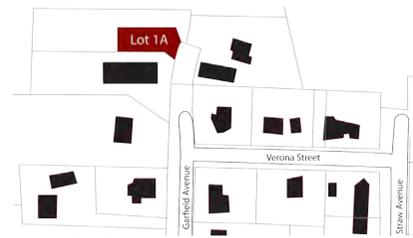


# 1.25 House



SIDE CAR METAPHOR



SITE LOCATION



MICRO HOUSE PRECEDENT AIRSTREAM PRECEDENT

## Concept: Main House + Micro House

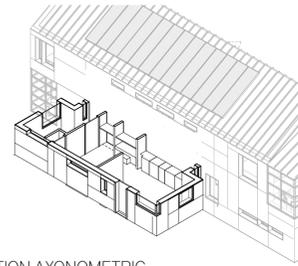
The 1.25 House is designed to take advantage of a range of narrow lot sizes from super narrow lots 25' in width to 50' wide lots such as this one. The concept of combining a micro-unit with a two bedroom house is in keeping with both trends toward urban environments that can offer very compact, affordable house typologies as part of their housing stock with the Northampton zoning allowing accessory units.

### The Main House(1,800 sf)

The main house is planned to have "eyes on the street" with the kitchen located at the front of the house. Cooking and dining are very active parts of the home thus locating these near the street places this active zone in the more public realm. The living room is located in the rear of the house offering more landscape/garden views and a quieter setting. The stair is open to the dining area as part of the more active zone of the first floor. The east bedroom could be used as a home office or studio space. The four season porch is enclosed with translucent panels filled with aerogel to provide R 20 walls.

### The Micro House(420 sf)

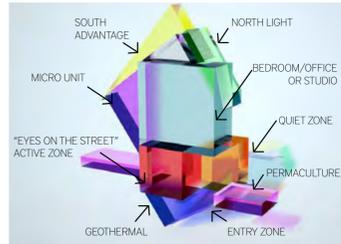
The micro unit is inspired by the interior efficiency of an Airstream trailer of similar dimensions as well as the motorcycle sidecar. It features all of the programmatic elements of a home; kitchen, living and dining area, full, accessible bathroom, bedroom and storage largely through compact factory made built-ins. It can be separated from the main unit or linked with a passage way depending on the projected use of both units. Or on a very tight budget it can be built first as a starter unit.



SECTION AXONOMETRIC

### Materiality and Energy Efficiency

The exterior building envelope is comprised of 1"-0" thick super insulated walls which could be factory panelized SIPs (structurally Insulated Panels) or site built double stud walls with dense pack cellulose insulation achieving a minimum of R-35 for walls and R-50 for the roof. 5/8" exterior grade plywood sheathing is wrapped with sheet water proofing. A rain screen space is created between the waterproofing and the color impregnated cementitious panels (See manufacturers specification from Swiss Pearl and others) bolted to stable Trex vertical battens. Thermal bridging is avoided. Window location in the thick walls are pulled in or pushed out depending on site orientation. In addition, window frames on the south and west walls project out 2" from the exterior wall surface to provide integrated shading of these windows. Owners could opt for triple glazed windows for greater efficiency or dual glazed argon gas windows both with low maintenance fiberglass frames. The recommended roofing material-also low maintenance-is a standing seam metal roof with Energy Star asphalt shingles as an economical alternate. Two mini-split ductless units provide heating and cooling for the main house and a single unit mini-split unit would heat and cool the micro-unit. Natural ventilation, natural lighting and LED lighting through out reduce annual energy bills as do photovoltaic panels and solar hot water. The central stair acts as a vertical shaft to allow warm air to rise and be vented through roof skylight vents in the warmer months.



EARLY CONCEPT DIAGRAM



KITCHEN + DINING ROOM + STAIRCASE



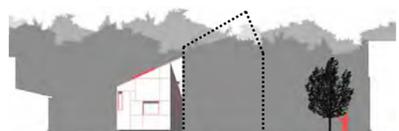
NORTH EAST VIEW



SOUTH WEST VIEW



NARROW 50' WIDE FULL BUILDOUT



NARROW 50' WIDE LOT WITH STARTER MICRO UNIT

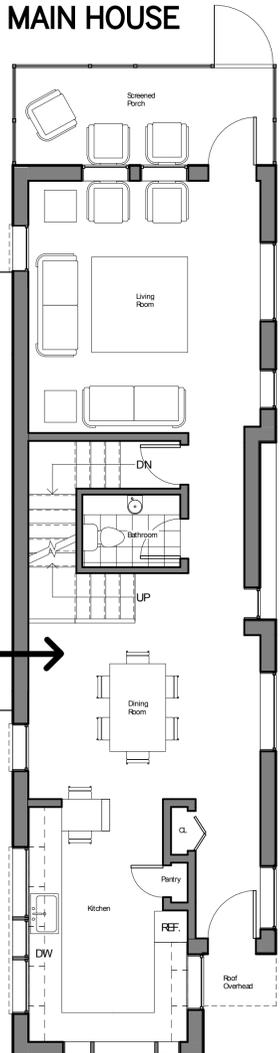
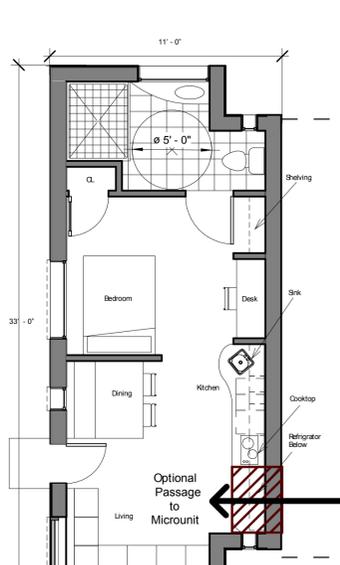


NARROW 25' WIDE LOT- MAIN HOUSE ONLY

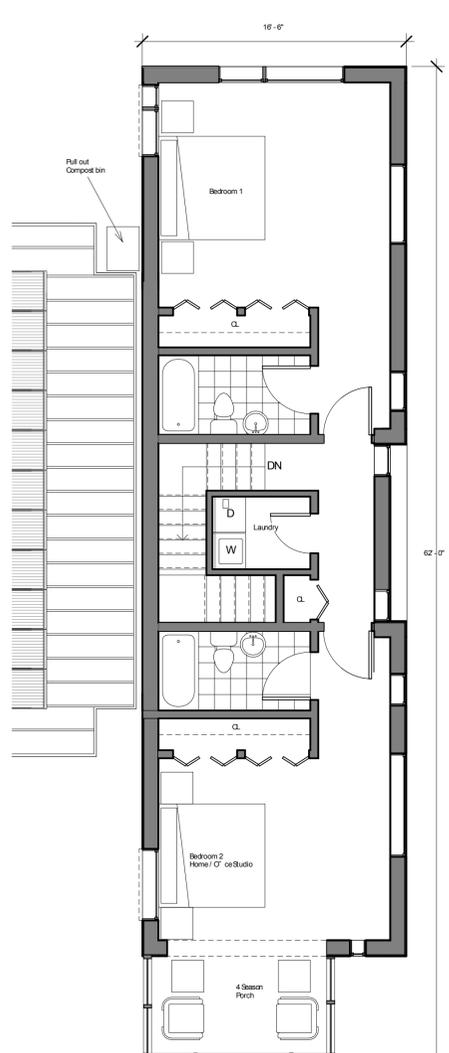
## OPTIONS

### MAIN HOUSE

### .25 HOUSE



FIRST FLOOR



SECOND FLOOR



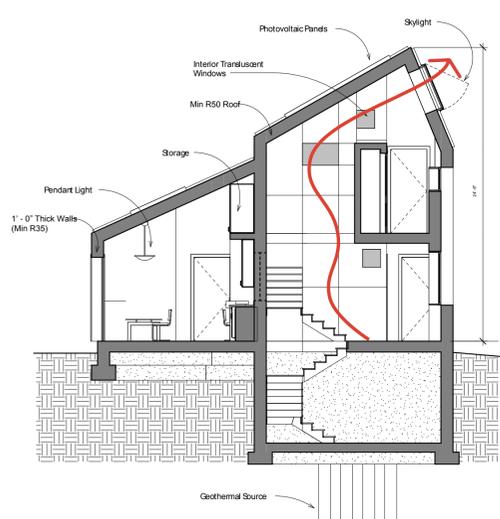
EAST/STREET ELEVATION



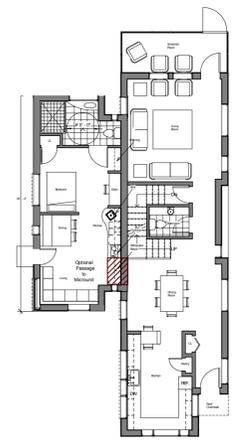
SOUTH ELEVATION

### Landscape

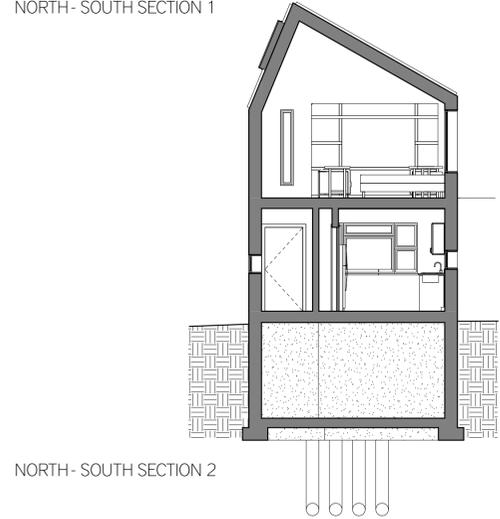
Conventional turf would be minimized and raised vegetable beds and perma-culture gardens encouraged in the planning of the site. "Hardscape" areas would be permeable surfaces by using either turf block or permeable paving. Deciduous trees planted to the south and west would provide summer shade but allow winter sun to penetrate.



NORTH - SOUTH SECTION 1



MICRO UNIT LOCATION # 1



NORTH - SOUTH SECTION 2



MICRO UNIT LOCATION # 2

### MIX AND MATCH

- .25 unit**
- Renter(s)
- Aging parent
- Teenager
- Returning grown child
- Caregiver/nanny
- Guest
- Visiting scholar/student

### Main Unit

- Family with 1-2 children
- Single parent 1-2 children
- 2 adults
- Artist -east/front bedroom =studio
- Small business owner (east/front bedroom =home office)



SITE PLAN