# Architecture as Living Memory: Building Across Borders

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## **ABSTRACT**

Border delineations and walls have been used to protect cities and towns throughout history. In the present age of modern surveillance and advanced military technology however, physical walls have much less significance for the protection of present-day states and nations and have become artifacts of mostly symbolic significance. In an increasingly connected world with the potential for becoming more compassionate, the symbolic significance of the border wall, barrier, and delineation demands to be reassessed and reapproached. This opens the possibility of designing a new binational border typology with functions of business, tourism, cultural education, hospitality, and public assembly that can mutually benefit bordering regions. The site of this thesis is the 1949 Armistice Agreement, or Green Line, on the perimeter of the West Bank of Palestine – a prolonged border conflict of our time and a powerful example of spatial injustice. Through a combination of ancient and modern materials, this thesis explores the potential of hospitality through the design of a roadside inn to recognize the history of its place and create a physical and symbolic bridge for future cooperation. In addition to lodging for travelers, the program incorporates a museum, artist workshops, dining areas, gift shops, and gathering spaces. Straddling the Green Line along the Dead Sea shoreline, it is designed to carry the memory of the land, but also to symbolize a future that joins divided communities.

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# GENERAL AUDIENCE ABSTRACT

This thesis looks at the problem of border delineations and walls within a modern context and proposes the use of borders for functions supplementary to border control and security - such as local commerce, cultural spaces, tourism, hospitality, and public gathering places. Border delineations and walls have been used to protect cities and towns throughout history. In the present age of modern surveillance and advanced military technology however, physical walls have much less significance for the protection of present-day states and nations and have become artifacts of mostly symbolic significance. In an increasingly connected world with the potential for becoming more compassionate, the symbolic significance of the border wall, barrier, and delineation demands to be reassessed and reapproached. This opens the possibility of designing a new binational border typology with functions of business, tourism, cultural education, hospitality, and public assembly that can mutually benefit bordering regions. Spatial justice involves the fair and equitable distribution within a space of resources and opportunities. The site of this thesis is the 1949 Armistice Agreement, or Green Line, on the perimeter of the West Bank of Palestine - a prolonged border conflict of our time and a powerful example of spatial injustice. Through a combination of ancient and modern materials, this thesis explores the potential of hospitality through the design of a roadside inn to recognize the history of its place and create a physical and symbolic bridge for future cooperation. In addition to lodging for travelers, the project's program, or scope of work, includes a museum, artist workshops, dining areas, gift shops, and gathering spaces. Straddling the Green Line along the Dead Sea shoreline, it is designed to carry the memory of the land, but also to symbolize a future that joins divided communities.

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I. BACKGROUND



## Introduction

I became interested in the connection between architecture, politics, and war through reading Architecture and Armed Conflict, a multi-authored book edited by JoAnne Mancini and Keith Bresnahan, and The Destruction of Memory, written by Robert Bevan. Through case studies of global conflicts, these books have shown how architecture carries psychological and symbolic significance among all communities. The examples demonstrate how space is used as a tool in politics and war to assert power — through the demarcation of space with structures, or the destruction of structures and the displacement of people. Furthermore, the work of British Israeli architect Eyal Weizman details the use of architecture in warfare and human rights abuse. His research shows how the Israeli military plans the destruction of Palestinian urban areas and homes through a guerrilla architectural vision — led by military leaders applying architectural theories toward urban warfare (Weizman, 13). Destruction of civilian homes is used as a technique to destroy the psychological stamina of the Palestinians in order to displace them.

While the internationally recognized 1949 Armistice Line, or Green Line, was made to resolve the conflict of land and space, the IDF is unconcerned with the borders recognized by governments and the international community — "military operations such as aerial attacks or commando raids...that affect the enemy psychologically and organizationally...whatever line they [the politicians] could agree upon — there they should put the fence. This is OK with me...as long as I can cross this fence" said Shimon Naveh, retired brigadier general and director of the IDF's Operational Theory Research Institute (Weizman, 11-12).

I began thinking of the reason for the perpetration of these human rights abuses. And it seems ironic that in order to create a home for the Jewish diaspora, survivors of torture and displacement during the Holocaust, that the Zionist movement should in turn perpetrate the ethnic cleansing and displacement of another community. The abuse of politics is seen in this, as the Zionist movement acts towards goals of space and power, without just process and without religious principles. I am also inspired by the resilience of the Palestinian people, people who struggle continuously in a discontinuous state that hinders daily freedom of movement – yet continue to protest for the rights to their land, property, and space, even when the international community has overlooked them. I also see hope in the efforts of Arab-Israeli peace-building projects - such as the coexisting efforts seen in cooperative communities of Palestinian Arab and Jewish citizens at Neve Shalom-Wahat Al-Salam (Oasis of Peace), and its projects that include the School for Peace, Children's Educational System, Pluralistic Spiritual Centre, and Youth Club, all aimed to increase the engagement and cooperation of the two communities. Schools and places of worship have typically been used as the program for founding these peace-building spaces – where children can pave the way for cooperation in the next generation, and the faithful can coexist together in their beliefs. My thesis builds upon these forerunners, expanding the spaces and programs that can be developed in peacebuilding efforts.

For my thesis, I became interested in questions of spatial justice. I considered these questions -- in working in the urban context as an artist or architect, what can be done to shift the spatial development imbalance of this region? How can I be mindful of who will benefit from any change and development? I wanted to create a place that remembers the persecution of the people of this land, and the refugees it has made of many. A place of hope. A place that is inviting, that instills trust rather than mistrust along a border with concerns of security. A place for the public. Where instead of a fence, wall, or other physical border, there will be an opening and a bridge, with proportions that create equality.

I began thinking of and answering the following questions about the site and program for my thesis.

#### Why create anything on the border line?

To commemorate the 1949 Armistice resolution and both symbolically and physically create a cooperative space. Constructing a structure straddling the border line remembers the fences of the past and symbolizes hope for the future.

## Why highlight the Green Line, creating a physical barrier where none existed before?

Memory and acknowledgement are important. The purpose is not to add a physical concrete or barbed wire barrier, like is done in other locations along the perimeter of the West Bank. But to claim a place for unity.

## Why create an inn and cultural center?

The western coast of the Dead Sea has been a hotspot for Israeli and international tourists. The popularity of tourism to this region can be used advantageously to enable interaction and engagement between a diverse group of people. As a civic structure, cooperatively operated by Palestine and Israel, it can symbolize hope for the two countries to work together, share, and benefit from the resources of this land. It will be a resting and learning place for travelers along the adjoining road, Highway 90. It is a homage to the historical caravanserais of this region, roadside inns for merchants that supported the flow of goods, information, and people. This will be a place of unification, education, awareness, conversation, and shared experience.

# The state of the little

The 'Iron Wall' policy expressed through the Separation Barrier between Israel and the West Bank

# Politics of Architecture

## ON SPACE AND POWER

The notion of space is tightly bound to the notion of power – as both, in turn, relate to freedom and autonomy. The ownership of land, the control of infrastructure and movement, and the design and construction of architecture are all involved with the notion of space, and therefore power. From individual landownership, homes, and businesses, to cities, civic buildings, and capitals, all are spaces that have significance to the physical and symbolic dimensions of the power of the individual, group, state, or nation.

The now 72-year-old Israel-Palestine conflict of space and power continues within a largely apathetic or ambivalent international sphere. As the Israeli state continues to expand past the original boundaries of its founding year, thus Palestine becomes an increasingly discontinuous remainder of the nation it once was. The displacement of Palestinians is growing exponentially, from 700,000 after the war in 1948, to 4.2 million in 2005, 5.2 million in 2015, and 6.2 million in 2020 (UN Report 2016).

As all aspects of human life depend on a state of balance, so does the design of spaces, and so does the allowance of power. The imbalance of power within the Israel-Palestine conflict therefore raises the thought—when and how will the scales tip in the future for this region, to restore balance towards justice and equality? Will the scale continue to tip toward the side of the aggressor, which can trigger a more forceful counterreaction? Or can measures be taken that allow the inevitable shift to be gentler and less reactionary?

Taking measures to create spaces of balance in all places facing an inequality and an imbalance of power, is well within the ability of the architect. Architecture has historically been used in the field of politics and power to physically mark territory and symbolically establish imagery of national identity. But architecture can go a step further—through transcending nationalism and using its power of symbolism, architecture can help establish imagery of inclusion and equality in the collective global consciousness and help towards achieving balance.

#### ON BORDERS AND BOUNDARIES

The notion of boundaries is essential to the discussion of space. Space within the context of power is distinctly delineated by boundaries. Walls have therefore been an integral part of city, town, and settlement design since ancient civilizations. These fortifications have served the purpose of enclosing regions, marking territorial boundaries, and keeping out aggressors. In the current world of modern surveillance and military technology however, physical walls as barriers between most nations have become an archaic relic of the past.

#### The Green Line

In the Israel-Palestine conflict, borderlines take a central role in the conflict. The state of Israel has been constructing a heavily fortified barrier wall which was initially presented to run along the 1948 Armistice Agreement Line, or Green Line, but has since deviated significantly eastwards, weaving through Palestinian towns and villages (Patel). At a total planned length of 712 km (of which 65.3% is completed), 15% of the barrier structure runs along the Green Line or within Israel, and 85% of the structure runs inside the West Bank (UN OCHA), barricading 27,520 Palestinians west of the barrier from the rest of the West Bank. (B'tselem).

The expansion has led to the demolition of Palestinian homes and confiscation of Palestinians' privately owned land for the direct purpose of expanding the wall. In addition, Israeli military also maneuvers heavy construction machinery "through walls [of homes] and across the depth of the city," as a procedure to extract Palestinians inside homes who Israel wants to detain (Weizman, 9). From 1967 to 2004, Israel has demolished 12,000 Palestinian homes and evicted 50,000 people (Bevan, 141). It has declared much of the land as 'state land,' where no Palestinian building is allowed, and placed a freeze on land registration for 30 years, such that Palestinians cannot prove ownership of their land and property (Bevan, 143).

The position on the IDF's guerilla warfare techniques have been described by Eyal Weizman and his conversation with Shimon Naveh, a retired brigadier general in the Israeli army, and the director of IDF's "Operational Theory Research Institute," as such –

His position is that the IDF must replace presence in occupied areas for the possibilities to move through it, or produce in it what he calls 'effects...military operations such as aerial attacks or commando raids...that affect the enemy psychologically and organizationally.' As such, 'whatever line they [the politicians] could agree upon – there they should put the fence. This is OK with me ... as long as I can cross this fence. What we need is not to be there – but ... to act there ... Withdrawal is not the "end of the story"' (Weizman, 11-12).

Apart from the demolition of walls and homes, Palestinian homes are also impacted by the controversial archeological projects taking place in East Jerusalem. The organization behind the excavation efforts and its funding is the City of David Foundation, created by former Israeli military commander David Be'eri in the 1980s to establish a strong Jewish presence (Lawler, 66). The tunneling operations have left costly damage to many Palestinian homes, resulting in collapsing of structures and damage to foundations and walls, and "many Palestinians believe the Jerusalem excavations and attempts to displace them are intimately connected." These war tactics in the Israeli-Palestinian conflict relate to the words of Alberti—"for there are two types of war machine: one demolishes the wall by ramming and striking it, the other undermines it and digs away its foundations" (Alberti, 103).

The separation barrier functions more towards creating a symbolic division rather than providing physical security, a physical manifestation of psychological barriers. It is also symbolic of a disregard for spatial justice—as Israel continues to flex the border and occupy more and more Palestinian land.

On the expulsion of the Palestinian population and destruction of homes and villages, Robert Bevan writes in *The Destruction of Memory*:

It is ethnic cleansing and has been increasingly recognized as such by a new generation of liberal Israeli historians...Creating 'facts on the ground' is Israel's three-dimensional territorial policy. It is a strategy designed to flex the 1967 border as far as possible in Israel's favor ahead of any peace settlement (Bevan, 140).

The infrastructure of division comes also in the form of mobility control, through the border walls, bypass roads, permanent and flying checkpoints, and other physical obstacles, controlling intercity, and in some locations, intracity movement. All of these factors, in addition to the unequal rights of Palestinians and Israelis within the same land and governance, and the lack of citizenship allowed to Palestinians, creates an apartheid and invasion of the spatial rights of the Palestinians, expanding the division and distrust between the two governates.



Sarpi checkpoint, Georgia and Turkey border



Opening in the wilderness, US and Canada border



Haskell Free Library and Opera House, US and Canada border



Dajabon Market, Haiti and Dominican Republic border

#### **Positive Border Spaces**

Many borders today appear more threatening than welcoming, with stark concrete walls or hostile barbed wire fencing. But there is some border architecture that can serve as examples for a different typology of border architecture. One such design is the watchtower at the Sarpi border checkpoint between Georgia and Turkey, a striking structure that creates a watchful presence but with a whimsical, unthreatening aesthetic. Another example is the 20-foot-wide "Slash" of trees along the length of wilderness dividing the US and Canada, making sure an average person recognizes they are on the border. Rather than a structure, this border takes advantage of the natural terrain to create an open space. Another example of border architecture on the US and Canada border is the Haskell Free Library and Opera House — a building straddling the international border, with access to both sides. The Dajabon Market on the border between Haiti and the Dominican Republic is another example of a welcoming design, a market which holds international fairs and vendors and buyers can cross the border without producing a passport or visa.

In his architectural treatise, *On the Art of Building*, Alberti advocates for creating ornaments for the road, a public facility, just as he advocates for ornaments to public sector buildings:

The road...is something essentially public, in that it is designed to convenience both residents and visitors...The countryside along a route may be a considerable ornament...full of villas and inns, and plenty of attractions; with views now of the sea, now of mountains, now of lakes, rivers, or springs, now of a parked rock or plain, and now of groves and valleys...If the traveler often comes upon objects that stimulate conversation, especially if it is about high matters, that is an ornament of the greatest dignity (Alberti, 244).

This thesis explores this idea of creating an ornament of the road expanding upon a border line to create a space for peace and rest of travelers, as a stage for stimulating conversations that will bring unity between people and land.

#### ON COLONIALISM AND MEMORY

There is a strange dichotomy in the colonizer's struggle to displace indigenous inhabitants, but also to claim the place through adopting its style and memory. Instead of a tool for beauty and peace, in the hands of an oppressor, it can be a tool for demolition, territorializing, and erasure of memory. Architecture is particularly within the center of the discussion of the Israel-Palestine conflict, as architectural manipulation has been a key instrument in Israel's territorial expansion — by erecting walls, checkpoints, segregated roadways, and settlements. Architecture has been weaponized in many senses — it is a tool of urban warfare, where the bulldozer has become a symbol of Israel's military, and is used for the destruction of homes, and public and commercial buildings. And lastly, it has been a tool in a reversal of the narrative and memory of the land through architectural symbolism.

Architectural style has also been a tool of Israel's politics and creating a narrative and image for the Israeli state. Israeli architects have struggled to create an architecture "of the place," "a place to which they wanted to belong, as well as possess" (Nitzan-Shiftan, 55). As the Zionist movement initiated in Europe, far from its realization in Palestine, Israel has struggled to create a national identity through a single Israeli architectural style for the Jewish people in Mandate Palestine (Nitzan-Shiftan 54). It has attempted different styles to create a narrative and foothold within the land – from the Brutalist style originating from Great Britain, gray and white, foreign to the desert land – to the provincial style of architecture, authentic and identifiable to the land, developed throughout Palestine since the early Muslim conquests of the 7<sup>th</sup> century, brown and gold, stone, and arched entryways.

Nitzan-Shiftan states in her article, "On Concrete and Stone," "Israel's nation-building project has utilized the past as a modern resource," (Nitzan-Shiftan, 61) through hunting the past on the grounds of archeology and a manifest destiny, in order to lay foundations for the future. The consequence of this has been the distress and displacement of an entire population. In his novel, *The Days of Tziklag*, the author, S. Yizhar, describes Israeli warriors who conquered the county "not only with weapons but also with a Bible and a plant guide, seeking traces of biblical sites beneath the broken clay pottery of deserted Arab villages" (Nitzan-Shiftan, 61). The Israeli archeologist, Yoram Tzafrir, writes about this experience within his generation during early statehood, explaining why touring the country with the guide of a pocket Bible was so common:

There was a yearning for the country, for those who lived in it and left in it the remains of their meager houses, the ashes of their bonfires and their wells. The longing is naive, it is not touched by the joy of appropriation that took place here after 1967. The past is longing, the broken clay pottery is connection, not a deed of property (Nitzan-Shiftan, 61).

The importance of social engineering through architecture to the colonists' mission is also apparent in the celebrated 1950's poster produced by Israel's Ministry of Tourism. The poster features the ancient, brown Jerusalem wall on one side and the modern, white, architecture of the settlers on the other side. A draped figure blows the shofar, a trumpet used for Jewish religious purposes, beckoning the Jewish people in invitation to the new state land. Tourism has become the state's largest source of income. The World Bank has stated that "restrictions on access and economic activity in Area C (the two-thirds of the PTs which remain under full Israeli control) cost the Palestinian economy US \$3.4 billion per year or about 35 per cent of its Gross Domestic Product" (Ghattas, 36). As Israel continues to flex its border along the Green Line and expand its settlements past the 1948 border, Palestine's access to space, movement, and resources continues to diminish.



Sobhiya Al-Amour, 50, confronts an Israeli bulldozer destroying homes, 2001



Israel Ministry of Tourism advertisement, 1950s

#### ON AN ARCHITECTURE OF PEACE – THE SPACE IN BETWEEN

Border architecture, the liminal spaces between territories, can be used as the canvas for creating peace-building places. An increasingly connected world has the potential to rethink the spatial development of territorial boundaries – to rethink a territorially 'closed' system as an 'open system' (Pogačar, 11). Borders hold the potential for creating structures not just for border-crossings, customs, and security, but also ones with supplementary functions – such as business, tourism, and hospitality.

In the case of Israel and Palestine, the space in between is "in a current condition of shifting, nonconsensual, and constantly negotiated borders" (Nitzan-Shiftan, 63). By acknowledging these spaces and creating a new architectural typology of the border, one without concrete walls and barbed wire, architecture can help to highlight the peace-building effort of a historic border line through creating a welcoming place of union rather than division. A fantastical place – creating comfort within a typically uncomfortable space – taking a liminal space, a space for passing through, and creating within it a destination, a place of pause, and a place of reflection.

Palestine holds religious significance to three Abrahamic religious, each seeking a homeland in the same place. "Place" undoubtedly has a deep significance to human existence. It establishes a sense of being and belonging, it connects people to each other, a home base and safety net, a space of familiarity to which to return to in an expansive world of unknowns. Such is true to the place of Palestine. But as Tzafir aptly writes, "the past is longing...not a deed of property" (Nitzan-Shiftan, 61). While historical and religious connection to a place is valuable and validating to people, it cannot come at the cost of other human lives. Nor does ownership of land validate racism and injustice.

Seventy-two years of conflict has shown that a place that provokes the passions of religious believers is not easily overcome. Some would say that resolution is so improbable that the idea is a fantasy. But the current paralysis of the conflict, and the dwindling interest of the international community, can also not continue. This conflict of modern-day settler colonialism should be a springboard for discussions on spatial justice issues by architects. Lawrence J. Vales writes in "Architecture, Power, and National Identity:" "One cannot build for strangers; history cannot be planned in advance; what is necessary needs aesthetic exaggeration" (Vales, 293).

The dignity of free access to space is a human right that architects have a responsibility to address. Architects must be conscious of the use of architecture as physical and symbolic weapons of destruction. Architecture should have positive applications, for creating inclusive spaces – to mediate between people, land, the built environment, and places.



## The Twins

People have looked up at the night sky for years and recognized two closely placed stars in the celestial sphere, one gold and one white, as brothers – twin stars. The twin stars have been mythologized since antiquity throughout different cultures and nations.

In modern times they are recognized as the stars Castor and Pollux, the Heavenly Twins, or the Dioscuri (Zeus' sons), patrons of ancient sailors. In Greek mythology, upon the death of the mortal brother, Castor, the immortal brother, Pollux, rejected his immortality to be reunited with his brother. To reward the brothers' loyalty and love, Zeus granted that they could remain together, dividing their time between Hades (the afterlife of mortals) and Mount Olympus (the home of the gods).

But the legend of the brothers originated far earlier than the Greek counterparts they are now recognized by. In Indian mythology they are the Aswins, twin Horse-gods who came to the rescue of people in distress. In Persian myth they are the twin children of the moon, Mashu and Mashtu. In Babylonian astronomy, they are "The Great Twins," guardians of the gateway to the Underworld. For the Phoenicians they are twin gazelles. In Hellenistic Egyptian astronomy, they are Horus the Elder and Horus the Younger. In China they are Yin and Yang, representing dualism, two contrasting halves of a circle.

The twin brothers are found in myths around the world. The overarching story of brothers rings true universally – with themes of fraternal love, the dualities and contrasts within life working in union, and the opposition and intertwined nature of mortality and immortality.

This thesis takes this metaphor for life and brotherhood, of opposition and equality, to explore the idea of architecture in neighboring places that can grow together and create mutually beneficial spaces. Much like the notion of international sister cities, the neighboring spaces on opposite sides of border lines can be thought of as bordering, brother cities. Through the design of the space in between, these paralleling spaces hold an opportunity for cooperation and mutually beneficial relationships for bordering towns and nations around the world.

II. SITE



# Region

The region of study is the 1948 Armistice Agreement Line, or Green Line, between Israel and the West Bank of Palestine. The terrain of this region ranges from rugged plains, to mountain ranges, to the lowest point on earth at the Dead Sea, 1,407 ft below sea level. The Mediterranean climate of the region is characterized by its dry, hot summers and wet, mild winters. In the springtime, an easterly wind travels from the deserts of Jordan, Syria, and Saudi Arabia carrying fine desert sands — lending an ominous, dusky yellow haze to the air.

The region has a rich and ancient history of caravans traveling along vast networks of routes for pilgrimage and trade. These caravans were large processions of people, animals, and goods, traveling enormous distances. Due to the intense heat of the region, caravans often travelled by night with torches to light the way – illuminating the desert with a procession of light. Along these routes were caravansaries, charitable foundations that provided free food and shelter to travelers. These roadside inns supported the flow of people, goods, and information across Asia, Europe, and Africa.



# **Site Comparisons**

1



## **NEVE SHALOM - WAHAT AL-SALAM (OASIS OF PEACE)**

Borders the 1949 Armistice Line. It is a village located on one of the two Latrun hilltops, midway between Jerusalem and Tel Aviv-Jaffa. It is the site of the existing "Oasis of Peace" city, founded in 1969, an intentional community jointly established by Jewish and Palestinian Arab citizens of Israel. It is an example of a successful cooperative community of Israeli and Palestinian people, coexisting. Its projects include the School for Peace, Children's Educational System, Pluralistic Spiritual Centre, and Youth Club.

2



## **OLD CITY JERUSALEM**

Borders the 1949 Armistice Line. This lot is in the Armenian Quarter bordering the city wall. Old City Jerusalem is a significant location to all three Abrahamic religions. By the 1947 UN statement, it should be treated as an international city. It is a high-profile location, with high tourist attraction.



## Selected Site

3



## **JORDAN RIFT VALLEY**

Borders the 1949 Armistice Line. Area within the Jordan Rift Valley, at the southern end of the Dead Sea. The site offers expansive views of the Dead Sea. Tourism to nearby Ein Gedi and Mitspe Shalem are existing points of attraction in this region. The Jordan River Valley is being considered for annexation by Israel, although Israel military and settlement homes have already been established on the West Bank here. Currently there is no border wall on this length of the 1949 Armistice Line.

# Selected Site



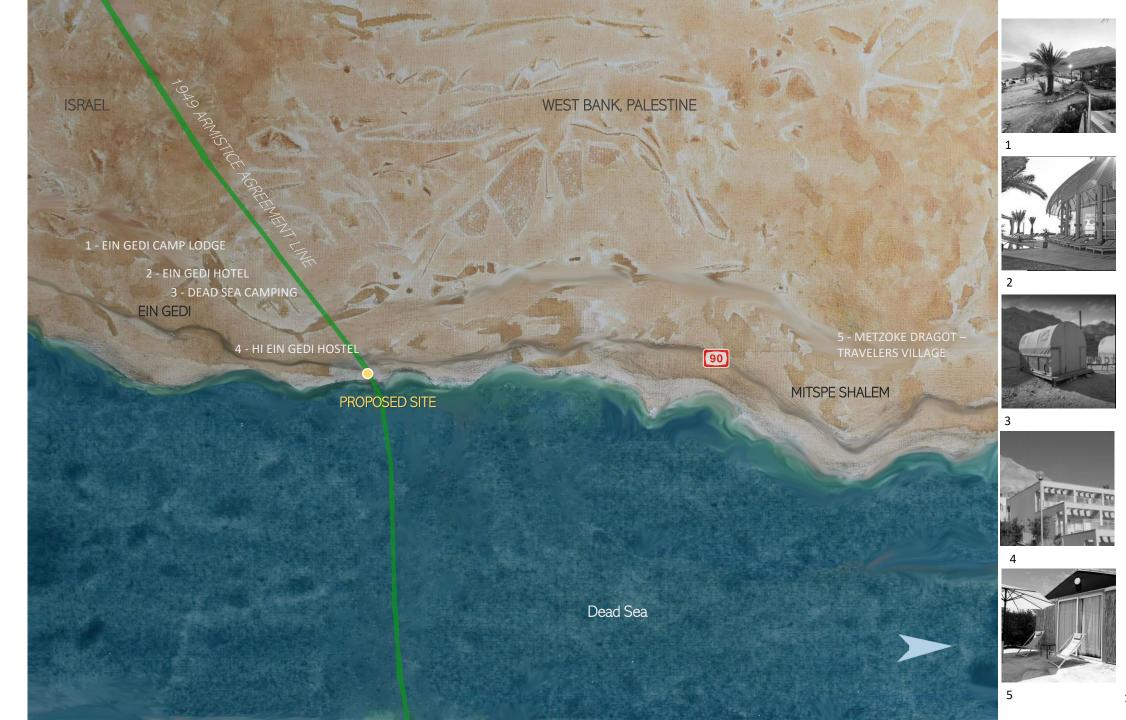


Existing Route 90 at the Green Line





Dead Sea coastal bank at the Green Line





# Site Considerations



#### **ACCESS**

Although the site of the proposed building lies on the Green Line, intended to separate a Palestinian West Bank to the North and Israel to the south, the western Dead Sea region is currently under Israeli occupation and settlement. Palestinians are not currently allowed access to the western Dead Sea coast, only accessible from Highway 90 on which two checkpoints turn back Palestinians who lack permits from Israel to travel here. This thesis refutes and rejects this discrimination, asserting that the site should be accessible to all people, regardless of ethnicity.

The site is on the 1949 Armistice Line, or Green Line on the edge of the Dead Sea. The Dead Sea region of the site is a popular tourism destination, particularly with the Israeli beach settlement, Mitzpe Shalem, 6.2 miles to the north of the Green Line, and the nature reserve and *kibbutz* (collective community), Ein Gedi, only 1.5 miles to the south of the Green Line.

Religious tourism, which brings travelers to the nearby northern cities of Bethlehem, Jerusalem, and Jericho, will also often bring travelers to complete their trip with a visit to the famous Dead Sea. Additionally, further south of the proposed site is the ancient fortress of Masada, a popular tourist attraction, as well as the coastal resort district of Ein Bokek.

The proposed site is therefore ideal for tourists to the region, as they can easily reach many religious and other tourist attractions to the north, south, and east. Tours from Jerusalem, to the western bank of the Dead Sea, to Masada, are regularly given and can be completed within a day or two.

These sites are all accessible to each other through Highway 90, a two-lane highway in some parts, running along the Jordan River valley, the western bank of the Dead Sea, to the Southern border with Egypt. The highway crosses the Israeli-occupied West Bank, and the portion along the Dead Sea coast is called the Dead Sea Highway. It is under consideration for lane expansions in certain segments. Tour buses run regularly along this route and travelers may also rent a car for self-guided trips.

The project proposes a roundabout on Highway 90 through which both northbound and southbound travelers can access the proposed building. The roundabout will be connected to a switchback access road that gradually takes the traveler down the slope of the cliff and to the building. To the west of the switchback access road will be an adjacent retaining wall. The retaining wall will provide opportunities for landscaping through desert plants that can grow well in crevices and cliffs (such as the tri-colored wall snapdragon, *loa ari tziliani*), and lighting which will illuminate the cliffs at night.









#### Cliff-face Architecture

- 1. Monastery of the Mount of Temptation, Jericho, Palestine
- 2. Houses at Yatta in the Judean hills, Hebron, Palestine
- 3. Mar Saba Monastary, Bethlehem, Palestine
- 4. Saint George Monastery in Wadi Qelt, Jericho, Palestine

#### CONSTRUCTION MEANS AND METHODS

The site topography requires certain construction considerations and careful planning. The proposed building straddles the 1949 Armistice Agreement Line, or Green Line, in the Jordan Rift Valley, on a cliff-face along the coast of the Dead Sea. The mountain region of the Judean Desert is composed primarily of a hard limestone sedimentary rock. Geotechnical engineers will first need to classify the existing rock type to ensure the stability of the rock formation and design a solid foundation.

Certain construction equipment and materials required from off-site locations can be transported through barges across the sea. This will help to avoid major road closures on Highway 90. Scaffolding will be required to access the site for construction and cranes will needed to hoist materials up. Blasting or specialized excavation equipment will be required to create the foundations within the cliff.













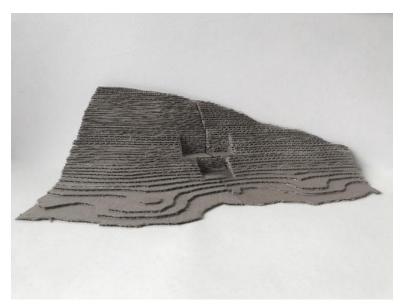


## **Hospitality and Tourism Architecture**

- 1. Ein Bokek Dead Sea Resort, Ein Bokek, Israel
- 2. HI Ein Gedi Hostel, Ein Gedi, Israel
- 3. Hostel HI, Masada, Israel
- 4. Caravanserai circa late 19th, early 20th century, Nablus, Palestine
- 5. Masada Museum and Visitor Center, Masada, Israel
- 6. Al-Hatruri Caravanserai, between Jerusalem and Jericho, Palestine
- 7. Caesarea Maritima National Park Visitor Center, Caesarea, Israel

III. BUILDING

# Concept





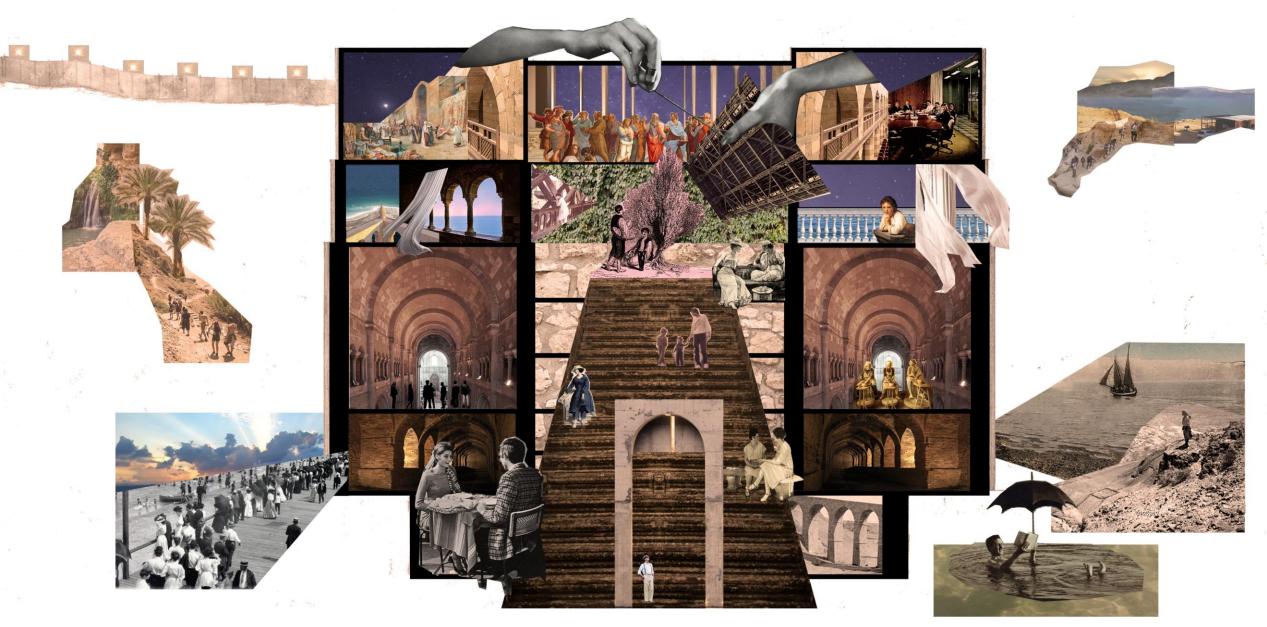


Cardboard site model, Bristol paper tower

The concept for this building came from the idea of highlighting the demarcation line with an opening of space, centered between two towers representative of the two neighboring enclaves.

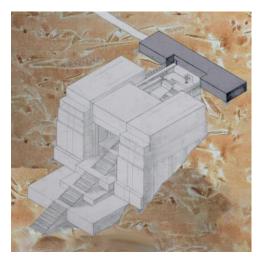


Collage of the site and core building elements

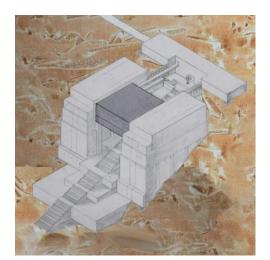


Collage of the experience within the proposed inn and visitor center

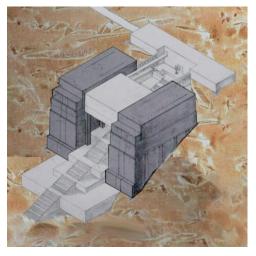
# Form



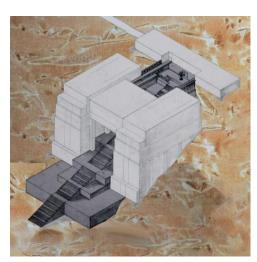
**Entry Annex** 



Bridge



Towers



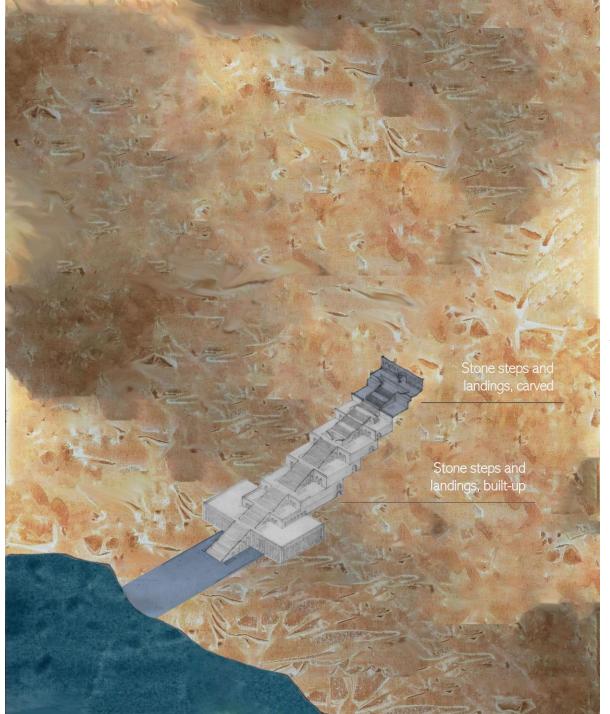
Perron

**The entry annex** is the main entrance to the building. Visitors can park their car or be dropped off by bus or shuttle in this covered landing space.

The two towers of the building, which will straddle the Green Line, will have load bearing masonry walls built with ashlar cut and worked limestone blocks excavated from the site, supported by internal reinforced concrete columns for floor support. The limestone of this region is also known as Jerusalem stone — a coarse, white stone that develops a yellow, golden hue in the light. The concrete columns have a gray, silver shade that will balance with the golden hue of the stone. The stone walls are tapered, with thickness ranging from 5 feet at the base to 3 foot at the top. The stone walls wrap the interior concrete structure with the material of the landscape. These traditionally built stone towers pay homage to the site's ancient history and Old-World building styles. They also represent the individuality of the two communities currently struggling for space, one on either side of the partition line.

**The perron**, or external stairway, runs along the political line. A portion of the top of these stairs and landings are carved out of the face of the cliff, while the portions below this are stone stairs built up from cut and worked limestones and supported by vaulted colonnades. The 36 feet wide stairs provide access to all levels of the building. The landings of the stairway allow for continuous crossing over between the two enclaves, so the undercroft, stairs, and landings form a community complex alive with movement and activity. The stairway is deeply shaded by the towers and bridge, giving visitors a cool refuge from the hot desert sun. The landings range from 5-10-18 feet.

A steel bridge with deck truss is anchored by the two stone towers and spans 90 feet over the external stairway. The modern style steel bridge connects the two enclaves and represents a space of unity for a new, modern age. It connects the most active level of the building, as it is situated between gift shops and restaurants. The bridge holds a modularly spaced steel column frame that supports the roof. A thin skylight in the roof runs along the axis of the Green Line, indicating the site's political significance. The floors of the bridge are of a highly reflective, polished natural stone, that will illuminate the floor in sunlight as well as reflect light at night.



# Perron

External stairs, of which the beginning is carved from the cliff face, and the remainder is built up with the excavated rocks.

# Materials



Jerusalem Stone

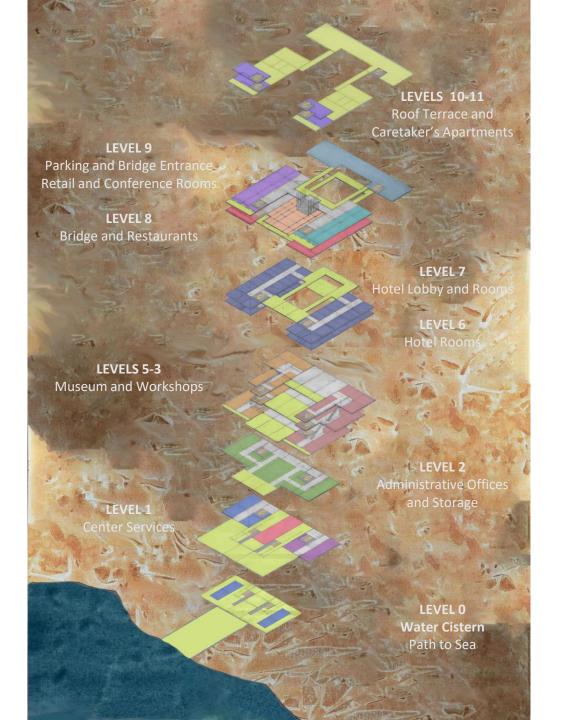












# Program

Parking and drop-off

Gift Shops

Conference rooms

Dining / Café

Open air space and circulation

Bridge – gathering area

Indoor circulation space

Guest rooms

Stairs

Museum

Elevators

Workshops

Caretaker's Apartments

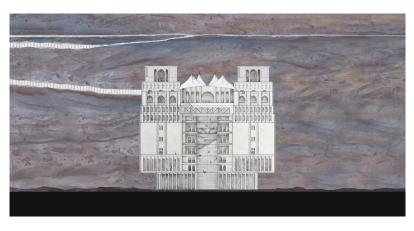
Administrative offices and storage

Showers

**Shoreline Services** 

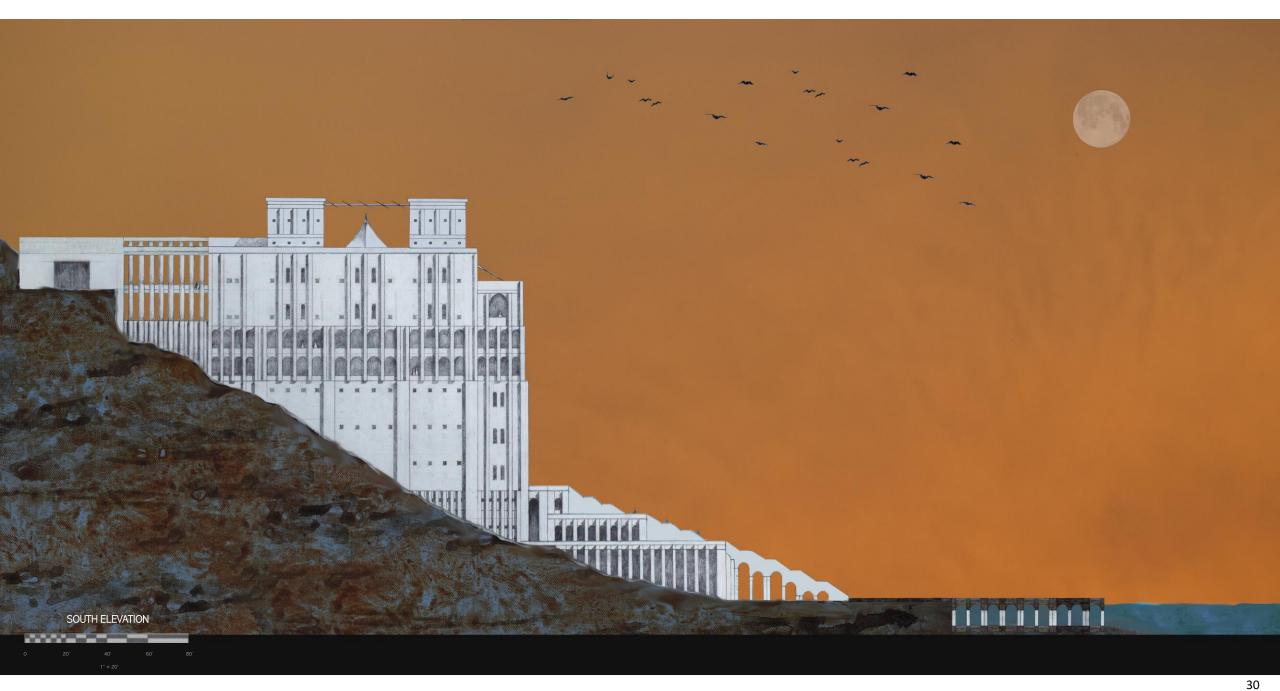
# The Building

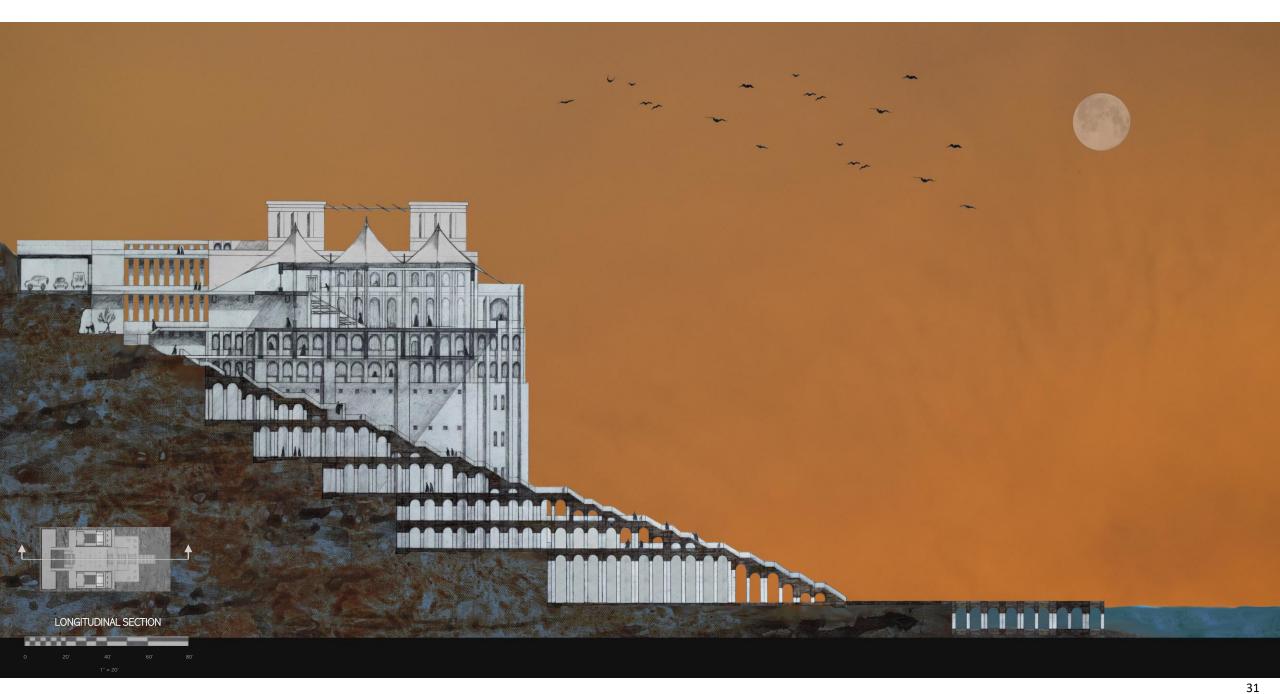


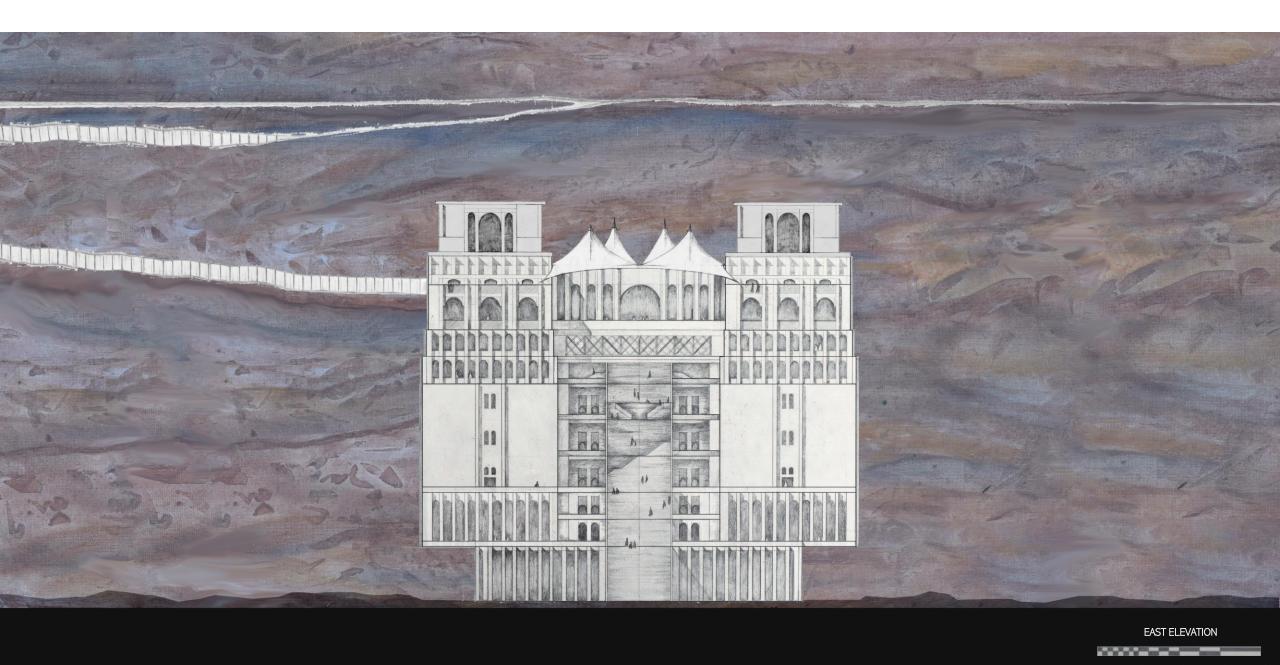






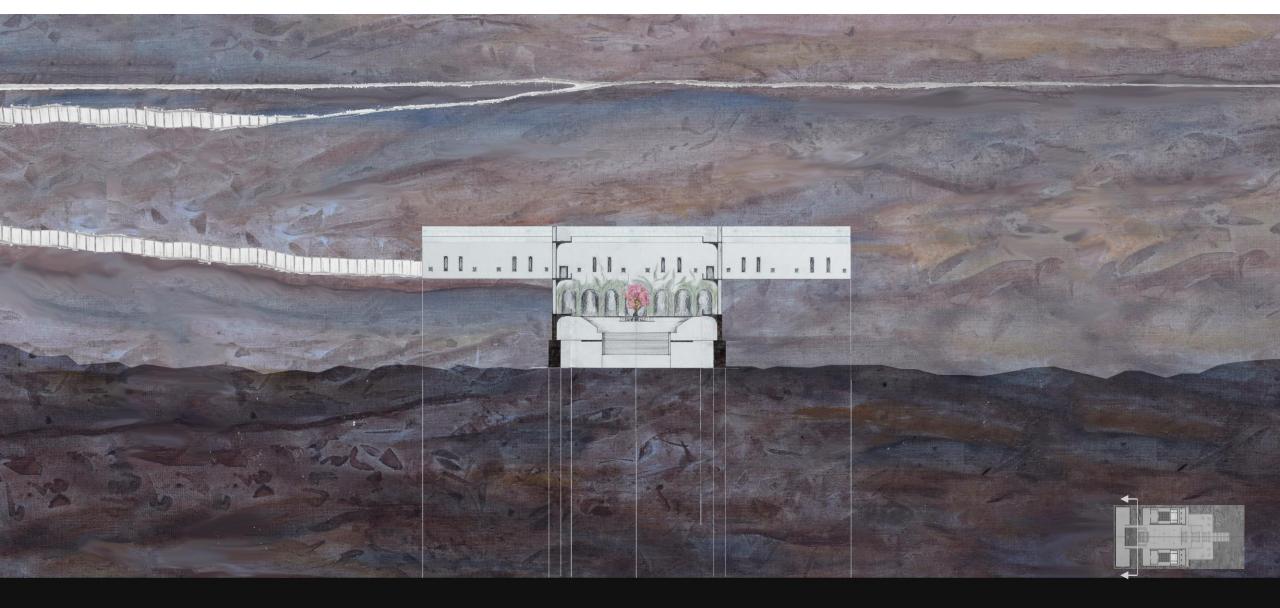




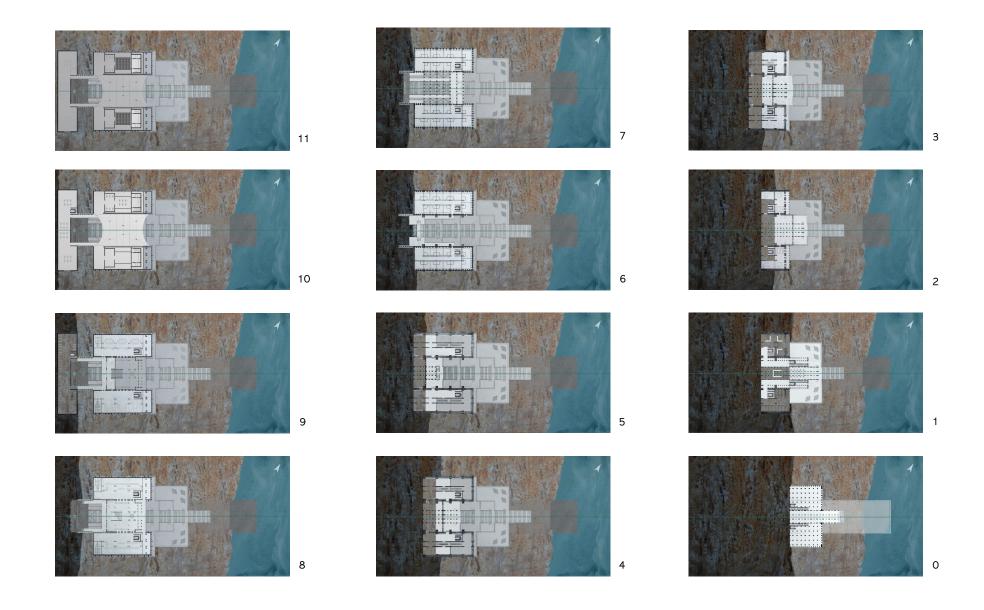




# TRANSVERSE SECTION 0 20' 40' 60' 80'

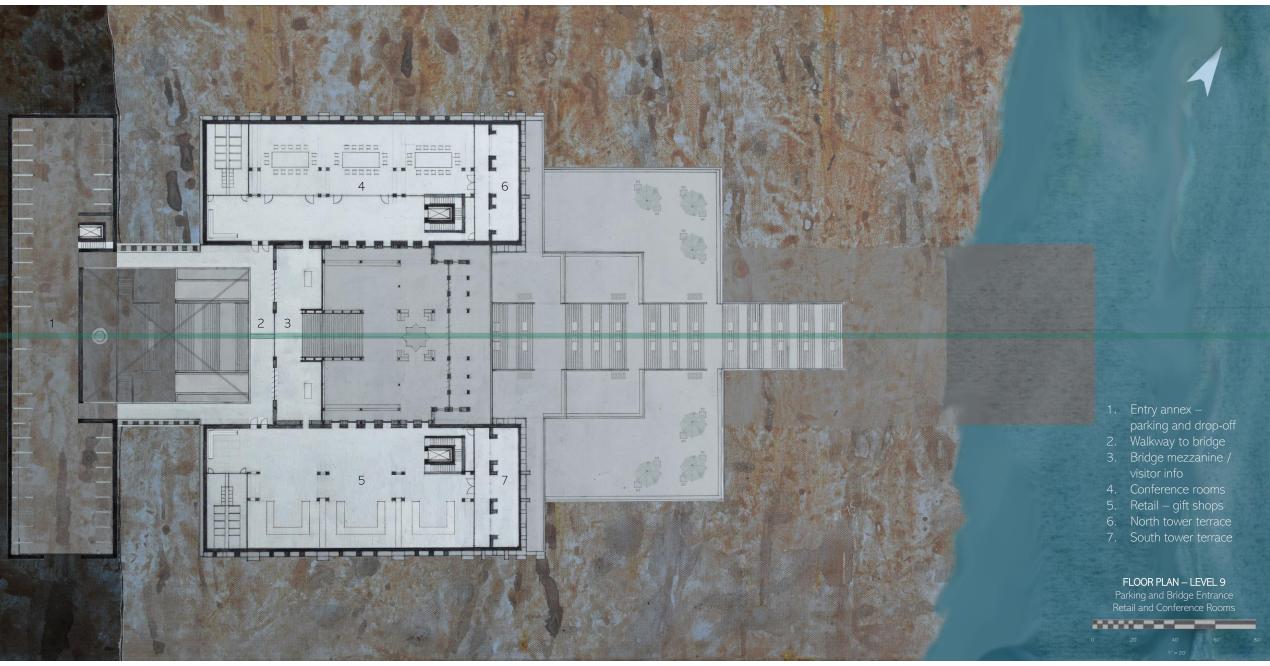


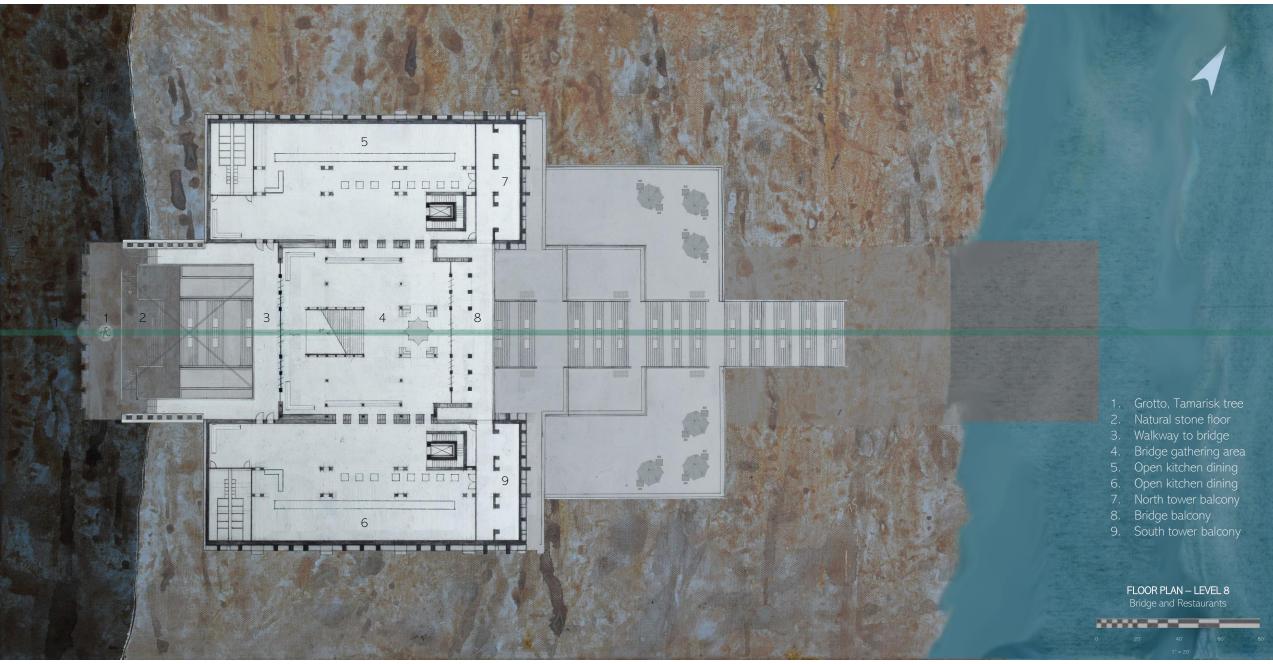


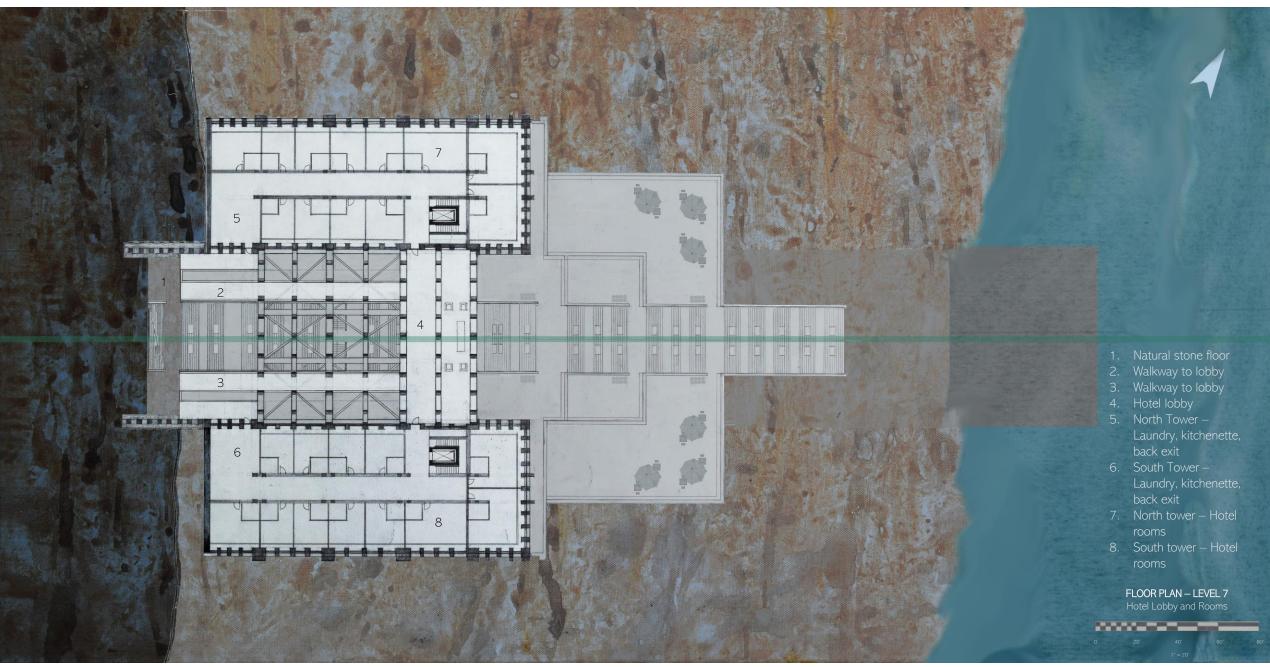




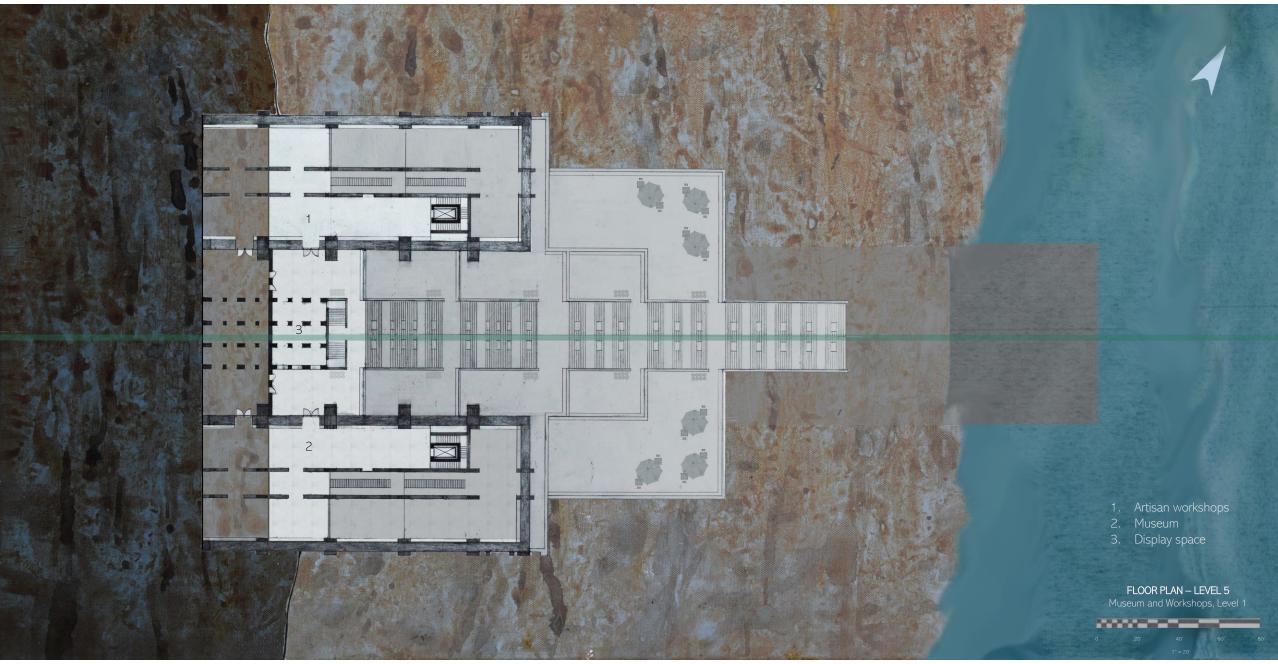


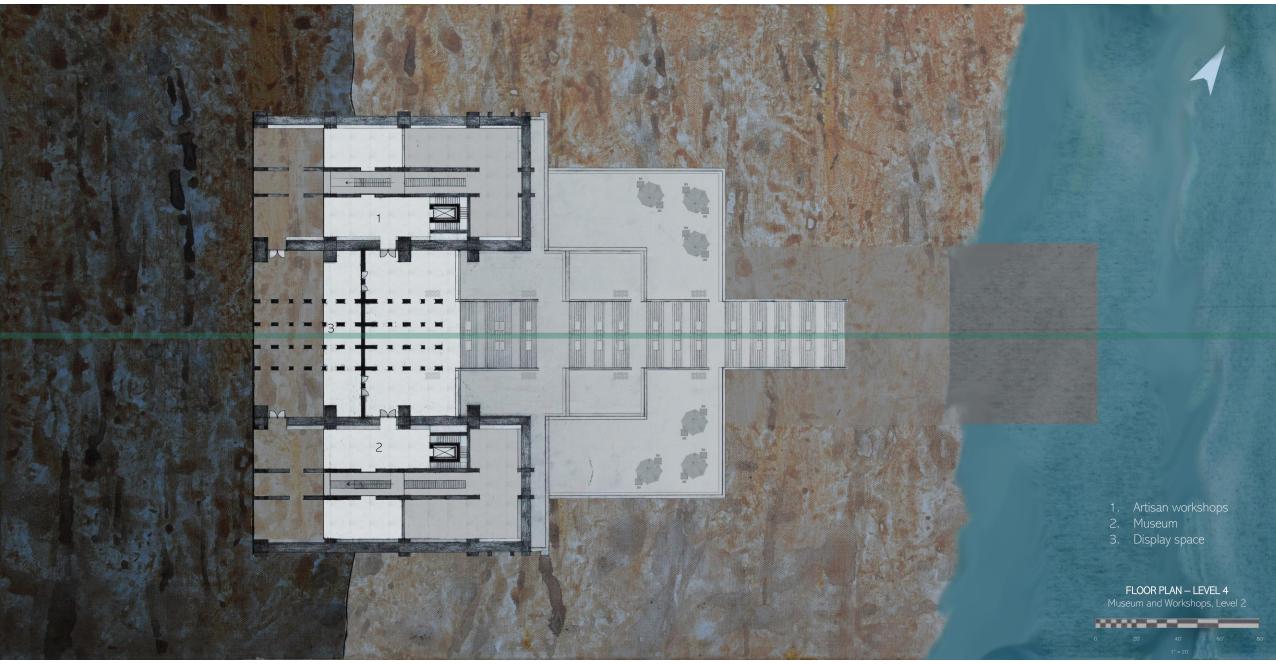


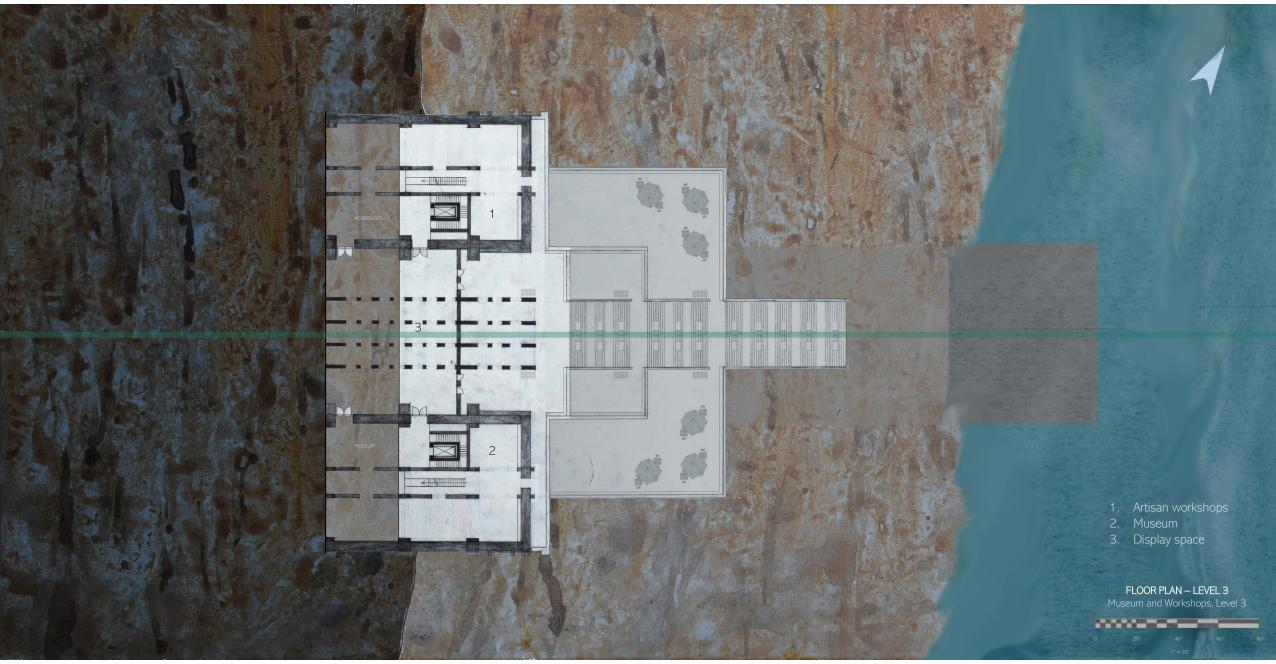


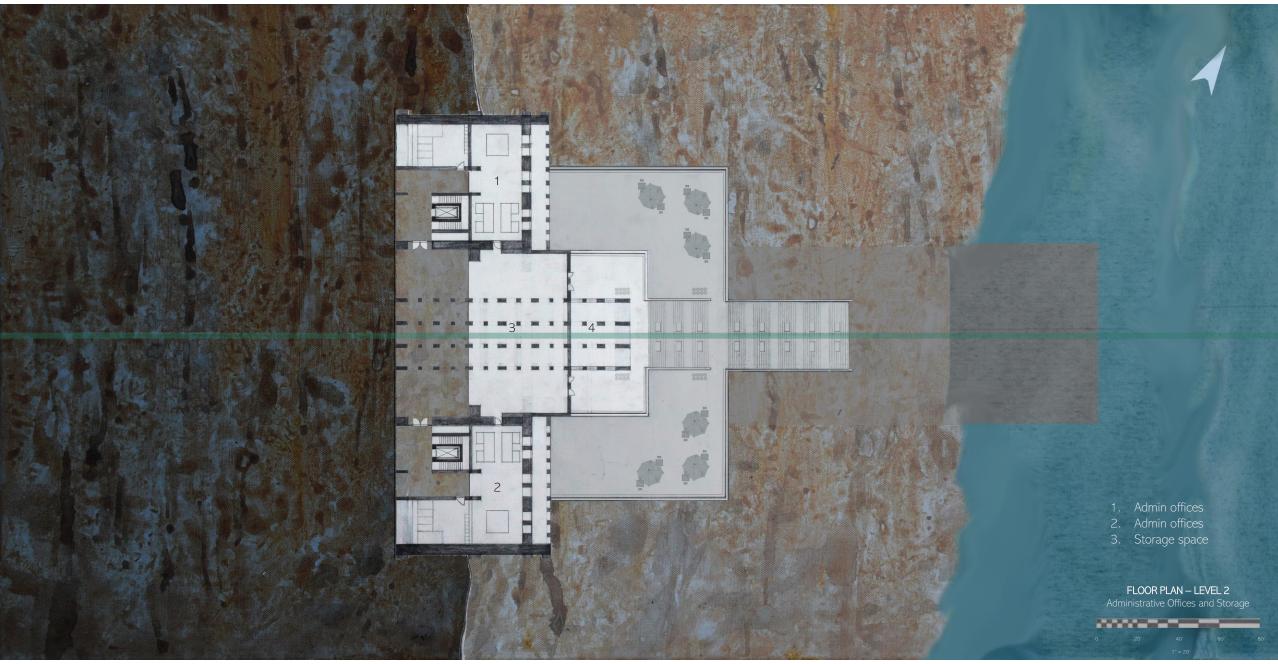


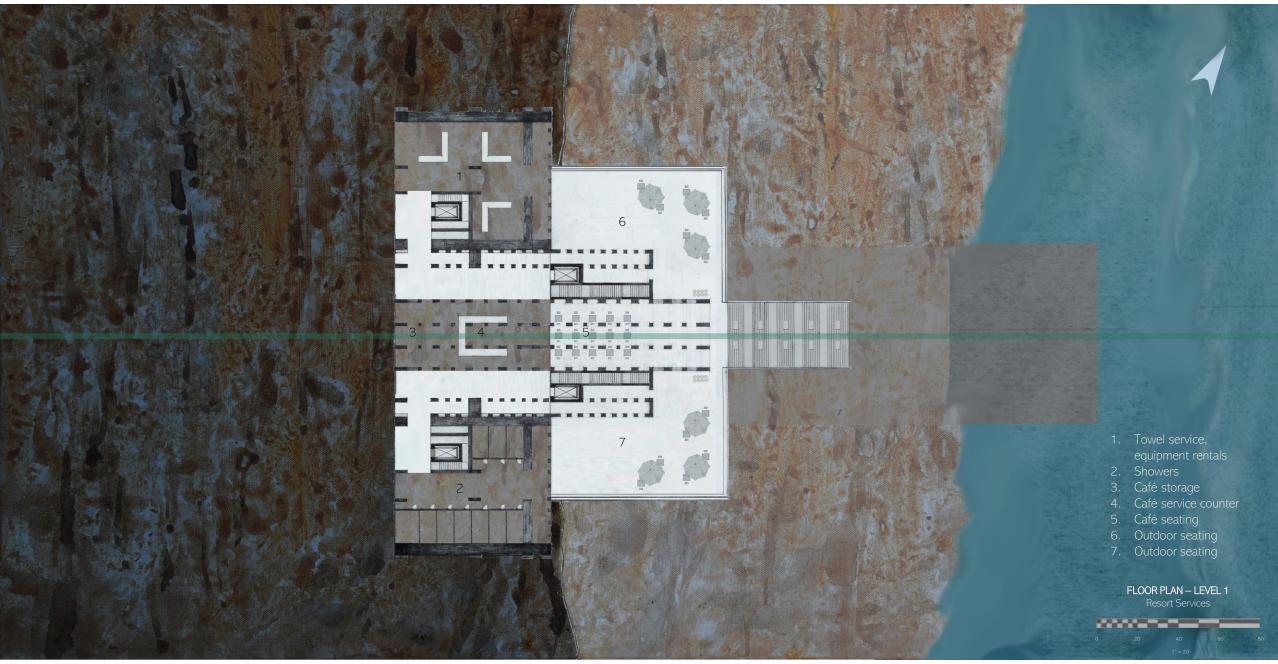


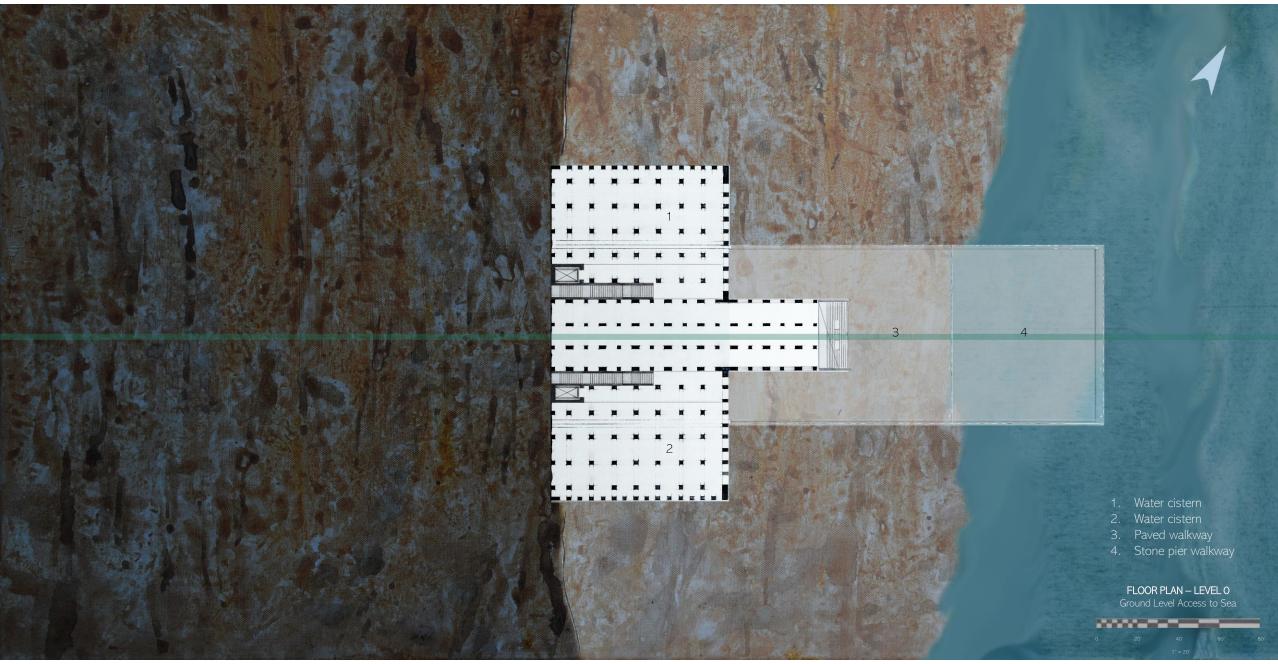




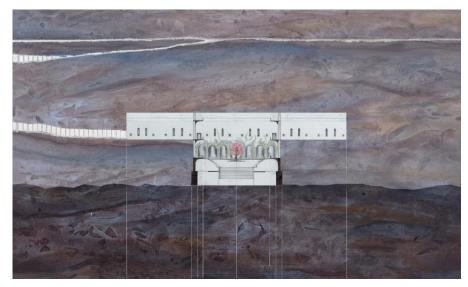








## Movement and Perspective Sketches



Transverse Section – Viewing the entry annex

#### **ENTRY ANNEX**

Indeed, there is a poetic power in movement, in the geometry of spatial organization. Movement through this building conveys an equality of space. There are symmetrical pathways on either side for circulation, and the visitor can choose to use either side, knowing that both are the same. A division of purpose of the functional spaces on either side of the Green Line on several floors ensures that visitors move back and forth between the two sides.

The traveler enters a roundabout on Route 90 that connects to a switchback road to access the proposed building. The traveler can park their vehicle or is dropped by a shuttle or bus service in a covered garage. Travelers make their way into the building along a cantilevered walkway supported on stone columns. All visitors (hotel guests, casual bathers, museum and workshop visitors, etc.) arrive through the same parking/drop off point and enter through the bridge mezzanine level.

#### Movement



Longitudinal Section – Viewing entry annex and walkways to tower

#### **ENTRANCE – WAITING AREA AND PATH TO BRIDGE**

The view of the expansive shoreline ahead is hidden temporarily by the building towers and bridge, yet the visitor can look down at a massive opening with stairs moving down the cliffside below them.

From the entry annex, visitors may access the roof terrace above the entry annex as well as above the North Tower, which can be used as a waiting space to wait for friends and family. Both the North and South Towers also include the Building Caretakers' apartments, separated from public access. The South Tower also contains mechanical space, separated from public access. The active roof terrace space can be viewed by travelers along the highway.

From the entry annex, visitors can then access the building through a mezzanine level of the bridge and receives information here about the region before making the way down to the lower level bridge area. Overnight guests are directed from here to either go down to the lower bridge level to access the outdoor stairs leading to the hotel lobby or make their way to the elevators on either tower to access the hotel lobby.





Interior perspective sketches – bridge

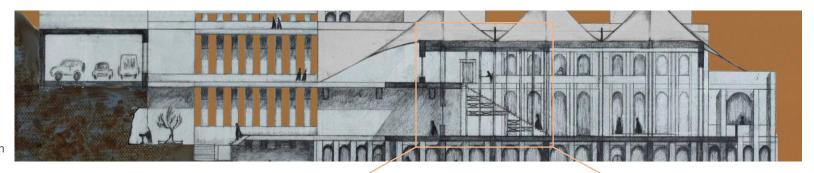
#### **BRIDGE GATHERING SPACE**

A central stairway leads the visitor down from the bridge mezzanine level to the lower gathering space. This stairway has a hung coffered ceiling, with a dark painted and engraved polygon pattern on plaster. The dark and low ceiling of the mezzanine and stairway, leading to the higher ceiling height and lighter color ceiling of the bridge space below, emphasizes the feeling of entering a bright, expansive gathering space.

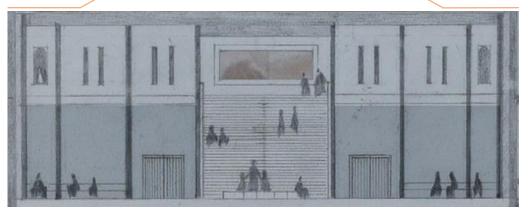
As the traveler moves down to the lower bridge level, the views to the horizon gradually open in a grand reveal of the Dead Sea, visible beyond the peristyle front of the bridge. Here, visitors can relax after a long day of exploring the region, converse with other travelers, and learn from each other. Above, a tensile fabric tent roof structure adds height, light, and air to the space. The bridge acts as a courtyard space, along the perimeter of which travelers can find shops selling indigenous materials, local crafts, pottery, and other goods, as well as restaurants with local cuisines. This is the most active space in the building, a place that can bridge communities through interaction with food, retail, and conversation with each other.



Interior perspective sketch - bridge



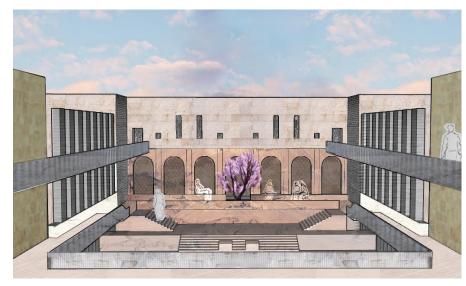
Longitudinal section



Section facing west



Reflected ceiling plan



Exterior perspective sketch – stairway courtyard

#### **EXTERNAL STAIRWAY – COURTYARD**

Exiting the bridge, the traveler can now begin the descent down the external stairway. She first comes across an external courtyard space at the top of the external stairs. This area contains a grotto with a fountain, carved stone benches along an arcaded wall, and a tamarisk tree planted in the natural stone ground. The tamarisk tree, which is native to this desert region, also holds religious significance, as it is recorded in the Bible to have been planted by Prophet Ibrahim (peace be upon him). Throughout the remainder of the external staircase as well, the visitor will find places to pause and rest – including raised stone platforms within the stairway, and benches on the wider landings. The landings also contain planters with indigenous, shade-loving plants such as Black Iris (an exotic flowering plant also known as the Negev, or Judean, Iris) and Desert Mugwort (also known as Witch's Herb, known for its medicinal and spiritual uses). This stairway between the two towers is another indicator of the Green Line. Descending or climbing the entire stairway is a strenuous process, a reminder of the difficulties faced by refugees in the wake of the delineation of the Green Line.



Interior perspective sketch – guest room

#### TRAVELERS' INN

Two floors with rooms for travelers and an open-air lobby are situated directly below the bridge level. Guests have an option to choose a room facing the sea or facing the external perron stairway below. Guests are assigned a room in the North or South Tower based on availability or random selection. Each guest room has a balcony that provides access to the outdoors as well as protection from the desert heat and sun by setting the rooms back and providing shade. Additional shade control is provided through adjustable, angled doors. Both floors have a back-end room with services such as kitchenette and laundry, and a back-end door connecting to the external stairway (accessible by key for guests who have checked in).



Exterior perspective sketch – from stair landings to sea



Exterior perspective sketch - stairs

#### **STAIRS**

A change in the direction of the external stairs occurs as the traveler reaches the museum and workshop level.

Beginning from the museum level (floor level 5) to the base of the building, the visitor is encouraged to cross over the Green Line, back and forth between the two towers. The external stairway is constructed on stone arches that act as pathways for crossing between the two sides. Crossing over the political delineation represents physical and symbolic openings and dialogue between the two countries.



Interior perspective sketch – museum and workshop stairs



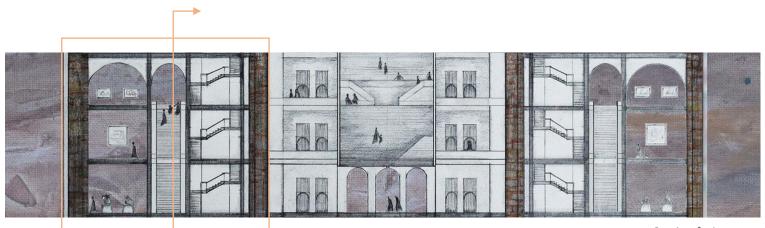
Interior perspective sketch – museum and workshop spaces

#### MUSEUM, WORKSHOPS, ADMINISTRATIVE SPACE

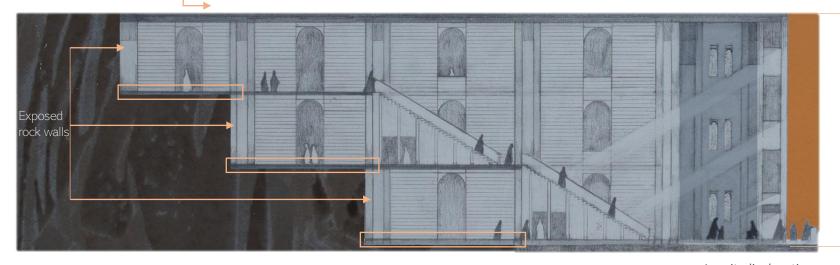
The museum and workshops level starts one floor below the lowest travelers' accommodation floor. Three floors of museum space are situated in the south tower, and three floors of workshop space are situated in the north tower. These spaces give travelers opportunities for learning about the political, cultural, and geographic history of the region. The museum will hold permanent and temporary exhibitions and artifacts in the South Tower. Workshops, or handicraft houses, in the North Tower will allow visitors a chance to see and learn from local artisans working with indigenous materials, crafts, and pottery.

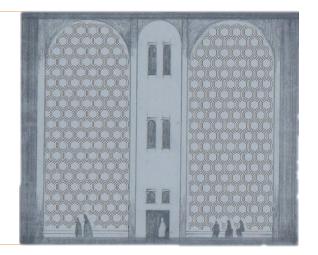
The cliff facing walls throughout these spaces have exposed living rock, and portions of the floors are also exposed living rock with epoxy treatment. The three floors in each tower will hold a narrow central stairway with dramatic floor to ceiling height. This space expresses the constricting feeling of barrier walls, a physical manifestation in other areas along the Green Line, without creating a barrier itself. Moving down the museum, the floor to ceiling heights become higher and more open, also indicating increasing proximity to the expansive landscape of the sea. From the base floor in front of the stairs, the visitor can exit out onto a balcony connecting to a platform around the external stairs. The two towers are also connected on each floor through the undercroft of the external stairway.

The floor beneath the museum and workshops contains administrative offices and storage space. This floor requires access keys for authorized individuals for both elevator and door entry.



Section facing west





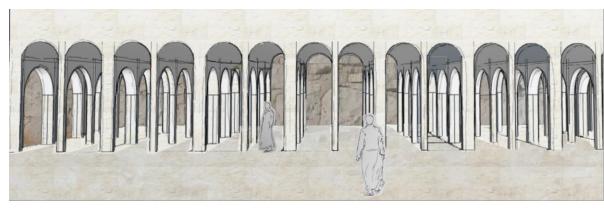
Longitudinal section

Section facing east





Section view -- undercroft



Interior perspective sketch – Level 1 Undercroft

#### UNDERCROFT

The concrete undercroft of the stairs acts as a passageway between the two towers. Barrel vaulted colonnades support the external stairway above. While crossing the undercroft and looking up, a cut along the center of the vaults and arches indicates the axis of the Green Line as the visitor passes beneath it. This cut along the concrete arches is another reminder of the Green Line.



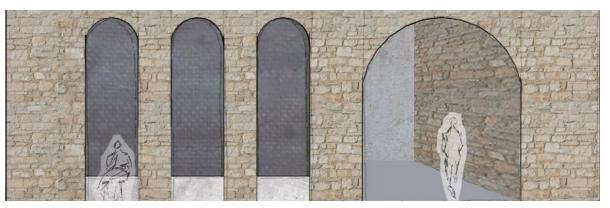
Exterior perspective sketch – Level 1 terrace



Interior perspective sketch – Level 1 café

### FIRST LEVEL CAFÉ AND TERRACE

The first floor contains services and amenities for tourists. These include towel service, equipment rentals (chairs, umbrellas, etc.), water and drinks station, as well as a central café. The ground level floor can be accessed by the main external stairway, or by the separate stairways and elevators connecting the first floor and ground level.



Exterior perspective sketch – Built-in seating areas and benches



Exterior perspective sketch – Building from southwest view

### **EXTERIOR VIEW**

The building serves as an ornament to the landscape of the rocky terrain. At night, it is beacon of light on the dark stretch of highway along the coastline.



Exterior perspective sketch – Path to water

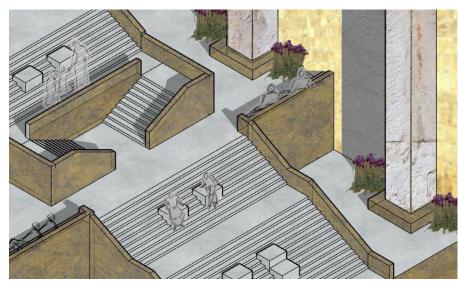
### PATH TO WATER

The ground level contains a paved platform pathway leading to the sea, which also runs along the axis of the Green Line. This platform will become more, or less, visible as the sea level fluctuates.



Exterior perspective sketch – The building from northeast view

Exterior perspective sketch – Tamarisk tree

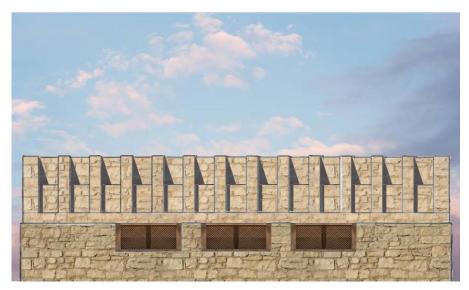


Exterior perspective sketch - stairs

### **Environment**

#### LANDSCAPE

The retaining wall lining the access road can hold plants that grow well in crevices and cliffs (such as the tri-colored wall snapdragon, *loa ari tziliani*). A tamarisk tree, which holds religious symbolism in Christianity to the Prophet Ibrahim (A.S), is planted at the topmost landing of the external stairways leading to the proposed building. The remainder of the stairway and landings are filled will other desert plants such as Black Iris (an exotic flowering plant also known as the Negev, or Judean, Iris) and Desert Mugwort (also known as Witch's Herb, known for its medicinal and spiritual uses). Plants placed around seating areas help to create spaces of pause.



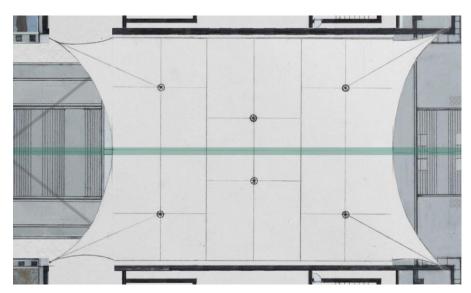
Terrace and wood lattice railing



Wood door

#### **WOOD DETAILS**

Wood is not abundantly found in this region and would be imported from elsewhere. As it is not a local material, it will only be used as accent detail for doors and balcony railings.



Tensile Roof Plan View



Tensile Roof – Front View

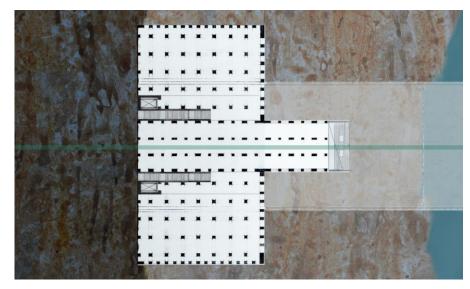
#### **ROOF**

Traditional Bedouin tents of the region were made from a loosely woven cloth of goat hair. The breathable tents allowed air to pass through, while providing shade from the hot climate. The fibers would also swell when becoming wet which helped to repel rain.

The roof structure above the bridge is adopted from this tradition. It is made of a PVC coated tensile fabric material, supported by a series of poles, steel frame, and ropes. The white color and translucent fabric will transmit sunlight to the bridge during the day. It will provide protection from the intense sunlight and heat, allow air transfer, and blur the line between indoor and outdoor space.



Water cistern with access stairs - Section View

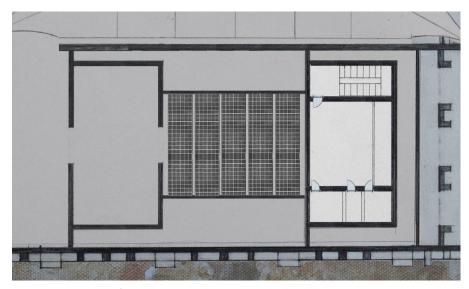


Ground Level Water Cistern - Plan View

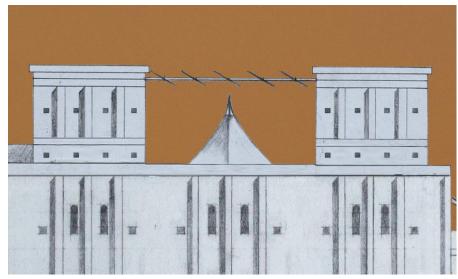
#### **WATER CISTERN**

Although the site is relatively remote, there are examples of thriving communities in this region, such as the long standing nearby community at Ein Gedi, the settlement at Mitzpe Shalem, and the historical ancient fortress of Masada, which included a palace and cisterns that were refilled by rainwater.

Water needs can be satisfied through rainwater harvested on a ground level cistern. The ground level masonry water cistern will be fed by rainwater as well as by truck delivery as needed.



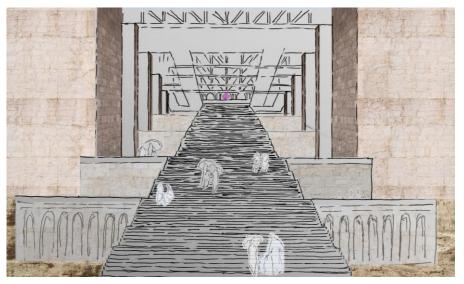
Solar panels – roof plan



Solar panels – side elevation

#### **SOLAR**

Solar panel grids will span between two structures on the roof terrace. Solar electric panels will generate electricity for the building, and solar thermal panels will be used for heating water. The grids will also have a secondary function as a pergola, providing shade to the roof terrace.



Exterior perspective sketch – Looking up into the external stairway



Pivoting/sliding glass and wood door

#### **SHADING**

The Jordan Rift Valley and the coast of the Dead Sea are all desert regions with dry, hot summers and mild winters. The average summer temperature is around 80 F and the average winter temperature is around 70 F. Nighttime activity for tourist recreation is desirable at this site, when temperatures cool after the setting of the sun. The museum, workshop, bridge, retail, and dining should stay open until late in the night.

The external stairway is deeply shaded by the towers and bridge, giving visitors a cool refuge from the hot desert sun as they descend or ascend the stairs.

The travelers' rooms have balconies that set the rooms back and provide shade and protection from the desert heat and sun. Additional shade control is provided through adjustable, angled doors.

IV. CONCLUSION



V. SOURCES

# **Image Credits**

All images by author unless otherwise noted. Images reproduced from other sources are solely for the use of educational purposes.

PAGE 8 Separation Barrier

Bevan, Robert. (2006). The Destruction of Memory. Reaktion Books Ltd.

**PAGE 10** Sarpi Checkpoint

https://www.archdaily.com/184315/sarpi-border-checkpoint-in-georgia-j-mayer-h-architects

US - Canada Border

https://www.atlasobscura.com/places/uscanada-border-slash

Haskell Free Library

https://www.atlasobscura.com/articles/the-us-canada-border-runs-through-this-tiny-library

Dajabon Market

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PAGE 11 Woman confronts Israeli bulldozer

Bevan, Robert. (2006). The Destruction of Memory. Reaktion Books Ltd.

Israel Ministry of Tourism advertisement poster

Nitzan-Shiftan, Alona. (2009). On Concrete and Stone: Shifts and Conflicts in Israeli Architecture. *Traditional Dwellings and Settlements Review, 21* (1), 51-65.

**PAGE 19** Existing Route 90 and Dead Sea coastal bank

Google Maps

PAGE 20 Ein Gedi Camp Lodge

https://www.facebook.com/pg/eingedicamplodge/photos/

Ein Gedi Hotel

https://www.tripadvisor.com/LocationPhotoDirectLink-g297744-d310226-i62929085-Ein Gedi Hotel-Ein Gedi Dead Sea Region.html

**Dead Sea Camping** 

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HI Ein Gedi Hostel

https://www.hihostels.com/hostels/ein-gedi

Metzoke Dargot – Travelers Village

https://www.booking.com/hotel/il/metsoke-dragot-hostel.html

**PAGE 22** Israel Tourism – collage of images

https://www.touristisrael.com/

**PAGE 23** Monastery of the Mount of Temptation

https://aleteia.org/2019/12/08/this-monastery-was-built-into-the-mount-of-temptation-where-jesus-was-said-to-have-been-tempted-by-the-devil/

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#### PAGE 24 Ein Bokek Dead Sea Resort

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#### HI Ein Gedi Hostel

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#### Caravanserai circa late 19th, early 20th century

https://www.mediastorehouse.com/mary-evans-prints-online/old-caravanserai-nablus-palestine-west-bank-14178002.html

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#### Al-Haturi Caravanserai

https://en.wikipedia.org/wiki/Inn\_of\_the\_Good\_Samaritan#/media/File:Good-Samaritan-Inn-656.jpg

#### Caesarea Maritima National Park Visitor Center

https://www.dreamstime.com/visitors-center-hosting-small-museum-caesarea-maritima-national-park-caesarea-maritima-was-ancient-city-image153296924

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