

## FROM THE BARRIADA AND OUT

- A STUDY OF POSSIBILLITIES FOR THE URBAN DEVELOPMENT OF THE LEFT BANK OF THE RIVER RIMAC

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## PRELIMINARY DOCUMENT SUMMARY\_

Lima has close to 9 million inhabitants, a number which multiplied almost 15 times from 1940 until today. The great population growth that started over 70 years ago resulted in an uncontrollable urban settlement through the formation of "Barriadas" (also called "Pueblos Jovenes"). These are informal settlements where people construct their own dwellings on land that is often not serviced. The services (water, electricity, sewage and roads) are established later.

Many of these old settlements are now consolidated neighbourhoods and part of the rest of the city's urban fabric. Yet they are in most cases areas that struggle with social problems like high crime rates and poverty, which gives them a certain labelling in the society. As well as social issues, the barriadas struggle with physical conditions like low building maintenance, lack of public space, public services and poor pedestrian mobility.

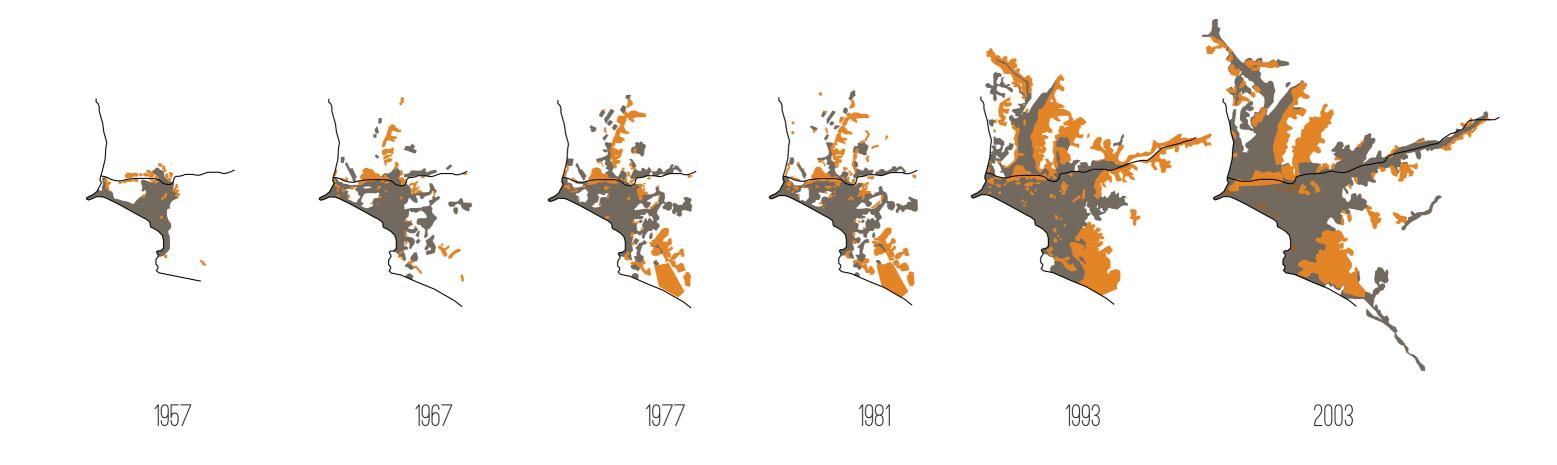
Peru's capital is still growing, and there is still a need for housing. Things are happening in the inner city in terms of urban renewal and densification, and in relation to this I find it interesting to look at the barriada's role in this. My working hypothesis is that the integration of the barriada into the rest of the city is not very successful, and that this results in a segregation.

The barriada fails to be seen as a worthy part of the city, and developments that stand in great contrast are favoured. This segregation has both physical and social sides to it, and I wish to work with the physical while keeping an aspiration to have a positive effect on the other.

My angle for this task is to work from the barriada and out. In order to integrate it into its surroundings, there needs to be some principles that make these connections. I believe these can be found as much within the area as from the outside. What is needed in the barriadas in terms of urban developments? How can we through architecture and planning work towards bettering the living conditions there? Can it become an inviting place?

As a response to my questions and ideas, and in order to investigate them further, I have narrowed it down to a task that will be my diploma project:

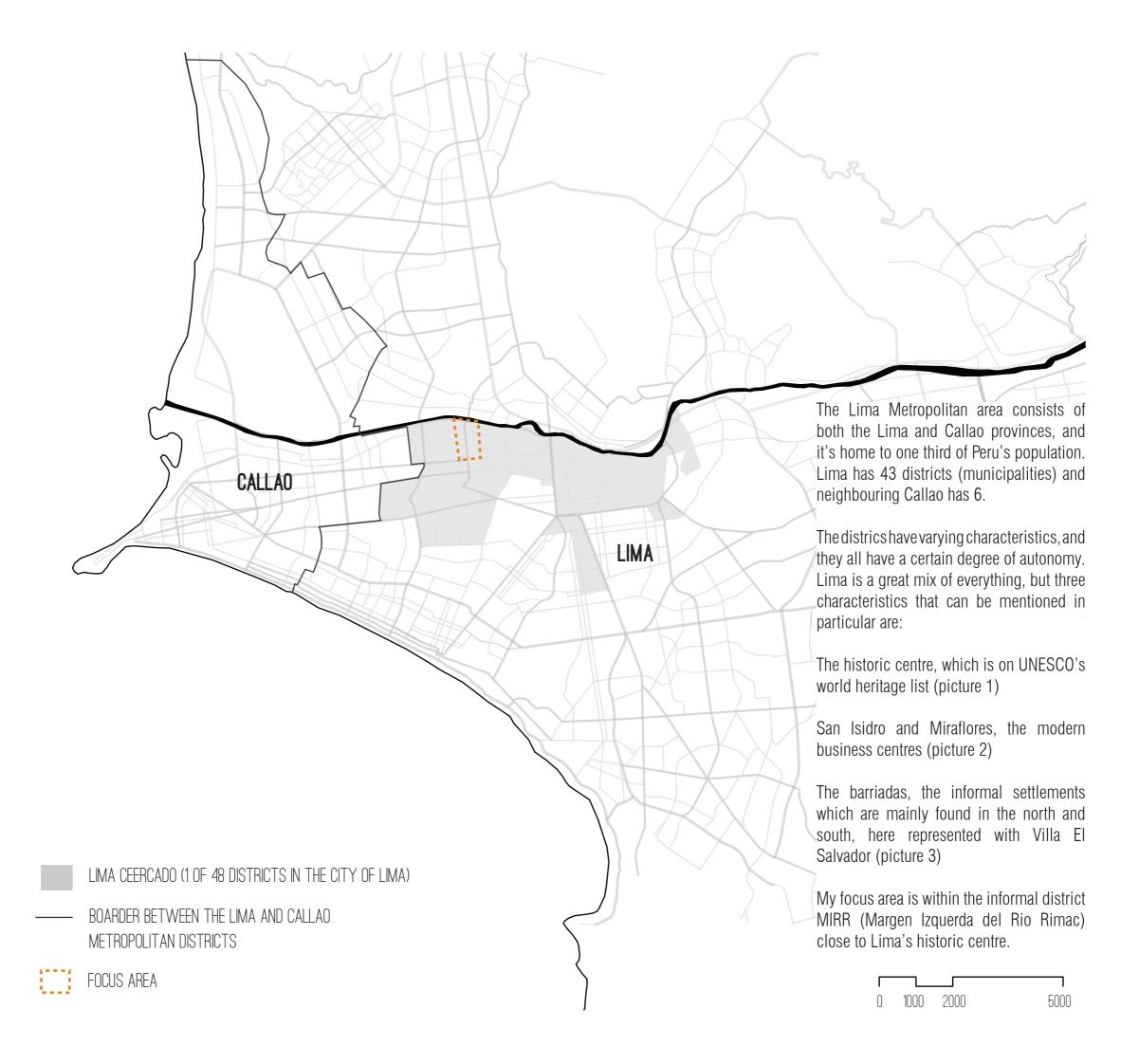
I will through urban planning and architecture give a study of possibilities for the development and process of integration of the barriadas south of the river Rimac and into its surrounding urban fabric in Lima, Peru.

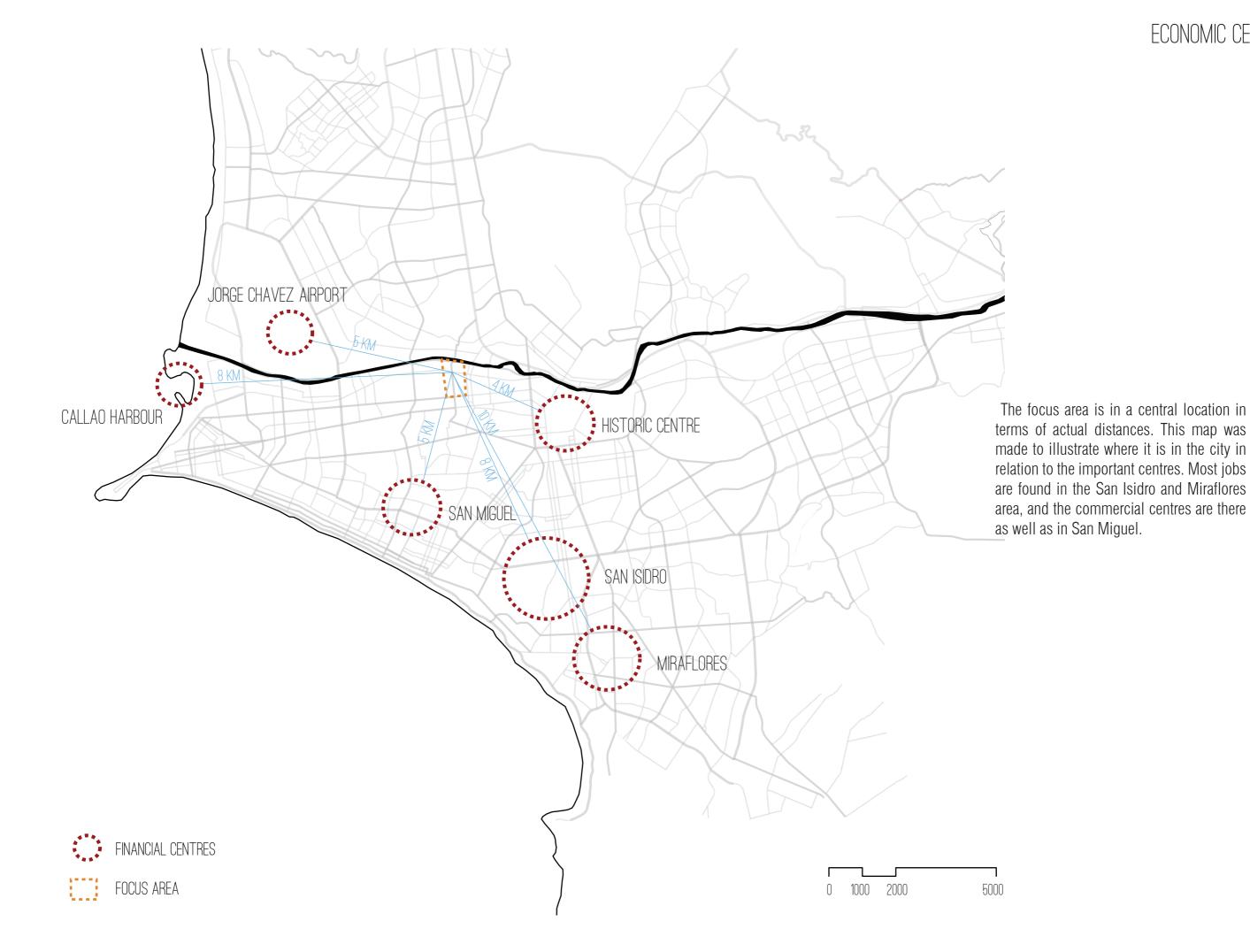


- RIVER RIMAC
- CONVENTIONAL LIMA
- BARRIADAS / PUEBLOS JOVENES
- TUGURIOS (SQUATTING AND RENTING OF EXISTING BUILDINGS - RESULTING IN OVERCROWDING)







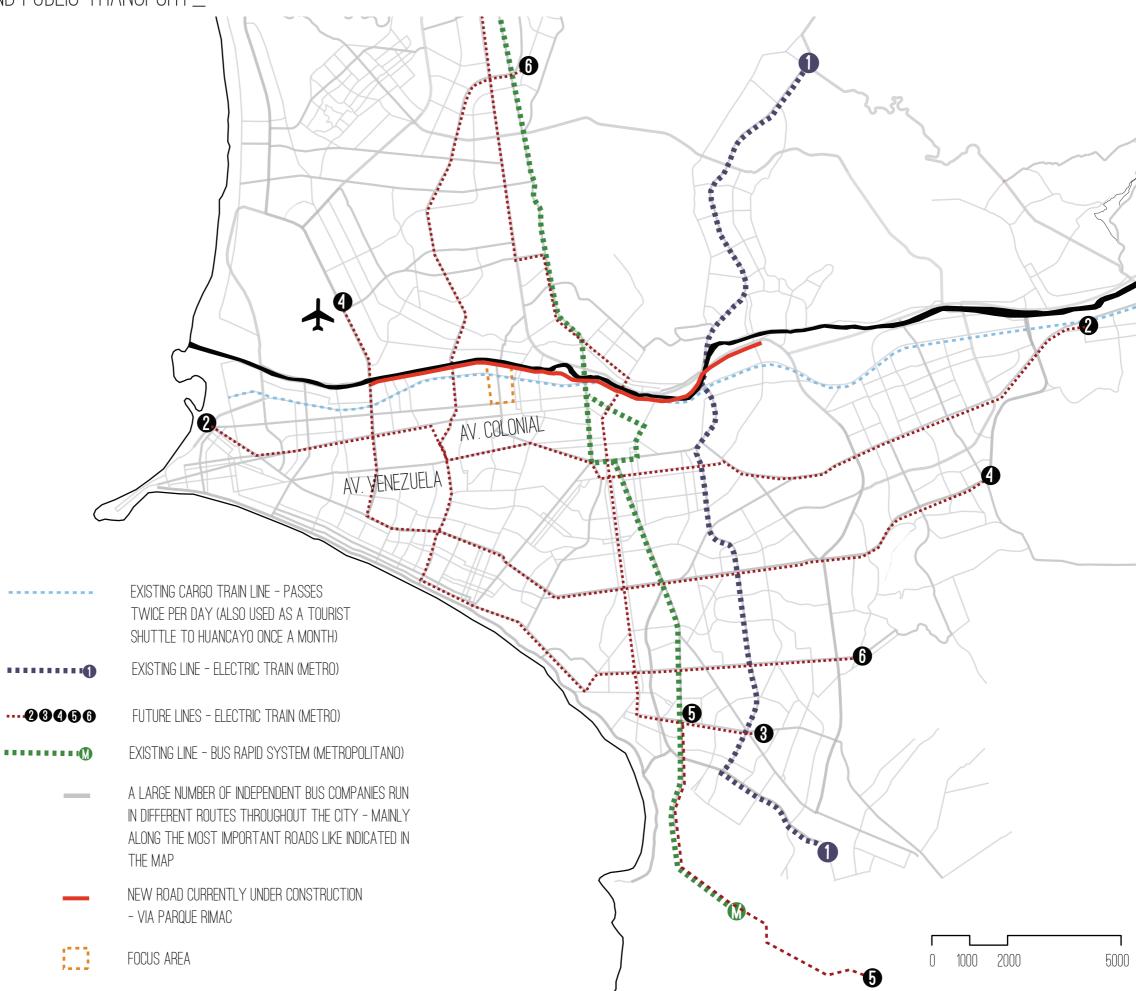


## EXISTING AND FUTURE ROADS AND PUBLIC TRANSPORT\_

One great challenge for the city as a whole is the transportation and infrastructure. Today there is only one line of the Metropolitano (the bus rapid system) and one line of the Metro (electric train), the rest of the travelling within the city goes via numerous independent bus companies and taxis.

There are many changes currently happening in Lima, and the infrastructure is in the government's focus. Plans for a complete Metro network within the city are put forward and the construction of Line 2 in is said to be around the corner. In this project I have laid down the complete Metro network as a basis for the future.

Roads are also being constructed, and the one highlighted in this infrastructure map is currently under construction and will go through the particular focus area I have chosen.



The focus area is within the MIRR district (Margen Izquerda del Rio Rimac - The Left Bank of The River Rimac), which is a large area of barriadas within the district of Lima Cercado. This was one of the first informal settlements in the city, dating back to 1948.

The hypothesis when stating this project was that the barriadas are segregated from the rest of the city. MIRR is located along the river, boardering to other districts and to Callao. To the south are areas that grew conventionally (so called "formal" areas) consisting of conventional middle class housing, governmental housing projects and South America's olderst university. A bit further east is the historic centre, which is on UNESCO's list of world heritage sites. To the north and across the river is the San Martin de Porres area, which grew informally as well. MIRR is also located right next to a large industrial belt reaching all the way from the historic centre and to Callao.

The initial reason why this area caught my interest was that it plays a great role in the future of Lima's residential development. The industry is moving out of the city, and this part of the city is in the process of being planned as an important residential area in the future. New residences are being constructed here and there already, and I personally have a critical eye towards how these new residential buildings are planned and designed, as there are no guidelines as to ensure the quality of the architecture and planning. I believe there should be put special attention to the meeting between the "formal" and "informal" city.

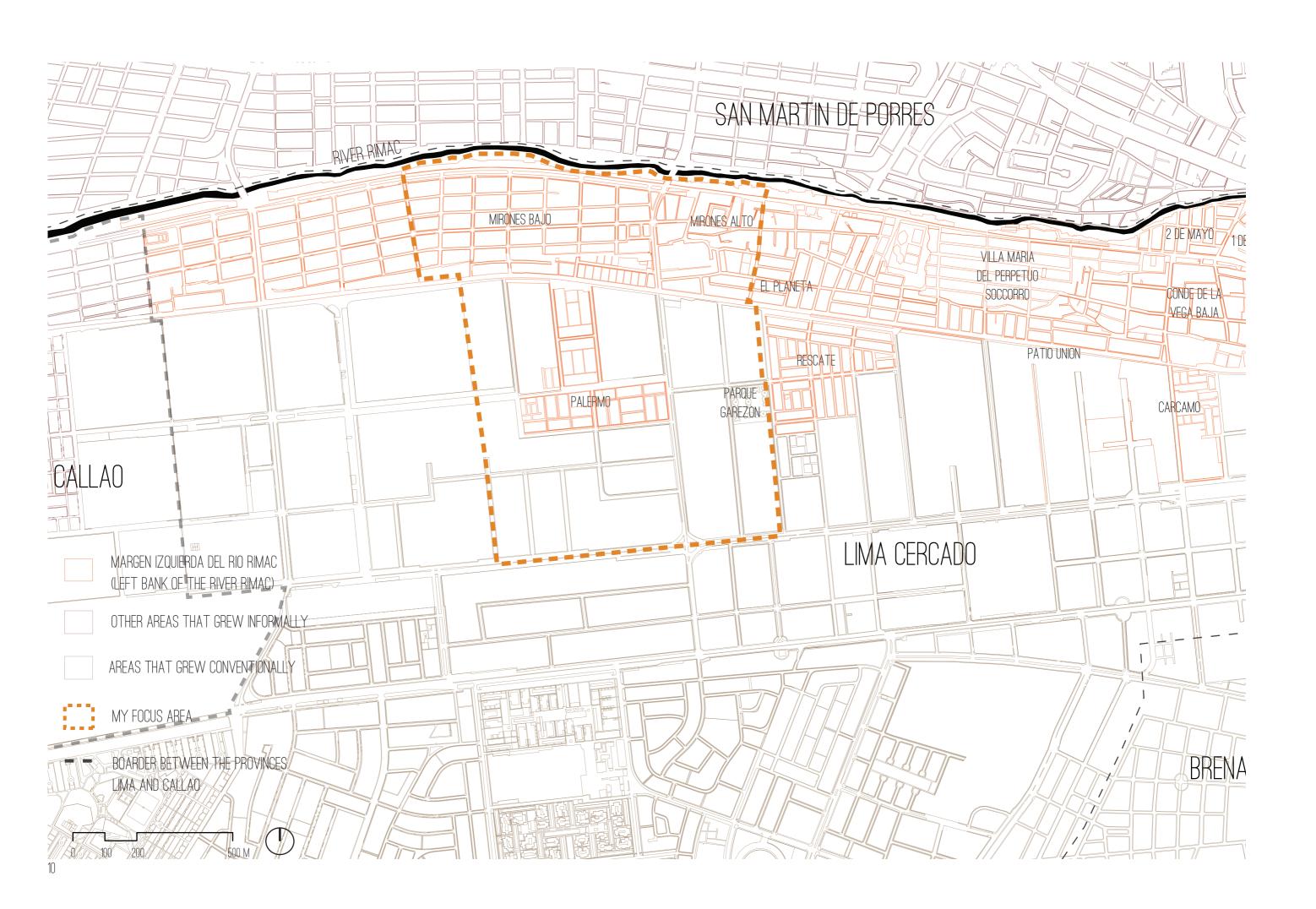
My approach is therefore to study the possibilities for the urban development of the barriadas in particular, in order for it to be

well connected to its surroundings and to future residential developments. I chose a focus area within MIRR based on the strategic connection north-south that is the road Avenida Nicolas Dueñas, which I saw as the physical connection between the formal and informal areas.

To investigate the area I mapped out a varity of things to gain a better understanding. I also put a lot of emphasism on learning from the people living there directly, so I conducted interviews and visited the area as often as I could during my study trip. I concluded that the area struggles with several problems. After doing my investigations, I had to re-think my definition of segregation and I put down the different aspects of this segregations in a diagram.

It has always been very important to me to get down to the scale where I can say I know the area and I have learned from the people actually living there. I believe strongly that they should be involved in the development of their own neighbourhood, but I had to adjust this idea to what was suitable as a Diploma Project and to what I was capable of organising.

Another very important thing for me is to make clear how I see my own role in this. I have to be precise in the fact that this project automatically is affected by me being an "outsider" - I am from a different culture and will therefore have my cultural luggage. It is therefore not my intention to broadcast this as the final answer to all the problems. It is a study of possibillities where I try to re-conceptualise the urban development of a given area and I use this opportunity to study a topic that interests me and which I believe I will benefit from on a greater scale.



# THE YEARS THE DIFFERENT NEIGHBOURHOODS FIRST APPEARED\_

MIRONES BAJO 1948
MIRONES ALTO 1949
EL PLANETA 1959
PALERMO 1972
PARQUE GAREZON 2010

### CHARACTERISTICS OF THE AREA\_











50



This great road project has resulted in a major relocation of people living along the riverside within my focus area. They are being offered compensation for their house or a new apartment in a complex like the one pictured to the left (Parque Union).

The new road will have 6 lanes and cross Av. Nicolas Dueñas in a viaduct (picture of the current construction of this is featured above). The plan is for it to be the fast route from the historic centre to the airport.

I have not succeeded in finding any information and illustrations on how the road will be exactly in my focus area and the rest of the barriadas in MIRR except for what I just stated above.







# ON-SITE REGISTRATIONS\_





















#### IN THE FIELD



### SUPPLEMENTARY





## CONCLUSIONS FROM INTERVIEWS - MAIN PROBLEMS

"We have been working hard to get Av. Materiales improved. The way it is now is a disaster."

We need proper streets and sidewalks.

"I am sometimes afraid of the other people living here"

"I would like to receive a fair price for my land or receive a house within the same area in Mirones because I have many costumers here and this is a central location. My whole family works and studies in Lima and I can't afford to leave Mirones and spend more time and money in transportation."

"A big issue here is

that a lot of people

are renting."

mistrust between neighbours security problems –

tenants suspected to be criminals -

feeling distanced from the rest of lima

tension between the community and "the outside"

overcrowding

current migration to the city

lack of public space

existing public space needs upgrading and activation feeling of neglect

high crime rates -

reduction of life quality - feeling unsafe

many tenants

bad financial status of the residents

conflict and tension in regards to via parque rimac

lack of good quality public spaces and pedestrian paths little individual feeling of responsability in public spaces

high crime rates —

mistrust to people from other neighbourhoods

gang activity and crime -

upgrading of public spaces-

problem that neighbours don't trust each other

tension because of relocation

challenges after being relocated

MISTRUST BETWEEN NEIGHBOURS

**CRIMF** 

UNSATISFACTORY PUBLIC SPACES

**OVERCROWDING** 

TENSION BECAUSE OF VIA PARQUE RIMAC

"A lot of people that live here now, rent properties.'

"People from other

come here and they

neighbourhoods

make a mess for

us. We really need

to find out how we

robbed just outside

the Serenazgo post,

and nobody did

anything."

can improve the

security. | got

"We are 10 blocks from Callao, so nobody cares.

NEGLECTED BY AUTHORITIES

"Even now a days people come here to Lima to search for more opportunities than what you find in the provinces"

> "It's okay. It's a good location. It's close to the centre, San Miguel and Miroaflores. But it is a problem in the peak hours.'

"When you don't have good public spaces, you feel less motivated to use them. Also, it creates a situation where young people don't have much space to engage in activities. and they turn to crime.'

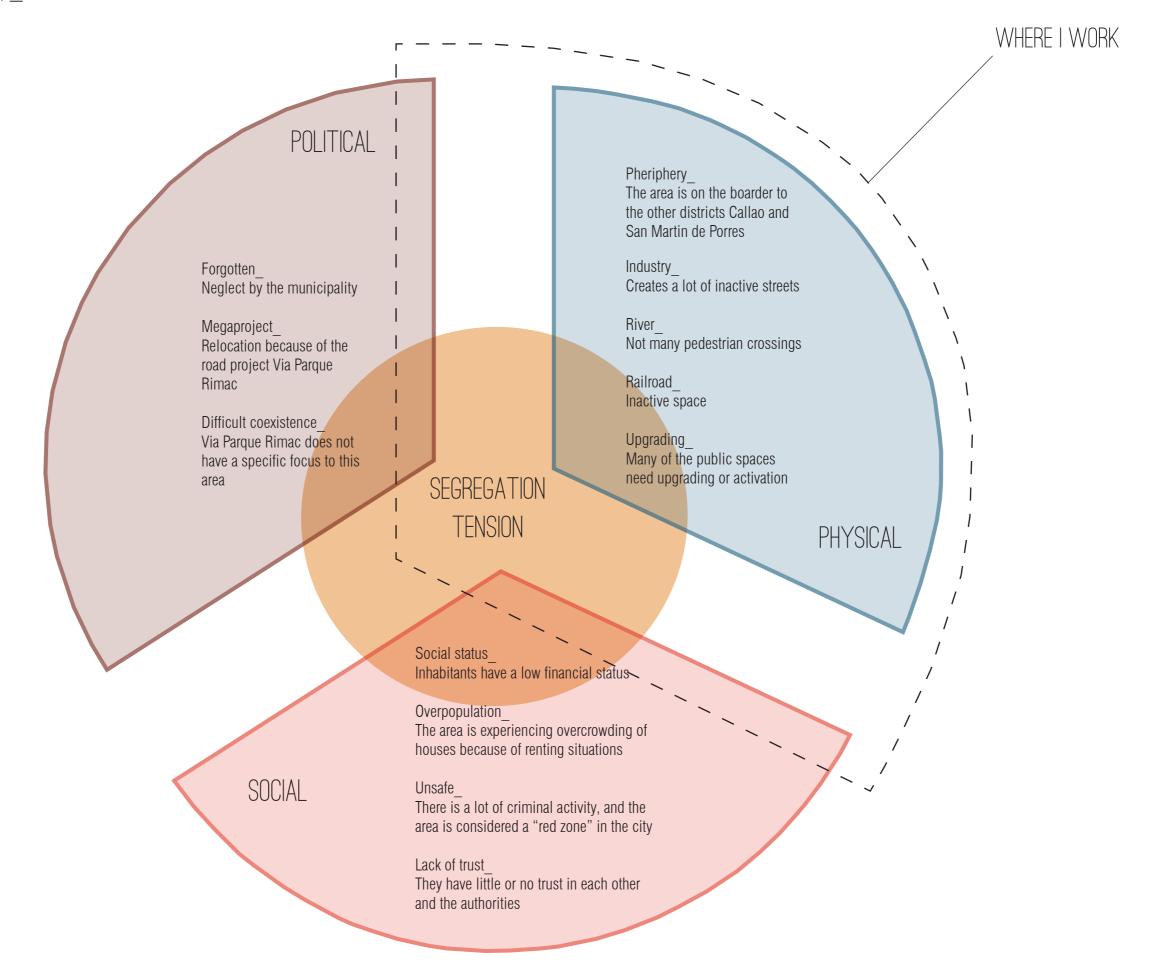
"There are a lot of bad people living around

here. Seeing a dead person in the street was

something you could never imagine 20 years

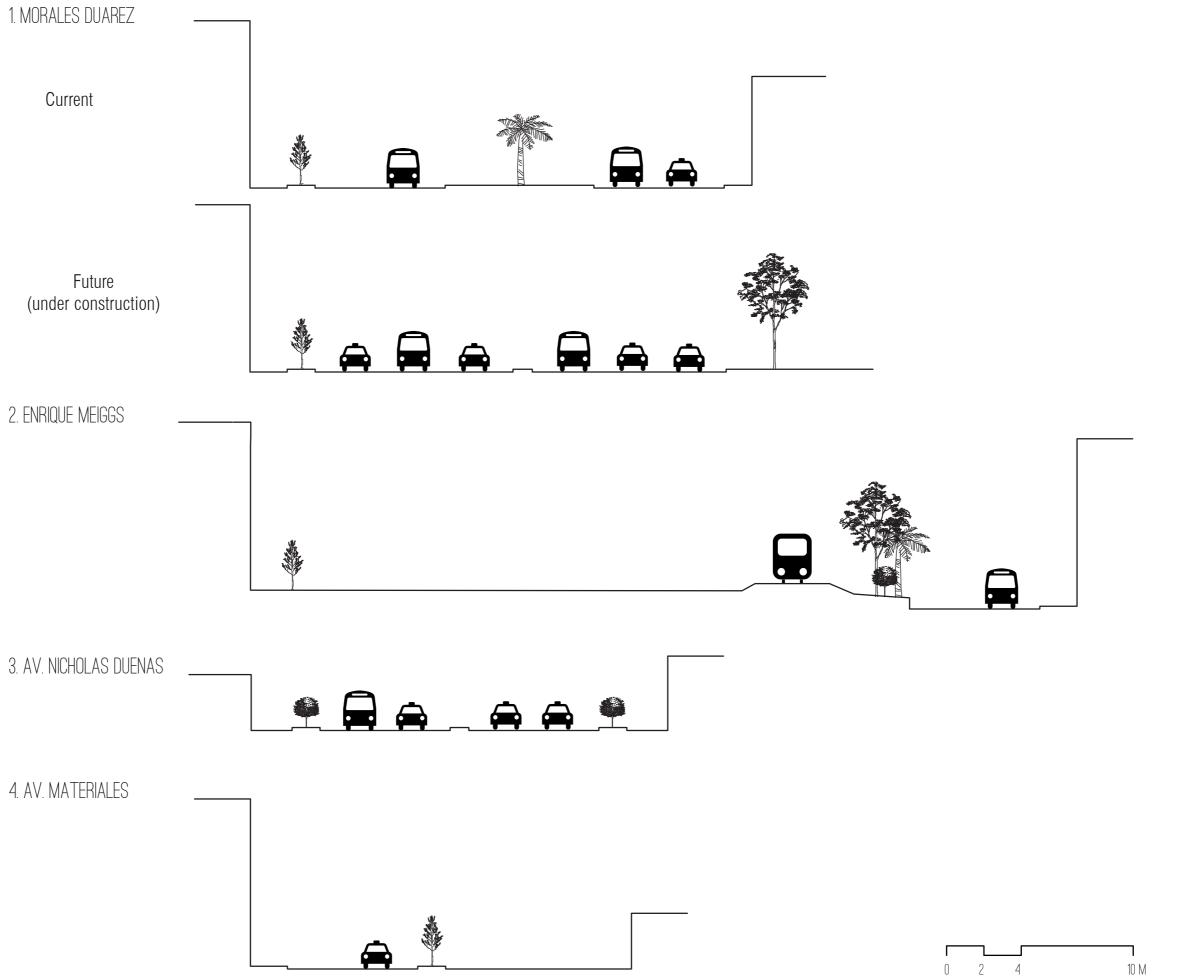
ago. Today, it's not a surprising sight."

"Her are a lot of young people that can be guided and encouraged to get things done. Like the young people that dance and skate in the park. They are not bad youths, but from a distance they might be perceived as that."









## RESIDENTIAL DENSITY\_



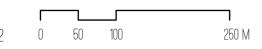


## PHYSICAL EVALUATION OF PUBLIC SPACES AND STREETSCAPES\_

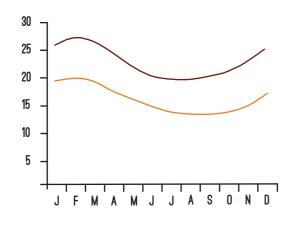
TOTAL AREA OF PUBLIC,
GREEN SPACES WITH LARGE
TREES AND SEATING:
8558 SQARE METRES
=
0,5 SQUARE METRES PER
PERSON

- PUBLIC SPACE I: GRASS, LARGE TREES AND SEATING
- PUBLIC SPACE II: LARGE TREES, SCARCE GRASS AND SEATING
- PUBLIC SPACE III: MOSTLY
  DECORATIVE. VARYING
  TYPES OF TREES AND
  SCARCE GRASS, NO SEATING.
- SEMI PUBLIC SPACE
- SPORTS AREA I: WELL EQUIPPED
- SPORTS AREA II: SCARCELY EQUIPPED
- MOST FREQUENT PEDESTRIAN ROUTES
- AREAS LARGELY MISSING PAVING AND ASPHALT

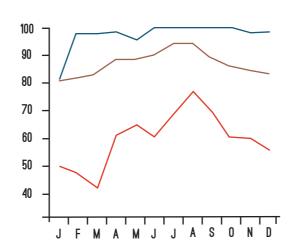




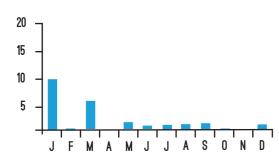
#### MAXIMUM AND MINIMUM TEMPERATURES (CELCIUS)\_



#### MAXIMUM, MINIMUM AND AVERAGE HUMIDITY (PERCENTAGE)\_



#### PERCIPITATION (MM)\_



#### CONCLUSION\_

WINTER SUMMER

#### SUMMARY

The mean annual temperature is 18 degrees celcius.

Very high humidity, gets frequently saturated during the nights in autumn and winter.

Cloud cover is almost permanent day and night from June-Sept.

Maximum and minimum temperatures are influenced by the sea surface water temperature (SST), warm air masses from the north, and also by the intencification of southern winds.

No rain, only drizzle.

#### NOTE

Peru is located in a seismic zone, and experiences eathquakes. Most of them are strongest south of Lima, although they can be noticed at times in Lima too. Peru's capital had its last big earthquake in 1974, where 179 people were killed, 1000 injured and more than 4000 buildings were damaged or destroyed.

SOURCES: WWW.SENAMHI.GOBPE WWW.WOLDWEATHERONLINE.COM

## ACTIVE AND INACTIVE FACADES\_



---- MORE THAN 2 DOORS EVERY 10 METRES

2 DOORS OR LESS EVERY 10 METRES

GATED AREAS

SCHOOLS

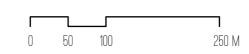
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## COMMERCIAL ACTIVITY\_

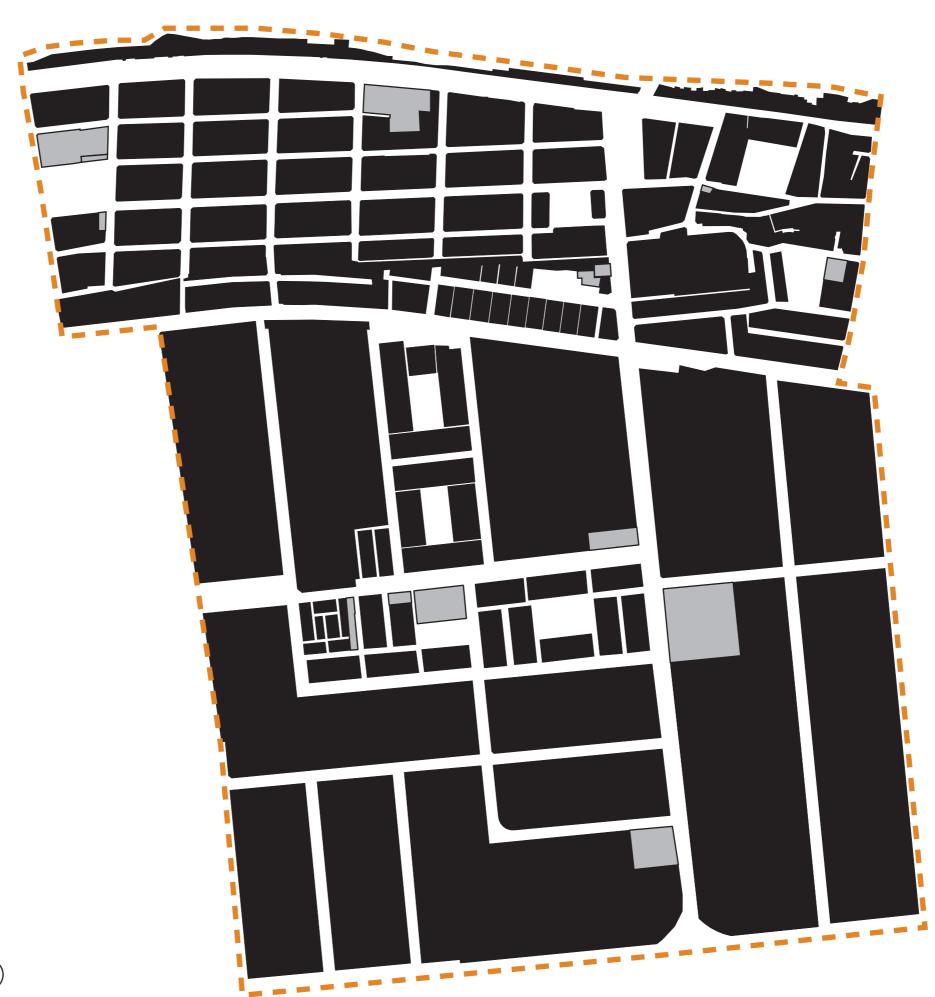


## MARKET HALLS

• VARIOUS TYPES OF COMMERCE, INCLUDING STREET SALES BOOTHS

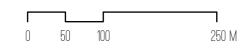






PUBLIC BUILDINGS

PRIVATE BUILDINGS

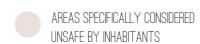




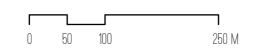








SERENAZGO OFFICES (SECURITY
BY THE MUNICIPALITY)





# ANALYSIS\_

## BARRIERS AND STREETS IN NEED OF ACTIVATION\_













## LIVING WITH THE CLIMATE\_



#### SHADOW\_

During the summer, the sun is very strong and the temperature can be quite high. Shadows in the streets and public spaces are necessary.



#### PUBLIC SPACES\_

The hot climate makes outdoor spaces very important. They are used in different ways than in other climates, and they can in some ways be seen as the extension of the living room. The availability of good public outdoor spaces can contribute to a better well-being for people who don't have private outdoor spaces.

The public spaces are also in the summer often used in the evenings in Lima - when the sun has set and they become more cool and comfortable. Measures can be taken to make sure the public spaces are good to be in also in the evenings.



#### DRY\_

The dry weather and climate changes are creating challenges regarding Lima's water supply in the future. The lack of rain also makes irrigation of parks and green areas difficult. It costs both money and effort.

The city is in a desert and therefore sand and dust are the natural ground covers. Vegetation is preferred for many reasons, and apart from being decorative it also prevents dust from spreading and polluting the air.



#### HOUSING\_

The hot climate makes good ventilation a necessity.

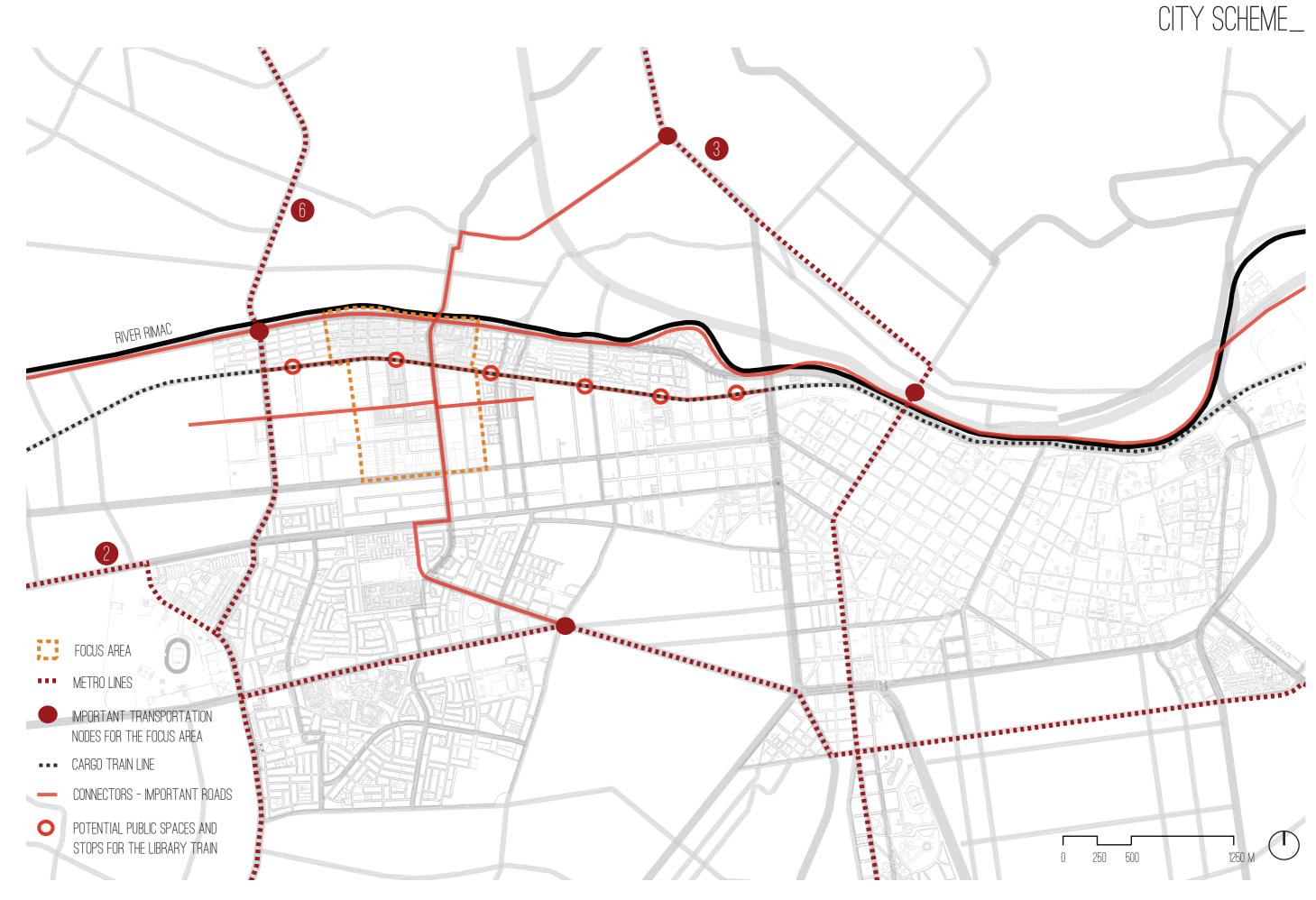
At the same time, the winters can be perceived as cold - not because of the temperature, but because of the high humidity. Good detailing of windows and doors are preferred.

The building structures needs to be earth quake resistant.

# PROPOSAL\_

STRATEGIES_ PROBLEM	WHAT I THINK CAN BE DONE
Lack of public space  Bad quality existing public space	_Alternative ways of thinking public spaces _Upgrade and activate existing public spaces
Crime	Create a framework /urban catalysts:  _Activation of public spaces through public functions  _Community promoting and developing projects which encourgae cooperation and trust  _Creation of attractors that promote the area in a positive way
Overcrowding	More affordable housing is needed Greater focus on housing from the goverment (regulation of rental situations, more housing programmes) The area can become more attractive for new, good quality and affordable housing developments
Tension because of Via Parque Rimac	_The company that is doing the road should reconsider the compensation given  _The road project needs to coexist with the people living there in a good way

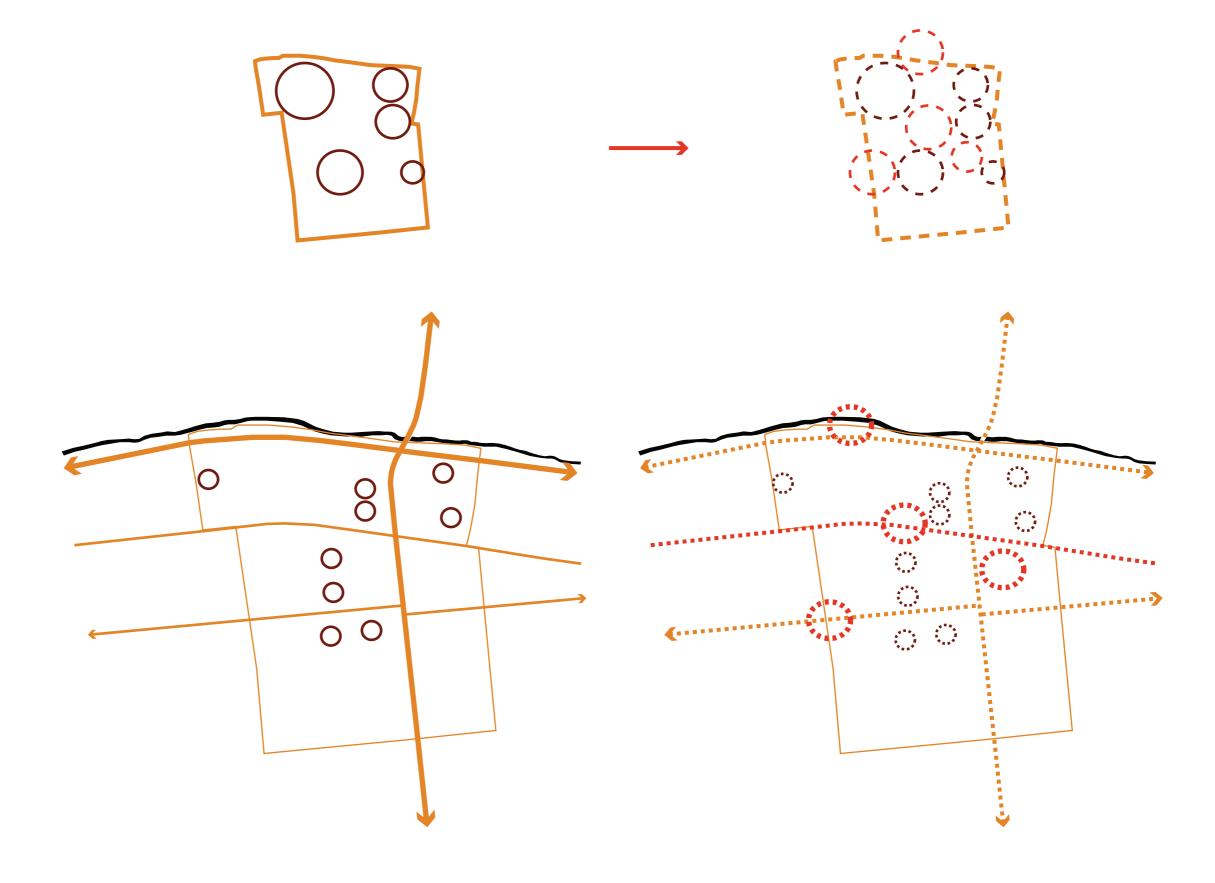
I WHERE I AIM TO WORK



## AREA SCHEME\_

The area is very intoverted - people within each neighbourhood keep to themselves and have no trust in the people around them. The idea is to construct ruptures, and put activities and public functions on the boarders between them. The barriada needs to become more open and extroverted to the rest of the city, but first it needs to create stronger relations within.

The concept is to break up the barriers and create connecting and inviting places. I propose to do that by promoting coexistence and introduce new pubic functions that reach out to the whole area and also to the rest of the city.



## THE POSSIBILITIES I PROPOSE AND THE ORDER OF THEM\_

I see 7 possible steps to achieve a good urban development of this area. To achieve the desired outcome, it is important to look at them together as a strategy as well as individual possibilities on their own.

#### Step 1 - Bus stops, bike paths, pedestrian crossings and pedestrian streets

I believe it it important to improve the pedestrian mobility. This is an important step towards creating a better coexistence between traffic and the pedestrian. I believe the strategy should be to promote pedestrian mobility and bikes, and better the conditions of the public transport. This area lays outside the planned new public transportation network, but it is well served by buses. Bus stops today are just a sign on the sidewalk indication the location, and I believe a bus stop should be a lot more. Part of the strategy should be to work towards building down the private car traffic, and one way to do so could be to slow down the traffic as a whole. That being said, in order for this to be an option, the public transportation needs to cover the needs. The public transportation should ideally be the fast and easy way of getting places, so bus lanes should be established in this area. This as well as taking certain streets to be pedestrian streets will be ways to achieve the wanted effect. This step is put here first because it is an important way of taking back the streets and it is also a step the municipality should take to show their presence and engagement in the area. When making pedestrian streets, it can also promote bottom up intiatives, which could be a good possibility in this situation.

#### Step 2 - Train Library and railroad park

The second step is to implement a public function in an old train carrige. This is also largely for the municipality and authorities to show their presence and aim for being a catalyst for the establishments of public space. If the train is converted and put into function, and stops are constructed, then there is a large possibillity that the activities around each stop will come by themselves, and this should be cultivated.

## Step 3 - Av. Materiales

Another important step is to develop Av. Materiales as the neighbouhood avenue. It should be a pedestrian firendly commercial area to the east, and a park with children's playgrounds to the west. This is an important road for the future housing developments that are very likely to appear along it. If small intiatives are taken, like larger sidewalks, bus stops, some trees and play equipment for the children, there is a great possibillity that more commerce will come and people will start perceiving it as an attractive avenue.

#### Step 4 - Youth centre

The location for this youth centre should be by the railway, on the boarder between Mirones Bajo and Palermo. This area is today is seen as a hang-out for criminals, and by constructing a youth centre the space can be taken back and its potential can be explored. It is a very important public function for the area, and needs to be prioritised. It can gain recognition as a landmark and symbol in the area, as well as providing space for social interaction.

#### Step 5 - Interim use of the industrial plots

Work needs to start with mapping the possibillieties for interim use of the industrial plots, and this work is likely to take time. The idea could be to construct well planned examples, and thereby spreading an idea across the area (and the rest of the city too). The idea behind it is to use the maximum potential of the area at all times. If interim uses are established, they can also be guidelines for future developments.

### Step 6 - Riverside park

When the new road is constructed and all the work with it is done, it's time to take back the riverside. This tactic will be with the aim to create a better coexistance with such a large road. In order for it not to be this wall off traffic and noise located right next to residences, the speed should be regulated, bus lanes implemented and large bus stops established as well as bike paths. The greenery will also be an important lung for and free area for the neighbourhoods. There might even be possibillities for cheaply irrigating the greenery with water from the river.

#### Step 7 - Sports hall and pedestrian bridge

When the park is there, the work towards meeting a need for an indoor sports hall should be started. Such a structure should give plenty of room for sports activities and social interactions, and it should also be a bridge connecting the different sides of the river.



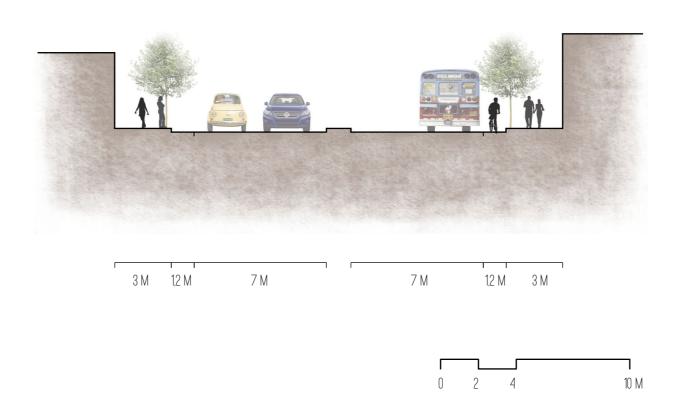


Proposed stage 1 - Bus stops, bike paths, pedestrian streets and pedestrian crossings

This collage of Av. Nicolas Dueñas, looking north, illustrates my perception of how a bus stop, sidewalk, bike path and pedestrian crossing can be. I propose larger bus stops where the bus can turn off the street and avoid bad traffic situations. I see the possibillity of making the bus stops more than what they are today - there should be more focus on the experience of waiting, of shadow, of light in the evening and of a place and a "break" in the monotonous industrial wall.

## STREET SECTION AA - AV. NICOLAS DUENAS\_

Proposal: Bike lanes, bus stops, bus lane and trees that provide shadow for the pedestrian.



## PERSPECTIVE 2 - AV. ENRIQUE MEIGGS - THE RAILROAD PARK, LIBRARY TRAIN AND YOUTH CENTRE\_



Proposed stage 2 - Library Train and park along the railroad

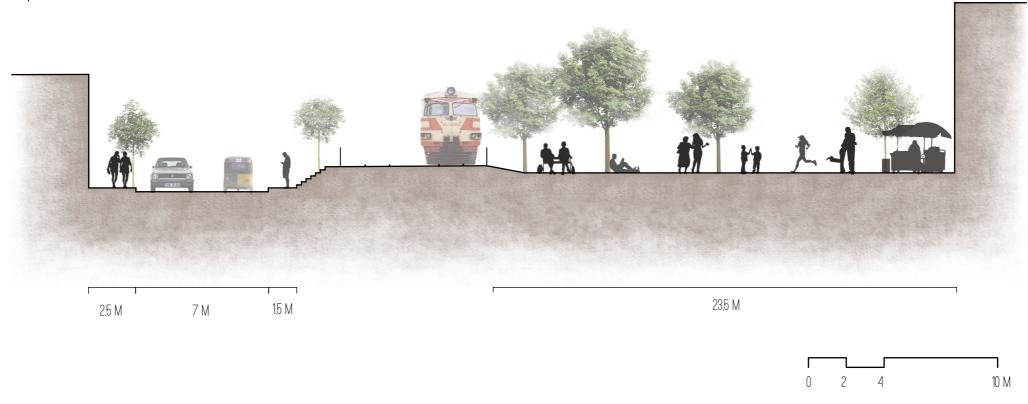
Here we get an impression of how I see the area between Mirones Bajo and Palermo, the view is looking east. This can be one of the Library Train stops and a public space for everyone.

## Proposed stage 4 - The Youth Centre

A 5-6 floor structure that stands as a landmark and symbol. A space to build relations amongst the youths.

## STREET SECTION BB - AV. ENRIQUE MEIGGS\_

Proposal: Extended sidewalks, curb side bus stop, trees that provide shadow for the pedestrian, Library Train stop and space for activities and relaxation.



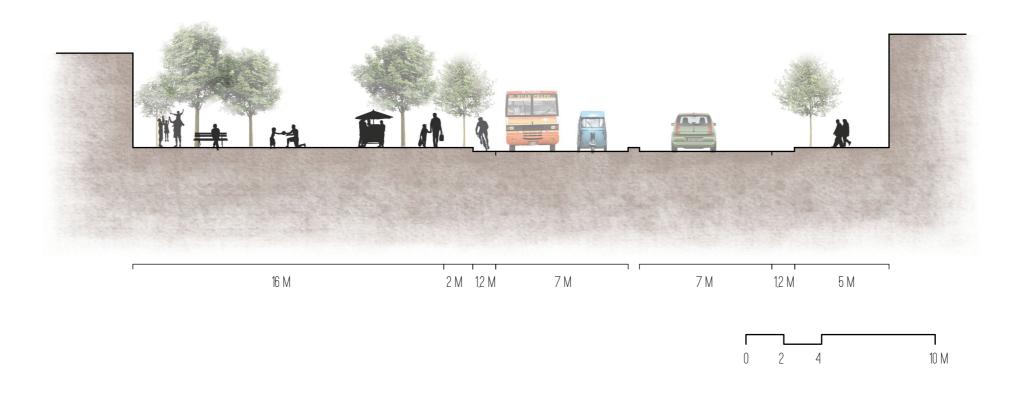


Proposed stage 3 - Av. Materiales

A neighbourhood avenue and important connector between existing and future neighbourhoods. Here illustrated looking towards the crossing with Av. Nicolas Dueñas. I see this area as very busy commercial area, building upon the exisiting commerce and market that are there today.

## STREET SECTION CC - AV. MATERIALES\_

Proposal: Extended sidewalks, bus stops, bike lanes, bus lanes and a park area with playgrounds for children.



## AV. MORALES DUAREZ / VIA APRQUE RIMAC - THE RIVERSIDE PARK AND SPORTS HALL



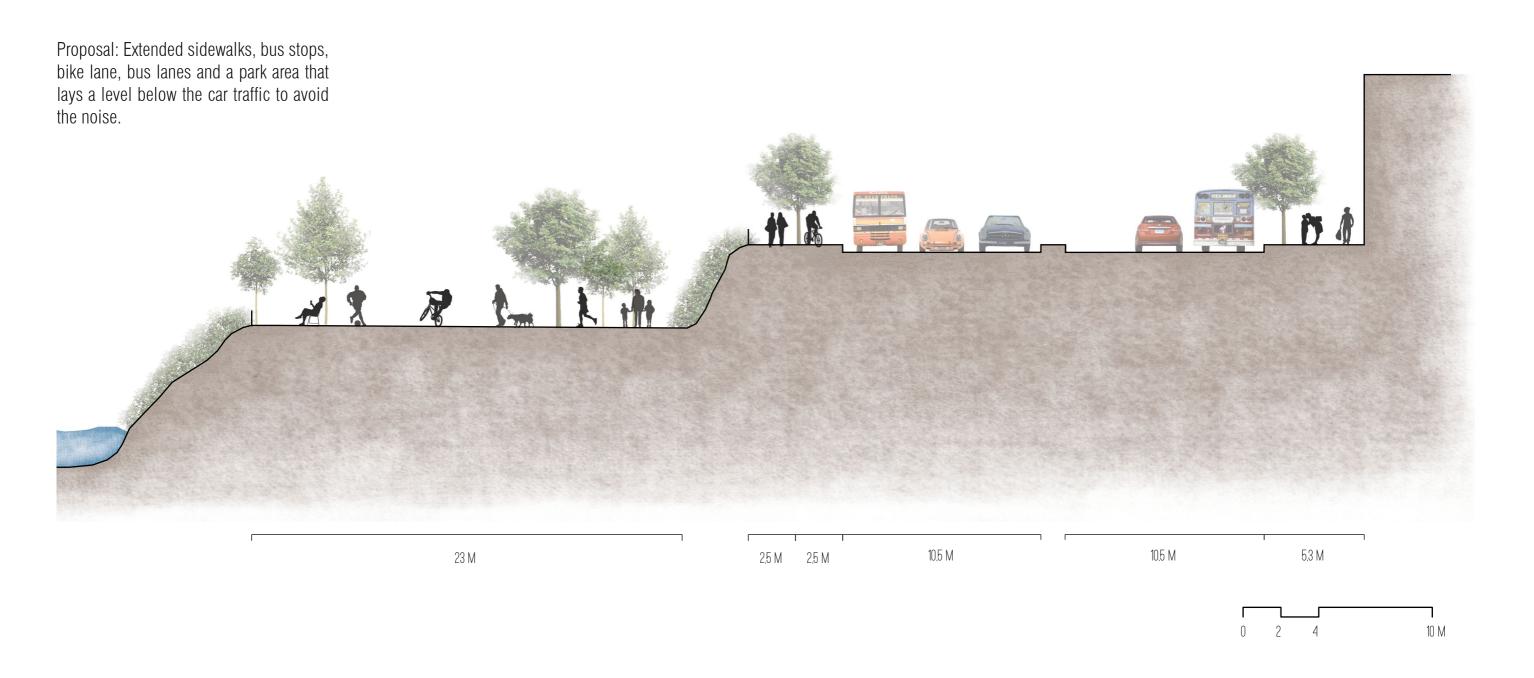
## Proposed stage 6 - Riverside park

In this collage the area is seen from the bridge looking west. The large road needs to coexist with the people, and a large step towards that is taking back the riverside. It should be a park for a wide range of sports and activities.

## Proposed stage 7 - Sports hall

A sports hall and a pedestrian connection across the river. There is a great need in the area for both an indoor sports space for everyone, and also a greater pedestrian mobility.

## STREET SECTION DD - AV. MORALES DUARES / VIA PARQUE RIMAC\_



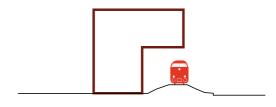
## STEP 2 -THE LIBRARY TRAIN\_

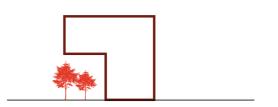


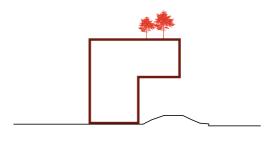
The idea is for the Library to act as an urban catalyst, located on the boarder between neighbourhoods.

I also see the possibillity for a park along the whole of the train tracks. By establishing this mobile library the government will have a great opportunity to show that they are visible in the area, and build a relation. The train can run along the tracks during the day as the cargo train only runs at 7am and 6pm. It can have different stops along the whole of MIRR, where the train can get off the tracks and stop in a safe situation. The idea is to start with establishing the train, and decide the stops. The greenery of the park will come next, and the stops will hopefully start processes of gatherings of people, activities and commerce.

## THE YOUTH CENTRE\_







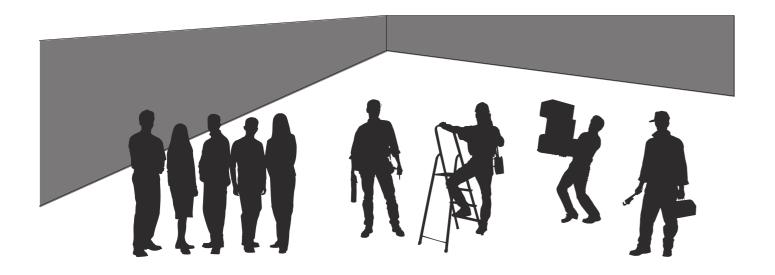
## A building that gives something to its surroundings.

The function of the youth centre will be a very important response to the social problems. It should be for all children and young adults, but there should be a particular focus on the young adults.

The potential for the location of the youth centre is to encourage for interaction across neighbourhoods. Today they largely keep to themselves, and have their own sport areas, public spaces and community centres.

The building should be a landmark, where the maximum potential of the site is exploited. It should also provide shadow to its surroundings - the park and the train - as well as providing an elevated semi public space on the roof.

## INTERIM USE OF THE INDUSTRIAL PLOTS\_



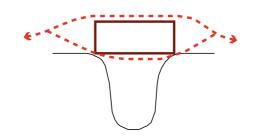
Seeing the maximum potential for the space in the city, also on a short term basis.

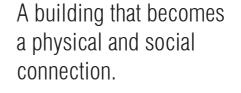
I see the possibillity for working towards enabling the industrial plots to be given a use between the stage where the industry moves and where the new development starts up. It is a bizarre situation where people in the city are struggeling for space, and vast plots can stand unused for a long period of time. Such an idea will have to be organised in terms of mapping out the situation and getting a cooperation up and going. *But most of the work lies with the people who will be using it*.

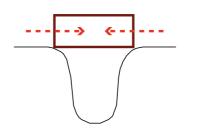
Uses on a very short basis can be: Activity spaces for schools and kindergardens, areas to ride bikes or perform sports, art exhibitions and cultural performances.

On a longer term: alotment gardens, workshops, skatepark, art galleries, regular performance spaces, market areas and regulated areas to live for homeless people.

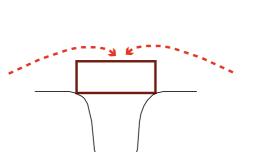
## THE SPORTS HALL\_







In addition to answering to needs in the area, the sports hall also becomes a manifestation of overcoming barriers. It should be a social space and a meeting space.



The idea is that the sports hall also functions as a pedestrian crossing between each side of the river. It encourages interaction across physical and perceived barriers.

The building should also be an extension of the park, with a rooftop space that also is a meeting space. This is to maximise the potential of the building and gain more space.

"() And that's where architecture comes in; the concept was "the most beautiful for the most humble." It implied a rupture from the idea that anything you give to the poor is a plus. We proposed that the best of society was where the greatest needs existed. The poor are habitually given crumbs, but our proposal was to give them the very best. We had to break away and show another way. We knew that fear encapsulates, fear isolates; fear and violence destroy all social capital"  - Sergio Fajardo, Mayor of Medellin, Colombia
"What a house <i>does</i> is far more than what it <i>is</i> ."  -John Turner, architect
"As an urban professional, the question should not be (and no longer is) how much can I do and how quickly can I do it, but what is the <i>least</i> that I can do and how much of it do I need to do to for it to sustain itself?"  -Nabeel Hamdi, architect
"The only way to get change is to construct ruptures"  - Giancarlo Mazzanti, architect
"Today it is necessary to make the therapeutic policy, which implies to consider the conditions of coexistence; it is necessary to learn how to coexist, and in that sense the favela teaches us."  - Jaques derrida, French philosopher