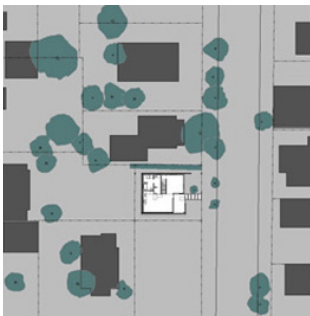


Woodlawn T.E.S.T. Residence

2000 Portland, Oregon

2001 Wood Design Citation Award



SITE & PROGRAM

The 40' x 48' infill site for this project was one of a section from an early 20th century subdivision of a rail yard in an urban neighborhood, and under current zoning was considered a sub-standard lot. The house was designed to test out a number of materials and construction techniques to provide energy efficiency and environmentally responsible choices within tight economic constraints. Portland Habitat for Humanity was the non-profit developer and contractor for this project.

Designing the building to sit into the sloping site section allowed for easy wheelchair access from the sidewalk elevation to ground floor level.

The building section and orientation provide for direct sunlight access to all of the primary use areas at the ground level and at the upper floor. The ground floor plan is designed to provide a 'front room' which can be used over time as a sitting room, home office or a bedroom.

Building type: Private House

Project type: New Construction

Project scope: Full contract

Client: Portland Habitat for Humanity

Size: 725 SF : Lower Level

420 SF: Upper Level

125 SF: Covered Porch

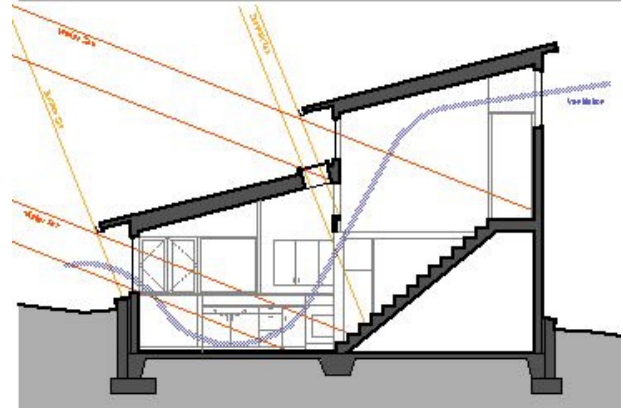
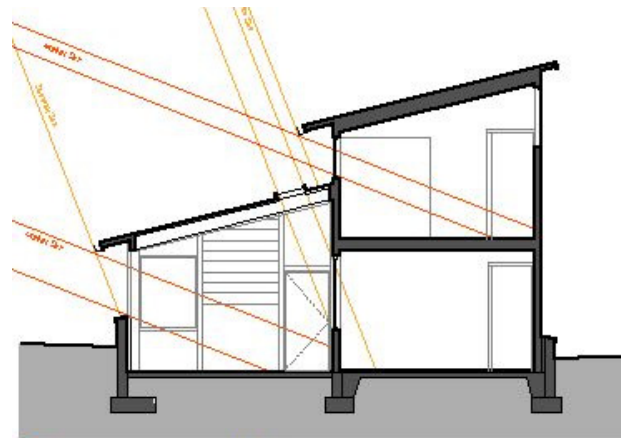
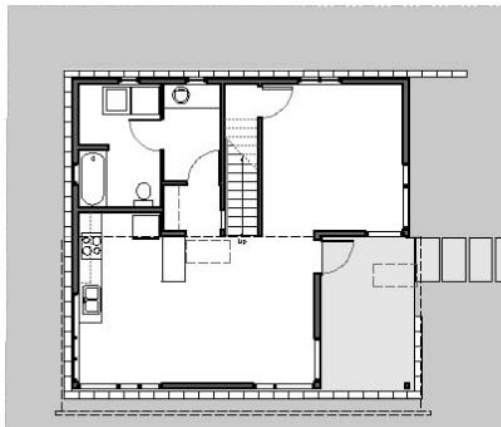
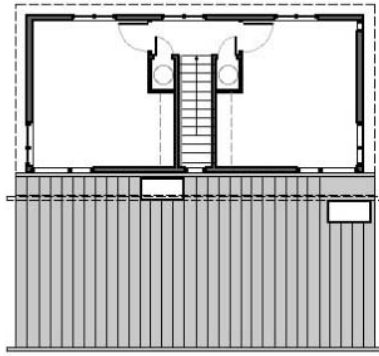
Schedule: Completed 2000

AWARDS

This project received a Wood Design Citation Award in 2001 from The Wood Products Council, the Canadian Wood Council, and Wood Design & Building magazine.

Woodlawn T.E.S.T. Residence

2000 Portland, Oregon



MATERIALS & CONSTRUCTION

The concrete slab on excavated grade is located within a low retaining wall perimeter that is open towards the street edge. The retaining wall is built of fully grouted reinforced concrete masonry units on a spread footing. The wall, floor and roof framing was designed on a 2' spacing module. The framing system is a composite of standard 2x6 and 2x4 wood stud walls with engineered lumber spanning members. Engineered Wood I-sections are used for the floor joists and roof rafters, and laminated veneer lumber sections for the continuous header/edge beams. Plywood decking was used at the upper floor and roof diaphragm.

Fiber-cement siding was installed over exterior sheathing with screws set to the stud layout. Rough-sawn 2x wood boards were used for the painted exterior trim. The metal roofing, gutters and flashings were fabricated of standard painted steel stock. All the fixed and operable windows use Low-E insulated glazing. Clear finished MDF was used for all interior trim and panels, as well as for the finish floor planking at the upper level. Painted gypsum board was used for wall and ceiling surfaces. The mechanical system is comprised of two natural gas fired water heaters - one used for domestic hot water, and the other for the radiant heating system; a hydronic topping slab at the ground level and fan coil units upstairs. The building section is designed to allow for natural stack ventilation.

