

Elements of Memory

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Thesis submitted to the faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

Master of Architecture

Approved by:

H. Scott Gartner, Chairman

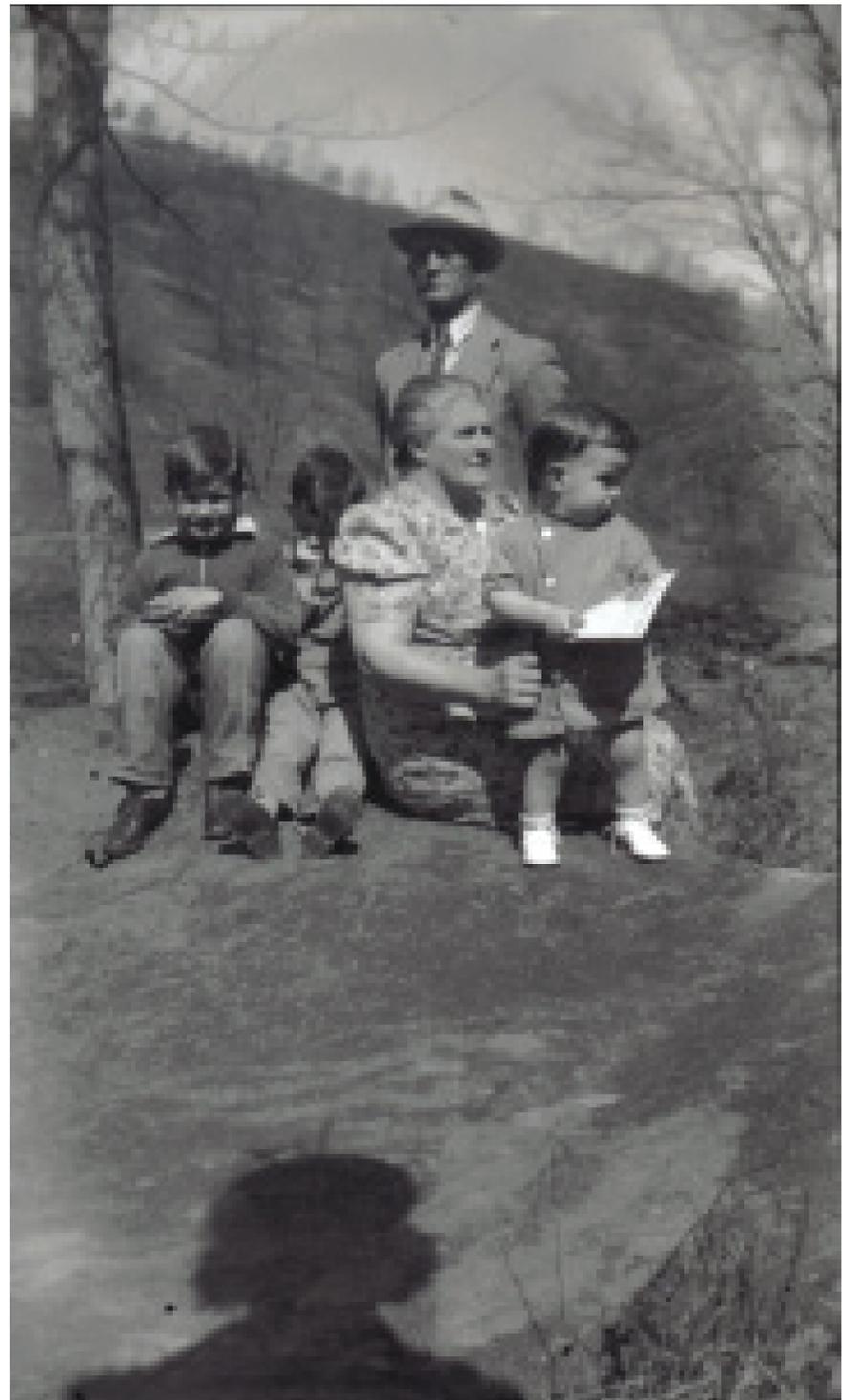
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Elements of Memory



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Abstract

I set out to create a house to nestle within the rugged landscape of West Virginia; a dwelling that would suit those living in rural villages and up remote hollows. This place is created by a retaining wall to hold back the slope and a generous roof to shelter from the weather. The structure is divided into two seemingly equal halves, one half being enclosed to form the house, the other remaining for outdoor space. Terrain and orientation were considered, giving rise to three variations of the house. Within each house, memories of my childhood surroundings are recognized and celebrated.



Acknowledgements

I would like to thank my parents, brother, Andrew, husband, Clayton and classmates. Scott for all his advice, encouragement, and voice of reason. Bill and Kay for their guidance. To Freeman and Morpew, for the foundation they provided and their confidence. To my grandparents, Herb and Edith Smith, for their love, unwavering belief in me, and for the photographs in this book that they cherished and passed onto me.

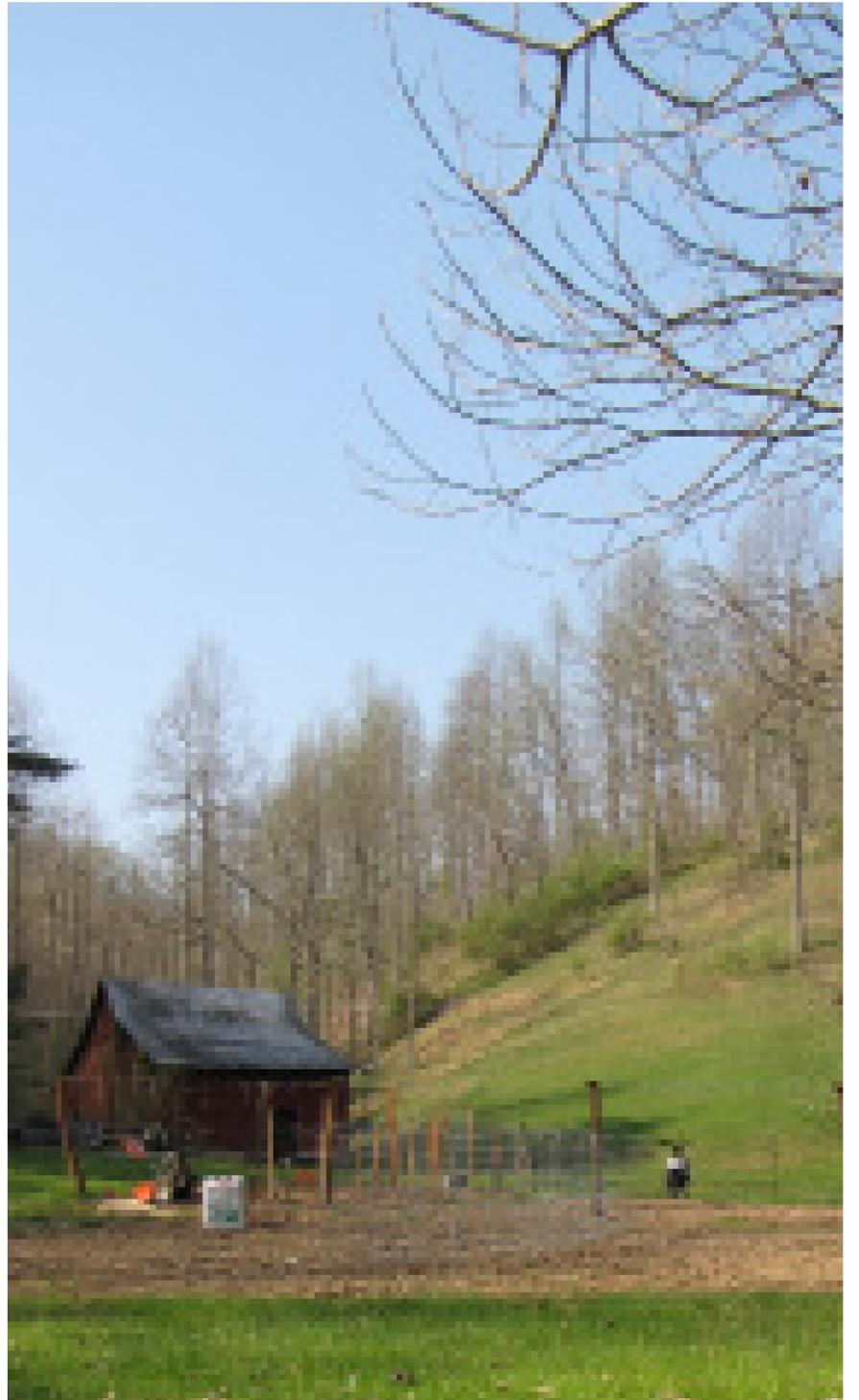


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A Way of Life

Speaking of his childhood, a rural West Virginian writes: "Life may have been difficult and laborious, but it was not complicated. It was connected to the gifts of life, nurtured by that which was grown by hand and distributed by family and neighbors. People counted because their numbers were small." Yet today, it can be said that "we are barely off the farm, a short distance from those 'primitive times.' There are fewer than a dozen folks, old-timers, who still use the horse and plow, whose sustenance mostly comes from the sod, a reminder of those simpler times. And many ... still raise a garden, have some animals and cut hay. It is in their soul to stick to the sod of their ancestors."¹



Hill

The area of West Virginia in which I grew up is very hilly. Grantsville, the county seat, developed along the slopes surrounding the Little Kanawha River. The houses within the town incorporate stairs and cut stone retaining walls to cope with the grade. Some would assume this topographical condition to be a disadvantage; however it is this condition that gives each of the streets a distinct presence and feel. As a child, I was fascinated with walking on top the walls that were a constant throughout the town. The houses, being above or below street level gave a sense of separation while the steps leading to the front porches gave a physical connection and gives a profound sense of arrival.



Material

The building materials that surrounded me in my youth were concrete block, steel pole columns, and metal frame casement windows. My grandfather designed and built the house and adjacent business. Concrete block was employed as retaining walls, walls of the house and commercial property, and the banisters that enclose the front porch. Steel pipe columns were used to support the porch and later the carport. My grandfather was a welder for the army during World War II, so he was knowledgeable when it came to the capabilities of steel and felt very comfortable using it as a building material. When my grandfather built something, he wanted to know that he could set a bulldozer on it and it would still be standing.



Porch

The front porch of my childhood home was used on the daily basis; to eat a meal, greet guests, watch traffic, and to watch for the school bus. Many summer days were spent at the town pool. On days when bad weather would arise, we cut the day short, came home, and watched the stormy displays from the shelter of our porch. Although lightning could have struck the house or surrounding yard at anytime, we always felt completely safe.



Carport

The front porch was extended by the front yard which was fenced in and provided my brothers and myself a safe place to play. This yard was eventually converted to a carport providing a solid surface for bike riding, roller skating, and skateboarding. These activities nearly gave my dad a heart attack on occasion, but I am sure he felt slightly better knowing that if we got hurt he was close by.



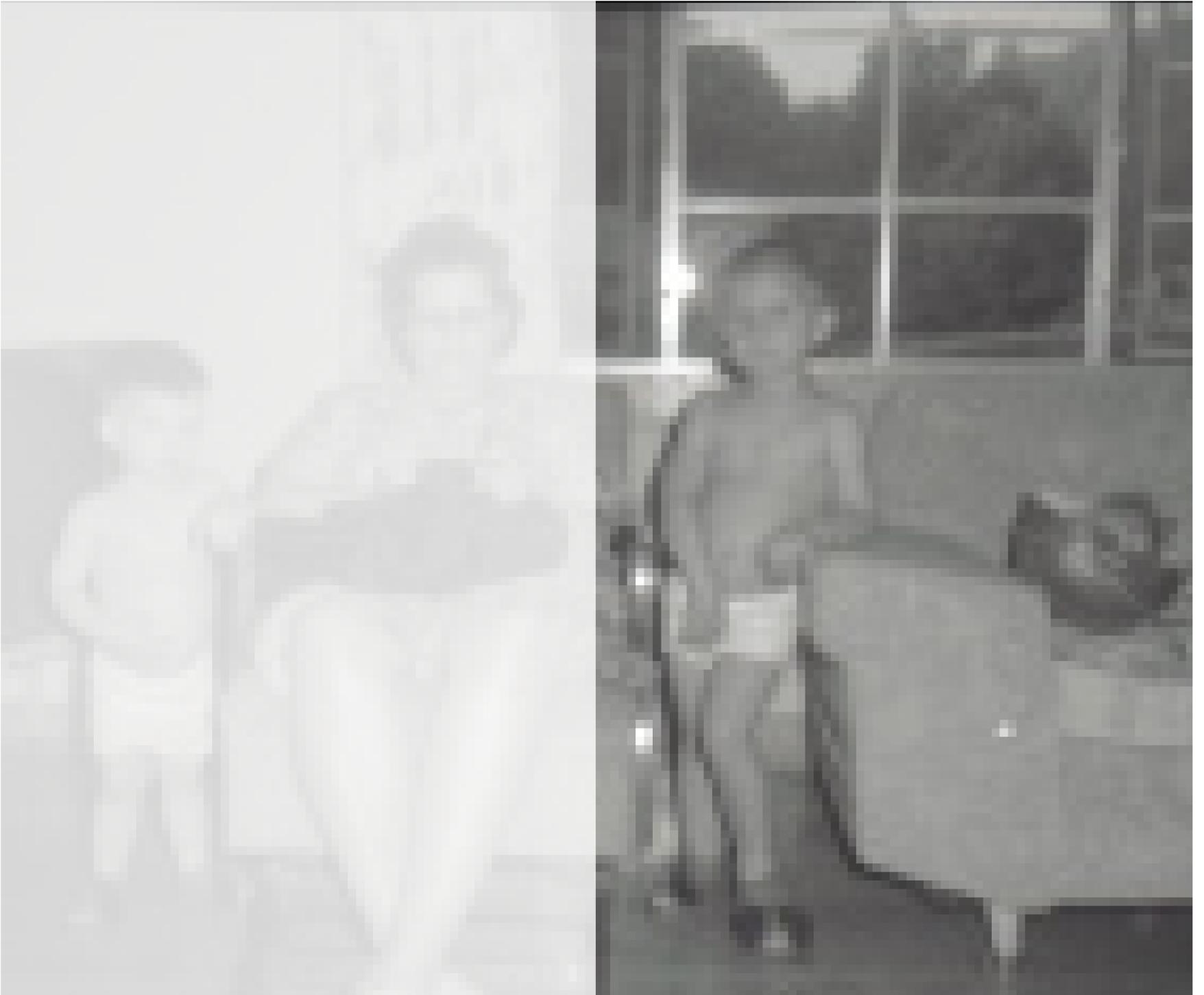
Kitchen Window

I recall every kitchen having a window with a view. In my grandmother's house there were two, which she used to keep tabs on the neighborhood. One looked out over the front yard, the street beyond, and the neighbors walking to get their mail. The other window faced the intersection at the end of their street, the carport and the parade of guests as they passed by on their way to the door. When I would visit my grandmother on the weekends, occasionally I would pick up my brother on the way. She could see just our heads as we passed her kitchen window. She was expecting me to arrive, but when she would see my brother she would squeal so loud with excitement we could hear her from outside.



Picture Window

The largest window in our home was one that faced south in the living room. It let in ample sunlight to illuminate the room, featured a deep sill that was perfect for the family pets to keep warm and sleep, and was used as an additional table on which to set drinks. One of my favorite things to do after school was lie on the couch in front of that window and listen to the vertical blinds clack together in the wind that came through the open windows.



Archway

Between the living room and dining area of our house was a large archway and floor furnace. During cold winter days, I would sit just to the side of the furnace vent and lean against the wall opening to keep warm. At some point, I began sitting in this spot all year round. It became the hearth of our home in my mind. I would sit there and talk to whomever was working in the kitchen while still being able to watch the TV in the living room. Looking back, I think I felt more visible to my family, since they had to pass by me so closely. I was purposefully putting myself in everyone's way.



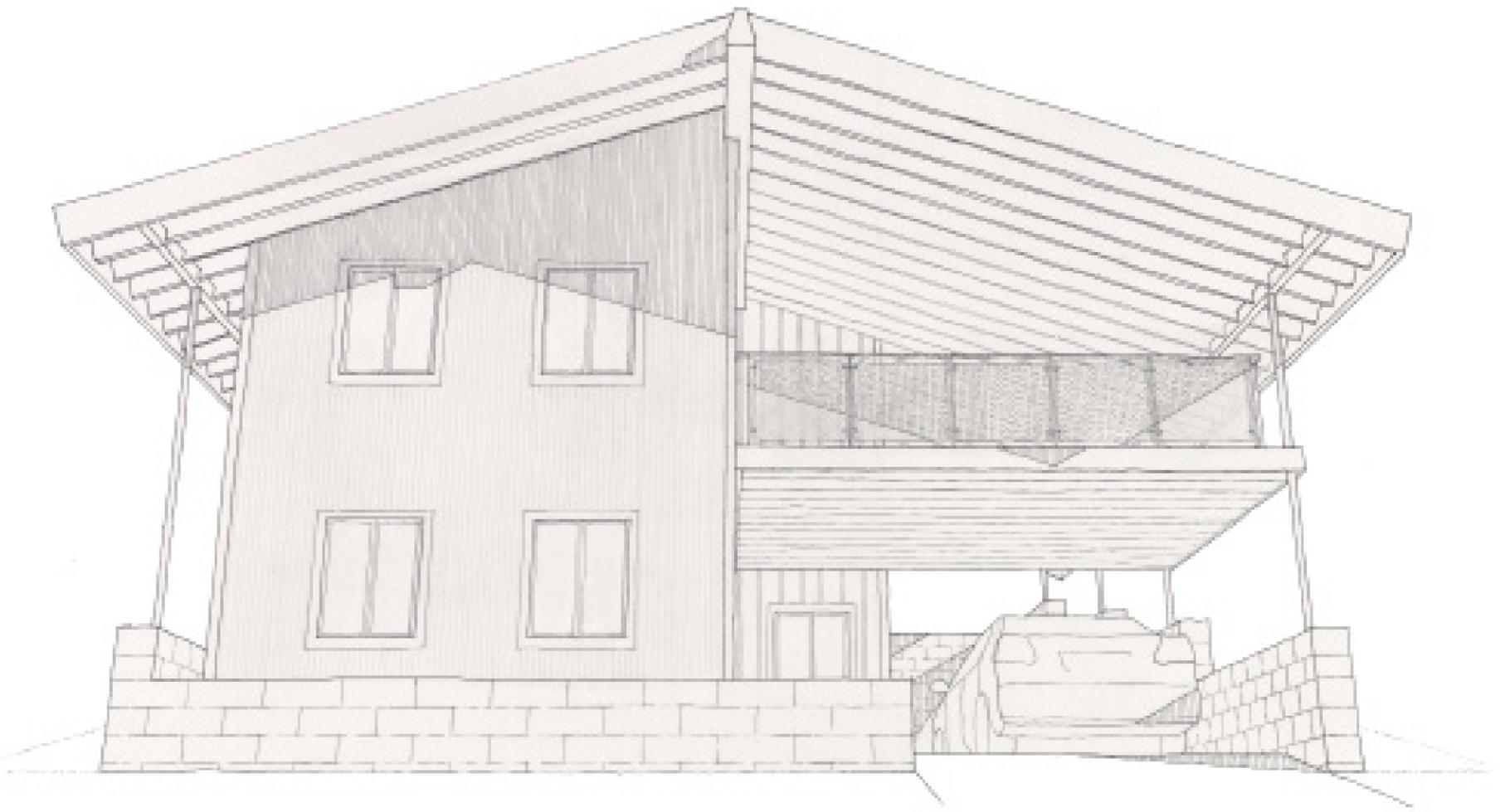
Stair

Stairs can be a natural reflection of the slope of the ground occurring outside, as they were in my house. They were also a place to position the children and grandchildren for a yearly photo documentation of their growth. Ours was a steep set of wooden stairs and as a child I would challenge myself to see how fast I could run up or down them. As I got older, the walls of the stairwell became lined with pictures causing me to slow down. The top step was in close proximity to our bathroom, so my dad would sit on it every evening to take off his shoes and socks and have a brief rest before getting cleaned up for supper.

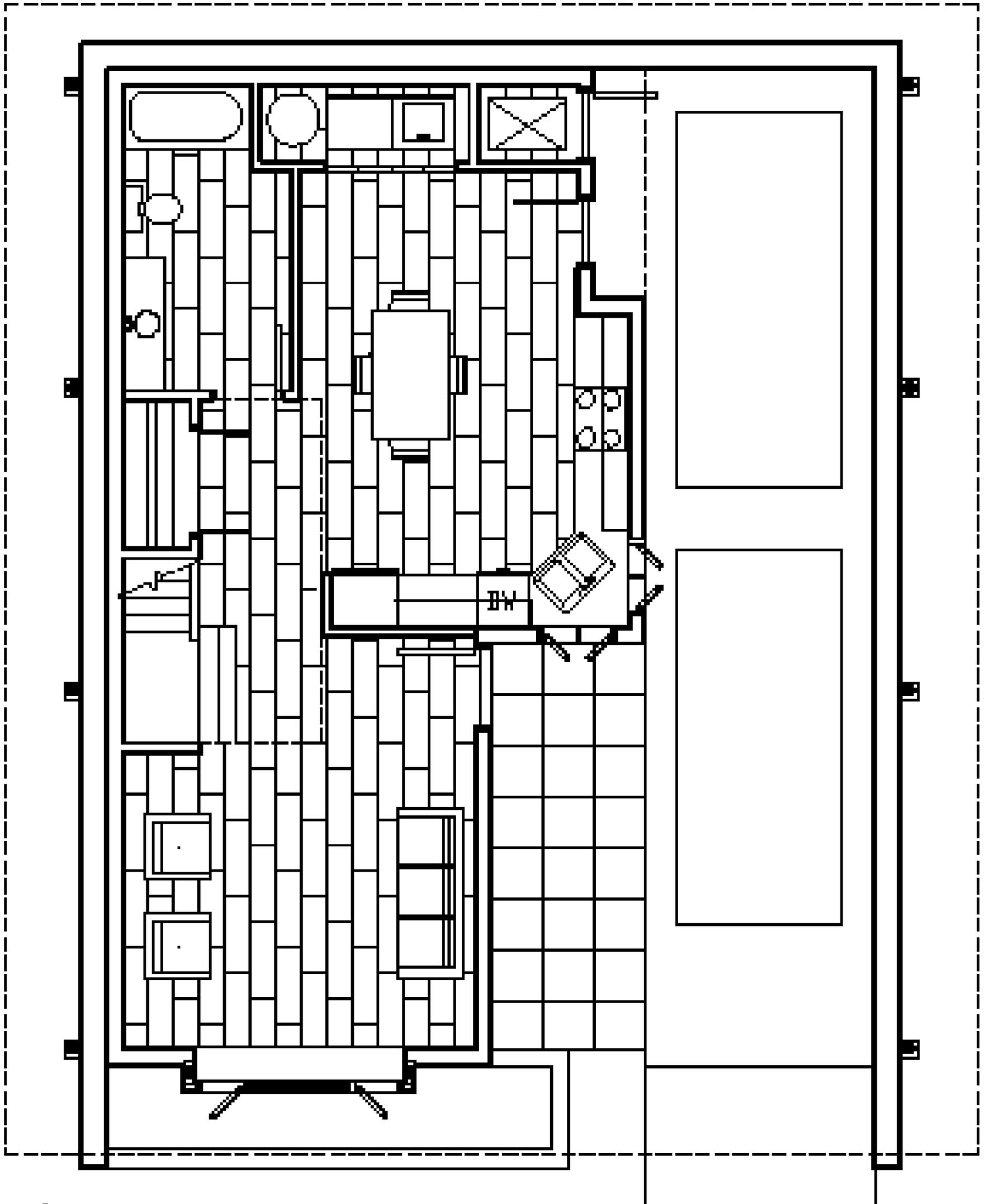


Three Houses

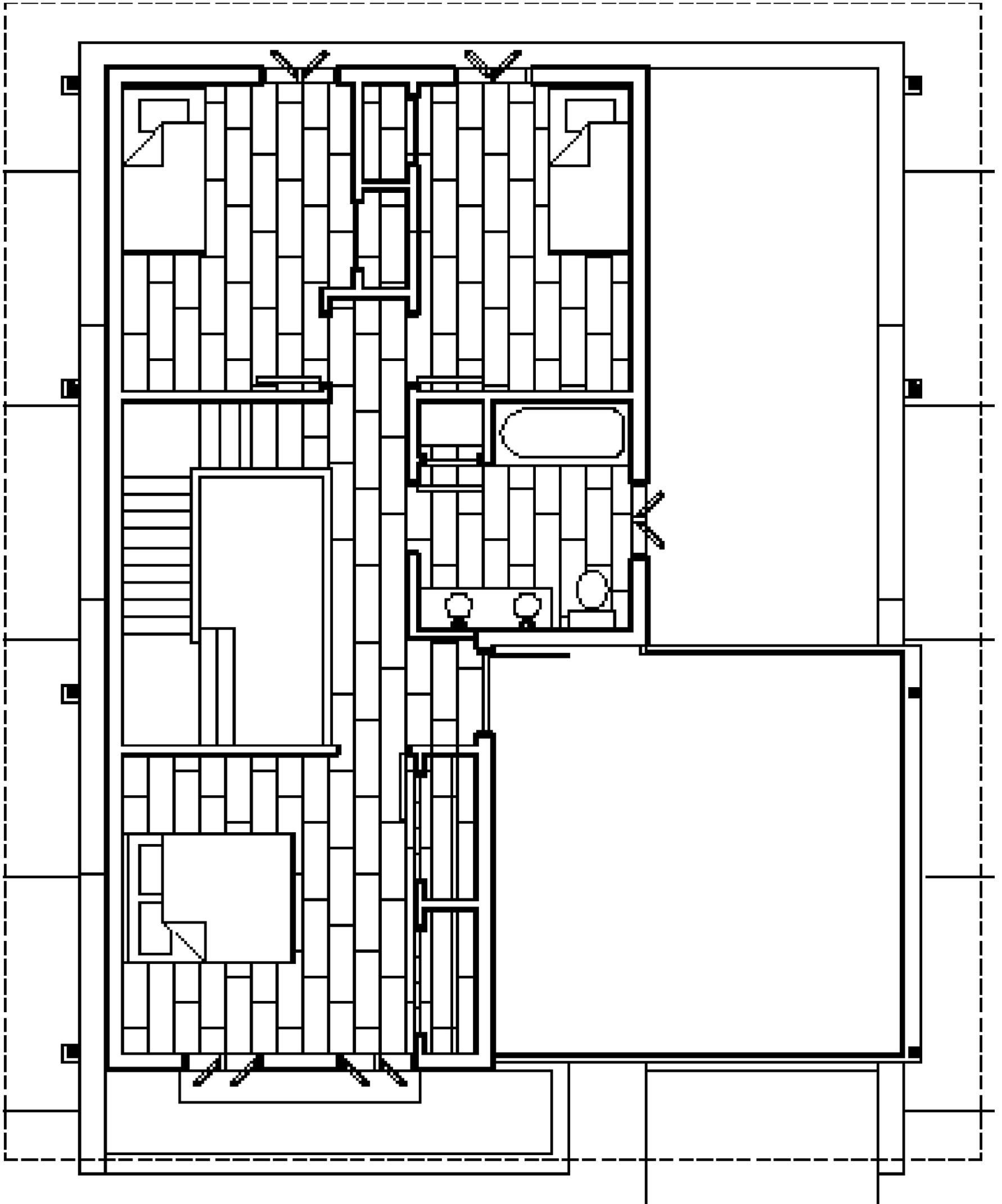
House 1 was the origin of all three houses. The design was modified to address terrain differences and orientation relative to the sun. House 1 is recessed into a hillside above a roadway and faces south. House 2 is situated similarly, except its frontal façade is directed north. House 3 is intended for sites which slope downward from the roadway and is entered on the upper level. It emerges from the hillside and faces south for maximum daylighting.



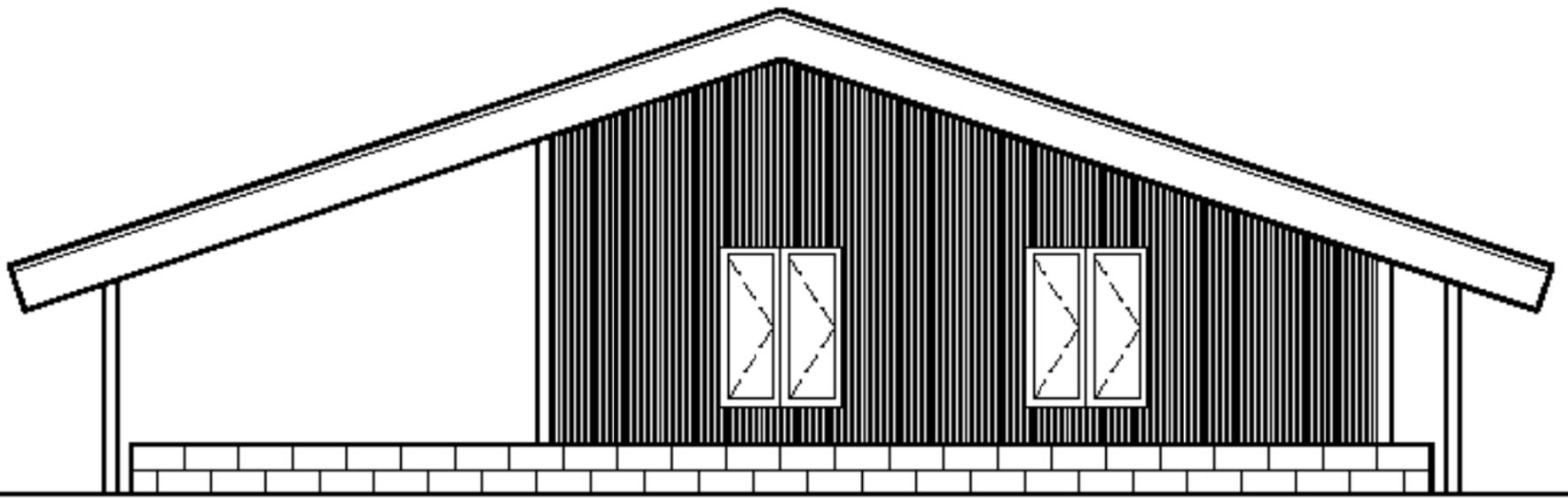
House 1



 H.1 - Main Level Plan

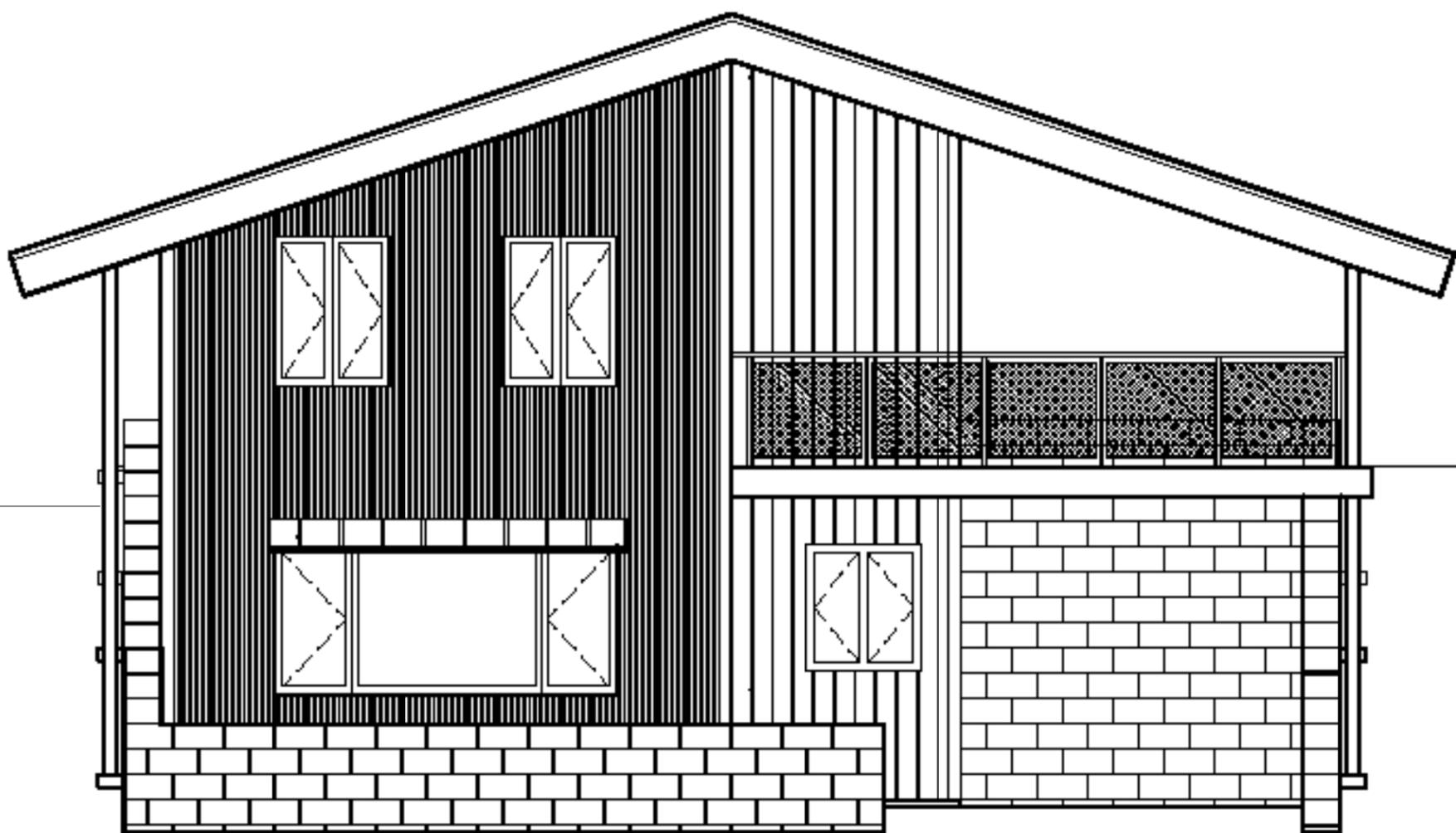


H.1 - Upper Level Plan 



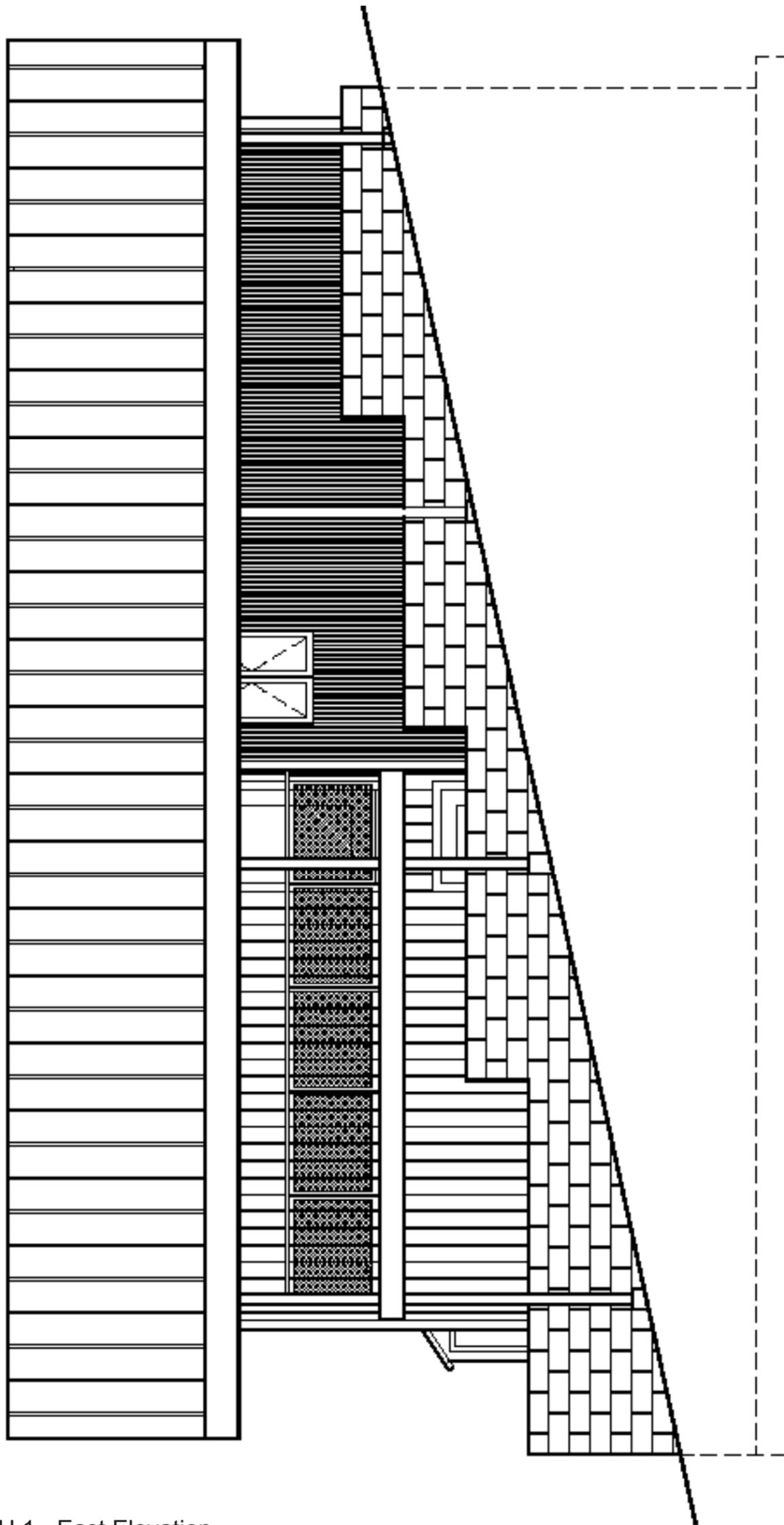
H.1 - North Elevation



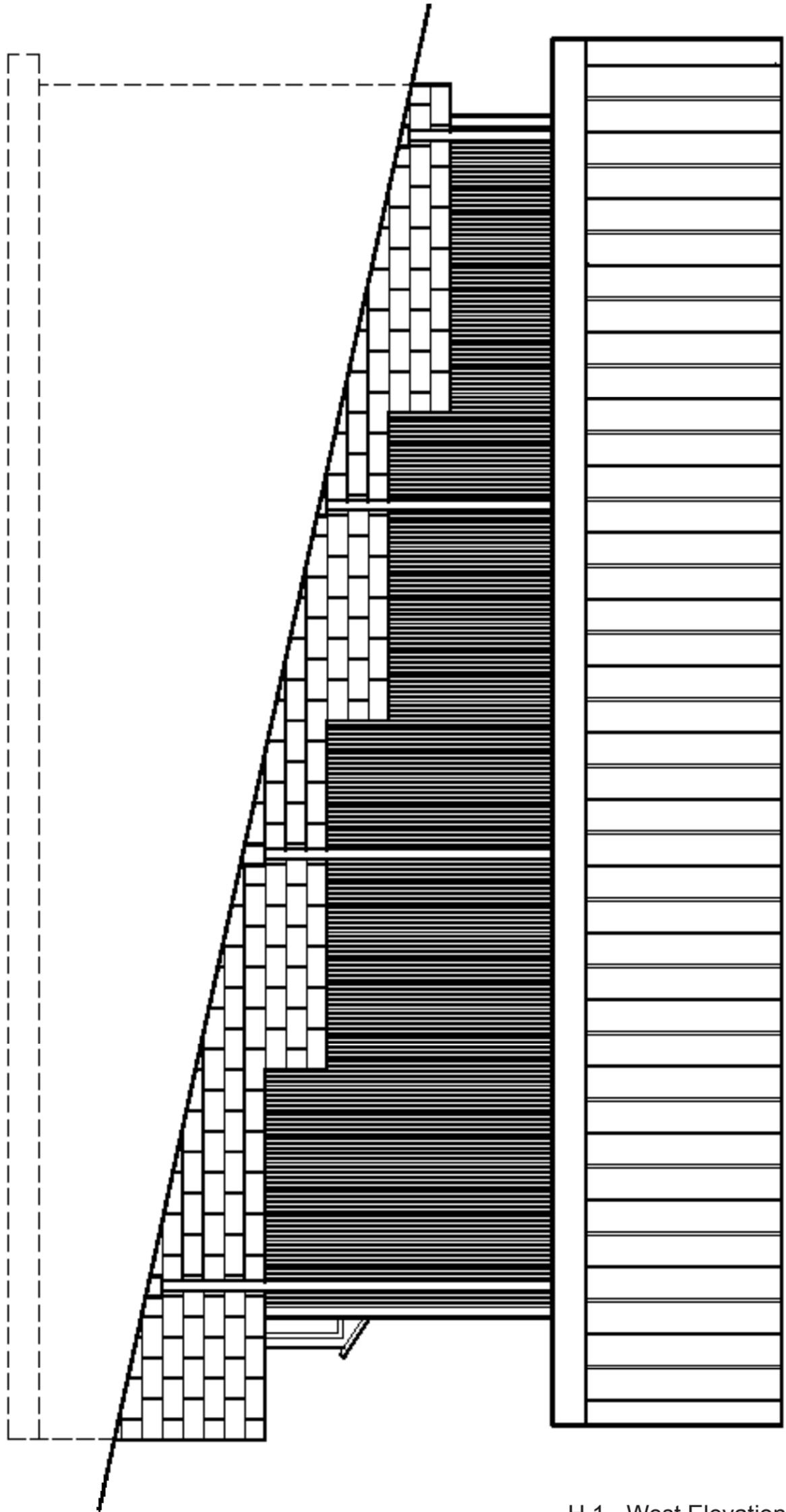


H.1 - South Elevation



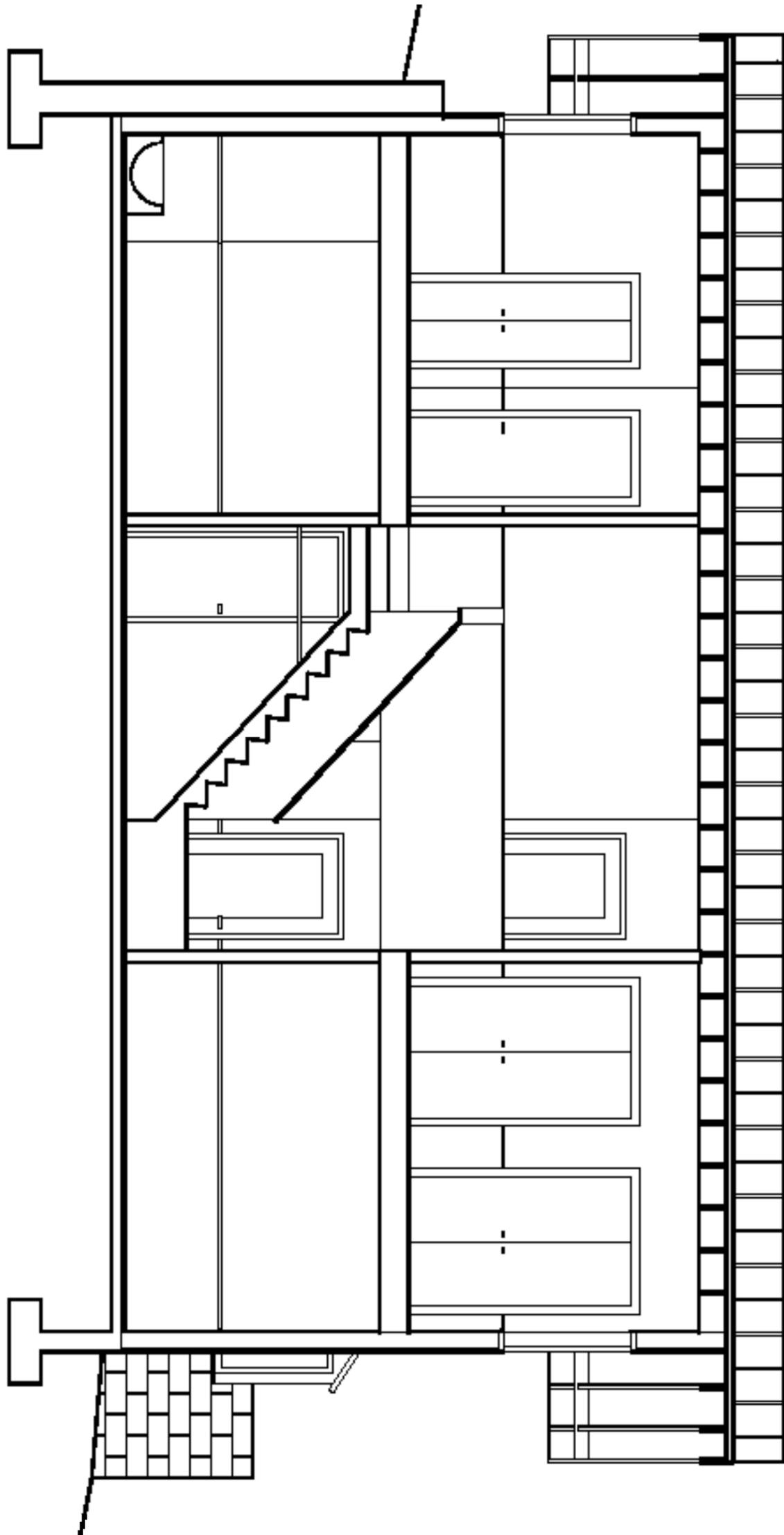


H.1 - East Elevation
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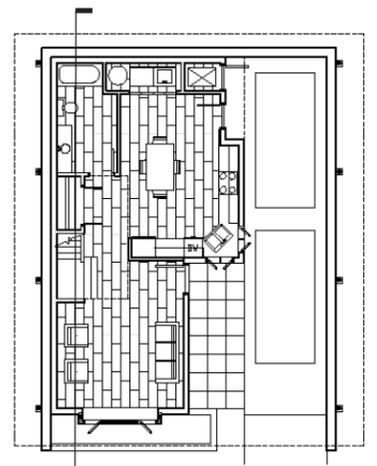


H.1 - West Elevation

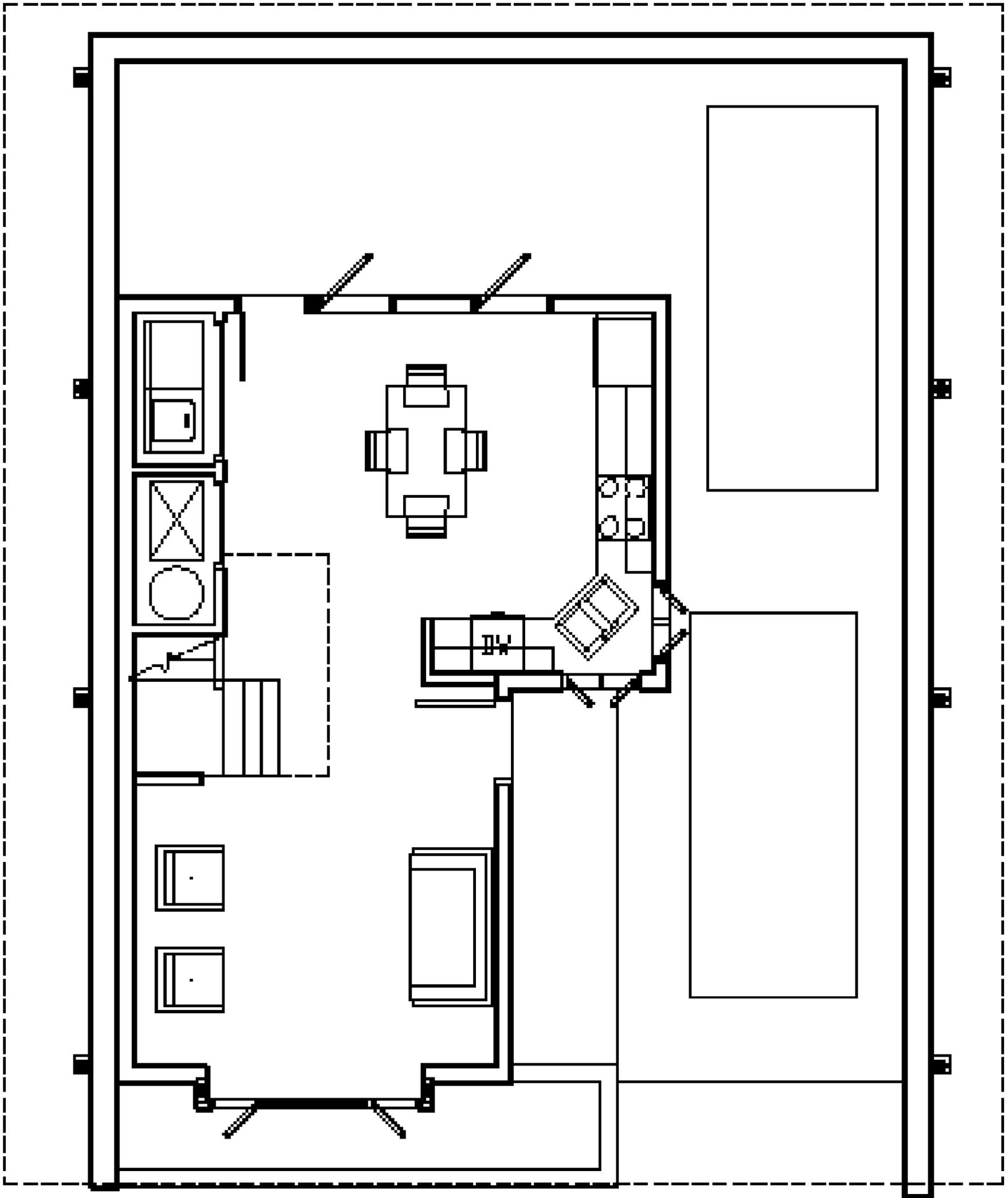




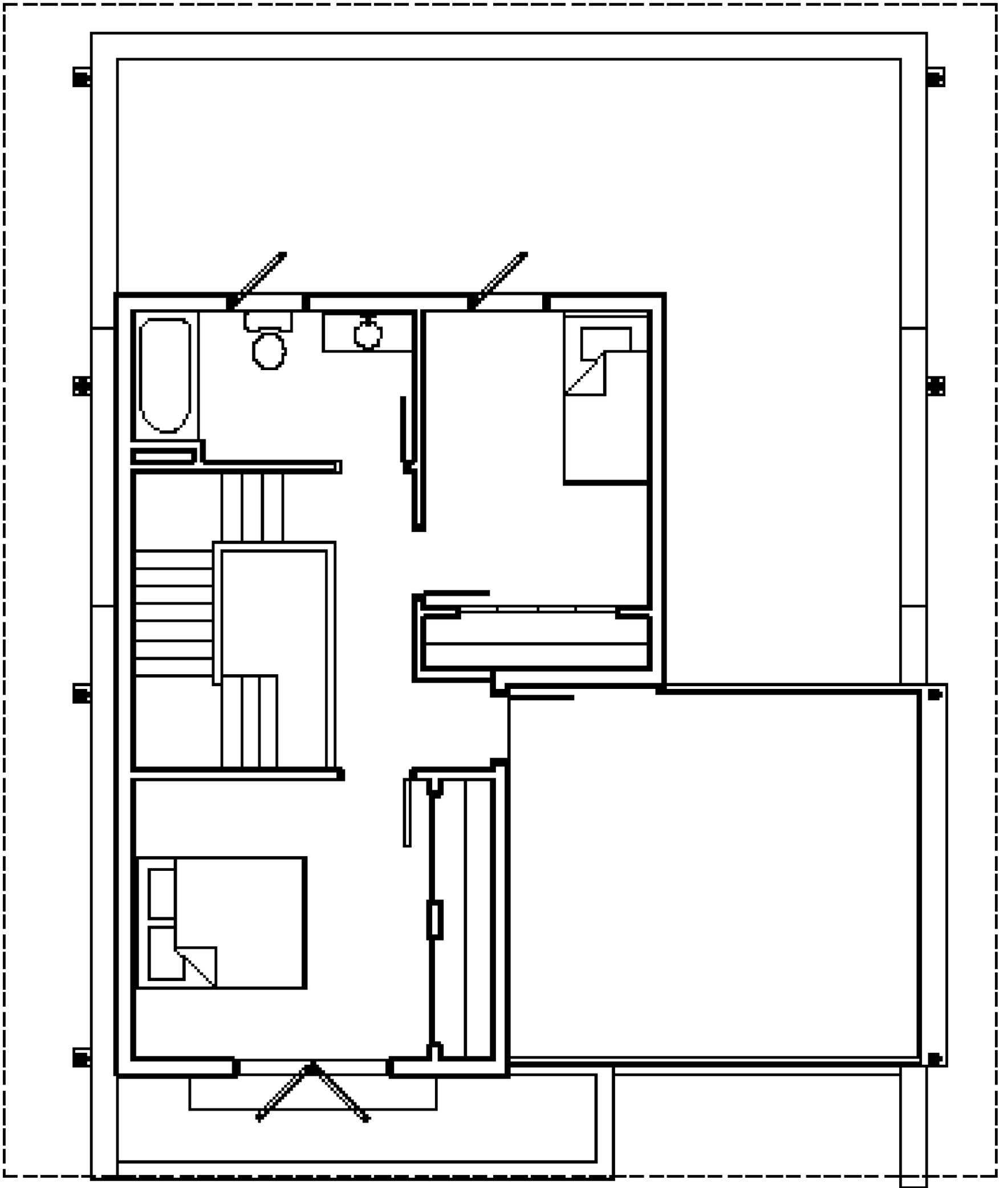
H.1 - Section



House 2

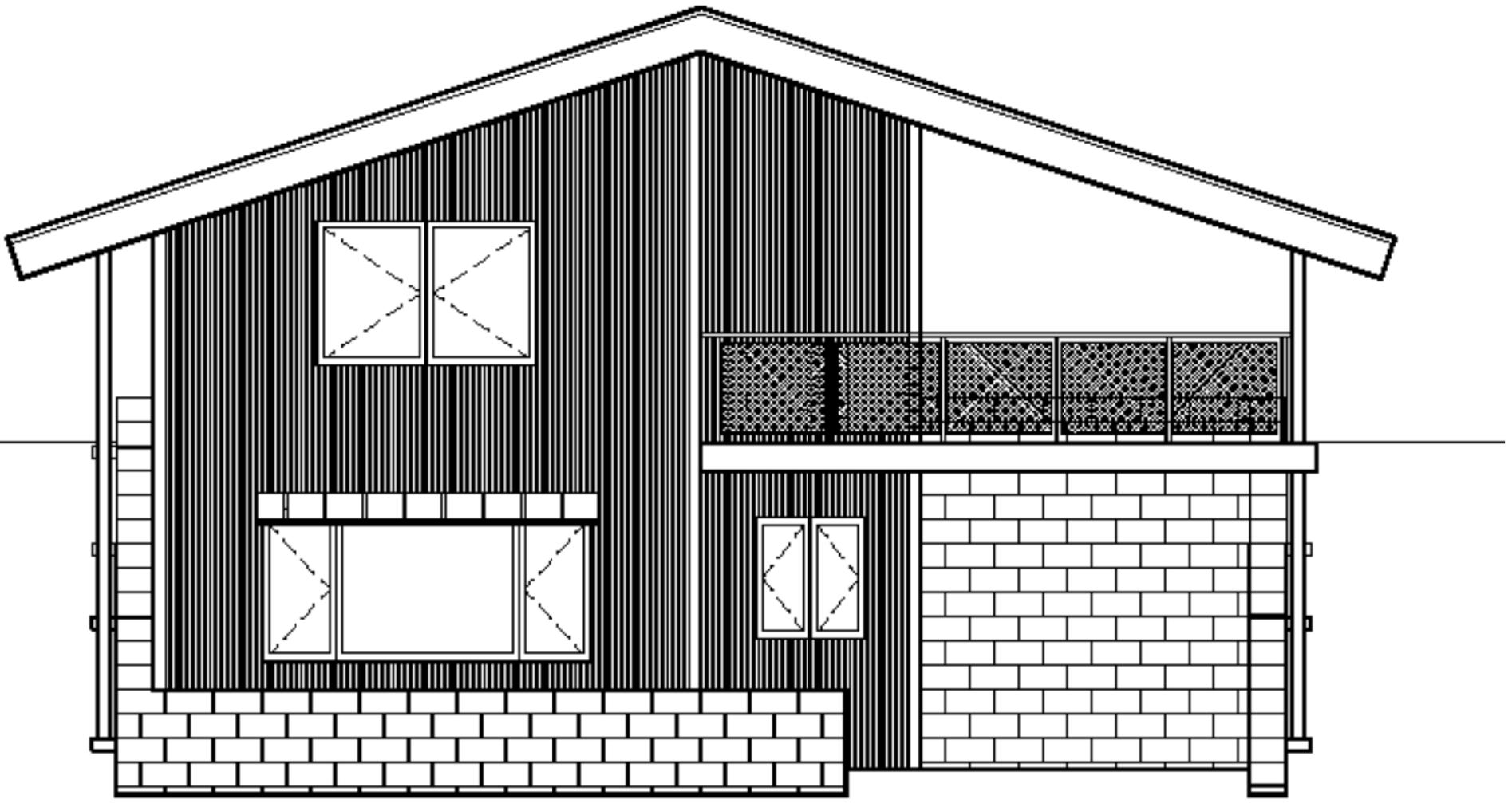


 H.2 - Main Level Plan



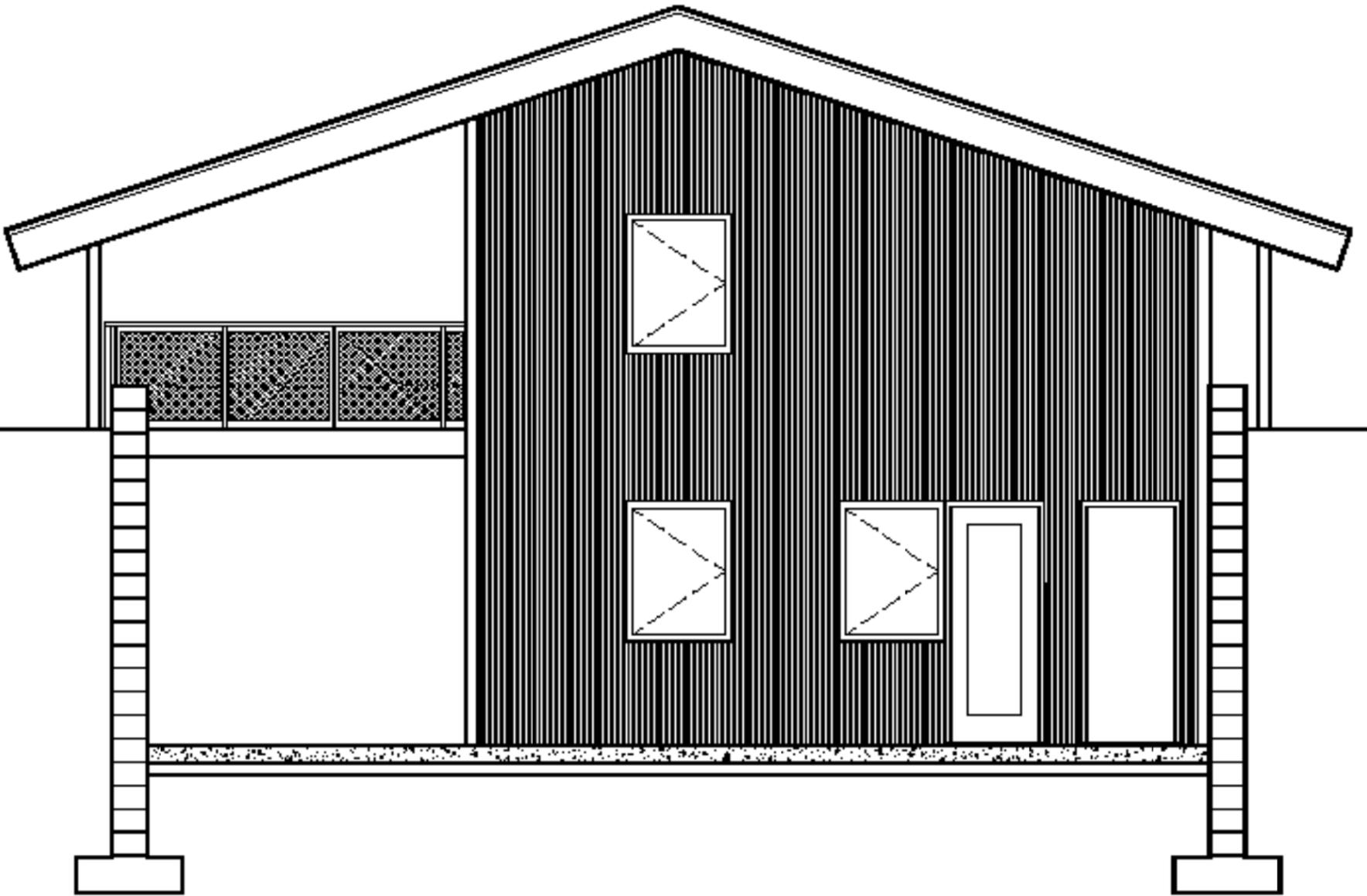
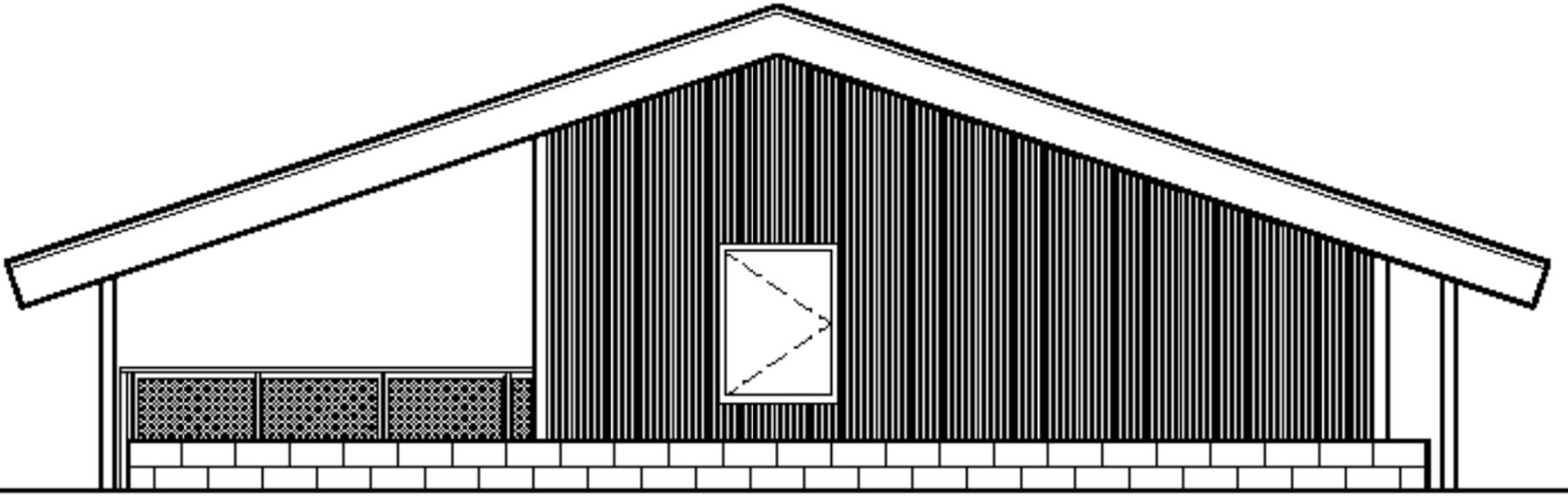
H.2 - Upper Level Plan





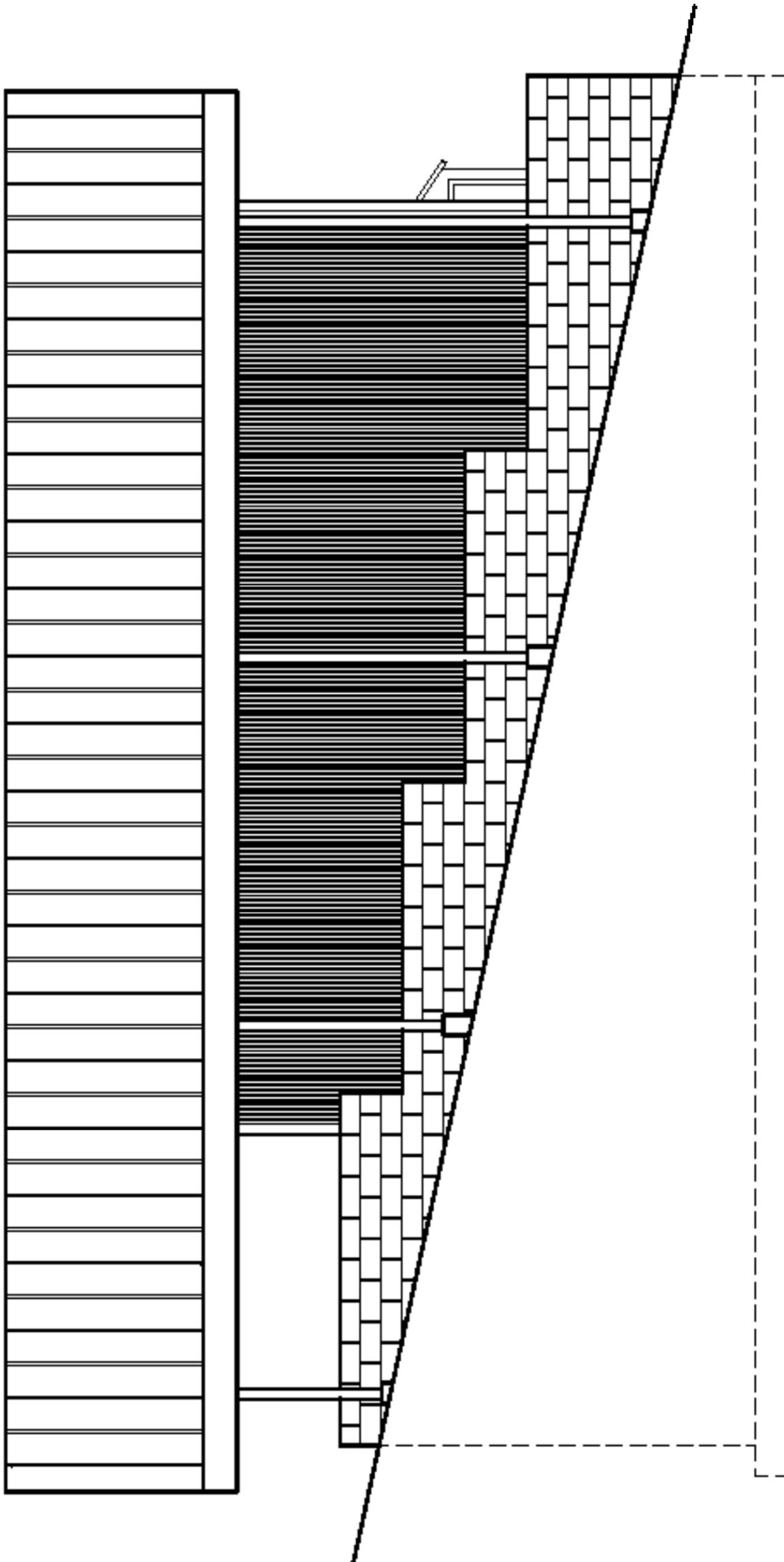
H.2 - North Elevation





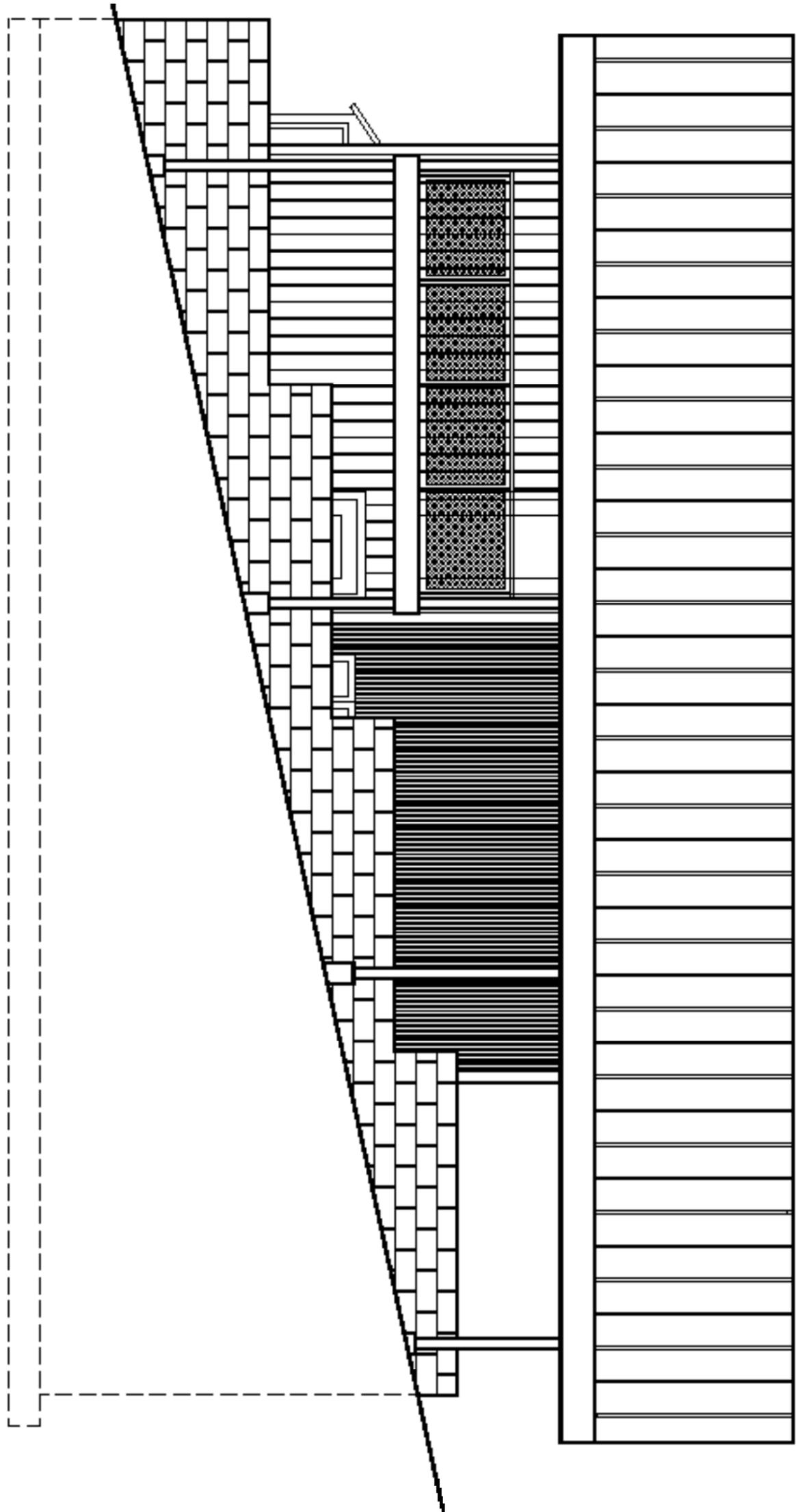
H.2 - South Elevation





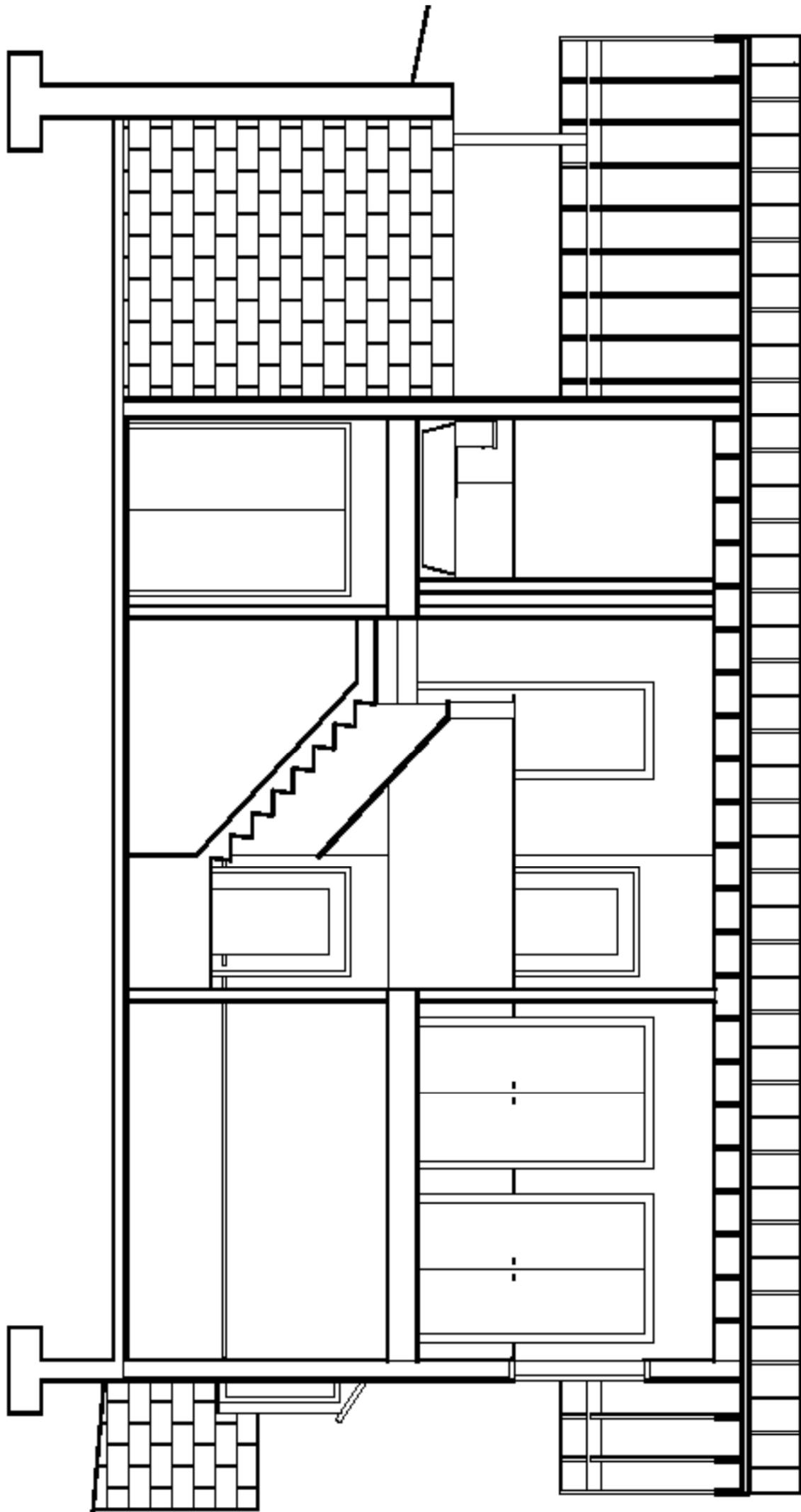
H.2 - East Elevation



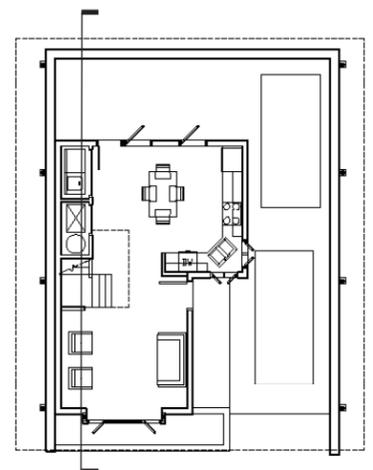


H.2 - West Elevation

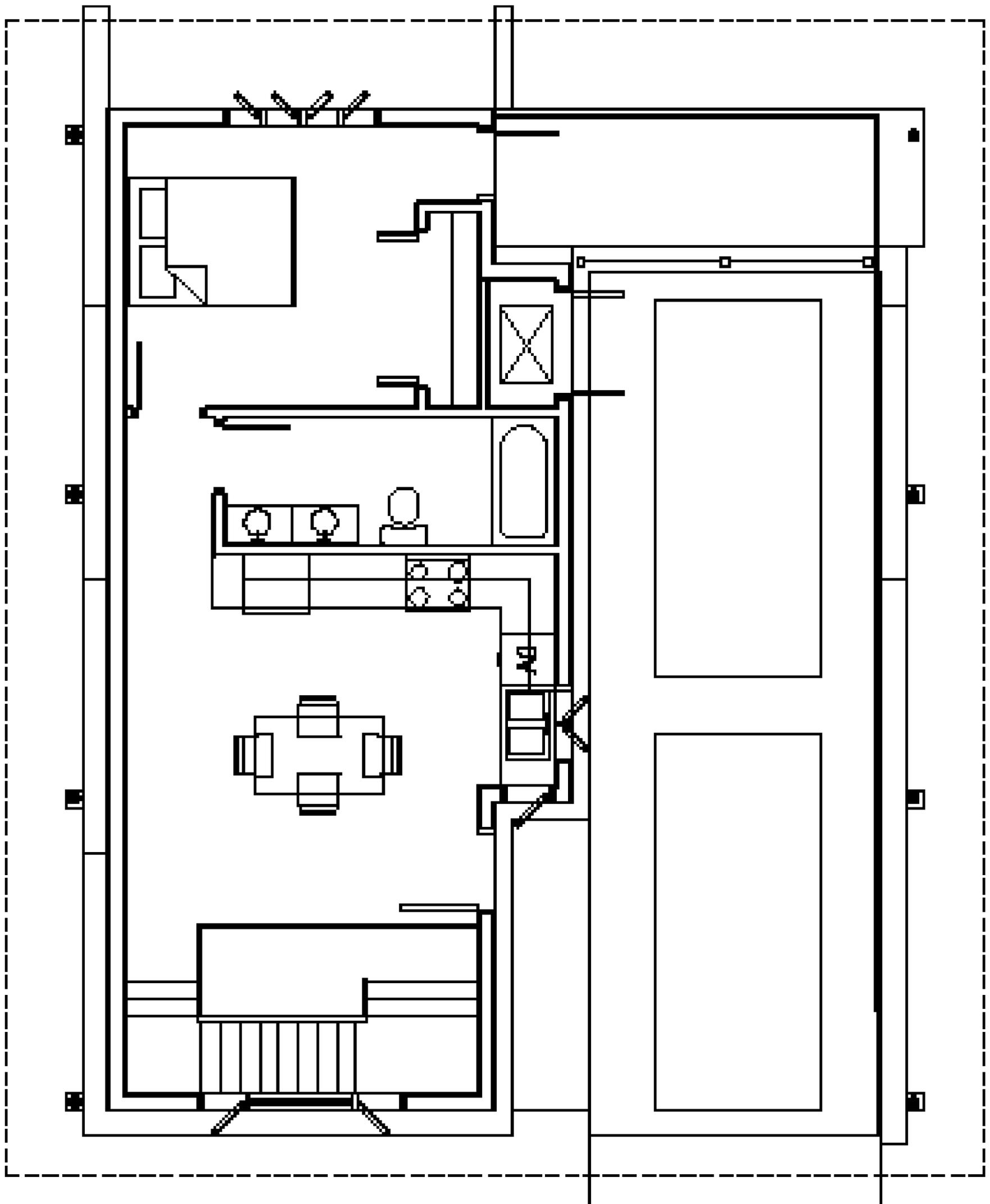




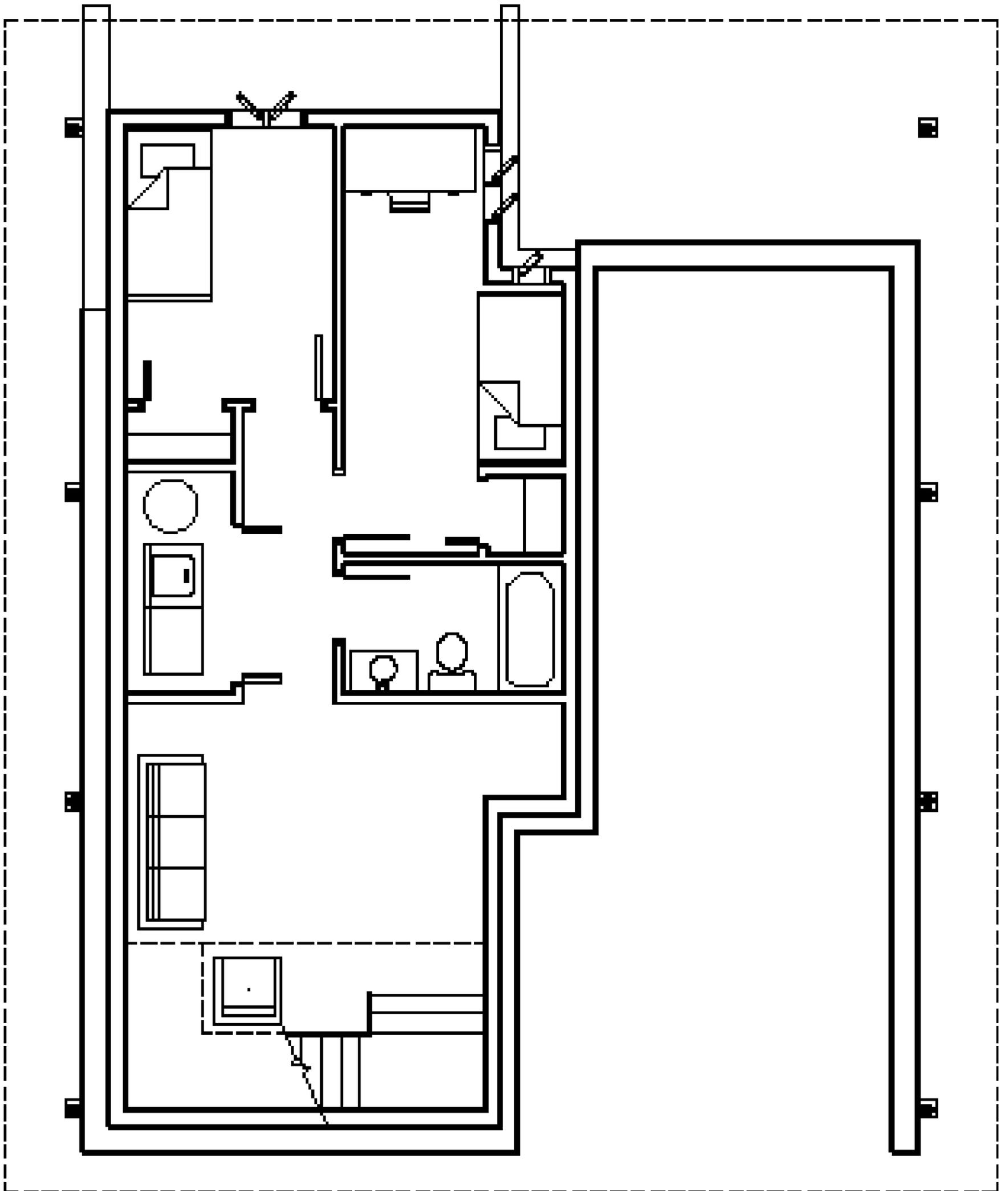
H.2 - Section



House 3



 H.3 - Main Level Plan



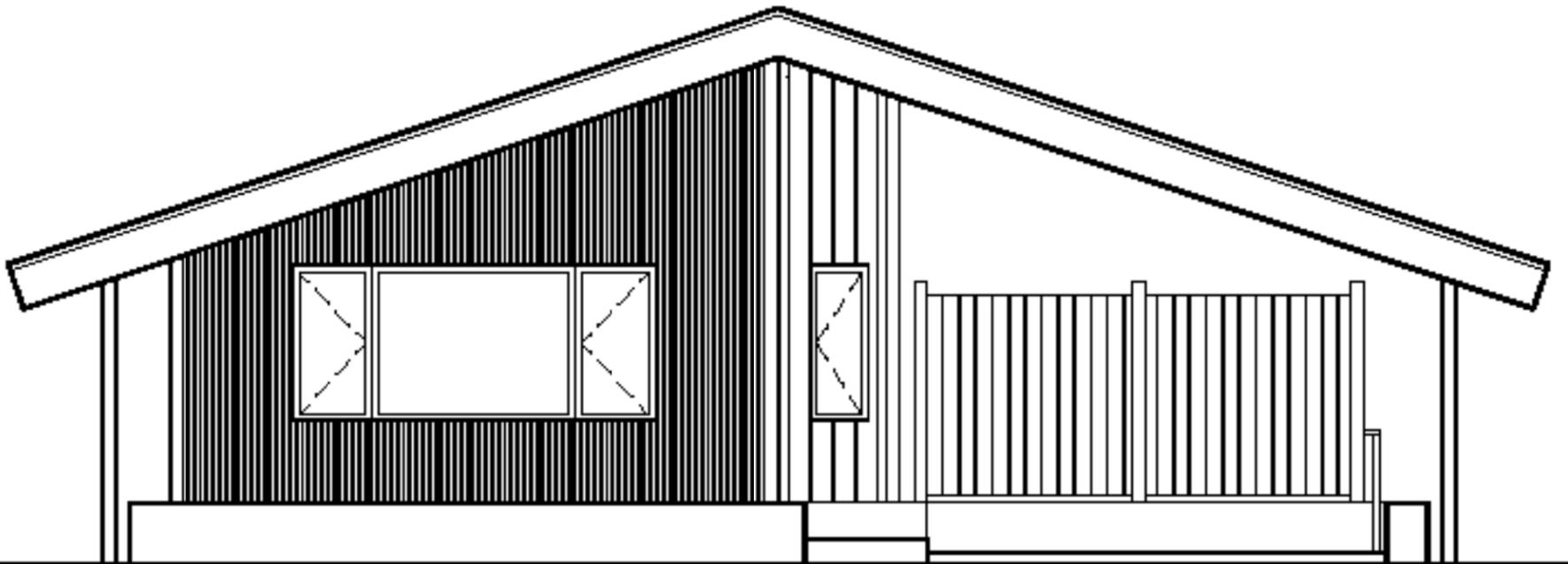
H.3 - Lower Level Plan





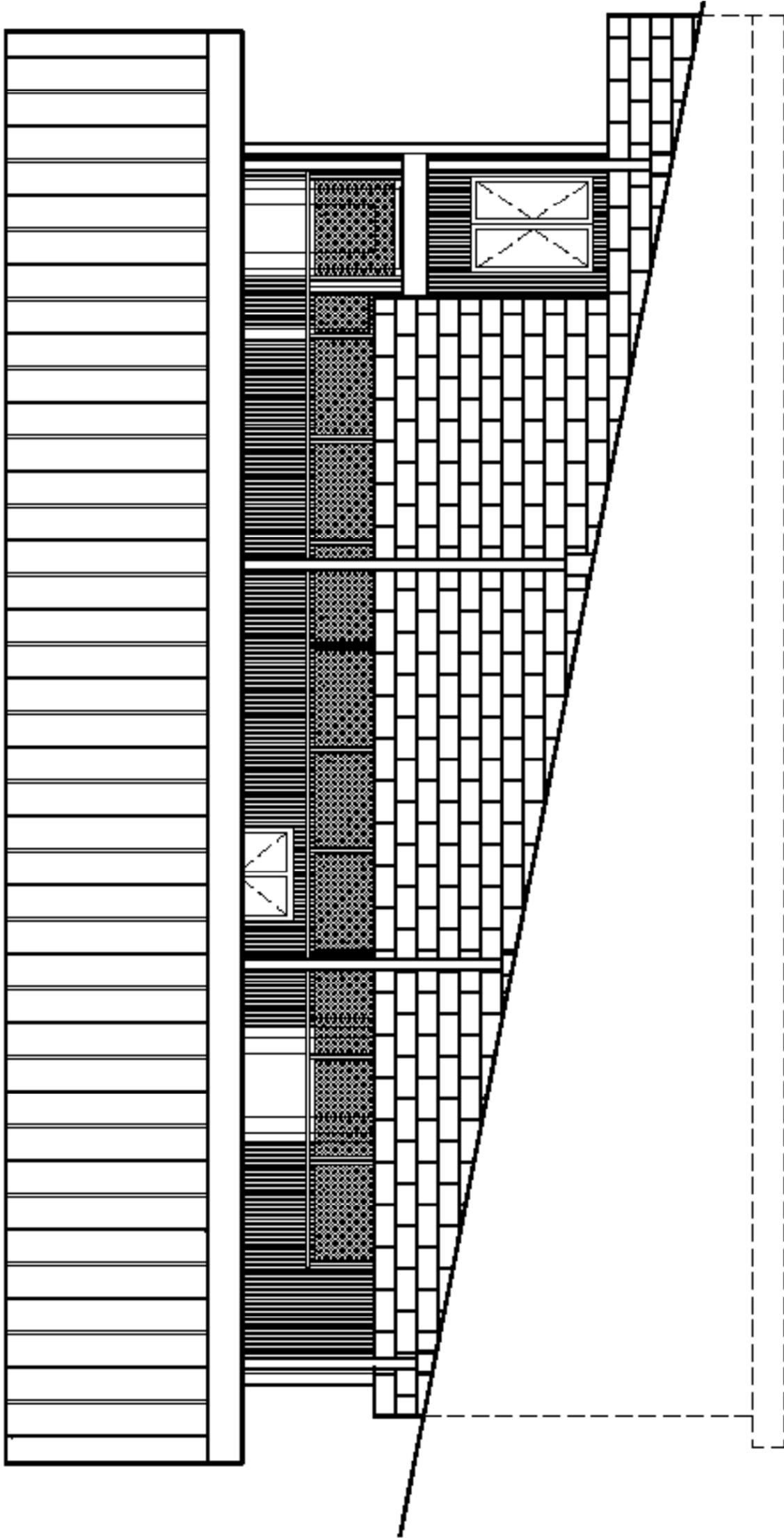
H.3 - North Elevation





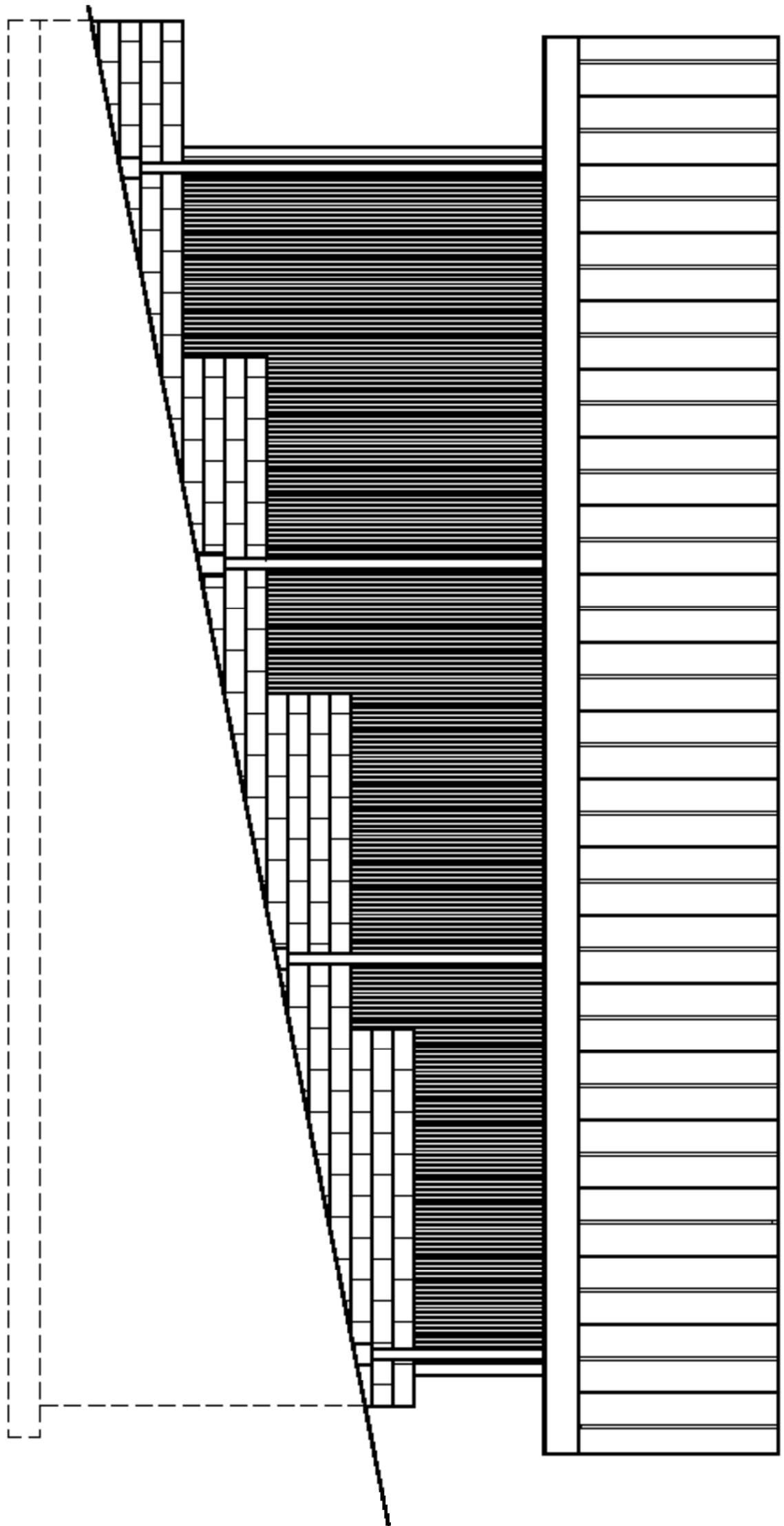
H.3 - South Elevation





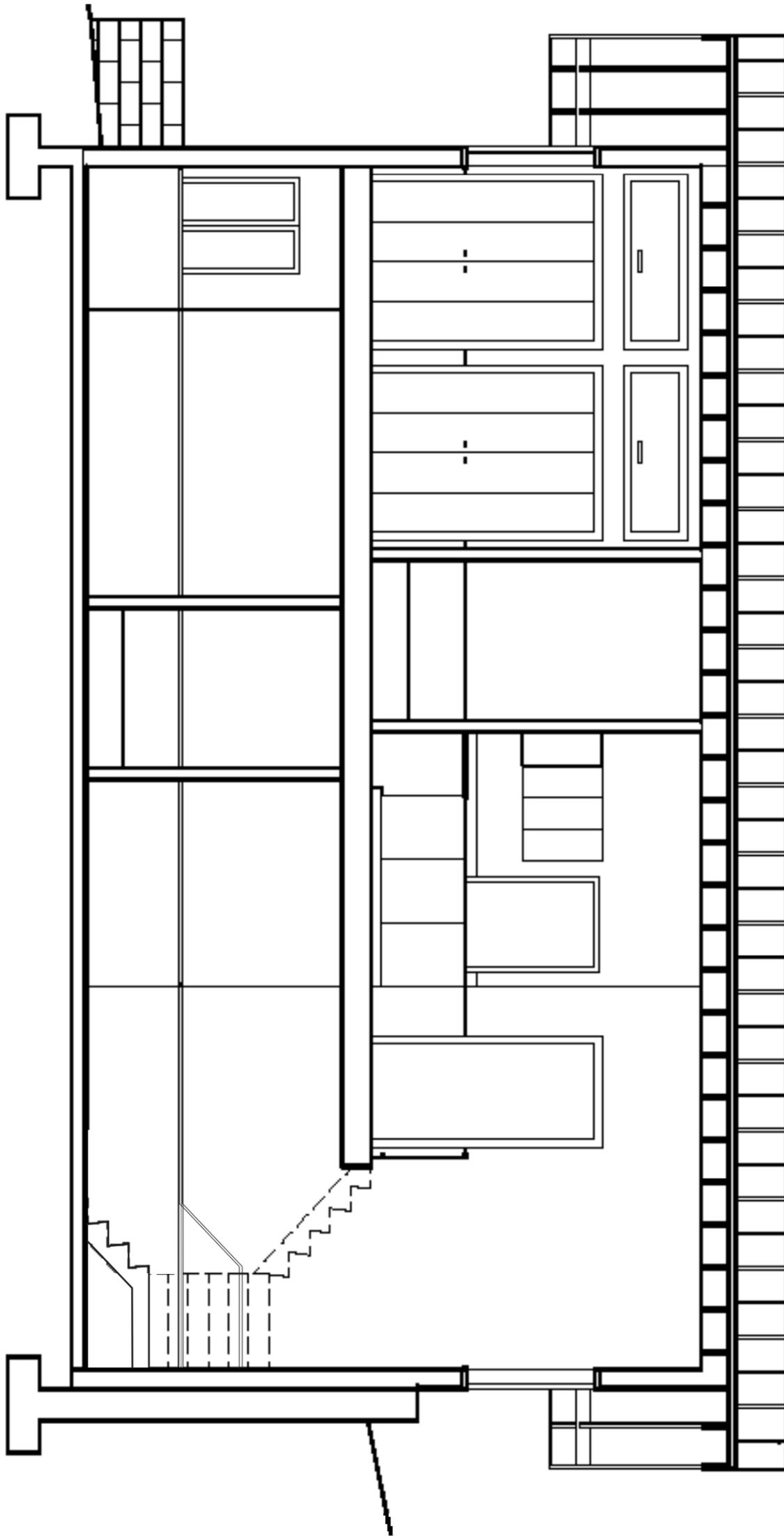
H.3 - East Elevation



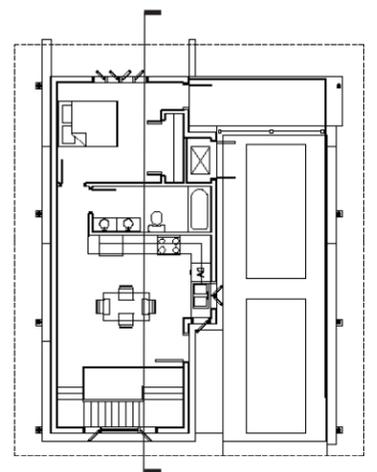


H.3 - West Elevation



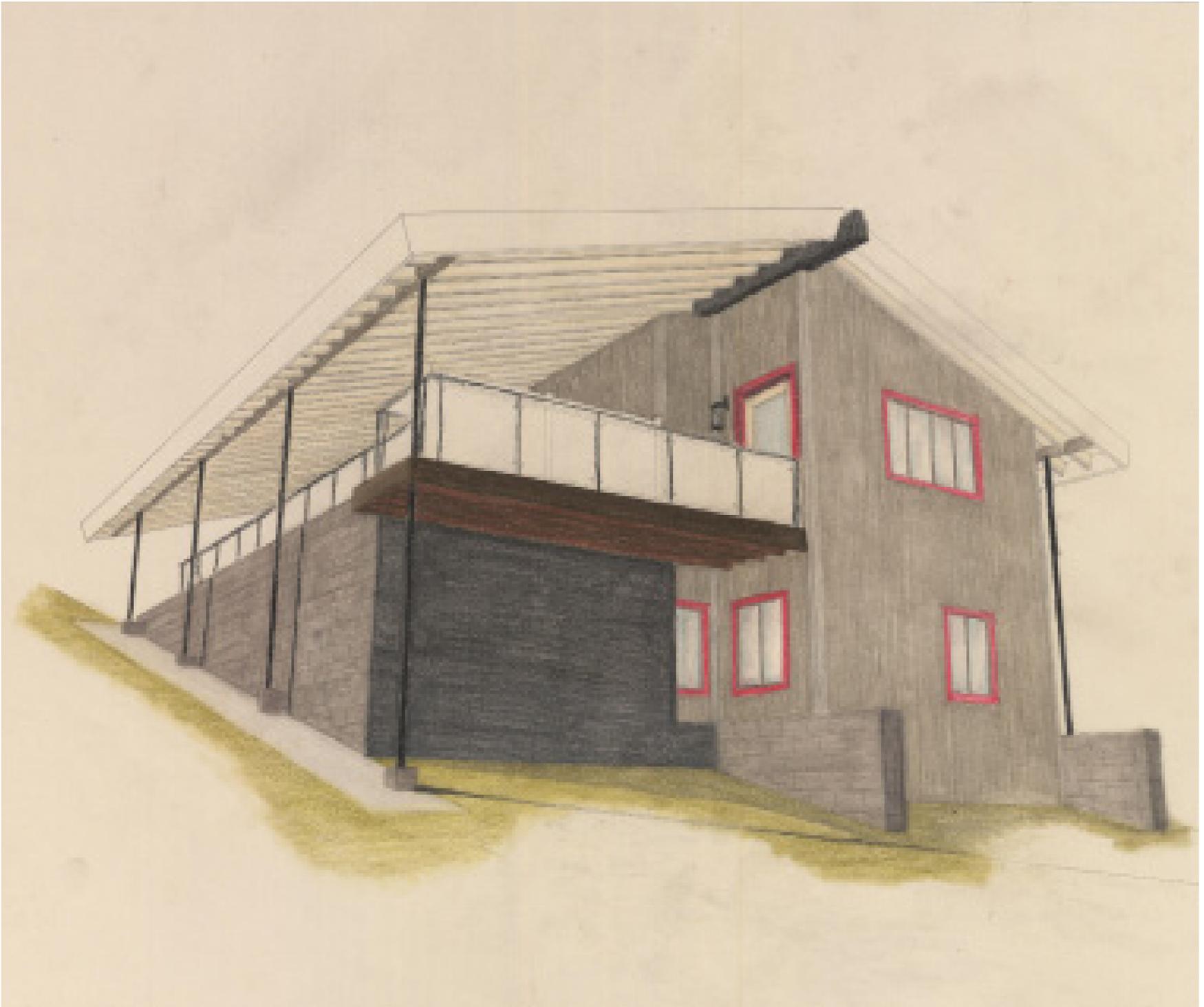


H.3 - Section



Hill

The slope of the building location would be cut into in order to create a flat site on which to construct the house. In some cases, the cut soil would be used as fill to create the outdoor space adjacent to the house. Positioning the house on a hill would protect it from potential flooding and also allow whatever flat land was available to be used as a vegetable garden. Houses, like these, that are partially underground save on energy costs, staying naturally cooler in summer and warmer in winter.



Material

Concrete blocks are used to retain soil on three sides of the house. Steel pipe columns support and become a part of the roof structure. The roof and wall are intentionally separate, only connecting near the ground, where a block is turned perpendicular to the wall to cradle the column. This separation emphasizes that the wall is in dialogue with that which is flat and the roof with that which is sloped. For the enclosing walls of the house, corrugated metal was used primarily, with board and batten used around entry areas. Both materials accentuate verticality, while the board and batten lends more texture to points that are in closer proximity to the residents.



Porch

The porch is essential to the entrance of the home; it provides a raised, transition area between the car and indoor space. The front porch on this house would be used for greeting guests and having a relaxing sit on cool summer evenings or mornings with a cup of coffee. Its size is appropriate for these types of intimate gatherings. The flower bed that extends in front of the porch adds a feeling of privacy and the block enclosure provides additional seating and table space. The porch deck above would be used for larger outdoor gatherings, such as birthday parties.



Carport

The carport is an extension of the porch and provides a large outdoor space for recreation, grilling, and an annual yard sale. For daily use, it integrates vehicle storage as a part of the structure. The cars would be tucked in beside the house, in the shadows, allowing the focus to remain on the house itself.



Kitchen Window

The two windows in the kitchen are located over the sink and look out onto the porch, driveway and arriving guests as well as the carport where children may be playing. These visual connections are essential to making the command center of the home function. This condition is created by pulling the exterior wall off the center line of the house, providing more space in the kitchen.



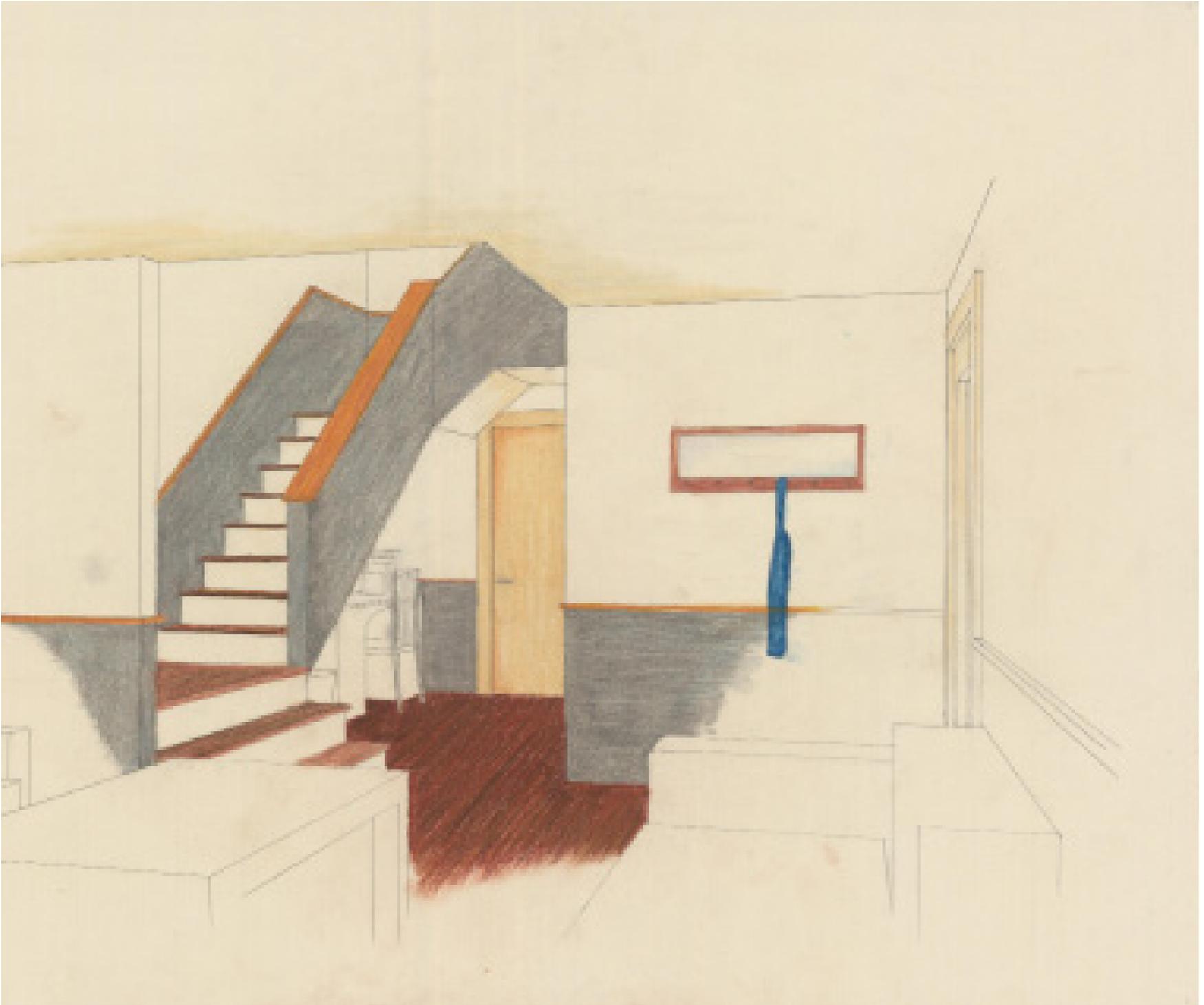
Picture Window

The large window on the front façade is the only window giving natural light to the living room; this is the primary reason for its size. It also provides a view to the flower bed outside, as well as approaching road and driveway. In house 2, the view can be experienced through the entire length of the house. The window in house 3 provides natural light to both the kitchen and living room by way of the stairwell at the front of the house.



Archway

The “archway” is created within the double height space that houses the stairs. The feeling of the archway is made by the wall at the stair landing and the wall along the entryway. The final few steps are wider, making a comfortable place to sit while putting on shoes or talking with people in the living room and kitchen or for watching TV while also keeping an eye on the stove.



Stair

The upper level hall is open to the stairs connecting the private rooms to the more public spaces. The chair rail, a constant throughout the house, continues as a handrail carrying the eye to the next level. In houses 1 and 2, the stairs utilize two landings to take advantage of the sloping roof and orient people into the circulation space on the main level. They follow the same pattern in house 3, except the stairs carry people to the living room on the lower floor. With the stairs located in what is essentially a light well, this would make an ideal place to sit and read a book.



Conclusion

The houses provide opportunities and spaces for both intimate private time, as well as family gathering. They could be set in a rural wooded area away from any neighbors or in a town surrounded by convenient shopping. The block retaining wall, the start of this construction, could be easily modified depending on the particular slope of the site. While the materials are less common for the area, the overall forms are reminiscent of traditional homes and are therefore familiar.



Endnotes

1. Weaver, Bob. "The Last Farmers - A World Close To Home." The Hur Herald: from Sunny Cal. 7 Aug. 2001. Web. 20 Apr 2010.

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