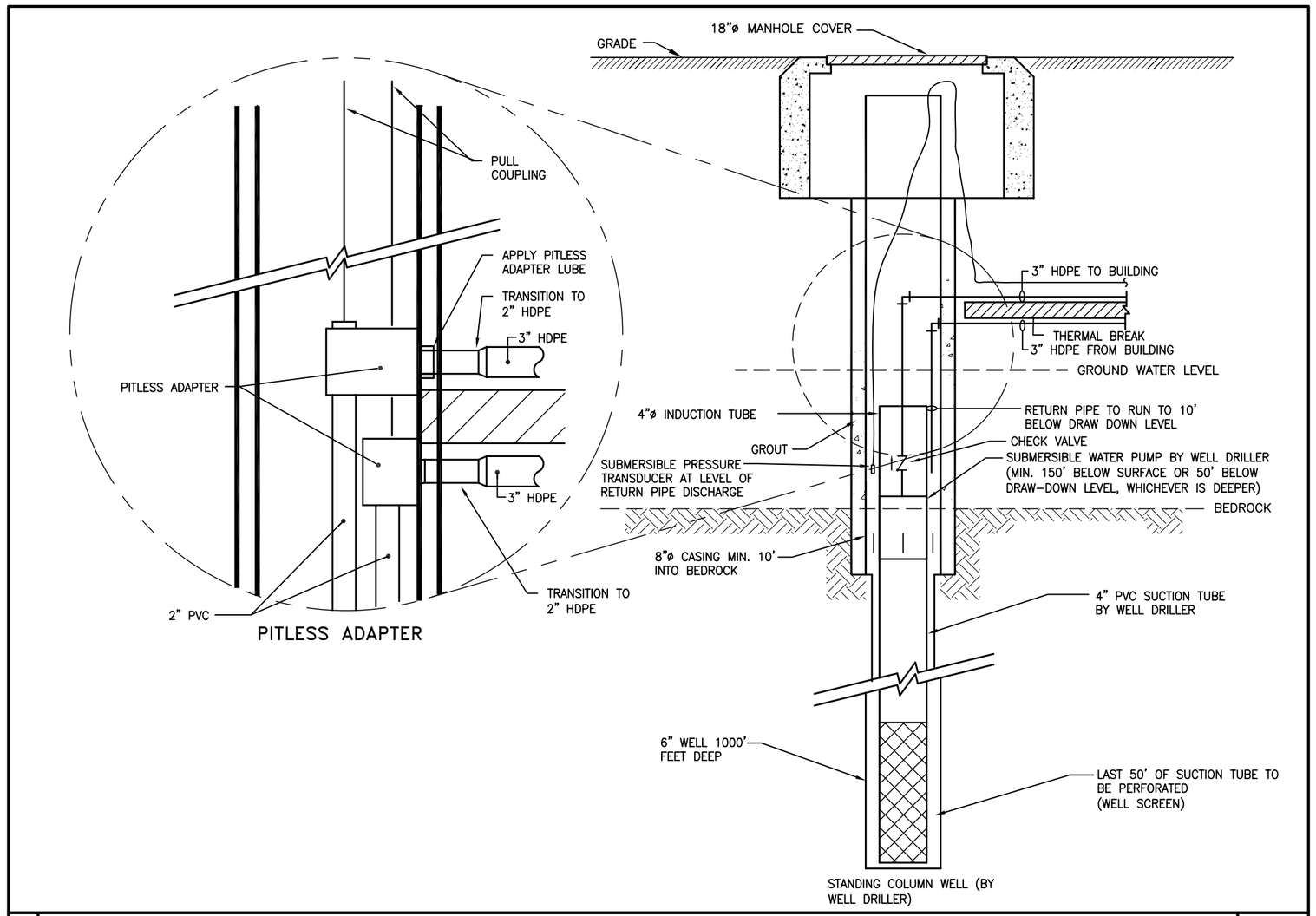

1	WELL DETAIL	N.T.S.

HVAC LEGEND

CAP	THREE WAY SOLENOID VALVE
PIPE BREAK	TWO WAY SOLENOID VALVE
CONCENTRIC REDUCER	TWO WAY MODULATING VALVE
ECCENTRIC REDUCER	CENTRIFUGAL PUMP
Y-TYPE STRAINER WITH GATE VALVE DRAIN & HOSE END CAP	AIR FLOW (SUPPLY)
SCREWED UNION	AIR FLOW (RETURN OR EXHAUST)
GATE VALVE	FLOW DIRECTIONAL ARROW
GLOBE VALVE	PITCH DIRECTIONAL ARROW
BALL VALVE	THERMOSTAT
BUTTERFLY VALVE	TEMPERATURE SENSOR
COMBINATION ISOLATION/ BALANCING VALVE	HUMIDISTAT
PETCOCK	KEYED NOTE
CHECK VALVE	BACKDRAFT DAMPER
AIR VENT	
POINT OF CONNECTION OF NEW PIPE OR DUCT TO EXISTING PIPE OR DUCT	

HVAC ABBREVIATIONS

°F	DEGREES FAHRENHEIT
°C	DEGREES CELSIUS
ø	DIAMETER
AAV	AUTOMATIC AIR VENT
AC	AIR CONDITIONING
ACV	AUTOMATIC CONTROL VALVE
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ALD	ACOUSTICALLY LINED DUCTWORK
AS	AIR SEPARATOR
ATC	AUTOMATIC TEMPERATURE CONTROL
ATV	ATOMSPHERIC VENT
BDD	BACKDRAFT DAMPER
BLR	BOILER
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNIT PER HOUR
BWR	SUPPLEMENTAL BOILER WATER RETURN
BWS	SUPPLEMENTAL BOILER WATER SUPPLY
CFM	CUBIC FEET PER MINUTE
HWS&R	HOT WATER SUPPLY & RETURN
CO	CLEAN-OUT
COND	CONDENSATE
CONN	CONNECTION
CRD	CEILING RADIATION DAMPER
CUH	CABINET UNIT HEATER
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
D	DRAIN
DB	DRY BULB TEMPERATURE
DH	DUCT HEATER
DIA	DIAMETER
DN	DOWN
DX	DIRECT EXPANSION
EAT	ENTERING AIR TEMPERTURE
EF	EXHAUST FAN
EG	EXHAUST GRILLE
ER	EXHAUST REGISTER
ERV	ENERGY RECOVERY VENTILATOR
ESP	EXTERNAL STATIC PRESSURE
ET	EXPANSION TANK
EWT	ENTERING WATER TEMPERATURE
EXH	EXHAUST
FA	FREE AREA
FLA	FULL LOAD AMPS
FLEX	FLEXIBLE
FPM	FEET PER MINUTE
FS	FLOW MEASURING STATION
FT	FEET
GPM	GALLONS PER MINUTE
GRD	GRADE (GROUND LEVEL)
HD	HEAD
HP	HORSEPOWER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
HZ	HERTZ
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
LD	LINEAR DIFFUSER
LVR	LOUVER
LWT	LEAVING WATER TEMPERATURE
M	MOTORIZED DAMPER
MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPS
MECH	MECHANICAL
MU	MAKE-UP WATER
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NO.	NUMBER
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OAI	OUTSIDE AIR INTAKE
OED	OPEN END DUCT
P	PUMP
PD	PRESSURE DROP/DIFFERENTIAL
PSI	POUNDS PER SQUARE INCH
PSIA	POUNDS PER SQUARE INCH ABSOUTE
PSID	POUNDS PER SQUARE INCH DIFFERENTIAL
PSIG	POUNDS PER SQUARE INCH GAUGE
RA	RETURN AIR
REQD	REQUIRED
RG	RETURN GRILLE
RPM	REVOLUTIONS PER MINUTE
SF	SUPPLY FAN
SPECS	SPECIFICATIONS
SQFT	SQUARE FEET
SR	SUPPLY REGISTER
T	THERMOSTAT
THA	TOTAL HEAT ABSORBED
THR	TOTAL HEAT REJECTED
TYP	TYPICAL
UC	UNDERCUT DOOR
V	VOLTS
VFD	VARIABLE FREQUENCY DRIVE
VD	VOLUME DAMPER
W/	WITH
W/O	WITHOUT
WB	WET BULB TEMPERATURE
WC	WATER COLUMN
WG	WATER GAUGE
WMS	WIRE MESH SCREEN

GENERAL NOTES:
1. COORDINATE ALL KITCHEN HOOD EXHAUST DUCT SIZES WITH HOOD MANUFACTURER'S INSTRUCTIONS.

Allied Consulting
Engineering Services, Inc.
215 Boston Post Road, Sudbury, MA
Tel: (978) 443-7888
Fax: (978) 443-4636

RUSSELL TREMAINE
ARCHITECT

MAY 16, 2008

5 & 6 BRIGHAM STREET
EAST BOSTON, MA

HVAC DETAILS

N.T.S.

H8

H:\27340-49\27348\HVAC\27348-H8.dwg, By: pons, PLOTTED: May 16, 2008 - 4:15pm