Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 01/06/14

MECHANICAL FIRST FLOOR PLAN
1/4"=1'-0"
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GENERAL NOTES

A. ALL OUTDOOR AIR INTAKES BY MECHANICAL EQUIPMENT SHALL HAVE A MINIMUM 10'-0" HORIZONTAL CLEARANCE FROM THE DISCHARGE OF ANY EXHAUST FAN, COMBUSTION EXHAUST OR PLUMBING VENT.

B. PROVIDE VIBRATION ISOLATION DEVICES AND FLEXIBLE DUCT/ PIPING CONNECTIONS TO ALL MOVING MACHINERY NOT INTERNALLY ISOLATED.

C. ALL DUCT DIMENSIONS SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS.

D. THE MECHANICAL CONTRACTOR SHALL COORDINATE ALL DUCT AND DIFFUSER LOCATIONS WITH LIGHT FIXTURES AS WELL AS SPRINKLER PIPING AND HEADS (WHERE INCLUDED IN THE PROJECT) FOR A COMPLETE INSTALLATION.

E. LOCATIONS FOR THERMOSTATS AND REMOTE SENSORS SHALL BE FIELD COORDINATED TO AVOID INTERFERENCE WITH WALL-MOUNTED DECOR OR PROXIMITY TO HEAT PRODUCING EQUIPMENT.

F. ALL HVAC AND RESTROOM EXHAUST DUCTWORK SHALL BE INSTALLED AS HIGH AS POSSIBLE UNDER THE ROOF STRUCTURE.

G. ALL RECTANGULAR, ROUND, AND FLEXIBLE DUCTWORK SHALL BE SIZED AS SHOWN ON THESE DRAWINGS; AND SHALL BE FABRICATED AND INSTALLED ACCORDING TO THE MOST RECENTLY PUBLISHED SMACNA STANDARDS. ALL JOINTS, SEAMS, AND CONNECTIONS MUST BE SECURELY FASTENED & SEALED BY APPROVED METHODS.

H. ANY FLEXIBLE DUCTS SHALL BE INSTALLED IN CONCEALED SPACES ONLY. THE MAXIMUM ALLOWABLE LENGTH OF FLEXIBLE DUCT SHALL BE 5'-0". ALL FLEXIBLE DUCTS SHALL BE CONNECTED TO BRANCH RUNS AND FITTINGS WITH A PANDUIT-TYPE BAND, AND SHALL NOT BE ATTACHED DIRECTLY TO THE AIR DEVICE COLLAR.

I. SUPPLY, RETURN, RESTROOM EXHAUST, AND MAKEUP AIR DUCT CONSTRUCTION SHALL BE GALVANIZED STEEL. GAUGES, SWAY BRACING AND SUSPENSION SHALL CONFORM TO SMACNA STANDARDS. SEAL ALL SEAMS AND JOINTS AIR AND WATERTIGHT. FLEXIBLE ALUMINUM DUCTWORK OR FIBERGLASS DUCTBOARD IS NOT ALLOWED (UNO).

J. PITCH ALL HORIZONTAL GREASE AND CONDENSATE DUCTWORK UNIFORMLY BACK TOWARDS THE RESPECTIVE HOOD OR APPLIANCE AT A MINIMUM 1/4" PER FOOT (NOT TO EXCEED 50'-0").

K. THE WALL MOUNTED BACK-SHELF TYPE KITCHEN EXHAUST HOODS SHALL BE INSTALLED AT 5'-11" AFF (UNO). COORDINATE THE INSTALLATION AND PLACEMENT OF THE EXHAUST HOODS IN THE FIELD. FIELD CUT HOOD WRAPPER TO BE 2" ABOVE FINISHED CEILING.

L. REFER TO MANUFACTURER SHEETS FOR THE HOOD CONTROL WIRING DIAGRAM FOR OPERATION OF THE KITCHEN HOOD EQUIPMENT.

M. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING THE AIR FILTERS AT THE ROOFTOP UNITS WITH 2" THICK PLEATED MERV 7 THROW AWAY TYPE AIR FILTERS AT THE COMPLETION OF CONSTRUCTION AND PRIOR TO AIR BALANCE AND STORE TURNOVER.

N. ROOF STRUCTURE SHALL BE REINFORCED (BY GC) AS REQUIRED, TO SUPPORT ADDITIONAL WEIGHT OF ROOFTOP EQUIPMENT.

KEYED NOTES

1. EXISTING SUPPLY AND RETURN DUCTS DOWN FROM THE RTU CONNECTIONS AND TRANSITION THROUGH THE ROOF AS SHOWN. INSTALL COMPLETE WITH FLEXIBLE CONNECTIONS AT EQUIPMENT.
2. SUSPEND NEW AHU AS HIGH AS POSSIBLE BELOW STRUCTURE AND ABOVE LIGHTING FIXTURES. INSULATED RETURN AIR PLENUM TO BE FULL SIZE OF R/A OPENING. TRANSITION PLENUM TO R/A GRILLE AS SHOWN.
3. EXTEND REFRIGERANT PIPING TO ROOF. CONTRACTOR TO PATCH ROOF PENETRATION FOR A WEATHER/WATER TIGHT SEAL.
4. EXISTING EXPOSED DUCTWORK TO REMAIN. CONNECT TO NEW 5-TON RTU. CONTRACTOR SHALL VERIFY THAT EXISTING DUCTWORK IS SIZED PROPERLY.
5. RETURN GRILLE AIR QUANTITY LISTED IS FOR PARTIAL RETURN DURING STANDARD OPERATING HOURS. RETURN DUCTS ARE SIZED FOR FULL RETURN DURING NIGHT SETBACK CONDITIONS. REFER TO SHEET M2.0 FOR AIR BALANCE REPORT ON DESIGN AIRFLOW RATES.
6. FACTORY AVAILABLE SMOKE DETECTOR CAPABLE OF SHUTTING DOWN THE RESPECTIVE MECHANICAL UNIT UPON ACTIVATION.
7. WALL MOUNTED THERMOSTAT SHALL BE MOUNTED AT 48" AFF. COORDINATE PLACEMENT WITH WALL DECOR AND EQUIPMENT. FIELD VERIFY WITH THE OWNER'S REPRESENTATIVE FOR THE FINAL LOCATION PRIOR TO INSTALLATION.
8. EXISTING CEILING MOUNTED EXHAUST FAN TO REMAIN. RESTROOM FAN SHALL BE INTERLOCKED WITH RESPECTIVE LIGHT SWITCH FOR SIMULTANEOUS OPERATION.
9. PROVIDE CEILING MOUNTED CABINET FAN FOR EXHAUST. ROUTE THE EXHAUST DUCT TO EXISTING WALL PENETRATION. RESTROOM FAN SHALL BE INTERLOCKED WITH RESPECTIVE LIGHT SWITCH FOR SIMULTANEOUS OPERATION.
10. ROUTE GREASE EXHAUST DUCT UP FROM HOOD COLLAR THRU ROOF TO EXHAUST FAN AS SHOWN. GREASE EXHAUST DUCT SHALL BE THE SAME SIZE AS THE HOOD COLLAR. FIELD VERIFY ANY REQUIRED TRANSITIONS OR OFFSETS OF EXHAUST DUCT FROM COMBUSTIBLE MATERIALS TO MAINTAIN THE MINIMUM CLEARANCES REQUIRED PER APPLICABLE CODE(S) AND FIRE WRAP MANUFACTURER'S INSTRUCTIONS.
11. ROUTE MAKEUP AIR DUCTWORK DOWN FULL SIZE FROM THE UNIT CONNECTION THROUGH THE ROOF AS SHOWN. PROVIDE FLEXIBLE CONNECTION AND TRANSITION AS REQUIRED.
12. ROUTE MAKEUP AIR DUCTWORK TO PERFORATED SUPPLY PLENUM COLLAR CONNECTION. MAKEUP AIR DUCT CONNECTION SHALL BE THE SAME SIZE AS THE PLENUM COLLAR.
13. WALL MOUNTED FIRE SUPPRESSION CABINET TO BE FURNISHED WITH THE HOOD PACKAGE, AND INSTALLED BY THE MECHANICAL CONTRACTOR ALONG WITH THE COMPLETE HOOD ASSEMBLY. FINAL PIPING AND LINKAGE CONNECTIONS TO BE MADE BY THE EXHAUST HOOD FIRE SUPPRESSION SUBCONTRACTOR.
14. MANUAL PULL STATION FOR KITCHEN HOOD FIRE SUPPRESSION SYSTEM ACTIVATION AND GAS SUPPLY SHUT-OFF TO BE FURNISHED BY THE FIRE SUPPRESSION SUBCONTRACTOR AND INSTALLED BY THE PLUMBING CONTRACTOR. THE ELECTRICAL CONTRACTOR SHALL PROVIDE A RECESSED JUNCTION BOX AND CONDUIT FOR PULL STATION LINKAGE. FIRE SUPPRESSION SUBCONTRACTOR SHALL VERIFY APPROVED LOCATION WITH THE LOCAL AUTHORITY AND COORDINATE THE COMPLETE INSTALLATION WITH ALL OTHER TRADES.
15. AIR DEVICE IN HARD LID CEILING SHALL BE INSTALLED COMPLETE WITH OPPOSED BLADE DAMPER FOR MANUAL VOLUME ADJUSTMENT.
16. ROUTE MANUFACTURER AVAILABLE CONCENTRIC VENT COMBUSTION AIR INTAKE/ EXHAUST PIPING FROM WATER HEATERS TO THE EXTERIOR WALL. INSTALL WITH THE MINIMUM ELBOWS AND OFFSETS AS NECESSARY FOR A COMPLETE INSTALLATION PER THE MANUFACTURER'S REQUIREMENTS. TERMINATE THE CONCENTRIC VENT COMBUSTION FLUES AT MANUFACTURER AVAILABLE WALL MOUNTED VENT CAPS WITH BIRD SCREEN. CAPS SHALL BE FURNISHED BY THE PLUMBING CONTRACTOR AND INSTALLED BY THE MECHANICAL CONTRACTOR. FIELD COORDINATE FINAL MOUNTING LOCATIONS AND ELEVATION WITH EXISTING CONDITIONS.

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DATE	DESCRIPTION
11/18/13	PERMIT ISSUE

△	DATE	DESCRIPTION

SHEET TITLE:
MECHANICAL FIRST FLOOR PLAN

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M1.0

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