

The Vermont Street Project is a collaboration of design/build team members, reclaimed and natural materials, energy efficiency and recent technologies, and a craft intensive application — a logical, achievable, and certainly at times difficult path when creating a home. Our many thanks to the following Partners and Suppliers for their insight, skill, and products:

Partners



Evolution Floors



Suppliers

Dyadic Metal Works  
FMC Exteriors  
Kasters Kustom Cutting

Land Ark Northwest  
Precision Finishes  
Sheldon Slate

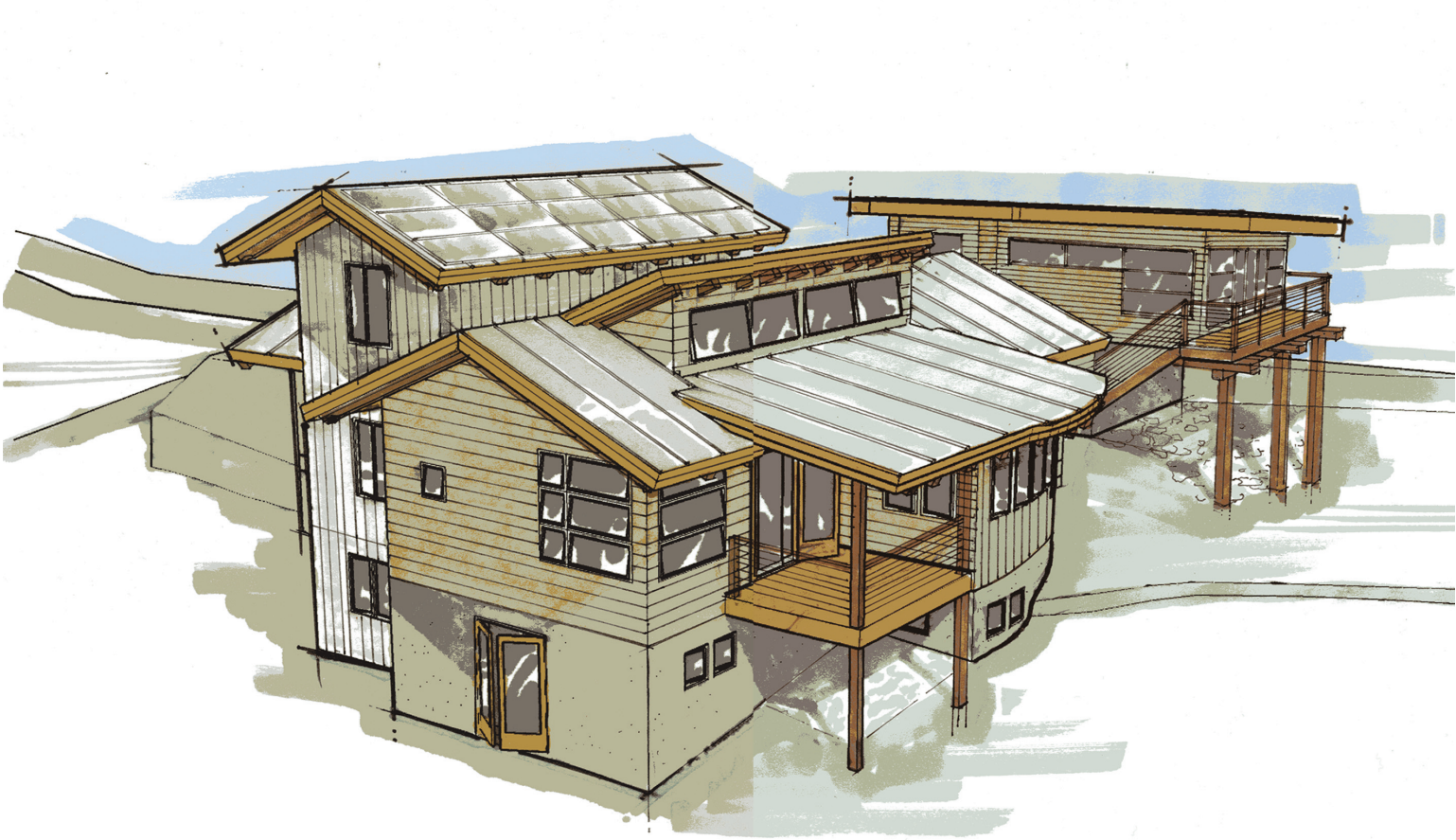
Solid Form Fabrication  
Water Brothers Construction

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The Vermont Street Project

5078 SW Vermont Street  
Portland, OR 97219



Greater sustainability in a design and craft-intensive home.



NEW ENERGY WORKS  
design | timberframing | woodworks



# Project Statement

This project is the result of decades of custom timber work and environmentally sensitive design and construction by New Energy Works Timberframers. It is both a living example of our company's work and shelter for the owner's family. It embodies our belief that effective sustainability in the built environment is a balance of four major points:

1. Advanced thermal and mechanical systems — A 4000 gallon rainwater collection system, 4.2 kW photovoltaic roof panels, solar domestic hot water, a 98% efficient boiler and heat recovery ventilator all play important roles.
2. Sustainable and, where appropriate, local sourcing of materials — A high percentage of materials was sourced locally with low embodied energy and recycled content. Every effort was made to use products sourced and manufactured in the US, or where labor and environment controls could be verified.
3. Longevity and effectiveness in structure and enclosure systems — This hybrid timber frame is an expression of structure and craft, engineered to last for generations. Its high efficiency envelope of Structural Insulated Panels and cellulose insulation eliminate thermal bridging, while providing breathable walls and effective rain screens.
4. Finally, true sustainability is entwined with the timelessness of great design and the beauty of fine craft. Both inspire us to love and maintain a building, establish high standards for everyone involved on the project, use available resources intelligently, and create meaningful work.

These areas cannot function alone. Think of them as four strong and necessary pillars of sustainable building; each one true and sturdy, each one contributing vital support.

## A Closer Look

### Main House

- 2,000 sq ft with additional 1,000 sq ft in day-lit lower level
- Three bedrooms with an office/fourth bedroom
- Two full baths, one half bath

### Lifestyle Features

- Common room with kitchen, dining, and living area
- Pantry
- Mudroom
- Tower room
- Recreation room
- Movie nook
- Storage room
- Wine cellar
- Library

### Structure

- Reclaimed industrial salvage Douglas fir for timber frame by New Energy Works Timberframers
- Insulated Concrete Forms (ICF) foundation blocks by Shelter Works of Philomath, OR
- Structural Insulated Panels (SIP) roof panels by Premier Panels of Fife, WA
- Matrix Walls: Cellulose (recycled newspaper) and rigid insulation

### Exterior Components

- Reclaimed redwood and barn siding by Pioneer Millworks
- FSC and Energy Star windows by Kolbe & Kolbe
- High reflectivity standing seam metal roofing by Custom-Bilt Metals

### Flooring and Ceilings

- Reclaimed Elm, Oak, and Douglas fir wood flooring by Pioneer Millworks
- Entry tile by Sheldon Slate
- Lower level polished and sealed concrete
- FSC Douglas fir T & G for ceiling by Pioneer Millworks

### Mechanical and Heating Systems

- 96-98% efficient boiler
- Lower level in slab radiant heat
- Main level European radiators
- Rais sealed combustion woodstove from ecohaus
- Heat recovering ventilator
- 4.2 kW photovoltaic system by Sanyo and ImaginEnergy
- Two solar domestic water panels by Shuco and ImaginEnergy
- No A/C
- ALL appliances meet new Energy Star ratings and include a variety of brands supplied by BASCO
- LED, CFL, halogen and conventional lighting

### Interior Finishes and Furnishings

- All wall coverings earthen clay by American Clay, applied by Traditional Natural Plaster
- Tung and linseed oil by Land Ark used on woodwork and oak flooring
- Custom stainless steel sink/counter locally made by Solid Form Fabrication
- Plumbing fixtures and hardware supplied by Chown Hardware
- Powder room sink cast in Portland, OR of recycled aluminum house parts
- Domestic slate countertop by Sheldon Slate
- Recycled oak countertop by NEWwoodworks
- Recycled glass and porcelain tile from ecohaus
- Built-ins, stairs, doors, cabinetry and other fine woodwork by NEWwoodworks
- Lighting design by gld DESIGNSTUDIO LLC

### Studio

- 680 sq ft
- Garage and workshop
- Home office/studio
- Guest retreat (kitchenette, bath, bedroom, sleeping nook)
- Covered porch

### Landscape

- Native plants and rockery
- Small urban farmstead to include chickens, raised beds, and composting
- Planning and design by New Energy Works Timberframers
- Install and consultation by Landscape East & West

### Design

While the majority of our work is in collaboration with architects and engineers, locally and around the country, the Vermont Street Project was designed by the New Energy Works team, including Jonathan Orpin, Maxine Bromfield, and Ty Allen RA, LEED AP.

Our thanks to our many Partners and Suppliers who helped us make this project a reality. Please don't hesitate to ask questions, we enjoy the conversation.

