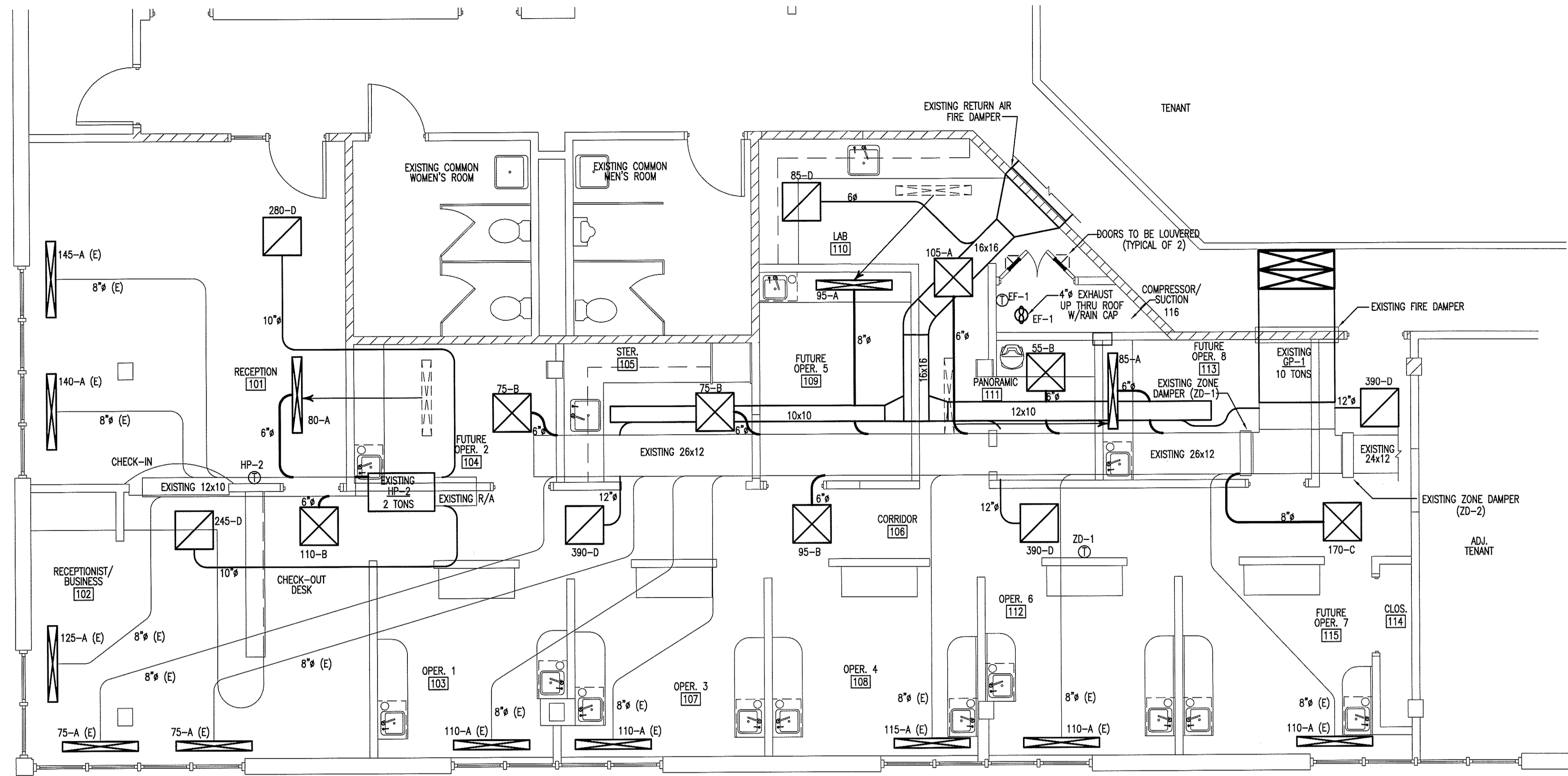


MECHANICAL NOTES:

- ALL HVAC EQUIPMENT AND DUCTWORK TO BE INSTALLED IN ACCORDANCE WITH STATE AND LOCAL CODES.
- THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL DUCTWORK, PIPING, AND ELECTRICAL REQUIREMENTS WITH ALL OTHER TRADES PRIOR TO BEGINNING INSTALLATION TO AVOID CONFLICTS AND INTERFERENCE WITH OTHER TRADES.
- ALL EQUIPMENT TO BE INSTALLED AS SUGGESTED BY MANUFACTURER.
- INSULATE SUPPLY AND RETURN DUCTWORK LOCATED IN UNCONDITIONED SPACES BY WRAPPING WITH INSULATION WITH A MINIMUM INSTALLED R-VALUE OF 5.0. DIMENSIONS SHOWN ARE INSIDE CLEAR AREA DIMENSIONS.
- EQUIP ROOF TOP UNIT WITH RETURN AIR FILTER & WASHABLE SCREEN FILTER ON OUTSIDE AIR INTAKE OF ROOF TOP UNITS.
- MECHANICAL SYSTEM TO BE BALANCED AND TESTED AFTER INSTALLATION TO ASSURE PROPER OPERATION.
- COORDINATE EXACT LOCATION OF THERMOSTATS WITH OWNER.
- ANY FIRE RATED ASSEMBLY PENETRATIONS ARE TO BE PER CODE. CONTRACTOR SHOULD REVIEW ALL FIRE RATING PENETRATIONS.
- EXHAUST FANS ARE TO BE FURNISHED, INSTALLED AND DUCTED TO OUTDOORS BY THE MECHANICAL CONTRACTOR. EXHAUST FAN TO BE WIRED BY THE ELECTRICAL CONTRACTOR.
- FINAL UTILITY CONNECTIONS (GAS, ELECTRIC, ETC.) TO EQUIPMENT SHALL BE MADE BY THE CONTRACTOR INSTALLING THE EQUIPMENT REQUIRING THE UTILITIES.
- DUCT DRAWINGS ARE DIAGNOSTIC AND ARE INTENDED TO SHOW THE INTENT OF THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY ADDITIONAL TRANSITIONS, OFFSETS, OR TURNS, IN THE DUCTWORK AND/OR PIPING, NOT SHOWN BUT REQUIRED FOR A COMPLETE AND OPERATING SYSTEM.
- ALL DUCTWORK SHALL BE INSTALLED TIGHT AGAINST THE STRUCTURE UNLESS OTHERWISE NOTED OR SHOWN.
- AIR DISTRIBUTION LOCATIONS SHOWN ON MECHANICAL PLANS ARE APPROXIMATE. SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR ACTUAL LOCATIONS.
- REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONED LOCATIONS OF WALLS AND PARTITIONS AND FOR PARTITION THICKNESS AND CONSTRUCTION MATERIALS.

SYMBOLS & ABBREVIATIONS LEGEND

SYMBOL	DESCRIPTION
⊕	THERMOSTAT
⊠	CEILING SUPPLY DIFFUSER
⊞	CEILING RETURN GRILLE
⊞	CEILING SUPPLY DIFFUSER TO BE RELOCATED
▭	SUPPLY DUCT SECTION
▭	RETURN DUCT SECTION
CFM	CUBIC FEET PER MINUTE
∅	DIAMETER OR POWER PHASE
CTE	CONNECT TO EXISTING
(E)	DENOTES EXISTING
O.A.	OUTSIDE AIR
R.A.	RETURN AIR
S.A.	SUPPLY AIR
A.F.F.	ABOVE FINISHED FLOOR



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

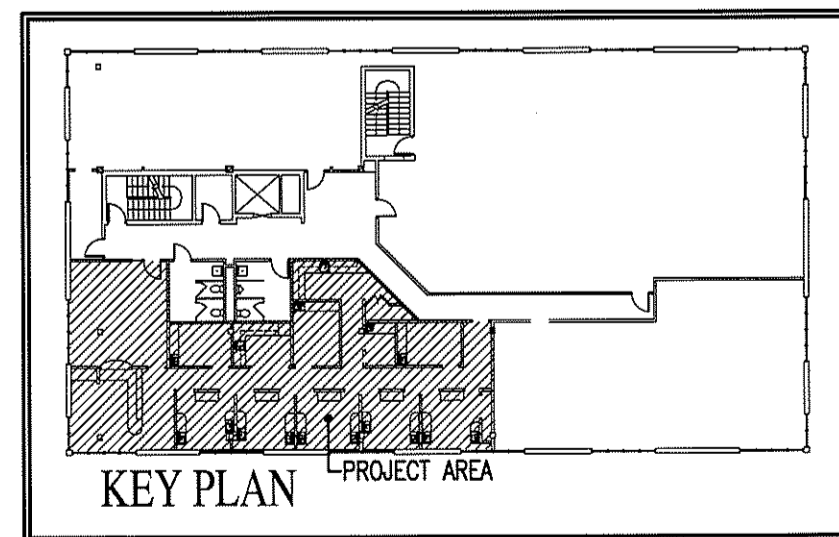
EXHAUST FAN SCHEDULE

MARK	MANUFACTURER	MODEL	TYPE	CFM	SP	MOTOR	POWER	SONES	WATTS	CONTROL	REMARKS
EF-1	GREENHECK	SP-A125	EXHAUST FAN	121	0.125" W.G.	F.H.P.	120V/1ϕ	1.8	53	THERMOSTAT	4" DUCT THRU ROOF W/RAIN CAP

AIR DISTRIBUTION SCHEDULE

MARK	MANUFACTURER	NECK SIZE	PANEL SIZE	CFM RANGE	USE	TYPE	MODEL	MATERIAL	FILTER SIZE
A	METALAIRE	8"∅	48X6	0-145	SUPPLY	*	*	STEEL	-
B	METALAIRE	6"∅	24X24	0-150	SUPPLY	STAMPED LOWER FACE	5700-6	STEEL	-
C	METALAIRE	8"∅	24X24	151-280	SUPPLY	STAMPED LOWER FACE	5700-6	STEEL	-
D	METALAIRE	22X22	24X24	0-1600	RETURN	NON-FILTERED RETURN GRILLE	7500R-6	STEEL	-

* EXISTING DIFFUSERS



WALL LEGEND

▨	1-HOUR RATED FIRE WALL
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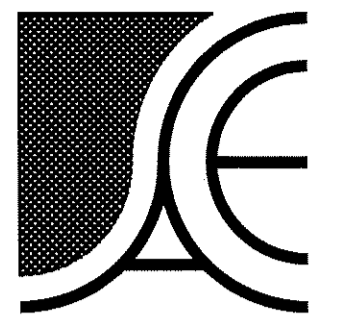
OUTSIDE AIR CALCULATIONS (GP-1)

OCCUPANCY CLASSIFICATION (PER TABLE 403.3)	NET (GROSS) SQUARE FOOTAGE	OCCUPANCY LOAD PERSONS PER 1,000 S.F.	CALCULATED # OF PEOPLE	OUTSIDE AIR REQUIRED PER PERSON (CFM)	OUTSIDE AIR REQUIRED PER S.F. (CFM)	OUTSIDE AIR REQUIRED (CFM)	OUTSIDE AIR PROVIDED (CFM)
OPER. 1 - 103	74	7	1	20	-	20	20
STER. - 105	54	7	1	15	-	20	20
CORRIDOR - 106	(282)	-	-	-	0.05	14	15
OPER. 3 - 107	78	7	1	20	-	20	20
OPER. 4 - 108	83	7	1	20	-	20	20
FUTURE OPER. 5 - 108	66	7	1	20	-	20	20
LAB - 110	74	7	1	15	-	20	20
SCAN-X - 111	(39)	-	-	-	0.15	6	10
OPER. 6 - 112	77	7	1	20	-	20	20
FUTURE OPER. 8 - 113	61	7	1	20	-	20	20
FUTURE OPER. 7 - 115	78	7	1	20	-	20	20
TOTAL OUTSIDE AIR						200	205

OUTSIDE AIR CALCULATIONS (HP-2)

OCCUPANCY CLASSIFICATION (PER TABLE 403.3)	NET (GROSS) SQUARE FOOTAGE	OCCUPANCY LOAD PERSONS PER 1,000 S.F.	CALCULATED # OF PEOPLE	OUTSIDE AIR REQUIRED PER PERSON (CFM)	OUTSIDE AIR REQUIRED PER S.F. (CFM)	OUTSIDE AIR REQUIRED (CFM)	OUTSIDE AIR PROVIDED (CFM)
RECEPTION - 101	225	30	7	15	-	105	105
RECEPTIONIST/BUSINESS - 102	122	7	1	20	-	20	20
FUTURE OPER. 2 - 104	58	7	1	20	-	20	20
CHECK-OUT DESK	(77)	-	-	-	0.05	4	5
TOTAL OUTSIDE AIR						149	150

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DR. MARTIN CLARK DENTISTRY
Raleigh, North Carolina

DRAWING NAME:
MECHANICAL PLAN

PROFESSIONAL SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 25043
ENGINEER KEVIN BENNETT
9/17/08

DRAWN EDM
DATE 9/17/08
SCALE AS NOTED
JOB NO. 8103
SHEET

M-1