

## Glass House

Bedford, New York

*Ogawa/Depardon Architects*

This project began when a young family, residing in New York City, decided to leave the city and raise their family in a more bucolic setting. They purchased several plots of land and pieced them together into a contiguous twenty-six-acre plot of rolling wooded hills that culminates at a rocky ridge with sweeping views of a protected nature preserve. In response to leaving the urban environment far behind them, the clients desired a large home to provide shelter for an expanding family in a tranquil landscape, but also to give them the feeling of privacy and spaciousness they lacked from their life in Manhattan.

The site offered many different types of experiences including gently contoured hills under an umbrella of dense trees, wetlands, and rocky outcroppings at a steep crest. The decision to position the house at the highest elevation point of the site, and overhang the structure over the rock face of the ravine, was an obvious choice to enable the house to benefit from the spectacular views beyond. This position also allowed the diversity of the various types of landscaped areas around the house to be transformed into outdoor rooms and, while associated together with interior spaces, merge the natural landscape with the composition of the house.

The form of the house is based on an orthogonal and linear organizational grid, which is set in contrast to the

natural curves of the land. Yet the structure is carefully integrated into its setting by the intricate manipulations of the levels, of the views from and to the house, and by the use of the materials that tie the house to the nature around it.

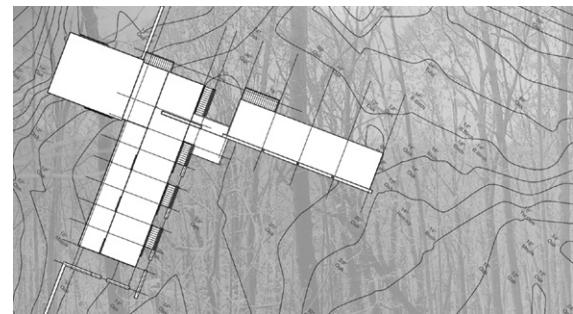
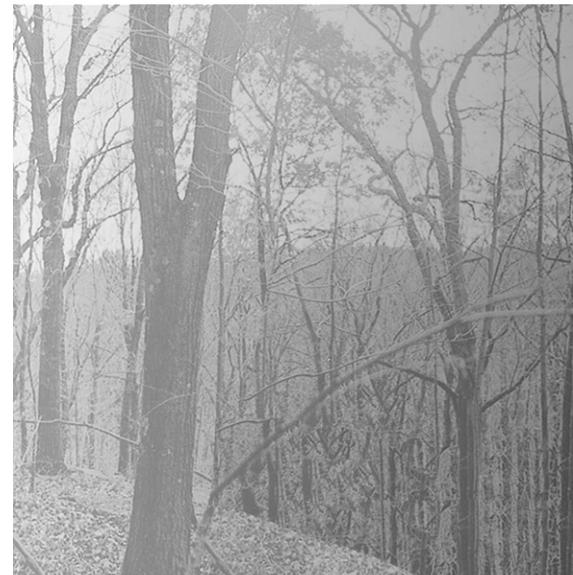
The design of the long private drive into this undulating landscape was as carefully considered as the design and placement of the house on the site. After a long path through the trees and up and down hills, the final approach of the road reaches the crest of a hill to discover an expansive forecourt where the house reveals itself. Long-range views of the valley are hidden from the arriving guests by the house itself, and the sights are focused on a long reflecting pool at the foot of a finely detailed stone wall and glass entry pavilion. Even though the clients wanted a house with completely open views of the landscape, they desired a strong sense of privacy from visitors arriving at the forecourt. The clients also wanted their home to make a bold statement to evoke a sense of awe from visitors of the site.

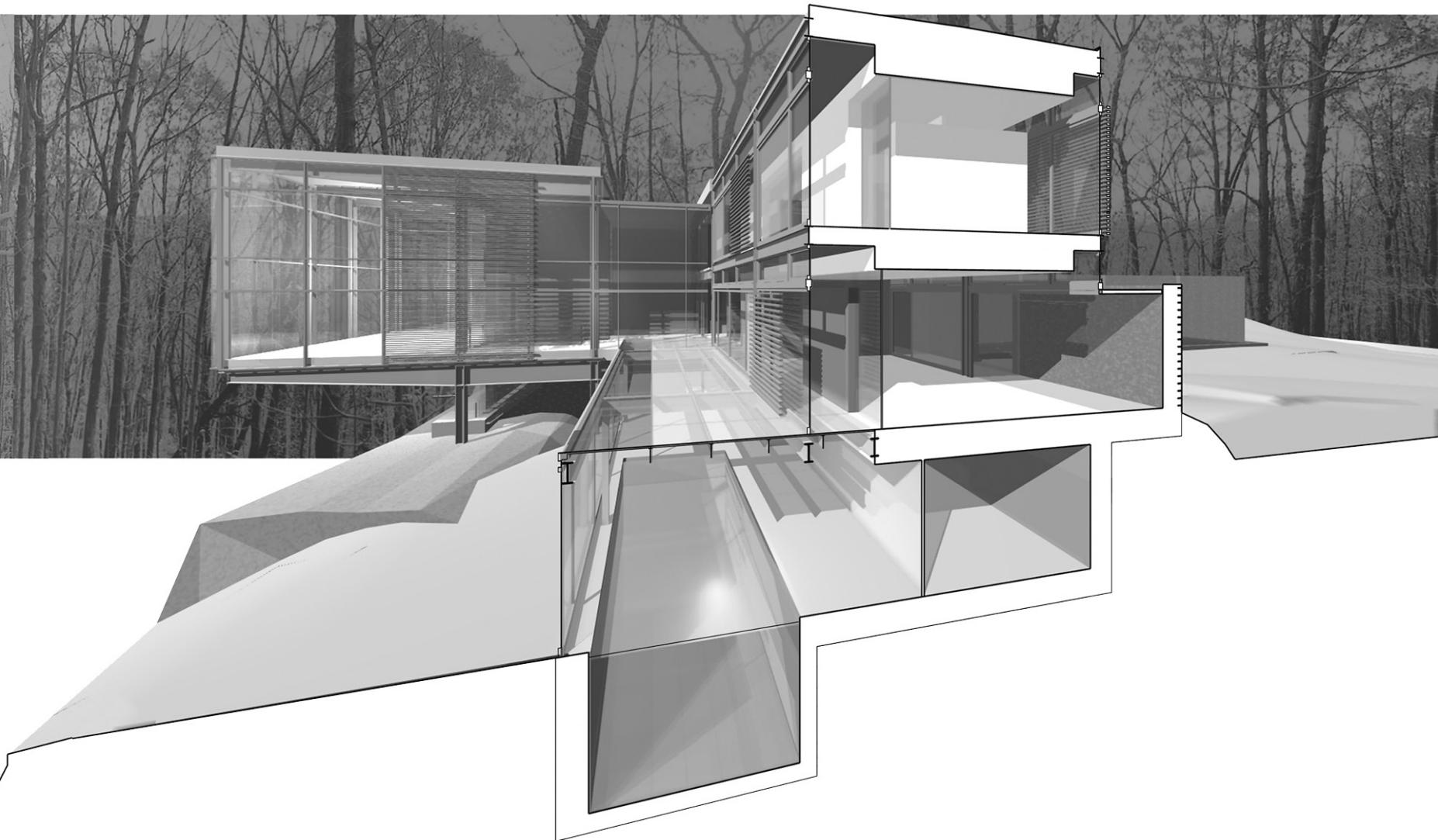
Conceptually, a modern glass house in harmony with nature was a logical solution. A transparent house would have the spaciousness and views to the outdoors its inhabitants required. The next step for us as their architects was to consider what a glass house could be and to seek out new possibilities and forms within the

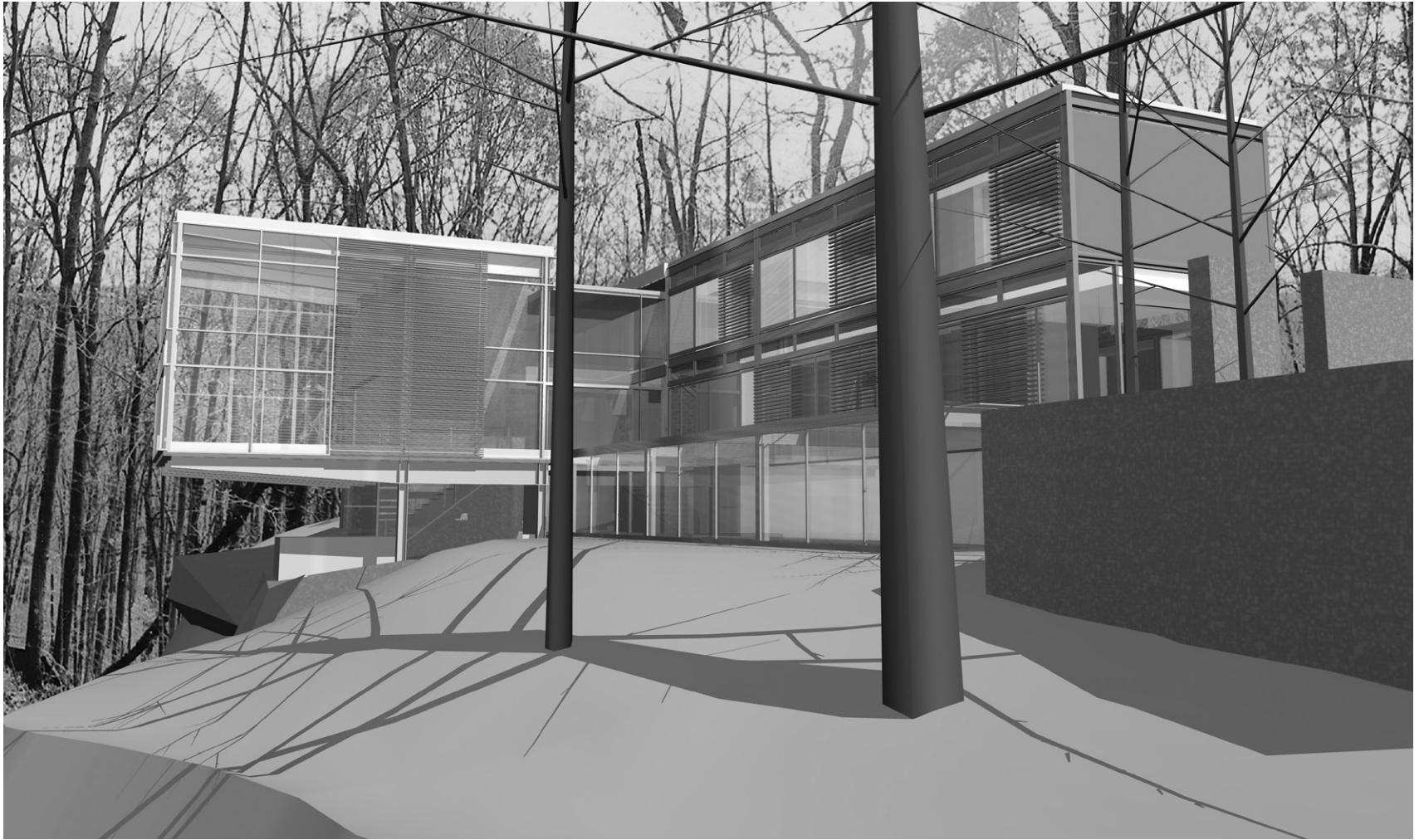
use of this material. Manipulating the transparency and translucency of glass as well as the interplay of its inherent luminosity against the opacity of stone is a driving theme in this project, as is the play of mass against weightlessness. Another conceptual design subtext is the exploration of the relationships between glass and water. It was of special interest to us to utilize, as an spatial element, the juxtaposition of a reflective and luminous material—glass—against that of an organic material—water—two materials sharing the same intrinsic qualities in radically different form.

To create the dialogue between transparency and opacity, two massive stone walls were inserted perpendicular to each other into an offset cruciform shape across the site. These walls serve to organize the plan and act as barriers to create privacy and control views to and from the house. The building's wings, in the form of glass volumes, visually emerge behind them and are anchored to the earth and site by these stone walls. The mass, opacity, and the anchoring to the ground is expressed through the stone walls. The juxtaposed weightlessness, transparency, and suspension is elaborated through the exposed and cantilevered steel structure and the glass skin framing the building wings.

The client's wish for a large and flexible home that met the changing needs of an expanding family, coupled with







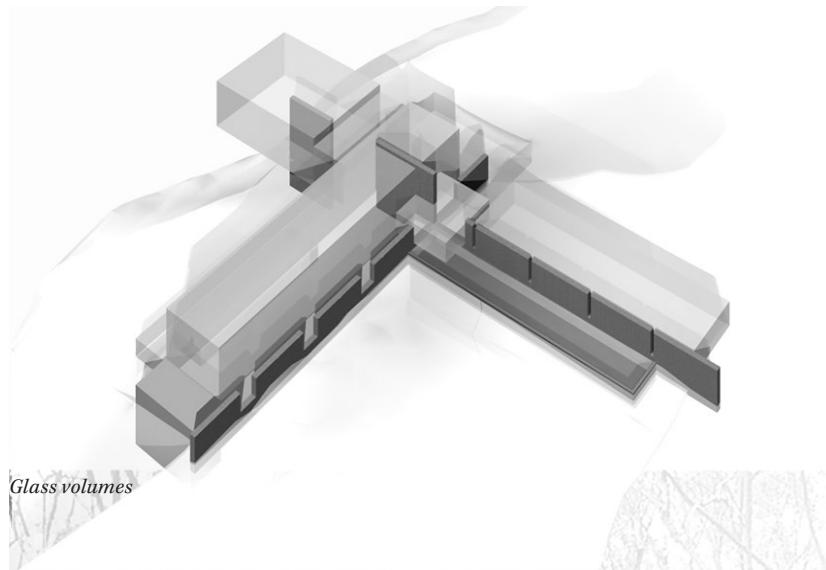
a desire for a bold design, created another specific design challenge. When the owner's program was tallied, the sum total was over 15,000 square feet. Designing a house with approximately 13,000 square feet of "living space" while maintaining a sensibility to the intimacy that a home requires was a difficult problem. The overall form of the house is defined by distinct expressions of the various program elements. Subtle variation in volume is intended to break down the overall impact of the client's sizable program needs. Two main wings run parallel to the stone walls, and are perpendicular to each other. The public/entertainment area and the private/sleeping area are linked at their intersection by a sky-lit double-height space where the vertical circulation

occurs through an open stair. The entry is situated at this intersection and is flanked by the two main stone walls. The bedroom wing runs north/south and is organized on two floors, the public sector is the core of the house where the main stair, kitchen, dining and family room occur. Beyond this core is a double height glass enclosed living room cantilevering off the ground and stone ravine below on deeply-tapered steel beams. A three-car garage wing combined with a private office at the entry side of the house is concealed by the continuation of the stone wall running east and west. To further decrease the scale of the house, the drop in grade was advantageously used to partially bury the lowest level of the house housing the indoor pool, playrooms, gym, and media room. The

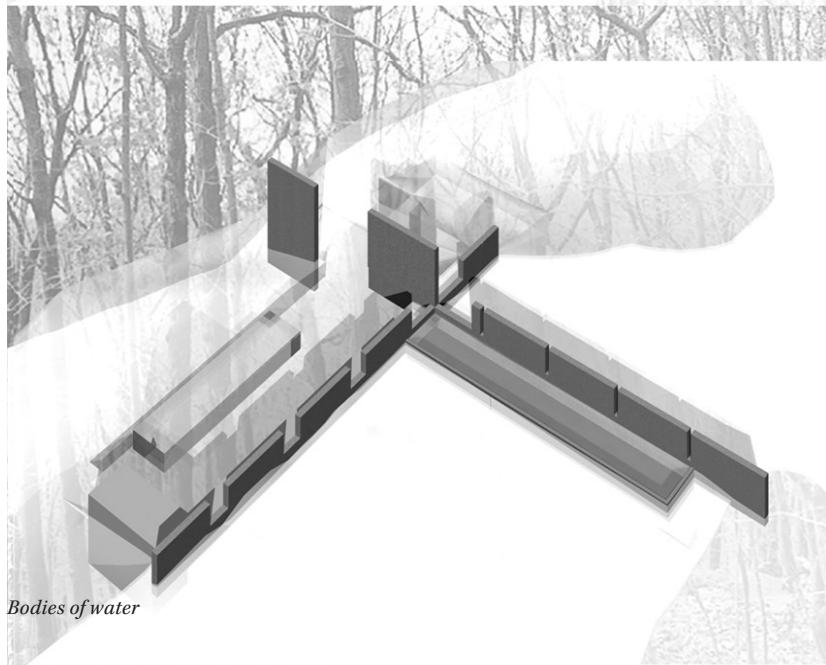
house appears to be a combination of one- and two-story volumes from the eastern entry court. After circulating through the house, a third level, partially below grade, reveals itself. Below the bedroom wing, tucked into the sloping grade, the interior swimming pool is enclosed vertically and horizontally in clear and translucent glass. The skylight over the swimming pool doubles as an exterior terrace, paved in translucent glass, that slips under the glass curtain wall to demarcate the hallway running the entire length of the master bedroom suite. To avoid the typical boxed-in character for bedrooms with conventional swinging doors and windows in a wall opening, we chose to redefine the nature of entry and enclosure. All of the spaces that comprise the master bedroom suite

and the childrens' bedrooms on the second floor have large sliding walls/doors that have the flexibility to be completely closed off for privacy but also to be fully opened and hidden in a pocket. On both floors the hallways have floor to ceiling glass that look out to an illuminated glass plank terrace and a panoramic view. When the sliding panels are pocketed, the scale of the bedroom expands and absorbs the hallway into its space and captures additional light and another view of the beautiful landscape beyond. Above the sliding glass windows are operable clerestory windows to aide the natural cross-ventilation.

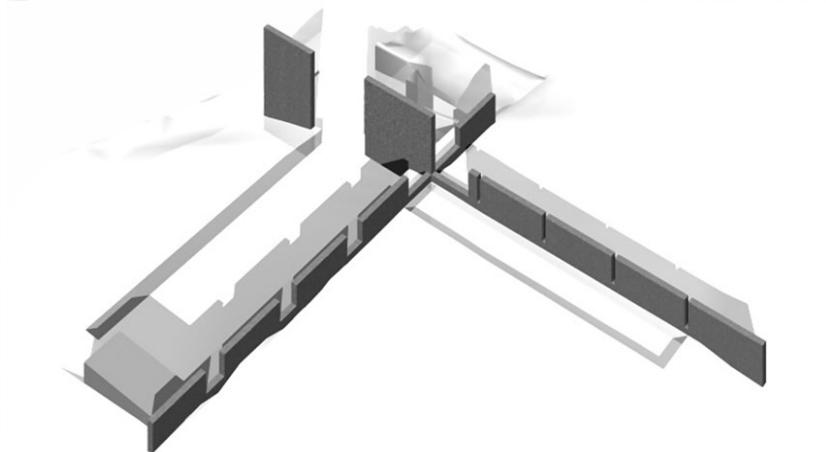
The skin of the building is predominantly steel and glass utilizing four variations of glass: transparent glass,



*Glass volumes*



*Bodies of water*

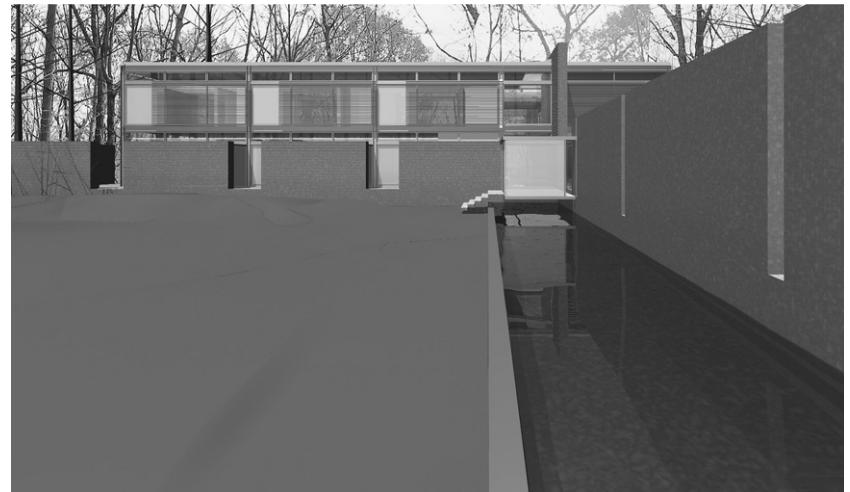


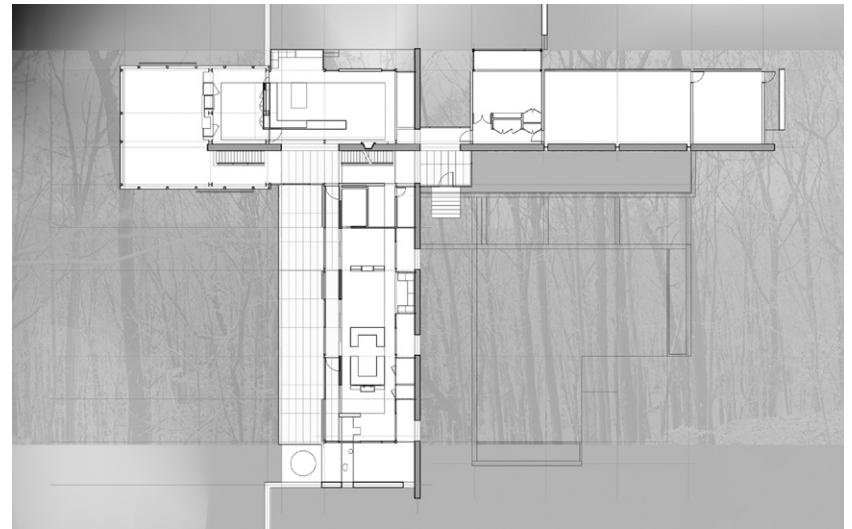
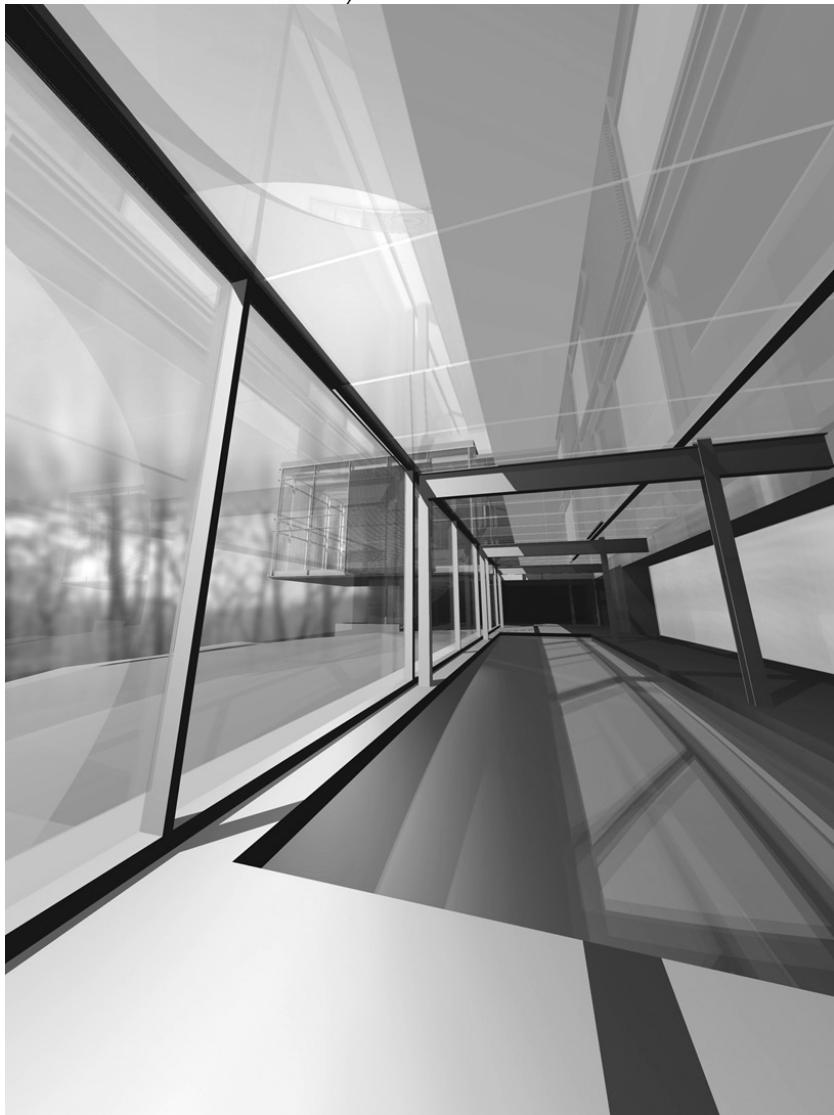
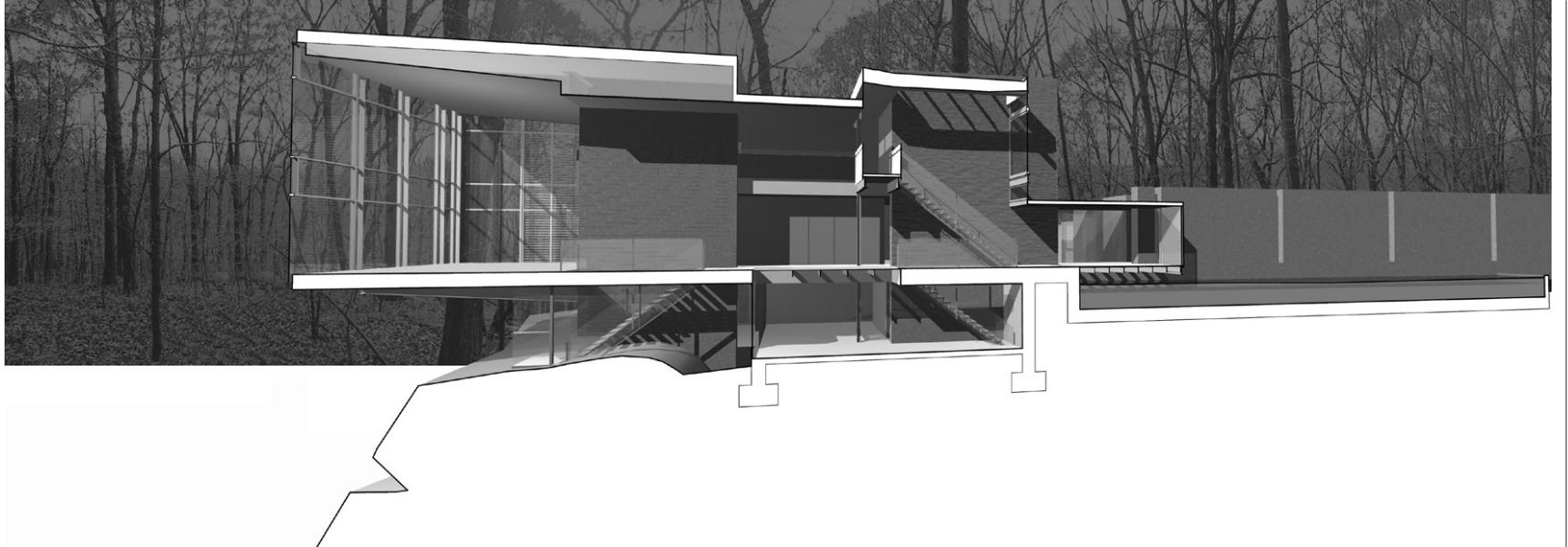
*Stone walls*

translucent interlayer glass, textured U-channel glass and 1-inch thick glass laminated plank flooring. The use of glass and its various transmutations define horizontal and vertical surfaces. U-channel glass serves as a masonry-like unit that forms minor rooms within the transition space between the stone walls and the glass enclosed wings. Wood-slatted screens are added as a layer to control privacy, sun shading, and to conceal operable windows with stainless steel insect screens. The horizontal planes of the house are predominantly delineated by stone, water, and translucent glass plank panels. The aforementioned dialogue between glass and water occurs as a horizontal surface at the introduction sequence, the entry, and at the final experience of the house, the pool room. Running along the foot of the stone wall defining the north side on the arrival court, is a shallow pool of black tiles reflecting the changing sky. At the intersection of the stone walls, hovering above the reflecting pool is an intimately-scaled entry pavilion with a glass floor. This compressed space is meant to direct one's view downward to the reflections and patterns of the water on the glass and to create an opposing effect to the largeness of the

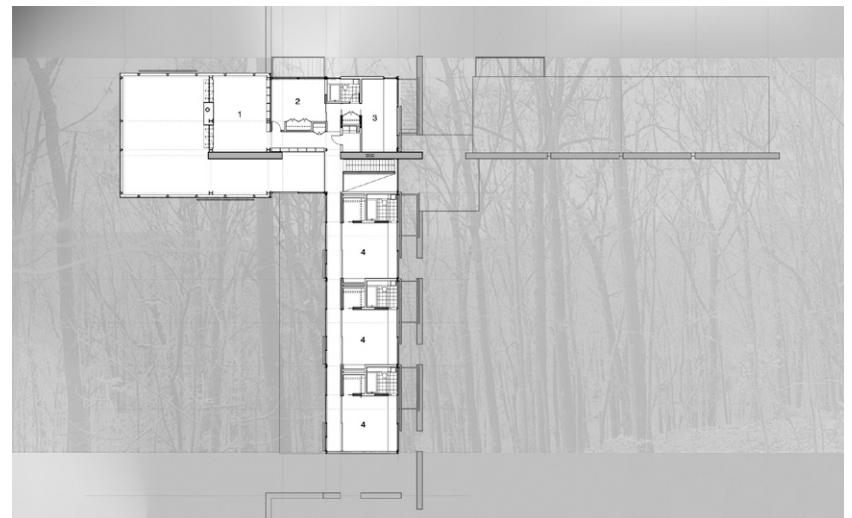
public areas which will be revealed as one discovers and experiences the sequence of spaces beyond. Another interplay using glass and water occurs at a wide expanse of glass plank flooring forming the terrace running parallel to the bedroom wing. This grand terrace with its panoramic view, also serves as a skylight to a swimming pool of the same shape directly below. At night, the submerged lighting in the swimming pool will send refracted patterns of water and light onto the glass floor above, which further dematerializes this translucent surface. A strip of clear glass seamlessly appears at the edge of the translucent floor plane as one reaches the edge of the terrace to allow a clear and unobstructed glimpse of the swimming pool below or conversely of the sky above when swimming.

The organizing elements, the conceptual subtexts, and the subtle detailing of this house all work together to break down the scale into a simple yet refined and sophisticated design. Unlike the typical traditional house plopped onto a site, the transcendental design of this house is intimately inspired by, and involved in, an eloquent dialogue with the landscape around it.





*First floor plan*



*Second floor plan*

