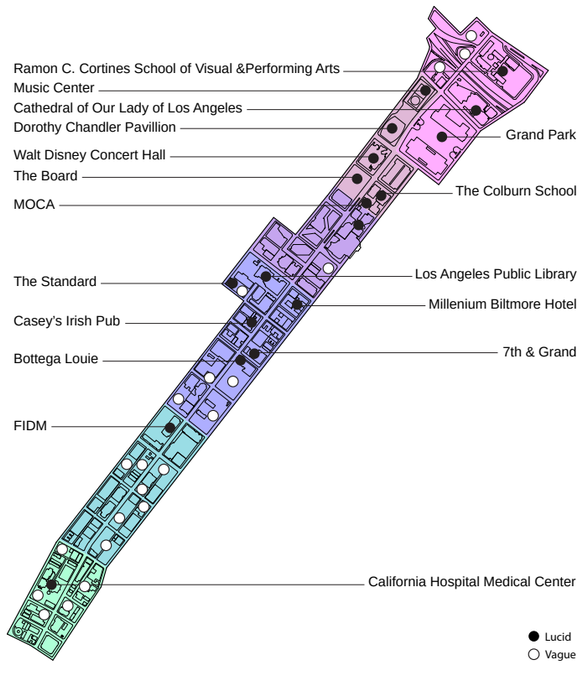
Isaac Michael Wilhelm

Grand Encounters

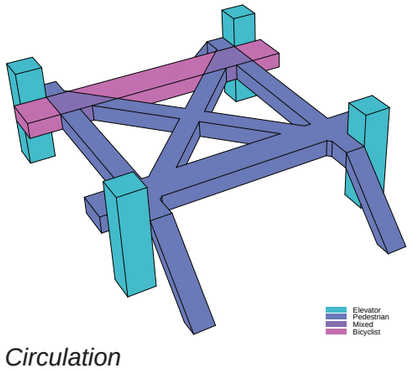
Occupying The Margins

Elevated above Grand Avenue in Downtown Los Angeles, this public space provides pedestrians and bicyclists a place to interact away from the congested automotive streets below. A separate pathway for bicyclists and another for pedestrians switch street sides at several locations. Furthermore, these locations create a dynamic circulation experience as the pathways bridge one another. The pathways are on opposite sides of the street for most the length; however, in one stretch they are stacked a top one another. L-shaped light-weight steel structures line the pathways to control views of Downtown. Also, the structures vary in canopy length, and their position flips sides along the pathway. Analyzing the trending and terrain vague sites along Grand Avenue determined the parklet locations. Each parklet possesses elevators and stairways at all four street corners of the intersecting streets below. This elevated diagonal cross-walk provides an escape from the busy urban street life beneath. There are six distinct parklets stitched between the pathways. Activities differ in the parklets depending on the location. The program activities include relaxation, tanning, dinning, drinking, shopping, walking the dog, and meditation. Participating in a City of Los Angeles bike share program, each parklet offers city funded bikes. Through the bike share program the interconnection of nine distinct marginal studio projects was achieved.

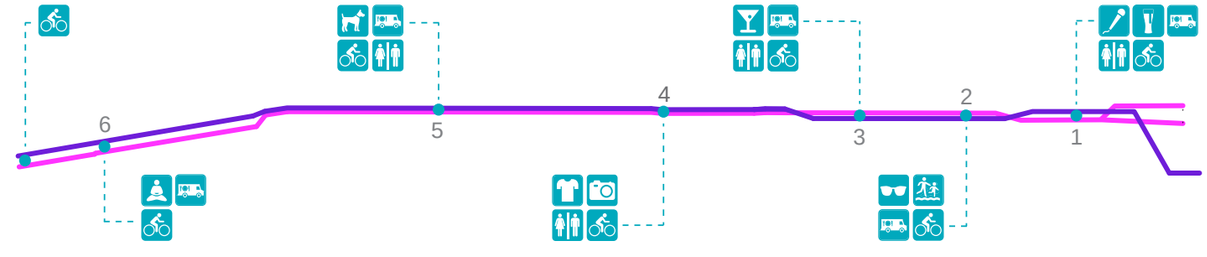
Urban Program



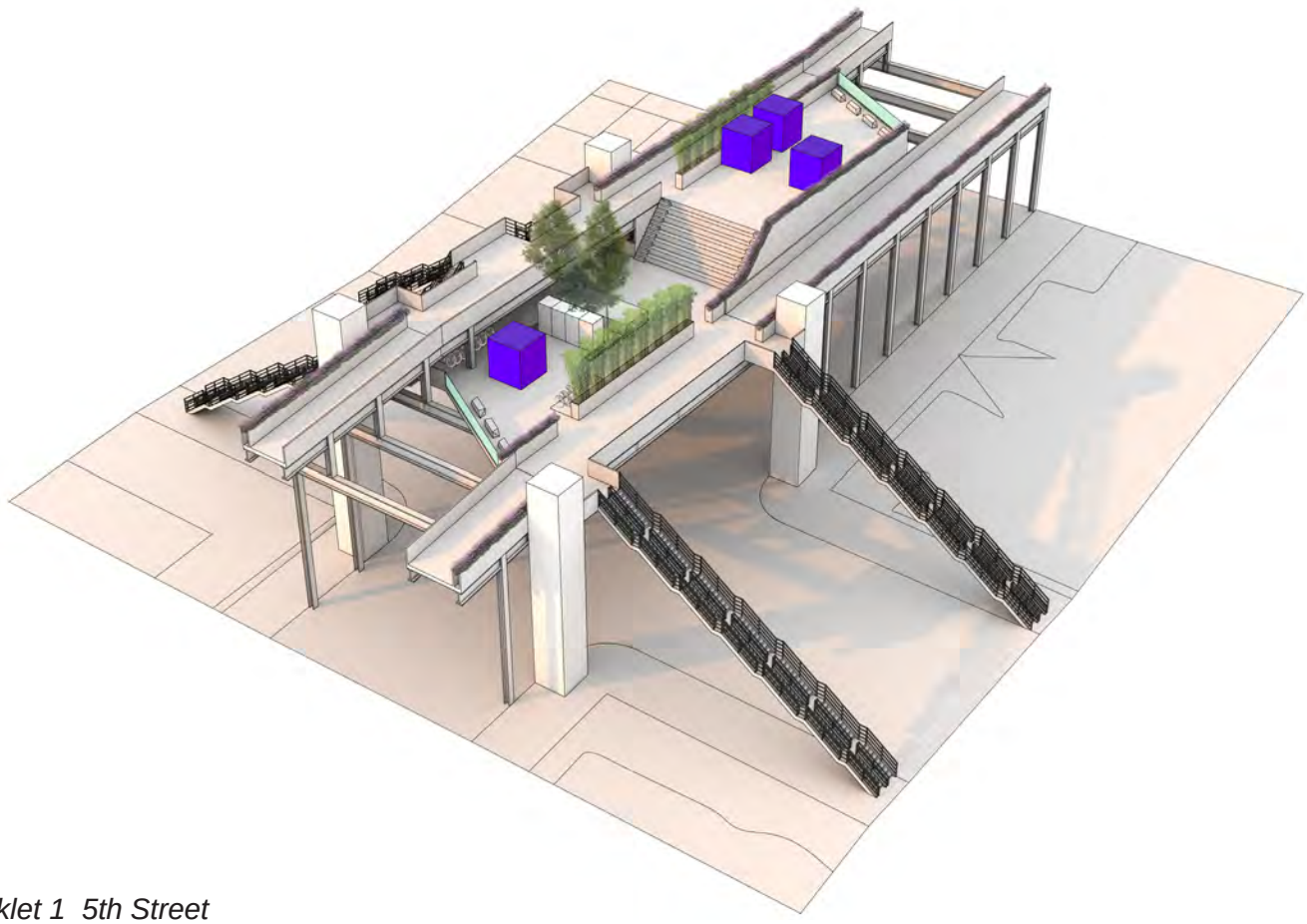
Trending Vs. Vague



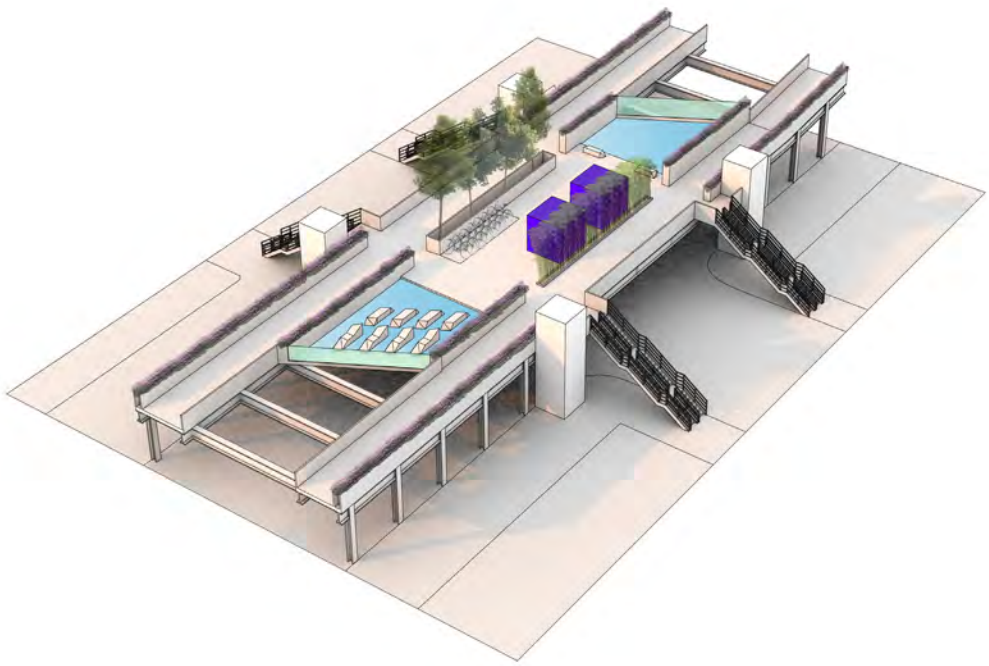
Parklet Circulation



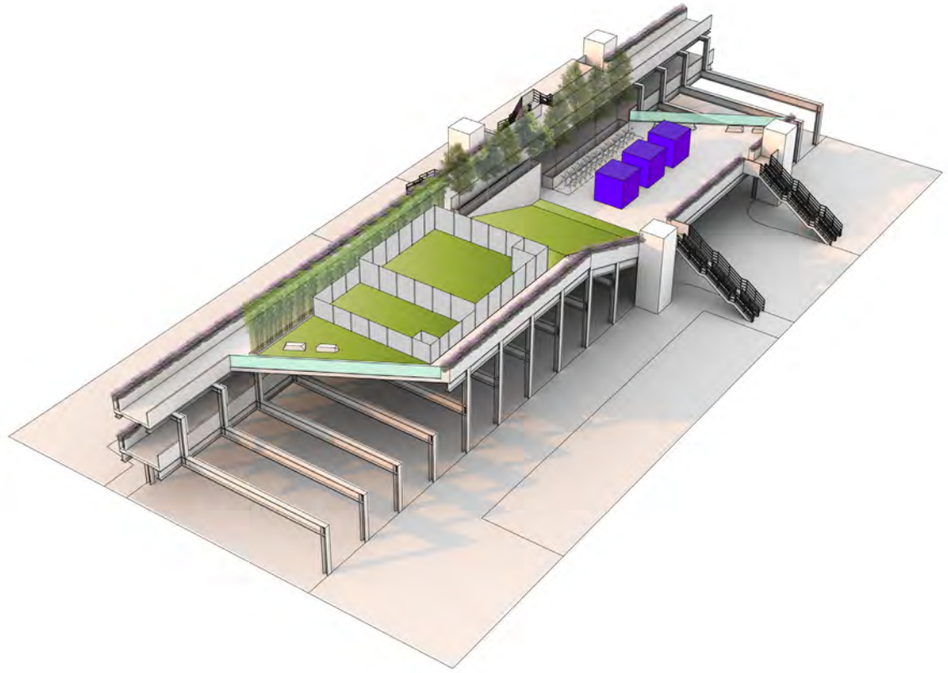
Parklet Map



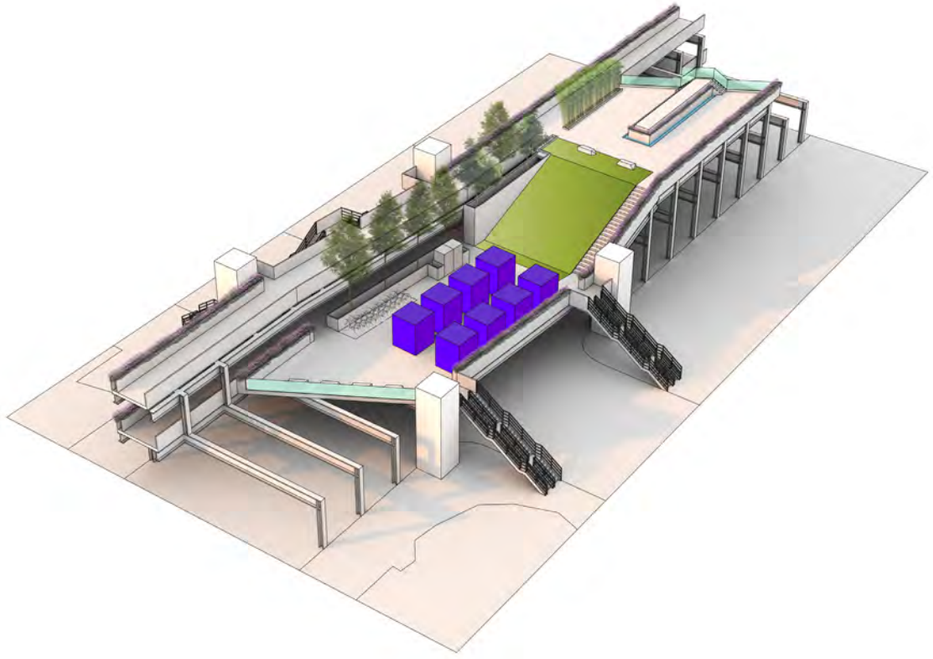
Parklet 1 5th Street



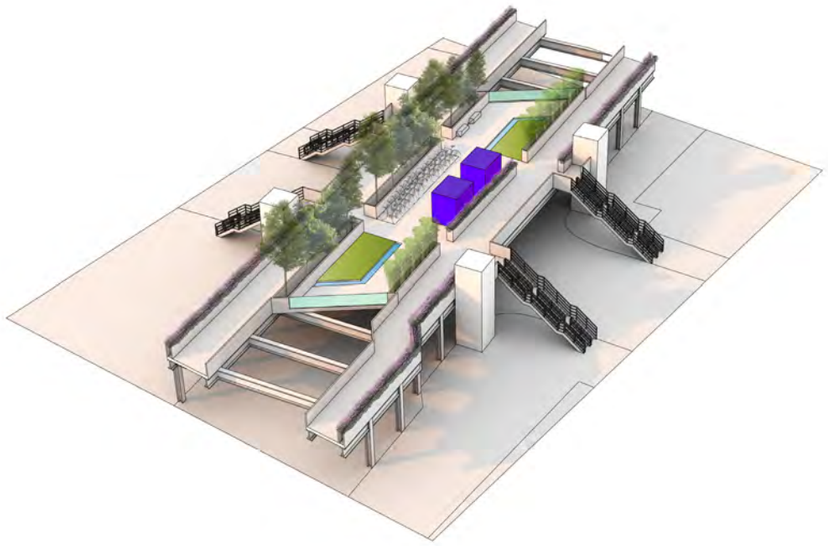
Parklet 2 6th Street



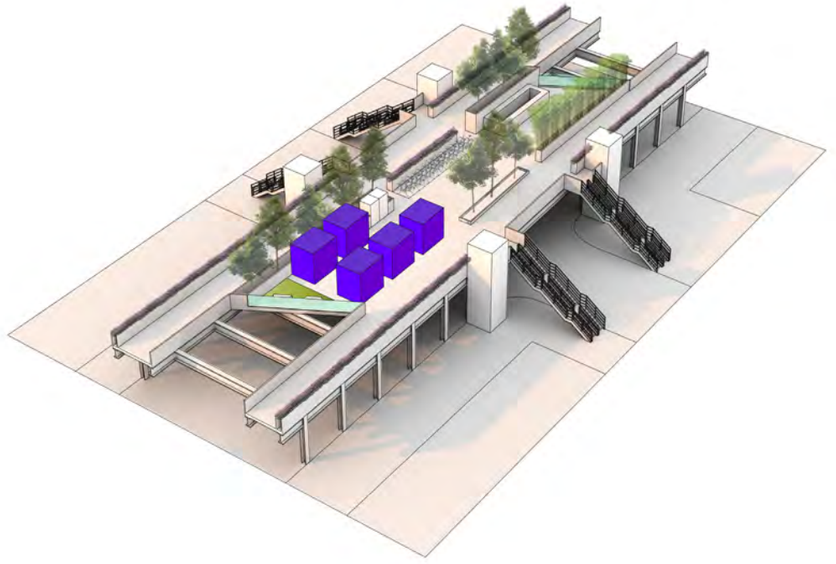
Parklet 5 11th Street



Parklet 4 9th Street

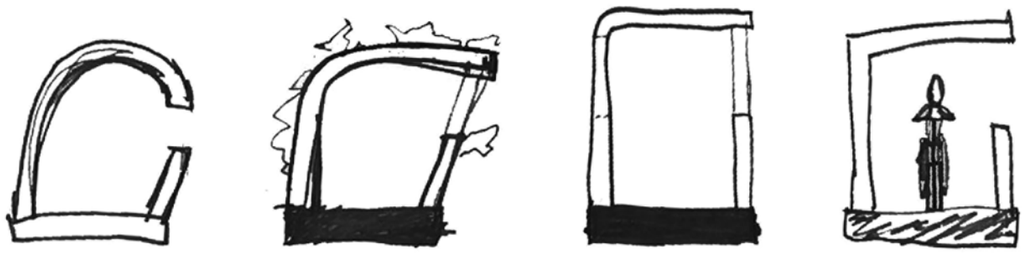


Parklet 6 15th Street

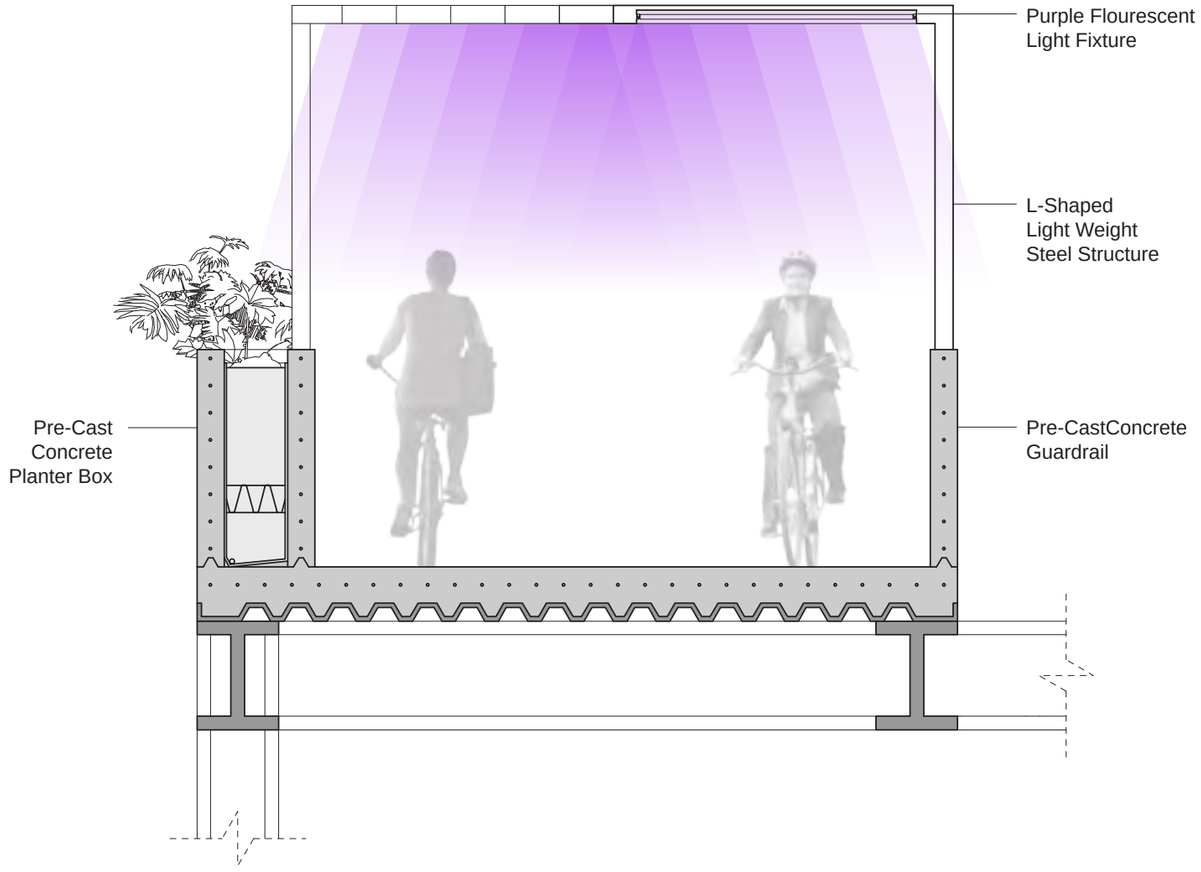


Parklet 3 7th Street

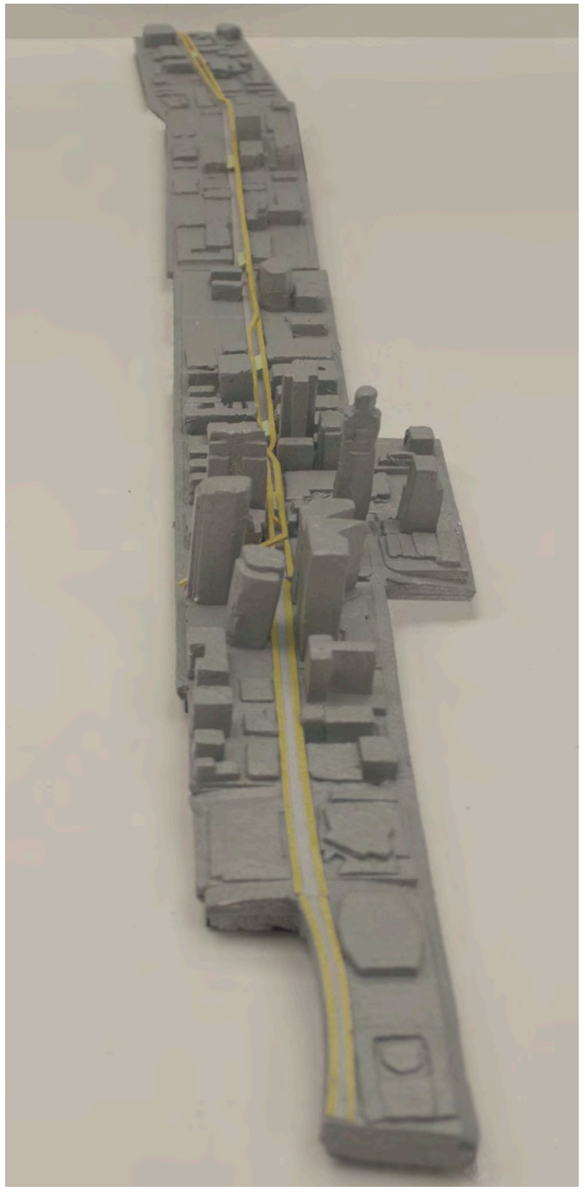
Pathway Enclosure Parti

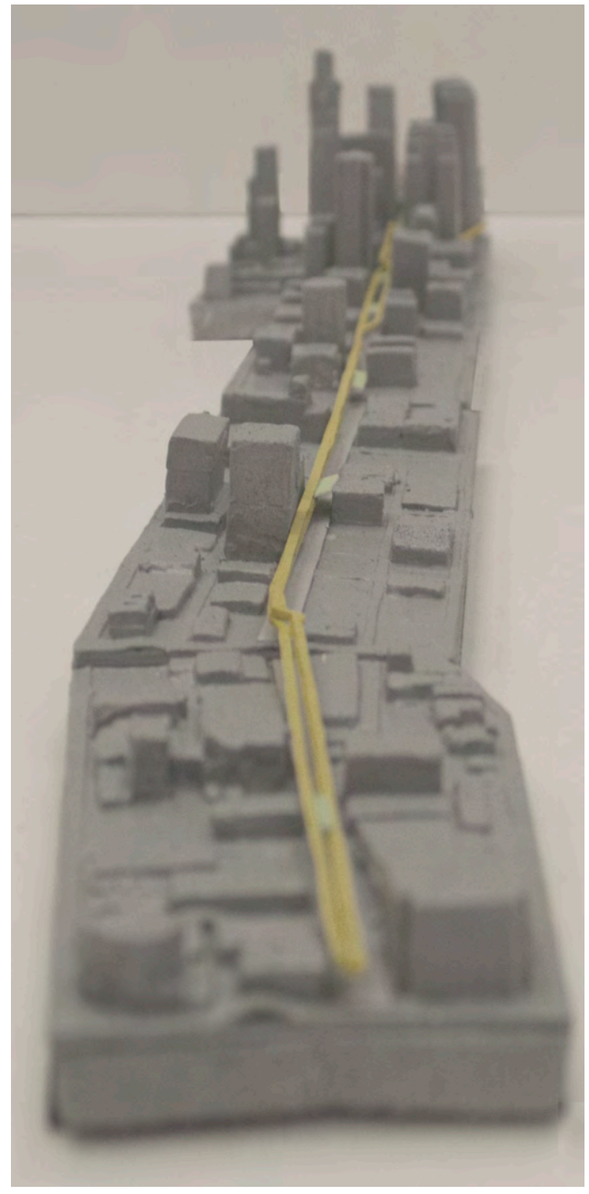


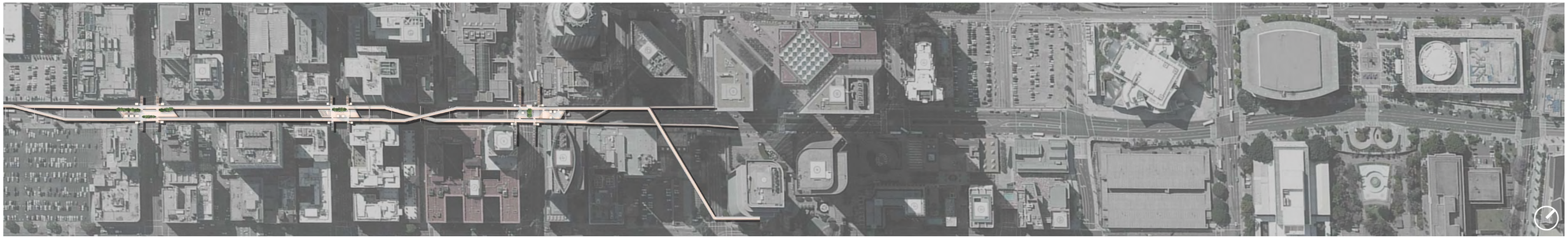
Canopy Evolution



Bicycle Pathway Detail Section & Lighting Strategy





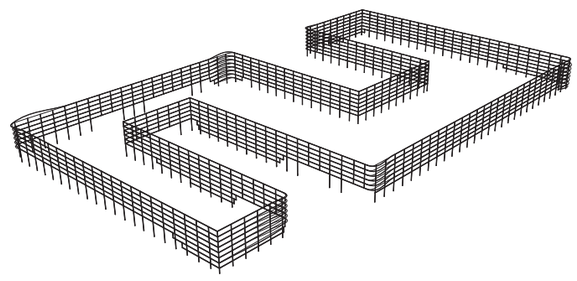


Transit Motel

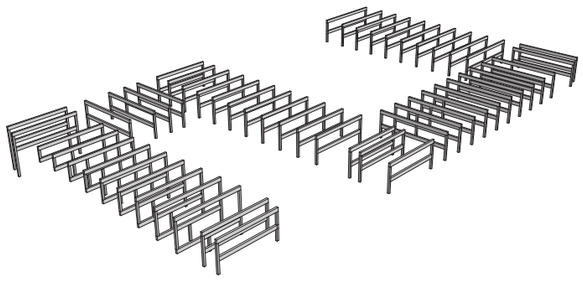
[Sub]urbanism: Bridging the In-Between

Located at 400 W. Cerritos Avenue, Glendale, California, the Glendale MetroLink/Amtrak Station serves as a catalyst for the developing suburban neighborhood. The form of the building is a “S” shape which developed through a series of models analyzing site circulation strategies. Constructed out of casted concrete, the entire building is wrapped in a secondary skin system of casted resin fastened to a steel structure. Mimicking a sponge, voids in the casted resin allow light to penetrate the space beyond. More than just a parking garage and a train station, the project includes a motel and a variety of commercial programs. Programmatic elements include the following:

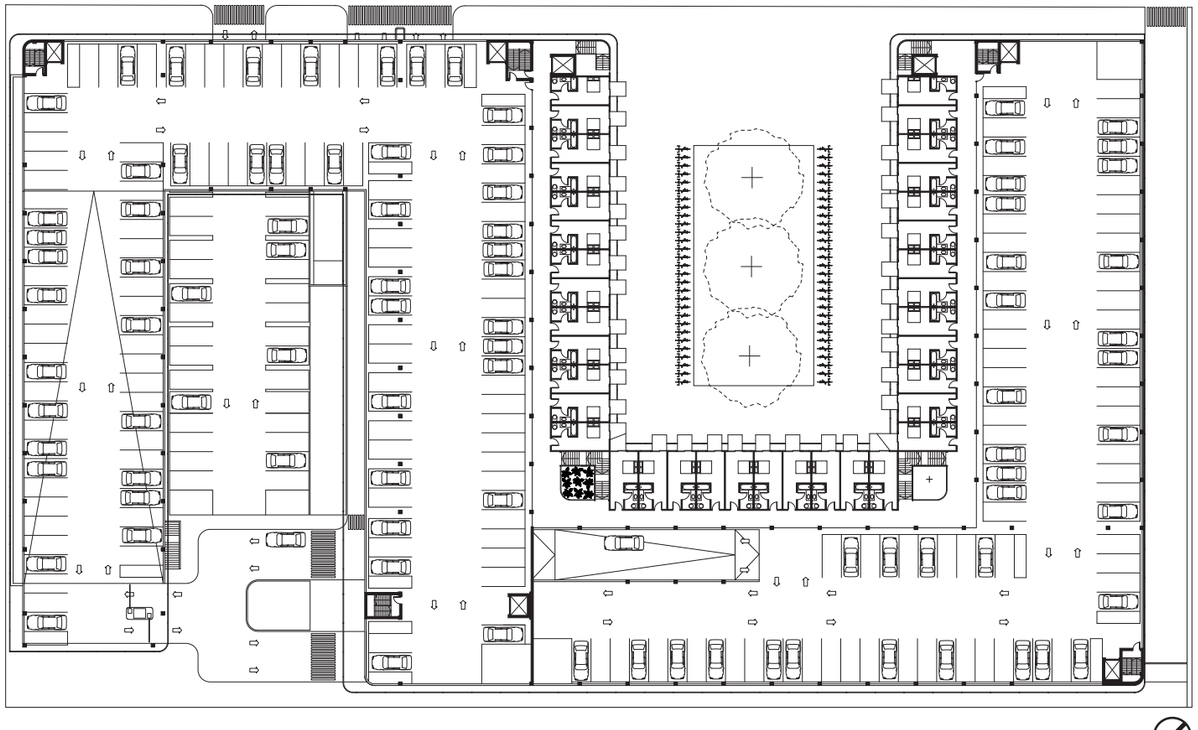
(Basement Level) 50 Rental Car Parking Spaces, 50 Rental Scooter Parking Spaces, 25 Administration Parking Spaces, Administrative Offices; (Ground Level) 30 Electric Recharge Station Spaces, 10 Zip Car Rental Spaces, Train Station, 2 Car Rentals, Scooter Rental, Bicycle Rental, Public Restrooms, Aquarium, Restaurant, Dry Cleaner, Convenience Store, Coffee Shop, Motel Lobby, Maids’ Quarters; (Second Level) 123 Short Term Parking Spaces, 86 Long Term Parking Spaces, 36 Motel Rooms.



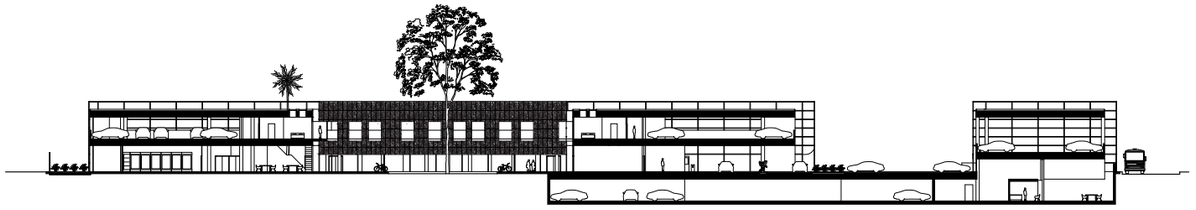
Skin Structure



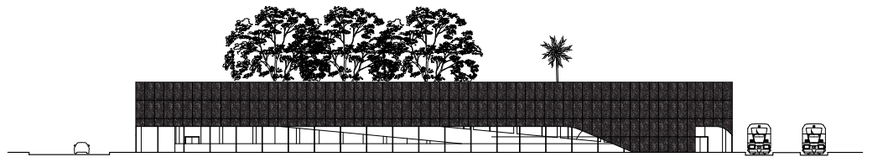
Columns + Beams



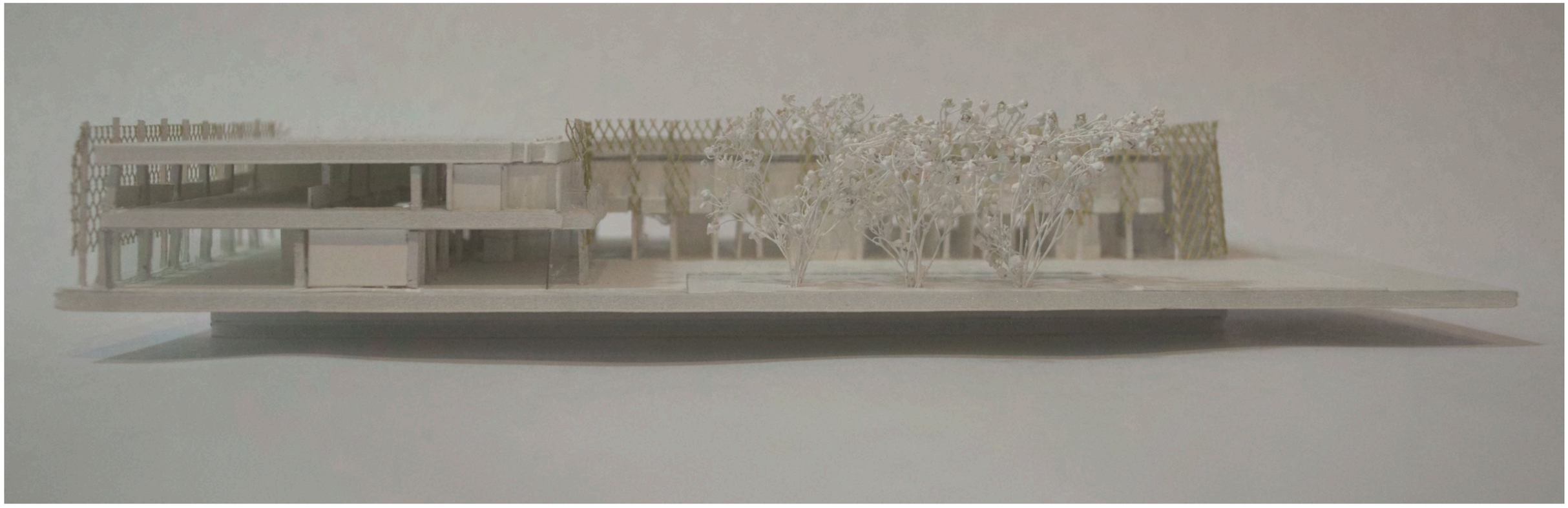
Second Floor Plan



Longitudinal Section



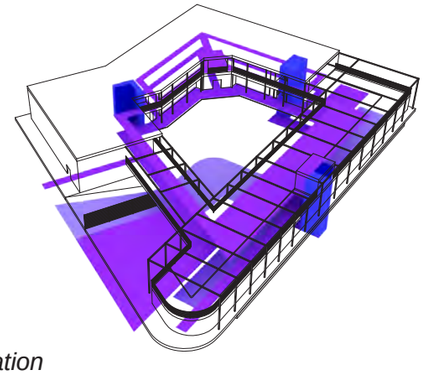
West Elevation



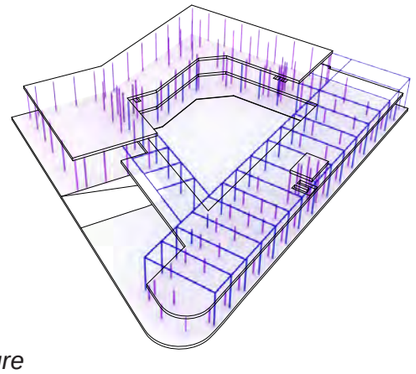
Courtyard Connections

Hybrid High School

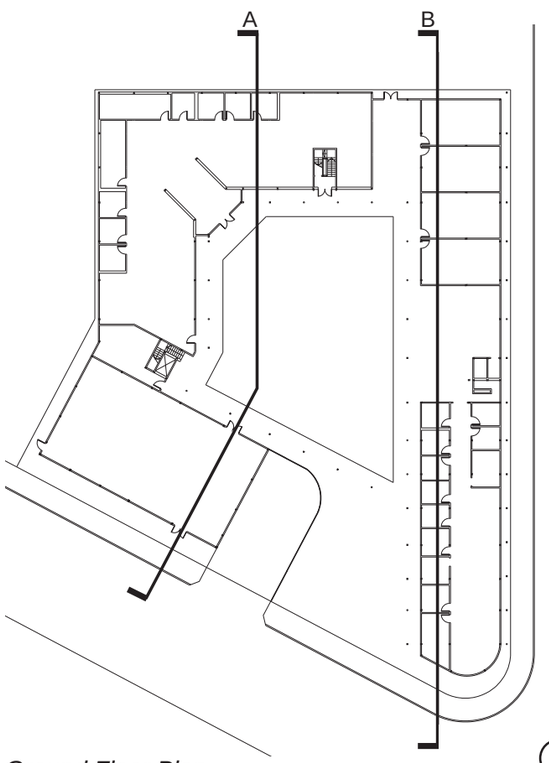
USC Hybrid High is a high school located on the corner of West Adams Boulevard and Hoover Street. Once a strip mall containing a Social Security Office and various small businesses, the project utilizes pre-existing structure to minimize construction costs. This school differs from the traditional style high school in that the curriculum allows for the students to attend class at their own convenience. Because of technological devices like iPads, students have little need for textbooks in this modern learning environment. The program consists of four learning labs (Math, Science, Language Arts, and Social Studies), Project Rooms, Group Work Rooms, Restrooms, Administrative Spaces, and a Multi-Purpose Space. The project is driven by a maximized interior courtyard. Entry for pedestrians and automobiles is from Adams Boulevard. A spacious rooftop garden on the eastern wing creates a visual connection to the neighboring Hoover Recreation Park. Louvers along the outer perimeter of windows decrease the solar heat gain. Also, an exposed gridded structure system adds aesthetic value to the building.



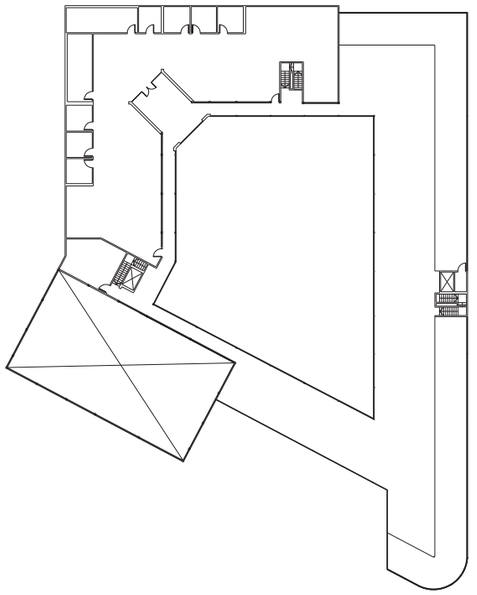
Circulation



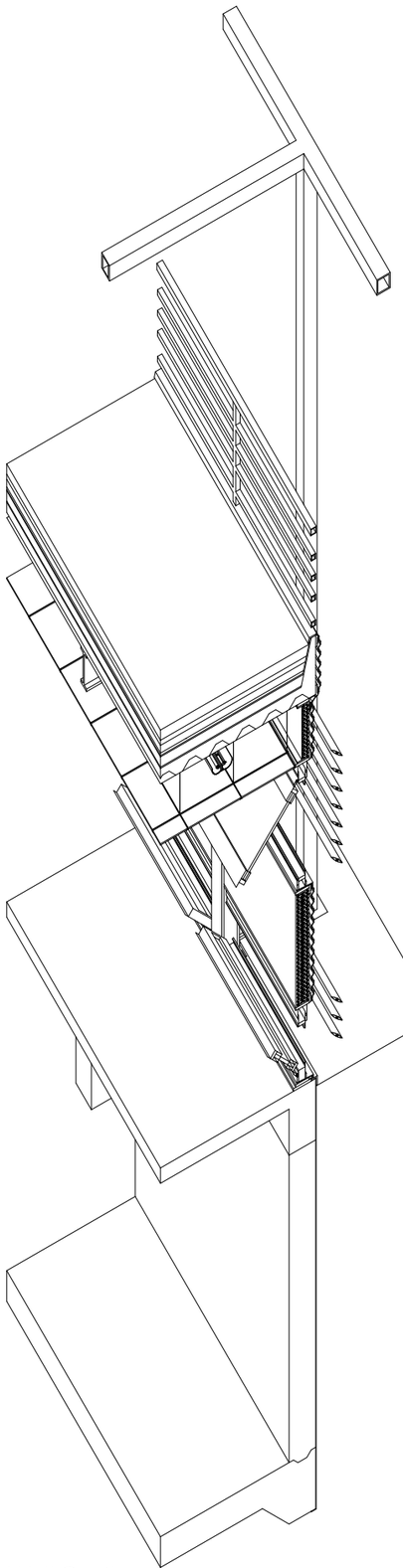
Structure



Ground Floor Plan



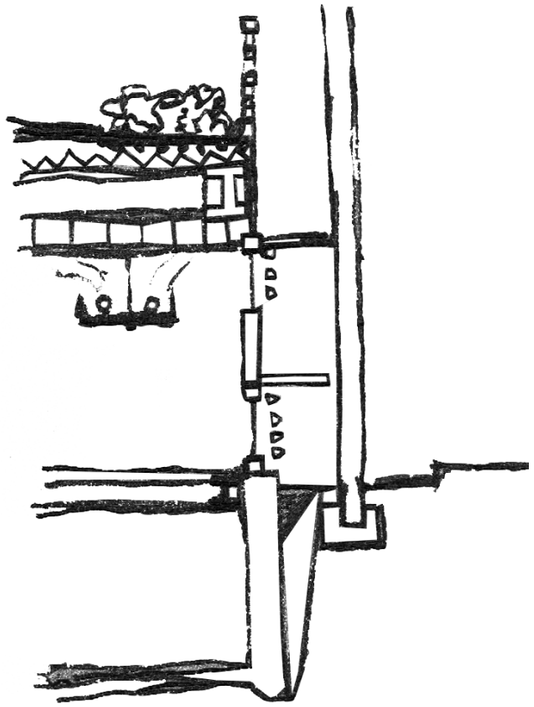
Second Floor Plan

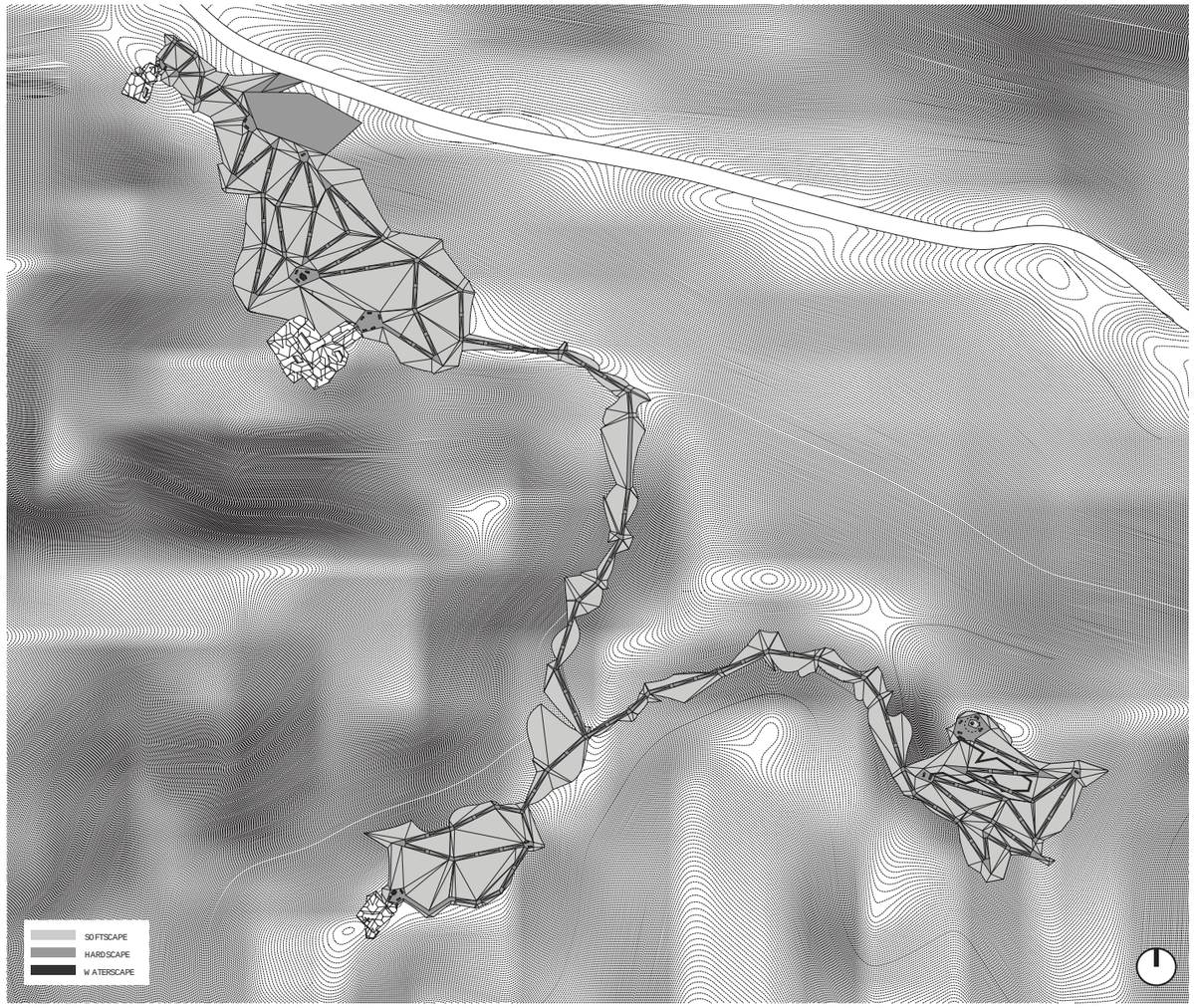


Detail Wall Section

Longitudinal Section A

Longitudinal Section B



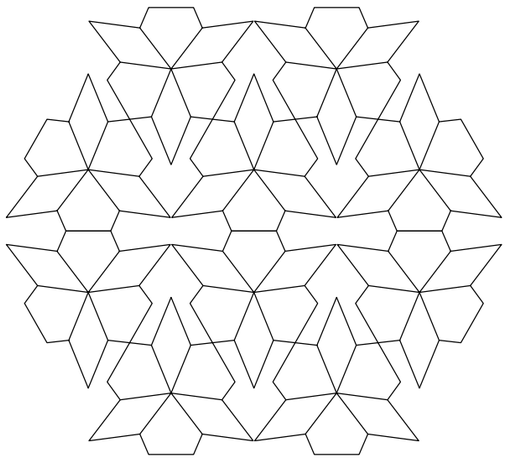


Site Plan

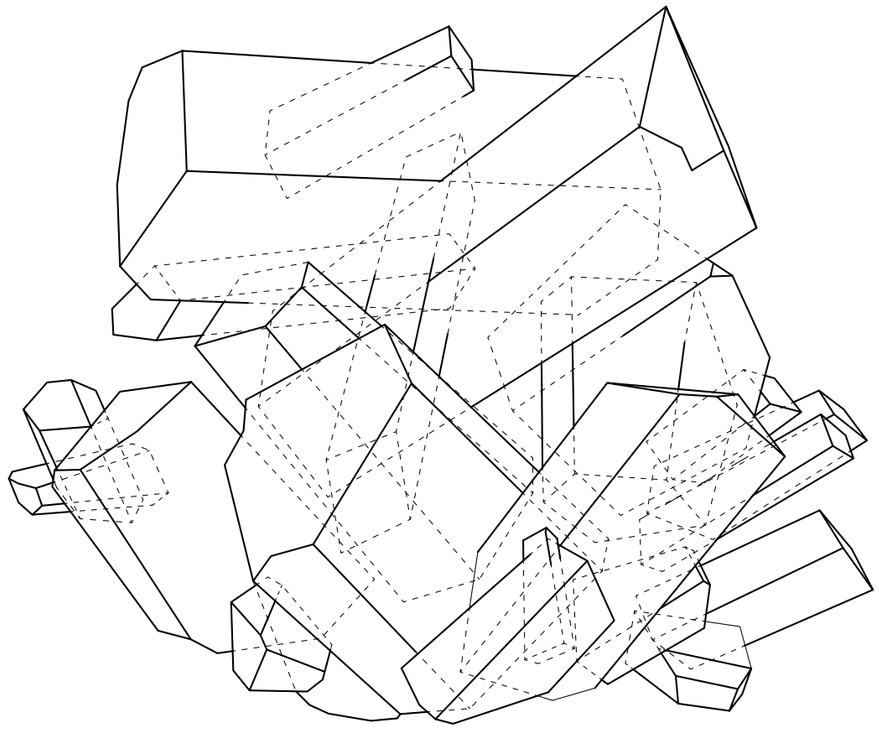
Eternal Crystals

Landform Building

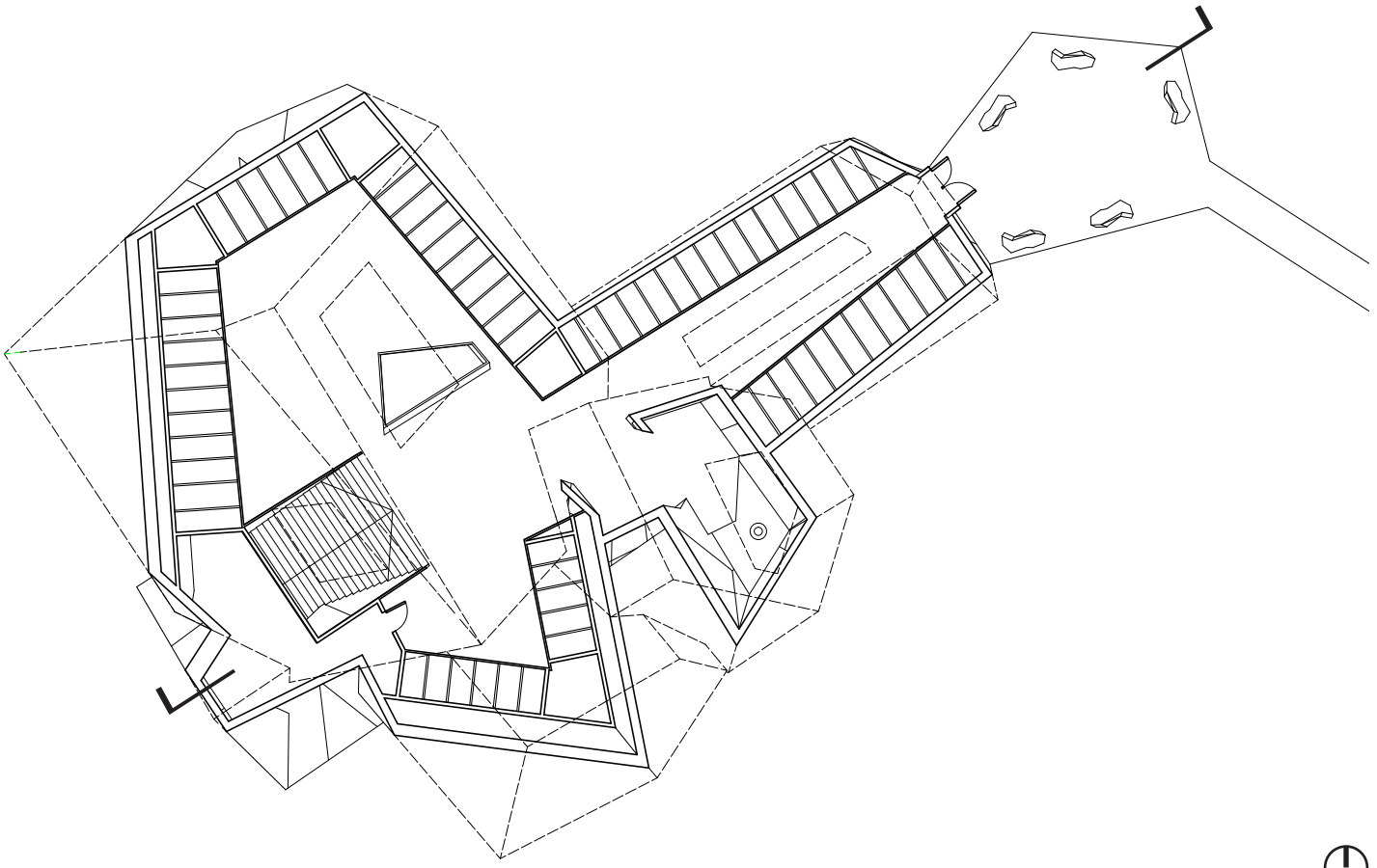
Eternal Crystals is a burial complex located on 250 acres in the coastline foothills of the Santa Monica Mountains in Malibu, California. The site consists of an administrative building, mausoleum, chapel, and outdoor reflection space. The project is conceptually influenced by the natural process of crystallization. Inspired by the mineral tincalconite, each building consists of several hexagonal “crystal” forms that intersect to create compelling interior spaces. Through studying the molecular structure of tincalconite a skin pattern was created for the concrete structure. The spaces are connected by jagged paths turning throughout the site. The long trails between the spaces provide mourners the opportunity to reflect on the journey of life while taking in the beautiful ocean and mountain views of Malibu.



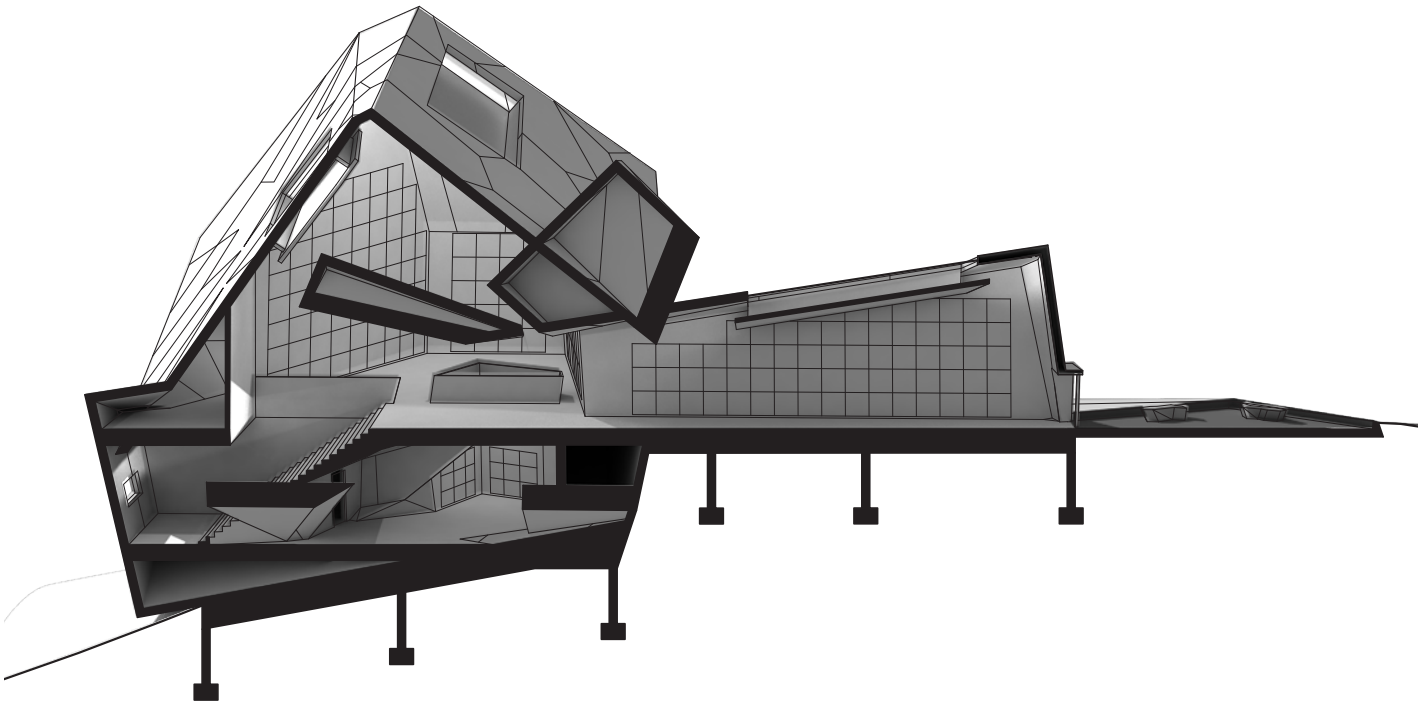
Tincalconite Molecular Pattern



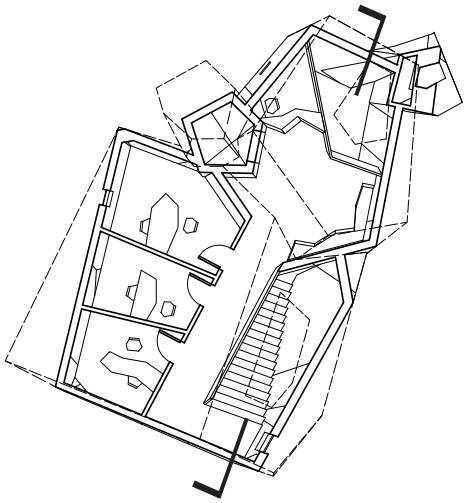
Tincalconite Intersecting Volumes



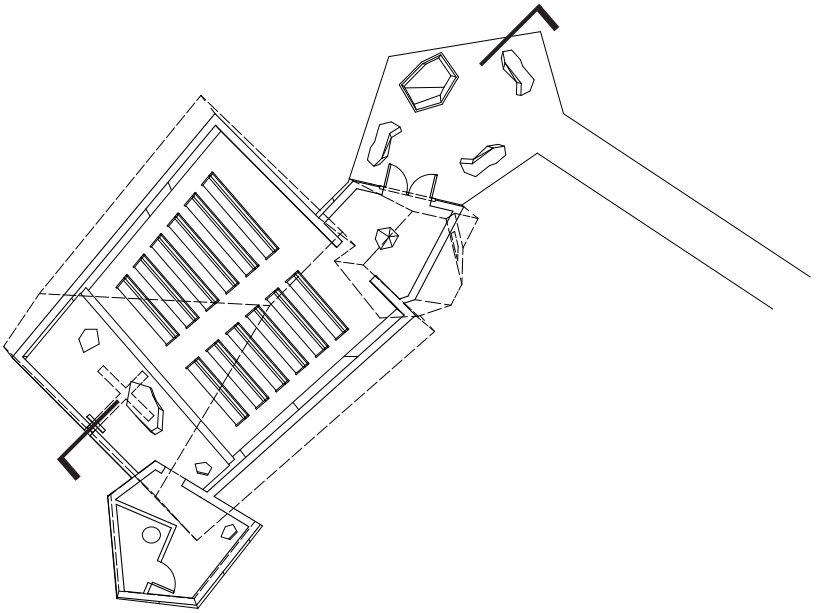
Mausoleum Ground Floor Plan



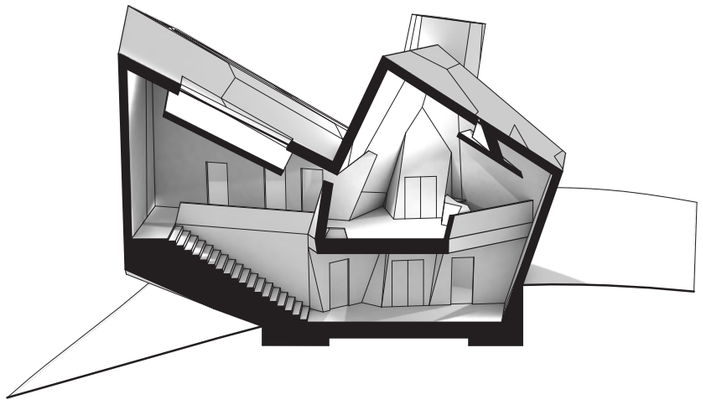
Mausoleum Longitudinal Section



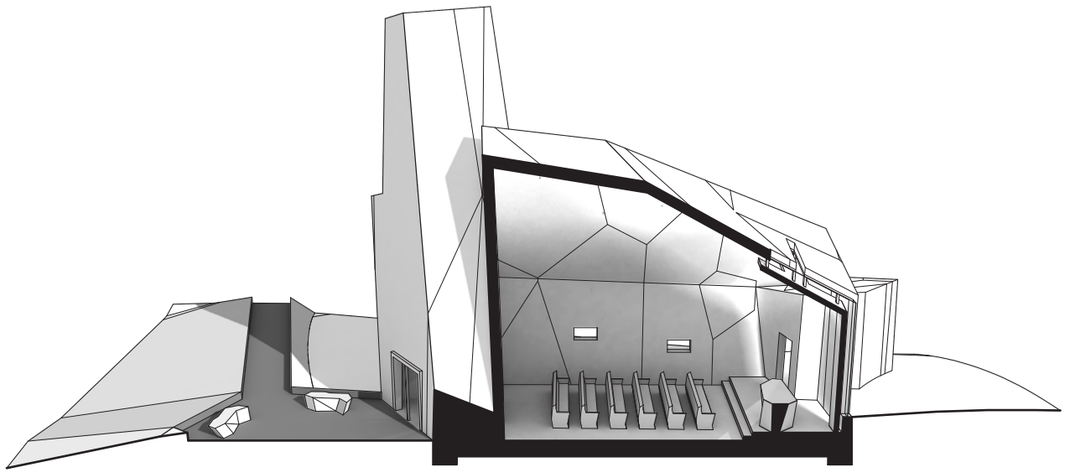
Administrative Second Floor Plan



Chapel Floor Plan



Administrative Longitudinal Section

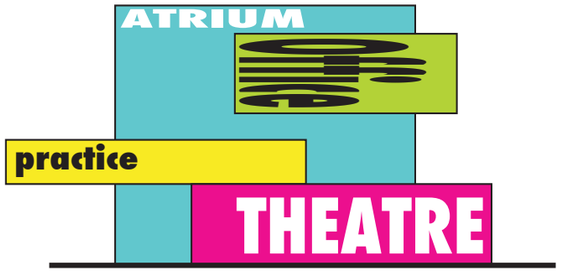


Chapel Longitudinal Section

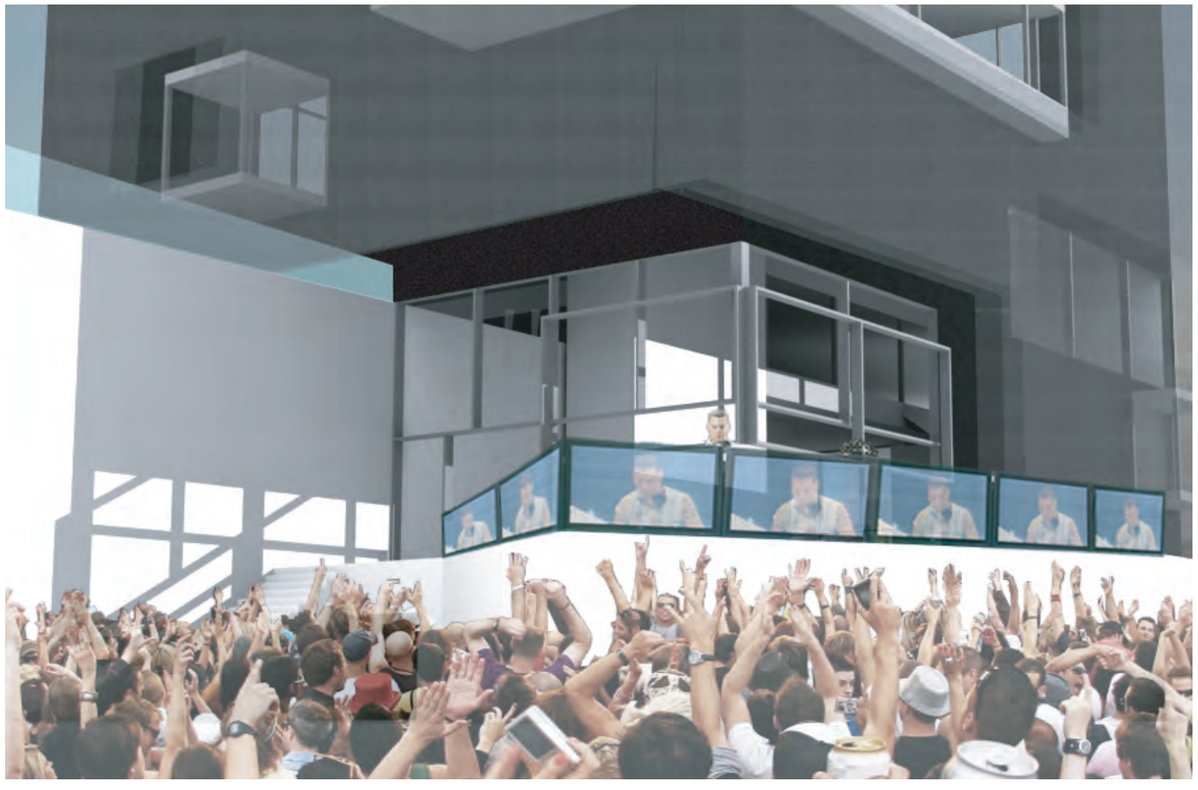
The Beat Box

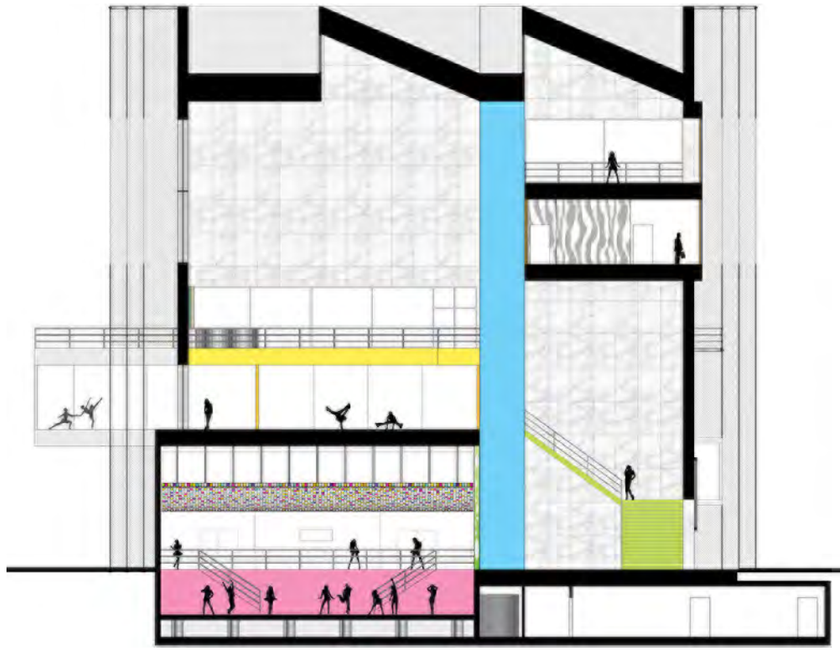
Lincoln Heights Music+Dance School

The Lincoln Heights Music and Dance School is an electronic music and ballet high school by week, and night club by weekend. Three shifting boxes contain the schooling program. A large multi-leveled mezzanine created by the negative space from the boxes functions as the night club. The ground level box consists of a performance theater with a hydraulic powered floor that can adjust from inclined auditorium seating to a flat standing floor. Located in the second box are the dance and music studios. The third box houses the administrative offices. Providing shelter for the mezzanine club, these program elements are enclosed within a large cube structure. There are also three outdoor spaces. An outdoor stage is located in the southwest corner of the cube structure. Also, an outdoor balcony is perched on top of the theater. Connected to the theater balcony via outdoor catwalk, the final outdoor space is located atop the roof of the studio spaces. The skin of the school building is comprised of three mesh layers, with cutouts for views to Downtown Los Angeles and the San Gabriel Mountains. By layering three walls of mesh in front of one another, an illusion that the mesh is morphing occurs as light reflects off the surfaces.



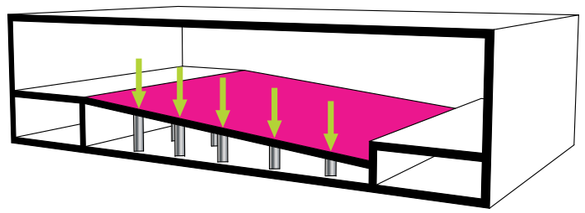
Program Concept

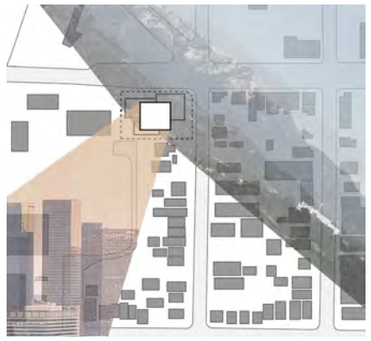




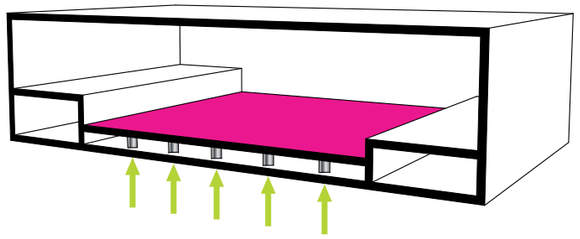
Transverse Section

Longitudinal Section

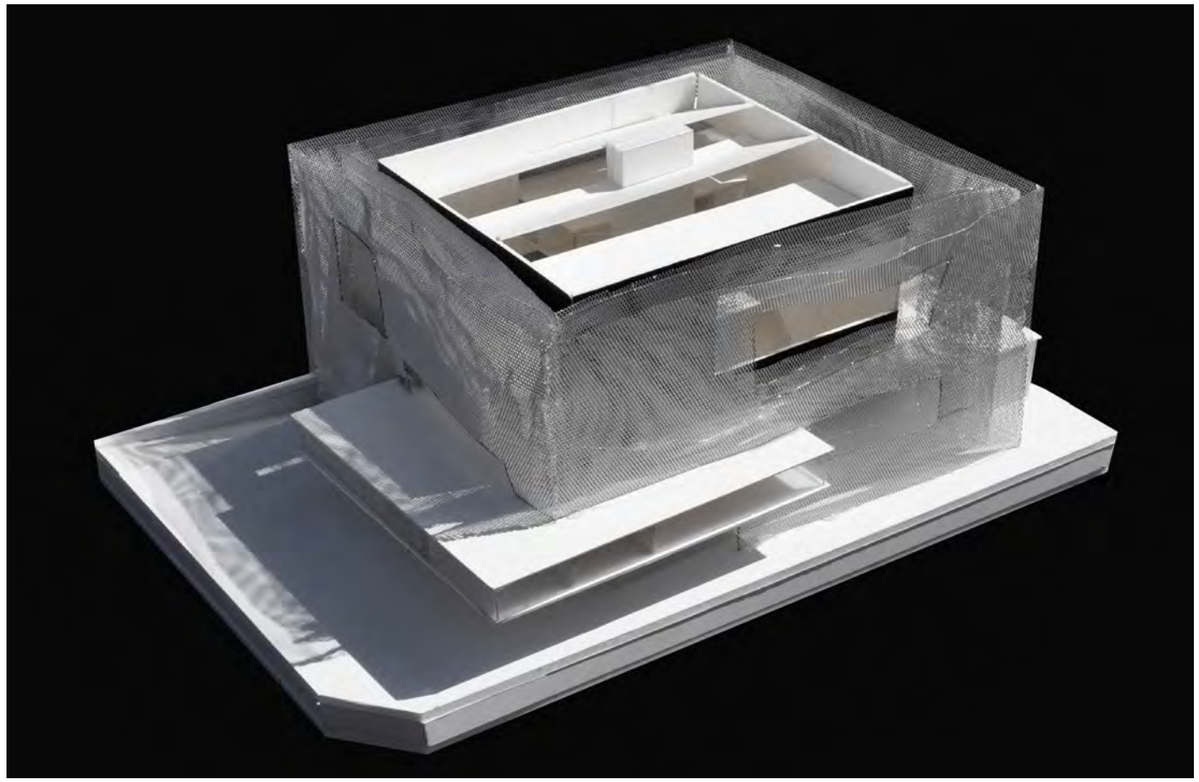




Views



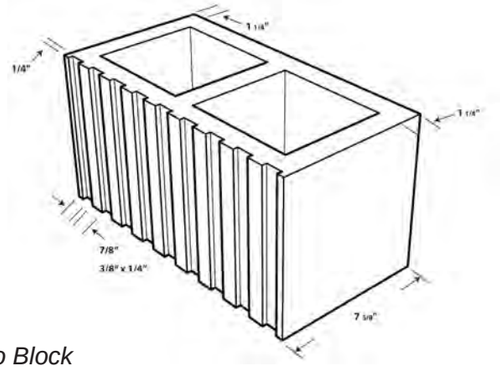
Hydraulic Theater Floor



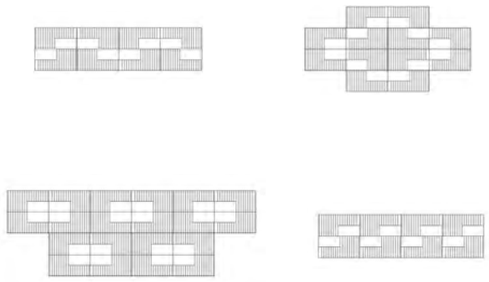
Lida+Lido Block

NCMA CMU Design

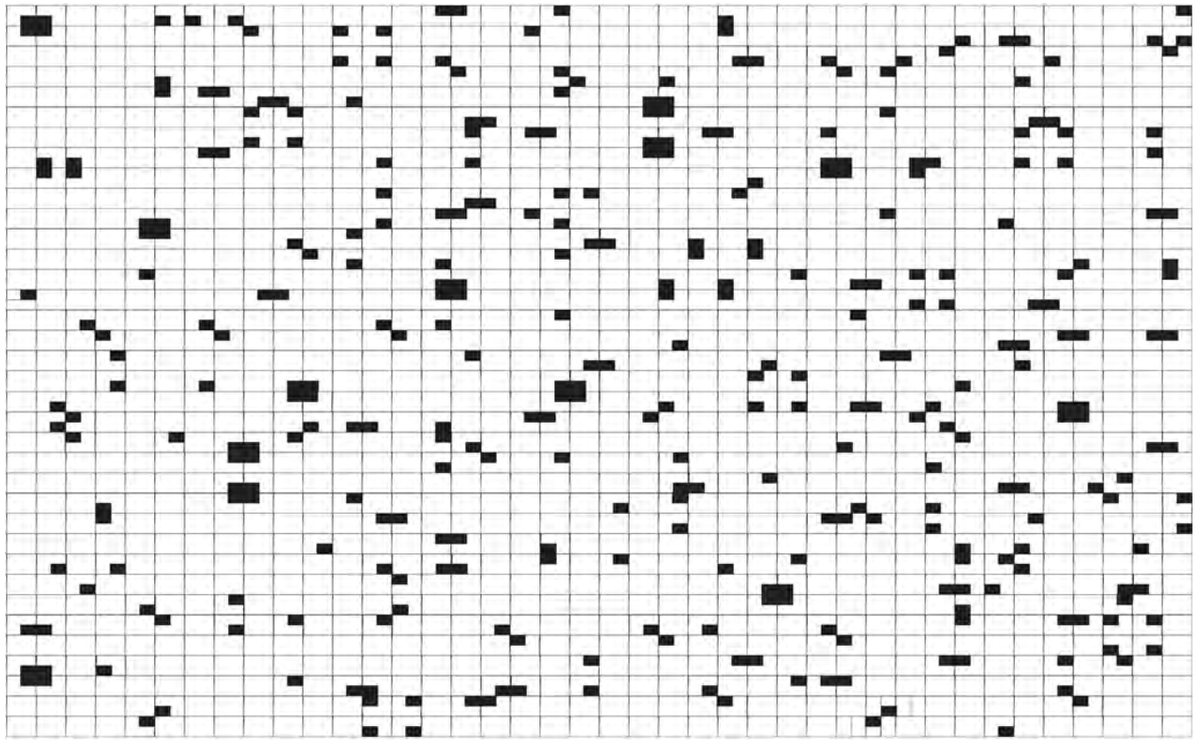
The Lida Block was designed to be integrated with ORCO Block Company's existing Lido Block. Both blocks are scored two sided in their respective patterns and have the same dimensions as a standard unit (8"x8"x16"). By combining the Lida Block with the Lido Block various aggregation patterns can be constructed. These blocks are ideal for creating a textured look on interior and exterior structural walls and landscape walls. The Lida Block design received second place in the National NCMA Unit Design Competition.



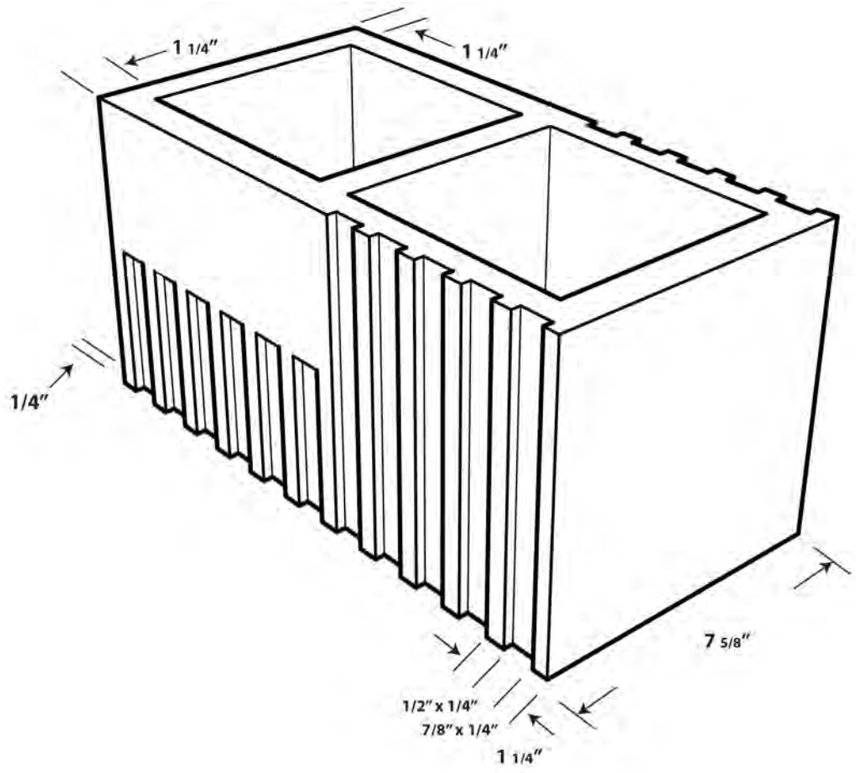
Lido Block



Lida Patterns

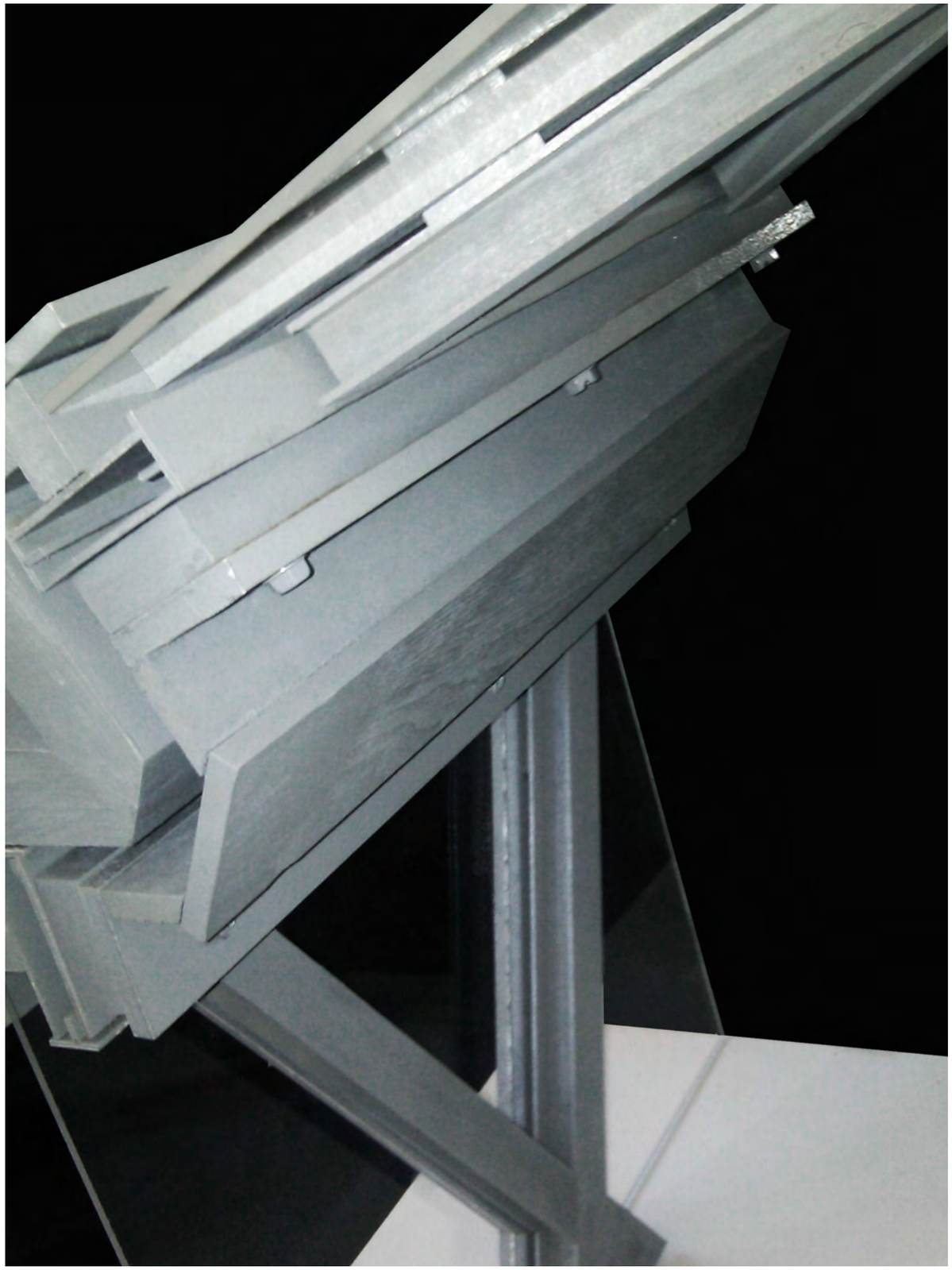


Concept Aggregation



Lida Block

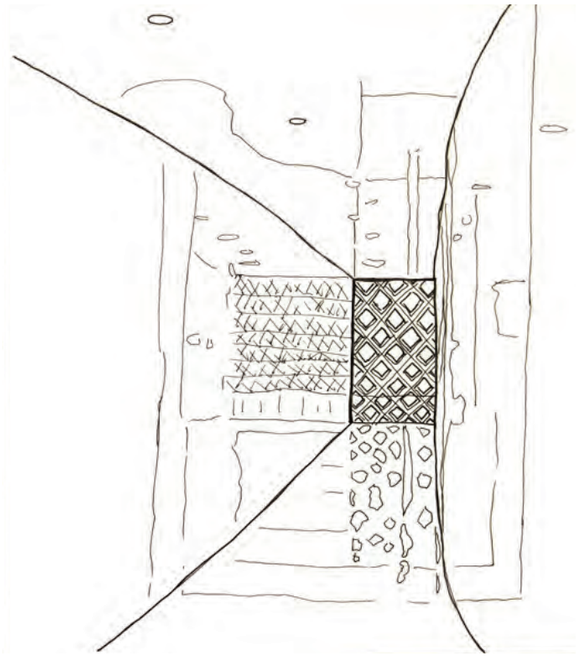
Prototype



Seattle Public Library

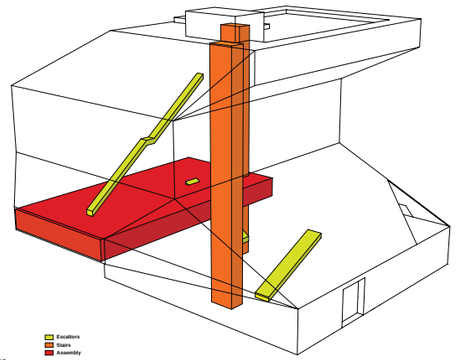
Precedential Tectonic Study

Through a precedential analysis of Rem Koolhaas's Seattle Public Library, a strong understanding of the structure, circulation, and program of the building was reached. The final outcome of the study was a detailed structural model of the metal-lattice skin structure. The model provides greater insight into the tectonics and construction methods used in building the unique skin system.

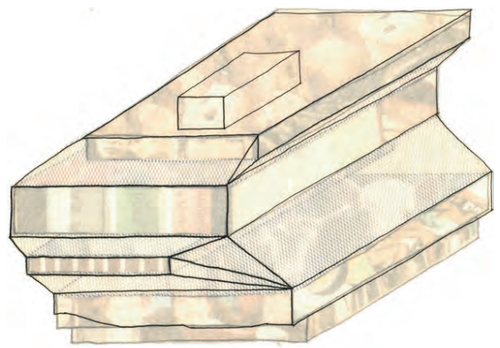


Interior Sketch

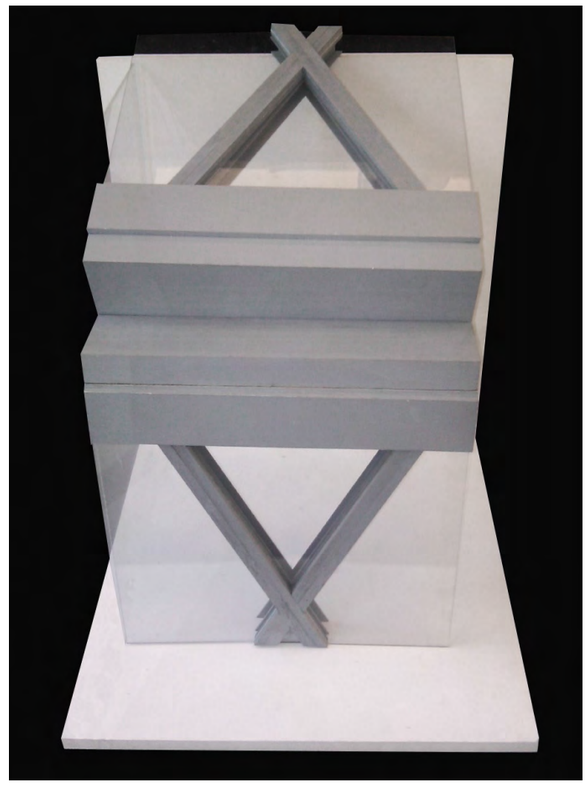
Structural Detail Sketch



Color



Program Collage

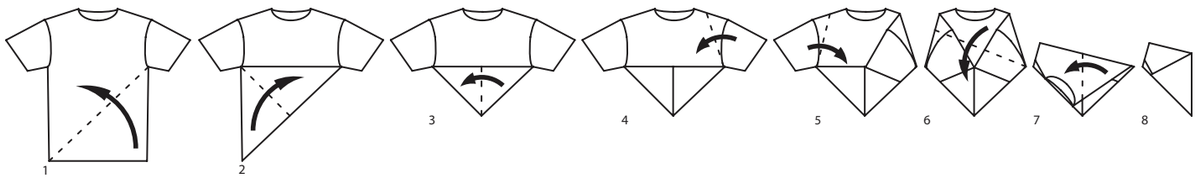


Melted + T-Unit

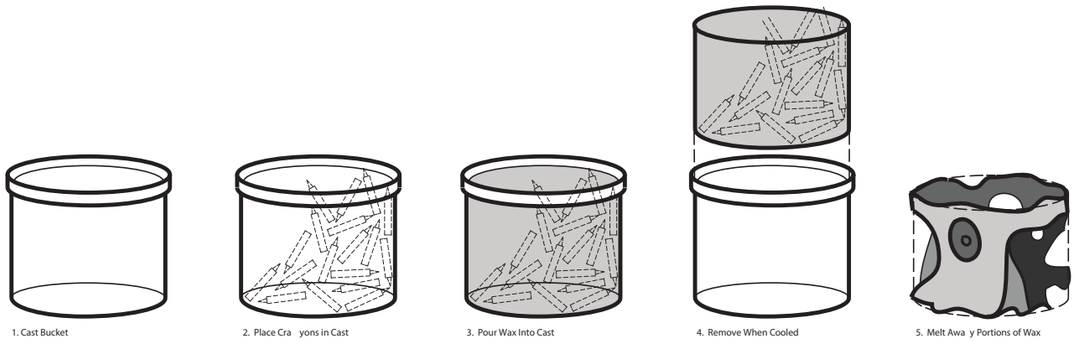
Casting + Unit Design

Melted is a casted form containing paraffin wax and crayons. First, a gallon bucket is used as the formwork. Next, approximately 100 crayons are placed in the bucket. When the melted transparent wax is poured on the crayons, the wax becomes brown as a result of the crayon colors bleeding and mixing. Finally, portions of the cooled-cast are torched away to expose and melt the crayons within the paraffin wax.

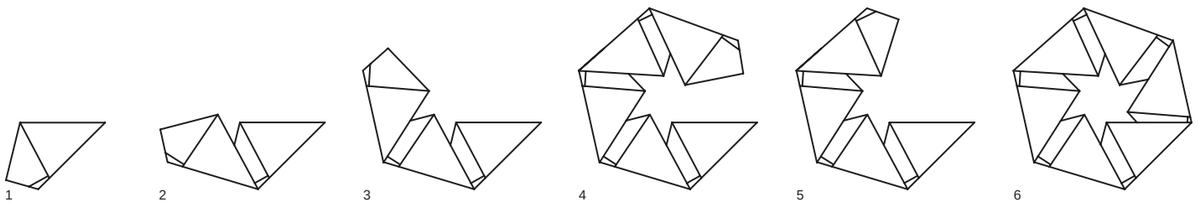
T-unit consists of six folded t-shirts pinned together to form a unit. By folding a t-shirt six times an interlocking base-unit is created. The final hexagonal unit is derived by interlocking six base-units. Although this prototype uses the same yellow shirt, various shades and colors may be used to create interesting gradients. The flexibility of the cloth allows the unit to conform to any surface-form. The unit can be tightly fastened or loosely draped.



Base Unit Process



Casting Process



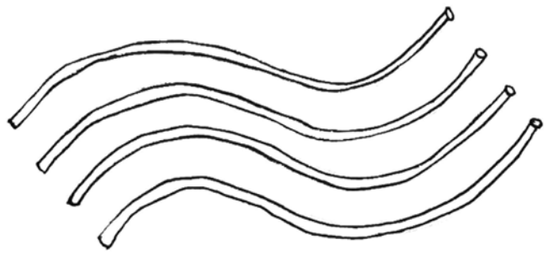
T-Unit Process

Paint Roller Bench

Unit Furniture Design

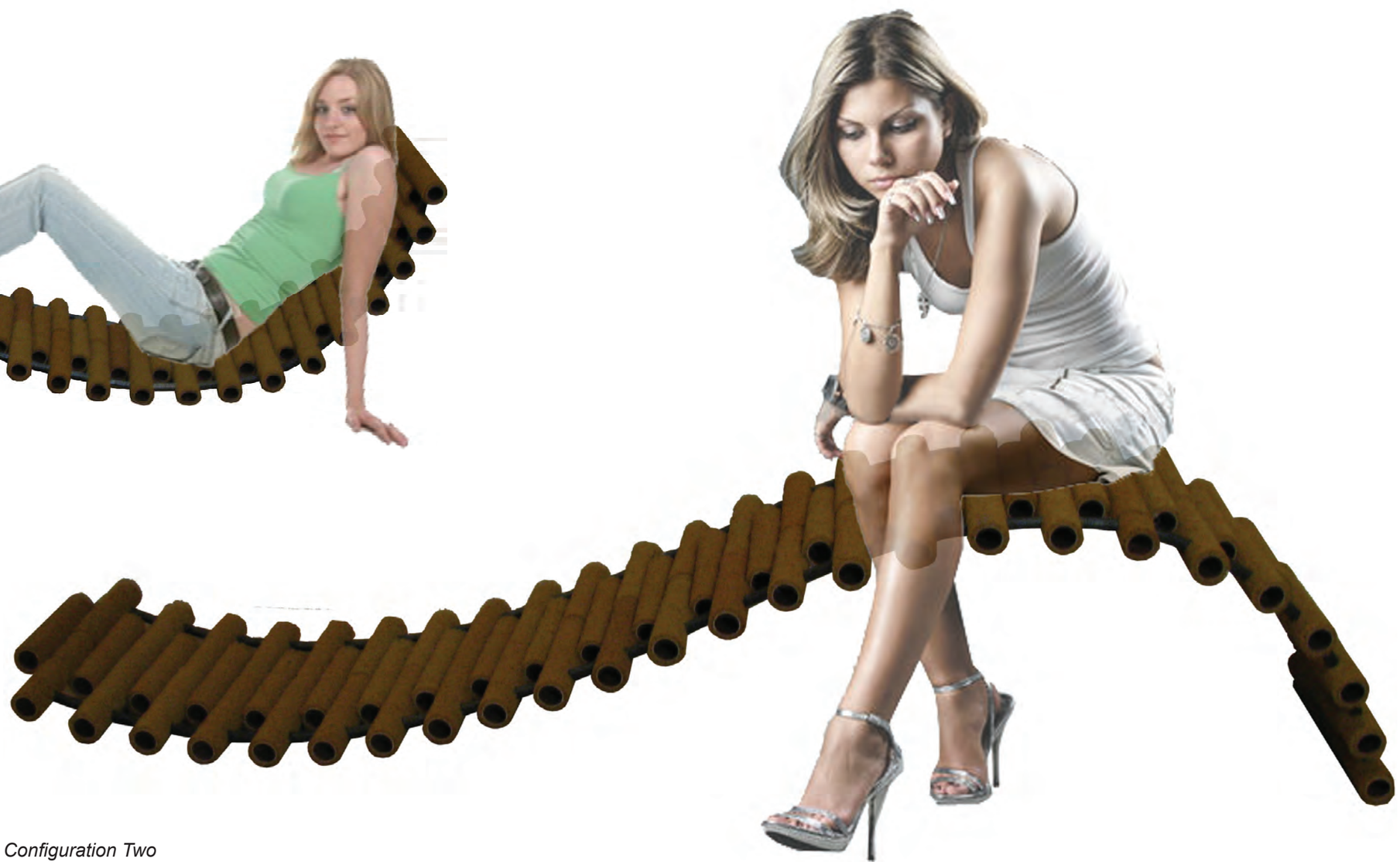
Paint Roller Bench may accommodate up to three people in the positions of sitting, standing, or reclining. Through material exploration, textured paint rollers were found to be desirable aesthetically and texturally as a unit. The form of the bench is inspired by the curve of the human spine, resulting in an orthopedically correct posture while reclining. Staggered in a two-one pattern, the paint rollers are held together with four hot-pressed structural steel spines. The two outer rods are momentarily exposed, while paint rollers completely conceal the inner two. The bench is double sided, capable of flipping for different seating configurations.

Unit



Structure

Configuration One

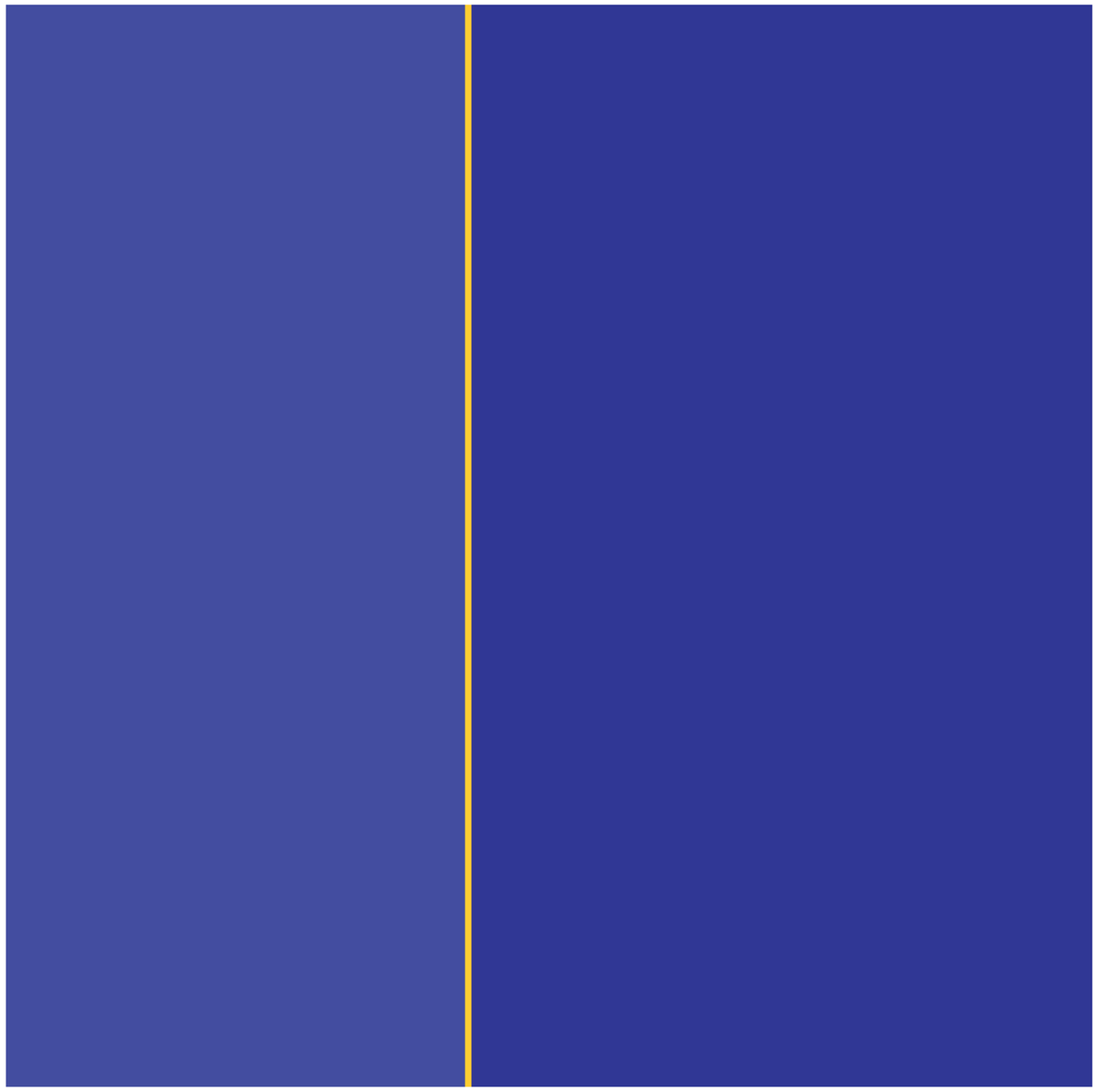


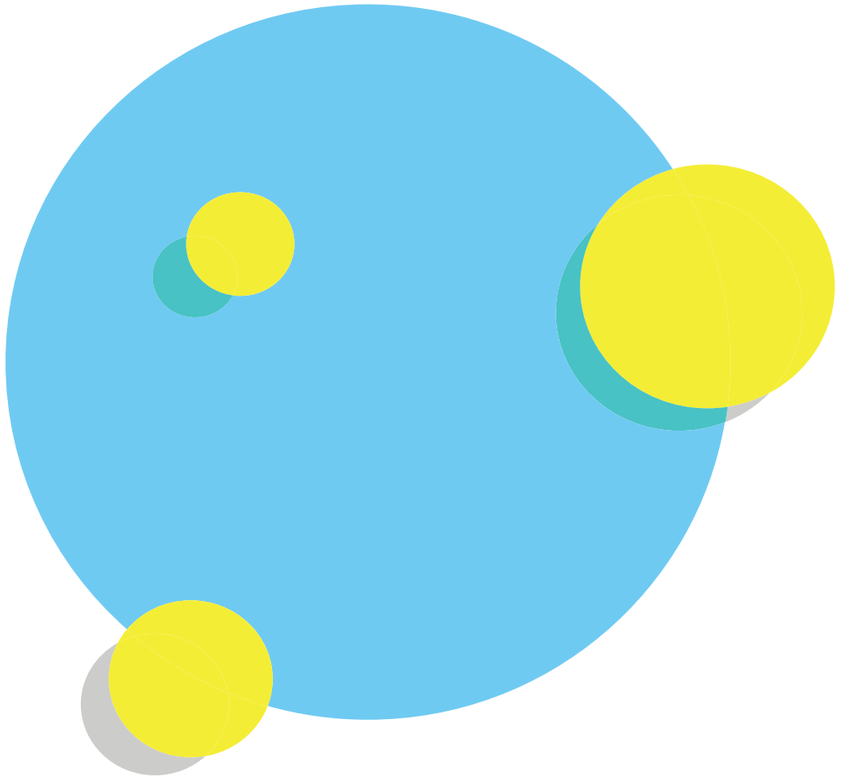
Configuration Two

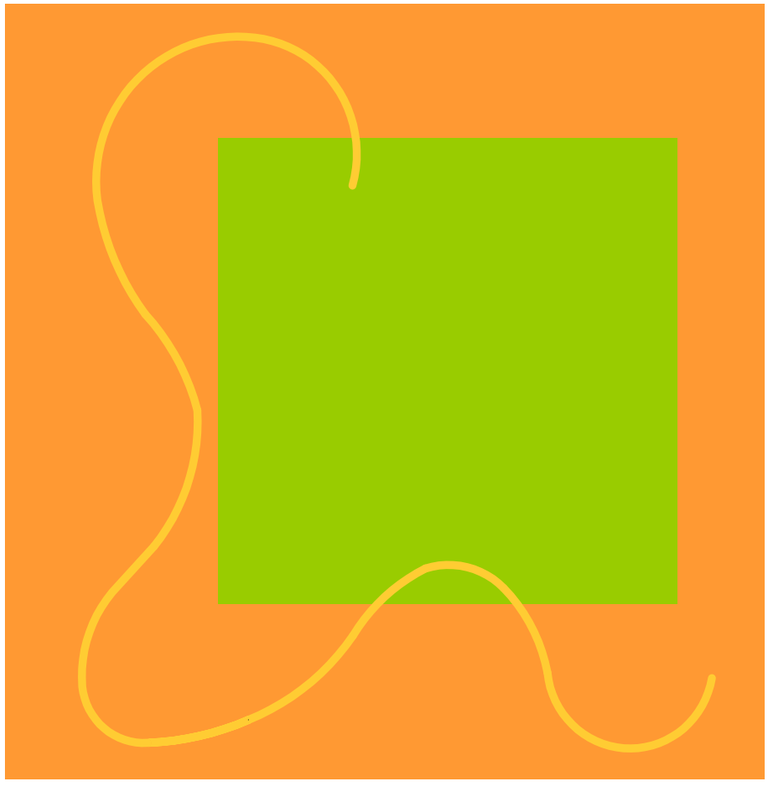
Verbal Graphics

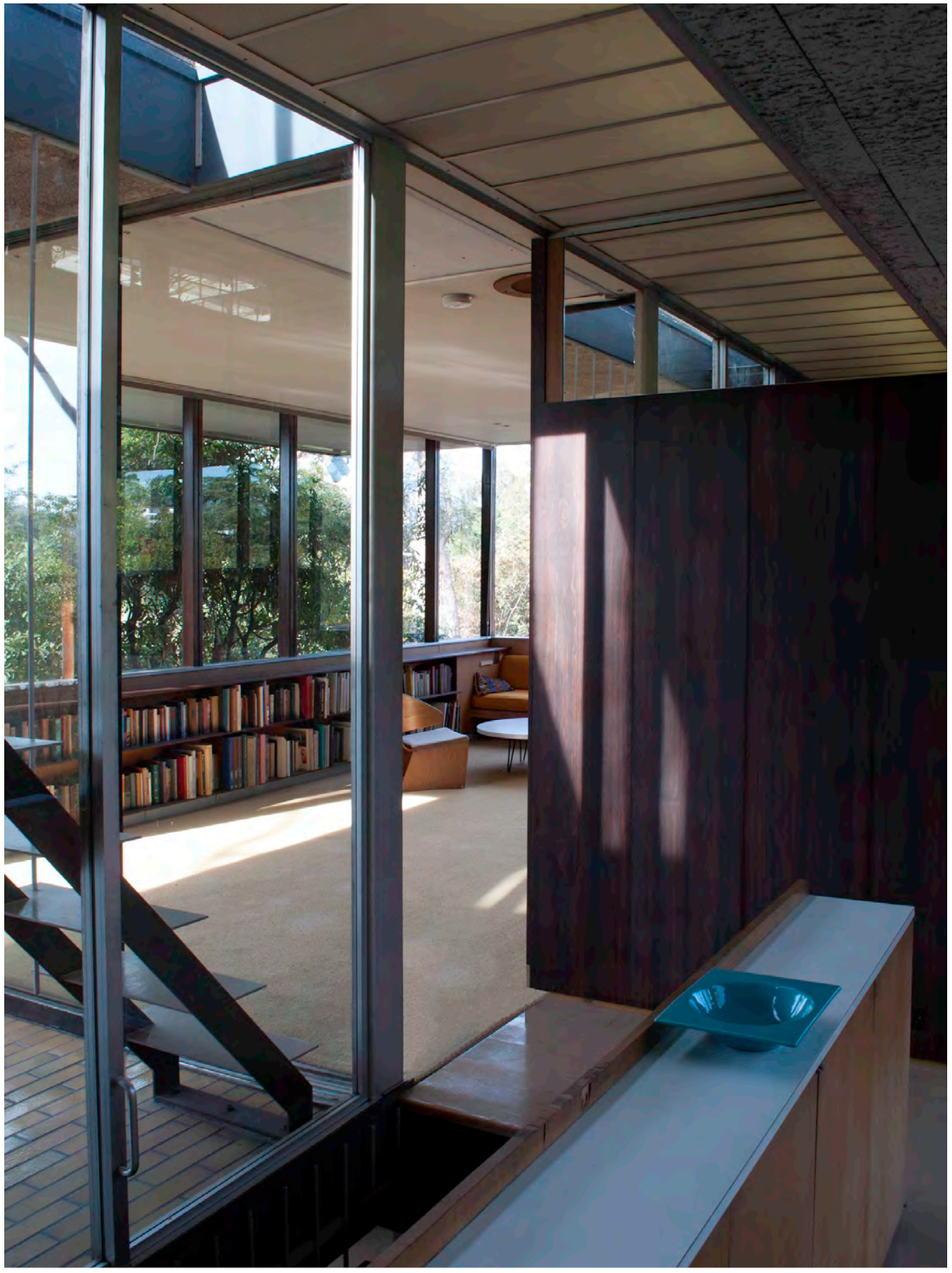
Graphic Design

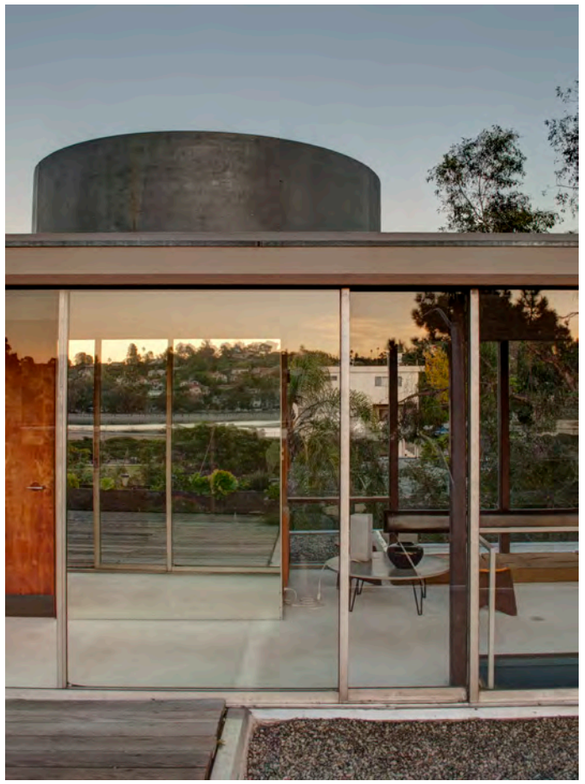
By using only color and shapes, these three graphic designs each represent a different action verb. The three verbs graphically defined are yearn (*lower left*), tickle (*lower right*), and float (*upper right*).











VDL II Research House

Architectural Photography

VDL (Van Der Leeuw) II Research House was designed by and for Richard Neutra in 1966. Photographs of the site were developed using Adobe Lightroom, Adobe Photoshop, and Photomatix Pro.

LA Metro-polis Map

Mapping Graphic

Diagraming the expansion of the LA Metro system, the maps shows the location of existing and planned metro stations. Several existing stations from each line and several planned Expo-Line stations where selected for urban analysis. Generating a radius vicinity map, residential and commercial programs were identified. In conclusion, the information begins to provide insight to the gentrification the neighborhoods surrounding planned stations will experience.