

# Censor booklet



## Content

5	introduction
6	project area
8	research: The wall
18	research: The street
26	Project: Wall Spaces
	site
	process
	proposals
	site plans and sections
	model photos
	illustrations
48	references and literature

Diploma Oslo School of Architecture and Design, spring 2018  
Astrid Fadnes

**supervisors:** Tone Selmer-Olsen, Sabine Müller, Vibeke Jensen

**diploma title:** Wall Spaces

**location:** São Paulo, Brazil



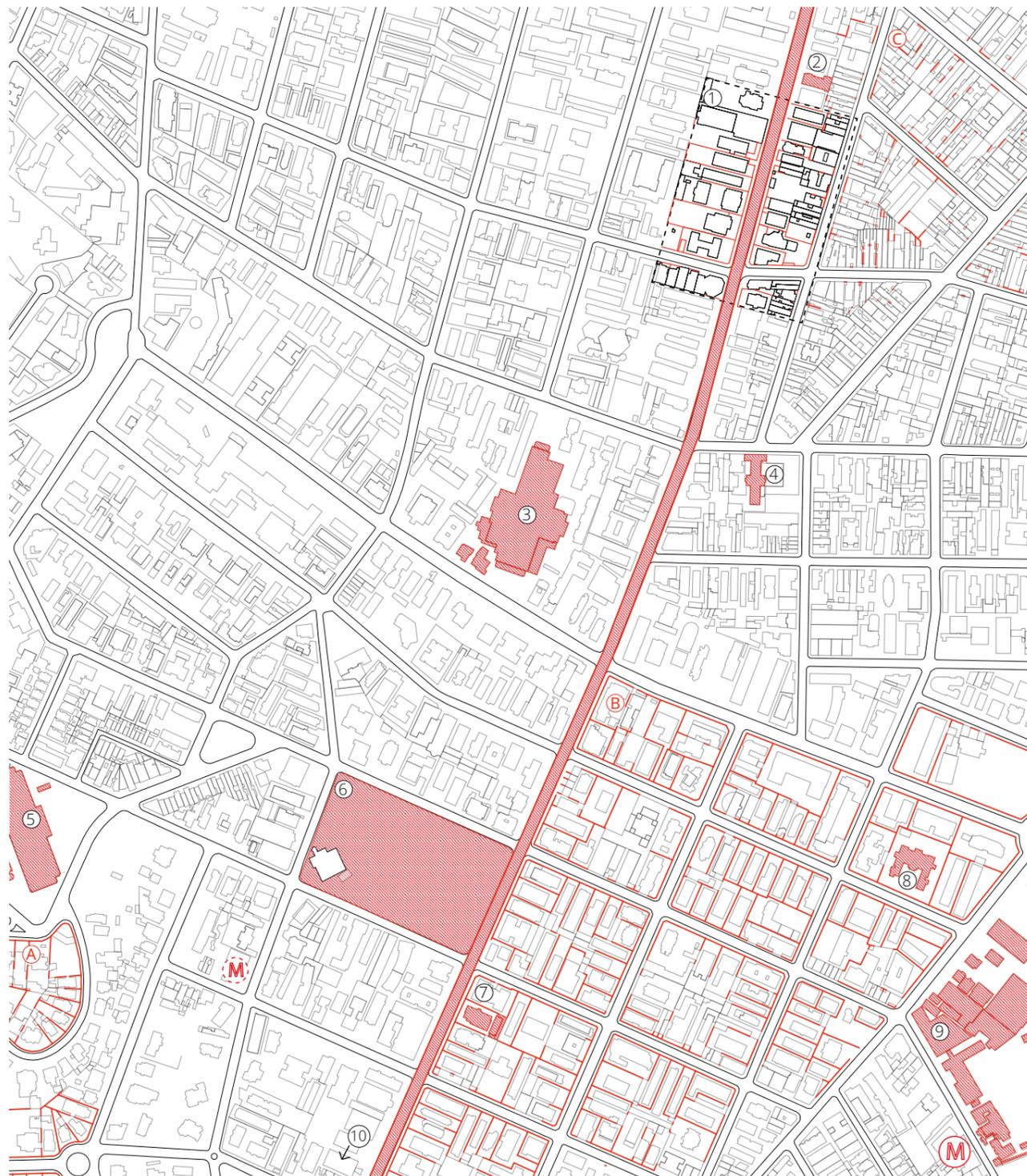
## introduction

*Cidade dos Muros, «City of walls», is one of São Paulo's nicknames. The project Wall Spaces explores how walls and fences can enrich both sides of a wall and how public spaces could be implemented.*

São Paulo lives up to its nickname: since the 1980s, extensive construction of walls and fences are creating a physical separation between buildings and the street, between the private and the public. Walls have become a distinctive feature of the city's urban morphology and has consequently left the city's urban spaces diminished and deteriorated. Through an analysis of existing walls and a strategic proposal, the project investigates the potential of the wall not as a separation barrier, but rather as a boundary where encounters may take place.

In one research part and one project part, the project focuses on a chosen central street and area in São Paulo.

The research investigates the quantitative and qualitative characteristics of walls and fences in São Paulo, gathered in maps, diagrams and a catalogue of selected walls. The other part of the research looks into the street as public space. The project proposal is a strategic one, exemplified on a pilot site.



**Project area**

Avenida Angélica and Higienópolis neighbourhood. Consolação district, São Paulo

 Avenida Angélica, street of analysis

 Metro station

 Metro in construction (2018)



A  
*The Curved*



B  
*The Curved*



C  
*The Fragmented*

Wall morphologies in area

- 1 Pilot site for project proposals
- 2 Synagogue
- 3 Higienópolis Shopping mall (1999)
- 4 Church
- 5 Brazilian Art Museum
- 6 Buenos Aires Park (1937)
- 7 Police Station
- 8 Architecture Faculty, São Paulo University
- 9 Mackenzie University (1968, originally MacKenzie College, founded in 1874)
- 10 Avenida Paulista, main business street



The metropolitan region of São Paulo, population: 21,2 million



The city of São Paulo, population: 12 million

Tietê river  
Pinheiros river

- old city center
- new city center
- Avenida Paulista, main business street
-  project area

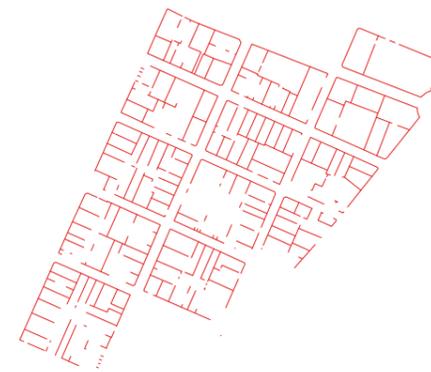


## The wall

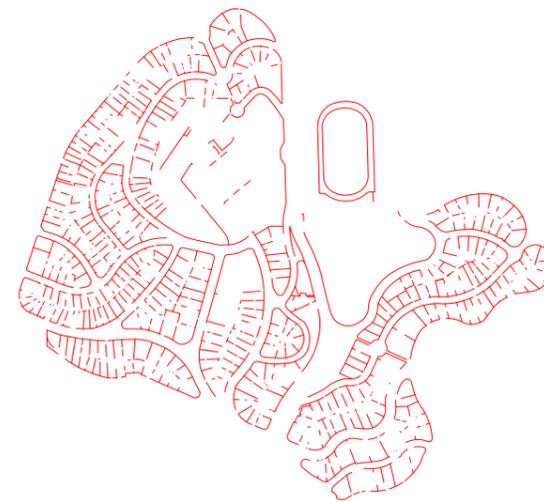
Both the historical settlement development and an increase in violent crime and fear of it can explain part of the reason why walls and fences have become such a distinctive part of São Paulo's urban morphology. The walls and fences are implemented both around housing blocks, offices and commercial and public services.



"The Fragmented"



"The Enclosed"

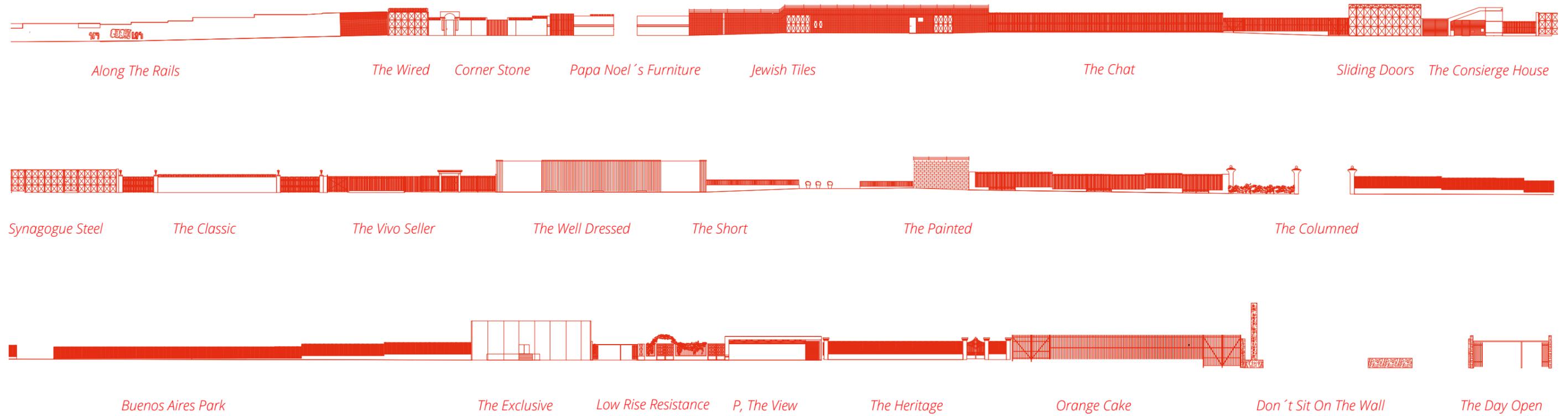


"The Curved"

Map of walls, Consolidação District, central São Paulo and wall morphologies.

## Wall Catalogue

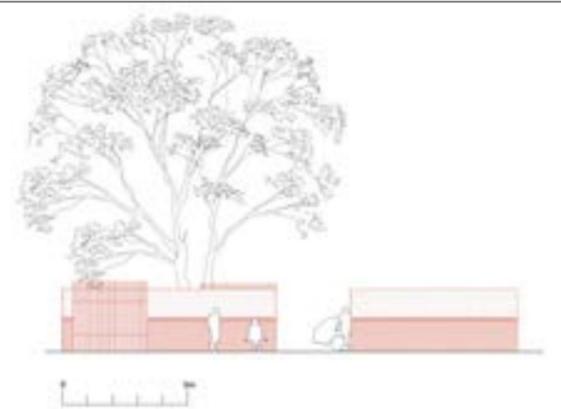
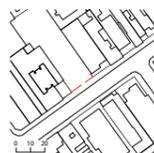
How have people appropriated the walls in São Paulo, how are they used, what are they made from, what is “behind” the fence and what condition do the walls create? 24 walls and fences along Avenida Angélica have been collected and evaluated in a catalogue.



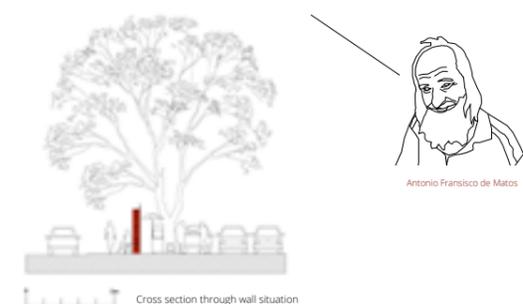
0    5m   10m

## 04 Papa Noel's Furniture

Materials: Stone, metal, concrete  
 Length: 18 m  
 Height: 2.5 m  
 Thickness: 10 cm  
 Vertical surface: 39m<sup>2</sup>  
 Weight: 25 344 kg  
 Security measures: Camera  
 Side one: Car parking  
 Side two: Furniture sale, side walk, street



"I work for myself, a battle to survive. I do my handcraft and sell it on the street, for nine years I have been working here. For christmas I work at the shopping malls as Santa Claus to make the ends meet."

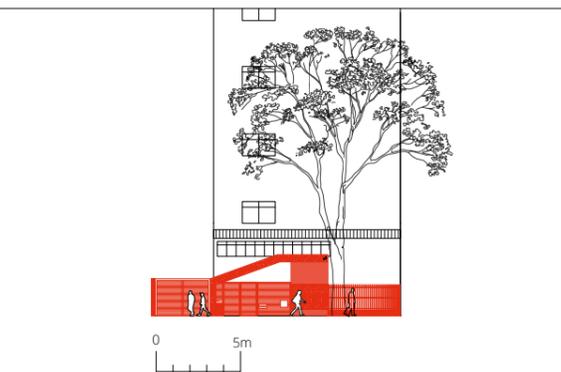


Cross section through wall situation

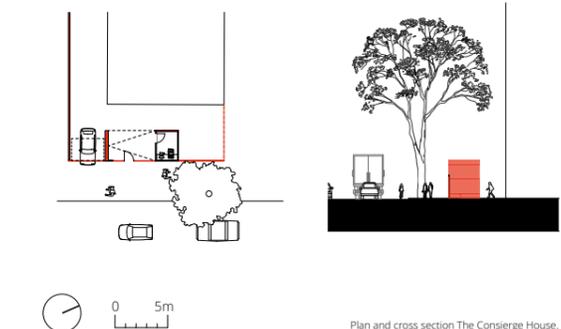


## 09 The Concierge House

Materials: Metal, concrete, glass  
 Length: 10,4 m  
 Height: 2 m  
 Thickness: 3-10 cm  
 Vertical surface: 21 m<sup>2</sup>  
 Weight: 1000 kg  
 Security measures: Concierge, camera  
 Side one: Residential building  
 Side two: Side walk, big tree



0 5m



Plan and cross section The Concierge House.

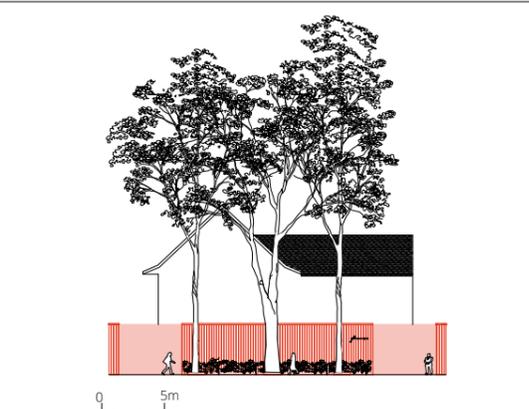


## 14 The Well Dressed

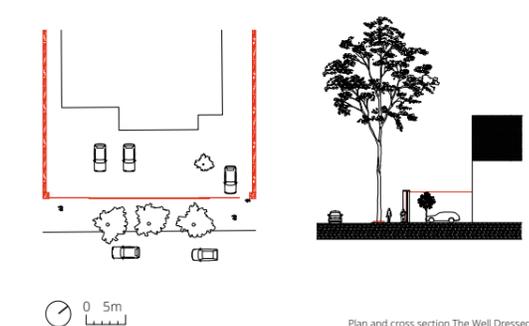
Materials: Metal, concrete, stone bricks  
 Length: 26,7 m  
 Height: 2 m  
 Thickness: 1,5 cm- 15 cm  
 Vertical surface: 55 m<sup>2</sup>  
 Weight: 2075 kg  
 Security measures: Concierge, camera  
 Side one: Buffet França, restaurant  
 Side two: A guard, sidewalk, trees, bushes



Always well dressed and with a wide foot position, the white gate on the northern side is always accompanied by a guard. The Well Dressed sticks out, not only for its height, but also for being the only pure wood construction in the area. The golden letters discretely hinting of what's on the inside, França, meaning France. A part from this, nothing reveals the inside, but the symmetrical trees in front, with a wooden base matching the wall, strengthens the sophisticated and delicate and noble look.



0 5m



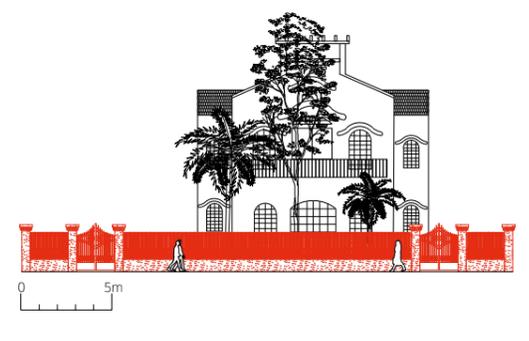
Plan and cross section The Well Dressed

## 12 The Heritage

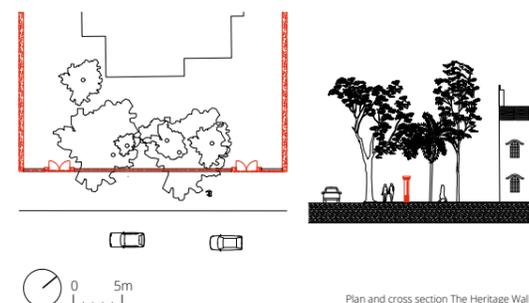
Materials: Concrete, metal bars  
 Length: 27 m  
 Height: 2,3 m  
 Thickness: 20 cm  
 Vertical surface: 60 m<sup>2</sup>  
 Weight: 12 750 kg  
 Security measures: Concierge, camera  
 Side one: IPHAN, Inst. of Historical and Artistic Heritage  
 Side two: Sidewalk, tree



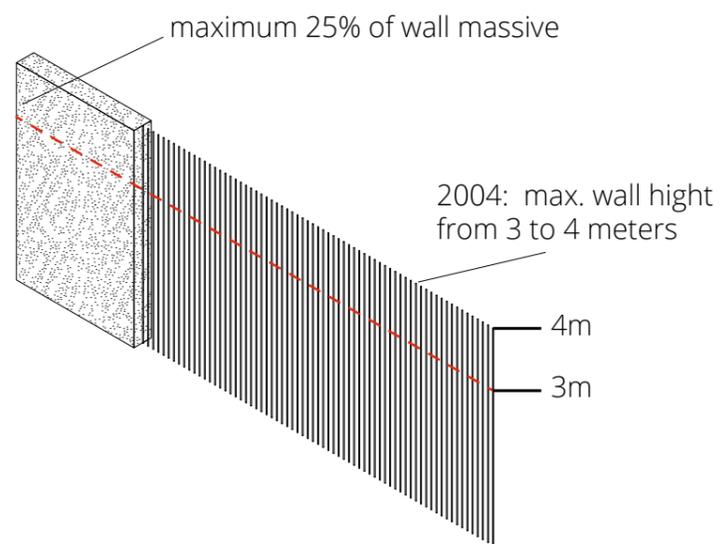
Drawn by the Brazilian architect Ramos de Azevedo in 1910, the building has an eclectic style, influences by art nouveau. The wrought iron gates origin from the same time, then constructed to make passage for horse-drawn vehicles and the fence was to keep the horses within the property. The sidewalk in front has the typical "São Paulo tiles", black and white shaped as an abstracted map of the region of São Paulo.



0 5m



Plan and cross section The Heritage Wall.



In 2004, the permitted height of the walls and fences in São Paulo, increased from 3 to 4 meters. In 2015 however, the city's Master Plan (Plano Diretor, 2015) only allows the wall to be maximum 25% massive, the rest should be transparent, as metal grids or glass.



EXISTING WALLS  
Avenida Angélica

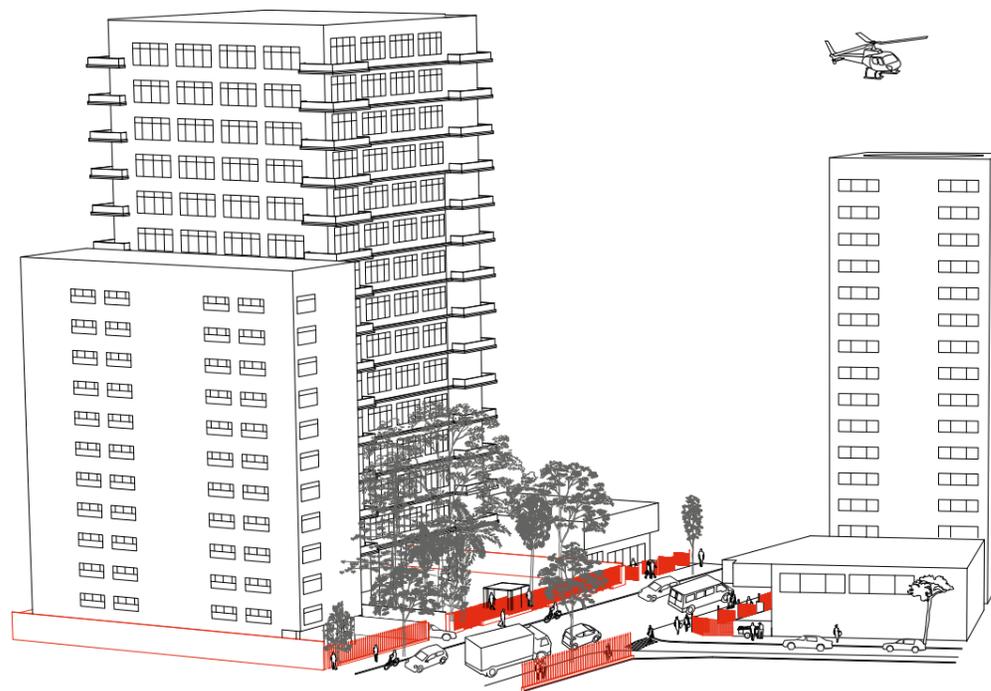


FUTURE POTENTIAL\_01  
full enclosure



FUTURE POTENTIAL\_02  
remove, move and modify

Diagram, walls along Avenida Angélica.



## The street: Avenida Angélica

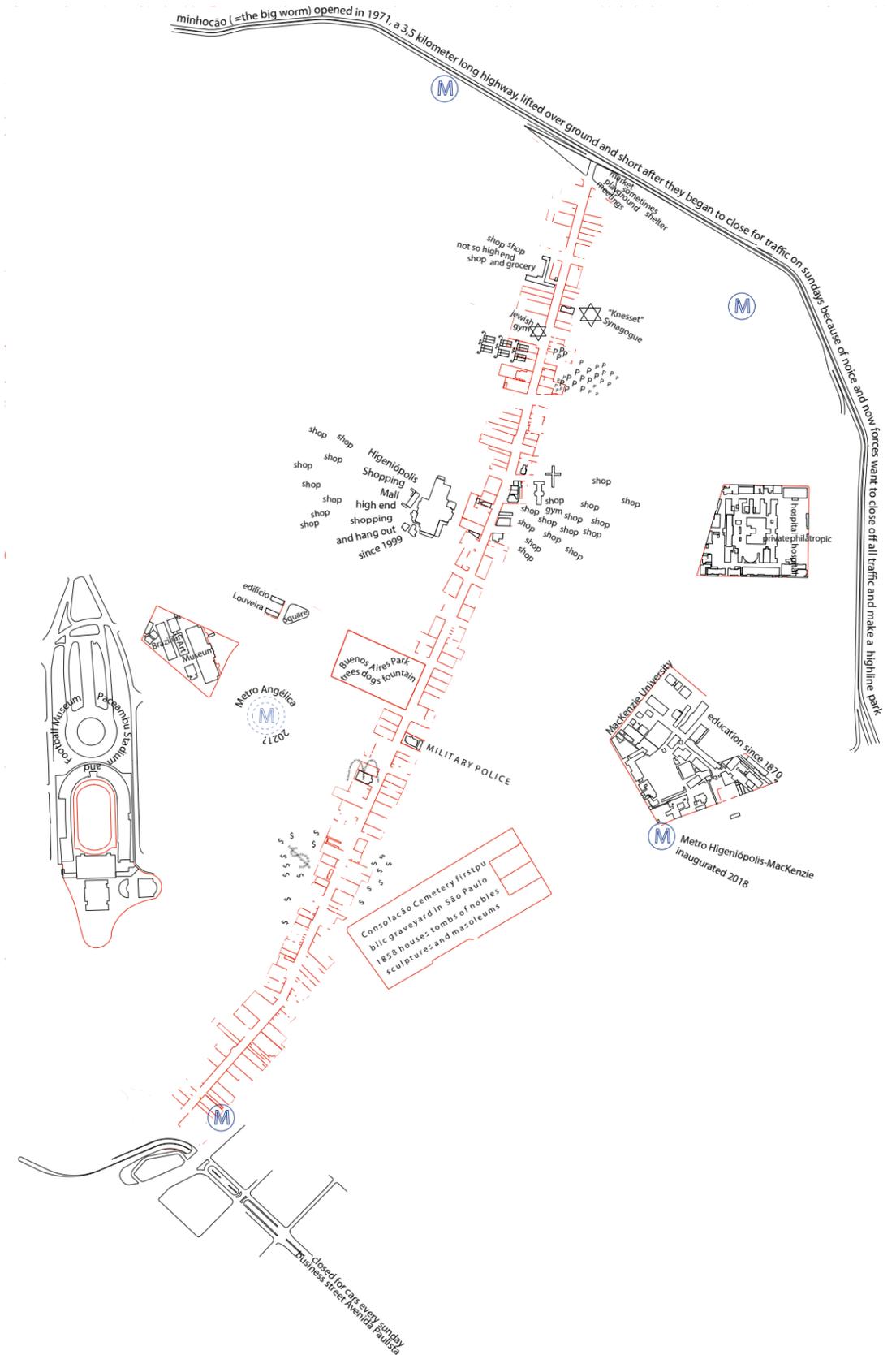
Avenida Angélica stretches through the central neighbourhood of Higienópolis, and the street makes out an important transport route between the city centre and São Paulo's main business street Avenida Paulista. 2100 cars pass per hour in rush hour and it's also a busy commuting route by foot and bus. Higienópolis has for long and still is regarded a noble area in the city, but also neighbours less valued and central areas. For the wide range of housing blocks, offices and commercial services and the demographic and social mix, Avenida Angélica is in the project considered as representative for São Paulo.

Only around 12% of ground floor is accessible for the pedestrian - and there is no public space above or under ground level. Underground level is extensively used for car parking and many roof tops in the area are equipped with helicopter parking.

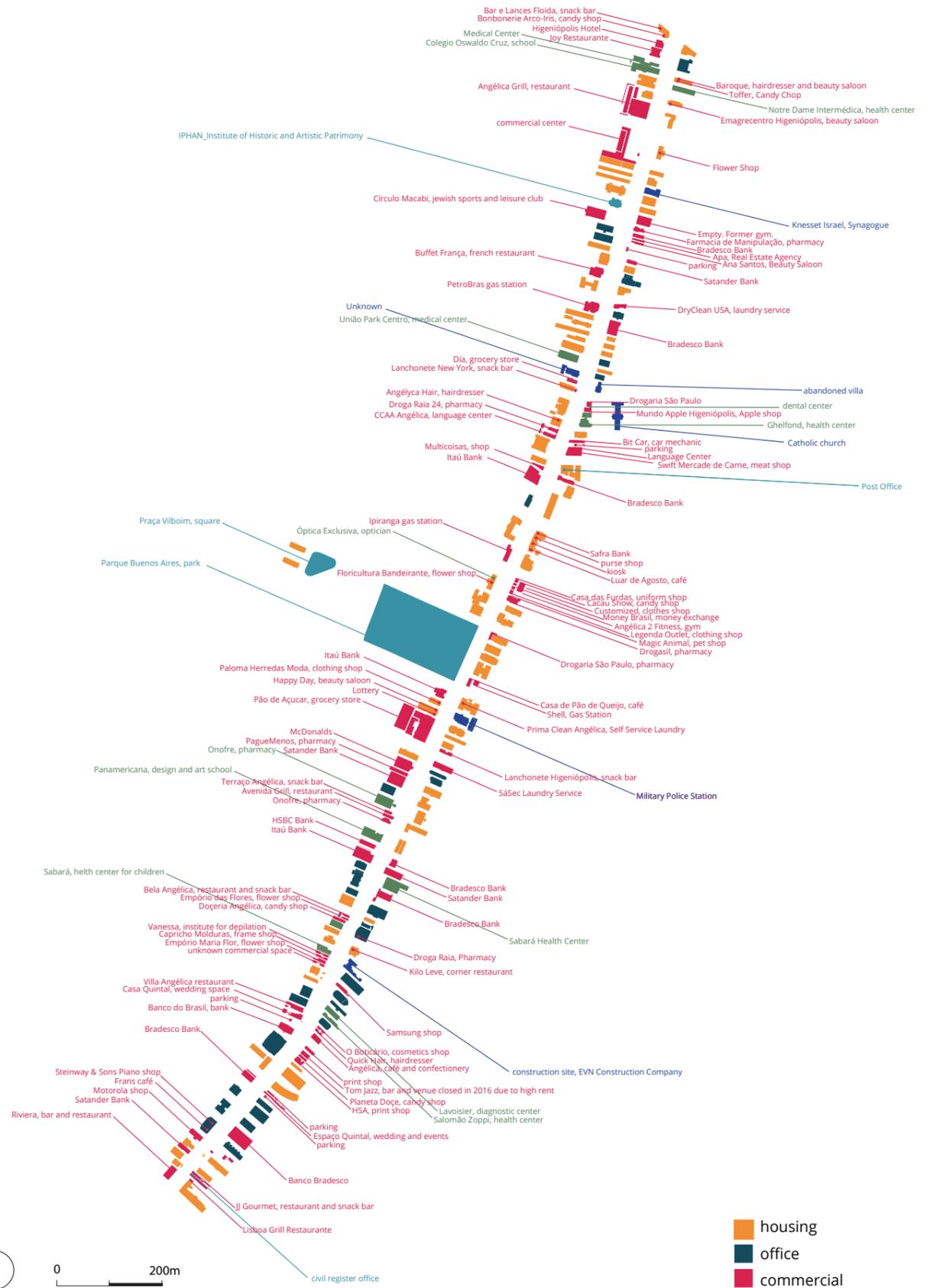


Map of street hierarchy

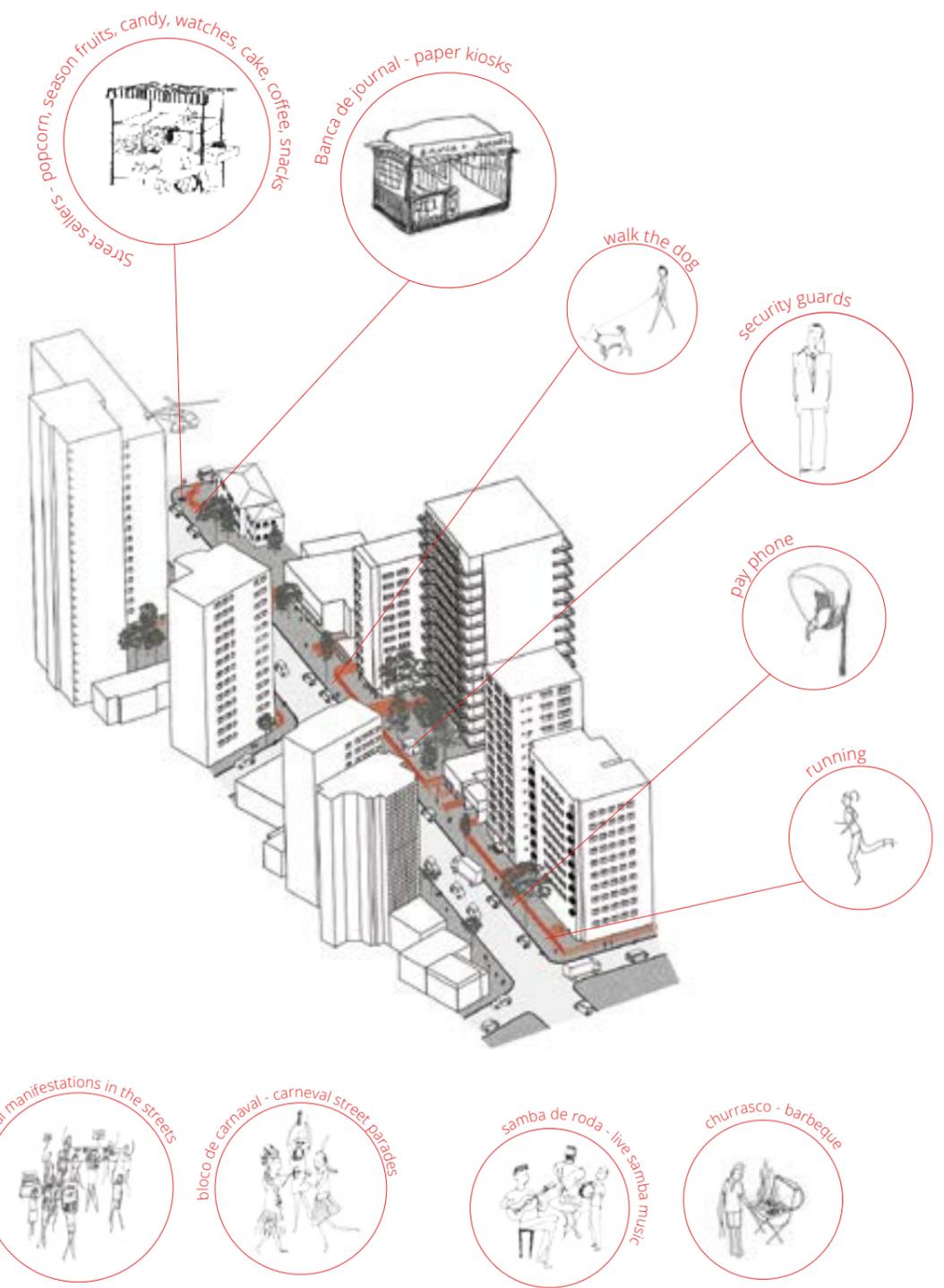
- Avenida Angélica
- Commercial
- main traffic road
- residential street
- residential/commercial



Map of interest



Map of use, Avenida Angélica



Map of use, Avenida Angélica



Historic map of Higienópolis, 1930. The map shows the historical property structure, typically narrow and deep, tracking back from the colonial time, referred to as a “typical São Paulo lot”. Avenida Angélica and project’s pilot site in white.

**VILLA**

1890-1910

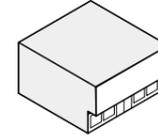


Commercial and private use originally housing for the elite and noble.

Eclectic and art nouveau style, 1-3 floors. Low fence.

**COMMERCIAL LOW RISE**

1950s - today

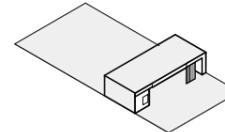


Banks, shops, medical centres, parking, cafes, snack bars, pharmacy.

1 floor (rarely 2). Some with fence and day open gates.

**PARKING LOT**

1950s - today

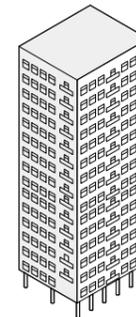


Commercial parking lots

Occupy the few open plots in the city. Often enclosed by painted walls.

**HOUSING BLOCK**

1920-1980+

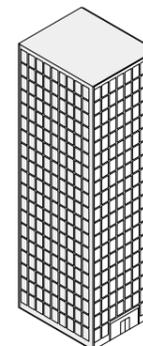


Residential

Spacious apartments, pilotis and garden, roof top gardens, modern ideals and materials.

**OFFICE HIGH RISE**

Mid 90s - today



Commercial offices, few with service/ commerce on ground floor

Concrete and glass, Helicopter landing on roof, parking garage.

Five main building typologies found along today's Avenida Angélica, time period, use and characteristics.

## Project: Wall Spaces

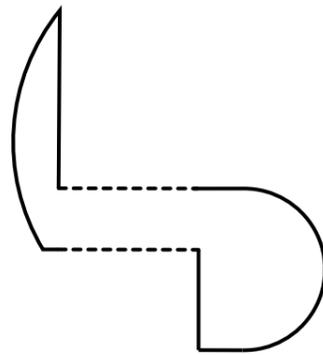
The project Wall Spaces investigates through three new wall types, how the wall can have both a social and technical purpose, rather than only a separating function. The three walls suggest public use and activity and implement new use and re-use of water in the city.

São Paulo is one of many cities suffering from a great water deficit. The latest water crisis in 2016 led people to drilling for wells on their private property, as the city covers a big network of rivers. The projects suggest public wells, aims to increase the potential of rainwater harvesting in the rain season and a potential connection to existing infrastructure.

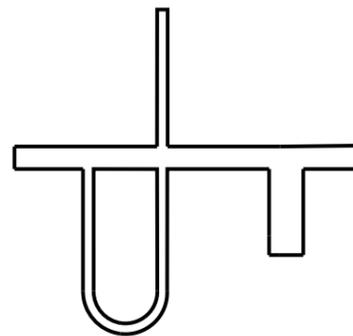
The project is a strategic one, applicable to different sites and situations. A site in the project area is chosen as a “pilot project”.



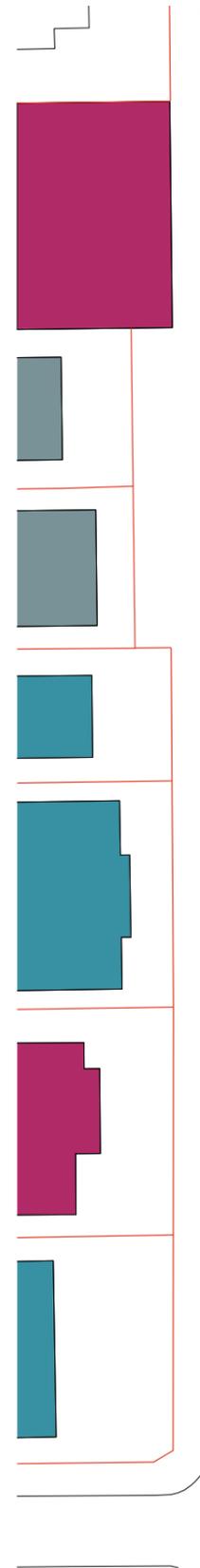
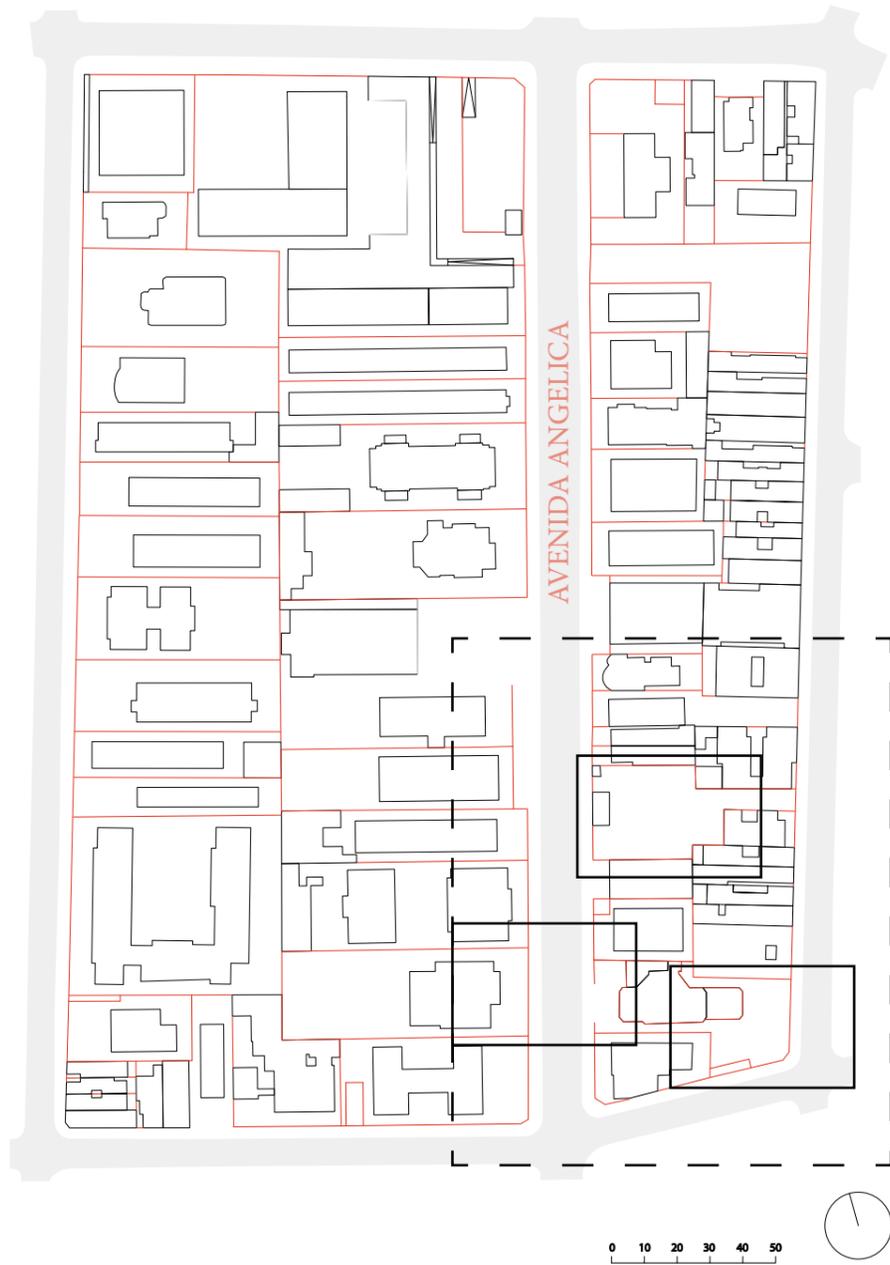
*Laundry Wall*



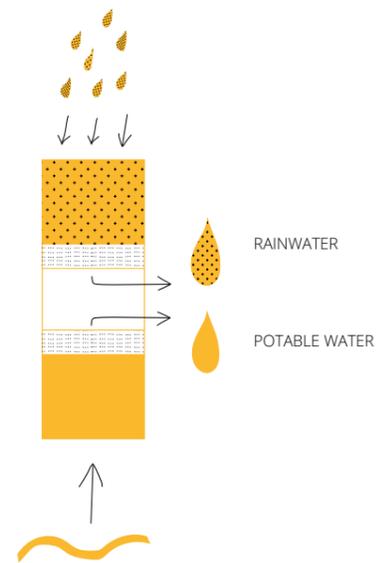
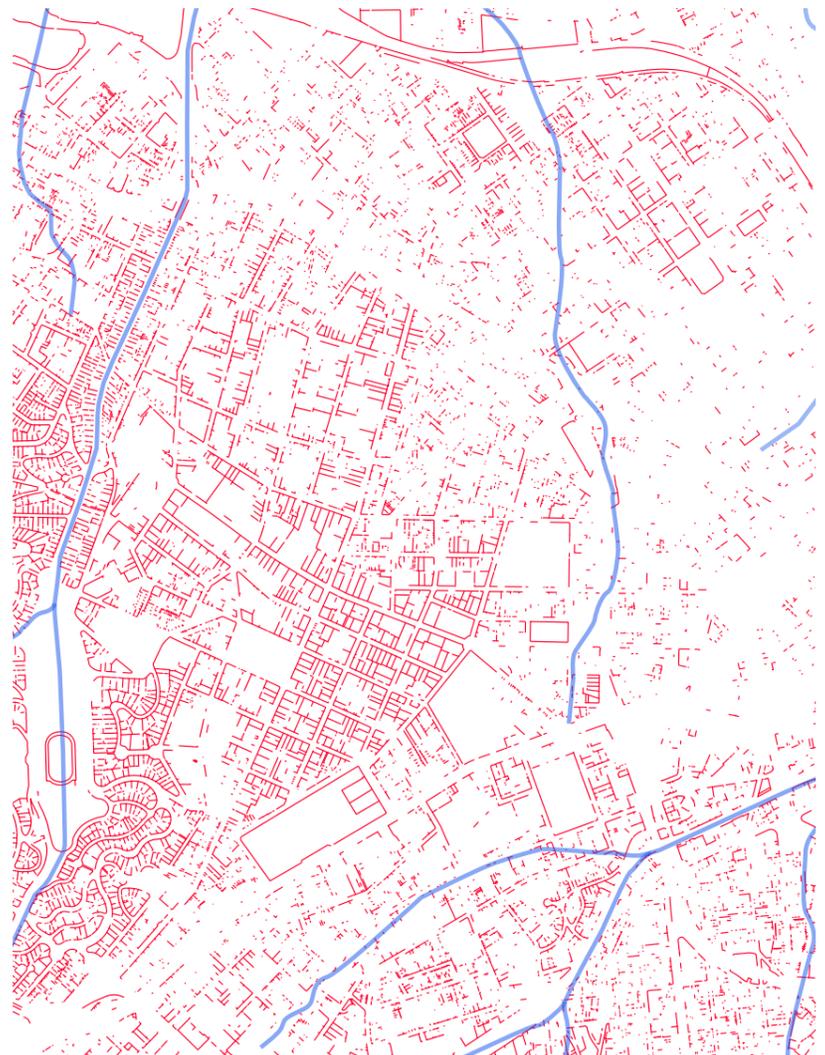
*Well Wall*



*Gym Wall*



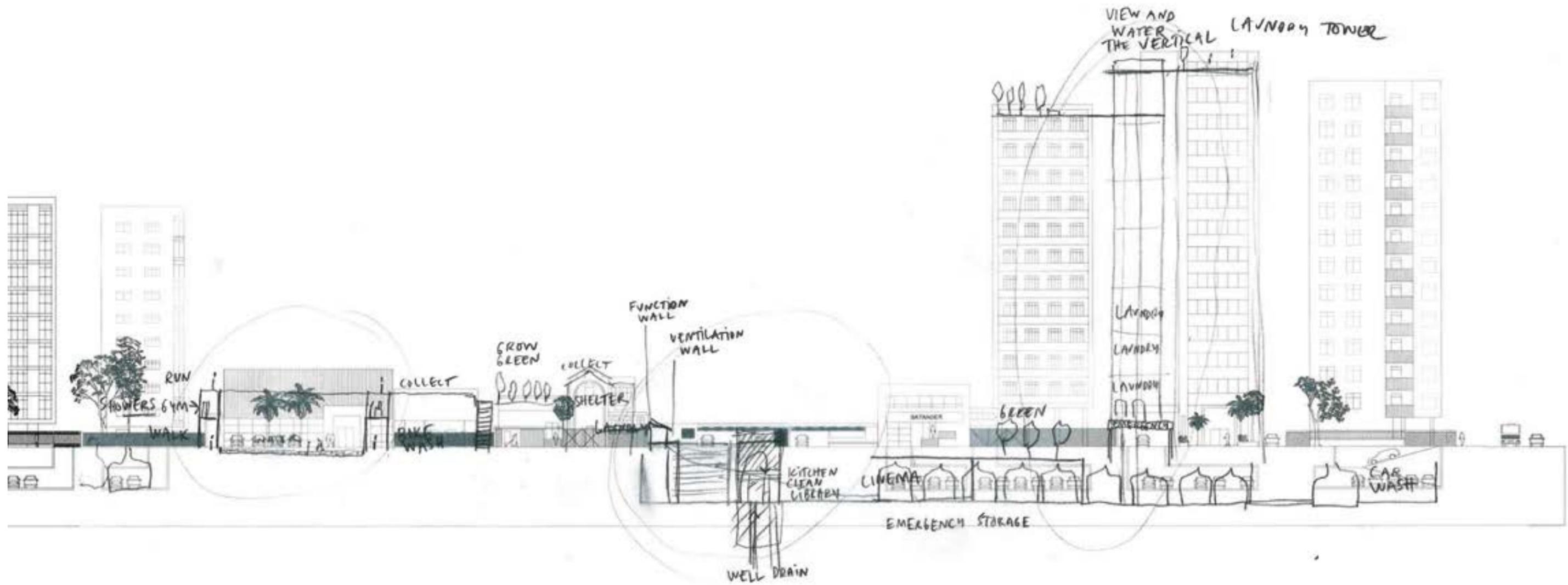
A quarter and three sites within the project area with a wide range in program and typologies is chosen as a pilot site for the project.



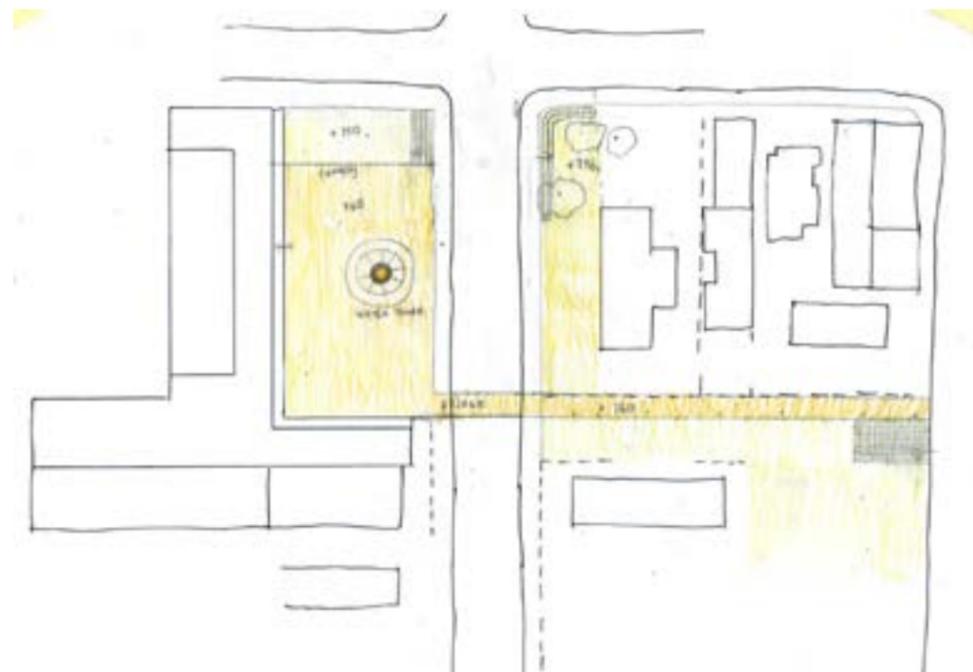
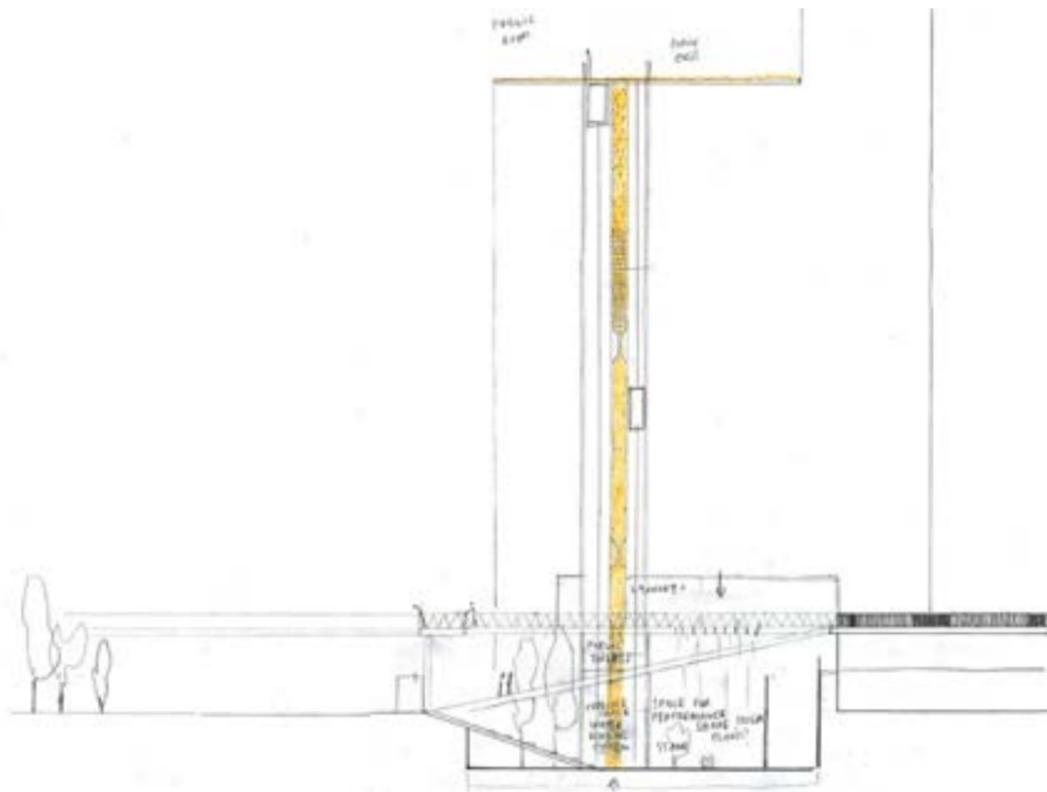
As São Paulo is one of many cities suffering from extensive water deficit, the project aims to explore how water infrastructure can be optimized and implemented in the project proposals for public spaces. São Paulo has a large network of rivers underground. This map shows the area's wall and the underground river network. During the latest drought in the city, people started drilling wells on their properties as they discovered they lived on top of rivers.

- |  |  |   |
|--|--|---|
|  |  | <p>01 Increase offset between private property and street<br/><i>wider sidewalk, increase space for pedestrian</i></p>          |
|  |  | <p>02 Make cross quarter pedestrian passages<br/><i>increase connection cross quarters, make exclusive pedestrian paths</i></p> |
|  |  | <p>03 expropriate private open lots for public use<br/><i>increase public space</i></p>   |
|  |  | <p>04 expropriate private parking garages for public use<br/><i>increase public space</i></p>                                   |
|  |  | <p>05 Take in use flat roof tops for public use<br/><i>increase public space</i></p>  |
|  |  | <p>06 Bridges and tunnels<br/><i>cross road connections and space for pedestrians</i></p>                                       |

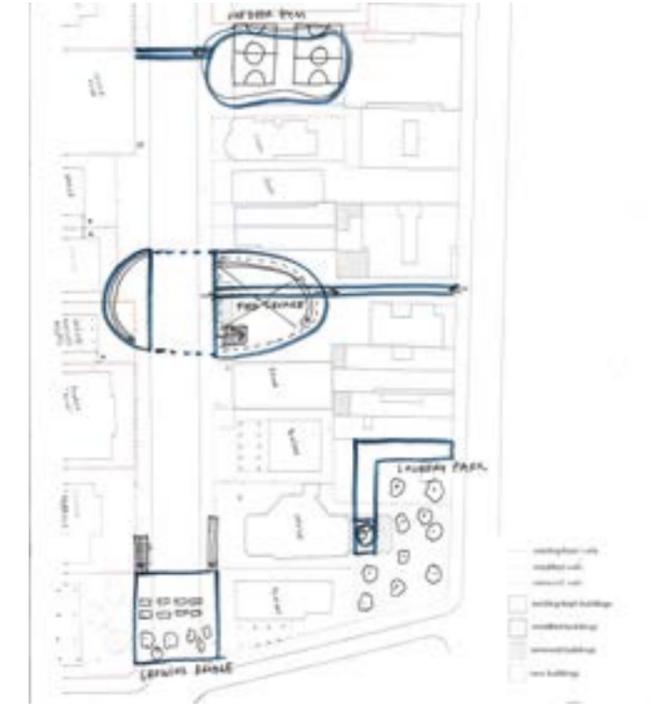
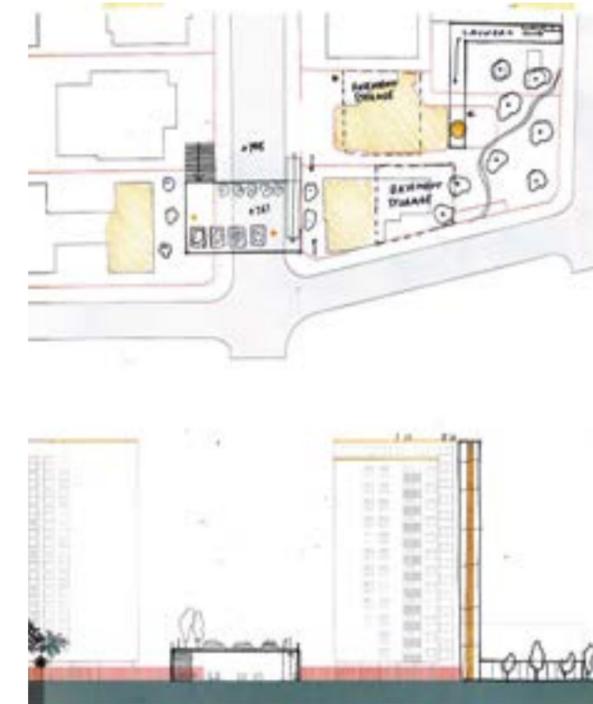
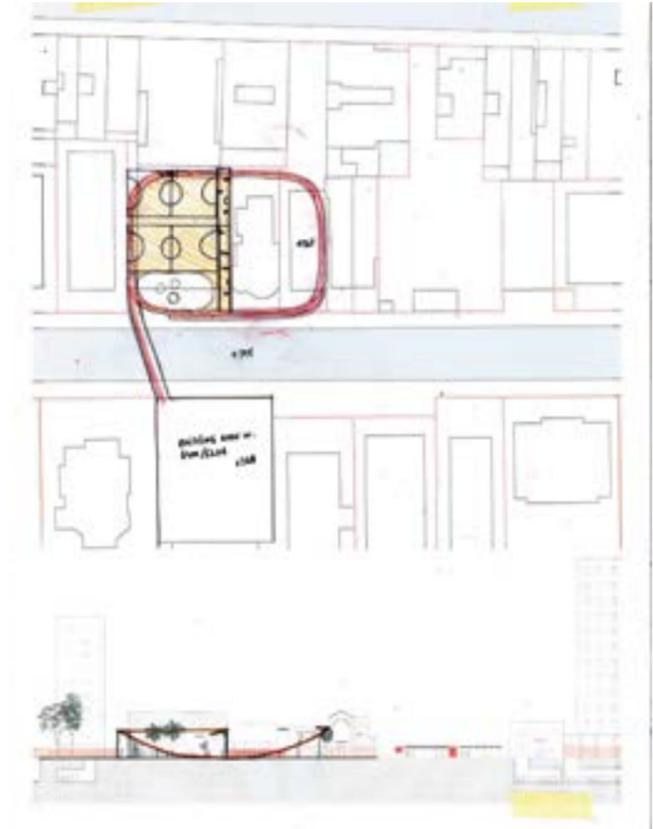
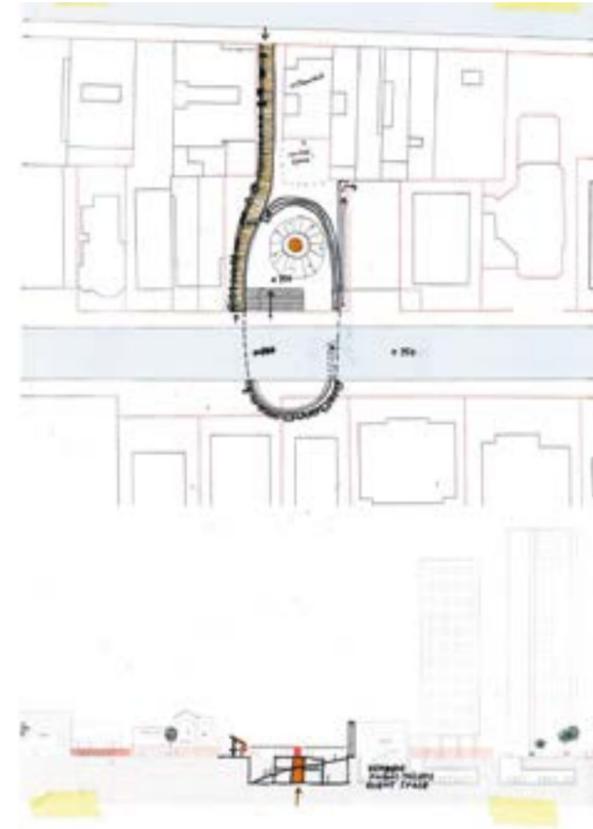
Strategy proposals for interventions, what and why.



Process: sketches, ideas on working with different levels and programming new walls



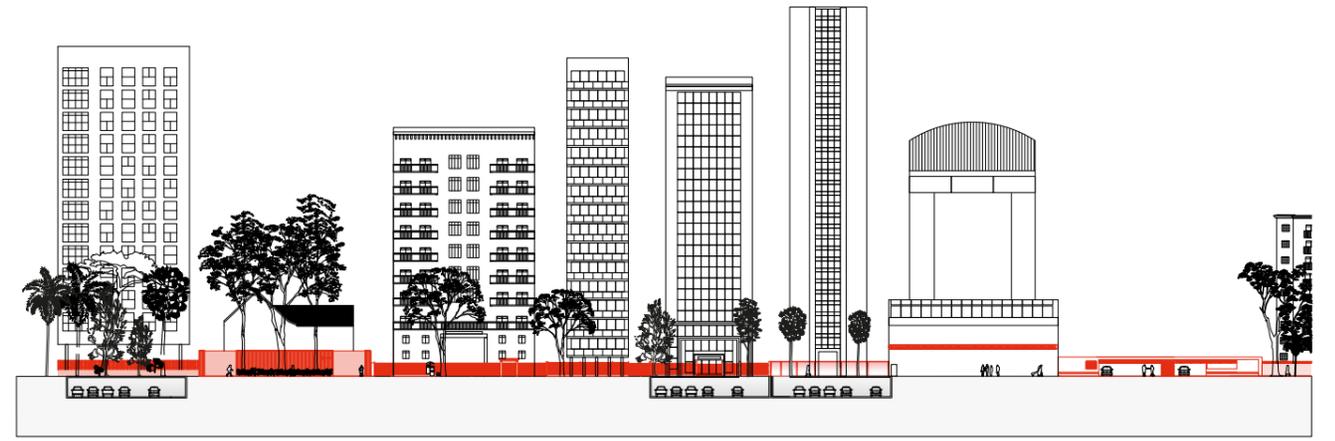
Early sketches on rainwater harvesting and public space.



Early sketches on three- four different project proposals for a new “wall”, implementing water.

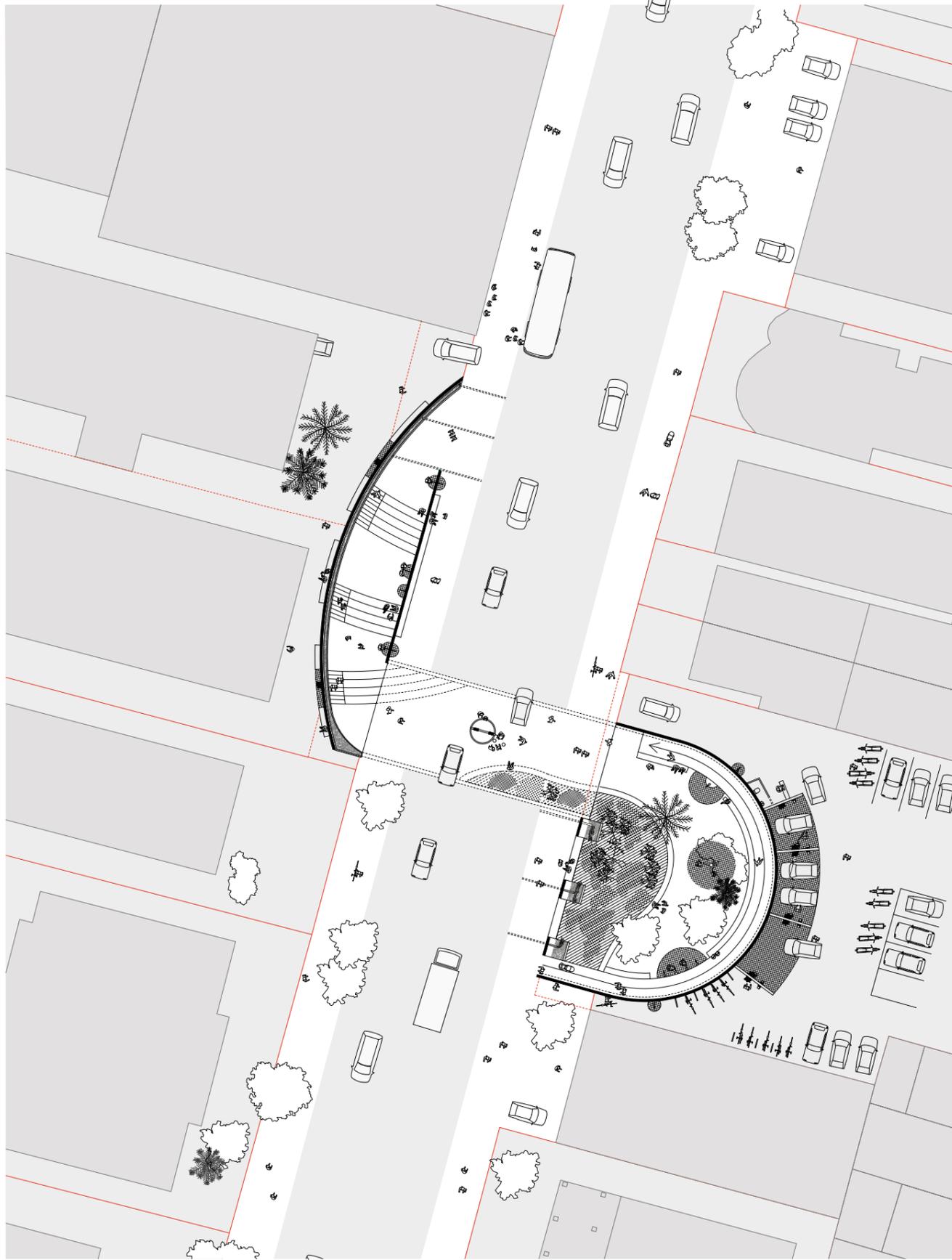


Final project proposals: The Well Wall, The Gym Wall, The Laundry Wall. Situation plan.



3A

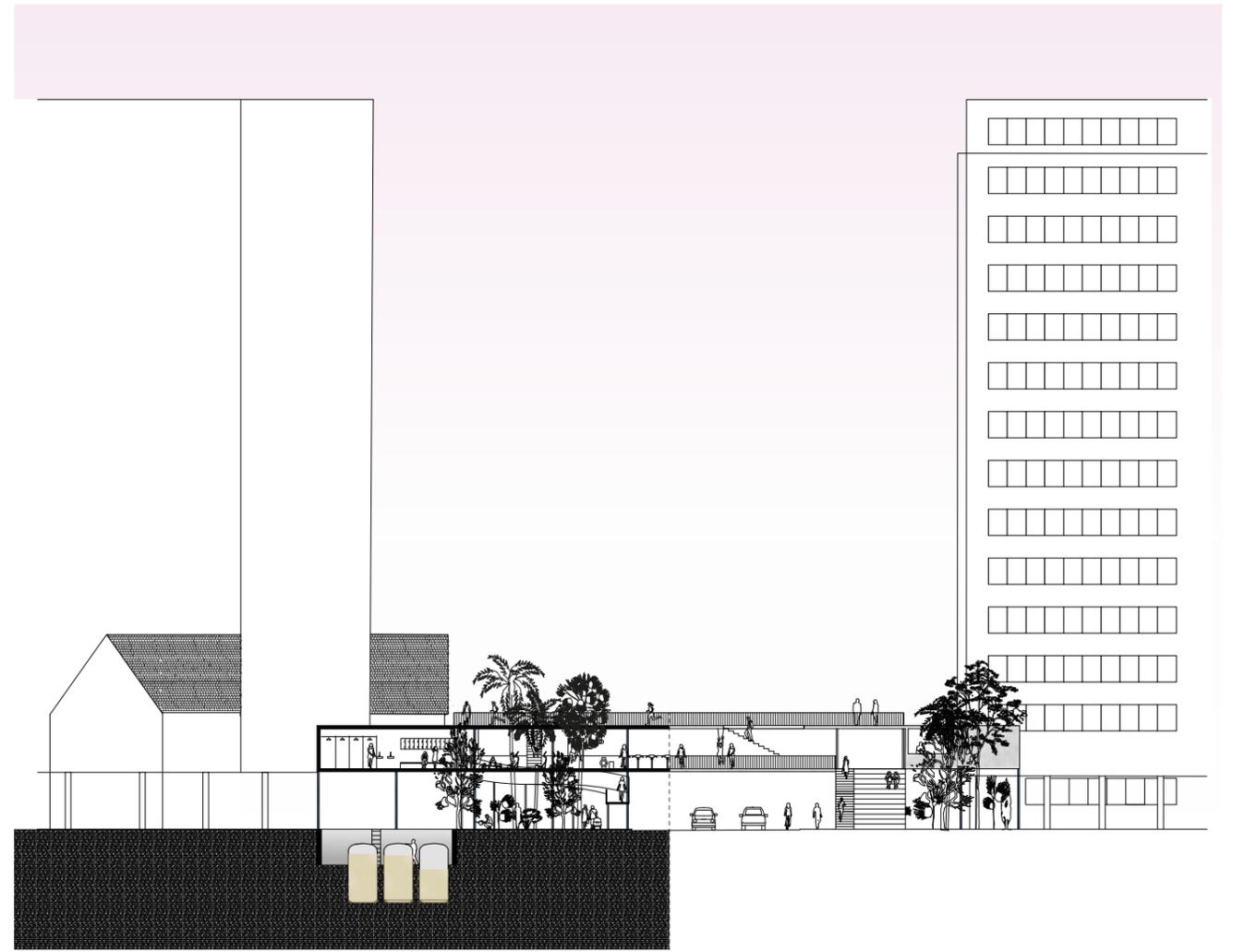
Street elevation  
 Upper: Existing situation  
 Lower: The three projects implemented. Laundry Wall is in this elevation implemented to a different site than on situation plan.



"WELL WALL"  
Situation plan

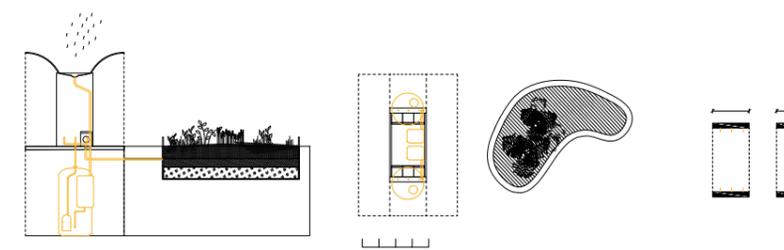
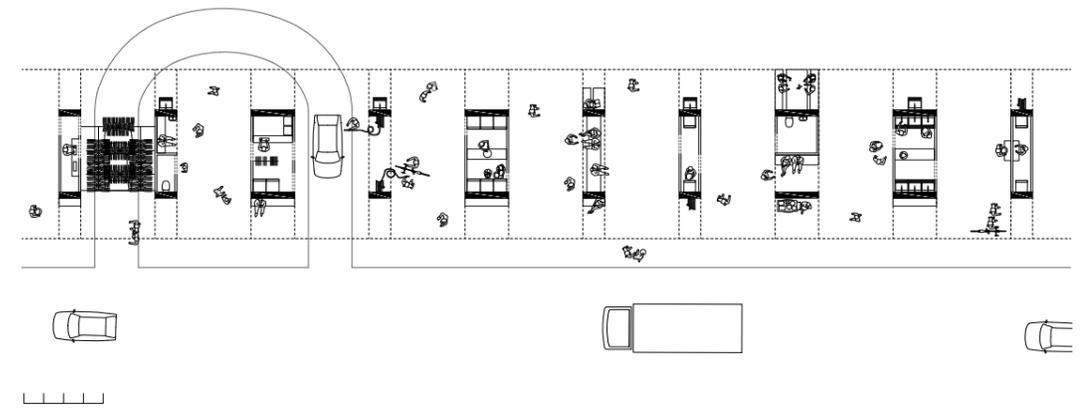
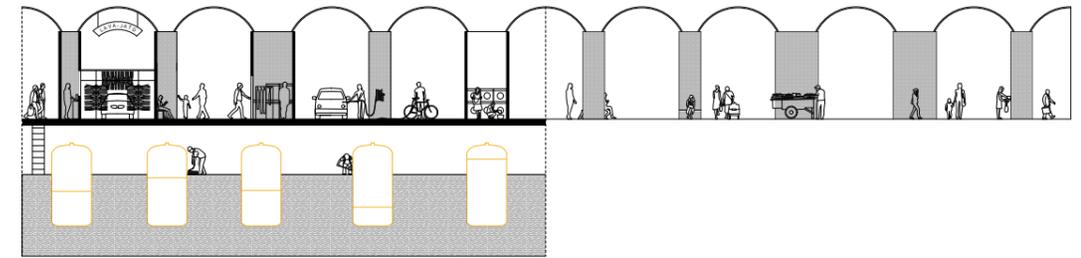
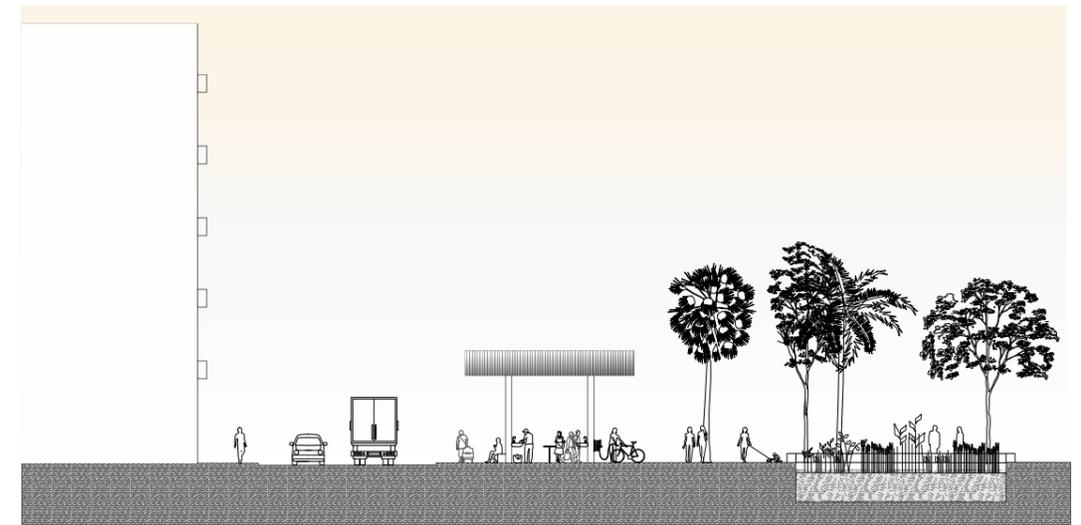


"WELL WALL"  
Section





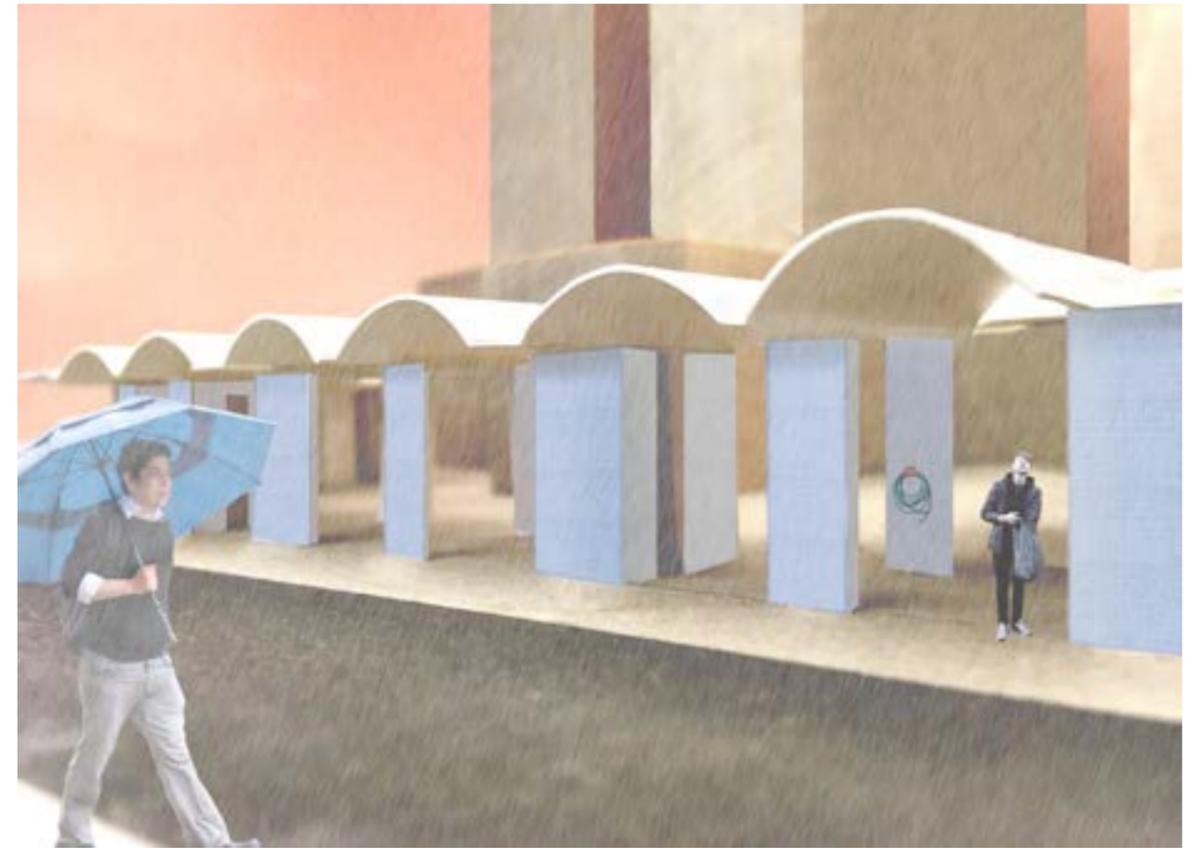
"LAUNDRY WALL"  
Situation plan



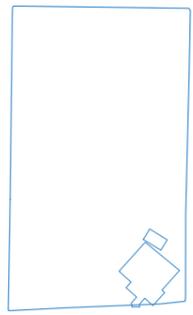
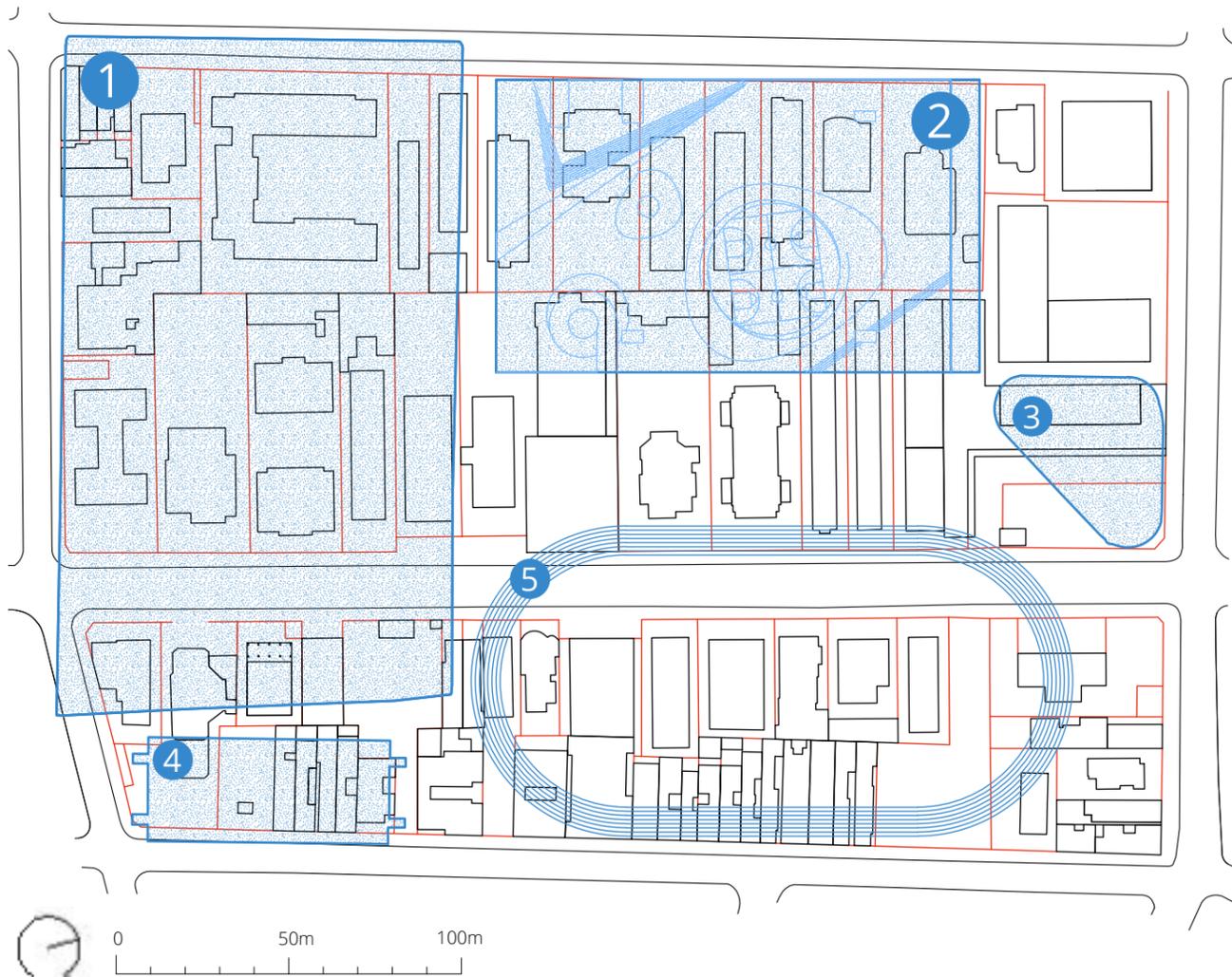
"LAUNDRY WALL"  
Section, elevation and concept



model photos



illustrations: Well Wall, Gym Wall, Laundry Wall.



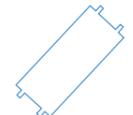
01 Buenos Aires Park



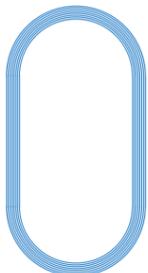
02 Israels Plads



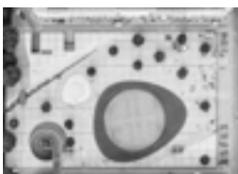
03 Vilaboim



04 MASP



05 400 m running track



Kobe, Copenhagen



neighbourhood square, Higienópolis São Paulo



Lina Bo Bardi, São Paulo



Subarquitectura, Alicante/Spain

Reference projects implemented on site to test size.

### Key literature

**Book:** City of Walls: Crime, Segregation, and Citizenship in São Paulo

**Author:** Teresa Pires do Rio Caldeira

### Relevance for project:

The book draws historical and contemporary lines of the urban development of São Paulo and introduces terms as fortified enclaves, aesthetic of security and the organizational pattern of closure of private spaces by walls, fences and monitoring to argue for the characterization of São Paulo as the city of walls. The history and the terms it discusses, are important for the research part of the project "Wall spaces" in order to base the project's new discussions and proposals on existing knowledge and historical traces.

**Book:** Espaço público e urbanidade em São Paulo (Public space and urbanity in São Paulo)

**Author:** Mauro Calliari

**Year:** 2016

**Relevance:** Contributes with an historical backdrop of development of public space in São Paulo which is useful in order to keep an historical perspective observing today's situation and how public spaces are effected by walls and fences.

**magazine:** Monolito: Higienópolis

**Editors:** Agnaldo Farias et.al.

**Year:** 2014

**Relevance:** Show the history of the buildings, whereas many were originally built without fences or walls, the residential gardens being open to the street. What was the original idea behind these constructions, it's relevant to know when the fences and walls were added to the construction and property to know how the response on security issues has changed through the past decades.

