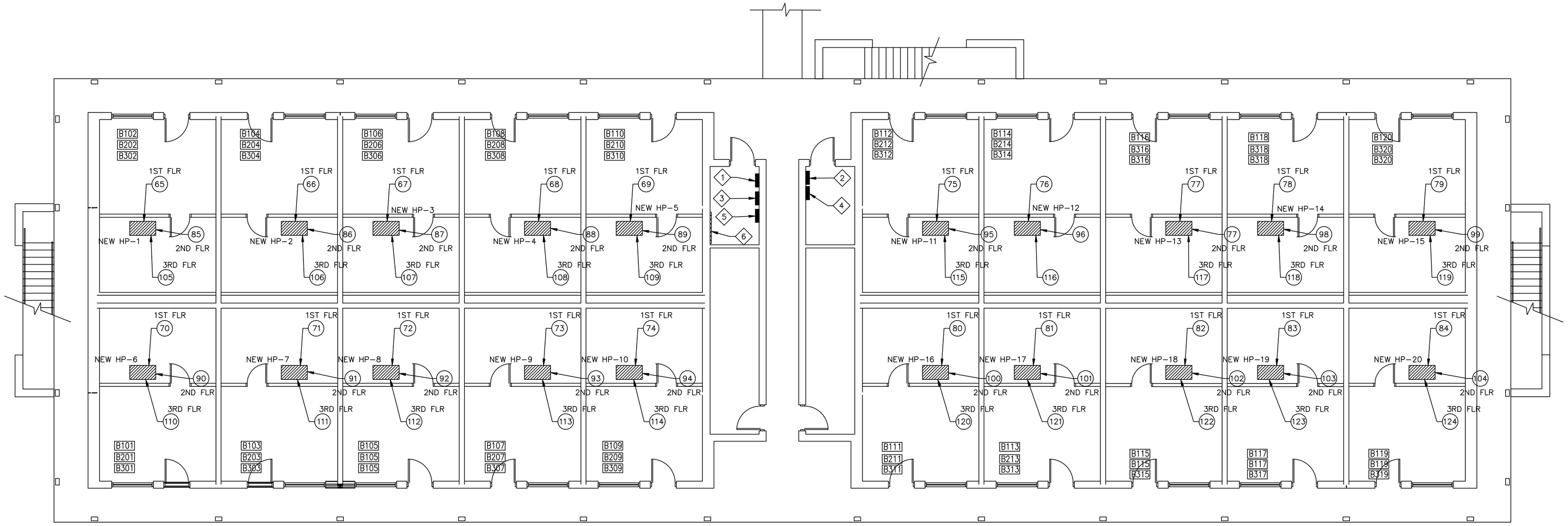
SEAL

NAVFAC

	STM	DESCRIPTION	DATE	APPR
1		ISSUED FOR CONSTRUCTION	11-24-09	DAH
2		ADDENDUM #1	12-11-09	DAH

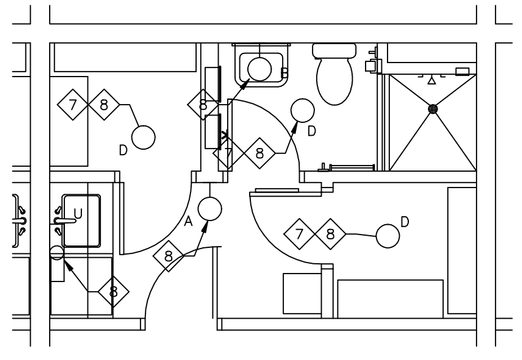
1 BUILDING F - ATTIC FLOOR PLAN - POWER
Scale:1/8"=1'-0"





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'

P.W. DWG. NO. 18946

1	ISSUED FOR CONSTRUCTION	11-24-09	DAH				
2	ADDENDUM #1	12-11-09	DAH				
	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 SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
FPT SOUTH CENTRAL
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

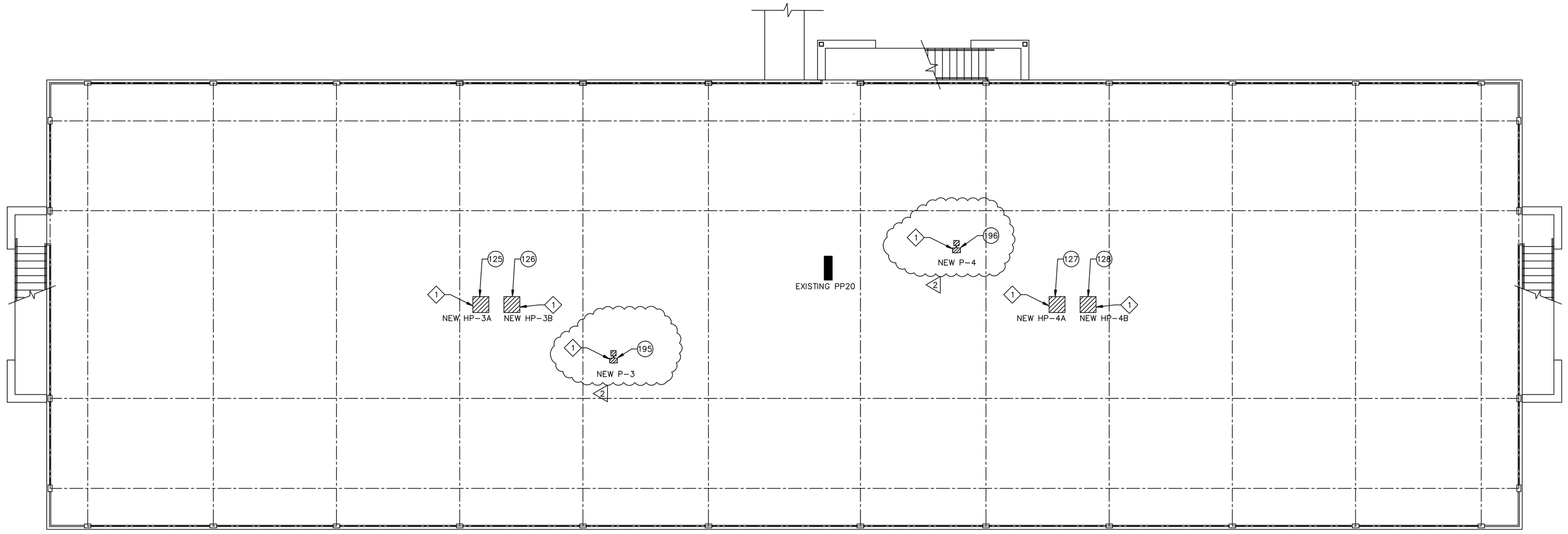
BLDG G – 1ST THRU 3RD FLOOR PLAN – POWER & LIGHTING

SCALE: AS SHOWN
EPROJECT NO.:
CONSTR. CONTR. NO.
NAVFAC DRAWING NO. 15032810
SHEET 29 OF 37

E102

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: F:\BounceBack_Express\Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 – PW 18999\PW 18918 BEQ HVAC\DWG\18946.dwg LAYOUT NAME: E102 PLOTTED: Friday, January 27, 2012 – 7:31am USER: elisabeth.hammitt



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.

2. REUSE EXSITING CIRCUITS FOR THIS EQUIPMENT. EXTEND EXISTING CIRCUITS AS NECESSARY TO REACH NEW STARTER/DISCONNECTS AND MECHANICAL EQUIPMENT. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS.

1/8"=1'–0" 0' 5' 10' 20' 30'

P.W. DWG. NO. 18947

SYM	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11-24-09	DAH
2	ADDENDUM #1	12-11-09	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 SOUTHEAST
BPT 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

BLDG G – ATTIC FLOOR PLAN – POWER

SCALE: AS SHOWN

EPROJECT NO.:

CONSTR. CONTR. NO.

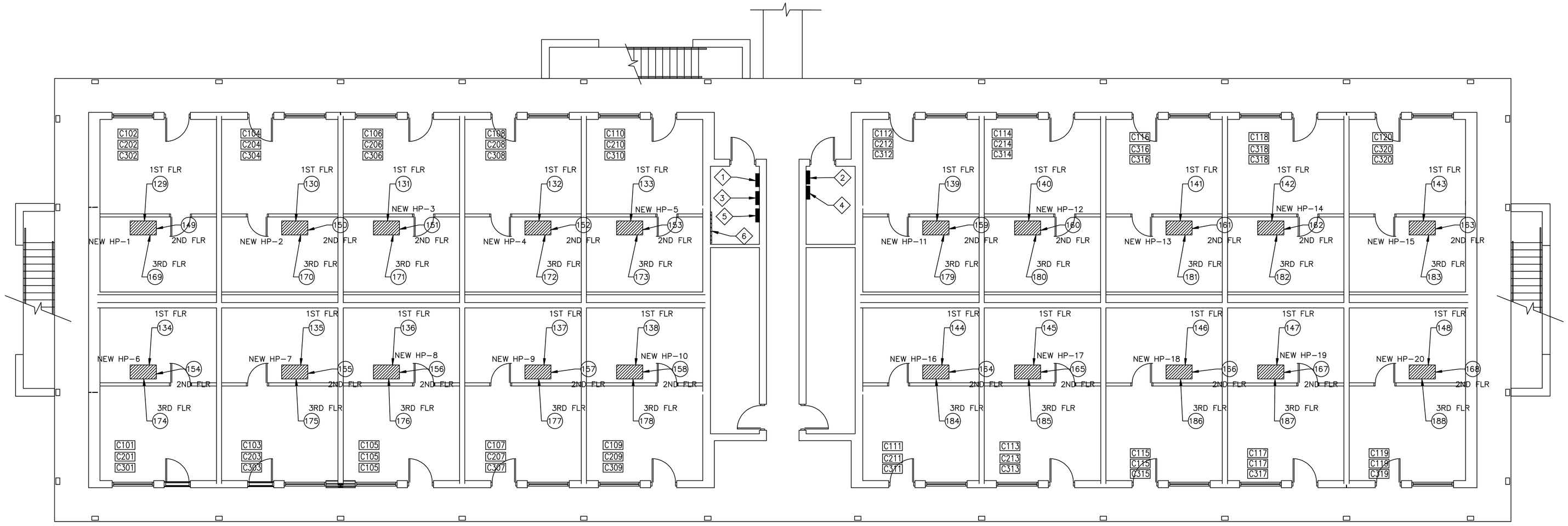
NAVFAC DRAWING NO.
15032811

SHEET 30 OF 37

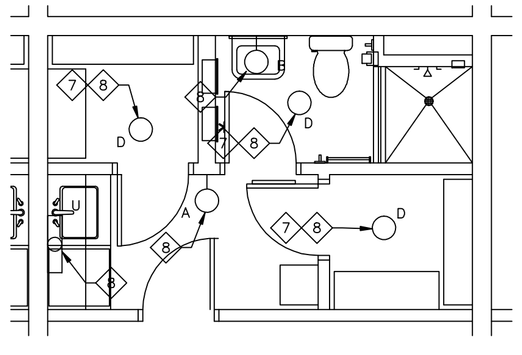
E103

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18947.dwg LAYOUT NAME: E103 PLOTTED: Friday, January 27, 2012 - 7:31am USER: elisabeth.hammitt



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'

P.W. DWG. NO. 18948

NO.	DESCRIPTION	DATE	APPR
1	ISSUED FOR CONSTRUCTION	11–24–09	DAH
2	ADDENDUM #1	12–11–09	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 SOUTHEAST
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL AIR STATION JACKSONVILLE
BPT SOUTH CENTRAL
MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

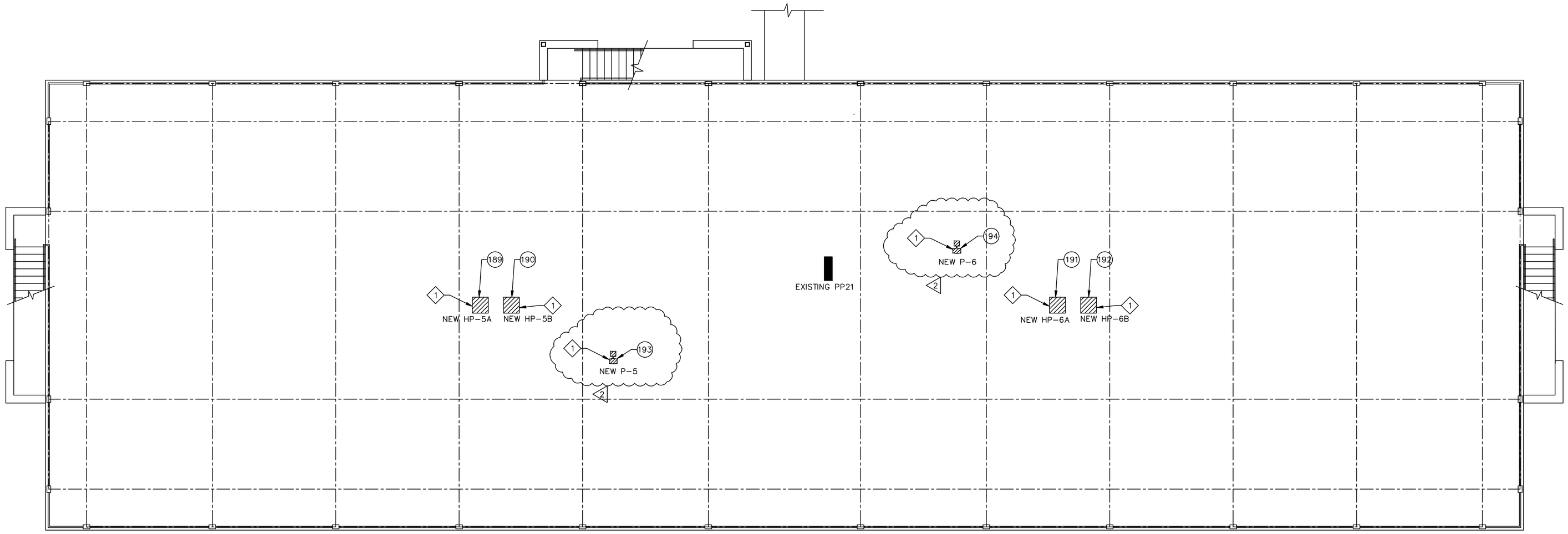
BLDG H – 1ST THRU 3RD
FLOOR PLAN – POWER & LIGHTING

SCALE: AS SHOWN
EPROJECT NO.:
CONSTR. CONTR. NO.
NAVFAC DRAWING NO. 15032812
SHEET 31 OF 37

E104

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18948.dwg LAYOUT NAME: E104 PLOTTED: Friday, January 27, 2012 - 7:32am USER: elisabeth.hammitt



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.

2 REUSE EXSITING CIRCUITS FOR THIS EQUIPMENT. EXTEND EXISTING CIRCUITS AS NECESSARY TO REACH NEW STARTER/DISCONNECTS AND MECHANICAL EQUIPMENT. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS.

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

P.W. DWG. NO. 18949

1	ISSUED FOR CONSTRUCTION	11-24-09	DAH					
2	ADDENDUM #1	12-11-09	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 SOUTHEAST
PT 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

BLDG H – ATTIC FLOOR PLAN – POWER

SCALE: AS SHOWN
EPROJECT NO.:
CONSTR. CONTR. NO.
NAVFAC DRAWING NO.
15032813
SHEET 32 OF 37

E105

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18949.dwg LAYOUT NAME: E105 PLOTTED: Friday, January 27, 2012 - 7:32am USER: elisabeth.hammitt

FILE NAME: F:\BounceBack_Express\B-Up Files Mon 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18950.dwg LAYOUT NAME: E300 PLOTTED: Friday, January 27, 2012 - 7:33pm USER: elisabeth.hornmitt

BUILDING F – MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

1 Scale:NOT TO SCALE

ITEM NO.	DESCRIPTION	EQUIPMENT CHARACTERISTICS VOLTS	Ph	FLA	CIRCUIT	FEEDER	STARTER SIZE	DISCONNECT SWITCH SIZE	P	FUSE	FEATURES	REMARKS
1	HP-1 (1ST FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
2	HP-2 (1ST FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
3	HP-3 (1ST FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
4	HP-4 (1ST FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
5	HP-5 (1ST FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
6	HP-6 (1ST FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
7	HP-7 (1ST FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
8	HP-8 (1ST FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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
15	HP-15 (1ST FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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
23	HP-23 (1ST FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
24	HP-24 (1ST FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
197	P-1 (ATTC-BUILDING F)	208	3	4.6	EXISTING	NEMA SIZE 1	30	3	NON	NEMA 1	PP19-25,27,29	EXTEND THE EXISTING FEEDER FROM PANEL PP19 TO NEW PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT. TIE INTO EXISTING DDC CONTROL SYSTEM
198	P-2 (ATTC-BUILDING F)	208	3	4.6	EXISTING	NEMA SIZE 1	30	3	NON	NEMA 1	PP19-26,28,30	EXTEND THE EXISTING FEEDER FROM PANEL PP19 TO NEW PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT. TIE INTO EXISTING DDC CONTROL SYSTEM
44	HP-14 (2ND FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
43	HP-13 (2ND FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
42	HP-12 (2ND FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
41	HP-11 (2ND FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
40	HP-10 (2ND FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
39	HP-9 (2ND FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
38	HP-8 (2ND FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
37	HP-7 (2ND FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
36	HP-6 (2ND FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
35	HP-5 (2ND FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
34	HP-4 (2ND FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
33	HP-3 (2ND FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
32	HP-2 (2ND FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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
60	HP-30 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
59	HP-29 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
58	HP-28 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
57	HP-27 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
56	HP-26 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
55	HP-25 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
54	HP-24 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
53	HP-23 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
52	HP-22 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
45	HP-15 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
44	HP-14 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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	EXISTING	N/A	N/A	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 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
31	HP-1 (3RD FLOOR-BUILDING F)	208	1	5.8	EXISTING	N/A	N/A	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
64	HP-28 (ATTC-BUILDING F)	208	3	2.5.0	PP19-38,40,42	3#6AWG & 1#GDC - 3/4"C	N/A	60	3	NON	NEMA 1	MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
63	HP-24 (ATTC-BUILDING F)	208	3	2.5.9	PP19-18,20,22	3#6AWG & 1#GDC - 3/4"C	N/A	60	3	NON	NEMA 1	MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
62	HP-18 (ATTC-BUILDING F)	208	3	2.5.9	PP19-37,39,41	3#6AWG & 1#GDC - 3/4"C	N/A	60	3	NON	NEMA 1	MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
61	HP-1A (ATTC-BUILDING F)	208	3	2.5.9	PP19-31,33,35	3#6AWG & 1#GDC - 3/4"C	N/A	60	3	NON	NEMA 1	MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.

MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

P.W. DWG. NO. 18950

DEPARTMENT OF THE NAVY
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

BUILDING F – MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

NAVFAC

APPR	DATE	DESCRIPTION	STAT
DMH	11-24-09	ISSUED FOR CONSTRUCTION	1
DMH	12-11-09	ADDENDUM #1	2

DES'D DAH | DRW DAH | CHK DAH

SATISFACTORY TO DATE

A/E INFO

APPROVED FOR COMMANDER NAVFAC / B.T.L.

AUTHRITY

SCALE: NOT TO SCALE

E3PROJECT NO.:

CONSTR. CONTR. NO.:

NAVFAC DRAWING NO.
1503281 4

SHEET 33 OF 37

E300

DRAWFORM REVISION: 7 AUGUST 2009

SCALE:

MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

ITEM NO.	DESCRIPTION	EQUIPMENT CHARACTERISTICS VOLTS	PH	FLA	CIRCUIT	FEEDER	STARTER SIZE	DISCONNECT SWITCH SIZE	P	FUSE	FEATURES	REMARKS
65	HP-1 (1ST FLOOR-BUILDING G)	208	1	5.8	PP7-2,4	EXISTING	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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.

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MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

ITEM NO.	DESCRIPTION	EQUIPMENT CHARACTERISTICS VOLTS	PH	FLA	CIRCUIT	FEEDER	STARTER SIZE	DISCONNECT SWITCH SIZE	P	FUSE	FEATURES	REMARKS
105	HP-1 (3RD FLOOR-BUILDING G)	208	1	5.8	PP11-2,4	EXISTING	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	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	N/A	60	3	NON	NEMA 1	MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
195	P-3 (ATTIC FLOOR-BUILDING G)	208	3	4.6	PP20-25,27,29	EXISTING	NEMA SIZE 1	30	3	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP19 TO NEW PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT. TIE INTO EXISTING DDC CONTROL SYSTEM.
196	P-4 (ATTIC FLOOR-BUILDING G)	208	3	4.6	PP20-26,28,30	EXISTING	NEMA SIZE 1	30	3	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP19 TO NEW PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT. TIE INTO EXISTING DDC CONTROL SYSTEM.

2

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

P.W. DWG. NO. 18951

NO.	DATE	DESCRIPTION	BY	APPR
1	11-24-09	ISSUED FOR CONSTRUCTION	DAH	
2	12-11-09	ADDENDUM #1	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 SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
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. 15032815
SHEET 34 OF 37

E301

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18951.dwg LAYOUT NAME: E301 PLOTTED: Friday, January 27, 2012 - 7:34am USER: elisabeth.hammitt

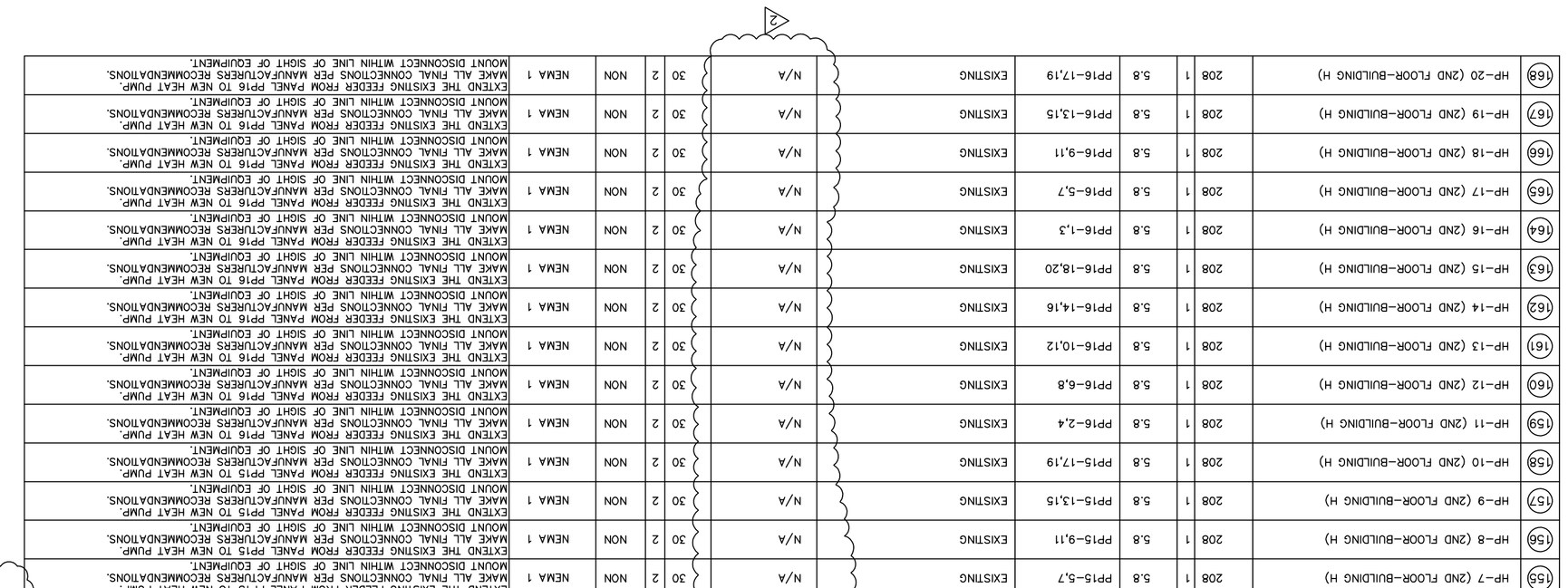
FILE NAME: F:\BounceBack...Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18952.dwg LAYOUT NAME: E302 PLOTTED: Friday, January 27, 2012 - 7:34am USER: elisabeth.hammitt

MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

ITEM NO.	DESCRIPTION	EQUIPMENT CHARACTERISTICS VOLTS	Ph	FLA	CIRCUIT	STARTER SIZE	FEEDER	DISCONNECT SWITCH SIZE	P	FUSE	FEATURES	REMARKS
(129)	HP-1 (1ST FLOOR-BUILDING H)	208	1	5.8	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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.
(139)	HP-11 (1ST FLOOR-BUILDING H)	208	1	5.8	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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	EXISTING	N/A		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 VOLTS	Ph	FLA	CIRCUIT	STARTER SIZE	FEEDER	DISCONNECT SWITCH SIZE	P	FUSE	FEATURES	REMARKS
(169)	P-1 (3RD FLOOR-BUILDING H)	208	1	5.8	P7-2,4	EXISTING		N/A		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)	P-2 (3RD FLOOR-BUILDING H)	208	1	5.8	P7-6,8	EXISTING		N/A		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)	P-3 (3RD FLOOR-BUILDING H)	208	1	5.8	P7-10,12	EXISTING		N/A		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)	P-4 (3RD FLOOR-BUILDING H)	208	1	5.8	P7-14,16	EXISTING		N/A		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)	P-5 (3RD FLOOR-BUILDING H)	208	1	5.8	P7-18,20	EXISTING		N/A		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)	P-6 (3RD FLOOR-BUILDING H)	208	1	5.8	P7-1,3	EXISTING		N/A		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)	P-7 (3RD FLOOR-BUILDING H)	208	1	5.8	P7-5,7	EXISTING		N/A		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)	P-8 (3RD FLOOR-BUILDING H)	208	1	5.8	P7-9,11	EXISTING		N/A		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)	P-9 (3RD FLOOR-BUILDING H)	208	1	5.8	P7-13,15	EXISTING		N/A		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)	P-10 (3RD FLOOR-BUILDING H)	208	1	5.8	P7-17,19	EXISTING		N/A		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)	P-11 (3RD FLOOR-BUILDING H)	208	1	5.8	P8-2,4	EXISTING		N/A		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)	P-12 (3RD FLOOR-BUILDING H)	208	1	5.8	P8-6,8	EXISTING		N/A		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)	P-13 (3RD FLOOR-BUILDING H)	208	1	5.8	P8-10,12	EXISTING		N/A		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)	P-14 (3RD FLOOR-BUILDING H)	208	1	5.8	P8-14,16	EXISTING		N/A		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)	P-15 (3RD FLOOR-BUILDING H)	208	1	5.8	P8-18,20	EXISTING		N/A		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)	P-16 (3RD FLOOR-BUILDING H)	208	1	5.8	P8-1,3	EXISTING		N/A		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)	P-17 (3RD FLOOR-BUILDING H)	208	1	5.8	P8-5,7	EXISTING		N/A		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)	P-18 (3RD FLOOR-BUILDING H)	208	1	5.8	P8-9,11	EXISTING		N/A		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)	P-19 (3RD FLOOR-BUILDING H)	208	1	5.8	P8-13,15	EXISTING		N/A		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)	P-20 (3RD FLOOR-BUILDING H)	208	1	5.8	P8-17,19	EXISTING		N/A		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)	P-5A (ATTIC-BUILDING H)	208	3	25.9	P21-31,33,35	3@AWG & 1@1/0 - 3/4"C		N/A		60	3	NON	NEMA 1	MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
(190)	P-5B (ATTIC-BUILDING H)	208	1	25.0	P21-17,19	2@AWG & 1@1/0 - 3/4"C		N/A		60	2	NON	NEMA 1	MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
(191)	P-6A (ATTIC-BUILDING H)	208	1	25.0	P21-15,23	2@AWG & 1@1/0 - 3/4"C		N/A		60	2	NON	NEMA 1	MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
(192)	P-6B (ATTIC-BUILDING H)	208	3	22.4	P21-21,23	3@AWG & 1@1/0 - 3/4"C		N/A		60	3	NON	NEMA 1	MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT.
(193)	P-5 (ATTIC-BUILDING H)	208	3	4.6	P21-25,27,29	EXISTING		NEMA SIZE 1		30	3	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP19 TO NEW PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT. TIE INTO EXISTING DDC CONTROL SYSTEM.
(194)	P-6 (ATTIC-BUILDING H)	208	3	4.6	P21-26,28,30	EXISTING		NEMA SIZE 1		30	3	NON	NEMA 1	EXTEND THE EXISTING FEEDER FROM PANEL PP19 TO NEW PUMP. MAKE ALL FINAL CONNECTIONS PER MANUFACTURERS RECOMMENDATIONS. MOUNT DISCONNECT WITHIN LINE OF SIGHT OF EQUIPMENT. TIE INTO EXISTING DDC CONTROL SYSTEM.



P.W. DWG. NO. 18953

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
BUILDING H - MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

SCALE: NOT TO SCALE
PROJECT NO.:
CONSTR. CONTR. NO.
NAVFAC DRAWING NO. 1503281G
SHEET 35 OF 37
E302

DRAWFORM REVISION: 7 AUGUST 2009

NO.	REVISION	BY	DATE
1	ISSUED FOR CONSTRUCTION	DWG	11-24-09
2	ADDENDUM #1	DWG	12-11-09

APP'R

DES DAH DRW DAH CHK DAH

SATISFACTORY TO DATE

ACTIVITY

FOR COMMANDER NAVFAC / BLT'L

APPROVED

A/E INFO

SEAL

NAVFAC

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	P	PHASE A B C	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	P	PHASE A B C	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	P	PHASE A B C	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	P	PHASE A B C	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	P	PHASE A B C	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 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 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	P	PHASE A B C	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 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 PP19 SCHEDULE

VOLTAGE: 208 V | MAINS: EXISTING 500A/3P MCB | MOUNTING: SURFACE | REMARKS:
BUS SIZE: 500 A | CONNECTED LOAD: 85.3 KVA, DEMAND LOAD: 85.7 KVA | FAULT DUTY: 22,000 A

NO	SERVES	NOTE	LOAD (kVA)	BREAKER TRIP	P	PHASE A B C	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-1	5	0.6	20	3		3	20	0.6	5	P-2	26
27	-----		0.6	---	--		--	---	0.6		-----	28
29	-----		0.6	---	--		--	---	0.6		-----	30
31	HP-1A	1	3.1	40	3		3	20	0.5	4	EF-001	32
33	-----		3.1	---	--		--	---	0.5		-----	34
35	-----		3.1	---	--		--	---	0.5		-----	36
37	HP-1B	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 5.1 KVA | MISC 0.0 KVA

CONNECTED CURRENT: 236.7 A.
DEMAND CURRENT: 237.8 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 EXISTING 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.
5. CONNECT NEW EQUIPMENT TO THIS CIRCUIT. REUSE THIS EXISTING CIRCUIT BREAKER.

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	P	PHASE A B C	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 0.6 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 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	P	PHASE A B C	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	P	PHASE A B C	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	P	PHASE A B C	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

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: 68.6 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-3	5	0.6	20	3	●			3	20	0.6	5	P-4	26
27	------		0.6	---	--		●		--	---	0.6		------	28
29	------		0.6	---	--			●	--	---	0.6		------	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: 190.4 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.
5. CONNECT NEW EQUIPMENT TO THIS CIRCUIT. REUSE THIS EXISTING CIRCUIT BREAKER.

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	RM C123 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 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: 68.6 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-5	5	0.6	20	3	●			3	20	0.6	5	P-6	26
27	------		0.6	---	--		●		--	---	0.6		------	28
29	------		0.6	---	--			●	--	---	0.6		------	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: 190.4 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.
5. CONNECT NEW EQUIPMENT TO THIS CIRCUIT. REUSE THIS EXISTING CIRCUIT BREAKER.

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

P.W. DWG. NO. 18954

NO	DAH	DAH						APPR
1	ISSUED FOR CONSTRUCTION						11-24-09	DATE
2	ADDENDUM #1						12-11-09	

DESCRIPTION

NAVFAC

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
NAVFAC SOUTHEAST
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
PORT SOUTH CENTRAL
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SOUTH CAROLINA

BEQ F, G & H - PHASE IV HVAC RENOVATION

PANELBOARD SCHEDULES

SEAL

SCALE: NOT TO SCALE
EPROJECT NO.:
CONSTR. CONTR. NO.
NAVFAC DRAWING NO.
15032818
SHEET 37 OF 37

E401

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: F:\BounceBack_Express\B-Up Files Mar 2009\AutoCAD Files\sorted by PW #\PW 18000 - PW 18999\PW 18918 BEQ HVAC\DWG\18954.dwg LAYOUT NAME: E401 PLOTTED: Friday, January 27, 2012 - 7:35am USER: elisabeth.hammitt