

# **Border Architecture: Rethinking the Future**

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University of Washington

Abstract

Border Architecture:  
Rethinking the Future

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The contemporary perspective of the U.S.- Mexican border can be defined by the current condition of a division and separation of nations. While the political border is clearly defined, the cultural border is very complex. Taking into consideration more than the traditional definition of borders, this thesis explores other types of barriers dividing the U.S. and Mexico, including cultural, economic, and educational obstacles. The political border is often separate from the physical barrier, and the spaces in-between creates the potential for the exchange of knowledge, culture, and commerce, redefining the socio-cultural identity of the region on either side of the border.

The analysis and complex exploration of border architecture will focus on the San Diego / Tijuana border region. This border plays a significant role in the context of the region, with its vast urban sprawl on both sides and varying physical characteristics. The exploration will investigate and develop spaces that will allow users to connect and communicate through different levels of separation and unique physical conditions. Therefore, changing not only the perception of identity but creating new opportunities for bi-national interactions.



## ACKNOWLEDGMENTS

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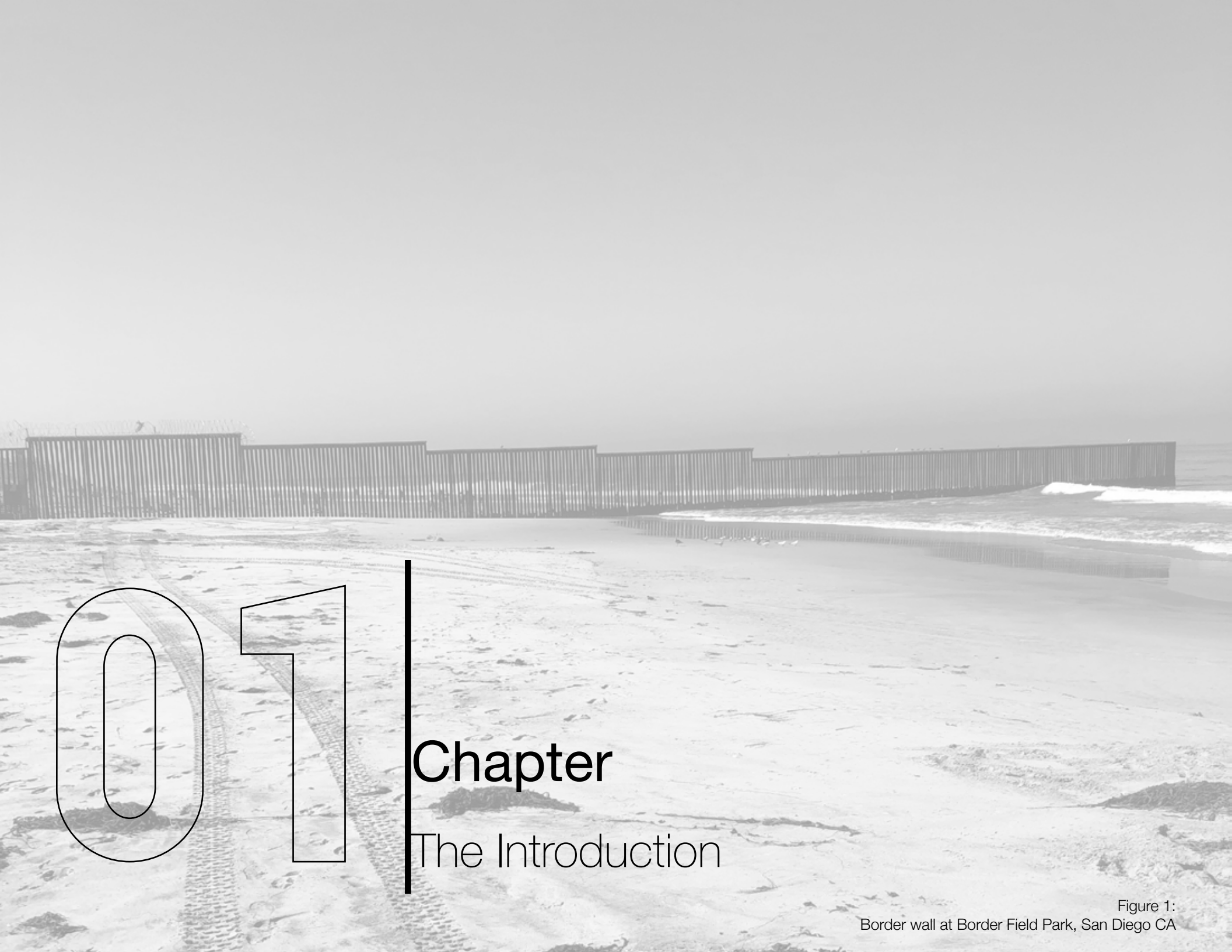
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The Introduction

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Border wall at Border Field Park, San Diego CA



Figure 2:  
Ariel view of the “Giant Picnic” at the border.

### *Redefining the Border*

The contemporary perspective of the U.S.- Mexican border can be defined by the current condition of a division and separation of nations. While the political border is clearly defined, the cultural border is very complex. Taking into consideration more than the traditional definition of borders, this thesis explores other types of barriers dividing the U.S. and Mexico, including cultural, economic, and educational obstacles. The political border is often separate from the physical barrier, and the spaces in-between creates the potential for the exchange of knowledge, culture, and commerce, redefining the socio-cultural identity of the region on either side of the border.

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# 02

## Chapter

## Defining Borders

Figure 3:  
Steel border fence along the San Diego, CA/ Tijuana MX border

## *What are Borders?*

A border, by definition, is the line that separates one country, state, or province from another. Many borders are manufactured through agreements between political or social entities that establish control over a territory. Borders were created to regulate the movement of people and goods while establishing political and power.

Establishing regulations and guidelines formalize the notion of political ownership. The requirement of identification and documentation, allowing individuals to move freely across borders, is a critical factor in establishing control. Passports or visas are usually required to establish one's identity within a country. These documents allow for citizenship, in turn allowing individuals the ability to move freely across the border.

Physically there are two types of borders, those that are defined by natural barriers that restrict movement and those that are purely political that require a constructed demarcation or barrier to maintain control across. One can find both border types along the U.S. - Mexican border.



Figure 4:  
International border, San Diego CA



Figure 5:

Pyrenees mountain range

## *Natural Borders*

Natural borders are naturally occurring barriers between two countries or regions. For centuries the method of using natural barriers as borders has been a common occurrence. Rivers, oceans, deserts, and mountain ranges have all served as natural obstacles to restrict movement between countries.

Historically, natural borders have been useful because they are easily defined. One of the earliest examples of a natural barrier is the Pyrenees mountain range (Figure 5:Left). They have long been a natural barrier dividing Spain and France along the Iberian peninsula. The permanence of natural barriers has aided in establishing secure borders allowing for a simple solution to separating and clarifying land claims.

Over time, as political regulations were established to precisely define the borders between countries, natural borders began to require more definition and clarification. The Rio Grande (Figure 6: Right) is one of the most identifiable natural barriers between the United States and Mexico, and over time has become the political border. It has also been an area of conflict due to the fluctuation of the river caused by seasons of drought and those of increased rain. The river has carved a path through the land that has changed over time.



Figure 6:  
The Rio Grande forms the border between the U.S./ Mexico

As the shores of the river fluctuate from year to year, the specific location of the border changes. This inconsistency has generated conflict between the U.S. and Mexico. The issue comes as land is gained or lost due to the river creating new paths. Though the changes are minimal, the effect has been felt on both sides of the border.

With larger rivers such as the Paraná River (Figure 7: Below) separating Paraguay, Argentina, and Brazil, the fluctuation does not have the same

effect on the political consequence for either nation, due to the lack of regulations on the definition of the border. This type of natural border has the ability to be more flexible and change with minimal effect to either nation because the regions surrounding the border are much less populated. Also, the Paraná River's change is less dramatic in comparison to that of the Rio Grande.



Figure 7:

The Paraná river separating Paraguay, Argentina and Brazil



Figure 8:

Big Bend National Park at the US / Mexico border

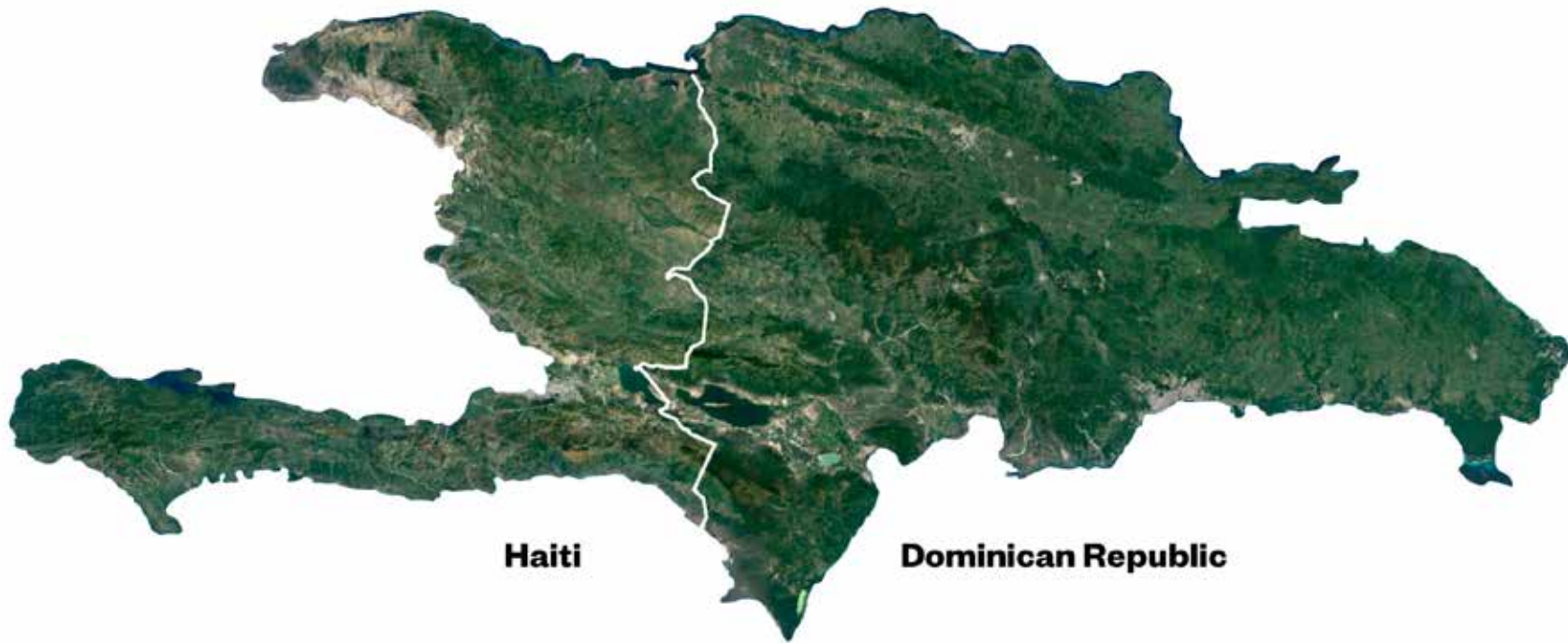


Figure 9:  
Aerial map of Haiti and the Dominican Republic Island

### *Political Borders*

Political boundaries are the dividing lines between countries, states, provinces, counties, and cities. These lines, more often called borders, are created by people or agencies to separate areas governed by different inhabitants. What makes these boundaries unique is their potential for change over time. This change happens with wars, treaties, and as power shifts from one successor to the next. The intangible nature of political borders allows for an evolutionary identity. They may carry a specific identity for centuries but have the potential to change

instantaneously with the transition of governmental power.

In many case's political borders are created from the natural barriers existing in the region, as previously mentioned. However, as political borders are established, natural barriers are sometimes also unintentionally created. In Haiti and the Dominican Republic, a political border was formed, dividing the island into two nations. On one side, the Dominican Republic was able to develop a more effective governmental system of

ordinances and regulations to control the inhabitant's use of natural resources. On the other hand, Haiti, as a developing nation, had limited governmental control. Therefore, the political border produced a natural ecological barrier due to deforestation. The aerial map (Figure 9:Prior) shows the apparent division between the two nations. In this case the political border has not only created two nations, but it divided an entire eco-system.

Political borders have always generated a sense of crisis. As border identification and security are created, the issue of personal freedom and movement are questioned. The limitation of passage between nations stretches beyond the individual and impacts the countries as well. The ability to transfer goods and products is often delayed or prevented entirely. This economic effect on the border regions mainly drives urgency to protect each side's interests and has resulted in many militarized borders.

The most well known and militarized border in the world is that of North and South Korea. All border crossings separating the two nations are defended by armed guards with an active display of power from both sides. This border has not only divided a single nation but has stopped nearly all movement of people and goods since World War II in 1945. The tension surrounding the border has begun to recede, but there is still a high level of security in the region. In cases such as this, borders become the cause of national identity rather than the result of national identity.



Figure 10:

Demilitarized Zone (DMZ) in Paju, South Korea

How borders are created plays a significant role in how they are perceived. The inhabitants of the region did not create the border between the U.S. and Mexico. The diverging cultural identity of the region is largely the result of a political agenda. As barriers were implemented between the United States and Mexico, a unique culture was divided into two.



Figure 11:  
Demilitarized Zone (DMZ) in Paju, South Korea



# 03

## Chapter Border History

Figure 12:  
(1973) Border wall at Border Field Park, San Diego CA

## *The History of the U.S./Mexican Border*

For centuries, America's borders have been up for grabs. With European countries arriving and claiming stakes over land that had long been claimed by the Native Americans. Lines slowly became borders as the wars and treaties of the United States resolved the controversies of ownership.

In the 1800s, as the U.S. moved West, the conflict of land was the primary issue. The claim stake to ownership and power drove the notion of movement. Over the next three centuries, various nations claimed pieces of the North American West Coast, and the Spanish held a significant portion of the west coast as their own. In 1821, Mexico gained its independence from Spain, and this marked the first sharing of the border between the U.S. and Mexico. The border itself was a much more fluid entity at the time, due to the inability to truly delineate any actual border. The maps being generated at the time were contested as much as the ownership of the land itself.

At the time, many U.S. residents began to immigrate into what was formally known as Mexico and claim territory as their own. Mexico soon found itself with an immigration problem. An escalating series of events eventually led to a brief conflict in which Mexico won the Alamo but lost the war. This dispute simmered for over two years, which finally led to the U.S. sending troops to the region and taking over the Rio Grande Valley. February 1848, the treaty of Guadalupe Hidalgo, marked the end of what was known as the Mexican-American War.



Figure 13:

U.S. Soldier standing a Mexican Soldier at the border  
Photo taken at the Arizona/Mexican Border on December 22, 1915

The end of the war began the delineation of the border we all understand today, between the U.S. and Mexico. The war may have ended, though the conflict surrounding the land had just begun. The line only existed on maps, though in the minds of the occupants of the Southwest, the region was still in flux. As the two countries begin the task of surveying the land, the paper line changed as ordered shifted, and the ruggedness of land exposed itself. The fierce desert and ever-evolving landscape made it very difficult to identify any accurate linear survey. Also, along with the wilderness, the climate of the region made the difficult task nearly impossible.



1821

Mexican Independence

**1837**  
*Americans began to flood to Texas, many of them illegally, Mexico hoped that these settlers would help bring order to their northern territory, but Mexico soon found itself with an immigration problem. Residents of the Mexican state of Coahuila y Tejas declared the independent Republic of Texas.*



1848

Treaty of Guadalupe Hidalgo

Independent Republic of  
 Texas  
**1837**

1821

*The West changed hands, as the newly formed nation of Mexico formed its independence from Spain. Mexico held what would one day become Arizona, California, Nevada, New Mexico, Utah, Texas, parts of Colorado, Kansas, Wyoming and a sliver of Oklahoma. Mexico then Stephen F Austin to start the colonization of Texas*



1848

*Mexico attacked the Alamo in April 1846 which began the Mexican American War. The Mexican-American War ended in February 1848, the border we see today began to take shape at that time. The war was disastrous for Mexico. In the Treaty of Guadalupe Hidalgo, Mexico ceded most of what we know as the American West to the U.S.*

1853

The U.S.-Mexico border we know today was completed by the Gadsden Purchase. 29,000 sq miles of land was sold by Mexico to the U.S. for \$10 mil. The acquisition gave the U.S. a route to build a Southern transcontinental railroad.



1821

The Gadsden Purchase

1853



Today

1909 - Meeting between president Porfirio Diaz and William H Taft marks the first meeting between the U.S. and Mexican presidents. It is also the first time an American president officially visited a foreign country.

1994 - NAFTA begins and the Mexican peso collapses. The border sees a massive increase in its population. President Bill Clinton uses a strict approach to limit illegal immigration - U.S. Operation Gatekeeper is introduced.

2006 - The Secure Fence Act of 2006 is an act of the United States Congress authorized and partially funded the construction of 700 miles of fencing along the Mexican border.

Figure 14:  
Time-line map of the U.S. Mexican border

As the endeavor proceeded to take over a decade, with no end in sight, many begin to question the methods of completion. Some suggested the U.S. send troops into Mexico to conquer more land, seize ports, and ensure power. Nevertheless, cooler heads prevailed, and instead, the U.S. generated what was known as the Gadsden Purchase. The acquisition gave the U.S. a route to build the Southern transcontinental railroad.

After the Gadsden Purchase, the border region was seen more as a place of opportunity for the two nations to succeed. The implementation of the railroad and formalization of the border introduced economics to the region. The growth of cities and the gradual construction of industry attracted people to the region. The U.S. relied heavily on the Mexican population for laborers, and the two nations thrived for decades with the economics of oil and food production.

The border had always been a place of opportunity. Though as history has proven, this identity has begun to shift and the region has become known as a corrupt, transient, or dangerous place. As stated by USA Today columnist Ron Dungan, "This is the border's history. The line that was non-existent, imaginary, disputed, negotiated, drawn, and unfindable. Then it was bloody, peaceful, useful, hard." The current identity of the U.S. Mexican border lives in the shadows of the steel barriers that separate the two nations, but the people and culture of the region will flourish as they always have. The images of the barriers (figure 15:Right) help to paint a picture of the existing conditions we hope to change and re-imagine through this thesis.





Figure 15:  
Various existing border conditions along the U.S. Mexican Border



*“The wall was conceptualized as one-sided: a barrier to keep people from one side from the south. Considering the structure as a single side wall represents a poor understanding of the delicate balance”*

- Ronald Real



Figure 16:  
End of the steel fence and start of steel vehicular barrier in the Imperial Valley



*Walls won't work because the space between Mexico  
and the United States forms a "third nation"  
- Michael Dear*



Figure 17:  
Border wall that separates Jacumba, California, from Jacume, Mexico



*Before building a wall, I'd ask to know what I was walling in  
or walling out, and whom I was like to give offense.*  
- Robert Frost



Figure 18:  
Border wall at the San Diego and Tijuana border meeting the ocean

# 04

## Chapter Methodology



Figure 19:  
the border wall at the Tijuana border at the Pacific Ocean

## Existing Conditions

Moving forward, understanding the existing border conditions is crucial to understanding the methods in which this proposal will interact with the region as a whole. The map (Figure 20: below) shows the locations of all the existing physical barriers along the 1,954 miles of the border dividing the U.S. and Mexico, as of 2018. The barriers along the border consist of 625 miles of pedestrian barriers and 311 miles of vehicular barriers. It also includes the areas that are delineated by natural borders, which are also political. The border regions in

California, Arizona, and New Mexico, are relatively flat desert land, which allows for the use and construction of physical barriers. The southern border of Texas, on the other hand, is a much harsher terrain. The Big Bend Mountain range is not only in a remote landscape but is also a brutal mountainous topography. The use of natural barriers such as this is a common occurrence. The Rio Grande River also defines most of the U.S.-Mexican border in Texas.



Figure 20:  
Map of the current border conditions

## *Border Crossing Data*

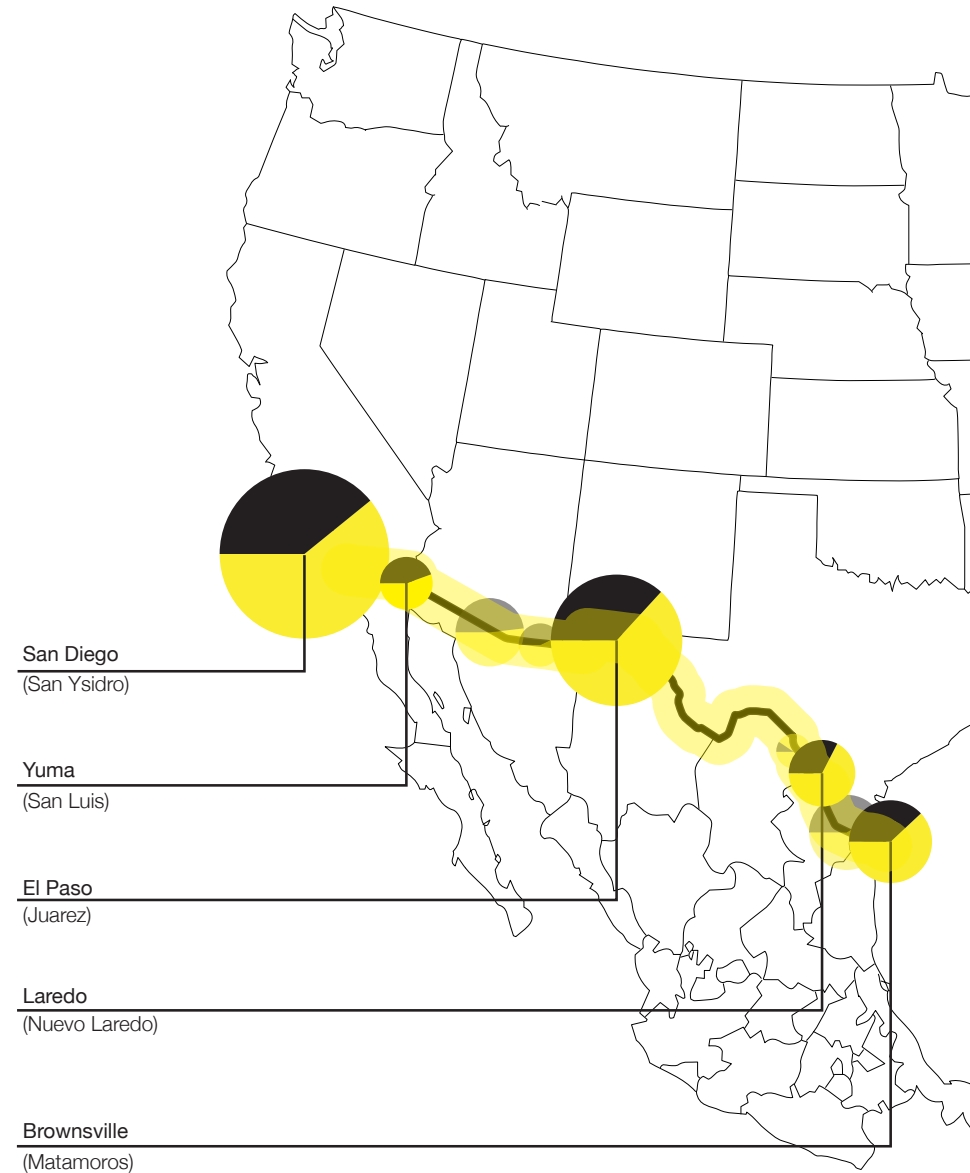
**San Ysidro - 9.43 million pedestrians, 14.5 million personal vehicles and 32,058 buses crossed into the US**

Yuma - 2.64 million pedestrians, 5.85 million personal vehicles and 28,389 buses crossed into the US

El Paso - 7.21 million pedestrians, 22.2 million personal vehicles and 15,977 buses crossed into the US

Laredo - 3.70 million pedestrians, 10.5 million personal vehicles and 4.62 commercial trucks crossed into the US

Brownsville - 3.11 million pedestrians, 6.97 million personal vehicles, and 237,000 commercial trucks crossed into the US



## Collecting Border Data

The population growth along the U.S. - Mexican border has been a significant reason for the U.S. deciding to secure the region, and thus generating the necessity for specified border crossing that allow individuals in or out of the country. Today there are 48 border crossing with 330 ports of entry between the U.S. and Mexico. The five major border crossings accounted for over 26.1 million pedestrian crossings and 60 million vehicle crossings annually in 2018. These crossings are all located between major "sister cities" that straddle the border (Figure 21:right).

The San Ysidro Port of entry will be the focus of the proposal. According to the U.S. Bureau of Transportation, the San Ysidro port of entry is the largest land border crossing in the western hemisphere. It is one of three ports of entry located along the San Diego/Tijuana border. This checkpoint alone processed 9.43 million pedestrians, 14.5 million personal vehicles, and 32,058 buses moving into the U.S. in 2018. The San Ysidro port of entry was recently redesigned to increase the efficiency of the border crossing, due to the immense movement along this border. On an average day during peak travel time, the wait time to cross from Tijuana into San Diego can take as long as 2 hours. As the population in the region continues to grow exponentially, the need for more efficient methods of maneuvering between the two nations is required.



KEY:

- Pedestrian
- Personal Vehicles

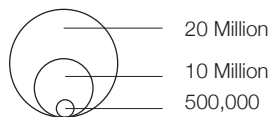


Figure 21:

U.S. / Mexico Map Locating border crossings



Figure 22:  
U.S. / Mexico Map Locating San Diego

## *Site Selection Criteria*

There are four critical factors used in the site selection Border Type, Urban and City Scale, Accessibility Network, and Topographic Conditions. It is essential that the site criteria contribute to, as well as enhance one another. Each of the factors establish unique site possibilities and provide a connection between them.

### Type of Border

As each site is selected, taking into consideration the existing border condition is the primary objective. This includes defining whether a natural or political border exists along with the barrier type used at each border location. Along the San Diego/Tijuana border, one will find a multitude of different border conditions. The current conditions along the border, according to population and existing economic criteria, help to define the border type as well as the barriers used.

### Urban and City Scale

An essential factor that coincides with the border crossing information mentioned prior is urban growth along the border. The potential for growth at each site, in terms of housing and economic infrastructure, connects directly to the socio-economic infrastructure of the region. Taking this into consideration will be a crucial factor in the site selection, as trade and economics are a vital part of the border issue. They tie directly to the overarching goal of minimizing the necessity of traversing

the border. Secondly, the prospective nature of the border lies in the future potential of the community. The connection to education and the transfer of knowledge plays a vital role in the evolution of the border region. Understanding how education is perceived around the border is critical as education is where innovation and evolution begin.

### Accessibility Network

The review and examination of public accessibility and transportation are vital to the site selections in order to promote urban sustainability. An excellent working transportation network that incorporates public transit not only decreases a cities carbon footprint but connects the city and neighborhoods directly. The interconnectivity allows for a deeper connection of the site to the city, which is essential to the success of each project.

### Topographic Conditions

When selecting a site, an understanding of the existing conditions is vital before proposing any intervention. Also, examining the criteria of safety with hazardous slopes or heavy ocean currents aids in the selection. Finally, the consideration of beauty on the site is important to consider in order to connect the user to a particular place. How the user will interpret the site visually is an essential factor to always keep in mind.

Site A  
No Physical Barrier

Site B  
Double Barrier - Buffer Zone

Site C  
Single Barrier

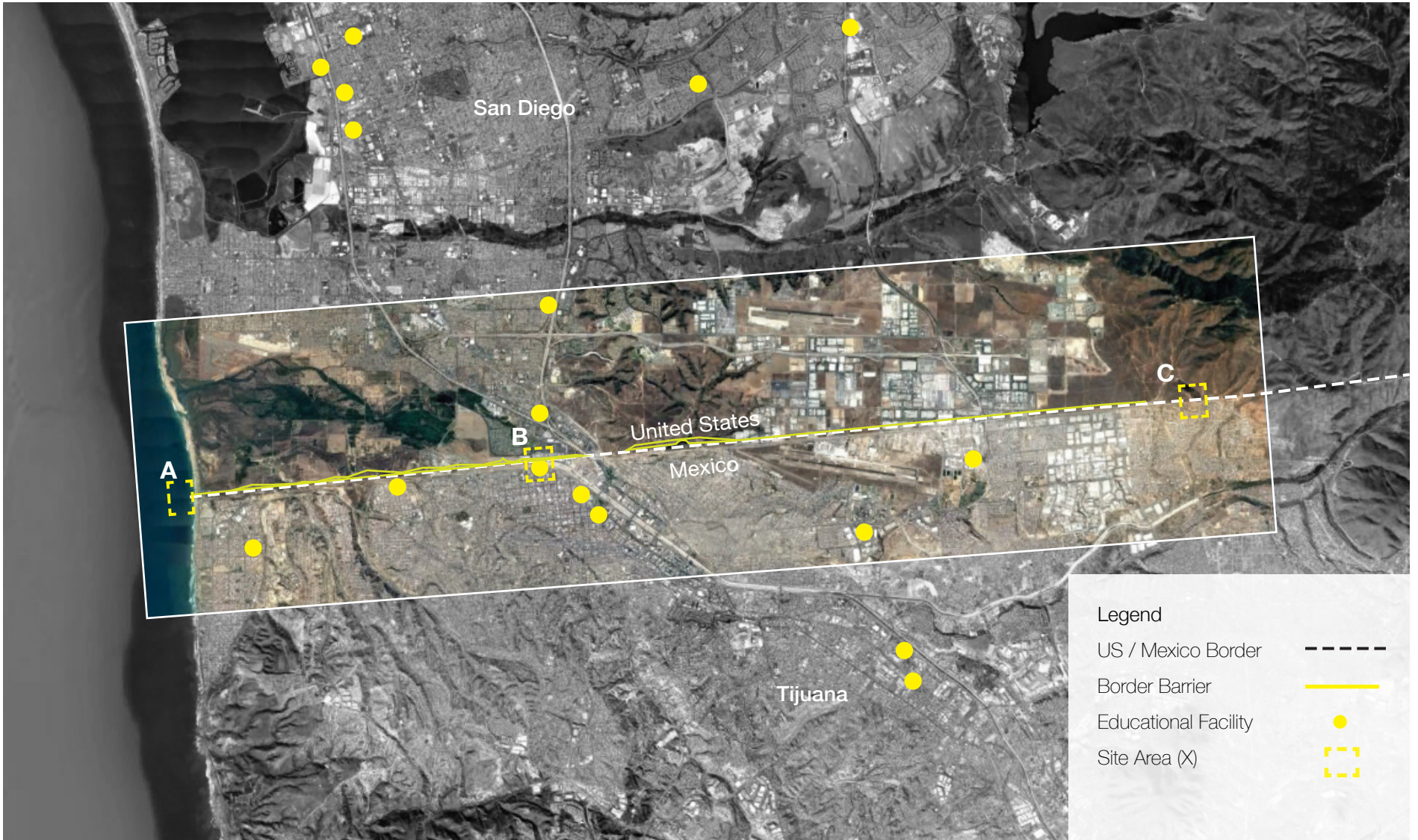


Figure 23:  
San Diego/Tijuana border site location map

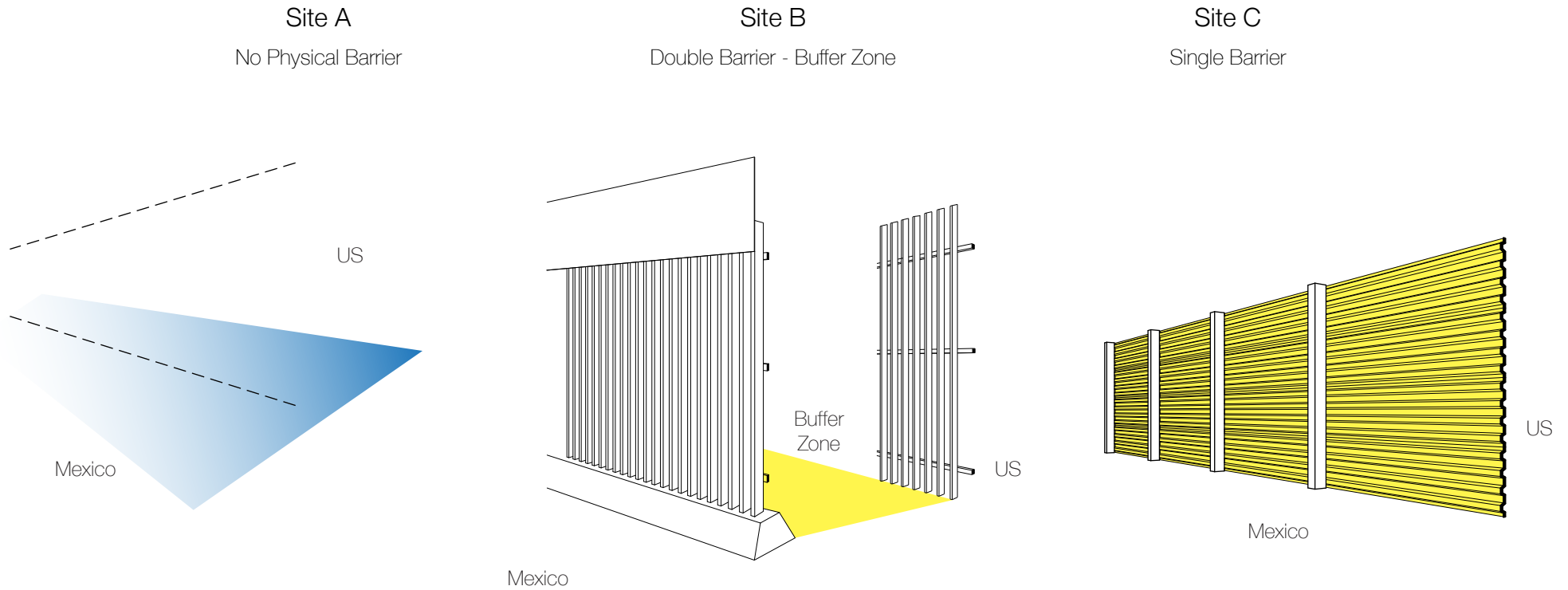


Figure 24:  
San Diego/Tijuana site barrier diagram

### Site Selection

Each of the three sites selected has a clear identifying factor. Site A is located in the Pacific Ocean, straddling the maritime border just west of Border Field State Park (U.S.) and the Jardines Playa De Tijuana (Mexico). This unique site has no physical barrier dividing the two nations. Site B, on the other hand, is located along the border at the closest point where the two urban fabrics come together. This site offers a very secure border condition, which relies upon a single barrier along the border and a secondary barrier 150 feet into the U.S.

generating a buffer zone between the two nations. This buffer zone provides a unique opportunity for a design proposal. Finally, Site C is located in an area that is densely populated only to the Tijuana side with a natural terrain to the U.S. side. This site consists of a single barrier along the border dividing the two nations. Each of the three site selections offers a separate and unique barrier condition — providing unique opportunities to interact and react to the border.

# Site A : Bi-National Baths

Border Field State Park / Jardines Playa De Tijuana

01

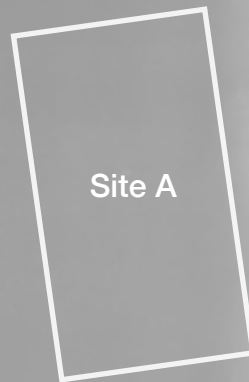


Figure 25:  
Site A: Ariel map of the San Diego/Tijuana border

### *Site A: The Bi-National Baths*

After visiting the San Diego / Tijuana border region, this site, in particular, stood out as the most unique. When compared to other sites, it was the one that offered the opportunity of no physical barrier. The site also connected directly to the urban fabric of Tijuana. It utilized the character of both natural and political border types simultaneously while introducing a third unique border characteristic of a maritime border. The maritime border extends from the shore dividing the U.S. and Mexico out into the Pacific Ocean for 18 miles.

The site invites the community to come together and share space as one while attempting to minimize the effect of the physical barrier dividing the two countries. Artists and the community have taken simple methods of manipulating the barrier to minimize its impact on the site. For example, they have painted the vertical slats of the steel fence blue to match and fade into the sky, attempting to blur the existence of the physical barrier. Also, murals are used to prove that the community will endure the test of time and continue to come together regardless of methods of security placed to separate the two nations.



Figure 26:

San Diego/Tijuana border wall at Tijuana Beach Malecon

## Legend

1. Monumental Plaza de Toros
2. International Friendship Park
3. Tijuana Beach Malecon
4. Border Field State Park
5. Monumento No. 258
6. Beach Restaurants /Industry
7. Beaches of Tijuana Jerusalem Hospital
8. US safety corridor - Buffer Zone



Figure 27:

Map of border near the Pacific Ocean

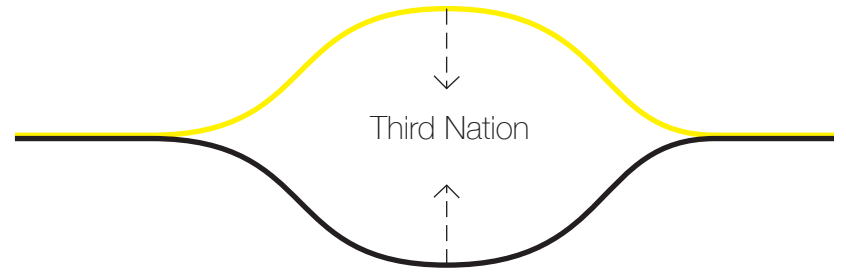
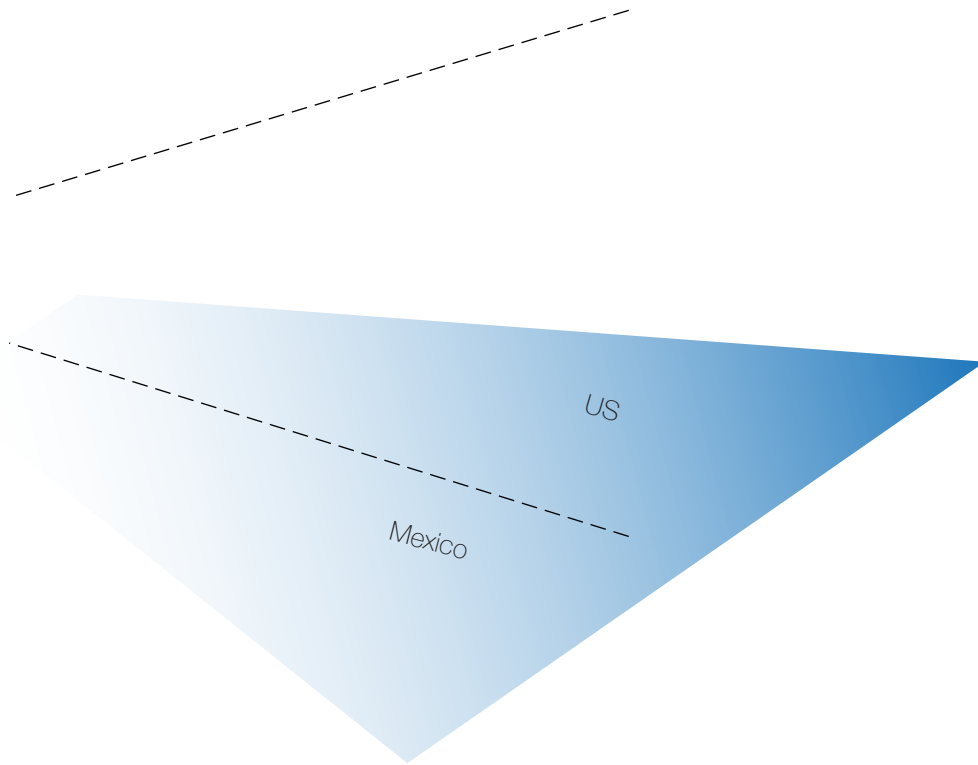
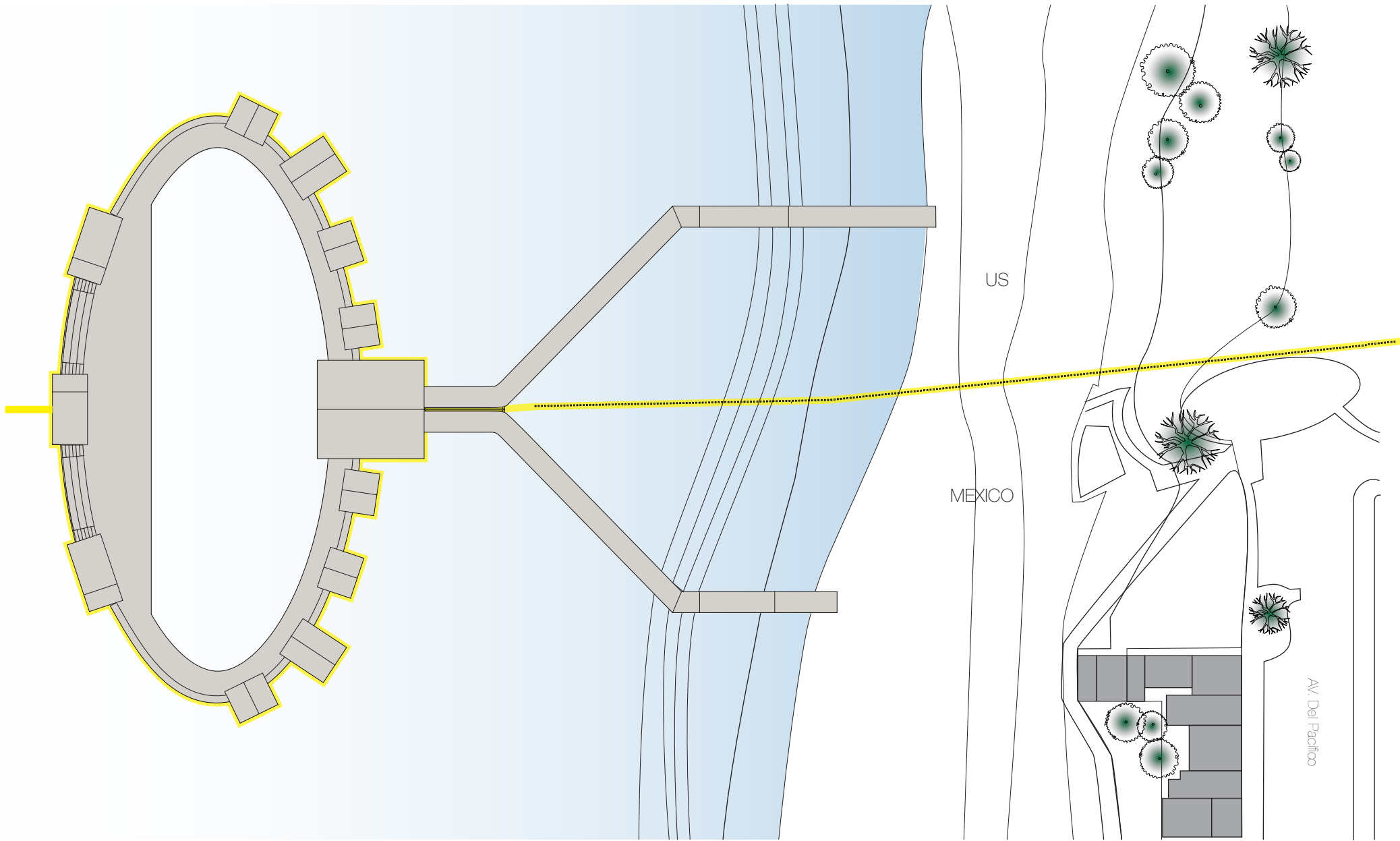


Figure 28:  
Site A: Site diagrams

### *Site A: The "Third Nation"*

The lack of physical barriers creates a unique opportunity that no other site offers. The political border has the most potential to be manipulated at the site due to the absence of the physical barriers. The manipulation of the border activates the notion of the "third nation," or the in-between space as a concept to provide the opportunity to not only redefine the border but redefine the character of its inhabitants.

As the potential for change in identity is created, the ability to redefine space follows. The diagram above shows the possible impact of taking the existing single border condition and separating it into two in order to create the "third nation," or a space with the a completely independent identity.



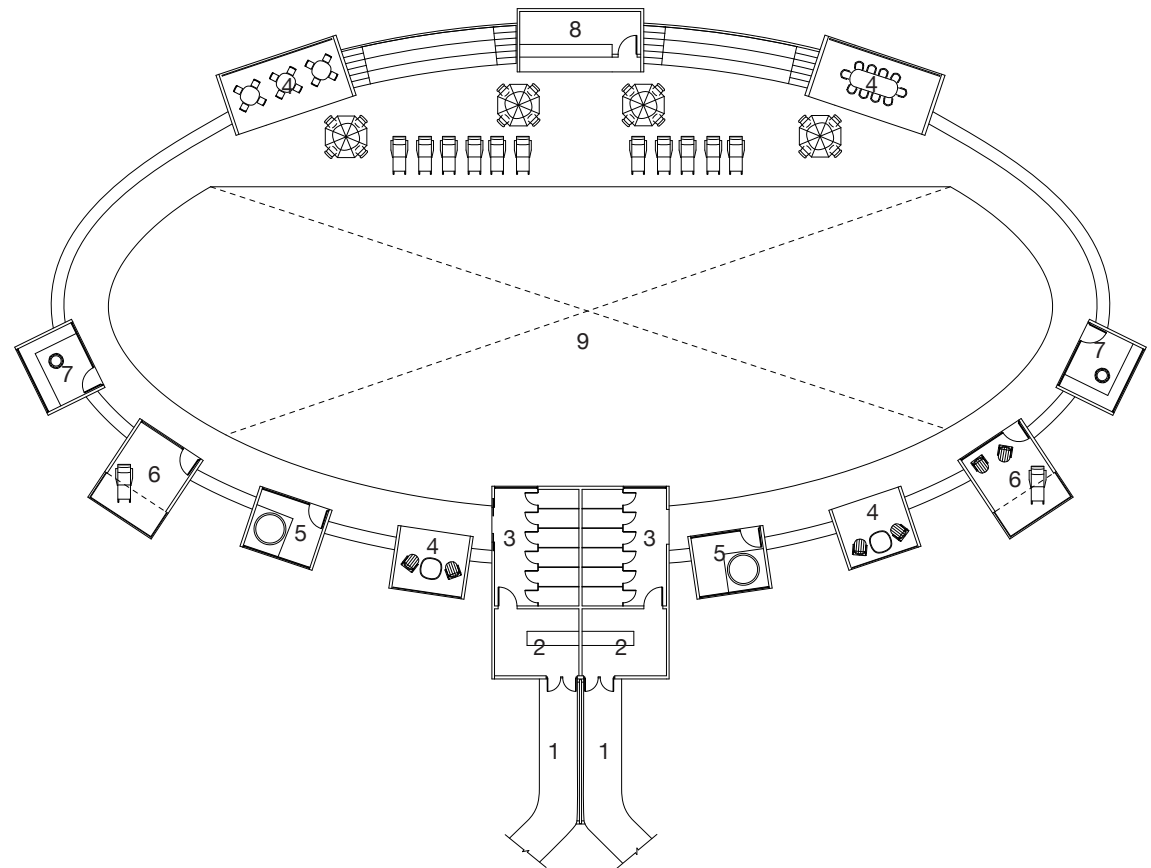
Site Plan

Figure 29:



Site A: "Bi-National Bath"

Using the diagram (Figure 27:prior), the endless possibilities of the barrier-free site revealed themselves through the simple gesture of creating a circular area between the two borders. IN order to take advantage of the natural resources of the site, designing a space for the community to come together and share the experience of the ocean was vital. Maintaining the simplicity of the diagram allowed for the design to match its fluid nature.



Legend

1. Entry Pedestrian Path
2. Customs Crossing
3. Changing room
4. Private sitting area
5. Private hot tub Sauna
6. Private sunning area
7. Private Sauna
8. Food Court
9. Open Pool

Floor Plan

Figure 30:





Building Section - Looking North

Figure 31:

The concept of the baths generates an alternate reality that grants the users a place to decompress and disconnect from the current conditions of the border. Entering the site, the users travel down a long pier running parallel to the existing border wall. As the wall disappears, the paths begin to merge. The two paths meet entering the initial structure of the baths. The user first passes through international customs, which allows them access to the baths. Within that initial structure exists the changing rooms. After changing the user exits into the “third nation,” the space in-between the border. Moving around the central pool, the users pass the more secluded spaces that allow for privacy. Within the baths, the concept of identity is minimized; spaces are universal and allow for different levels of interaction. The shared central pool is the focus most strongly symbolized the concept of coming together. The pool itself is 10’ -0” deep with a protective rigid mesh enclosure for security from the ocean. Finally, the views connect the user back to land or out over the Pacific Ocean, conveying a feeling of disconnection from the reality of the existing conditions around the border region and truly redefining the identity of the inhabitants.

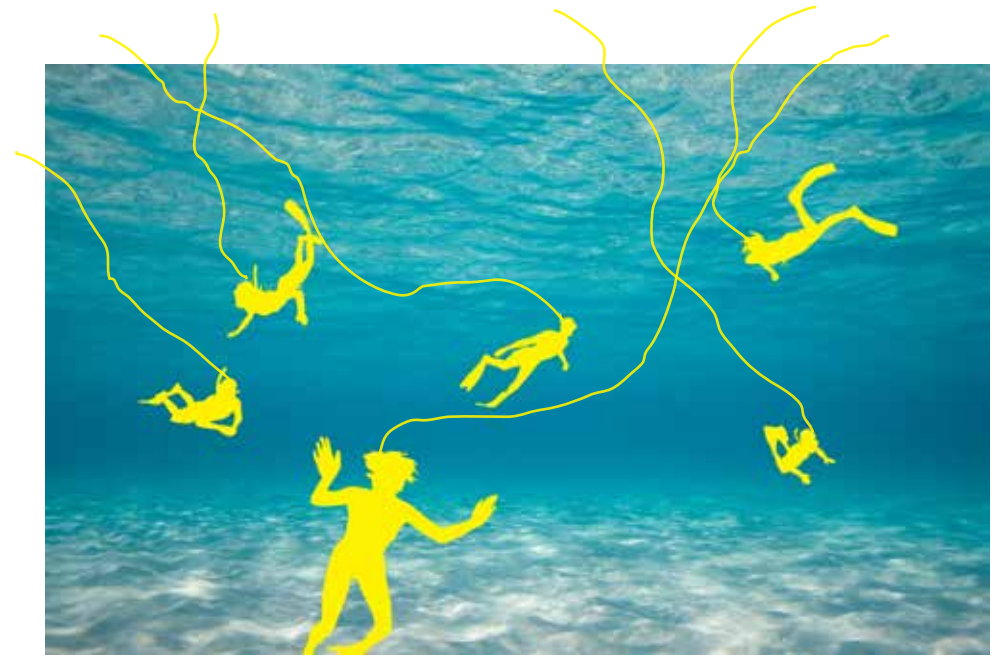


Figure 32:

Bi-National Baths: Concept Render



Figure 33:  
Bi-National Baths: Interior Vignette

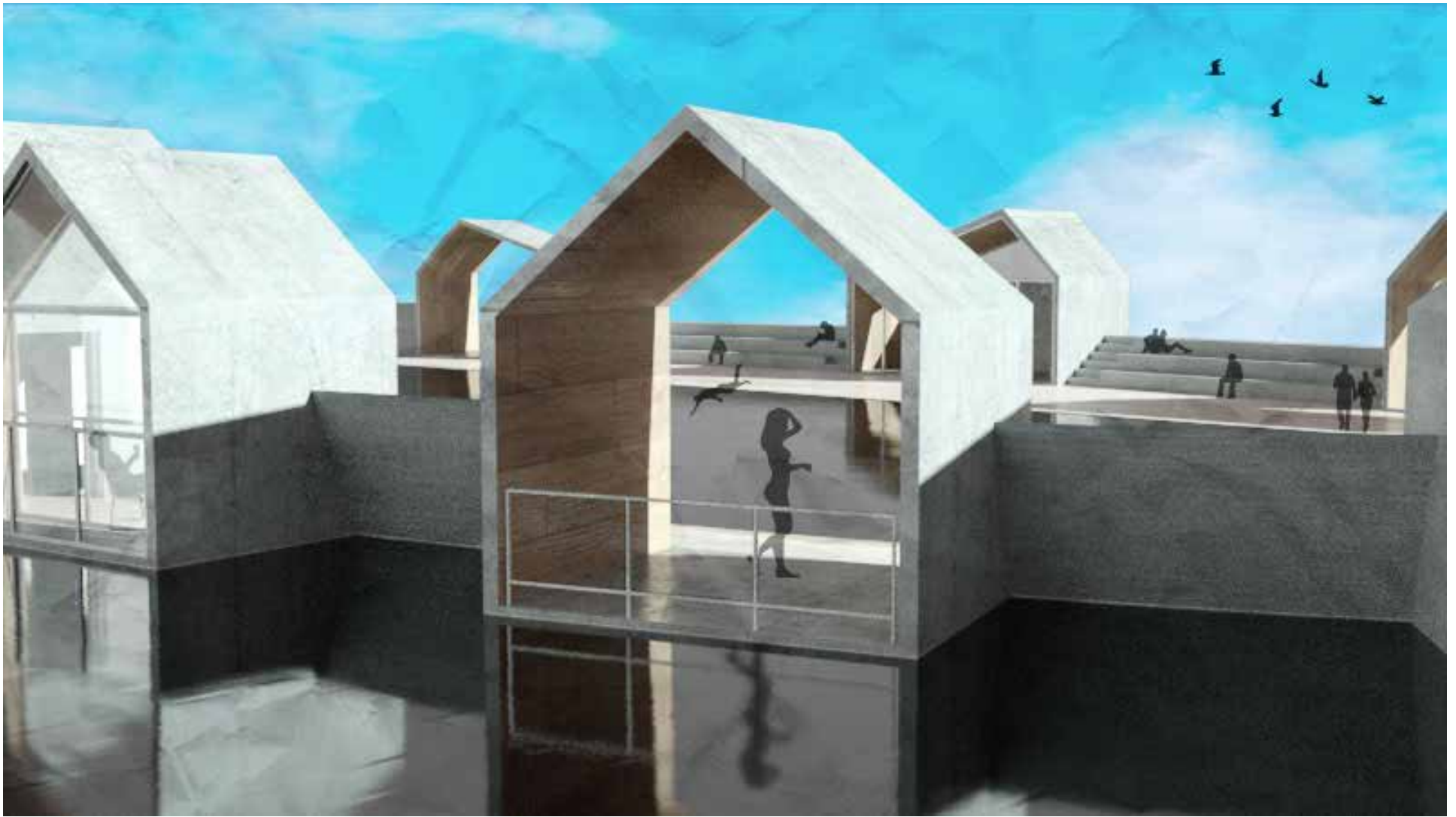


Figure 34:  
Bi-National Baths: Interior Vignette

# Site B : Bi-National Art Gallery

San Ysidro / Zona Norte

02



Figure 35:  
Site B :Ariel map of the San Diego / Tijuana Border

### *Site B: The Bi-National Art Gallery*

Site B is the point along the San Diego/Tijuana border, where the two urban fabrics come together. Security is the prime factor on the site. This portion of the border is defined by a 15' -0" steel fence. A security buffer zone is generated by the U.S. constructing a secondary steel barrier 150 yards into the U.S. side. This zone is highly secure and under 24 hours surveillance. However, this site offers multiple opportunities for intervention.

The buffer zone currently carries an identity of security and division but has the potential to offer a space of unity. The vertical space of the site is clear and presents an opportunity for the two nations to come together. The ability to connect and still maintain national identity while allowing for interaction is the concept of the site.

The two communities currently coexist within a region but have little to no direct interaction. The capability of coming together and sharing space and culture develops a bridge between the two countries. The two communities share a history as one, yet exist as two very distinct entities. Reconnecting the two nations would help in redefining the border and the region.



Figure 36:  
US Buffer Zone, San Diego CA

**Legend**

- 1. Tijuana River
- 2. Benito Juárez Sports Center
- 3. Gabriel Ramos Millán Elementary School
- 4. North Zone Delegation - Migrant Housing
- 5. International Highway
- 6. Coral Gate Community
- 7. US safety corridor - Buffer Zone
- 8. Willow Elementary



Figure 37:  
Map of border near the San Ysidro border crossing

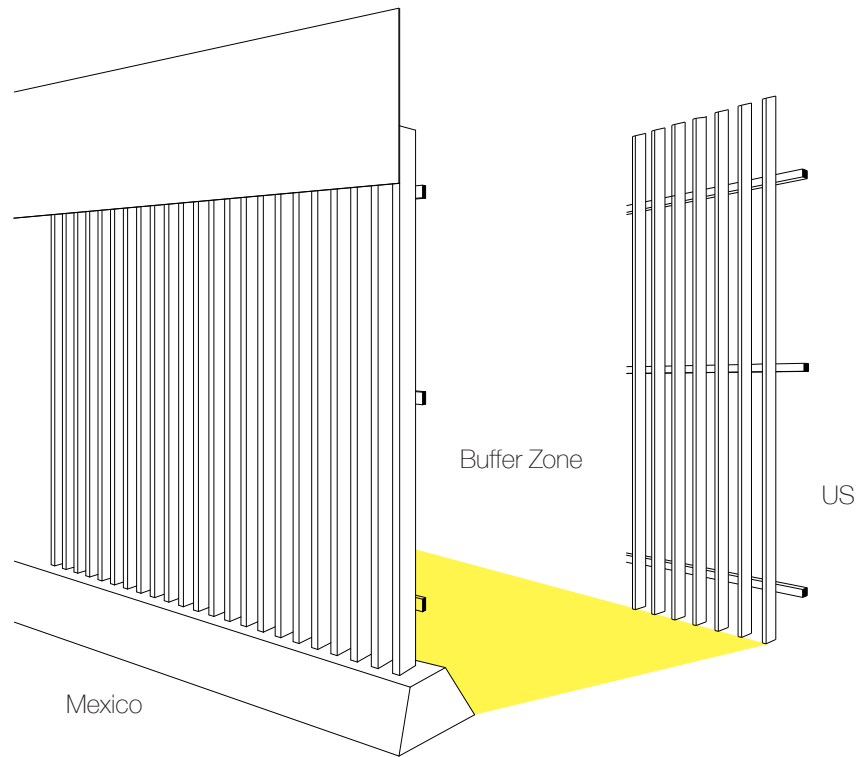
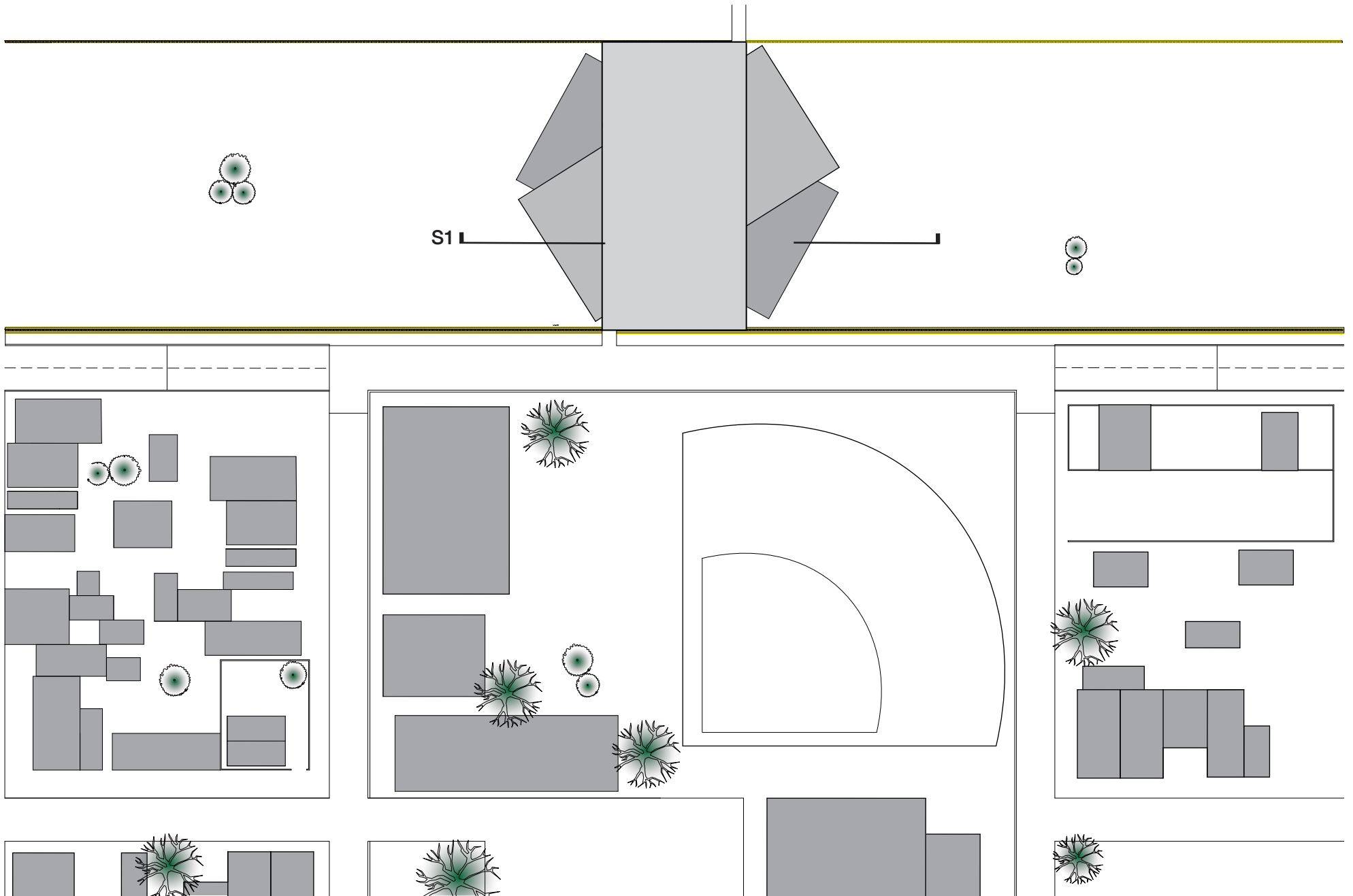


Figure 38:  
US Buffer Zone Site C diagrams

### *Site B: Buffer Zone*

The double barrier creates a particular site condition that has the potential to redefine the meaning of the border. The current buffer zone allows for no unauthorized persons to occupy the space. The no man's land persona of the zone deepens the division between the two nations. Shrinking the division of the buffer zone only happens when the area is redefined.

The diagram above of a double helix is an example of how two objects can come together to combine and create one uniform entity and yet, remain as two individual objects. The space between the two objects is as valuable as the objects themselves. The negative space becomes the place where sharing occurs, and the interconnectivity has a character identity of its own. The art gallery offers a location to come together in a unique manner to share a cultural and educational experience.



Site Plan

Figure 39:

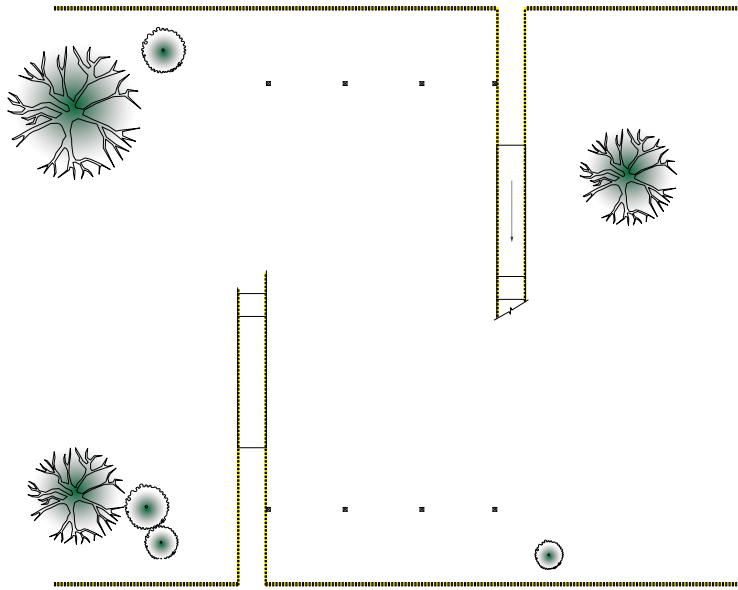




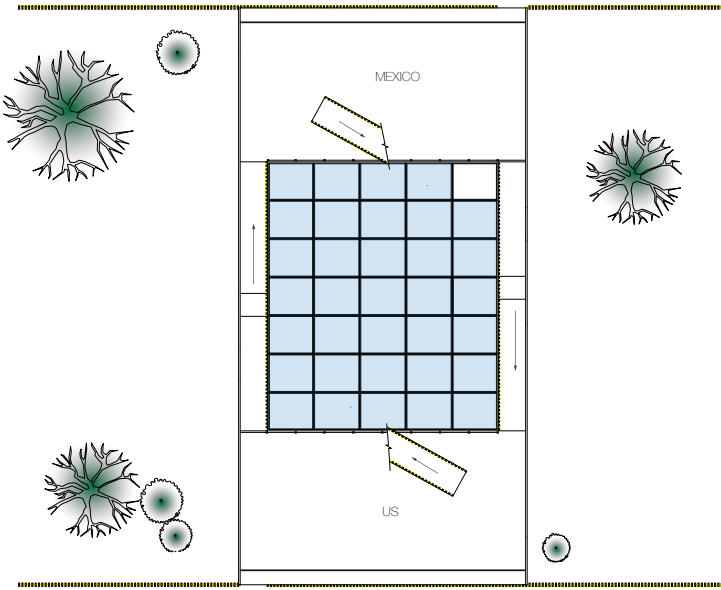
Figure 40:  
Bi-National Art Gallery: Exterior Perspective Render

### *Site B: The Bi-National Art Gallery*

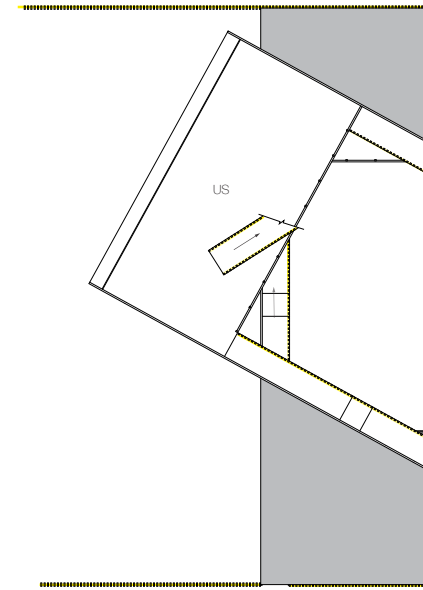
The heavy traffic of the interstate along the Mexican border quiets as it moves below the ground just before the site. Small slits along the long tall steel barrier open and allow users to move into the “no man’s land” zone for a brief second before entering the gallery. The border wall wraps the corner, marking the path towards the gallery. The urban fabrics of the two countries begin to collide at the site, and the space above morphs and evolves into a collaborative space of art and culture. The once unoccupied space of the site gains life through the movement of people from both sides. As the user enters the gallery from their respective country, they are thrust upward and over the land. Looking out towards the opposite country, they feel a sense of connection beyond their current location. The sense of traversing the border is present, but the reality is that the user remains part of their homeland. They can see and hear one another, but the buffer zone remains a division between them. The user then turns their perspective inward, and the art hanging from within the buffer zone creates another connection between the two countries, allowing them to share in an experience of art and culture.



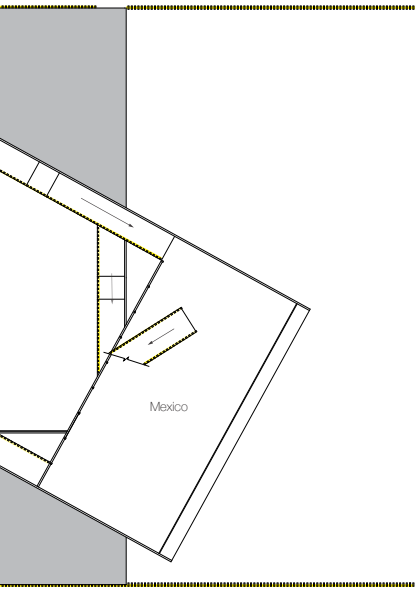
Ground Floor Plan



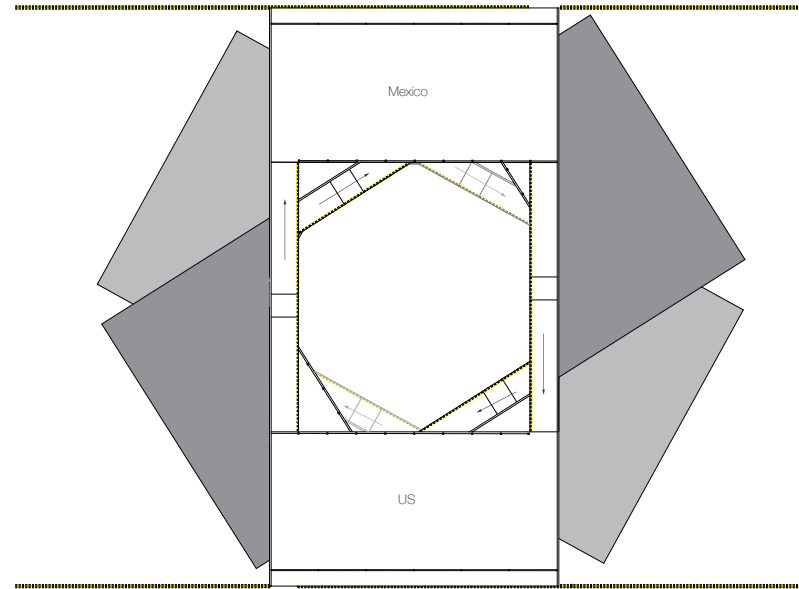
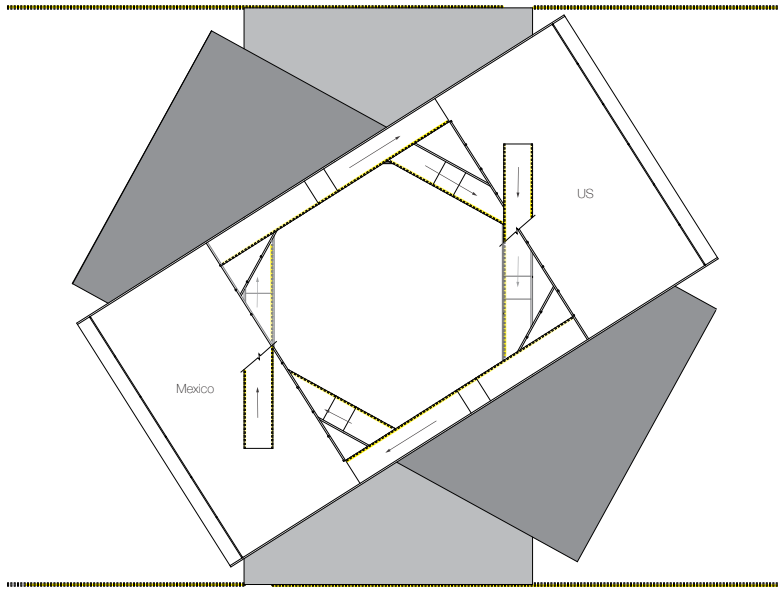
First Floor Plan



Second Floor Plan

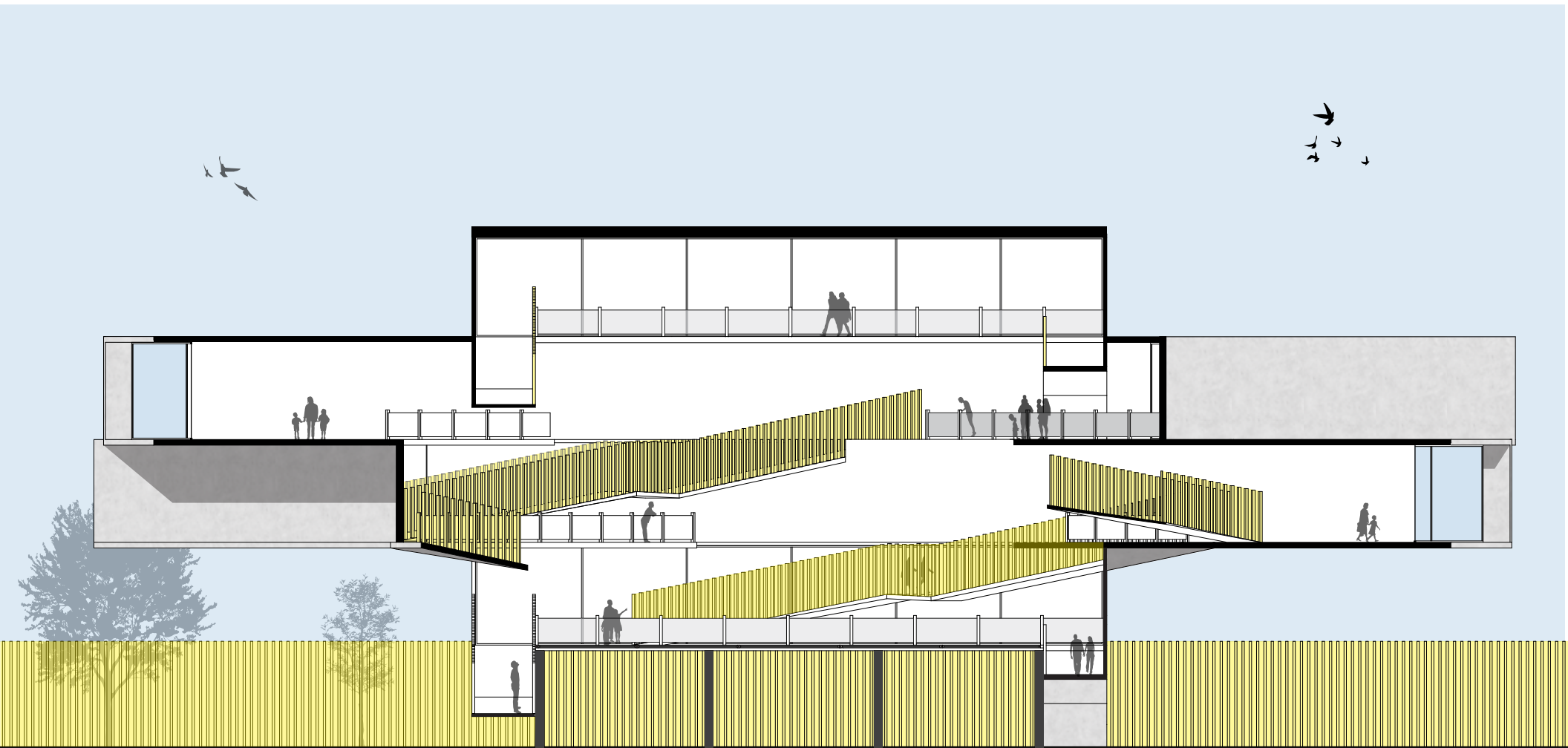


Thrid Floor Plan



Fourth Floor Plan

Figure 41:  
Bi-National Art Gallery floor plans



Building Section - Looking North

Figure 42:



Figure 43:

Bi-National Art Gallery: Interior Vignette



Figure 44:

Bi-National Art Gallery: Interior Vignette

# Site C : Bi-National Restaurant

Otay Mesa / CD Industrial and Rinconada

03



Figure 45:  
Site C: Ariel map of the San Diego / Tijuana Border

### *Site C: Bi-National Restaurant*

Site C is located on the eastern edge of the San Diego/Tijuana border. The area to the south is the densely populated Rinconada neighborhood of Tijuana. To the north, the Cuyamaca mountain range generates a natural border condition. The proximity to the International Tijuana Airport provides an excellent potential for population growth on the northern side of the border.

On this site the border condition, consists of a single barrier dividing the U.S. and Mexico. This condition is unique because it does not have the same harsh perception as the majority of the border does. Also, this section of the border does not carry the same level of direct security. This location is one of the only portions of the border along the San Diego / Tijuana border that does not allow for any direct connection, visually or physically. There is a complete disconnect between the two countries in a much more direct manner.



Figure 46:  
Border condition along Site C

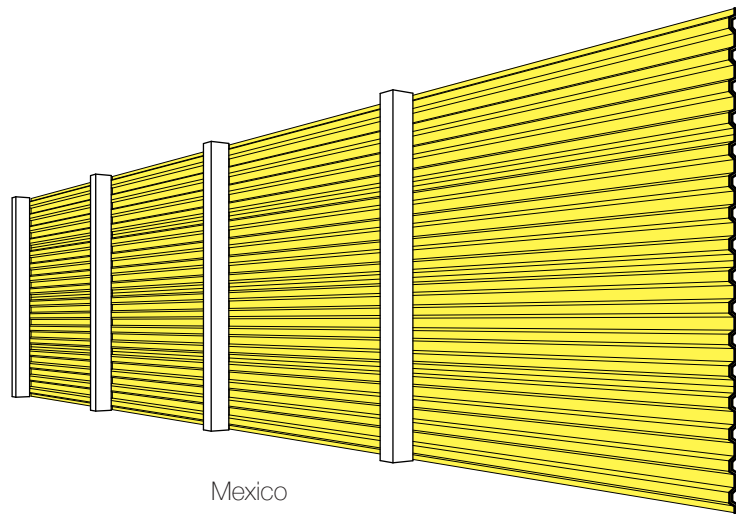
Legend

- |                                       |                                     |
|---------------------------------------|-------------------------------------|
| 1. Primary School 24                  | 5. US safety corridor - Buffer Zone |
| 2. Bose Corporation                   | 6. Diego Rivera Children's Garden   |
| 3. Panasonic Ecology Sysytems of Mex. | 7. Boeing Manufacturing Corp.       |
| 4. Otay Open Space Preserve           | 8. Water Treatment Plant            |



Figure 47:

Ariel vicinity map of border near along the North Eastern boundary of Tijuana



US

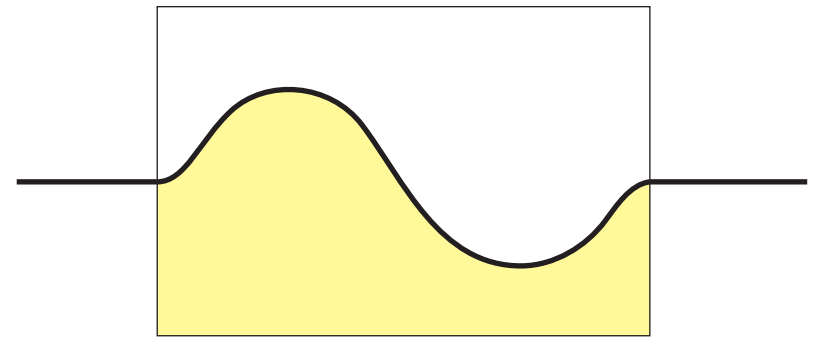
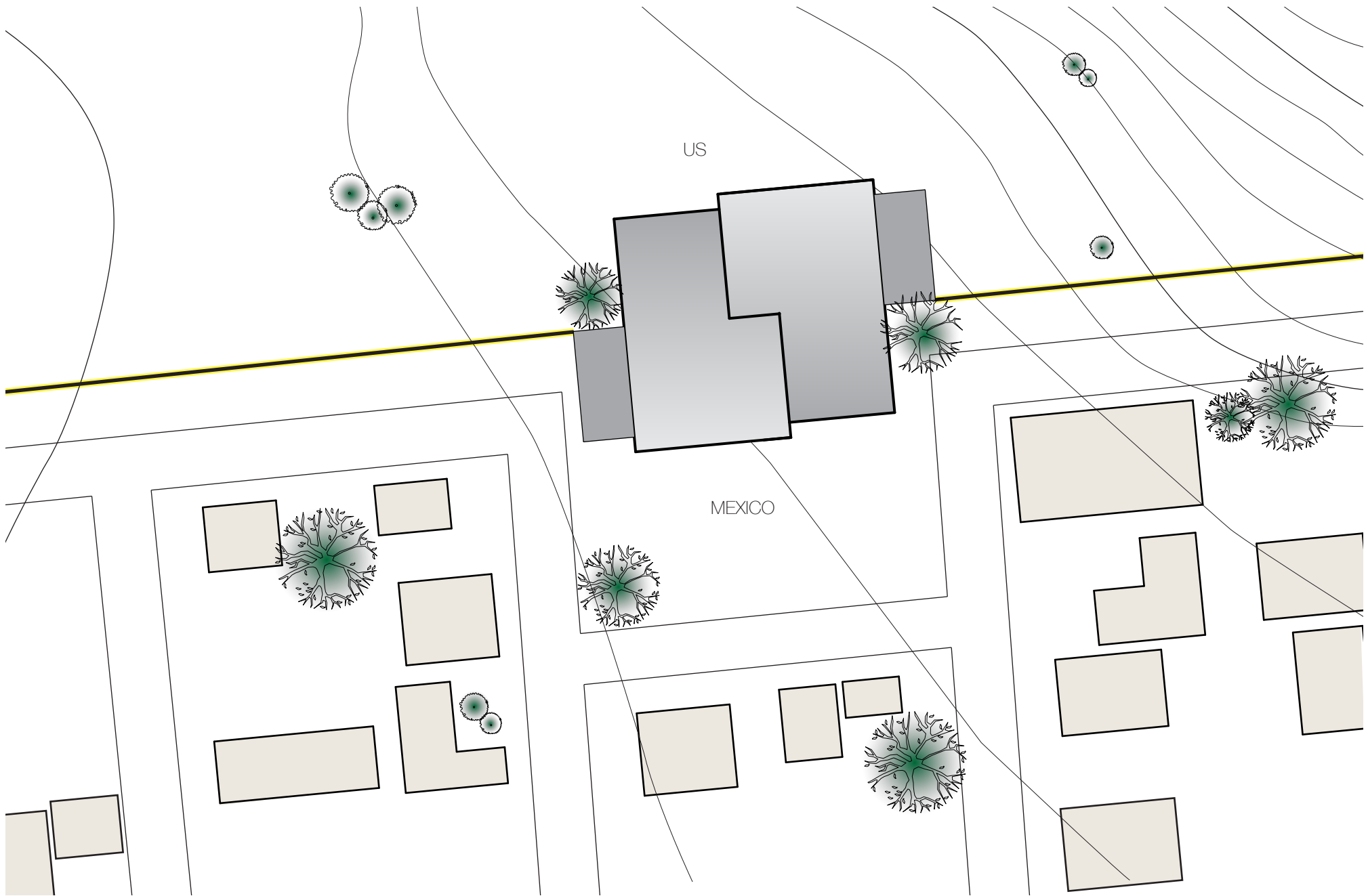


Figure 48:  
Site C: Border Barrier Diagrams

### *Site C: The Single wall*

The potential of the site is driven by the border condition, re-imagining the barrier dividing the two nations and posing a question. Can space redefine the meaning of the border, or can the border redefine the meaning of space? The answer lies within the combination of the user and their experience and addresses the assumption that space is experienced through the user's sensory interaction. It questions the notion of the border and its influence on the user's experience. Using the space within the structure to allow the border to deform, allows for unique experiences. Taking a simple form and disjointing the space within creates a unique experience.

This simple gesture of sweeping the imaginary line beyond the parallel current condition allows for moments of overlap and movement. The spaces push and pull on one another, generating a sense of tension and compression.



Site Plan

Figure 49:

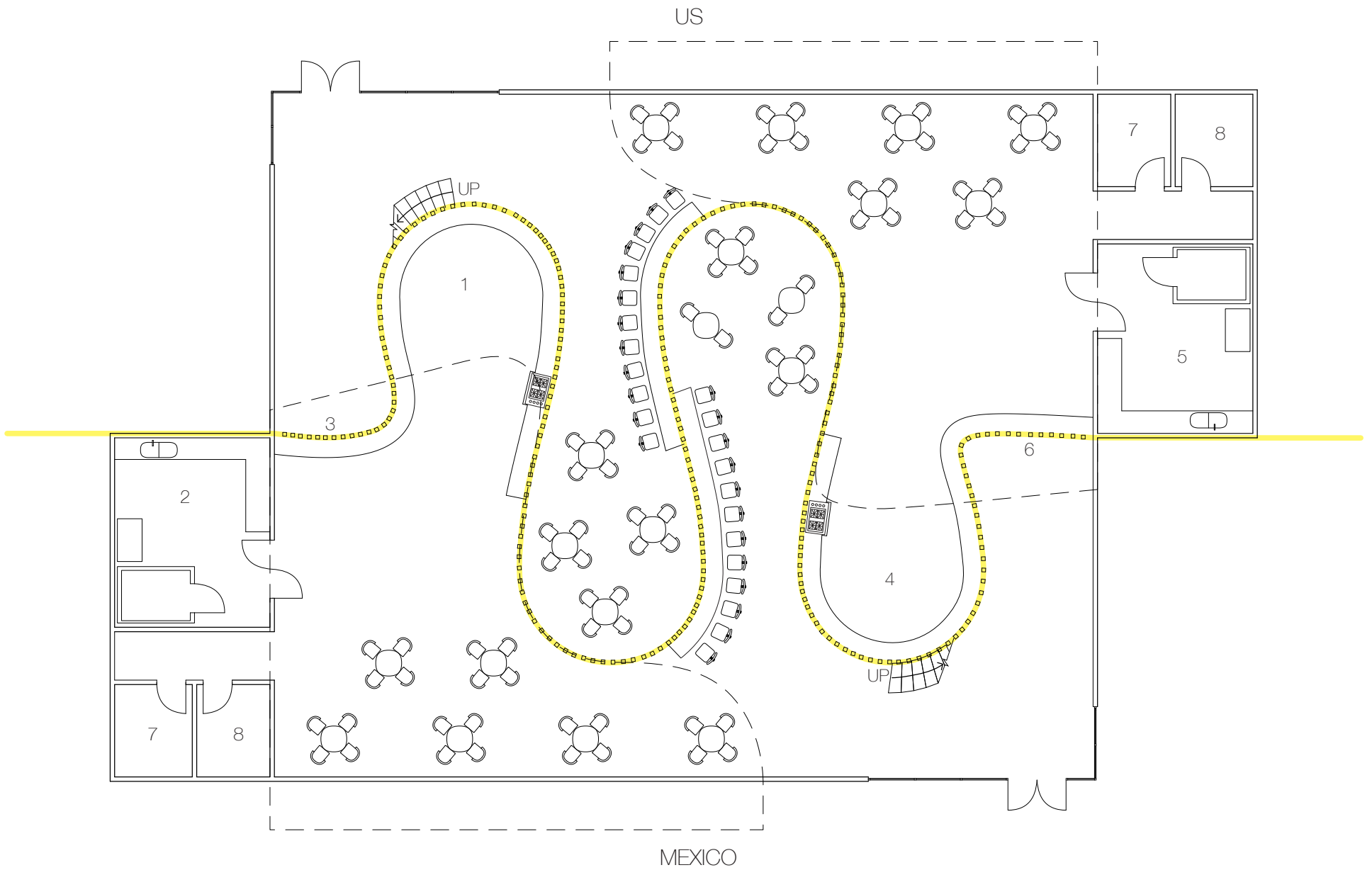


### *Site C: Bi-National Restaurant*

As the steel columns extend from wall to wall, sweeping across the structure, they push the space into compression, and then relax, inviting the users to move beyond the current location of the border. They create a feeling of movement within the architecture, freeing the users begin to connect visually. They can see one another moving in and out of the unfamiliar winding of the structure, and feel the heat from the stoves as they come to life in the kitchens.

The sounds of each kitchen creates a symphony of new sounds triggering different senses. The connection then reaches yet another level of consciousness through the mixing of aromas.

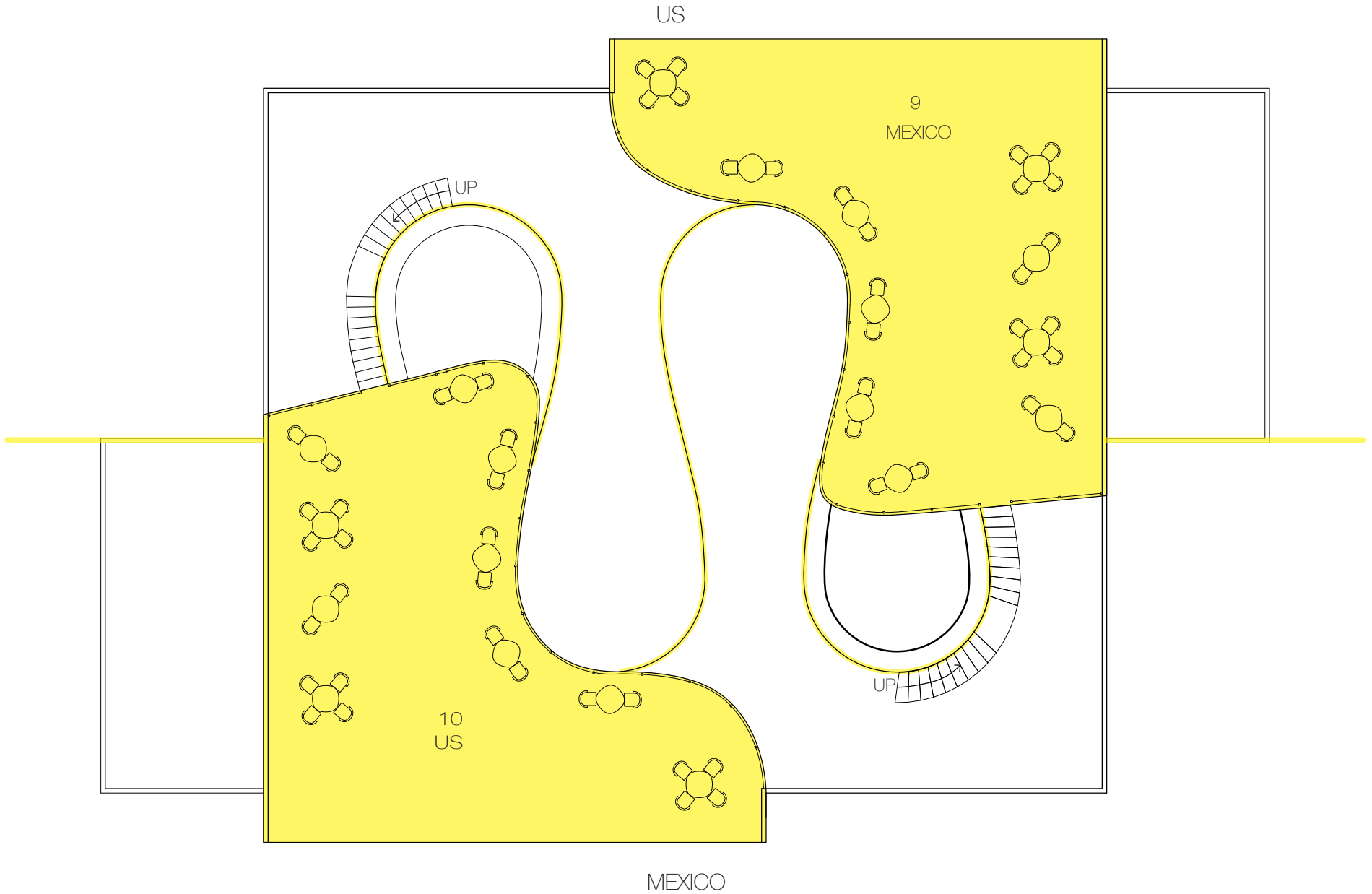
The space encourages the users to connect on multiple levels with one another. Connection occurs from visually and audibly through the barrier itself, as well as physically sharing a meal. The mix of food from nation to nation allows for a transfer of culture and a combination of experiences like no other. A restaurant is a place of sharing and connection. The area within those walls pushes the boundary of interaction between user and space, redefining the meanings of both.



First Floor Plan

Figure 50:





Mezzanine Floor Plan

Figure 51:





Building Section - Looking North

Figure 52:

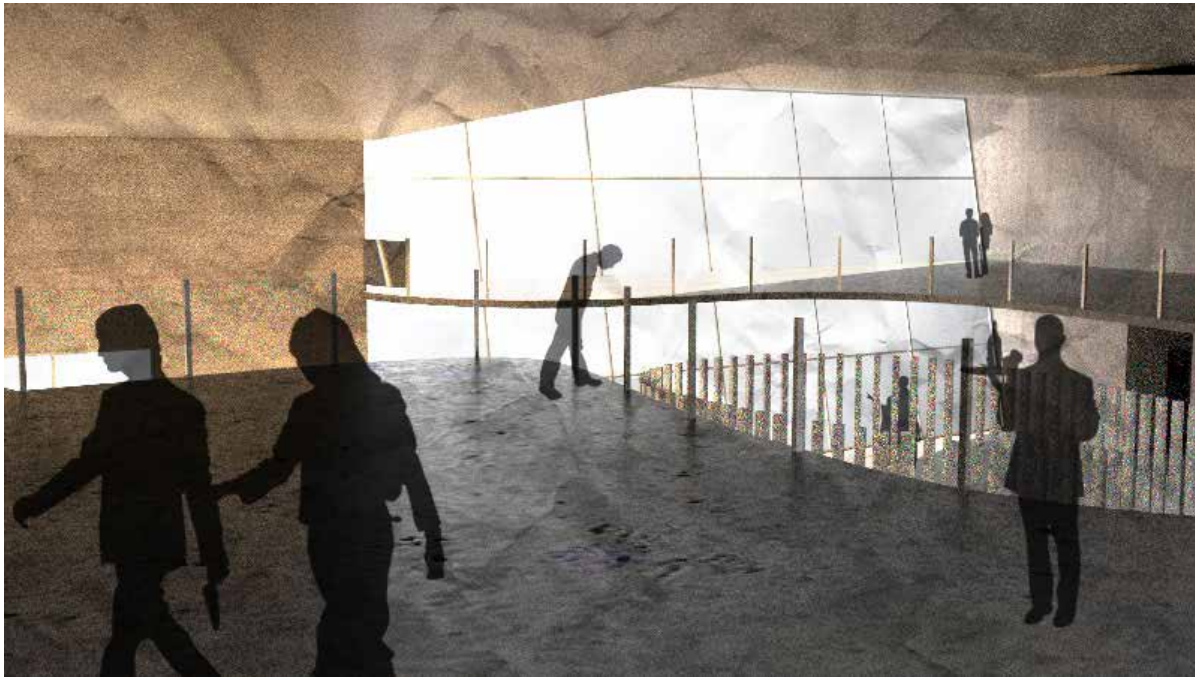


Figure 53:  
Bi-National Restaurant: Interior Vignette



Figure 54:  
Bi-National Restaurant: Interior Vignette

# 05

## Chapter Conclusion

Figure 55:  
a comparison of the existing border condition with that of 1973

## *Conclusion*

The reality around the U.S.-Mexican border includes tensions that arise through ethnic, environmental, and cultural issues. How we react to those issues depends primarily on the willingness to cooperate and illustrate a sense of togetherness. If we react in a positive way we can create a realm of prosperity for both sides.

The application of the lessons learned in this project offers new and innovative ways of sharing space as well as cultural identity. This has the possibility of reconnecting a region that has been segmented into two divided identities in their own right. The simple abstract framework used to embrace the complexity of the border region in this thesis create a methods of redefining the socio-cultural identities within this region. The creation of shared space on multiple levels of intervention allows for the development and possibility to blur the political construct of the border.

The knowledge learned from the San Diego/Tijuana border region can begin to modify the construct of the border, which includes security, immigration, transportation, and culture. These interventions can be applied in many ways beyond what this thesis proposed. It is essential to keep imagining architectural possibilities. Architecture can analyze the limitations and constructs of the border and create a deeper connection between the U.S- Mexico that allows for a bi-national merging of space and identity.



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