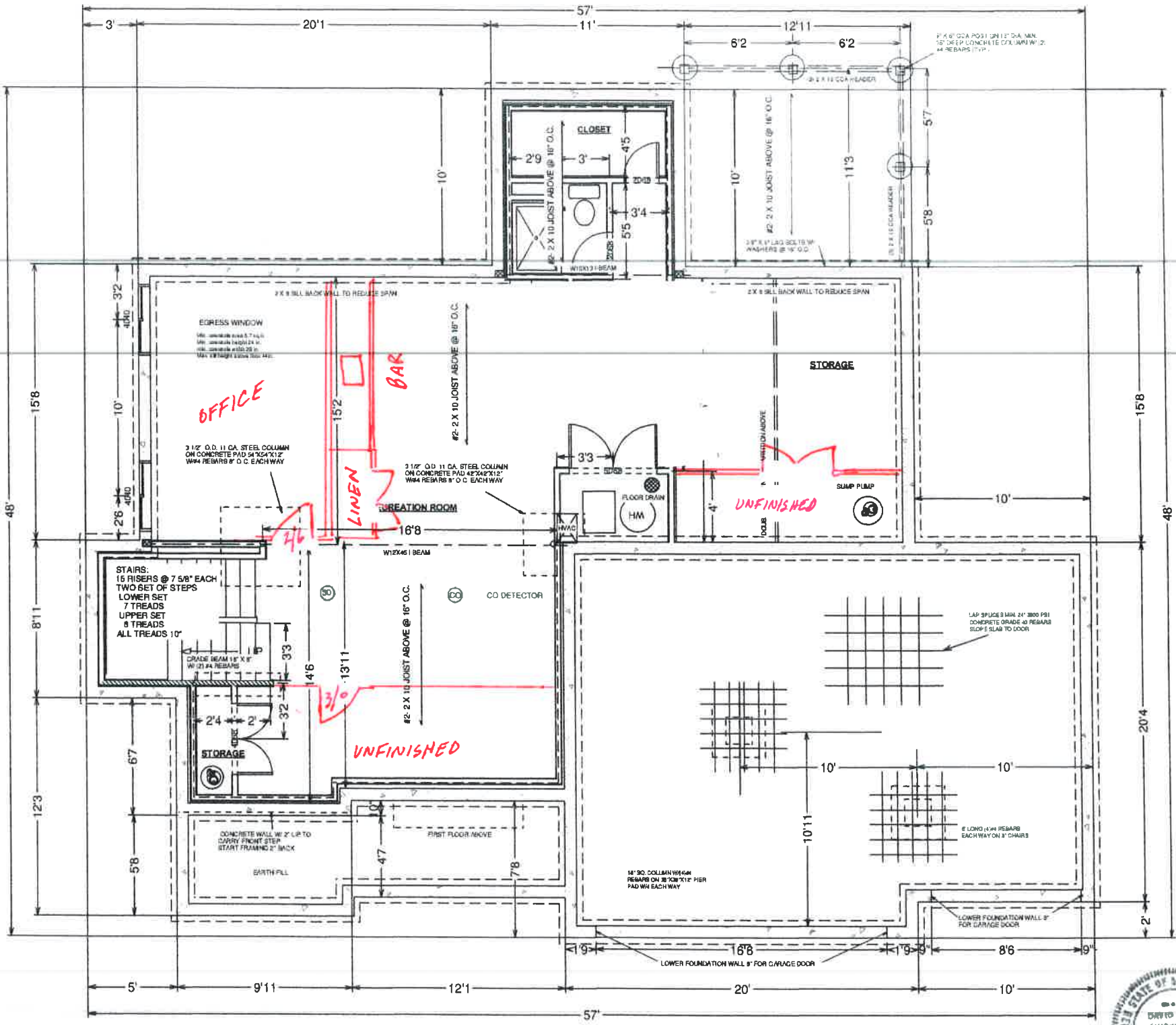


1329 NE Brandywine Rd - LSMP 64064

Combustion Air Calculations
Area where furnace & HW heater are located
is 28 sf
Input Capacities
Furnace = 200,000 BTU/hr
HW/Hr = 50,000 BTU/hr
Total = 250,000 BTU/hr
50 cu ft volume required per 1,000 BTU/hr
Volume required = 50 x 250 = 12,500 cu ft
Available volume = 25 x 8 = 224 cu ft
Normal infiltration is not adequate
Therefore install 2 vents with minimum free
Area of 150 sq in each (Metal vents with
minimum gross area of 200 sq in each) in wall
between furnace area and recreation/living area
One opening shall be within 12' of the top and
One with 12' of the bottom of the space

1. 12" x 8" OF CONCRETE WALLS WITH 4 BARS
HORIZONTAL AND 4 BARS VERTICAL @ 18" O.C. ON
18" x 8" CONCRETE FOOTING WITH 4 BARS
CONTINUOUS
2. WALK OUT: 2x8 STUDS @ 18" O.C. ON 4" x 8" x 3/4"
CONCRETE WALL ON 18" x 8" CONCRETE FOOTING
3. BRICK SHELF REQUIRED ON FRONT OF HOUSE
EXISTING DIMENSIONS DO NOT ALLOW FOR BRICK
ADJUSTMENT MUST BE MADE TO FRAMING OR
FOUNDATION
4. FOUNDATION DESIGNED FOR 2000 PSF BEARING
5. COLUMN FOOTING 12" TYPICAL WITH 4 BARS @ 18" O.C.
EACH WAY
6. BOTTOM OF FOOTING MIN. 30" BELOW FINISHED
GRADE

1. DWELLINGS / GARAGE OPENINGS BETWEEN GARAGE AND SLEEPING
PURPOSES SHALL NOT BE PERMITTED. OTHER OPENINGS SHALL BE
EQUIPPED WITH SOLID WOOD OR STEEL DOORS NOT LESS THAN 1-5/8"
THICK OR 20 MINUTE RATED DOORS WITH SELF CLOSING DEVICES
REQUIRED FOR GARAGE / DWELLINGS SEPARATION DOORS. R302.5.1
2. WHOLE HOUSE MECHANICAL VENTILATION SYSTEM IS REQUIRED
FOR ANY DWELLING WITH AIR INFILTRATION AT A RATE OF LESS THAN
3 AIR CHANGES PER HOUR (AT ACH50 STANDARD) R303.4
3. CARBON MONOXIDE DETECTORS REQUIRED R310.0
4. STEEL COLUMNS SHALL BE MINIMUM SCHEDULE 40 R407.3
5. DECK LEDGER ATTACHMENT TO HOUSE SHALL BE PER TABLES 507.2
AND 507.2.1
6. STUDS SHALL BE CONTINUOUS BETWEEN FLOOR, CEILING AND OR
ROOF DIAPHRAGMS R602.3
7. ADDED REQUIREMENTS FOR WINDOW FALL PROTECTION R102.2
8. NEW PROVISIONS FOR ATTACHMENT OF RAFTERS, TRUSSES AND
ROOF BEAMS R802.3.1, R802.11
9. INSULATION REQUIRED FOR ALL BASEMENT WALLS (INCLUDING
UNFINISHED BASEMENTS) N1002.1
10. EXTERIOR WINDOWS/DOORS SHALL HAVE U FACTOR 0.35 AND
GLAZING SHALL HAVE SOLAR HEAT GAIN FACTOR OF 0.40 N1002.1
11. HOUSE LEAKAGE AND DUCT LEAKAGE PERFORMANCE STANDARDS
EFFECTIVE JANUARY 1, 2014 A SAMPLE TESTING PROGRAM WILL BE
IMPLEMENTED OCTOBER 1, 2012 IBCIRC N1002.4.1.2 N1003.2.2
12. LIGHTING FIXTURES PENETRATING THE THERMAL ENVELOPE (E.G.
CANN LIGHTS IN ATTIC) SHALL BE IC RATED, LEAKAGE RATED AND
SEALED TO THE GYPSUM WALLBOARD N1002.4.4
13. PROGRAMMABLE THERMOSTAT REQUIRED N1003.1.1
14. AIR HANDLERS SHALL BE RATED FOR MAXIMUM 2 % AIR LEAKAGE
RATE N1003.2.2.1
15. BUILDING CAVITIES USED AS RETURN AIR PLenums SHALL BE
SEALED TO PREVENT LEAKAGE ACROSS THE THERMAL ENVELOPE IBCIRC
N1003.2.2
16. CERTAIN HOT WATER PIPES SHALL BE INSULATED N1003.4
17. ALL EXHAUST FANS SHALL TERMINATE TO THE BUILDING EXTERIOR
N1007.2
18. MAKEUP AIR SYSTEM REQUIRED FOR KITCHEN EXHAUST HOODS
THAT EXCEED 400 CFM N1003.4
19. BUILDING CAVITIES IN A THERMAL ENVELOPE WALL (INCLUDING
THE WALL BETWEEN THE HOUSE AND GARAGE) SHALL NOT BE USED AS
RETURN AIR PLenums (UNLESS THE REQUIRED INSULATION AND AIR
BARRIER ARE MAINTAINED) IBCIRC N1003.1.1, 77.5
20. AN AIR HANDLING SYSTEM SHALL NOT SERVE BOTH THE LIVING
SPACE AND THE GARAGE N1003.6
21. A CONCRETE- ENCASED GROUNDING ELECTRODE (UFER GROUND)
CONNECTION SHALL BE PROVIDED TO THE ELECTRICAL SERVICE IBCIRC
E3608.1
22. COMPLIANCE WITH THE REQUIREMENT AND SHOW CONNECTION AS
NEEDED FOR ROOF BEAM, TRUS, RAFTER, AND GROUND CONNECTION FOR
LIFT FOR IRC 901.1



To the best of my knowledge these plans are drawn to
comply with the applicable building codes and are made with due care
and skill. I am not responsible for any errors or omissions in the
plans or for any consequences resulting from the use of the plans.
The contractor shall verify all dimensions and conditions
before construction begins.
When every effort has been made in the preparation of the
plans to avoid mistakes, the maker can not guarantee against
human error and the user assumes full responsibility for the
proper use of the plans and the value of the construction and the
results reported to the code.

BUILDING CONTRACTOR/OWNER
TO REVIEW AND VERIFY ALL DIMENSIONS,
SPECIFICATIONS, AND CONNECTIONS BEFORE
CONSTRUCTION BEGINS.
ELECTRICAL SYSTEM CODE: SEC.2701
MECHANICAL SYSTEM CODE: SEC.2801
PLUMBING SYSTEM CODE: SEC.2901

PAGE
3
PLAN:
AR-1 & 3

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

THE
WALKER

DRAFT
Dave Richards Homebuilding, Inc.

