

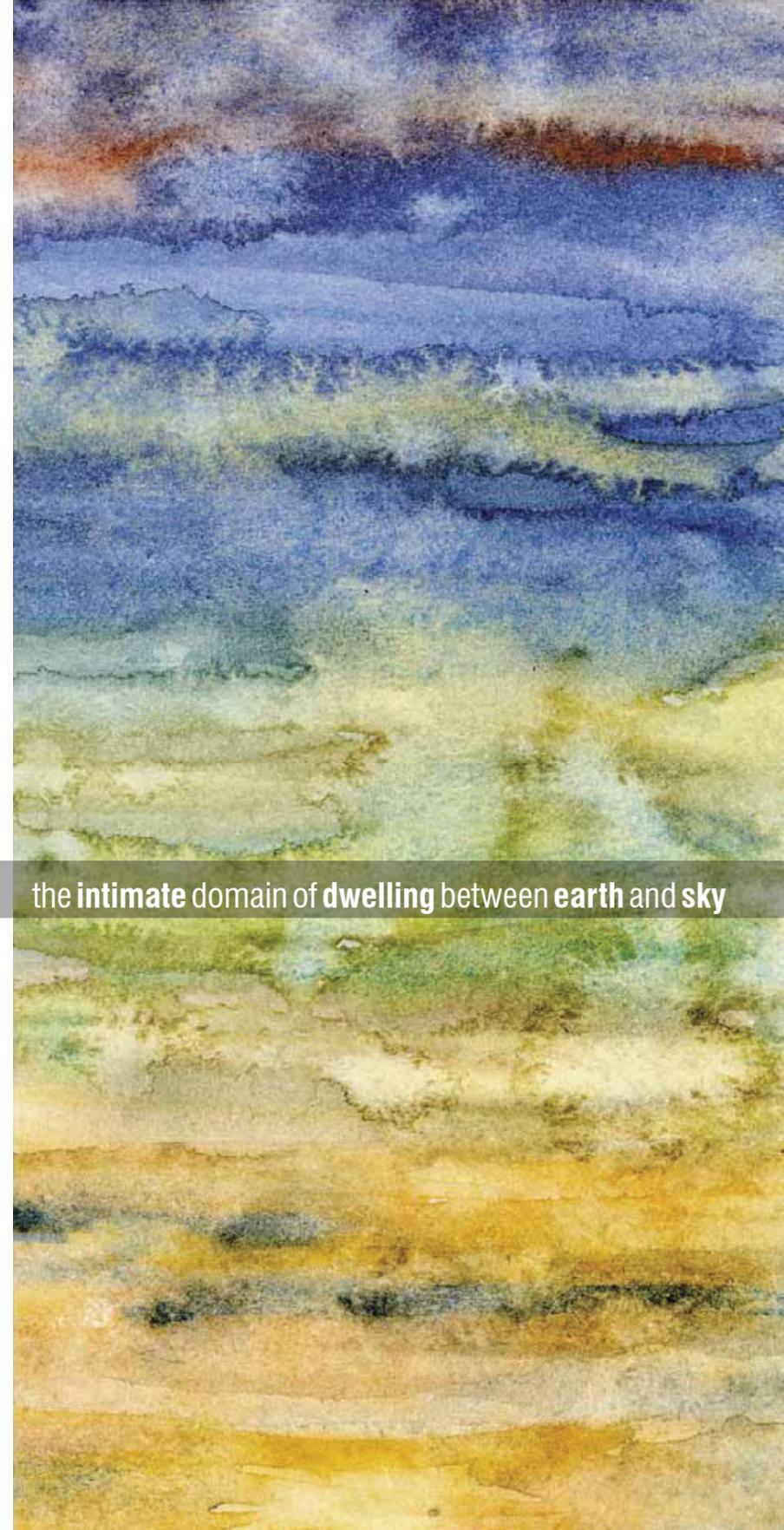
A thesis submitted to the faculty of the Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of Masters of Architecture in Architecture.

claire larsen andreas

the intimate domain of dwelling between earth and sky

chair of committee Susan Piedmont-Palladino
committee member Paul Emmons
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A B S T R A C T

The original constructive act of human nature was to make shelter. The original architectural act of human nature was to create place. Nature is made of emotive elemental matter- the horizontal of earth, the vertical of sky, the transcendence of water and the energy of fire. Human beings, alone among the living, have the opportunity to purposefully act. We have squandered this privilege until now, only considering nature where we have not yet built. We must endear ourselves to the source of our existence and through each experience gain nourishment and inspiration. Architecture manifests the spiritual revelation of human intervention into nature. The intimate act of dwelling requires fulfillment and sacrifice. The home should inspire the mind, envelop the soul, nurture the body, and free the spirit. The inhabitant must feel grounded within the foundation, thoughtfully carved into the earth, permeated with the warmth of being embedded, and enriched by the centering focus of a flame within the darkness. The inhabitant must feel elevated without weight upon lightness of frame, touched by a cool breeze, surrounded by canopy and inspired by the heavens. For this journey, the architect must purposefully and poetically place humanity within nature. This is the intimate domain of dwelling between earth and sky.

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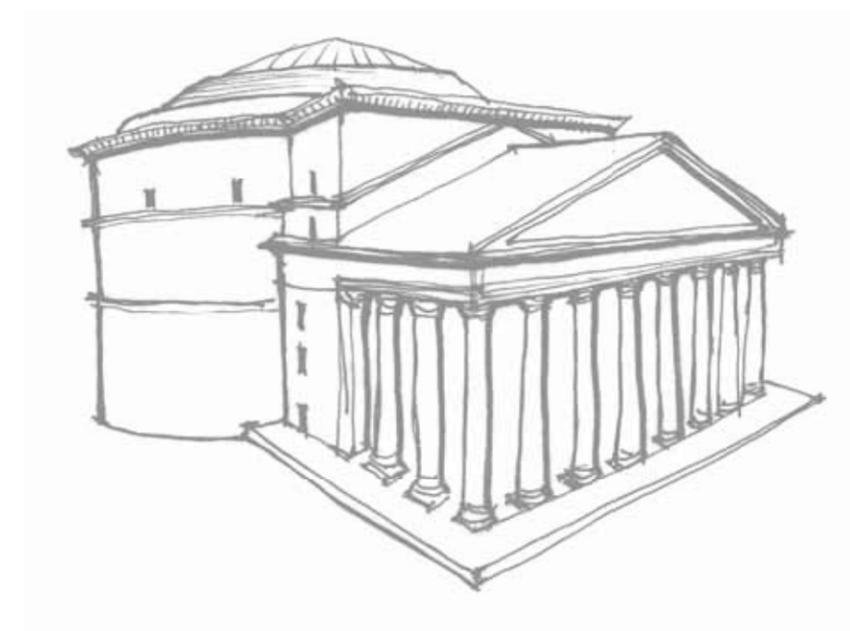
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hut: the essential dwelling

origin: the precedents

The original constructive act of human nature was to make shelter from the sun, from the wind, and from the rest of God's creations. The hut was born out of a need for protection. Through the practice of building over time combined with the unique human ability to strive, desperation morphed into aspiration. The primitive requirement for protection compounded into an aesthetic yearning to please both themselves and the gods. Building became an act, not simply of necessity, but of intention. Humans decided when they built the primitive hut that there was a need to be sheltered. Humans decided when they built the symbolic temple there was another desire. The original architectural act was a creation of a place that could evoke emotion and satisfaction. In early architecture, the sublime was revealed in the fundamental. Design was born as an orchestration of the experience of a place. The place became a composed interaction between the body and the landscape. Architecture became a vessel christened with a triple charge. It centered the inhabitants- enclosing, enriching, and protecting them. It communicated the duality of dependence shared by both humanity and nature. It carries the inhabitant through temperance toward timelessness.



temple: the construction of desire

site facing south



rock creek parkway

pennsylvania avenue bridge

status quo: the present

At present, architectural practice is dwarfed by commercial building in both cultural value and visibility to society. Modernity through misrepresentation has made an inside world which has become so artificial that our openings to the outside world do not open, our water is additively and chemically "purified", our fresh air is filtered and re-circulated, and we turn lights on during the day. Nature has all been shut out completely from the ironically termed "concrete jungle". The very word natural has come to mean anti-human. Nature has become where we have not built yet. Yet, synonyms for "natural" include usual, normal, expected, likely, and innate. How has humanity become extremely unnatural, yet our behavior has become normal, expected, likely, and unfortunately, innate? Why must we live exclusive from that which we are essentially built?

Today our senses have been numbed by over-stimulation and nostalgia. Repetition has been made meaningful and symmetry for its own sake still reigns supreme. We build today to separate ourselves into airless, character-less, light-less corners. We prefer poisonous maintenance-free materials to those which mandate care and have character. We do not recognize our daily dependence on the elements of nature nor remember the kind of joy we once gained from their reverence. We have lost a communicative relationship to the places in which we live through ease, laziness and greed. The common human environment is one we have created out of middle gray without the color of meaningful emotion. This status quo requires a reconstitution of our future based on the constants that connect our collective past to our future.

site facing north



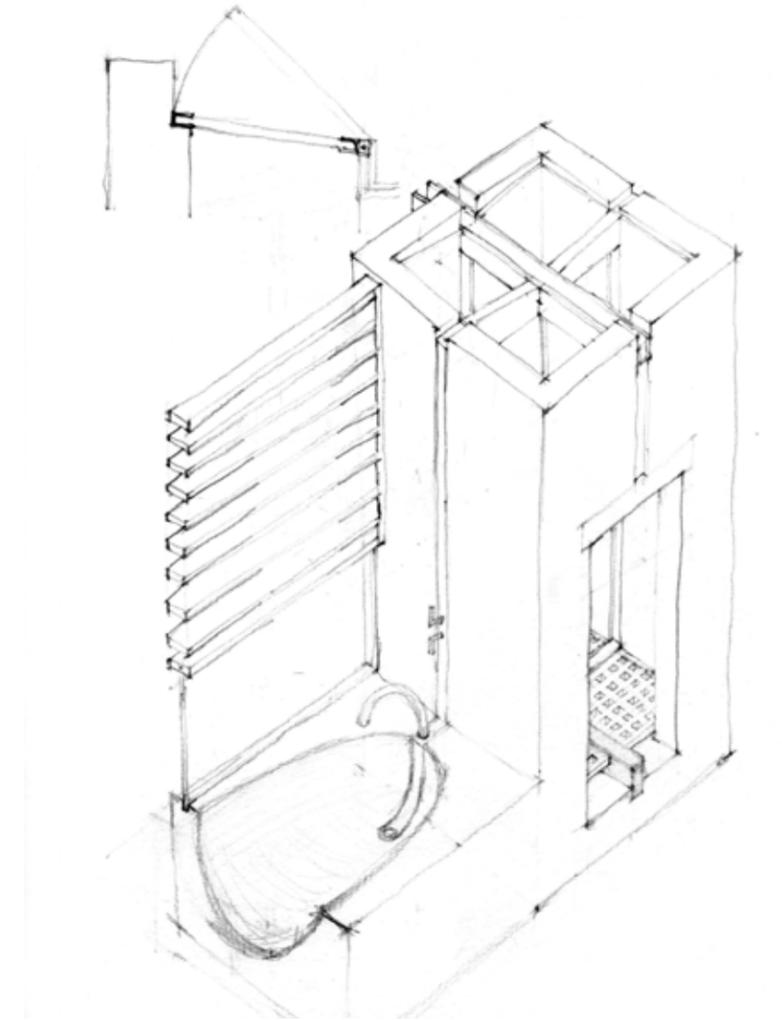
constant: the essence of nature

The elements of nature form its essence. The omnipresent natural environment is made of air, earth, water, and fire. The first element, earth, is both material and context. It is both the horizontal plane to build on and in, as well as, the wealth of potential to build with. Together with air, the second element, the vertical realm of earth and sky is formed. Air gives humanity life and makes earth inhabitable. The third element, fire, is natural energy. Fire and light become both literal and symbolic sources of warmth. Water, the fourth element, is the most essential element of life on the planet. It washes, cools and nourishes, and in its variable physical forms is used, wasted and only sometimes revered. Among the living things that the elements of nature support is human life. Nature is a complex interdependent world of which humanity is just a part.



big tree on site | becomes a geographical and spiritual center

early concept | to wash



constant: the essence of humanity

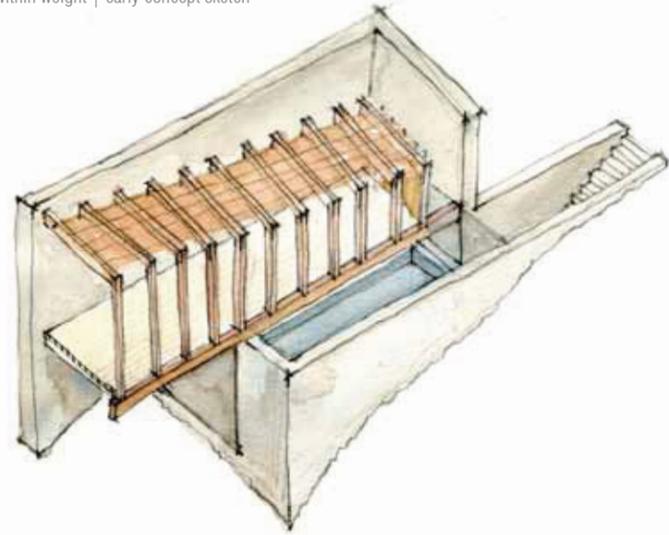
The essence of human existence is inherently natural. The four basic elements of nature, as composed and combined by God, have the capability to infinitely feed us, nourish us, and inspire us. The condition in the equation is the value humanity gives its naturally elemental dependence and the recognition of our vulnerability in that we are not exclusive from the equation. If we do not endear ourselves to the source of our existence, we will eventually cease to exist. We are water, we need fire and its light, the earth supports us and we have wind within us. We share these needs with every other living thing on this planet. What makes us uniquely human is the ability to know, to think and to purposefully act. This ability could be defined as a fifth element- spirit, which through the human senses and tempered with emotion, invests meaning in the first four physical elements. It is the essence of humanity that prompted the art of building beyond its first simple act.

The essential evidence of life is the ability to breathe. But, as humans we have the ability to give life itself meaning and we must exercise upon our desire to live. If either exchange falters: the act of breath or the knowledge of its gift, human life is essentially over. With the awareness of our own humanity, we have been accorded a responsibility to care for ourselves. Our emotional, physical, sociological, mental, and spiritual health relies on active cultivation of mind, body, soul and spirit. The human element is our ability to intellectually interact with our physical surroundings through the means of our corporal senses. Like breathing, these senses can be repetitive and almost dormant, without conscious attempts to receive responses from our environment. If we are attentive to our senses, experiencing moisture or dryness, warmth or cold, light or dark actually affects our emotions and our mental well-being. Not only do our bodies tell us if we are physically comfortable, our mind tells us if we are inspired, depressed, uplifted or simply satisfied. Our bodies and our senses are designed to fully and richly experience the world around us if we choose listen to them, to cultivate them and use them to their greatest power. Through the emotional result of heightening our perception of what we experience through our senses, we can choose what is meaningful to us. Meaningful making based on both physical and emotional interaction can create a place grounded in that exchange and founded on essential humanity.

question: the essence of architecture

The constants of humanity and nature provide a foundation of timelessness on which to build an enduring architecture. Architecture is the art of building in nature. As the art of photography centers on a vision, the art of sculpture becomes texturally interpretive, painting integrates color and light, and music resounds audibly to the soul, architecture encompasses all of these into a composed experience of being. That constructed place must direct the human senses of vision, texture, color, light, sound, and smell back toward the natural elements on which we are dependent. To experience the spiritual revelation of that dependence is to inhabit the beauty of belonging. The design of the building must give meaning to the site, just as the site gives meaning to the building. Then the presence of one cannot exist without the other and it truly belongs. In the same way the human experience of the building must give meaning to its material form, just as the design of the building will create a human experience. The well designed solution must purposefully and poetically place human beings within nature.

lightness within weight | early concept sketch



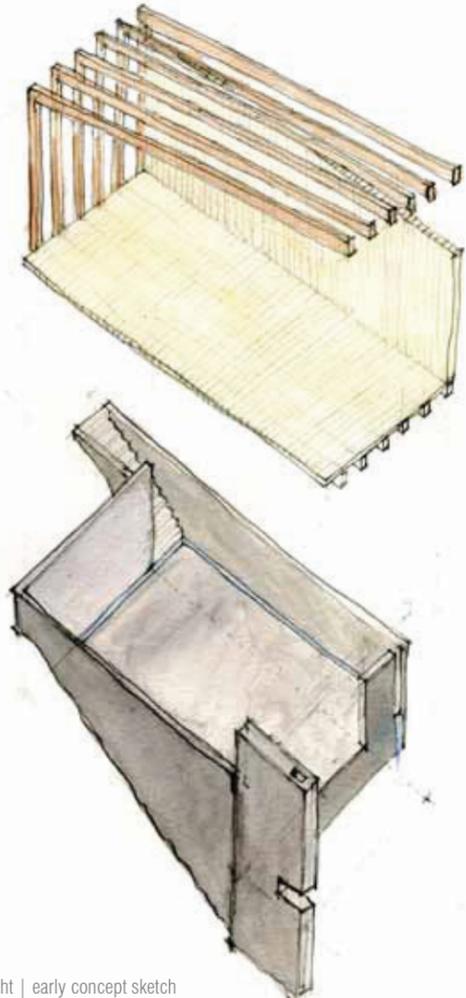
answer: the design of the home

The architecture of this thesis will respond with a vessel for belonging. The home should inspire the mind, envelop the soul, nurture the body, and free the spirit. The home is the vessel in and with which we understand our world and our place within it. The body is one with the house and the house is one with nature, thus the body is one with nature through the act of dwelling within the house.

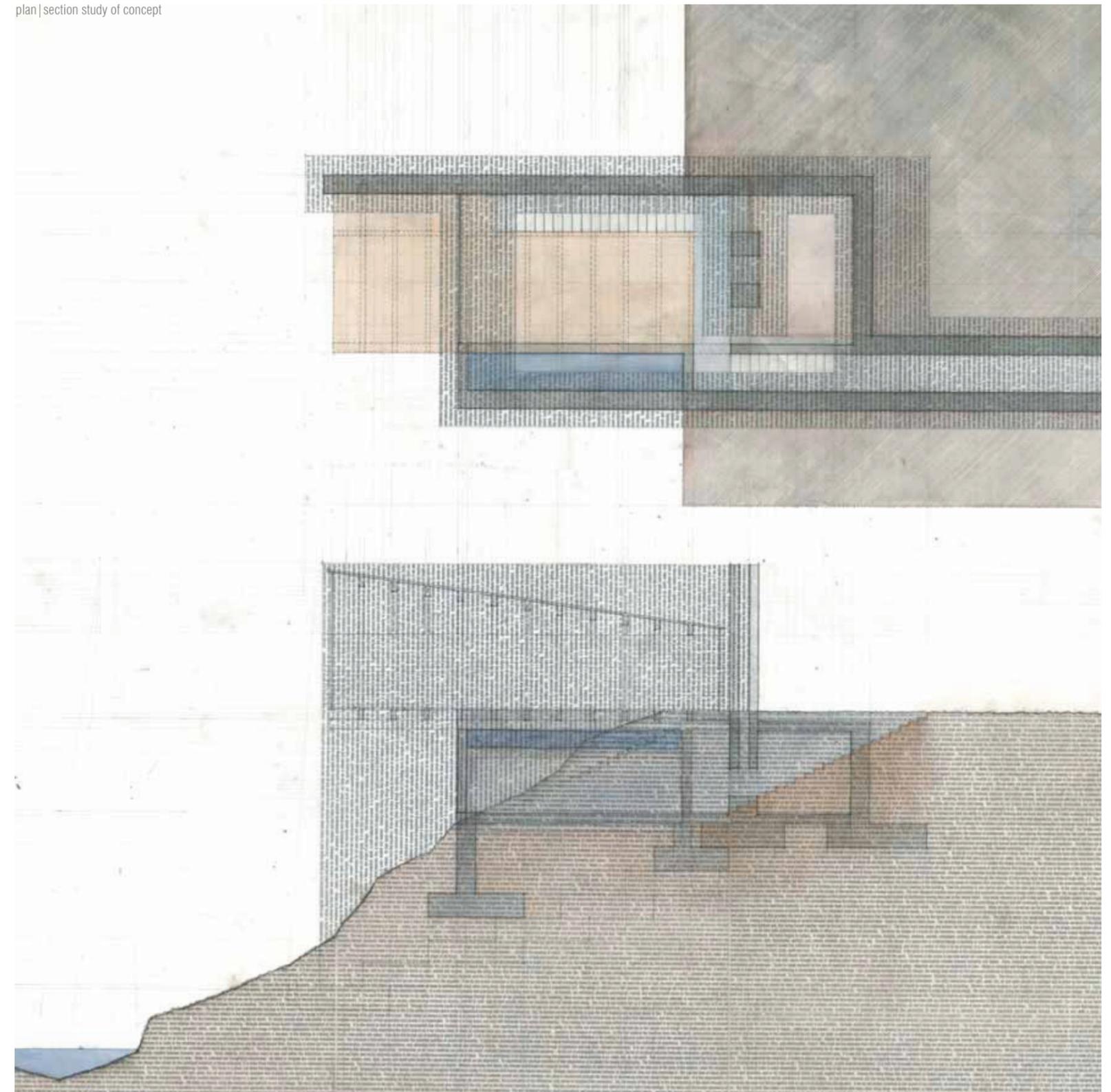
Recent lessons from science depict the whole as being much more than the sum of its parts. The essence of life is being discovered not in the molecules themselves, but in the organization of them. The emphasis is on the connections between the things and not the things themselves. In a house the things become elemental materials, it is how we assemble them in building that gives the house life congruent with nature. Form, material, and structure marry to blur and soften the distinctions between architecture and landscape. Space is made seasonal. Materials are chosen as testaments to time. Water is collected and thoughtfully transformed. An intent to integrate the inside and outside worlds is made manifest in the positioning of fenestration and the sectional change. Just as existing ecologies inspire the design, the design then celebrates the continued existence of those ecologies.

The place in which one fundamentally belongs is his home. Having a home is a relationship of comfort between daily life and immediate environment. Home is where family takes place. This physical and spiritual unit must be housed in a dwelling that understands it. The house must encourage and enliven the familial unit. Building homes is strengthening families. The home is a place, not where life happens, but where life becomes what it should be. The everyday act of waking up should be warm, cozy, and uplifting. The nightly act of gathering around a table for a meal should be inviting, intimate, and grounding. Whether comfort requires a cool breeze or a warm fire, a home should provide it. Each specific act of dwelling requires a state of mind that comes not from within us, but from around us. The human advantage is that we have the ability to create those surroundings. We make our homes, using the materials and methods of our own design. We must design what we want our state of mind to be. Our homes, as our families, should be both sacred temples and solid shelters.

lightness and weight | early concept sketch



plan | section study of concept



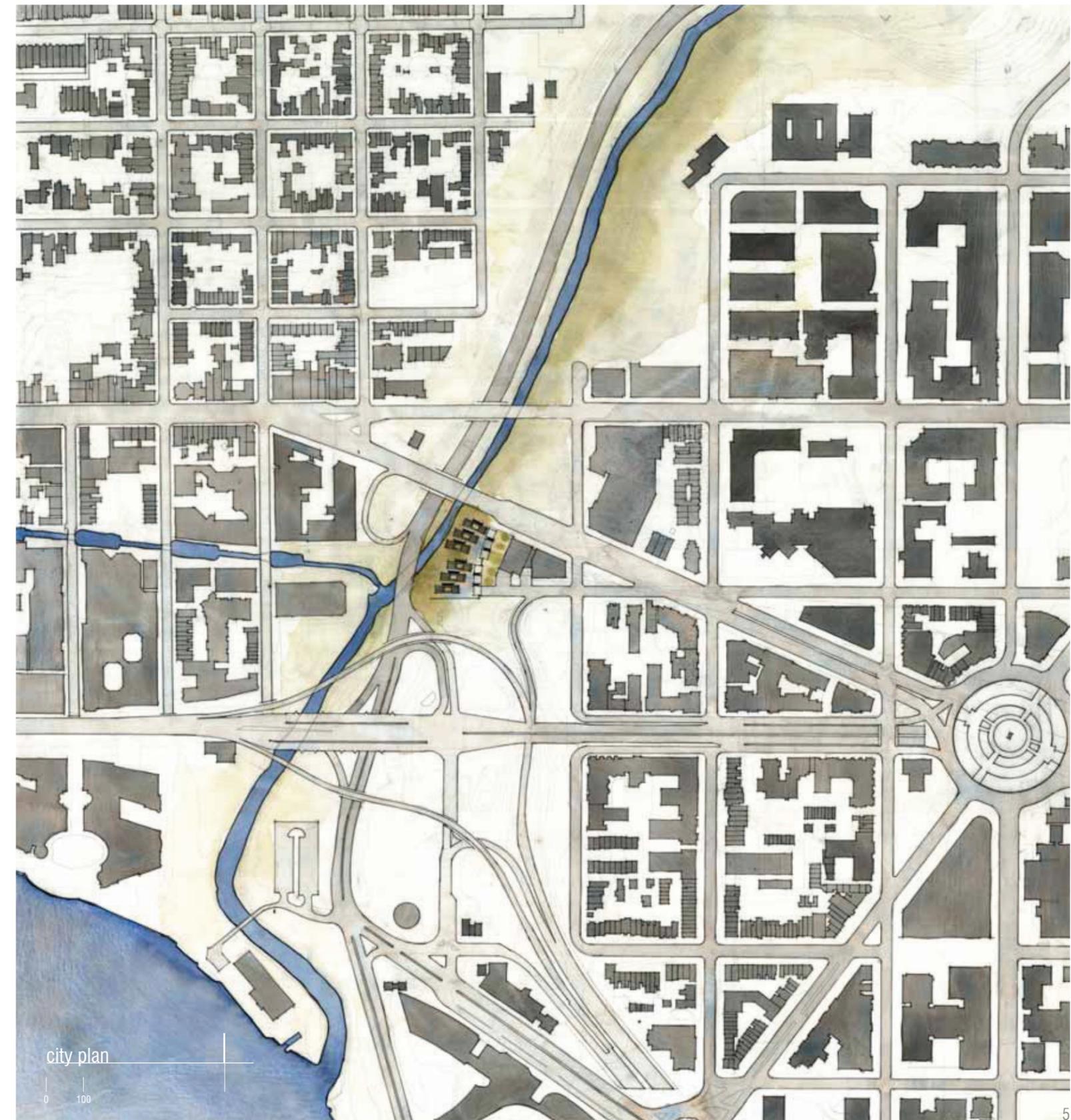
establishment of a specific domain for significant inhabitants

To be without a home is to be isolated. To provide transitional housing is to provide a step up to something. The comfort of a home gives a feeling of belonging to a place within the community. The homeless have few options so an architecture with a diversity of spaces gives them choices over how and where to spend their time. When given options they can decide where makes them feel good. They can choose to be embedded and therefore embraced. They can choose to be elevated and therefore uplifted. For the homeless, sometimes there is a family, but no home. To simply provide them with shelter is under serving them. Through directed focus toward the heightened perception of spatial conditions, the feeling of home begins to surface from the house. From the warmth and intimacy of beginning to belong, self-assurance could begin to emerge.

The site is an empty lot bordered by Rock Creek Parkway and Rock Creek to the west, Pennsylvania Avenue to the north, a banal office building to east and leftover urban interstitial space to the south. It is truly an edge space where the urban grid, the DC diagonal, the curve of the on ramp and the natural world collide. There could be no better space to place a transitional community with a mission to ground people, provide them with purpose and then send them out into the city to take on new roles and responsibilities. By treating the site as an assemblage, the families maintain their individual identities but are strengthened by their shared histories to gain collective confidence to move on toward independence.



site: slope at edge and in between





site elevations study

plan of the site

When connecting this community to nature beyond and the city that surrounds it, entry is the pivotal transitional space. Clear, articulate points of entry must create one progression from the world out there to the place in here. The natural topography of the site is made present by decreasing the elevation of each dwelling from north to south. A circulation of stairs and ramps is then endulating, providing boundaries and thresholds. The structure and rigor of the dwellings is regular, familiar and ordered, but each dwelling rotates around a center in the plan to provide it a unique perspective and identity.

The assemblage of connected dwellings splay across the hillside, each cantilever individually focused on the creek below. The dwellings are separated by their private courtyards but share a common foundation. Their individual paths of entry cross the zone of their own water gardens to bring them to the communal path. Along this north/south circulation is planned a series of community structures to form a spine to bind the community of families. These would be flexible places for meetings and classes for support and training. This spine is only broken by the east/west stair which is centered on the big tree. This natural relic provides both a geographical and spiritual center and focus for the site and its inhabitants.



site perspective study



design of the intimate dwelling

The vessel of belonging holds the essential serenity of architecture founded on the elemental nature inherent to humanity.

thoughtful infiltration of the land

The foundation should not just support the building but can also be desirable to inhabit. The inherent cool, dark and intimate qualities can be cultivated through revealing the wall thickness, exposing the concrete, and carving out a hearth. On the north side, the foundation wall rises above the horizon to become the water core and is hollowed out to allow bathing and washing within it. The height of the massive core on the northern exposure protects the dwelling from winter winds and gets warmed by the low winter southern sun to radiate heat within. The concrete wall continues to wrap around the east end of the dwelling to surround the heart of the home, providing durability and foundation to the act of cooking. The only aperture in this wall, which allows a pointed connection to the outside world, is above the sink with a view across the water garden toward the east, the rising sun and the path of entry into this domain.

sensible skin and symbolic structure

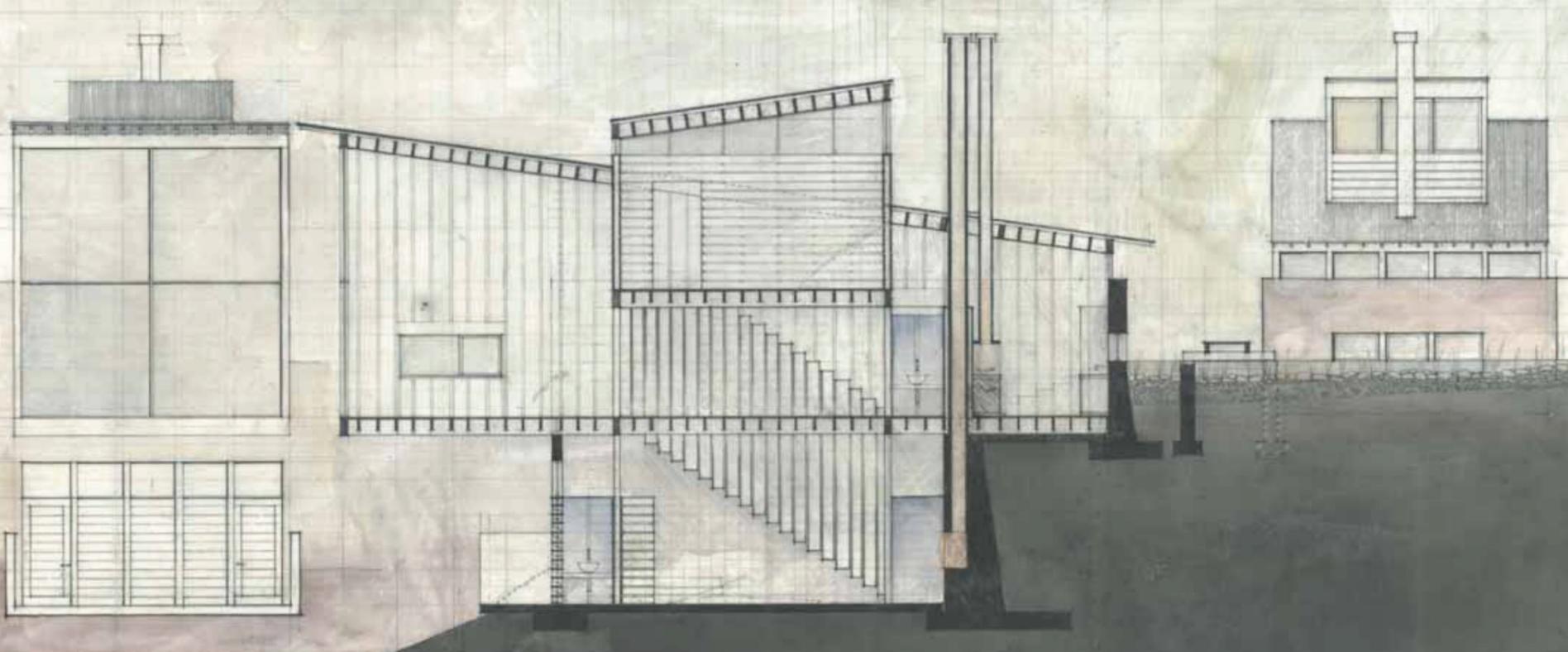
Translucence allows the framework to be known but not completely revealed. The lucid skin allows natural light to wash the interior without the vulnerability of complete transparency. This quality affords privacy but alludes to a connection beyond and within. The cantilevered frame continues the sense of lightness in contrast to the weight of concrete. The exposed network of beams, joists, columns, and rafters provides a texture of support. The verticality of the structure carries both the eye and the mind up beyond the horizontal plane.

purposefully provided openings

Windows are the lenses to the image of the world beyond the domain. Openings are a means to bring the landscape and its seasons, its weather, and its time within. The large expanse of western glass lets the setting sun in through the filtering trees. The north facing window is a horizontal slot to provide a fixed and focused view which also operates to bring in the breeze. The breeze escapes through the south facing window which is a vertical slot that rotates your view, so you see less earth and more sky. The narrow entry door provides access and security while the wide pocket garden door provides excess and freedom. The screened and louvered ground level opening is more closed than open but has the ability to moderate how much world is allowed into the domain.

synthesized circulation

A stair can be sculpture that you stand on and move through. Floors are solid where gathering, living, dining and cooking happens and perforated where movement happens around and between these spaces. The main level is where public and private meet and intersect. To gain solitude for sleep the inhabitant must make a decision. Up leads to the heavens and the stars, lightness and suspension. Down leads to the cave and the fire, weight and warmth. The location of rest could change by personality, season or family dynamic, but it is always an inherently private experience.



process: final section | elevation study

process: final plan study



communication of the design through drawing

structure

The detailed structure was drawn in the computer and printed on mylar. This tool provides mathematical rigor and an order that allows three dimensions to be broken down into two.

texture and materiality

The prints were drawn over with graphite to lend an understanding of depth and gravity that only lineweight can provide. The lightness and texture of wood is conveyed against the solid of concrete and ground. Nature is made present through its chaos and curves.

emotion and elements

Clear gesso was then brushed on the mylar and allowed to dry. The emotions of the spaces provided by the natural elements around which they were focused was made present with watercolor. To follow the colors through the drawings is how the elements move into, through and around the architecture.



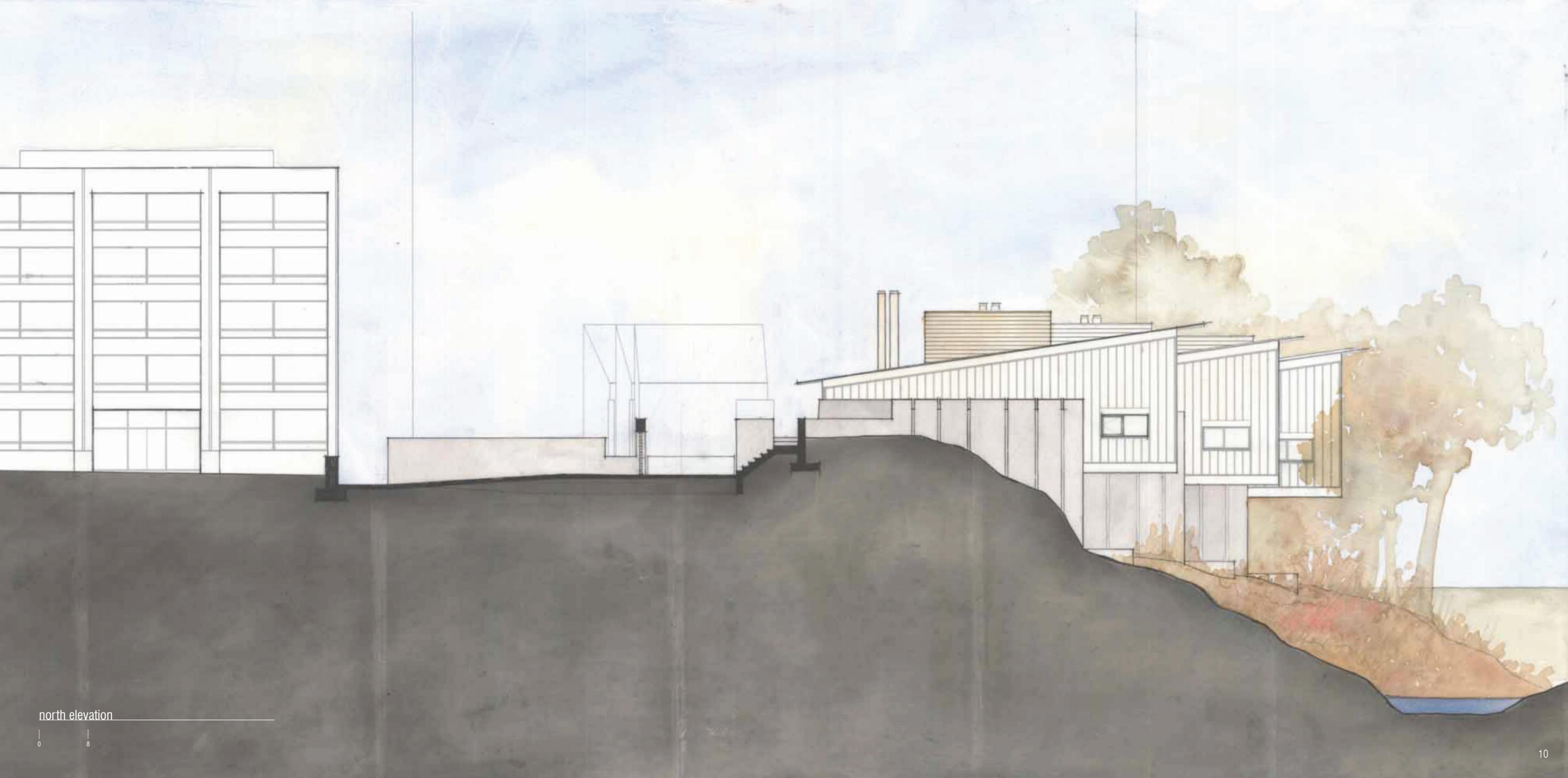
west elevation

0 8



east elevation

0 8



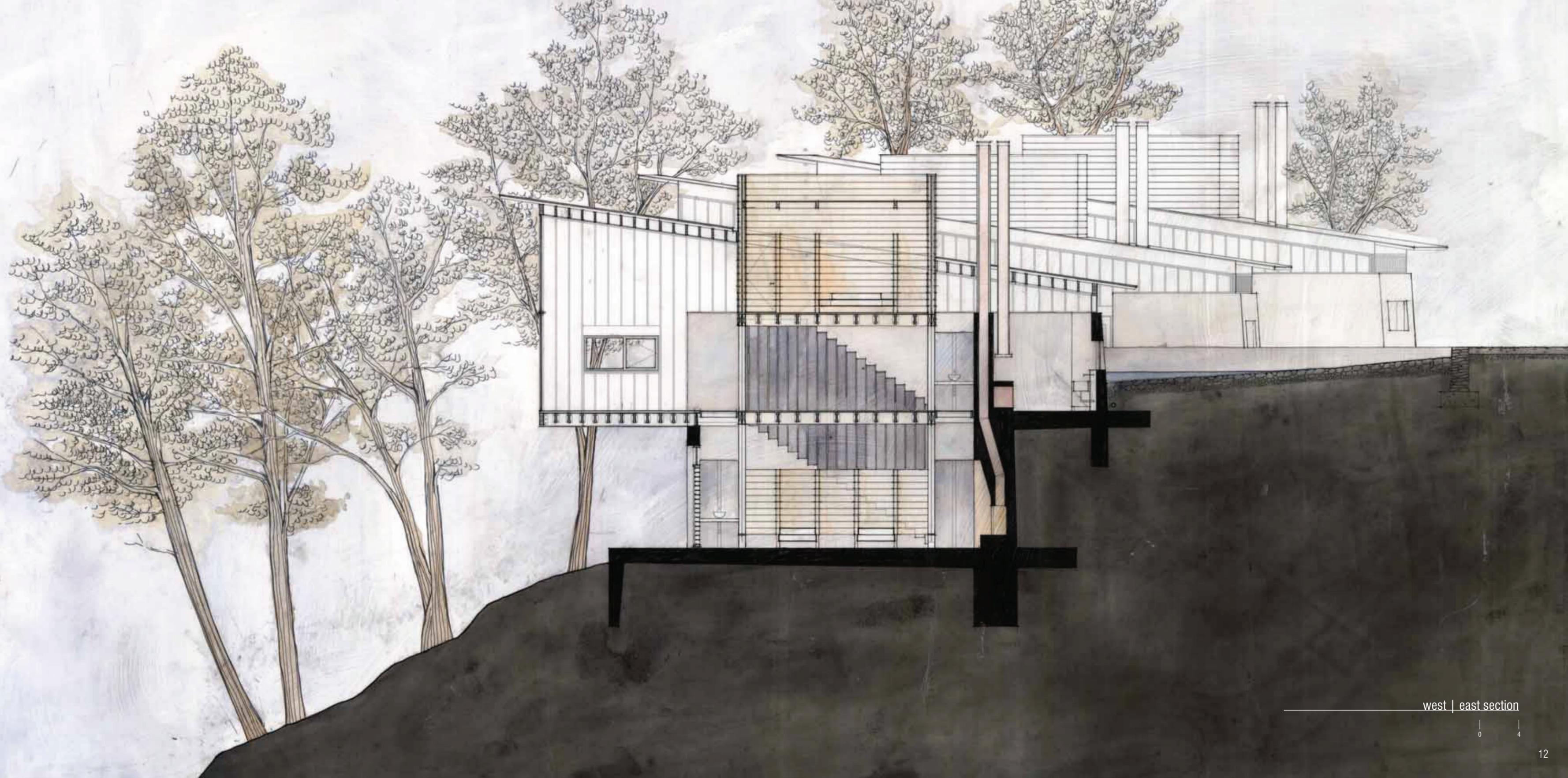
north elevation

0 8



south elevation

0 8



west | east section

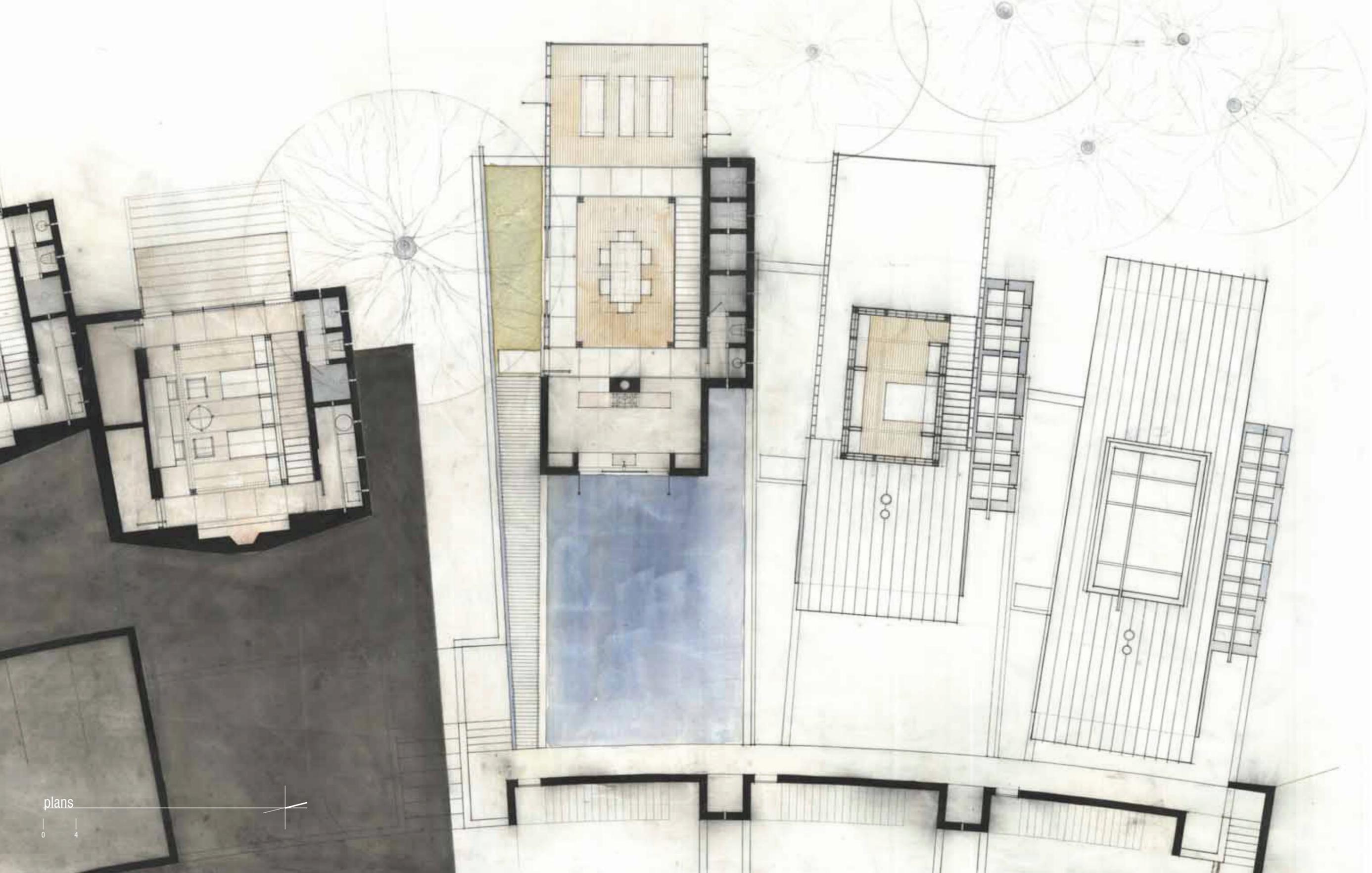
0 4



south | north section

0

4

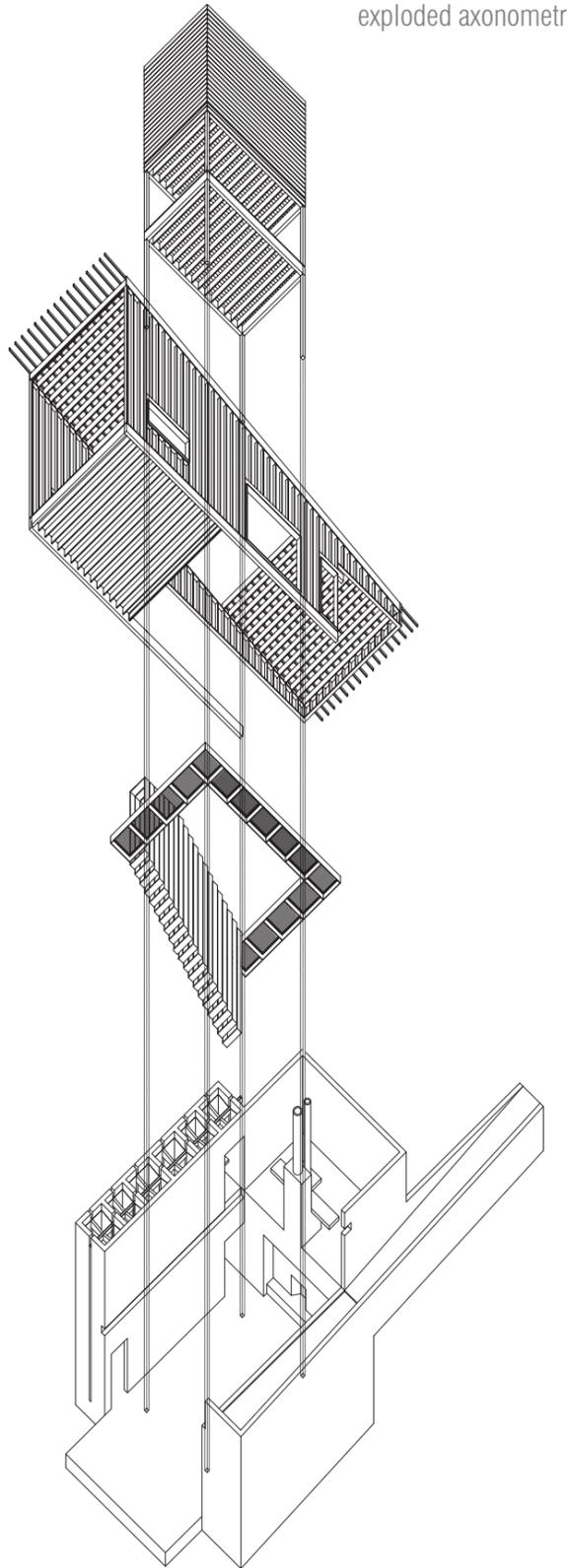


plans

0 4



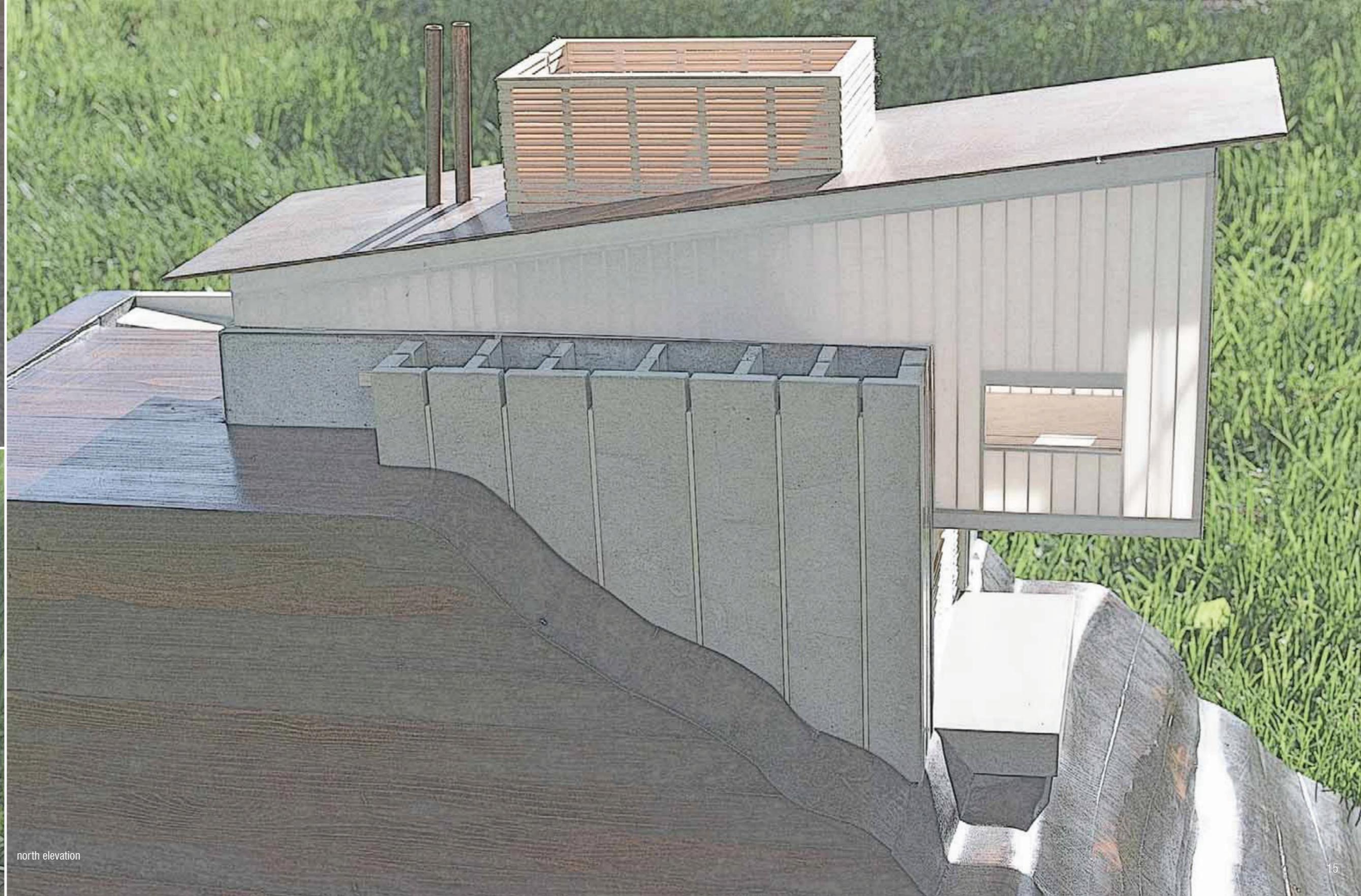
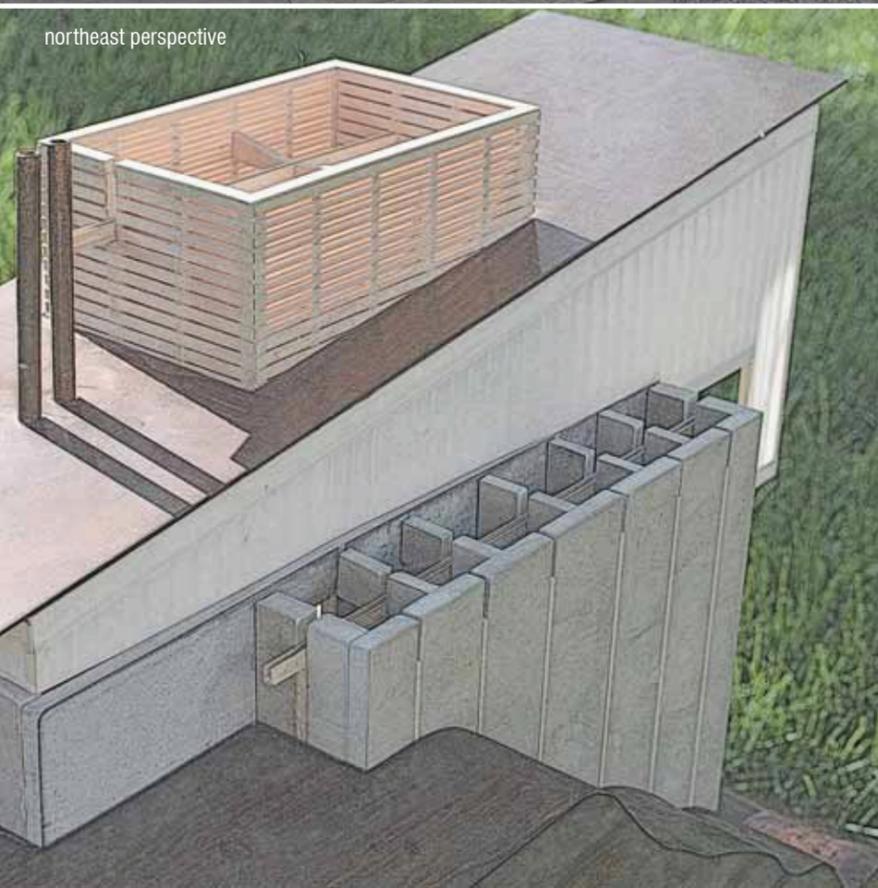
exploded axonometric



northwest perspective

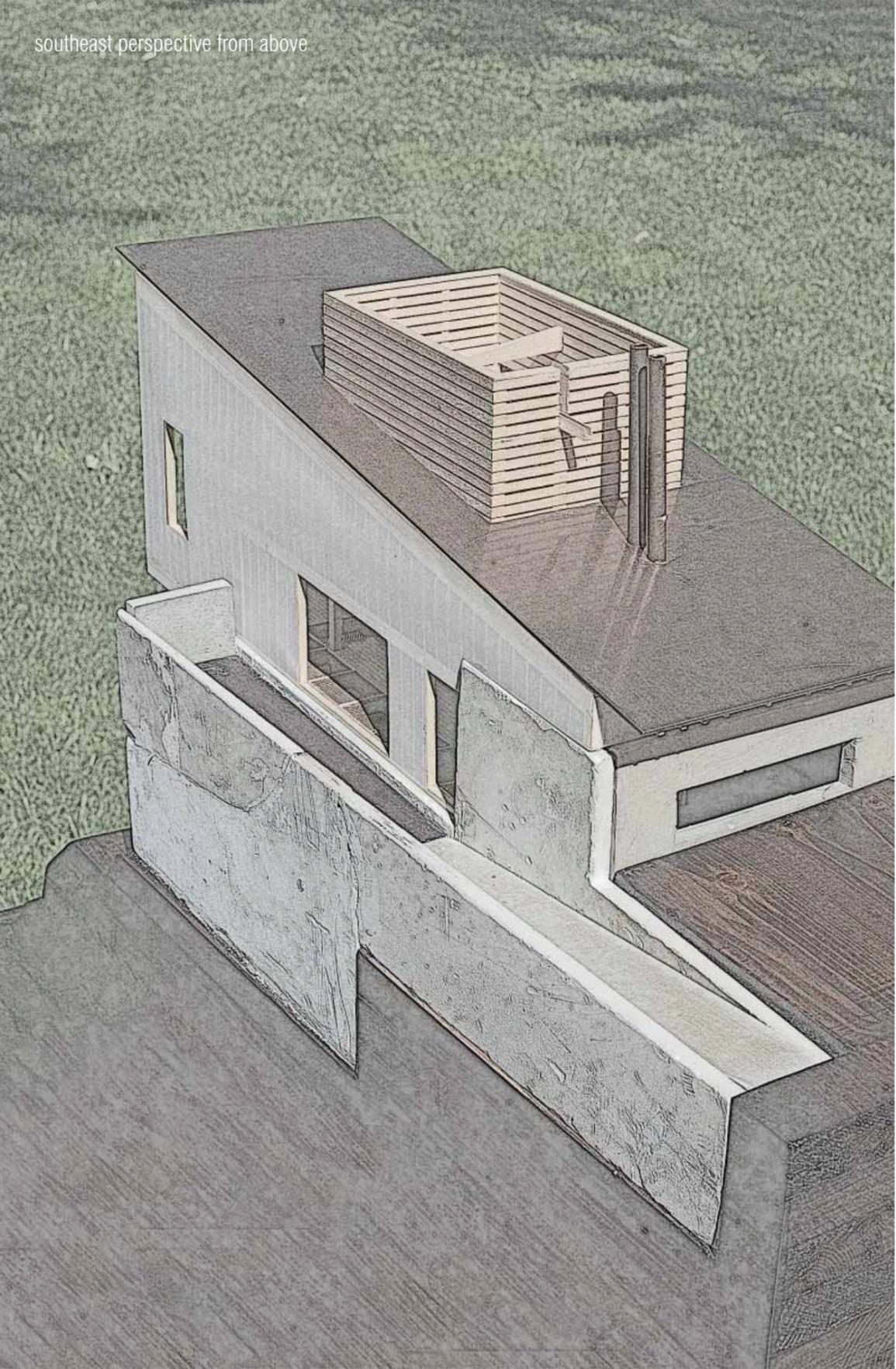


northeast perspective



north elevation

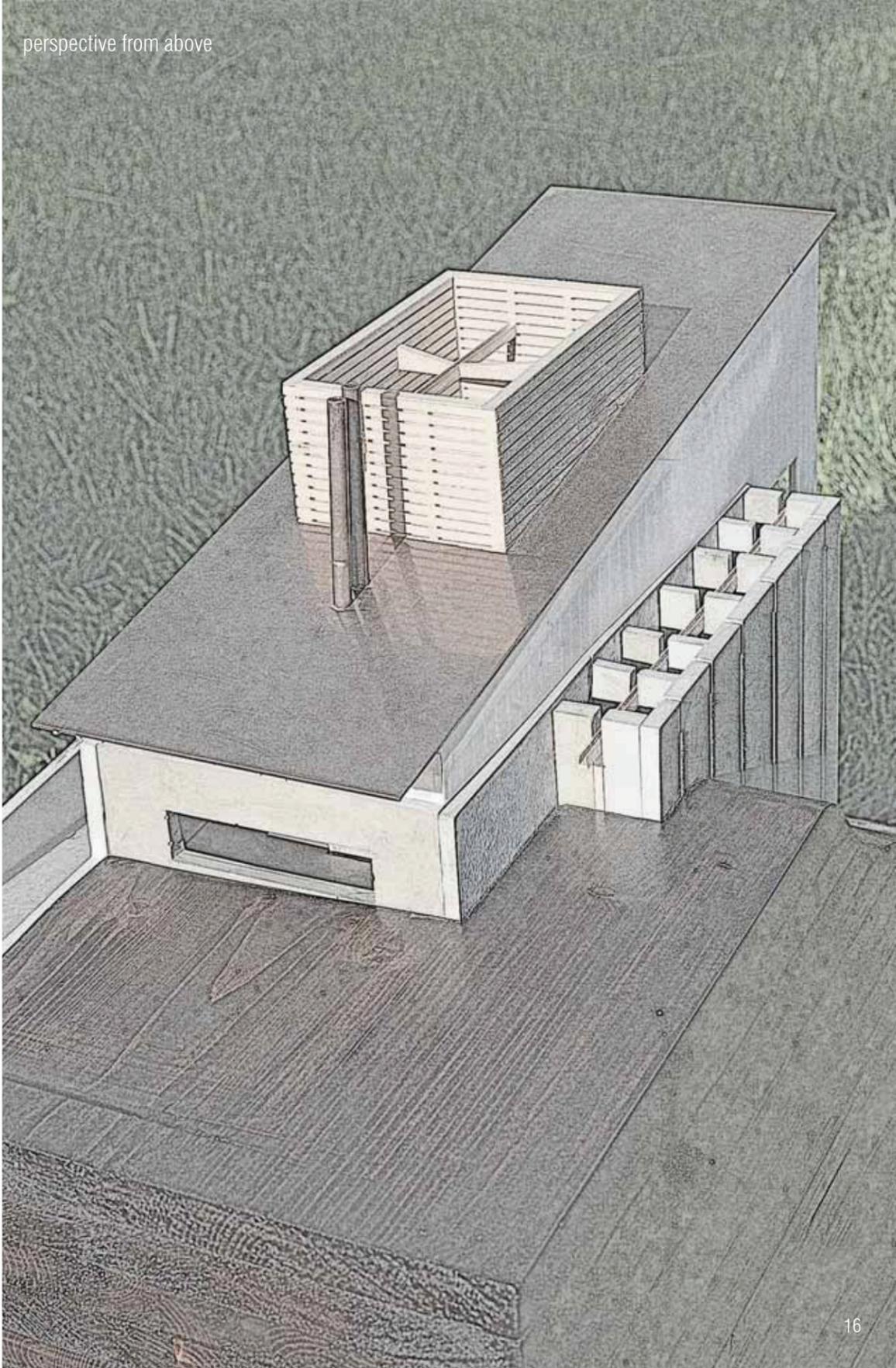
southeast perspective from above

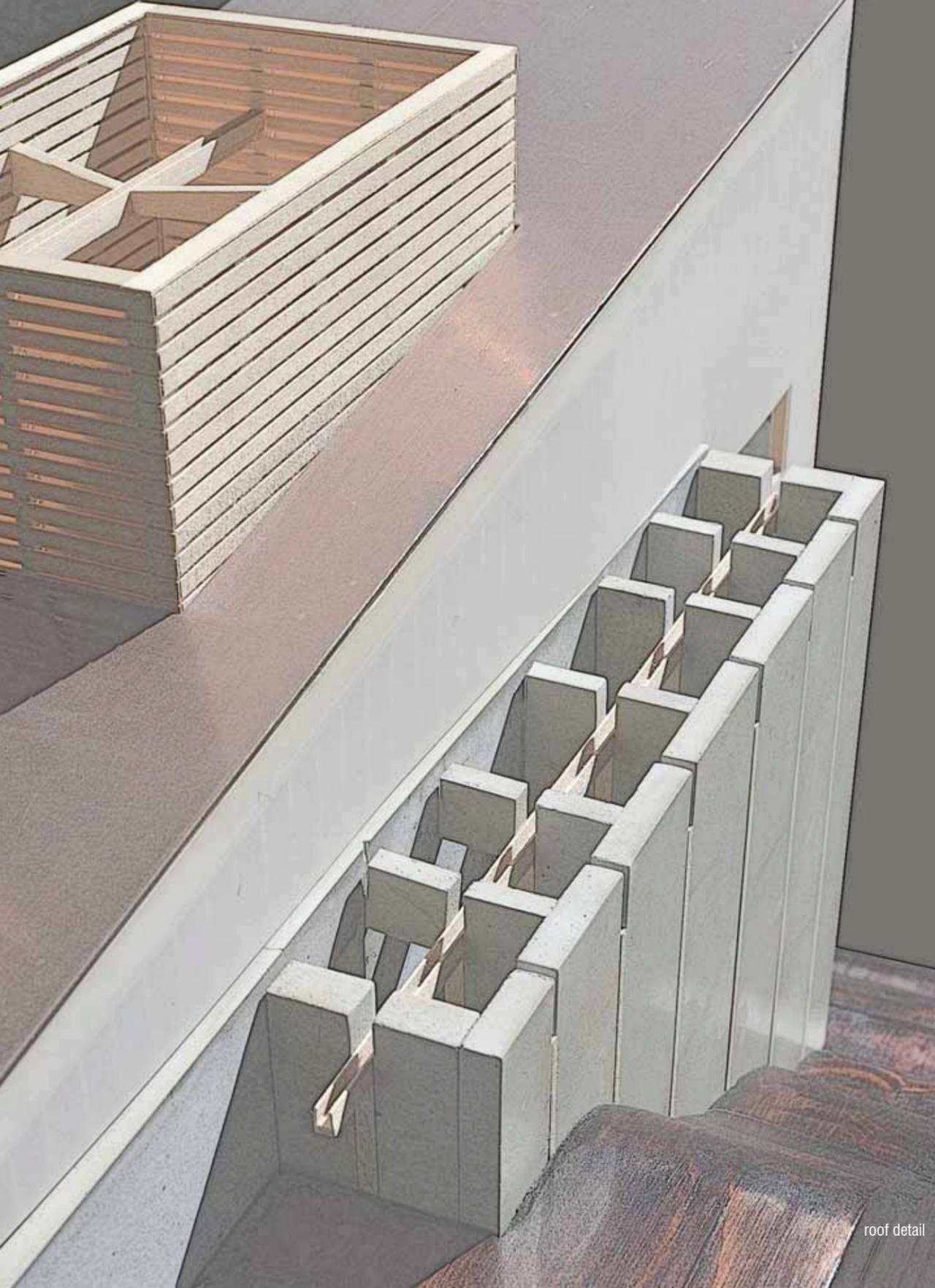


west elevation



perspective from above





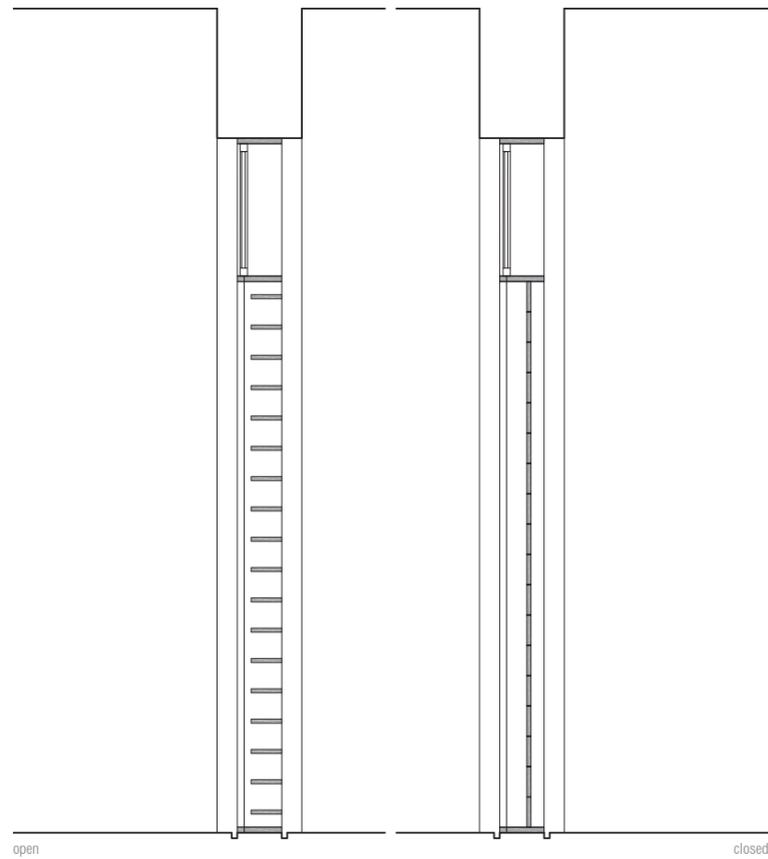
roof detail



entry perspective



northwest perspective



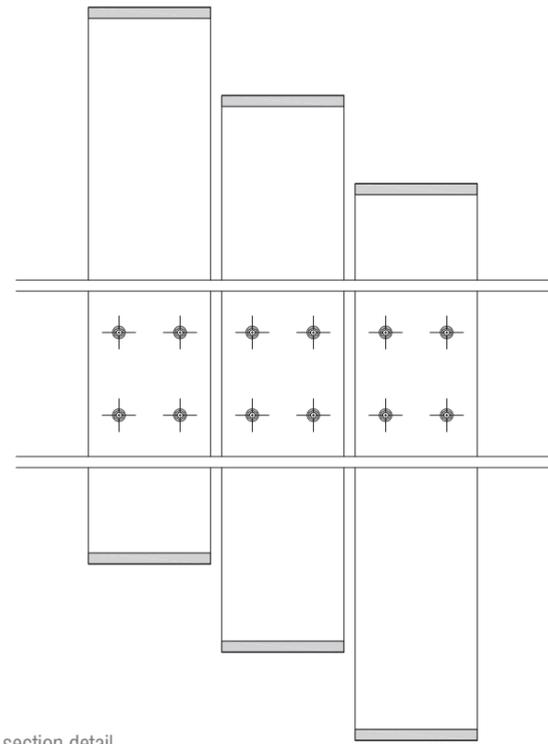
section of screen wall at ground level
opportunity to control your own environment



southwest perspective



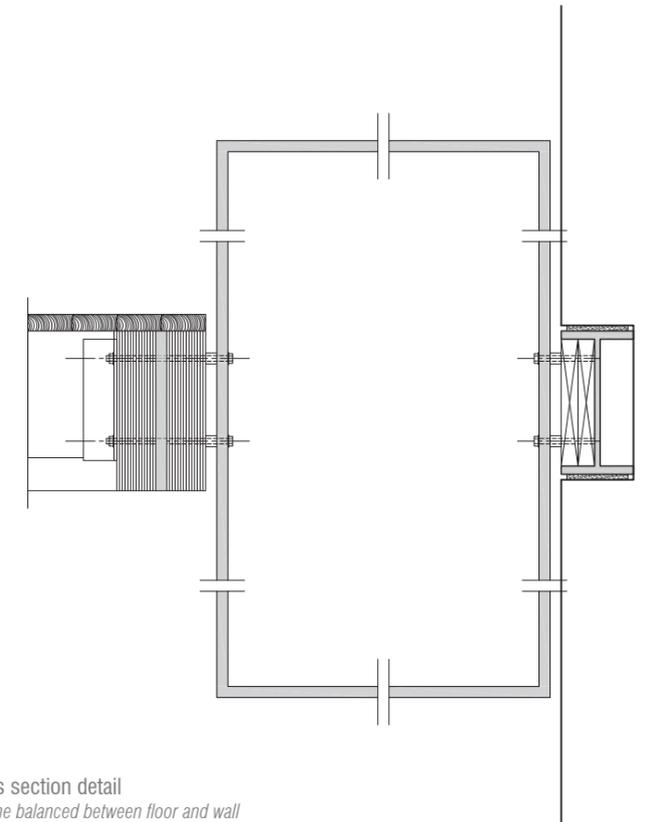
stait detail through south opening



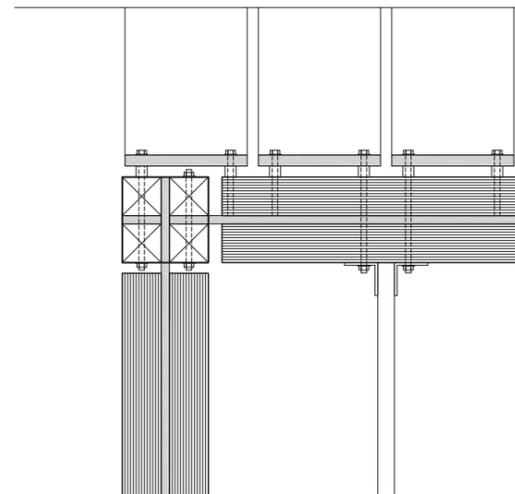
stair longitudinal section detail
circulation as navigation under, through, and above



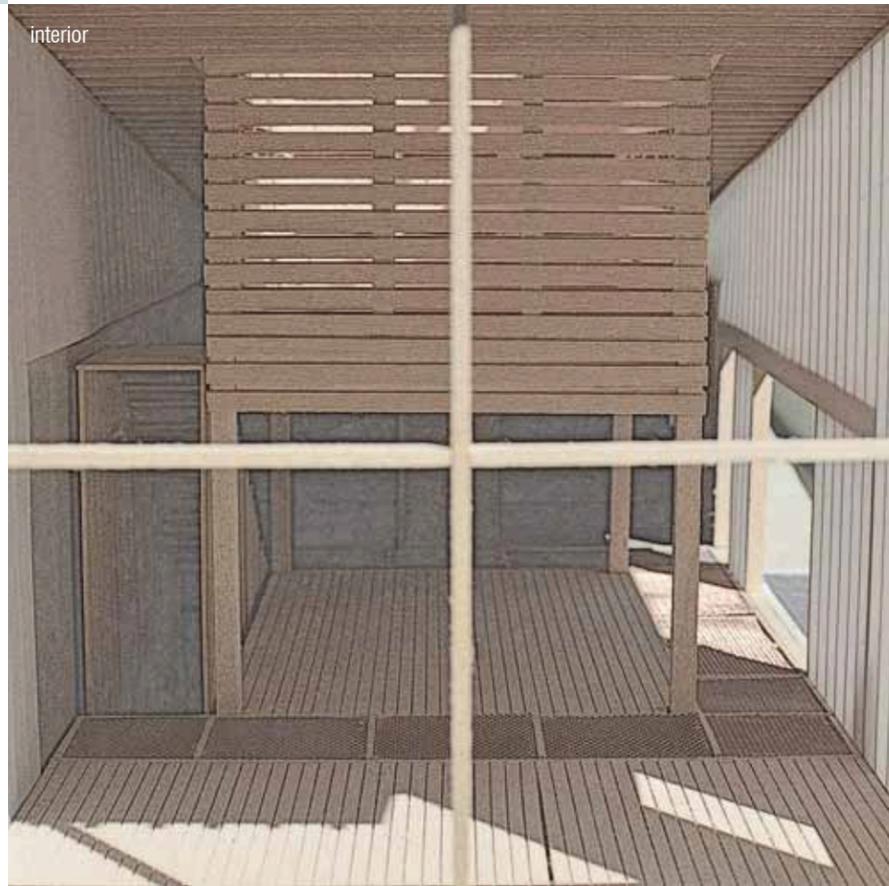
top of stair



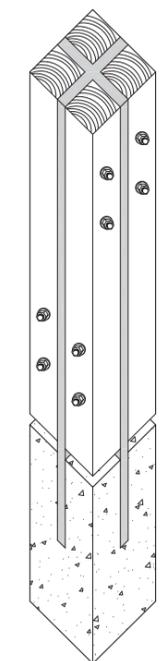
stair cross section detail
floating frame balanced between floor and wall



column plan
integrated connection between horizontal floor, vertical column, and undulating stair



interior



column base
lightness of wood, strengthened by steel and embedded into the weight of concrete

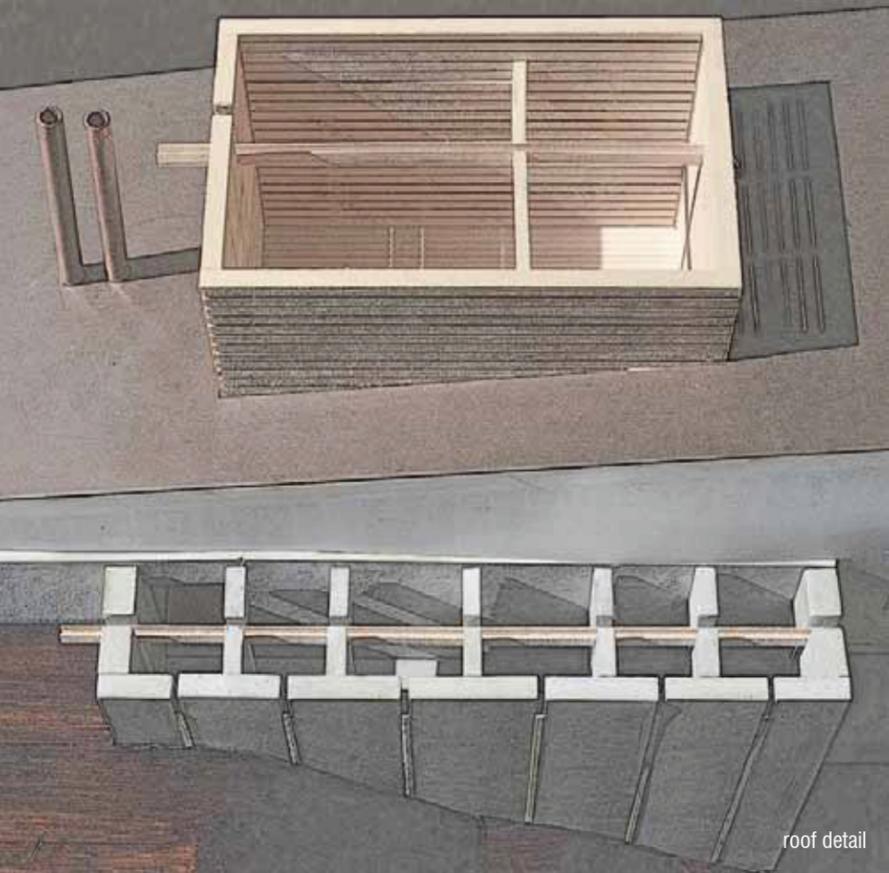
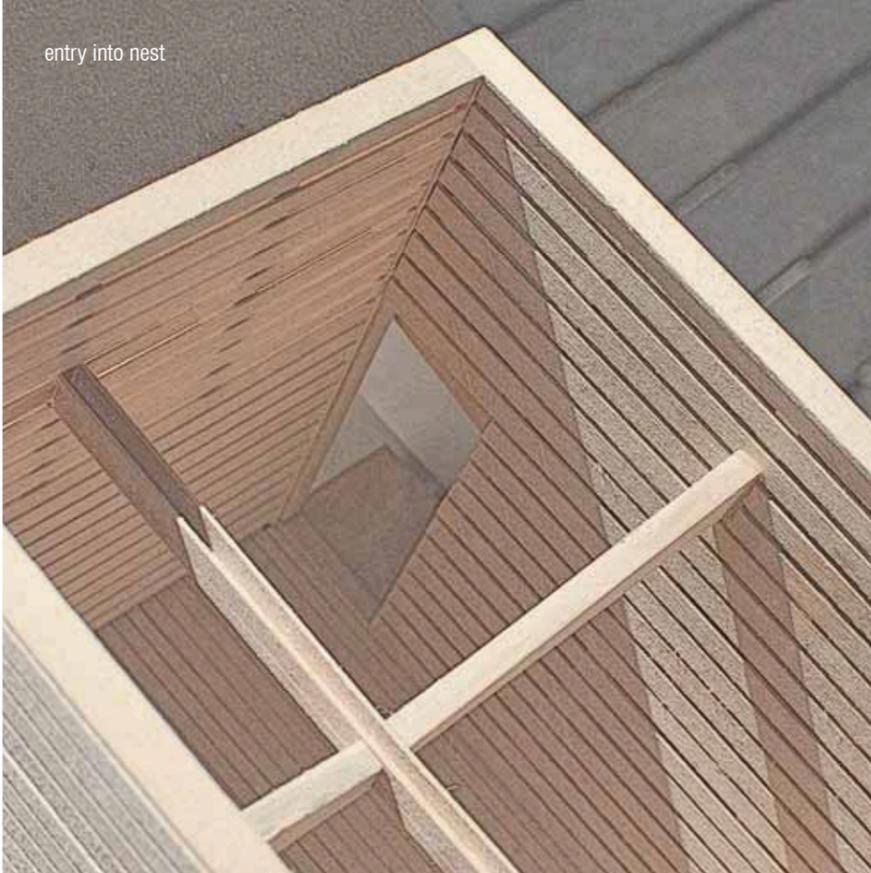


bottom of stair | column bases

roof detail of nest

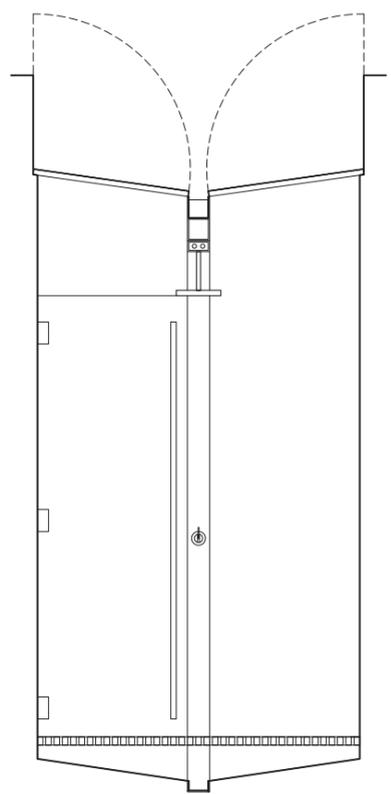


entry into nest

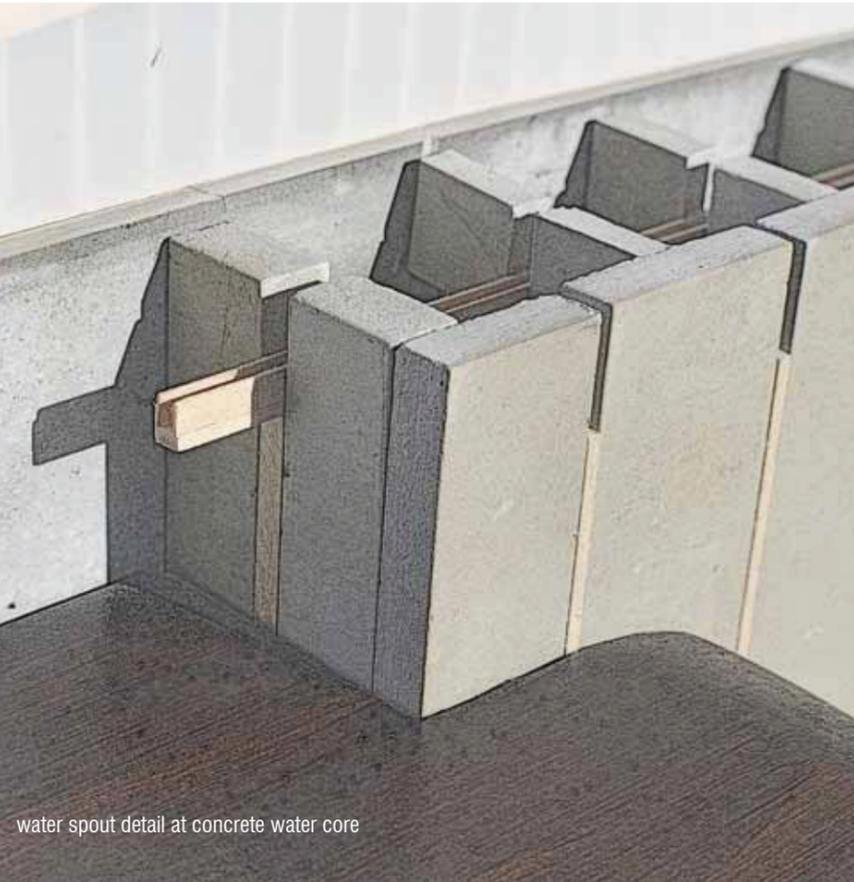


roof detail

to exhaust
air movement requires the inhabitant to actually open the roof to the sky



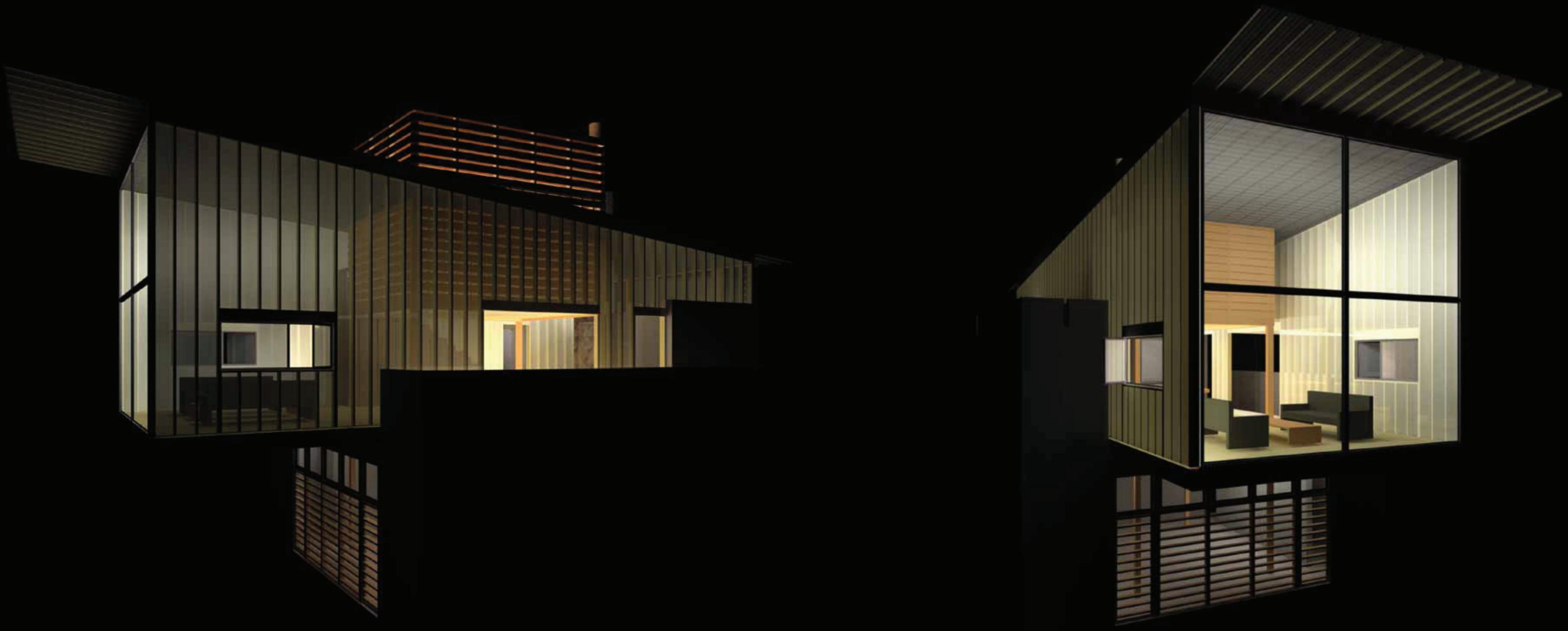
to wash
all water movement is made both evident and relevant to the inhabitant



water spout detail at concrete water core



water spout detail at nest



to dwell at night
home as lantern, communal beacon, textures of light



the intimate domain of dwelling between earth and sky