CHAS. ROBERTS AIR CONDITIONING, INC. 9828 N. 19th AVENUE PHOENIX, ARIZONA 85021 943-7291

BUILDER: republic PLAN: 1370 DATE: 06-30-99 SENSIBLE LATENT 26917 1380 28297 TOTALS 20050 EQUIPMENT SELECTION

GAS/ELECTRIC

UNIT A - GOODMAN 3.5 TON GAS/ELECTRIC SPLIT AIR CONDITIONING SYSTEM MODEL CK42-1(OUTDOOR)/H-49(COIL)/GMPH075-4(GAS FURNACE) 39500 BTU/H COOLING 75000 BTU/H HEATING RATED @ ARI CONDITIONS FLA. 21.1/8.2

EF-2 = AIRO 2510REGISTERS - RRAC 800-50/150 R/A GRILLES - RRAC 50GH-5FF

DESIGN CONDITIONS

SUMMER

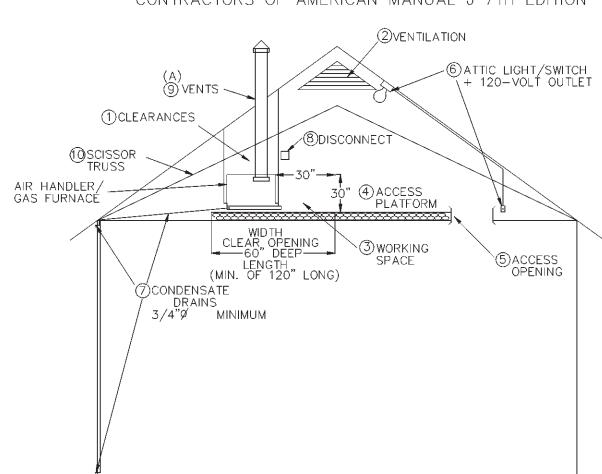
EXHAUST FANS - EF-1 = AIRO 650

WINTER

HOODS - ROUGH-IN

OUTSIDE TEMPERATURE 34 DB OUTSIDE TEMPERATURE 110 DB - 71 WB INSIDE TEMPERATURE 74 DB INSIDE TEMPERATURE 78 DB - 63 WB

> LOAD CALCULATED IN ACCORDANCE WITH AIR CONDITIONING CONTRACTORS OF AMERICAN MANUAL J 7TH EDITION

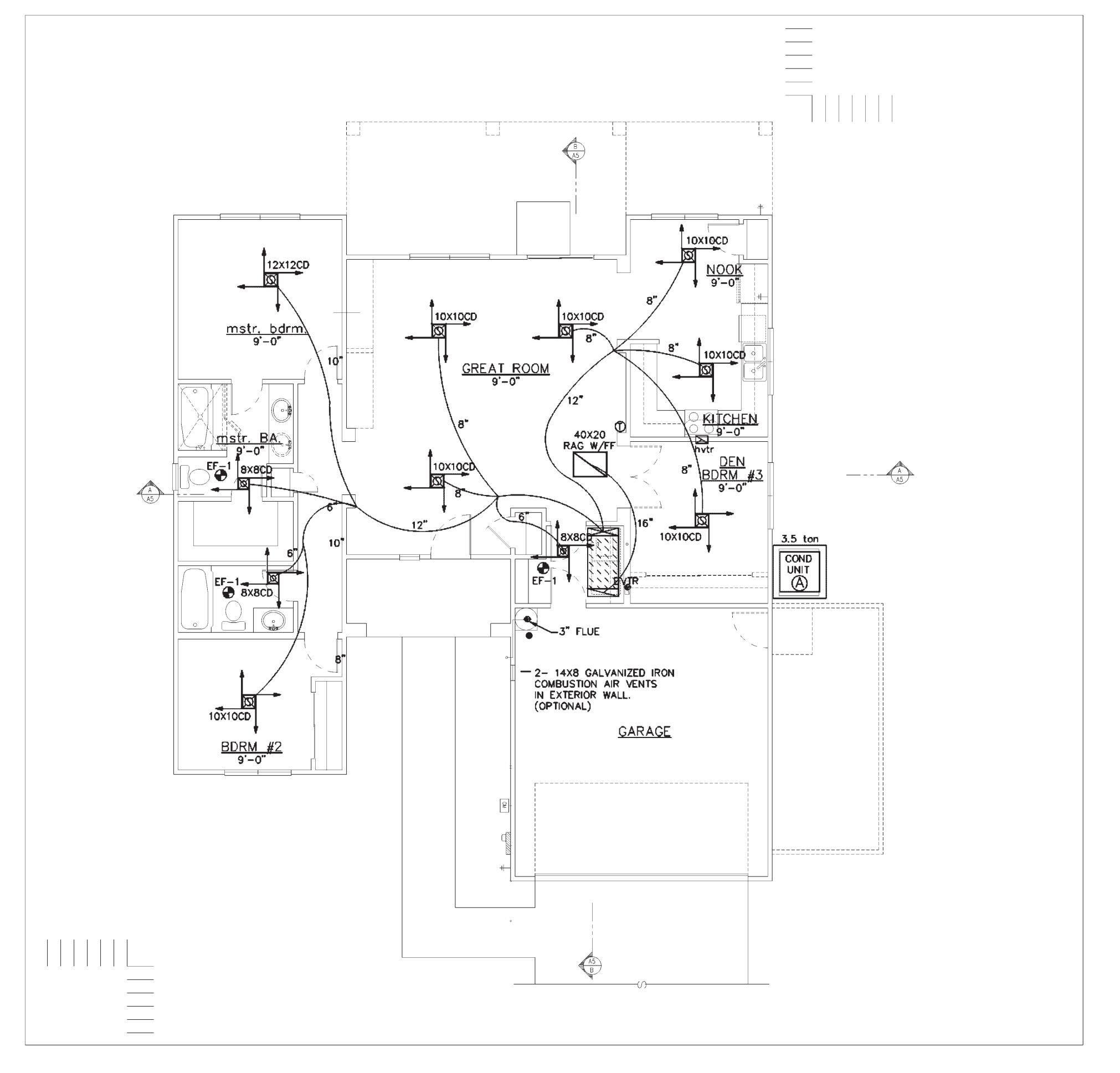


REQUIREMENTS FOR ATTIC AIR HANDLER OR GAS FURNACE

- CLEARANCES FROM COMBUSTABLE MATERIALS FOR GAS FIRED FURNACES MUST BE AS SPECIFIED IN THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND APPLICABLE LOCAL BUILDING CODES. (A)
- 2. VENTILATION THE NET Free VENTILATION AREA SHALL NOT BE LESS THAN 1/150 of the area OF THE SPACE VENTILATED.

 EXECPTIONS: THE AREA MAY BE 1/300 OF THE AREA OF THE SPACE VENTILATED PROVIDED 50 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE VENTILATED AT LEAST 3 FEET ABOVE EAVE OR CORNICE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS.

 * REQUIRED ATTIC VENTILATION EXCEEDS REQUIREMENTS FOR FURNACE COMBUSTION AIR. (A)
- 3. WORKING SPACE A WORKING PLATFORM must NOT be LESS THAN 30 inches in depth fOR THE ENTIRE SERVICE SIDE OF THE FURNACE WITH A minimum height of 30 inches head clearance.
- 4. access platform the access platform must be a minimum of 24 inches wide continious floor not more than 20 feet in length unless
 - the entire AIR HANDLER/furnace can be serviced from the attic access opening. * make provisions for propér insulation to be installed under the platforms when required.
- 5. access opening attic openings and passageways to the AIR HANDLER/furnace must be 30 INCHES X 30 INCHES. execption: the access opening into the space may be 22 inches by 30 inChes provided the largest piece of equipment can be removed through this
- attic light a permanent 120-volt receptical outlet and lighting fixture controlled by a switch located at the required passage way opening shall be provideD at or near the AIR HANDLER/furnace.
- 7. condensate drains a secondary drain pan must be installed under the coil section to prevent damage to the ceiling below. the secondary drain must be installed with a minimum grade of 1/8 inch per 12 inches of horizontal run and must exit to the outside where it can be readily visible.
- 8. disconnect a positive means of electrical disconnect must be located at or near the AIR HANDLER/furnace.
- 9. vents— type b vent, size per furnace manufactures specifications.
 - vents must terminate in accordance to u.m.c. requirements provided they are at least 8 feet from any vertical wall of 45 DEGREES or more and terminate not less that 2 feet higher than the highest point they pass through. (A)
- 10. if furnace is located below scissor truss the recommend insulating proceedure is along ceiling LINE below the furnace not along scissor above to provide proper combustion AIR with out COMPROMISING the integrity of the thermal envelope by penetrating it with combustion ducts. (A)
- the specifications above meet the minimum requirements established in the 1988, 1991, 1994 u.b.c and u.m.c.
- (A) APPLIES TO GAS FURNACE ONLY. 11-4-96



MECHANICAL PLAN

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

 $\times \times 98 - \times \times \times$ DRAWN BY: DRAFTER REVISIONS