

Architectural Brief

kiki



So I chose this photo for my cover slide because it served as most of the inspiration for the main ideas around my house.

Client



1. laborers
2. living temporarily
3. oftentimes with family
4. big sense of community

Choosing the farm meant there were quite specific needs for this client. The things that were most important for me to consider was the fact that residents should mostly be able-bodied, which means I could incorporate steeper than standard stairs. Being temporary means that most likely not much will be brought to decorate, so the house should come fully furnished and look nice without need for extra stuff. Space should be able to comfortable house two adults, and maybe even a child. There should be space for the community to gather while also opportunity for privacy. And most importantly, I had to remember that while this would be someones home for most of the year it would also be their place of work, which means focusing on providing distance from the job.

Site



1. countryside
2. beautiful views
3. rich soil/greenery

Being unoccupied during winter really affected my design for the maleable door, as I had to make sure it would be secure even if no one is checking on it for months. Since housing would be in the summer heating wouldn't be much of a concern. We should try to get the most out of a beautiful night sky and sunsets, and orient buildings with the preexisting buildings in mind for sun exposure. The surface of the site is soil, so would likely need to be covered in gravel or buildings built on foundation. Since it is farmland there aren't many trees to protect from the wind so it is also a windy place.

Restrains



1. price
2. foundation
3. community space

Of course one of the restraints this whole project gave us was to keep our houses small (some may even say tiny). Further, keeping costs down is also a necessity. Because of the soil it would be necessary to do some working to keep the houses on solid ground, perhaps a foundation. Also, to foster community in the farm a consideration had to be made with regards to what spaces will be communal and which should be primarily private.

Motivation



How To Catch All The Lions:

Make a fence around an area containing no lions.
Enter the area. Close the gate. All lions are now
on the other side of the fence.

There's a math joke that goes [read from slide]. It's maybe not the funniest joke around, but it offers insight into what I feel like is the most important aspect of a house. All walls are made to either keep inside things in or outside things out, but with a little change of perspective what's inside can be outside and vice versa. My main goal for this project was to make a house that allows its residents to feel as if they are on the outside no matter what side they are really on. I think this is especially noticeable during extreme weather. A home should turn weather into a show: something we watch without fear it could ever touch us.



the first thing I thought of to do make this happen was convexity and concavity. I've seen windows like these when I was flipping through Gerri's books, and I noticed how impossible it was to feel like you are on the inside when looking at it from the outside. I wanted a round wall, and instead of making it convex, enclosing the inside of the house i made it concave, enclosing the outside of the house.



of course every outside has an inside, and I wanted the inside of this curve to be both a sense of community and a sense of outdoors, and there's no better combination of those two things than a fire pit. I lived in the backwoods of Minnesota and every get together in the summer would be had around a fire.

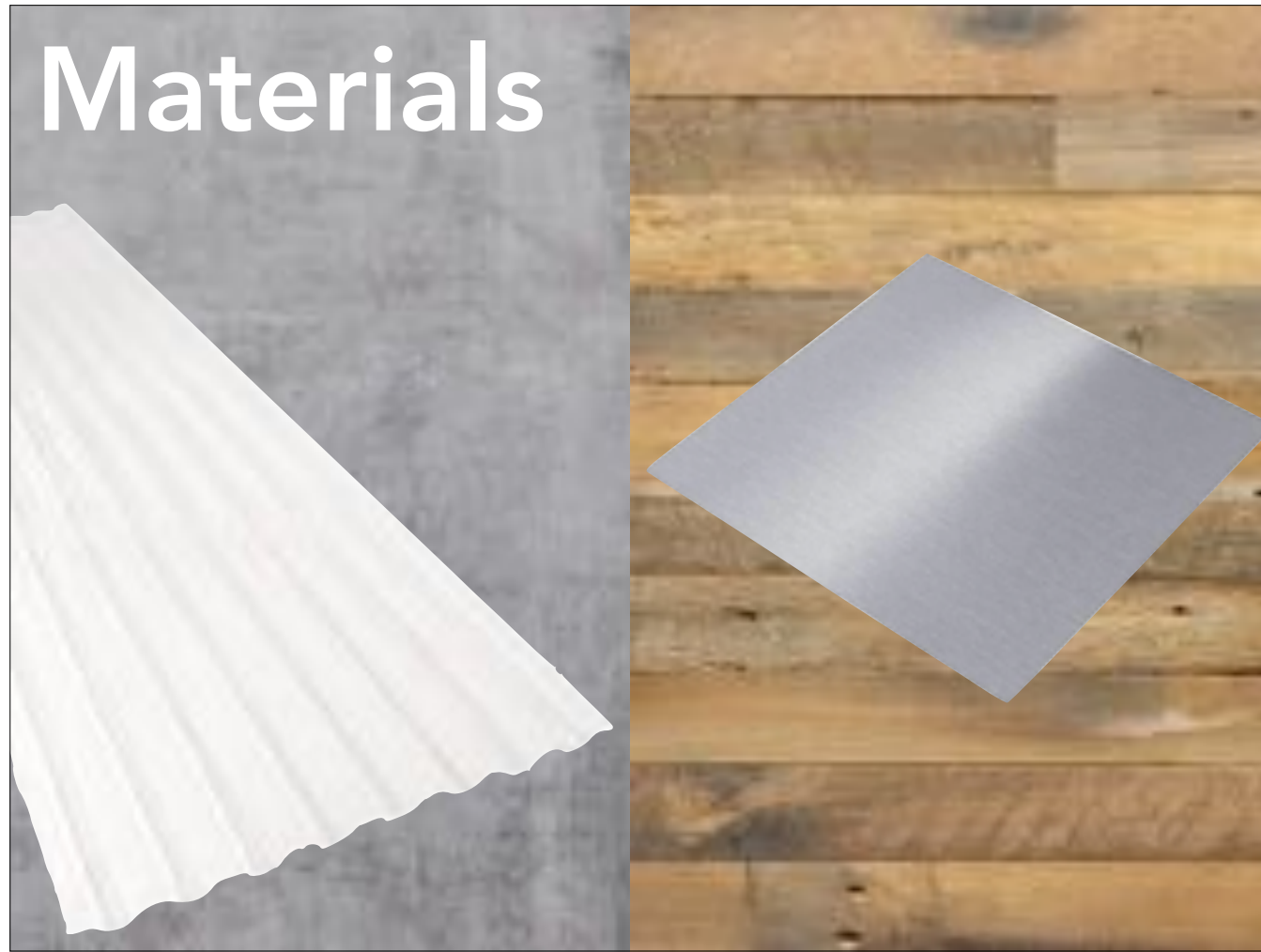


The other priorities of mine were keeping a cohesive look with the farm (though keeping a modern feel). So it felt all too natural to build a greenhouse style roof, which contributes to the feeling of being outside. The use of corrugated plastic to mimic the greenhouse at the farm leads us to the discussion of materials.



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Materials



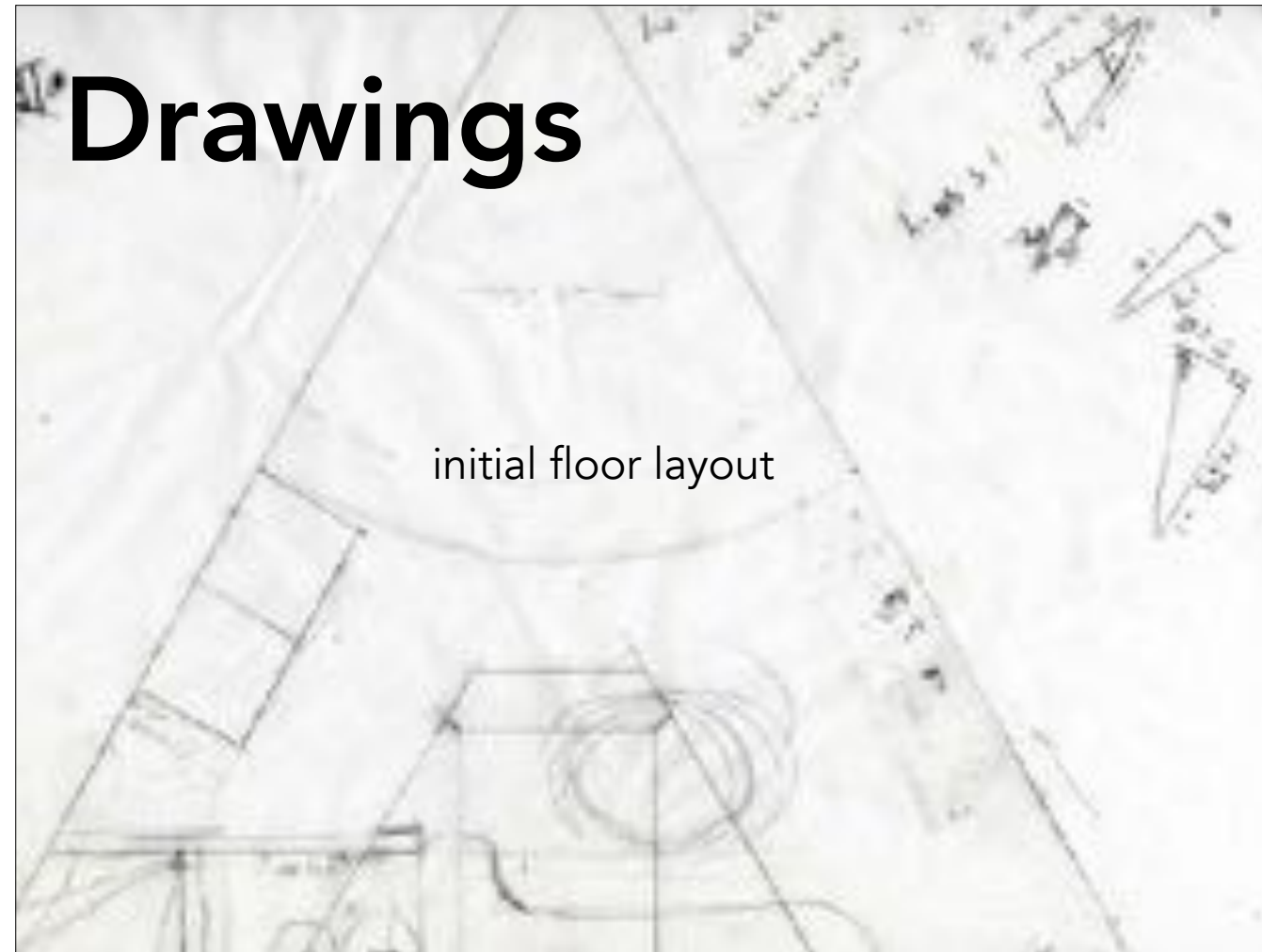
I tried to keep costs low primarily on the materials end of things. The corrugated plastic roof would be significantly cheaper than windows, and fully eliminates the need for any (draft and light-wise). The siding of the building could easily be made from reclaimed wood, or otherwise locally sourced timber. The aluminum panels would also be cheap to make, and resemble some of the corrugated metal pieces of the barn structures. And the concrete floor would also save costs (and I personally really like the look and durability of concrete).

Layout



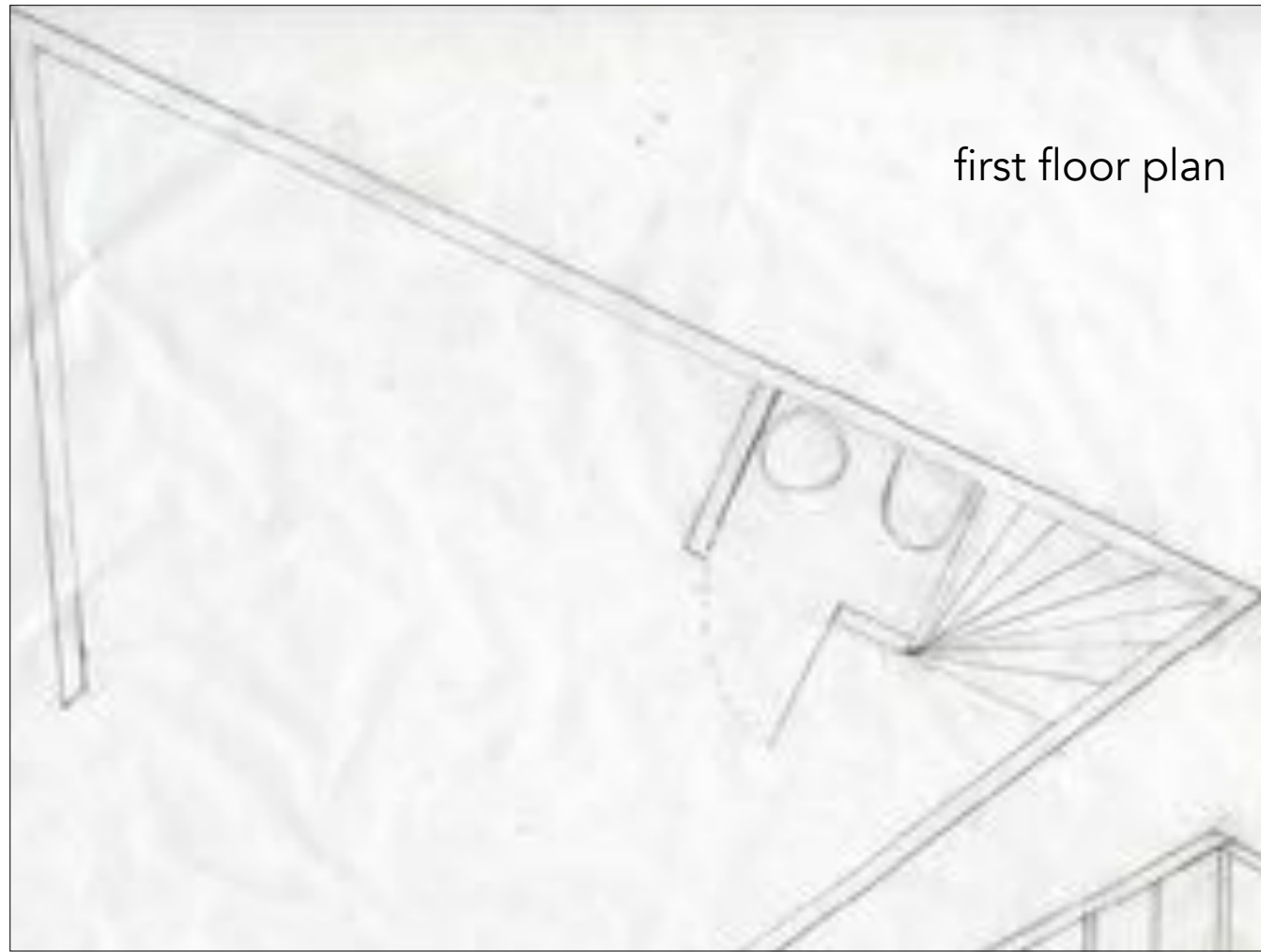
The houses would be laid out in a circle around a fire pit. This orientation has the sturdy full walls facing the outside so that wind should not be violent on the inside, but the gaps between houses allow for some comfortable breeze. Since light will come mostly from the roof and not from side windows each house should get a similar amount of light as there are no direction facing windows. I've shown 7 houses though there is some flexibility in number that could fit, an odd number is preferable to avoid a directly opposite neighbor, so patios could still feel somewhat private. The homes should be to scale, with 30 ft long sides, though for two sides the actual walls are only 15 feet long. The house has not been modeled with a foundation, but one could easily be made, instead the house was designed as if the ground would be treated to hold a structure.

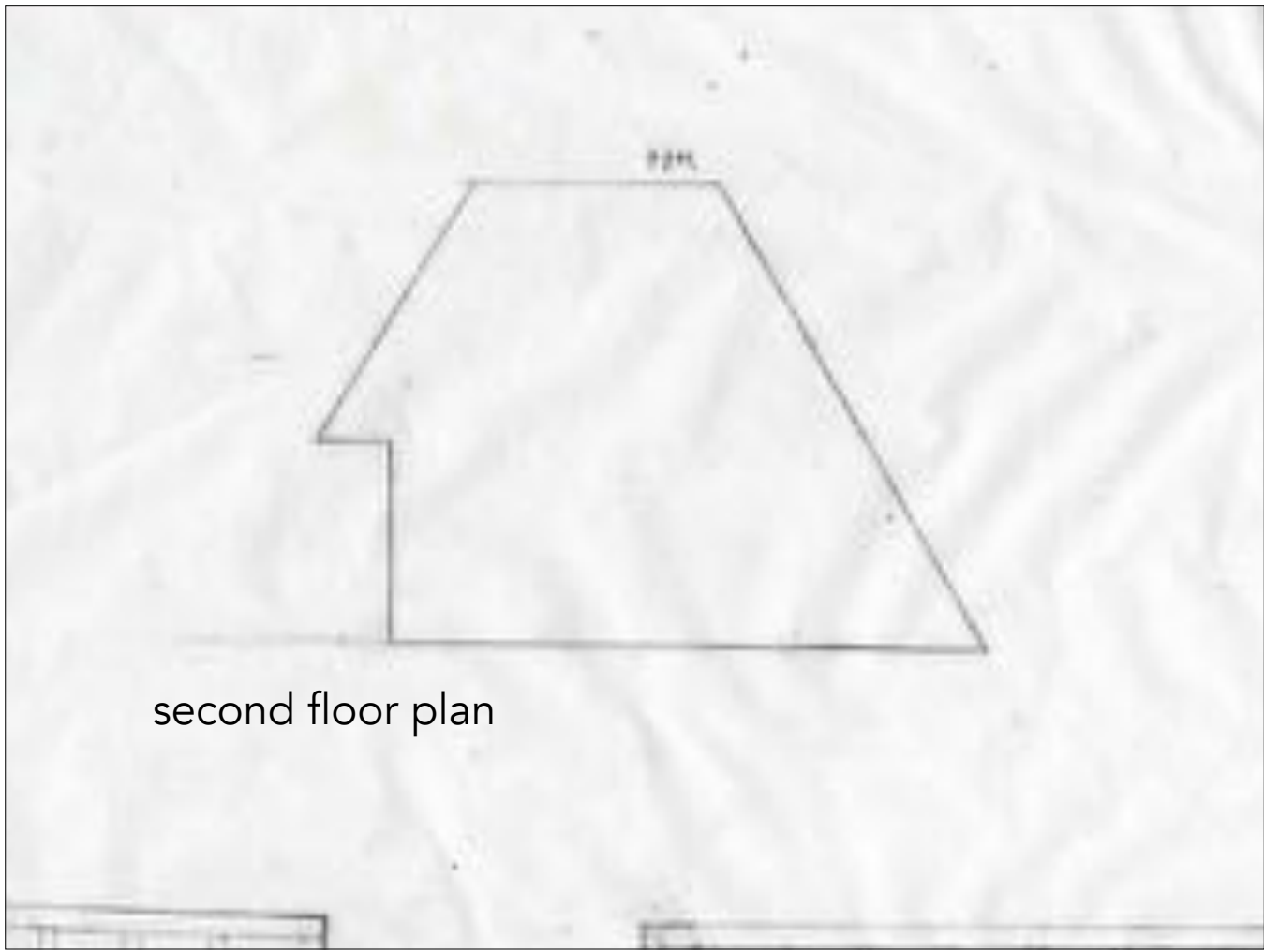
Drawings



initial floor layout

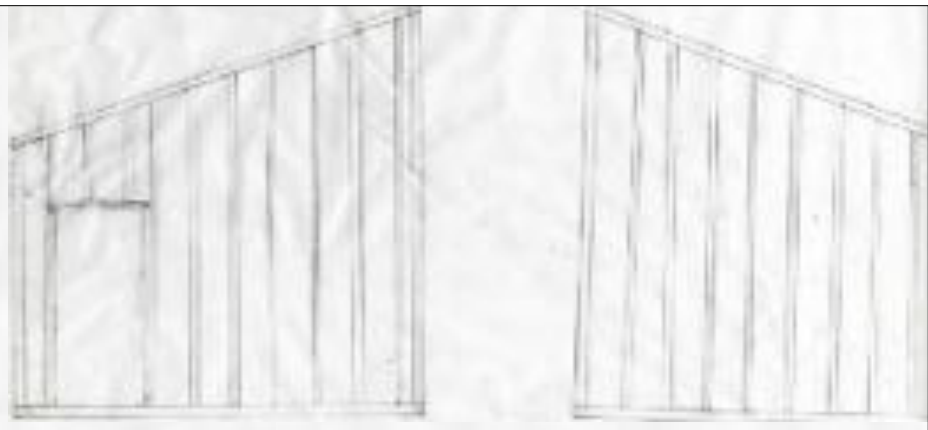
first floor plan





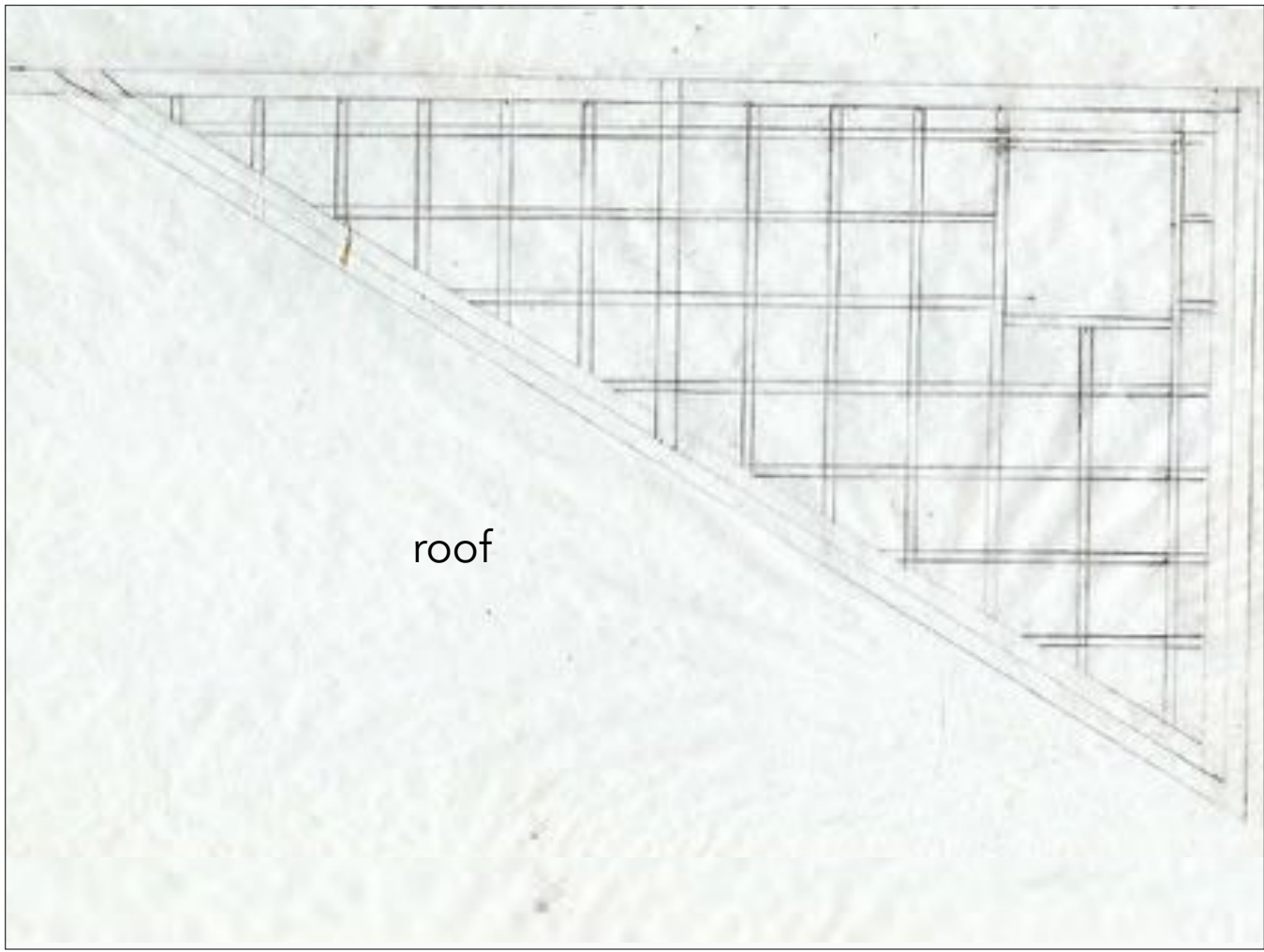
second floor plan

side walls



back wall





roof

first model



Gerri suggested I make a tiny model of the shape I wanted to get a better feel for the massing.

Model



Here is the model I made by myself. Some things are not quite accurate, for example a support beam would probably be needed to hold the roof up at the corner. Also a piece of wall between the roof and top of the panels would be necessary to keep the weather out. Ideally this would be made of glass or plastic, but to keep the model working I left it out.



Here is the model with perspective on the site with the doors half open.



again with the lights off. Not quite the same perspective but I'm just not a good photographer sorry.





when is a door not a door?



when it's a wall!



my roof looks off because I didn't do a great job making it the right angle and I couldn't just let it fit the angle of the house because I wanted to be able to take it off.



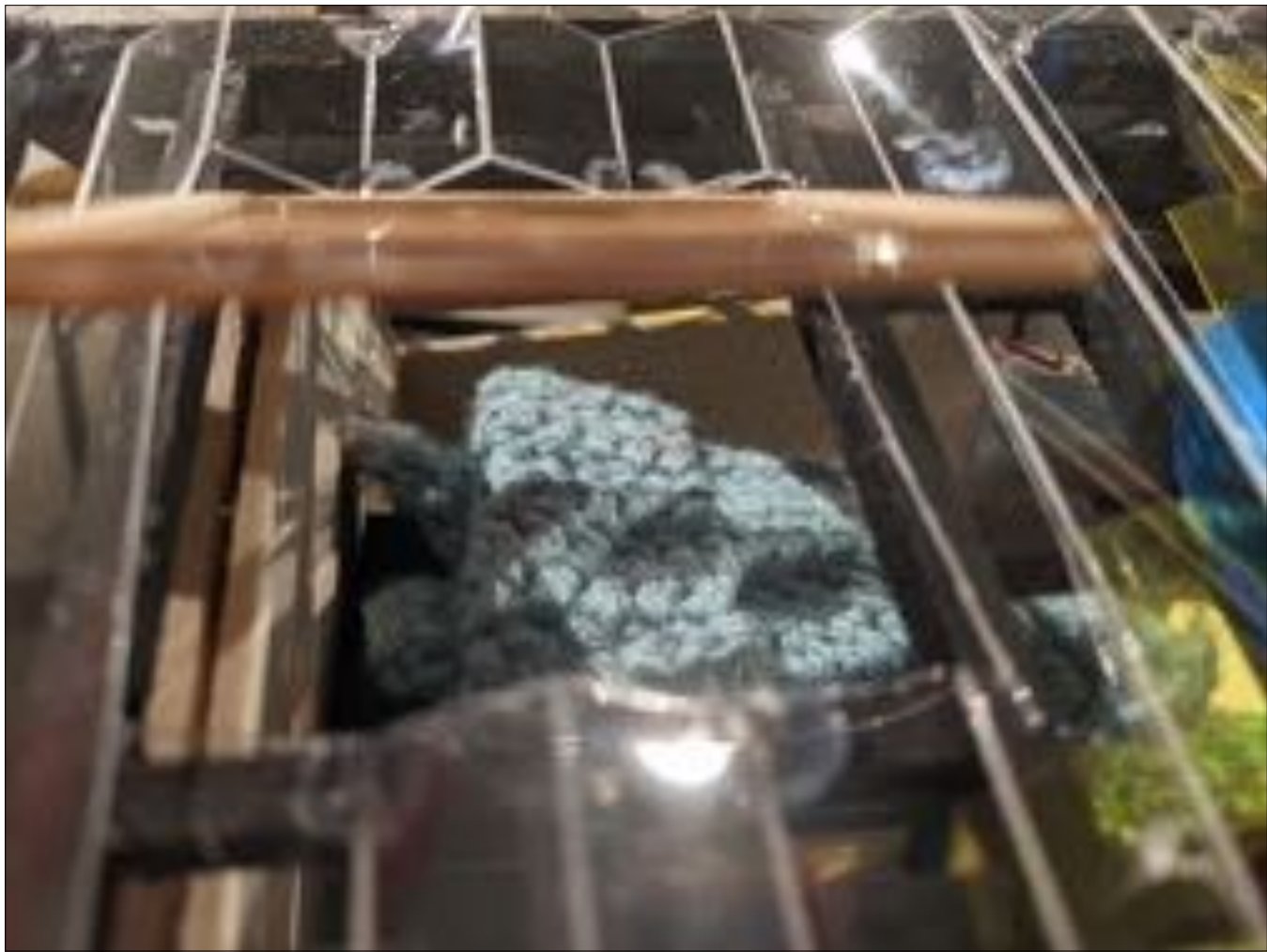




those stairs are not the easiest to maneuver so they really only work because residents should be able-bodied. The left wall was really free space, that I realised after taking all the pictures should really be a wardrobe, or other storage.



the windows on the roof will keep it from getting hot like a real greenhouse. I considered windows on the back wall, especially on the first floor. If the house was getting too hot a window there, if opened, would pull wind from the front open wall and create a nice draft.



more roof detail, the window would likely need a little stand to stay up.



the bathroom contains a toilet and tabo. Tabo is a filipino shower, were you just have a faucet that fills a bucket. You scoop the water onto yourself. This way the shower doubles as a sink and minimal water is used. Since people will mostly be living during summer months, cold showers would feel great (though you could add hot water if desired). The drain just fits on the floor. I figured fitting it under the stairs would be good as one side of it you only sit on anyway.



the roof has colored shapes in it. A circle for the sun, wave for the river, and zig zag for the mountains. These are the three things I think of most when I think of PNW (the sun because boy do I miss it). The colors will dance around the house as the sun moves across the sky, livening up the cold concrete. Each unit would have unique colorings and patterns to keep each house feeling special.



under the loft is a convertible space, perfect for eating or relaxing. The unit would come with a minifridge and microwave so leftovers could be stored and reheated, though a full kitchen would be communal, probably by converting the vegetable wash station or simply adding a new building for that purpose.



the bench along the wall would be built-in with storage space underneath and the ability to change it



into a bed for a third household member or guest, or even just to be a nice reading nook.



the fire pit would be the center of the dwellings, with benches for shared seating, and maybe games (like cornhole or ladderball or such) to promote a close-knit community.