

1. About your client: What are the needs of the person you are housing?

The person I am housing may be a Reed student experiencing housing insecurity who is in need of affordable housing, or a houseless individual residing in Portland. This individual may be in a couple or have small children. I designed a house to have a cozy sleeping space with a queen bed, allowing for two adults to sleep there, or an adult and a child, or potentially multiple children if an additional bed were placed on the loft. There is a full bathroom with a bathtub and shower so the inhabitant can have their own space for hygiene maintenance. Accessibility was taken into consideration, and although the bathroom does have a tub and is on the first floor, the narrow stairs to the loft and deck area are not wheelchair accessible.

2. What site did you choose given your client's needs?

I chose the lot on SE 28th Ave and Steele Street as a way to provide urban housing. If the inhabitant is a Reed student, they will be very close to campus. If the inhabitant is not a student, the house is close to multiple bus lines that can serve as transportation to a workplace and a variety of grocery stores around the city.

3. What are the characteristics of this site?

This lot has a great view of the sunset to the west. It also has good southern light exposure. These two sunlight factors determined a lot of the house's window design and placement. Besides the natural light, the lot has plumbing that can be worked into the house's individual bathroom. Pairs of houses will have the wall where the bathroom is up against each other, so the plumbing for the bathrooms will be routed to 4 locations across the lot, spanning all 8 houses. There are 3 shared kitchens, which will be plumbed separately.

4. What are the Physical and Mechanical restraints/needs?

A special aspect of this house is the large semi-triangular window, and the rectangular sunset-viewing window. These can either be bought to fit the design, or potentially replaced by a number of used windows that can fit into the same space on the house, allowing a similar effect. The interior loft and exterior deck are also aspects which need to be specially constructed with plenty of structural support for people to occupy these spaces.

5. What type of shelter/home did you design and how big is it?

I designed a house that is not just a sleeper, because it has a full bathroom and a workspace. The footprint of the house is 12' x 30', there is an 8' x 8' interior loft space, and a 12' x 12' exterior deck. It is portable on wheels, as it fits the 12' x 30' trailer size and can be lifted from the ground. The plumbing must be temporarily installed and deinstalled upon moving the house.

6. How does your design fit on the site? How many units could be on your site?

The house fits into the NW corner of the lot, along SE 28th Ave. I mapped out 8 units of the same size onto the lot, plus 3 shared kitchens, one of which is larger in size to allow for double the capacity of the other two smaller kitchens. Between the 8 tiny houses there are plans for many planter boxes, which will allow for vegetables, herbs, and flowers to grow atop the lot. Beside the kitchens, there will be outdoor seating under patio tents to encourage community among the residents. There will also be a play structure for children who may live in the houses.

7. What are the best materials to use to build this?

This house can be made from recycled, scrap, or sustainably sourced wood. I built the model with a paneled wood look, which can be made with any available wood. The windows can either be custom cut or fashioned out of recycled windows placed in the same spots as the house's design.

8. What are the aesthetic special visual properties used to enhance livability?

The sunset-view window and the semi-triangular window facing the deck are the main aesthetic features of this house. These two windows face the west and the south, respectively, allowing for light to enter the house from multiple angles. The large sunset window illuminates the loft area, allowing for natural light over the desk and workspace. A mirror on the back wall of the house beside the stairs allows the sunlight to reflect off the back wall into the bedroom underneath the loft. On the outdoor deck, inhabitants can plant vines or potted plants along the safety railings.

9. Describe your main motivation for your design.

I began with the plan of designing a house on a 12' x 30' wheeled platform. I wanted a portion of the house to allow for a private outdoor hangout spot. I also wanted to incorporate a lofted second floor into the house. Many of the tiny houses we saw in class had lofted beds, but I decided to put the bed under the loft because the upper area has more natural light, which is not necessary for a cozy sleeping space. These factors, and optimizing natural light through the two big windows, were the main factors motivating the design of this house.

Drawings of your design:

1. Floor plan



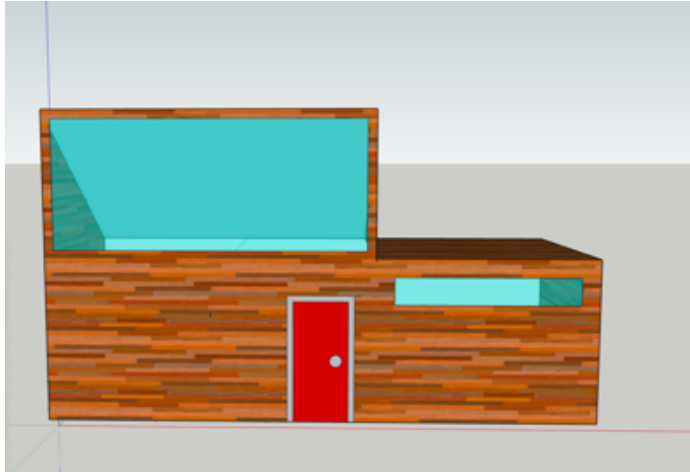
Large window overlooking lofted workspace

Out-of-bathroom sink

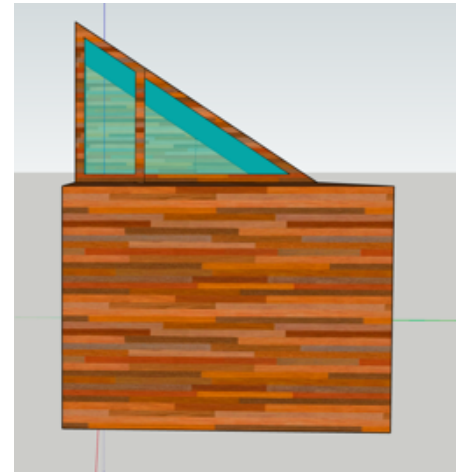


2. Elevations

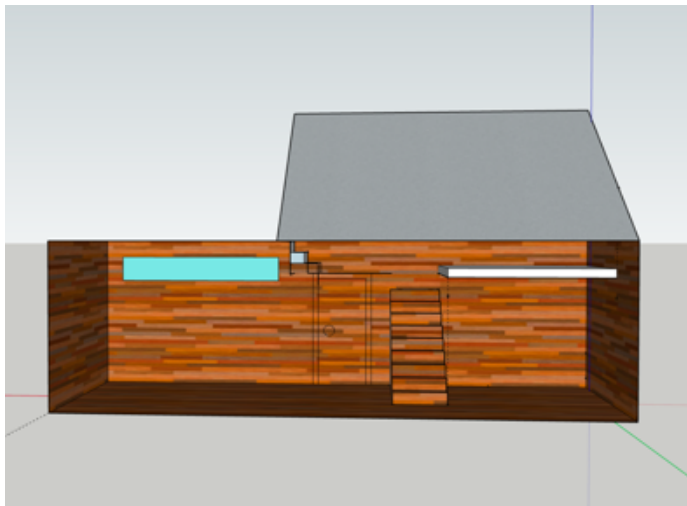
Front / West-facing side



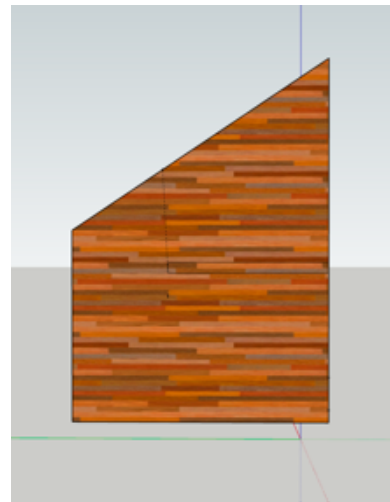
South-facing side



Back / East-facing side



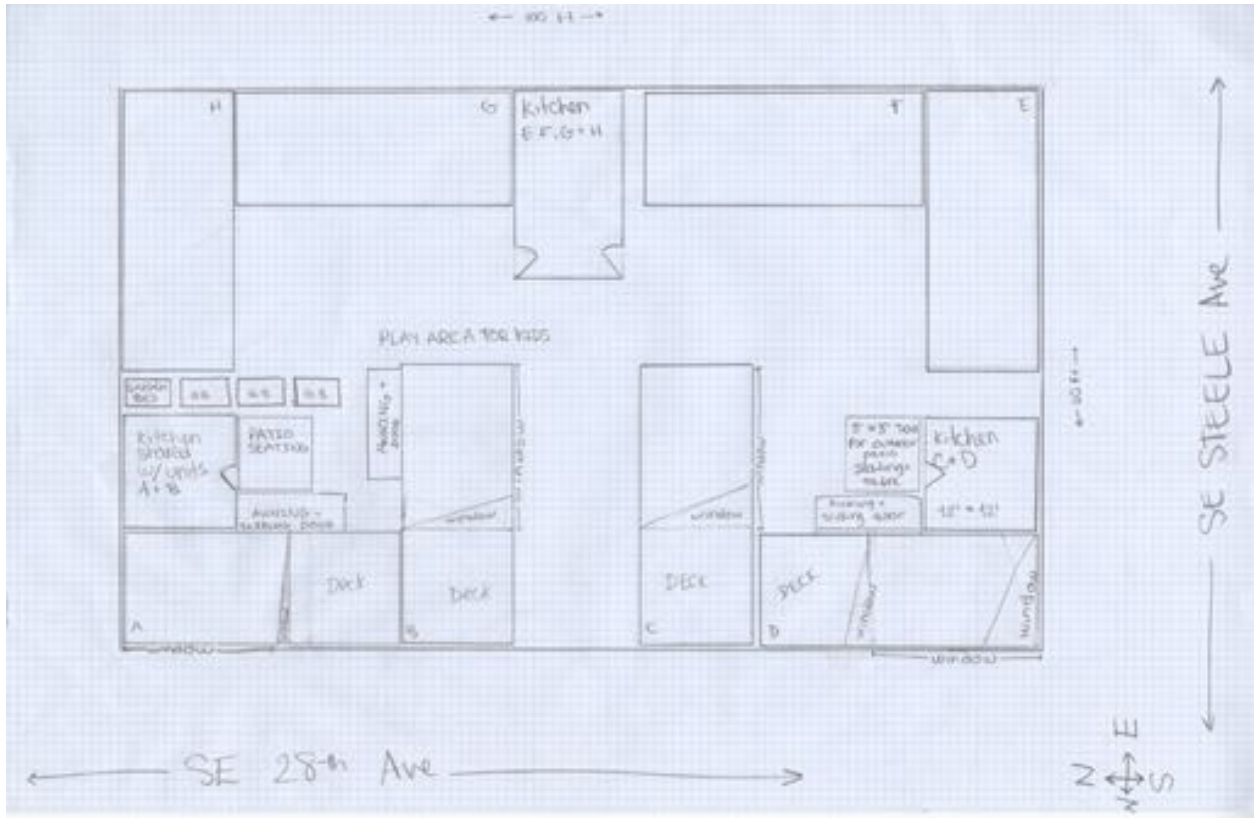
North-facing side

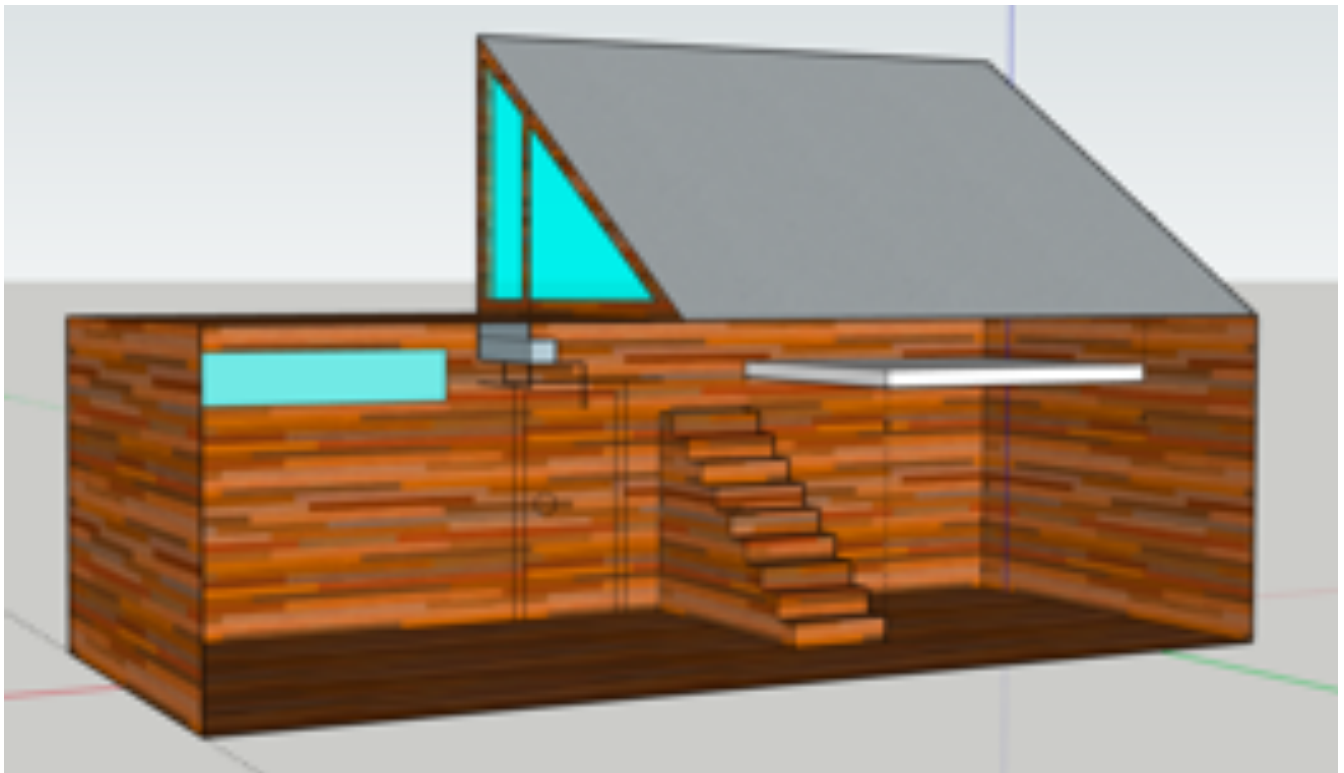
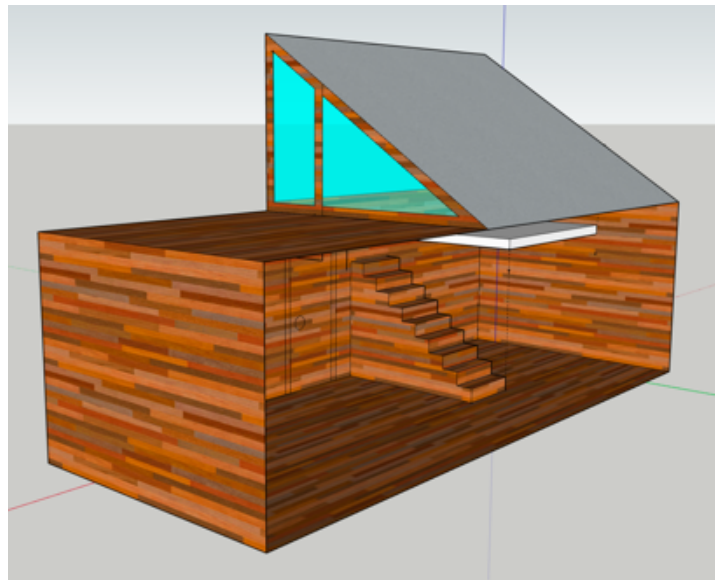
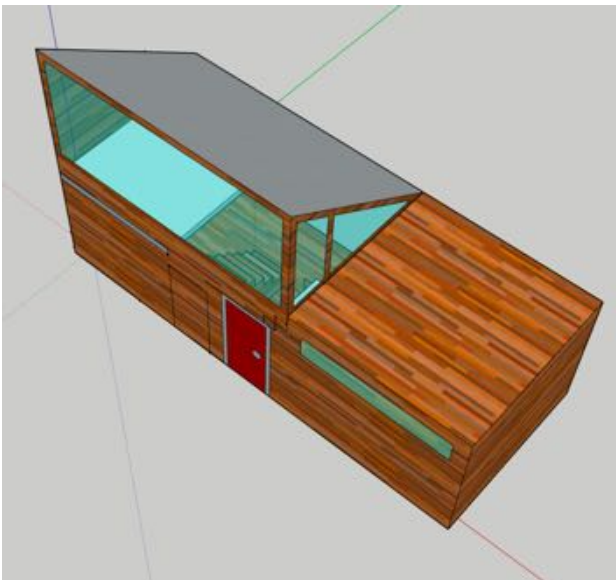
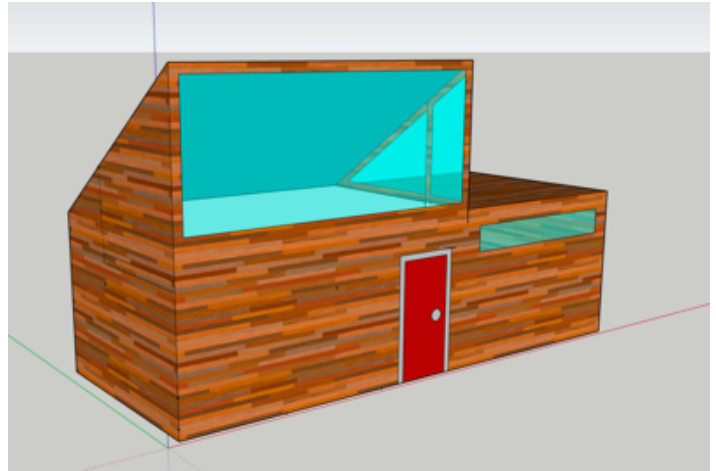
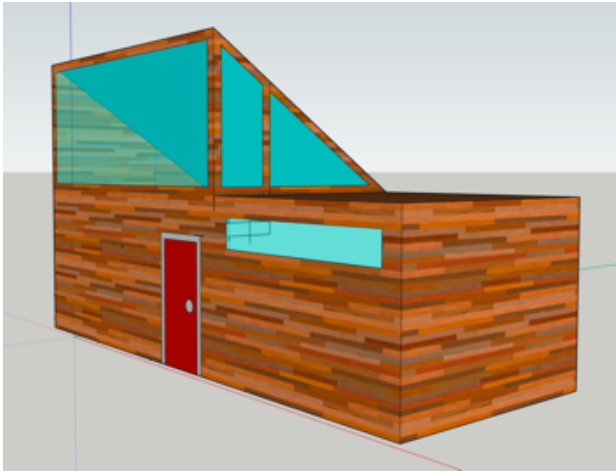


I changed many aspects of the house's design when I began building the house. I decided to add two small bedroom windows on the lower NW corner of the house. The stairs had to be moved to against the NE back wall as I decided to raise the roof 4' on the eastern side to allow for more headspace in the loft

3. Perspective and placement on the site

Much consideration was placed on the configuration of the eight houses in the tiny house village. Each house will have all of the same main facets, such as a large rectangular window facing either the south or west, and a semi-triangular window leading to the exterior deck space. The pairs of houses on SE 28th will share a kitchen between two houses, and the four houses along the back of the lot will share one large double-equipped kitchen in the center of the lot. Outdoor seating, planter boxes, and a recreation area for kids will be interspersed throughout.





Photos of your model with description:

- 1. Each side of the building + 4 perspectives**

Northeastern side



South-facing side



North-facing side



Front / Western-facing side



Southeastern side

2. Close up of areas of interest



Exterior deck with southern window view into house



Lofted interior workspace visible through sunset-viewing window



Through the sliding back door, one can see out the bedroom's two NW corner windows, and the stairs leading up to the loft

I furnished the loft with a desk and armchair to give possible inhabitants an idea of what the space could be used for. I know I would be excited about the great natural light for all the Zoom calls I need to do for school and work.





I took great pleasure in furnishing the tiny house with a to-scale Queen bed and bathroom

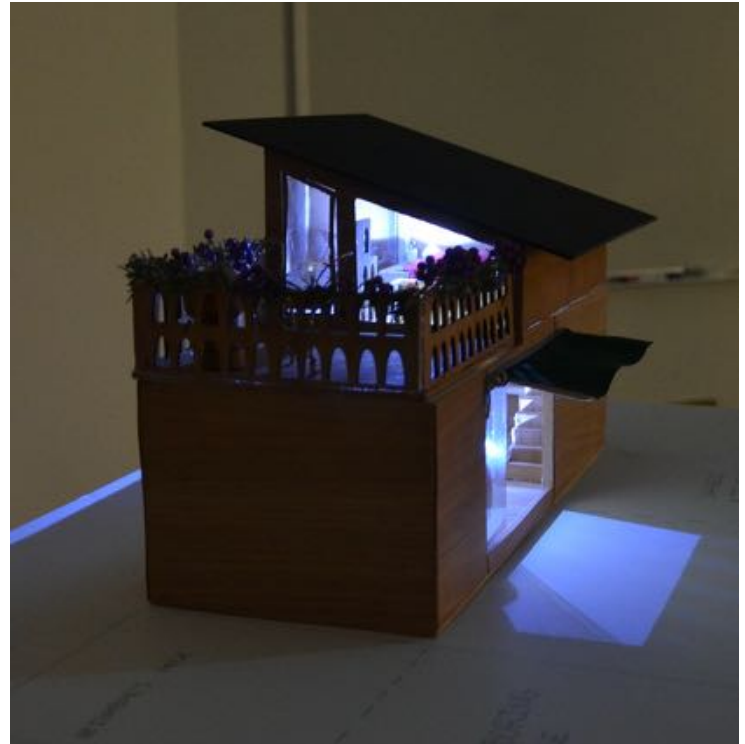


The mirror beside the stairs acts both as a full length mirror off the bedroom, and to reflect light coming in through the second-floor window. Storage, like drawers or a closet, can be installed underneath the stairs, accessible from the bedroom.

3. Photo with light moving into the building– and photos of light moving out of the building

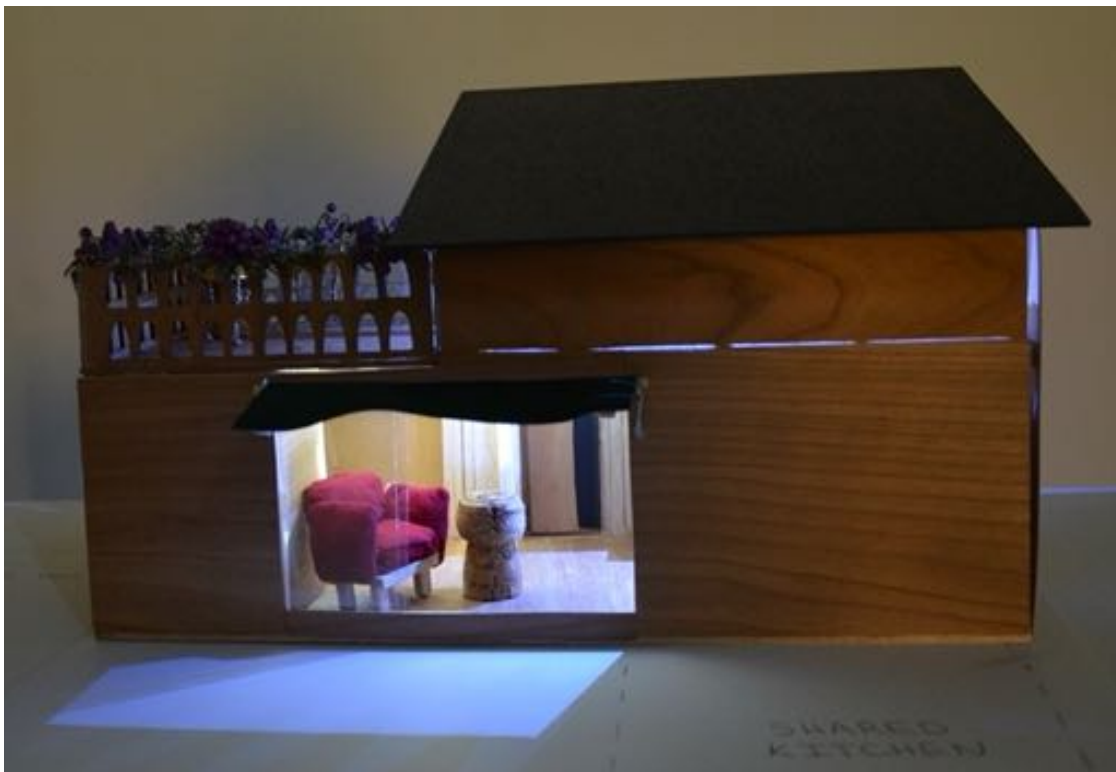


Peering into the loft from southwestern vantage point



Southeastern side illuminated at night, ground-level sliding door on the eastern wall reveals interior staircase leading up to the loft, visible through the window above

Eastern side revealing interior living space through the sliding door. The bathroom is to the left, behind the southern wall, bedroom is to the right. Front door is visible straight ahead.





Northwestern side illuminated at night, lower windows peer into the bedroom, upper window overlooks interior loft



Northern wall removed, interior visible through the length of the house



Narrow horizontal window below the deck lets natural light into the vanity/sink area during the day. At night privacy is maintained by the height of the window, as a passerby on the sidewalk cannot see into the living space. I would recommend curtains for the street-view bedroom window.