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//so·lic·it

1. to ask, induce, advise, entice, or command (a person) to do something
2. to seek to obtain by persuasion, entreaty, earnest or respectful request, or formal application
3. to seek to influence or incite to action, esp. unlawful, illegal, evil or wrong action.
4. to approach or accost (a person) with an offer of sexual services (in return for payment)
  - if one were to solicit architecture, one would...
    - + know in advance what he or she wanted
    - + ask, induce, advise, entice, command, persuade, and/ or request an architect to produce it
    - + this is the way most architecture is produced problems with this approach.
    - + clients do not always know what they want
    - + there are urgencies and opportunities that are relevant to architecture and that are not being addressed by clients
    - + architecture should not limit itself to that which is prescribed for it

//un·so·lic·it·ed

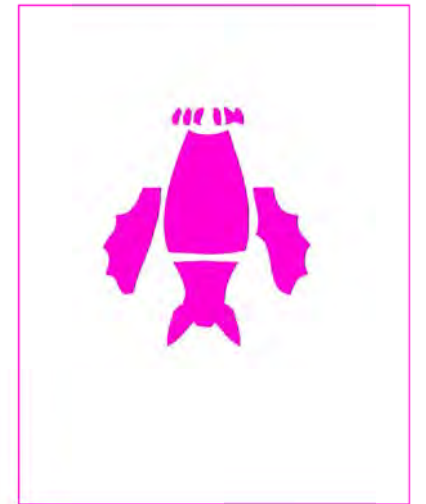
1. not looked for or requested; unsought
2. unasked for to make unsolicited architecture one would...
  - + not wait for a client to direct action
  - + pro-actively respond with architectural solutions to opportunities and urgencies when they arise
  - + this requires a redefinition of architecture's mandate

//ar·chi·tec·ture

1. the profession of designing artificial constructions and environments, defined by four cornerstone principles: program, client, site, and budget
2. the character or style or action or process of building
3. the plan, organization, or structure of anything

//un·so·lic·it·ed ar·chi·tec·ture

1. the practice of designing constructions and/or environments that proactively respond to under-explored societal urgencies and/or opportunities (here, the architectural product is unsolicited)
2. the practice of retro-actively ascribing an architectural plan, organization, or structure onto a construction, situation, or environment not previously thought of as architectural (here, the architectural thinking is unsolicited)



## // transgressing the AIA

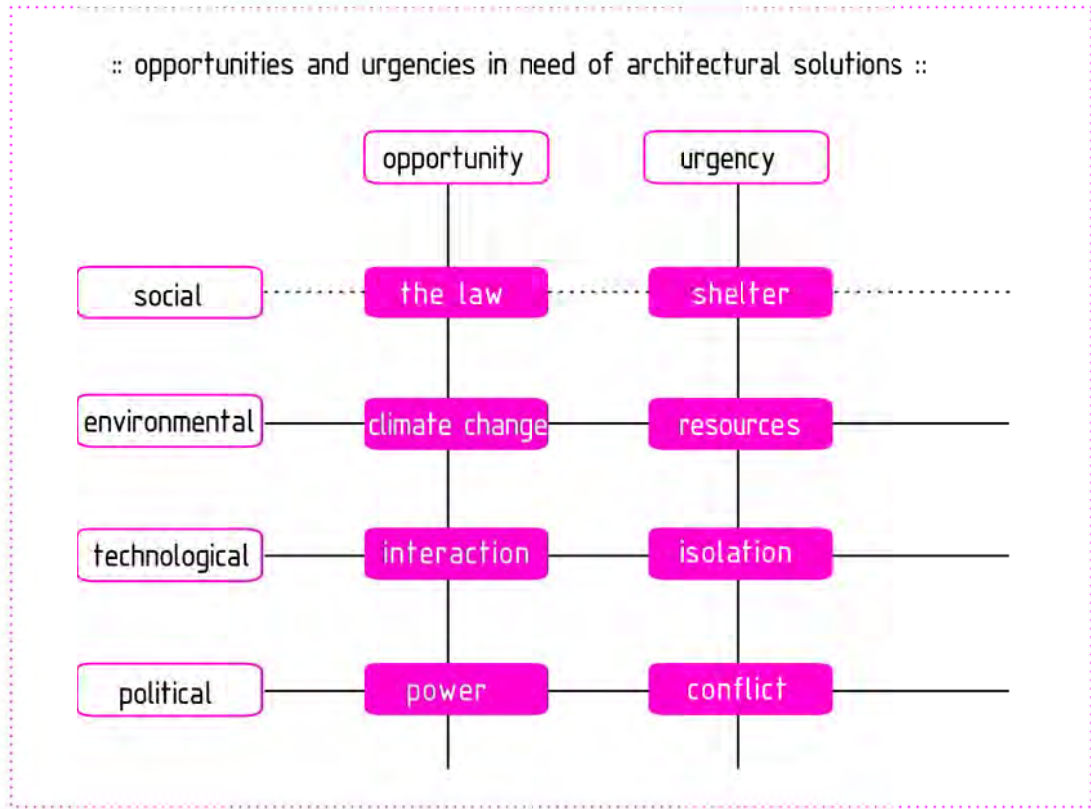
our first step to unsolicitedness

### // the problem (as we see it)

- + we are entering the architectural profession at a time when the role of the architect is more specialized than ever before in history and, ironically, increasingly marginalized
- + this combination of specialization and marginalization limits the scope of what architects (can) do
- + an increased commodification of iconic star-architecture, the a rising need for technical input from non-architects in the building process, and the inward focus of autonomous architectural theory have all contributed to the current situation where architects' domain of innovation seems to be limited to formal expressions

### // our solution

- + the office of unsolicited architecture (OUA) aims to fight this marginalization by providing an example of how an architectural firm today might operate outside of what has become the accepted framework
- + OUA is a new architectural practice founded on the premise of exposing un(der)explored territories for architecture, negotiating a more proactive role for the architect, and applying architectural thinking



which opportunities and urgencies would benefit from unsolicited architecture?

- + one pressing urgency is the need to combat the shrinking domain of architecture
- + since there are no clients requesting such an action, taking on this task is, by definition, an unsolicited act
- + this is, in essence, the purpose of the office for unsolicited architecture
- + other urgencies and opportunities in need of architectural solutions include:
- + environment not previously thought of as architectural (here, the architectural thinking is unsolicited)

// OPPORTUNITY + URGENCY  
finding our niche

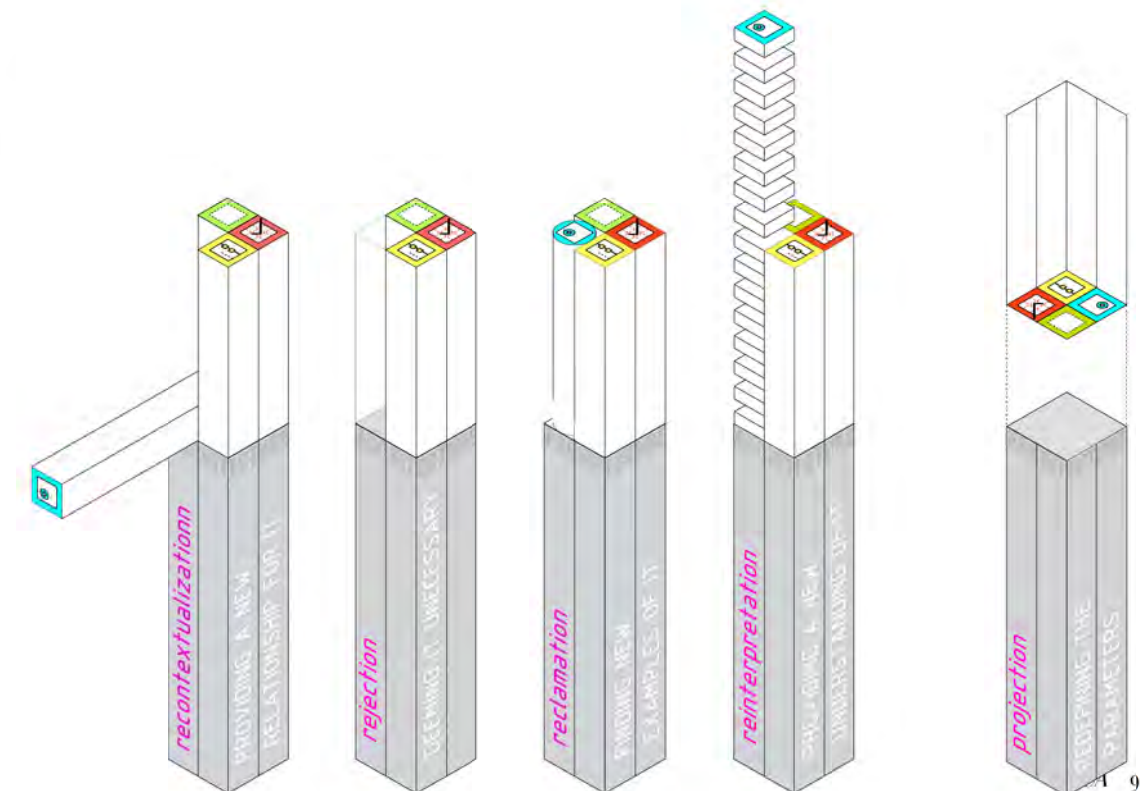
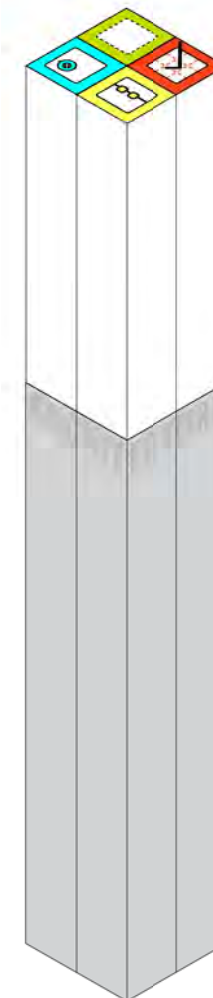


what are the four cornerstones of architecture?

how does one transgress one of the four cornerstones of architecture?

- \* by rejection, deeming it unnecessary
- \* by reinterpretation, providing a new understanding of it
- \* by recontextualization, providing a new relationship for it
- \* by reclamation, finding new examples of it

// TRANSGRESSING the four cornerstones of architecture

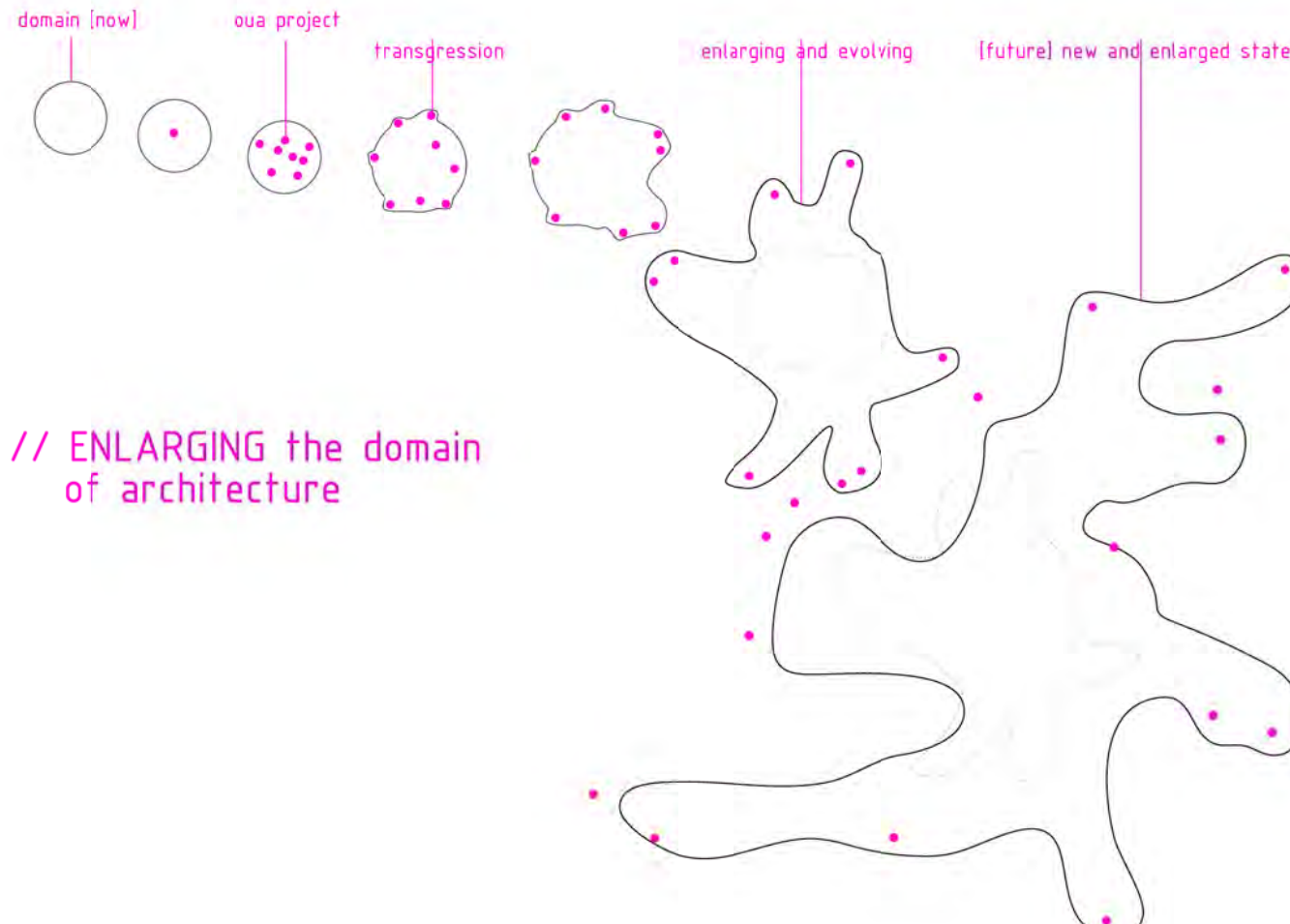


how does one project the four cornerstones of architecture onto something outside of architecture?

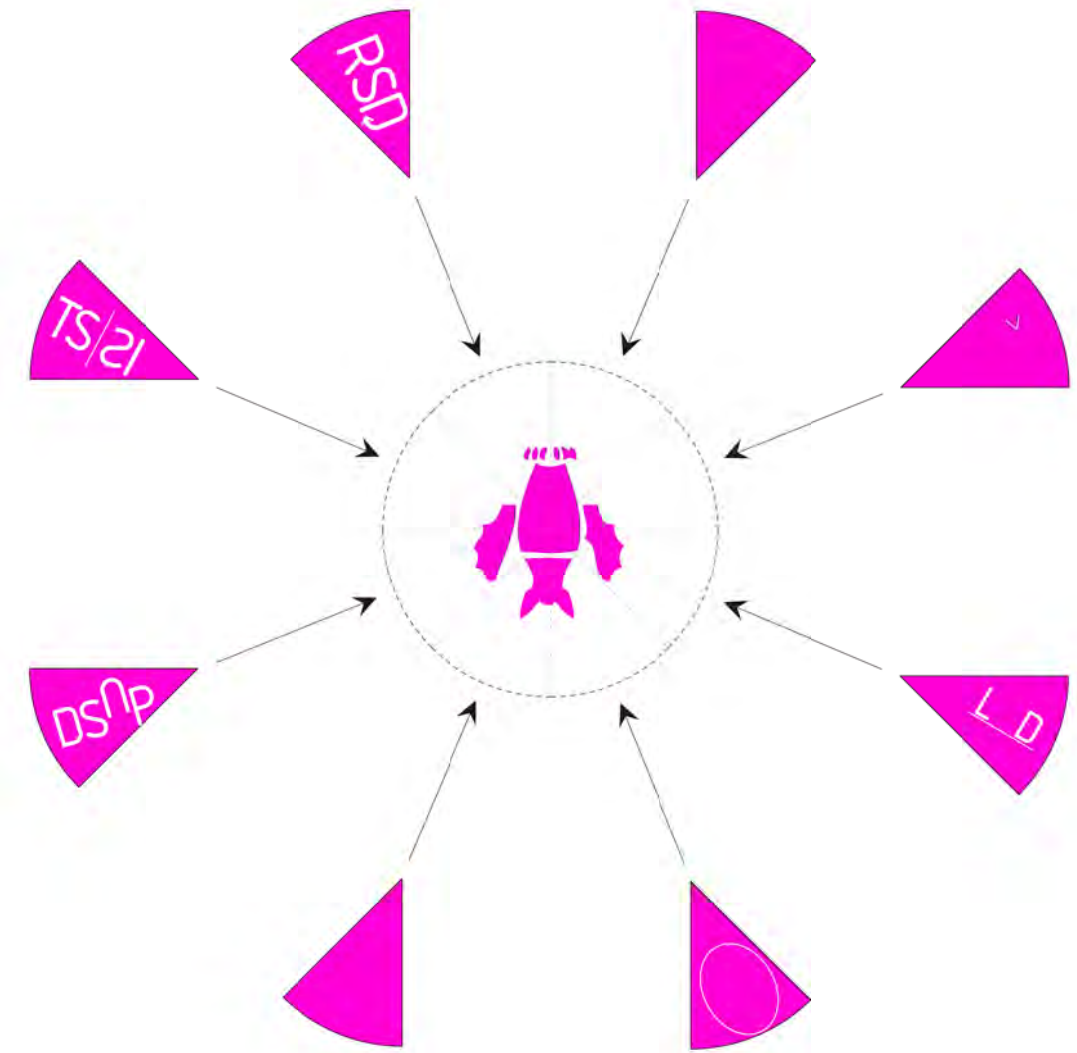
- + one pressing urgency is the need to combat the shrinking domain of architecture
- + by redefining the parameters of a situation, in architectural terms
- + this can be a rhetorical act
- + it can also be an act of declaration-by-making; by acting as if something is architecture, we demonstrate that it can be architecture
- + by consistently challenging the given paradigm, we enlarge the field of architecture and change its domain.

who makes unsolicited architecture?

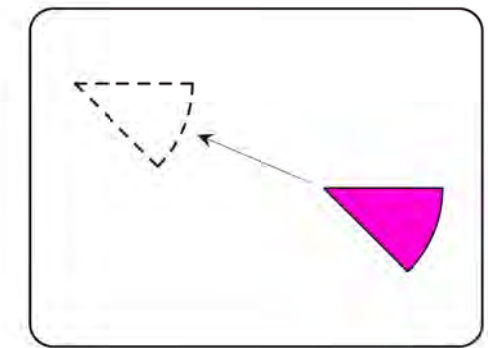
- + the office for unsolicited architecture (oua) is an alliance of people committed to the project of redefining architecture's mandate
- + oua currently consists of 14 founding members from MIT and the NAi
- + oua is interested in recruiting new supporters who are also committed to our cause
- + while oua exists for the explicit purpose of understanding and developing unsolicited architecture, anyone can make it; oua can tell you how...



// ENLARGING the domain of architecture



- //NPM Non-Physical Materials seeing the invisible
- //DSUP Department of Shelter and Urban (re-Programming minimum intervention for maximum effect)
- //TS-SI Tactical Social-Spatial Interventions subverting borders
- //DRP Department of RePracticing architects violating themselves
- // RSD Radical Sustainability Department architecting sustainability
- // AM Applied Media anchoring the digital in the physical
- //LAD Legal Affairs Department litigation as a means of project acquisition
- //DGCC Department of Global Climate Change potential in disaster



// STRUCTURE OF OUA

// TRANSGRESSING the role of the architect  
generative word play

# architects

verb

noun

!

[ architects-verb-noun ] is a linguistic manipulation tool used by architects to generate new functional and productive roles. the words are compiled randomly from a list of verbs and nouns extracted from the mission statements of prominent architectural protagonists\*.

\*recent pritzker prize winners

// GROUNDING OUA in history

UNSOLICITED STUDIO PRESENTS

# Unsolicited Agendas

A History for the Next Hundred Years



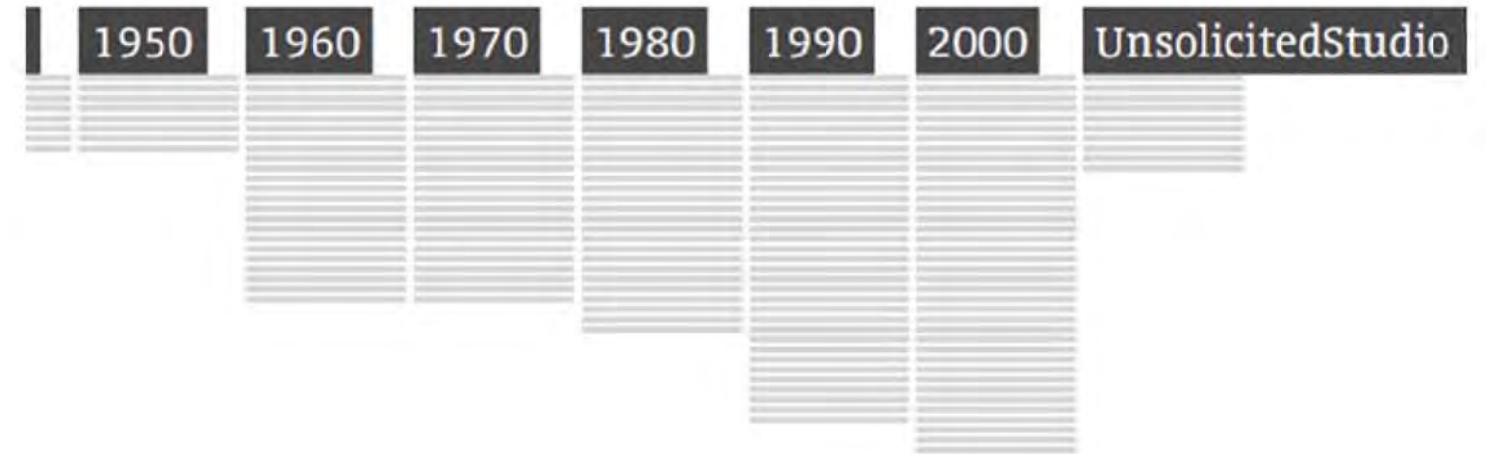
[HTTP://EN.WIKIPEDIA.ORG/WIKI/BAUHAUS](http://en.wikipedia.org/wiki/Bauhaus)

# Bauhaus

**TAGS** production domain distribution client art

INDUSTRIAL DESIGN

The aims to violate a typical architect/client structure, industrial manufacturers as the clients of a new architecture positioned architecture ('the complete building') as the aim of all visual arts.



Architecture Germany 1930 1920 1910

ing

te



Program  
(that justifies it)

Client  
(who enga...)

Site  
(that grounds it)

Budget  
(that pays for it)

P

C

S

b



TRANSGRESSION

AREA

TYPE

J

(re)Ject  
(deem unnecessary)

I

(re)Interpret  
(provide new understanding of)

C

(re)Contextualize  
(provide new relationship for)

D

(re)Claim  
(find new)



Lacaton + Vassal



Eisenman



Venturi & Scott-Brown



Napster



Cirugeda



Price



LOL Architects



One Red Paperclip



OMA/AMO



Le Corbusier



Schafer



bauhaus



Klein



Rakowitz



Matta-Clark

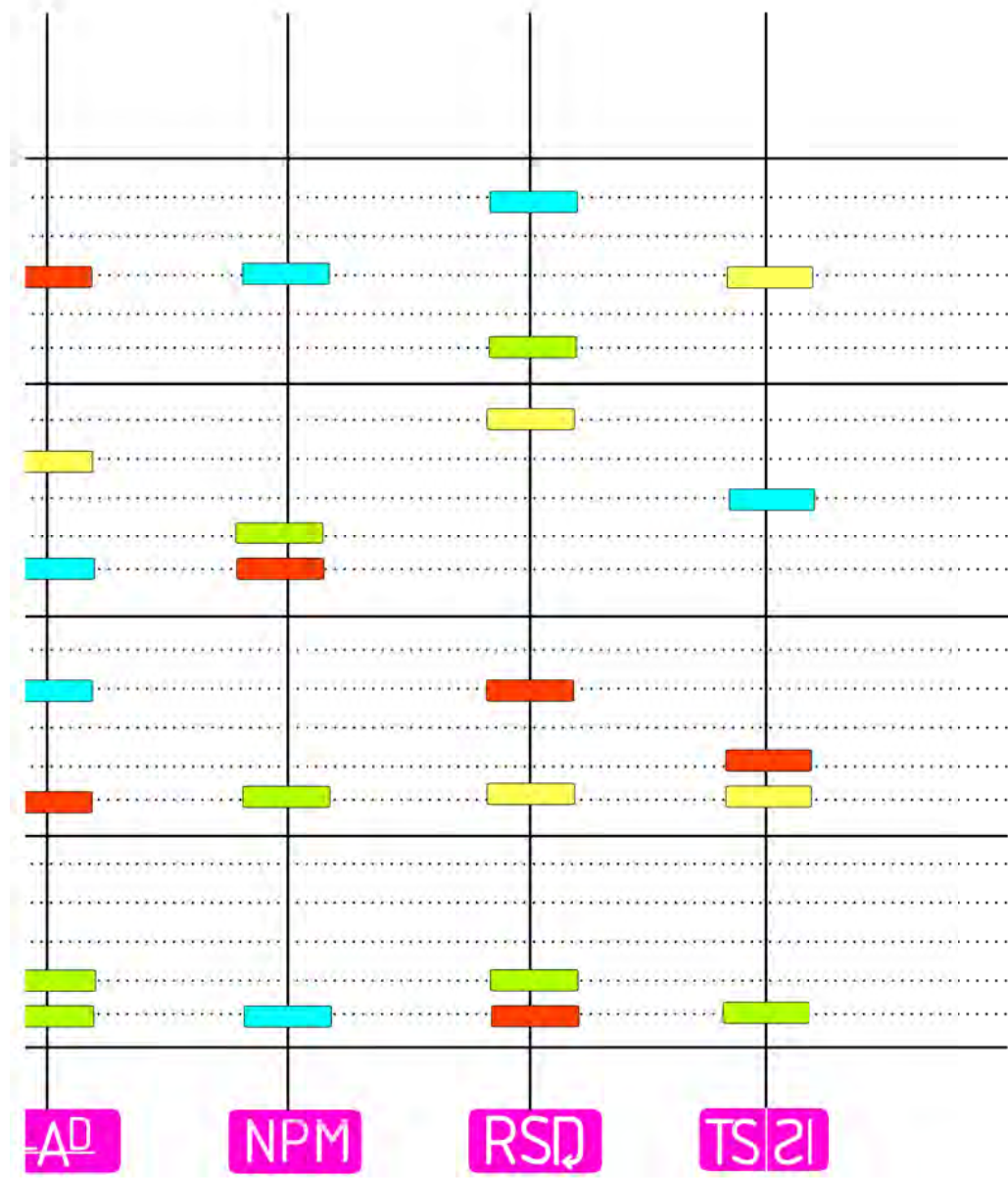
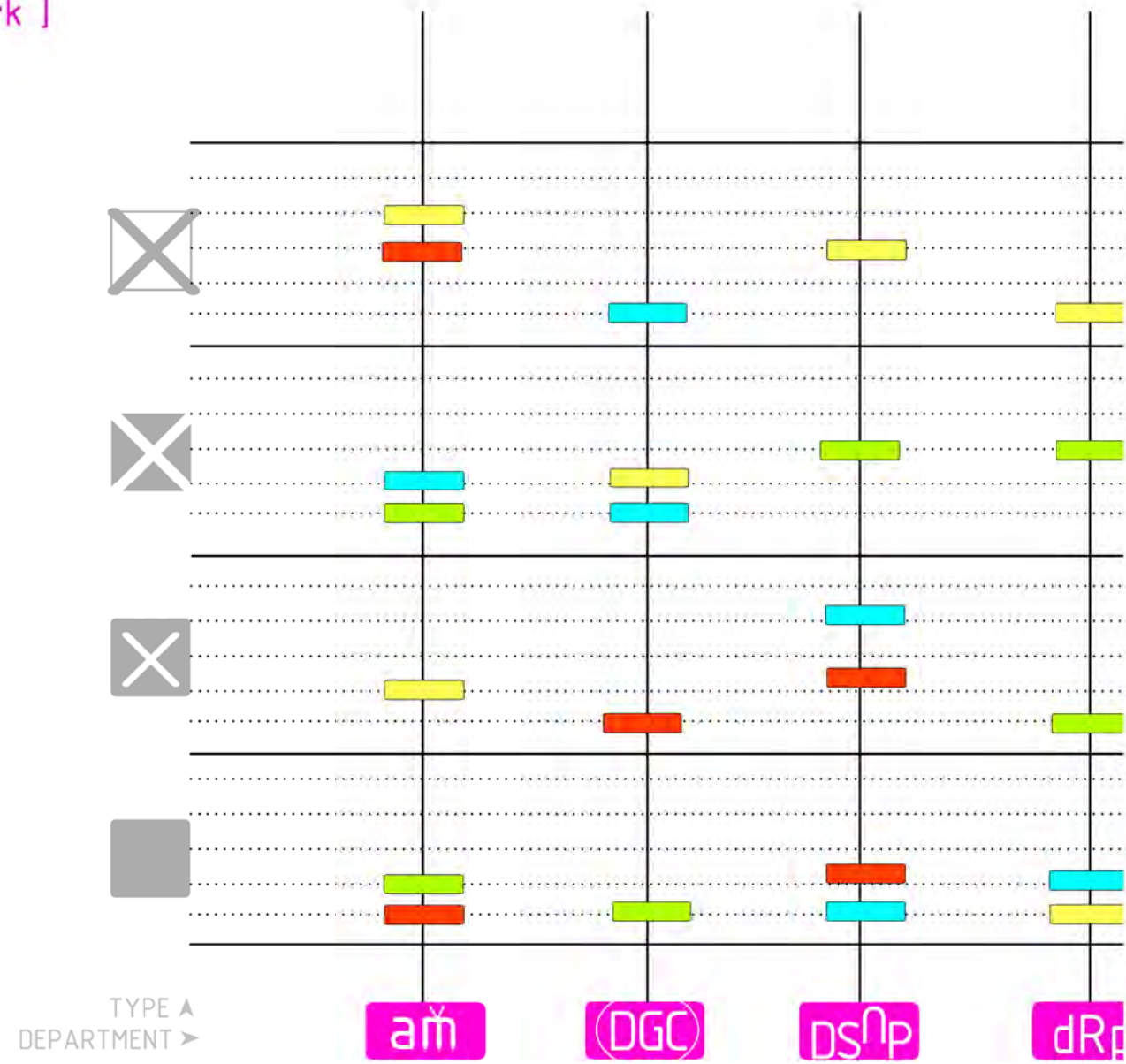


Fuller (M)

// GROUNDING OUA in historical transgressions

[ at work ]

[ at work ]



LEGEND

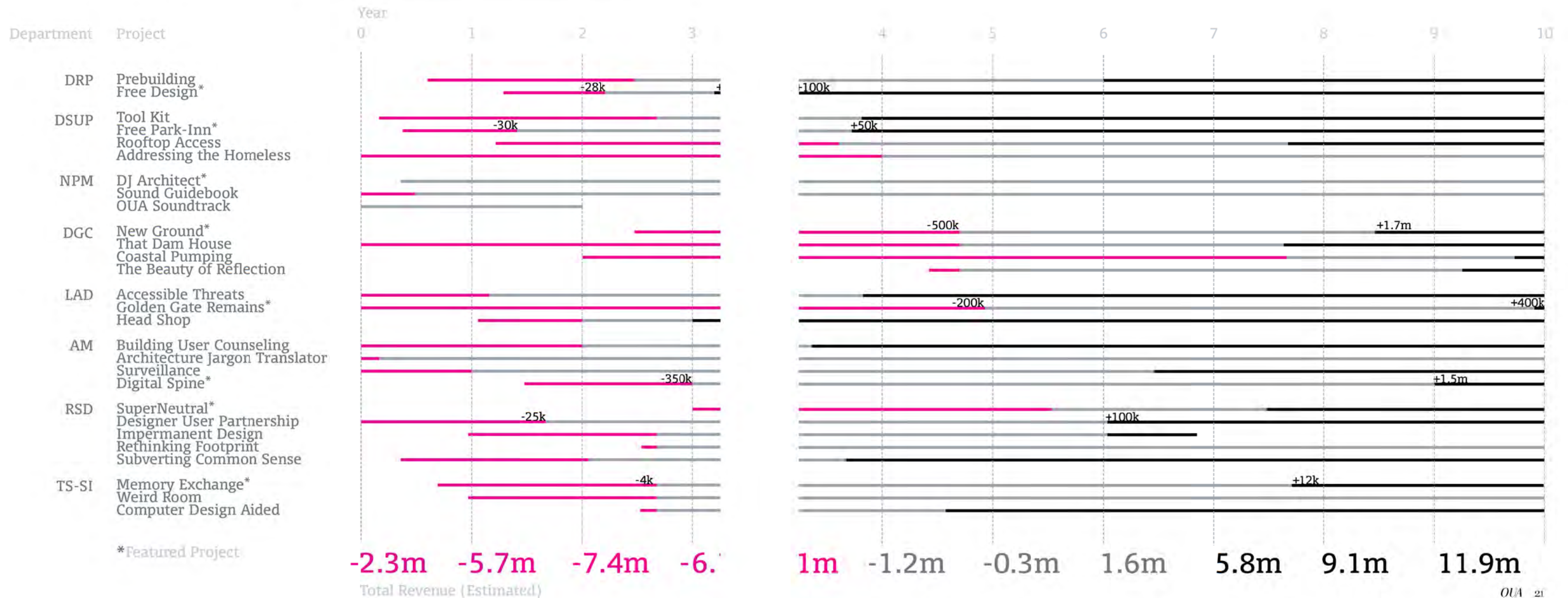
- |  |         |  |                     |
|--|---------|--|---------------------|
|  | budget  |  | rejection           |
|  | client  |  | reinterpretation    |
|  | program |  | recontextualization |
|  | site    |  | reclamation         |

// OUA AT WORK breadth of projects and transgressions

# We design opportunities, not architecture.™

Our portfolio is not a set of design projects so much as a collection of opportunities for architects. As such, unlike the traditional studio where the final review is a chance to explain a design process, each project will validate itself

through a plan of realization that includes financial solvency and even profitability. In short, we seek to show that to be Unsolicited™ does not come at great monetary cost, but instead offers the promise of financial rewards.



# Profit from your own misfortune.™

The Office of Unsolicited Architecture rejects the culture of complaint that surrounds architects.

We intend to profit from what have traditionally been viewed as the shortcomings of engaging in practice.

For example, we are cur-

rently developing a student consortium that partners with the U.S. Department of Education and the U.S. Department of Defense to leverage our educational loans as work-for-hire incentive in Iraq.

We take advantage of inequalities in the workforce and

workplace, on scales as small as the firm and as large as the global economy.

# If you're going to be rich, you might as well be happy.™

OUA believes you can make money while doing what makes you happy. Whether it be for socially responsible causes, artistic expression, or a provocative idea that needs to be realized, OUA provides solutions that marry personal fulfillment with sound business practices.

For example, the one of the Department of Tactical Social Spatial Interventions' (TS-SI's) projects in the troubled area of Kashmir uses reciprocal outsourcing as a way of empowering local inhabitants and enriching the lives of workers both in Kashmir and from OUA.

In the meantime, we're establishing a self-sustaining market that encourages local designers.

Join our team and see the benefits of our firm today!

# Divest in the future.™

Divestment describes the process a company uses to grow financially by selling off business units in order to focus their resources on a market it judges to be more profitable or promising. At the Office of Unsolicited Architecture, we've streamlined that process by

vetting future trends and technologies to allow architects to work in areas that will be profitable.

We're not afraid to abandon old ideas to find new areas of research.

For example, the SuperNeutral project from the Depart-

ment of Radical Sustainable Design (RSD) operates in the alternate currency system of carbon emissions credits.

We look for fundamental changes in the future, not fads or fashion.

# am

*department of applied media*

ANCHORING THE DIGITAL IN THE PHYSICAL

## what does AM do?

AM uses new media to enrich previously impoverished public space, seeking to rescue people from their increasing disconnect from physical environments due to their use of (locationless) digital technologies. Thus, AM redefines the impact of new media technologies -- turning tools of isolation into modes of connection.

## what is AM's strategy?

AM approaches new media technology from two perspectives (simultaneously):

1. experimentally: exploiting and investigating new technologies
2. critically: commenting on the way new media impacts the way people interact with each other through the vehicle of architecture.

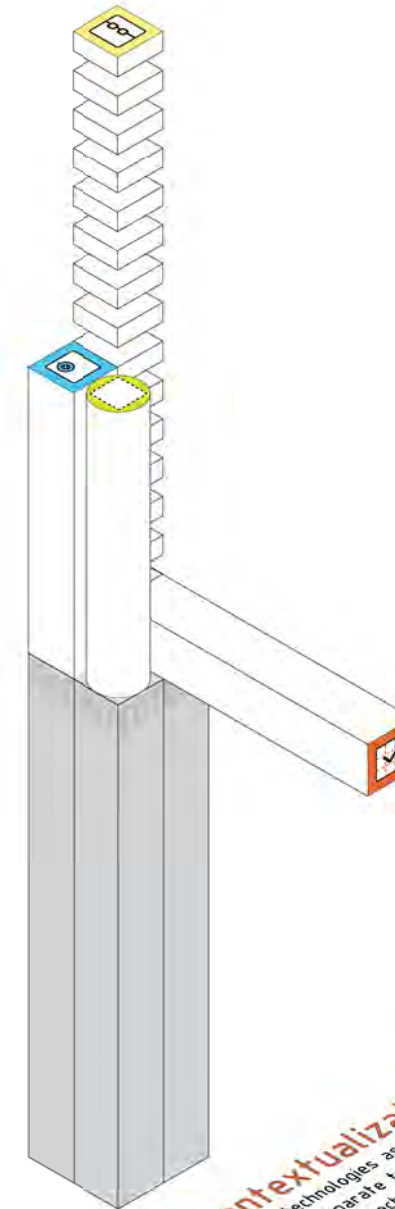
## how is AM unsolicited?

AM designs user-generated architecture  
By allowing the public to interact with (and determine) an architectural program, AM's projects are, by definition, unsolicited.



feature project THE DIGITAL SPINE  
audience THE CITY OF SEATTLE

The Digital Spine links the locationless digital territory of Seattle's Broadband Initiative to a specific physical space in the city. In doing so, it uses new media to revitalize old infrastructure.



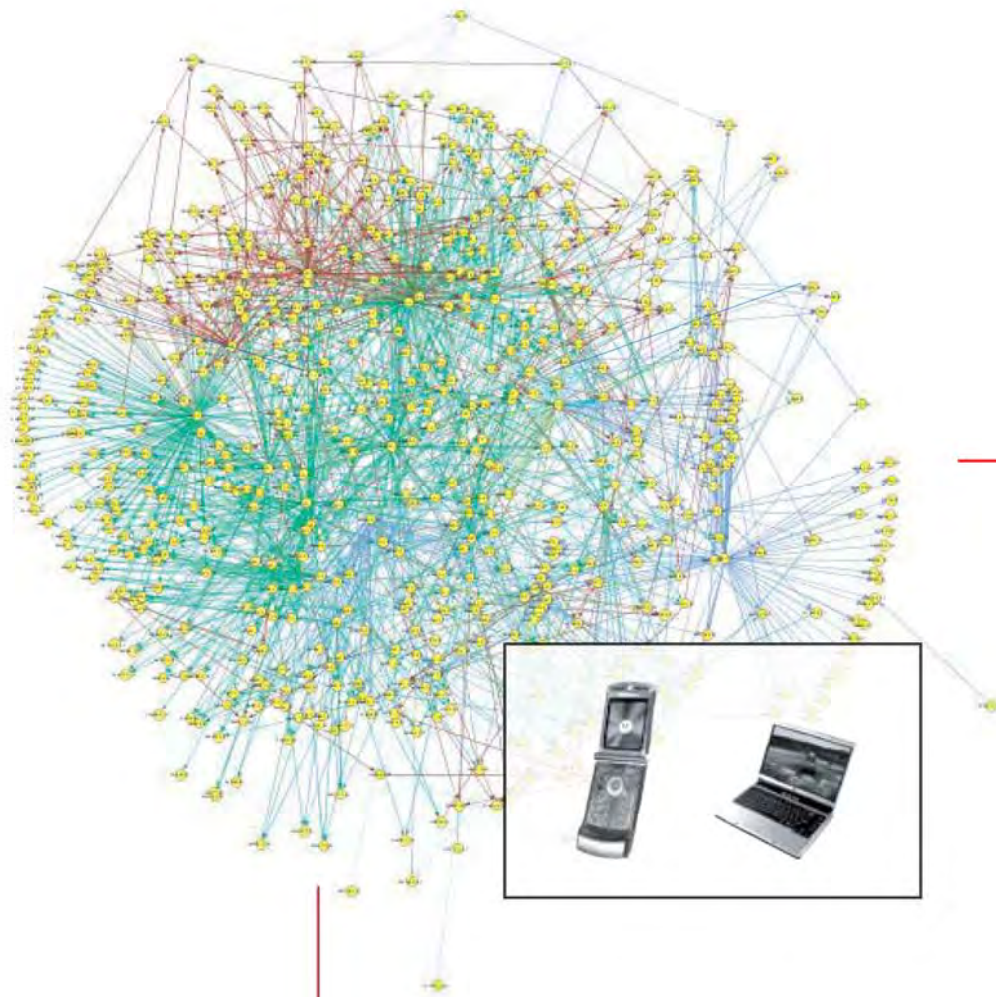
	opportunity	urgency
social		
environmental		
technological	interaction	isolation
political		

**recontextualization of program:**  
new media technologies as programmatic elements  
just opposing disparate types of program-urban infrastructure  
with interactive technology.

**reinterpretation of client:**  
not only one who commissions a project, but also one who engages it.  
client becomes active participant in development of programmatic  
elements through user-generated content.

**reclamation of site:**  
not only physical space, but virtual space

## APPLIED MEDIA : ANCHORING THE DIGITAL IN THE PHYSICAL



**YES!**



information about the immediate environment, stimulating engagement.



**NO!**

AM uses new media to enrich previously impoverished public space, seeking to rescue people from their increasing disconnect from physical environments due to their use of (locationless) digital technologies. Thus, AM redefines public spaces using the same technologies that are responsible for their neglect.

**IF**



**THEN**



## **AS ICT PENETRATION LEVELS RISE, TRAFFIC INCREASES**

The common notion that ICT will reduce travel by allowing people to work/communicate remotely is misleading. Most internet usage (85% of the internet used for e-mail) and cell phone usage relates to communication which is directly connected to social activity; as people communicate more (remotely), they also socialize more (directly) leading to an increase in transit levels and changes in transit patterns. Ultimately greater ICT penetration increases traffic and tends to make travel less nodal. (Castells, Gillespie and Richardson)

There is a correlation between ICT penetration and transit levels. Cities should recognize and respond to this correlation by actively tying transit infrastructure to ICT infrastructure.



“By the year 2015: Broadband for all”  
-Seattle Task Force on Telecommunication



## SEATTLE BROADBAND INITIATIVE

Cities around the world are taking a pro-active approach towards increasing ICT penetration. Seattle has adopted one of the most aggressive attitudes in declaring it a necessity to provide inexpensive broadband access to the entire city.

In 2004, Mayor Greg Nickels and the City Council established a citizen’s Task Force on Telecommunications Innovation to explore the feasibility of using the City’s broadband assets in a telecommunications network available to the public. The Task Force concluded that the Seattle market lacks the competitive forces that will lead to a state of the art broadband network, and that fiber optic cable to the premises is the only technology available today to meet Seattle’s long-term needs.

On May 22, 2006, the City of Seattle issued a Request for Interest seeking private partners to join the City in creating a competitive fiber to the premises (FTTP) broadband network serving the City, its citizens, businesses and institutions. Such a network would offer very high bi-directional bandwidth, deliver integrated voice, video and data services and would eventually serve the entire city.

Among the stated goals of the initiative is the goal to ‘promoting Seattle as a world leader in information technology’.





- An in-place viaduct rebuild (that would be 70% larger due to increases in safety standards) was voted down by 55%.

- The alternative cut-and-cover tunnel was voted down by 70%

## VIADUCT REBUILD

In 2001 the Seattle Times reported that Seattle was ranked second only to Los Angeles for the worst traffic in the nation. Since then the traffic problem has worsened, and it has the potential to become exponentially worse overnight when construction starts on the Alaskan Way Viaduct.

The Alaskan Way viaduct is a double deck elevated freeway which runs along the waterfront in downtown Seattle. The freeway needs to be replaced due to structural damage incurred during the Nisqually earthquake in the late 90s. There is an estimated 20% chance that an earthquake will shut the viaduct down permanently within the next ten years. The freeway was slated to be demolished in 2007 but voters have not been able to agree on a rebuild option. Because the freeway is one of only two North-South corridors in Seattle, there has been much resistance to public transit options that do not involve a rebuild.

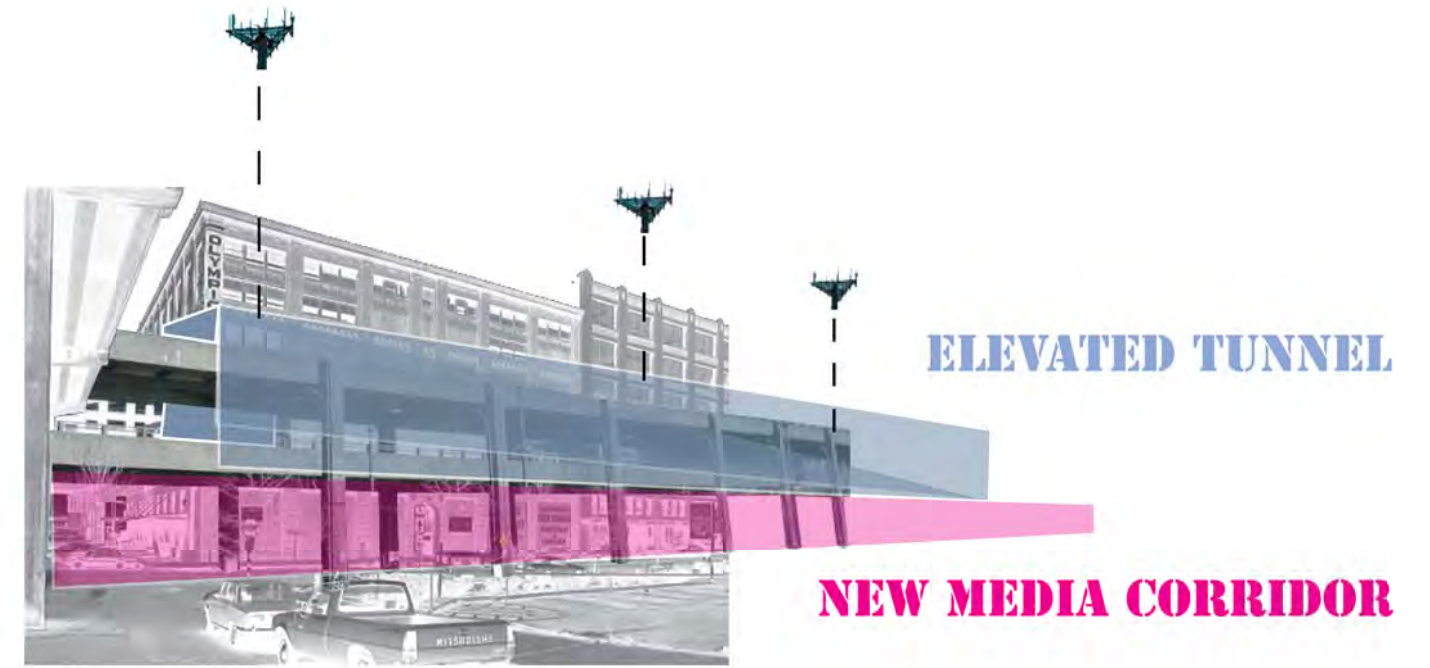
In the most recent vote, on March 13th, both options were voted down. The tunnel is seen as too expensive while the rebuild is considered to be ugly. Most significantly, both proposals are unpopular because neither is fully funded and there is no place to re-route traffic during the 6-9 years of construction.

After the unsuccessful vote, the city of Seattle slated \$500,000 to the investigation of a surface/transit option where a multi-lane freeway would be built on surface level running along the same waterfront route that the viaduct currently runs. This option is unacceptable because it would continue to divide the downtown and the waterfront.

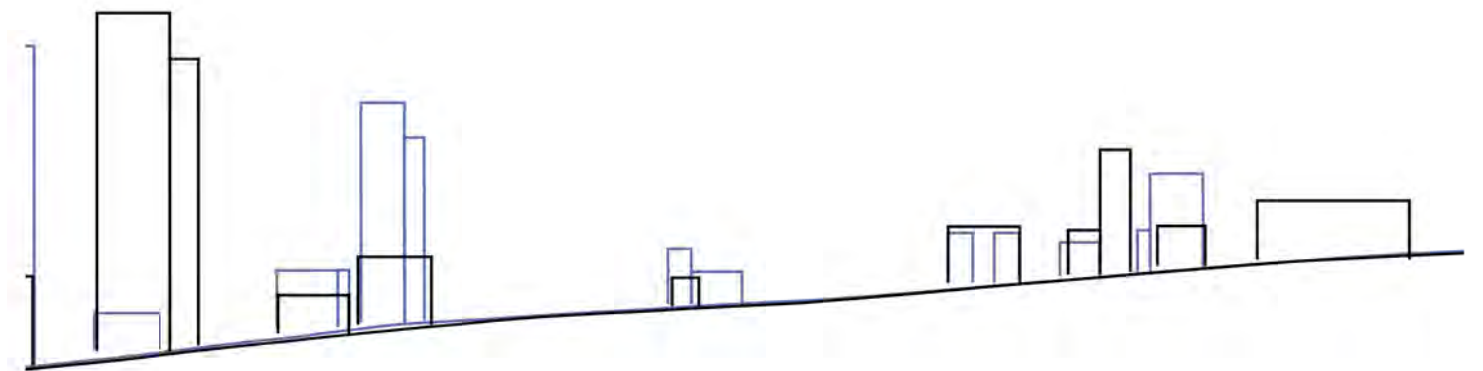
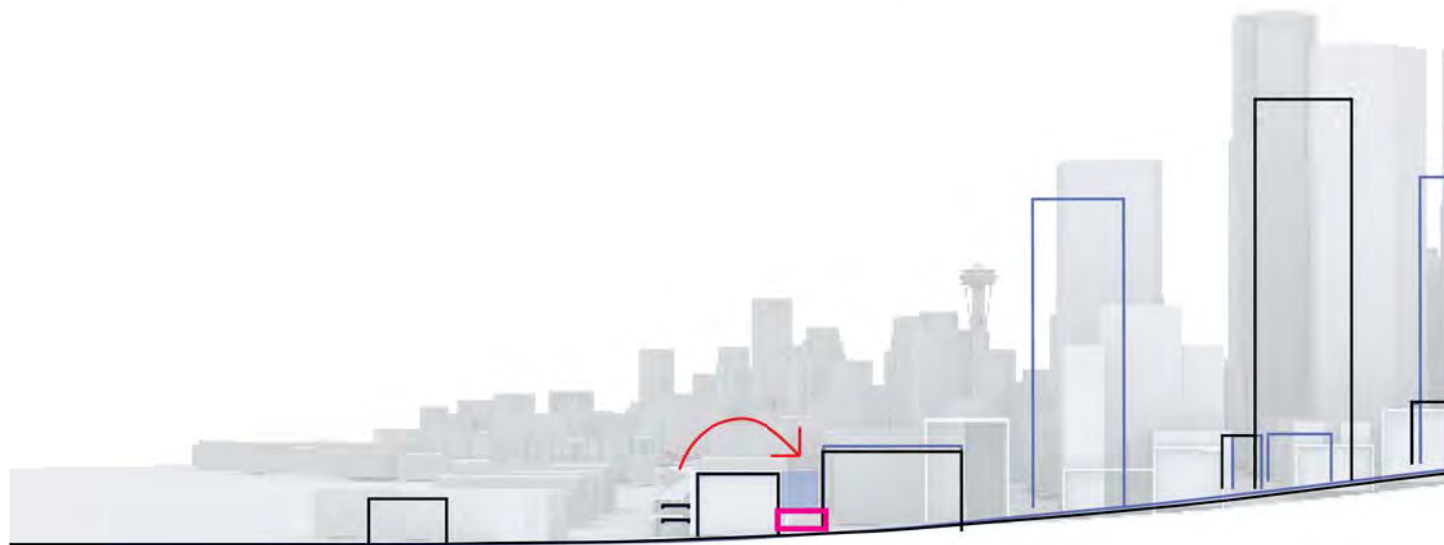
## SOLUTION: DIGITAL SPINE

Instead of funding an investigation into the surface/transit option for the viaduct replacement, OUA's Applied Media department is proposing an alternative for investigation that will better benefit the city. The Digital Spine alternative proposes to rebuild the viaduct one block to the East of the current site incorporating a new media pedestrian corridor below on Western Ave. By combining the viaduct rebuild with the broadband initiative, the city is acknowledging the correlation between ICT and transit and the potential for a mutually beneficial relationship. By employing ICT in creating a new public space, the city is fighting to refocus attention on specific physical spaces and fighting the less nodal transit that ICT encourages.

While the surface/transit option places a multi-lane highway directly on the waterfront, the Digital Spine proposal leaves the waterfront open for development of park, pedestrian, and public transportation, greatly enhancing the quality of the waterfront. While the surface/transit option would require traffic to be re-routed through downtown for years during construction, the Digital Spine would allow the existing viaduct to be used during construction, making the latter far more appealing to voters and the city.



The new viaduct will be enclosed as it passes through the downtown city blocks creating an elevated tunnel. At times areas above the viaduct will support new buildings that span across the street. This new real estate will help fund the new media elements as well as provide some additional funding for the viaduct.





## NEW MEDIA CORRIDOR

Although the Broadband Initiative will benefit Seattleites, it also promotes a focus on a digital space as opposed to any specific physical environment which has destructive potential for the city. The digital spine proposal addresses the much needed physical location and symbolic presence for Seattle's Broadband Initiative. If the driving force behind the initiative is to 'promote Seattle as a world leader in information technology', then the initiative not only needs a symbolic presence in the city, but also needs to use ICT to focus attention on specific physical locations within the city. The digital spine answers both of these needs with a new pedestrian zone where ICT technologies are used to connect inhabitants and tourists to their immediate physical environment as well as connect them to other cities around the world.



The new media corridor will adopt new technologies as they arise, but the initial components will include four public teleconferencing systems and a system of annotated spaces.

## LCD 'WINDOWS'

Along the new media corridor there are four public teleconferencing systems that provide a direct link to cities around the world. These systems function as windows connecting Seattle to it's sister cities around the world as well as public displays for programmed content.

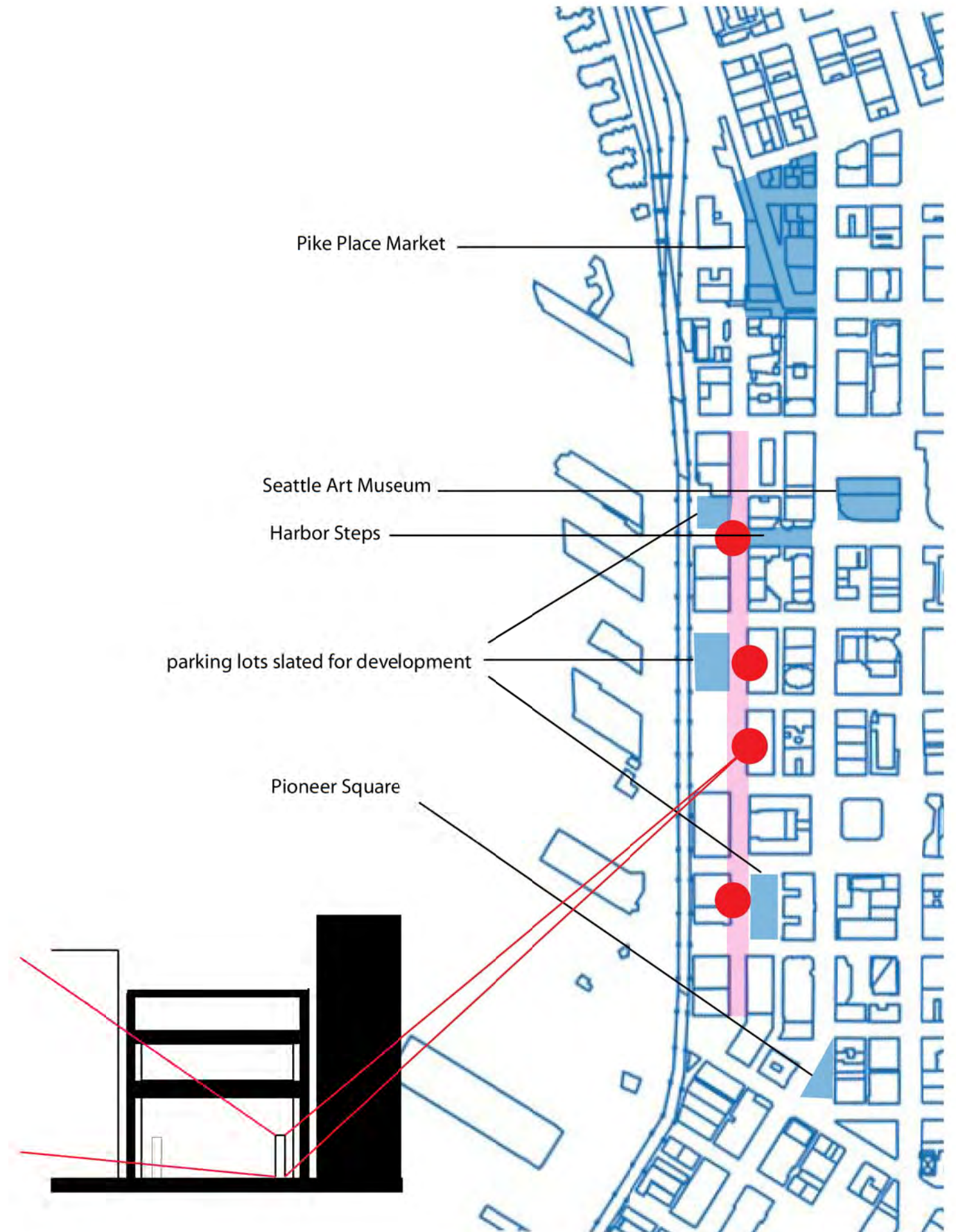
Each screen will intermittently feature programmed content ranging from user generated content to entertainment to educational programs. The content of the programming promotes the stated goals of the broadband initiative.

The user generated programming will include an on-line interface where users upload content and vote on what is displayed via the internet. This type of content aims to engage and stimulate dialog among Seattleites as well as people from around the world.

The entertainment programming aims to gather people locally around events in a public space and will include programs like an outdoor movie series during the summer.

The educational programming aims to expose the public to research based out of the local universities as well as educate about new media technologies through exposure. Programs include streaming footage from the bottom of the ocean from a University of Washington research group.

The screens are located adjacent to existing public spaces and lots that can be developed into public squares or parks.



# ANNOTATED SPACE

The new media corridor is the core of an ever expanding city wide spatial annotation project. The project aims to provide people with information about their immediate physical environment, provoking them to engage with that environment.

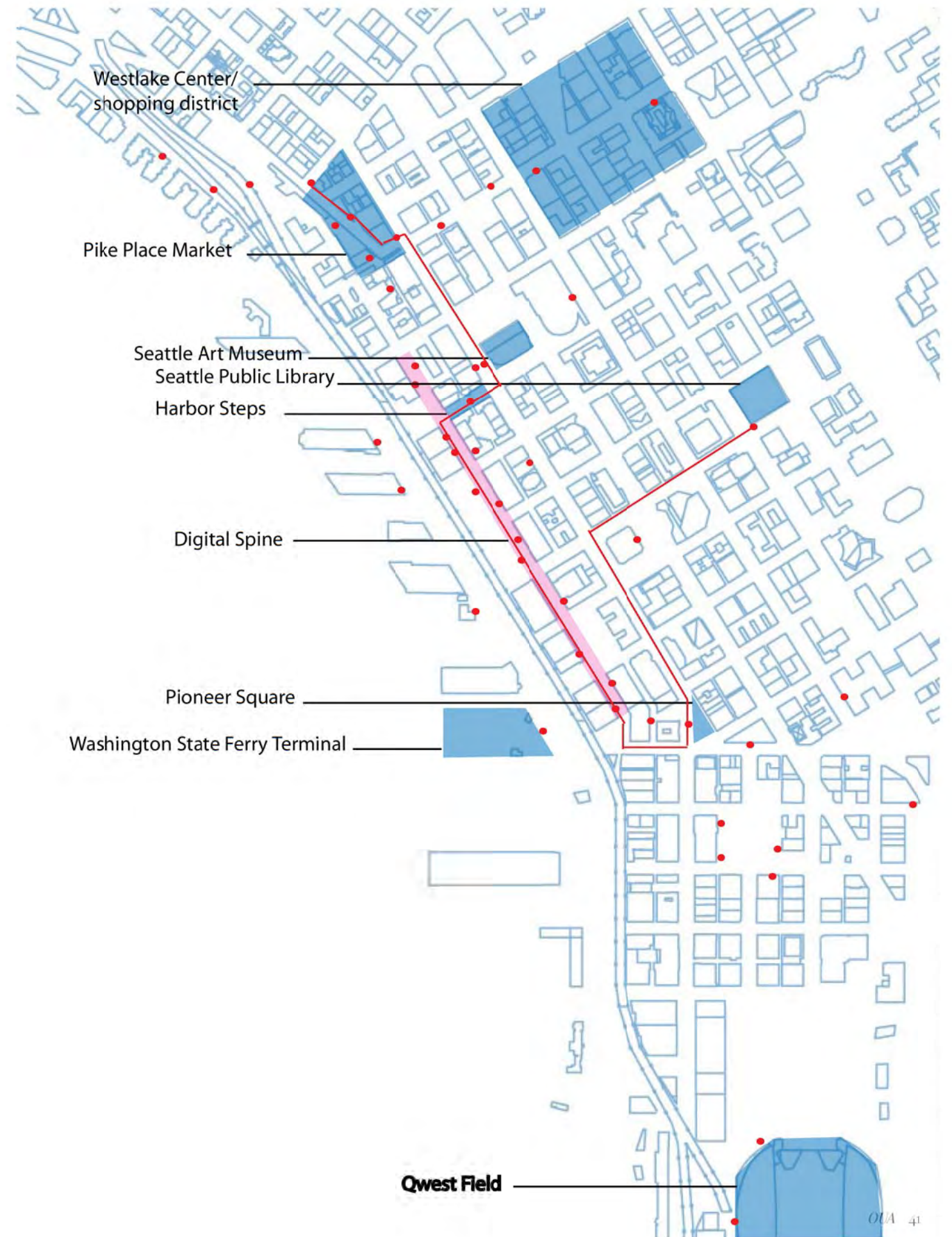
The annotated locations are linked together in a variety of ways targeting different users within the city. For example there are a series of walking tours targeting tourists visiting the city. The tourist can select a tour and be guided along an annotated path receiving information about each site as they arrive. Among the ways in which annotated locations are linked is through practical information about nearby businesses and facilities. As one walks through the city, they can receive information about nearby restaurants or businesses, from exact location to menu to consumer ratings.

The project is based on a bluetooth technology platform which is already integrated into most cell phones and PDAs. The location based information will use either RFID technology or GPS based technology depending on the necessary range.

Annotated Seattle tour:



Information is provided about each site upon arrival as well as directions to the next site along the path.



## FINANCING

The new media corridor will animate an area of downtown that is currently somewhat industrial and under used. This will draw people to the area, encouraging commercial development and thus raise property values.

Currently the average property value of one parcel of land (one city block) along Western Ave is \$4.1 million. Using the property tax rate in Seattle, if the new construction increases property values by a modest 10%, then the resulting increase in property tax will be \$3,000 per parcel per year. Given that there are 14 parcels adjacent to the project, that is an additional \$42,000 in property tax revenue per year.

### Initial cost of the teleconferencing screens:

Outdoor Hi-Resolution LCD screen - \$150 k each (\$600 k total)

Video equipment - \$30 k total

Installation - \$20 k total

Total initial expenses - \$650 k

### Operating costs of teleconferencing screens:

Power: 10kW - at \$0.04 per kWh (current Seattle rate)

$\$0.04 \times 10\text{kH} \times 24\text{h} \times 30\text{ days} = \$288$  per screen per month

Total electricity = \$1150 per month

Maintenance = \$300 per month (labor, equipment and bulb replacement)

Total operation costs = \$1450 per month, \$17,400 per year

### New media corridor:

The installation of the teleconferencing screens will be financed by funds generated from leasing the new real estate created above the elevated tunnel.

The operating costs for the teleconferencing screens will be financed by the increase in property taxes generated by the increased land value.

The annotated spaces will be subsidized by the property taxes, but will also be funded by the local businesses which are featured.

### Elevated tunnel:

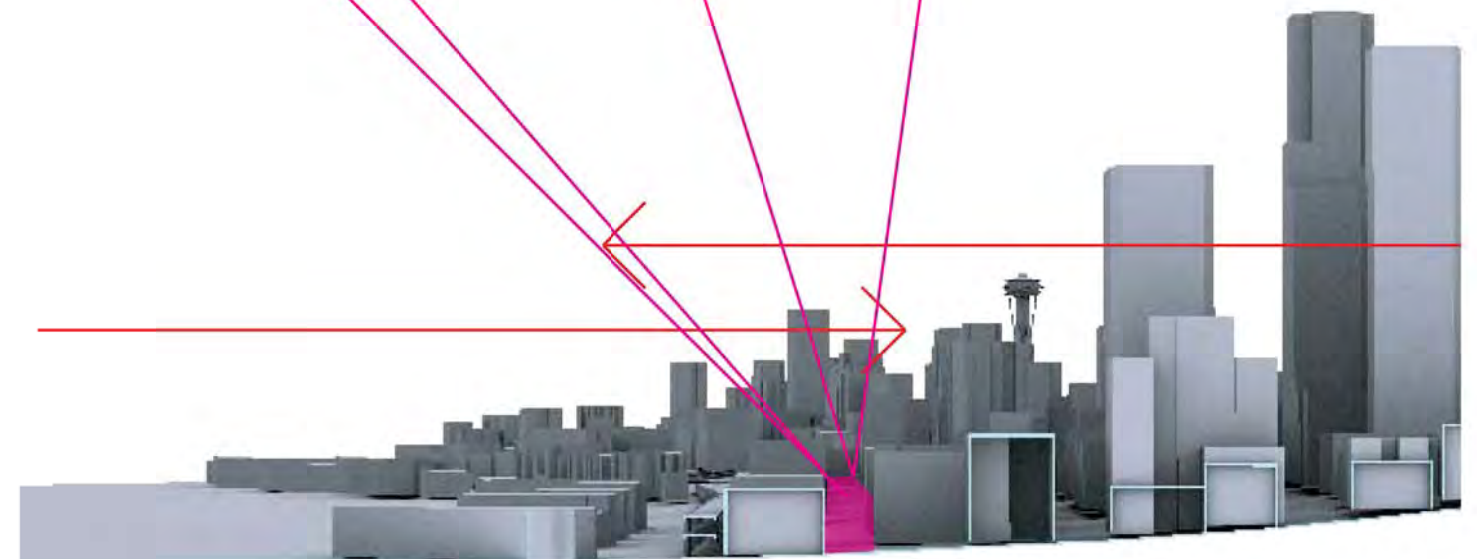
The viaduct rebuild will retain it's original funding but will receive additional funding through revenue created by leasing the new real estate generated above the elevated tunnel. Excess property taxes generated by the increase in land value will provide some additional funding.

## SOLUTION: DIGITAL SPINE

AM proposes that Seattle will not only be a leader in information technology but more importantly that it will lead the world in acknowledging and addressing the need to refocus attention on the physical environment as the use of ICT increases; the need to rescuing physical space from the increasing focus on locationless digital space. The Digital Spine project proposes to use the ICT technologies promoted by the Broadband Initiative to refocus attention onto the physical environment.

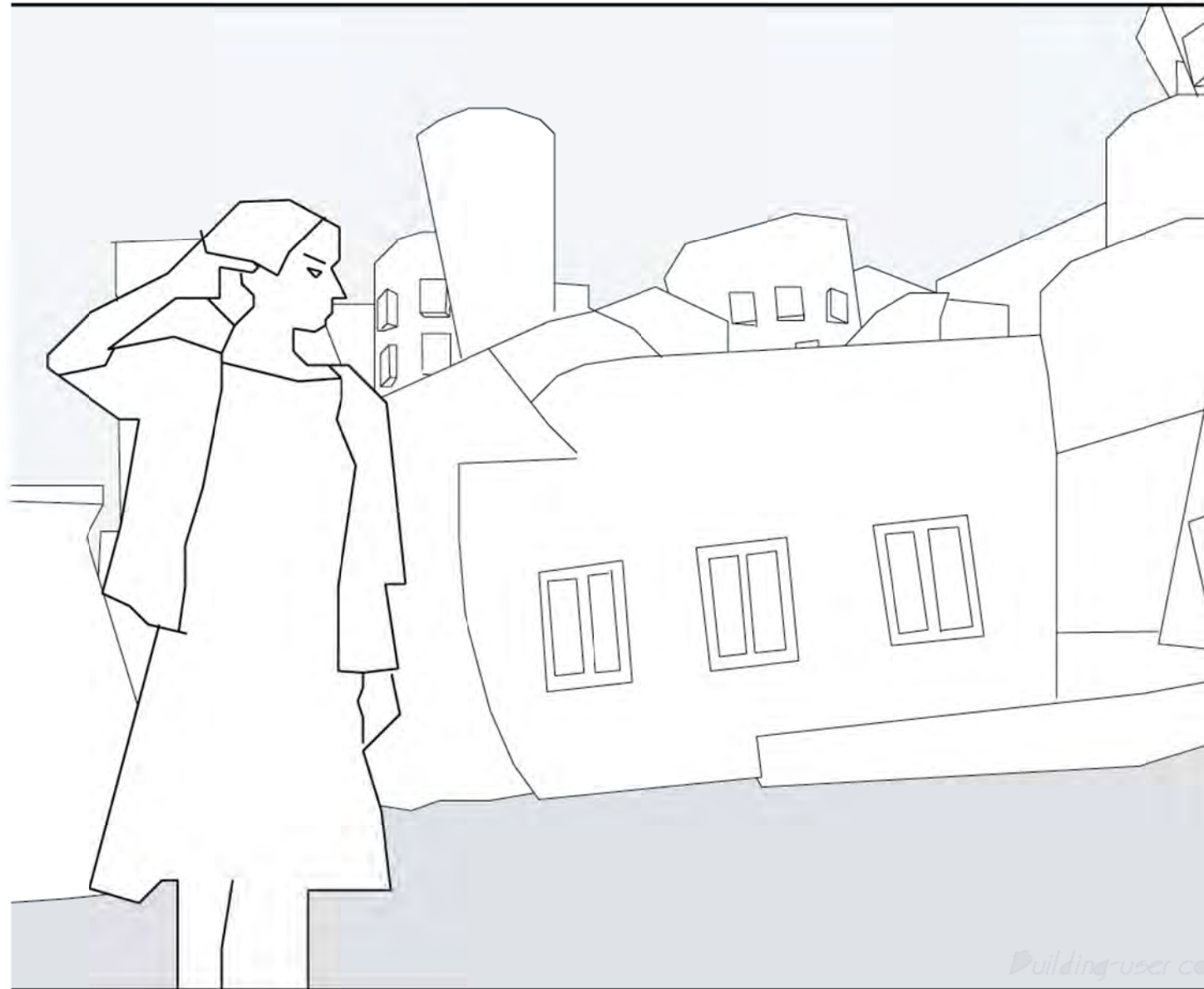
The new media corridor will connect Seattle's downtown to the waterfront with pedestrian zone where the city is currently divided by the Alaskan Way viaduct. The corridor will create a new public space drawing residents and tourists to what was formerly an underused area of downtown. The corridor will connect downtown to the waterfront through the creation of a pedestrian zone, connect the city to the world through public teleconferencing systems and connect people to their immediate physical environment through new media technologies.

By moving the viaduct one block over and enclosing it to create an elevated tunnel, the problems that are currently keeping the viaduct project at a standstill are all solved. AM proposes that the Digital Spine is the only viable solution for the viaduct that voters will accept and consequently the \$500,000 currently slated for a new proposal be used to further explore this alternative.



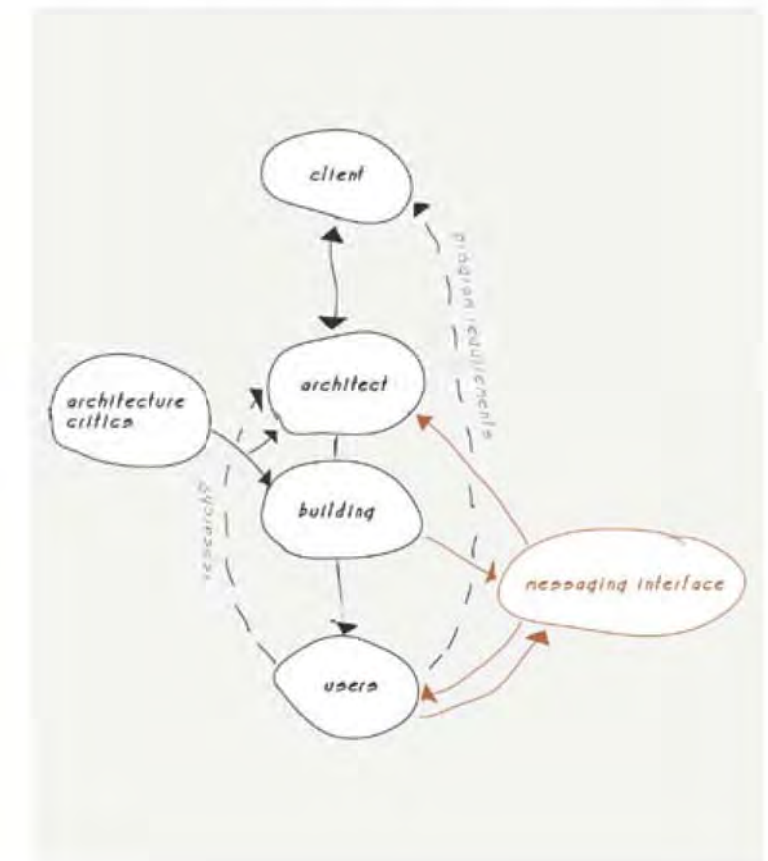
**AM  
SUPPLEMENTAL PROJECT**

## ANNOTATED ARCHITECTURE : RESCUING ARCHITECTURE FROM PUBLIC APATHY

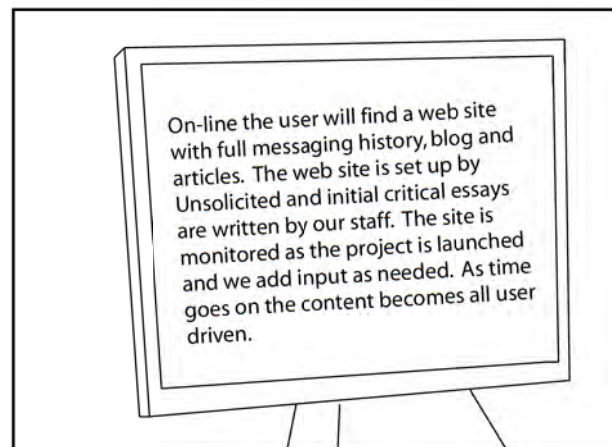
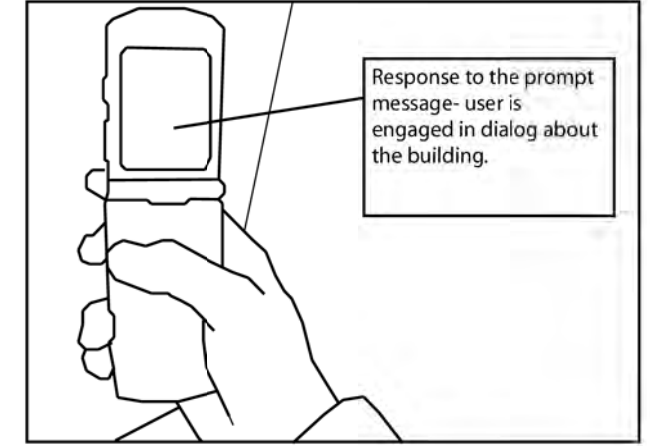
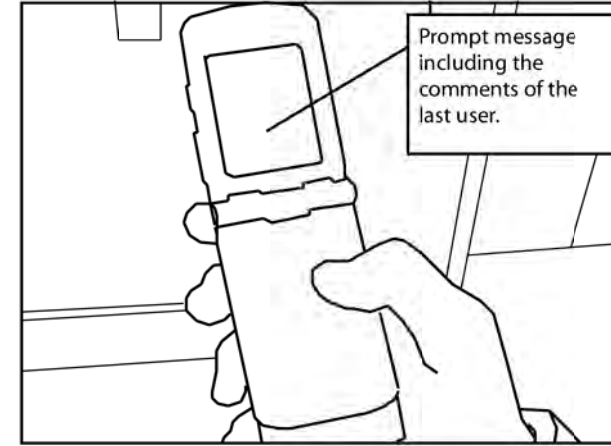
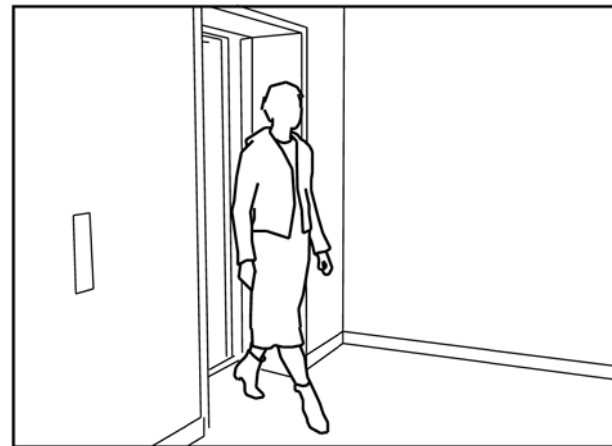
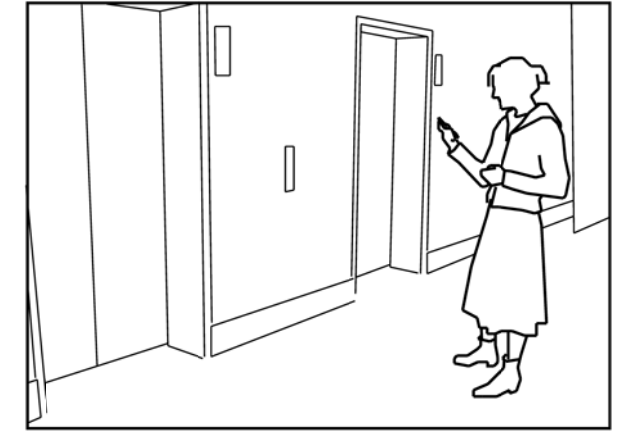
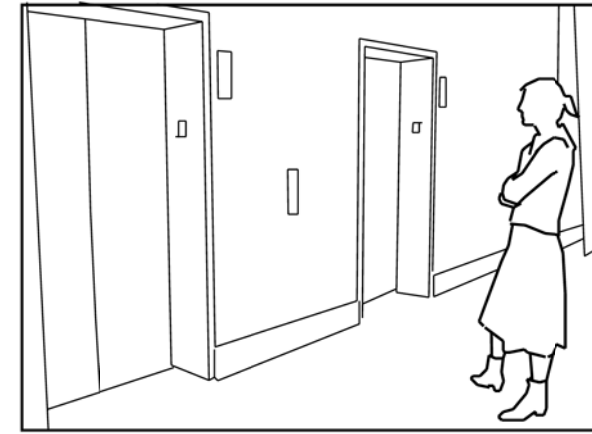
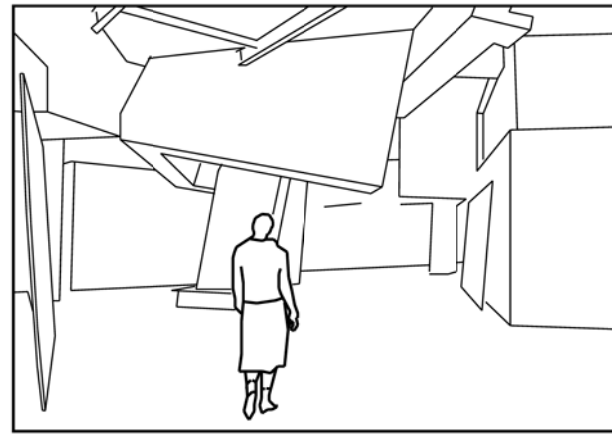
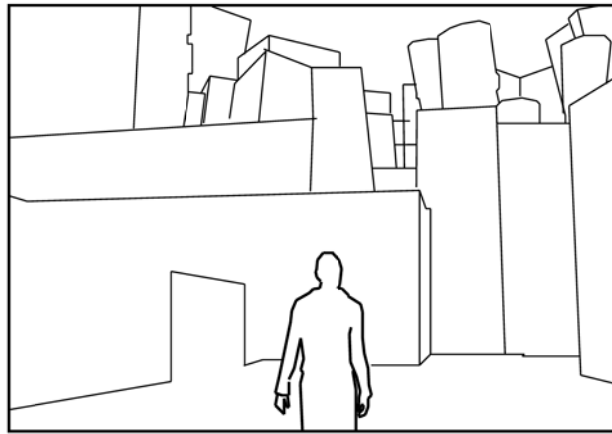


This project facilitates a dialog between a building and its users with the goal of stimulating discourse related to architecture in the general public. Our services include a messaging interface where users are prompted to engage in a dialog about the spaces they inhabit. Anticipated clients are institutions that would like to foster fond feelings towards unpopular architectural projects like MIT and the Stata Center, as well as others who would like to battle the widespread public apathy towards architecture.

The project is an attempt to engage a wider segment of the population in thinking about architecture, and eventually increasing the quality of the built environment. The project violates the traditional cycle of architecture criticism (see diagram) by facilitating dialog directly between a building and its users.







In this scenario there are messaging nodes imbedded in the Stata Center in locations where people might linger for a couple minutes. As people linger in a space they receive an unsolicited text message prompting them to respond to the architecture. The messaging system is set up so that it only texts one in ten people that pass and it will not text the same number twice. This ensures that it will eventually text most people but will not come across as spam. The individual then either ignores or responds to the prompt. The accumulation of responses creates a dialog on a site specific blog about the architecture, hopefully engaging people that would not otherwise be exposed to architectural discourse.



*department of global climate change*

POTENTIAL IN DISASTER

### what does DGCC do?

The effects of Global Climate Change will alter the way we live, dictating the need for new architectural and urban strategies. Also, the anticipation of apocalyptic disaster encourages a certain suspension of disbelief, that creates a space for radical ideas and poignant reflections. DGCC takes advantage of the opportunities that present themselves in the anticipation as well as the wake of disaster

### what is DGCC's strategy?

DGCC responds to Climate Change in four ways:

1. prevention – architecture that aggressively counteracts the effects of Climate Change
2. preparation – architecture that prepares for the inevitable.
3. provocation – architecture that appropriates the effects of Climate Change
4. promotion – architecture that takes advantage of an aesthetic renewal that accompanies destruction

### how is DGCC unsolicited?

DGCC designs for the unknown

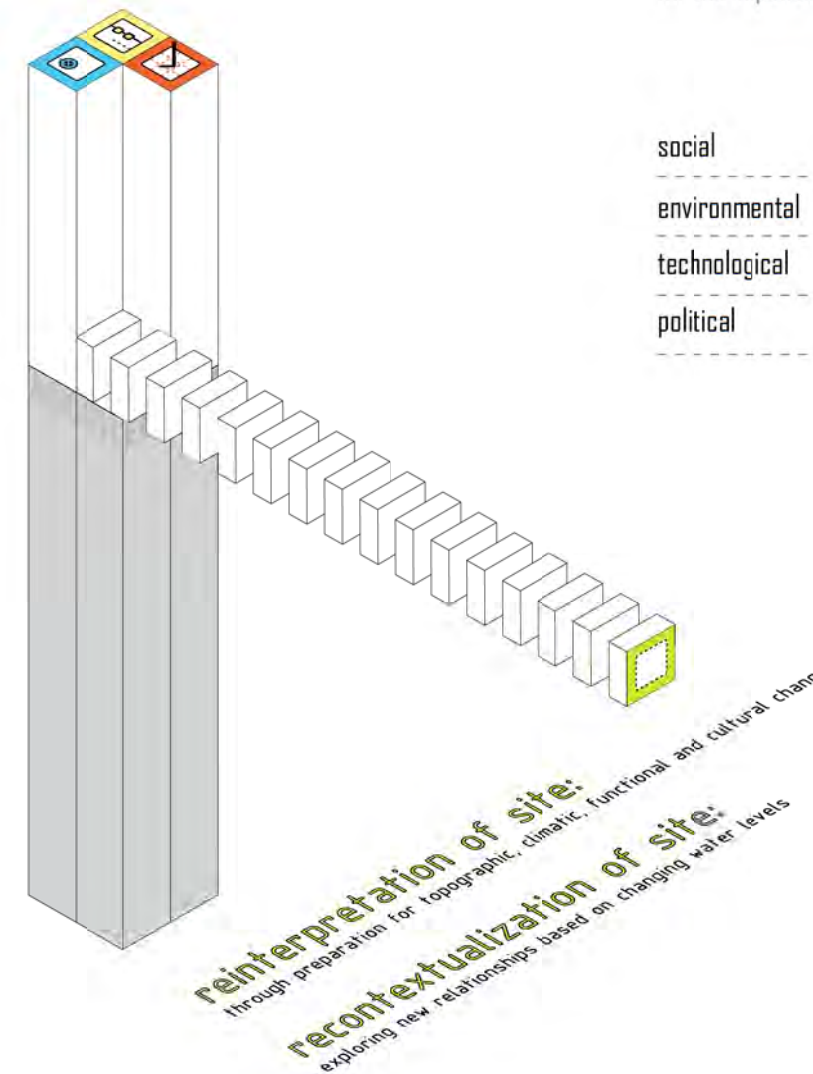
DGCC anticipates potential effects of Climate Change, designing interventions that are flexible enough to accommodate the unknown that is inherent in prediction

Anticipating disaster demands a pro-active (and speculative) approach; we cannot afford to wait until all of the relevant parameters are known. By this time it is too late. The disaster has struck...



feature project **NEW GROUND**  
audience **THE CITY OF BOSTON**

NewGround outlines an urban strategy that can help the city of Boston to prepare for the impending floods due to climate change.



	opportunity	urgency
social		
environmental	disaster	
technological		
political		

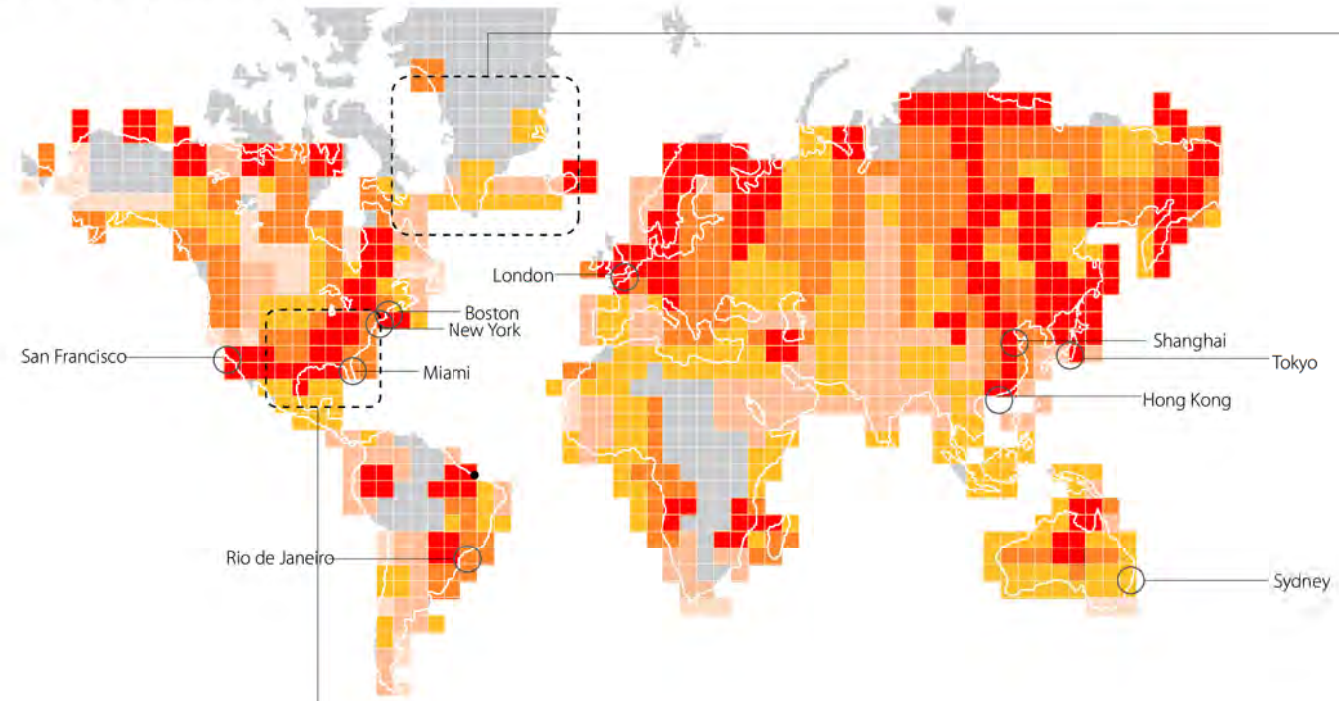
# **OUA / Global Climate Change** What's happening?

## Department of Global Climate Change

The Department focuses on seeking design opportunities in the changing climatic situation that we experience nowadays. The department investigate how architectural practice could address the current social issues by design and planning strategies and provide solutions and services for cities to deal with the global climate changes to in terms of planning strategies and architecture opportunities.

Global warming is the main war that humankind is fighting at the moment. Temperature raise bring the melting of ice in the poles, change in annual rainfalls and most severely the rise in sea level. WATER-FLOOD becomes one of our biggest problems that we need to deal with.

## Annual Temperature Changes

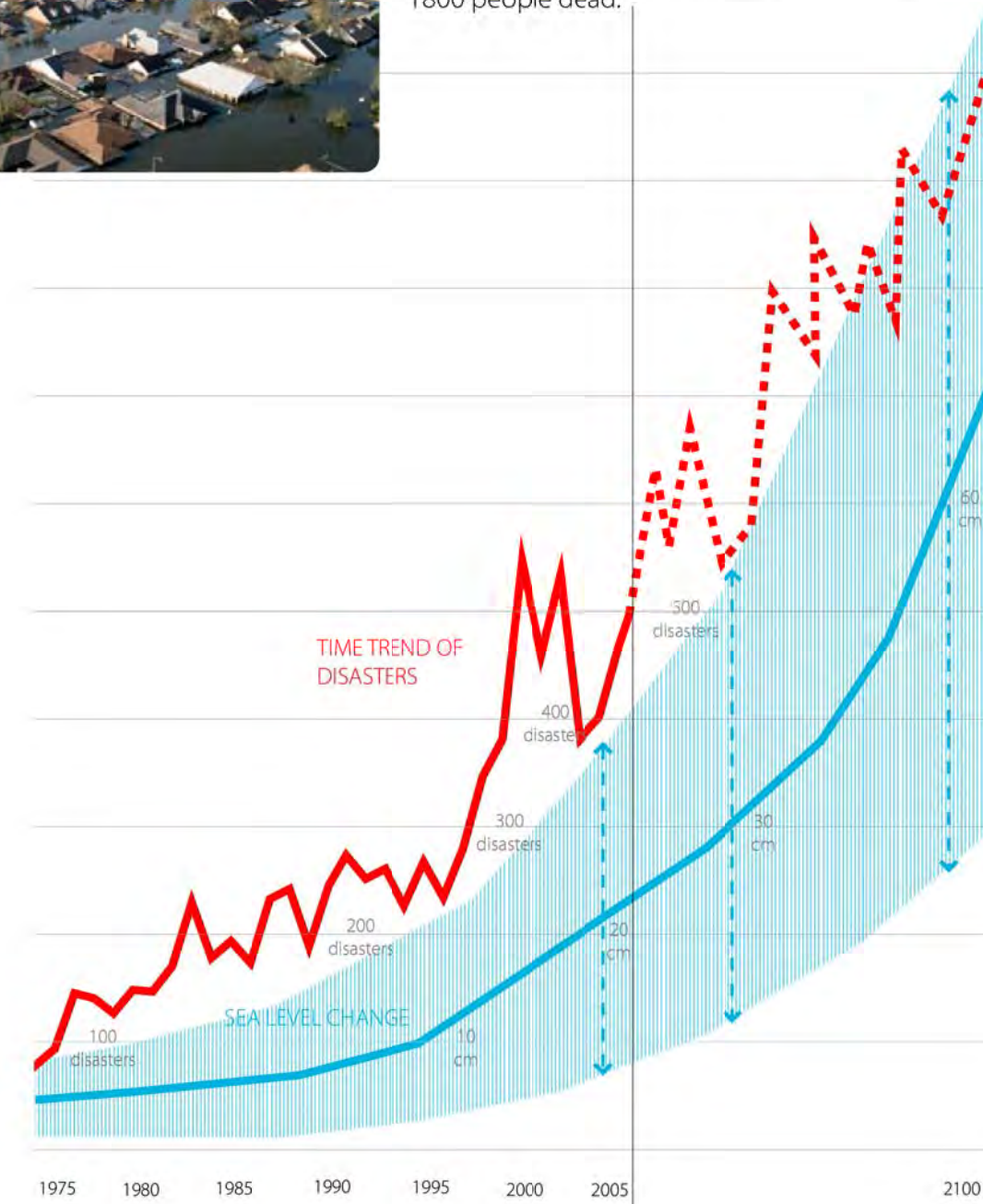
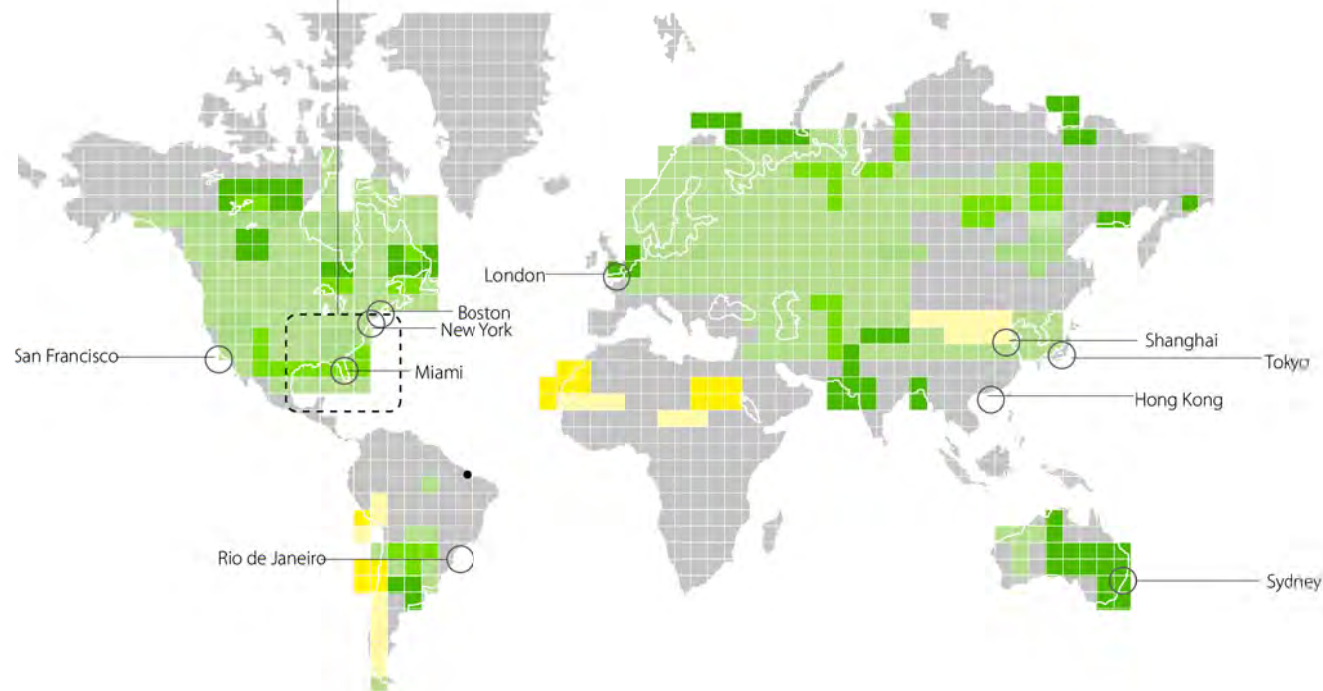


Greenland Ice Sheet has thinned by more than a meter a year on its southern and eastern edges since 1993.

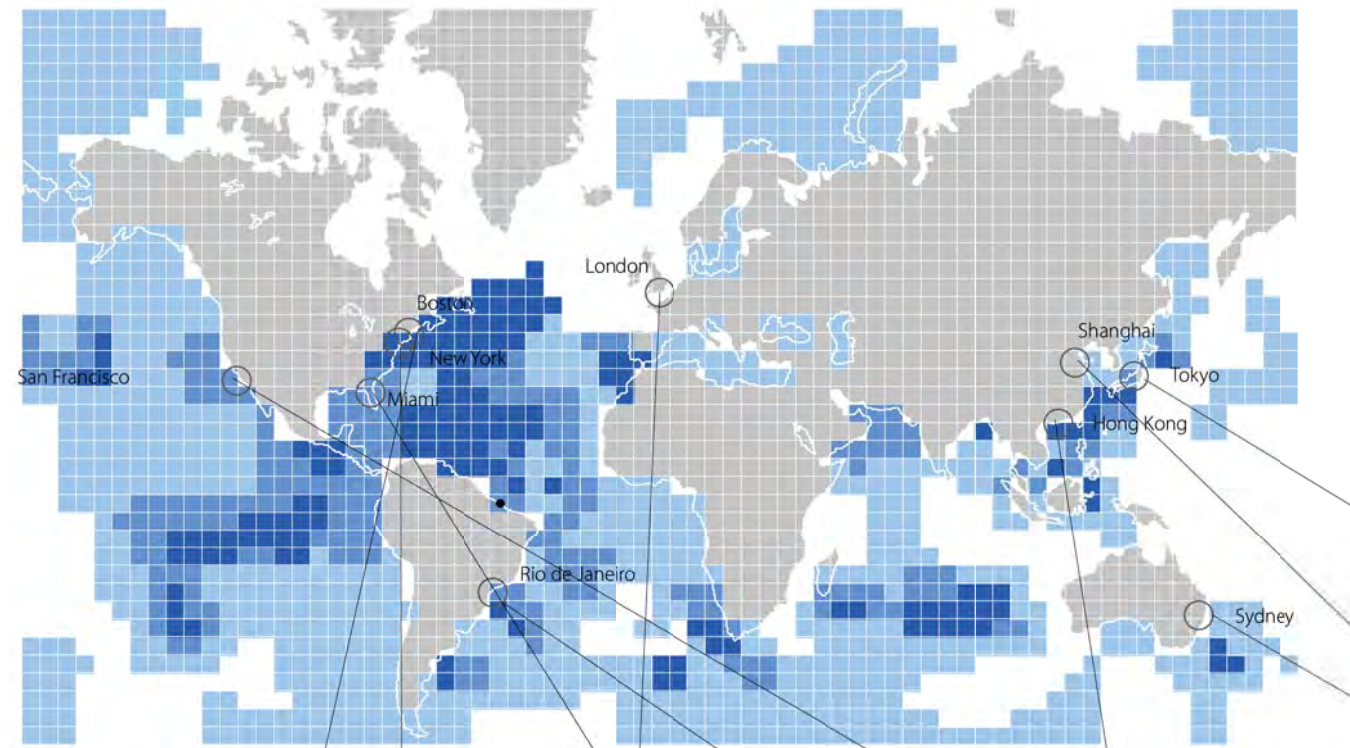


Global Warming has caused more severe hurricane and rain-fall. In only the Hurricane Katrina, it caused 1800 people dead.

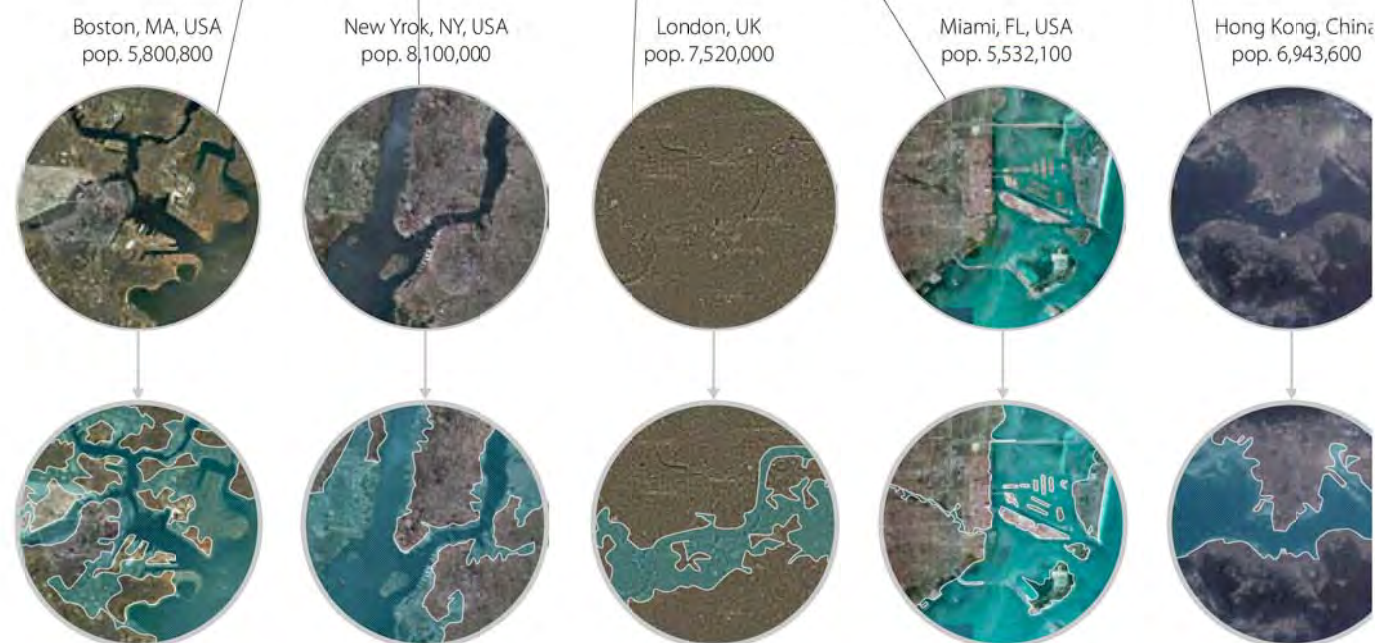
## Annual Rainfall Changes



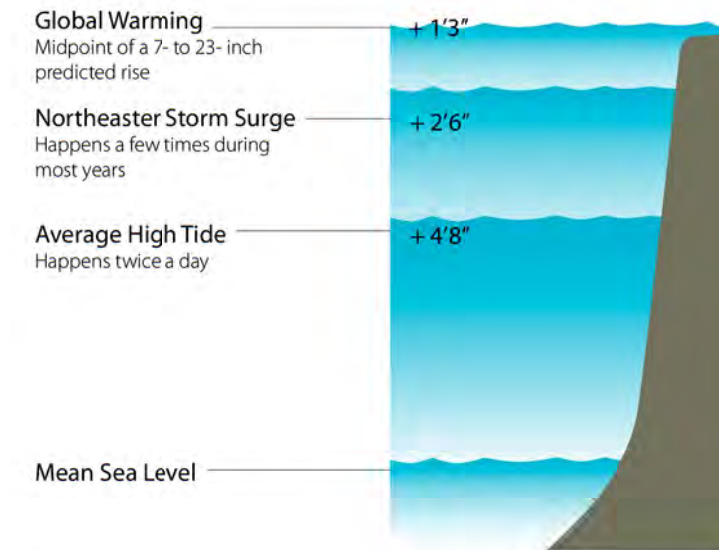
## Global Sea Level Changes



## Flood Plain in Coastal Metropolis as Sea Level Rises

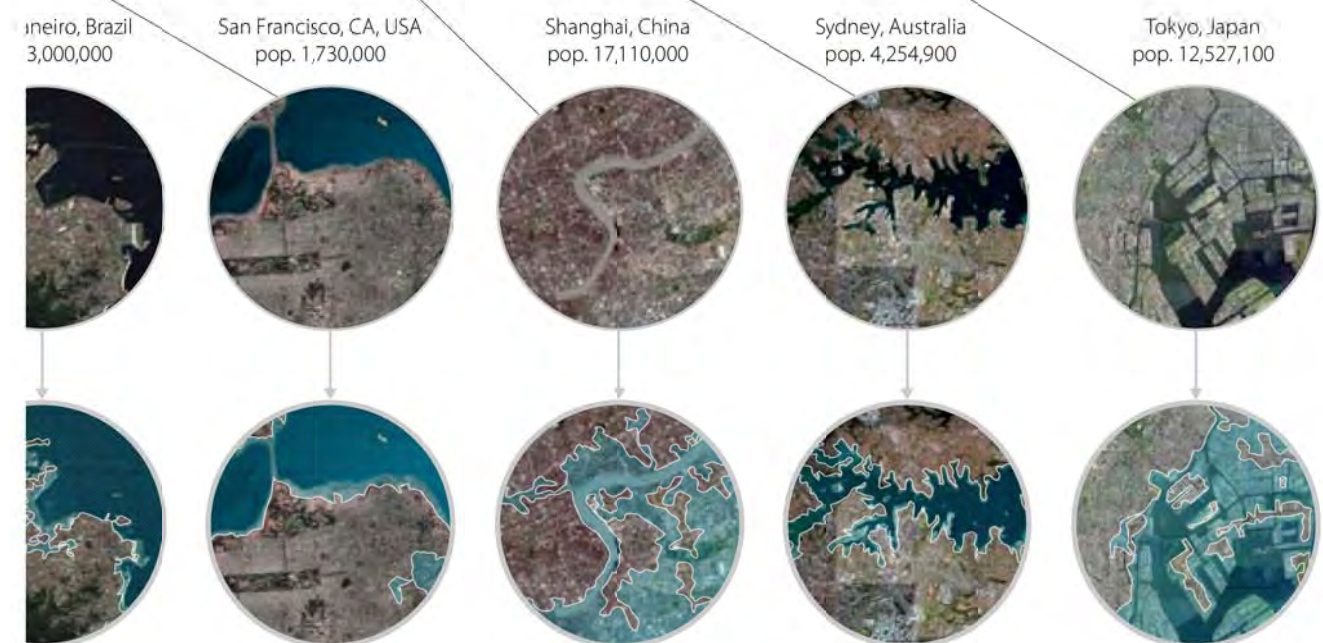


## Sea Level Changes Magnitude



As the water level rises, flooding will become more often than before. Water comes and goes from time to time due to different climatic conditions. A heavy rainfall may result a flood for 3 days. Or if a hurricane comes, flood water stays in the city for months.

The flood damage is enormous. There are 2 aspects that flood water damaging the city, the first one is the wave power of the sea water, the second one is the staying of the water disables the operation of the city. It is important to realise the crisis that we are experiencing nowadays with the sea level changing.



# Water Related Disasters



## Hurricane

Katrina (2005), New Orleans  
 Death: >1800  
 Damage: \$84 billion  
 Flood: >90 days



## Monsoon Rain

Rain, Vietnam (2000)  
 Flood killed: >300  
 Damage 1000 houses were completely destroyed



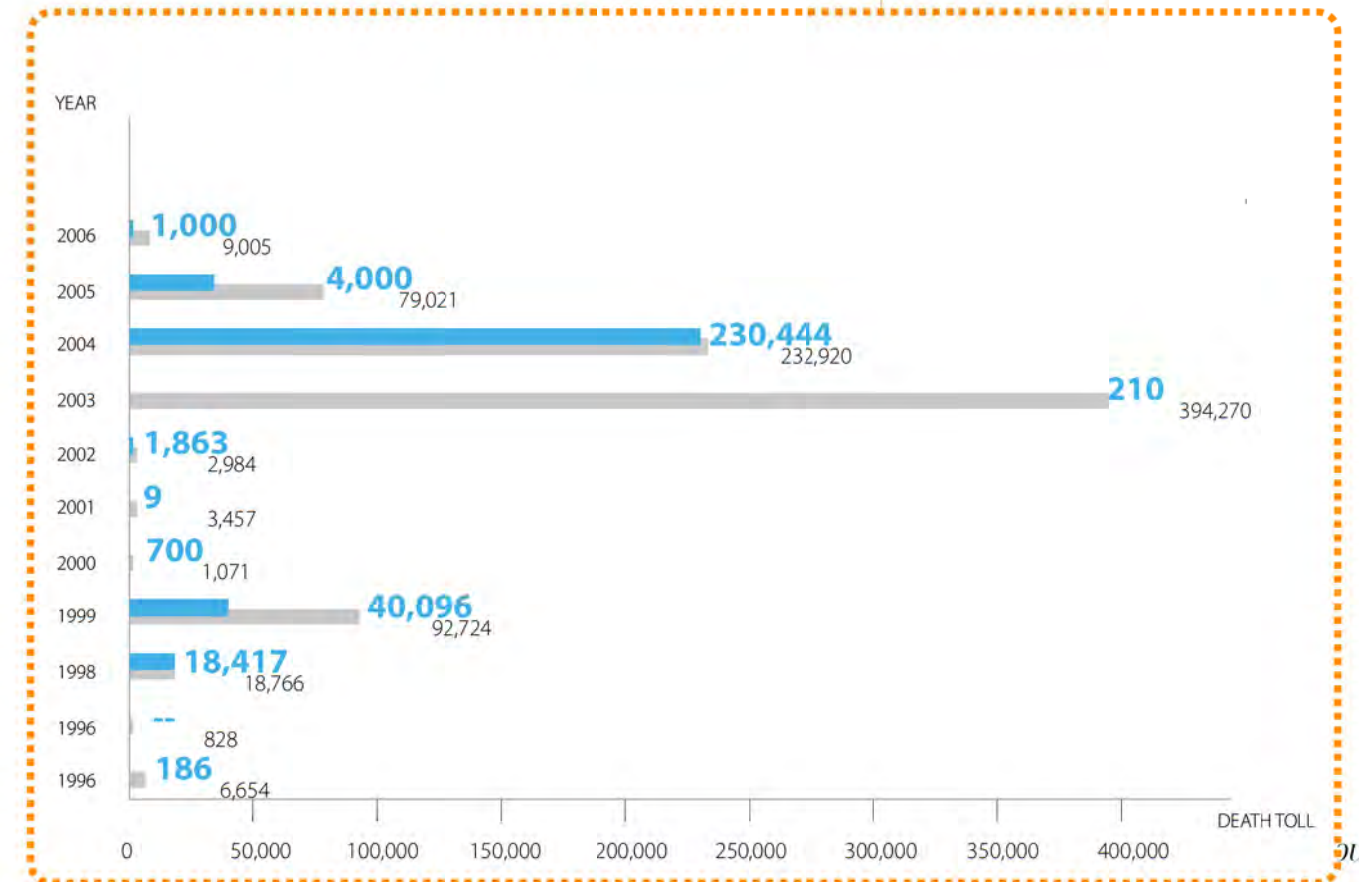
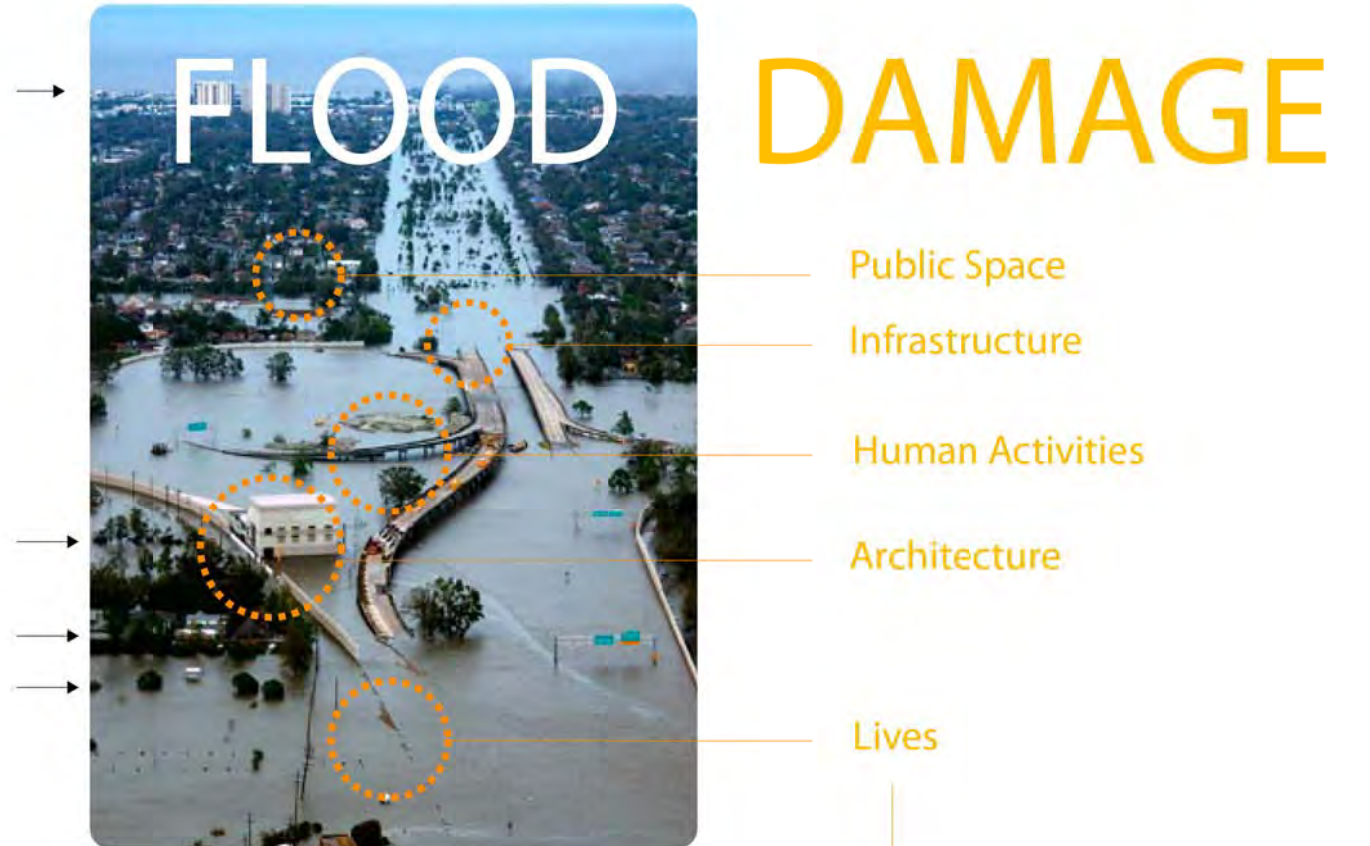
## River Overhrow

Rock River, Wincosin(2004)  
 Flood covered the downtown area



## Tsunami

Indian Ocean Tsunami(2004)  
 Death:300,000  
 Damage: \$950 billion



**OUA / Global Climate Change**

# Opportunities/ Financial Strategy

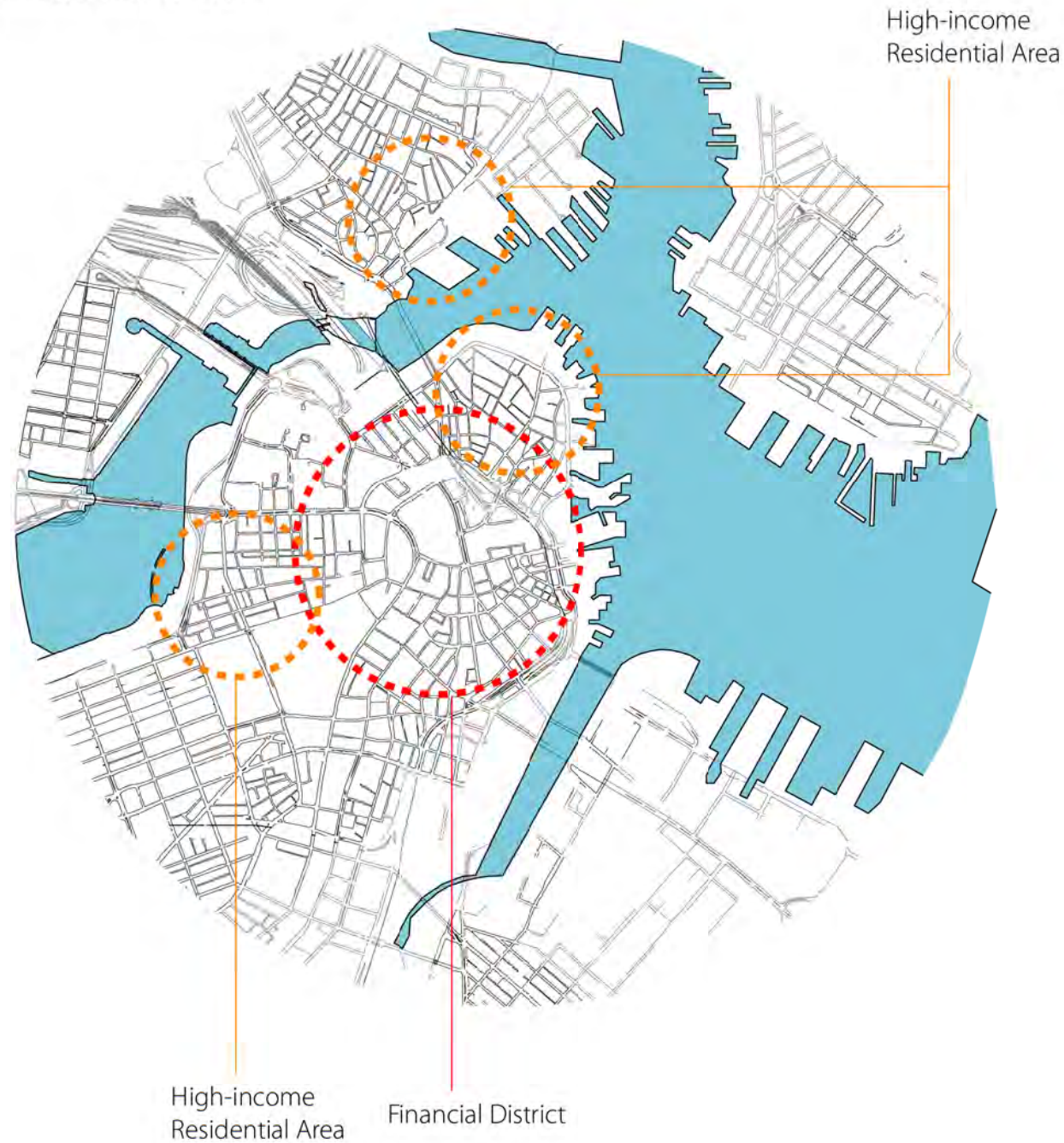
OUA/DGC takes Boston as a case study city to develop the planning strategy and architectural ideas for cities to prepare for the future flood.

The Project is divided into various scales:

- 1) Masterplanning Strategies
- 2) Architecture Design
- 3) Flooding Devices

This unsolicited proposal will become a package for FEMA, BRA to re-generate ideas on cities.

# High-Tide Condition



Average High Tide  
Happens twice a day

+ 4'8"

Mean Sea Level

# Northeaster Storm Surge Condition



Northeaster Storm Surge  
Happens a few times during most years

+ 2'6"

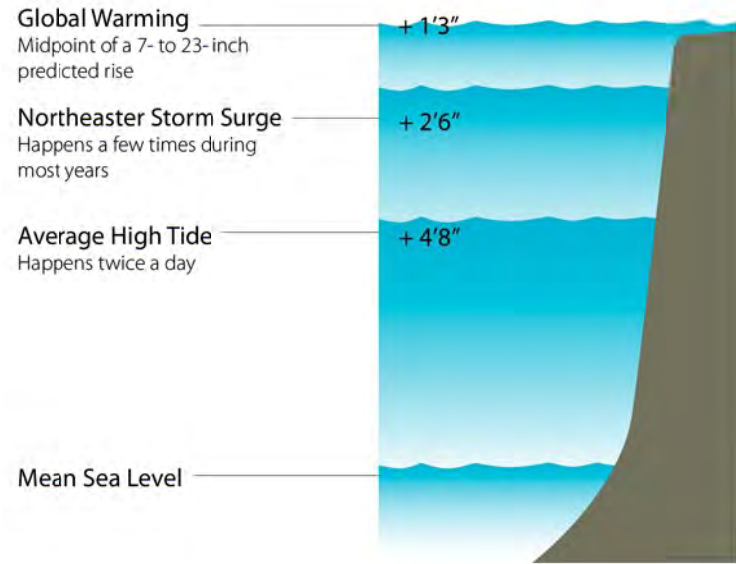
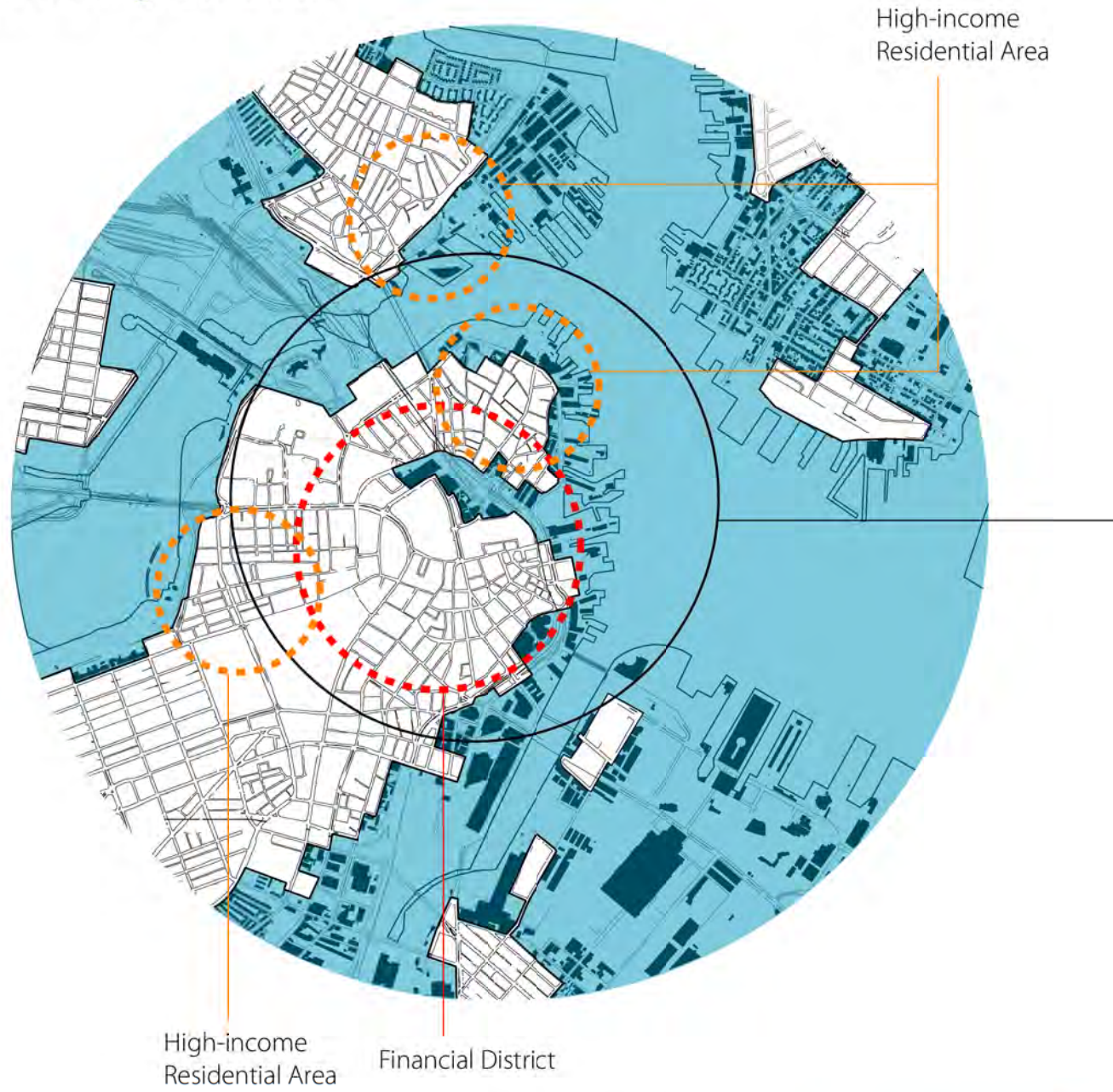
Average High Tide  
Happens twice a day

+ 4'8"

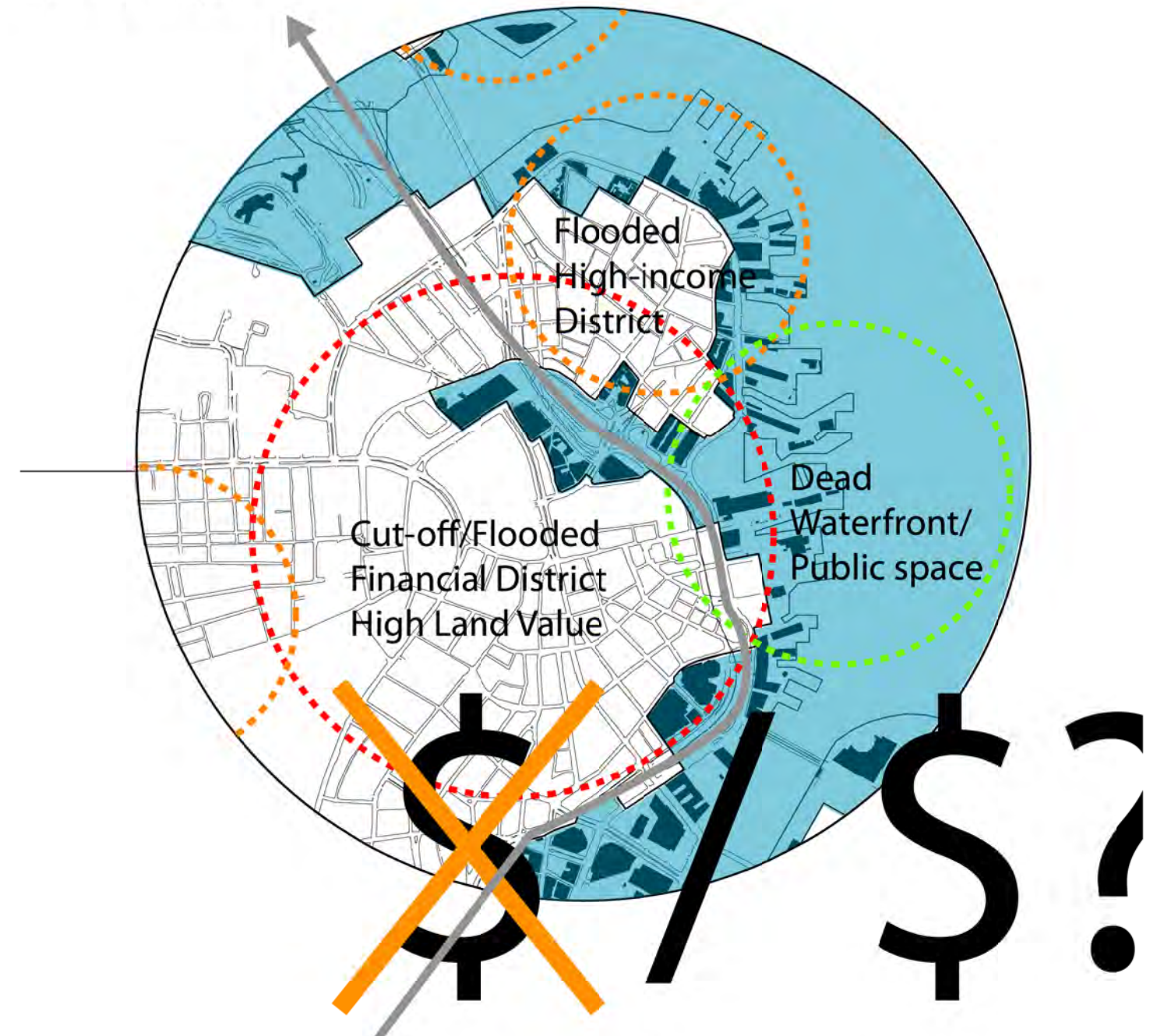
Mean Sea Level



# Global Warming Condition



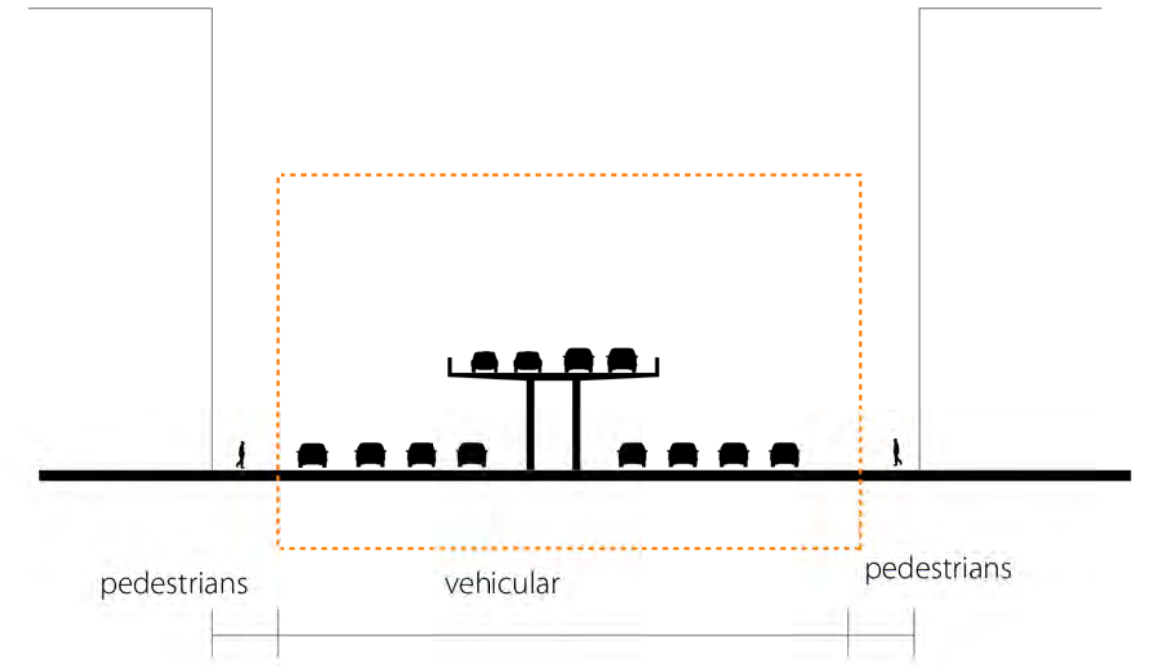
# District Analysis



**Central Artery (Big Dig)**  
 -currently a wasted space which cut off the financial district from the waterfront, lower the Land Value. However, lots of money is input to maintain the facilities.  
 -when it is flooded, the infrastructure will not be functional because it is not designed to cater the flooding condition.

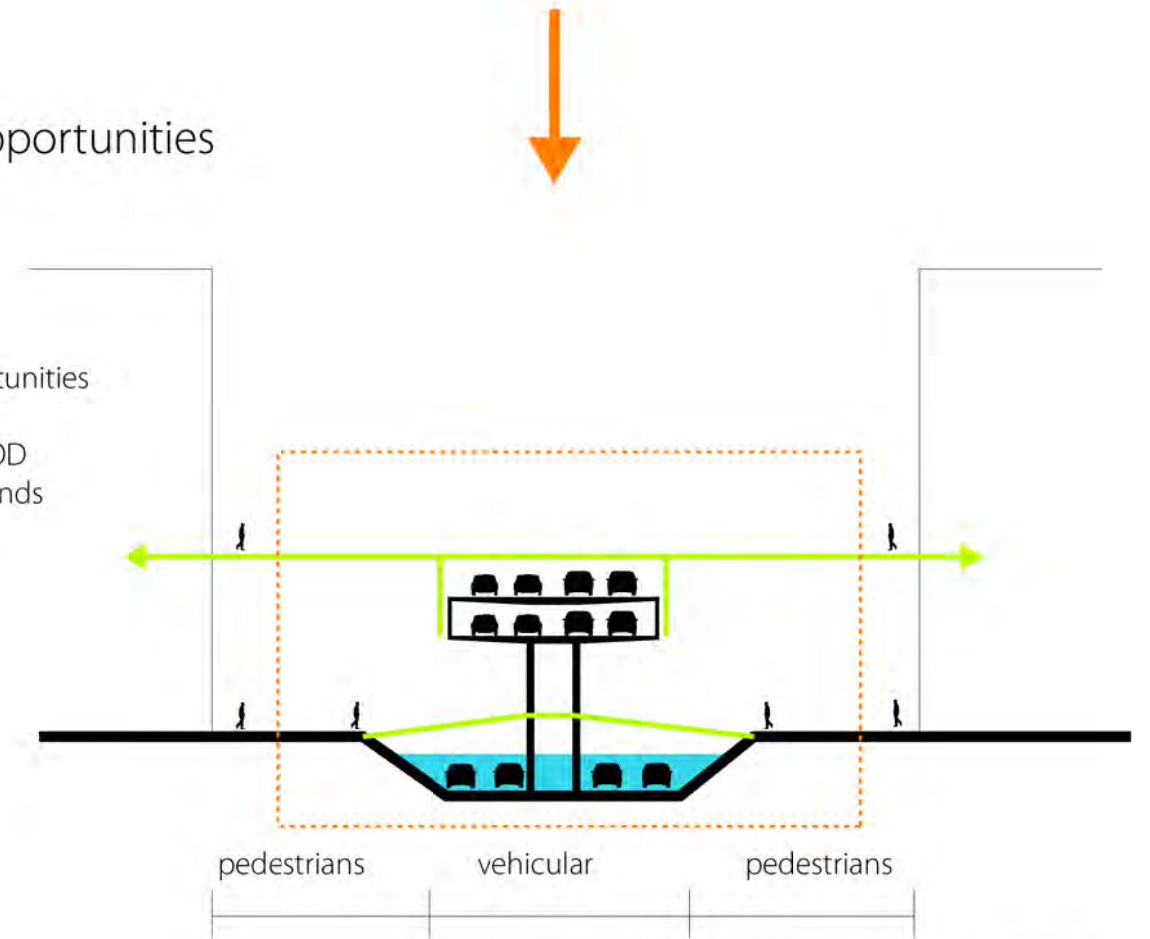


Current Condition

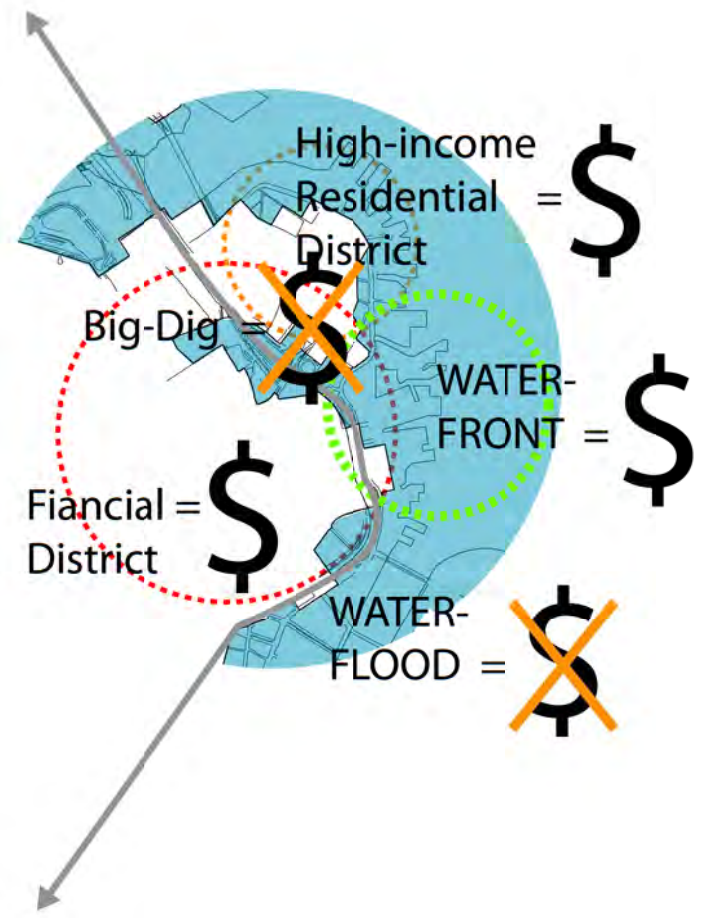


Re-inventing Opportunities

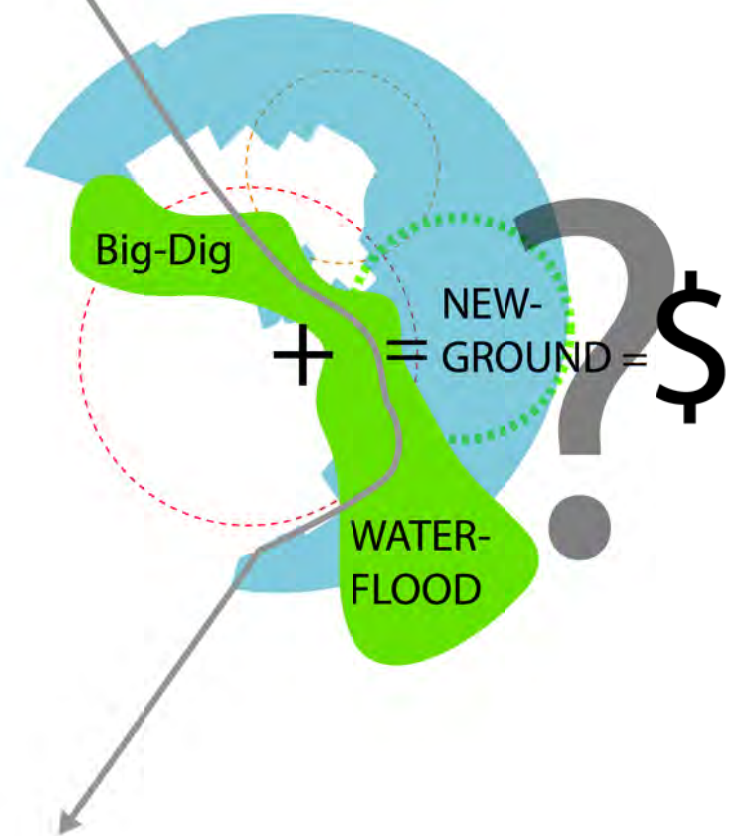
More Ground for Opportunities  
 Less wasted space  
 Preparation for the FLOOD  
 Re-connecting the grounds



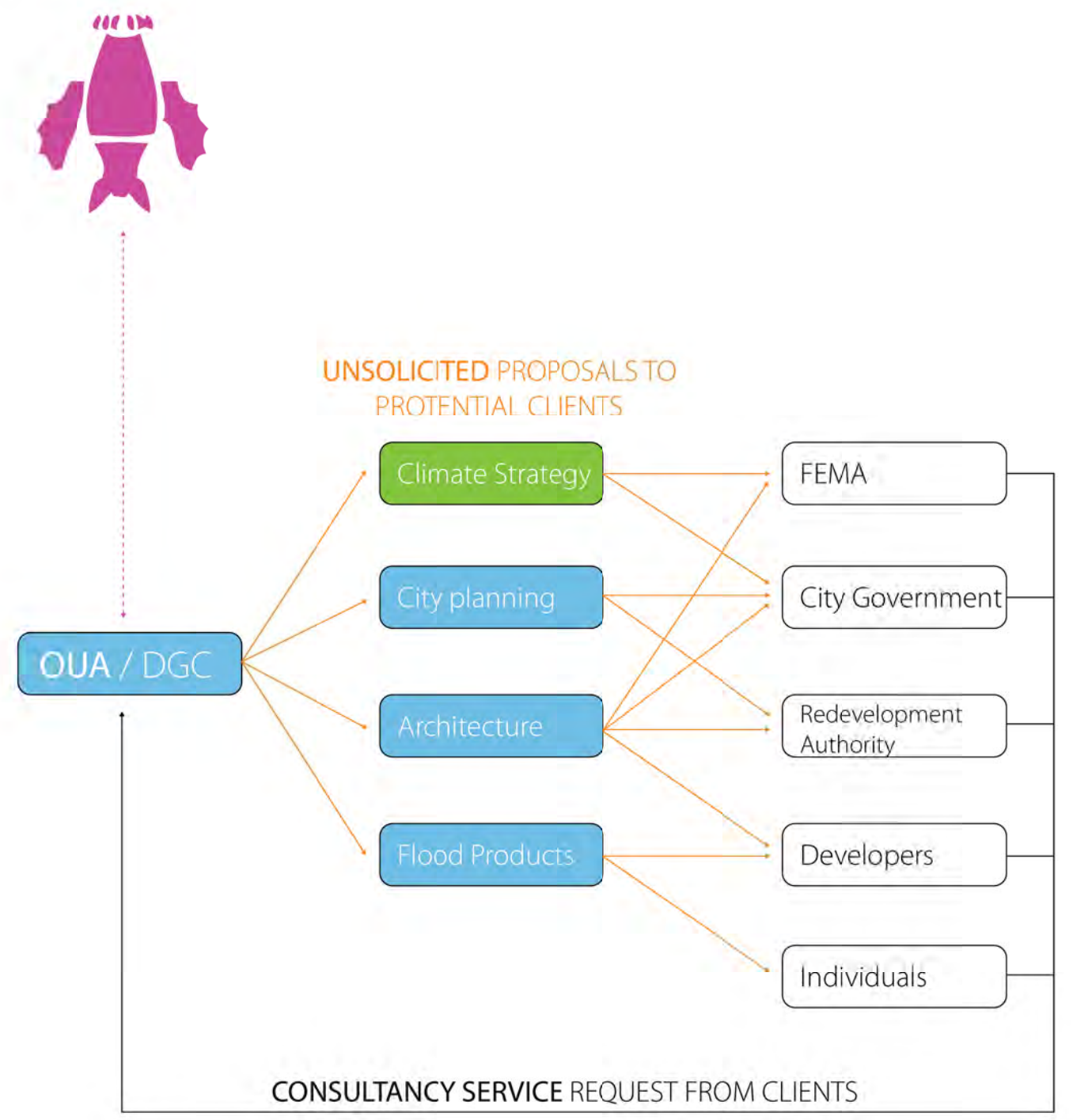
# Financial Analysis



# Opportunities in Flooding



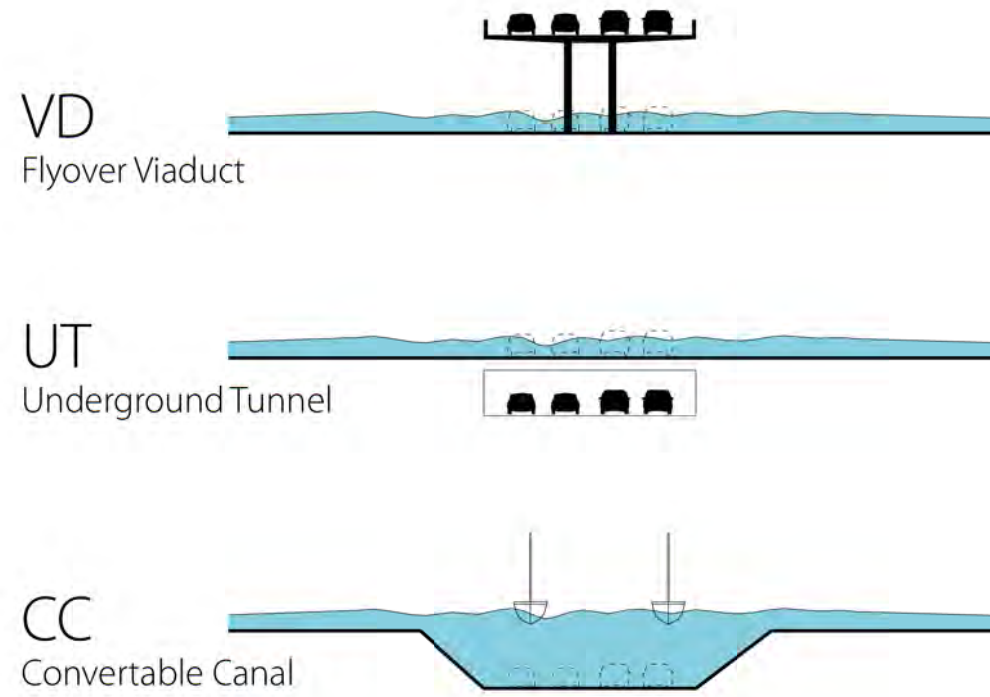
# Financial Model



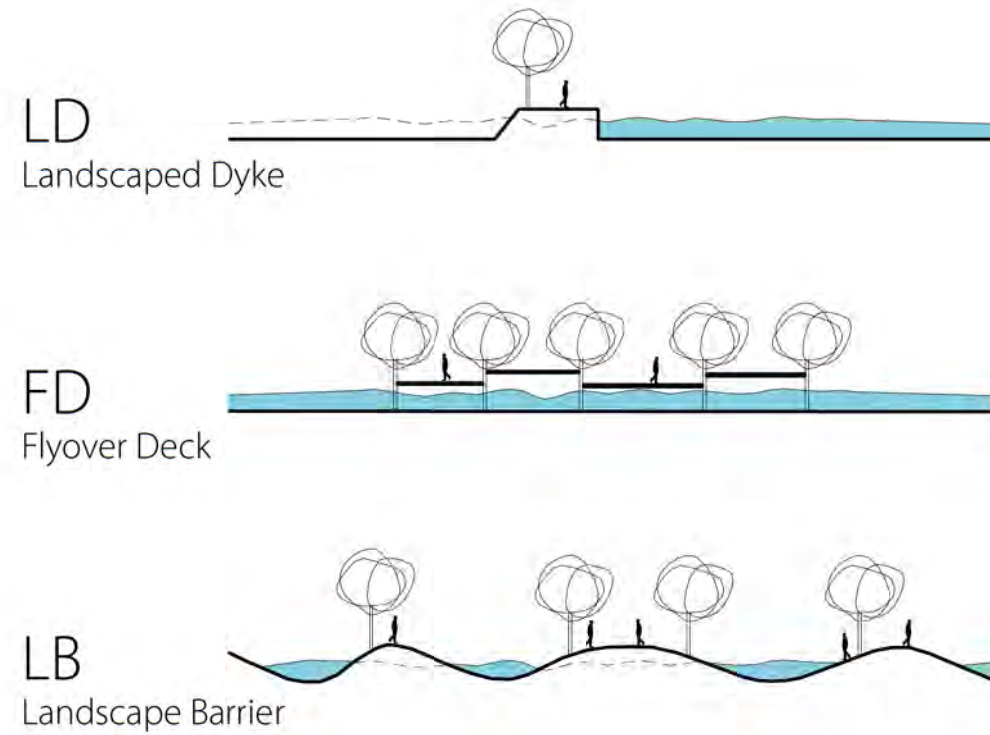
**OUA / Global Climate Change**  
Design Strategy  
for Flooding

RE-Inventing the New Ground/New Opportunities

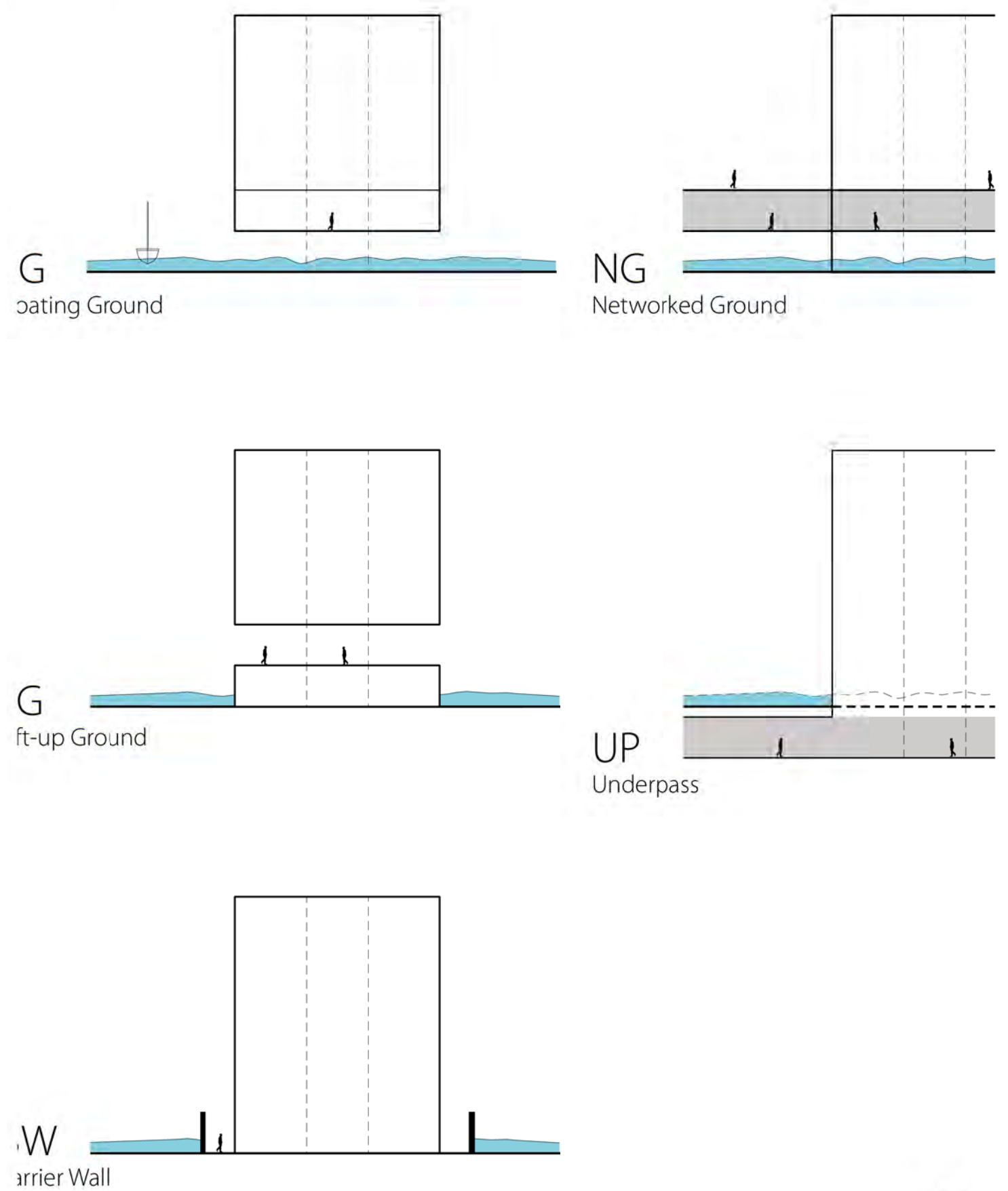
## Infrastructure Strategy



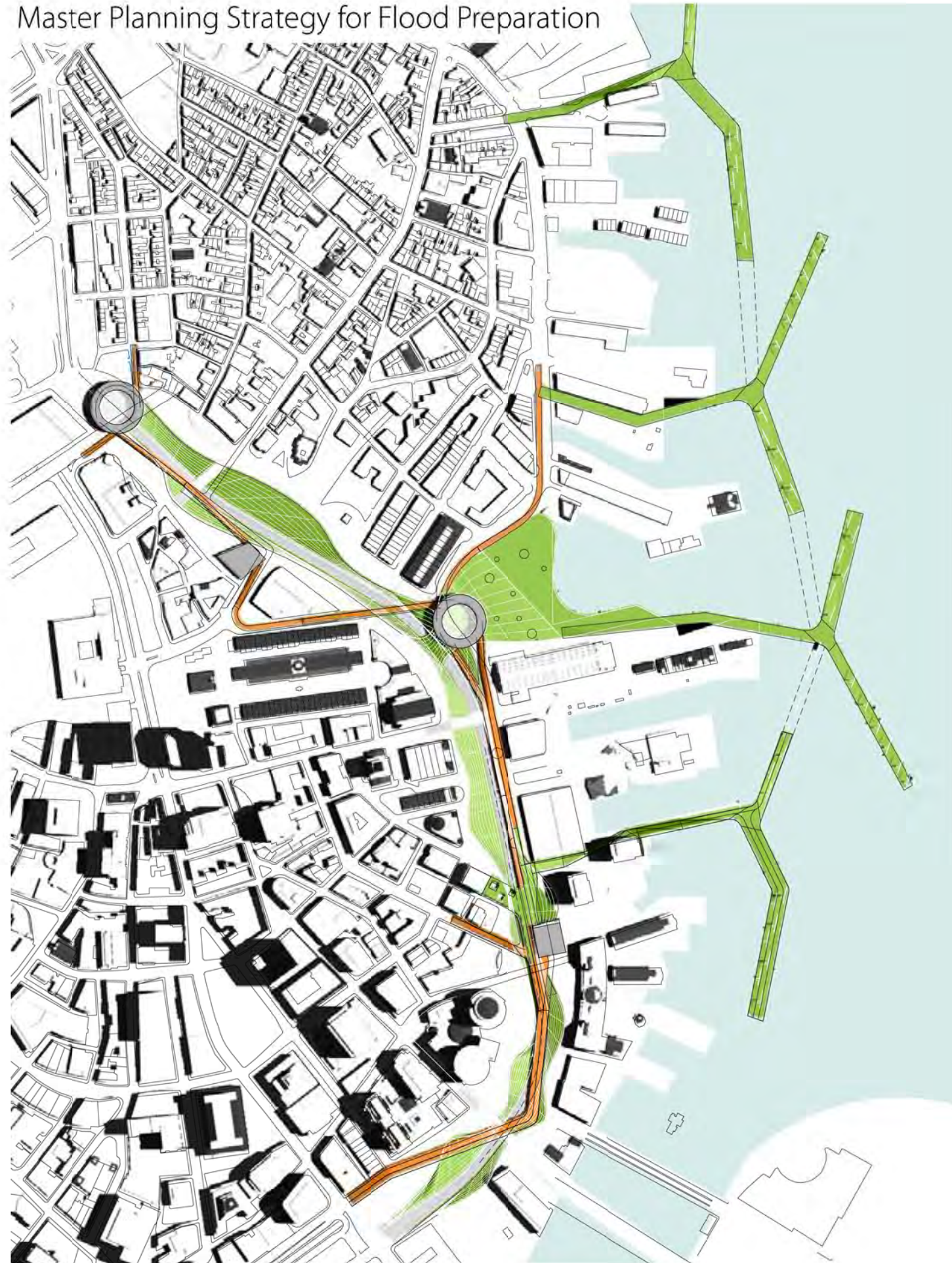
## Landscape Strategy



## Building Strategy



# Master Planning Strategy for Flood Preparation



Potential New Developments



New City Landmark



Hanging Garden



Connected Urban Park



Normal Day with Average Water Level



Northeaster Storm Surge

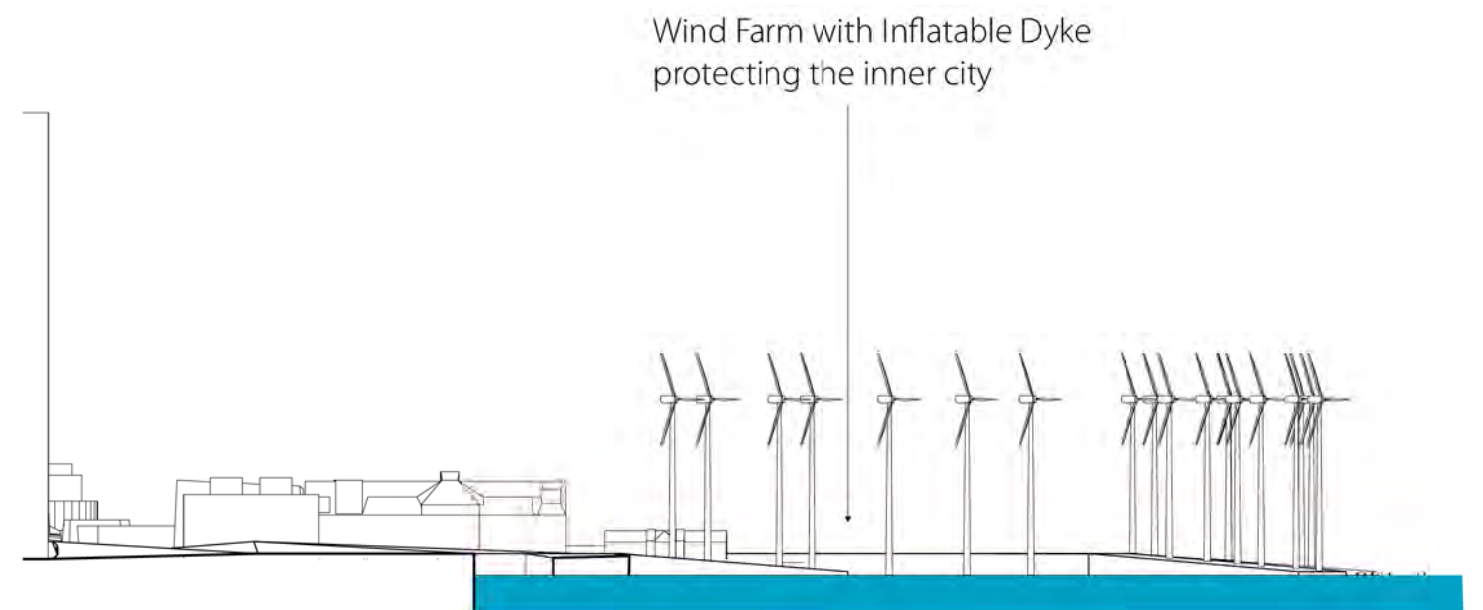
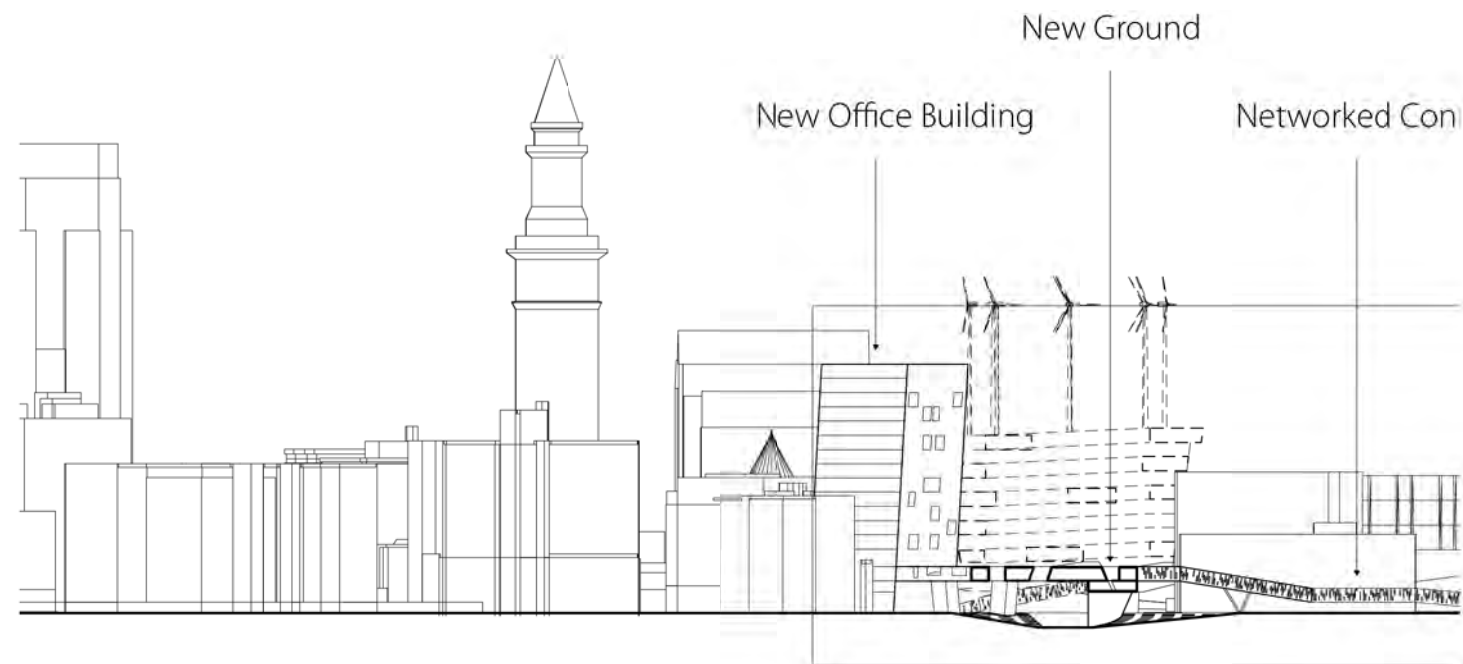
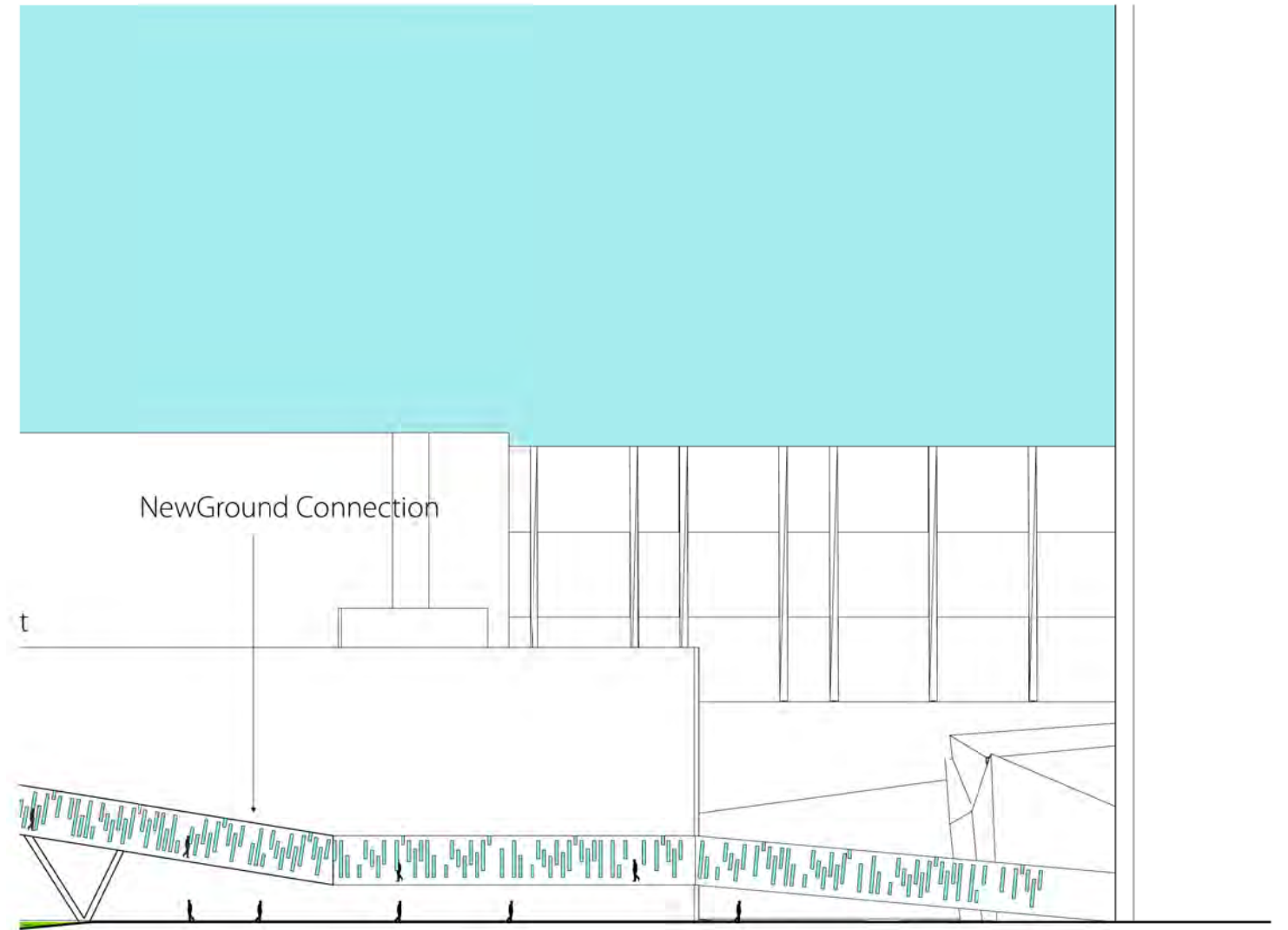


Canal Store the Flood Water

Inflatable Dykes for Protection



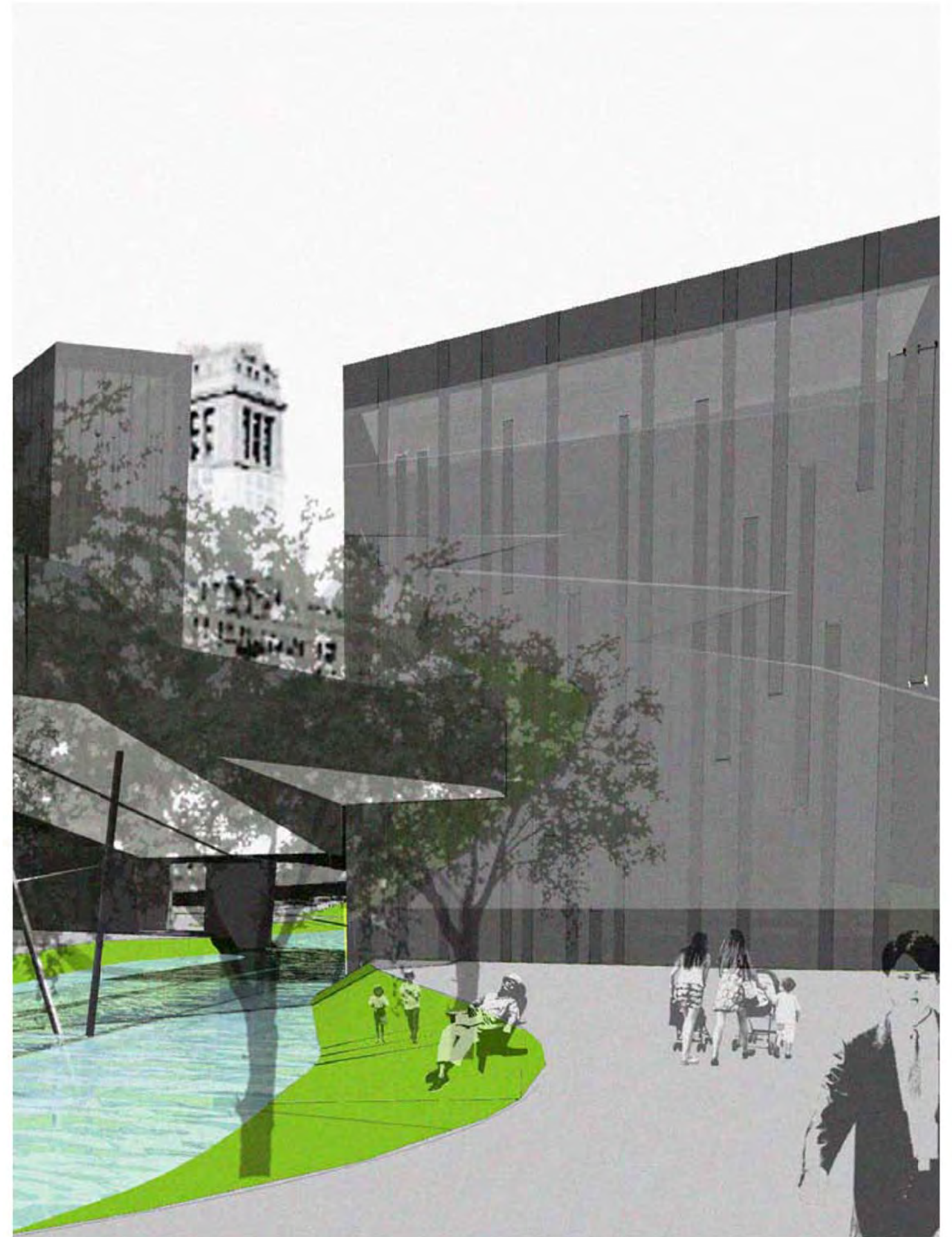
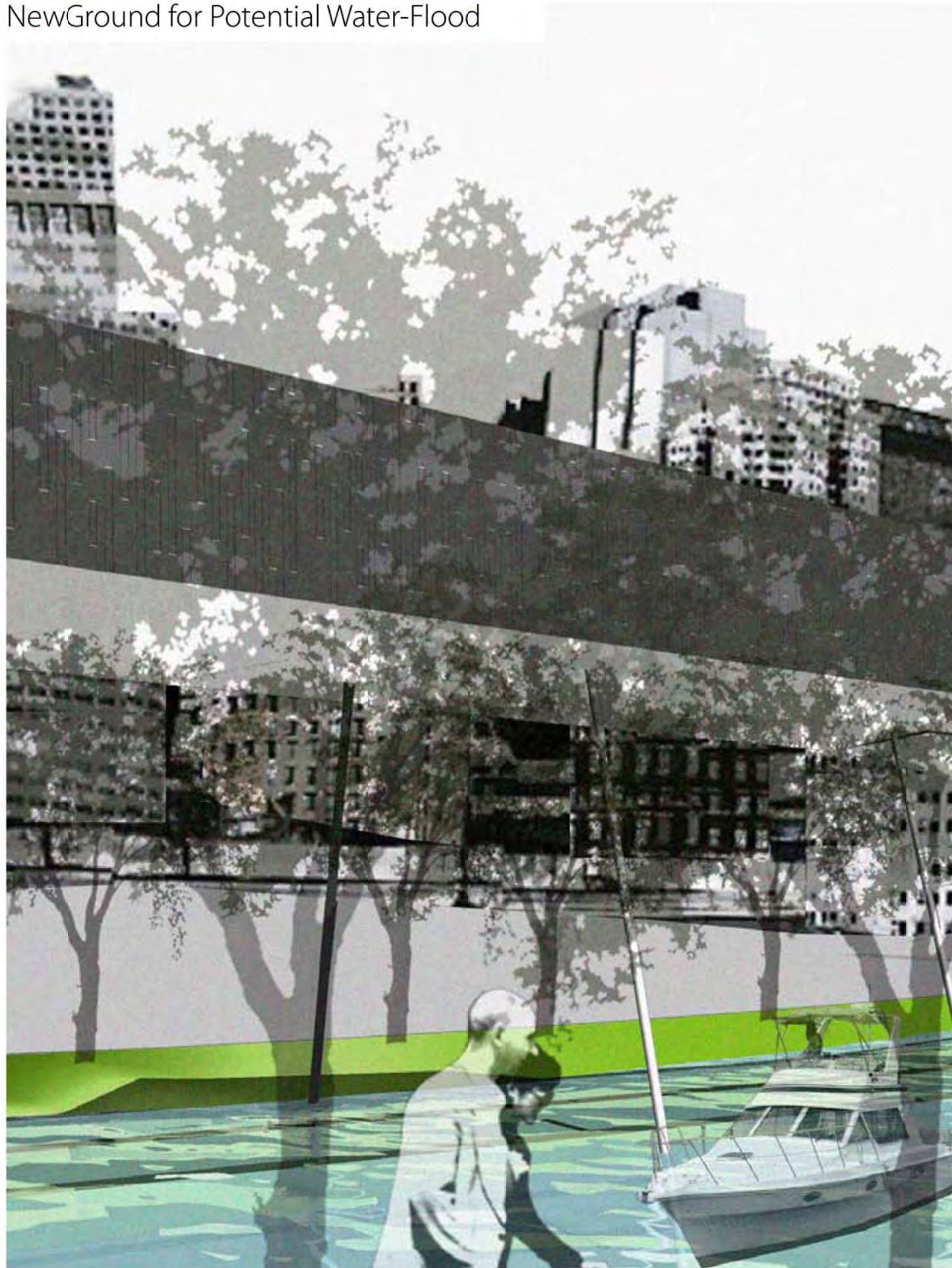
# Architecture and Landscape Strategy for Flood

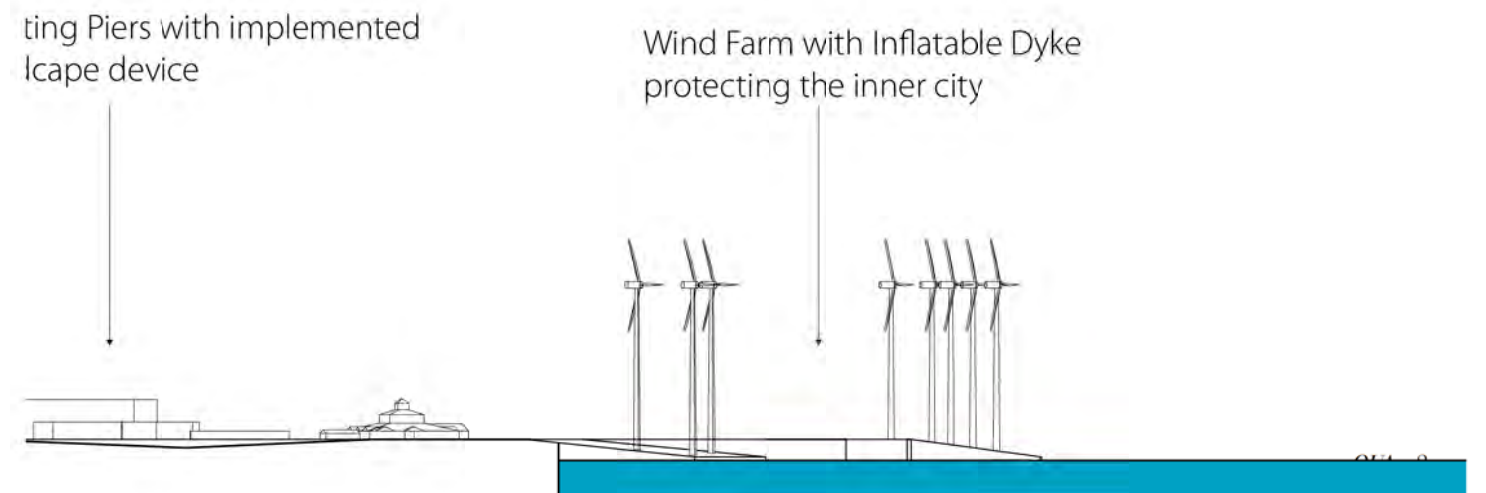
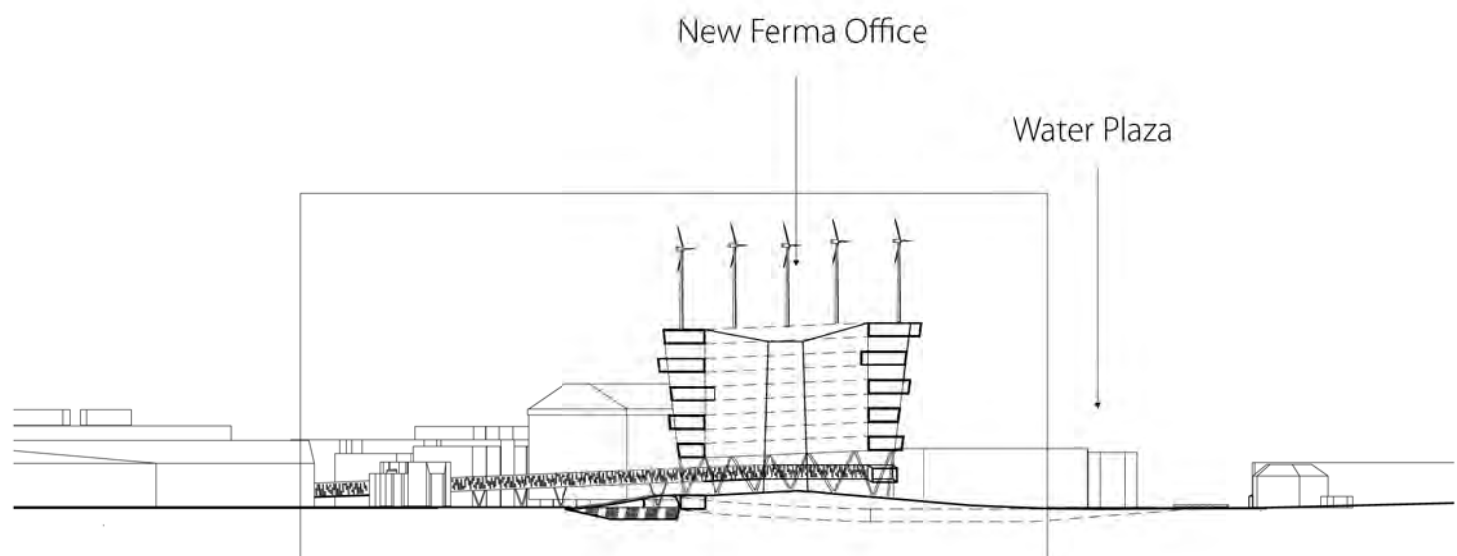
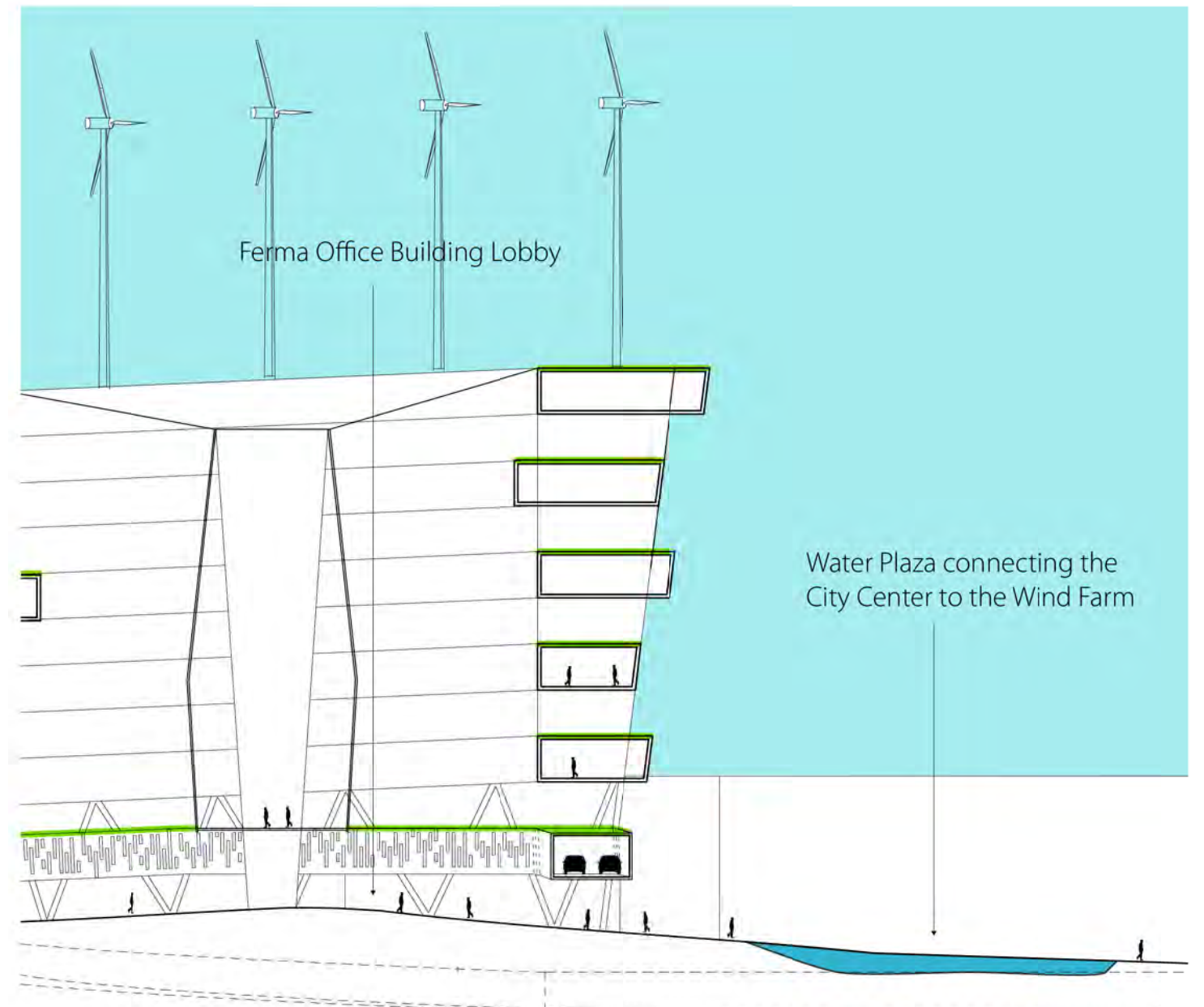
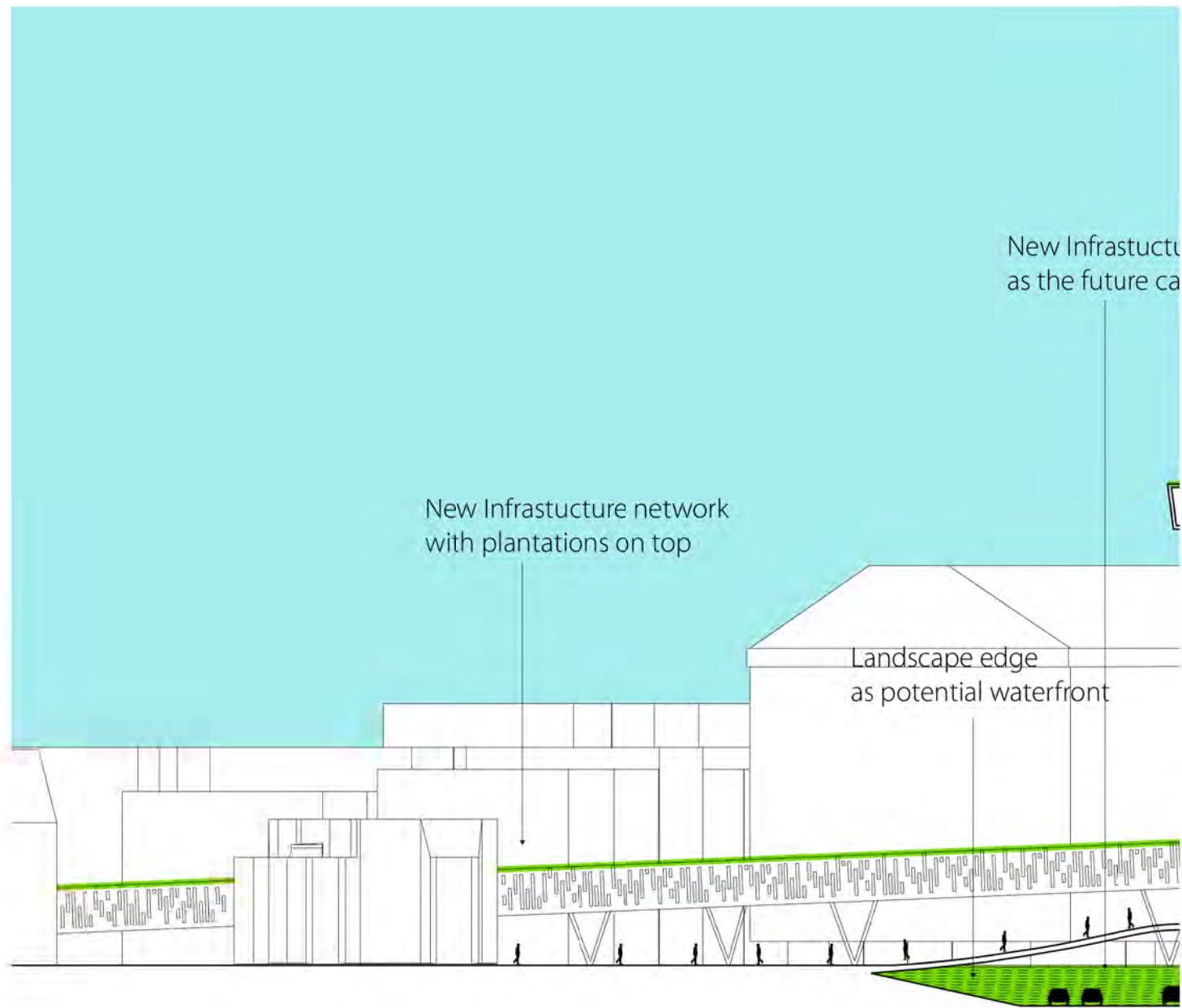


NewGround for infrastructure and Public space

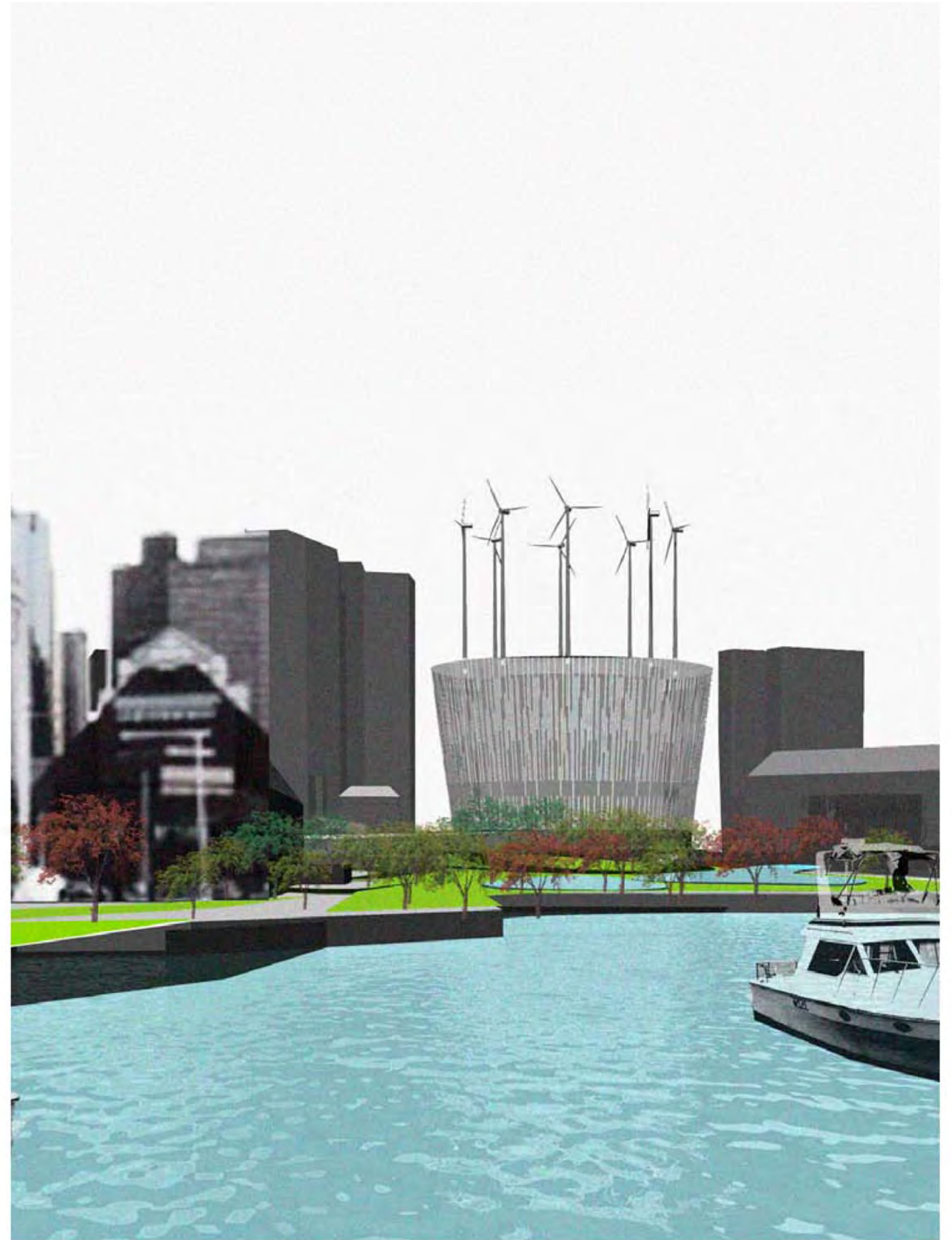


NewGround for Potential Water-Flood





NewGround for Existing Water-Front



# dRp

*department of (re)practicing*

ARCHITECTS VIOLATING THEMSELVES

## what does DRP do?

DRP searches for creative ways of reorganizing the building process in order to rescue it from convention, boredom, and normalcy and to increase its efficacy. In so doing, DRP also responds to an urgent need for improved communication amongst the many people involved in making an architectural project.

## what is DRP's strategy?

DRP aims to develop...

1. a new psychology of design, that will lead to
2. a new economy of design

## how is DRP unsolicited?

DRP pro-actively fosters communication among disparate parties involved in architectural production. DRP treats the design process in and of itself as a project that needs architecting; thus, it calls on architects to re-think and adjust the way that they work. DRP's questioning of the design process extends to OUA -- Recognizing that even the most transgressive structure, loses some of its edge once solidified, DRP aims to ensure that OUA does not become complacent in its mode of operation --that it continually transgresses its own understanding of architecture.



**the program of free design:**  
research and knowledge produced by architects

**the clients of free design:**  
architects themselves. DRP explores how architects might not only produce architecture, but consume it as well.

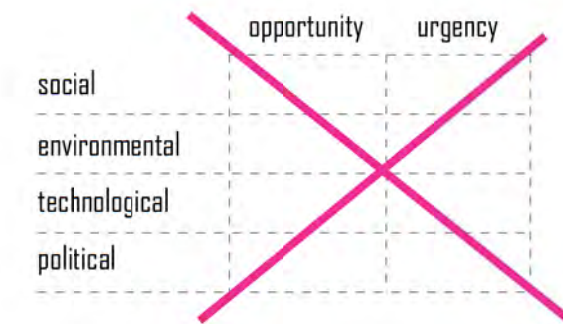
**the site of free design:**  
the field of architecture itself.

**the budget of free design:**  
in delaying that design research is free. DRP assigns a currency value to the creative process.



feature project FREE DESIGN  
audience ARCHITECTS

Free Design is a web based platform that allows architects to publish, share, and invest in design research.



# FREE DESIGN

Rescuing creativity from the burden of convention



***“There is nothing new, of course, about a young architect with giant ambition and a thin portfolio.[.]”***

“[ ]Architecture remains a field where prominence and gray hair are thought to be synonymous, especially by clients.”  
Christopher Hawthorne Architectural Record 05 06

As architects we know this statement to be painfully true. But it not only concerns youth, it concerns anyone with a creative drive labeled as marginal and refusing to settle for the “bread and butter” that the mainstream has to offer.

Sadly clients rarely trust such architects. To convince clients, one needs a rich portfolio and demonstrated professionalism in built projects. To achieve this, we set out on a journey that inevitably starts with small projects, small honoraries and short design times. Believing that creativity should not be restrained by the size of the project, most accept to work at a loss in hope of that eventual prominence and gray hair.

How can we break away from this cycle? Can we reward ambition, talent and creativity regardless of professional history and status? How can we liberate innovation from the clutches of the all too familiar expectations?

FREE DESIGN proposes a solution.



**FREE DESIGN** is a web based platform allowing architects to publish, share and fund design research.

#### OUR AIM IS

- To liberate creativity from profitability by separating design budget from construction budget.
- To redefine the value of design by setting up a trade and funding platform rooted within the design community.
- To promote the continuity of knowledge by actively moderating sharing and publication.
- To open the accessibility of good design by lowering, if not eliminating, the cost of design to the client.

CLIENT MEETING  
BUILDER BUDGET  
HONORARY  
PROJECT SITE DESIGNER  
PUBLICATION CREATIVE PROCESS  
RESEARCH

**PROGRAM**  
**BUDGET**  
**CLIENT**

DRP applies architectural structure to the practice of architecture itself. Thus we begin by defining four cornerstones.

**Client** - Designer

By setting the designer as a client, the project explores how architects can not only produce architecture but consume it as well.

**Program** - Project, Publication, Honorary, Research

The structure of sharing, publishing and funding design research and knowledge justifies the project.

**Budget** - Research, Creative Process

By posing design as free, we assign a value to the creative process as a currency in itself. Rather than creativity being dependent on conventional budget, it now is the resource that fuels the FREE DESIGN structure.

**Site** - Client, Builder, Budget, Honorary, Designer

Our intervention is grounded in the profession of architecture itself, spanning from client to architect to builder.

## Where FD can help.

Architecture without a client - material and product innovation



WORK Co.

Prototype integration and development



ARO

Micro projects - prototype as architecture



Ball Nogues

Small scale projects (<1 Million USD)



## How FD can help.

**Fund**



Large scale foam construction project. Unbuilt, left at conceptual stage. FD can fund this concept to develop a prototype. The resulting material knowledge can then be translated into other projects by investing designers.

**Share**



Prototype partition construction. Design and prototype, no published project integration. FD can publish this project in the archived section and let the firm benefit from free access to other projects. If accessed, it can also generate many applications by other designers.

**Learn**



Installation. One year of development, two weeks construction. If this project had used FD, it could have drastically cut development time by accessing existing archived material, like this Officeda project:



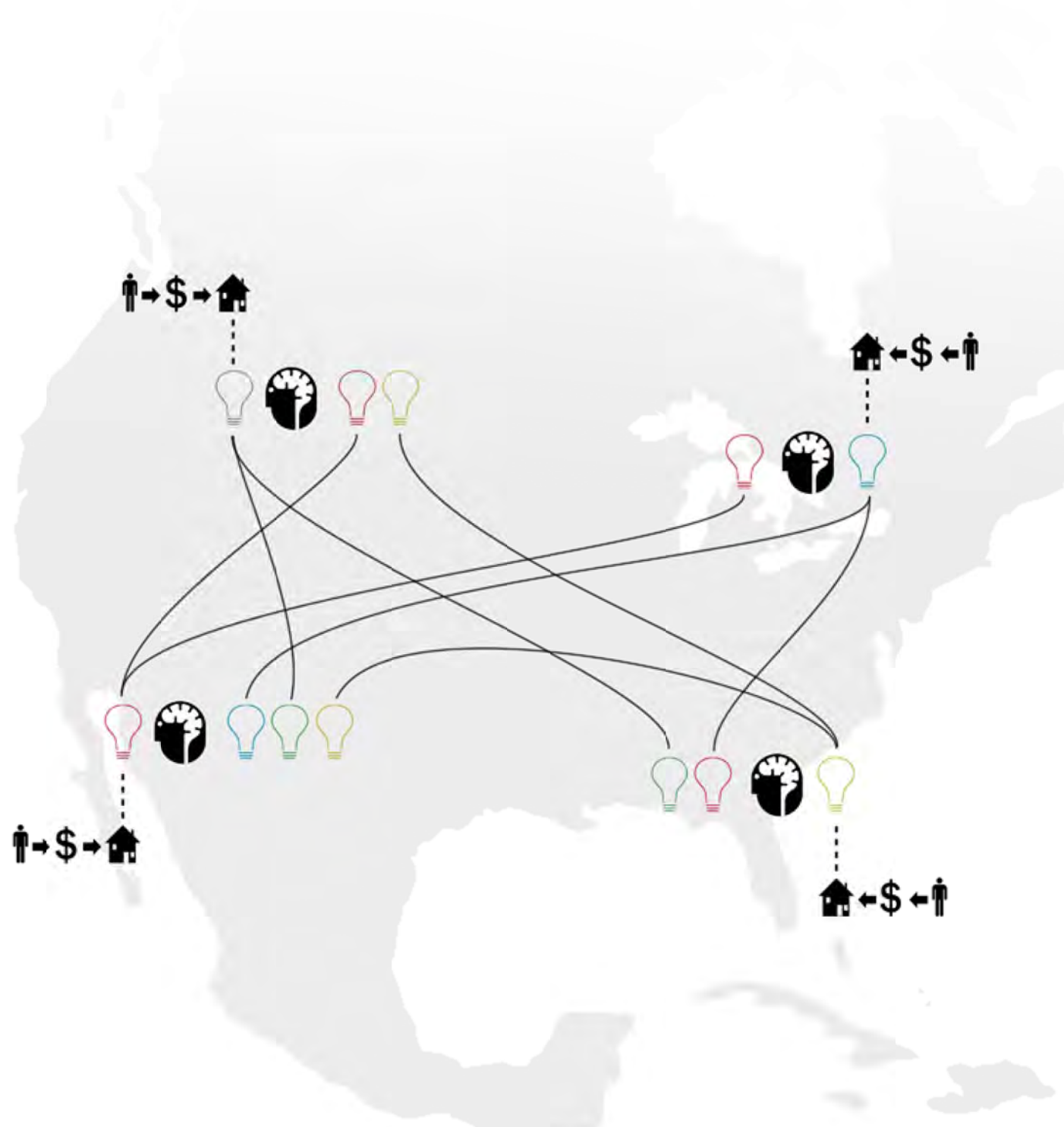
**Devide**



Larger scale projects can benefit from partial funding. FD can fund a part of an architectural project that requires particular design investigation, thus focusing resources where they will be most fruitful. Larger scale projects can lower their design costs by accessing multiple archived projects.

## Creativity as Currency

When we think of sharing designs, open source platforms such as Open Architecture Network come to mind. But its difficult to make sure that shared and posted information is at all useful. If the goal of FD is to transfer knowledge we must ensure the quality and pertinence of the information being accessed.



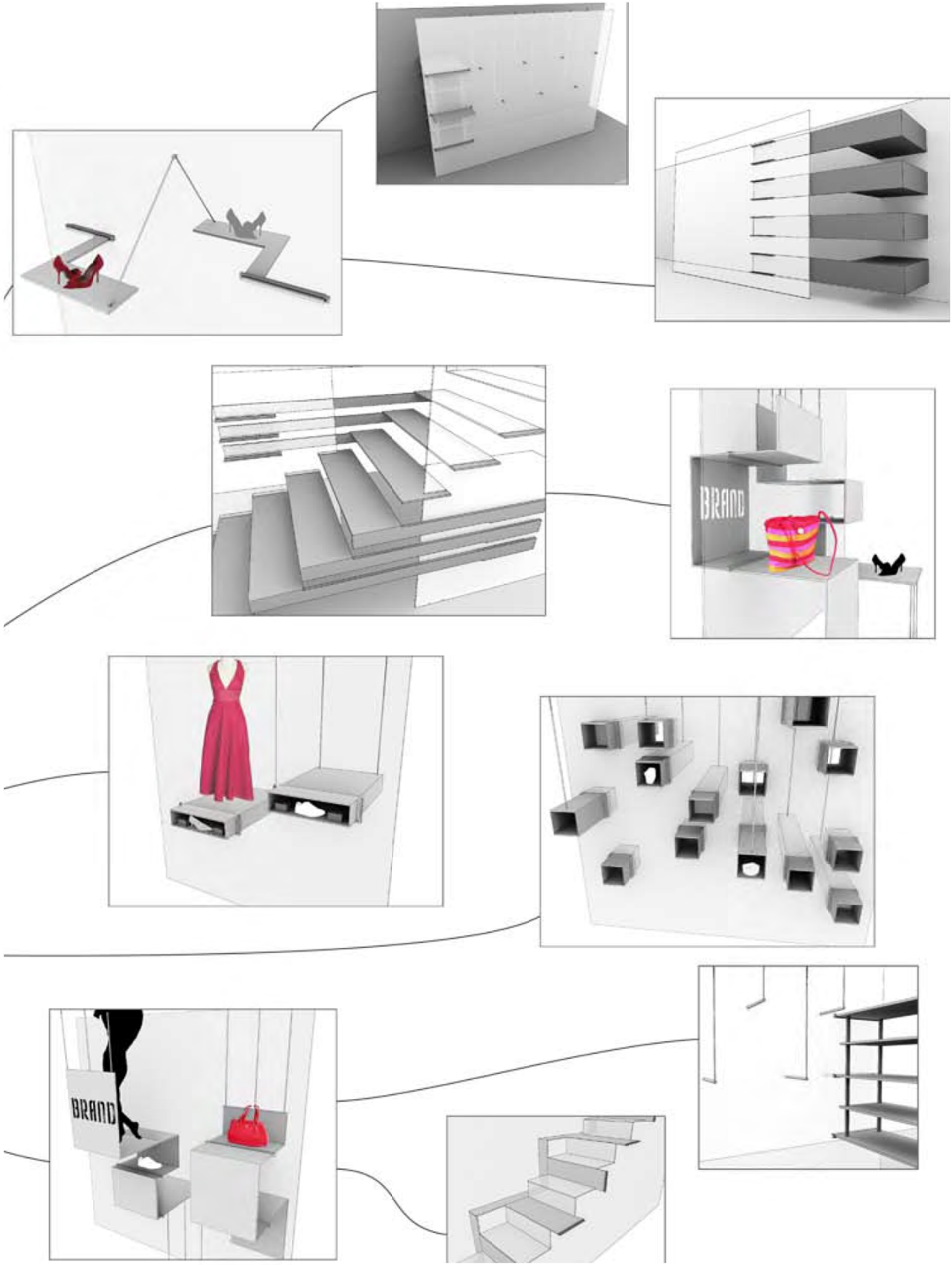
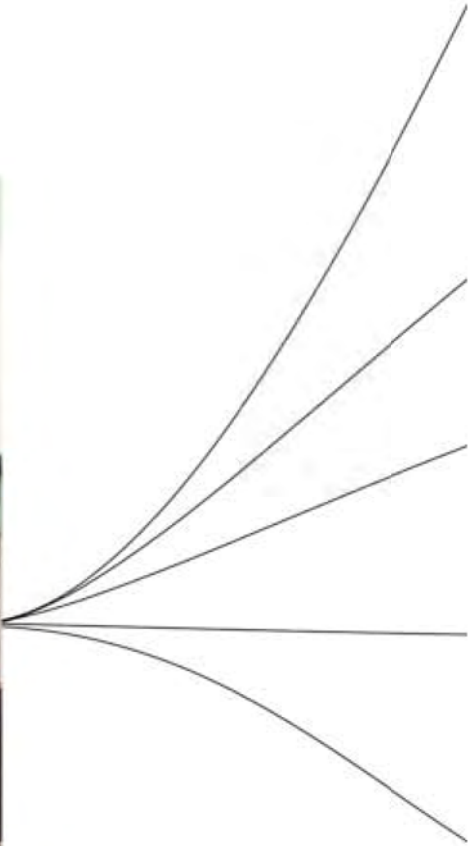
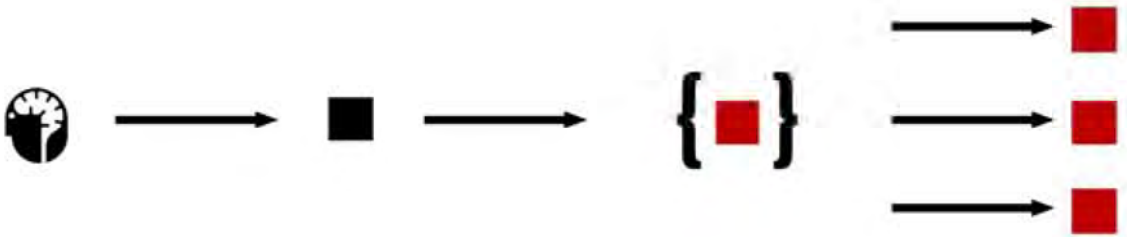
## Why architects are needed.

The real value of published projects lies not in the details of the finished product, but rather in the failures, limitations and revelations of the development process. Within a firm, this accumulation of information gets sometimes misplaced in the process. In some cases, this oversight in organization places knowledge on the shoulders of individuals and not documents. If FD is to archive and trade project knowledge through the medium of documents, it must parse and organize information efficiently. We as architects are best suited for the job. To group scattered information, extract useful data, and break down projects into digested components, the FD staff will actively review every submission that goes into the library of projects.



# Transfer of Knowledge

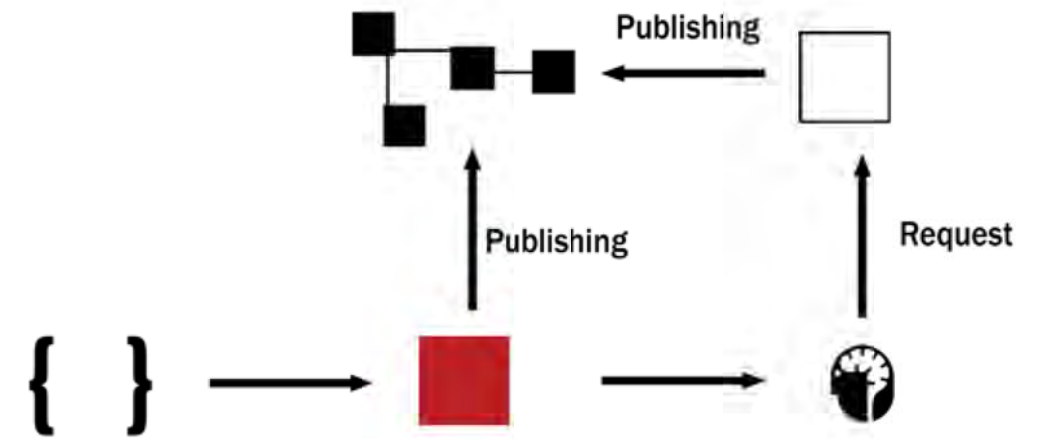
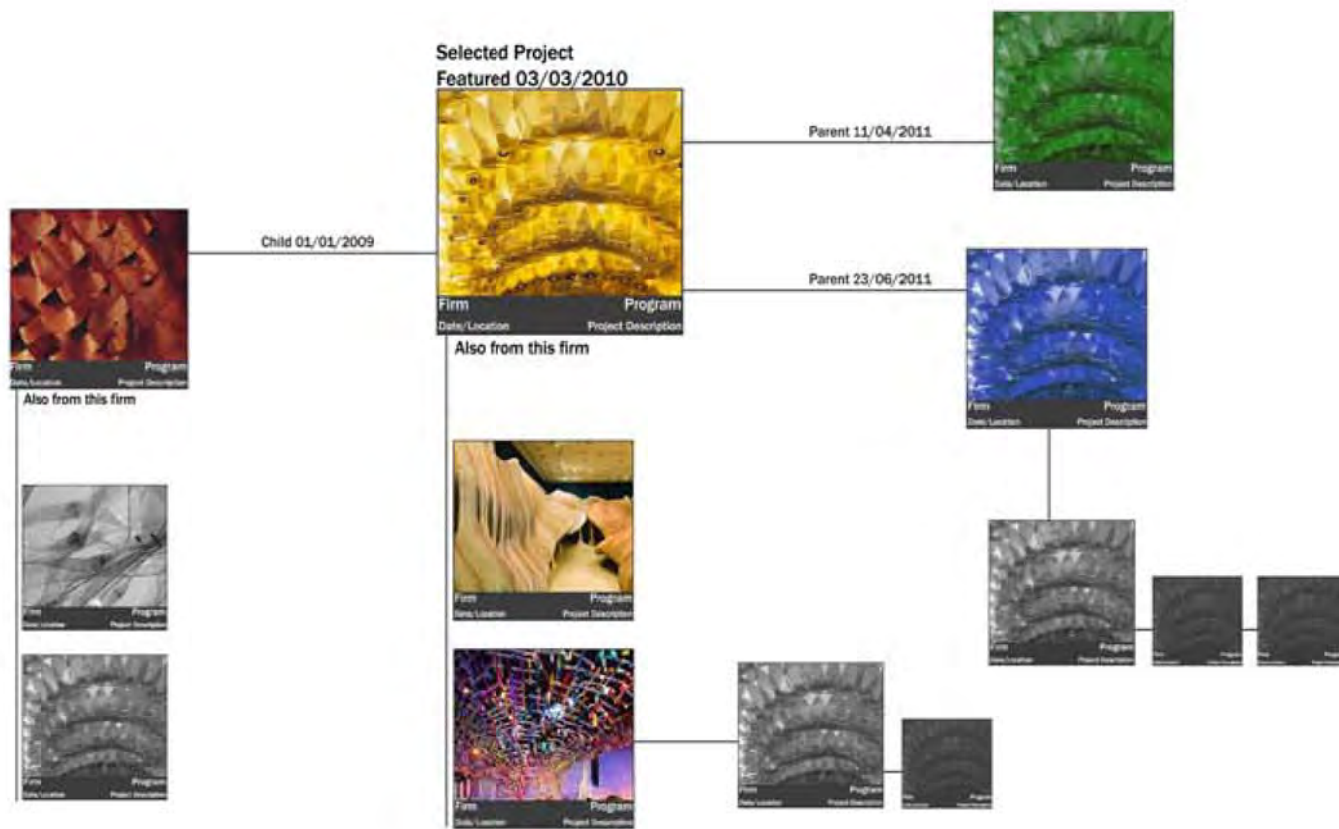
After FD archives a project, it can be accessed and in turn help in generating a multitude of projects by other designers.



# Publishing and Access

When a project is archived in FD, it goes into the global family tree. To access an item, a designer must first submit the project that will benefit from it. The transaction is recorded and both parent and child appear in the tree.

This representation and sequencing places design within an interconnected network of discrete pieces of knowledge. We thus recognize individual contribution to architectural innovation.



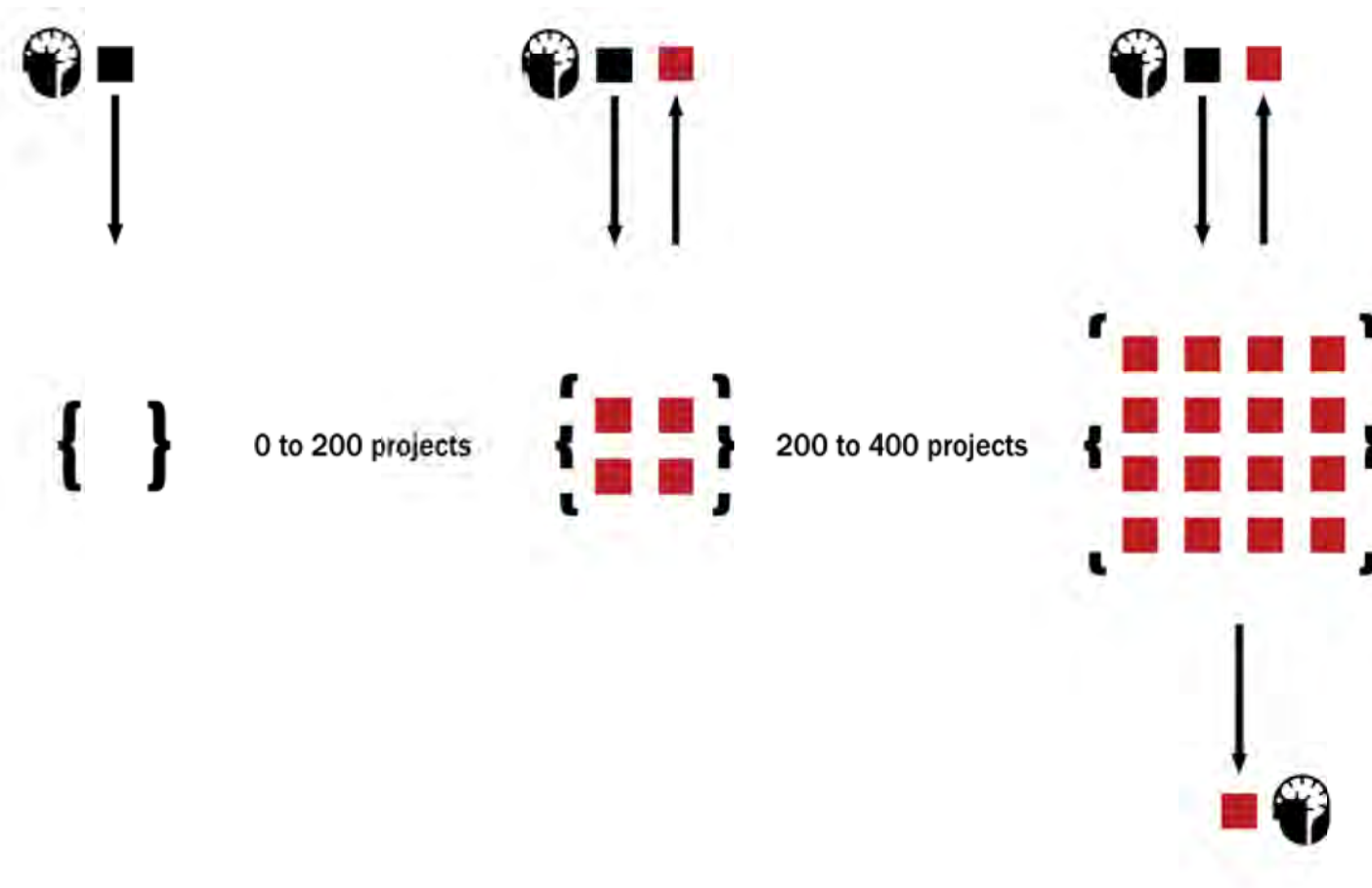
# Implementation

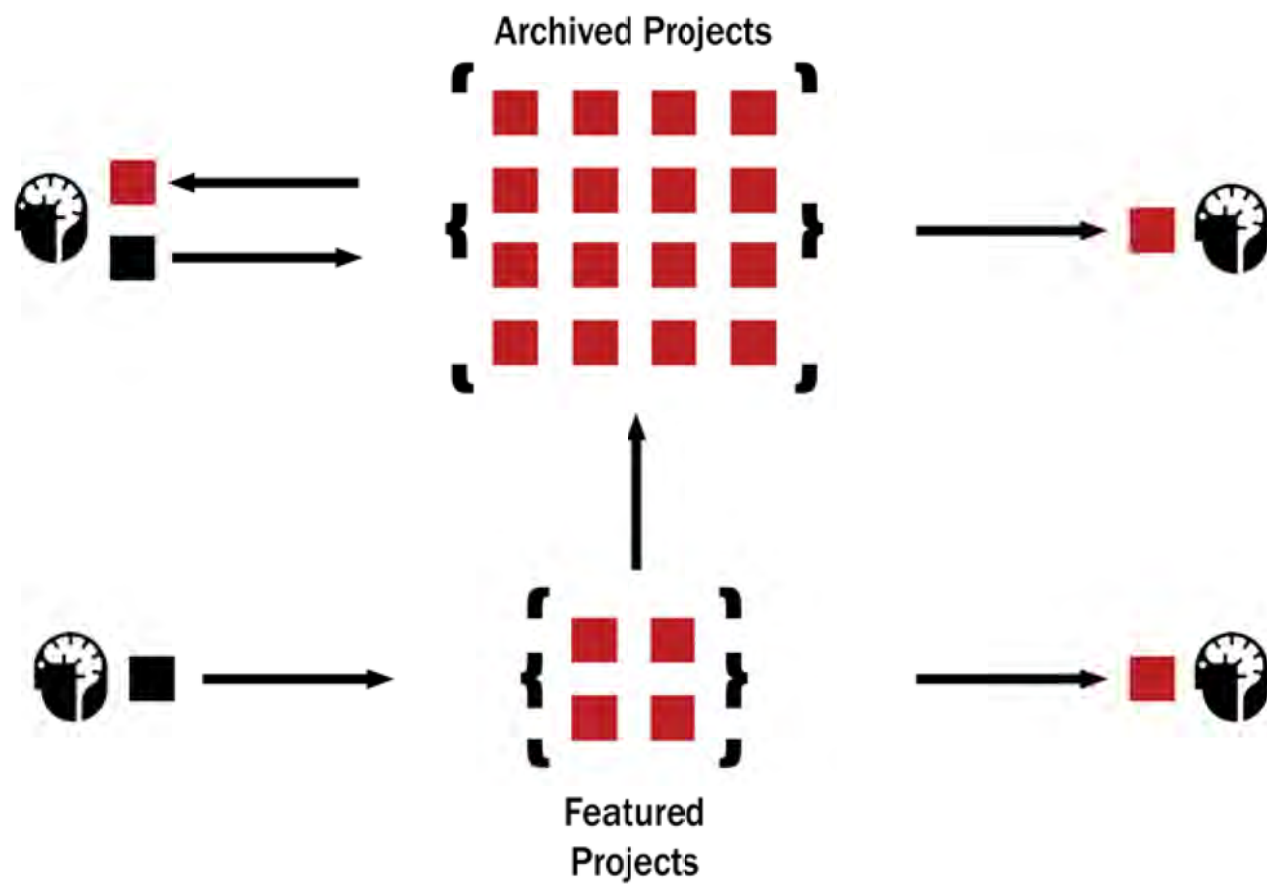
## The first six months

For the first 6 months, FD will be a free service. The goal for this period is to amass a collection of at least 200 projects in the library (400 after 1 year). DRP will staff two employees to establish liaisons with prominent firms doing innovative design research and catalogue their submitted projects. The department will also spend one month to develop a website from an open source database/ package. This process will demand around 30 000\$ in labor costs and minimal material costs.

Access and submission of projects will be on a trade basis and OUA will not receive a monetary return at this point. When a firm submits one project, it will have free access to three archived ones. These credits can be used at a later time when the library expands. As a further incentive, the submitting firms will have an opportunity to get monetary compensation. Firms who do not have projects to submit can pay a nominal fee (100\$-200\$) to access archived projects. This fee will go directly to the firms.

To increase traffic and awareness, FD will have secondary free services open to the public. As with Open Architecture Network, students will be able to post projects onto the platform and benefit from a free forum for architectural discussion. FD will go further and incorporate these freelance projects into the tree of archived professional projects. As a result, students and professionals can connect and participate in mutual exchanges.





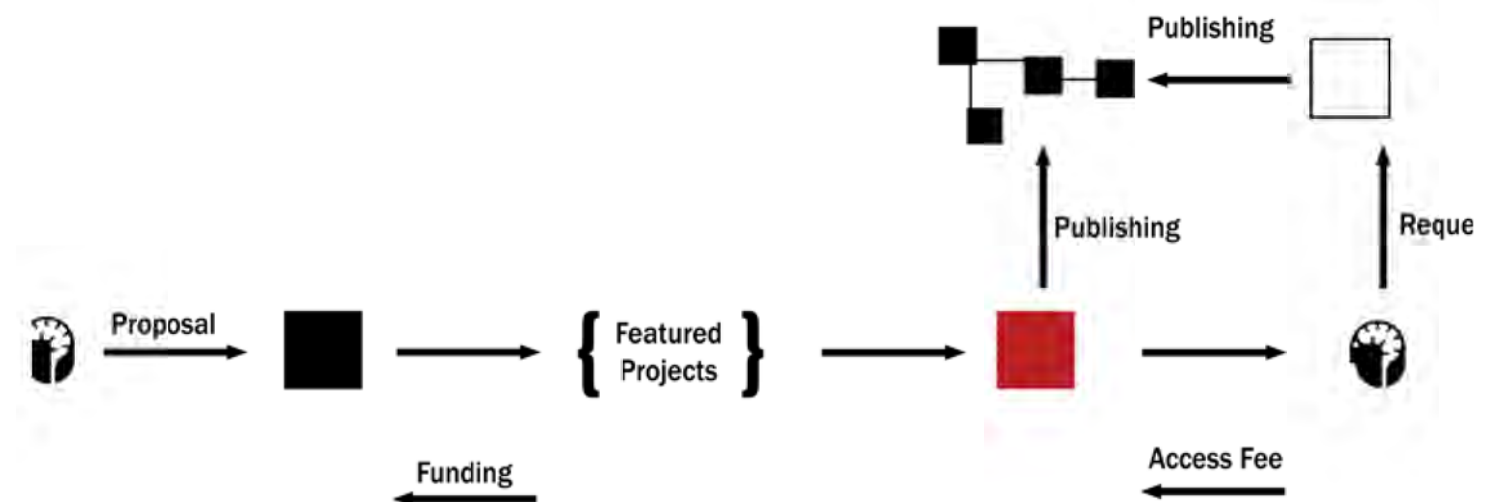
## After one year

At this point FREE DESIGN can implement its full set of features. During this time period, another 200 projects will be archived. In addition, DRP will find research projects in progress that need funding. These projects will be linked to subscribers who can share in the research. The funding of these featured projects in progress will come from investing designers interested in the outcome of the research. To access the published information, a designer will have to register with the network and pay a fee (around \$500) per project.

For a micro project (20 000\$ - 30 000\$ construction budget), FD could finance 4 times the conventional design fee (15%) by collecting 20 subscriptions of 500\$.

For small projects (1-2 Million), 20 subscriptions will finance 10% - 20% of the total design fees.

Any subscriptions beyond that will contribute to the department's revenue. To sustain two employees full time, FD will need 100 subscriptions beyond the nominal amount. For a goal of 15 featured projects per year, this means an average of 28 subscriptions per project. Being profitable, FD can continue funding new design projects and expanding its library and services.





# DSUP

*department of shelter and urban  
[re]programming*

MINIMUM INTERVENTION / MAXIMUM EFFECT

## what does DSUP do?

Economic imbalances, separation of social classes, concentration of power, and scarcity of land, have made shelter unattainable for many in urban environments. DSUP creates small interventions that re-program under-utilized urban spaces and address the pressing need to redistribute societal resources. DSUP demonstrates how re-Programming can lead to regeneration and revitalization -- using new programs to build new productivity.

## what is DSUP's strategy?

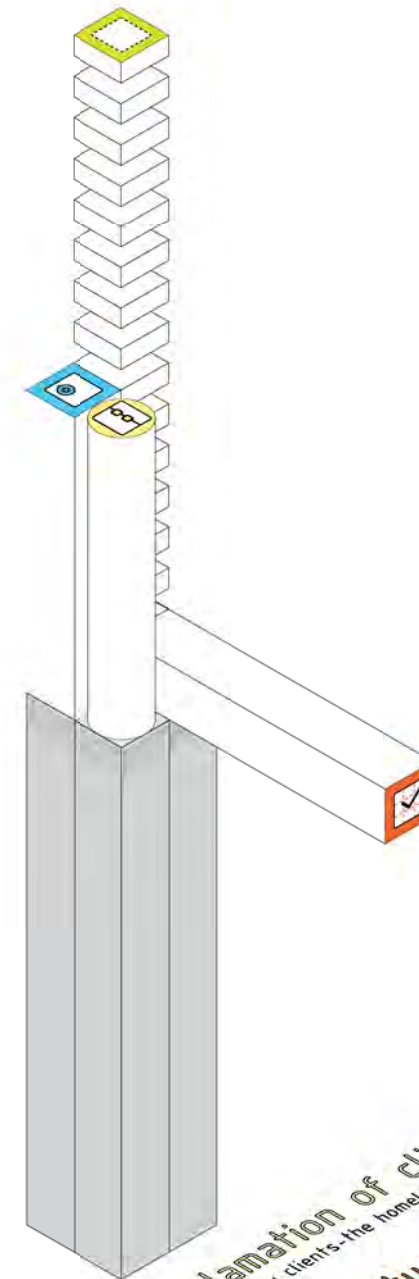
DSUP reduces the scale of the architectural intervention to the absolute minimum possible without sacrificing potency. This reduction might apply to...

1. the physical size of the intervention
2. the time duration of the intervention

## how is DSUP unsolicited?

DSUP engages in modern-day Robin-Hooding.

DSUP addresses problems of underrepresented social groups, who lack the social agency or financial means to solicit architectural interventions; since DSUP's client-base is largely poor and not accustomed to working with architects, DSUP must not only pro-actively engage these clients but also discover creative financing strategies.



**reclamation of client:**  
finding new clients-the homeless

**recontextualization of program:**  
juxtaposing housing with parking structures

**reinterpretation of site:**  
function of site changes throughout the day



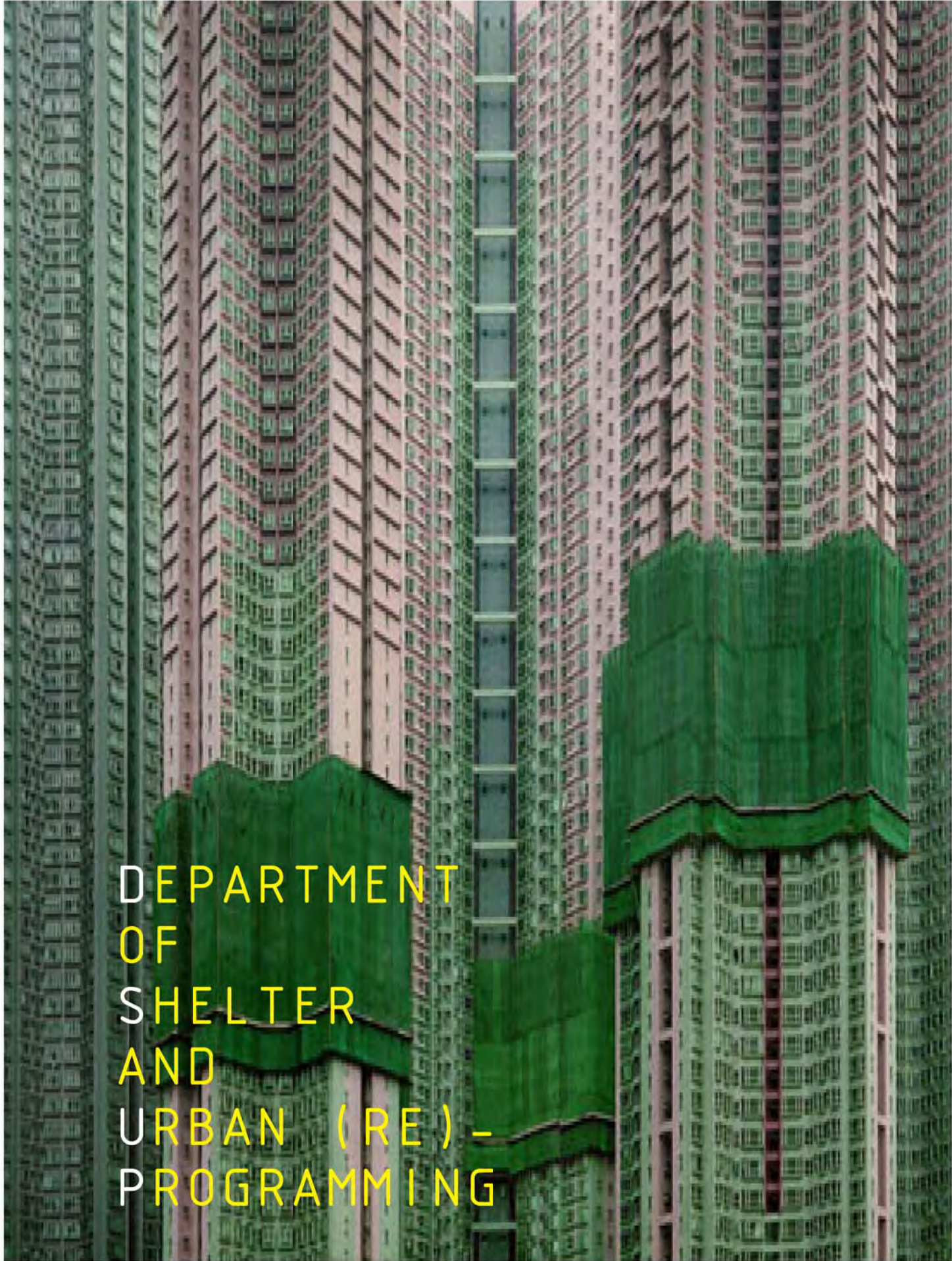
feature project FREE PARK-INN  
audience THE HOMELESS / U.S.  
GOVERNMENT (HUD)

Free Park-inn outlines an innovative approach to confronting housing and shelter issues by re-programming urban parking garages as nocturnal homeless shelters.

	opportunity	urgency
social		← shelter
environmental		
technological		
political		

By 2050 over 6 billion people, two thirds of humanity, will be living in towns and cities.

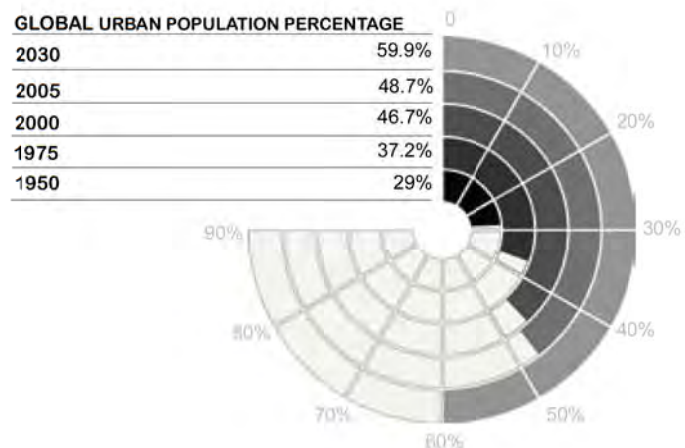
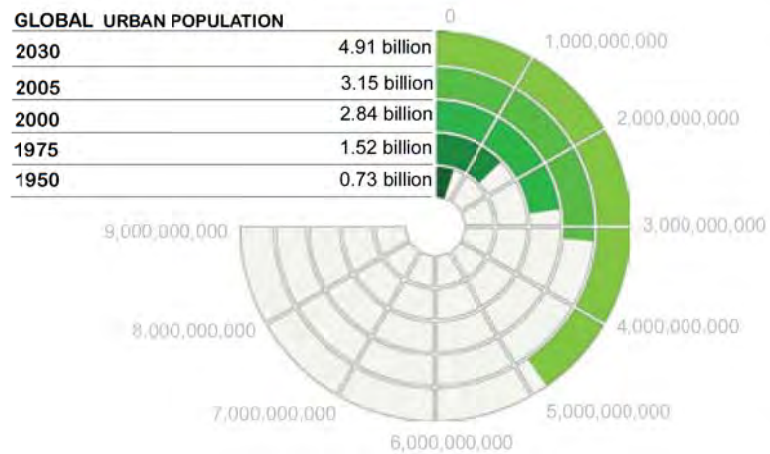
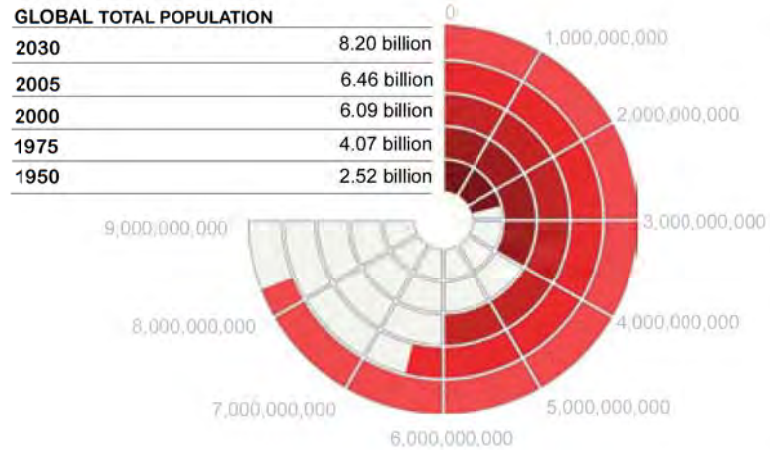
Can the CITY be re-programmed?



DEPARTMENT  
OF  
SHELTER  
AND  
URBAN (RE)-  
PROGRAMMING

# URGENCY 1


## Growth of cities = Expansion or Relocation?



In what is referred as the arrival of the "Urban Millennium", the UN-HABITAT 2006 Annual Report says that sometime in the middle of 2007, the majority of people worldwide will be living in towns or cities, for the very first time in history. It is estimated 93% of urban growth will occur in Asia and Africa, and to a lesser extent in Latin America and the Caribbean. By 2050 over 6 billion people, two thirds of humanity, will be living in towns and cities.

The growth of cities leads to increase in density and the rise of land values. Cities seem to be getting crowded, and the trend is not stopping anytime soon. Cities are forced to expand and the people relocate as the result- either the rich moving to the suburbs for more space, or the poor relocating to make room for economic developments. The resulting scarcity of land leads to various social problems and division of economic groups. However, the question is:



- Lateral Expansion 
- Vertical Expansion 
- Demolition 
- Relocation 

→ ARE WE REALLY RUNNING OUT OF SPACE?

# SURPLUS PORTFOLIO

## Additional potential projects

### [Accessible Rooftops]

Minimum interventions to make other urban under-used spaces (rooftops, etc.) visible and accessible. Using minimum facilities such as signage or staircases as initiation of project, then providing toolkit for the users to finish the project.

### [Addressing the homeless]

Utilizing digital technology to provide mailing addresses for the homeless, for bank accounts and other uses as means of economical improvement.

### [Parasitic Apartment]

Using social conscience as means for the rich to finance the poor to stay in valuable lands in the case of urbanization and development of the cities. In return the poor would "pay back" in the form of energy with PV panels. The rich and the poor co-exist but have the choice of not interacting.

### [Slum Eco-Tourism]

Fabrication of interchangeable building components for existing informal slums for constant re-building. And to use marketing strategy to promote slums as eco-tourist destinations for progressive travelers

DEPARTMENT  
OF  
SHELTER  
AND  
URBAN (RE)-  
PROGRAMMING

# BUSINESS STRATEGY

## Project partners and evolution

\$\$\$\$\$\$ START-UP

CITY OF BOSTON  
EMERGENCY SHELTER COMMISSION

PRIVATE CORPORATIONS

US DEPT. OF HOUSING &  
URBAN DEVELOPMENT GRANT

FOOD

CAFETERIA SURPLUS

GREATER BOSTON FOOD BANK

\$\$\$\$\$\$ SHORT-TERM

NATIONAL COALITION FOR  
THE HOMELESS

COMMUNITY VOICEMAIL

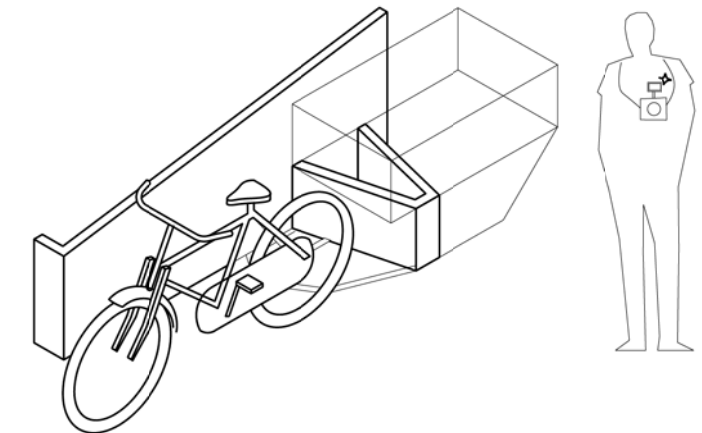
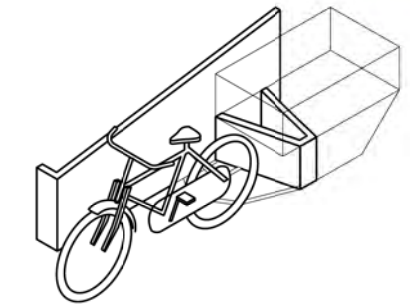
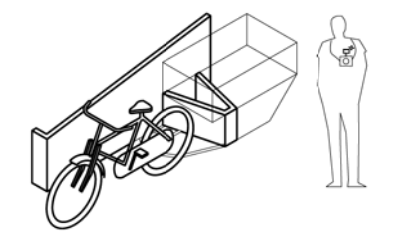
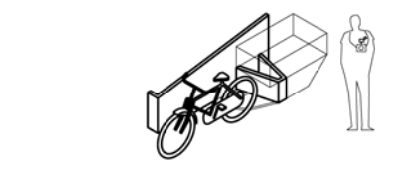
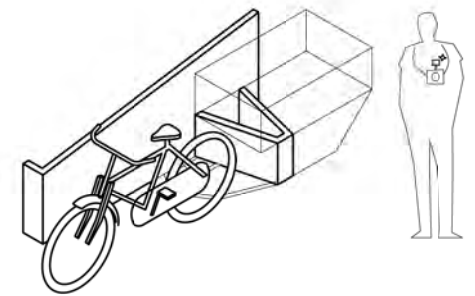
CITY OF CAMBRIDGE EMPLOYMENT  
(LIBRARY...)

\$\$\$\$\$\$ LONG-TERM

HOMELESS MOBILITY + EMPOWERMENT  
=EMPLOYMENT

GOVERNMENT CONTRACT = income  
(profit for OUA)

The project depends heavily on government funding in the early stages, so partnership with existing governmental agencies and NGO's are essential. The objective is not to compete with existing shelters but to be "plugged in" to the current programs devoted to end homeless-related issues. As an alternative approach to house the homeless, one important long-term goal of the project is to obtain recognition from the federal government and secure government contracts as new types of homeless "shelter".



### THE EVOLUTION

In the long run, the mobility would evolve so each person has his/her own mobile, in the form of bicycle, providing portable storage and mobility for employment opportunities. They would take on a more active role in their decisions by carrying their own furniture pieces and be able to choose which parking garage they want to be a part of.

After the homeless gains more mobility, they will be hired as paparazzi reporters. Currently there is a societal hunger for first-hand photos or eye-witness reports. Pairing that with the widespread of media outlets, information becomes valuable. With the homeless already familiar with the streetscapes and always observing the surrounding, the added stability and mobility the project provides would be one way to empower the homeless. *So the large corporations no longer provide for the homeless, as the beginning of the project. Instead it is the homeless that provide for the (media) corporations.*

# BUSINESS STRATEGY

## Finance analysis and long term plan

### AUDIENCE

The homeless in its final outcome  
 Government agencies and NGO's in its partnership  
 The public in its message

### BUSINESS PLAN

#### Short-term

- Partnership with existing organizations for funding
- Registration
- Robin Hoodin' the corporations I (corporate sponsorship)

#### Long-term

- Mobilize and empower the homeless
- Robin Hoodin' the corporations II (embedding)

### WORK PLAN AND TIME TABLE:

#### Immediate:

- Work: construction of truck
- Funding need: construction and material cost
- Funding source: US Dept. of HUB grants, City of Boston Emergency Shelter Commissions, City of Cambridge,
- Alternative funding source: private corporations.

#### Short Term:

- Work: maintenance and regulation control, establish partnership with NGO's
- Funding need: utility, maintenance
- Funding source: City of Cambridge (library, etc.), NGO's (National Coalition for the homeless, National Alliance to End Homelessness, Community Voicemail)
- Alternative funding source: private corporations.

#### Long Term:

- Work: multiplication of prototype (patent, gov't funding), mobilize and empower the homeless
- Funding need: profit
- Funding source: government contract, homeless
- Alternative funding source: private corporations

### FINANCE BREAKDOWN

Truck  
 Shelter (Protection)  
 Bed  
 Food  
 Shower  
 Toilet  
 Laundry  
 Mail Room\*

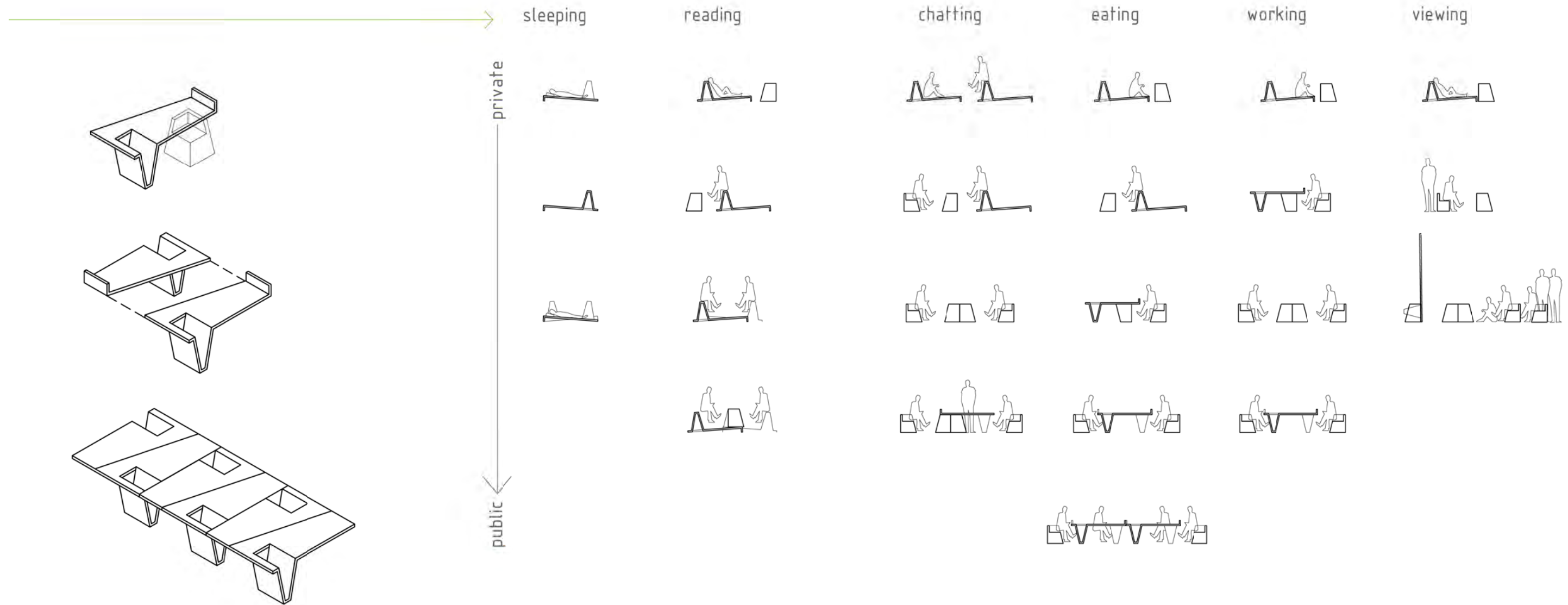
### EXPENSES

Item	Cost	Possible Donation?
<b>One Time:</b>		
Truck	\$5000	Yes
Truck renovation	\$2000?	
Community furniture	\$1000	
Portable shower(*2)	\$1295*2	Yes
Holding tank for shower(*2)	\$610*2	Yes
(Portable toilet*2)	\$520*2	Yes
	Or (\$1295*2)	Yes
<b>Monthly:</b>		
Food	\$5000/month	Yes
Water	\$500	
Electricity	\$500	
(Portable toilet*2, service incl)	(\$105*2/month)	
(Portable toilet service)	\$100*2/month)	
Gas for truck	\$500	
Driver/ social worker	\$2500/month	Yes (Volunteer)
<b>Total:</b>		
Scenario A1 (buy everything/ meals donated/ buy toilets)		\$12850 up front +\$4200 per month
Scenario A2 (buy everything/ meals donated/ rent toilets)		\$11810 up front +\$4210 per month
Scenario B (volunteer driver)		\$11810 up front +\$1710 per month
Scenario C (volunteer driver + truck donation)		\$6810 up front +1710 per month

-Contribution to society: shelter, public awareness, poverty alleviation\*  
 -Contribution to office: publicity, positive image, long-term profit\*

# PROJECT STRATEGY

## Community Construction



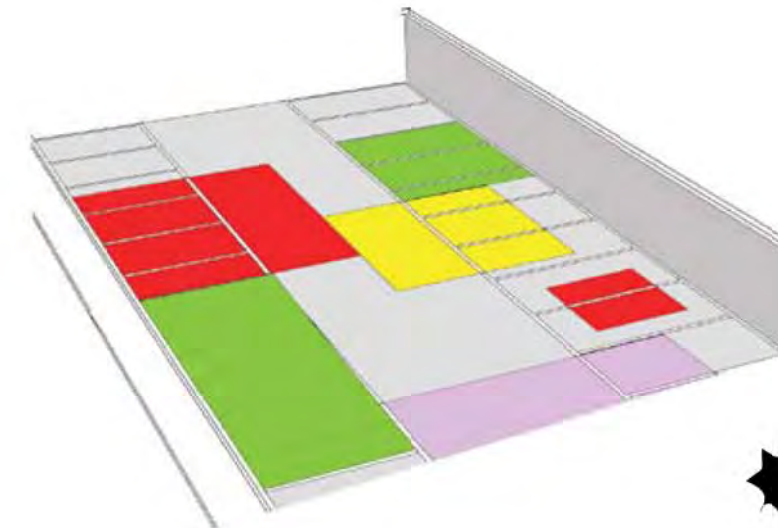
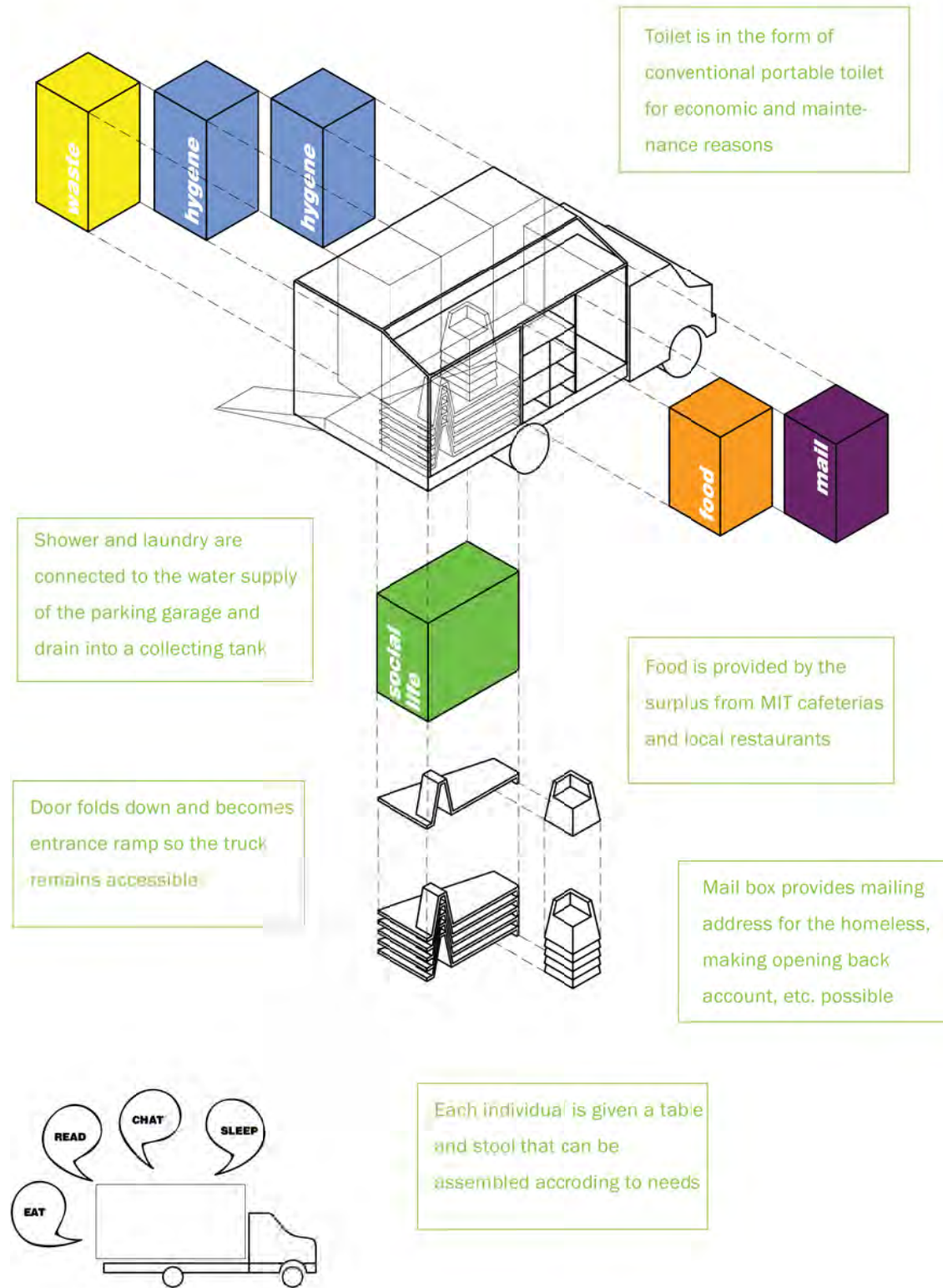
Can the activities make a place home? the furniture can be turned and assembled into various tools for domestic activities and social interactions. Sometimes the furniture only works when two works together



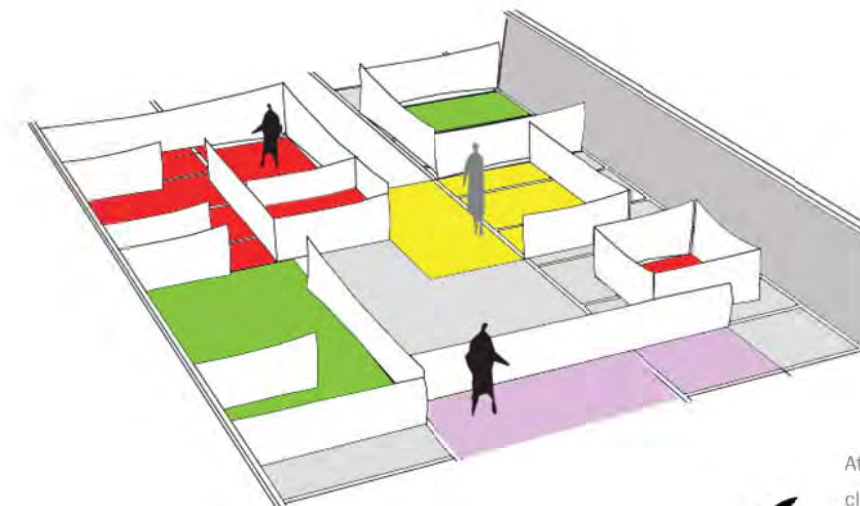
What kind of space can they create?

# PROJECT STRATEGY

## "Free ParkInn"-- the truck



During the day, the truck take everything out of the garage. Traces of activities in the night are visible on the ground



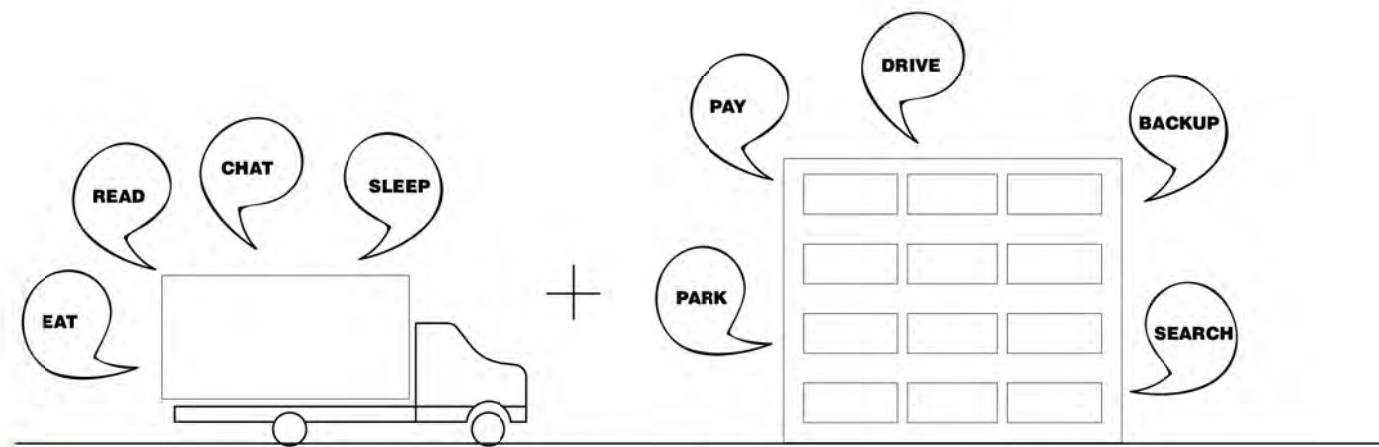
At night, after the parking lot is cleared, the truck enters the garage. Footings on the ground holds metal poles that support each individual "tents" that divide up the spaces

Instead of building a shelter over us, we take all of our domestic activities with us and find one nobody is using. The mobile truck injects the program of a home into a parking structure, which is under-utilized at night. Can the activities make a space "home"?

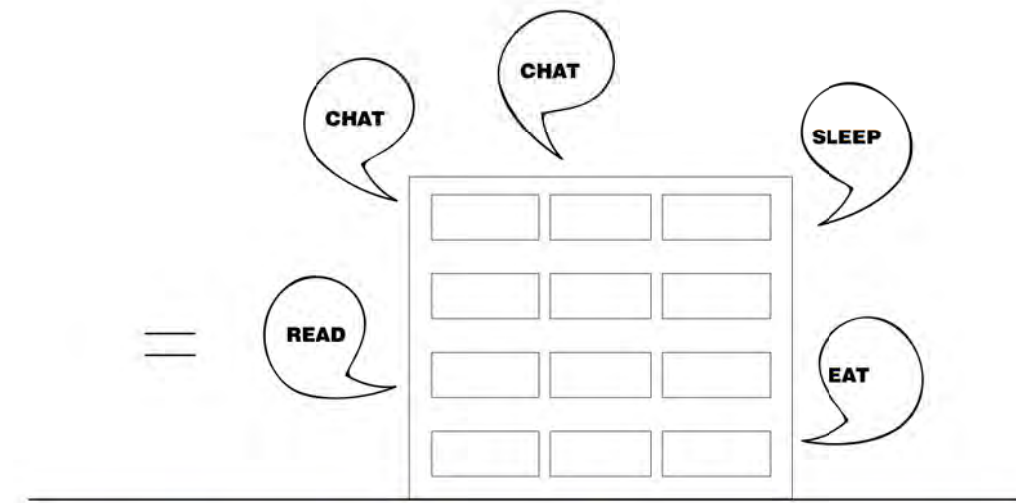


# PROJECT STRATEGY

"Free ParkInn"-- the time share approach



The parking garage is a societal surplus into home for the homeless, and shifting



in the night and can be reprogrammed surplus to the needy.

Required by building code, parking facilities take up large areas of land in cities. The program of a parking lot is essential to our society, however they are mostly under-utilized at night. They become a societal surplus when they are not being used and can be used by those in need.

# SITES + TYPES

What is available vs. what is possible

- parking site A
- parking site B
- parking site C
- parking site D



Taking Boston and Cambridge as examples, there are several types of parking sites with great potentials for the project. The study mainly focuses on the Theater/ China Town district of Boston and the Central Square area in Cambridge, where homelessness is a serious issue yet with great potential. Each type provide different beneficial qualities that would contribute to the success of the project.



## A PARKING SITE

Type A sites are underground parking lots underneath hotels, offices, etc, that provide good shelter for the project. Possible corporate sponsorship is available. However, lack of natural ventilation is a problem.



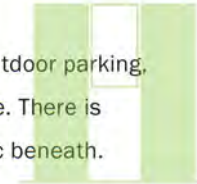
## B PARKING SITE

Type B sites are above ground parking garages sandwiched between commercial buildings. They provide good shelter with various degree of protection from the natural elements. Possible corporate sponsorship is available.



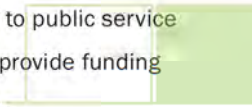
## C PARKING SITE

Type C sites are "voids" that are not constructed but left open for outdoor parking, or left unbuilt to provide entrance to parking lots further into the site. There is potential to build above the entrances without obstructing the traffic beneath.



## D PARKING SITE

Type D sites are above ground parking garages that are attached to public service entities, such as community library. The vicinity to such services provide funding possibilities but also employment opportunities for the homeless.



# INTERVENTION

## Re-program and hybridize

We are often under the assumption that when a lot of land is transformed into a building, the lot is occupied, and we move on to the next lot. However, as part of OUA's effort in exploring the under-explored, this department takes an active role in investigating the urban environment as it is and creates a systematic process to re-program spaces that are under-utilized, inaccessible, and ultimately invisible.



### STRATEGIES

#### Time-share

+adding new program to existing spaces according to time of the day, filling in when the spaces are not utilized.

#### Piggy-back

+adding new program to existing spaces according to function, coming up with secondary functions to the conventional functions.

By injecting new programs into banal domains, a new type of hybrid space is created to sustain its original purpose but also provide programs for those in need. As architects, OUA reprogram these invisible spaces with minimal intervention to make them available again. By solely uncovering potential projects and providing the necessary tools for the users to complete the projects, OUA can be efficient and consequently more effective than traditional offices.

# OPPORTUNITY

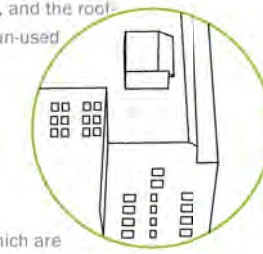
Urban wastelands: potential of the banal

## UNDER-UTILIZED SPACES



Parking lots or garages for offices, stores, schools, etc, are mostly used only during the day. It is under-used in the evening.

Many buildings in cities do not build to their maximum height, and the rooftop spaces are often left un-used

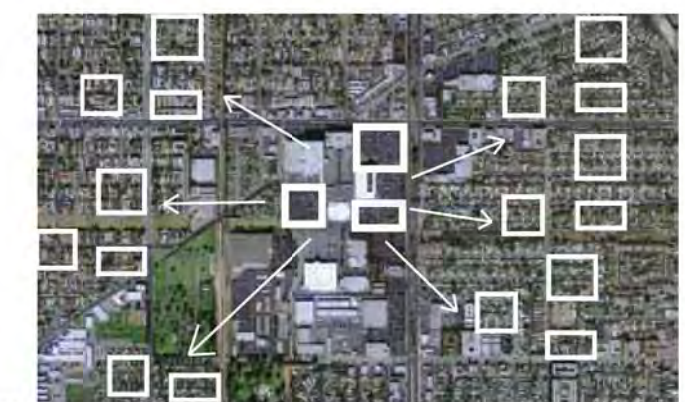


Besides focusing on building new spaces or replacing undesirable (e.g. less profitable) spaces, we can also examine what we currently have and examine if they have been used to their full potential

External fire escapes, which are required by law in many cases, provide access down, but its function of taking people up is often neglected.



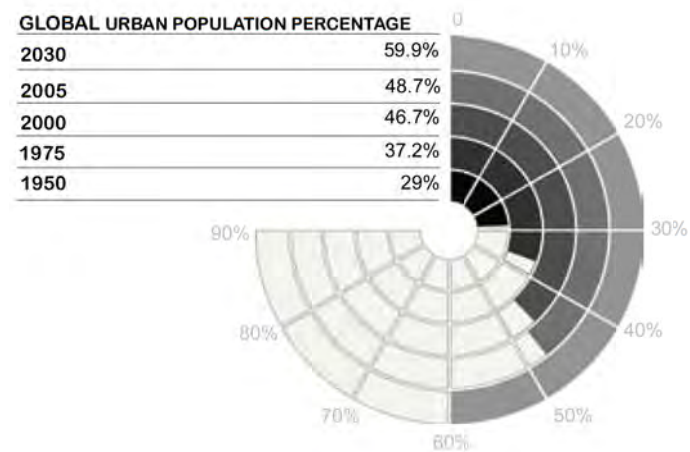
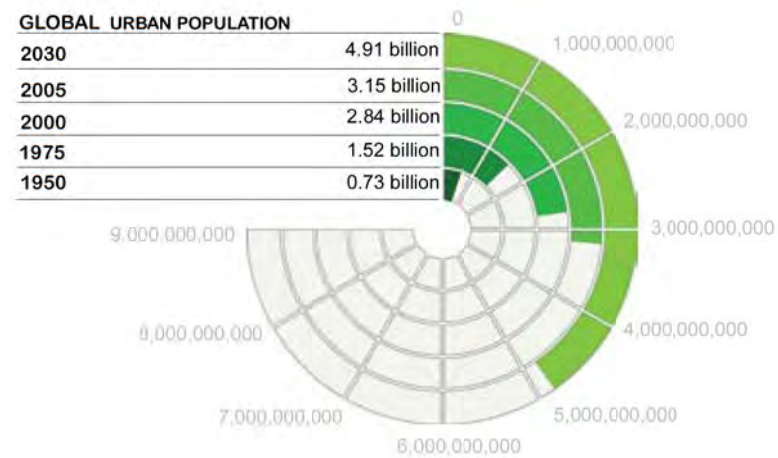
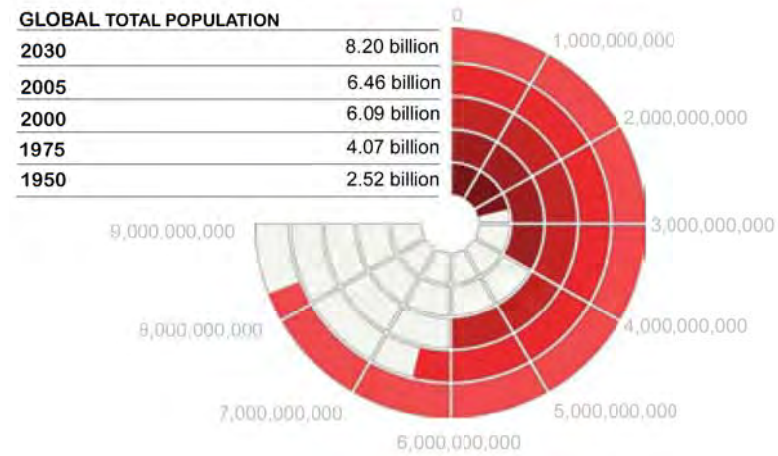
There are plenty of spaces in all typical urbanized environments that occupy vast areas of land but are extremely under-utilized. Some of these domains are needed for economic reasons while others are simply required by law, but all of them are stereotyped in a way we often overlook their potential. Some of these spaces are under-used in its time duration (parking lots), while others are under-used in its physical space (rooftops and fire ladders).



A parking lot for a typical shopping mall can take up as much space as 3 to 4 blocks of an averaged residential neighborhood

# URGENCY 1



## Growth of cities = Expansion or Relocation?



In what is referred as the arrival of the "Urban Millennium", the UN-HABITAT 2006 Annual Report says that sometime in the middle of 2007, the majority of people worldwide will be living in towns or cities, for the very first time in history. It is estimated 93% of urban growth will occur in Asia and Africa, and to a lesser extent in Latin America and the Caribbean. By 2050 over 6 billion people, two thirds of humanity, will be living in towns and cities.

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- Lateral Expansion 
- Vertical Expansion 
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- Relocation 

→ ARE WE REALLY RUNNING OUT OF SPACE?

By 2050 over 6 billion people, two thirds of humanity, will be living in towns and cities.

Can the CITY be re-programmed?



DEPARTMENT  
OF  
SHELTER  
AND  
URBAN (RE)-  
PROGRAMMING

# LAD

*legal affairs department*

LITIGATION AS A MEANS OF PROJECT ACQUISITION

## what does LAD do?

LAD explores and exploits overlooked opportunities within the existing legal landscape, challenging the traditional relationship that architects have to the law by viewing regulations as opportunities instead of hindrances. LAD turns these opportunities into urgencies by applying them to taboo social topics.

## what is LAD's strategy?

LAD approaches the law in three ways.

1. litigation PusSuits: the law will change...we're just beginning the process
2. mutable law: the law is changing...and we're jumping on the bandwagon
3. head shop law: by designing infrastructure for illicit activities, we can profit from them without breaking the law; we also question our own understanding of 'urgency' as something that is defined by a moral imperative. Are there urgencies that are amoral, or even immoral?

## how is LAD unsolicited?

LAD coerces clients into action

LAD's pro-active strategy for project acquisition involves presenting a potential client with an impending (legal) problem as well as the architectural solution to that problem.

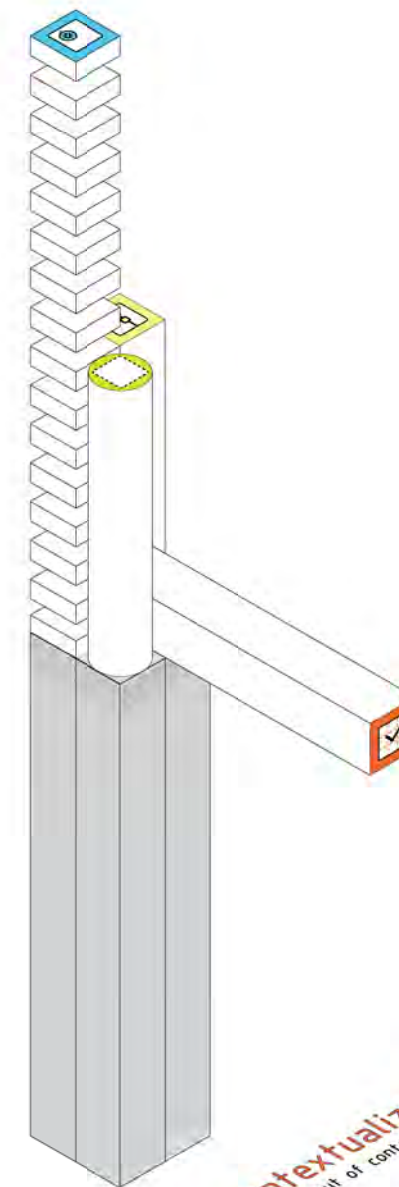
The content of LAD's projects are also unsolicited in that they deal with taboo topics.



## feature project GOLDEN GATE REMAINS audience THE GOLDEN GATE BRIDGE DISTRICT BOARD

The Golden Gate Remains outlines a strategy that can help the city of San Francisco ensure the vitality of its primary landmark through installing a columbarium on the Golden Gate Bridge.

	opportunity	urgency
social	the law →	
environmental		
technological		
political		



**recontextualization of program:**  
a cemetery out of context

**reclamation of site:**  
untouchable iconic sites reclaimed for architectural intervention.

**reinterpretation of budget:**  
through creating income, project fixes bridge's financial ills

# SAN FRANCISCO, CALIFORNIA

**The Golden Gate Remains**  
*three problems, one solution*  
*A Proposal for the Golden Gate Bridge*



## ***The three i's*** *Defining the Problems*



### ***interment***

A law passed in 1902 made new cemeteries illegal and existing graves were exhumed and moved. Currently there are no new cemeteries in San Francisco accepting new interments.



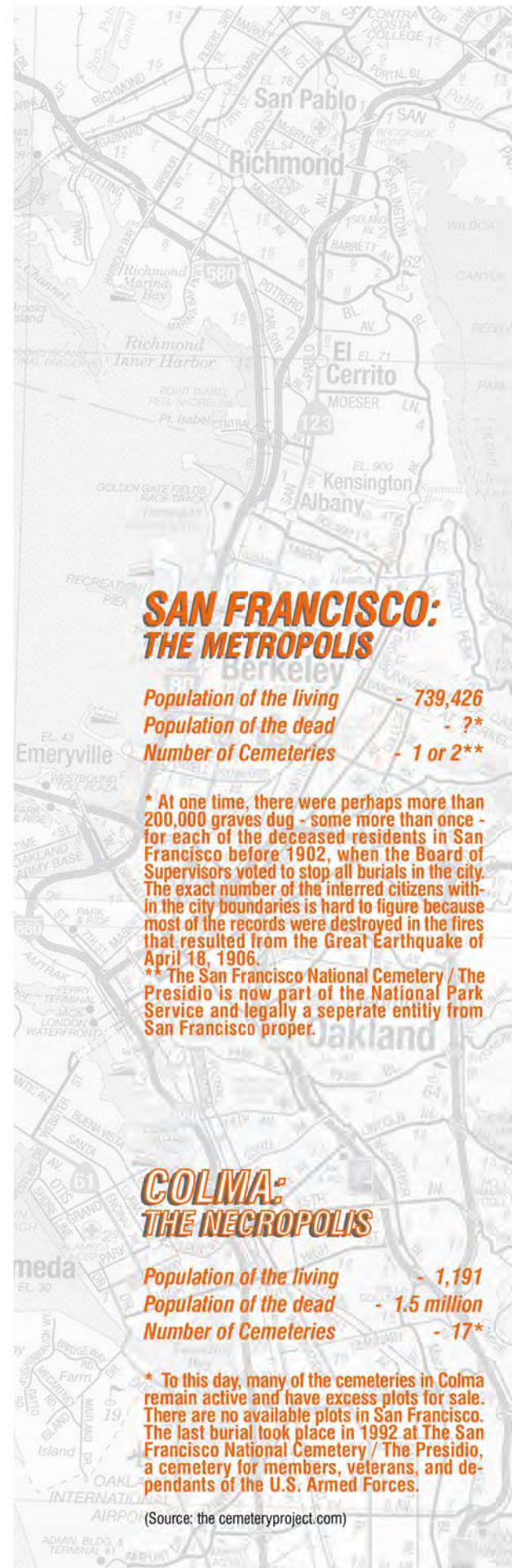
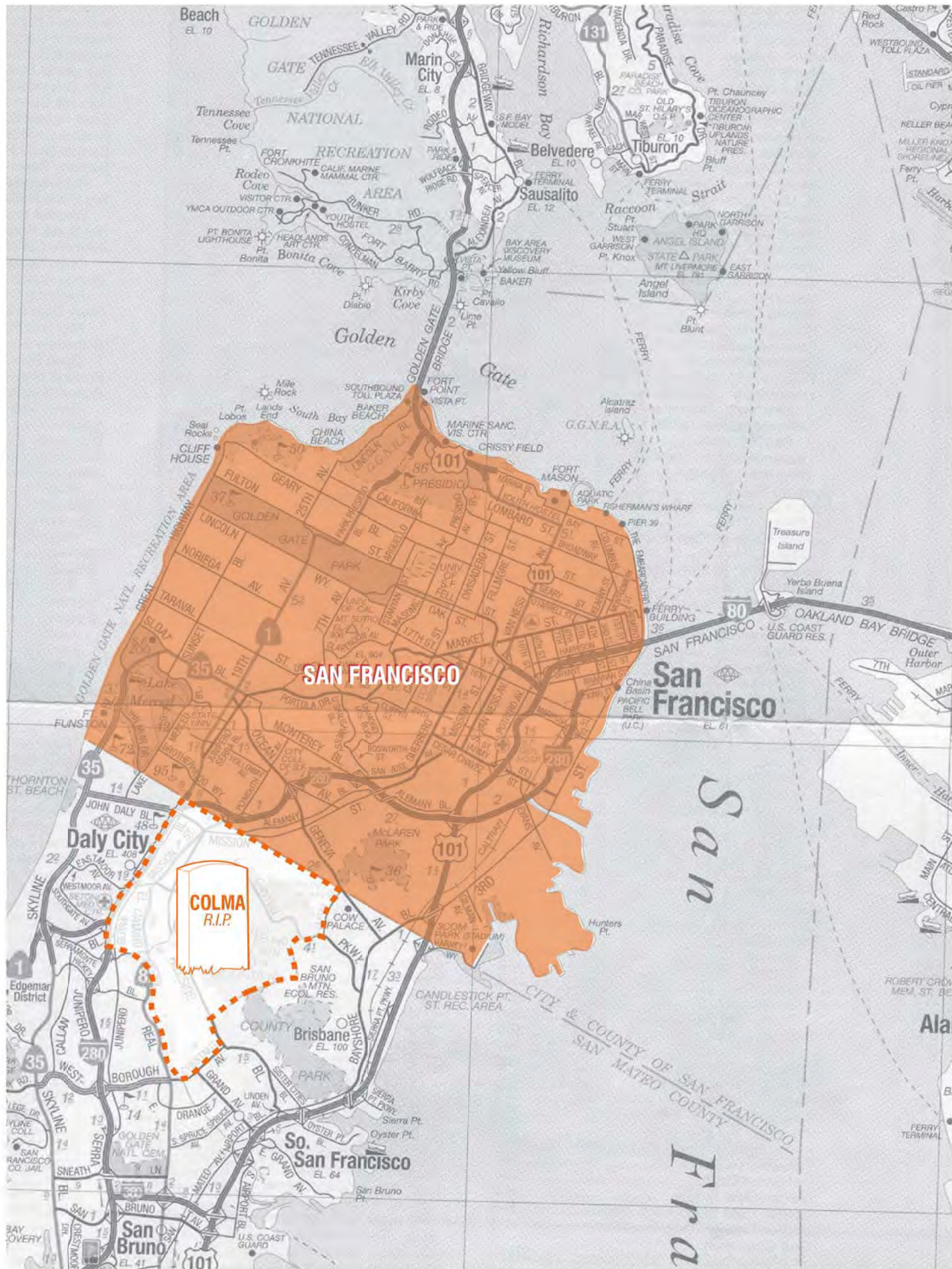
### ***(the) inconsolable***

The San Francisco Golden Gate Bridge has become a magnet for suicides. A barrier, currently being considered to reduce the deaths, has polarized the local community.



### ***insufficiency***

The cost of keeping the Golden Gate Bridge operational has increased beyond the budget allowed by tolls. The Golden Gate Bridge District Board is considering budget models that will cover the projected deficits including new toll hikes and corporate sponsorship.



*interment*

# DEAD LAWS ROLLING IN THE GRAVE

## SAN FRANCISCO: THE METROPOLIS

Population of the living - 739,426  
 Population of the dead - ?\*  
 Number of Cemeteries - 1 or 2\*\*

\* At one time, there were perhaps more than 200,000 graves dug - some more than once - for each of the deceased residents in San Francisco before 1902, when the Board of Supervisors voted to stop all burials in the city. The exact number of the interred citizens within the city boundaries is hard to figure because most of the records were destroyed in the fires that resulted from the Great Earthquake of April 18, 1906.

\*\* The San Francisco National Cemetery / The Presidio is now part of the National Park Service and legally a separate entity from San Francisco proper.

## COLMA: THE NECROPOLIS

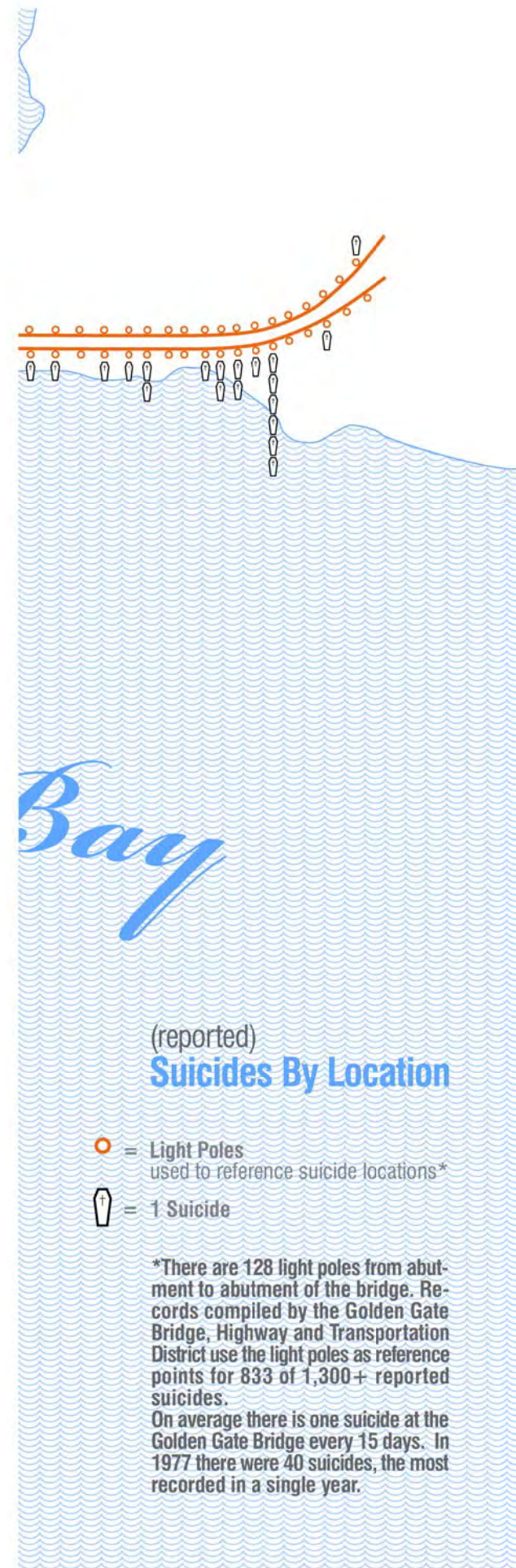
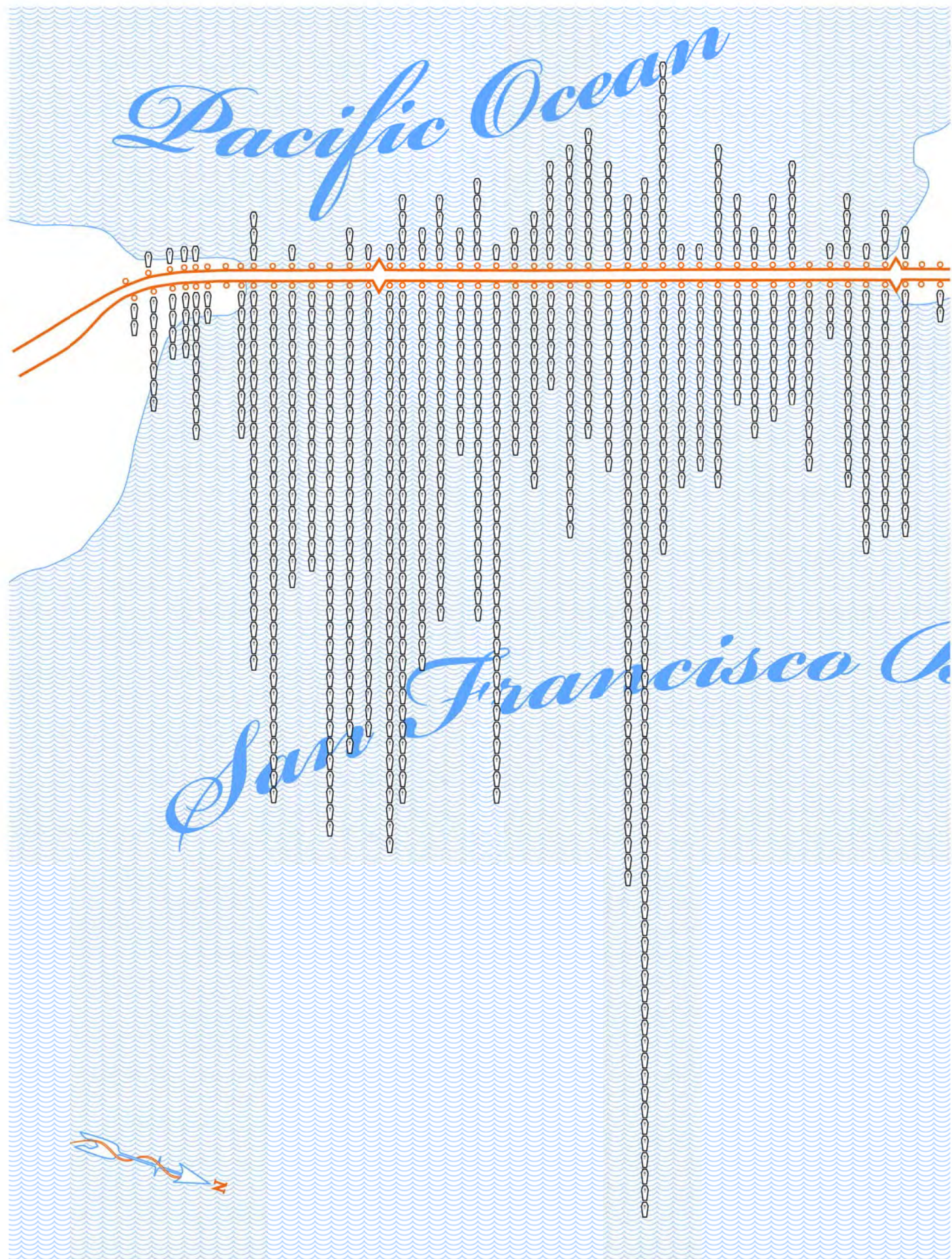
Population of the living - 1,191  
 Population of the dead - 1.5 million  
 Number of Cemeteries - 17\*

\* To this day, many of the cemeteries in Colma remain active and have excess plots for sale. There are no available plots in San Francisco. The last burial took place in 1992 at The San Francisco National Cemetery / The Presidio, a cemetery for members, veterans, and dependants of the U.S. Armed Forces.

(Source: the.cemeteryproject.com)

In the 1800's, San Francisco Board of Supervisors became increasingly concerned about the public health problems created by cemeteries as well as about the ever-decreasing available space for the growing city. So, in 1902, the board voted to outlaw any more interments within the city limits. They also demanded that the largest cemeteries in the city move their bones elsewhere. Many fought for years to keep their loved ones' remains undisturbed. The legal battles extended for 40 years, but finally in 1942, the last bodies were removed from the city. With the exceptions of only the Mission Dolores Cemetery and the San Francisco National Cemetery at the Presidio (neither of which accepts new burials), there are no cemeteries in San Francisco. Unclaimed headstones and monuments were recycled for building various seawalls, landfills, and park gutters. Obviously, San Francisco still had people dying on a regular basis, and they needed somewhere to be buried. Following the lead of the Catholic Church, which had begun in 1892 to bury its dead in an old potato field five miles south of San Francisco, many people began to look to the small city of Colma for their cemetery needs. Colma is the only incorporated city in America where the dead outnumber the living.

All active cemeteries, including those in Colma, are working with a finite commodity, space. For this reason, many people are now reconsidering how their remains will be cared for. San Francisco can continue to commit the remains of its citizens elsewhere, but is there a responsible way to inter the residents of San Francisco? The location of one's final resting point has immeasurable value. Many residents of San Francisco feel their very identity is linked to the city. In a city where new interment is outlawed, an active cemetery perceived to be within San Francisco city limits would be an attractive and profitable commodity.



(the) inconsolable

# GOLDEN GATE SUICIDES

The Golden Gate Bridge is recognized as the world's no.1 suicide magnet. Officials in charge of other landmarks with suicide problems have installed barriers, but the Golden Gate Bridge still offers the inconsolable an easily accessible suicide. The San Francisco Chronicle, in its Lethal Beauty series, listed the five factors that make the Golden Gate Bridge an alluring site of suicides.

## 1. Accessibility

With 4 ft. high railings and nearby parking lots, it is possible for someone to jump from the bridge minutes after arriving.

## 2. Finality

Some ways of ending your life allow you to reconsider the action, but not jumping from a bridge. Once you jump from the edge of the Golden Gate Bridge, there is no turning back.

## 3. The Werther Effect

Certain landmarks such as the Golden Gate Bridge have become destinations for suicide.

## 4. Grandeur

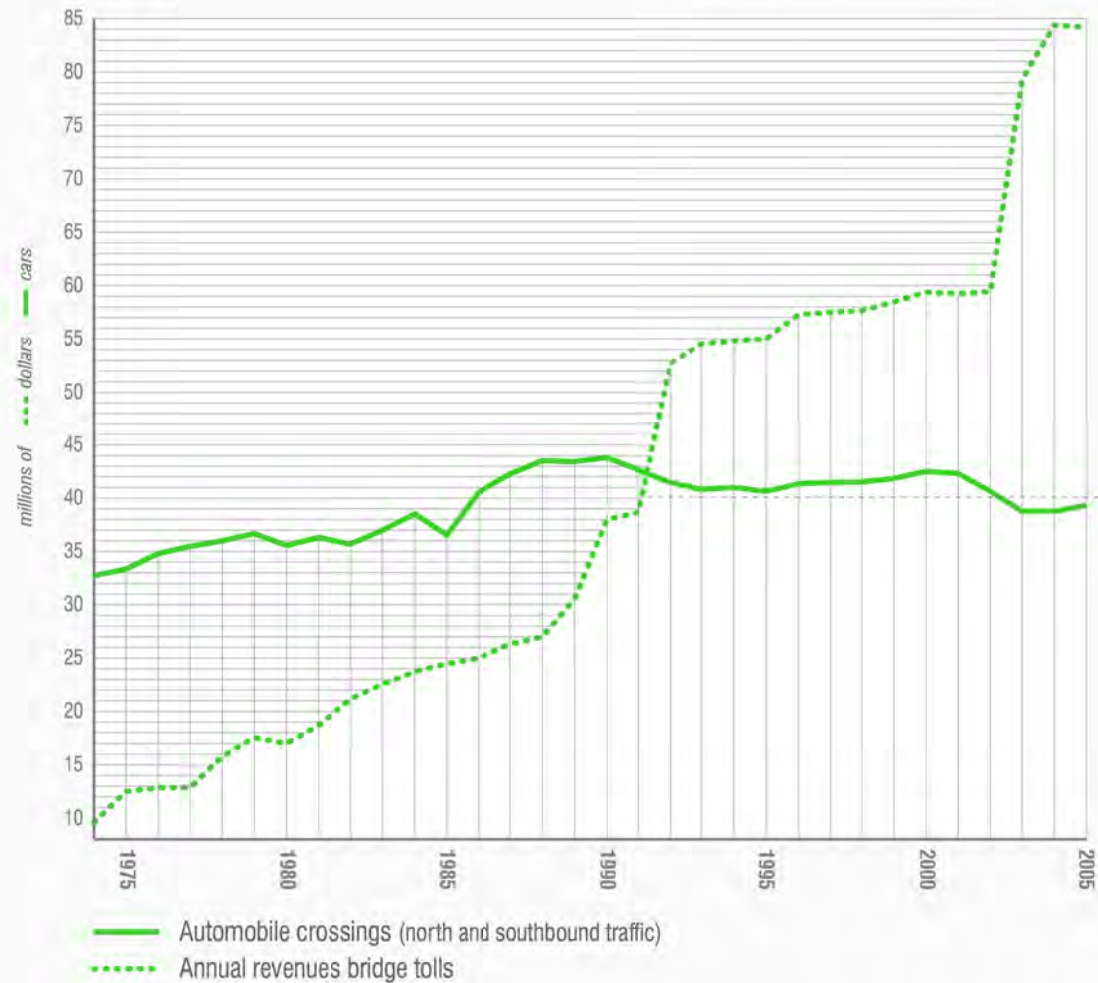
For the suicidal, jumping from the iconic bridge is a bold and public statement.

## 5. Joining the Herd

Some claim that jumping from the Golden Gate Bridge is equal to joining a community of previous jumpers.

The Golden Gate District Board is currently studying the viability of a suicide barrier. The issue has polarized the local community, either strongly for or strongly against a barrier. Those opposed claim that the barrier will alter the refined aesthetics of the iconic bridge and that those wanting to commit suicide will just find another means. Studies have proven otherwise: people deterred from committing suicide do not, in the vast majority of cases, re-attempt.

## GOLDEN GATE BRIDGE ANNUAL TOLL REVENUES VS. ANNUAL AUTO CROSSINGS 1974 - 2005



## GOLDEN GATE BRIDGE TOLLS 1937 - 2007



**insufficiency**

## GOLDEN GATE TRAFFIC

There are 5 lanes for automobile crossing on the bridge. A moveable barrier allows the center lane of the bridge to be used for either northbound or southbound traffic, depending on the need. This ability of lane redirection has helped the bridge to reach its maximum volume. Over the years the volume of traffic has increased very little with an avg. of 40 million automobiles crossing the bridge.

In order to offset growing traffic flows across the bridge, the Golden Gate Bridge operates a ferry and bus service. These alternatives serve the north bay communities, Marin and Sonoma County, which have not enacted any taxes to support the service. The toll bridge revenues are used to offset operation costs for these services. In effect, the very services used to lessen the traffic on the bridge (ferry and bus services) are reliant on the revenues created by the traffic crossing the bridge.

## GOLDEN GATE TOLLS

In order to keep up with rising operating costs the bridge has done one thing, raise tolls. The tolls have been increasing since the bridge's beginnings, but the increase is exponential. Currently the board is looking at increasing the now \$5 bridge toll for automobiles to \$6. If one considers the rising costs and the levelling of traffic volume, it seems obvious that the old fall back solution of toll-hikes can not solve the future deficits.

One possible solution that has been proposed is to charge a toll to pedestrians and bicycle traffic. This, of course, has been a hard sell to the citizens of the bay area, who believe the iconic bridge is a public place akin to a park. Even if the toll was enacted, it would only be a partial fix to an expanding problem.

# BRIDGING THE DEFICITS

The cost of keeping the Golden Gate Bridge operational has exceeded its means, tolls collected from south bound traffic. The reasons for the growing deficit are multiple.

### 1. Renovation and Upkeep Projects

Some examples include an ongoing multiphased seismic retrofit project estimated to cost in excess of 160 million dollars. There are 38 full time painters and 17 steelworkers employed to conduct continual maintenance on the bridge. The Golden Gate Bridge District Board is funding studies for possible suicide barriers.

### 2. Post 9/11 Insurance

Insurance prices for the bridge have doubled since Sept. 11, 2001. Compounding the problem, the bridge can not be insured against possible terrorist attack because the Golden Gate Bridge is considered a likely target of terrorism.

### 3. Bridge - Bus - Ferry

Currently bridge tolls pay not only for the bridge itself, but also bus and ferry services in the North Bay. 50% of the money needed to run the bus and ferry services, created to offset growing automobile traffic on the bridge, is provided by bridge tolls.

The tolls to cross the bridge have grown from as low as 25 cents to the current toll of 5 dollars. A new plan is being reviewed that would increase the tolls to 6 dollars and, for the first time, charge a toll to pedestrians crossing the bridge.

Currently the Golden Gate Bridge faces a deficit of 87 million dollars over the next five years. In order to cover this gap, bridge officials are now considering a "partnership" program. The new program would invite sponsorship in limited ways as a means of making up budget shortfalls without raising tolls.



# GOLDEN GATE COLUMBARIUM/MEMORIAL

The Golden Gate Bridge is an icon associated with the city of San Francisco. Surely all residents of the bay area claim some ownership of the bridge, but the general public considers being on the bridge synonymous with being in San Francisco. Assuming there is a desire, or even an urgency, to have one's remains memorialized with the city of San Francisco, couldn't the Golden Gate bridge act as a weak surrogate, it is, in many ways, more representative of the city than its own international landmarks. Currently there is concern over environmental impacts of cemetery burial. A columbarium, a crypt for the storage of cremated ashes, is considered a "green" option for storage and remembrance of remains. The bridge, acting as a symbolic extension of the city of San Francisco, could promote a progressive approach to interment in opposition to the outdated laws governing its current policy.

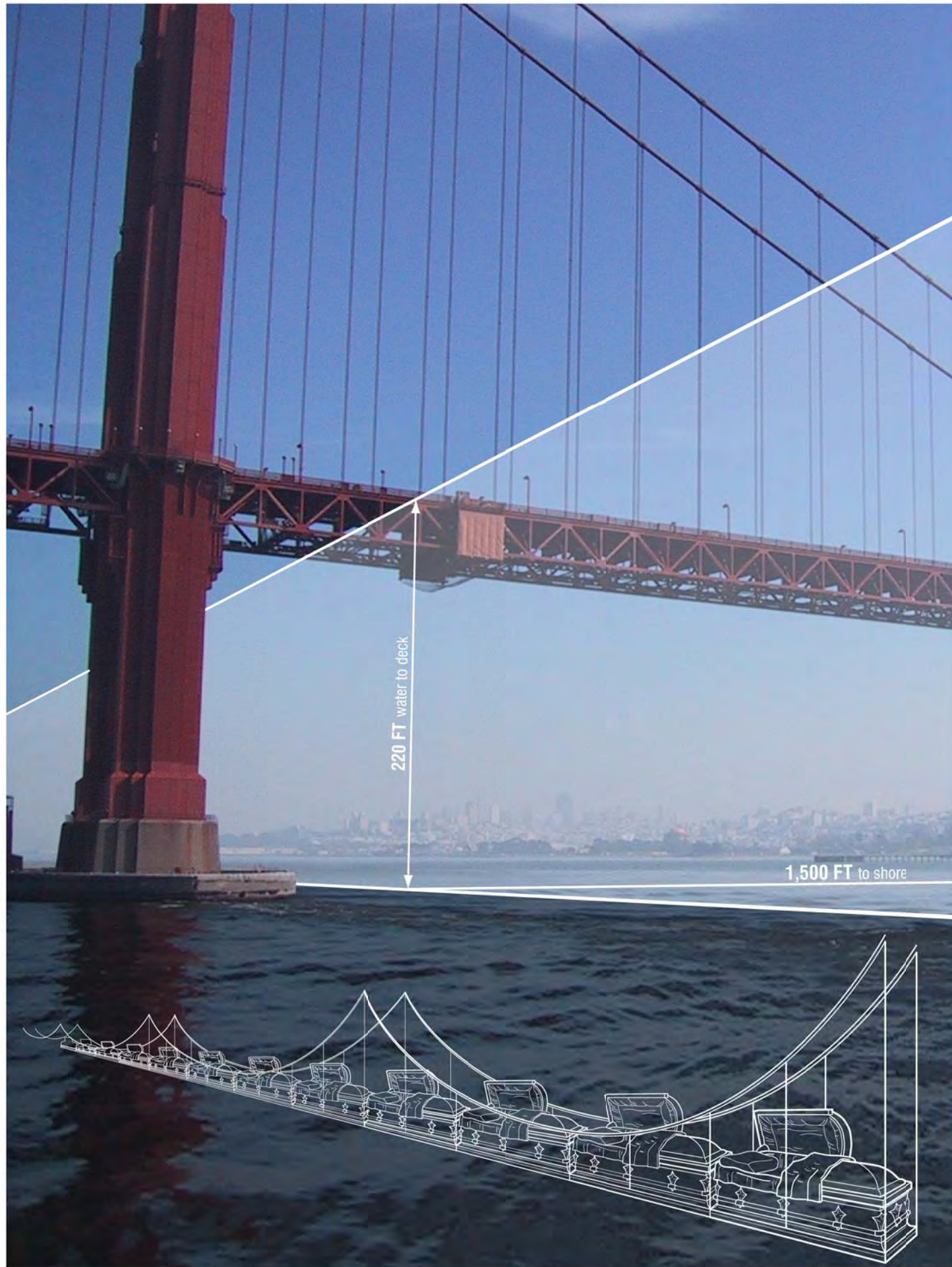


The Golden Gate District Board is currently funding a study into suicide prevention at the Golden Gate Bridge. It is assumed that if the study finds a barrier to be an effective solution, a suicide barrier will become a real project. A columbarium could act as an obstacle to suicide. Previous barriers have been criticized by the public because they alter the aesthetics of the bridge. If a new program, the columbarium, could find a way to exist within the infrastructure of the bridge without raising concerns of aesthetic compromise, would the argument over the barrier become a moot point? Considering actions taken at other famous suicide landmarks, a suicide barrier seems inevitable. Death already has its ties to the bridge; the Golden Gate Bridge is the world's no. 1 suicide magnet. A columbarium could at once acknowledge and solve that while creating a welcome commodity.



The Golden Gate Bridge is operating in the red. Solutions being considered are tolls and corporate sponsorship. The tolls may be able to mend current budget shortfalls but offer little hope of solving the problem long-term. All cemeteries and columbariums operate with budgets that must account for projected upkeep. Costs of interment and burial are calculated in perpetuity. The money paid by those interred is invested that allows all future expenses to be withdrawn as needed. This is the perfect model of sponsorship for a bridge with an increasing financial burden. Patrons will pay a premium to be interred within a landmark and that investment can help cover operational costs in perpetuity.





# THE NEW SITE OF INTERMENT

New cemeteries are outlawed within the city limits of San Francisco, but the majority of the Golden Gate Bridge is beyond the city limits. There are two California laws that further limit the location of a cemetery and associated programs.

**1. No cemetery\* can be located within 150 feet of a body of water.**

The Golden Gate Bridge's driving deck is, on average, 220 feet above the San Francisco Bay, well beyond the limits defined in California law.

**2. Scattering Ashes over open water is prohibited within 500 yards of the shoreline.**

The middle span of the Golden Gate Bridge starts, at both ends, far beyond 500 yards of the shore. Scattering ashes only, not regular functions of a cemetery, are forbidden in this zone.

\* According to California law, "cemetery" means any of the following:

- (1) a burial park, for earth interments.
- (2) a mausoleum, for crypt or vault interments.
- (3) a crematory and columbarium, for cinerary interments.
- (4) a place where six or more human bodies are buried.

Building on an existing bridge requires the design exist in specific, tectonic margins.

**1. The weight of the new structure has to be within the allowable dead load.**

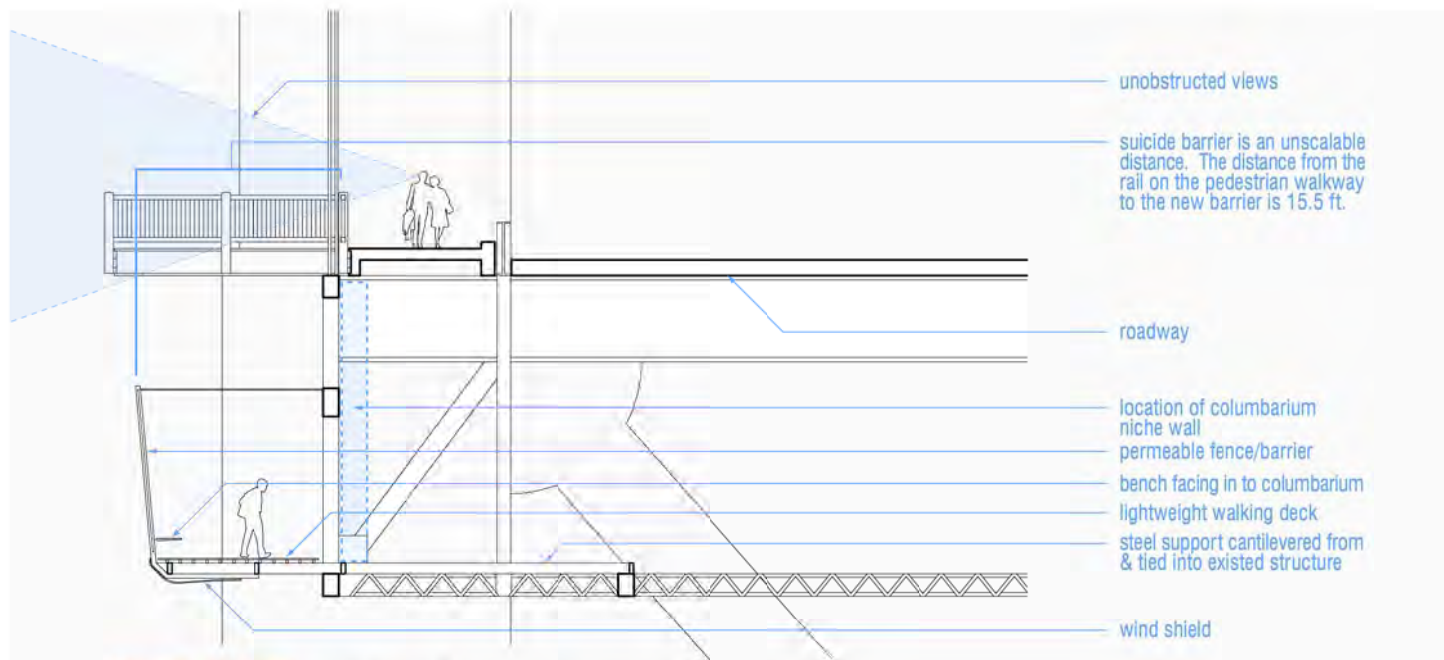
The total weight of the Golden Gate Bridge has decreased since its completion. Upon completion, the bridge weighed 894,500 tons and now, due to new reduced weight decking material, the weight is 887,000 tons. The columbarium will be designed to work within this **allowable 7,500 ton load**. This load deficit allows a structure that can not exceed 1,670 lbs. per linear foot of bridge, assuming the entire length of the bridge (8,981 ft. including approaches) is used.

**2. The columbarium can not add a significant wind load to the bridge.**

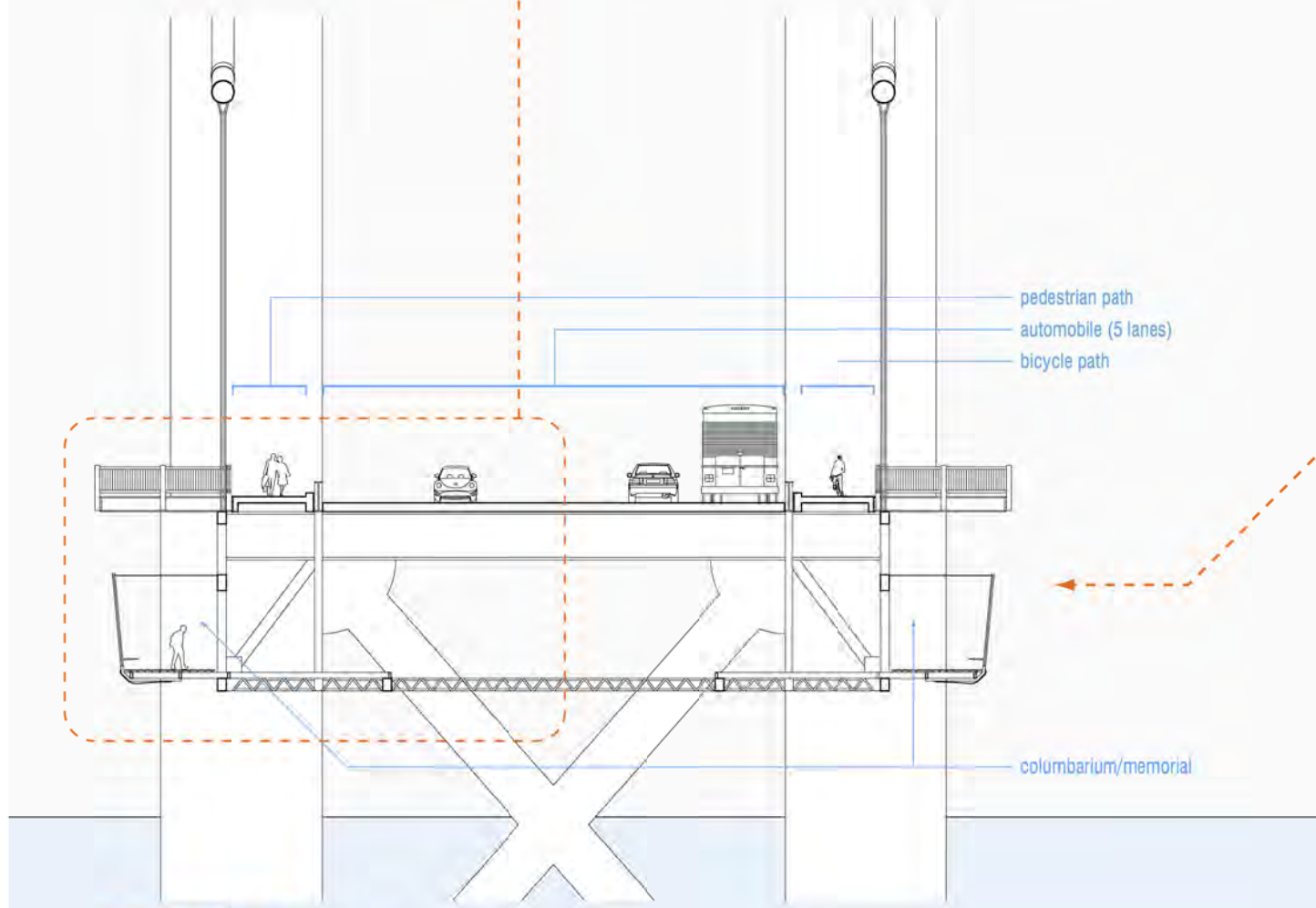
Also, the structure must be permeable to wind if it is not to increase the stresses currently absorbed by the Golden Gate Bridge. By minimizing the surface area in relation to the winds entering and leaving the bay, the columbarium can avoid adding significant wind drag.

## THE NEW PROGRAMS

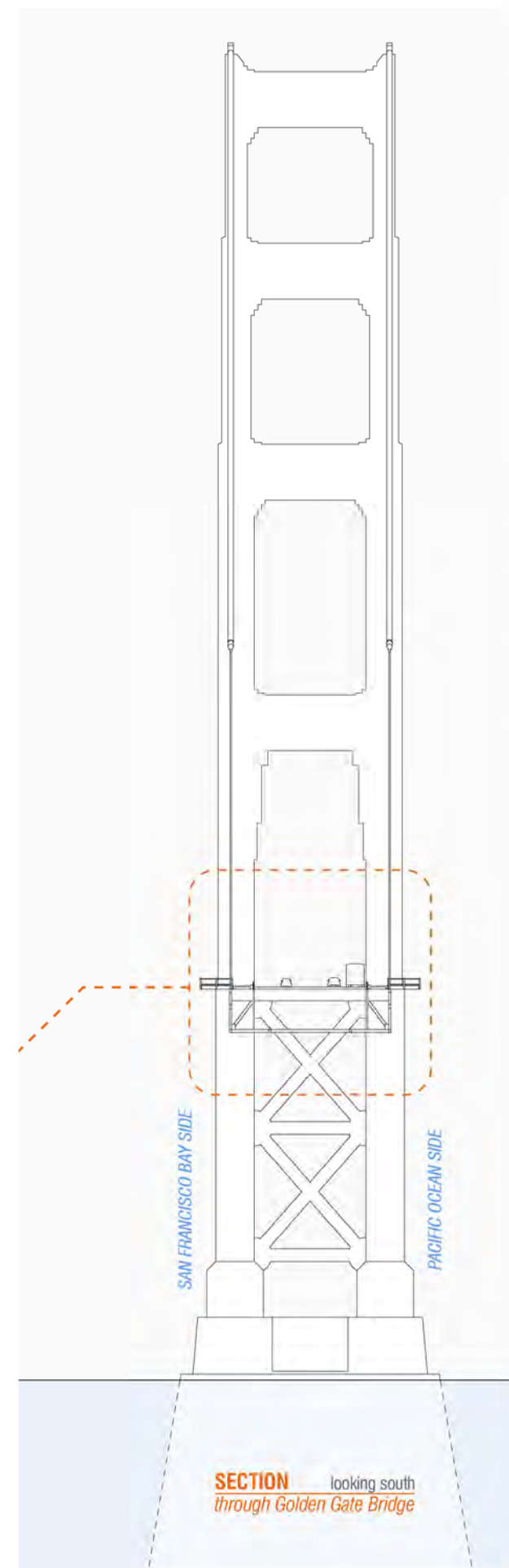
- **cemetery (columbarium)**  
storage and care for human crematory remains
- **memorial**  
physical construction in remembrance of the suicide victims on Golden Gate Bridge
- **scattering platform**  
a site for disposing crematory remains in the Pacific Ocean
- **suicide barrier**  
the columbarium itself will prevent the success of future suicide attempts



**PARTIAL SECTION** looking south  
new columbarium/memorial - one side



**PARTIAL SECTION** looking south  
showing new columbarium/memorial



## WHERE IS IT? HOW DOES IT WORK?

The columbarium/memorial is cantilevered from & supported by the existing structure. The columbarium niche, storing the interred, is within the frame of the bridge. This new structure creates a second pedestrian path. The existing pedestrian path is for crossing and the low railing allows unobstructed views to the Pacific Ocean and back to the city of San Francisco. The new path is for reflection and consideration of the interred and lives lost to suicide. The path is defined by the columbarium niche wall inside the structure of the bridge and a permeable fence towards the outside.

The fence along the edge of the columbarium serves two functions.

1. It acts as a screen, encouraging views in towards the niche wall.

The existing pathway, with the low railing, remains the primary destination for sight-seeing with its unobstructed views. The new columbarium with a perimeter fence and benches forces views back into the structure of the bridge, the location of the remains.

2. It is the suicide barrier for the level above.

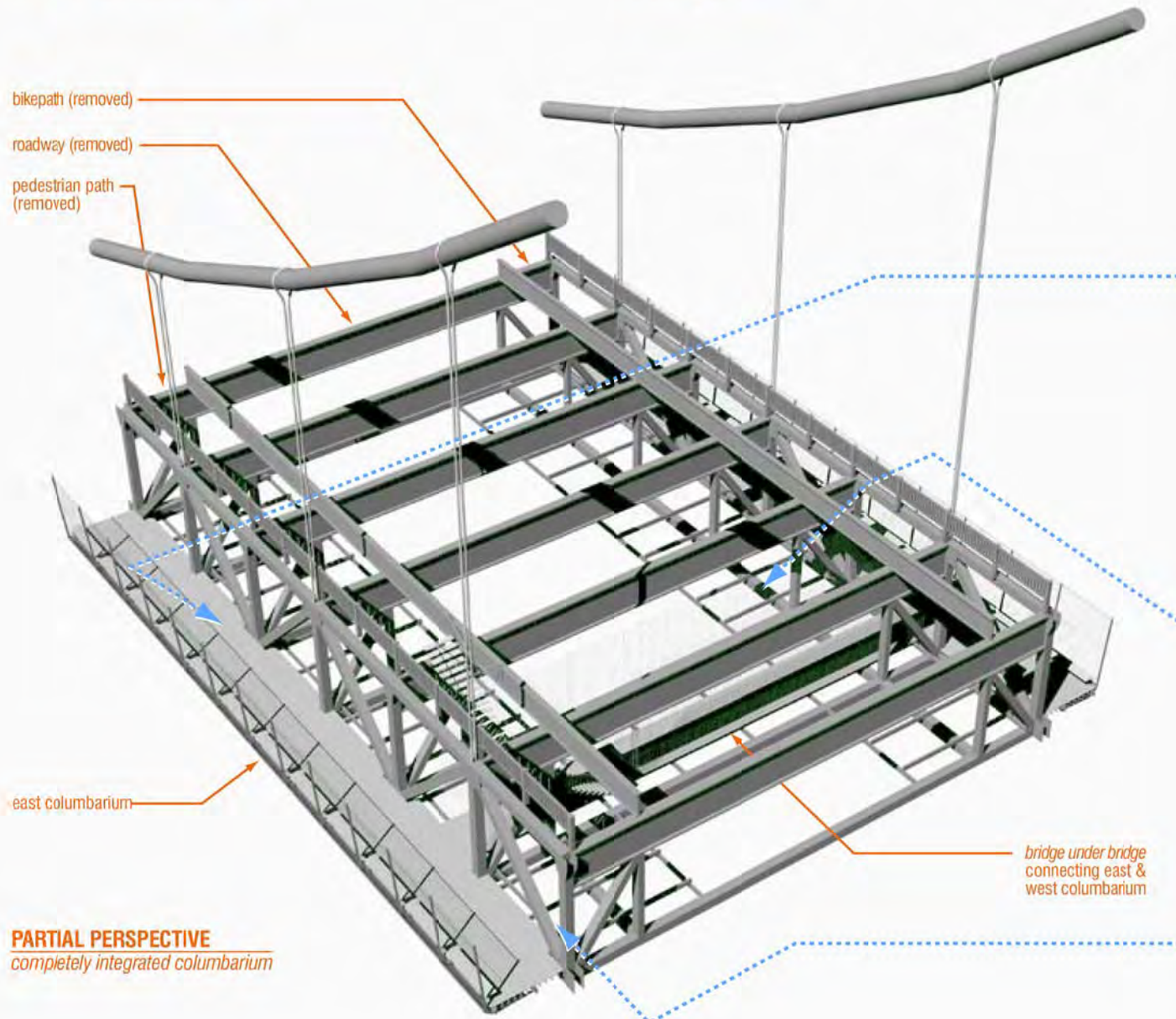
One problem of previous solutions to the suicide barrier was that they inhibited the view from the pedestrian walkway. By making the railing higher, previous designs have attempted to thwart possible suicides at the expense of panoramic views of the San Francisco Bay area. Instead of proposing an unscalable height, this barrier relies on distance to stop suicide jumpers from falling to their death. People wishing to jump from the bridge would have to clear a distance of over 15 feet in order to fall to the water. Otherwise they would just fall into the Columbarium below, a fall of less than 30 feet.

Currently there are officers who patrol the bridge and intervene and prevent suicides. They are assisted by cameras along the bridge looking for suspicious persons. Although it is very effective, the sheer length of the Golden Gate Bridge means this deterrent is only partially effective. This design is modular in that it can be installed in specific locations along the bridge or globally, across the length of it. Of course it is effective only where it is implemented, but it could also be seen, if only locally implemented, as a means of reducing the area of possible suicide locations. Reducing the area to be patrolled by officers will make their efforts to stop suicides more effective.



**PARTIAL ELEVATION \*\***  
with new columbarium/memorial

**PARTIAL ELEVATION \***  
the existing condition



**PARTIAL PERSPECTIVE**  
completely integrated columbarium

**DON'T BUILD UP...BUILD OUT**

The columbarium/memorial exists within the structure of the bridge. Previous suicide barrier options have increased the height of the pedestrian railing, therefore changing the bridge profile when seen in elevation. Because the new columbarium is made of a light-weight, permeable structure and is located in the trusses of the bridge, when seen in elevation the columbarium is hardly visible.

**HOW'S IT LOOK?**  
**CAN IT DISAPPEAR?**

Comparing the Golden Gate Bridge as exists\* to the bridge in combination with the projected columbarium structure\*\*, it can be seen how small the visible footprint could be because:

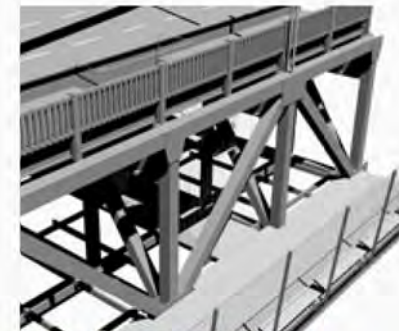
**1 It exists in the guts of the bridge.**

The urns, stairs, and connecting walkways are all located in the existing structure. The roadway above the structure keeps everything below it in shadow. Visually those parts in the shadows disappear.

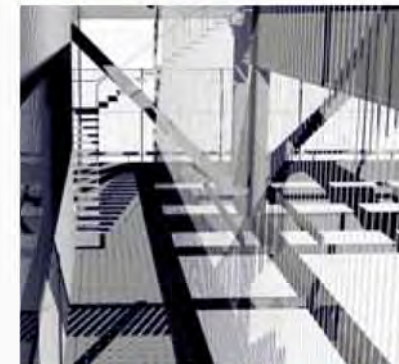
**2 It is made up of small, light-weight members.**

The columbarium structure does not need to carry large loads and it is built up from the existing robust bridge structure. Furthermore, the effectiveness of the members must be maximized in order to keep the structure as permeable to wind as possible. The fence/barrier which projects beyond the original structure is comprised of many thin vertical rods that from a short distance are invisible.

As mentioned, this design is modular and can work at just one structural bay or along the entire length of the bridge as well as on either the east, west, or both sides of the bridge. If the columbarium is on both sides of the bridge it can be connected through the existing structure and under the roadway surface. This hidden passage or *bridge under bridge* is suspended from the existing structure and allows people to access both the east and west columbariums from the existing pedestrian path.



looking down on east columbarium

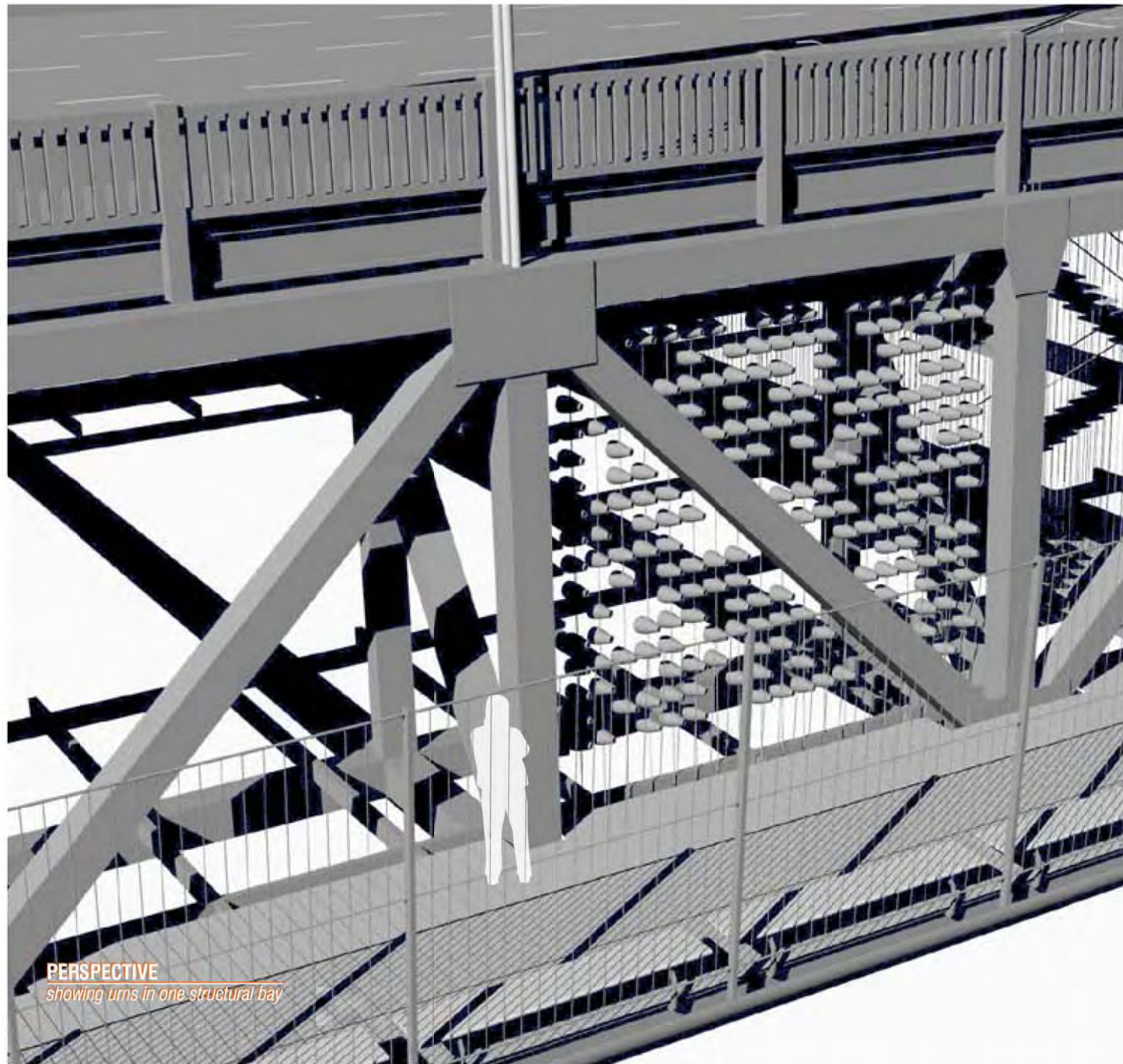


looking down bridge under bridge towards stairs leading up to pedestrian path



showing height change between pedestrian path and columbarium





**PERSPECTIVE**  
showing urns in one structural bay



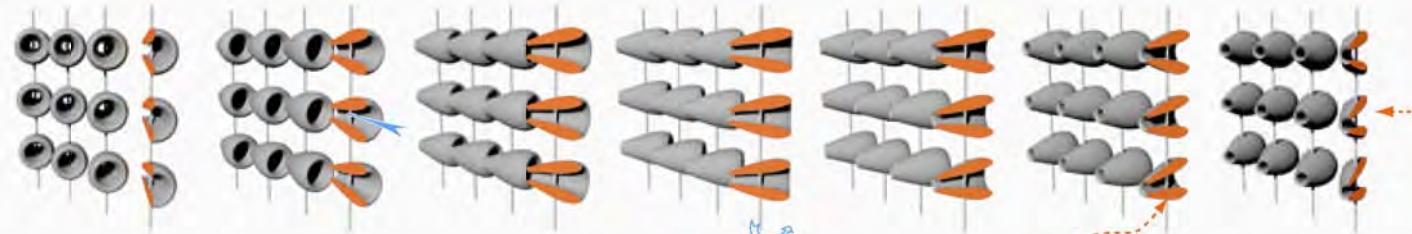
# STUFF IT IN A SOCK THE WINDSOCK URN

## URN STUDY 1 - THE ANIMATE URN

The *Windsock Urn* uses the existing iconic urn as a formal beginning. The windsocks are laid out in a grid and connected to vertically adjacent urns by a stationary rod. The individual urns can rotate freely about the stationary rod as dictated by wind currents. Each urn is 11 inches long with a maximum diameter of 8 inches. The center is hollow, allowing the strong bay winds to pass through with little drag. The urn is a double-walled structure made from aluminum. The aluminum urn is durable, light, and resistant to ocean bay corrosion. This construction keeps the weight well within the loading parameters and allows the urn to turn freely in the wind. The remains of the interred are stored within the thickness of the double-walled urn.

The windsock urn design allows for a maximum (shown in elevation drawing) of **576 urns per structural bay, 288 for each side of the bridge (east and west)**. The hollow design of the vessels creates very little wind drag by (1) acting as a screen that is **84% open** at its most dense location and (2) controls wind-generated vortices by rotating to the direction of least resistance.

Finding one celebrated patron could create immediate interest in the columbarium. Seeing that this would be the only option for interment "in" San Francisco, is there a celebrity with ties to the bay area who wants to remain with the city?

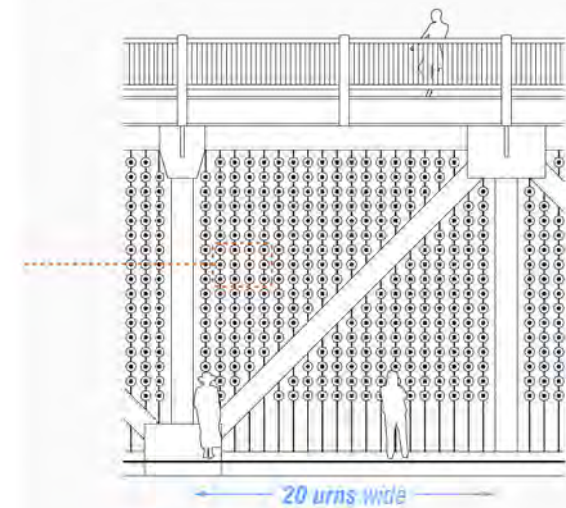


Wind passes freely through the hollow urn.

Each receptacle is able to turn in the direction of the least wind resistance.

Remains are stored within the walls of the individual urns.

**PARTIAL SECTIONS**  
through urns



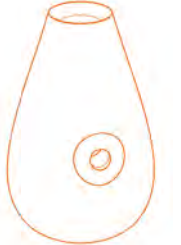
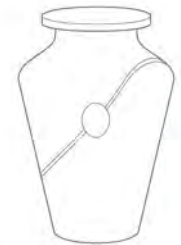
**PARTIAL ELEVATION**  
one structural bay with urns

**Greta Garbo**  
April 15, 1890  
Stockholm, Sweden

**Mahatma Gandhi**  
January 30, 1869  
Self-Realization Fellowship  
Lake Shrine, The Nile,  
The Thames, The Volga, etc.

**Burt Lancaster**  
October 20, 1914  
Los Angeles, CA

**George Lucas**  
?  
Golden Gate Bridge





**PERSPECTIVE**  
showing urns in one structural bay



# ASHES IN THE GRILL

## PERMEABLE NICHES

### URN STUDY 2 - THE STATIC URN

The *Permeable Niches* are lightweight aerodynamic modules that, when combined, infill the space between trusses below the deck of the Golden Gate Bridge. The structure echoes the diagonal trusses of the bridge, thus maximizing the efficiency of the design. The design allows three different urn types (*1X, 2X, and 4X*) to be linked together to form the columbarium niche wall. The individual urns are 11 inches deep and vary in height. The structure of each urn, once coupled to the neighboring urn, is an aerofoil section which keeps wind drag to a minimum. The urn is a double-walled structure made from aluminum. The aluminum urn is durable, light, and resistant to ocean bay corrosion. The remains of the interred are stored within the thickness of the double-walled urn.

The windsack urn design allows for a maximum (if only 1X size is used) of **402 urns per structural bay, 201 for each side of the bridge (east and west)**. The hollow design of the niche wall minimizes the wind drag. At its most dense, the *Permeable Niche* wall is over 65% open.

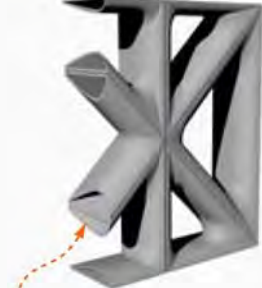
The *Permeable Niche* design gives prospective patrons 3 size options and the opportunity to purchase family "plots". The larger sizes can be subdivided internally or work as a larger monument for the interred.



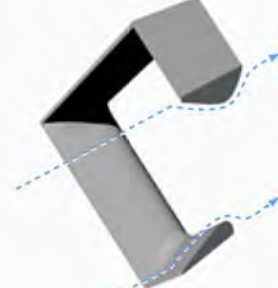
Individual units (3 types)



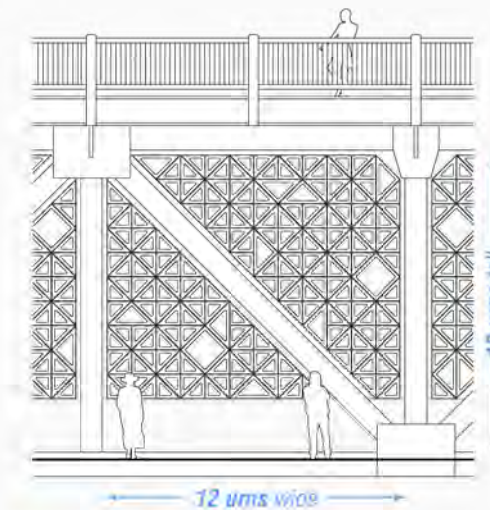
Individual units assembled as a group to *make up the columbarium wall*.



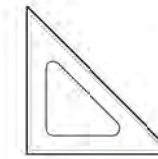
*Remains* are stored within the walls of the individual urns.



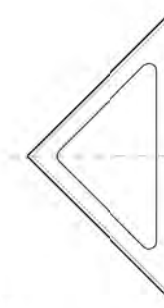
Aerodynamic design pulls wind through structure with *little wind drag*.



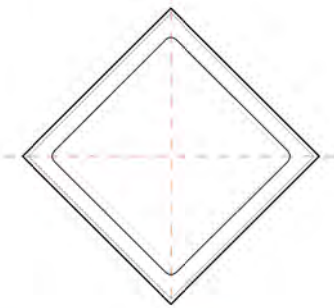
**PARTIAL ELEVATION**  
one structural bay with urns



**SMALL (1X)**  
Single Urn

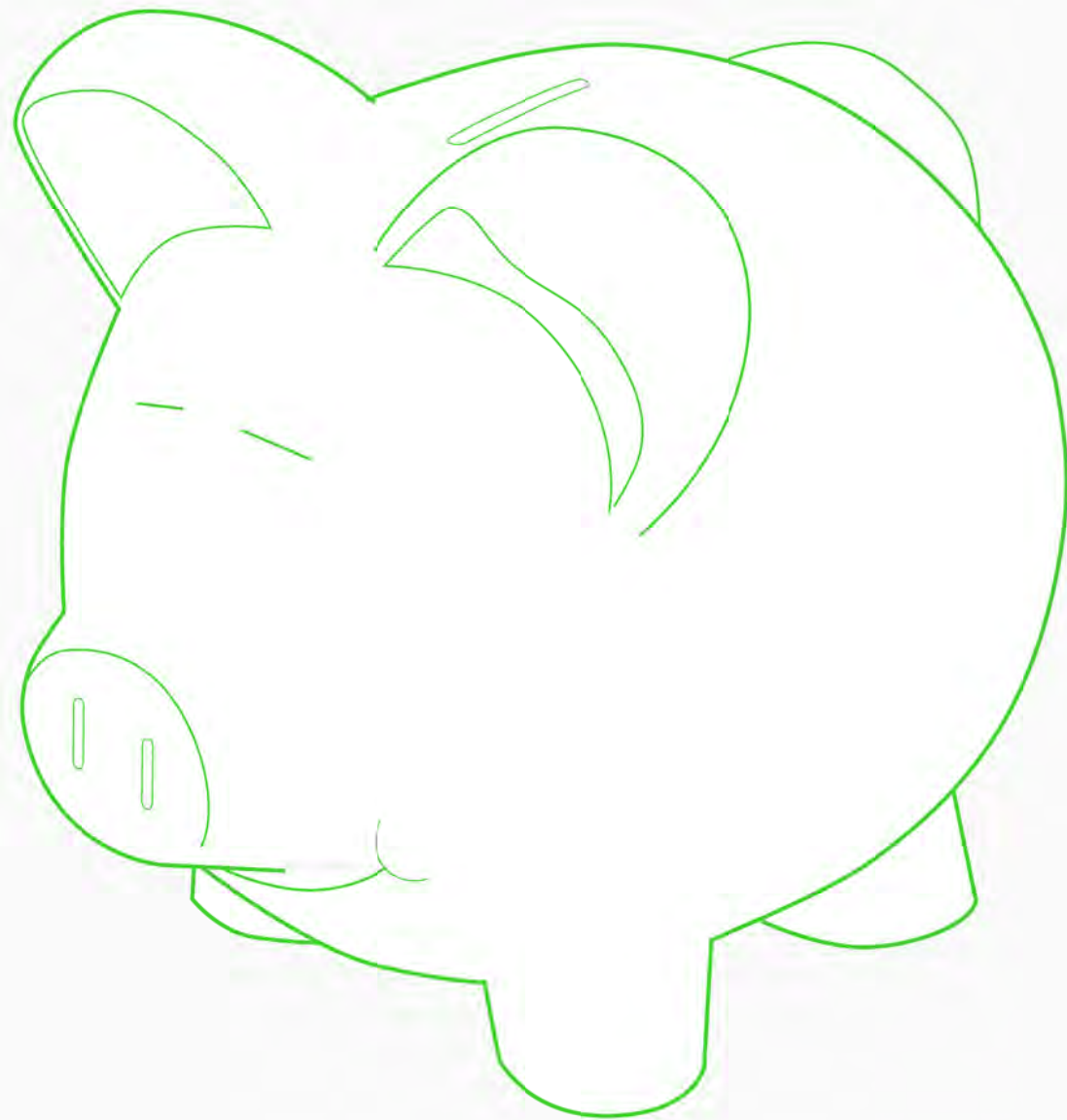


**MEDIUM (2X)**  
Large Single Urn  
or divided for 2 family members



**LARGE (4X)**  
Large Single Urn  
or divided for 4 family members

**URN SPECIFICS**  
how they work



## Making Money as the Wind Blows

Cremation	\$200
Transportation	+ \$50
Aluminum Urn	+ \$300
<b>Total Costs</b>	<b>\$550</b>



Income per Urn minus initial cost	\$4,450
Number of "plots" per structural bay	x 576
Number of Bays main span only	x 140
<b>Columbarium Income</b> both sides of main span	<b>\$358</b> million
Annual Yield %	5.5%
<b>Income in Perpetuity</b>	<b>\$20</b> million

## SAVING LIVES & STORING MEMORIES ALL THE WAY TO THE BANK

The Golden Gate District Board is facing an 87 million dollar deficit for the next five years. As illustrated in previous pages, the possible solutions to this problem (toll increases) will not have long-term viability. One proposal put forth by the board does seem promising, but not as proposed. Bringing in private entities to help cover the funding gap could solve all future monetary shortcomings if seen in a new light; the columbarium light. The "partnership program" as promoted has met public criticism. People are scared that the character of San Francisco's landmark will change through sponsorship. **But what if the bridges partner had no marketing aims and could solve other problems associated with the bridge, not just money problems but the suicide problem as well?** This is not your standard corporate sponsor, this is a super-hero.

The "partnership program" is looking to secure 4 million dollars a year from an outside entity. What that partner will get is the issue of contention. The columbarium needs nothing but space; the space below the occupiable surface of the bridge. With that space, it can assure the 4 million dollars in annual funding with ease.

First, it is assumed that the Golden Gate District Board will have to build a suicide barrier in the near future. The columbarium acts as a barrier as well, so the cost of initial construction (just the skeleton) could be paid for with this funding. **Further costs would include the urn, cremation, and transportation. Per "plot" this would come to a total of \$550.**

Pricing the columbarium is difficult. The price of a columbarium niche and cremation can range from \$3,000 to over \$15,000. **For this proposal the "plots" are priced at a conservative \$5,000.** Considering the unparalleled location, the price per interment could be much higher. Subtracting the initial cost, **each "plot" would bring in \$4,450 to be invested in a fund and drawn from in perpetuity.**

The columbarium, in order to provide income of \$4 million per year for the Golden Gate Bridge, would have to create a perpetuity fund of \$80 million. With the assumptions listed above, that equates to **18,000 interments.**

Depending on the urn option, **this could be achieved in as few as 31 structural bays of the bridge; there are 140 structural bays in the main span alone.** If the 140 bays of the main span were all used the bridge could support **over 80,000 niches, bringing in over \$358 million, resulting in an annual fund of almost \$20 million in perpetuity.** This is using the main span ONLY, not the entire bridge (returns could get even bigger). The strength of these returns allows the design to be implemented in phases, reacting to monetary needs and suicide prevention.



*department of non-physical materials*

SEE THE INVISIBLE

### what does NPM do?

NPM designs an architecture based on senses other than vision. It demonstrates how architecture can be used to visualize (otherwise) invisible phenomena. By exposing the relevancy of invisible phenomena and then mastering techniques for manipulating them, NPM invents a new niche market for architecture. "Who designed your sound-scape?"

### what is NPM's strategy?

By attending to non-physical phenomena

1. NPM changes the way one experiences place
2. NPM changes the way one experiences architecture

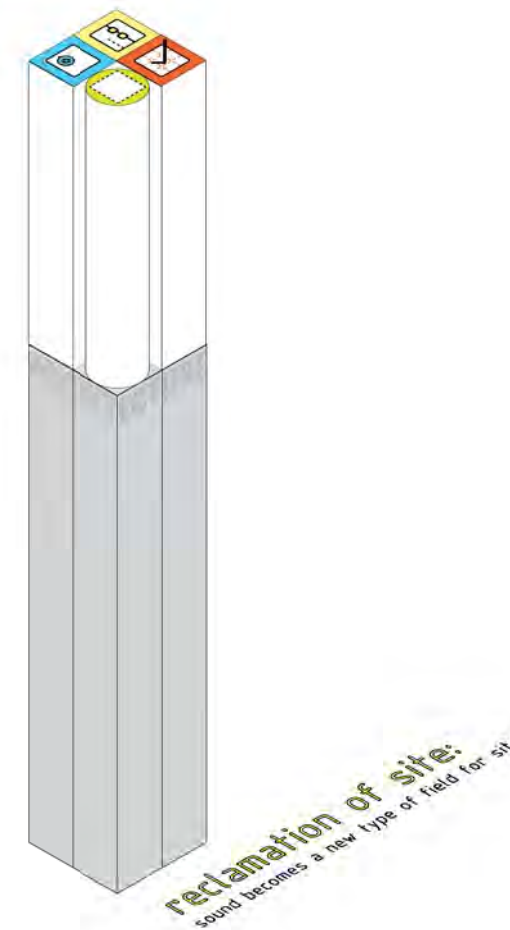
### how is NPM unsolicited?

NPM treats the non physical as an architectural material in an effort to make visible that which has been overlooked by previous architects.



feature project DJ ARCHITECT  
audience THE CITY OF BOSTON

DJ Architect approaches sound as an architectural material in order to change the way that one experiences place.



	opportunity	urgency
social		
environmental	sound	
technological		
political		

OVA



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100





Office of Unsolicited Architecture  
 NPM / Non-Physical Material  
 Soundscape

**How sound can shape our experience of architectural space?**

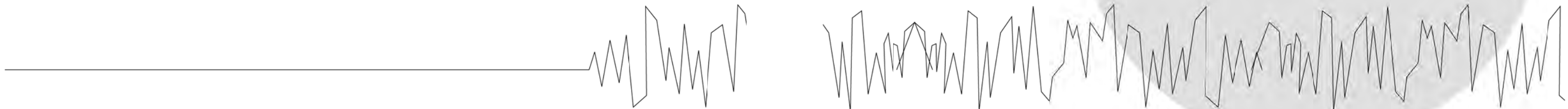
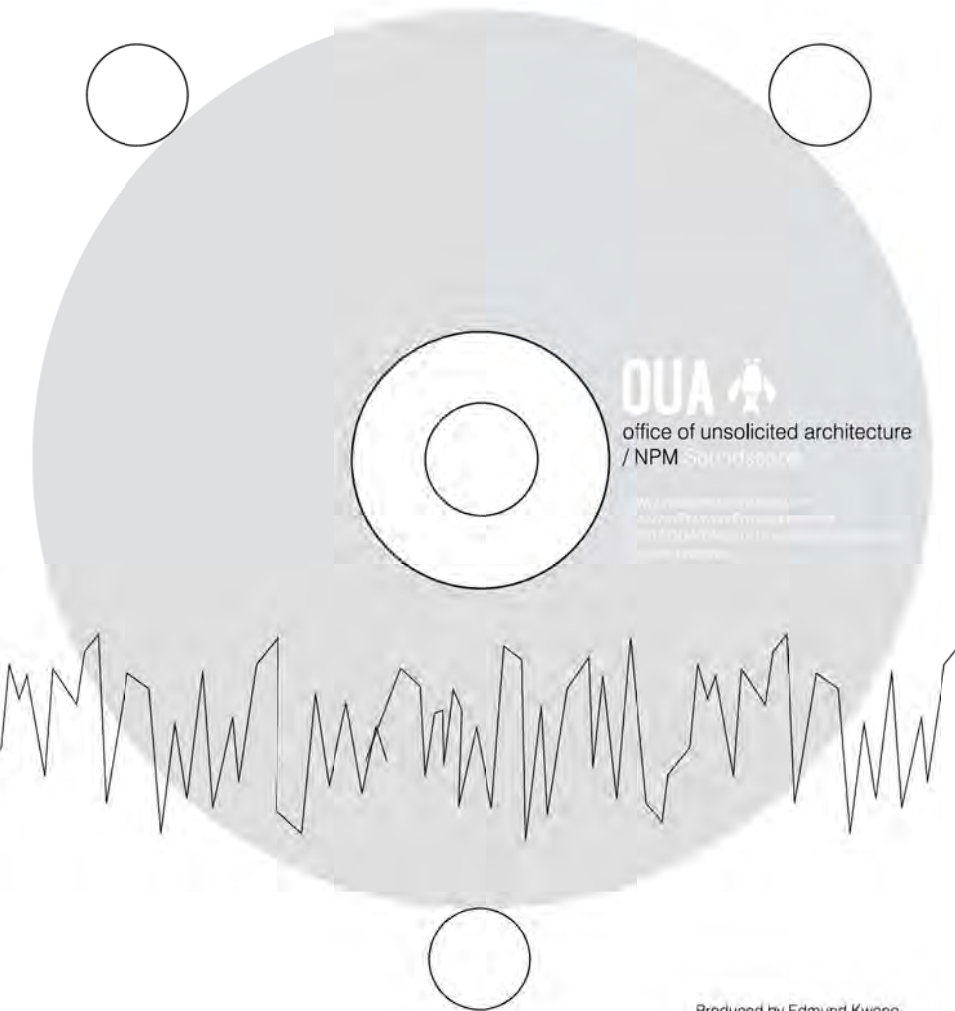
Being unsolicited architects, we are interested in how sound may physically construct a space in a sculptural way, a viewer may choose a path though this physical yet virtual space. For a long period of time, "sound" has been a neglected object of study within discourses of architecture. My department is to reintroduce the world not only through physical materials, but also through sounds.

The sonic environment in the NPM/Non-Physical Material unit changes how people look at space. Instead of using actual physical construction materials to create a barrier to protect ourselves from the sonic aggressions of the urban environment, my department created wall of sounds as a response that would compete in power with ambient noise of the modern world. This intervention allows me to reprogram an inhabitable site. Also it becomes entertaining to see the outside world without interruption of the noises. Sound thus acts to transform the representational space of habitation, both within and outside of the NPM unit. You and the NPM are the one thing and that's your space. You're in your own time capsule; it's like your living room. The idea is you're in your own little bubble. You're in your own little world and you have a certain amount of control and you don't have so much interruption.

Using sounds as a primary design element can lead to an unsolicited way to practice architecture. Through the renovation of sonic environment, the site creates an intimate experience even though it alienates you from the world, like the Walkman did in the 80s and the Internet does today. The work of the NPM department becomes a manipulation of the "real" and of a participant's projections, fantasies and desires.

Office of Unsolicited Architecture  
 / NPM

01 :: duck .park	2:59
02 :: protest	4:05
03 :: boston .soundscape	4:00

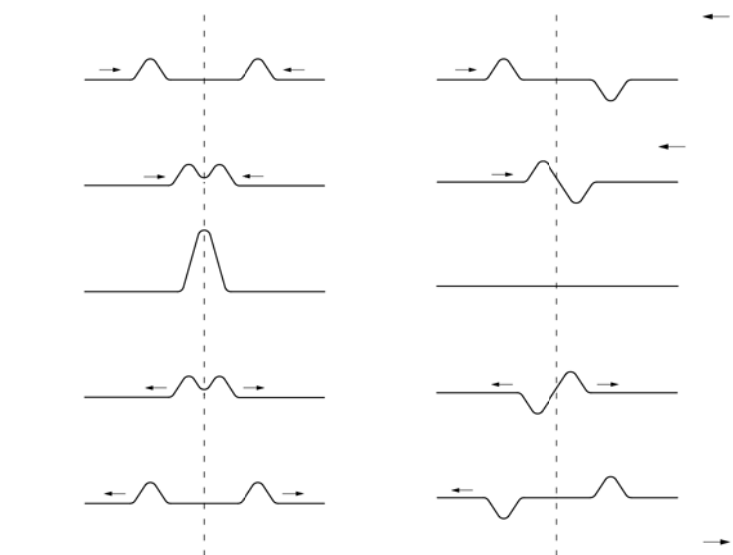
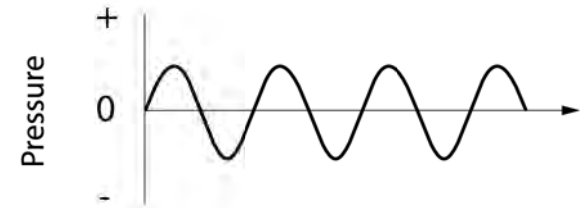


Produced by Edmund Kwong

[www.unsolicitedarchitects.com](http://www.unsolicitedarchitects.com)

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## Basic Acoustic and Sound Waves



### PERIODIC SOUND WAVES

Periodic sound waves are a regularly repeated pattern of oscillation. A sine wave is the simplest form of a periodic wave, representing a pure tone at one single constant frequency.

### APERIODIC SOUND WAVES

Aperiodic sound waves have no periodic frequency or oscillation. They are technically referred to as noise.

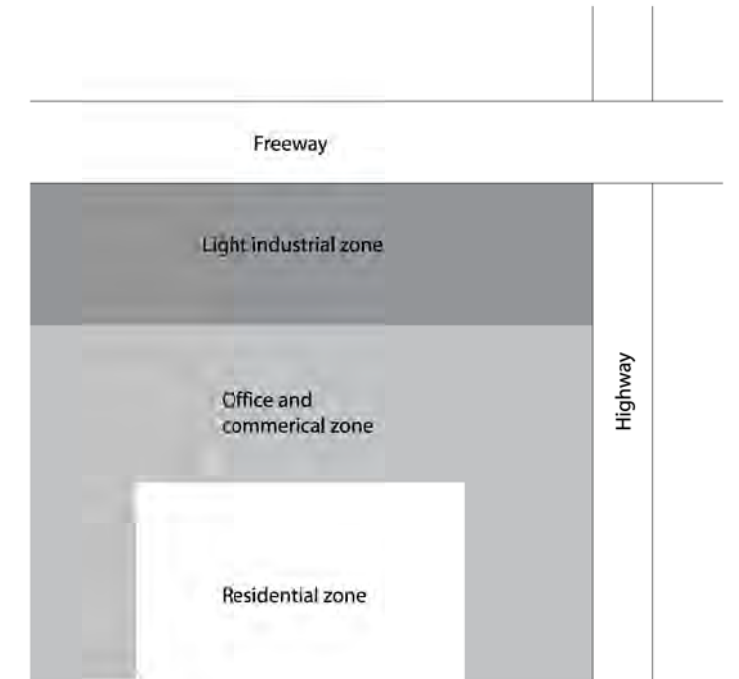
### INTERFERENCE

Two or more waves may support each other through constructive interference, or cancel each other out (destructive interference). A large number of different sound waves traveling in different directions can be superimposed in space, and can still be detected as distinctive from one another.

### SUPERPOSITION OF SOUND WAVES

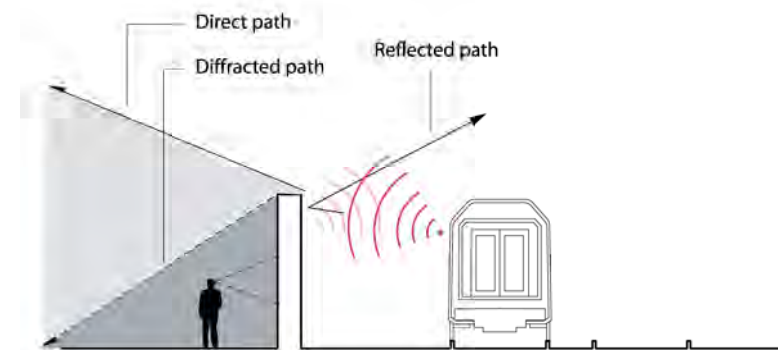
Sound waves traveling in opposite directions can pass through each other and emerge in their original condition.

Source	dBA
<i>Traffic</i>	
Large truck at 90 km/h	86
Passenger cars at 90 km/h	71
Motorcycle at 90 km/h	95
Snowmobile	85
Train	94
Train siren	109
Car horn	97
Commerical Airplane/ 1.5 km from take-off flight path	78
Helicopter	80
<i>Outdoors</i>	
Birds	57
Cicadas	57
Barking dog	72
Lawn mower	86
Pistol shot (peak impulse levels)	106
Surf	78
Wind in tree leaves	43



### ZONING LAWS

Zoning laws and maps often provide for the separation of quiet and noisy areas. Where inconsistent uses occur (a residential area near a highway)



### OUTDOOR BARRIERS

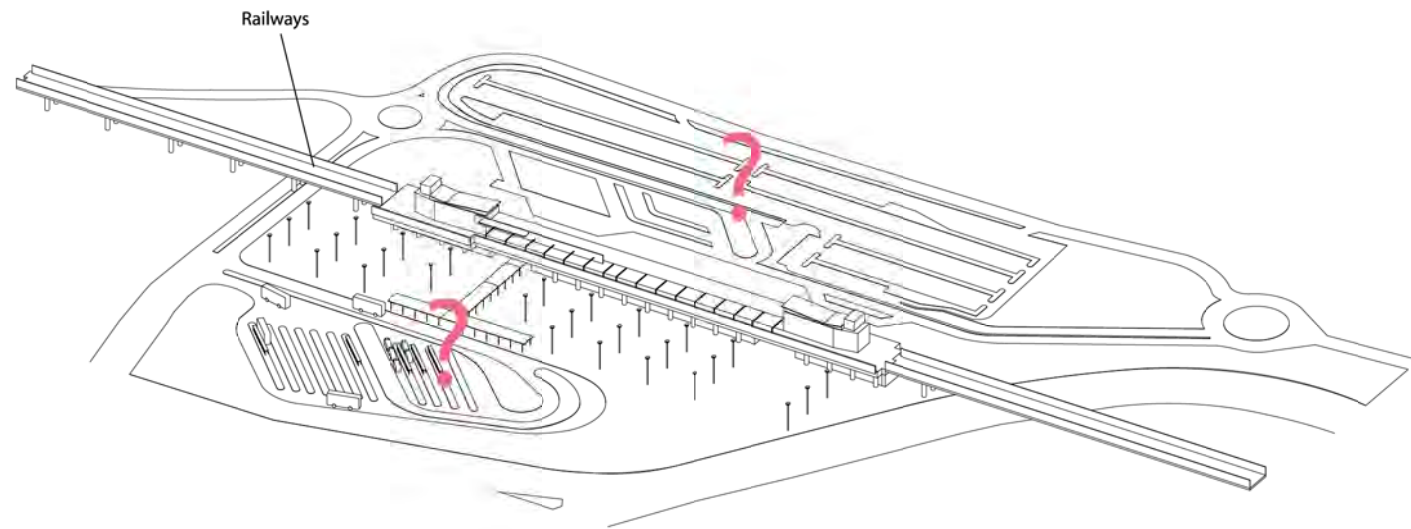
Freestanding structures can deflect, absorb or reflect sound, especially higher frequencies.



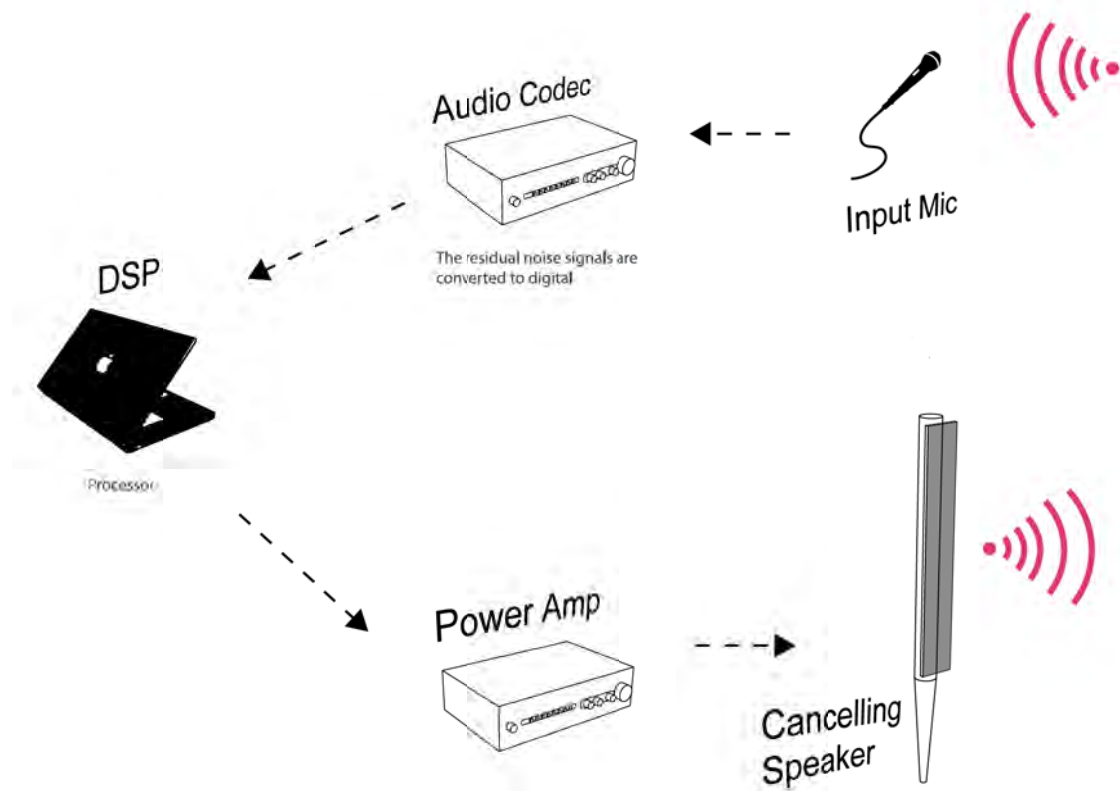
### VEGETATION

Vegetation can help attenuate propagated sound. The shielding effect of trees and shrubs is often overestimated. A thin visual barrier of greenery has a negligible effect as a sound barrier.

# How can Unsolicited Architects utilize these peripheral spaces?



## Noise Cancellation System Diagram



## The Biological Effects of Noise on Wildlife



1. Many types of frogs and insects vocalize together in a given habitat so that no one individual stands out among the many. This chorus creates a protectively expansive audio performance inhibiting predators from locating any single place from which sound emanates. The synchronized frog voices originate from so many places at once that they appear to be coming from everywhere.

2. However, when the coherent patterns are upset by the sound of a jet plane as it flies within range of the pond, the special frog biophony is broken. In an attempt to reestablish the unified rhythm and chorus, individual frogs momentarily stand out giving predators like coyotes or owls perfect opportunities to snag a meal.

3. With noise cancellation system, the frogs are back in harmony and the special frog biophony is synchronized again. It becomes impossible to locate any single place from which sound emanates. Frogs are safely camouflaged with the environment.



## A NPM-Conditioned Unit

Environment acoustics is mainly concerned with noise, or undesirable sounds. Especially in urban conditions, noise levels are increasing with greater population density. Can architecture be audible? The city is also to be heard and not only to be seen. In this respect, staying in this NPM-conditioned unit is like a wonderful decoding instrument of urban sonic environment. In this unit, people use it not only to protect himself from the sonic aggressions of the city but also to filter and enhance the events that give the place its meaning. Depending upon the places and what is happening in the space, the sound cancellation device is used in order to be able to mask noise pollution, such as traffic noise. This space is both one to look out from and to be looked into. It is simultaneously private and public. User lose themselves in the pleasure of habitation and become increasingly aware of the activities inside.

## Aesthetization of the existing situation

The sonic environment in the NPM-conditioned unit changes how people look at space. Also it becomes entertaining to see the outside world without interruption of the noises. Sound thus acts to transform the representational space of habitation, both within and outside of the NPM-conditioned unit. You and the NPM-conditioned unit are the one thing and that's your space. You're in your own time capsule, it's like your living room. The idea is you're in your own little bubble. You're in your own little world and you have a certain amount of control and you don't have so much interruption.

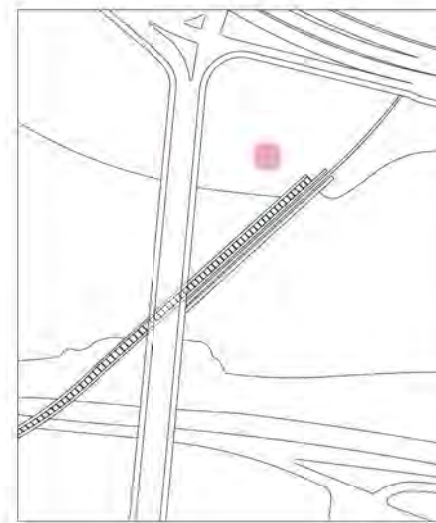
## duck .park



Track 01 :: duck .park :: 2:59



## interchange .park



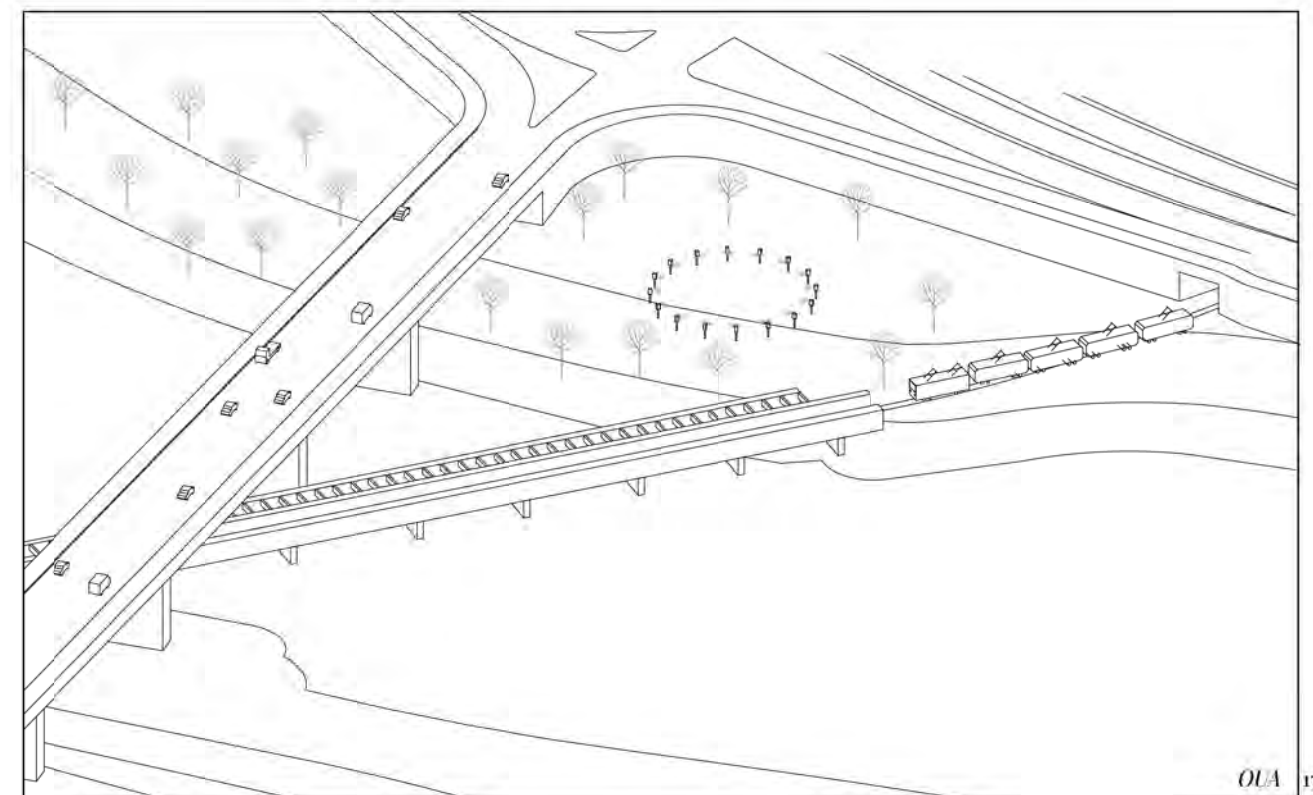
Site plan



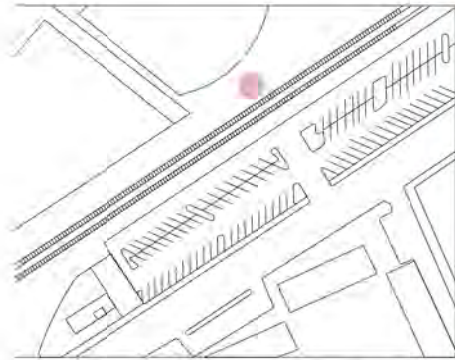
Site : Cambridge Port, MA

**Strategy :** A complete loop of speakers is formed to protect the area from the sonic aggressions of traffic. As you walk in this loop, you become disjoined from seen reality. It becomes a manipulation of the 'real' and of a user's projections, fantasies and desires.

Press # 3 to play the soundtrack



# railway .linear .park

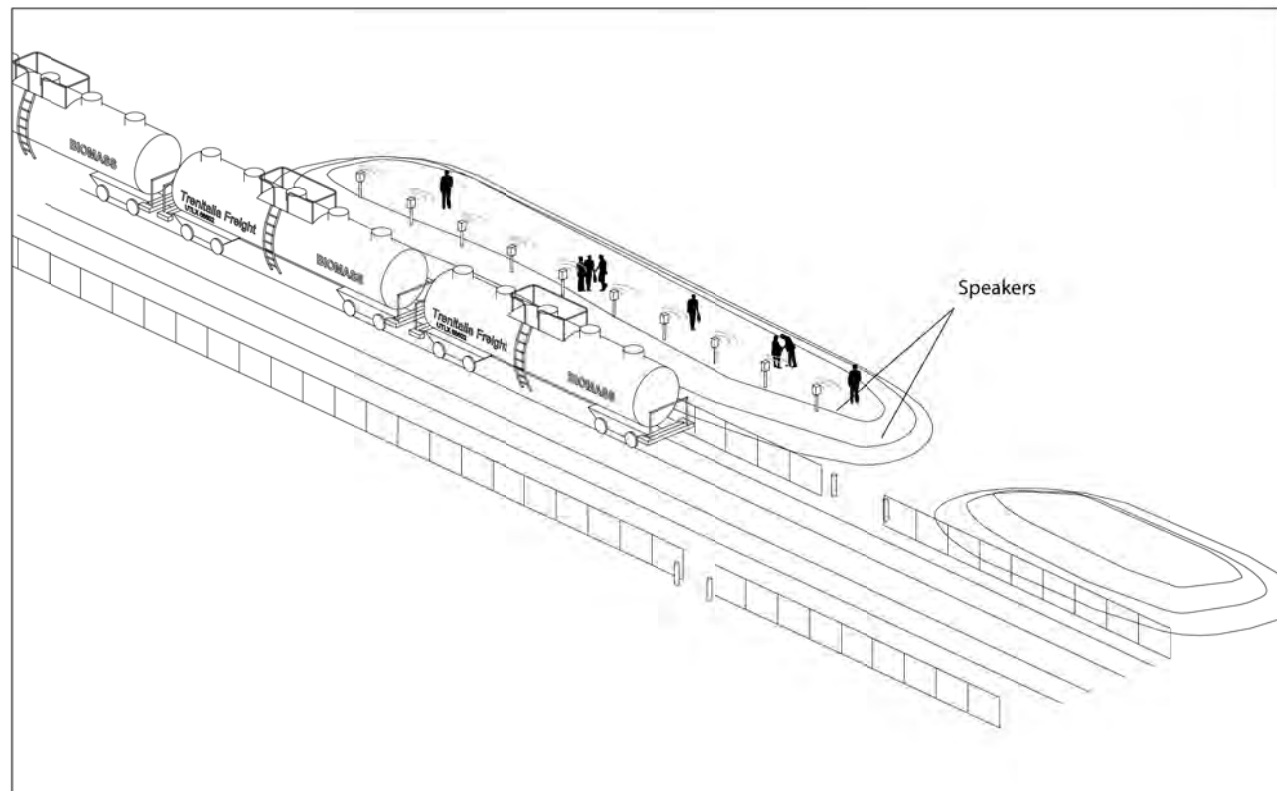


Site plan



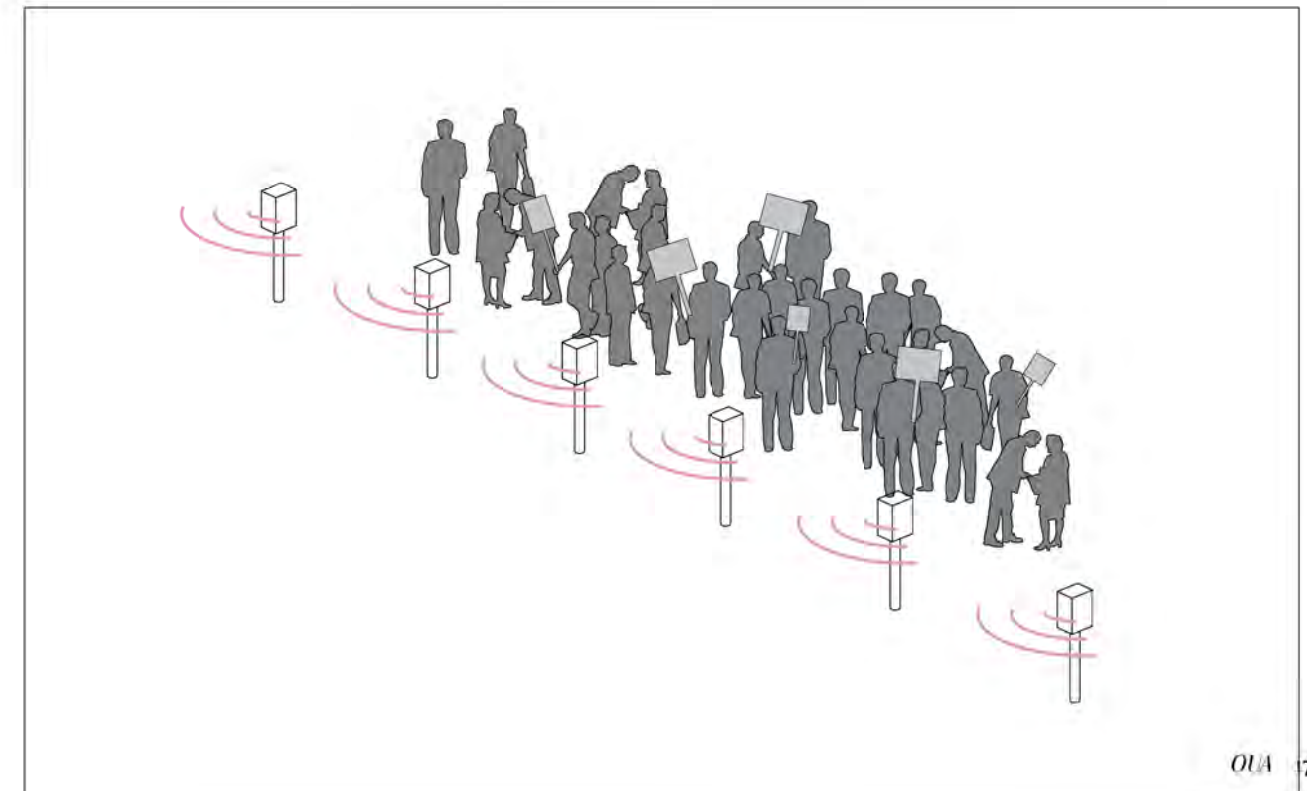
**Site :** Cambridge Port, MA

**Strategy :** The Linear Park are protected from the sonic aggressions of trains. In this park, sound becomes a primary concern, a row of speakers is positioned to create music that would compete in power with trains noise. By renovating this park with sounds, it filters and enhances the events that give the place its meaning.



**Site :** Novartis Company, Cambridge, MA

**Strategy :** With the noise cancellation device, the voice of protesters are being cancelled out with other frequencies. This invention is used in order to be able to listen to or to mask voices. It becomes a practical device for politicians.





*department of radical sustainability*

APPLYING SUSTAINABILITY TO ARCHITECTURE AND ARCHITECTURE TO SUSTAINABILITY

**what does RSD do?**

The urgency that RSD addresses goes beyond the issues of carbon neutrality or climate change: RSD's ultimate urge is to reconfigure civilization itself, so that its members are able to meet their needs and express their greatest potential in the present, while preserving natural ecosystems (of which they are a part) for the future.

**what is RSD's strategy?**

RSD approaches sustainability...

1. As an excuse to re-evaluate the way we make and inhabit architecture.
2. As a way of thinking.

While RSD's projects are steps in the right direction, we are always cognizant that THIS IS NOT ENOUGH; RSD projects are not finalized solutions, but research programs that help to refine our understanding of sustainability and find examples of what long-term sustainable solutions ought to be.

**how is RSD unsolicited?**

RSD questions needs before design

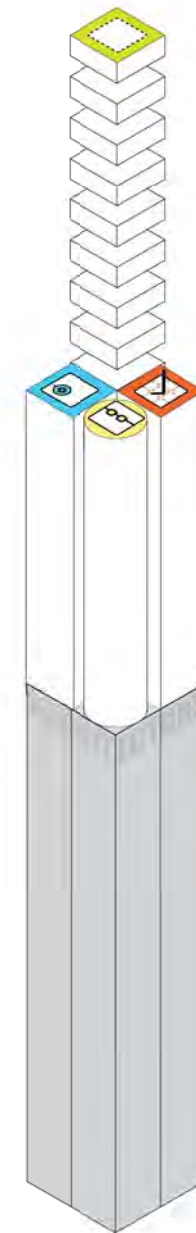
In a time when it seems some societies have evolved beyond concern for their very existence, RSD aims to synchronize its clients (almost everybody) with concerns for their own well-being (one of long-term livelihood, not short-term satisfaction).



feature project **SUPERNEUTRAL**  
audience **EVERYONE**

SuperNeutral outlines a strategy that can help everyone to reduce their carbon footprint, by investing in an architecture that operates in the alternate currency system of carbon emission credits.

	opportunity	urgency
social		
environmental		← resources
technological		
political		



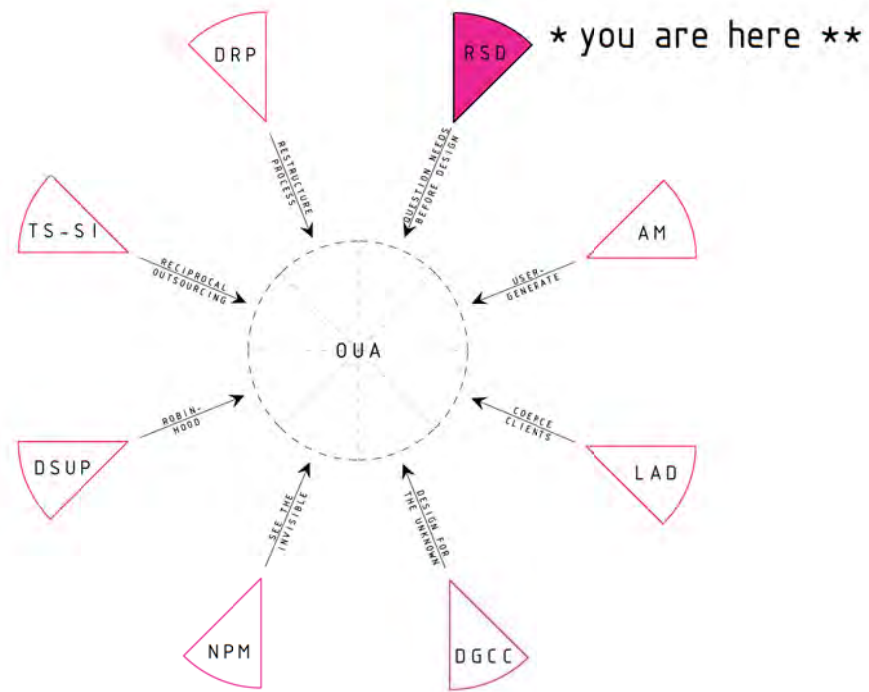
**reinterpretation of site:**  
sites previously considered to be too small or too inaccessible are shown to have architectural value

**rejection of budget:**  
through demonstrating an openness to alternate methods of judging value

**reclamation of client(s):**  
the traditional one-to-one architect-client structure is dismantled in order to allow individuals with limited means to engage in architecture

# / OUA MAP

01



**\* you are here \*\***

**\*\* now go here** .....>

# / CONTENT MAP

RETRO.ACTIVE SUSTAINABILITY (applying architecture to sustainability)	PRO.ACTIVE SUSTAINABILITY (applying sustainability to architecture)		
RSD MANIFESTO page 03-04	PRECEDENCE *gordon maffa-clark *carbon neutral page 07	URGENCY *climate change page 08	OPPORTUNITY *professional domain *debt/currency *space page 08
RSD DIY page 05-06	SITE *site context map *microsite catalog page 11-12	PROGRAM page 13-14	BUDGET *business model *project financing page 09
SURPLUS PORTFOLIO *subverting common sense *sacrificing the right angle *reprinting footprint *sustainable surfing *hungry architects *question needs before design page 15-16	CLIENT *microsite contract page 10	PROJECT *Closing the Gap *Planting Walls page 13-14	CLIENT *sponsor contract page 10

# /RSD MANIFESTO

RETRO.ACTIVE  
SUSTAINABILITY

rsd is  
a  
frame  
of  
mind

<sup>03</sup>The Radical Sustainability Department is a vital component of OUA that engages in urgent and opportunistic research and production. \*

The urgency that RSD addresses goes beyond the issues of carbon neutrality or climate change; our ultimate urge is to reconfigure civilization itself, so that its members are able to meet their needs and express their greatest potential in the present, while preserving natural ecosystems (of which they are a part) for future. \*

In a time when it seems societies have evolved beyond concern for their very existence, RSD aims to synchronize its clients (almost everybody) with concerns for their own well-being (one of long-term livelihood, not short-term satisfaction), and with the means of addressing these concerns. \*

"We are architects, designers, thinkers, and doers - not ecologists. Thus we firmly believe that we are crucial members of the discussion on sustainability."

- OUA RSD

Rsd wants to take current notions of sustainable architecture for granted, and transgress these boundaries. Reductions in energy usage alone are not going to solve the world's long-term problems - and thus are not truly sustainable. It sends a message to the public that reducing is optional and ENOUGH. But as we said,

THIS IS NOT ENOUGH

Our projects will aim as much as possible to satisfy all the physical requirements of "green design" but in addition, highlight specific issues which expand the domain of "sustainability."

tags

balance for granted

challenge climate

code behavior

conserve materials

open the public

program users

protect the future

push boundaries

question needs

teach clients

understand systems

share environment

solicit conservation

<sup>04</sup>

<sup>05</sup> Applying "architecture" to sustainability

Sustainability is a relatively new field and, due to its urgent nature, requires as much input NOW as possible. By the time a problem becomes an issue, it is nearly too late. By applying our conceptualization, design, and problem solving skills to the problem of sustainability, OUA's goal is to help define emerging problems of sustainability and propose solutions before the final tipping point for intervention is irreversibly past.

[Meta-Level] Firm Structure

We are striving for internal sustainability as our firm matures. To this end, we are adhering to guidelines outlined by Hargroves & Smith.

[Mid-Level] Research

Much of our work will lie in conceptual research and development. This material will be disseminated through our website and other media - unless specifically noted otherwise.

Applying "sustainability" to architecture <sup>06</sup>

Sustainable architecture is commonly defined as "the minimizing of negative environmental impact of buildings by enhancing efficiency and moderation in the use of materials, energy, and development space." This of course is also our mandate, but in the spirit of OUA, we will seek to challenge, even violate, traditional architectural solutions to sustainability. To this end SD will address sustainable architecture first through violations of the cornerstones of site, budget, client, and program, as well as engage in (non-physical) marketing and research programs.

[Mid-Level] Research

Conceptual research and development will be disseminated through our website and other media - because research is useless unless shared, debated, and marketed.

[Base-Level] Projects

RSD's portfolio will comprise of physical and non-physical projects. Projects generally stem from research done at the MidLevel stage, although the reverse can also be done. The aim is to develop both working projects the research to support it.

# / PRECEDENTS

07

## / HOW RSD SEES IT

RSD believes that the odd-lots which permeate our cities are not lost, but just require creative solutions and alternate modes of financing to make such small projects viable.

## / HOW RSD SEES IT

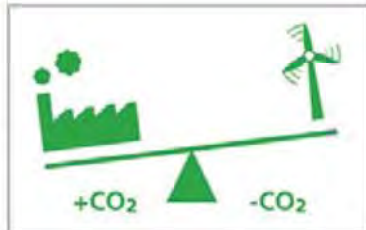
RSD believes that coinciding carbon regative projects with the odd-lots would simultaneously help to recapture wasted energy and as well as wasted space.

## / GORDON MATTA-CLARK / ODDLOTS

Part of the Anarchitecture group, Matta-Clark was interested in the idea of entropy, metamorphic gaps, and leftover/ambiguous space. Fake Estates was a project engaged with the issue of land ownership and the myth of the American dream - that everyone could become "landed gentry" by owning property. Matta-Clark "buys" into this dream by purchasing 15 leftover and unwanted properties in Manhattan for \$25-\$75 a plot. Ironically, these "estates" were unusable or unaccessible for development, and so his ability to capitalize on the land, and thus his ownership of them, existed virtually only on paper. The notion of site is questioned: does land, irrespective of its size, still maintain value in the rationalized city? What urban transformations have caused the emergence of these sites, and what architectural potential does it hold?

## / CARBONNEUTRAL / www.carbonneutral.com

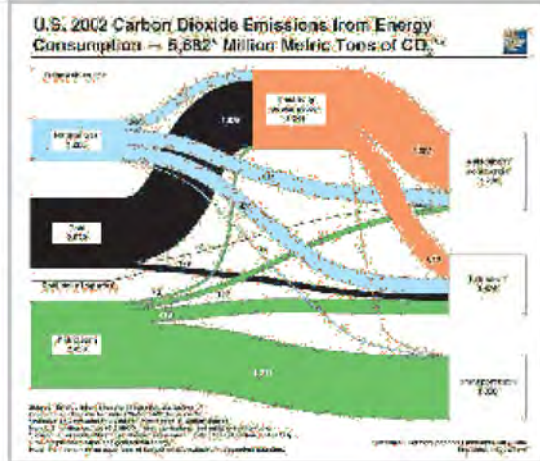
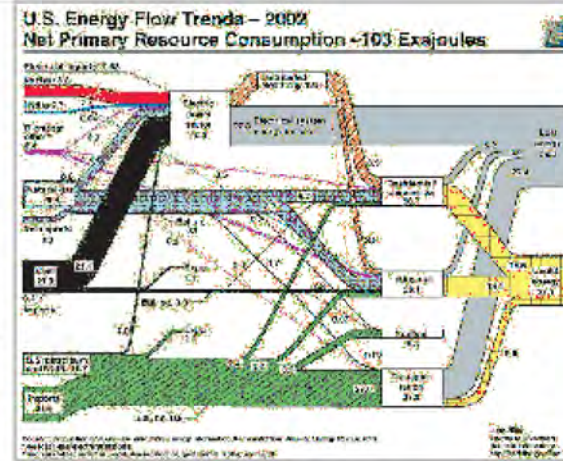
CarbonNeutral is just one example of the latest emergent business model: carbon offsetting programs with online interfaces. However, these companies have few projects that directly influence the environment in which the the sponsor lives. How can carbon neutral projects be brought closer to home?



# / URGENCY / OPPORTUNITY

08

source : Lawrence Livermore National Laboratory : www.eed.llnl.gov/flow/



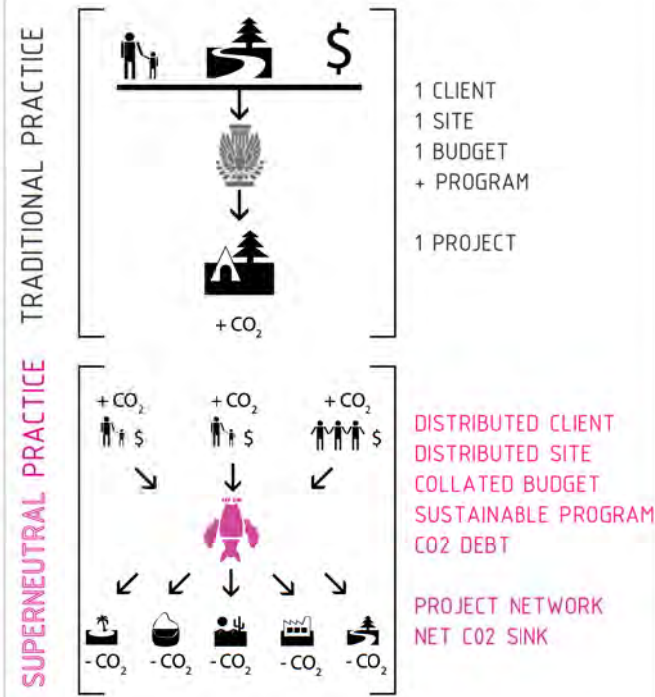
- \*Nearly 60% of energy expenditure in the US is lost
- \*The building sector accounts for 25% of industry's total energy consumption
- \*Architects can directly influence at least 1/5 of energy consumption - energy related to residential and commercial uses
- \*Thus architects have a duty to address energy consumption and conservation through sustainable design practice, as a matter of URGENCY rather than as option

- \*When energy consumption is regarded in terms of carbon dioxide emissions, the building sector becomes even more prominent as a contributor to global climate change
- \*Rather than assign or assume blame, architects should see this situation as a design challenge, and furthermore, as an ECONOMIC and MARKETING OPPORTUNITY to expand the realm of architectural practice

# / BUDGET

**TRANSGRESSION:**  
CAN ARCHITECTS OPERATE IN AN ALTERNATE CURRENCY?  
/dominate industry through prescience

09 BUSINESS MODEL FINANCING SUPERNEUTRAL



Projected cost of SuperNeutral construction\* : \$21,690  
\*project details on page

Average heating bill per month per household: \$156 (90 Therms)  
Total heating bill for 3 households: \$468 / month (270 them)

20% of the heating/cooling energy can be saved since the construction removes one wall out of 5 surfaces:  
\$94 per month (54 therms / month)

This is doubled because 2 houses get the savings:  
\$188 (108 therms)

= \$2256 saved in 1 year (1296 therms)  
= 7.75 tonnes of CO2 saved

\*The price of the construction is paid back within 8 years.  
\*The payback period will likely decrease as the price of natural gas is projected to rise.  
\*If the project is subsidized by CO2 offset payments then the cost could be repaid within 5 years or less.  
\*Clients will make a profit after 5 years as well as get more living space.  
\*The extra rooms can be rented out for additional income.

# / CLIENT

**TRANSGRESSION:**  
CAN ARCHITECTS BE EMANCIPATED FROM THE CLIENT'S CONTROL?  
/marketing to the masses

CONTRACT :: MICROSITE OWNER CONTRACT :: MICROSITE SPONSOR

**PROJECT DESCRIPTION**

- ( ) The owner of an unused/underused space consults OUA to determine a suitable intervention that would conserve energy and make more efficient use of the property.
- ( ) In addition to a minimal fixed design fee, the client transfers all CO2 credits saved by the project to OUA. In return, OUA manages all design and construction matters.
- ( ) OUA provides partial sponsorship through selling the CO2 credits that are saved as a result of the project.

**SERVICES PROVIDED**

- (O) Project potential assessment, savings calculations (energy expense for owner)
- (C) Behavioral assessment (monitoring/educating the client) - if requested
- (O) Design consulting
- (O) Materials and labor sourcing
- (O) Construction and implementation
- (C) Post-implementation monitoring of building (and client) performance
- (C) Documentation of finished project
- (O) Advertising of project for CO2 offset sponsoring

**OWNERSHIP OF THE WORK PRODUCTS**

- ( ) The client owns all physical elements attached to his property.
- ( ) OUA owns the right to collect and use images and data of the project.
- ( ) OUA owns the CO2 credits unless the client wishes to keep them (at a cost to the client)

**TRANSACTION DESCRIPTION**

- ( ) The client decides how much of his CO2 debt he wants to offset.
- ( ) OUA agrees to maintain a project portfolio which at all times will produce a net carbon sink larger than the net carbon credits that it sells, therefore maintaining carbon neutrality in the overall scope of the operation.

**SERVICES PROVIDED**

- (O) Update and maintenance of Microsite catalogue
- (C) Assistance in calculating client's CO2 debt
- (O) Documentation/certificate of sponsorship/carbon offset provided

**OWNERSHIP OF THE WORK PRODUCTS**

- ( ) CO2 offset credits are transferred to the client upon sponsorship agreement (through an online interface)

**LEGEND**

- (O) = Sole responsibility of OUA; OUA reserves the right to subcontract these services to a third party
- (C) = The responsibility of OUA with the assistance of and compliance from the client. Failure of the client to assist OUA in fulfilling these obligations may warrant cancellation of the contract.



# / SITE

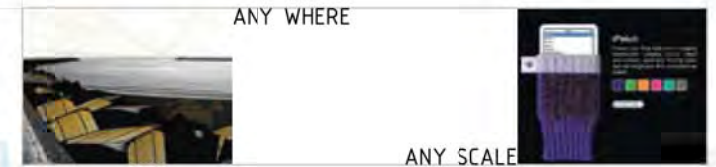
# SuperNeutral



- \* When a site is submitted to OUA, it is documented through pictures, diagrams and GPS positioning. A directory of all MicroSite locations is stored on the OUA website, and available for download as .KMZ files so anyone can find, share, and add MicroSites on Google Earth.
- \* This tagging system exposes the vast amount of potential space for intervention, as well as our inadequacy at addressing the overwhelming waste produced by our urbanistic patterns.
- \* Lot 17, shown above is a typical "air space" between two buildings in Cambridge. This is the MicroSite used in Program 1 (page 13).
- \* Lot 21 is an under-performing wall that could be easily enhanced with the PlantWall system.

MICROSITES are fragments of properties that are too small for permanent construction; usually inaccessible, overlooked, leftover spaces as a result of the human endeavour to standardize space; non-traditional architectural sites, such as a clothing, vehicles, and pets can also be MicroSites.

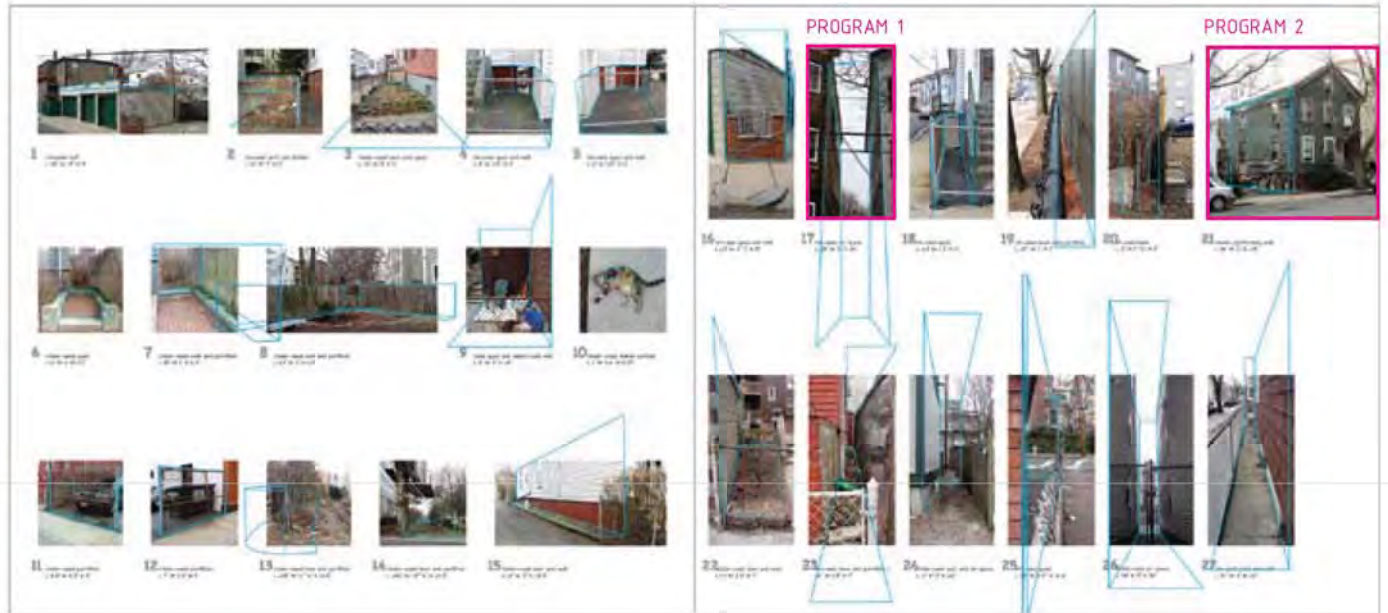
# microsite catalog



- Curb**  
narrow; long; horizontal; paved
- Partition**  
vertical; non-load bearing; under 1 storey
- Quad**  
horizontal; paved
- Lawn**  
horizontal; suitable for planting
- Wall**  
vertical; load bearing; insulated
- Roof**  
sloped; insulated
- Air Space**  
empty space; any dimension

## TYPOLGY

Offset your carbon dioxide emissions: Sponsor a SuperNeutral MicroSite! MicroSites live in your neighborhood. Your donation will not only help to create a carbon sink, it will improve the quality of the neighborhood in visible and practical ways. To donate or sponsor a MicroSite today, visit [www.unsolicitedstudio.com](http://www.unsolicitedstudio.com).



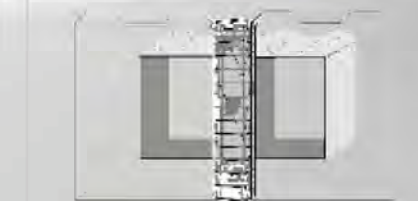
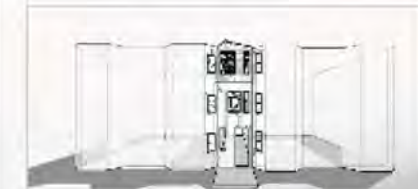
# / PROGRAM

1

## CLOSING THE GAP

MICROSITE LOT #: 17

TYPE: AIR SPACE



MicroSite: Space between two residential buildings.  
Urgency: Residential buildings are a major contributor to energy consumption and CO2 production.  
Solution: Modifying existing structures can be difficult or cost-prohibitive. However, simply by adding two small, high-insulation and fire-rated

walls at the ends of the interstitial space could cut heating/cooling costs, increase habitable space, and foster a new public/private interface where previously there was only a void depicting the artificial boundaries of private property.

# / PROGRAM

2

Context: A lower-middle class residential neighborhood in Cambridge. Diagonally across the street is a children's playground.  
Microsite: Unsightly, deteriorating wall of a single-family detached house.

Urgency: Energy efficiency of the structure is compromised; this particular case would be very costly to repair by conventional means.  
Solution: Cost-efficient plant wall beautifies as well as provides excellent thermal protection; CO2 sink.

## PLANTING WALLS

MICROSITE LOT #: 21

TYPE: WALL



# / PORTFOLIO



## SUBVERTING COMMON SENSE

- \* Common sense is shunned because it isn't sexy enough. Can radical approaches create the same outcome as common sense? Sustainability is often about doing sensible things, but this isn't "sexy." However, it is more attractive to be radical, irrational, and spectacular. How can architecture lend common sense some sex appeal?
- \* In response, RSD will make sustainability sexy

cornerstone transgressions ::  
recontextualize PROGRAM

## SACRIFICING THE RIGHT ANGLE

- \* We have an obscene obsession with the right angle. This fetishization is imbedded in the city in the form of the grid.
- \* Boston has large areas of unusable space because the rationalization of lots clashes with the irrational layout of streets.
- \* RSD will begin a marketing campaign to de-fetishize the right angle. This will create comfort in odd or degenerate spaces, cutting down on wasted space.

cornerstone transgressions ::  
reclaim SITE  
reinterpret PROGRAM

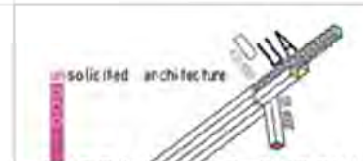


## REPRINTING FOOTPRINT

- \* Building footprint, ecological footprint, carbon footprint... We often hear *foot-print* in different contexts, but its ubiquitous use has only led to further abstraction.
- \* RSD aims to visualize footprint in physical design, event design and graphic representation.

cornerstone projections ::  
recontextualize PROGRAM

# / ONGOINGS



## SUSTAINABLE SURFING

- \* QUA will have the world's first sustainable website. By unsolicitedly donating all advertising revenues to carbon neutral projects, QUA demonstrates that sustainability can and needs to enter all realms of activity, regardless of how insignificant the energy expenditure may seem.

cornerstone projections ::  
reclaim PROGRAM



## HUNGRY ARCHITECTS

- \* Although LEED certified and a winner of numerous green building awards, the Stata Center has had an inoperable grey water system for the past 8 months.
- \* Professor Sherley's recent hunger strike brought attention to racism and the tenure process at MIT.
- \* Sherley was given free food at the end of his hunger strike.
- \* In order to eat, QUA goes on a hunger strike to protest the Stata Center's unsustainability.

cornerstone transgressions ::  
reinterpret PROGRAM  
\* As a group socially minded architects, QUA can draw attention to social issues merely by not eating. The architectural act that "justifies" this project is not one of building, but one of protest.

## QUESTION NEEDS BEFORE DESIGN

- \* People can't appreciate the consequences of using a product unless they understand the benefits of doing so. How can an educational program be built into design?
- \* RSD will market an appreciation of consequence.

reinterpret BUDGET  
\* This budgeting mechanism is used as a way of forcing action. By creating a new type of debt (food) and immersing ourselves in it, we effectively become a threat.



*department of tactical  
social-spatial interventions*

SUBVERTING BORDERS

### what does TS SI do?

TS-SI pursues projects in border zones where architecture's social problem-solving potential has not yet been fully explored. It views architecture as a means of facilitating dialogue across political and/or geographic borders.

### what is TS-SI's strategy?

Architecture typically serves two functions:

1. bringing people together by enclosing space and
2. separating people by building walls

TS-SI strives for enclosure in places of separation -- to bring together people who have been separated by imposed barriers. TS-SI also aims to turn this increased communication into an economic opportunity

1. by outsourcing our design production to them
2. by outsourcing their architectural training to us

### how is TS-SI unsolicited?

TS-SI engages in reciprocal outsourcing.

TS-SI investigates how architecture can operate in highly charged political zones, using its outsider status to maintain a separation/autonomy from partial interests.

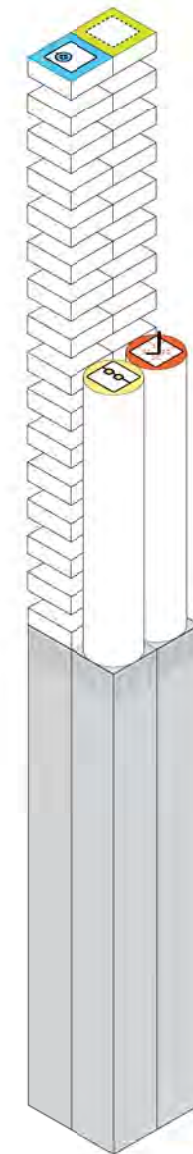
TS-SI pursues humanitarian projects of its own devising, creating closed-loop budgeting systems to ensure their feasibility and sustainability.



feature project **MEMORY EXCHANGE**  
audience **THE PEOPLE OF KASHMIR**

Memory Exchange proposes a mobile public space that allows people on either side of the Kashmiri border to share aspects of their daily lives with each other. In order to finance its humanitarian aims, Memory Exchange exploits corporate outsourcing strategies.

	opportunity	urgency
social		
environmental		
technological		
political		← conflict



**reinterpretation of program:**  
declaring a political agenda for architecture's programme

**reclamation of client:**  
by engaging in reciprocal outsourcing, OUA becomes a client of its own architecture

**reclamation of site:**  
to include not only a physical plot of land, but also a situation in which architecture might intervene

**reinterpretation of budget:**  
by engaging in reciprocal outsourcing, OUA creates a closed-loop budgeting system

I  
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T

TACTICAL SOCIO-SPATIAL INTERVENTION

**border**

**is an architectural problem**

because border implies a violent, arbitrary separation of space, which architects deal with every day. who can say that the wall between palestine and israel is not an architectural problem?

**civil reunification**

**is an architectural problem**

because architecture inspires emotions by forms and spaces. a space where communication takes place catalyses civil reunification faster than any sort of government propaganda.

**conflict**

**is an architectural problem**

because conflict arises from the lack of communication. when media, language, propaganda fail to do so, what communicates better than a spatial intervention? who says books killed architecture? plus it happens everyday - why should architects be impotent about it? if so,

**when was the last time you**

**see a war zone architect?**

# TS-SI

TACTICAL SPOD-SPECIAL INTERVENTION

## WHAT IS TS-SI?

TS-SI is one of the expertises of the oua. it pursues projects in border zones where architecture's social potential has not yet been fully explored. It views architecture as a means of **facilitating dialogue across political and/or geographic borders**. We view architecture as a tool for facilitating reconciliation and reunification. TS-SI focuses on, but is not limited to, **post-conflict development on a cultural level**.

## HOW DOES TS-SI WORK?

architecture creates spatial experience of different sorts. our designs, therefore, provide architectural frameworks that satisfy the **communication and cultural needs** of the separated regions that we are dealing with. **TS-SI focuses on local commitment**. in order to tailor-make spatial solutions for a specific region, we would set up a satellite operation in the middle of it. the execution of our design involves locals from both sides of a border. instead of drawing a line between us - as foreign contributors to the project - and the locals, we would send an emissary to the region prior to the execution of our design. s/he is responsible for **establishing a BUSINESS**. while **TS-SI is highly rooted in the local**, it also takes advantage of its global position by **SELLING PRODUCTS PRODUCED with our business worldwide**. This process of **reciprocal outsourcing** allows TS-SI's input to become a **cohesive part of the daily lives of the locals**. at the end of the day, none of our projects are 'oua's projects, with the help of locals', but rather 'oua, as locals, helps building a framework for a project'.

## IS TS-SI A HUMANITARIAN NGO BRANCH OF THE OUA?

yes and no. while TS-SI deals with social problems created by political borders as much as an ngo does, it differs in two ways. **what to provide**: while humanitarian organisations often provide locals with daily needs ranging from food, running water, shelter to job training and education, TS-SI focuses on the **emotional and cultural needs of the locals** living in regions where families and loved ones are separated by arbitrary borders. **how to provide**: most humanitarian organizations rely on donations. TS-SI sustains itself by means of **establishing a BUSINESS in the region**. This creates a closed financial loops that allows TS-SI to be **independent from donors**. TS-SI, therefore, is free to catalyze political processes without being bound by political mandates attached to endowments.

## Why is it part of the oua?

as an project department of the oua, TS-SI violates the four cornerstones of architectural practice in the following ways: **Reinterpretation of program**: declaring a political agenda for architecture's programme. **Reclamation of client**: by engaging in reciprocal outsourcing, OUA becomes a client of its own architecture. **Reclamation of site**: to include not only a physical plot of land, but also a situation in which architecture might intervene. **Reinterpretation of budget**: by engaging in reciprocal outsourcing, OUA creates a closed-loop budgeting system

## MEMORY EXCHANGE: ADAPTIVE PUBLIC SPACE FOR KASHMIR FOR STABILIZED WAR ZONES



Ever since 1942 **Kashmir** has been divided into three colonies – approximately half belongs to India and the rest belongs primarily to Pakistan. the two countries' acquisition of the state of Kashmir led to endless skirmishes and the **separation of families and communities**. Recently, however, the tension between the two countries seem to have eased a little, which led to a great leap forward in the peace progress of Kashmir. One of the signs towards peace is a **new bus route** that was introduced last year. It runs from **Srinagar**, the Indian capital of Kashmir to **Muzaraffabad**, Sringar's counterpart in Parkistani Kashmir, along the one and only one trade route between the two parts of Kashmir, which has been closed during the war. Talks about resuming transportation services are well on their way as well. That said, as a means of communication the new bus service is far from ideal: 1.The bus route is still threatened by local guerrilla groups, particularly the Kashmir Independence Fighters. It is not safe for large number of civilians to travel across the bother still. 2.The bus route is highly politicised. Only those who fit a certain set of criteria can get pass the border. **Not everyone can enjoy re-communication**. 3.Only a small number of people can cross the border each time. The bus does not run frequently (only one every two weeks) and those who take the bus travel across the border for private reunions. Given that telecommunication infrastructure in Kashmir was almost entirely destroyed in the recent earthquake, the **bus service contributes very little** to the notion of civil reunification on a broader social sphere.

**TO US, THIS IS AN ARCHITECTURAL OPPORTUNITY. THE SITUATION CALLS FOR A PUBLIC SPACE THAT TRANSPORTS MEMORIES AND STORIES ACROSS THE BORDER, SUCH THAT NOT ONLY EXCLUSIVE INDIVIDUALS BUT THE ALSO THE GENERAL MASS CAN PARTICIPATE IN THE PROCESS OF CIVIL REUNIFICATION.**

TS-SI  
TACTICAL SPOD-SPECIAL INTERVENTION

MEMORY EXCHANGE: ADAPTIVE PUBLIC SPACE FOR KASHMIR FOR STABILIZED WAR ZONES



**videos** transported across the border on the **memory exchange theater**  
 In the case of Kashmir, TS-SI proposes to replace the bus service with movie clips - movie clips made by locals from both sides of the border - transported on a mobile public theater that can **create a venue** wherever it goes. the theatre runs along the bus route and **unfolds at designated locations** at Srinagar and Muzaffarabad. This way everyone in the region can come to **share messages and memories**, without having to risk their lives to get on the bus and travel along the bus route themselves. at times even performers can travel on the mobile theater as well.

STRATEGY: RECIPROCAL OUTSOURCING



**Deployment**

Length: 6 months

Owing to the fact that the construction of this mobile theater requires participation of locals who have **digital design skills**, we are going to equip them with these skills at the first place such that, in the same way as IT experts from Bangalore teaching locals basic IT skills, the locals can use what they are taught to improve their living standards.

OUA will send one emissary to encourage memory and cultural exchange through **design education** in the turbulent region Kashmir. During his/her stay s/he will train and teach 10 students, 5 from each side of the border, how to use **CAD and video editing softwares**.

At this stage, the OUA is offering a **free service in exchange for the engagement** of the locals. In other words, local Kashmiris are **outsourcing** their teaching positions to us. Taking advantage of the low cost of living in Kashmir we are going to be funded easily by small grants and fellowships that are not attached to political/capitalistic mandates.

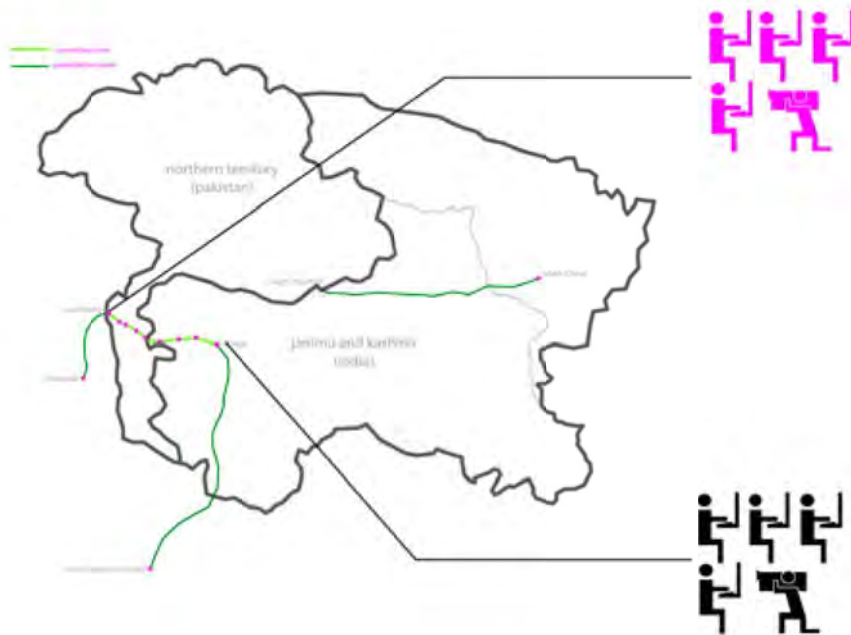
The cost of equipments will be funded by the **Grassroot Initiative of the Media Lab**, which provides free computers and video editing equipments.

EXCHANGE

COMMUNICATION

CIVIL REUNIFICATION

STRATEGY: RECIPROCAL OUTSOURCING



EXCHANGE

COMMUNICATION

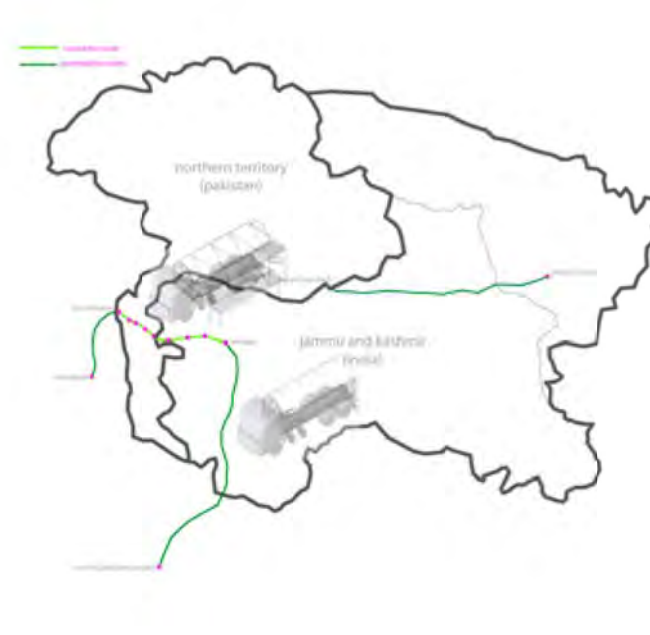
Stage II: funding

Length: 1-3 years

In the next stage of the project, we will alternate between using our newly trained workforce to participate in digital production for the mobile theater and the amenity facilities associated with it, as well as OUA's other clients. The profit we generate will be put towards the final design project. At the same time, these locals are going to make and edit video clips of the process as well as their daily lives. These edited clips are going to be transported across the border using the mobile theater in the next stage such that it will become a regular event for locals at a specific venue. At this stage the OUA is introducing a foreign business will become daily routines for the locals. In this way we, on behalf of our clients, are outsourcing digital production to the locals. Taking advantage of our global position the local's produce can yield a reasonably high revenue that can sustain the OUA, the locals as well as the Memory Exchange project.

CIVIL REUNIFICATION

STRATEGY: RECIPROCAL OUTSOURCING



EXCHANGE

COMMUNICATION

Stage III: Execution and Evaluation

Length: 3 months

Since much of the production work has been done in the previous stage, the construction process takes only a short time. The mobile theater will be up and running in no more than three months.

Videos of the construction process, daily activities of the locals and whatever the local Kashmiris need to say or show will be delivered.

The OUA does not run the service of transportation. But by soliciting local NGOs, this project will become a sustainable service that continues even after our intervention. By facilitating cultural exchange across the border, it is hoped that the civil reunification between the two people would eventually catalyse the final political resolution for the region.

The field workers that we have trained can be kept as our employees for other global operations.

It is important to note that although our intervention is different for each border scenario we come across, our expertise and strategies of building a framework for communication is applicable universally.

CIVIL REUNIFICATION



MEMORY EXCHANGE: ADAPTIVE PUBLIC SPACE FOR KASHMIR FOR STABILIZED WAR ZONES



**Project background:**

In 1950 the Korean War broke out. Poignant perhaps is the fact that the two fraternal twins were fighting against each other on behalf of the ideologies that they thought they represent respectively. The war was ended with three-million casualties, among which approximately 600,000 were Koreans. As a result of the military stalemate, the two countries have been holding a ceasefire since 1953.

The two countries are still at war in every sense of the word. According to an article from the Economist, "Two-thirds of the huge North Korean army and 80% of its firepower are dug in within 100km (62 miles) of the demilitarised zone (DMZ), the misnomer of a frontier, which President Clinton on a visit in 1993 called "the scariest place on earth". The Americans estimated in 1994 that in a war some 50,000 of their troops and ten times as many South Korean servicemen would die, to say nothing of the civilian toll."

The two way lane for the bridge of no return is a project that responds to the current situation of the Peninsula. Efforts to relieve the political tension, however, has been well under way for years. The famous Sunshine Policy, a South Korean initiative that aims that helping North Korea to become economically independent as the first step towards reunification, resulted in the construction of two 'special economic zones' (Sinuiju and Kaesong), a highway that runs from Seoul to Kaesong and a railway that runs the Seoul-Dorasan-PyongYang-Sinuiju line. Reunification, both civil and political, is contingent upon sustaining a sense of fraternity on both sides generations after generations.

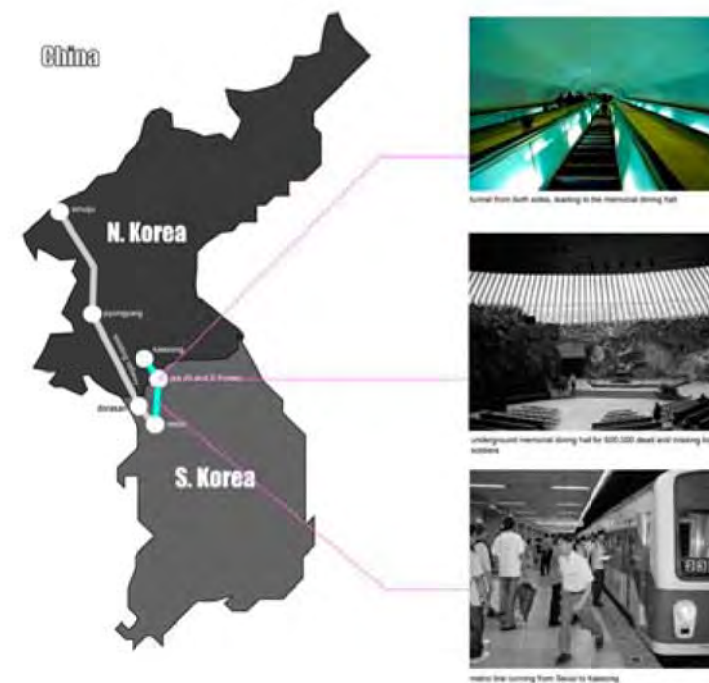
**Site:**

North and South Korea are currently separated by the Demilitarized Zone, which is patrolled by armies from the UN, North Korea and South Korea. The main establishment within the DMZ is the Joint Security Area (JSA), an area that is open for limited tour visits from the South side and completely inaccessible from the North side (anyone who trespasses the area from the North will be shot).

The city closest to the Demilitarized zone in North Korea is Kaesong, an industrial city whose construction was almost single-handedly funded by the South Korean Government and the countries' private corporations. Tax reductions and the political advantage of building in North Korea attracted many local South Korean firms to move their bases from other parts of Southeast Asia to Kaesong. An ever-increasing population of South Koreans from Seoul are commuting there on a daily basis.

Another striking feature of the DMZ are the four tunnels discovered in the 1970s on the South Korean side of the border. These now-abandoned tunnels, each of them about 15 to 20km long, were suspected to be North Korean's attempt to invade the South. After these tunnels were abandoned they became major escape route for North Korean defectors.

A TWO WAY LANE FOR THE BRIDGE OF NO RETURN: A SUBWAY LINE FOR N/S KOREA



**Project:**

This project harnesses on three understated architectural/ infrastructural needs that can be addressed in the context of TS-SI:

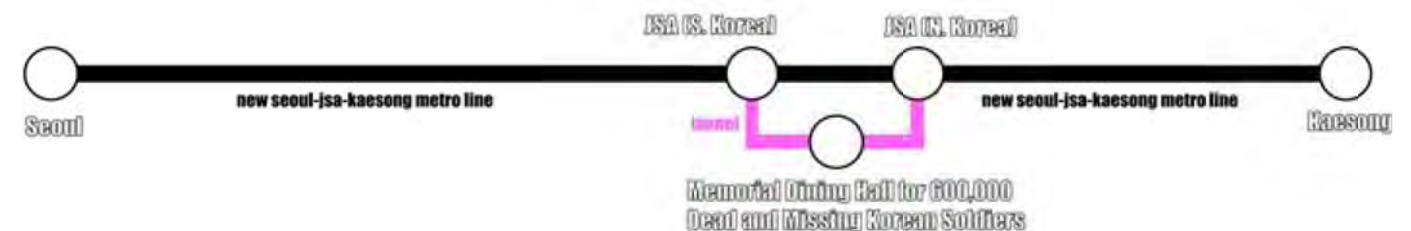
1. Civil reunification: the political barrier, albeit still substantial, is inching towards gradual breakdown. An important catalyst of the process would be to unleash the emotional energy embedded in the JSA. To most Koreans, North and South, the JSA is a stigma with respect to a common denominator that both countries hold dear – self-determination as a nation, or Juche in North Korean propaganda terminology (because it is currently controlled by UN troops, especially American troops). It is crucial that Koreans from both sides, as well as tourists from foreign countries, to have first-hand experience of the area and develop their own sentiments towards the urgency of civil reunification.
2. Profit from tourism shared by the two sides of the border: the JSA and the tunnels could be, as much as concentration camps in Poland already are, popular tourist sites. Although North Korea does not grant access to its own half of the JSA at the moment, it is hoped that as political tension melts down, tourism of this theme would provide substantial income for North Korea's bleak economy. Proper infrastructure will then be needed as a gesture towards civil reunification.
3. Commuter traffic from Seoul to Kaesong: As traffic between the two countries increases, better infrastructure is needed.

In response to the aforesaid, we propose an infrastructural system – the first tunnel that is dug a) not from North Korea to South Korea but from both directions to the JSA and b) with the consent of the people from both sides for peaceful purposes - that includes:

1. An underground transit system that runs Seoul-JSA(South)-JSA(North)-Kaesong (JSA North would not be open until political conditions allow;
2. A tunnel that start from both sides and culminates to;
3. An underground memorial/ dining hall for 600,000 dead and missing Korean soldiers.

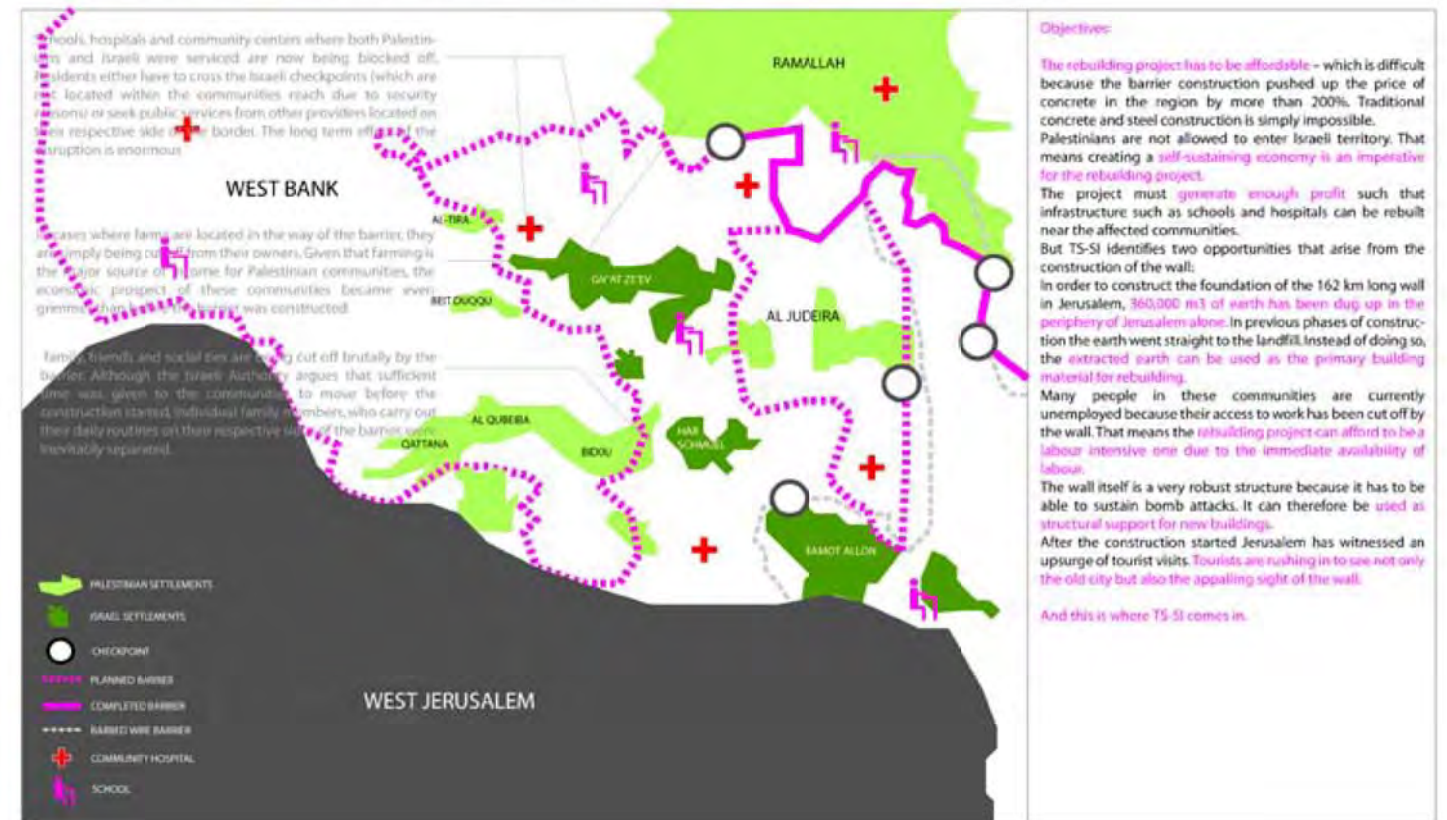
This proposal, apart from implementing infrastructure that suits pragmatic needs, create a venue for North/South Koreans to meet under a controlled and nonetheless poetic environment. Along the same line as other TS-SI projects, it introduces dialogue across a barrier without transgressing against local conditions. The dialogue in this case, for instance, do not have to be between North and South Koreans to create the desire effect. It is hoped that the poignancy of being separated from families would pass down from the older generation, who had first-hand experience of the separation, to the younger generation, who will gain first-hand experience of the sentiment of the separation.

\*The Bridge of No Return is the name of a bridge on the North Korean side of the JSA. Once defectors cross this bridge they will be protected by the South Korean Authority.

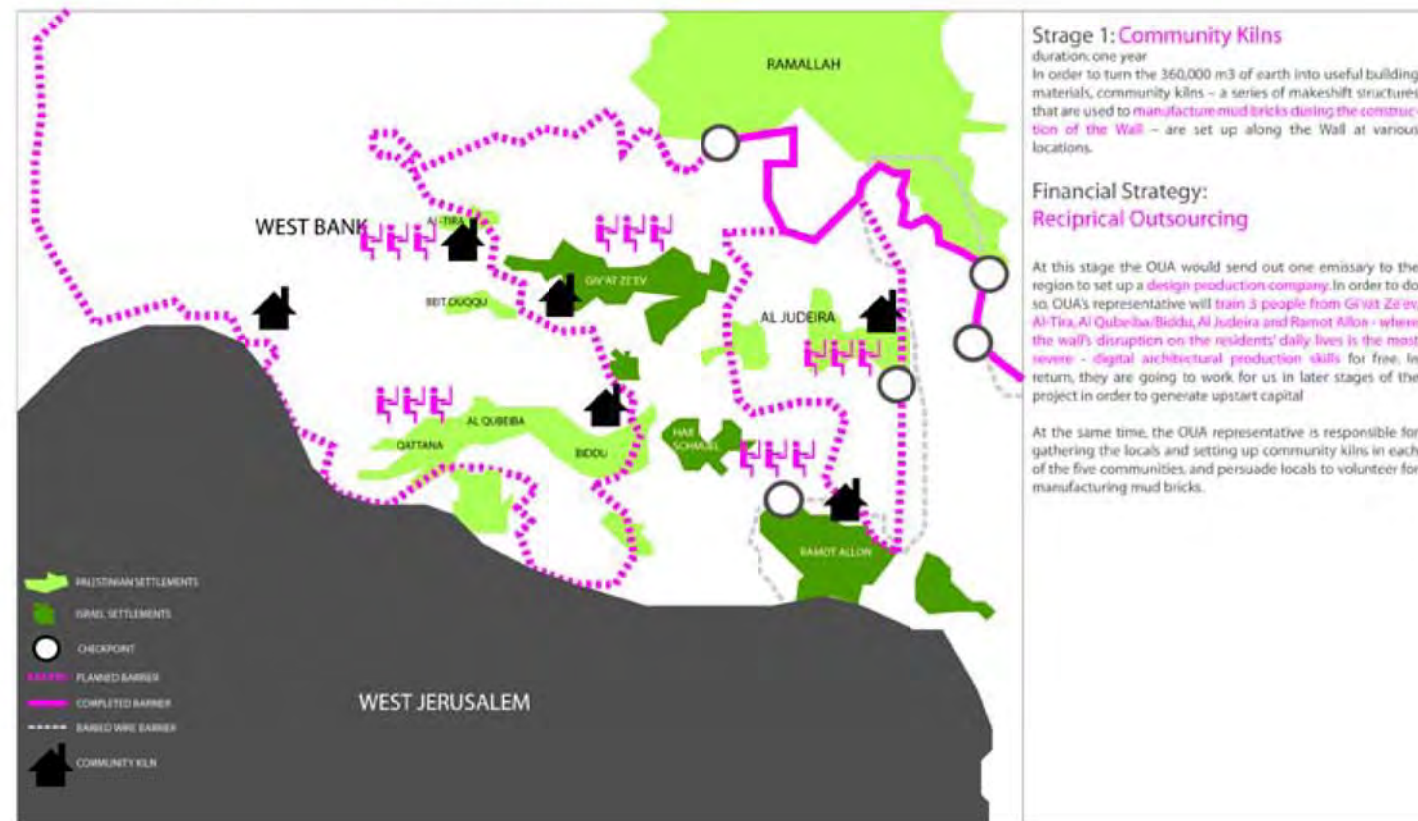




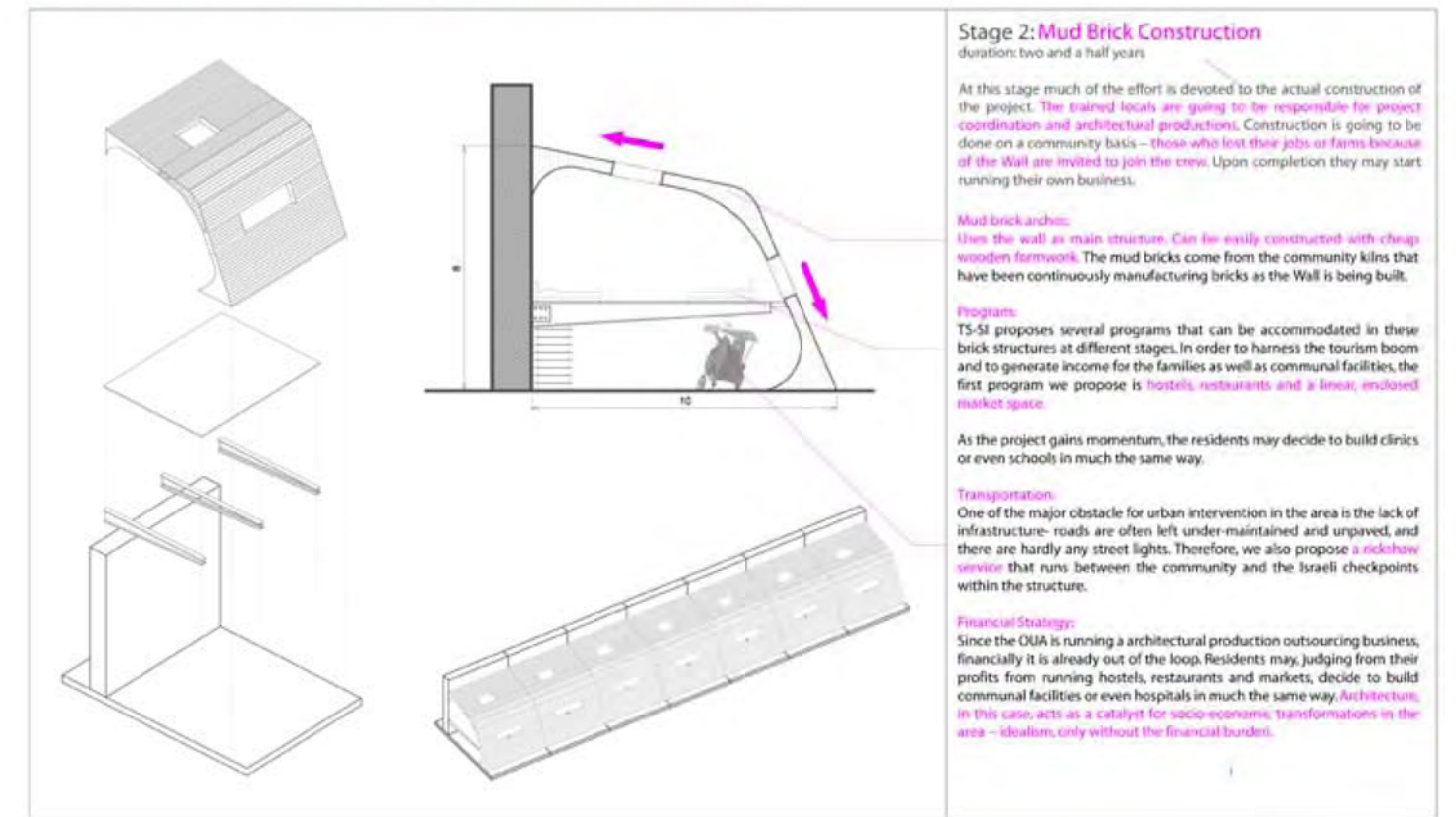
### THE JERUSALEM WALL PROJECT: TURNING DISPAIR INTO OPPORTUNITIES



## THE JERUSALEM WALL PROJECT: GENERAL STRATEGY



## THE JERUSALEM WALL PROJECT: GENERAL STRATEGY



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