PART 1 - GENERAL

ARTICLE 1 - ELECTRICAL SYSTEMS

1.03 PIPED, INSPEC'TED AND LISTED, EXCEPT AS INDICATED ON DRAWINGS.

ARTICLE 1.1 - CONDUIT SYSTEM INSTALLATION

1.1.2 JACKETED CABLE CONNECTORS: FOR STEEL AND ALUMINUM CONDUIT, USE LOCKNUTS. INSTALL INSULATED THROAT METAL CLAMPS OR COMPRESSION CONNECTORS, WITH BANDS OF GREEN AND TWO BANDS OF YELLOW.

1.1.3 TERMINAL JUNCTION BOXES: USE METAL-CLAD CABLE, TYPE MC.

ARTICLE 1.2 - CONTROL PLATE AND MEET SUPPORT SYSTEM INSTALLATION

1.2.4 PROVIDE TERMINAL JUNCTION BOXES IN ALL EXTERIOR WALLS EXCEPT AS INDICATED ON DRAWINGS.

ARTICLE 1.3 - LIGHTING SYSTEM INSTALLATION

1.3.2 PROVIDE LIGHTING FIXTURES IN ALL RACED WAYS EXCEPT AS INDICATED ON DRAWINGS.

ARTICLE 1.4 - GROUNDING BUS INSTALLATION

1.4.1 PROVIDE GROUNDING BUS: ROUTE ALONG SHORTEST AND ACCESSIBLE FOR INSPECTION AND MAINTENANCE EXCEPT WHERE INSTALLED AS BRANCH CIRCUITING CONCEALED IN WALLS.

PART 2 - PROJECT SPECIFICATIONS

ARTICLE 2.1 - GROUNDING CONDUCTORS INSTALLATION

2.1.2 PROVIDE GROUNDING CONDUCTORS: ROUTE ALONG SHORTEST AND ACCESSIBLE FOR INSPECTION AND MAINTENANCE EXCEPT WHERE INSTALLED AS BRANCH CIRCUITING CONCEALED IN WALLS.

ARTICLE 2.2 - EQUIPMENT INSTALLATION

2.2.1 PROVIDE EQUIPMENT INSTALLATION IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.3 - ELECTRICAL CABLES AND WIRING INSTALLATION

2.3.2 PROVIDE ELECTRICAL CABLES AND WIRING IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.4 - MOUNTING HEIGHTS INSTALLATION

2.4.1 PROVIDE MOUNTING HEIGHTS IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.5 - DISCONNECTING MEANS INSTALLATION

2.5.1 PROVIDE DISCONNECTING MEANS IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.6 - ELECTRONIC TIME SWITCH INSTALLATION

2.6.1 PROVIDE ELECTRONIC TIME SWITCH IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.7 - EQUALIZATION INSTALLATION

2.7.1 PROVIDE EQUALIZATION IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.8 - SURFACE RACEWAYS INSTALLATION

2.8.1 PROVIDE SURFACE RACEWAYS IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.9 - FLEXIBLE CONDUIT INSTALLATION

2.9.1 PROVIDE FLEXIBLE CONDUIT IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.10 - WATER SERVICE INSTALLATION

2.10.1 PROVIDE WATER SERVICE IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.11 - VIBRATING EQUIPMENT INSTALLATION

2.11.1 PROVIDE VIBRATING EQUIPMENT IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.12 - ELECTRICAL WORK INSTALLATION

2.12.1 PROVIDE ELECTRICAL WORK IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.13 - MOULDED CASE CIRCUIT BREAKERS INSTALLATION

2.13.1 PROVIDE MOULDED CASE CIRCUIT BREAKERS IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.14 - ELECTRICAL PANEL INSTALLATION

2.14.1 PROVIDE ELECTRICAL PANEL IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.15 - ELECTRICAL GROUNDING INSTALLATION

2.15.1 PROVIDE ELECTRICAL GROUNDING IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.16 - ELECTRICAL WIRING INSTALLATION

2.16.1 PROVIDE ELECTRICAL WIRING IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.17 - ELECTRICAL EQUIPMENT INSTALLATION

2.17.1 PROVIDE ELECTRICAL EQUIPMENT IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.18 - ELECTRICAL SYSTEMS INSTALLATION

2.18.1 PROVIDE ELECTRICAL SYSTEMS IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.19 - ELECTRICAL WORK INSTALLATION

2.19.1 PROVIDE ELECTRICAL WORK IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.20 - ELECTRICAL PANEL INSTALLATION

2.20.1 PROVIDE ELECTRICAL PANEL IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.21 - ELECTRICAL GROUNDING INSTALLATION

2.21.1 PROVIDE ELECTRICAL GROUNDING IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.22 - ELECTRICAL WIRING INSTALLATION

2.22.1 PROVIDE ELECTRICAL WIRING IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.23 - ELECTRICAL EQUIPMENT INSTALLATION

2.23.1 PROVIDE ELECTRICAL EQUIPMENT IN CONFORMITY WITH THIS PROJECT.

ARTICLE 2.24 - ELECTRICAL SYSTEMS INSTALLATION

2.24.1 PROVIDE ELECTRICAL SYSTEMS IN CONFORMITY WITH THIS PROJECT.
NEMA WD 6 CONFIGURATIONS L5-20P AND L5-20R, BODY CONNECTOR.

PROVIDE LUMINAIRES FROM A SINGLE MANUFACTURER FOR REPLACE DEVICES THAT HAVE BEEN IN TEMPORARY USE.

2.2 PROVIDE ENCLOSURES AND SCREWLESS TERMINATION DEVICES TO ALLOW FOR A COMBINATION OF ENERGIZED AND DE-ENERGIZED INSTALLATION.

3.1 PROVIDE EXTRA MATERIALS THAT MATCH PRODUCTS SUBMITTED.

3.3 INSTALL WIRING DEVICES AFTER ALL WALL OF THE WALL.

4.3 INSTALL WIRING DEVICES AFTER ALL WALL.

4.4 INSTALL WIRING DEVICES AFTER ALL WALL.

5.3 INSTALL WIRING DEVICES AFTER ALL WALL.

5.4 INSTALL WIRING DEVICES AFTER ALL WALL.

6.3 INSTALL WIRING DEVICES AFTER ALL WALL.

6.4 INSTALL WIRING DEVICES AFTER ALL WALL.

7.3 INSTALL WIRING DEVICES AFTER ALL WALL.

7.4 INSTALL WIRING DEVICES AFTER ALL WALL.

8.3 INSTALL WIRING DEVICES AFTER ALL WALL.

8.4 INSTALL WIRING DEVICES AFTER ALL WALL.

9.3 INSTALL WIRING DEVICES AFTER ALL WALL.

9.4 INSTALL WIRING DEVICES AFTER ALL WALL.

10.3 INSTALL WIRING DEVICES AFTER ALL WALL.

10.4 INSTALL WIRING DEVICES AFTER ALL WALL.

11.3 INSTALL WIRING DEVICES AFTER ALL WALL.

11.4 INSTALL WIRING DEVICES AFTER ALL WALL.

12.3 INSTALL WIRING DEVICES AFTER ALL WALL.

12.4 INSTALL WIRING DEVICES AFTER ALL WALL.

13.3 INSTALL WIRING DEVICES AFTER ALL WALL.

13.4 INSTALL WIRING DEVICES AFTER ALL WALL.

14.3 INSTALL WIRING DEVICES AFTER ALL WALL.

14.4 INSTALL WIRING DEVICES AFTER ALL WALL.

15.3 INSTALL WIRING DEVICES AFTER ALL WALL.

15.4 INSTALL WIRING DEVICES AFTER ALL WALL.

16.3 INSTALL WIRING DEVICES AFTER ALL WALL.

16.4 INSTALL WIRING DEVICES AFTER ALL WALL.

17.3 INSTALL WIRING DEVICES AFTER ALL WALL.

17.4 INSTALL WIRING DEVICES AFTER ALL WALL.

18.3 INSTALL WIRING DEVICES AFTER ALL WALL.

18.4 INSTALL WIRING DEVICES AFTER ALL WALL.

19.3 INSTALL WIRING DEVICES AFTER ALL WALL.

19.4 INSTALL WIRING DEVICES AFTER ALL WALL.

20.3 INSTALL WIRING DEVICES AFTER ALL WALL.

20.4 INSTALL WIRING DEVICES AFTER ALL WALL.

21.3 INSTALL WIRING DEVICES AFTER ALL WALL.

21.4 INSTALL WIRING DEVICES AFTER ALL WALL.

22.3 INSTALL WIRING DEVICES AFTER ALL WALL.

22.4 INSTALL WIRING DEVICES AFTER ALL WALL.

23.3 INSTALL WIRING DEVICES AFTER ALL WALL.

23.4 INSTALL WIRING DEVICES AFTER ALL WALL.

24.3 INSTALL WIRING DEVICES AFTER ALL WALL.

24.4 INSTALL WIRING DEVICES AFTER ALL WALL.

25.3 INSTALL WIRING DEVICES AFTER ALL WALL.

25.4 INSTALL WIRING DEVICES AFTER ALL WALL.

26.3 INSTALL WIRING DEVICES AFTER ALL WALL.

26.4 INSTALL WIRING DEVICES AFTER ALL WALL.

27.3 INSTALL WIRING DEVICES AFTER ALL WALL.

27.4 INSTALL WIRING DEVICES AFTER ALL WALL.

28.3 INSTALL WIRING DEVICES AFTER ALL WALL.

28.4 INSTALL WIRING DEVICES AFTER ALL WALL.

29.3 INSTALL WIRING DEVICES AFTER ALL WALL.

29.4 INSTALL WIRING DEVICES AFTER ALL WALL.

30.3 INSTALL WIRING DEVICES AFTER ALL WALL.

30.4 INSTALL WIRING DEVICES AFTER ALL WALL.

31.3 INSTALL WIRING DEVICES AFTER ALL WALL.

31.4 INSTALL WIRING DEVICES AFTER ALL WALL.

32.3 INSTALL WIRING DEVICES AFTER ALL WALL.

32.4 INSTALL WIRING DEVICES AFTER ALL WALL.

33.3 INSTALL WIRING DEVICES AFTER ALL WALL.

33.4 INSTALL WIRING DEVICES AFTER ALL WALL.

34.3 INSTALL WIRING DEVICES AFTER ALL WALL.

34.4 INSTALL WIRING DEVICES AFTER ALL WALL.
EXISTING SWITCHBOARD SPARE BUCKET/BUS STABS
EXISTING INTERIOR SWITCHBOARD LUGS
EXISTING SWITCHBOARD
EXISTING SWITCHBOARD

DRAWING NUMBER
E501
E501

DRAWING TITLE
P7. CURRENTLY FED FROM PANEL 'EM', CIRCUIT NUMBER #10,12.
P6. CURRENTLY FED FROM PANEL 'ET', CIRCUIT NUMBER #5,7.
P4. CURRENTLY FED FROM PANEL 'BH', CIRCUIT NUMBER #10,12.
P3. CURRENTLY FED FROM PANEL 'BK', CIRCUIT NUMBER #22,24.

DATE
10-25-2018
CHECKED

MWM
DRAWN

DAVID C. PRICE
PROFESSIONAL ENGINEER

POWER RISER CODE NOTES:
1. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
2. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
3. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
4. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
5. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
6. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
7. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
8. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
9. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.

POWER RISER CODE NOTES:
10. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
11. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
12. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
13. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
14. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
15. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
16. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
17. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
18. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
19. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
20. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.

ELECTRICAL RISER DIAGRAMS

1. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
2. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
3. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
4. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
5. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
6. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
7. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
8. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
9. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
10. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING BRANCH CIRCUIT BREAKER RATINGS AND LOCATION PRIOR TO INSTALLATION.
DUCTLESS UNIT SPLIT SYSTEM A/C PIPING

6. SENSING WATER IN PAN. MITSUBISHI

7. DUCTLESS UNIT SPLIT SYSTEM A/C WIRING

8. ON WALL 2' 0" ABOVE ROOM. PROVIDE 1/2" Ø COPPER PIPE IN BOILER MODEL SI1730-230 DISCONNECT EXCESS WATER LEVEL. MITSUBISHI STOP COOLING UPON SENSING DC P.

CONDENSATE SPACE

SEAL

ELECTRIC POWER WIRING.

ADDITIONAL LOW AMBIENT CONTROLS. WIND BAFFLE SHALL BE REQUIRED).

SYSTEMS TO DESIGN FLOW WITH REPORT SUBMITTED TO OWNER. BALANCING SHALL BE PERFORMED BY AN INDEPENDENT AFTER INSTALLATION AND EQUIPMENT IS PLACED IN OPERATION, HVAC CONTRACTOR IS RESPONSIBLE FOR BALANCING SYSTEMS DURING SUMMER SEASON AND HEATING SYSTEMS DURING WINTER SEASON, INCLUDING AT LEAST A PERIOD OF SYSTEMS DURING SUMMER SEASON AND HEATING SYSTEMS DURING WINTER SEASON, INCLUDING AT LEAST A PERIOD OF START UP AND PLACE ALL SYSTEMS IN OPERATION AND TAG ALL SWITCHES AND CONTROLS WITH PERMANENT LABELS.

GENERAL

SUBSTITUTE.

SUBMIT SHOP DRAWINGS FOR MECHANICAL EQUIPMENT, WITH ADEQUATE DETAILS AND SCALES TO CLEARLY SHOW ALL EQUIPMENT AND MATERIALS SHALL BE NEW, FREE OF DEFECTS AND U.L. LABELED.

NAMEPLATE AND HANDLING

THE SYSTEMS AS SHOWN ON THE DRAWINGS ARE DIAGRAMMATIC. CONFIRM ALL DIMENSIONS BY FIELD MEASUREMENT.

GENERAL INFORMATION

CONTRACTORS ESTIMATING THIS WORK SHALL VISIT THE SITE AND FULLY INFORM THEMSELVES OF THE NATURE OF THE WORK TO BE PERFORMED AND TO THE SPECIFICATIONS. ADEQUATE DETAILS AND SCALES TO CLEARLY SHOW ALL EQUIPMENT AND MATERIALS SHALL BE NEW, FREE OF DEFECTS AND U.L. LABELED.

THE INDOOR UNIT FAN SHALL BE HIGH PERFORMANCE, DOUBLE INLET, FORWARD CURVE, DIRECT DRIVE SIROCCO.

DIFFUSER, REGISTER & GRILLE UNIT DESIGNATION W/ CFM

THE INDOOR UNIT FAN SHALL BE HIGH PERFORMANCE, DOUBLE INLET, FORWARD CURVE, DIRECT DRIVE SIROCCO.

DIFFUSER, REGISTER & GRILLE UNIT DESIGNATION W/ CFM

THE INDOOR UNIT FAN SHALL BE HIGH PERFORMANCE, DOUBLE INLET, FORWARD CURVE, DIRECT DRIVE SIROCCO.

DIFFUSER, REGISTER & GRILLE UNIT DESIGNATION W/ CFM

THE INDOOR UNIT FAN SHALL BE HIGH PERFORMANCE, DOUBLE INLET, FORWARD CURVE, DIRECT DRIVE SIROCCO.

DIFFUSER, REGISTER & GRILLE UNIT DESIGNATION W/ CFM

THE INDOOR UNIT FAN SHALL BE HIGH PERFORMANCE, DOUBLE INLET, FORWARD CURVE, DIRECT DRIVE SIROCCO.
1. INSTALL NEW EVAPORATOR UNIT SURFACE MOUNT ON CEILING TO AVOID LIGHTS. HANG FROM STRUCTURE ABOVE. RUN 3/8" NYLON TUBING FROM PUMPED CONDENSATE DRAIN TO FLOOR DRAIN IN ADJACENT BOILER ROOM. SEE PIPING DETAIL ON DRAWING M-001 FOR PIPING.

2. MOUNT CONDENSING UNIT ON KNEE BRACE SUPPORTS FROM WALL. SEE DETAIL DRAWING M-001.