

borderwalk





**Borderwalk**  
Spatial Politics & Cultural Intimacies  
on the U.S./Mexican Border

A Design Thesis Submitted to the  
Department of Architecture and Landscape Architecture  
of North Dakota State University

by

Kristopher Kuster

In Partial Fulfillment of the Requirements  
for the Degree of  
Master of Architecture

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Primary Thesis Advisor

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Thesis Committee Chair

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**Abstract** By definition, borders lie on the edges. This project investigates the spatial implications of politically defined borders, and the effects that these materializations have in the context of urban space and the movement through and/or around them.

Borderwalk transforms the border into a center, and creates junctures rather than limits. It resurrects the forgotten landscape held captive between the two existing border walls and elevates it. It is served by a light rail transit system and introduces multiple new crossing points, it seeks to facilitate movement and dialogue. It creates space for binational farmer's markets, youth sports, and community gardens. It is a place for families and friends separated by the border.

Globalization has created a multitude of new boundaries, both physical, and abstract, which require contemporary architecture to develop a more comprehensive and integrated spatial, social, and political consciousness if it intends to be a relevant voice in future conversations.

Typology: **Inhabitable Wall**  
Project's Total ft<sup>2</sup>: **14,519,014 ft<sup>2</sup>**

**Key Words // Border / Migrancy / Urbanism/**



# Statement of Intent

# Problem Statement

What role do politics play in the shaping and organization of spaces which we encounter and inhabit every day? Further, how do one's own politics affect one's own experience of these spaces?

**Typology** Inhabitable Wall

**The Claim** Although the act of crossing a state's national border is largely an issue of politics, it is equally a matter of architecture.

**Premises** Our bodies are mobile regions of personal space that interact with other spatialities of varying scales and intensities. Borders exist at all levels of these encounters. All borders are primarily concerned with spatial conditions, both literally and figuratively, and how one moves through or around them, or alternately embraces them. While by definition, borders create dichotomy, taking sides, and producing and occupying spaces of opposition; they also invite transgression and transcendence, creating dynamic spaces of hybridity.

In the supposed age of globalization, it seems paradoxical that border zones [especially those which lie between nations considered to be "First-World" and those condemned "Third-World"] have become increasingly militarized. The weaponization of the U.S.—Mexico borderlands has significant architectural implications, in which architecture becomes a materialization of political power and prejudices. *Architecture is never neutral.*

## **Theoretical Premise**

The border should not be treated as an exclusionary barrier, but rather an intersection or nexus of trajectories and encounters.

## **Project Justification**

As the gap between the world's wealthy and poor continue to broaden and natural resources diminish, a nation's geographical region becomes either a crutch or a burden, thus routes of exodus and arrival become essential actions for survival. However, this future may be closer than one anticipates. Writing on the current U.S.-Mexico border condition, Bryan Finoki, author of the excellent blog Subtopia, suggests, "It seems one way or another a growing majority of the world's people are becoming geo-economically uprooted and caught in between two parallels of opposing nowheres: a past place of expulsion, and a future one of denial." (Finoki)



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**The Proposal**<sub>9</sub>

## Narrative

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*"When you get there, there is no there there."*

*-Gertrude Stein*

Borders by definition lie on the fringes, resulting in a dichotomized spatiality, which in the case of San Diego–Tijuana is defined by an architecture of surveillance and militarization. The effects and of globalization have widened the gap between the wealthy and the poor, and perhaps nowhere is this illustrated in such startling detail as it is in the Borderlands of the United States and Mexico.

Urban theorist/activist Mike Davis (2004) writes, "The wall...functions like a dam, creating a reservoir of labour-power on the Mexican side of the border that can be tapped on demand via the secret aqueduct managed by polleros, iguanas, and coyotes." (240).

Teddy Cruz also describes the border as a dam, but also as if it were a looking glass of sorts with very different lenses depending which side of the wall you are looking at. He writes, "Seen from the U.S., the border wall is a dam which keeps the chaotic growth and spontaneous development of Tijuana's dense and mutating urban organism from contaminating San Diego's picturesque order. Seen from Mexico, the wall is a scar which Tijuana has to continually witness in order to construct its own identity" (Cruz, 1999)

The wall between San Diego and Tijuana is as much an architectural problem as it is a socio-political problem. Because it is, in fact, largely an architectural problem, Architecture is tasked in this thesis project with imagining new possibilities for this shattered landscape. The many layers of political and social influences that created this landscape cannot be solved solely by Architecture, but Architecture must react to these conditions, and pose alternative scenarios if any sort of significant change for the better is desired. Architecture must mine the space beyond its traditional boundaries and cultivate the space between it and other disciplines and processes.



## Client

Citizens of the San Diego–Tijuana Metropolitan Region

## User

The ~83,810 individuals who pass through the San Ysidro Port of Entry on a daily basis (Bureau of Transportation Statistics), and the countless others who would otherwise risk their lives crossing illegally through the desert to the east.

## Project Elements

Customs Offices  
Recreational Green Space  
Light Rail Transit System  
Amphitheater  
Sports Fields  
Community Gardens  
Bike/Pedestrian Paths  
International Farmer's Market

## Project Emphasis

At the port of entry, one's identity is reduced to a name on a passport, the possessions in his/her vehicle. This project will attempt to rethink policy, and therefore the perceptual spatiality of the U.S.—Mexican border in the greater San Diego/Tijuana metropolitan region.

## Plan for Proceeding

Intensive research must still be done to more fully comprehend the many systems that contribute to the many adversities faced by the migrant, tourist, and transnational. I have not yet experienced the Borderlands, and it will be imperative for me to do so, and will be perhaps the most significant element of my qualitative research.

This research will inform the making on multiple physical models, diagrams, and drawings. These investigations will be documented and then edited for relevance, to be published in the NDSU Architecture Library for future reference from researchers.

## The Site

The metropolitan region of San Diego and Tijuana is somewhat of a microcosm of the effects of globalization. Goods and capital [which are produced in extremely low-wage paying *maquiladoras*] flow freely across the border, while individuals must endure intensive/invasive security procedures, and an increasingly alarming rate of socioeconomic disparities.

The region supports a population of 4.3 million residents, and is continually growing at a rate of 2.8% annually. (ICF, 20) Tijuana is growing at almost twice the rate of San Diego, and it is estimated that half of those new residents in Tijuana will find shelter in squatter-communities, which suffer from severe overcrowding, pollution, and lack of infrastructure and services. (ICF, 29)

The metropolitan area is linked by two international crossing points. The San Ysidro Point of entry located at the terminus of Interstate 805, is the busiest land port of entry in the world with approximately 30 million people crossing annually. The Otay Mesa port of entry serves mostly commercial traffic, with 744,929 trucks and 9,980,523 pedestrians crossing in 2011 (Bureau of Transportation Statistics, 2011).



(Satellite imagery from Google Maps)

# Past Studio Experience

## SECOND YEAR

### Fall Semester 2006

Instructor: Darryl Booker

- \_A Teahouse
- \_Mississippi River Rowing Clubhouse
- \_ Dwelling for an Ecologist

### Spring Semester 2007

Instructor: Joan Vorderbruggen

- \_Waldorf School
- \_Red River Dance Academy

## THIRD YEAR

### Fall Semester 2008

Instructor: Steve Martens

- \_Research Center for Migratory Game Birds
- \_Freemason's Guild Lodge

### Spring Semester 2009

Instructor: David Crutchfield

- \_Austin Performing Arts Center
- \_Hotel Virgin Galactic
- \_Expansion to the Chicago Art Institute

## FOURTH YEAR

### Fall Semester 2009

Instructor: Bakr Aly Ahmed

- \_LOCUS: A Transnational High-Rise Community
- \_KKE Design Competition

### Spring Semester 2010

Instructors: Darryl Booker,  
Paul Gleye, Frank Kratky

- \_Santo Domingo Urban Design
- \_Marvin Windows Competition

## FIFTH YEAR

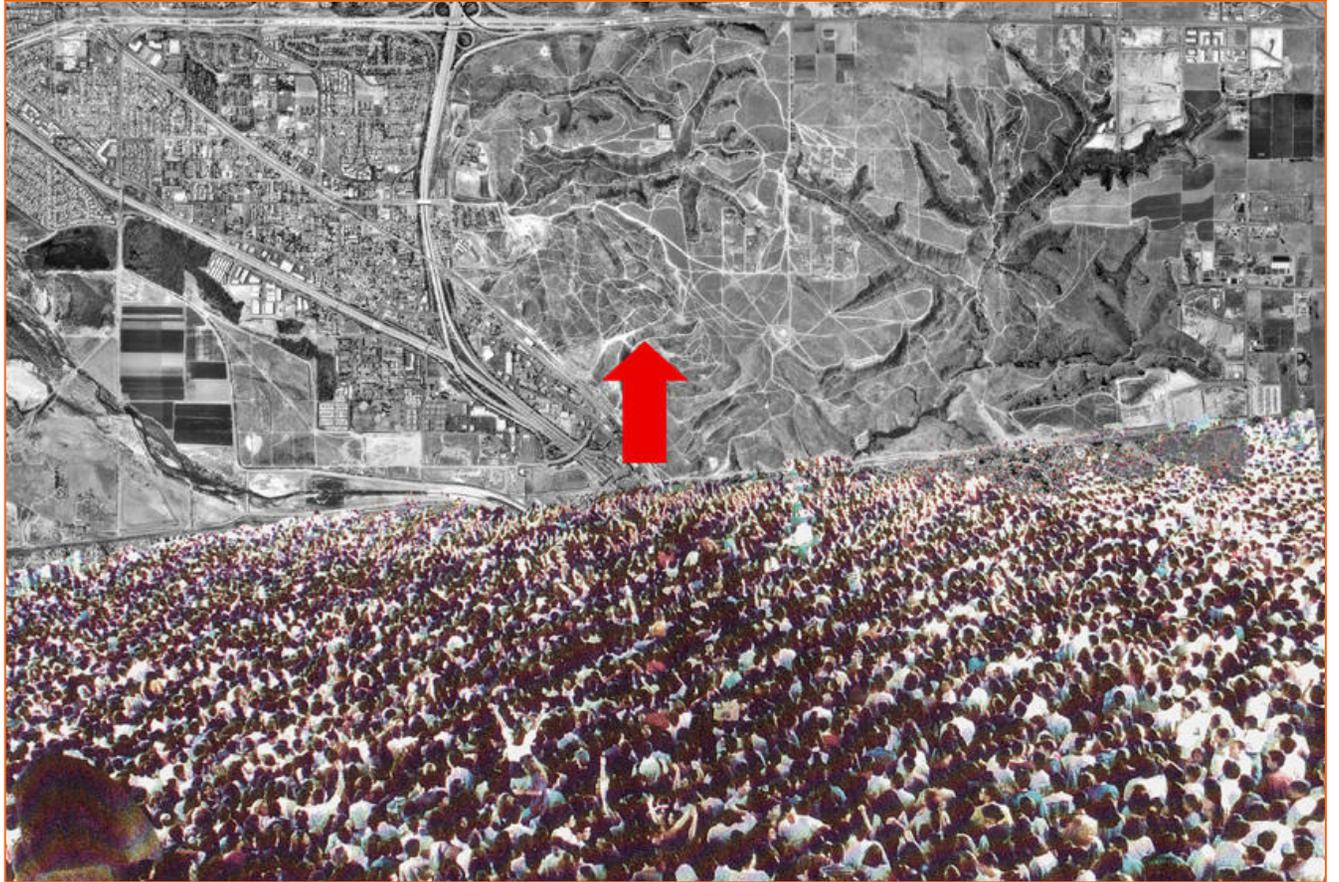
### Fall Semester 2011

Instructor: Cindy Urness

- \_MXC Transit Center



**The Program**



## Results from Typological Research

In an effort to improve its image as a welcoming gateway, the United States General Services Administration (GSA) has recently approved the construction and/or remodeling of 37 new U.S. Ports of Entry, as a part of its Design Excellence Program. (Hales, 2006) However, while these new gateways into the United States may improve the nation's image, this improvement is largely a fictional one that will exist only through seductive architectural photographs and media write-ups. Yet, one's appearance can only be polished so much by brand-new, "LEED certified" architecture when there exists a grotesque, tectonic construction—sculpted out of leftover steel from Operation Desert Storm into a fortified wall, seething with sociopolitical subtext.

These proposals by the GSA seem to neglect the realities of the U.S./Mexican border, by reducing that reality to a mere image. However, the borderlands are a very distinct and vibrant *place*, shaped by memories, narratives, struggles, encounters, ambitions, and terrors. Instead of asking ourselves how we can refine our façades, we should be asking ourselves, and others: *How can we imagine an architecture of sociocultural-sustainability in the borderlands?*

In order for us to imagine new frontiers, it is important to first investigate where is the origin of the fears that cause us to erect walls. Ronin Shamir, a Professor at Tel-Aviv University, suggests in his article "Without Borders? Notes on Globalization as a Mobility Regime" published in *Sociological Theory*, that throughout most of civilized history, there has existed a notion that correlates migrants with social ills, and that those assumptions are still heavily ingrained in contemporary foreign policy-making. Shamir further rationalizes that the processes influencing globalization, simultaneously generate the perceived necessity for a stable national identity, protected from "unwarranted infiltration by suspect populations" (Shamir, 2005). Channeling these observations are those of Eric Holding, a Research Associate in Architectural Studies at Middlesex University, and also director of Evolver, a London-based interdisciplinary design consulting firm. In an article published in *Architectural Design*, he writes, "Migratory processes create social tension. These rapidly develop spatial implications, driven by a perceived collective desire for a community to protect its everyday environment from those that constitute the 'other', the 'they who are not us'; defined as they are in this instance by their differing politico-religious beliefs (Holding, 1999)."

This common approach of dichotomous thinking in terms of *us* and/or *them* indicates that the borders we define have implications that extend much further than the physicality of a militarized barrier. Borders are not always malicious conceptions, and one could argue are in fact quite necessary—a roof overhead, a winter jacket, a hand railing on a balcony, the spaces between people and objects that allows them to enter into a dialogue with one another, etc. However, it is the intentions and practices which act as catalysts towards the construction of our boundaries, and the significance with which we bestow upon them. We shape our borders, and our borders continue to shape us. Wherever you go, you take your borders with you.

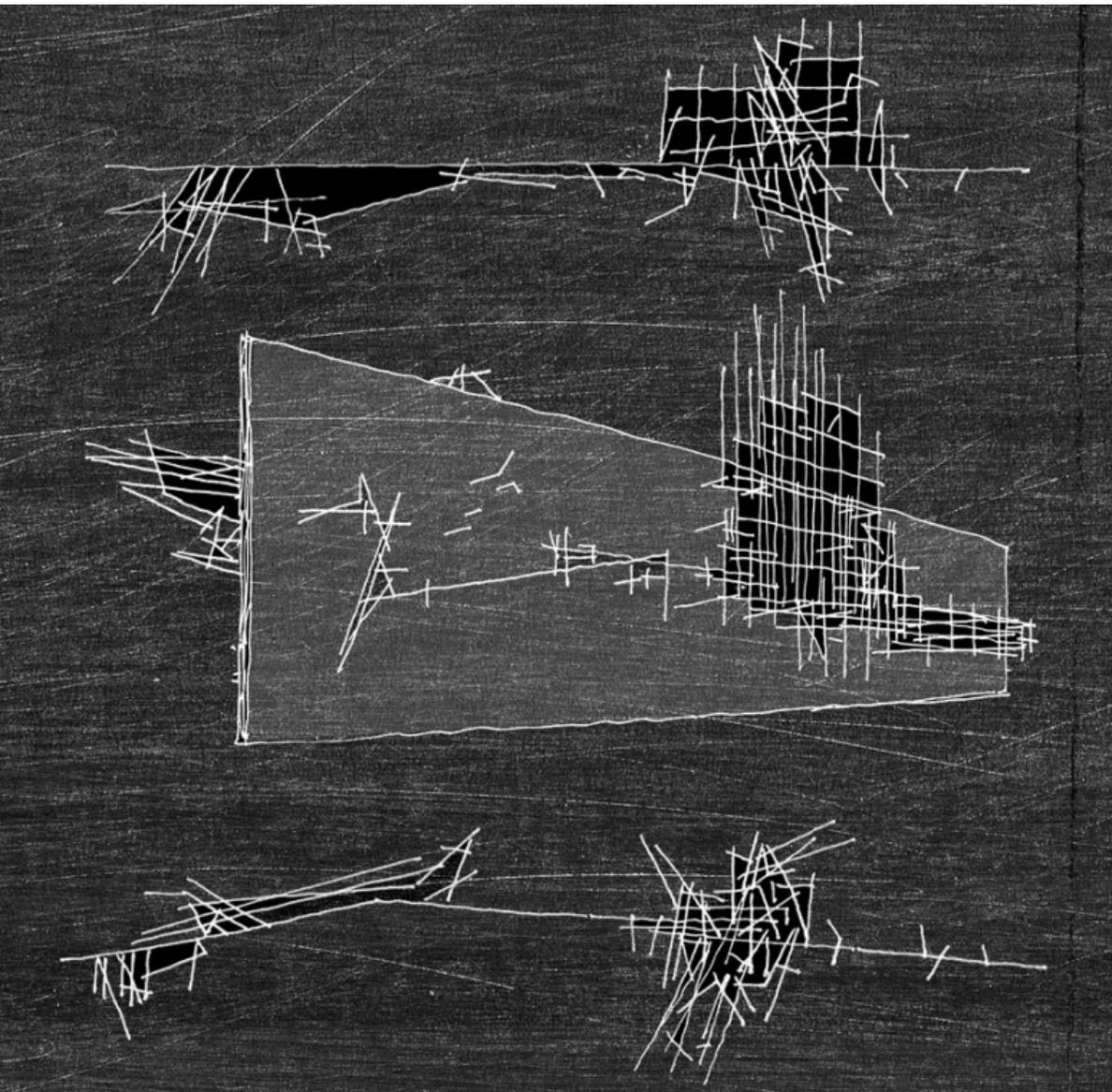


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## Walls and Games

Lebbeus Woods, via his blog, has imagined several scenarios for the future of walls, while also delivering a biting critique of exclusionary architectural practices. In a post titled “Wall Games”, Woods defines Israel and Palestine as two opposing players, each of whom controls their respective sides of the wall with a team comprised of architects, builders, artists, and performers, in a speculative game. Each team takes turns erecting a cantilevered construction that is supported entirely by one section of the concrete barrier. The other team then faces the challenge of countering the weight of the opposing side’s cantilever with their own construction. The objective, as stated by Woods, is simply *to win*. The stipulations required to win are not clearly stated, only that the game must keep going. If a section of the wall topples over, both teams lose. (Woods, 2009b) Thus, the wall becomes a fulcrum, precariously balancing each side’s creations, and creating a space of anxious uncertainty and fear, that essentially perpetuates the wall’s existence. This scenario becomes somewhat of a question of the “chicken or the egg?”. Does the terror that populates the opposing players define the wall? Or does the wall itself define this “terror”-tory?

RIGHT: Drawing for Wall Game  
(Courtesy of Lebbeus Woods)



Woods also imagined a protective wall for Bosnia, during the turmoil which erupted in the former Yugoslavia, in a post titled “Metastructure”. Because of NATO’s enforcing of a no-fly zone over the entirety of former Yugoslavia, the combat was fought entirely on the ground. Woods postulated that a single repellent barrier could only last so long against the heavy, armored artillery of contemporary warfare. This led to the envisioning of an *absorbent* wall, which functioned much like a sponge. The wall was to be excessively tall and extremely wide, composed of a labyrinth-like interior, into which only foot soldiers could enter through small crevices. Once inside of this superstructure, the soldiers would become either lost and hysterical, simply die, or (upon realizing the futility of escape) “move in” and inhabit this in-between space. The “in-betweeners”, as Woods refers to them, would soon run out of water and food rations. Bosnian farmers might begin selling their produce to the in-betweeners. The farmers may even eventually decide to move in also, creating a city within this in-between space. (Woods, 2009a)

Games are an interesting point of departure into investigating the lives of walls. Demographer Audrey Singer and Sociologist Doug Massey, in a study published by the Center of Migration Studies of New York, calculated that an individual attempting an “illegal” entry into the United States from Mexico has approximately a 32% chance of evading border patrols. This percentage then increases with each repeated attempt. (Massey and Singer, 1998)

The study also observes and notes an almost game-like behavior between unsuccessful crossers and the U.S. Border Patrol officers who apprehend them. Massey and Singer speculate that the Border Patrol functions primarily as a “bureaucratic coping strategy”. They cite a scenario in which a career-minded Border Patrol officer’s incentives reside primarily in a large number of arrests with minimal processing time. The migrant’s incentives are essentially evading any and all patrol officers. Should the migrant be apprehended, he/she has the right to a hearing. However, because of the Justice Department’s excessive backlog, the migrant often opts to waive these rights to be deported as soon as possible so as to have the opportunity to try crossing again. This outcome is also favorable to career-minded officers, as it allows them to return back to patrolling more quickly so as to apprehend more individuals. (Massey and Singer, 1998)



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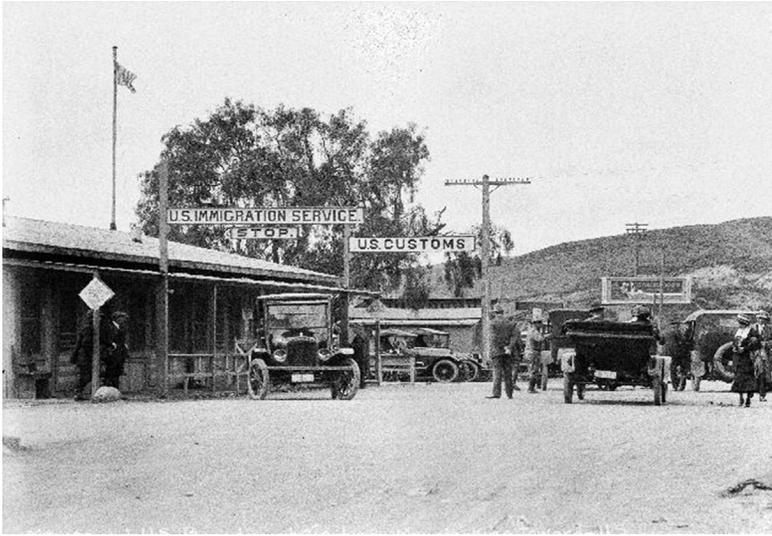
*“Walls can be an armature for transformation, an instrument not for dividing and separating, but for bringing opposing ideas and people together. It all depends on the design, the architecture of a wall. (Woods, 2009a)”*

On the following page is an excerpt from an interview with Michael Sorkin, a renowned architecture critic, with Aleksandra Wagner, in the publication *Man and Space*, which perhaps best illustrates the importance of architects’ involvement in the political spectrum.

Wagner: *In your Introduction you refer to a “non-violent, ethical activity, a model for this book” by which you call for a different practice of architecture and for a different stance in thinking about the built environment. I am interested in the notion of ethics, as well as in violence that might be linked with architecture. What did you have in mind?*

Sorkin: Architecture is capable of participating in, and of producing, all kinds of violence; it parallels other structures of violent behavior. In this case of the Wall, there is the violence of the disruption of familiar patterns and relationships, there is a violent assault on the possibility of leading a life of calm and tranquility, there is the violence of imprisonment, there is the violence of ugliness. Architecture can do the violence of homogeneity, of deficiency, of displacement – it can be a barrier to many, many things.

I would argue not only that other ways are possible, but that architecture does have clear ethical duties. These begin with many about which all agree – to be safe, to protect against fire, rainfall, toxins. But there are more, including enhancing the possibility to live a good life, stewarding our relationship to the finite resources of the planet, or respecting the physical compacts of existing good-city forms. And, architecture’s duties also include establishing and symbolizing various means of equitable distribution of spaces, resources, goods, relationships, experiences. Our duty is to make things better – what could be more depressing for an architect than images of Beirut reduced to rubble? I do think we have a big problem with the lingering romance of images of the violent. It seems that, because we live in culture in which things are more and more disposable, we fall into stupid exaltations of the so-called creative violence of capital, constantly engaged in the allegedly productive cycle of renewal and re-invention. Not all destruction is creative. (Wagner, 2006)



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## Historical Context

The landscape of San Diego and Tijuana, and more significantly—the landscape *between* these two cities has changed drastically since the inception of these communities.

Like most Mexican border communities, Tijuana developed out of necessity. As resources in the populous central plateaus of Mexico became scarce, the search for resources led many settlers to Mexico's northern provinces. At the very northwestern tip of Baja California and across the Gulf of California, Tijuana was heavily isolated from the economic center of Mexico. This isolation, however, created new links with the cities of the American Southwest (Herzog, 1999).

Tijuana began as a border outpost approximately 12 miles south of San Diego, with little more than a Customs House, post office, market, and housing for little more than 300 residents—mostly farmers. As the agriculture, mining, oil, and railroad industries began expanding in the late nineteenth century, the population grew rapidly. During this time, Tijuana started to carve out an identity as a receptacle of migrants and laborers (Herzog, 1999).

Perhaps the most economically important industry that developed in Tijuana was tourism in the 1920's. The prohibition of alcohol in the United States during this time, provided a lucrative business opportunity for the city due to its proximity with the large population of San Diego. Tijuana was soon filled with highly caricatured and mimetic architecture in the forms of casinos, racing tracks, cantinas, brothels, and hotels and became a sort of oasis of forbidden pleasure, funded almost entirely by American dollars (Herzog, 1999). In a sense, it was precedent for what Las Vegas or Disneyland would become.

However, because of Tijuana's increasing dependence on the American economy, it was also heavily affected by the depression during the 1930's. Over 500,000 immigrants were deported back to Mexico from the United States, with most of them taking up home in border towns like Tijuana, until they would be cleared to return to America. The economy was soon revitalized during World War II by American G.I.'s stationed in San Diego, lured by the seedy and indulgent nostalgia of the 1920's (Herzog, 1999).

In his work *On the Border*, Tom Miller speaks of the border landscape as “...sleazy and sleepy, dusty and desolate, places where the poor and criminal mingle... sexy and hypnotic, mysterious and magical, self-reliant and remarkably resilient. It changes pesos into dollars, humans into illegals, innocence into hedonism”(Miller, 1981).

Globalism began to affect Tijuana in the 1980's with the construction of *Maquiladoras*, or assembly plants, funded by foreign businesses to take advantage of low-wages. These monolithic concrete constructions now dot Tijuana's eastern landscape, employing migrants from southern Mexico and Central America who have taken up residence in the slums on the outskirts of the city (Herzog, 1999).

Globalism has also transformed the tourism industry, which was once an entirely locally owned enterprise, is now managed largely from a distant multi-national corporate office. While tourism provides obvious economic benefits, those benefits are distributed asymmetrically, and it also creates a number of further cultural problems. The tourism industry has constructed placeless landscapes of homogeneity. Foreign-owned hotels, restaurants, retail stores, etc. seem to paradoxically displace the very culture that the tourist comes to seek.

The passing of NAFTA and Operation Gatekeeper in 1994 has perhaps made the most devastating impact on Tijuana. NAFTA opened up the Mexican market to competition with highly-subsidized agricultural exports and state-supported corporations from the United States. This agreement essentially made it impossible for small business owners and farmers in Mexico to return a profit, creating a drastic rise in unemployment (Chomsky, 2009). Further exacerbating these conditions was the passing of Operation Gatekeeper, which militarized the urban border shared by San Diego and Tijuana, with the erection of two border walls and a no-man's land in between populated by Border Patrol officers, motion sensors, cameras, and other surveillance equipment (U.S. Department of Justice, 1998).

Throughout its history, the city of Tijuana has largely been shaped by outside forces. Which poses the question: *Where is the Tijuana in Tijuana?*



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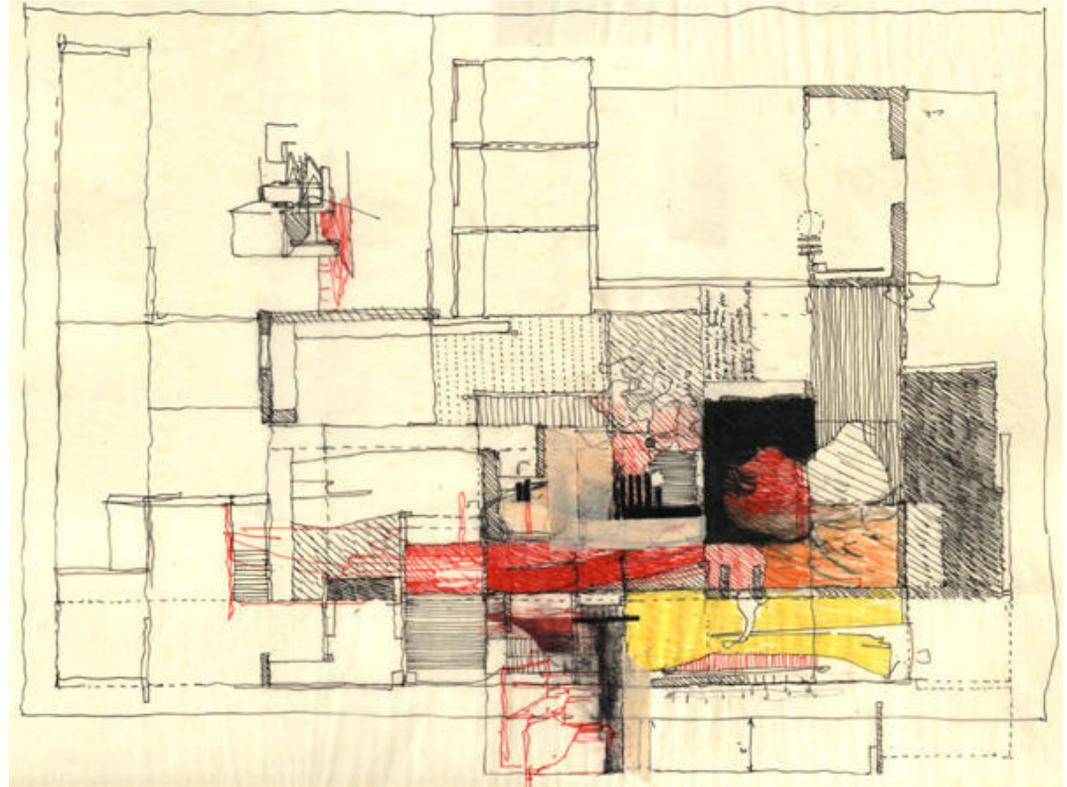
case studies

**Estudio Teddy Cruz**

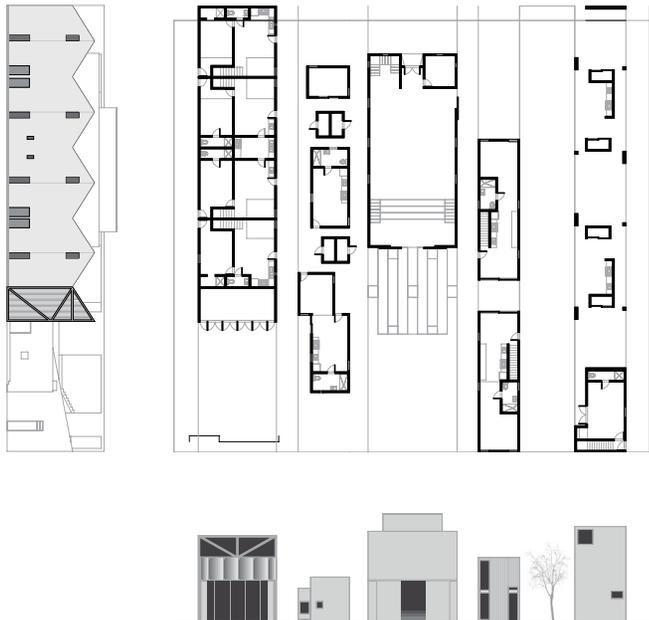
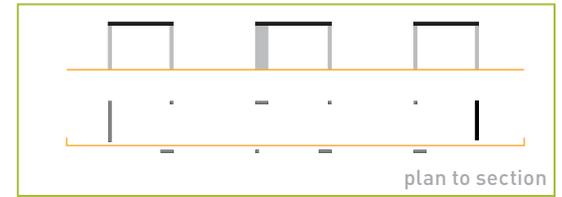
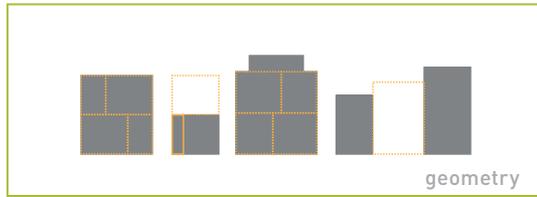
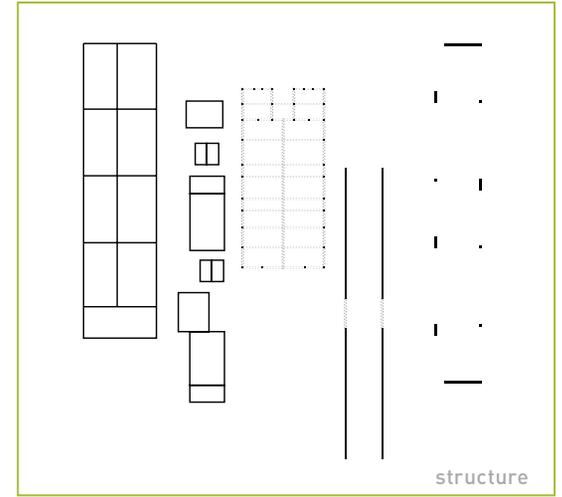
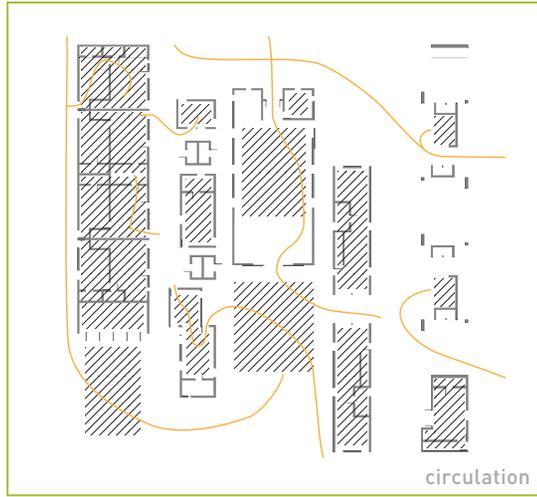
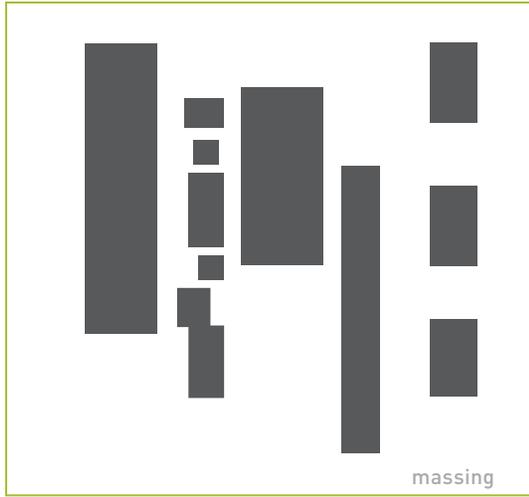
## **Casa Familiar**

Situated on the border of the United States and Mexico between Tijuana and San Diego, Casa Familiar seeks to aid in the development and legitimization of a misunderstood and complex social phenomenon. The constant flux of materials, people and ideas at this particular immigration juncture provides a rich and daunting set of tasks for an architectural vernacular to address. Teddy Cruz's design specifically looks at the transitional status of many immigrants who need housing, immigration services, education and job placement. The housing project is designed as a nongovernmental institution that would fulfill the needs of a marginalized populace residing in San Ysidro, which has a median income that is sixty percent lower than the rest of San Diego County.

Through studies of the informal uses of land in this dilapidated suburban area, the aim of the design arose as a series of complexes for housing. These housing "strata" when combined, form shared spaces that recognize and make use of the dense, multiuse, and often illegal development against zoning standards and precautions. After a decade of study and community cooperation in San Ysidro, alternative zoning categories and standards have been developed to that are more appropriate to the city's density, income levels and existing infrastructure.



Two small-scale projects began construction in 2011 on abandoned or underutilized lots. The two projects, Living Rooms at the Border and Senior Housing with Childcare, are connected by pedestrian alleyways, provide affordable apartments with community centers and incorporate flexible multiuse indoor and outdoor spaces. Cruz has sought to give voice and credence to the marginalized and convoluted life in immigration hubs. This integration of neighborhood living with sensible design exists as an example of architecture's ability to articulate and activate community through its bonds, while contributing to political, social, and economic transformation.



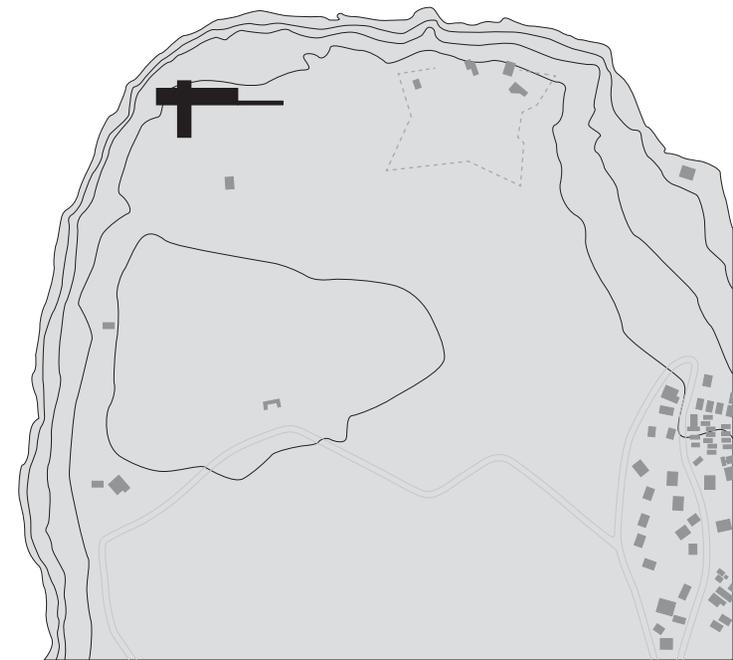
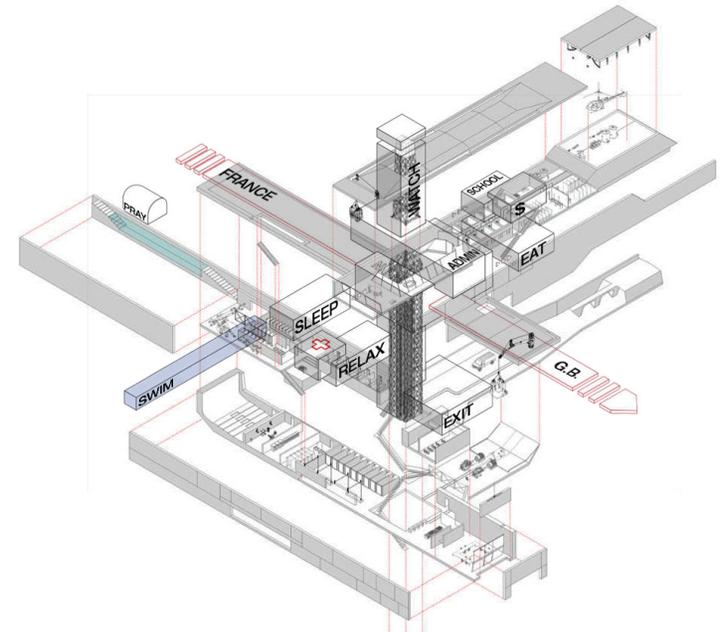
Hugo Kaici & Felix de Montesquiou

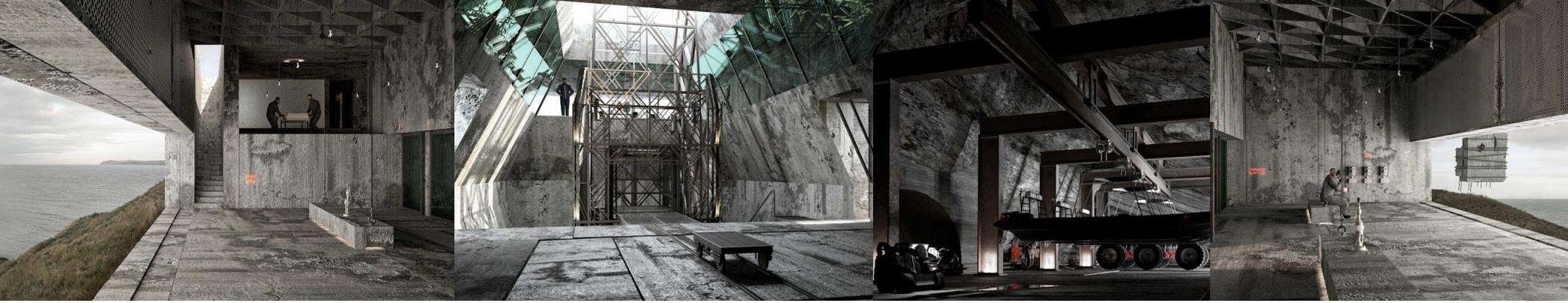
## Illegal Immigration Base

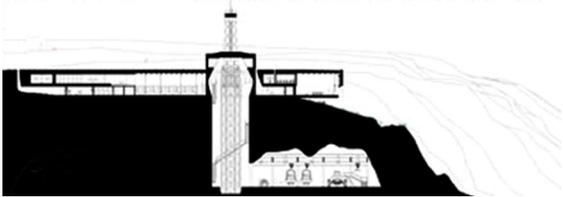
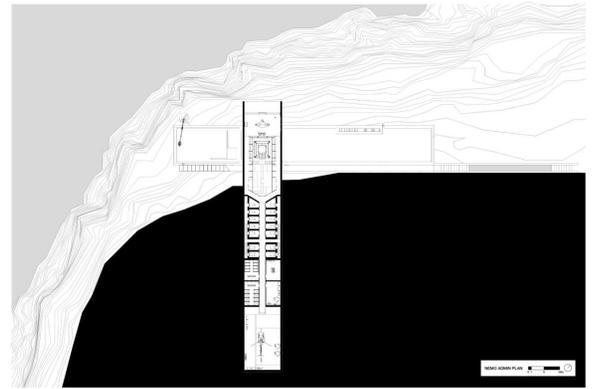
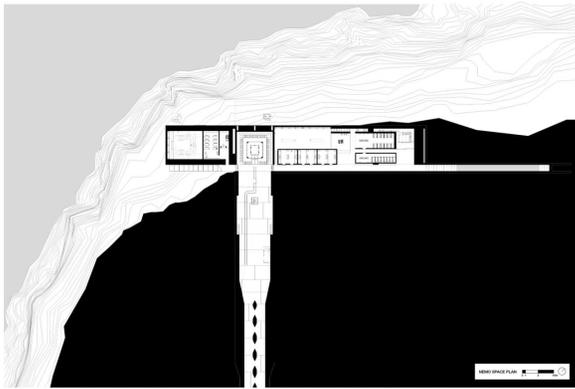
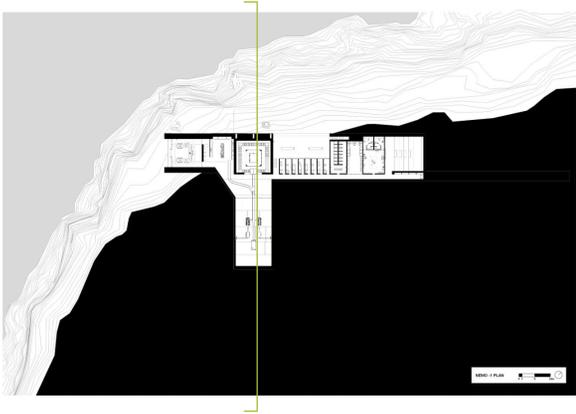
In this theoretical project, Hugo Kaici and Felix de Montesquiou respond to cultural trends in Europe's attitude towards illegal immigration and the sinister overtone communicated by mainstream media. The pair developed the project while studying at the Ecole Speciale d'Architecture in Paris. Calais is located 42km from the British coast, and is the most often used point of departure in France. The project is partly a reaction to Sarkozy's closure of the Sangatte center a year or so ago. The project is envisioned as a reversal on many different levels. A fictional company called NEMO (Northern Europe Migrants Organisation) is meant to take over the illegal immigration industry from the Kurdish Mafia. This company's base of operations would be housed on the French coast of Calais, in a bunker emulating the already existing WWII German bunkers on the French coast. This is meant as a reversal of the Atlantic Wall, where this bunker would be a point of perforation rather than fortification.

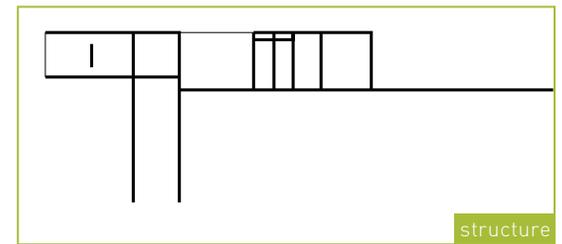
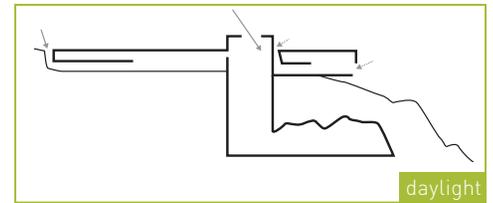
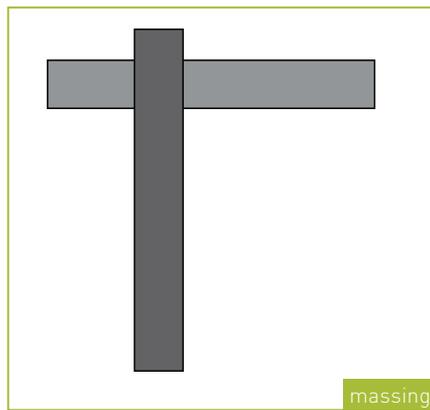
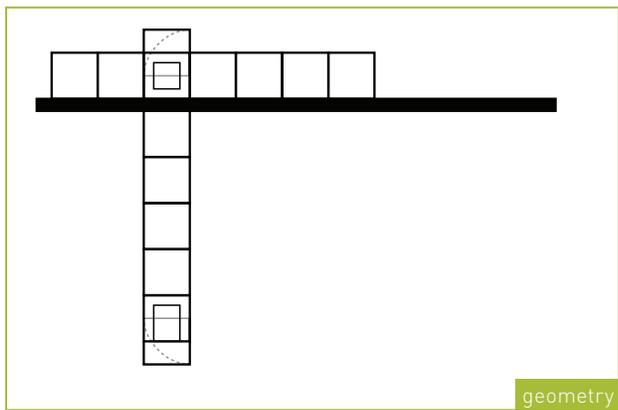
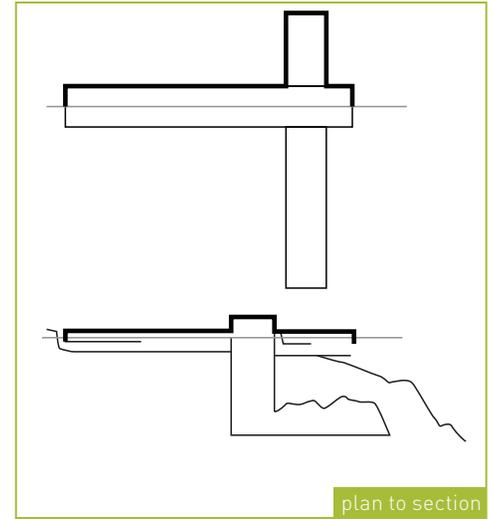
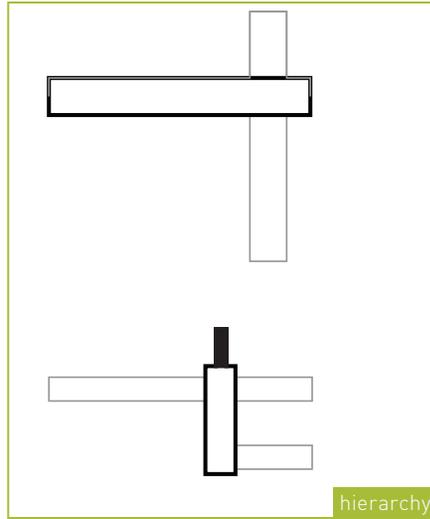
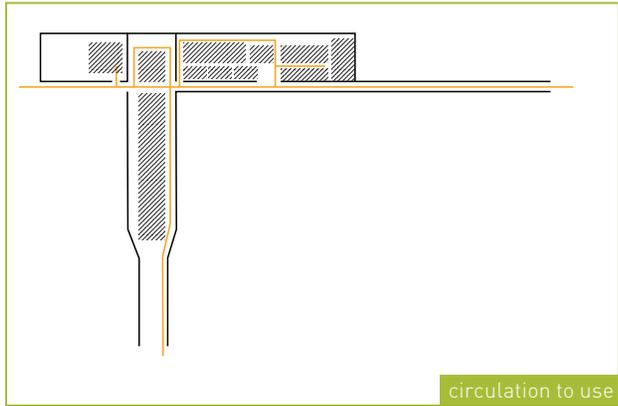
The architecture is minimalistic as a totality, stripped down to only the absolute essential functions. The renderings are photo realistic and brutal in their presentation of the ritual of crossing a threshold. The irony present in this project is indicative of societal indifference and lack of cooperation between countries whose borders are being crossed.

The bunker's exterior projects outward and inward along the coastline. The interior is humanized in the renderings with security cages, guards and views out to the project's destination: the 42km jaunt by boat to the United Kingdom. The bunker's camouflage and the competition to the Kurdish mafia developed here is part of a biting commentary on world affairs as related to the weaponization of urban space, visible and invisible borders.







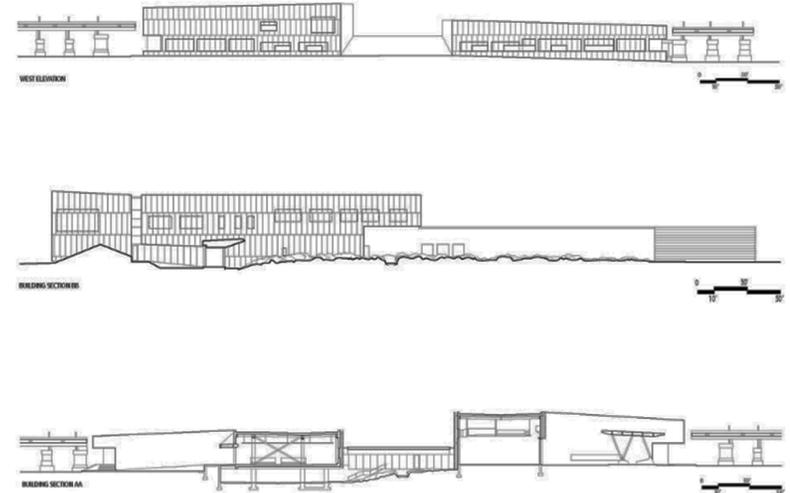


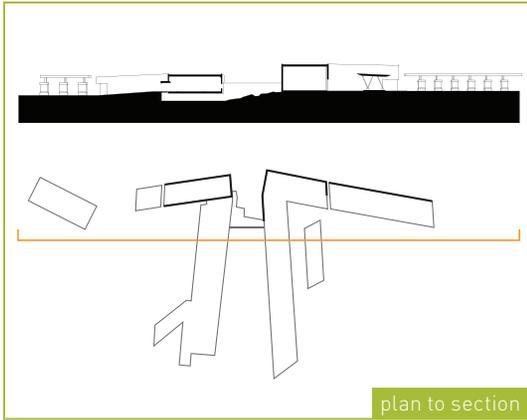
Robert Siegel

## U.S. Land Port of Entry, Calais, ME

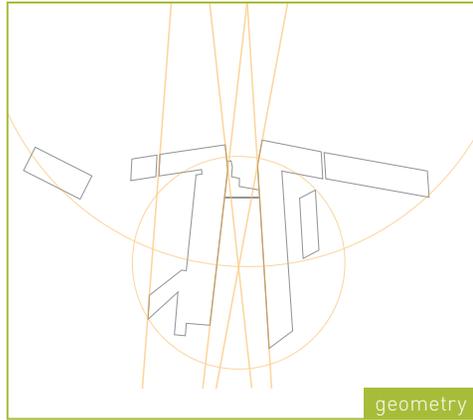
As part of a bi-national infrastructure initiative between the United States and Canada, The Calais, Maine US Land Port of Entry by Robert Siegel Architects seeks to revitalize aging infrastructure and evoke a renewed sense of passage. It is situated on the highest point of the site to evoke a sense of monumentality in the representation of the United States' prominence. Robert Siegel saw this project as an opportunity to revisit the rituals of crossing a threshold and passage. It was envisioned to reinvent the border station building by drawing the visual connection of arrival and passage through a large open space presentation instead of merely the road and gate. The two large building masses are organized to envelope a quiet courtyard that provides access to the employees. The construction materials and design are supposedly inspired by the glacially eroded terrain of Maine. The expanded aluminum screen envelopes the masses at ground level while the rest of the exteriors are made up of panelized steel and glass.

The 100,000 sq. ft. project is located on rocky terrain in Calais, ME adjacent to the aquifer that supplies the city's water. The project is on its way to LEED Gold status. The overwhelming optimistic attitude towards border control that characterizes this project is indicative of an attitude to accept borders as necessary. The idea that border control stations can be welcoming, in an age of surveillance checkpoints portrays the syzygistic nature of such projects.

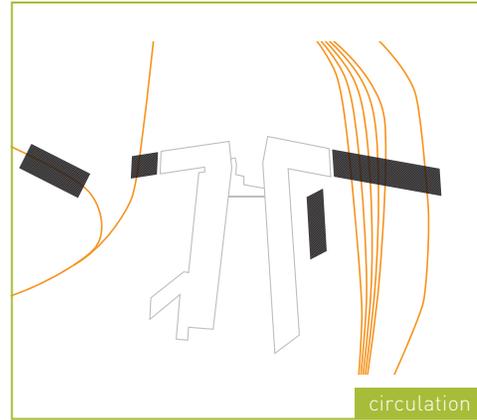




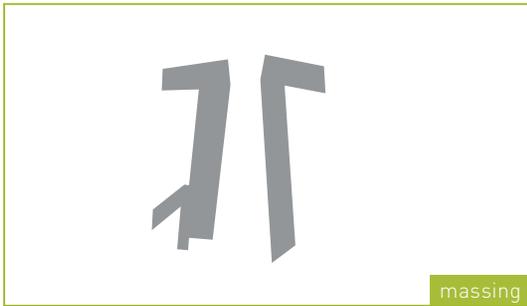
plan to section



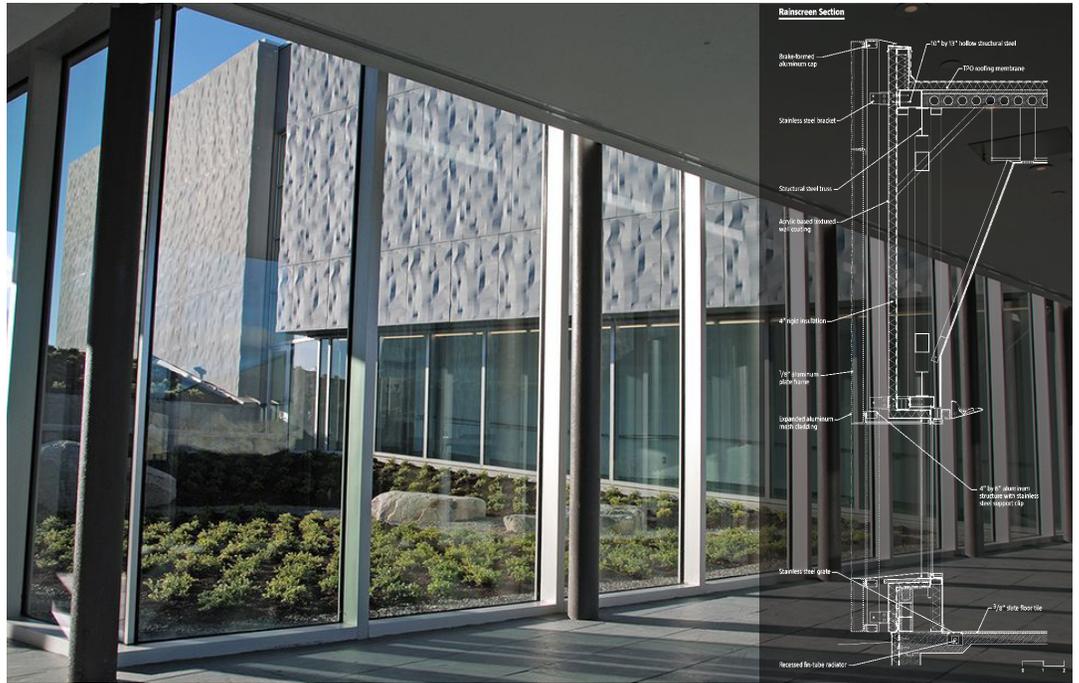
geometry



circulation



massing



The metropolitan region of San Diego and Tijuana is somewhat of a microcosm of the effects of globalization. Goods and capital [which are produced in extremely low-wage paying *maquiladoras*] flow freely across the border, while individuals must endure intensive/invasive security procedures, and an increasingly alarming rate of socioeconomic disparities.

The region supports a population of 4.3 million residents, and is continually growing at a rate of 2.8% annually. (ICF, 20) Tijuana is growing at almost twice the rate of San Diego, and it is estimated that half of those new residents in Tijuana will find shelter in squatter-communities, which suffer from severe overcrowding, pollution, and lack of infrastructure and services. (ICF, 29)

The metropolitan area is linked by two international crossing points. The San Ysidro Point of entry located at the terminus of Interstate 805, is the busiest land port of entry in the world with approximately 30 million people crossing annually. The Otay Mesa port of entry serves mostly commercial traffic, with 744,929 trucks and 9,980,523 pedestrians crossing in 2011 (Bureau of Transportation Statistics, 2011).



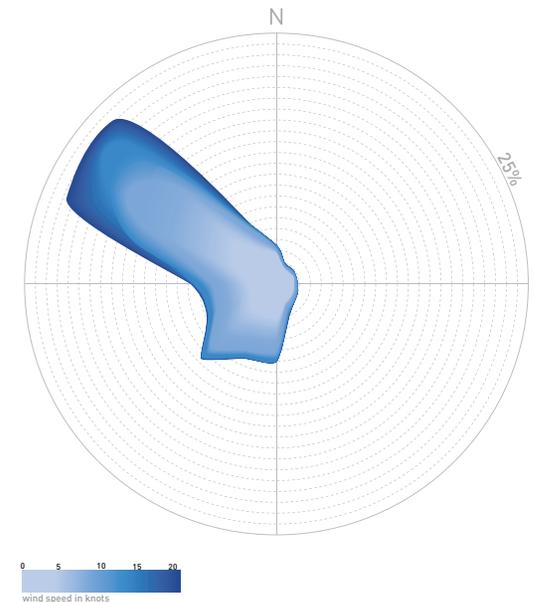
## site analysis



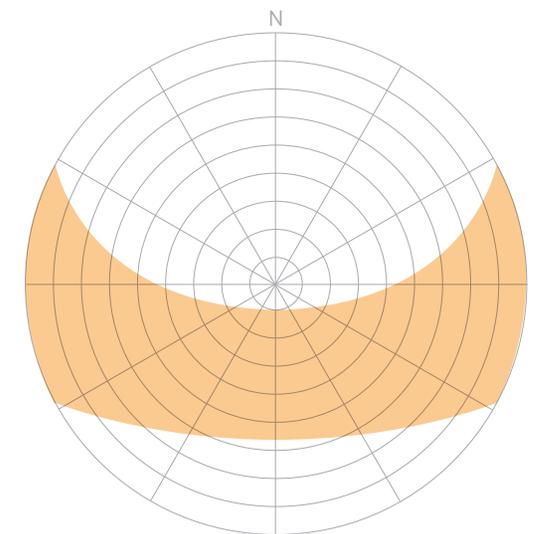
## Climate

The San Diego/Tijuana metropolitan region's climate is heavily influenced by its proximity to San Diego Bay and the Pacific Ocean. These bodies of water essentially produce an almost continual zone of high pressure. This high-pressure zone creates winds predominantly from the northwest direction. These winds also create dry summers that are generally warm, and wet winters that are typically cool. Because this is a coastal region, the daily temperature rarely varies more than 15 degrees Fahrenheit year round, as opposed to fluctuations of more than 30 degrees Fahrenheit just a few more miles inland.

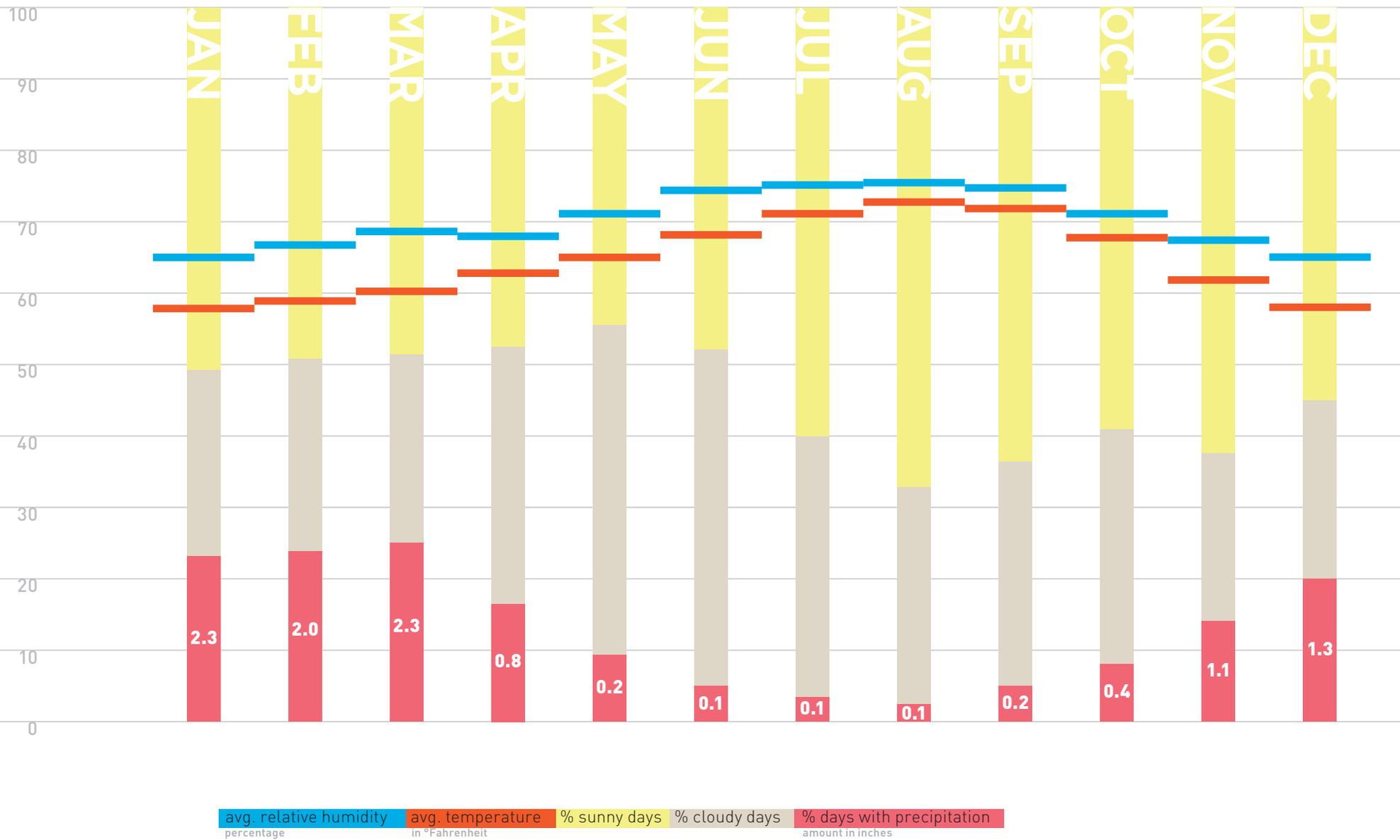
These high-pressure systems commonly create a region of two types of temperature inversion. Subsidence inversions appear during the warm, summer months as a result of sinking heavy air that meets the cooler marine air. This collision creates a barrier which traps pollutants. Radiation inversion typically occurs during cool, winter nights as heat rises from the earth and comes into contact with the cooler air above. This inversion also traps pollutants. This becomes a problem over time as the amount of pollutants builds up in the atmosphere where they chemically react to produce ozone or smog. (GSA, 2009)



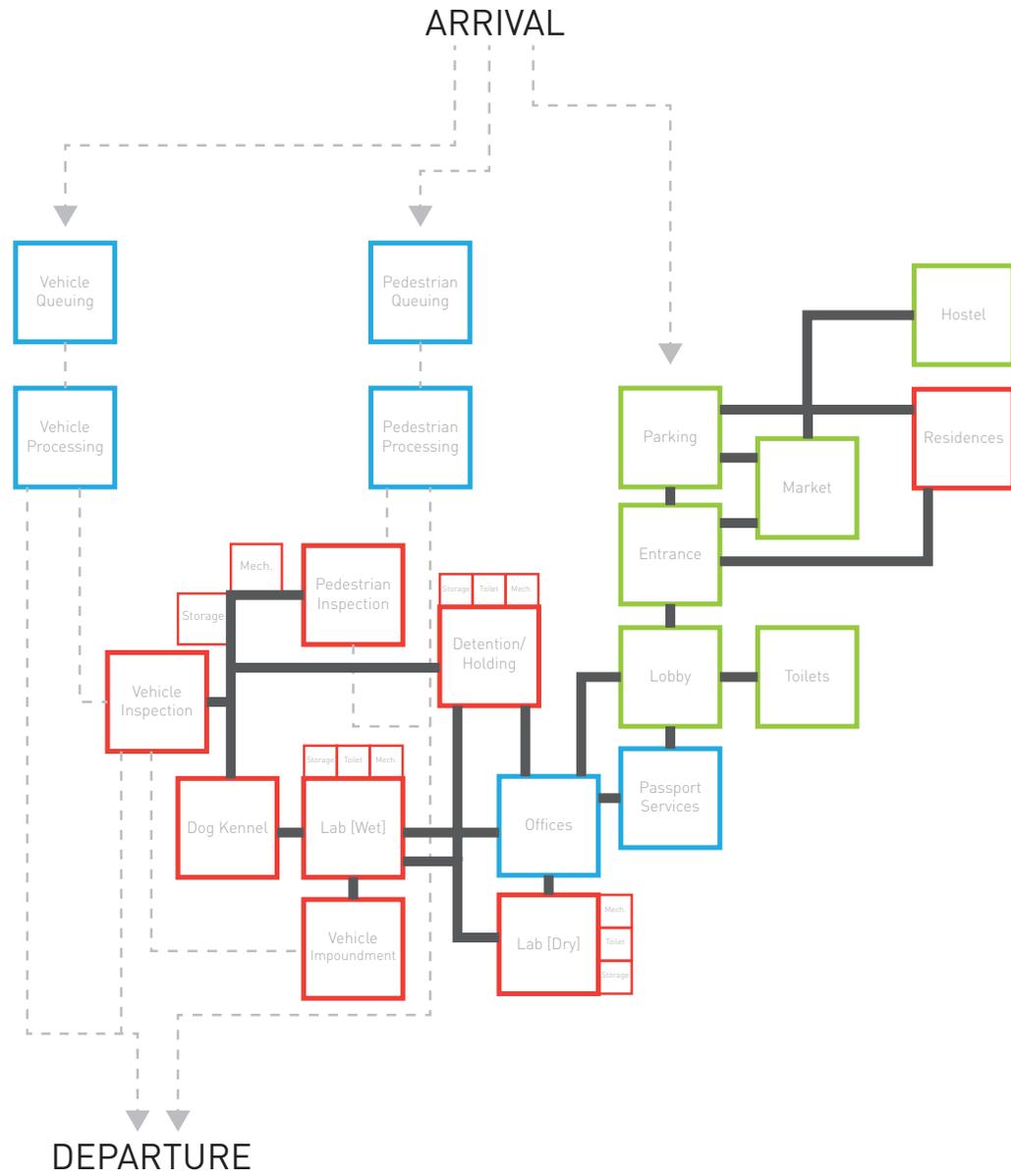
wind rose



sun path





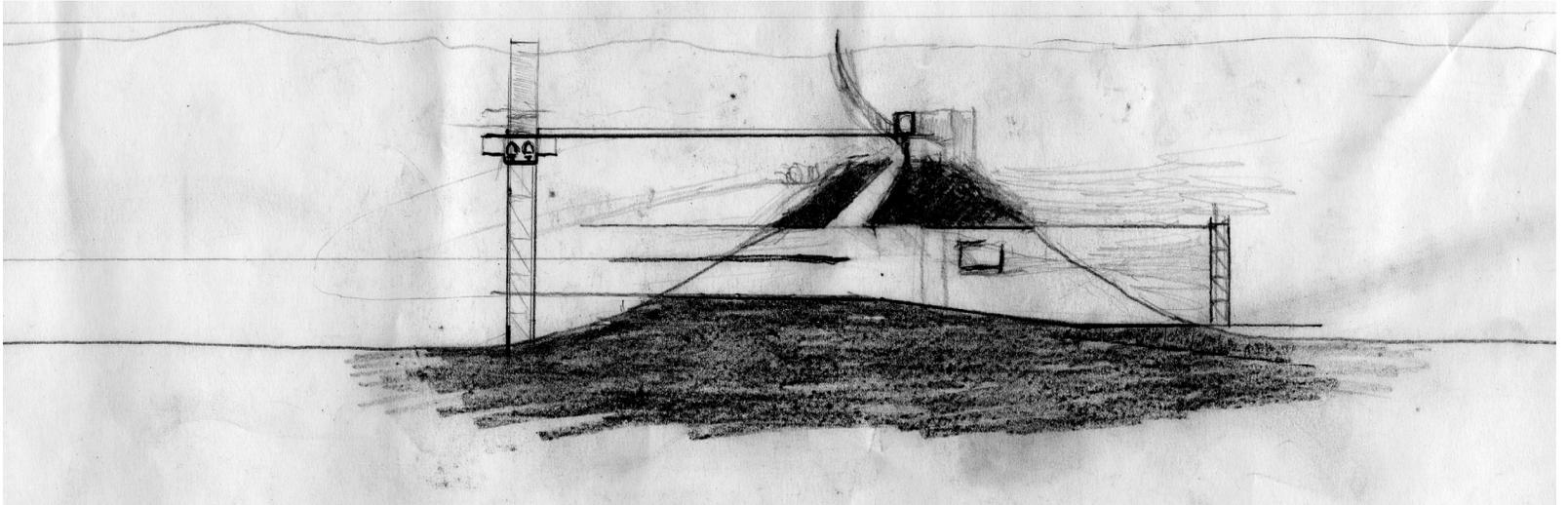




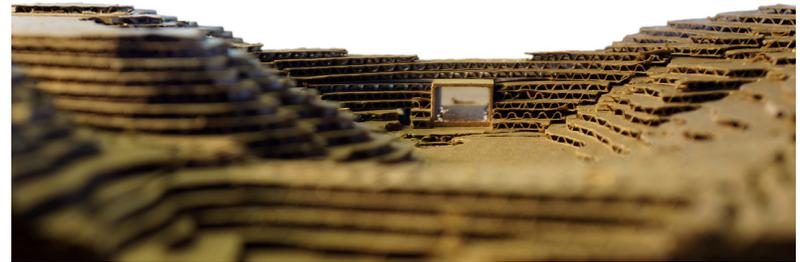
**project documentation**

images on right:  
abandoned port of entry  
investigations

images on opposite page:  
early sketches of hybrid  
border space

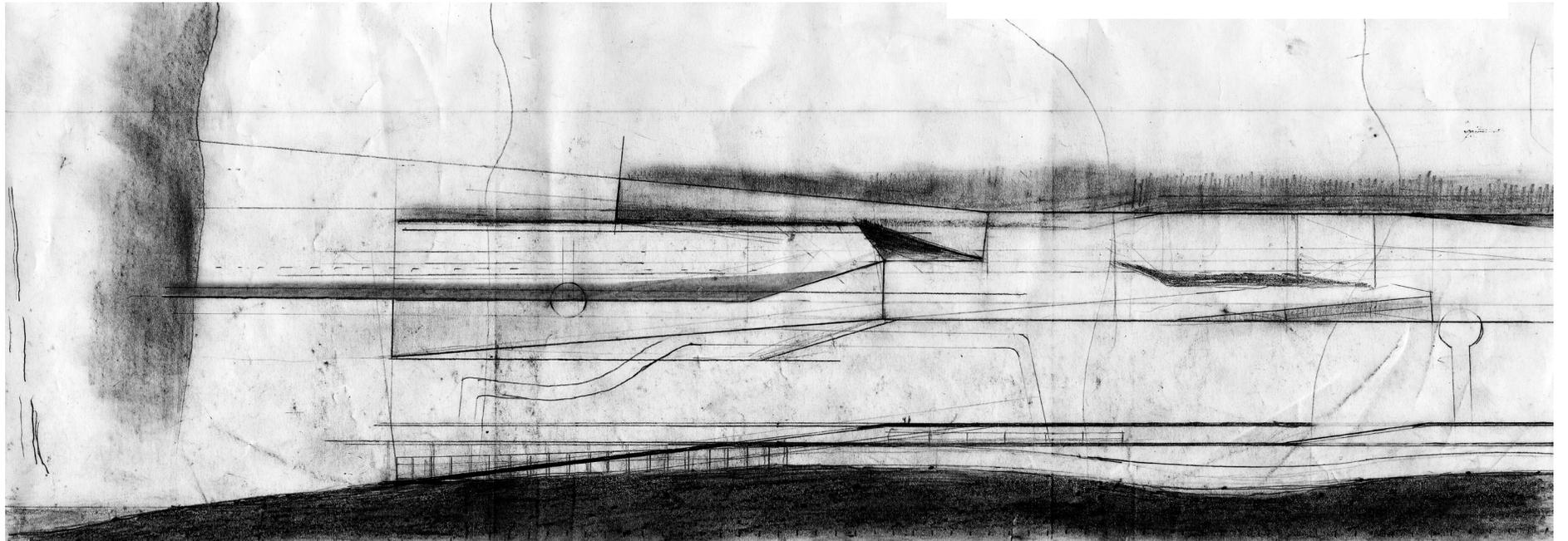
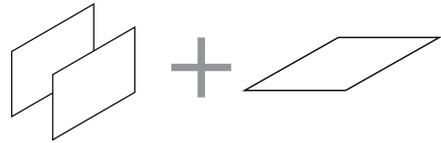
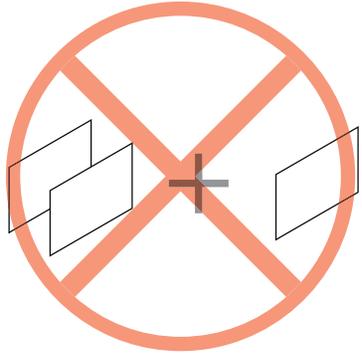


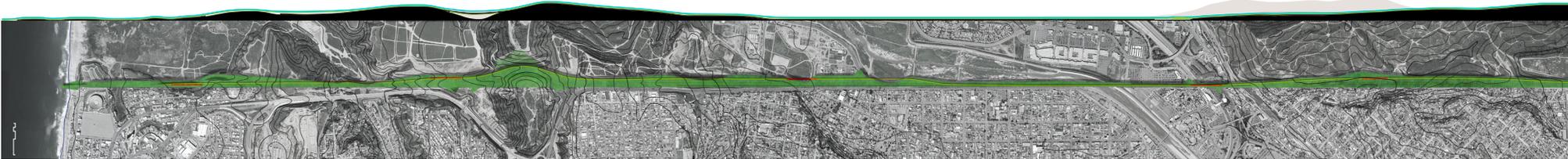
This project began as an International Port of Entry located in Smuggler's Gulch, a deep ravine along the San Diego–Tijuana border, which was recently dammed so a new fence could be built on top of it. However, with further investigation, this typology seemed less and less likely to respond in the long-term to any of the problems I have previously addressed. Rather than looking at the wall as something to be punctured or momentarily vanish, how could one, in a sense, *reveal* the wall?



Upon learning of a proposed third wall to be built between San Diego and Tijuana, I began exploring alternative possibilities to another barrier wall. Rather than constructing another tectonic fortification, the third wall could be flipped horizontally and become a surface acting as a conduit—facilitating movement and interaction in a hybridized urban space.



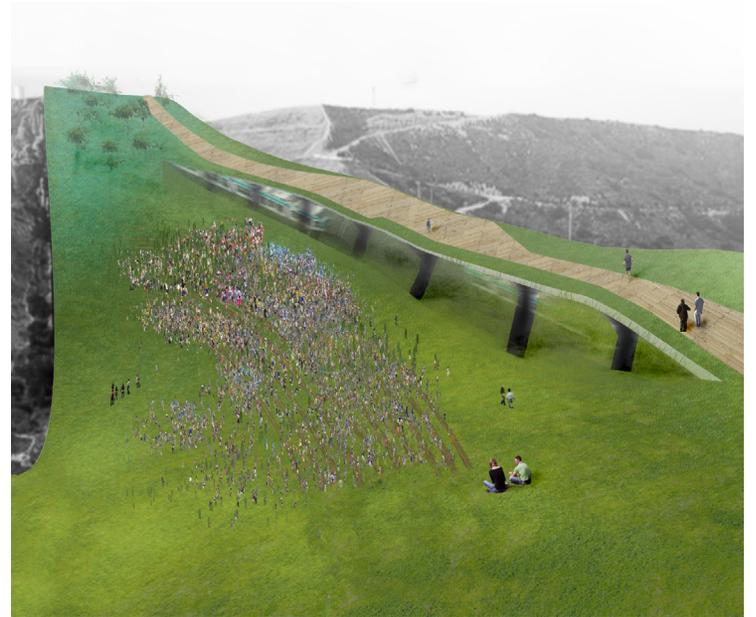




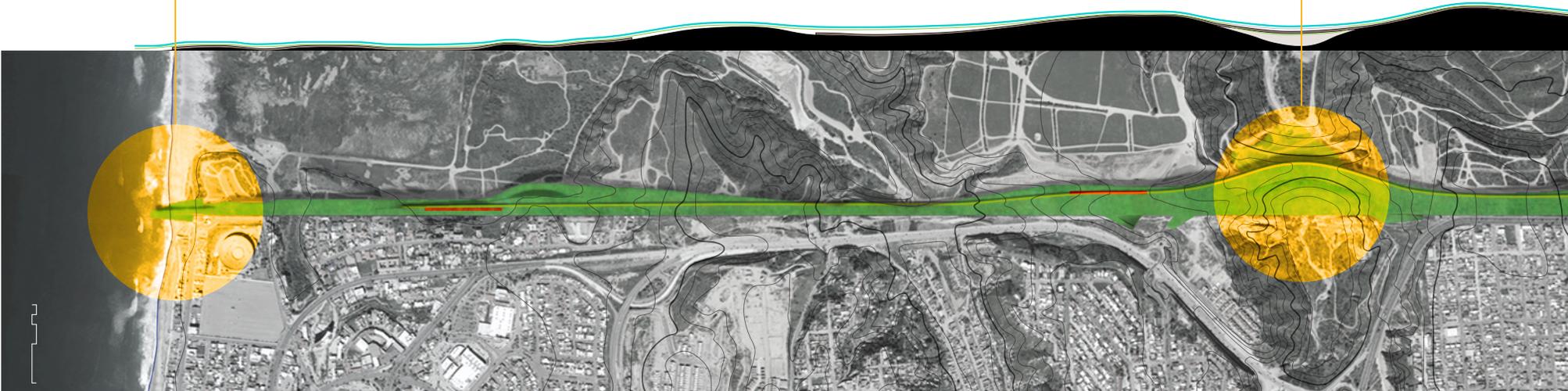




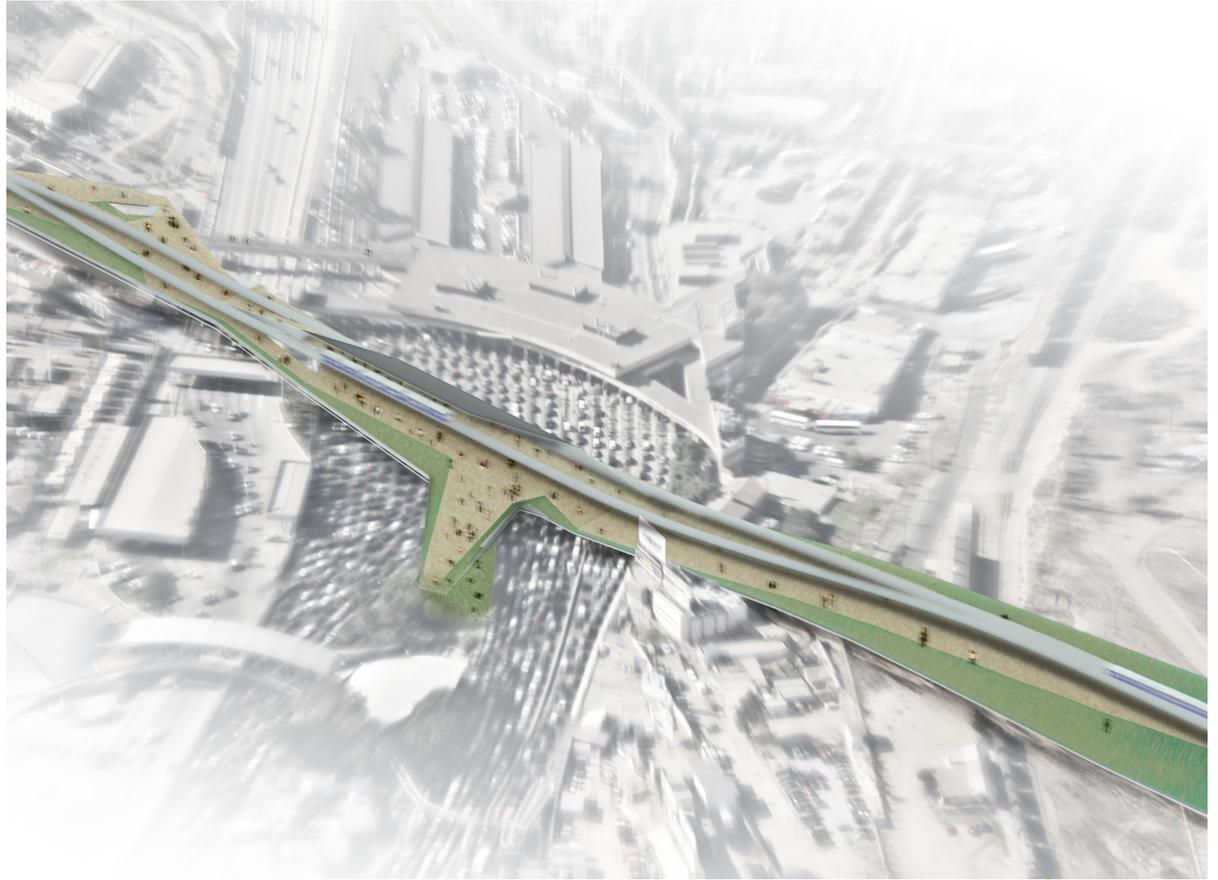
Borderwalk greets the Pacific Ocean

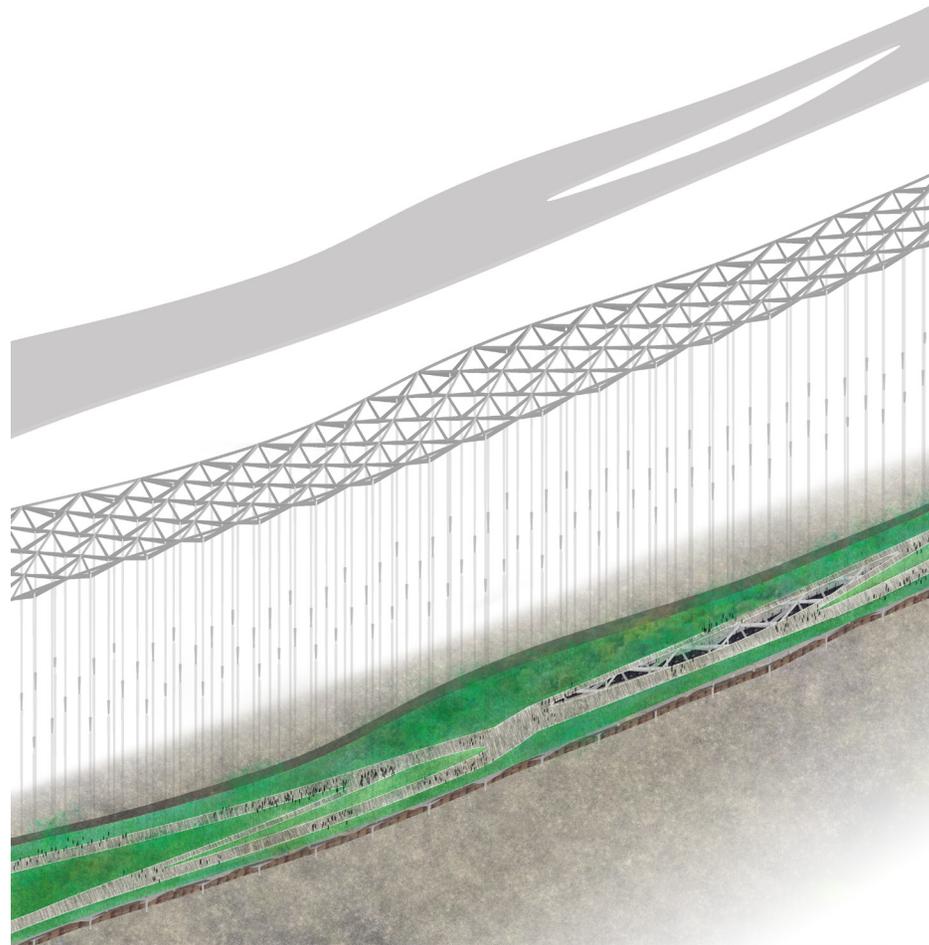


Amphitheater in Smuggler's Gulch

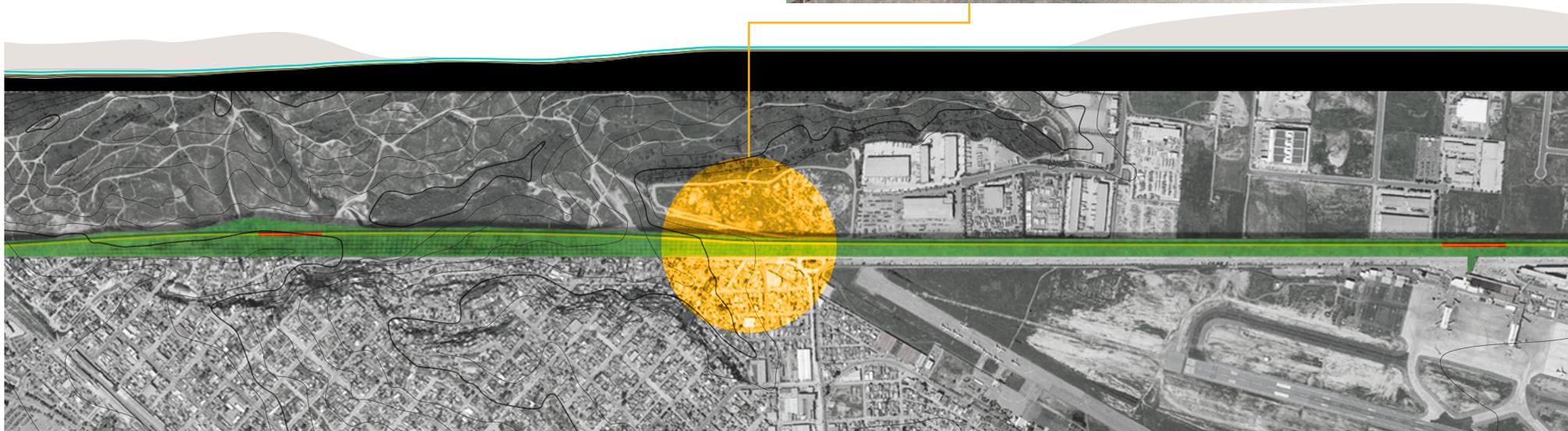


Market and Transit Station above  
San Ysidro Port of Entry.





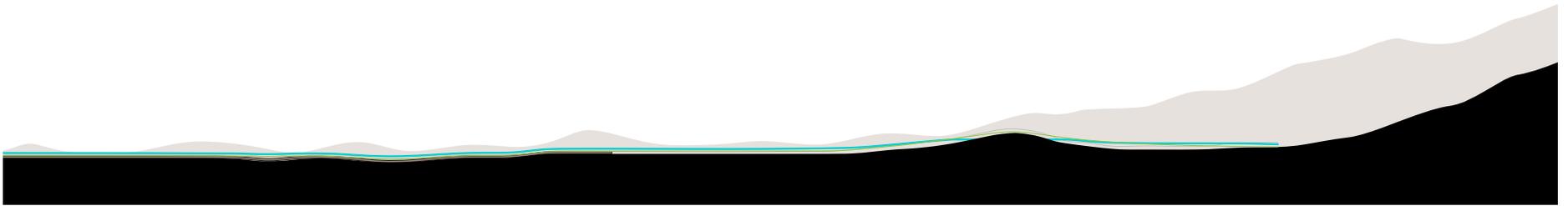
Exploded axon showing structural mesh



By definition, borders lie on the edges, Borderwalk transforms the border into a center, and creates junctures rather than limits. It resurrects the forgotten landscape held captive between the two existing border walls and elevates it. It is served by a light rail transit system and introduces multiple new crossing points, it seeks to facilitate movement and dialogue. It creates space for binational farmer's markets, youth sports, and community gardens. It is a place for families and friends separated by the border.

Globalization has created a multitude of new boundaries, both physical, and imaginary, which requires contemporary architecture to develop a more comprehensive and integrated spatial, social, and political consciousness if it intends to be a relevant voice in future conversations.







Borderwalk at the foot of the Laguna Mountains

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- 3 Ignelzi, L. Border Wall Construction. Digital Image. Cryptome, n.d. Web. 9 Dec. 2011. <<http://cryptome.org/eyeball/border-wall/border-wall.htm>>
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- 5 Woods, L. *Wall for Bosnia*. Digital Image. Boiteaoutils, n.d. Web. 6 Dec. 2011. <[http://4.bp.blogspot.com/\\_EWY1PIsPzBA/TH6Kp4-oDbI/AAAAAAACsE/cJai9EWPhy8/s1600/lebbeus+woods+labyrinth+wall2.jpg](http://4.bp.blogspot.com/_EWY1PIsPzBA/TH6Kp4-oDbI/AAAAAAACsE/cJai9EWPhy8/s1600/lebbeus+woods+labyrinth+wall2.jpg)>
- 6 Customs House. Digital Image. San Diego Historical Society, n.d. Web. 6 Dec. 2011. <<http://content.cdlib.org/ark:/13030/kt8m3nc7v9/?order=1>>
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- 8 *Aerial view of Tijuana, Mexico and Tijuana River Estuary*. Digital Image. San Diego Historical Society. (1920).. Web. 6 Dec. 2011. <<http://content.cdlib.org/ark:/13030/kt8m3nc7v9/?order=1>>
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- 10 James, G. *Looking Towards Mexico, Otay Mesa*. Museum of Modern Art, New York, NY. (1997) Web. 6 Dec. 2011. <[http://www.moma.org/collection/browse\\_results.php?criteria=O%3AAD%3AE%3A7160|A%3AAR%3AE%3A1&page\\_number=4&template\\_id=1&sort\\_order=1](http://www.moma.org/collection/browse_results.php?criteria=O%3AAD%3AE%3A7160|A%3AAR%3AE%3A1&page_number=4&template_id=1&sort_order=1)>
- 11 Satellite Image. Digital Image. n.p., n.d. Web. 6 Dec., 2011. <<http://geology.com/world-cities/tijuana-mexico.shtml>>