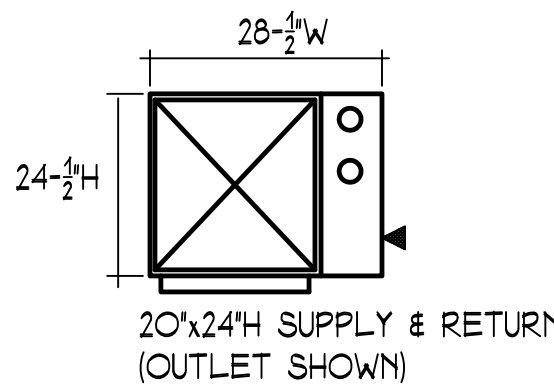


**GAS FIRED FURNACE VENT DETAIL 3**  
NTS (THRU ROOF)

NOTES:  
1. SEE ALSO AC UNIT SCHEMATIC FOR MAXIMUM/MINIMUM DISTANCES BETWEEN UNIT FLUES. INSTALL PER MANUFAC. REQUIREMENTS.

ELEVATIONS

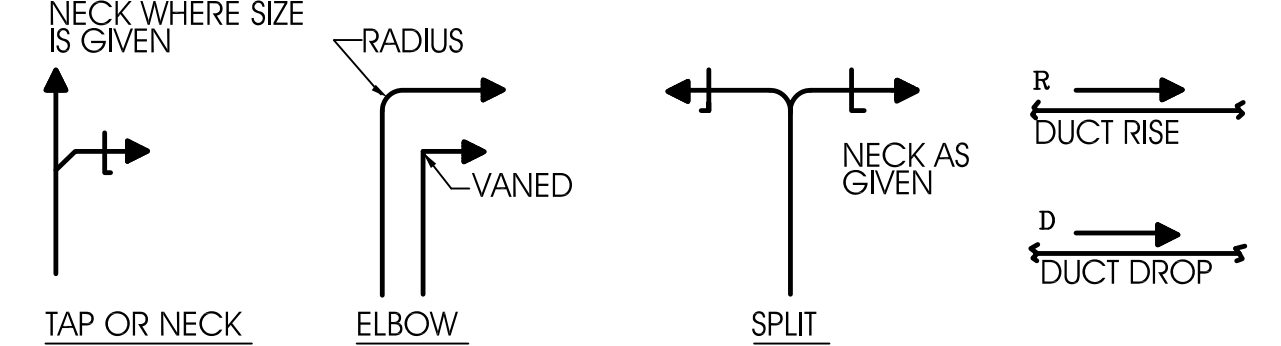
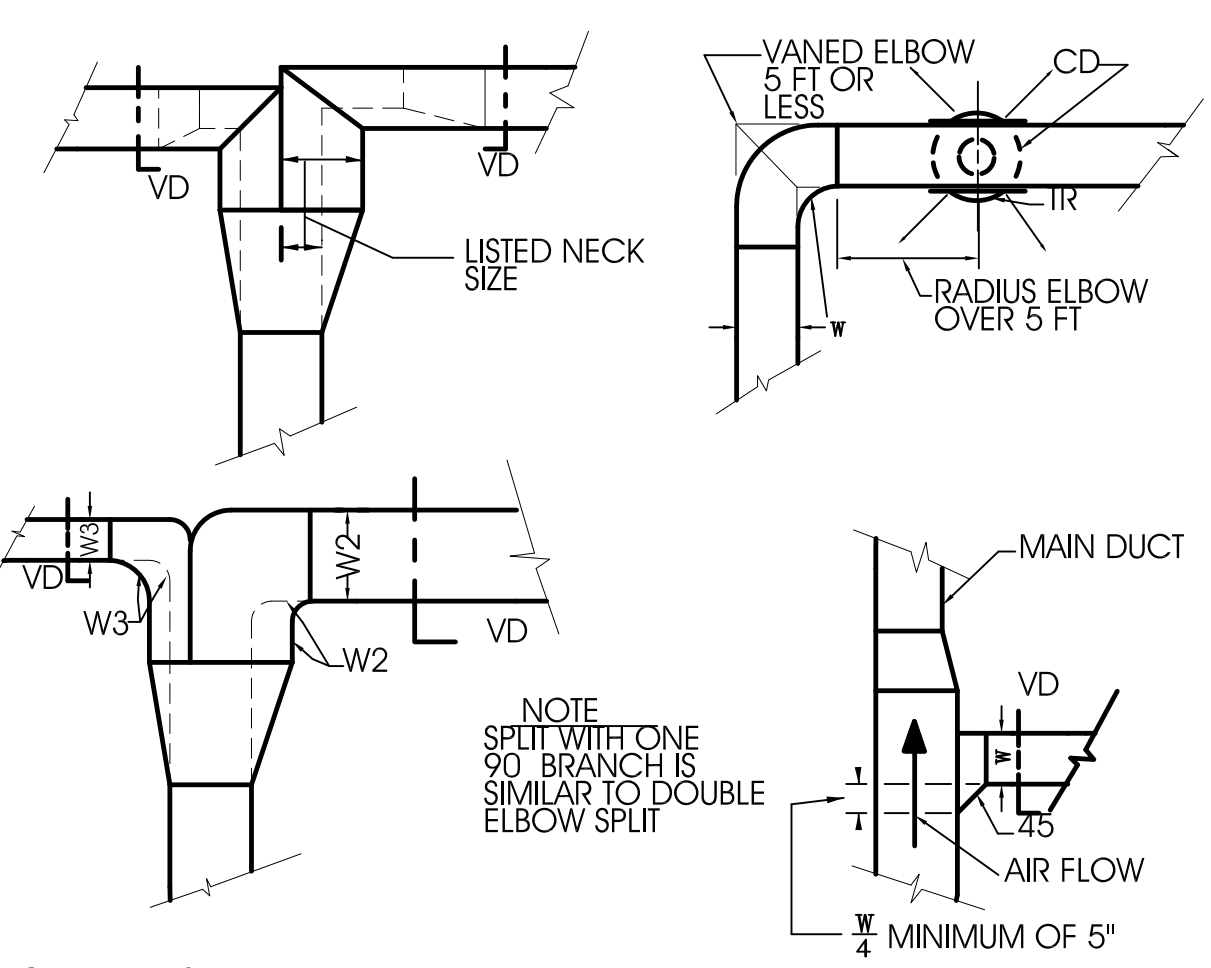
ROOF



**AC-1-1, AC-2-1, AC-2-2: (LEFT HAND)**  
SCALE: 3/4" = 1'-0"  
(NOMINAL 5 TON/120 MBH)

- NOTES:
1. GAS PIPING, RA, DRAIN & ELECTRIC CONNECTIONS TO BE LEFT OR RIGHT HANDED PER FIELD CONDITIONS.
  2. MATCH FURNACE & FUTURE DX COOLING COIL COMPONENTS EXACTLY.
  3. CLEARANCE TO COMBUSTIBLES:  
REAR - 6"  
FRONT - 18"

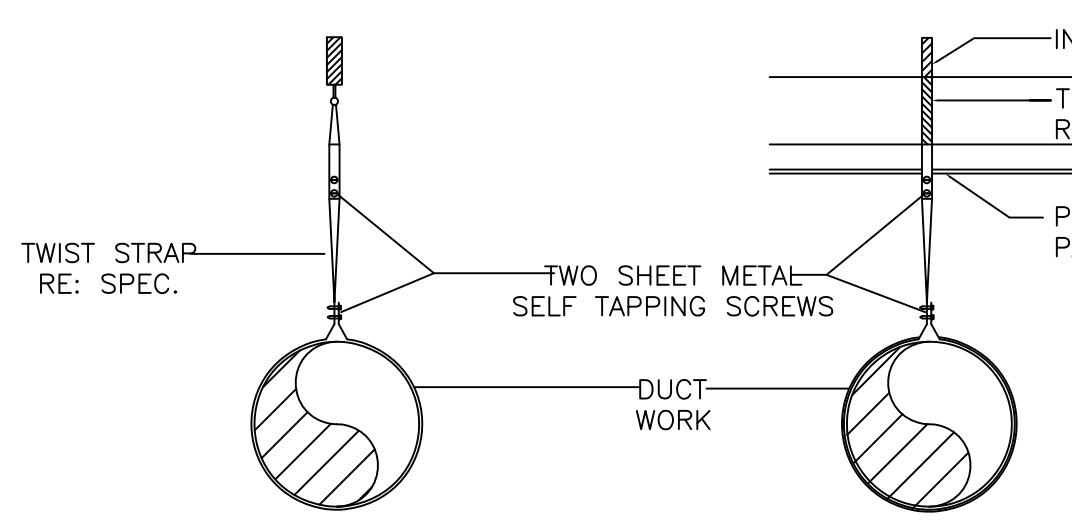
**BASEMENT A/C UNIT DETAIL**  
NO SCALE



SINGLE LINE REPRESENTATIONS - REFER TO DOUBLE LINE DETAILS ABOVE

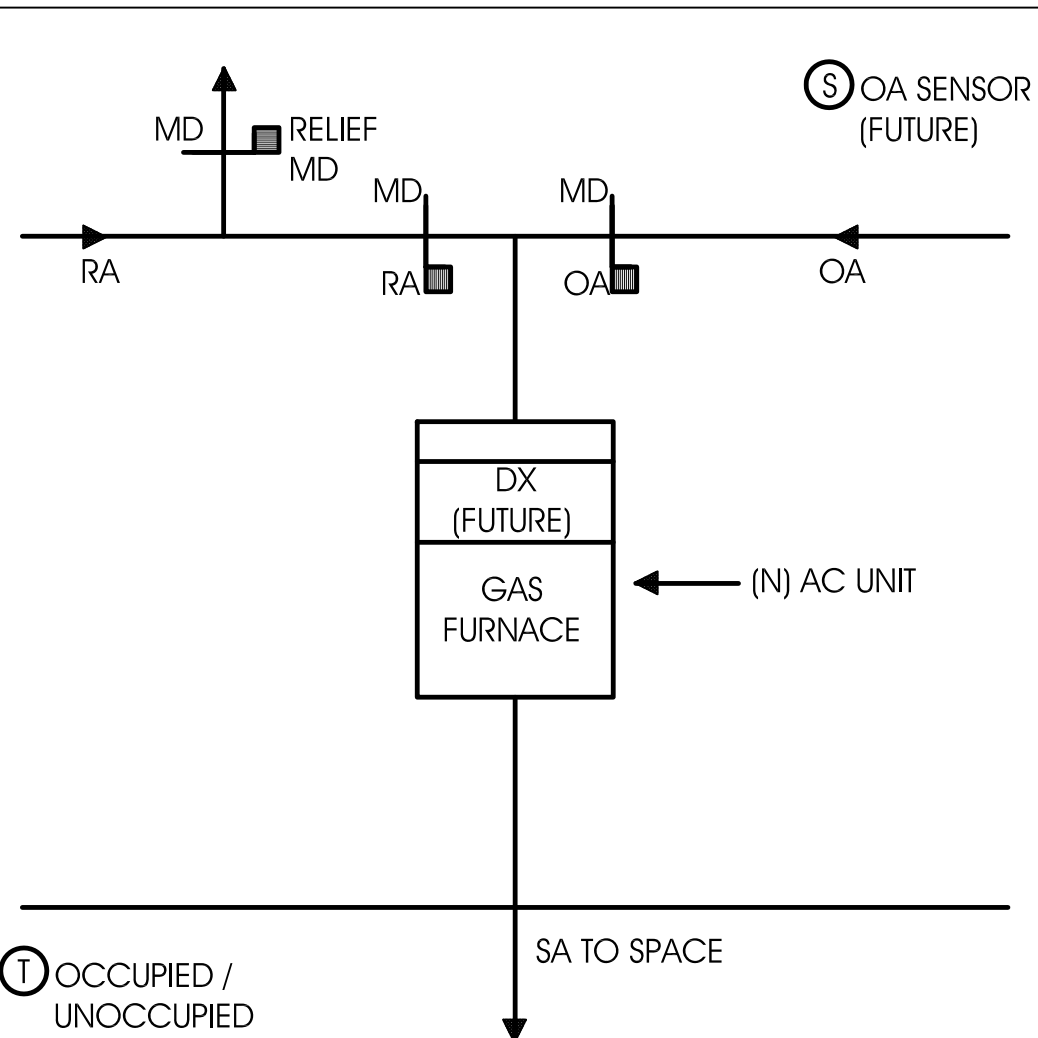
- NOTES:
1. USE RADIUS OR SQUARE VANED BENDS FOR BOTH ELBOWS AND SPLITS AS DETERMINED BY SPACE LIMITATIONS AND DISTANCE FROM AIR OUTLETS.
  2. ALL VANED ELBOWS SHALL BE SQUARE (CONSTANT WIDTH).
  3. WHERE DUCTS SPLIT, SOLID LINE IS PREFERRED ARRANGEMENT UNLESS PRECLUDED BY SPACE CONDITIONS OR INDICATED OTHERWISE ON DRAWINGS. USED ELBOWED SPLIT FOR BRANCH CONNECTION ONLY WHERE NECK SIZE IS GIVEN.

**DUCTWORK BRANCH TAKEOFF CONNECTIONS**  
NO SCALE



**DUCT HANGER ATTACHMENTS**

- NO SCALE
- NOTES:
1. HANGER SIZE & SPACING PER SMACMA & LOCAL CODE.
  2. STEEL SHOWN, WOOD SIMILAR.



- NOTES:
1. NEW AC-1-1, AC-2-1 & AC-2-2 TO MODULATE GAS FIRED FURNACE TO MAINTAIN SET POINT TEMPERATURE OF ROOM THERMOSTAT.
  2. SET OUTDOOR AIR DAMPER TO MINIMUM POSITION WITH CORRESPONDING RELIEF DAMPER.

**CONTROL SCHEMATIC**

NO SCALE

**SYMBOLS**

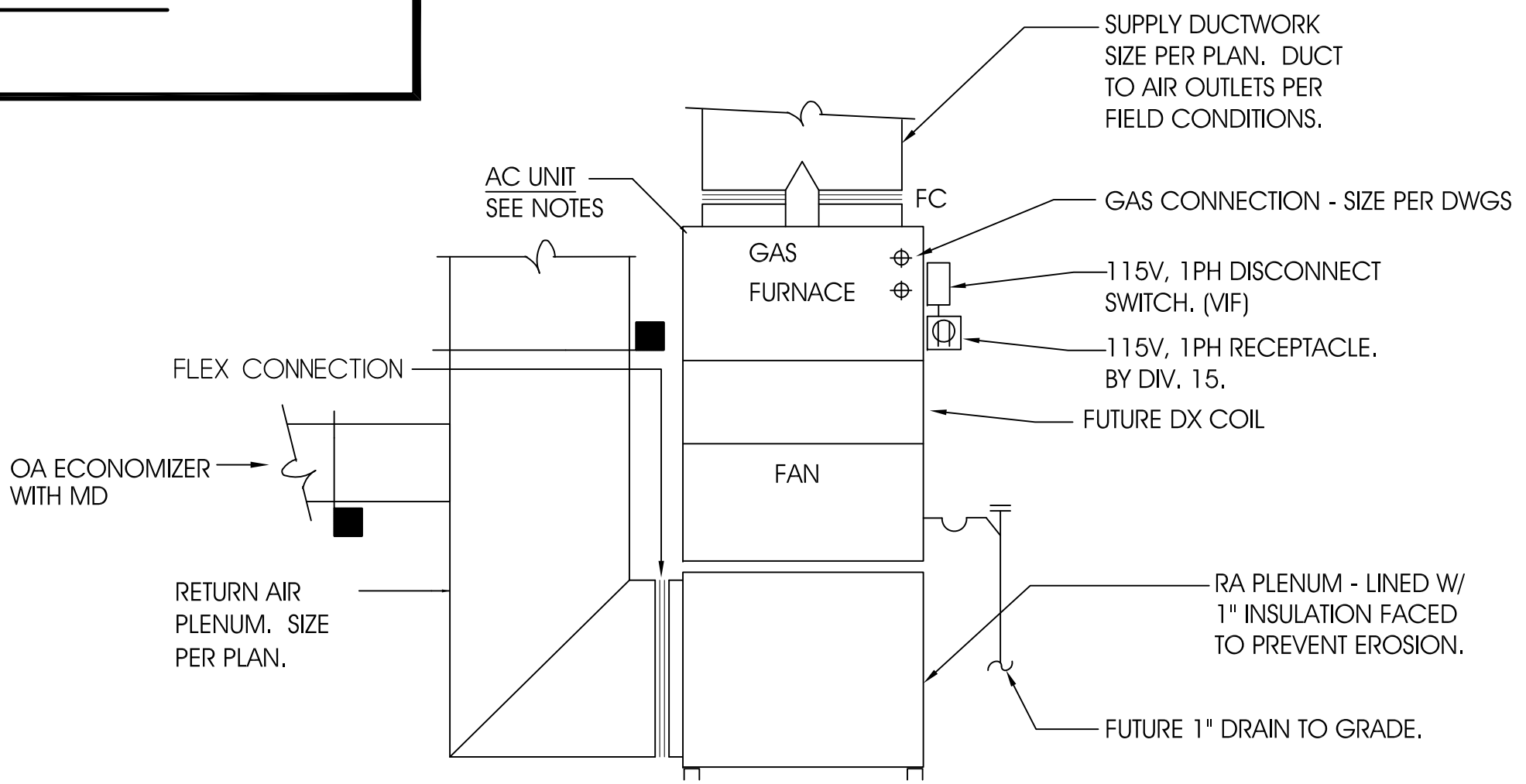
(N)	NEW	G	GAS PIPE
(E)	EXISTING	TR	TOP REGISTER
-X-X-	(R) REMOVE	FC	FLEX CONNECTION
(A)	ABANDON	OAI	OUTDOOR AIR INTAKE
-S-	SANITARY	MD	MOTORIZED DAMPER
-V-	VENT	N	NECK
-CW-	COLD WATER	SA	SUPPLY AIR
⊙	BALL VALVE	RA	RETURN AIR
⊕	UNION	OA	OUTSIDE AIR
⊘	CHECK VALVE		
⊔	UNDERCUT DOOR		

**GENERAL NOTES**

1. THE DRAWINGS ARE TO BE CONSIDERED SCHEMATIC ONLY AND DO NOT NECESSARILY SHOW THE EXACT LOCATION AND DETAILS OF THE WORK TO BE INSTALLED. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, CLEARANCES AND ELEVATIONS.
2. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL FIXTURES, OUTLETS AND ACCESSORIES.
3. PROVIDE ACCESS DOORS FOR CEILING AND WALL ACCESS TO ALL FIRE DAMPERS PIPING AND VALVES REQUIRING SERVICE. (INSTALLATION BY THIS CONTRACTOR)
4. WHERE EQUIPMENT DATA IS NOT SHOWN ON PLANS OR DRAWINGS. REFER TO SPECIFICATIONS.
5. CONTRACTOR IS RESPONSIBLE FOR ALL CHANGES TO WORK OF ALL TRADES NECESSITATED BY PROVIDING EQUIPMENT DIFFERING IN ANY RESPECT FROM THAT INDICATED. ALL EQUIPMENT SHALL BE SELECTED TO FIT AVAILABLE SPACE.
6. VERIFY ALL DIMENSIONS, CLEARANCES AND ELEVATIONS IN FIELD.
7. ALL WORK CONDUCTED UNDER THE HVAC TRADE, SHALL BE PERFORMED BY A PERSON WITH A SPECIAL CERTIFICATION FROM THE COUNTY OF BERGEN TO CONDUCT THAT TRADE, IN ACCORDANCE WITH THE "BERGEN COUNTY LICENSING LAW", LATEST REVISION.
8. THE HVAC CONTRACTOR SHALL PROVIDE ALL NECESSARY LABOR, MATERIAL & EQUIPMENT TO MAINTAIN TEMPORARY HEAT DURING CONSTRUCTION, AFTER THE BUILDING IS ENCLOSED, SO AS TO CREATE A TEMPERATURE WITHIN THE ENCLOSED SPACE SUITABLE FOR ALL BUILDING TRADES INCLUDING GENERAL CONSTRUCTION, PLUMBING, HVAC & ELECTRICAL.

**A/C UNIT SCHEDULE**

UNIT #	NOM TONS	MAX HTG-MBH	UNIT CFM
<b>FIRST FLOOR</b>			
AC-1-1	5	114	2000
<b>SECOND FLOOR</b>			
AC-2-1	5	114	2000
AC-2-2	5	114	2000



**SPLIT AC UNIT SCHEMATIC - (SEE ALSO BASE A/C UNIT DETAIL)**  
NO SCALE

- NOTES:
1. NEW AC UNITS WITH GAS FIRED FURNACES TO BE BASED ON TRANE SPLIT SYSTEM CONSISTING OF FURNACE WITH BLOWER ONLY. AC, AIR COOLED CONDENSING UNIT AND DX COIL TO BE INSTALLED IN FUTURE. UNITS TO BE MODULATING DIRECT VENTED FURNACES WITH FUTURE TWO STAGE CONDENSING UNITS AND COILS. UNITS TO BE MOUNTED HORIZONTALLY IN ATIC.
- AC-1-1 FUTURE AIR COOLED CONDENSING UNIT (NIC), (NOMINAL 5 TON) 208/230V, 1PH, \* MBH TOTAL AT 80/67 EAT AND 95° AMBIENT AT 2000 CFM. SEER \* EER \*, R-410.  
AC-2-1  
AC-2-2 PROVIDE HORIZONTAL AIR HANDLING, FURNACE - MODULATING NATURAL GAS DIRECT VENT UNIT TUHMD120ACV5VA WITH SPACE FOR FUTURE DX COIL (NIC), 52 MBH INPUT LOW STAGE/114 MBH INPUT HIGH STAGE, 95.0 A FLUE FURNACE WITH 1/2 HP FAN MOTOR, 0.5" ESP AT HIGH SPEED, 115V, 1PH, 15.2A.
- SEE BASE DETAILS ON THIS DWG. MAX FUSE SIZE 20A.

ALL FURNACES SHALL BE SUITABLE FOR NATURAL GAS. PROVIDE FILTERS FOR ALL SYSTEM (2 SETS FOR EACH SYSTEM) AND A PROGRAMMABLE HEAT/COOL THERMOSTAT.

Phase 1

**DARLINGTON SCHOOLHOUSE**

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New York-New Jersey Trail Conference  
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DATE	JUNE 14, 2010
DRAWN BY	VP
CHECKED BY	RHB
JOB NO.	ARBPE 3052
MECHANICAL: SYMBOLS, NOTES, AND DETAILS	<b>M-1</b>