MECHANICAL:

GENERAL

1. INSTALLATION OF APPLIANCES SHALL BE PER IMC SEC 304.
2. APPLIANCES SHALL BE LOCATED PER IMC SEC 303.
3. CLEARANCE TO APPLIANCES SHALL BE PROVIDED PER IMC SEC 304.9.
4. APPLIANCES SHALL BE VENTED TO THE OUTSIDE PER IMC SEC 804.3.5.
5. APPLIANCE VENT TERMINATION SHALL BE PER IMC SEC 804.
6. APPLIANCE VENTING SHALL BE SIZED PER IMC 801.6.
7. VENT CONNECTORS SHALL BE PER IMC SEC 803.
8. AUXILIARY DRAIN PAN SHALL BE PROVIDED PER IPC SEC 314.2.3.

MECHANICAL VENTILATION

1. MECHANICAL VENTILATION SHALL BE PROVIDED PER IMC TABLE 403.3.
2. INTAKE OPENINGS SHALL BE PER IMC SEC 401.4.
3. DUCTING SHALL BE PER IMC SEC 603.

EXHAUST SYSTEMS

1. RESTROOMS SHALL BE VENTILATED PER IMC TABLE 403.3.

DUCT SYSTEMS

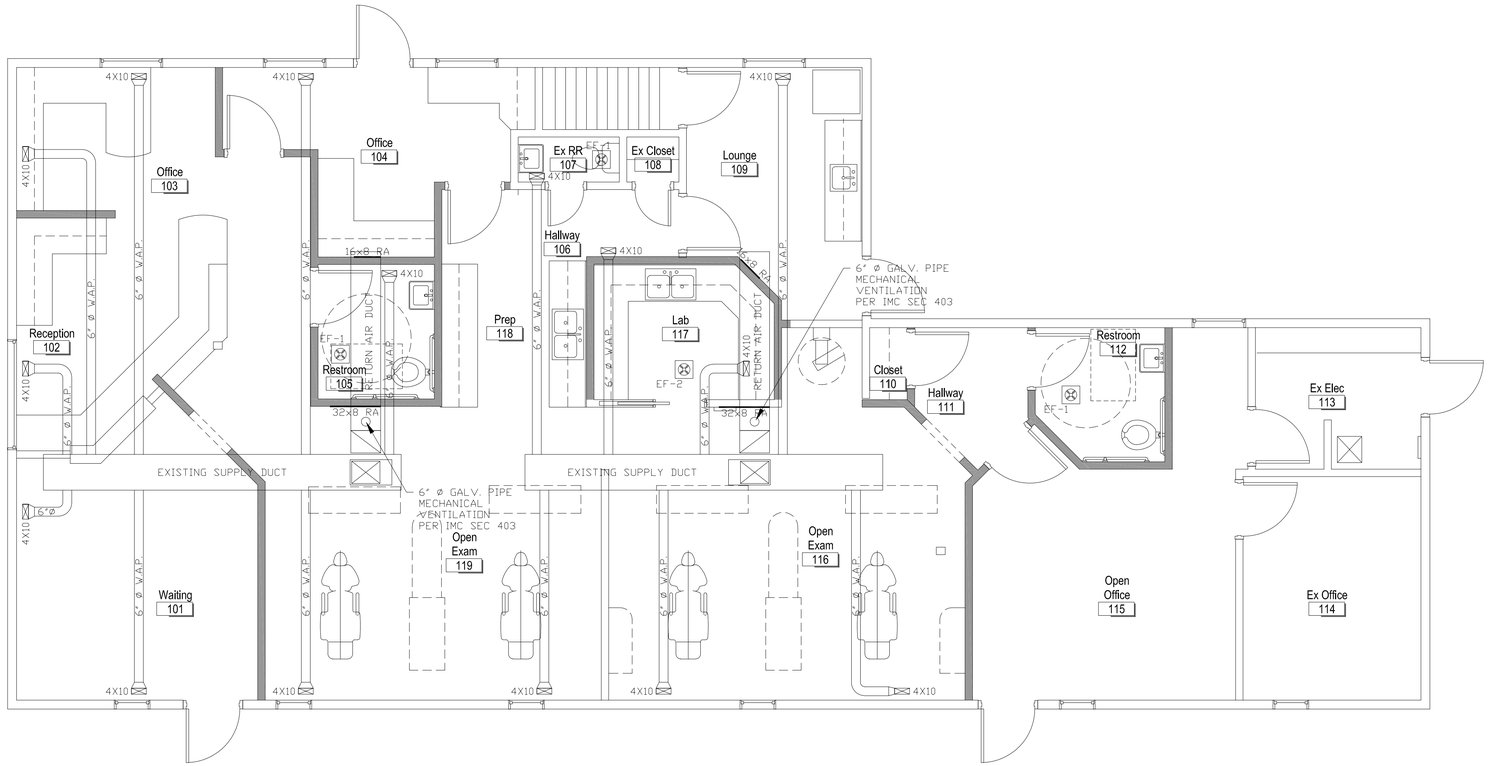
1. DUCT SYSTEMS SERVING HEATING, COOLING AND VENTILATION EQUIPMENT SHALL BE PER IMC SEC 603.
2. SUPPLY AIR DUCTING:
   - 26 GA. GALVINIZED RECTANGLE DUCT
   - 6" ø GALVINIZED METAL DUCT (WAP)
   - 6" ø FACTORY MADE AIR DUCTS
3. GALVINIZED METAL DUCT SHALL BE SUPPORTED PER IMC SEC 603.10.
4. GALVINIZED METAL DUCT SHALL BE INSULATED PER IMC SEC 604 (R-5).
5. RETURN AIR DUCTING SHALL BE PER PER IMC SEC 603.10.

COMBUSTION AIR

1. COMBUSTION AIR SHALL BE PROVIDED PER IMC SEC 701.
2. COMBUSTION AIR SHALL BE SUPPLIED PER IMC SEC 701.
3. COMBUSTION AIR OPENINGS SHALL BE TERMINATED IN THE ATTIC SPACE PER IFGC 304.
4. COMBUSTION AIR SHALL COMPLY WITH IFGC 304.

FUEL GAS

1. APPLIANCES SHALL BE CONNECTED TO THE FUEL GAS PIPING PER IFGC
2. THE FUEL GAS SYSTEM SHALL BE A DESIGN / BUILD BY THE SITE CONTRACTOR.



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

CONSTRUCTION NOTES:

1. THESE DRAWINGS ARE BASED UPON AVAILABLE DOCUMENTS, WHICH MAY NOT ACCURATELY PORTRAY AS-BUILT CONDITIONS. EXISTING EQUIPMENT AND PIPING SIZES, LOCATIONS, AND DIMENSIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO DEMOLITION AND CONSTRUCTION. NOTIFY THE ENGINEER IMMEDIATELY OF ALL DISCREPANCIES AFFECTING THE REMOVAL OF EXISTING EQUIPMENT AND PIPING AND THE INSTALLATION OF NEW EQUIPMENT AND PIPING.
2. INSTALL PIPING AND DUCT WORK TO BEST SUIT FIELD CONDITIONS AND COORDINATE WITH THE INSTALLATION WORK OF OTHER TRADES. THESE DRAWINGS INDICATE APPROXIMATE LOCATIONS. DO NOT SCALE TO DETERMINE LOCATION OF PIPING. ALL DUCT WORK SHALL BE 26 GAUGE OR THICKER AND SHALL BE INSTALLED PER SMACNA STANDARDS.
3. PROTECT ALL EXISTING EQUIPMENT AND DUCT WORK THAT IS TO REMAIN.
4. REPAIR AND/OR REPLACE ALL EXISTING UTILITIES, STRUCTURAL ELEMENTS, EQUIPMENT, PIPING, CONDUIT, AND DUCT WORK THAT IS DAMAGED AS A RESULT OF THIS WORK.
5. EXHAUST DUCT TERMINATION SHALL MAINTAIN A MINIMUM OF 10' CLEARANCE HORIZONTALLY OR NOT LESS THAN 3' VERTICALLY FROM AIR INTAKE OPENINGS.

EQUIPMENT SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	AIRFLOW	HEATING	COOLING	REMARKS
FURN #1	EXISTING	EXISTING	800	EXISTING		1
FURN #2	EXISTING	EXISTING	800	EXISTING		1
A/C #1	EXISTING	EXISTING			2 TON	1
A/C #2	EXISTING	EXISTING			2 TON	1

REMARKS:
1. EXISTING EQUIPMENT AND DUCT WORK SHALL BE REUSED, INSTALL NEW DUCT WORK AS REQUIRED.

EXHAUST FAN SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	AIRFLOW (in cfm)	ELECTRICAL				LOCATION	REMARKS
				watt	volt	ph	amps		
EF-1	_	_	50	_	120	1	_	EX RR #107	1
EF-1	_	_	50	_	120	1	_	RESTROOM #105	1
EF-1	_	_	50	_	120	1	_	RESTROOM #112	1
EF-2	_	_	80	_	120	1	_	LAB #117	1

REMARKS:
1. EXHAUST FANS DUCTS SHALL BE 4" ø AND SHALL BE TERMINATED TO THE EXTERIOR.

MECHANICAL LEGEND

	FURNACE
	CONDENSING UNIT
	EXHAUST FAN
T	THERMOSTAT (TO BE LOCATED PER CUSTOMERS REQUEST)

RONALD McMANAMAN P.E
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MARK	DATE	DESCRIPTION
	11-18-15	ADD 6" ø PIPE AND NOTATION FOR MECHANICAL VENTILATION

PROJECT NO: ----
CAD DWG FILE: MECH PLANSET.DWG
DRAWN BY: K. HECTOR GIRARDIN
CHK'D BY: RON McMANAMAN
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SHEET TITLE
MECHANICAL PLAN

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SHEET 3 OF 4

PLUMBING:

GENERAL

1. DWV SYSTEMS ROUGH IN AND FINISHED PLUMBING SHALL BE TESTED PER IPC 312.3
2. WATER SUPPLY SYSTEM SHALL BE TESTED PER IPC 312.5
3. PIPING IN CONCEALED LOCATIONS, INSTALLED THROUGH FRAMING MENBERS SHALL BE PROTECTED BY SHIELD PLATES WHEN LESS THAN 1½" FROM MEMBER EDGE.
4. PIPING SHALL BE SUPPORTED PER IPC 308
5. A WATER TIGHT PAN SHALL BE INSTALLED BENEATH THE WATER HEATER WHEN IT IS INSTALLED WHERE DAMAGE MAY RESULT FROM LEAKAGE PER IPC 504.7

WATER SUPPLY

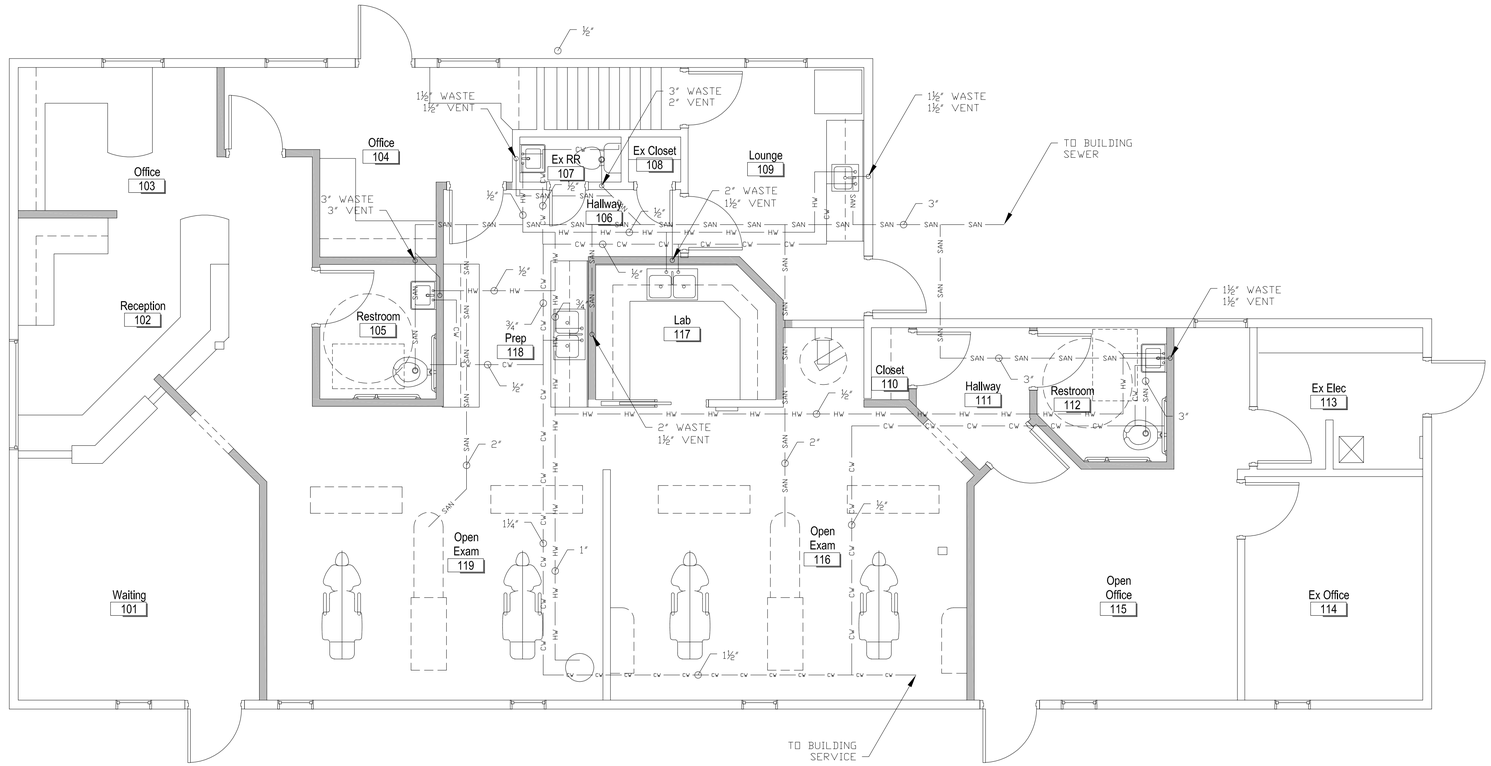
1. FULL OPEN VALVE SHALL BE PROVIDED AT THE WATER SERVICE ENTRANCE PER IPC 606.
2. THE WATER SUPPLY SHALL BE PROTECTED FROM CONTAMINATION PER IPC 608
3. WATER SUPPLY MAINS, BRANCHS, AND RISERS SHALL BE SIZED PER IPC 604 (PRESSURE RANGE - 40 TO 49 PSI)
   - MINIMUM WATER SERVICE SHALL BE ¾"
   - MINIMUM BRANCH MAINS SHALL BE ¾"
   - BRANCH MAINS SHALL BE ½" WITH LESS THAN 3 FIXTURES UNITS
4. ¼ TURN ½" SHUT OFF VALVES SHALL BE PROVIDED AT EACH PLUMBING FIXTURE PER IPC 606.2.
5. WATER SUPPLY PIPING SHALL BE INSULATED PER IPC SEC 607.2.
6. TEMPERTURE LIMITING DEVICES SHALL BE INSTALLED AT LAVATORIES AND SINKS PER IPC SEC. 607.1.
7. EXTERIOR HOSE BIBBS SHALL BE FROST PROOF PER IPC SEC 608.15.4.2.
8. WATER HAMMER ARRESTORS SHALL BE INSTALLED ON QUICK CLOSING VALVES PER IPC 604.9.
9. THERMAL EXPANSION CONTROL SHALL BE PROVIDED PER IPC 607.3

DRAIN, WASTE, AND VENT

1. DRAIN, WASTE, AND VENT (DWV) PIPING SHALL BE SCHEDULE 40 PVC UNLESS NOTED OTHERWISE
2. PVC PIPING SHALL BE SUPPORTED PER IRC TABLE 308.5 48" MAXIMUM HORIZONTAL SPACING
3. CHANGE IN DIRECTION IN THE DRAINAGE PIPING SHALL BE PER IPC 706
   - VERTICAL TO HORIZONTAL, LONG SWEEP FITTING
   - HORIZONTAL TO HORIZONTAL, LONG SWEEP FITTING
4. DRAINAGE PIPING CLEANOUTS SHALL BE PROVIDED PER IPC 706
5. STAND PIPES SHALL BE A MINIMUM 18" AND A MAXIMUM OF 42" ABOVE THE TRAP PER IPC 802.4
6. OPEN VENT PIPES THAT EXTEND THROUGH THE ROOF SHALL TERMINATE 12" MIN. ABOVE THE ROOF.
7. VENTS SHALL BE SIZED PER IPC 908 MINIMUM VENT THROUGH THE ROOF SHALL BE ONE HALF THE REQUIRED BUILDING SEWER
8. VENTS THROUGH THE ROOF SUBJECT TO FROST CLOSURE SHALL BE A MINIMUM OF 3", VENTS LESS THAN 3" SHALL BE INCREASED IN SIZE A MINIMUM OF 12" BELOW THE ROOF PER IPC SEC 904.2.
9. MAXIMUM DISTANCE OF FIXTURE TRAP FROM VENT SHALL BE PER IPC TABLE 906.1.
10. PVC PIPING SHALL BE PROTECTED FROM UV EXPOSURE.

HEALTH CARE

1. HEALTH CARE FIXTURES AND EQUIPMENT SHALL BE PER IPC SEC 422
2. HEALTH CARE WATER SUPPLY SHALL BE PER IPC SEC 609
3. HEALTH CARE SANITARY DRAINAGE SHALL BE PER IPC SEC 713
4. MEDICAL GAS SHALL BE PER NFPA 99C



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

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MARK	DATE	DESCRIPTION

PROJECT NO: 2015.015
CAD DWG FILE: MECH PLANSET.DWG
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CHK'D BY: R. McMANAMAN
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SHEET TITLE
PLUMBING PLAN

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SHEET 4 OF 4