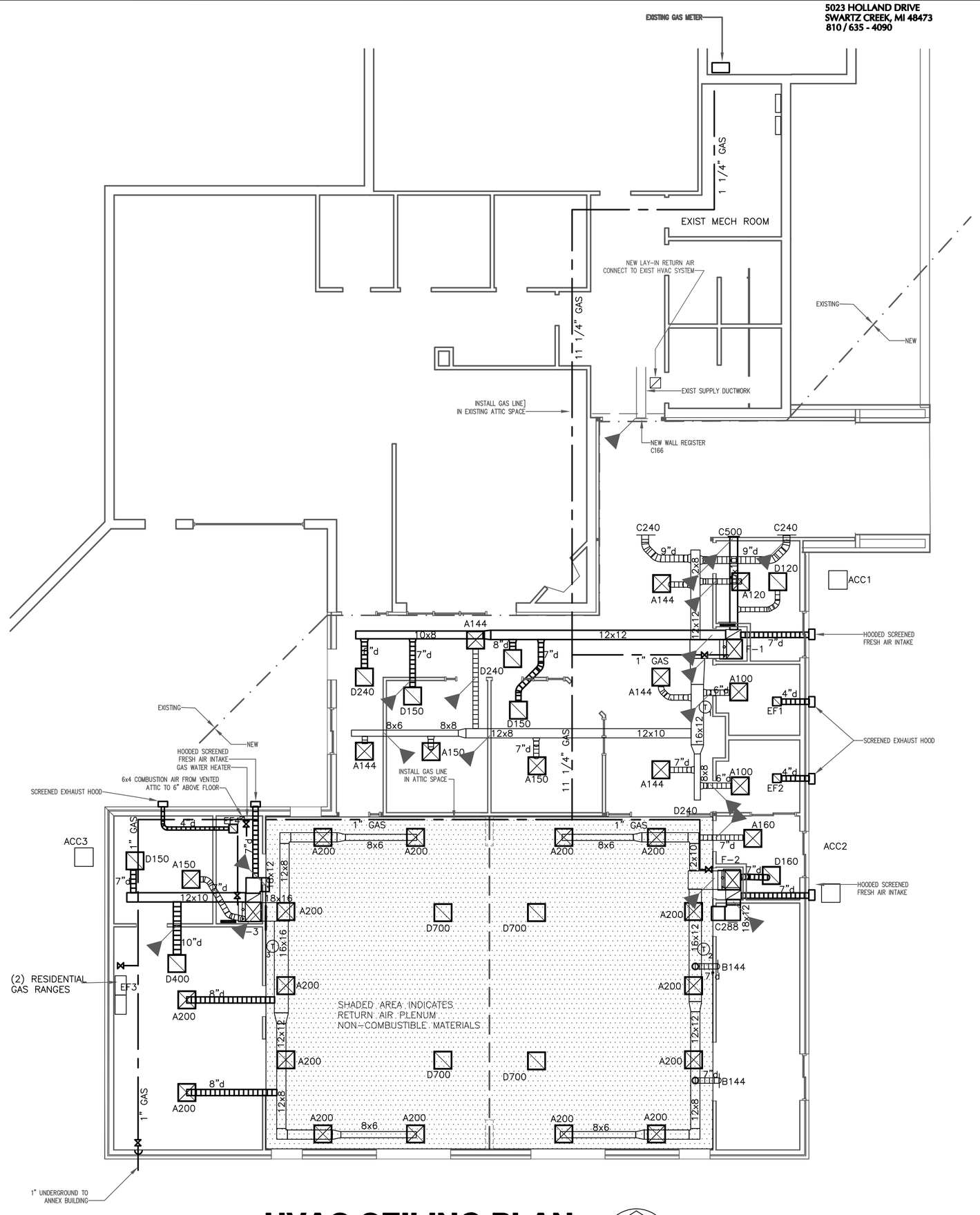
HULL - STEPHENS AND ASSOCIATES
ARCHITECTS
5023 HOLLAND DRIVE
SWARTZ CREEK, MI 48473
810 / 635 - 4090




# HVAC CEILING PLAN

1/8" = 1'-0"

| EQUIPMENT SCHEDULE | | | | | | | | VENTILATION SCHEDULE (CUBIC FEET PER MINUTE) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AREA | MARK | MFG | MODEL | TONAGE | OUTPUT BTUH | ELECTRICAL | REMARKS | SUPPLY | RETURN | OUTDOOR | EXHAUST |
| FOYER | F-1 | ACCEPTABLE MANUFACTURERS: TRANE, CARRIER, LENNOX, LUXAIR, AMANA, BRYANT | | 4.5 | 100,000 | 208-230/60/3 | 95% EFF, SEER 10, VARIABLE SPEED BLOWER | 1820 | 1500 | 140 | 180 |
| DINING ROOM | F-2 | | | 4.5 | 100,000 | 208-230/60/3 | 95% EFF, SEER 10, VARIABLE SPEED BLOWER | 1800 | 1670 | 130 | |
| DINING RM | F-3 | | | 5 | 100,000 | 208-230/60/3 | 95% EFF, SEER 10, VARIABLE SPEED BLOWER | 2000 | 1500 | 140 | 360 |
| | | | | | | | | | | | |
| EXHAUST FAN SCHEDULE | | | | | | | | | | | |
| WOMEN | EF-1 | GREENHECK | SPA-290 | | | 120/60/1 | 3.6 SONES, .25" SP, BACKDRAFT DAMPER WEATHER PROOF WALL HOOD | | | | 90 |
| MEN | EF-2 | GREENHECK | SPA-290 | | | 120/60/1 | 3.5 SONES, .25" SP, BACKDRAFT DAMPER WEATHER PROOF WALL HOOD | | | | 90 |
| KITCHEN | EF-3 | NUTONE | NS130SS (2 REQUIRED) | | | 120/60/1 | | | | | (2) @180=360 |
| JANITOR | EF-4 | GREENHECK | SPA-110 | | | 120/60/1 | 3.5 SONES, .25" SP, BACKDRAFT DAMPER WEATHER PROOF WALL HOOD | | | | 90 |
| | | | | | | | | | | | |

FRESH AIR REQUIREMENTS ARE BEING MET PER MICHIGAN BUILDING CODE 2006, SECTION 1203.4, NATURAL VENTILATION

## DIFFUSER & GRILLE SCHEDULE

A =TITUS TMS STYLE, 24"x24" LAY-IN, NECK SIZE FOR NC OF 25 OR LESS, FACTORY SET FOR 5% MINIMUM, WITH OPPOSED BLADE DAMPER. CFM AS SCHEDULED ON PLAN

B = NOT USED

C = TITUS 300/350 PAINTED STEEL HORIZONTAL LOUVERS

D = TTITUS 50F-7, 24"x24" LAY-IN RETURN OR EXHAUST, FACTORY SET FOR 5% MINIMUM. CFM AS SCHEDULED ON PLAN

REGISTER TYPE
A300
CFM

DIFFUSER AND GRILLE NECK SIZES

| CFM RANGE | NECK SIZE |
|---|---|
| 100-175 | 6" |
| 176-275 | 8" |
| 276-450 | 10" |
| 451-600 | 12" |

VERTICAL FIRE/SMOKE DAMPER

HORIZONTAL FIRE/SMOKE DAMPER

T1 PROGRAMABLE THERMOSTAT

NATURAL GAS LOADS

| | | |
|---|---|---|
| EXISTING | | 350,000 |
| FURNACE | 100,000 BTU | |
| FURNACE | 100,000 | |
| FURNACE | 100,000 | |
| WATER HEATER | 50,000 | |
| PROPOSED | | 680,000 |
| FURNACE #1 | 100,000 | |
| FURNACE #2 | 100,000 | |
| FURNACE #3 | 100,000 | |
| WATER HEATER | 40,000 | |
| GAS RANGES | 240,000 | |
| ANNEX BUILDING | 100,000 | |
| TOTAL | | 1,030,000 |

GAS LINE SIZES BASED ON ASSUMPTION OF 2 PSI GAS PRESSURE, 1 PSI PRESSURE DROP, .6 SPECIFIC GRAVITY

ADDITIONS TO

SWARTZ CREEK SENIOR CENTER

8095 CIVIC DRIVE
SWARTZ CREEK, MI 48473
JOB NO 2008.11

HVAC PLAN

DRN: CHKD:

| DATE | ISSUED FOR |
|---|---|
| 04 28 09 | STATE REVIEW |
| 06 03 09 | BIDS |
| 06 24 09 | CONTRACT |
| 09 14 09 | REVISIONS-OVERHEAD DUCTS |

SHEET
M1
OF 1