

38 STARBIRD STREET

DAVID & SHARON LOGVIN

Building Type: Two-story single family residence built in 1919. The house features three bedrooms and one bath with 1,483sqft net living area; 2,792sqft gross area.

Existing Building Efficiency (HERS*): 114

Proposed Building Efficiency (HERS): 50



PROPOSED ENHANCEMENTS

BUILDING INSULATION | COST: \$6,116 | INCENTIVES: \$2,072

The attic and walls are currently insulated, 3.5” cellulose blown into the walls, and 5.5” cellulose blown into the attic. The ceiling also contains 6” fiberglass batting rolled in. Insulation enhancements include removal of asbestos pipe insulation and chimney cement, replacing and adding fiberglass insulation on pipe runs † Insulate rim joists with 2” Hanid Foam † Install 6” fiberglass batting in the basement ceiling † Install 11.4” blown-in insulation in attic † Dense-pack rafters with 5” cellulose † Replace attic door with R-38 Styrofoam † Provide sealing in areas with air leaks.

DOORS & WINDOWS | COST: \$928 | INCENTIVES: \$30

The 5 second fl. windows are energy star vinyl windows and will remain, 11 windows located on the first floor are double pane, vinyl and will remain. Four basement windows will be replaced with vinyl Energy Star windows. Storm door at the entrance will be replaced.

MECHANICAL | COST: \$18,457 | INCENTIVES: \$5,385

The existing natural gas boiler (65% efficient), steam distribution, to be replaced by a natural gas steam unit with 82% efficiency, includes Energy Star thermostat † natural gas hot water unit will be replaced with solar thermal system to pre-heat water and natural gas tankless water unit † solar powered attic vent will replace existing rooftop turbine † duel window mount heat recovery ventilators located on the first floor † positive displacement dryer and exhaust fan vents † fan system to distribute passive solar gain from sun room.

APPLIANCES | COST: \$2,619 | INCENTIVES: \$140

The existing refrigerator and dishwasher will be replaced with Energy Star models † existing window A/C units replaced with two Energy Star units † replace incandescent bulbs with Compact Fluorescent.

SOLAR PV | COST: \$29,700 | INCENTIVES: \$17,830

3.01KW Solar Photovoltaic system to be placed on the south facing roof, and connected to the electric grid for net metering. Installation requires rafter and main girder reinforcement.

PROJECT OUTCOMES

Project Funding

Total Cost: \$58,786

Incentives: (\$25,758)

Project Cost: \$33,028

1st. yr Savings: \$1,316

30yr Savings: \$86,730

NPV: \$37,214

ROI: 11%

Energy Savings

Existing Energy Use (MMBTU):

Proposed Energy Use (MMBTU):

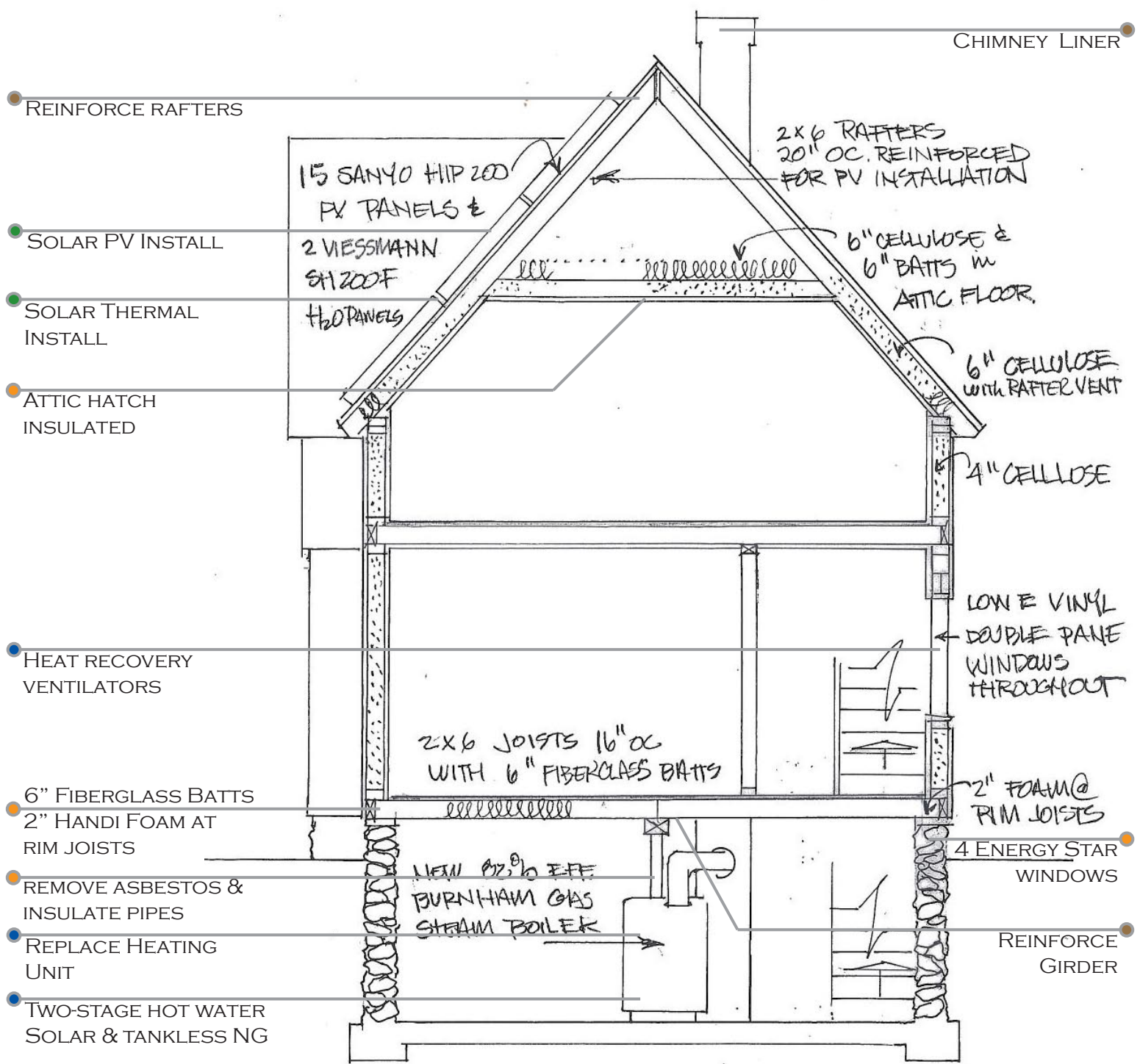
Emissions Reduction (CO²): 4.8 TONS/ YR

Emissions Reduction Equivalent

Trees Planted: 800

Cars off the Road / Yr: 0.8

*The Home Energy Rating Systems (HERS) is used to determine a building’s efficiency. The HERS index is used to determine if a building is rated an energy star home (85 HERS), as a reference, homes built to the current energy code are 100 HERS.



38 STARBUCK ST.