

ABSTRACT

Title of Thesis: VERTICAL PROMENADE | TRANSFORMING
BLOCK ISLAND'S COASTLINE

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2017

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Planning, and Preservation

The Mohegan Bluffs on Block Island's southern coast have been a main destination for tourist and residents. However, its inaccessibility prevents many from seeing and experiencing the views and nature that it has to offer. This thesis will attempt to solve the problem of accessibility and vertical experience on Block Island's coastline. It will address the question: can two different realms of the coastline, the top of a bluff and a beach 125 feet below, be connected in a meaningful way that creates a memorable experience along the descent? This design proposition will work fluidly with nature and integrate itself seemingly into the profile of the bluff, while incorporating sustainable design features to reduce the impact it has on its environment. This design will explore the idea of time and how architecture can begin to reveal the ecological history of the site. This design will incorporate art and exploration as an integral part of the vertical experience. It is no longer about the destination, but the sequence of events and spaces along the way that lead there.

VERTICAL PROMENADE | TRANSFORMING BLOCK ISLAND'S COASTLINE

By

Emily Katherine Latham

Thesis submitted to the Faculty of the Graduate School of the
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of the requirements for the degree of
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Chapter 1: Introduction

Problems

The Mohegan Bluffs, located on the southern edge of Block Island, Rhode Island is one of the most scenic places to visit in all New England. However, the beach is inaccessible to many due to the drastic topographic changes and the lack of accessible options. As the site exists currently, the only means of descending to the beach is a decrepit stair that does not meet code. This stair, stops about three quarters of the way down the bluff, and the remainder is a series of loose boulders that people are forced to traverse through. The site also presents a unique and challenging situation; the site is not active during seventy-five percent of the year. This design proposal needs to programmatically support this secluded atmosphere while also supporting a vibrant scene in the summer months.

Themes/ Goals

This thesis aims to improve the accessibility of Block Island's Coastline so that people with disabilities and health concerns can enjoy the views and the beach at the Mohegan Bluffs. By creating a path that integrates into the natural setting of the site, this design proposal offers visitors the opportunity to connect with nature and art. The vulnerability of the site to erosion means that there is immense opportunity to have the architecture expose this natural process and time, which can help to reveal the history of the site. Ultimately, the focus is less on the destination, and more about the journey connecting the two sacred realms of water and architecture.

Opportunities

This site has the opportunity to support an artist retreat that can be used in the off season, which can transform into an art education center during the summer. This architectural design proposal has opportunity to work fluidly within the landscape so that the poetic nature of the site is not to be disturbed. This thesis aims to connect people back to art at specific moments along this vertical promenade. The stream that flows through the center of the site has the opportunity to be captured at the top of the bluff and used in sustainable measures throughout the building, again enforcing the idea of connecting the architecture back to the natural elements of the site.

Chapter 2: Site

Block Island is an island located in the United States 13 miles off Rhode Island's southern coast. It is coextensive with the town of New Shoreham, which is the smallest town in the state of Rhode Island. Block island is known for being a tourist destination during the summer months, bringing its normal population of about 1000 residents to 15,000-20,000¹. Most the island is undeveloped, with 43% being preserved open space maintained by The Nature Conservatory and The Block Island Conservatory².

This thesis's site is located on the Mohegan Bluffs. These bluffs are located on the Southeastern coast of Block Island, about a half hour walk from the Downtown area of Old Harbor, and adjacent to the Southeast Lighthouse-- an important landmark on the island. The drastic topographic changes on the site provide a unique opportunity to design in section and to figure out a way to create a sequence of spaces that connect two different realms of the landscape.

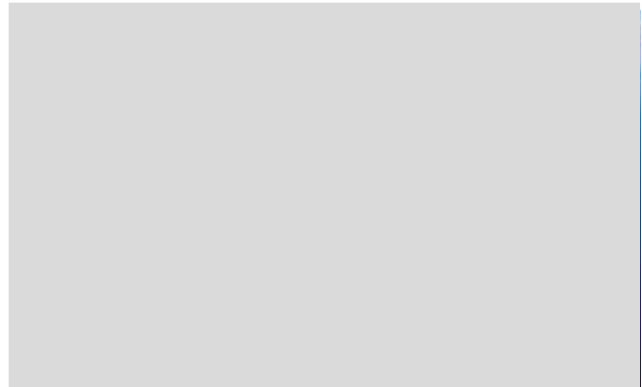


Figure 1: Aerial View of Block Island Looking Towards the Mainland (Source: Google)

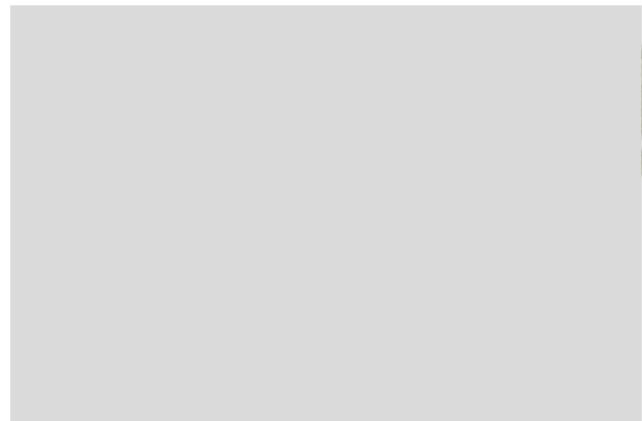


Figure 2: Geographical Location of Block Island in Relation to Mainland (Source: Google)

¹ "Block Island: People and Places." Block Island, RI. Accessed November 12, 2016.

² "Block Island." The Nature Conservancy. Accessed November 17, 2016.



Figure 3: Base Map of Site (Source: Author)

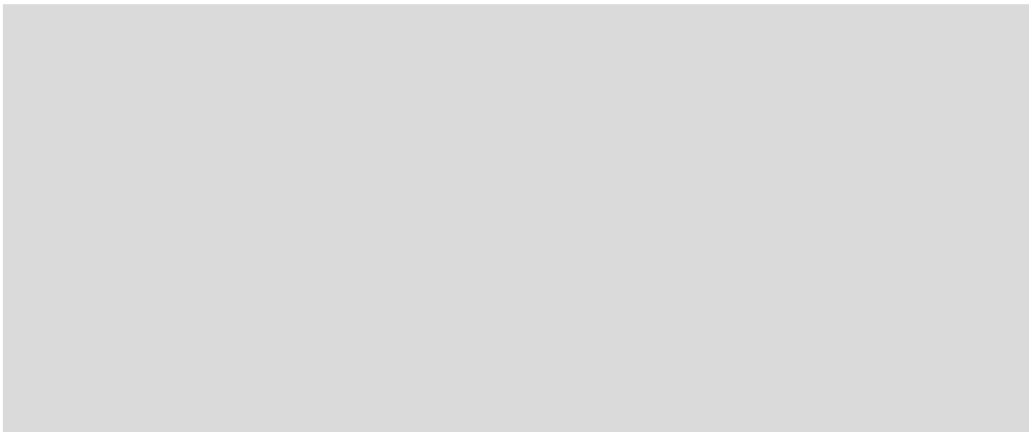


Figure 4: View of Site from Atlantic Ocean (Source: Google Earth)

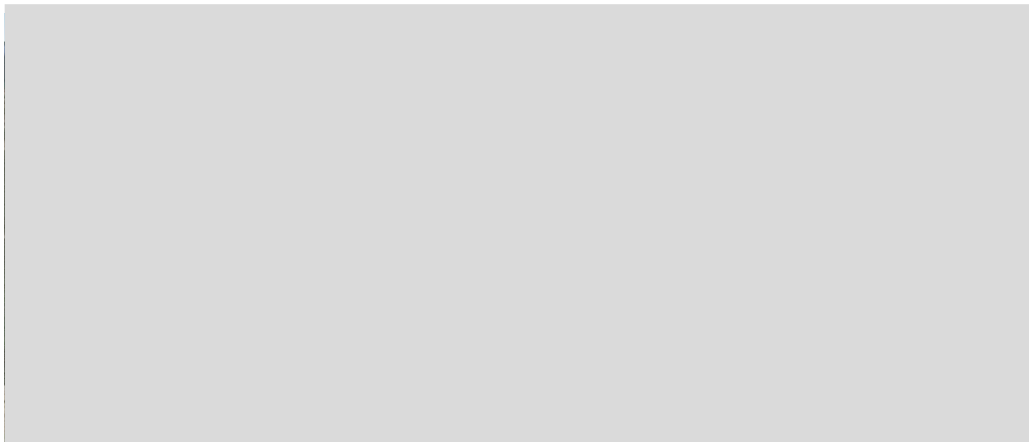


Figure 5: Birdseye View from Southwest (Source: Google Earth)

Cultural History

Evidence of human settlement on Block Island date as far back as 8000 BC and it is suggested that it was used as a permanent settlement since 500 AD, where it supported an initial 600 inhabitants³. Due to evidence found on the island, it is believed that the Narragansett Indians were likely the first inhabitants of the island. Their name for the island was “Manisses” which means Island of the Little God. The native tribe is sometimes referred to as the Manissean Indians because of the name that was given to the Island⁴.

In 1590, one of the most important battles on the island occurred. An invading party of the Mohegan Indians was confronted by the native people of Block Island on the southern edge of the island. They were ultimately driven over the bluffs by the native people leading to the naming of the site-- The Mohegan Bluffs-- the same site in which this thesis explores⁵. Finally, in 1614, the island was charted by Dutch explorer Adrian Block, who named the island Block Island, after himself⁶. The Mohegan Bluffs, the site of this thesis along with most of the island is now considered to be a native heritage site which is something to be considered in the design or programming of the building.

Natural History

³ "History | Block Island Historical Society." Block Island Historical Society. Accessed November 27, 2016.

⁴ "History." Block Island Tourism Council. Accessed November 27, 2016.

⁵ "History | Block Island Historical Society." Block Island Historical Society. Accessed November 27, 2016.

⁶ "History." Block Island Tourism Council. Accessed November 27, 2016.

Block island was formed by glaciers 10,000 years ago, making it a place of diverse geographical features and habitats. These habitats include “beaches, sand dunes, coastal bluffs, morainal grasslands, maritime scrubland, salt ponds, kettle hole ponds, and various other freshwater wetland ecosystems”⁷. Because of this wide variety of habitats and ecosystems, Block Island is known as one of the more “ecologically significant areas in the state and in the entire Northeast” region of the United States⁸. The island was once very heavily forested. However, in the eighteenth century, European settlers removed the trees to create farmland and to fuel the construction material. The natural history of the island has helped to define its character today and has made it a diverse place for many to explore and research. This idea of exploration and research is something that this thesis attempts to incorporate in the design as well as in the programmatic use of the space.

Topography

This thesis’s site is on the Mohegan Bluffs, located on the Southeastern coast of the island. In most locations, the bluff offers a very steep topographic change of about a 155-foot vertical drop. The location of the current stair, which is the only means of transitioning down from the top of the bluff to Corn Cove (the beach) below is in a natural wedge created by the constant erosion of the bluff. The architectural intervention will also sit in this “wedge” of topographic change, making it a more gradual transition downwards while also allowing for more programmatic space. By locating the building at the place of more gradual topographic change, the building can begin to work more

⁷ "Conservancy." Block Island Tourism Council. Accessed November 27, 2016.

⁸ "Conservancy." Block Island Tourism Council. Accessed November 27, 2016.

fluidly with nature and integrate itself into the bluff's profile. This also allows the architecture to be seen from Spring Street, giving it more of a presence, and drawing visitors towards the site and the project. The topography of the site presents both a challenge and opportunity for design. Fully understanding the elevation changes and how the topography helps to frame views can help to make decisions as to where this design proposition will be located on the site.

Geology

“Block Island formed like a dot of icing on the top of a geological layer cake. The island today is a small mass of gravel sitting above layers of clay and sand, all of which are piled on a basement complex of crystalline bedrock”⁹. This thesis's site reveals the power of “ice to deform and the ability of meltwater to dissect layers of sediment”¹⁰. Block Island is composed of loose glacial deposits and a small amount of other unconsolidated or weakly consolidated and sedimentary rock¹¹. Figure 7 shows the basic geological makeup of the island. Seismic refraction studies detected a bedrock surface about 1,150 feet below sea level, which was interpreted to be igneous or metamorphic rock¹². The lack of bedrock will present a challenging problem when figuring out how this design proposition will be structurally anchored into the bluff. Above this layer of bedrock lies Cretaceous sediment rock. This zone is about 650-800

⁹ Sirkin, Leslie A. *Block Island Geology: History, Processes, and Field Excursions*. 5. Watch Hill, RI: Book & Tackle Shop, 1994.

¹⁰ Sirkin, Leslie A. *Block Island Geology: History, Processes, and Field Excursions*. 43. Watch Hill, RI: Book & Tackle Shop, 1994

¹¹ Paton, Peter W., Lisa Gould, Peter August, and Alexander Frost. *The Ecology of Block Island: Proceedings of the Rhode Island Natural History Survey Conference, October 28, 2000*. 13. Kingston, RI: Rhode Island Natural History Survey, 2002.

¹² Paton, Peter W., Lisa Gould, Peter August, and Alexander Frost. *The Ecology of Block Island: Proceedings of the Rhode Island Natural History Survey Conference, October 28, 2000*. 20. Kingston, RI: Rhode Island Natural History Survey, 2002.

feet thick and consists of partially cemented sandstone and conglomerate, and very compact clay and silt. The top of this layer sits about 165 feet below sea level¹³. The lower moraine zone, or lower drift sheet, is about 200 feet thick and sits on the Cretaceous sedimentary sequence. This layer is generally below sea level on the southern part of the island, and it is “composed of glacially transported slabs and blocks of folded and faulted Cretaceous and pre-late Wisconsinan glacial sediment”¹⁴.

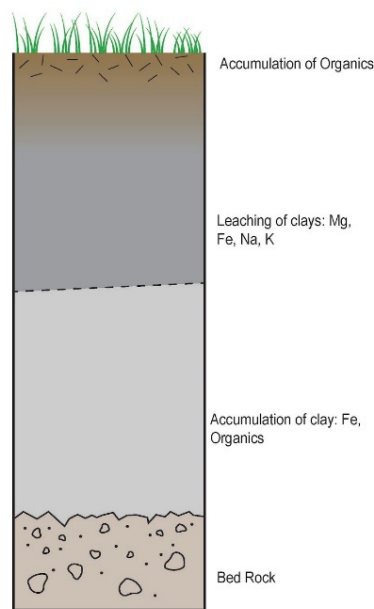


Figure 7: General Geological Makeup of Island (Source: Author)

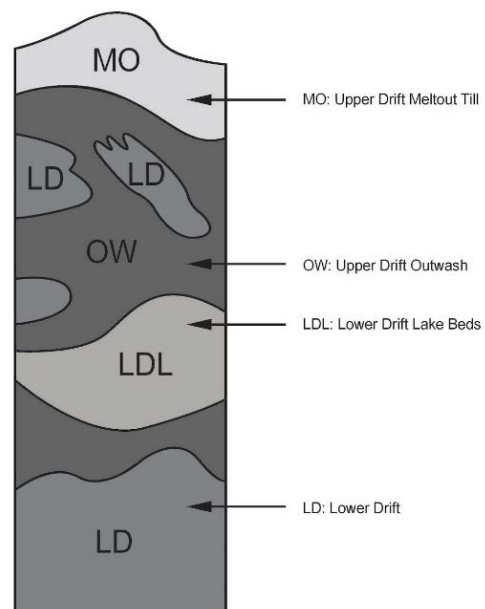


Figure 7: Upper Moraine Detail of Mohegan Bluffs (Source: Author)

¹³ Paton, Peter W., Lisa Gould, Peter August, and Alexander Frost. *The Ecology of Block Island: Proceedings of the Rhode Island Natural History Survey Conference, October 28, 2000*. 20. Kingston, RI: Rhode Island Natural History Survey, 2002.

¹⁴ Paton, Peter W., Lisa Gould, Peter August, and Alexander Frost. *The Ecology of Block Island: Proceedings of the Rhode Island Natural History Survey Conference, October 28, 2000*. 21. Kingston, RI: Rhode Island Natural History Survey, 2002.

The upper moraine zone, or upper drift sheet, ranges up to 245 feet thick

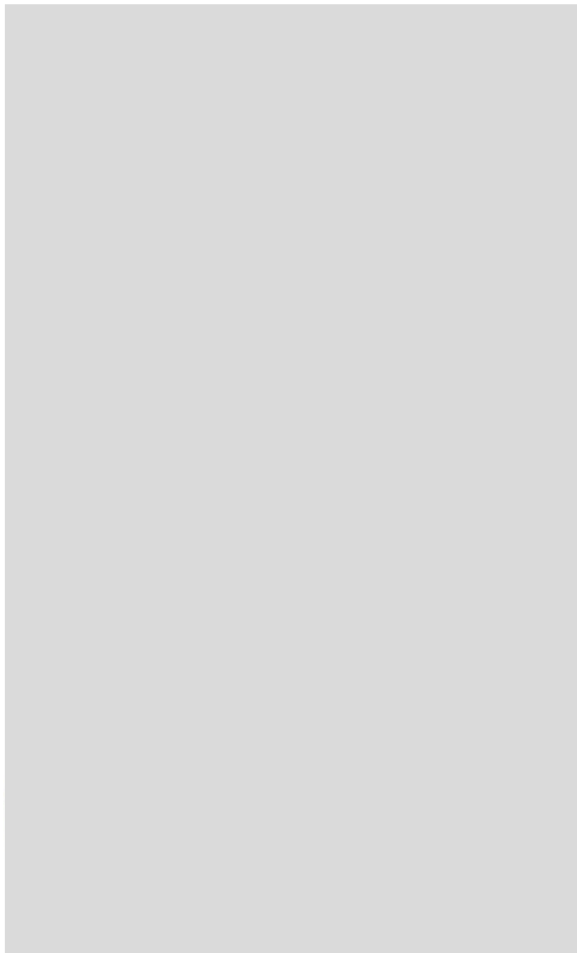


Figure 8: Geological Makeup of Entire Island (Source: RIGIS)

and is exposed at the surface on much of the southern part of the island. This layer sits atop the lower moraine zone and is composed of a wide array of stratified material, sandy debris flow diamict or till, and uncommon dark compact till¹⁵. The upper moraine zone is what is exposed at the Mohegan Bluffs and is what this design proposition will be interacting with on the surface. Figure 7 shows a detail of the geological makeup of the upper moraine portion of the Mohegan Bluffs. This site's geology is categorized as Loess over

Ablation Till and Coastal Bluff and Beaches, which is essentially mixed clay

and till. Figure 8 shows the different geological makeup of the entire island.

Considerable glacial sediment has been removed by rising sea levels and coastal erosion over the last twelve thousand years, which means the site is constantly subject to change¹⁶. It is important to understand the geological makeup of the site

¹⁵ Paton, Peter W., Lisa Gould, Peter August, and Alexander Frost. *The Ecology of Block Island: Proceedings of the Rhode Island Natural History Survey Conference, October 28, 2000*. 21. Kingston, RI: Rhode Island Natural History Survey, 2002.

¹⁶ Sirkin, Leslie A. *Block Island Geology: History, Processes, and Field Excursions*. 40. Watch Hill, RI: Book & Tackle Shop, 1994

because it can help to prepare for these changing conditions. In order for this building to survive on an ever-changing site, it is important for the structure to be able to connect into bedrock. By structurally “locking” into secure soil, the building will be able to stay in place. As the bluff erodes, the architecture will become more and more exposed, revealing a sense of time.

Access

The island can be accessed by two methods-- boat or plane. In the summer months, there are five ferries that run constantly from the island to their respective destinations. The Point Judith ferry offers a fast ferry and regular speed ferry getting people to the island in an half hour or hour. The regular ferry out of Point Judith is the only way for the public to transport a vehicle to and from the island. Other ferry options include ports from Newport, RI, Fall River, MA, New London, CT, and Long Island, NY.

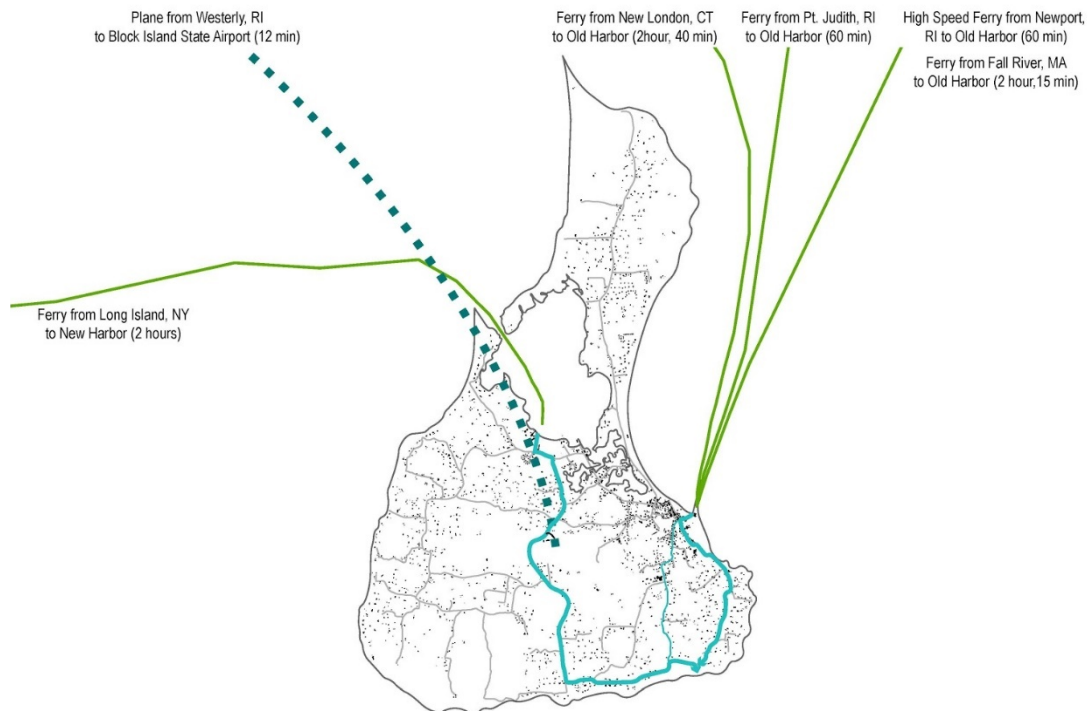


Figure 9: Ways to Access the Island (Source: Author)

Many of these ferries are only operational in the summer months, meaning that access to the island is reduced significantly in the off season. There is also always the option to access the island through a private boat, which can be docked in either New Harbor or Old Harbor.

Flying to the island is the last option to access the island but is very limited. There is a single airport located centrally on Block Island, which receives flights from Westerly, RI airport. The opportunity to fly as a method of getting to the island is much more frequent in the summer months. In the off seasons, the frequency of these flights is reduced significantly. Figure 9 shows the different options of how to access the island with travel times.

Once an individual arrives on the Island, in either New Harbor or Old Harbor, the route to the Mohegan Bluffs is straightforward. From New Harbor, an individual can travel on foot, bike, or by vehicle south on Center Road, which passes by the airport. Center Road eventually turns into Lakeshore Drive which eventually turns into Mohegan Trail, finally leading to Spring Street with the site on the right (13 min by car, 1 hour 15 min walking, half hour

biking). From Old Harbor, traveling South on Spring Street will lead directly to the site on the left (8 min by car, 32 min walking, 13 min biking). Figure 10 shows the major

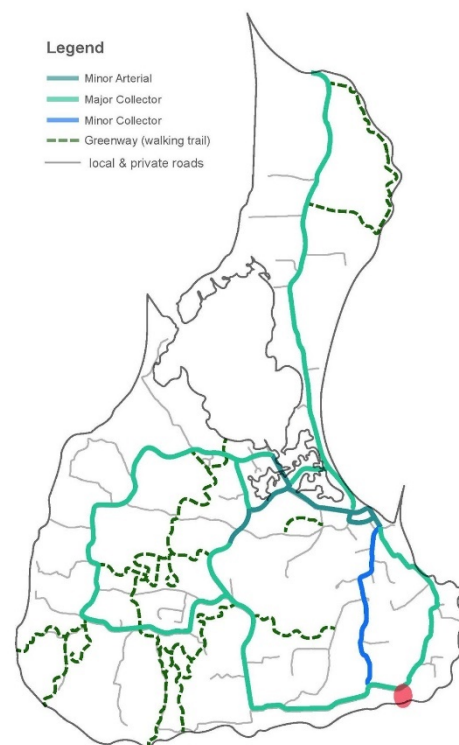


Figure 10: Transportation/ Recreation Network on Island (Source: Author)

roads and major recreational trails on the island. Spring Road, one of the major collector corridors runs adjacent to the Mohegan Bluffs, providing easy access to the site. The major hiking trails have an opportunity to connect to the site for this thesis, possibly offering another connection back to nature and giving the architecture a recreational aspect.

Erosion and Sea Level Rise

The Mohegan Bluffs are a site that is subject to constant change due to erosion, exposure to changing tides and seas level rise. The changing conditions make it a difficult site to design for. This thesis must address how the design can adapt over time and still uphold the design principles that were instilled at its conception despite geological changes. Erosion will play a huge role in how over time, the building can become more and more exposed, revealing the history. Materiality in the design will play a large role in accomplishing this goal.

“Since 1930, sea-level rise in Rhode Island has increased an average of one inch per decade”¹⁷, which may not seem like a lot in the present. This thesis must consider the life of the building over 25 years, 50 years, even 100 years. One hundred years down the road, that equates to about eight feet three inches, which can impact the design significantly. The base of the building which will rest on or near the beach will be constantly exposed to harsh conditions, so it needs to be flexible. The rate of sea-level rise has quickened and the sea level along Rhode Island’s coast has risen six inches over

¹⁷ Hapke, Cheryl J., Emily A. Himmelstoss, Meredith G. Kratzmann, Jeffrey H. List, and Robert Thieler. "National Assessment of Shoreline Change: Historical Shoreline Change along the New England and Mid-Atlantic Coasts." USGS. February 23, 2011. Accessed November 17, 2016.

the last forty years, and it is projected to continue into the next century¹⁸. Materiality is important to consider when thinking about the design of this thesis. The materials at the base of the bluff need to be suitable for receiving constant attack from water. The structural integrity of these materials needs to be maintained despite the constant harsh conditions.

A major factor in the frequency and severity of erosion is the amount of water on a site. "Mass Wasting involved the movement of rock materials downslope in response to gravity aided by water content. It ranges in magnitude and rate of movement from the nearly imperceptible soil creep on gentle slopes to the abrupt fall of sedimentary debris from cliffs and the wholesale slumping and sliding of massive blocks of moraine along sea cliffs"¹⁹. Water on a site can initiate erosion because it turns soft, fine-grained materials into mud flows. Slumping, which is a form of mass wasting, occurs when a coherent mass of loosely consolidated materials or rock layers moves a short distance down a slope. Rainwater infiltration, saturation of clays, erosion of the cliff face, wave erosion at the base and the orientation of the layers of sediment are all factors towards slumping²⁰. It is what gives the bluff such a distinguished characteristic. However, it is important to realize that, although slumping is common on the bluffs, it is not predictable and it is in a constant state of adjustment.

¹⁸ Hapke, Cheryl J., Emily A. Himmelstoss, Meredith G. Kratzmann, Jeffrey H. List, and Robert Thieler. "National Assessment of Shoreline Change: Historical Shoreline Change along the New England and Mid-Atlantic Coasts." USGS. February 23, 2011. Accessed November 17, 2016.

¹⁹ Sirkin, Leslie A. *Block Island Geology: History, Processes, and Field Excursions*. 70. Watch Hill, RI: Book & Tackle Shop, 1994

²⁰ Sirkin, Leslie A. *Block Island Geology: History, Processes, and Field Excursions*. 71. Watch Hill, RI: Book & Tackle Shop, 1994

Construction processes can have a large impact on the frequency and severity of erosion. The disruption from the building process can disrupt sediment layers which allow excess water into the ground, therefore speeding up the process of erosion. When thinking about the design of this thesis, it will be important to consider how there can be a minimal impact on the existing conditions of the site. There will likely need to be alterations to the sediment, so it will be extremely important to structurally account for the erosion that will take place.

Solar Orientations

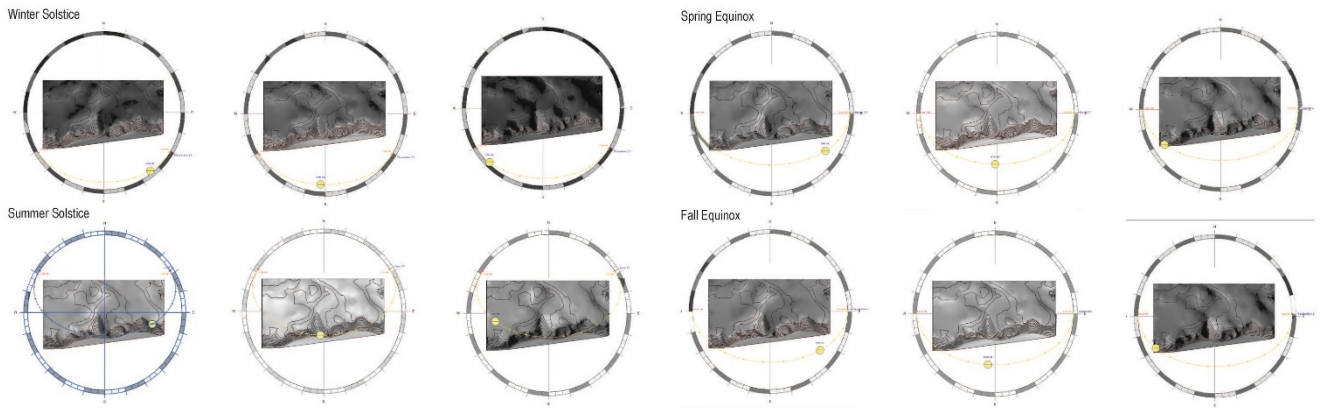


Figure 11: Shadow Studies on Site (Source: Author)

This site located on the southern edge of the Block Island receives constant exposed to direct sunlight at all times of the year. This thesis will orient itself North-South, with the majority of programmatic elements facing south towards the water and allowing for natural daylight to enter the spaces. The lack of tall vegetation on the site also contributes to the large amount of solar exposure the site receives. Figure 11 shows the site's shadow studies. The studies were taken at the Summer and Winter Solstice and the Fall and Spring Equinox, at 9am, 12pm, and 3pm. It is clear that the surrounding bluff profiles are the only cause of shadow on the site, and it only occurs when the sun is at

low angle in early morning or late afternoon times. By analyzing the solar conditions of the site, the arrangement of program can be facilitated. Programmatic spaces that don't need direct sunlight can be arranged where the light is diffused or where a shadow hits a certain location on the site. It can also be helpful when beginning to think further into the design about where solar shading techniques need to be used for certain programmatic spaces or when beginning to consider solar energy panels.

Vegetation

A large portion of Block Island is undeveloped land, and preserved land through the Nature Conservatory. Because of this, much of the island is highly vegetated. There is a wide variety of species on the island, and large portions that are forested. Bluffs, typically are sparsely vegetated due to the high amount of erosion. However, areas where freshwater emerges, such as at The Mohegan Bluffs, and more specifically, the “wedge” where this thesis will be located, there is an opportunity for plant community development²¹. At the top of the bluff, the area is defined by Pasture-grass field



Figure 12: Vegetation of Island
(Source: RIGIS)

and Highland pine shrub land. The middle ground of the bluff as well as the beach below does not have any vegetation, and is categorized as dunes and sand. Figure 13 shows the specific species on the site include: Common Horsetail (*Equisetum arvense*), Common

²¹ Paton, Peter W., Lisa Gould, Peter August, and Alexander Frost. *The Ecology of Block Island: Proceedings of the Rhode Island Natural History Survey Conference, October 28, 2000*. 40. Kingston, RI: Rhode Island Natural History Survey, 2002.



Figure 13: Specific Vegetation on Site (Source: Google)

Three-Square (*Scirpus Pungens*), Pearlwort (*Sagina Procumbens*), and Toad-Rush (*Juncus Bufonius*)²². Figure 12 shows the vegetation of the entire island. Incorporating the native vegetation of the island into the landscape design of this thesis will be vital to the design having a fluid connection to the site. There is also opportunity to have the users of the project interact and move with the existing vegetation, creating a sense of discovery along the descent.

Wind

The wind plays a huge part of the atmosphere of the site and can be an important energy component. Sea breezes from Atlantic Ocean are constantly penetrating

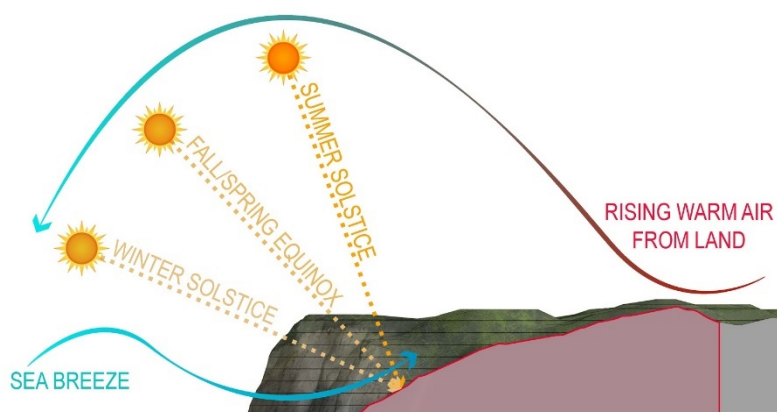


Figure 14: Wind and Solar Penetration on Site (Source: Author)

the site creating a comfortable feeling during the summer.

Due to the steep change in topography from the beach to the top of the bluff, there is a unique condition from the wind. The wind from the

²² Paton, Peter W., Lisa Gould, Peter August, and Alexander Frost. *The Ecology of Block Island: Proceedings of the Rhode Island Natural History Survey Conference, October 28, 2000*. 40. Kingston, RI: Rhode Island Natural History Survey, 2002.

ocean aims towards the bluff and moves up and over towards the top of the highest topographic point. The warm air from the land moves upwards and is drawn towards the ocean where it then descends and its cooled²³. This means that the site is almost constantly experiencing some sort of coastal breeze and there is a very comfortable experience on the bluff as well as the beach. There is opportunity because of the thesis's site to utilize this wind as a source of energy to help to power the building, reducing the negative impact on the environment.

Important Nodes

The Mohegan Bluffs are arguably the most scenic spot on the island. There are, however a few other notable places on the island that draw attention from tourist and residents. These nodes, are relatively well connected to each other, with most them within a half hour walking radius of each other. The North Light, New Harbor, Old Harbor, Southeast Lighthouse and the offshore water wind farm are the most notable nodes on (and off the coast of) the island and many them act as a strong tourist attraction.

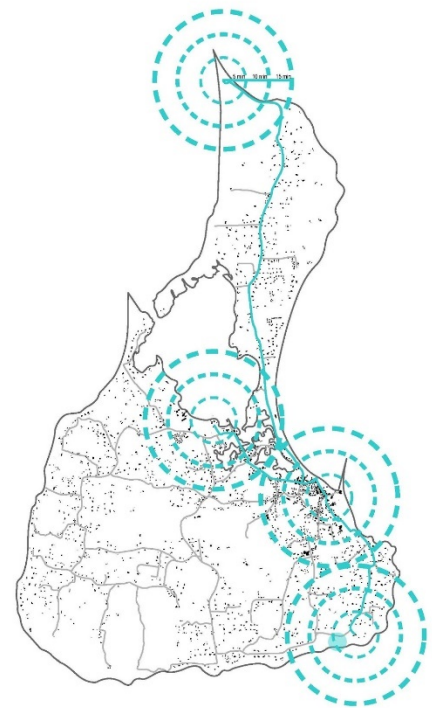


Figure 15: Important Nodes and Walking Radius (Source: Author)

North Light is located on the Northern most tip of the island at Sandy

²³ "Rhode Island Wind Resource Map and Potential Wind Capacity." WIND Exchange: Rhode Island Wind Resource Map and Potential Wind Capacity. September 24, 2015. Accessed October 16, 2016.

Point. The current lighthouse is the fourth one on the site. It went through a period of extreme neglect the lighthouse was purchased by New Shoreham and the North Light Commission, which worked hard to relight it and transform the bottom level into a museum. Access to the lighthouse is quite difficult. The only means of reaching the lighthouse is by walking along the coastline on the beach about a half mile or by a vehicle that can traverse through the sand. Without the North Light as a destination on the northern point of the island, the area would not be active and would be populated by only private residences.

New Harbor is located on the southern edge of the Great Salt Pond, located slightly north from the center of the island. New harbor has three large marinas, 75 acres for vessels to anchor, and 90 town moorings, making it the primary location for private vessels. A few restaurants and small hotels are located at New Harbor, providing views out toward the water. In the summer months, the area is quite active with people and becomes a destination on the island. However, in the off season, not a single place stays open, making the harbor a desolate area.

Old Harbor is considered the “downtown” of Block Island. It is the most active and populated place and is the location of many all year-round restaurants. It is also the main destination on the island for ferry access from Point Judith, Fall River, New London and Newport. For many people, Old harbor is the main destination on the island. Old harbor includes places to eat, to shop, and provides entertainment. Although the majority of the restaurants, hotels, and shops close down in the off season, there are a few that remain open for residents and tourist to enjoy.

Immediately to the east of the site is the Southeast Lighthouse, which is

currently the icon that identifies the southern edge of the island. From the top of bluff, you are able to see the lighthouse and these sight lines could be used as a big advantage in the design of the building. The Southeast Lighthouse was named a national historic landmark in 1997 as one of the most

architecturally significant lighthouses built in the United States. When the lighthouse was built in 1874, there was 300 feet of land the lay between the structure and the edge of the bluff. However, over the next

100 years, the bluff eroded to within 75 feet of the lighthouse²⁴. There was huge concern that if nothing was done, the lighthouse would eventually crumble with the erosion. In 1993, the lighthouse began its moving process. The entire move took nineteen days to complete and it was

relocated 300 feet away from the edge of the bluff once again. This was a huge engineering task and it strategically had to move in a zigzag pattern to that no single part of the lighthouse would receive too much stress. The history of the lighthouse goes to show how significant the erosion on the site is, and how the design of this thesis will need to take erosion into account.

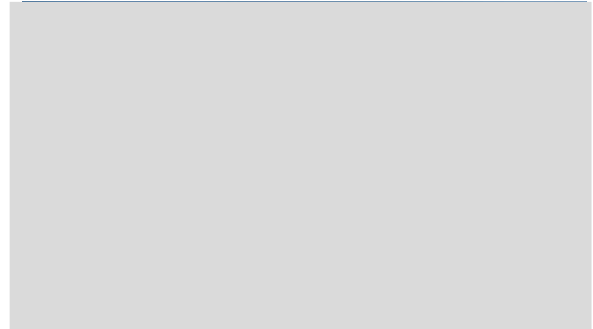


Figure 16: Aerial view of Island towards Water Wind Farm (Source: Google)

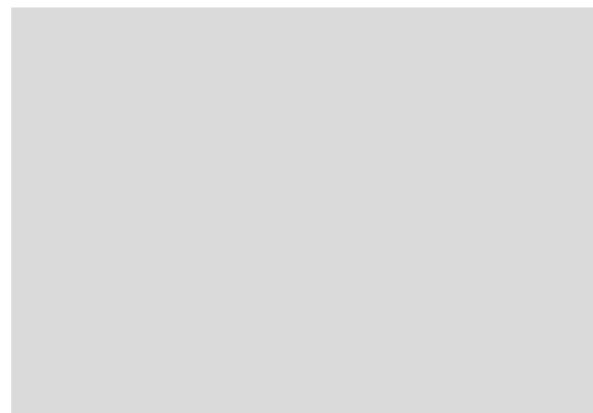


Figure 17: View of Water Wind Farm from Southeast Lighthouse (Source: Google)

²⁴ Holmes, R. "Block Island Southeast Lighthouse." Rhode Island Lighthouse History. December 23, 2012. Accessed October 01, 2015.

Also in direct view of the site is the offshore water wind farm. These thirty watts, five turbine water wind farm is located 3.5 miles off the southern edge of Block Island and provides a mesmerizing view as you look out from the bluff towards the horizon. The wind farm is expected to produce more than 125,000 megawatt hours annually²⁵. The structures, which were designed by Alstom Wind, stand 600 feet high and can withstand a category 3 storm. Not only is the water wind farm an important view to consider in the design, but it will connect the island to the grid for the first time. This means that the island will no longer need to use diesel generators because it will be replaced with power from the cable supplying the island.

Climate and Natural Disasters

The oceanic climate on Block Island is unique for the New England area. It is typically seen in the West coast of the United States and the middle latitudes of continents. Oceanic climate means that the summers are cooler than the mainland and the winters are warmer than the mainland. The air temperature during these months is related to the water temperature. This climate is greatly influenced by the surrounding ocean and prevailing winds

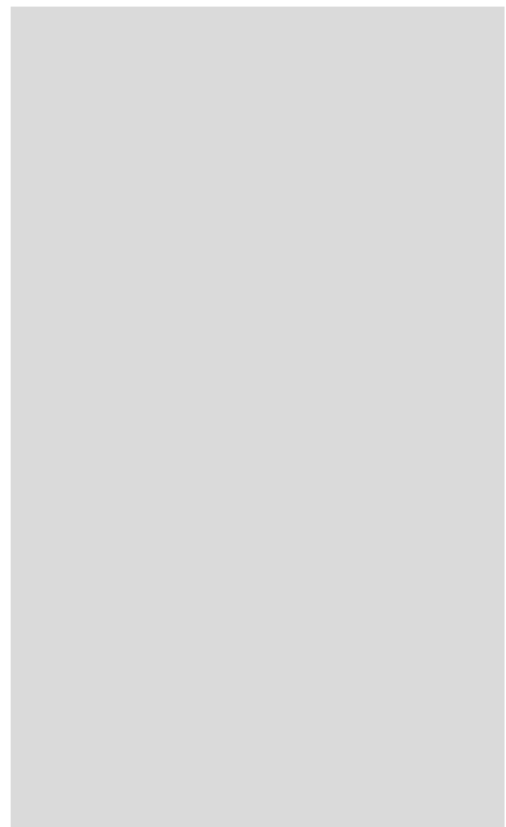


Figure 18: Areas Inundated by Hurricanes (Source: RIGIS)

²⁵ "Block Island Wind Farm - Deepwater Wind." Deepwater Wind. Accessed November 27, 2016.

that generally blow offshore²⁶. The oceanic climate typically does not have a dry season, and rain is more evenly dispersed throughout the year. The Northeast of the United States is prone to many different weather conditions. This thesis site is exposed to extreme colds with ice and snow, extreme heat, as well as heavy rains.

Major storms can have a huge effect on the rate of mass wasting. On average, storms alone have increased the rate well above 4 feet per year²⁷. Storms, in many instances, have completely washed out sand layers, leaving large cavities around the masses of lower till, which causes slumping and erosion²⁸. This damage is often not seen immediately so it is sometimes difficult to examine the full impact of a storm on the island. Although it is rare that hurricanes of a high category reach the New England area, there is still a chance that this extreme weather can be seen and it must be taken to account. Figure 18 shows the areas impacted by a category 1, 2, 3, and 4 hurricanes. The areas impacted the most are the Old Harbor and New Harbor areas as well as the Northern point of the island. This thesis's site, indicated by the red circle shows that hurricane winds and rains aren't a huge threat, but the beach and lower bluff area would see some damage, which needs to be considered in the design of the lower areas of this thesis. However, the areas at the top of the bluff as well as the middle area of the bluff see almost no damage.

²⁶ Library, World Public. "Oceanic Climate." Oceanic Climate | World Public Library - EBooks | Read EBooks Online. Accessed November 27, 2016.

²⁷ Sirkin, Leslie A. *Block Island Geology: History, Processes, and Field Excursions*. 76. Watch Hill, RI: Book & Tackle Shop, 1994

²⁸ Sirkin, Leslie A. *Block Island Geology: History, Processes, and Field Excursions*. 76. Watch Hill, RI: Book & Tackle Shop, 1994

Land and Building Use

The island has a commitment to keeping businesses local to help support the local economy. This means that residents and visitors will never find chain retailers or chain restaurants. Most the island is dominated by private residential, with a small concentration of commercial buildings at New Harbor and Old Harbor as seen in Figure 21. A few state-owned buildings occupy the island, including the North Lighthouse, Southeast Lighthouse, Block Island Airport, and the school. These buildings are scattered around the island, allowing for a slight break in the residential fabric. Figure 21 shows the zoning breakdown of the island, which again displays the high quantity of land zoned specifically for residential purposes, and New and Old Harbor zones for commercial and mixed use purposes.

Immediately surrounding the site are a few private single family residential

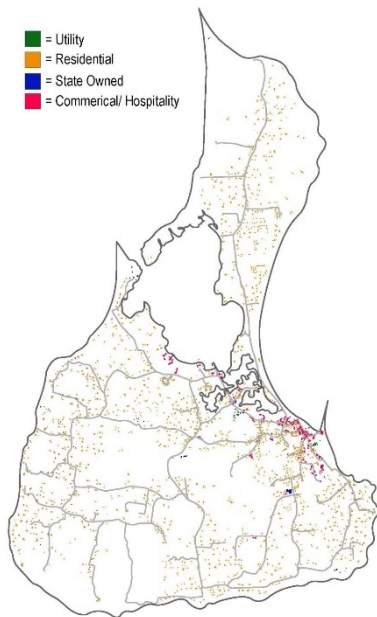


Figure 21: Building Use
(Source: Author)

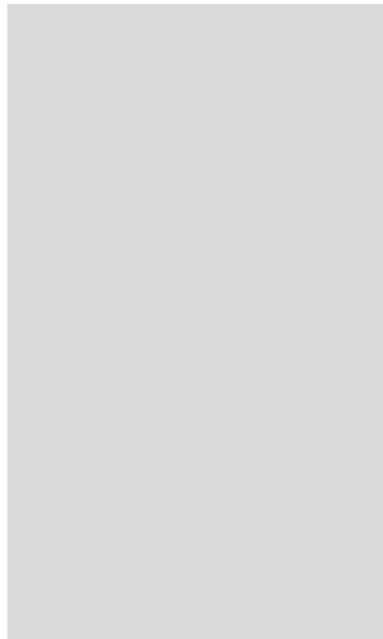


Figure 21: Zoning (Source:
RIGIS)

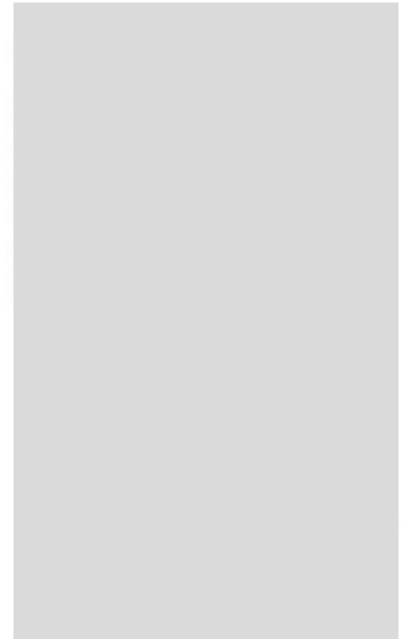


Figure 21: Land Use (Source:
RIGIS)

buildings to the North. To the east of the site is the Southeast Lighthouse, a large destination for tourist visiting the island. The remainder of the surrounding land is densely vegetated and not developed, allowing for a lot of opportunity to expand in any direction. The closest commercial entity is located in the Old Harbor/ Downtown area of the island which is about a 30-minute walk. This thesis's site's land use is currently identified as forested land, sandy areas (not beaches, but where the clay of the bluffs is located) and beach (where the bluffs meet the sand) as seen in Figure 21.

In the summer months, commercial and hospitality venues are more available and the percentage that are open reduces significantly as the tourist leave the island. During summer, about 50 restaurants are open and thriving, but that number reduces to about 3 during the off season, with all of them centered around the downtown²⁹. There is a huge need for activity on the island in the offseason to keep the vibrancy alive. This lack of activity near the site provides a unique opportunity to re-imagine programmatic elements on the island's southern edge.

Land Conservation

Block Island, is considered to be one of "The Last Great Places" in the Western Hemisphere by the Nature Conservancy. A lot of this has to do with the

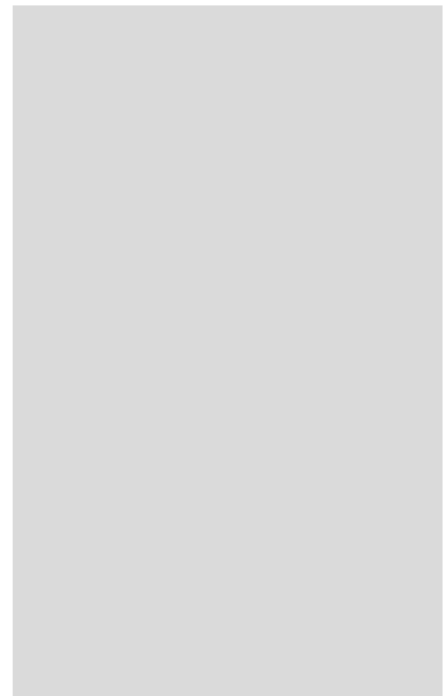


Figure 22: Land Conservation Areas (Source: RIGIS)

²⁹ Howie Rice, Permanent Resident of Block Island since 1945

ecological and natural significance of the island. The various habitats on the island support over 40 species of wildlife that are considered endangered or rare. The island has become a critical stopping point for bird species on their migration from North to South. As mentioned before, there is also a rich cultural and spiritual history of the island, adding to its significance. Because of these elements, 43% of the island is considered protected land. Figure 22 shows the areas on the island that are included in this 43%. The site for this thesis, located on the southeastern coast at the Mohegan Bluffs is identified by the blue area defined as State owned conserved land. This thesis will take the liberty of making an exception to this conserved land zone and argue that a design proposition on the site will help to improve the site and act as a destination for residents and visitors to the island.

Floodplains

This thesis site is located very close to the water, and even though there is a steep topographic change moving away from the waterfront, floodplains are an important thing to consider. At the top of the bluff the space is defined as an area with minimal flood risk. At the base of the bluff, where the building meets the beach, the area is defined as Zone VE. This means that this area is subject to inundation by the 1 percent annual chance flood event with additional hazards due to storm-induced velocity wave

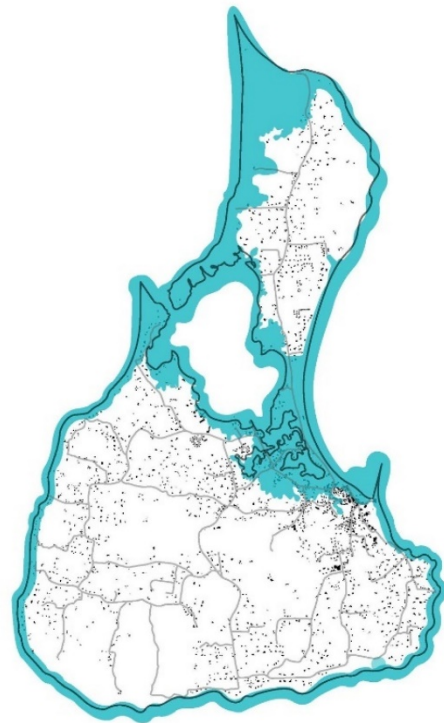


Figure 23: One Hundred Year Flood Plain (Source: Author)

action. In the one-hundred-year flood, which is seen in Figure 23, the very base of this thesis project would be affected. This could provide a unique opportunity when trying to address programmatic needs of the space on the beach. The water could become an asset to the building and help to work with the program of this space.

Hydrology

Hydrology is a very important factor when beginning the design of this project. The water that exists on the site plays a huge role in the erosion that is constantly occurring and will have major implications on the structural integrity of this thesis' design. The island on average receives about 45 inches of rainfall per year with an average of two and a half to four inches per month. This number reduced to 30 inches in dry years³⁰. There is no coincidence that the water deficient months, June through September, are when the Island has its seasonal high population and high water use. This rain that is constantly penetrating the island tends to seek lower elevations. This water, which initially runs overland as a thin sheet, begins to cut into the soils to form gullies. These gullies merge into stream channels which increase in depth and width until they reach the bluff³¹. This water is transmitted through the aquifers, a porous and permeable layer of rock or sediment capable of readily transmitting groundwater, depending on the nature of the materials and the slope of the layers, at a rate of flow around 200-300 feet per day³². This thesis site, has a stream that has cut a deep channel through the middle of

³⁰ Sirkin, Leslie A. *Block Island Geology: History, Processes, and Field Excursions*. 98. Watch Hill, RI: Book & Tackle Shop, 1994

³¹ Sirkin, Leslie A. *Block Island Geology: History, Processes, and Field Excursions*. 98. Watch Hill, RI: Book & Tackle Shop, 1994

³² Sirkin, Leslie A. *Block Island Geology: History, Processes, and Field Excursions*. 99. Watch Hill, RI: Book & Tackle Shop, 1994

the “wedge”. This channel, as seen in Figure 24 will have major implications on the design and location of this thesis. It is important to not alter the stream because it is a major route for water to escape during storms and it can affect the process of erosion.

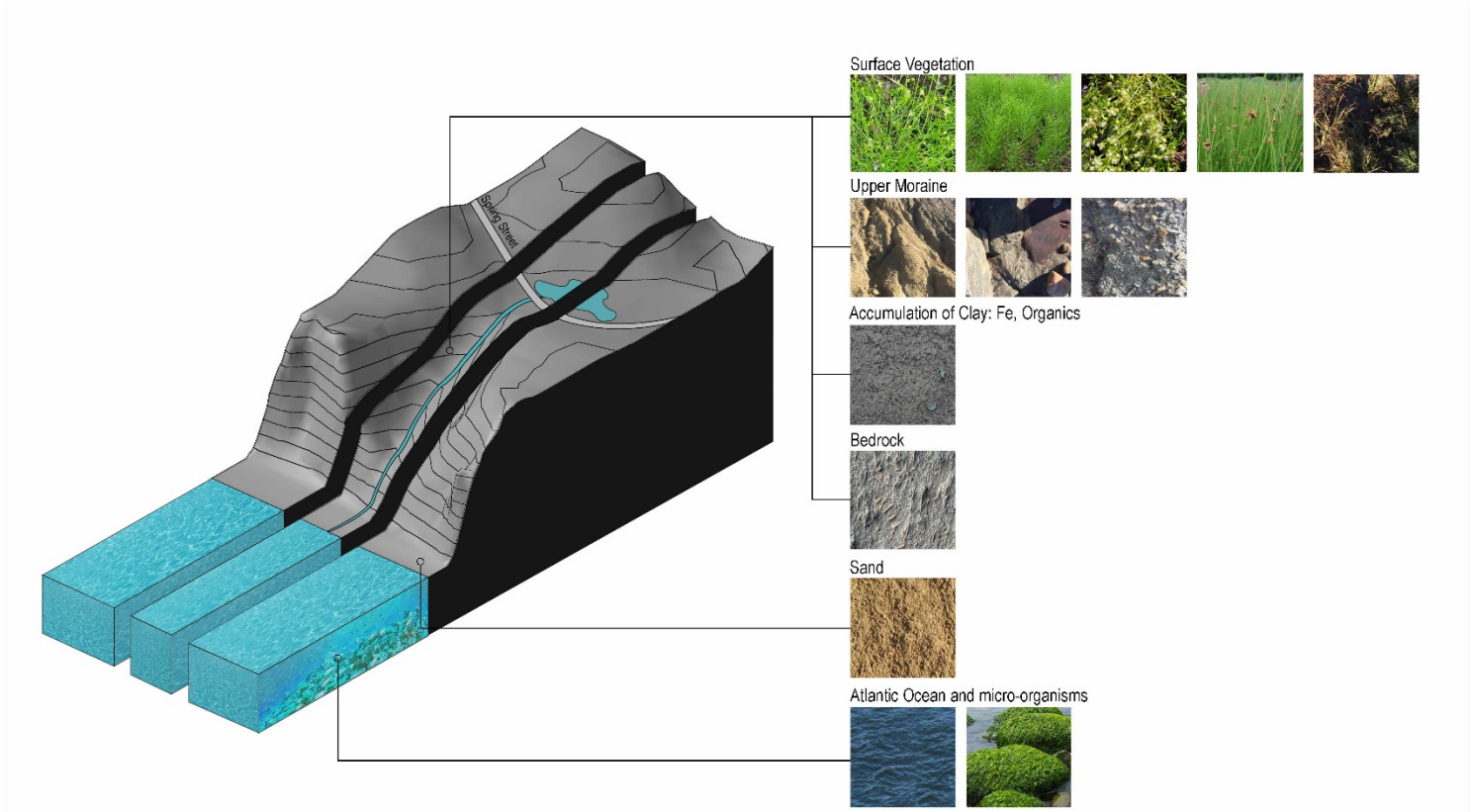


Figure 24: Site Compilation Diagram (Source: Author)

Poetics of the Site

The site of this thesis has a poetic quality to it. The desolation that the site experiences in the off season, and the activity it experiences in the summer gives it a “sacred” quality. The connection to nature and water that people experience on the site is something to be taken advantage of and used in the design of this thesis. The design proposition will act as a sacred realm in the landscape and the path leading people down towards the beach will connect the two sacred realms of the water and building.

Chapter 3: Program

Users



Block Island, located 13 miles of the coast of Rhode Island presents an interesting condition where the population greatly increases during the summer months. There are only 953 full time residents made up of majority people aged 40- 65+. Only 17% of the residents of Island are age 18 and under. In the summer months, that number skyrockets to about 15,000-20,000 people³³. The islands activity level directly relates to this difference in population. In summer, there is a vibrancy to the island and in the off season, is becomes a secluded, desolate quiet beach town perfect for artist and writers seeking silence and focus. This thesis will help to transform the bluff into a quiet artist and writers retreat during the off season and a gallery, teaching space in the summer. By providing a programmatic element that thrives off of desolation and seclusion, the site will be kept active.

³³ "Block Island: People and Places." Block Island, RI. Accessed November 12, 2016.

The major user of this thesis will be artist and writers seeking a creative, comfortable, quiet, and stimulating environment to get inspired and create new work. The artists and writers will help to activate the site during the inactive times of the year. The art and writings produced in this off season will become an amenity for the locals and tourist to observe and will act as an inspiration for the young artist that will come to learn here in the summer months. These users will can take full advantage of the natural conditions of the site and use it as inspiration for their work.

Bar

Block Island, in its summer months has about fifty restaurants that are open, providing a wide range of options for people to eat and drink. In the off season, this number drastically drops to two restaurants, significantly reducing the variety that people on the island have to eat. These two restaurants are in Old Harbor, meaning that there is no option for food or drink on the southern edge of the island. This bar will provide a small, intimate space on the southern edge of the island for people to drink a cocktail and enjoy the scenery. The space can also be adapted and used for gallery openings or private events within the space. The bar, is located on a projected volume, suspended above the beach, therefore offering unobstructed views of the landscape.

Gallery

The gallery space will be the largest programmatic elements in the design. This is where the work produced by the resident artists will display the work. Here, it will be able to be admired, acknowledged and purchased. By integrating artwork produced in the workspace along this path, visitors are constantly reminded of the relationship between art and nature. The intimate gallery spaces will provide a contemplative space to rest and

view the artwork and the scenery. The gallery space of the main building will become a public amenity at all times of the year. This space will be designed with flexibility in mind, to accommodate the display of all types of artwork and to provide a space for events and presentations. Natural and artificial light will be extremely important in this space and will be carefully considered in the design of the space as well as views directed out towards the landscape.

Artist's Studios

The ten artist's villas will be scattered in the landscape surrounding the Mohegan bluffs. Each resident artist villa will include a bedroom, closet, small kitchen area, small living space, observation area, and individual studio space. The difference in location on the site will offer a unique perspective and alternate source of inspiration for the work. Every month or two, the artist's staying at the retreat will change and will have the opportunity to adapt this space to his or her needs, so a level of flexibility needs to be included in the design.

Observation Spaces

The observation spaces will include indoor and outdoor spaces. These spaces will occur at the elevation of the building as well as various moments along exterior paths, providing visitors opportunities to rest and reflect upon the scenery and art. More public, open spaces for viewing will be provided as well as smaller, more intimate spaces.

Support Spaces

The support spaces include restrooms for the visitors of the gallery and bar. A significant amount of storage space will be necessary to house art supplies as well as old artwork.

Chapter 4: Precedent

Connecting Architecture with Topography

Casa Malaparte / Naples, Italy / Adalberto Libera

The home, which was conceived in 1937, sits on a dangerous cliff, 32 meters above the sea with the only access to it by foot or by boat. Casa Malaparte is essentially a box made of red brick, with a large monumental stair that leads to the roof. The stairs act as an extension of the home because of the similar geometry and proportion. The most interesting aspect of this precedent is not seen from aerial images or the plan, but rather the section of it. Because it sits on such a difficult topographic site, the section takes full advantage of it. The home carves into the landscape and works with the natural conditions of the site as seen in Figure 26.



Figure 26: Interaction of Building and Topography (Source: Author)

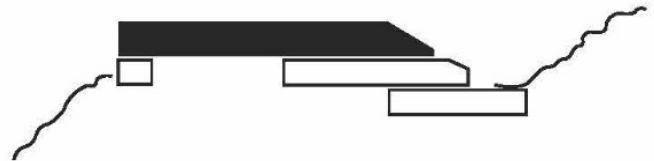


Figure 26: Building Carving Out Landscape for Inhabitable Space (Source: Author)

De Lemos / Portugal / Carvalho Araujo

De Lemos is private home, and although it is programmatically very different from this thesis, the techniques used are still very relevant. The most important aspect to note in this precedent is the way that the building conforms to the landscape. The shape of the building mimics the contour lines of the site so it sits naturally in the landscape. Courtyard spaces are created where the home “pulls away” from the contour line, creating an outdoor room. Because the home is carved into the land in the same language of the contours, the roof can become an amenity space that is directly accessed by the

natural landscape. There are also instances where the natural rock formations of the site are integrated into the home and become focal elements in certain spaces and act as walls to define the interior space. The glass used in the design of the building is strategically placed to direct views out to specific areas in the landscape below.

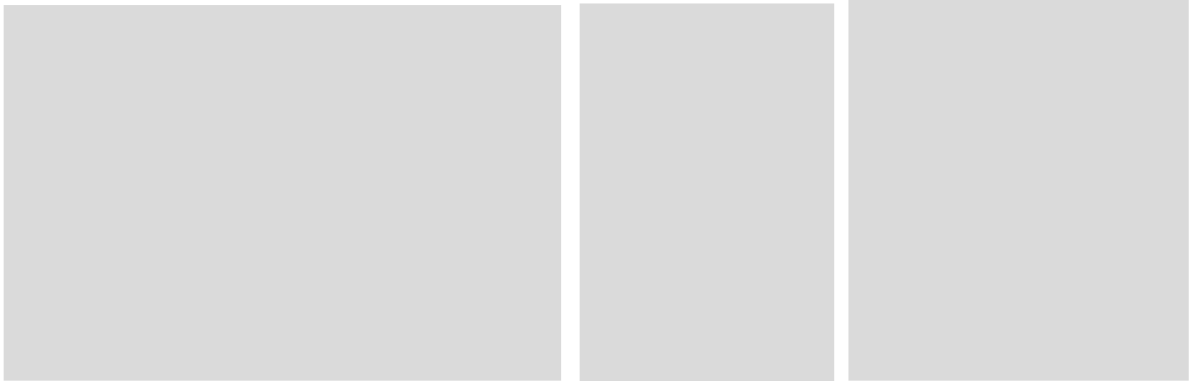


Figure 27: Images of De Lemos (Source: ArchDaily)

Notre Dame du Haut Addition / France / Renzo Piano

This precedent deals with topography and integrating the building into the landscape. The addition, which acts as a visitor's center as well as a play for the nuns to stay, cuts into the landscape and follows the contour lines of the site. Its disguised appearance in the landscape was done purposefully so it would not take away from the presence of the chapel. The building, although carved into the landscape receive direct sunlight through the south facing elevation.

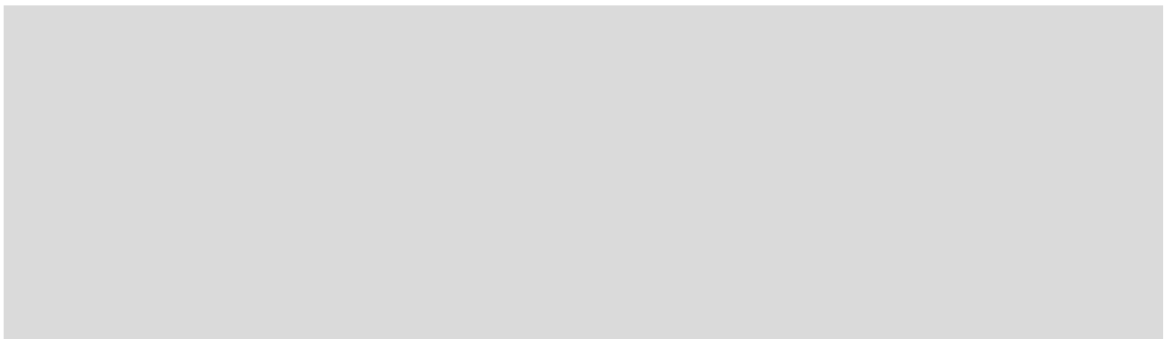


Figure 28: Notre Dame Du Haut Addition Section (Source: ArchDaily)

Connecting Sacred and Profane

Toledo Escalator / Spain / Elias Torres

This precedent is a great example of how to connect the pedestrian from two very different elevation levels using an escalator that integrates fluidly with the landscape. The escalator acts as a connective piece between the bottom of the medieval hillside and the top. On one side is a large retaining wall and the other opens up and gives pedestrians views out to the landscape as the individual ascends or descends. The natural landscape extends overhead and provides protection from the elements. The natural cover also provides a sort of camouflage for the escalator, so when you are standing on top of the hillsides, there is no evidence that the escalator exists, therefore maintaining the natural language of the site.

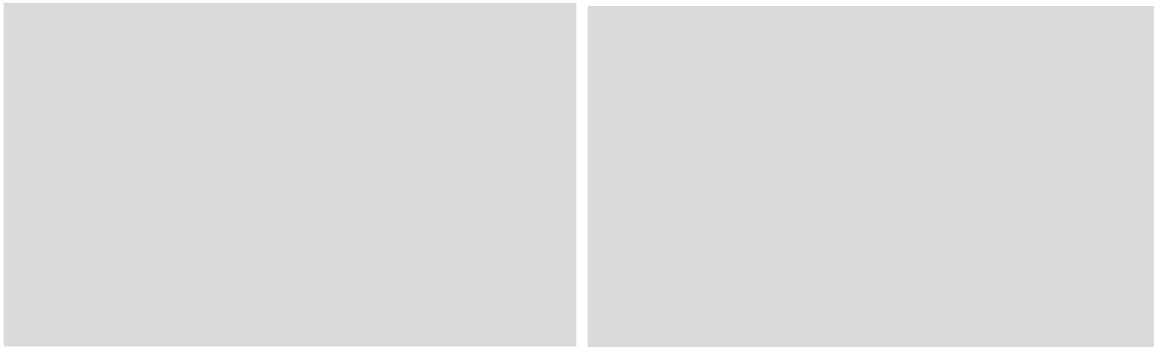


Figure 29: Toledo Escalator Images (Source: Google)

Ramp at Castelldefels Castle / Spain / Elias Torres

This ramping system in this precedent was created to bring the pedestrian up a zigzagging ramp to the Castle that sits 60 meters above the sea level. The gentle slope, and it's integration into the landscape allow a comfortable ascent where moments of rest can be taken to reflect upon the surroundings. The ramp structure is supported by a large retaining wall and concrete framework. The Corten steel panels provide the railing and also disguise the ramp from the lower street level in an artistic way. This structure helps

to mitigate erosion on the site because it prevents soils from moving around. This technique would be extremely helpful when thinking about how to connect people down through the site towards the beach in this thesis.

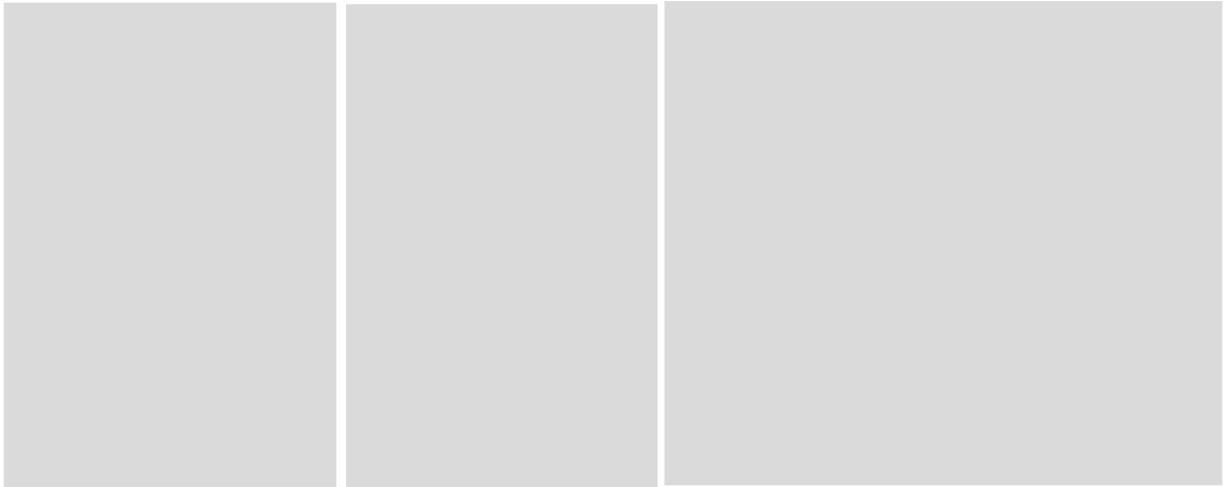


Figure 30: Ramp at Castelldefels Castel Images (Source: Google)

Connecting Architecture with Art

Cassilhaus / North Carolina / Ellen Cassilly and Frank Konhaus

Cassilhaus is a home, art gallery, and artist studio located in the forested mountains of North Carolina. Artists of various disciplines come to Cassilhause to interact and collaborate with each other in the hopes of inspiring new work. The resident artists have an “artist pod” that is connected to the main house where they have free reign to explore and create. Ellen and Frank made sure that the artist’s pod would have plenty of diverse spaces with different ceiling heights and various lighting options so no single discipline was favored over another. The main gallery connects to the living spaces and there are three smaller gallery spaces for a more intimate experience with the art. The space utilizes clerestory windows to create the feeling of floating roofs and to maximize the

amount of reflected light into the space without allowing too much direct sunlight on the art.

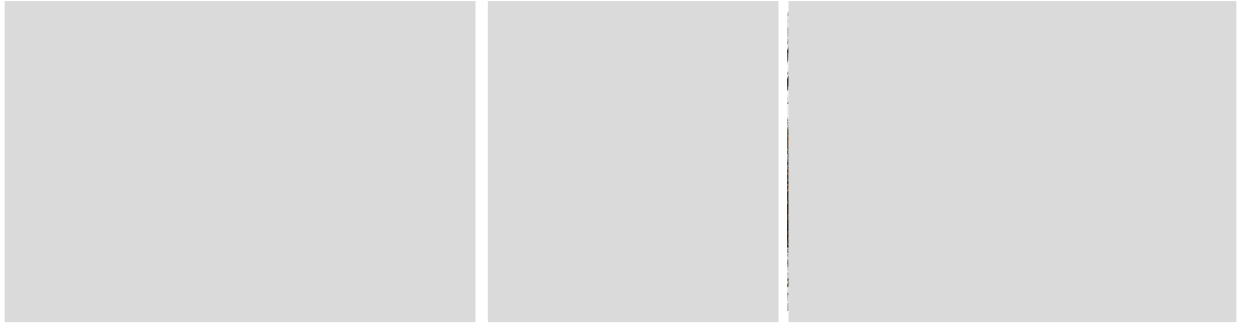


Figure 31: Cassilhaus Images (Source: Google)

MacDowell Colony / New Hampshire

The MacDowell Colony is comprised of 32 private artist's studios located within an extensive wooded area of New Hampshire. These studios are each secluded from one another so each artist can have a personal interaction with the landscape. Each studio is designed for the discipline of the artist in the space. Bedrooms and communal dining and living spaces have their own space where artists can collaborate and interact with one another.

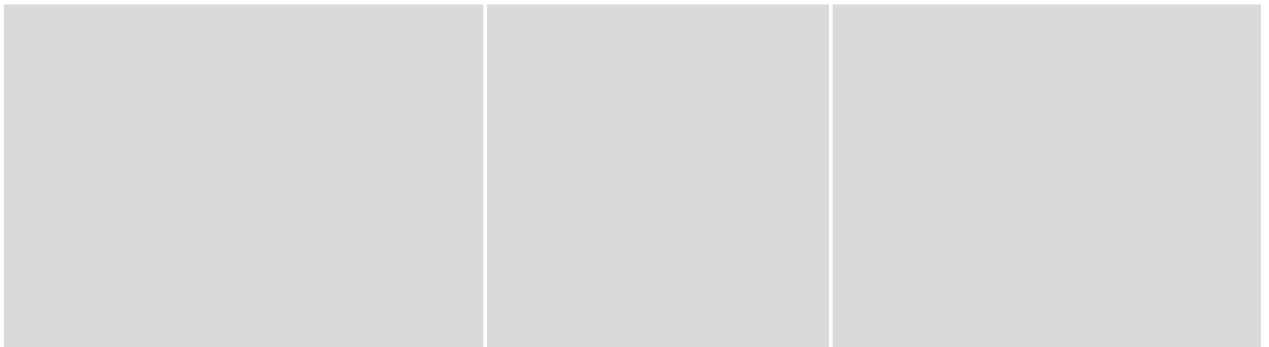


Figure 32: MacDowell Colony Images (Source: Google)

Yaddo / New York

Yaddo is a retreat for artists with a mission to “nurture the creative process by providing an opportunity for artist to work without interruption in a supportive

environment”³⁴. Yaddo is located in a secluded landscape offering minimal distractions for artist to work. The property has a main mansion which provides the artist a communal space to gather and work and provides scattered smaller studios which act as individual work spaces.



Figure 33: Yaddo Images (Source: Google)

Connecting Architecture with Nature

Ghost Labs / Nova Scotia / MacKay-Lyons Sweetapple Architects

Ghost Labs are a series of buildings situated in the landscape designed by students and built by students in a two-week process. These structures are specifically placed in the landscape and use local vernacular with a modern twist and design strategies aimed to capture views. Each structure has a slightly different purpose. There is a small cluster of

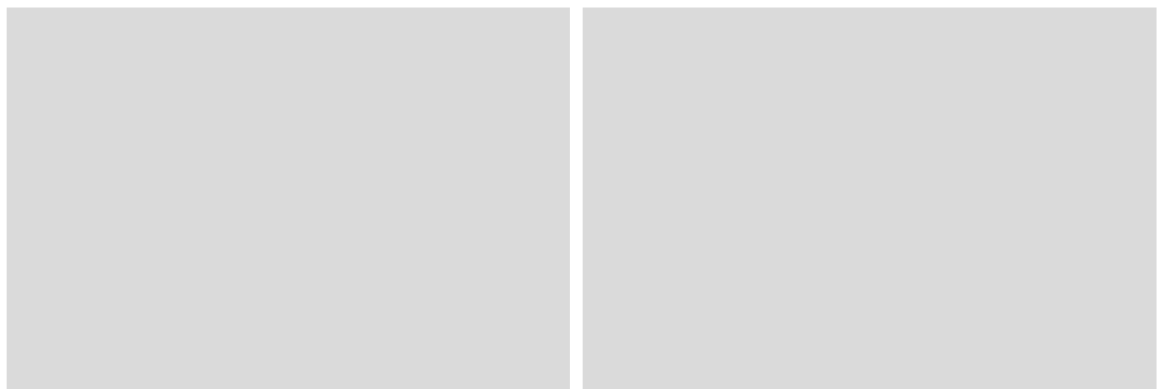


Figure 34: Ghost Labs Images (Source: Google)

buildings designated for the architects to stay and rest, a main “barn” used for the design process, and a series of others acting as spaces of reflection, contemplation, or gathering.

Salk Institute / California / Louis Khan

The Salk Institute is a piece of architecture that encompasses the idea of architecture connecting back to water. The two symmetric buildings have a stream flowing through the central plaza which connects back to the horizon line of the water in the distance. The buildings themselves, although a different program, foster a collaborative experience with no walls separating spaces. The spaces are all diagonally oriented so there is opportunity to take advantage of the views and further connect the architectural experience back to the water.

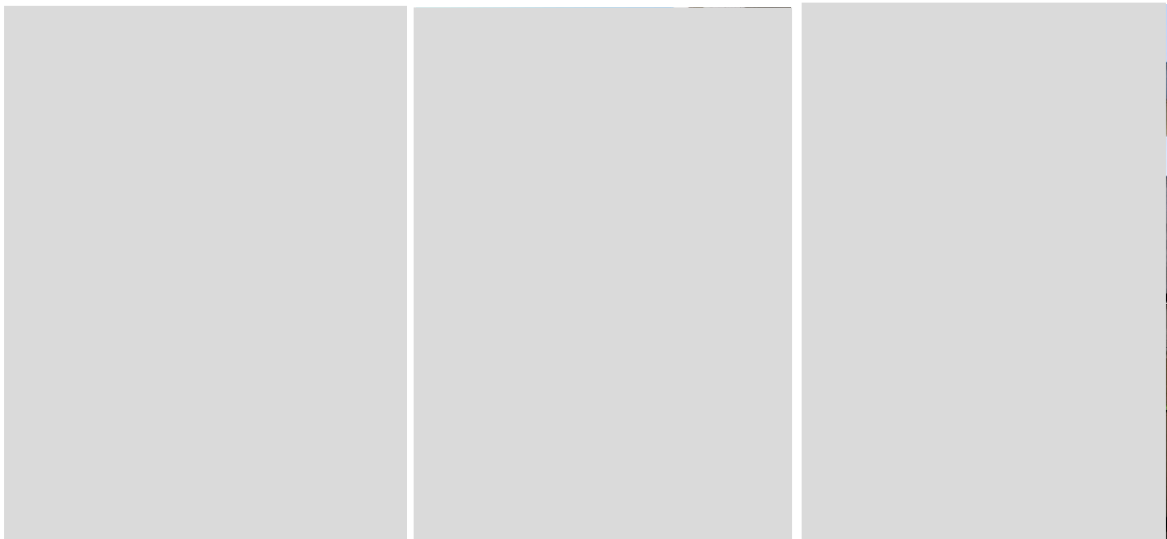


Figure 35: Salk Institute Images (Source: ArchDaily)

Connecting Food with Art

Platform Monsant / South Korea / Platform_a

This restaurant, located on top of a mountain, acts as a retreat for patrons. Every design move made in this restaurant was to direct views out to the landscape. Even the materiality of the structure was meant to reflect and mimic the natural surroundings. As

seen in Figure 37, the stair running alongside the boxed mass of the restaurant is a way to transition up to the rooftop which acts as an observation platform for the surrounding

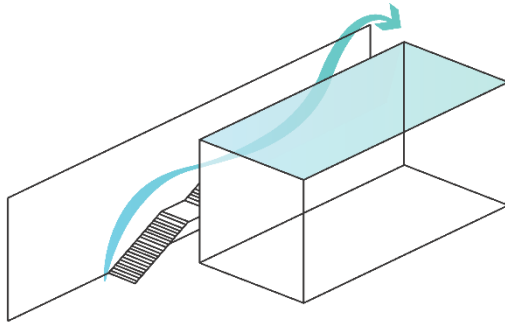


Figure 37: Roof as Amenity Space
(Source: Author)

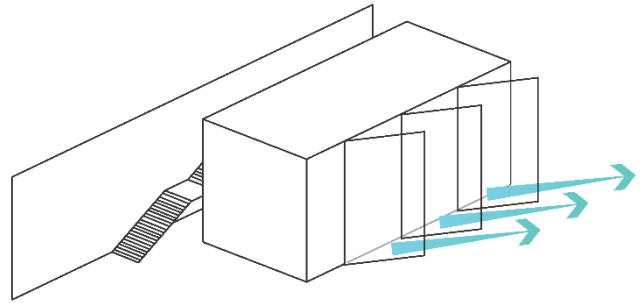


Figure 37: Operable Glass Panels Along South Elevation (Source: Author)

landscape. This stair runs adjacent to a weathered wall that once again, frames views as you transition upwards. On the roof are two large skylights that allow additional natural light into the interior mass of the restaurant and they act as benches for people to sit on and observe the surroundings. The interior space blends the line between indoors and outdoors with large operable windows on the southern elevation. This panels rotate completely open and allow a direct connection to the landscape and views. This operable system can be seen in Figure 37.

Although this precedent is large in scale for the site, it provides many valuable design ideas that can be applied to this thesis. The winery is divided into three main programmatic zones all of which sit on a base that is used for storing the wines beers. The first zone is used for wine and beer tastings, the middle zone is used as a lounge space, and the third zone is used for housing the brewing equipment. Figure 40 shows the general program massing of the winery. This middle zone that is used for lounging also provides extensive views out to the landscape. On either side of the space, the walls open and connect into outdoor patio and balcony spaces, blending the barrier between indoors and outdoors. These balcony and patio spaces become an extension of the interior space and direct views out towards the landscape, as seen in Figure 40. The exposed structure on the exterior of the building helps to create a rhythm on the façade and give insight as to the organization of the elements on the interior. The building mass extends out from the landscape and the exposed structure helps to support the suspended mass by anchoring into the ground. The rhythm of the exposed structure can be seen in Figure 40.

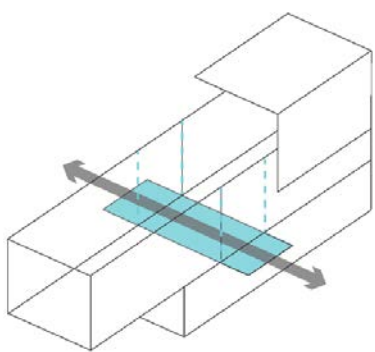


Figure 40: Middle Core Opens to Landscape (Source: Author)

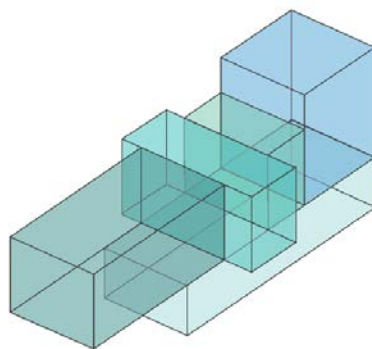


Figure 40: General Massing (Source: Author)

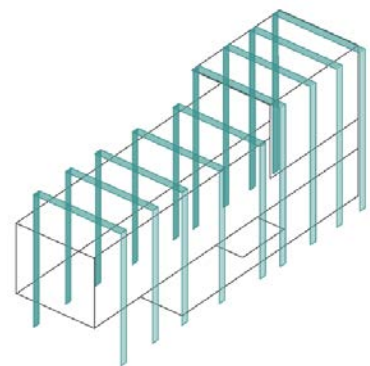


Figure 40: Exposed Structure Creates Rhythm (Source: Author)

Chapter 5: Initial Design Strategies

Site Parti Diagrams

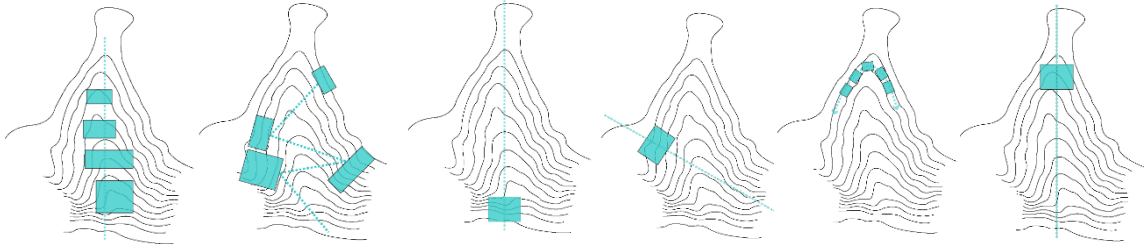


Figure 41: Initial Design Partis

The design process began with the intention of there being a series of buildings or pavilions in the landscape (Figure 41). These pavilions would be connected by a series of ramps. However, this concept came to an end when it was recognized that the amount of ramping that would be needed to get people down to the water would ruin the integrity of the site, and would take away the natural characteristics of it. Taking a step back, it was important to understand the different sectional conditions of the site and how the building would sit in the landscape (Figure 42).

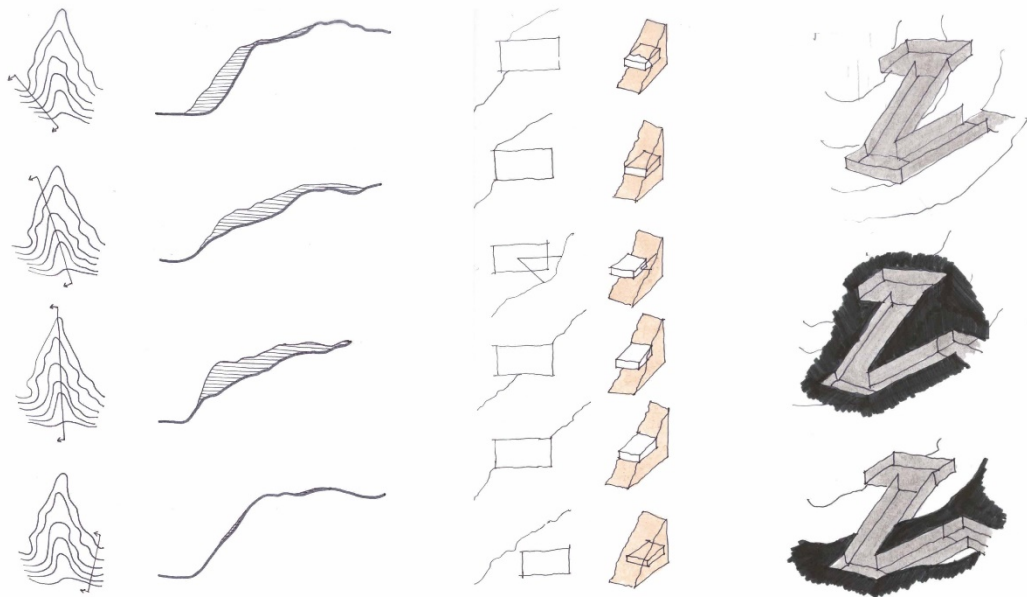


Figure 42: Sectional Conditions, Massing Conditions

This exploration transitioned into the second iteration of design where tunneling began to play a role in the movement of people. The concern with this method of getting people down to the water involved natural light. If people are being brought down into the earth 125' then tunneled outwards ~400' how would natural light be able to access these spaces? It became a concern, until the design idea to flip that concept 180 degrees was developed. Instead of tunneling people, could that vertical sequence be exposed and treated as an object in space?



Figure 43: Aerial View of Entire Scheme in Landscape

The end design proposition intends to make a bold statement in the landscape that presents the accessible route as an object in space that can be identified from the site as well as from the water. The site plan is comprised of a series of artist studios that are scattered in the landscape and a larger gallery space located in the center of the ravine that eventually projects outwards from the earth.

Artist's Studios

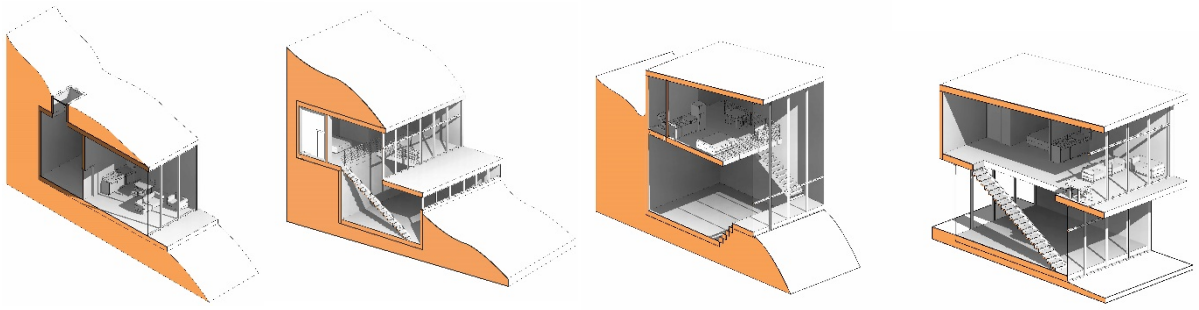


Figure 44: Artist's Studios Variations

There are 4 different types of artist's studios. The variations offer different working spaces for artists of different types of occupy the space. For example, painters and sculptors might want more natural light than a photographer or someone who works with digital media. The different options of location in the landscape also offers varying levels of privacy. Many artist work better in isolation and many artist work better when they interact with others. All variations on the artist's studios are designed with landscape in mind and are organized with the intention of unobstructed views of the ocean and surrounding vegetation.

Gallery

The gallery is where the hub of activity is on the site. This is the space where the work produced by residents on the island and artist invited to this retreat can be displayed, appreciated and bought. The sequence of approaching the site is an important one (Figure 45). It aims to maintain the natural characteristics of the site and act as means of disguise for the gallery, meaning that when one is experiencing the approach, there is no indication of a building occupying the site.

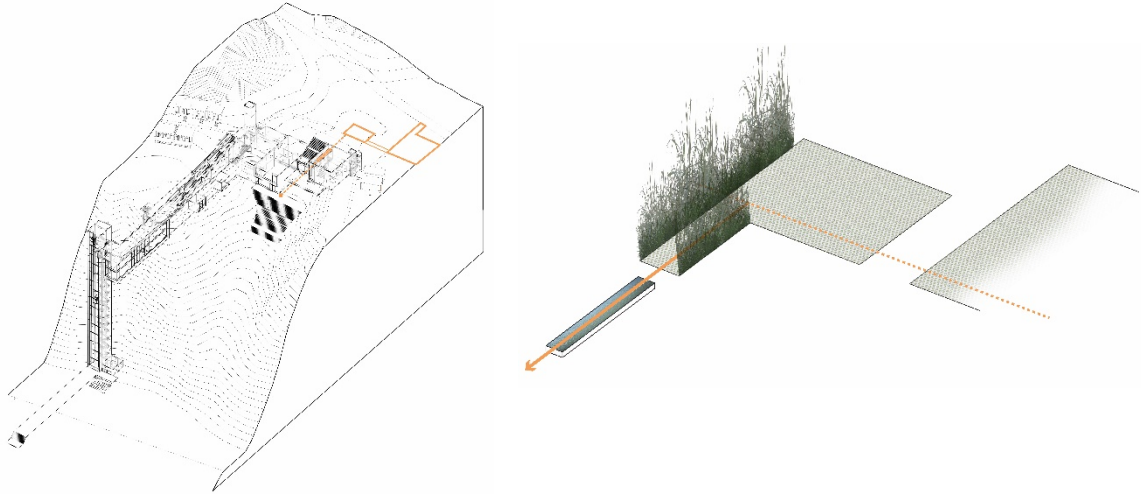


Figure 45: Arrival Sequence Diagram

An important consideration that must be addressed in the design was how to manage water runoff going through the ravine. To do this, a three-step sequence was developed. In the arrival sequence, the vehicular parking area, bike parking area, as well as the roof of the first gallery space are covered in permeable pavers, which capture the rainfall and divert it to a collection pool that is located on axis with the exit from the bike parking area. This collection pool, when filled with water, draws the visitors eye out towards the horizon line of the ocean. When the collection pool reaches capacity, the excess water is diverted to an underground cistern where the water is stored, filtered, and used in the building as grey water. This process can be seen in Figure 46.

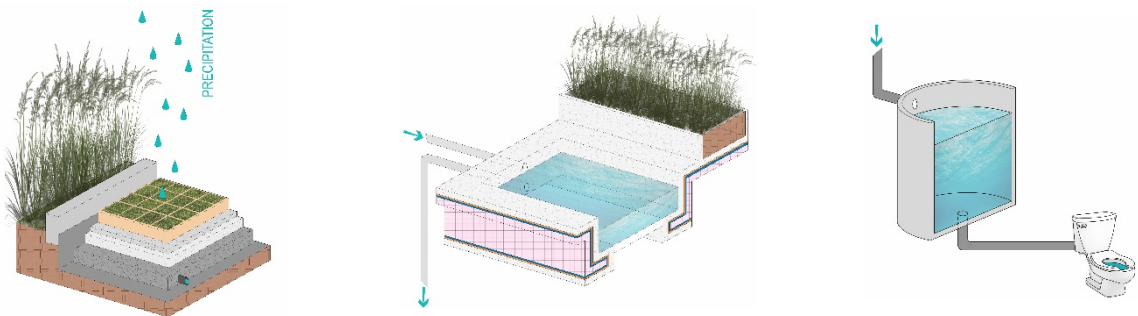


Figure 46: Rainfall Collection and Distribution Process

To get pedestrians to the beach, there are two main routes to take: the ‘beach-goers’ path and the ‘gallery-goers’ path. The beach goers path, brings pedestrians directly to the vertical circulation tower. The path begins in the bike parking area and diverts off into a vegetation path that curves with the contours of the site. At the end of this path, the vegetation frames views to the horizon and the pedestrian is exposed to a stair and ramp system leading to the tower. Along this descent, native plants and flowers, along with lightwells for the gallery run adjacent. This moment within the sequence can be seen in Figure 47 and Figure 48.

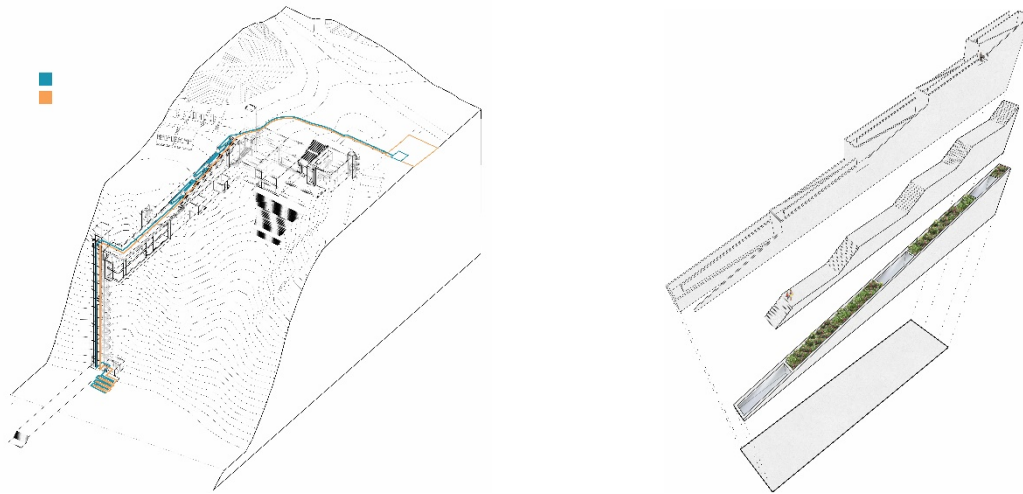


Figure 48: 'Beach-Goers' Path



Figure 47: Stair/ Ramp to Tower

The 'gallery-goers' path leads people to the vertical circulation tower through a series of interior and exterior spaces that engage people with the natural landscape and artwork. The organization of spaces and circulation was heavily guided by natural light within the space. The path of the space has moments where the visitor needs to pivot, and as that change in position happens, there is natural light ahead guiding the intended path of circulation. In certain spaces, that natural light comes from above, in others it is coming from the side. These daylight relationships are displayed in Figure 50. The location of natural light in the building also played a role in the organization of spaces

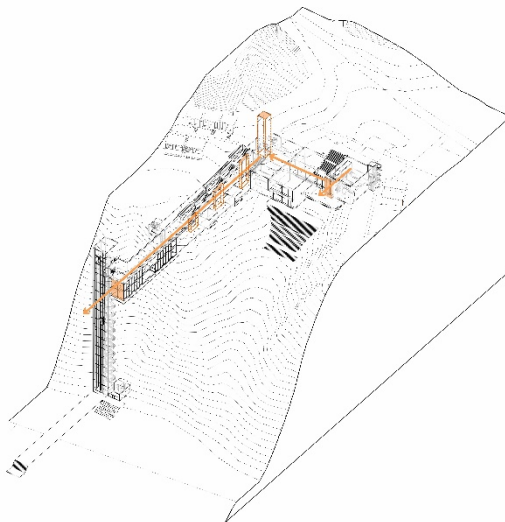


Figure 50: Light Relationships

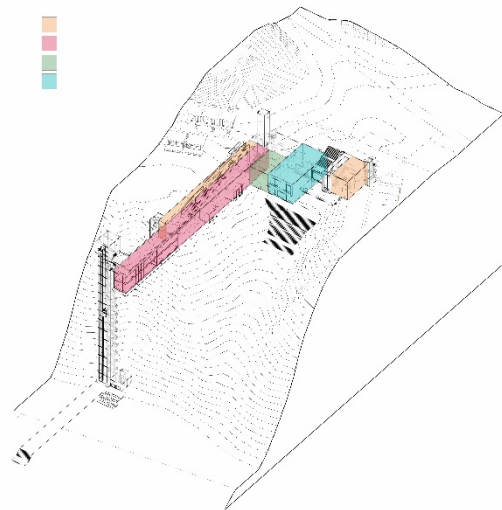


Figure 49: Program Blocking

within the gallery. In places where more direct light entered the space, galleries for sculpture were located. In areas where there was reflected and diffused lighting, painting galleries were located. Finally, in areas where no natural light was omitted, is where photography or digital media was displayed. In spaces that receive complete natural light, observation areas, lounge space, and the bar were located. The general program arrangement can be seen in Figure 49.

Sequence of Spaces

The approach to the gallery involves an interesting play between landscape and man-made structure. Vegetation frames pedestrians view of the building during the first step in the sequence, but as the approach sequence progresses, the building itself helps to frame views out towards the horizon, which can be seen in Figure 51. The grand stair leading to the entry, encourages slow movement to appreciate the landscape.



Figure 51: Entry Stair

The first moment of vertical circulation occurs in the entry gallery space. This transition down to the main level of the gallery features a worn wooden wall to bring back ideas of the New England vernacular. This stair is framed by a large window that offers views out to the Atlantic Ocean. This moment is seen in Figure 54. At the bottom of this stair, are large pivoting doors that open out onto the first observation deck. This space blurs the line between indoors and outdoors, and provides a preview into some of the lower gallery spaces (Figure 53).



Figure 54: First Observation Deck



Figure 53: Connective 'Catwalk'

Moving forward in the sequence is the main gallery promenade. The main pivot point in the design of the gallery aims to give you views towards the final destination of the sequence by framing views out to the horizon. Light entering from the lightwells and from the observation pods creates a rhythm in the space as you progress towards the tower (Figure 52). The light entering not only guides the path but also helps to highlight sculptural pieces along the sequence. At this moment, the worn wood reveals itself once

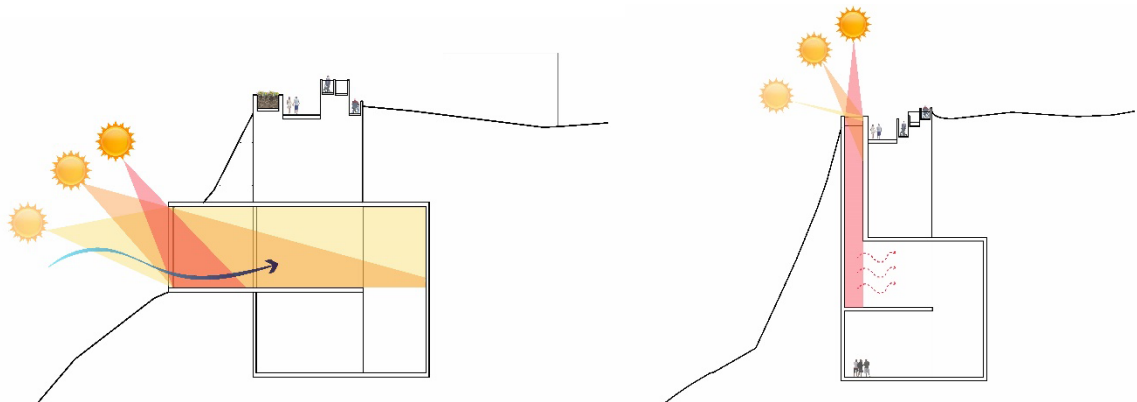


Figure 52: Gallery Daylighting Techniques

again, emphasizing another moment of vertical movement. This space can be seen in Figure 57.



Figure 57: Main Gallery Leading Towards Tower

At the lower level of the main gallery space, is a more intimate gallery to display painting (Seen in Figure 56). This space provides a buffer zone between the lower linear gallery and the suspended sculpture gallery and lecture space. Figure 55 shows the lower level linear gallery which provides room for larger scaled paintings or drawings. The upper level promenade opens to this space and provides a different perspective for people viewing the artwork.

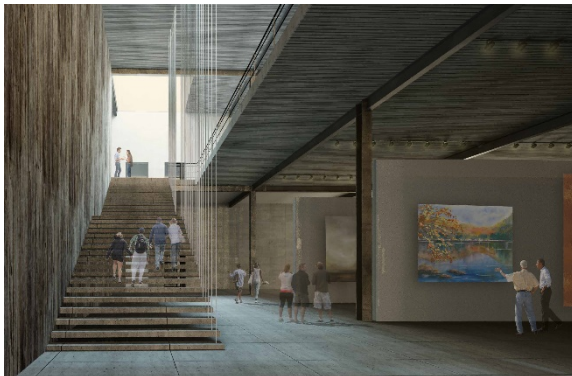


Figure 56: Lower Level Stair



Figure 55: Lower Level Linear Gallery

The lecture/impromptu performance and suspended sculpture gallery is the most naturally lit gallery space. With south facing floor to ceiling glazing, the space is perfect for larger gatherings and larger scaled pieces of art. This space also has an enclosed catwalk running through the upper portion of the space. This provides another perspective for people moving through the space to observe the artwork and to view any lectures or performances happening (Figure 58). The view from the lecture/performance space towards the catwalk can be seen in Figure 59.



Figure 59: Lecture Space

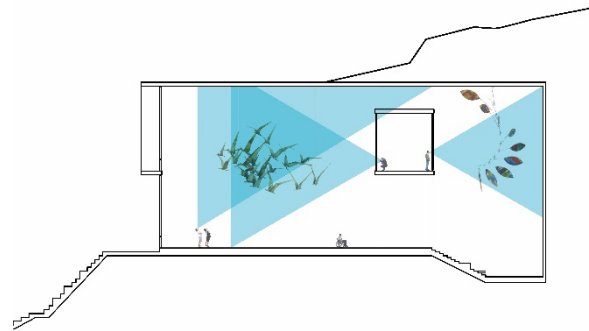


Figure 58: Cone of Vision in Space

This space filters out into the second observation deck. This observation deck transitions into a set of “hangout” stairs with different areas to sit and stand to pause and appreciate the landscape. At the bottom of the hangout stairs, visitors have the option to take a natural and undefined path down to the water. Figure 60 shows the experience that a visitor might have on those hangout stairs looking towards the gallery.



Figure 60: View from Ravine

The moment when the gallery space reveals itself from underneath the terrain, unobstructed views of the water and landscape are offered. On the main level, guests have an enclosed space that provides places to sit and view the surroundings (Figure 61). On the lower level, a lounge area (Figure 64) and bar area (Figure 63) are provided for everyday use or for special events that may take place. Both spaces also offer unobstructed views and can truly become a destination and amenity for residents and tourists of the island.



Figure 61: View from Bridge



Figure 64: Lounge



Figure 63: Bar

At the base of this vertical promenade, visitors reach the beach. Here, a dock made of the same wood that was seen as a detail throughout the building, meets the vertical circulation tower. This dock extends down into the water and terraces into a platform where kids can jump into the water or kayaks can dock their kayaks. A ramping system descends down from the dock where able bodied people as well as persons with disabilities can access and enjoy the beach. At night, this gallery and tower glow with



Figure 62: Night View of Gallery from Coast

light and become an identifiable marker for the islands coastline. This image, as seen in Figure 62 appears as if it is a modern-day lighthouse.

Chapter 7: Conclusion

This thesis, addresses the issue of accessibility of the Mohegan Bluffs located on Block Island, RI. Through this gallery and landscape design, a vertical sequence of spaces is created that highlights and frames the natural landscape and engages people with art. The program begins to help activate the site during times of the year where it is otherwise deserted and will bring recognition to local and foreign artist. The design of this space is the catalyst for transformation of the island's coastline. The bold statement it makes in the landscape as an object in space becomes a beacon for the island and an identifiable marker from the water.

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