

Easley Associates Architects
 223 N. Independence
 Enid, OK

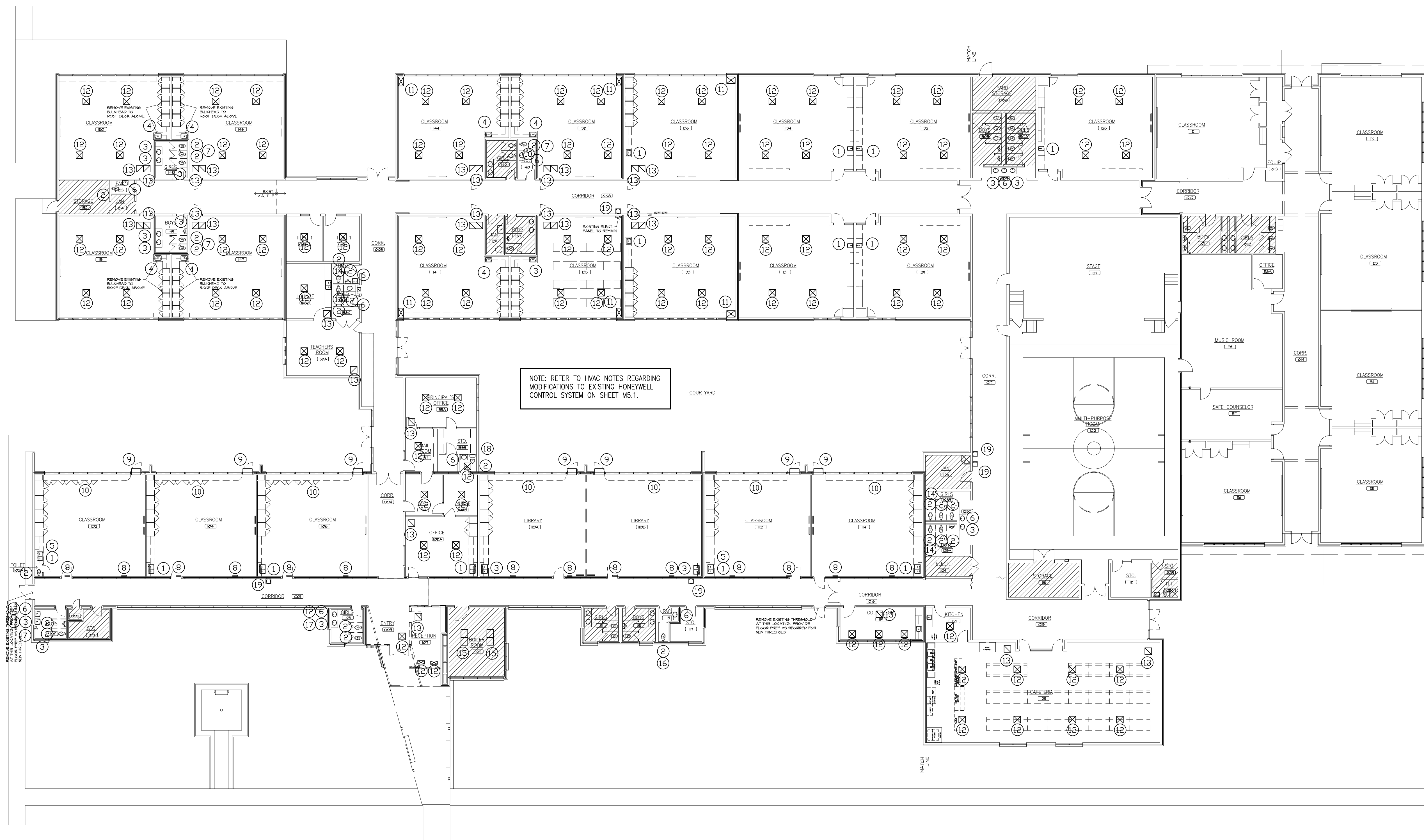


**2012 ALTERATIONS TO
 MONROE ELEMENTARY SCHOOL**
 400 WEST COTTONWOOD
 INDEPENDENT SCHOOL DISTRICT NO. 57
 500 SOUTH INDEPENDENCE ENID, OKLAHOMA



DATE: 02/04/2012
 REV.:

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MECHANICAL DEMO KEYNOTES

- 1 EXISTING SINK AND TRIM TO BE REMOVED. EXISTING SANITARY, VENT, CW AND HW SUPPLY ROUGH-IN TO REMAIN FOR CONNECTION TO NEW SINK.
- 2 EXISTING PLUMBING FIXTURE (WATER CLOSET OR URINAL) AND TRIM TO BE REMOVED. EXISTING SANITARY, VENT AND CW SUPPLY ROUGH-IN TO REMAIN FOR CONNECTION TO NEW FIXTURE. WHERE POSITION OF NEW FIXTURE IS SHIFTED, ADJUST PIPING AS REQUIRED. ANY NEW PIPING EXTENSION TO BE CONCEALED.
- 3 EXISTING PLUMBING FIXTURE AND TRIM TO BE REMOVED. EXISTING SANITARY, VENT, CW AND HW SUPPLY ROUGH-IN TO BE REMOVED AND CAPPED IN WALL, FLOOR OR CEILING SO THAT ANY EXISTING PIPING REMAINING IN OPERATION IS COMPLETELY CONCEALED.
- 4 EXISTING SINK AND TRIM TO BE REMOVED. EXISTING SANITARY, VENT, CW AND HW SUPPLY ROUGH-IN TO REMAIN FOR CONNECTION TO NEW SINK. EXTEND PIPING IN NEW MILLWORK FROM EXISTING ROUGH-IN TO NEW FIXTURE CONNECTIONS AT NEW FIXTURE LOCATION.
- 5 POINT OF USE TANK TYPE WATER HEATER TO BE REMOVED.
- 6 EXISTING LAVATORY AND TRIM TO BE REMOVED. EXISTING SANITARY, VENT AND CW SUPPLY ROUGH-IN TO REMAIN FOR CONNECTION TO NEW FIXTURE. WHERE POSITION OF NEW FIXTURE IS SHIFTED, ADJUST PIPING AS REQUIRED. ANY NEW PIPING EXTENSION TO BE CONCEALED.
- 7 EXISTING FLOOR DRAIN GRATE/CLEANOUT COVER, ETC. TO BE REMOVED FOR REPLACEMENT WITH NEW GRATE OR COVER. COORDINATE FINAL INSTALLATION AND ELEVATION OF NEW GRATE/COVER WITH NEW FLOOR FINISH.
- 8 EXISTING SIDEWALL GRILLE TO BE REMOVED. CAP EXISTING DUCTWORK BEHIND WALL.
- 9 EXISTING THRU-WALL HVAC UNIT TO BE REMOVED.
- 10 EXISTING MILLWORK TO BE REMOVED BY OTHERS. MECHANICAL CONTRACTOR TO DEMOLISH AND REMOVE ANY EXISTING BOILER PIPING, RADIATORS, SUPPLY DUCTWORK, AND ASSOCIATED COMPONENTS WITHIN THE EXISTING MILLWORK.
- 11 EXISTING MILLWORK TO BE REMOVED BY OTHERS. MECHANICAL CONTRACTOR TO DEMOLISH AND REMOVE EXISTING FURNACE CASING, RETURN GRILLE, SUPPLY DUCTWORK, AND ASSOCIATED COMPONENTS. EXISTING OUTSIDE AIR LOUVER TO BE ABANDONED AND SEALED.
- 12 EXISTING CEILING DIFFUSER TO BE REMOVED. EXISTING BRANCH DUCT TO REMAIN FOR RE-INSTALLATION AND CONNECTION OF NEW CEILING DIFFUSER. VERIFY EXACT LOCATION AND SIZE OF EXISTING. COORDINATE WITH NEW CEILING.
- 13 EXISTING RETURN AIR GRILLE TO BE REMOVED. EXISTING DUCTWORK TO REMAIN FOR RE-INSTALLATION AND CONNECTION OF NEW RETURN GRILLE. VERIFY EXACT LOCATION AND SIZE OF EXISTING. COORDINATE WITH NEW CEILING.
- 14 EXISTING TOILET CEILING EXHAUST GRILLE TO BE REMOVED. EXISTING BRANCH DUCT TO REMAIN FOR RE-INSTALLATION AND CONNECTION OF NEW RETURN GRILLE IN NEW CEILING. VERIFY EXACT LOCATION AND SIZE OF EXISTING. COORDINATE WITH NEW CEILING.
- 15 EXISTING TWINNED FURNACE UNITS. ONE EXISTING UNIT TO REMAIN IN OPERATION. DISCONNECT CONTROLS FROM ONE TWINNED FURNACE AND REMOVE TO LEAVE ONLY ONE FURNACE OPERATIONAL. ABANDONED FURNACE TO BE REMOVED AND RETURNED TO OWNER FOR STORAGE. MODIFY EXISTING DUCTWORK AS REQUIRED TO ALLOW CONNECTION OF EXISTING FURNACE REMAINING IN OPERATION TO EXISTING DUCTWORK. PROVIDE NEW TRANSITIONS AS REQUIRED FOR PROPER AIRFLOW.
- 16 EXISTING WALL MOUNTED EXHAUST FAN AND WALL CAP TO BE REMOVED.
- 17 EXISTING WALL MOUNTED EXHAUST FAN TO BE REMOVED. EXISTING DUCT AND WALL CAP TO REMAIN FOR RE-CONNECTION TO NEW FAN.
- 18 EXISTING CEILING-EXHAUST FAN TO BE REMOVED. EXISTING BRANCH DUCT TO REMAIN FOR RE-CONNECTION TO NEW FAN.

OVERALL MECHANICAL DEMO PLAN
 1/16" = 1'-0"
 NORTH



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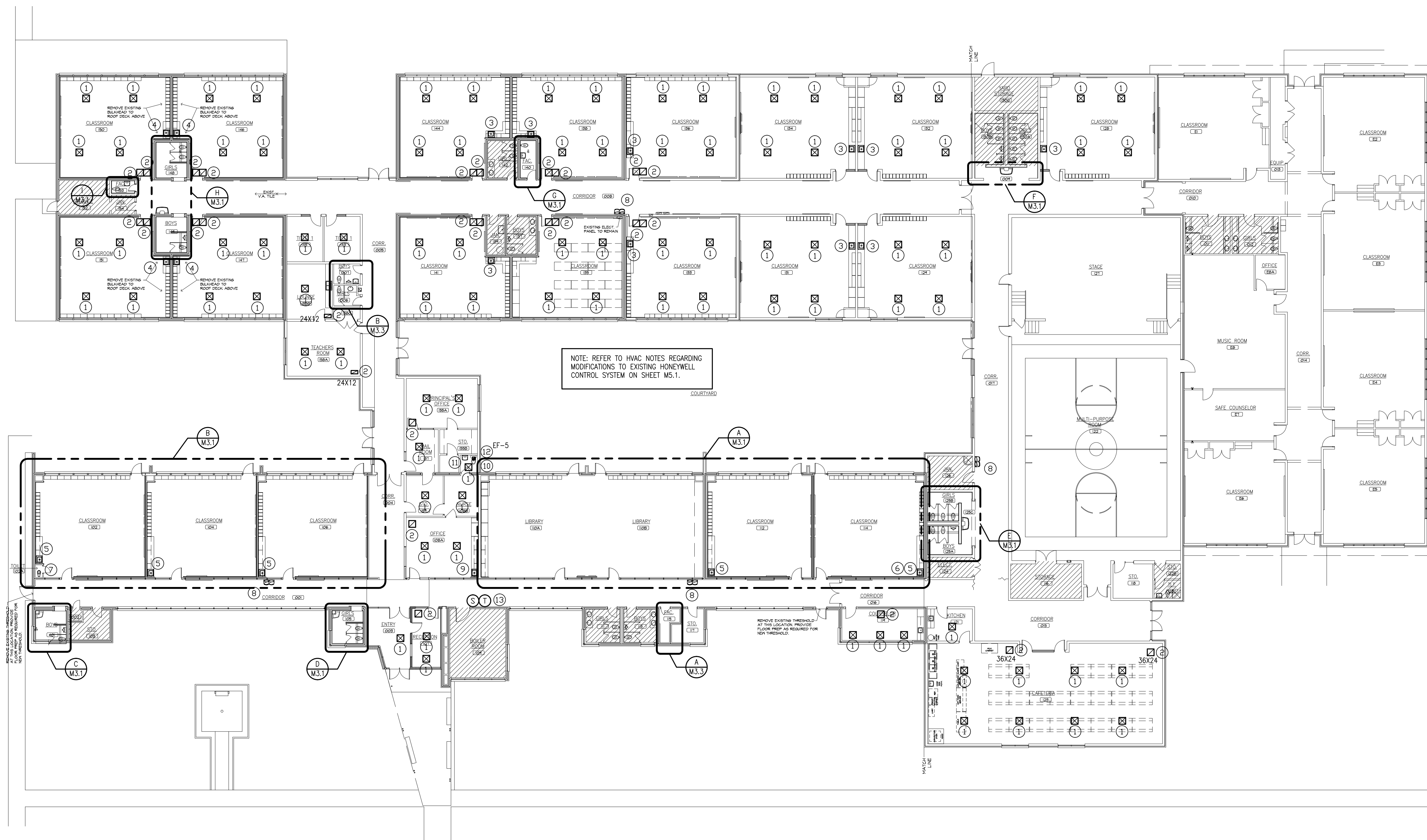


2012 ALTERATIONS TO
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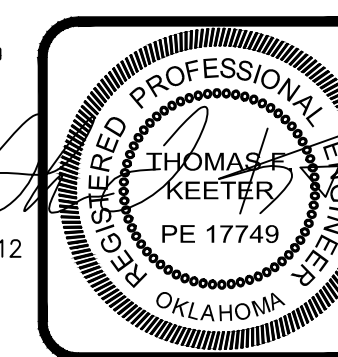


MECHANICAL KEYNOTES

- 1 NEW EXISTING CEILING DIFFUSER CD-1, TO BE RECONNECTED TO EXISTING BRANCH DUCT. VERIFY EXACT LOCATION AND DUCT SIZE OF EXISTING. COORDINATE WITH NEW CEILING. MAINTAIN EXISTING AIR BALANCE.
- 2 NEW RETURN AIR GRILLE RAG-1, 24X24 UNLESS NOTED OTHERWISE, TO BE RECONNECTED TO EXISTING DUCTWORK. VERIFY EXACT LOCATION AND SIZE OF EXISTING DUCTWORK. COORDINATE WITH NEW CEILING.
- 3 INSTALL NEW SINK (FIXTURE S-1) IN NEW MILLWORK. CONNECT TO EXISTING SANITARY, VENT, CW AND HW SUPPLY ROUGH-IN. EXTEND EXISTING PIPING AS REQUIRED WHERE NEW LOCATION OF FIXTURE IS SHIFTED FROM EXISTING LOCATION. ALL PIPING IS TO BE CONCEALED.
- 4 INSTALL NEW SINK (FIXTURE S-1) IN NEW MILLWORK. CONNECT TO EXISTING SANITARY, VENT, CW AND HW SUPPLY ROUGH-IN. EXTEND PIPING IN NEW MILLWORK FROM EXISTING ROUGH-IN TO NEW FIXTURE CONNECTIONS AT NEW FIXTURE LOCATION.
- 5 INSTALL NEW SINK (FIXTURE S-1) IN NEW MILLWORK. CONNECT TO EXISTING SANITARY, VENT, CW AND HW SUPPLY ROUGH-IN. PROVIDE NEW BELOW COUNTER ELECTRIC WATER HEATER. EEMAX SP3012 120V/1PH, 3.0 KW, 25A.
- 6 EXISTING SANITARY DOES NOT DRAIN PROPERLY. CLEAN AND OPEN OR REPAIR LINE AS REQUIRED TO RESTORE FULL DRAIN FUNCTION.
- 7 INSTALL NEW WATER CLOSET FIXTURE (WC-2) IN EXISTING CLOSET. RE-CONNECT NEW FIXTURE TO EXISTING ROUGH-IN PIPING.
- 8 INSTALL NEW ELECTRIC WATER COOLER ON EXISTING WALL. CONNECT TO EXISTING SANITARY, VENT, CW AND HW SUPPLY ROUGH-IN. EXTEND EXISTING PIPING AS REQUIRED WHERE NEW LOCATION OF FIXTURE IS SHIFTED FROM EXISTING LOCATION. ALL PIPING IS TO BE CONCEALED.
- 9 INSTALL NEW SINK (FIXTURE S-2) IN NEW MILLWORK. CONNECT TO EXISTING SANITARY, VENT, CW AND HW SUPPLY ROUGH-IN. PROVIDE NEW BELOW COUNTER ELECTRIC WATER HEATER. EEMAX SP3012 120V/1PH, 3.0 KW, 25A.
- 10 INSTALL NEW WATER CLOSET (FIXTURE WC-1) AT EXISTING TOILET. CONNECT TO EXISTING SANITARY AND VENT ROUGH-IN. EXTEND NEW CW SUPPLY TO NEAREST AVAILABLE ADEQUATELY SIZED EXISTING PIPING AS REQUIRED. ALL PIPING IS TO BE CONCEALED.
- 11 INSTALL NEW LAV (FIXTURE L-1) ON EXISTING WALL. CONNECT TO EXISTING SANITARY, VENT, CW AND HW SUPPLY ROUGH-IN.
- 12 NEW CEILING EXHAUST FAN TO BE RECONNECTED TO EXISTING DUCTWORK. VERIFY EXACT LOCATION AND SIZE OF EXISTING DUCTWORK. COORDINATE WITH NEW CEILING.
- 13 NEW HONEYWELL SENSOR AND T-STAT FOR FURNACES IN BOILER ROOM SERVING SOUTH CORRIDOR. PROVIDE ACRYLIC LOCKING COVER.

A OVERALL MECHANICAL PLAN
M2.1 1/16" = 1'-0"



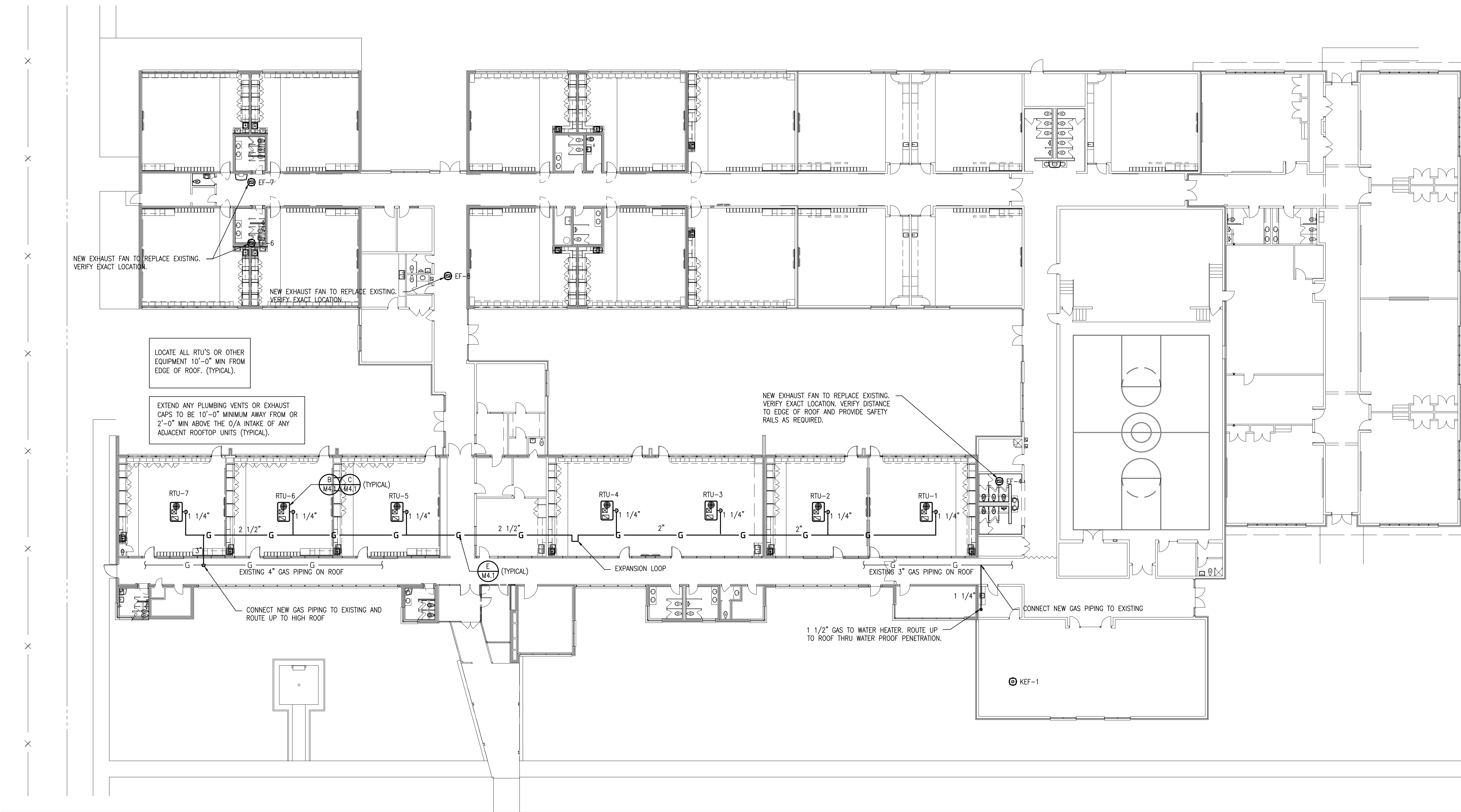


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LOCATE ALL RTU'S OR OTHER EQUIPMENT 10'-0" MIN FROM EDGE OF ROOF. (TYPICAL).

EXTEND ANY PLUMBING VENTS OR EXHAUST CAPS TO BE 10'-0" MINIMUM AWAY FROM OR 2'-0" MIN ABOVE THE O/A INTAKE OF ANY ADJACENT ROOFTOP UNITS (TYPICAL).

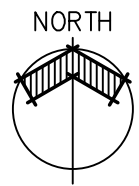
NEW EXHAUST FAN TO REPLACE EXISTING. VERIFY EXACT LOCATION. VERIFY DISTANCE TO EDGE OF ROOF AND PROVIDE SAFETY RAILS AS REQUIRED.

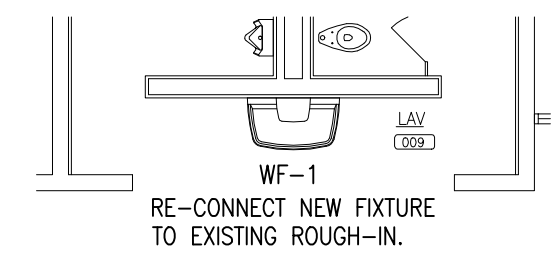
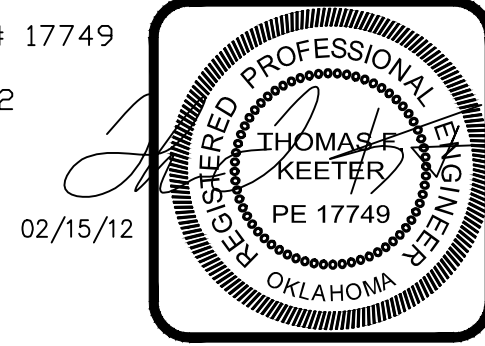
CONNECT NEW GAS PIPING TO EXISTING AND ROUTE UP TO HIGH ROOF

1 1/2" GAS TO WATER HEATER. ROUTE UP TO ROOF THRU WATER PROOF PENETRATION.

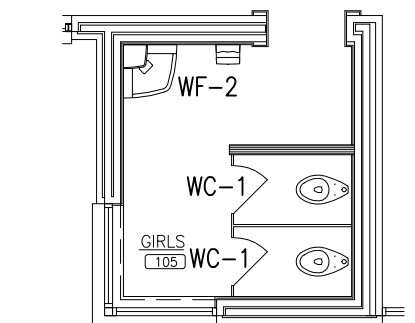
CONNECT NEW GAS PIPING TO EXISTING

OVERALL MECHANICAL ROOF PLAN
 1/16" = 1'-0"



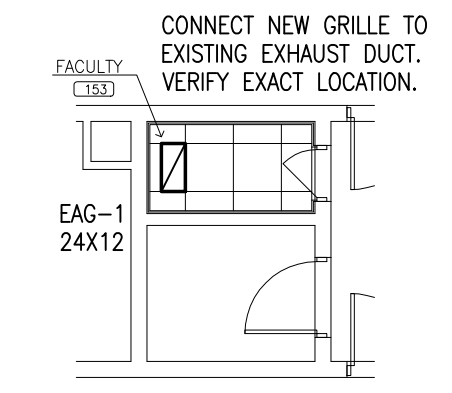
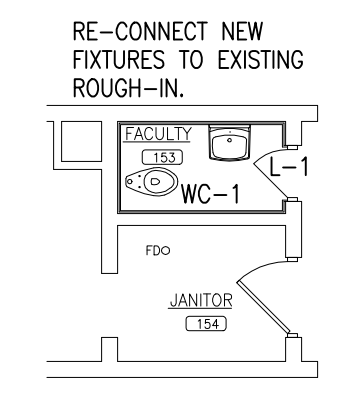


F PARTIAL PLUMBING PLAN RM 009
 M3.1 1/8" = 1'-0"

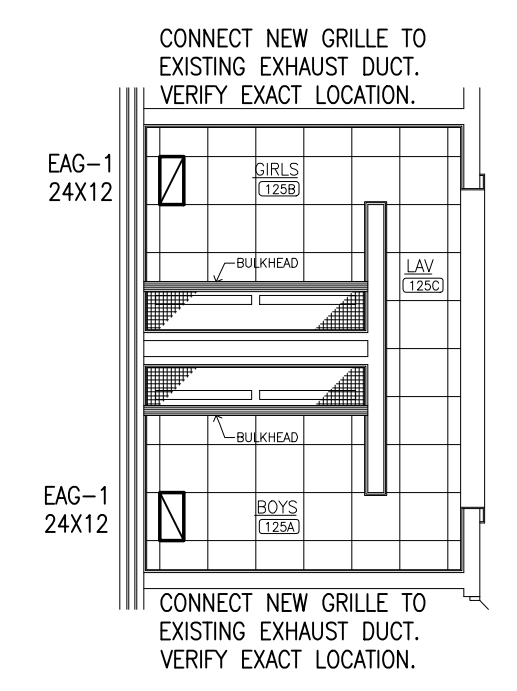
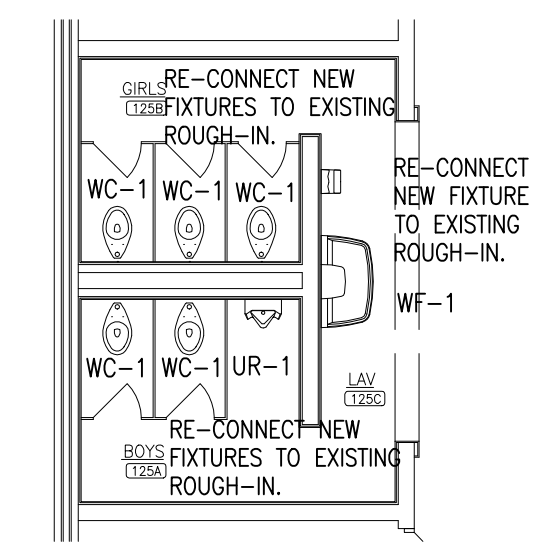


D PARTIAL PLUMBING/HVAC PLANS RM 105
 M3.1 1/8" = 1'-0"

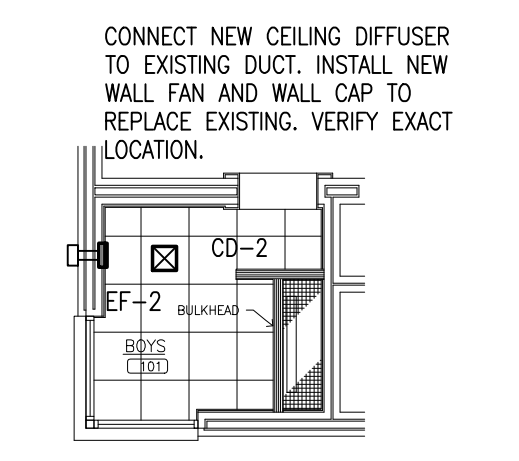
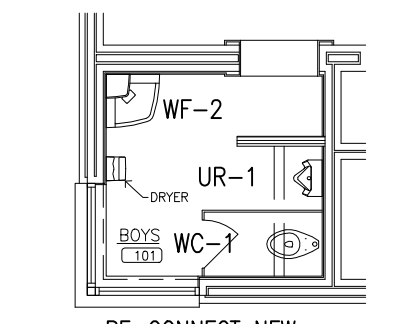
CONNECT NEW CEILING DIFFUSER TO EXISTING DUCT. INSTALL NEW WALL FAN AND WALL CAP TO REPLACE EXISTING. VERIFY EXACT LOCATION.



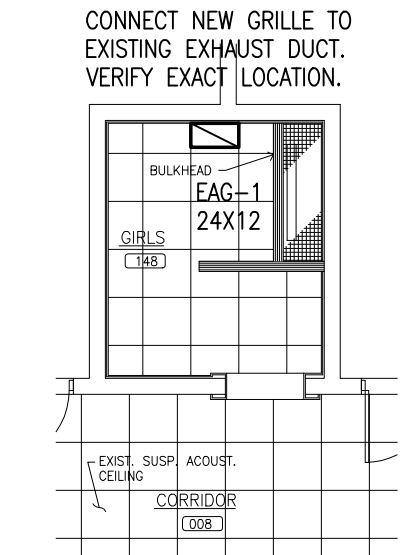
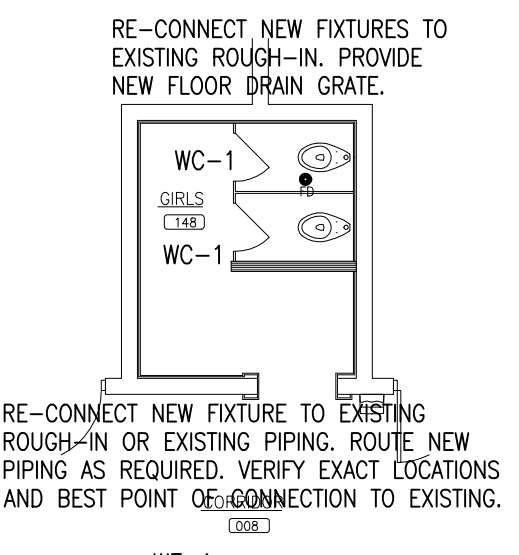
I PARTIAL PLUMBING/HVAC PLANS RM 153
 M3.1 1/8" = 1'-0"



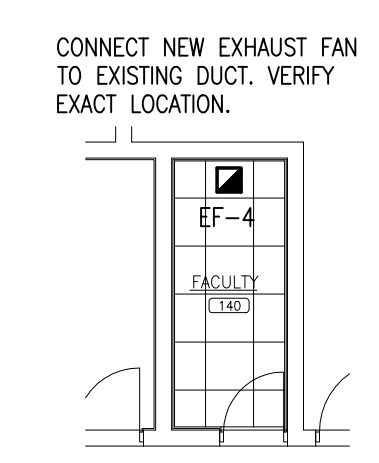
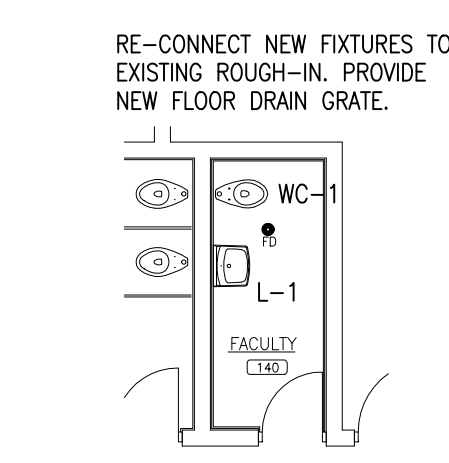
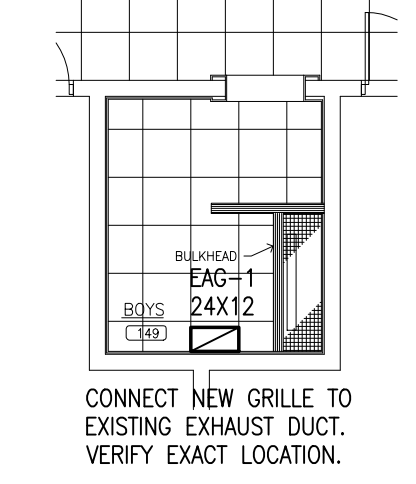
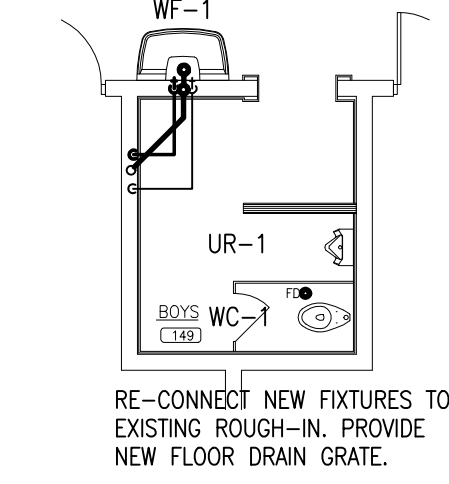
E PARTIAL PLUMBING/HVAC PLANS RM 125A,B
 M3.1 1/8" = 1'-0"



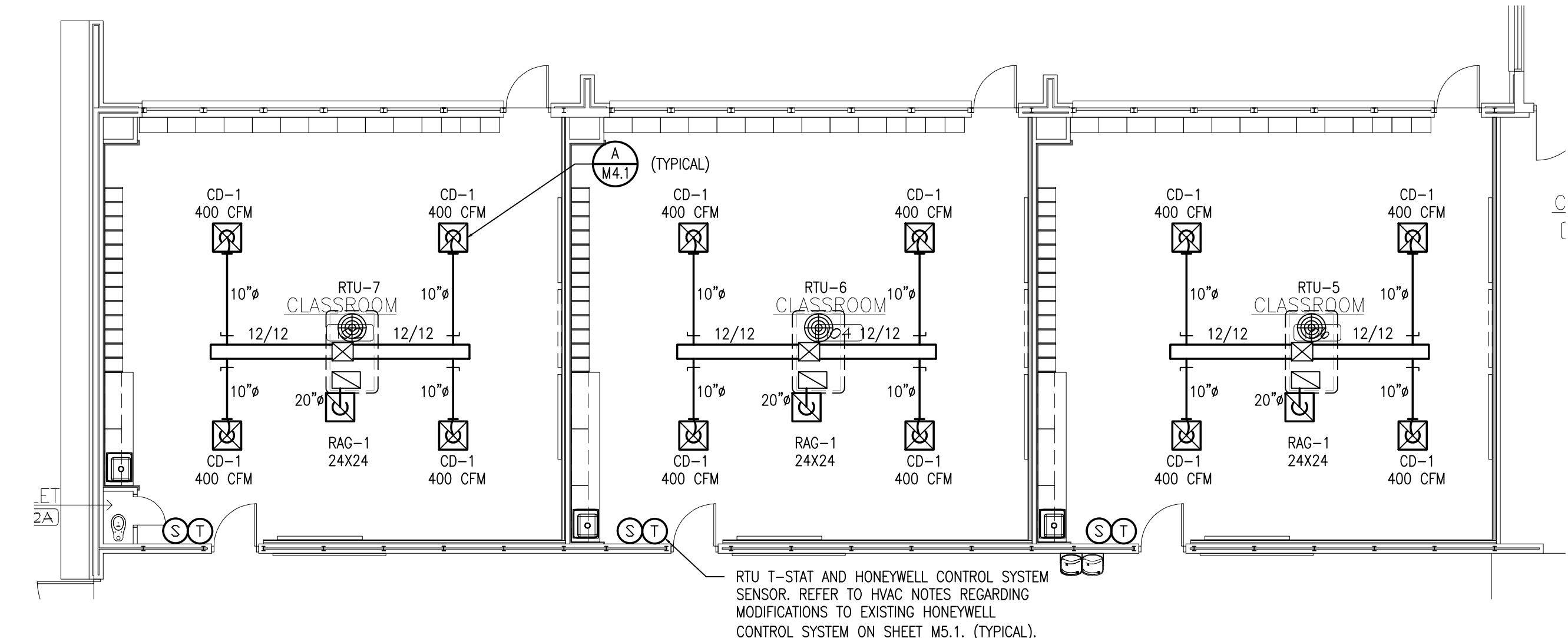
C PARTIAL PLUMBING/HVAC PLANS RM 101
 M3.1 1/8" = 1'-0"



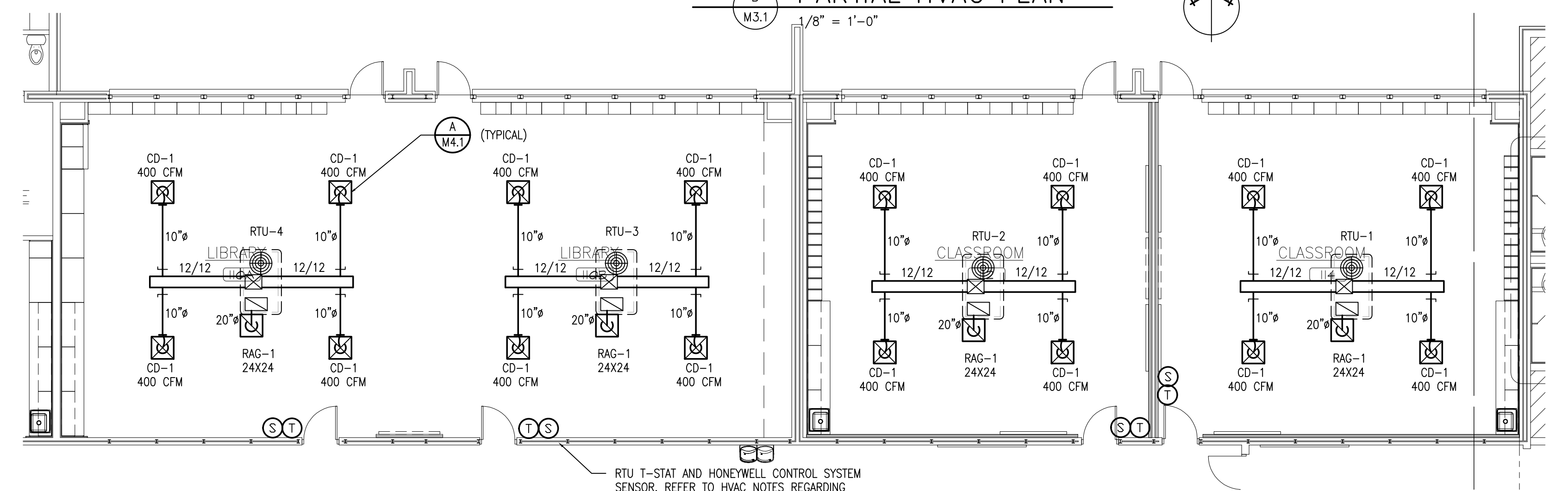
H PARTIAL PLUMBING/HVAC PLANS RMS 148/149
 M3.1 1/8" = 1'-0"



G PARTIAL PLUMBING/HVAC PLANS RM 140
 M3.1 1/8" = 1'-0"

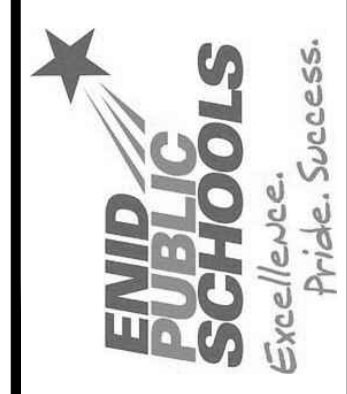


B PARTIAL HVAC PLAN
 M3.1 1/8" = 1'-0"

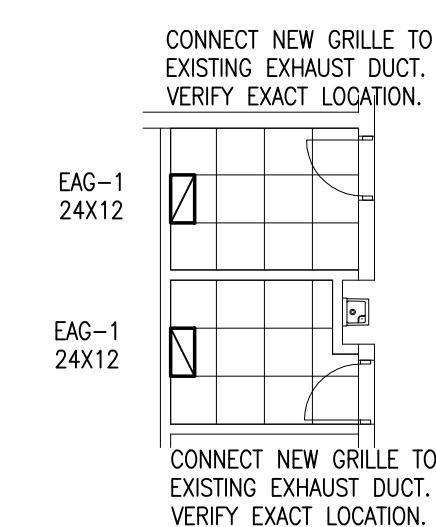
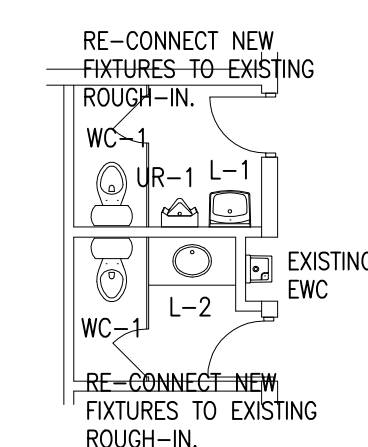


A PARTIAL HVAC PLAN
 M3.1 1/8" = 1'-0"

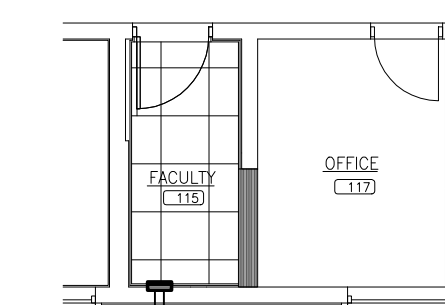
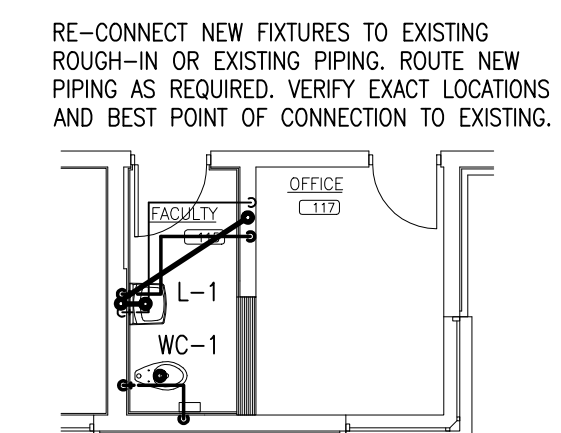
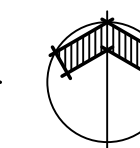
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 500 SOUTH INDEPENDENCE END, OKLAHOMA



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B PARTIAL PLUMBING/HVAC PLANS RMS 006/007
 M3.3 1/8" = 1'-0"



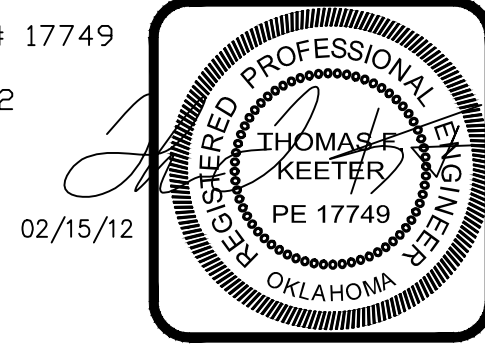
A PARTIAL PLUMBING/HVAC PLANS RM 115
 M3.3 1/8" = 1'-0"



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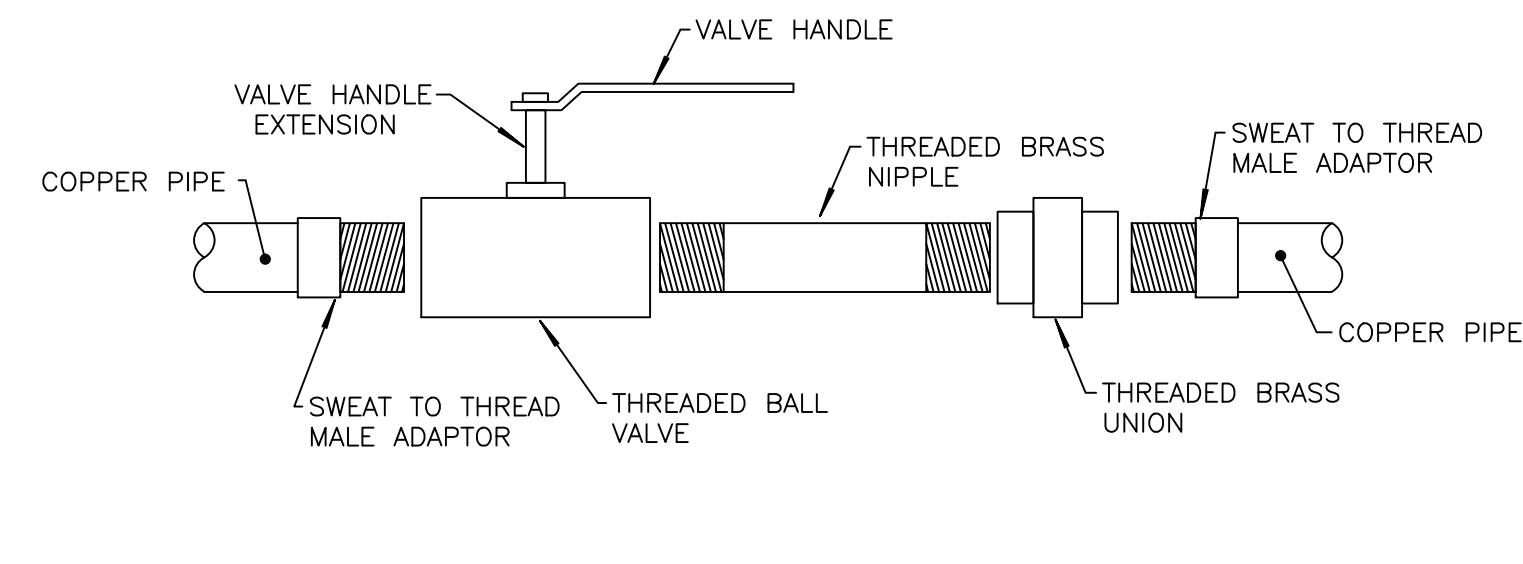
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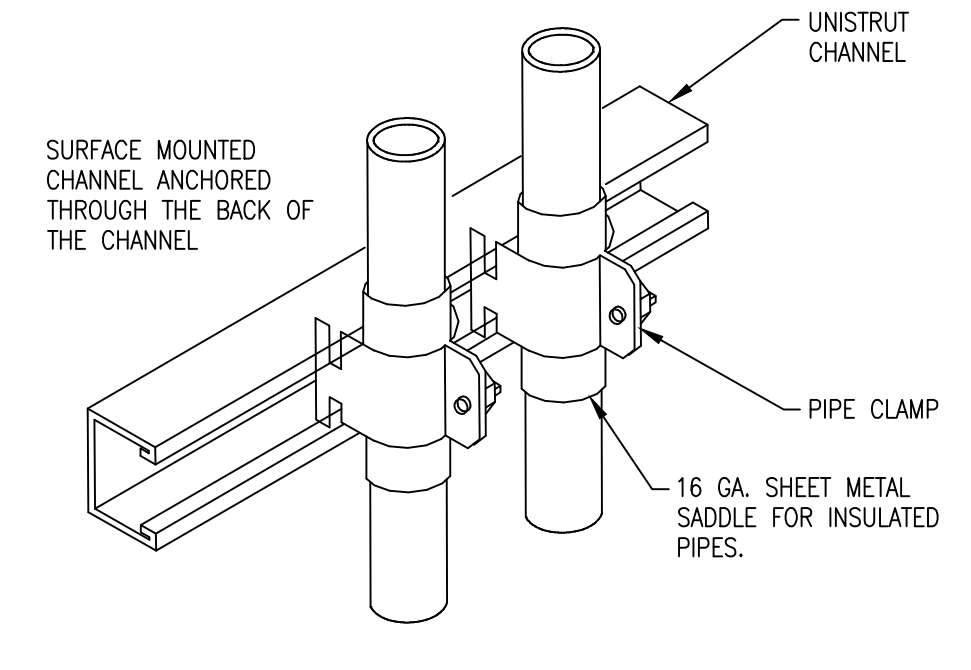
NOTE: DETAILS SHOWN ARE "TYPICAL" AND APPLY THROUGHOUT THE PROJECT WHETHER SPECIFICALLY REFERENCED IN EACH APPLICABLE LOCATION OR NOT.

PLUMBING SYMBOLS	
	SANITARY SEWER
	ACID WASTE
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	NATURAL GAS ABOVE GROUND
	NATURAL GAS BELOW GRADE
	PLUMBING VENT
	ELBOW - TURNED DOWN
	ELBOW - TURNED UP
	TEE - TURNED DOWN
	TEE - TURNED UP
	GATE VALVE
	BALL VALVE
	CHECK VALVE
	SHUT-OFF VALVE IN VERTICAL LINE
	GAS PRESSURE REGULATOR
	T & P RELIEF VALVE
	FLOOR DRAIN
	FLOOR CLEANOUT
	YARD CLEANOUT
	FREEZE PROOF WALL HYDRANT
	WALL CLEANOUT

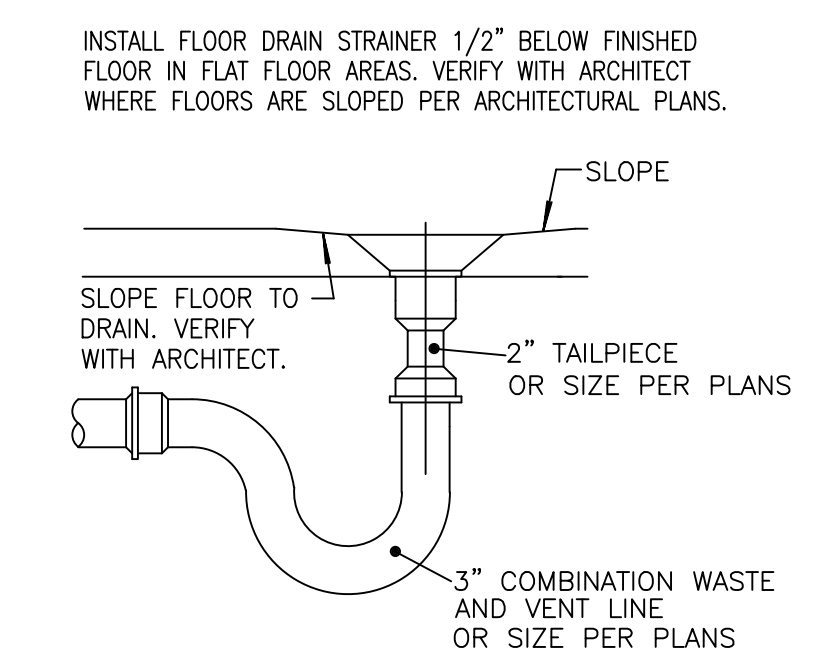
HVAC SYMBOLS	
	SUPPLY DUCT (UP, DOWN)
	RETURN/EXHAUST DUCT (UP, DOWN)
	ROUND DUCT (UP, DOWN)
	ROUND DUCT
	ROUND FLEXIBLE DUCT (1-LINE)
	BRANCH DUCT W/BALANCE DAMPER (1-LINE, 2-LINE)
	RECT BRANCH DUCT W/CONICAL TAP (1-LINE, 2-LINE)
	ROUND BRANCH DUCT W/CONICAL TAP (1-LINE, 2-LINE)
	SUPPLY GRILL
	RETURN GRILL
	SIDE WALL GRILL
	DUCT SIZE - ROUND, RECTANGULAR (INSIDE DIA.)
	THERMOSTAT, SENSOR, HUMIDISTAT, SMOKE DETECTOR, FIRESTAT
	GAS PRESSURE REGULATOR
	NATURAL GAS
	CONDENSATE DRAIN LINE
	FIRE DAMPER
	MOTORIZED DAMPER



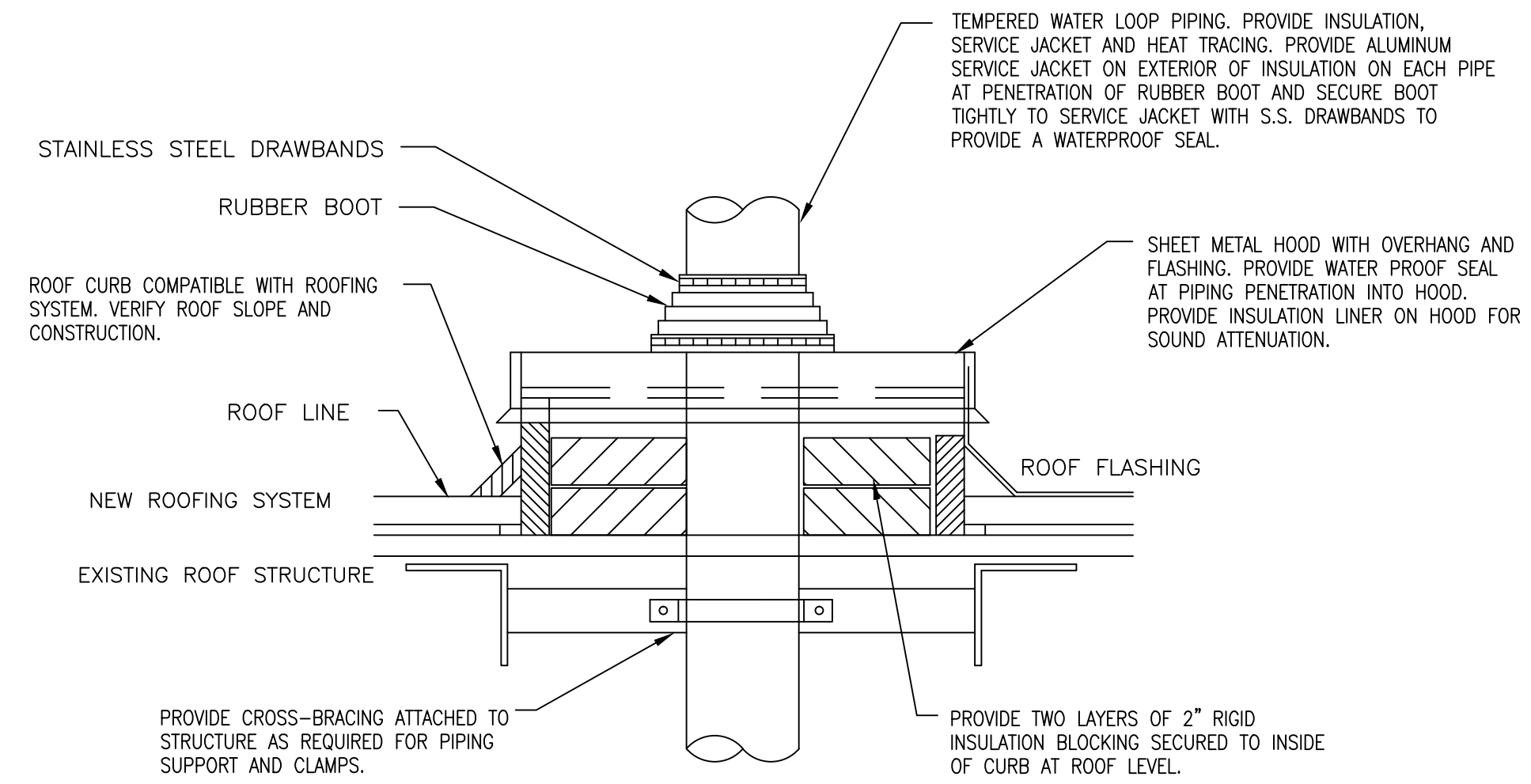
I TYPICAL VALVE ASSEMBLY DETAIL
N.T.S.



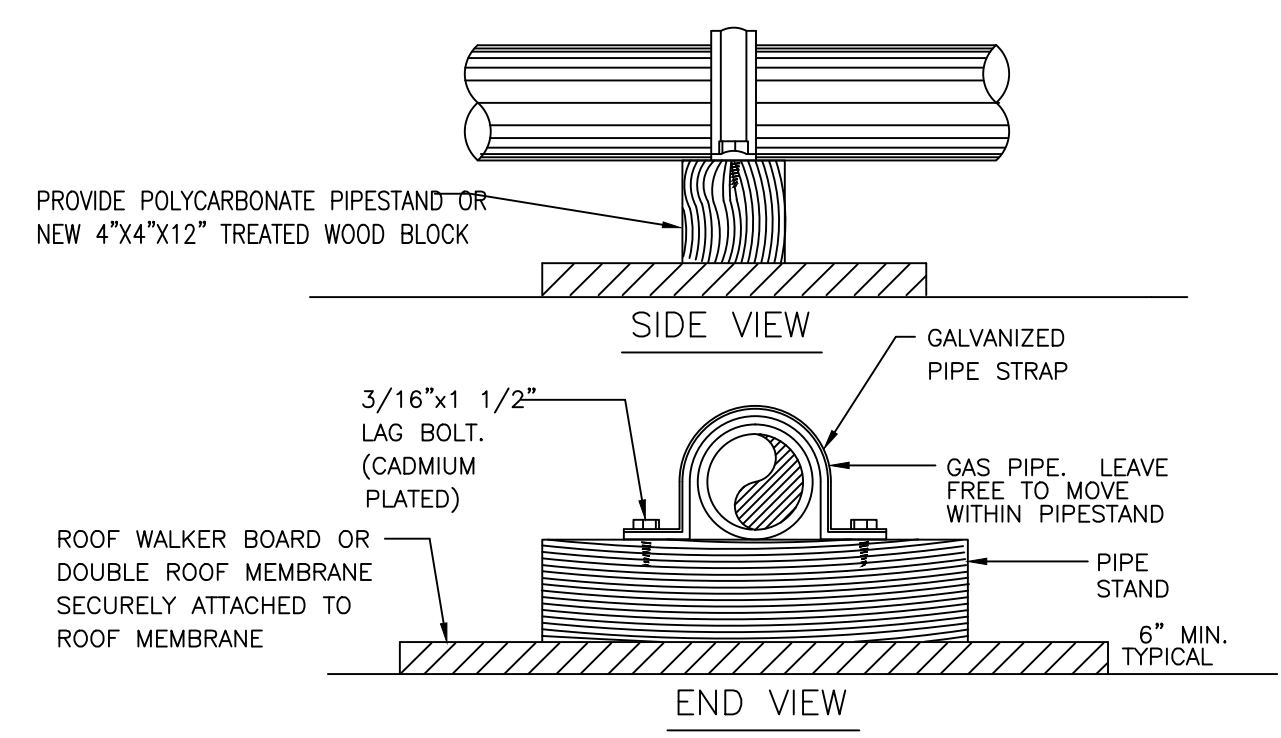
H TYPICAL WALL PIPING SUPPORTS
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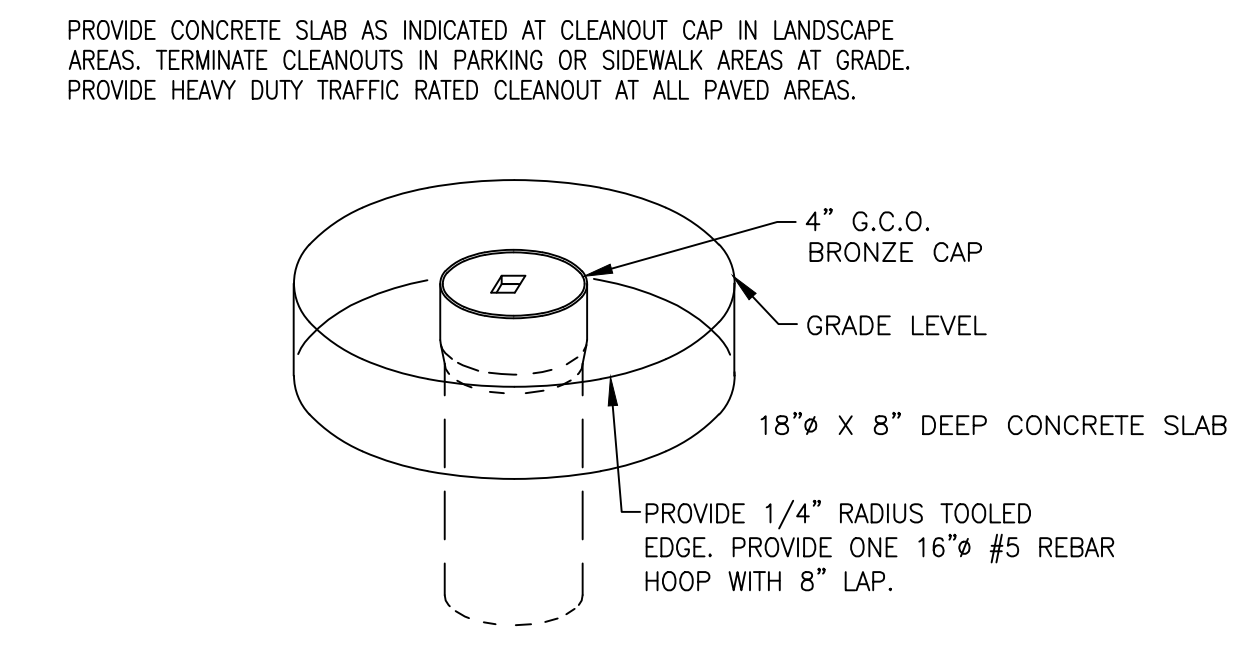
G TYPICAL FLOOR DRAIN PIPING DETAIL
N.T.S.



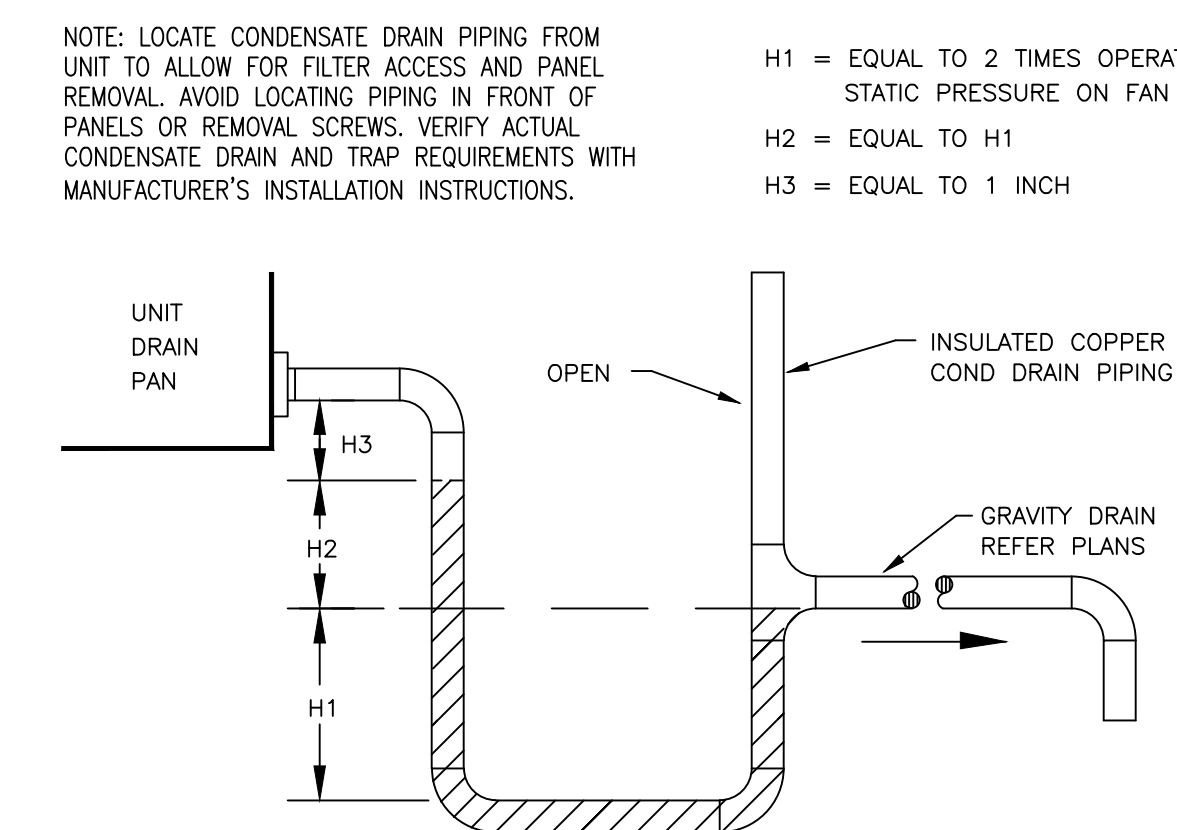
F TYPICAL PIPING ROOF PENETRATION
N.T.S.



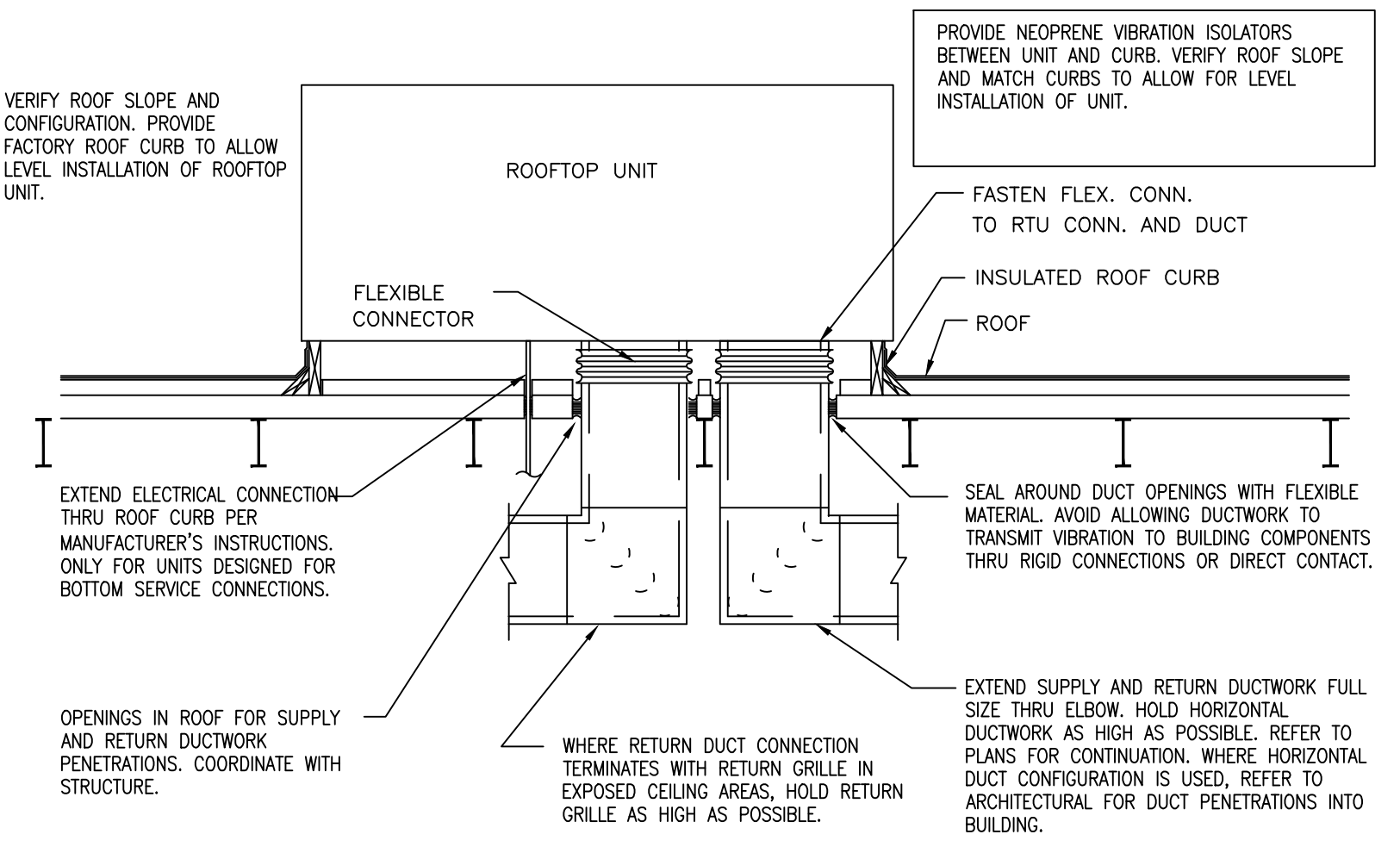
E TYPICAL PIPING ROOF SUPPORTS
N.T.S.



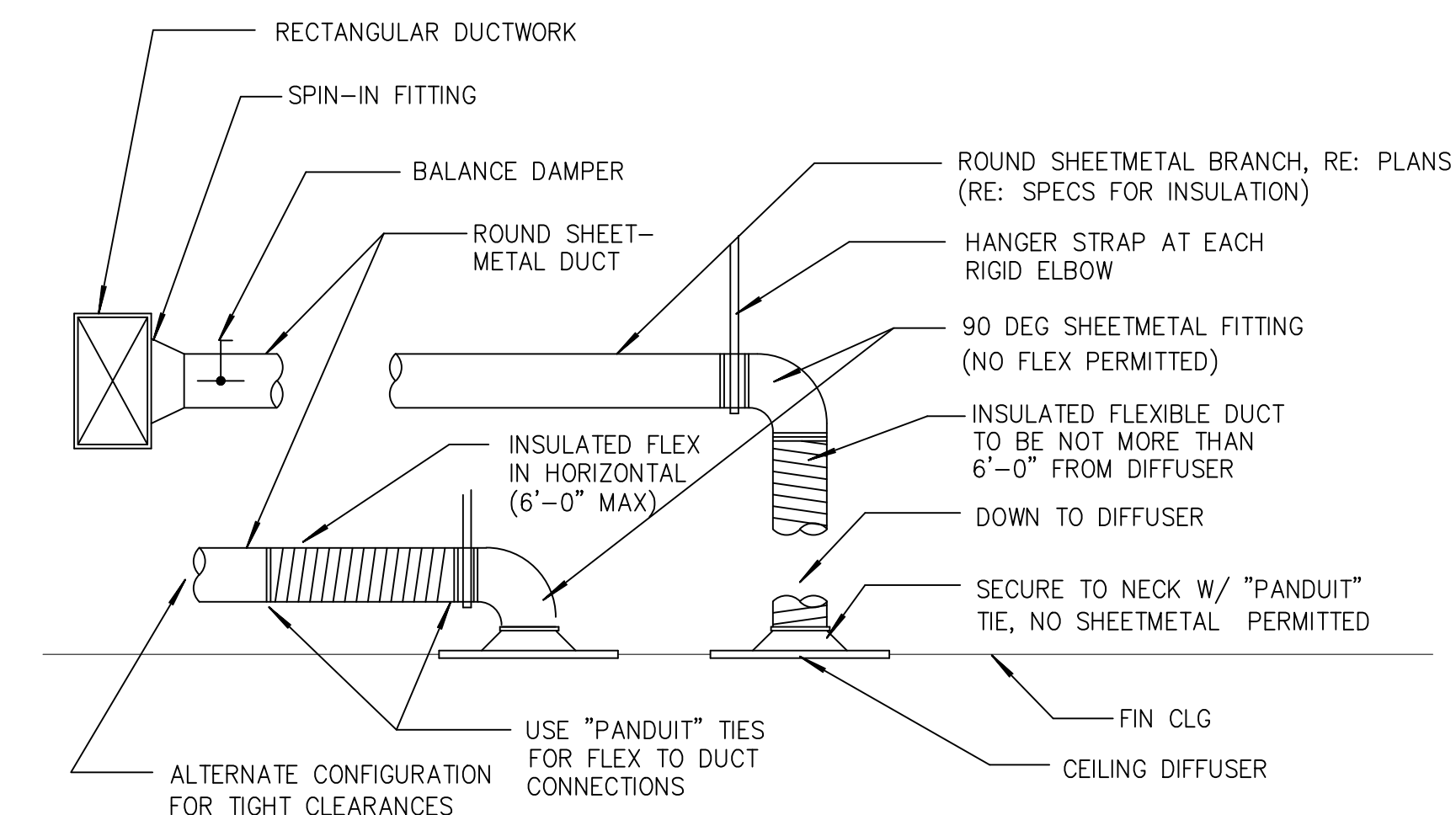
D TYPICAL GRADE CLEANOUT DETAIL
N.T.S.



C TYPICAL CONDENSATE DRAIN
N.T.S.



B TYPICAL RTU DUCT CONNECTION
N.T.S.



A BRANCH DUCT DETAIL-LAY-IN CEILING
N.T.S.

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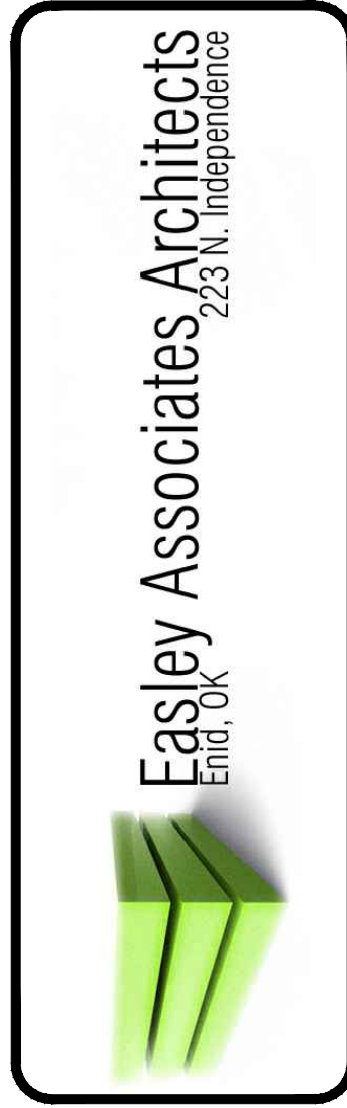
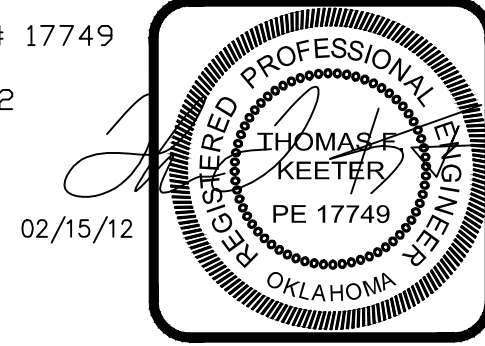
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ENID PUBLIC SCHOOLS
Excellence. Pride. Success.

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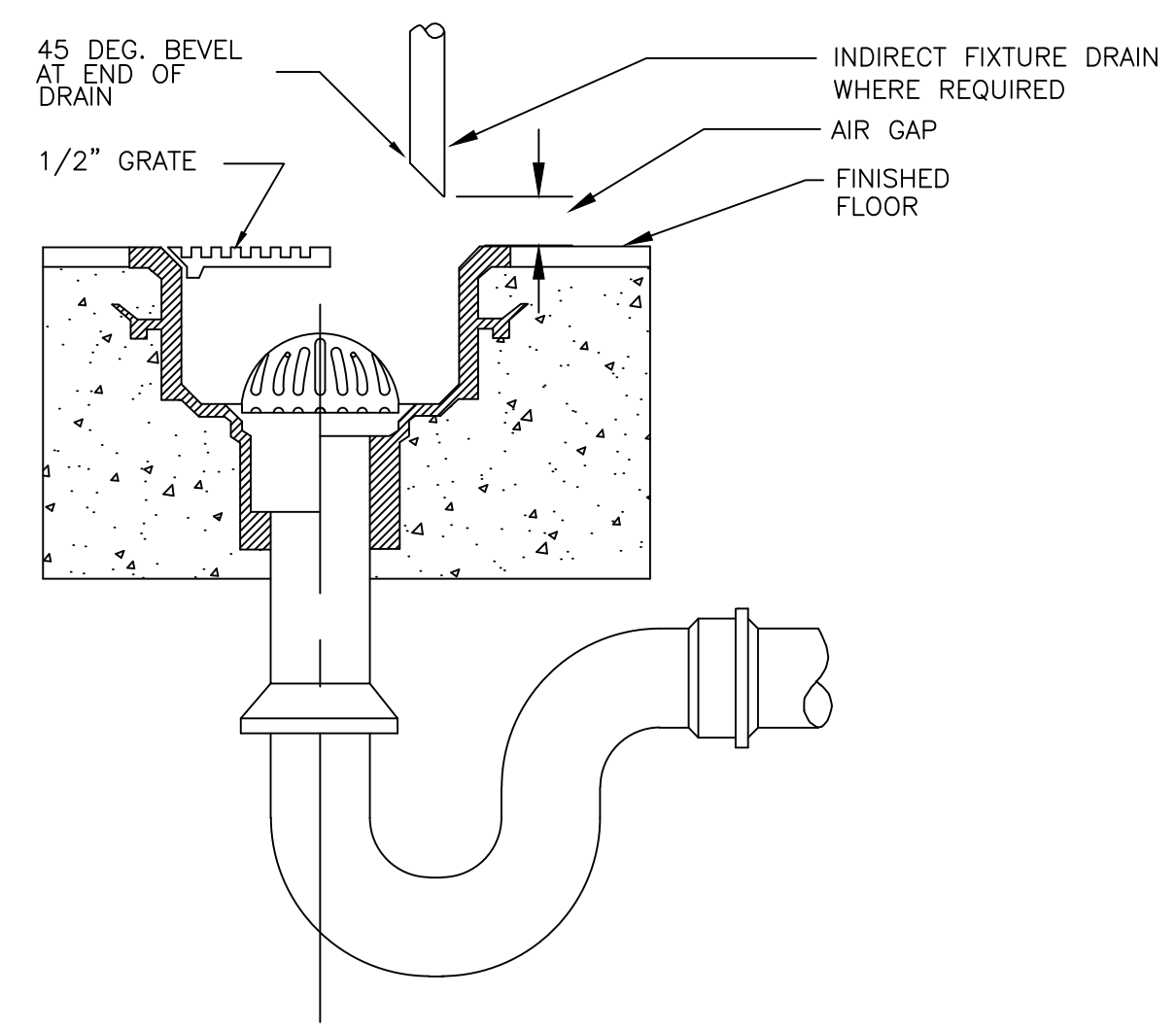
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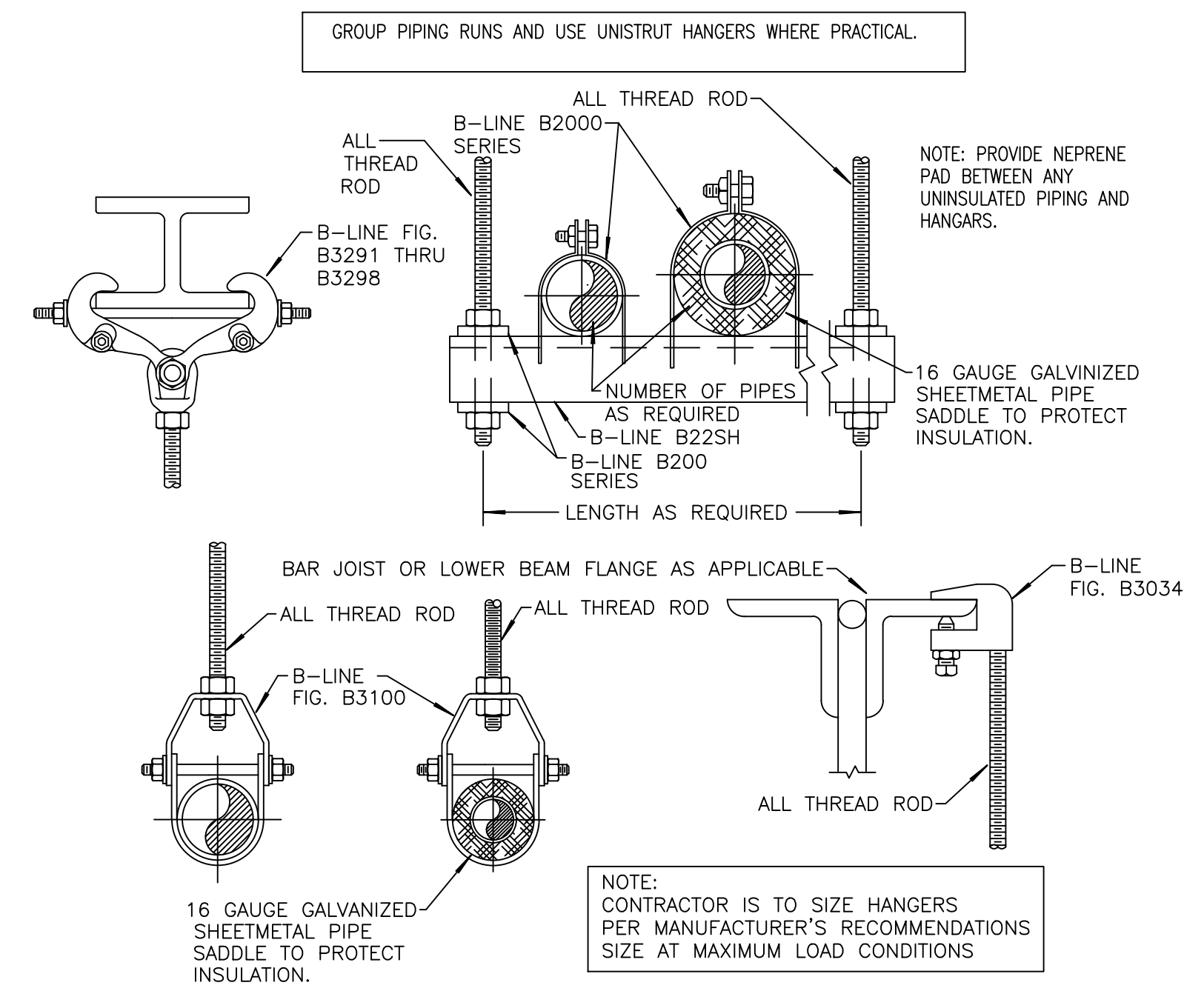
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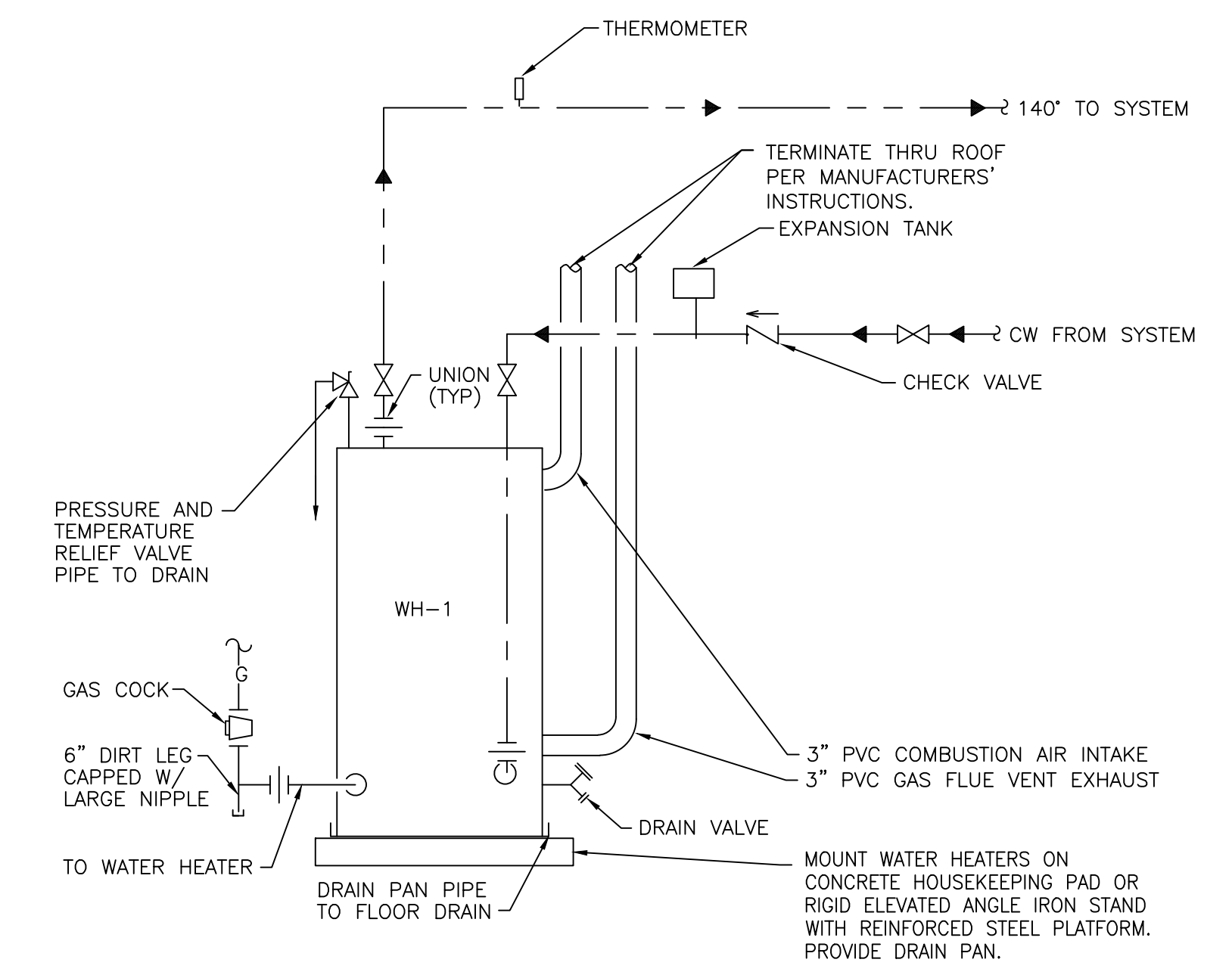
C TYPICAL FLOOR SINK PIPING DETAIL
N.T.S.



B TYPICAL PIPE HANGER DETAIL
N.T.S.



A GAS WATER HEATER DETAIL
N.T.S.





02/15/12

GENERAL NOTES:

1. THE DRAWINGS ARE INTENDED TO COVER THE LAYOUT & DESIGN OF THE WORK & ARE NOT TO BE SCALED FOR EXACT MEASUREMENTS.
2. THE MECHANICAL WORK INCLUDES COMPLETE AND FUNCTIONAL SYSTEMS OF PLUMBING, FIRE PROTECTION, HEATING, VENTILATING, AIR CONDITIONING, EXHAUST & TEMPERATURE CONTROL.
3. THE CONTRACTOR SHALL VISIT THE SITE BEFORE SUBMITTING A BID & SHALL VERIFY ALL DIMENSIONS & LOCATIONS PRIOR TO PURCHASING COMPONENTS OR COMMENCING WORK.
4. ANY CONNECTION TO, OR RELOCATION OF, EXISTING UTILITIES REQUIRING DISCONNECTION OF NORMAL UTILITY SERVICES SHALL BE SCHEDULED & COORDINATED WITH THE OWNER OR HIS REPRESENTATIVE. PREMIUM TIME SHALL BE INCLUDED.
5. IN NO CASE SHALL THE UTILITIES BE LEFT DISCONNECTED AT THE END OF A WORKDAY WITHOUT AUTHORIZATION FROM THE OWNER.
6. PROVIDE ALL EXCAVATION NECESSARY FOR INSTALLATION OF THE WORK INCLUDED. COMPLY WITH ALL APPLICABLE & GOVERNING SAFETY REGULATIONS INCLUDING OSHA.
7. CONTRACTOR SHALL INCLUDE ALL NECESSARY CUTTING & PATCHING OF WALLS, FLOORS, CEILINGS & ROOFS FOR INSTALLATION. NO STRUCTURAL MEMBERS SHALL BE CUT WITHOUT PERMISSION FROM THE ARCHITECT.
8. CONTRACTOR SHALL REPAIR ANY EXISTING FACILITIES DAMAGED DUE TO THE OPERATIONS OF THE CONTRACTOR.
9. PERFORMANCE, WORKMANSHIP & MATERIAL SHALL COMPLY WITH GOVERNING CODES, STATE STATUTES, CITY ORDINANCES & REGULATIONS OF REGULATORY BODIES HAVING JURISDICTION.
10. CONTRACTOR SHALL PROCURE & PAY FOR ALL REQUIRED PERMITS & LICENSES.
11. GUARANTEE EACH NEW SYSTEM & EACH ELEMENT THEREOF AGAINST ANY DEFECT DUE TO FAULTY WORKMANSHIP, DESIGN OR MATERIAL FOR A PERIOD OF ONE YEAR.
12. INSTALL ALL EQUIPMENT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
13. SUBMIT FIVE (5) COPIES OF COMPLETE PRODUCT DATA & SHOP DRAWINGS. EACH SUBMITTAL SHALL BE STAMPED & DATED BY THE CONTRACTOR.
14. REQUESTS FOR SUBSTITUTIONS SHALL BE MADE SEVEN (7) DAYS PRIOR TO BID.
15. THE CONTRACTOR SHALL SHOW, ON BLUE-LINE PRINTS, ANY CHANGES FROM THE ORIGINAL DRAWINGS MADE DURING INSTALLATION. DELIVER TO THE OWNER WHEN THE WORK IS COMPLETED.
16. PROVIDE TWO (2) COPIES OF OPERATING & SERVICE MANUALS, INCLUDING OPERATING INSTRUCTIONS, SERVICE INSTRUCTIONS & SUBMITTAL LITERATURE TO THE OWNER.
17. DEMONSTRATE TO & INSTRUCT THE OWNER IN THE PROPER OPERATION & MAINTENANCE OF ALL SYSTEMS.
18. WHERE EQUIPMENT IS FURNISHED BY THE OWNER OR OTHER CONTRACTOR, PROVIDE ROUGH-IN & MAKE FINAL CONNECTIONS PER SHOP DRAWINGS & MANUFACTURER'S INSTALLATION INSTRUCTIONS.
19. STORE EQUIPMENT & MATERIAL TO PREVENT DAMAGE. DAMAGED EQUIPMENT SHALL BE REPLACED OR RESTORED TO A CONDITION ACCEPTABLE TO THE OWNER.
20. TOUCH UP OR REFINISH MINOR DAMAGE TO ITEMS OF EQUIPMENT SUPPLIED WITH MANUFACTURER'S STANDARD FINISH.
21. TEST ALL SAFETY DEVICES, PERFORM EQUIPMENT START-UP & MAKE ANY ADJUSTMENTS REQUIRED TO MAKE THE EQUIPMENT FULLY OPERATIONAL PER THE MANUFACTURER'S INSTRUCTIONS.
22. PROVIDE NON-CONDUCTING TYPE CONNECTIONS WHENEVER JOINING DISSIMILAR MATERIALS.
23. INSULATION MATERIAL SHALL HAVE A MINIMUM RATING OF 25 FLAME SPREAD AND 50 FOR SMOKE DEVELOPED. ALL ADHESIVES SHALL BE WATERPROOF.
24. PROVIDE FIRESTOPPING FOR PIPES, DUCTWORK, ETC. PASSING THROUGH FIRE OR SMOKE PARTITIONS.
25. COORDINATE WITH OTHER TRADES WHEN LOCATING EQUIPMENT, PIPING, DUCTWORK, ETC.
26. VERIFY VOLTAGE AND PHASE OF ELECTRICAL SERVICE TO EACH PIECE OF EQUIPMENT.
27. ALL EQUIPMENT SHALL BE INSTALLED IN SUCH A MANNER THAT ALL COMPONENTS REQUIRING ACCESS ARE LOCATED AND INSTALLED THAT THEY MAY BE SERVICED, RESET, REPLACED, RECALIBRATED, ETC. BY SERVICE PERSONNEL USING NORMAL SERVICE TOOLS AND EQUIPMENT.
28. ALL EQUIPMENT AND RELATED ABOVE SLAB PIPING, FLUES, DUCTWORK, CONTROL WIRING, AND ACCESSORIES SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO BUILDING LINES AND, IF INSTALLED WITHIN THE BUILDING ENVELOPE, SHALL BE INSTALLED AS HIGH AS POSSIBLE TO ALLOW THE MAXIMUM AMOUNT OF HEADROOM. ALL EQUIPMENT SHALL BE INSTALLED WITH THE REQUIRED CLEARANCES AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER OR GOVERNING CODES.

DEMOLITION NOTES:

WHERE DEMOLITION WORK IS REQUIRED AS PART OF THIS SCOPE OF WORK, THE FOLLOWING NOTES APPLY:

1. REMOVE ALL EXISTING ABOVE FLOOR AND EXPOSED PIPING TO FIXTURES BEING REMOVED UNLESS NOTED AS UTILIZED IN NEW CONSTRUCTION.
2. SOME EQUIPMENT, PIPING AND DUCTWORK TO BE REMOVED IS NOT SHOWN. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND VERIFYING ALL LOCATIONS, DIMENSIONS AND CONDITIONS OF ALL EXISTING EQUIPMENT, ANY EXISTING DUCTWORK, PIPING, ETC. LOCATIONS THAT ARE SHOWN ARE APPROXIMATE AND ARE TO BE USED AS GENERAL GUIDELINES ONLY.
4. DEMOLISH EXISTING ABANDONED SYSTEMS, EQUIPMENT, ETC. AS NECESSARY TO MAKE WAY FOR NEW CONSTRUCTION. VERIFY WITH OWNER FOR ANY ITEMS NOT DIRECTLY NOTED ON THE PLANS. AVOID DISRUPTION OF SERVICES DURING NORMAL BUSINESS HOURS. DISRUPTION OF SERVICES SHALL BE COORDINATED WITH OWNER AND SCHEDULED AFTER NORMAL BUSINESS HOURS OR AS OTHERWISE APPROVED BY OWNER. RELOCATE ANY EXISTING PLUMBING OR HVAC SYSTEMS REMAINING IN USE AS REQUIRED TO MAINTAIN FUNCTIONALITY OF EXISTING SYSTEMS AND ACCOMMODATE LAYOUT OF NEW CONSTRUCTION. ANY RELOCATED INTERIOR PIPING OR DUCTWORK SHALL BE CONCEALED WITHIN THE NEW CONSTRUCTION.
5. PRIOR TO DEMOLITION, FIELD VERIFY AND IDENTIFY ANY EXISTING EQUIPMENT TO REMAIN IN SERVICE THAT IS CURRENTLY SERVED BY SYSTEMS TO BE DEMOLISHED. NOTIFY ARCHITECT OF ANY SUCH CONDITIONS AND REMOVE AND/OR RELOCATE THE SERVICES AS DIRECTED.
7. VERIFY WITH OWNER PRIOR TO DEMOLITION TO IDENTIFY WHETHER EXISTING MATERIALS, SYSTEMS, EQUIPMENT, ETC. ARE CONSIDERED SALVAGE OR DEBRIS. REMOVE DEBRIS FROM SITE AND DISPOSE OF IN APPROVED MANNER. RETURN SALVAGE TO OWNER IN A LOCATION AND MANNER AS DIRECTED BY OWNER.

ALL DUCTWORK AND PIPING IS TO BE CONCEALED. WHERE EXISTING IS TO BE ABANDONED, CAP TO BE CONCEALED IN NEW OR PATCHED WALLS, CEILINGS OR FLOORS AS APPLICABLE. VERIFY THE EXACT LOCATION OF ALL EXISTING PIPING, DUCTWORK AND RELATED ITEMS. ANY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE. VERIFY THE OPERATION OF EXISTING EXHAUST FANS TO REMAIN AND ALERT THE ARCHITECT/ENGINEER IF ANY EXISTING FANS INTENDED FOR RE-USE ARE NOT FUNCTIONING PROPERLY. REFER TO THE PLUMBING FIXTURE SCHEDULE FOR PIPING RUNOUT SIZES. CONNECT TO EXISTING WHERE POSSIBLE OR EXTEND NEW PIPING TO THE NEAREST ADEQUATELY SIZED EXISTING LINE. CLEAN OR REPLACE ANY EXISTING FLOOR DRAIN GRATES IN REMODELED TOILETS AS REQUIRED TO MAKE EXISTING FLOOR DRAINS FULLY FUNCTIONAL.

HVAC NOTES:

1. FABRICATE AND INSTALL ALL DUCTWORK, FITTINGS AND SUPPORTS PER SMACNA STANDARDS.
2. DUCTWORK DIMENSIONS INDICATED ARE NET FREE AREA.
3. RECTANGULAR SHEETMETAL DUCTWORK SHALL BE INSULATED WITH 1" INTERNAL LINER. CONCEALED ROUND DUCTWORK SHALL BE WRAPPED WITH 2" INSULATION. EXPOSED ROUND DUCTWORK TO BE UNSULATED SPIRAL. ANY EXTERIOR DUCTWORK TO BE SEALED WATERTIGHT WITH PAINTABLE FLEXIBLE MASTIC TYPE SEALER. FLEXIBLE DUCT RUNOUTS SHALL BE LIMITED TO 6'-0" MAXIMUM. EXPOSED DUCTWORK TO BE PAINTED. VERIFY PAINT SELECTION WITH ARCHITECT. REMOVE ALL PAPER MANUFACTURING LABELS FROM DUCTWORK PRIOR TO PAINTING.
4. COORDINATE EXACT DUCTWORK ROUTING AND GRILLE & DIFFUSER LOCATIONS WITH LIGHTS, FIRE SPRINKLER & PLUMBING PIPING, AND STRUCTURE. PROVIDE OFFSETS TO ROUTE BRANCH DUCTS THRU JOIST SPACE WHERE REQUIRED TO CROSS OBSTRUCTIONS IN CEILING SPACE. VERIFY ALL DUCT SIZING AND ROUTING WITH STRUCTURE PRIOR TO FABRICATION.
5. PROVIDE LOCKABLE VOLUME CONTROL DAMPER TO EACH BRANCH DUCT RUNOUT TO SUPPLY DIFFUSER FOR SYSTEM BALANCING. PROVIDE TURNING VANES IN ALL RECTANGULAR ELBOWS.
6. PROVIDE 100% FREE AREA FIRE DAMPERS, SMOKE DAMPERS OR COMBINATION FIRE AND SMOKE DAMPERS AS REQUIRED AT ALL PENETRATIONS OF RATED PARTITIONS. PROVIDE ACCESS TO RESET FUSIBLE LINKS. REFER TO ARCHITECT'S PARTITION PLANS FOR EXACT LOCATIONS AND RATINGS OF FIRE AND SMOKE RATED PARTITIONS. COORDINATE ELECTRICAL REQUIREMENTS FOR POWER AND ACTIVATION OF SMOKE/COMBINATION FIRE AND SMOKE DAMPERS WITH ELECTRICAL CONTRACTOR.
7. LOCATE O/A INTAKES 10'-0" MINIMUM FROM PLUMBING, COMBUSTION AIR OR EXHAUST VENTS.
8. PROVIDE DUCTWORK VIBRATION ISOLATION AS REQUIRED BY EACH PIECE OF EQUIPMENT OR AS INDICATED ON PLANS.
9. DISCHARGE INDOOR FURNACE UNIT CONDENSATE DRAIN PIPING TO FLOOR DRAIN OR OTHER APPROVED LOCATION WITH AIR GAP. DO NOT DISCHARGE CONDENSATE DRAINS INTO RECEPTORS THAT TERMINATE ONTO SIDEWALKS OR TRAFFIC WAYS. LOCATE PIPING TO AVOID BLOCKING FILTER AND UNIT MAINTENANCE ACCESS. PROVIDE CONDENSATE DRAIN TRAPS PER MANUFACTURER'S INSTRUCTIONS. EXTERIOR CONDENSATE DRAINS TO BE COPPER OR GALVANIZED STEEL.
10. REFER TO ARCHITECTURAL PLANS FOR VENT FLASHING DETAILS FOR ROOF PENETRATIONS. ANY PENETRATIONS OF THE BUILDING EXTERIOR ARE TO BE COMPLETELY SEALED AND INSTALLED IN CONFORMANCE WITH THE WARRANTY REQUIREMENTS OF THE BUILDING SYSTEM. WALL CAPS OR VENTS TO BE PAINTED TO MATCH EXTERIOR WALL FINISH. VERIFY PAINT COLOR WITH ARCHITECT.
11. PROVIDE DUCT SMOKE DETECTORS WHERE REQUIRED BY THE MECHANICAL CODE OR INDICATED ON PLANS. COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR ANY POWER AND FIRE ALARM REQUIREMENTS.
12. PROVIDE ACCESS PANEL IN ANY LOCATION REQUIRING MAINTENANCE ACCESS TO DUCTWORK, DAMPERS, CONTROL DEVICES, EQUIPMENT, ETC. VERIFY WALL OR CEILING CONSTRUCTION REQUIREMENTS. PROVIDE MINIMUM SIZE REQUIRED FOR FULL CHASE, CEILING, WALL OR SERVICE AREA MAINTENANCE ACCESS.
13. COORDINATE ALL CEILING DIFFUSER TYPES TO MATCH THE FINAL CEILING CONFIGURATION ON THE ARCHITECT'S REFLECTED CEILING PLANS.
14. PROVIDE OFFSETS IN ALL TRANSFER DUCTS INTO CEILING SPACE AND BRANCH RETURN DUCTS FOR SOUND ATTENUATION. PROVIDE A MINIMUM OF ONE 90° BEND IN EACH BRANCH DUCT OR OFFSET BRANCHES FROM MAIN DUCT TO AVOID DIRECT TRANSMISSION OF SOUND THROUGH DUCT FROM ADJACENT SPACES.
15. PROVIDE HVAC UNIT MANUFACTURER'S COMMERCIAL 7-DAY PROGRAMMABLE, AUTOMATIC CHANGEOVER T-STATS, HONEYWELL, OR EQUAL, WITH OVERRIDE AND LOCKOUT CAPABILITY OR EQUAL. PROVIDE NON-PROGRAMMABLE DIGITAL T-STATS FOR EXHAUST FANS INDICATED W/7-STAT CONTROL. MECHANICAL CONTRACTOR TO PROVIDE T-STATS, CONDUIT AND WIRING AS REQUIRED FOR ALL MECHANICAL CONTROLS. WHERE CONTROL WIRING IS LOCATED IN RETURN PLENUMS, CONDUIT OR PLENUM RATED WIRE IS REQUIRED. PROVIDE SPACE MOUNTED CO2 SENSOR ADJACENT TO T-STAT TO PROVIDE DEMAND CONTROLLED VENTILATION. INTERLOCK CO2 SENSOR WITH OUTSIDE AIR MOTORIZED DAMPER.
17. VERIFY EXACT LOCATIONS AND SPACE REQUIREMENTS OF EQUIPMENT AND CONNECTIONS. PROVIDE ADEQUATE SERVICE CLEARANCE FOR ALL EQUIPMENT. AVOID PLACEMENT OF EQUIPMENT THAT INTERFERES WITH TUBE PULL AREAS, DOOR SWINGS, ACCESS COVER REMOVAL, ETC.
18. REFER TO MANUFACTURER'S INSTRUCTIONS FOR CONNECTIONS AND ADDITIONAL REQUIREMENTS FOR COMPLETE INSTALLATION OF EQUIPMENT AND DEVICES THAT ARE INSTALLED AS PART OF THIS WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL CONNECTIONS TO EQUIPMENT AS INDICATED ON THE CONTRACT DOCUMENTS PER THE RELEVANT MANUFACTURER'S INSTRUCTIONS. COORDINATE WITH MANUFACTURER'S INFORMATION TO PROVIDE ALL REQUIRED VALVES, REGULATORS, BACKFLOW PREVENTERS FILTERS, DRAINS, TUBING AND FITTINGS FOR FINAL CONNECTION THAT ARE NOT OTHERWISE INDICATED ON THE CONTRACT DOCUMENTS.
19. COORDINATE CURB TYPES W/ROOF SYSTEM FOR ALL ROOF MOUNTED EQUIPMENT. ROOF CURBS TO BE COMPATIBLE W/SPECIFIC ROOF TYPE AND ROOF WARRANTY REQUIREMENTS.

PLUMBING NOTES:

1. ALL HOT AND COLD WATER PIPING SHALL BE INSULATED.
2. PROVIDE READILY ACCESSIBLE VALVES AT HOT AND COLD WATER PLUMBING HEADERS.
3. PROVIDE SHUTOFF VALVES WITH UNIONS AT EACH SERVICE CONNECTION TO EACH PIECE OF EQUIPMENT. VALVE HANDLES SHALL BE PROVIDED WITH EXTENSIONS TO ALLOW HANDLE ACCESS BEYOND FACE OF INSULATION.
4. PROVIDE SHOCK ABSORBERS AT END OF EACH FIXTURE AND/OR PLUMBING HEADER.
5. ALL PIPING SHALL BE PROPERLY SUPPORTED.
6. DO NOT INSTALL PIPING IN ELECTRIC ROOMS OR DIRECTLY ABOVE ELECTRICAL EQUIPMENT.
7. GRADE MAIN HORIZONTAL DRAINAGE PIPING 1/8" MIN TO 1/4" PER FOOT UNLESS OTHERWISE NOTED. MAIN SANITARY PIPING THROUGH THE BUILDING IS DESIGNED FOR 1/8" PER FOOT. SLOPE OF PIPING MAY BE ADJUSTED AS REQUIRED TO MEET ELEVATION OF EXISTING SANITARY MAIN PIPING IN COMPLIANCE WITH IPC REQUIREMENTS. VERIFY EXISTING SANITARY ELEVATION PRIOR TO CONSTRUCTION AND COORDINATE NEW PIPING TO ALLOW PROPER SLOPE IN THE ENTIRE SYSTEM PER IPC REQUIREMENTS.
8. INSTALL PIPING TO ALLOW FOR EXPANSION & CONTRACTION WITHOUT STRESSING PIPING OR CONNECTED EQUIPMENT.
9. PROVIDE REDUCED PRESSURE BACKFLOW PREVENTER ON ALL CONNECTIONS OF NONPOTABLE WATER TO POTABLE WATER.

DOMESTIC WATER - 150R OF DESIGN PRESSURE/NOT LESS THAN 150 PSIG
SANITARY - 10' STATIC HEAD
NATURAL GAS - 25 PSIG
11. PROVIDE ALL GAS TRIM ITEMS PER MANUFACTURER'S INSTRUCTIONS, INCLUDING ALL VALVING, DIRTLEG, ETC. WHERE GAS DISTRIBUTION PIPING IS AT ELEVATED PRESSURE, PROVIDE GAS COCK AND REGULATOR TO REDUCE PRESSURE PRIOR TO EQUIPMENT OR LOW PRESSURE BRANCH PIPING CONNECTION. ANY REGULATORS LOCATED INDOORS ARE TO BE VENTED TO THE EXTERIOR OF THE BUILDING OR PROVIDED WITH VENT LIMITING DEVICES PER MANUFACTURER'S INSTRUCTIONS AND IN ACCORDANCE WITH CODE REQUIREMENTS.
12. PROVIDE ACCESS PANEL FOR EQUIPMENT OR ISOLATION VALVES IN LOCATIONS AS REQUIRED TO MAINTAIN ACCESSIBILITY. PROVIDE MINIMUM SIZE REQUIRED FOR FULL MAINTENANCE ACCESS. VERIFY WALL OR CEILING CONSTRUCTION REQUIREMENTS. ACCESS PANELS TO BE COMPATIBLE WITH WALL TYPE AND WALL RATING.
13. LOCATE FLOOR DRAINS AND CLEANOUTS TO BE EASILY ACCESSIBLE FOR MAINTENANCE. FLOOR DRAINS, FLOOR SINKS, ETC. WITH SQUARE TOPS TO BE INSTALLED SQUARE WITH ROOM OR ADJACENT EQUIPMENT SURFACES.
14. COLLECT PLUMBING VENTS FROM REMOTE FIXTURES IN CEILING SPACE AND TERMINATE GROUPINGS WITH 2" MINIMUM VTR OR VENT THRU WALL OR AS INDICATED ON PLANS. PLUMBING VENT TERMINATIONS TO BE LOCATED 10'-0" MINIMUM FROM ANY OUTSIDE AIR INTAKE LOCATIONS. VERIFY EXACT LOCATIONS WITH MECHANICAL CONTRACTOR.
15. REFER TO MANUFACTURER'S INSTRUCTIONS FOR CONNECTIONS AND ADDITIONAL REQUIREMENTS FOR COMPLETE INSTALLATION OF EQUIPMENT AND DEVICES THAT ARE INSTALLED AS PART OF THIS WORK.
16. FURNISH ALL TUBING AND FITTINGS AS REQUIRED FOR ALL FINAL EQUIPMENT CONNECTIONS.
17. ROUTE ALL WATER PIPING SO AS TO AVOID THE POTENTIAL FOR FREEZING.
18. COORDINATE PIPING ROUTING AND PLACEMENT OF EQUIPMENT AND DEVICES WITH THE HVAC AND ELECTRICAL CONTRACTORS PRIOR TO INSTALLATION.
19. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHTS OF PLUMBING FIXTURES.
20. COORDINATE EXACT LOCATION AND ROUTING OF ALL UNDERSLAB PIPING SYSTEMS TO AVOID CONFLICT WITH FOUNDATION, COLUMN FOOTINGS, ETC. WHILE MAINTAINING PROPER FLOWLINES.
21. COORDINATE ALL FLOOR SINKS, FLOOR DRAINS, TRENCH DRAINS, AND CLEANOUTS WITH FINISHED FLOOR ELEVATIONS TO ENSURE THEY ARE INSTALLED PLUMB AND LEVEL.
22. PLUMBING CONTRACTOR SHALL INSULATE ANY PIPING ROUTED IN EXTERIOR BUILDING WALLS TO PREVENT FREEZING. ALL ISOLATION OR BALANCING VALVES TO PIPING ROUTED IN CHASE AREAS SHALL BE READILY ACCESSIBLE FROM CEILING AREA OR THROUGH ACCESS PANELS. PROVIDE ISOLATION VALVES ON BRANCH PIPING FROM MAINS TO ISOLATED FIXTURES OR FIXTURE GROUPS.
23. ALL EXPOSED PIPING PENETRATING FINISHED WALLS SHALL BE PROVIDED WITH CHROME PLATED ESCUTCHEONS.
24. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL CONNECTIONS TO EQUIPMENT AS INDICATED ON THE CONTRACT DOCUMENTS PER THE RELEVANT MANUFACTURER'S INSTRUCTIONS. COORDINATE WITH MANUFACTURER'S INFORMATION TO PROVIDE ALL REQUIRED VALVES, REGULATORS, BACKFLOW PREVENTERS FILTERS, DRAINS, TUBING AND FITTINGS FOR FINAL CONNECTION THAT ARE NOT OTHERWISE INDICATED ON THE CONTRACT DOCUMENTS.
25. ALL PIPING IN FINISHED AREAS SHALL BE CONCEALED. ANY EXPOSED PIPING IN SERVICE AREAS SHALL BE INSTALLED IN A NEAT APPEARING MANNER AND PROPERLY SUPPORTED IN PLACE. ANY INSULATION ON EXPOSED PIPING SHALL BE PROVIDED WITH PAINTABLE SERVICE JACKET ON ALL PIPING AND FITTINGS. ALL INTERIOR OR EXTERIOR EXPOSED PIPING OR EXPOSED INSULATION SERVICE JACKET IS TO BE PAINTED. VERIFY FINAL PAINT SELECTION WITH ARCHITECT. EXPOSED AND EXTERIOR NATURAL GAS PIPING AND SUPPORTS SHALL BE PAINTED. VERIFY COLOR SELECTION WITH ARCHITECT.
26. MAKE ANY 90° CHANGES IN DIRECTION OF MAIN SANITARY SEWER PIPING WITH MULTIPLE FITTINGS OF 45° MAXIMUM.

MODIFICATIONS TO EXISTING HONEYWELL CONTROL SYSTEM:

1. DEMOLITION: EXISTING WIRING IS IN SURFACE-MOUNTED CONDUIT. EXISTING HONEYWELL SENSORS SHALL BE PROTECTED AS REQUIRED, AND SENSOR CAN REMAIN ATTACHED TO THE WIRING, ROLLED UP AND PROTECTED IN ITS EXISTING LOCATION DURING CONSTRUCTION. ALL SENSORS ARE IN GOOD WORKING CONDITION PRIOR TO CONSTRUCTION AND SHALL REMAIN IN GOOD WORKING CONDITION AFTER CONSTRUCTION IS COMPLETE.
2. WHERE EXISTING SENSORS ARE LOCATED ON WALLS TO RECEIVE NEW FURRING/GYPSUM BOARD:
 - A. REMOVE EXISTING SURFACE-MOUNTED CONDUIT. PROTECT EXISTING DEVICE AS NOTED ABOVE.
 - B. PROVIDE NEW EMPTY CONDUIT & BOX IN NEW FURRING/GYPSUM BOARD FOR FUTURE DEVICE LOCATION. DEVICE LOCATION SHALL BE ON INTERIOR WALL AT A LOCATION APPROVED BY THE OWNER. OWNER SHALL RE-INSTALL WIRING & HONEYWELL SENSOR IN CONTRACTOR-FURNISHED CONDUIT & BOX.
3. ALL NEW THERMOSTATS SHALL BE AS FOLLOWS:
 - A. HONEYWELL THERMOSTAT, NON-PROGRAMMABLE, DIGITAL, WITH BATTERY BACKUP, 1 OR 2 STAGE AS REQUIRED BY HVAC UNIT.
 - B. THERMOSTATS SHALL BE LOCATED ON INTERIOR WALL, WIRING TO BE CONCEALED IN CONDUIT, LOCATIONS TO BE APPROVED BY OWNER.
 - C. WHERE APPLICABLE, THERMOSTATS AND HONEYWELL SENSORS SHALL BE LOCATED SIDE BY SIDE.

NOTE:

PLANS ARE DIAGRAMMATIC. RELOCATION OF EQUIPMENT AND OFFSETS OF DUCTWORK AND PIPING WILL BE REQUIRED. SUBMIT FABRICATION DRAWINGS FOR ACTUAL LOCATIONS SHOWING DIMENSIONS OF ACTUAL EQUIPMENT USED.

FURNISH ALL LABOR, MATERIALS, TOOLS, TRANSPORTATION, EQUIPMENT, SERVICES, AND FACILITIES REQUIRED FOR THE COMPLETE INSTALLATION OF ALL WORK AS SHOWN ON THE PLANS AND OUTLINED IN THE SPECIFICATIONS. THE WORK SHALL ALSO INCLUDE ALL MATERIAL, EQUIPMENT, AND APPARATUS NOT SHOWN, BUT WHICH ARE NECESSARY TO MAKE A COMPLETE WORKING INSTALLATION OF SYSTEMS. THE DRAWINGS AND SPECIFICATIONS ARE NOT FABRICATION DRAWINGS OR STEP BY STEP INSTRUCTIONS. THEIR INTENT IS TO ESTABLISH THE MINIMUM STANDARD OF PERFORMANCE THAT IS ACCEPTABLE FOR THIS PROJECT. ALL THE WORK AND EVERY DEVICE IS NOT NECESSARILY DESCRIBED OR INDICATED. THE CONTRACTOR IS EXPECTED TO INCLUDE THESE ITEMS IN HIS BID BY HIS FORESIGHT FROM PREVIOUS EXPERIENCE OR WITH A DOLLAR CONTINGENCY AMOUNT FOR UNFORESEEN EXPENSES. THE CONTRACTOR SHOULD BE FAMILIAR WITH THE ARCHITECTURAL, STRUCTURAL, CIVIL, PLANS ETC. BEFORE MAKING A BID. FIELD MEASURING AND COORDINATING WITH OTHER TRADES IS MANDATORY.

SUPPLY AND INSTALL THE SYSTEMS INDICATED ON DRAWINGS IN A COMPLETE AND 100% WORKING ORDER, SATISFYING ALL APPLICABLE CODES.

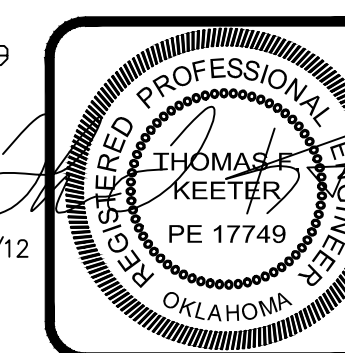


2012 ALTERATIONS TO
MONROE ELEMENTARY SCHOOL
400 WEST COTTONWOOD
INDEPENDENT SCHOOL DISTRICT NO. 57
500 SOUTH INDEPENDENCE ENID, OKLAHOMA



DATE: 02/04/2012
REV.:

M5.1
OF 11



PLUMBING FIXTURE SCHEDULE										
MARK	FIXTURE	TYPE	MFR	MODEL	TRIM	WATER		WASTE	VENT	NOTES
						COLD	HOT			
						RUNOUT	RUNOUT			
WC-1	WATER CLOSET	FLUSH VALVE SIPHON JET FLOOR MOUNTED	AMERICAN STANDARD	MADERA ELONGATED 2234.015	ZURN ZER6000-CP-WS1 BATTERY POWERED SENSOR FLUSH VALVE, WHITE, CHURCH 1955 OPEN FRONT SEAT	1	--	4	2	B,G,J
WC-2	WATER CLOSET CHILD'S	FLUSH VALVE SIPHON JET FLOOR MOUNTED	AMERICAN STANDARD	BABY DEVORO ROUND 10" H 2282.010	ZURN ZER6000-CP-WS1 BATTERY POWERED SENSOR FLUSH VALVE, WHITE, CHILD SEAT.	1	--	4	2	B,G,J
UR-1	URINAL ADA	FLUSH VALVE SIPHON JET WALL MOUNTED	AMERICAN STANDARD	WASHBROOK 6501.010	ZURN ZERS6003-CP-WS1 BATTERY POWERED SENSOR FLUSH VALVE	3/4	--	2	1 1/2	F,G,H,I,J
L-1	LAVATORY	WALL HUNG VITREOUS CHINA	AMERICAN STANDARD	DECLYN 19"X17" 0321.075	SLOAN EBF-85 BATTERY POWERED SENSOR FAUCET, TRIM PLATE, BOT VALVE, AND GRID STRAINER	1/2	1/2	2	1 1/2	A,D,E,F,G,I,J,K
L-2	LAVATORY	COUNTER MOUNTED VITREOUS CHINA	AMERICAN STANDARD	AQUALYN 20"X17" 0476.028	SLOAN EBF-85 BATTERY POWERED SENSOR FAUCET, TRIM PLATE, BOT VALVE, AND GRID STRAINER	1/2	1/2	2	1 1/2	A,D,E,G,I,J,K
HS-1	HAND WASH SINK	WALL HUNG STAINLESS STEEL	JOHN BOOS	PBHS-W-1410-P 14"X10"X5"	PB-HS-4 FAUCET, MOUNTING BRACKET AND GRID STRAINER	3/4	3/4	2	1 1/2	A,D,E,F,G,I,K
WF-1	LAVATORY ADA	WALL MOUNTED 4 STATION	BRADLEY	TERREON QUADRA-FOUNT MF2944-JUV	JUVENILE HEIGHT, TOUCH TIME METERING CONTROL, LIQUID SOAP DISPENSER, THERMOSTATIC MIXING VALVE, P-TRAP, VERIFY COLOR WITH ARCHITECT	3/4	3/4	2	1 1/2	G,H,I,J,K
WF-2	LAVATORY ADA	CORNER WALL MOUNTED 2 STATION	BRADLEY	TERREON CORNER-FOUNT MF2922-JUV	JUVENILE HEIGHT, TOUCH TIME METERING CONTROL, LIQUID SOAP DISPENSER, THERMOSTATIC MIXING VALVE, P-TRAP, VERIFY COLOR WITH ARCHITECT	3/4	3/4	2	1 1/2	G,H,I,J,K
S-1	CLASSROOM SINK	COUNTER, SINGLE COMPARTMENT, STAINLESS STEEL	ELKAY	LUSTERTONE DRKR-2220-L	LK-2439 FAUCET W/RESTRICTED SWING SPOUT, ADA LEVER HANDLES, LK-1141-A BUBBLER, GRID STRAINER.	1/2	1/2	2	1 1/2	A,D,G,K,L,M
S-2	SINK	COUNTER, SINGLE COMPARTMENT, STAINLESS STEEL	ELKAY	LUSTERTONE LR-1918	LK-4100 SINGLE LEVER SWING SPOUT FAUCET AND GRID STRAINER	1/2	1/2	2	1 1/2	A,D,G,K,M
EW-1	ELECTRIC WATER COOLER ADA	WALL HUNG BI-LEVEL	ELKAY	EZTLBC	FRONT PUSH BARS, P-TRAP, CARRIER SUPPLY STOP	1/2	--	1 1/4	1 1/2	A,C,F,G
SI-1	SOLIDS INTERCEPTOR	FLOOR MOUNTED ARE STEEL	ZURN	Z-1181	REMOVABLE SEDIMENT BUCKET AND SCREENS	--	--	2	1 1/2	G

NOTES:
A. CHROME PLATED ANGLE SUPPLY WITH LOOSE TEE HANDLE STOPS & CHROME PLATED ESCUTCHEON.
B. BOLT CAPS WITH RETAINER CLIPS.
C. 1 1/4" CHROME PLATED TUBULAR P-TRAP WITH CLEANOUT PLUG & ESCUTCHEON.
D. 1 1/2" CHROME PLATED TUBULAR P-TRAP WITH CLEANOUT PLUG & ESCUTCHEON.
E. INSTALL P-TRAP USING OFF-SET TAILPIECE. INSULATE HOT WATER SUPPLY, TAILPIECE AND TRAP WITH TRUBRO LAV GUARD SYSTEM.
F. PROVIDE CARRIER. PROVIDE WALL HANGER ON EXISTING MASONRY WALLS.
G. INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
H. INSTALL AT ADA BARRIER FREE HEIGHT.
I. REFER TO ARCHITECTURAL PLANS FOR EXACT ELEVATION OF FIXTURE.
J. SENSOR FLUSH VALVES AND FAUCETS- PROVIDE TRANSFORMERS FOR CONTROL CIRCUITS ON HARDWIRED VALVES PER MANUFACTURER'S INSTRUCTIONS. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR. CAREFULLY COORDINATE THE INSTALLATION OF THE SENSOR ROUGH-IN AND COORDINATE INSTALLATION WITH ELECTRICAL CONTRACTOR TO ENSURE THAT SENSOR OPERATES PROPERLY IN FINAL INSTALLATION. ROUGH-IN THE VALVE AND SENSOR LOCATIONS FROM FIXTURE HEIGHT TO ENSURE ADEQUATE SENSING FOR CHILD HEIGHT FIXTURE USE ON CORRESPONDING FIXTURES. PROVIDE CHROME PLATED TUBING COVERS AND ESCUTCHEONS AS REQUIRED TO MATCH SENSOR COMPONENTS AND FLUSH VALVE FOR COMPLETE INSTALLATION. ALL CONTROL WIRING AND ELECTRICAL COMPONENTS ARE TO BE COMPLETELY CONCEALED.
K. PROVIDE POWERS LM495 ASSE 1070 THERMOSTATIC MIXING VALVE OR EQUIVALENT ON HOT WATER SUPPLY TO FIXTURE.
L. COORDINATE WITH MILLWORK AND VERIFY BUBBLER POSITION FOR EACH CLASSROOM APPLICATION.
M. RE-CONNECT SINK TO EXISTING ROUGH-IN. VERIFY EXACT SIZE, LOCATIONS AND CONNECTION REQUIREMENTS OF EXISTING.

WATER HEATER SCHEDULE									
MARK	MANUFACTURER MODEL NO.	TANK SIZE GAL.	ELECTRIC HEATER		GAS HEATER		DELIVERY TEMP.	RECOVERY GPH	NOTES
			VOLTS/PH	No. ELEMENTS	V/PH/HZ	INPUT MBH			
			TOTAL KW	KW/ELEMENT					
WH-1	A.O. SMITH BTH-120 CYCLONE XI	60 GAL.	--	--	115/1/60	120	140° F	154	A,B,C

NOTES:
A. RECOVERY RATE INDICATED IS FOR 90°F RISE. WATER HEATER RECOVERY IS AT SEA LEVEL.
B. PROVIDE PVC COMBUSTION AIR AND VENT FLUES TO ROOF OR WALL PER MANUFACTURER'S INSTRUCTIONS.
C. ROUTE T & P RELIEF AND FLUE CONDENSATE TO FLOOR DRAIN OR OTHER APPROVED LOCATION.

ROOFTOP UNIT SCHEDULE														
UNIT NO.	MANUFACTURER & MODEL NO.	CFM	HEATING		COOLING (M.B.H)		E.S.P. "H ₂ O"	CFM O.A.	H.P. FAN	UNIT				NOTES
			TYPE	IN/OUT (M.B.H.) OR KW	THC	SHC				VOLTS	PH.	MCA	MOCP	
RTU-1 THRU RTU-7	TRANE YSC048E3RM	1600	NG	80/64	49.2	36.9	0.6	200	--	208	3	25.2	35	A,C,D,E,F,G,H,J,K

NOTES:
A. UNIT CAPACITIES ARE AT ARI CONDITIONS.
B. PROVIDE SMOKE DETECTORS. (PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL.)
C. PROVIDE PROGRAMMABLE THERMOSTAT OR THERMOSTAT/HUMIDISTAT PER HVAC NOTES AND PLANS. UNIT TO BE CONNECTED TO EXISTING HONEYWELL CONTROL SYSTEM. VERIFY EXACT CONNECTION REQUIREMENTS WITH EXISTING SYSTEM.
D. PROVIDE INTEGRATED ECONOMIZER WITH ENTHALPY CONTROLS.
E. PROVIDE LOW AMBIENT CONTROLS, FILTER RACK AND FILTERS.
F. PROVIDE FACTORY MANUFACTURED ROOF CURB. MATCH ROOF SLOPE.
G. PROVIDE INTEGRAL BAROMETRIC RELIEF DAMPER.
H. PROVIDE ACCESSORY CONDENSER COIL HAIL GUARD.
I. PROVIDE MOISTUREMIZER COIL OPTION AND HUMIDISTAT.
J. PROVIDE FACTORY INSTALLED HOT GAS REHEAT COIL AND HUMIDISTAT.
K. PROVIDE RETURN DUCT MOUNTED IAQ CO2 SENSOR ACCESSORY TO PROVIDE PROPORTIONAL OUTSIDE AIR DAMPER CONTROL.

GRILLE AND DIFFUSER SCHEDULE									
MARK	MANUFACTURER & MODEL NO.	SIZE	CFM	VEL. FPM	SP H O	THROW	NC MAX.	DAMPER	NOTES
CD-1	TITUS TMS 24X24	REFER PLANS	REFER PLANS	--	--	--	--	IN DUCT	A,B,D
CD-2	TITUS TMS 12X12	REFER PLANS	REFER PLANS	--	--	--	--	IN DUCT	A,B,D
RAG-1	TITUS 50-F	REFER PLANS	REFER PLANS	--	--	--	--	NONE	B,D
EAG-1	TITUS 350 RL	REFER PLANS	REFER PLANS	--	--	--	--	OB	C,D

NOTES:
A. NECK SIZE SAME AS DUCT SIZE.
B. LAY-IN FRAME. VERIFY WITH CEILING TYPE.
C. SURFACE MOUNT FRAME. VERIFY WITH CEILING TYPE WHERE APPLICABLE. RAPID MOUNT FRAME IS ACCEPTABLE WHERE COMPATIBLE WITH CEILING FRAMING.
D. BASE COLOR TO BE WHITE. VERIFY FINAL COLOR WITH ARCHITECT.

FAN SCHEDULE												
MARK	LOCATION	MANUFACTURER & MODEL NO.	CFM	S.P.	RPM	BHP	DRIVE	MOTOR				NOTES
								RPM	HP	VOLT	PH.	
EF-1	ROOF	COOK ACE-D 100C15DH	600	.45	1550	--	DIRECT	1550	0.125	115	1	A,C
EF-2,3,9	TOILET WALL	BROAN 509 WALL FAN	180	.25	1925	--	DIRECT	1925	180W	115	1	A,B
EF-4,5	TOILET CEILING	COOK GEMINI GC-240	100	.25	1200	--	DIRECT	1200	65W	115	1	A,B
EF-6,7,8	ROOF	COOK ACE-D 90C15DL	330	.45	1715	--	DIRECT	1715	0.125	115	1	A,C,D
KEF-1	FOOD SERVICE HOOD EXHAUST FAN. REFER TO FOOD SERVICE FAN SCHEDULES FOR INFORMATION.											

NOTES:
A. INTERLOCK FAN WITH LIGHT SWITCH.
B. PROVIDE BACKDRAFT DAMPER AND CONNECT TO EXISTING ROOF OR WALL CAP AS INDICATED ON PLANS.
C. PROVIDE BACKDRAFT DAMPER. INSTALL ON EXISTING ROOF CURB.
D. PROVIDE FSC VARIABLE SPEED CONTROL ACCESSORY NEAR FAN FOR BALANCING.

2012 ALTERATIONS TO
MONROE ELEMENTARY SCHOOL
400 WEST COTTONWOOD
INDEPENDENT SCHOOL DISTRICT NO. 57
500 SOUTH INDEPENDENCE ENID, OKLAHOMA



DATE: 02/04/2012
REV.:

M5.2
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