LEGEND

AC	AIR CONDITIONING UNIT
ACC	AIR COOLED CONDENSER
ACCU	AIR COOLED CONDENSING UNIT
ACV	AUTOMATIC CONTROL VALVE
AD	ACCESS DOOR
AE	AIR EXTRACTOR
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
ALD	ACOUSTICALLY LINED DUCT
ATC	AUTOMATIC TEMPERATURE CONTROL
BBU	BOILER BURNER UNIT
BD	BAROMETRIC DAMPER
BDD	BACKDRAFT DAMPER
CBD	COUNTERBALANCED BACKDRAFT DAMPER
CC	COOLING COIL
CD	CEILING DIFFUSER
CDR	CONDENSATE DRAIN (AHU, FC, ETC.)
CDRP	CONDENSATE DRAIN PUMP (AHU, FC, ETC.)
CG	CEILING GRILLE
CFM	CUBIC FEET PER MINUTE
CH	CHILLER UNIT
CHWP	CHILLED WATER PUMP
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CO	CLEANOUT
C	CONVECTOR
CPD	CONDENSATE PUMP DISCHARGE
CR	CONDENSATE RETURN
CT	COOLING TOWER
CUH	CABINET UNIT HEATER
CW	COLD WATER
CWP	CONDENSER WATER PUMP
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
D	CONDENSATE DRAIN
D&D	DROP AND DRIP
DDR	DOUBLE DEFLECTION REGISTER
DEF	DEFLECTION
DHW	DOMESTIC HOT WATER
EF	EXHAUST FAN
EG	EXHAUST GRILLE
ER	EXHAUST REGISTER
EXH	EXHAUST
FC	FLEXIBLE CONNECTOR
FCU	FAN COIL UNIT

FD	FIRE DAMPER
FL	FINNED LENGTH OF RADIATION
FM	FLOW METER
FOR	FUEL OIL RETURN
FOS	FUEL OIL SUPPLY
FPT	FREEZE PROTECTION THERMOSTAT
FR	FLOOR REGISTER
FS	FLOW SWITCH
F&T	FLOAT & THERMOSTATIC TRAP
GCR	GRID CORE REGISTER
GPM	GALLONS PER MINUTE
HC	HEATING COIL
HE	HEAT EXCHANGER
HEDV	HOSE END DRAIN VALVE
HEF	HIGH EFFICIENCY FILTER BANK
HPCR	HIGH PRESSURE CONDENSATE RETURN (OVER 30 PSIG)
HPS	HIGH PRESSURE STEAM (OVER 30 PSIG)
HRC	HEAT RECOVERY COIL
HRP	HEAT RECOVERY PUMP
HRR	HEAT RECOVERY RETURN
HRS	HEAT RECOVERY SUPPLY
HUM	HUMIDIFIER
HWP	HEATING WATER PUMP
HWR	HEATING WATER RETURN
HWS	HEATING WATER SUPPLY
HV	HEATING & VENTILATING UNIT
LD	LINEAR DIFFUSER
LG	LINEAR GRILLE
LPCR	LOW PRESSURE CONDENSATE RETURN (0–15 PSIG)
LPS	LOW PRESSURE STEAM (0–15 PSIG)
LSGV	LOCK SHIELD GATE VALVE
MAN/LS	MANUAL CONTROL FROM LIGHT SWITCH
MAN/SS	MANUAL CONTROL WITH VARIABLE SPEED SWITCH
MBH	1000 BRITISH THERMAL UNITS PER HOUR
MCC	MOTOR CONTROL CENTER
MD	MOTORIZED DAMPER
MPCR	MEDIUM PRESSURE CONDENSATE RETURN (16 – 30 PSIG)
MPS	MEDIUM PRESSURE STEAM (16 – 30 PSIG)
MS	MAGNETIC STARTER
OA	OUTSIDE AIR
OED	OPEN ENDED DUCT
OS&Y	OUTSIDE SCREW & YOKE GATE VALVE
PD	PRESSURE DROP
PH	PREHEAT COIL
PRD	PRESSURE RELIEF DAMPER
PRV	PRESSURE REDUCING VALVE

R/D	RADIATION WITH DAMPER
RCHWP	RESET CHILLED WATER PUMP
RCHWR	RESET CHILLED WATER RETURN
RCHWS	RESET CHILLED WATER SUPPLY
REF	RETURN/EXHAUST FAN
RET	RETURN
RF	RETURN AIR FAN
RH	REHEAT COIL
RHWP	RESET HOT WATER PUMP
RHWR	RESET HOT WATER RETURN
RHWS	RESET HOT WATER SUPPLY
RPM	REVOLUTIONS PER MINUTE
RR	RETURN REGISTER
S	SWITCH
SA	SOUND ATTENUATOR
SCV	SELF – CONTAINED CONTROL VALVE
SD	SMOKE DAMPER
SDR	SINGLE DEFLECTION REGISTER
SF	SUPPLY FAN
SG	SUPPLY GRILLE
SP	STATIC PRESSURE
SS	STAINLESS STEEL
SUP	SUPPLY
SV	SOLENOID VALVE
TC	TIME CLOCK
TID	THERMALLY INSULATED DUCT
TD	TRANSFER DUCT
TF	TRANSFER FAN
TG	TRANSFER GRILLE
TR	TEMPERATURE RISE
TT	THERMOSTATIC TRAP
UH	UNIT HEATER
VAV	VARIABLE AIR VOLUME BOX
VB	VACUUM BREAKER
VD	VOLUME DAMPER
VF	VENTILATION FAN
WC	WATER COLUMN
WG	WALL GRILLE
WR	WALL REGISTER
	ACOUSTICALLY LINED DUCT
	ACV 2 – WAY
	ACV 3 – WAY
	BALANCE VALVE
BDD	BACKDRAFT DAMPER
	CAP – PIPE
	CHECK VALVE

	COMBINATION BALANCING, FLOW MEASURING & TIGHT SHUT–OFF VALVE
	DUCT SECTION – SUPPLY
	DUCT SECTION – RETURN/EXHAUST
	DUCT TURNING VANES
FD	FIRE DAMPER (1 1/2 HOUR RATED)
FD (3 HR)	FIRE DAMPER (3 HOUR RATED)
	FLEXIBLE DUCT
	FLOAT & THERMOSTATIC TRAP
	ISOLATION VALVE
	GLOBE VALVE
H	HUMIDISTAT
HS	HUMIDITY SENSOR
	LOCKSHIELD GATE VALVE
	LOUVER
V	MANUAL AIR VENT
MD	MOTORIZED DAMPER
S O/U	OCCUPIED/UNOCCUPIED SWITCH
	OS&Y GATE VALVE
	PETCOCK FOR GAUGE CONNECTION
	PIPE ANCHOR
	PIPE GUIDE
DN	PITCH DOWN
	PLUG VALVE
P	PRESSURE GAUGE
	PRESSURE REDUCING VALVE
	PRESSURE RELIEF VALVE
PRD	PRESSURE RELIEF DAMPER
A 10'–0" FL/D 10.0 MBH	RADIATION I.D. (TYPE A, 10'–0" FINNED LENGTH, 10,000 BTU/HR) WITH DAMPER
A 10'–0" FL 10.0 MBH	RADIATION I.D. (TYPE A, 10'–0" FINNED LENGTH, 10,000 BTU/HR) WITHOUT DAMPER
	REDUCER – CONCENTRIC
	REDUCER – ECCENTRIC
	RETURN AIR
	RETURN AIR DUCT
	RETURN PIPING (HEATING WATER, CHILLED WATER HEAT RECOVERY, CONDENSATE RETURN)
A MH101	SECTION I.D. (SECTION A SHOWN ON DWG. MH101)
SD	SMOKE DAMPER
	STRAINER
	SUPPLY AIR
	SUPPLY AIR DUCT
	SUPPLY PIPING (HEATING WATER, CHILLED WATER HEAT RECOVERY, STEAM)
S P	SWITCH WITH PILOT LIGHT
	TAKE – OFF FROM BOTTOM OF PIPE
	TAKE – OFF FROM TOP OF PIPE
TS	TEMPERATURE SENSOR

	THERMOMETER
	THERMOMETER WELL
SD	DUCT MOUNTED SMOKE DETECTOR (BY DIVISION 16)
T	THERMOSTAT
T C	THERMOSTAT COOLING
T H	THERMOSTAT HEATING
T N	THERMOSTAT – NIGHT
T H/C	THERMOSTAT – HEATING/COOLING
	THERMOSTATIC TRAP
S T	TIMER SWITCH
	UNION
S V	VARIABLE SPEED SWITCH W/OFF "POSITION"
VD	VOLUME DAMPER

S (SUPPLY) R (RETURN)
E (EXHAUST) T (TRANSFER)
SUPPLY DIFFUSER (TYPE 2)
DIFFUSER DESCRIPTION
(SEE REG., GRILLES & DIFF SCHEDULE)
QUANTITY
S2 4 400
400 CFM EA

GENERAL NOTES

1. VISIT THE BUILDING SITE PRIOR TO BIDDING TO BECOME FAMILIAR WITH EXISTING CONDITIONS, AND TO TAKE MEASUREMENTS AS NECESSARY FOR COMPLETION OF THE WORK ASSOCIATED WITH THE DESIGN INTENT OF THESE CONTRACT DOCUMENTS.
2. COORDINATE WORK OF MECHANICAL SUBCONTRACTOR WITH WORK OF OTHER TRADES.
3. DUCTWORK, PIPING AND EQUIPMENT ARE INDICATED DIAGRAMMATICALLY. FIELD–VERIFY LOCATIONS.
4. PRIOR TO FABRICATING DUCTWORK, COORDINATE WITH OTHER TRADES TO ENSURE THAT THE DUCTWORK CAN BE INSTALLED WITH THE INDICATED SIZES AND LOCATIONS. FIELD–VERIFY EXISTING DUCT SIZES AND CONDITIONS. SUBMIT ANY DISCREPANCIES OR PROPOSED CHANGES.
5. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR LOCATIONS OF CEILING DIFFUSERS AND REGISTERS.
6. PROVIDE VOLUME DAMPERS SO THAT EVERY REGISTER, GRILLE, AND DIFFUSER (SUPPLY, RETURN, AND EXHAUST) CAN BE INDIVIDUALLY BALANCED. VERIFY INSTALLATION OF EXISTING VOLUME DAMPERS AT EACH BRANCH IN EXISTING SUPPLY DUCT. PROVIDE ADDITIONAL VOLUME DAMPERS WHERE REQUIRED.
7. LOCATE VOLUME DAMPERS AS FAR AWAY FROM REGISTERS, GRILLES, AND DIFFUSERS AS POSSIBLE TO MINIMIZE NOISE. LOCATE TO BE UNOBSTRUCTED AND EASILY ACCESSIBLE FOR TESTING AND BALANCING. LOCATE ABOVE ACCESSIBLE SUSPENDED CEILINGS WHEREVER POSSIBLE. WHERE VOLUME DAMPERS MUST BE LOCATED ABOVE GYPBOARD CEILINGS, PROVIDE ACCESS PANELS AS SPECIFIED AND NOTIFY THE ARCHITECT VERBALLY AND IN WRITING OF SUCH LOCATIONS. OBTAIN PERMISSION FROM THE ARCHITECT BEFORE INSTALLING ACCESS PANELS.
8. DUCT ELBOWS SHALL BE LONG–RADIUS TYPE (THROAT RADIUS EQUAL TO OR GREATER THAN DUCT WIDTH IN THE PLANE OF THE TURN) WHEREVER SPACE ALLOWS. IF SPACE IS NOT ADEQUATE, PROVIDE MITERED ELBOWS WITH TURNING VANES.
9. PROVIDE 16 GAUGE SINGLE–THICKNESS TURNING VANES AT MITERED DUCT ELBOWS. VANE EDGES (LEADING AND TRAILING) SHALL BE TANGENTIAL TO AIRFLOW.
10. FLEXIBLE DUCTWORK IS NOT ALLOWED IN NEGATIVE PRESSURE SYSTEMS. DO NOT USE FLEXIBLE DUCTWORK IN RETURN AND EXHAUST SYSTEMS.
11. FLEXIBLE DUCT LENGTHS SHALL NOT EXCEED 5'–0".
12. PAINT DUCTWORK VISIBLE THRU CEILING OPENINGS, DUCT OPENINGS, AND REGISTERS, GRILLES AND DIFFUSERS WITH BLACK PAINT IN ACCORDANCE WITH SECTION 09900 – PAINTING.
13. SEAL DUCTWORK AND PIPING THRU MECHANICAL ROOM FLOORS AND PARTITIONS, AND THRU FIRE–RATED ASSEMBLIES, WITH FIRESTOPPING MATERIAL AS SPECIFIED.
14. MOUNT THERMOSTATS AND TEMPERATURE AND HUMIDITY SENSORS AT 48 INCHES AFF TO CENTERLINE OF ITEM. PROVIDE ELECTRICAL WALL BOX ATTACHED TO FRAMING.
15. WHERE THERMOSTATS/TEMPERATURE SENSORS ARE LOCATED NEAR LIGHT SWITCHES, INSTALL SO THAT LIGHT SWITCHES ARE NEARER THE DOOR JAMBS. THE INTENT IS TO LOCATE THERMOSTATS/ TEMPERATURE SENSORS SO THEY WILL NOT INTERFERE WITH ACCESSIBILITY OF LIGHT SWITCHES.

HARRIMAN
Architects + Engineers
36 Harriman Drive
Auburn, ME 04210
207.784.5100 tel
123 Middle Street
Portland, ME 04101
207.775.0053 tel
One Perimeter Road
Manchester, NH 03103
603.626.1242 tel
www.harriman.com

© 2011

STATE OF MAINE
CLIFTON W. GREIM
No. 6405
LICENSED
PROFESSIONAL ENGINEER

Project Title
WESTGATE SHOPPING CENTER ANYTIME FITNESS
PORTLAND, MAINE

HA Project No. 11110

Key Plan

Mark	Date	Description
–	07–13–11	ISSUED FOR CONSTRUCTION
–	06–13–11	95% REVIEW

Issue Dates

Drawing Status

Drawing Title
LEGEND AND GENERAL NOTES

PA / PE: CG
Drawn By: REM

Drawing Number
M00.1