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SUBMITTAL FORM

INHABITING THE STREETS

by

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# inhabiting the streets

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mar mikhael . armenia street

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American University of Beirut

Faculty of Agriculture and Food  
Sciences

Landscape Architecture. Class of 2016

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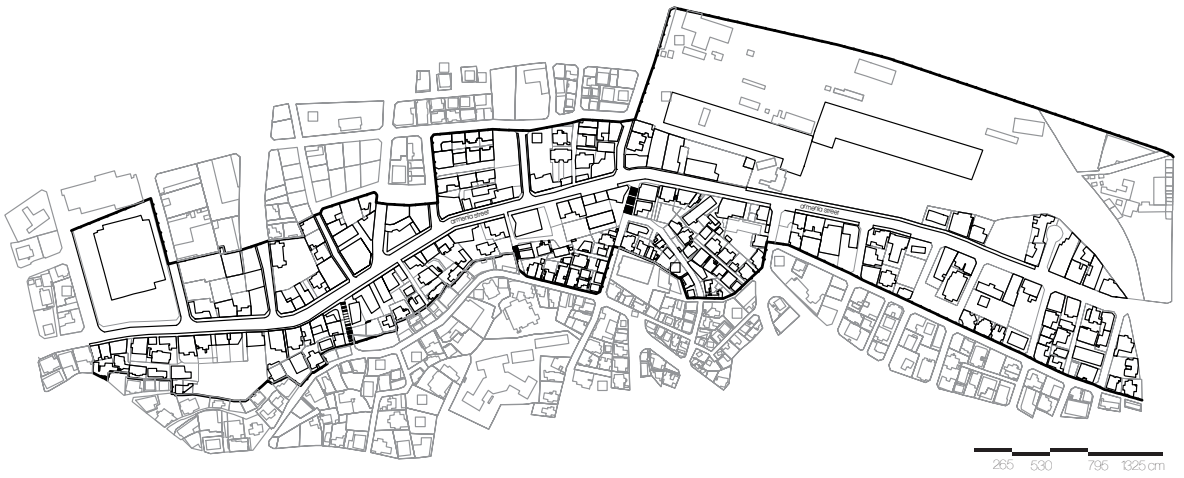
## II introduction

The Medawar district, located in East Beirut, covers the area between the hills of Achrafieh and the Mediterranean Sea and important neighborhoods such as Mar Mikhael and Karatina. Through time, the district has developed distinctively following the construction of the wide seaside highway Charles Helou. It has always welcomed a variety of sects and communities, such as, Armenians and Lebanese from other regions.

Mar Mikhael was traditionally known for its railway station and was previously recognized as an industrial hub. Nowadays, it has emerged to be a prominent residential and commercial neighborhood. Considered to be an extension of the Gemmayzeh neighborhood, Mar Mikhael is characterized by its strategic location, lying between both Geitaoui and Burj Hammoud areas. Recently its dynamic and rich urban fabric has served for the creative and entertainment scenes in Beirut.

The following thesis tackles issues and problems faced by the neighborhood and investigates the street as a potential public space in Beirut. A thorough site inventory and analysis lead to a conceptual design model for the Armenia street.





### III problem and project statement



Mar Mikhael neighborhood, located in the Medawar District, is unique in its spatial configuration and urban fabric.

Narrow streets represent the time before the introduction of private cars ; stairways facilitate the accessibility and the climb to the upper neighborhood of Geitaoui and the old traditional houses define its identity.

However , its urban character is slowly overlaid by new development , erasing its historical significance. Its strategic location next to the City Center characterizes the neighborhood as a zone under threat.

In 2014, a controversial project was proposed by the Beirut municipality endangering the entire neighborhood of Mar Mikhael. The Fouad Boutros Highway project includes a 13 km four-lane highway connecting Alfred Naccache Road with Charred Helou Avenue. The highway along with a 25 meter long tunnel and a bridge over Armenia Street are threatening important historical buildings, the pedestrian accessibility, gardens and orchards.

The project aims at enhancing Mar Mikhael 's streets and stairways as open public spaces , creating an overall unique walking experience while reclaiming its heritage as a place for expression .

## IV theory

Jan Gehl, born in 1936, architect and professor of Urban Design at the School of Architecture in Copenhagen, has published several books concerning livability of cities and residential areas. *Life Between Buildings*, published in 2011, covers the understanding of the public life in cities and is a guide to designing more lively and healthy public spaces through humanistic planning principles.

The theory, *TO ASSEMBLE OR DISPERSE: City and Site Planning*, explores planning decisions related to assembling or dispersing people and social events. As he explains, if activities and people are assembled, it is likely for individual events to stimulate one another. Citizens would have the ability to participate and experience several events. However, it is important to understand that it is people and events that need to be assembled, and not buildings. As Jan Gehl mentions, "the design of buildings in relation to relevant human dimensions is crucial".

Large, medium and small scale cities and towns have been examined in a planning context. A particular section discusses the qualities of a town that is a street. In this situation, pedestrian activity is enhanced, as the individual is able to experience and see what is going on in the area, by only taking a short walk. A street-oriented site with all the low buildings, the residences, the entrances and offices assembled creates an interesting human pattern, with a horizontal oriented sensory system. As discussed in the theory, unlike modern cities, old cities have established more intimate public spaces because of a more concentrated street network.

The theory explores the impact of large buildings on social activities and events. As it has been mentioned, the concentration of activities depends on assembled exchange zone between street and facade, as well as short distances between buildings and other functions. Hence, high rises with few visitors and isolated entrances, deactivate the public environment, and hence, disperse events and activities. Street life is enhanced when buildings and street frontages are narrow. Human scale areas include both clear horizontal and vertical eye-sight.

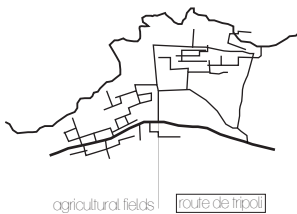
Hence, there is a special relationship between the people, the street and the buildings. As Jan Gehl states, "low buildings along a street are in harmony with the way in which people move about and the way in which the senses function, as opposed to tall buildings, which are not"

## V site inventory and site analysis

### history

In the 19th century agricultural fields covered the entire Medawar district, including Mar Mikhael. Armenia street was initially known as Route de Tripoli being the only connection to Tripoli. 1891 marked the construction of the Mar Mikhael railway station, following the agreement between the Ottoman Empire and France allowing the latter to build tracks from Beirut to Damascus. At this time, exceptional suburban houses were built, with the use of red pitched roofs, Ottoman arches and stone. The "sakan" and "bayt armid" were maximum 1 to 2 level high, and are now considered traditional Lebanese houses.

1876

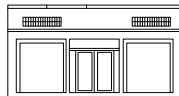


1891

construction of railway station with tracks from Beirut to Damascus

end of 19th century

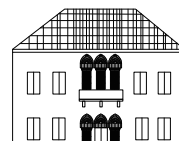
archetype سكن



composition  
flat roof (timber structure)  
stone use  
metallic fenestrations

number of floors  
from 1 to 2 maximum

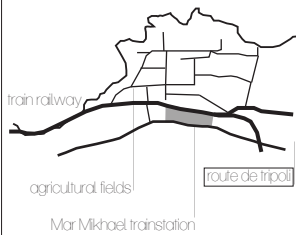
central hall villa بيت ارميد



composition  
red pitched roof  
Ottoman arch evolution  
stone use  
stairs vertical circulation

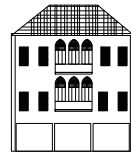
number of floors  
from 1 to 2 maximum

1923



1920s - 1940s

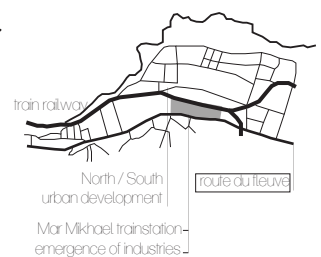
urban house حارات



composition  
red pitched roof  
balconies- extraversion  
stone use  
commercial ground floor or

number of floors  
from 3 to 4 maximum

1936



urban building مكانات



composition  
red pitched roof  
balconies  
concrete introduction  
vertical circulation acting as joint  
commercial ground floor or

number of floors  
from 4 to 6 maximum

From the 1920s till the 1940s, the area started developing following the construction of train railways traveling from the North to the South. Small and big industries started to emerge next to the coast and the railway station. In 1936, Route de Tripoli changed its name to Route du fleuve, due to the nearby Beirut River. Mar mikhael became an attraction and urban houses appeared in parallel with the increasing development. The "harat" and "wikalat", 2 to 3 level high, dominated the Mar Mikhael area, and both introduced balconies and commercial ground floors.

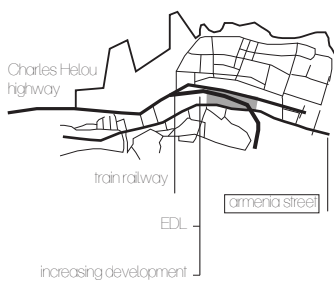
Following the creation of the Electricite du Liban (EDL) in 1964, Charles Helou highway was constructed on the coast, and development started increasing in both Southern and Northern Mar Mikhael. Route du Fleuve changed its name to Armenia Street, due to the increasing Armenian population.

In 1976, the trainstation stopped functioning, Mar Mikhael became a commercial and residential area while still preserving the railway station as a place of heritage. Traditional suburban and urban houses are still present in the area, however, due to the extensive demand, high rises are slowly destroying Mar Mikhael's urban character.

1964

creation of Electricite du Liban (EDL)

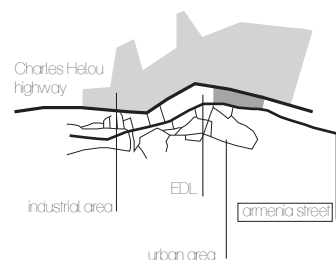
1968



1976

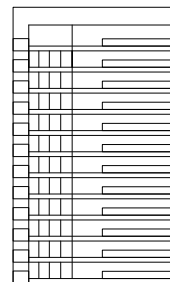
Disactivation of Mar Mikhael railway station

2006



21st century

the tower



composition  
use of extensive concrete  
modern building type

number of floors  
over 10 floors

002. historical timeline

## the community

Mar Mikhael's community has evolved through time, with the development of the neighborhood. Shop owners are mostly locals, suffering from the increasing rent. Slowly, tourists, attracted by the authenticity of the neighborhood, started to rent old apartments for cheap prices.

Through interviews with locals and tourists, different issues, as well as qualities, were discussed. The following quotes are chosen from discussions and for confidentiality issues, pictures were not taken.





« les bars ferment vers 3 ou 4 heures du matin, et la rue est une piste de danse. Le weekend, tout le quartier ne dort pas.»

« Bars do not close before 3 or 4 AM. On weekends, the street becomes a dance floor, which makes it difficult for us to sleep»

« ما بستوعب كيف بيقدرو يشربو و يقعدو على دراج لتحت بيتنا»

« I cannot understand how they can eat and drink on the sidewalks and on the stairs under our house»

« كنت إدفع ٢٥٠ دولار بالشهر ، و هالأ بدفع ١٠٠٠ بالشهر»

« Five years ago, I used to pay 250 dollars for my shop, now I pay 1000 dollars per month»

« The traffic is horrible. It can take me 2 hours to find a parking spot»

« كل هل بنيات رح تختفي»

« So on enough all of these old buildings will disappear»

« I have been renting here for the past year. I found the area very charming and I just feel home. Everything is walking distance»

« و إذا في ضجه. هيك أحسن، مش مثل ما كانت من كم سنة مثل المقبرة»

« What about the noise? I like it more this way. A few years ago, the area felt like a cemetery»

## the built environment

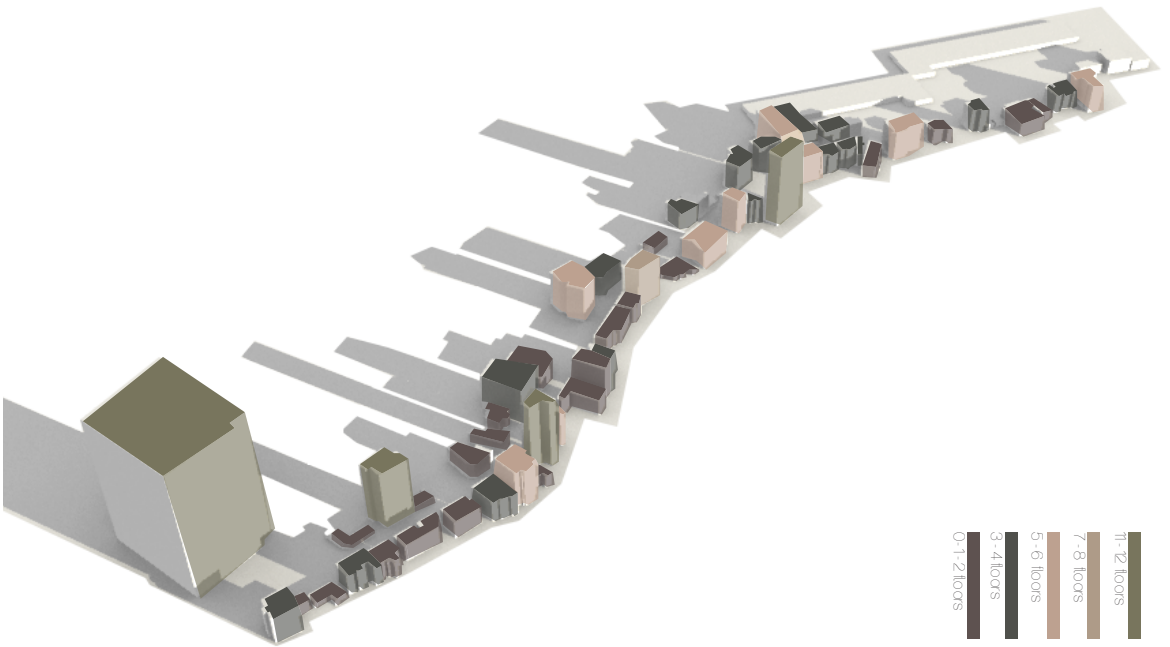
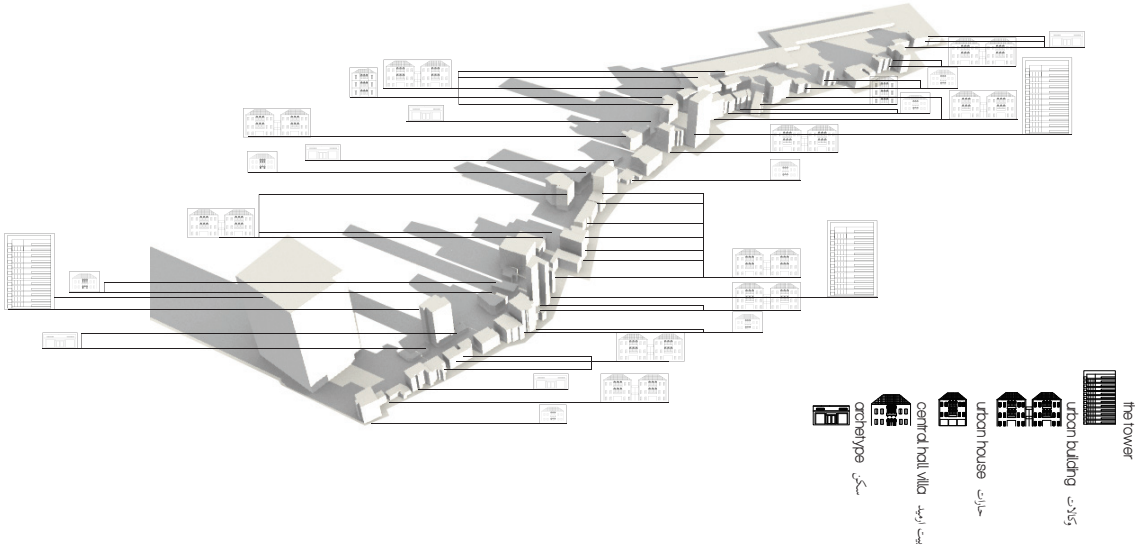
The traditional quarter of Mar Mikhael is covered by different types of old buildings dating back from the end of the 19th century. Archetypes, central hall villas, urban houses and buildings can be found in every corner of the Armenia Street. The most common building is the "wikalat", Arabic term for urban building. It is mainly composed of a red pitched roof, balconies and a vertical circulation path acting as a joint between two buildings. Its main characteristic is its active commercial ground floor.

Mar mikhael is interesting as its streets are at human scale. The houses and buildings do not exceed 7 floors. However the upcoming development is increasing in the old quarter changing the community's habits and character. Currently, three towers are being built in the beginning, center and at the end of the street of Mar Mikhael. Each tower is 11 to 13 level high.

As a resident explains, Har Properties decided to demolish the famous Vendome Cinema, in order to build the Aya Tower.

"How does Aya tower look in this urban landscape which is mostly low houses."  
(Rayya Salem, 2010)





## the natural environment

As it is an urban area, the ecological aspect is not very diverse. The vegetation is spread throughout the whole neighborhood, since some private gardens remained. However it is mainly abundant and dominant in two areas : the street and the railway station.

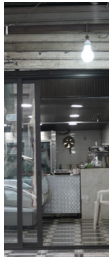
The streetscape is mainly composed of the native *Ficus nitida* along with *Albizia julibrissin*. However , in the railway station, wild vegetation surrounds the area with a variety of groundcovers, herbaceous plants and palm trees , such as *Lantana camara* , *Eucalyptus sp.* and *Washingtonia robusta*.



265 530 795 1325 cm



# land use



Shops have always been present in Mar Mikhael's traditional quarter. Throughout the years, it evolved from being an industrial hub to a residential and commercial area. These shops cover the ground floor area of every old building, making them accessible to the pedestrians and the community. These shops have shaped the identity of the old neighborhood. A pedestrian is able to walk through a variety of textile shops, garages, restaurants, pubs, cafes and offices, grasping the neighborhood's richness.



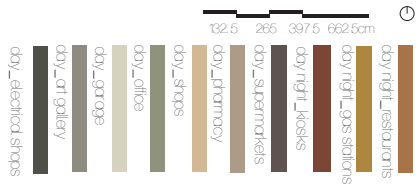


## land use

Armenia Street is known for its diversity in the ground floor land use. During the day, the services provided are found throughout the whole street. Some services, such as restaurants and pubs, are closed, while electrical shops and garages are the most frequently found. Some offices related to art and entertainment, are scattered in the alleys of Mar Mikhael, away from the concentration of traffic and noise.







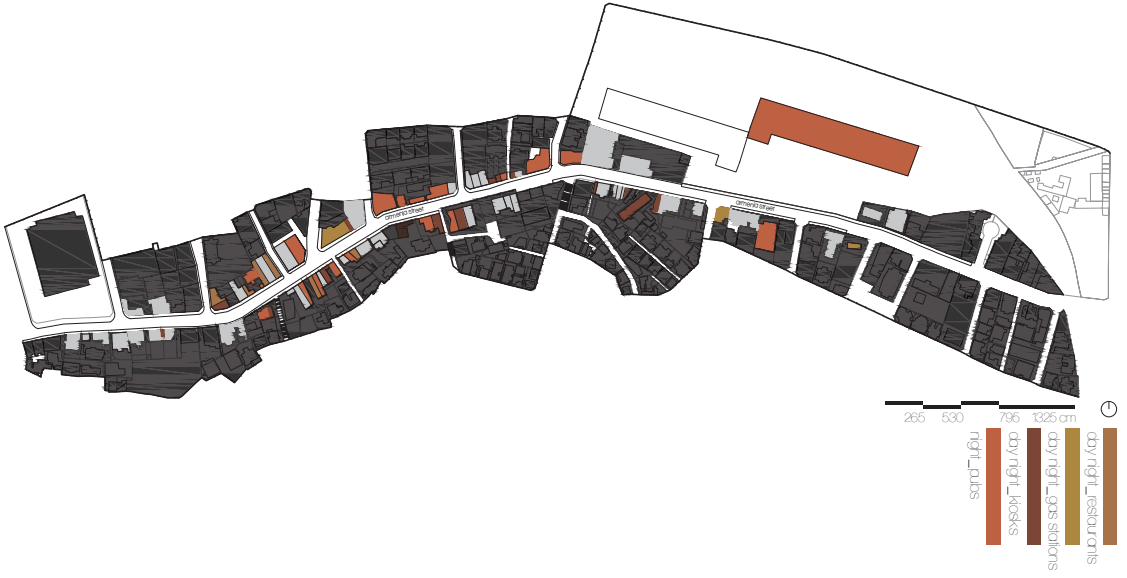
## land use

However, at night, the land use shifts along with the activities. Restaurants and pubs open their doors around 5 pm, targeting the youth. These services, unlike during day time are concentrated in the central area of Armenia Street, allowing an interaction between tourists and young adults.

The upper floor is generally residential, however some offices and shops have extended their services to upper levels.



009 .night time ground floor land use



010 .upper floor land use

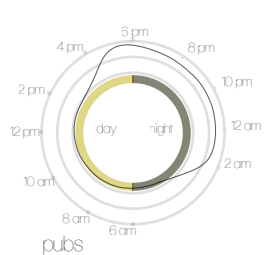
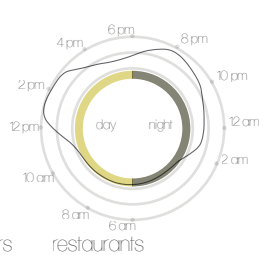
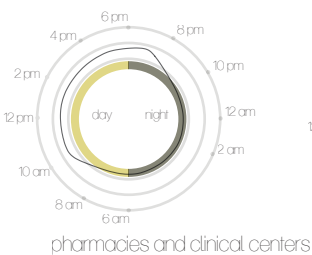
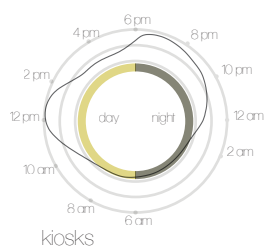
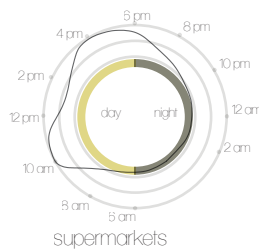
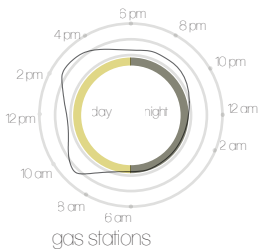
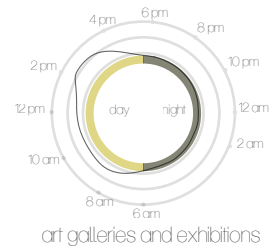
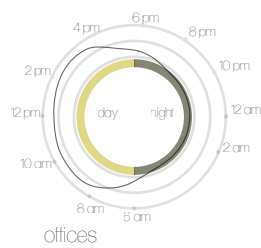
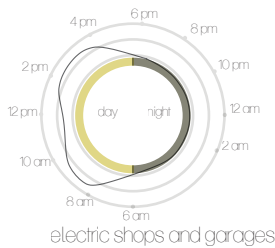


## human activities

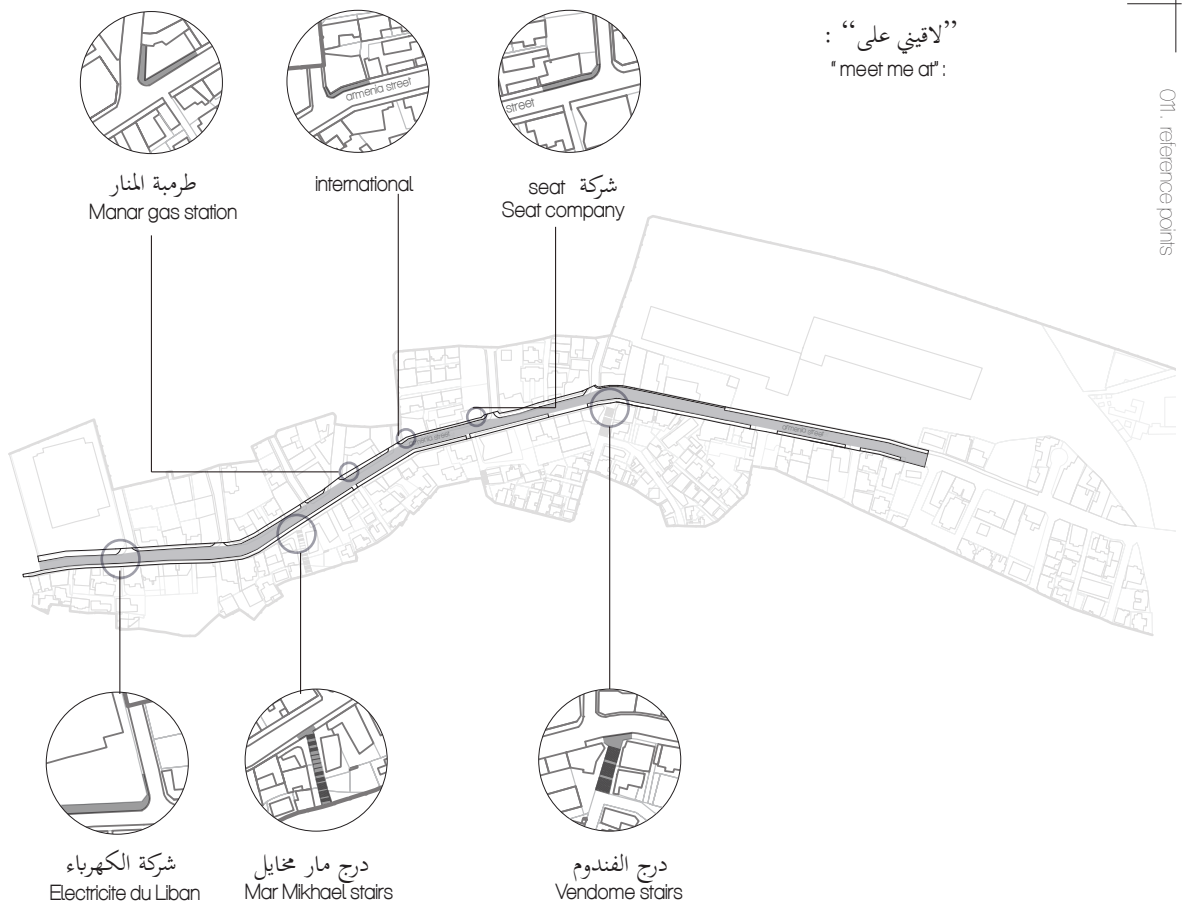
The human activities change according to two factors : time and land use. The concentration of people during the day is located in areas where garages, electric shops, galleries, supermarkets and pharmacies are situated. From 9 am to 2 pm, locals are found on the streets, starting their day with grocery shopping or heading to their nearby offices.

At night time, young adults coming from neighboring areas and tourists start to gather on the street, around pubs and restaurants.

The diagram found below explains the density of people relating to the types of services, and demonstrates the variety of human activities, defining Mar Mikhael as a vibrant area.



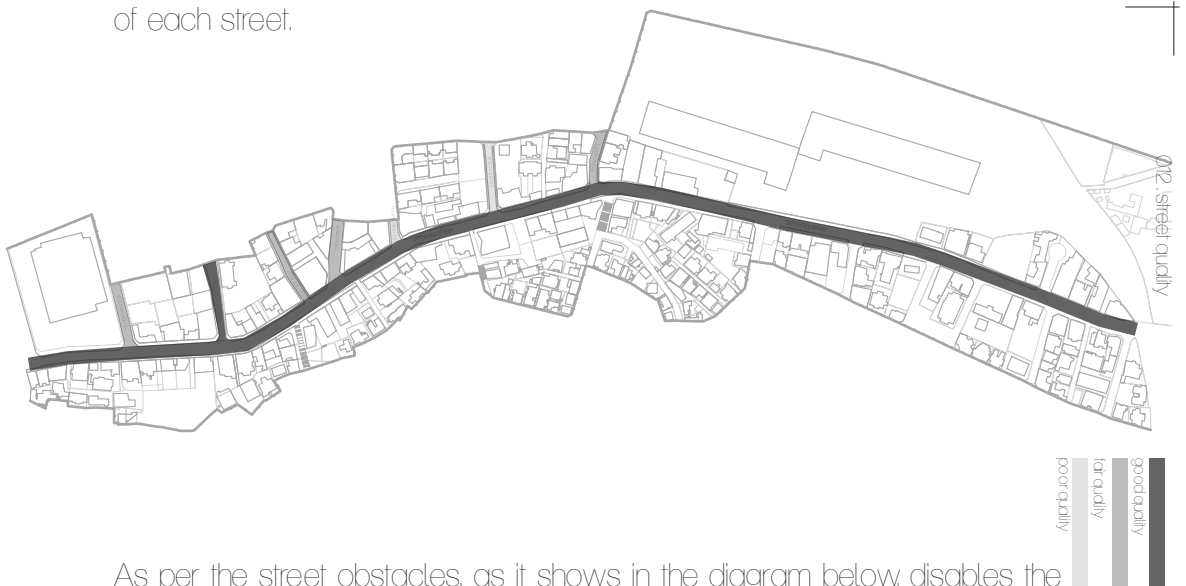
The concentration of people is found in specific zones, characterized by points of attraction. "Meet me at" defines reference points, based on people's interaction with the street. Electricite du Liban, Mar Mikhael stairs and Vendome steps are important landmarks in the Mar Mikhael area; whilst Manar gas station, international pub, and the seat company are reference points created by the pedestrian.



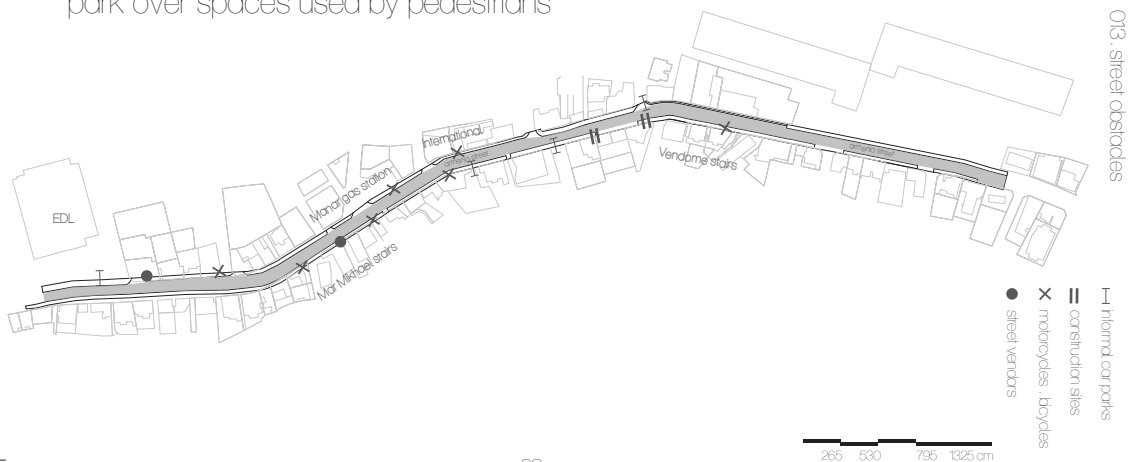
## street investigation

As an urban design project, it is important to investigate in this section both Mar Mikhael's main street, Armenia Street, and its connecting streets. An assessment of safety, friendliness, attractiveness, efficiency and the analysis of width and street obstacles lead to an evaluation of street quality. Each street is analyzed according to specific characteristics.

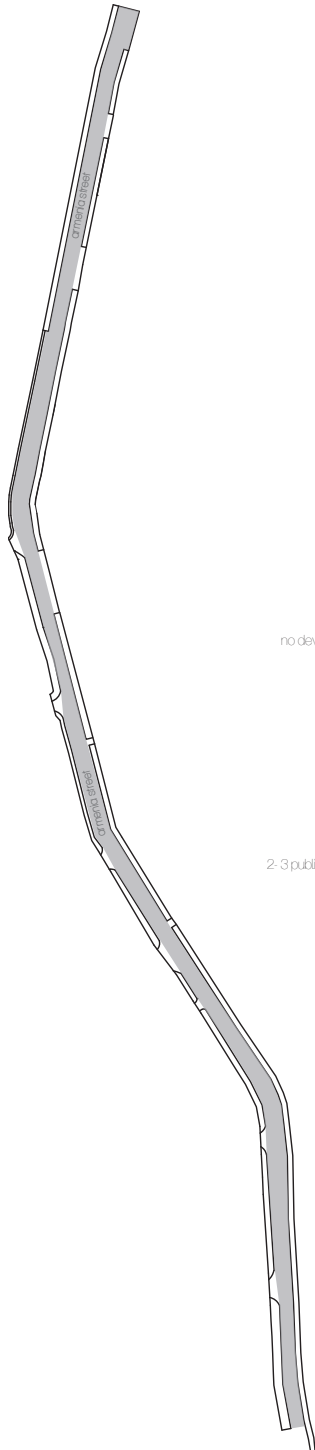
The following pages present the analysis of primary and secondary roads, constituting the neighborhood of Mar Mikhael. The map displayed below demonstrates the conclusion of the street assessments, by defining the quality of each street.



As per the street obstacles, as it shows in the diagram below, disables the pedestrian to walk freely and comfortably. Motorcycles park on the sidewalks, bicycles are attached to trunks, construction sites cover the sidewalk, and cars park over spaces used by pedestrians



The main street of Mar Mikhael is defined as a good quality street, relatively to its secondary streets for the presence of 4 public spaces, including 3 main stairs and railway station. The width of the sidewalk is adequate for the pedestrians, however, a lack of signs and signals for pedestrians remains.

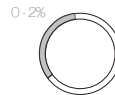


### armenia street primary road

#### ■ safety assessment



presence of buffer zone



adequacy of sidewalk slope



adequacy of pedestrian crossing

#### ■ attractiveness assessment



sitting area covered/uncovered



range of inviting open landscape area

#### ■ friendliness assessment



no deviation to or segregated paths



adequacy of sidewalk width



adequacy of sidewalk slope



active outdoor or public spaces



range of comfortable outdoor or sitting area

#### ■ efficiency assessment



the route is easy to navigate



adequate pedestrian crossings

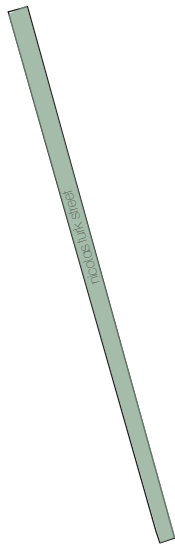


time that people need to wait before crossing the street



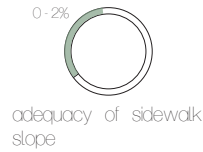
visible pedestrian crossing signal or sign

Nicolas Turk street is defined as a fair quality street : sitting areas are uncovered , the width of the sidewalk is narrow, and the route is fairly easy to navigate since pedestrian signs are not present enough.

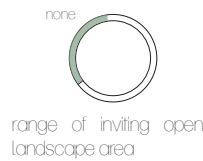
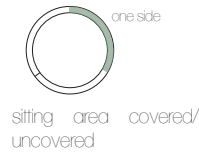


### nicolas turk street secondary road

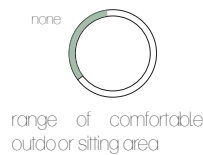
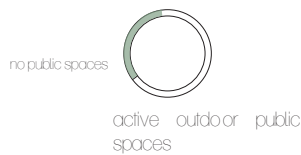
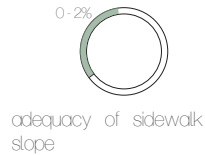
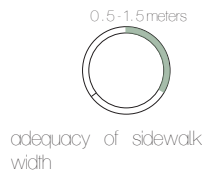
#### ■ safety assessment



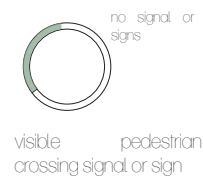
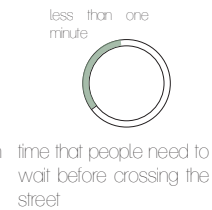
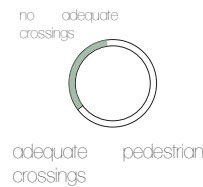
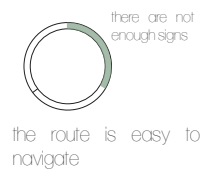
#### ■ attractiveness assessment



#### ■ friendliness assessment

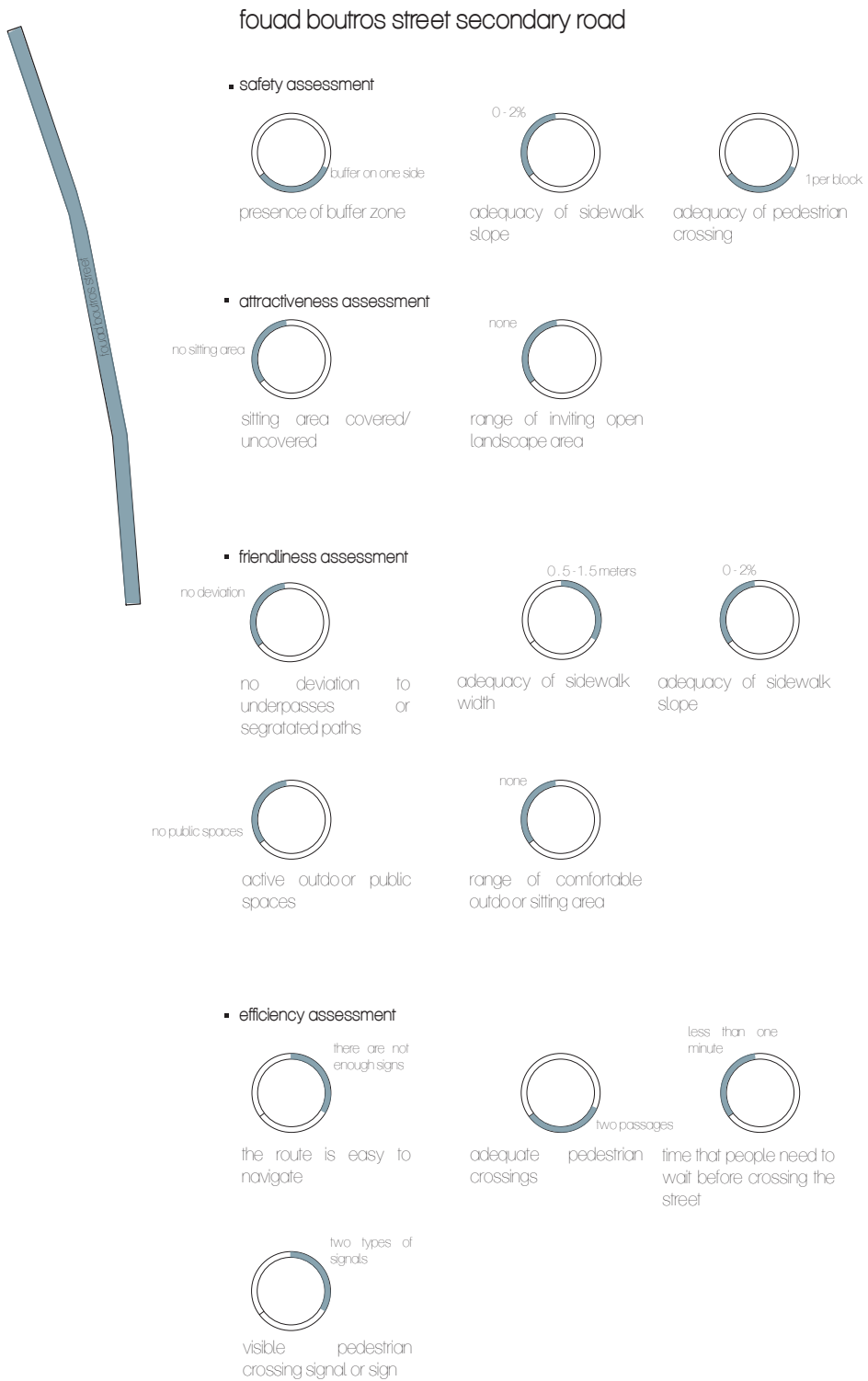


#### ■ efficiency assessment

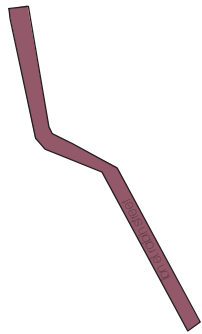




Fouad Boutros street is defined as a good quality street for its adequate pedestrian crossings and visible pedestrian signs.

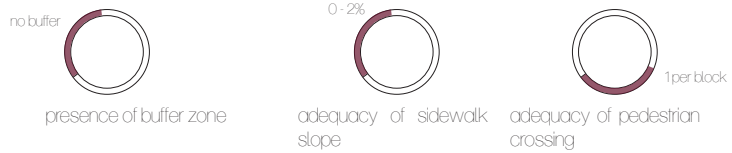


Ibn el RabiH street is characterized as a fair quality street because of the lack of public spaces, narrow sidewalks, no sitting areas and no pedestrian signs.



### ibn el rabiH street secondary road

#### ▪ safety assessment



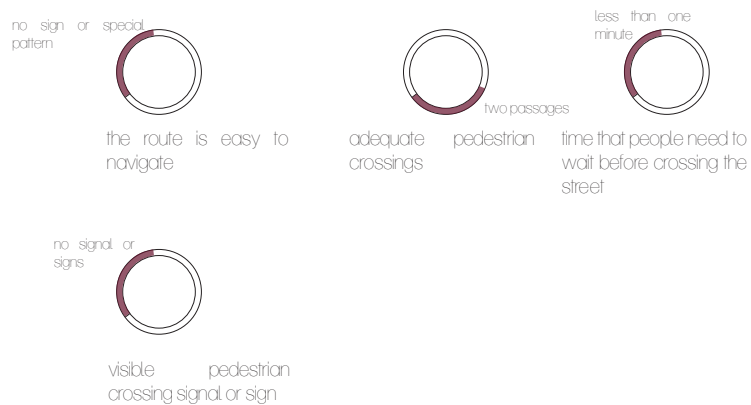
#### ▪ attractiveness assessment



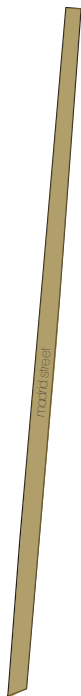
#### ▪ friendliness assessment



#### ▪ efficiency assessment



Madrid street is defined as a fair quality street as it is not adequate for pedestrians. Even though the street is wider, resting spots do not exist along the narrow sidewalk and buffer zones such as street trees, are not present.



### madrid street secondary road

#### ▪ safety assessment

no buffer



presence of buffer zone

0-2%



adequacy of sidewalk slope



1 per block  
adequacy of pedestrian crossing

#### ▪ attractiveness assessment

no sitting area



sitting area covered/  
uncovered

none



range of inviting open  
landscape area

#### ▪ friendliness assessment

no deviation



no deviation to  
or  
segregated paths

0.5-1.5 meters



adequacy of sidewalk  
width

0-2%



adequacy of sidewalk  
slope

no public spaces



active outdoor public  
spaces

none



range of comfortable  
outdoor or sitting area

#### ▪ efficiency assessment

there are not  
enough signs



the route is easy to  
navigate

no passages



adequate pedestrian  
crossings

less than one  
minute



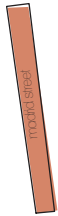
time that people need to  
wait before crossing the  
street

two types of  
signals



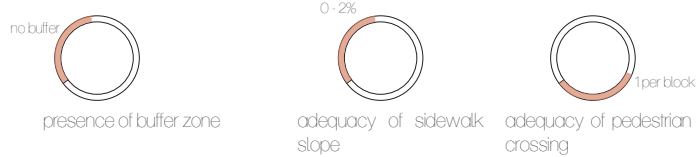
visible pedestrian  
crossing signal or sign

Alexander Fleming Street and Lamartine Street are poor quality streets, excluding pedestrian signals, sitting areas and comfortable sidewalks. Both streets do not include street trees, discouraging the interaction between the community and the natural environment.



### alexander fleming street secondary road

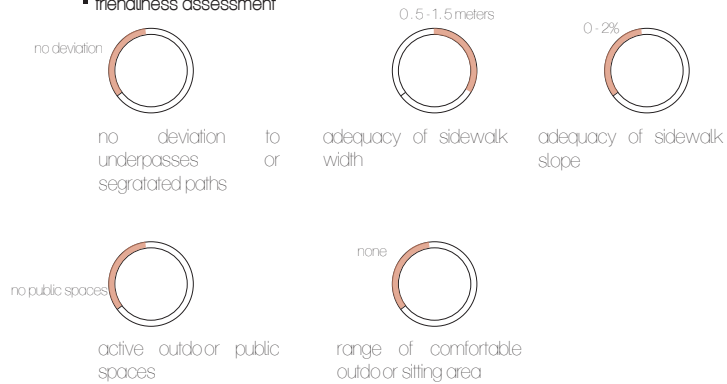
#### ▪ safety assessment



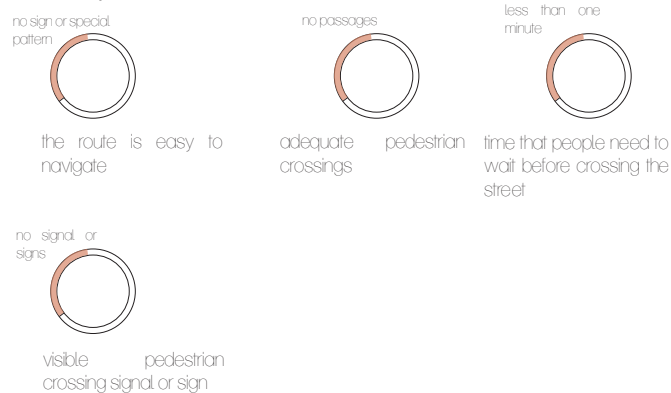
#### ▪ attractiveness assessment



#### ▪ friendliness assessment



#### ▪ efficiency assessment

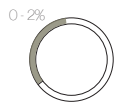


## lamartine street secondary road

### ▪ safety assessment



presence of buffer zone



adequacy of sidewalk slope



adequacy of pedestrian crossing

### ▪ attractiveness assessment



sitting area covered/uncovered

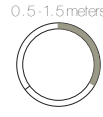


range of inviting open landscape area

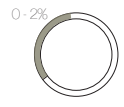
### ▪ friendliness assessment



no deviation underpasses or segregated paths



adequacy of sidewalk width



adequacy of sidewalk slope

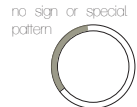


active outdoor or public spaces



range of comfortable outdoor or sitting area

### ▪ efficiency assessment



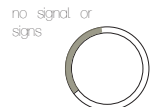
the route is easy to navigate



adequate pedestrian crossings

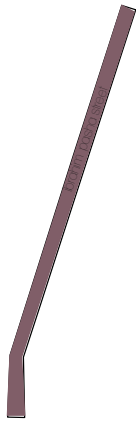


time that people need to wait before crossing the street



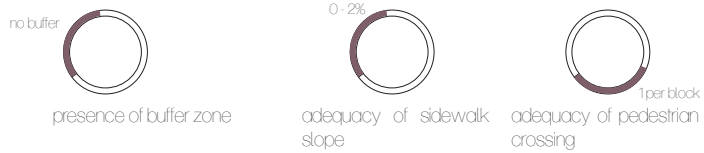
visible pedestrian crossing signal or sign

Ibrahim Pasha is a fair quality street as well, with narrow sidewalks, no buffer zone, no sitting area and visible pedestrian crossings and signs.



### ibrahim pasha street secondary road

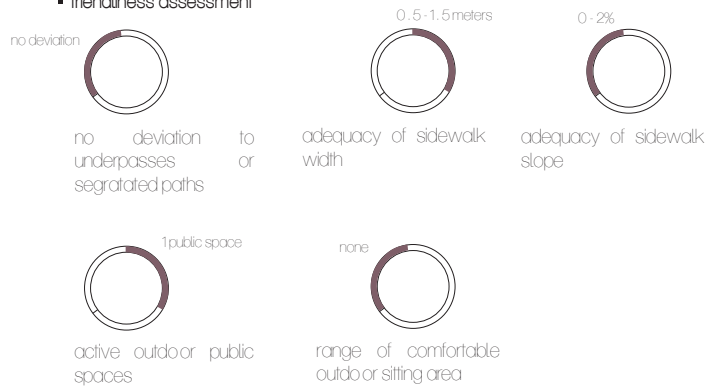
#### ▪ safety assessment



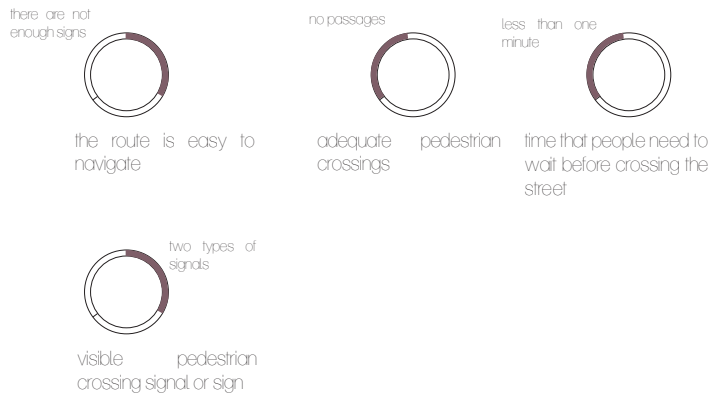
#### ▪ attractiveness assessment



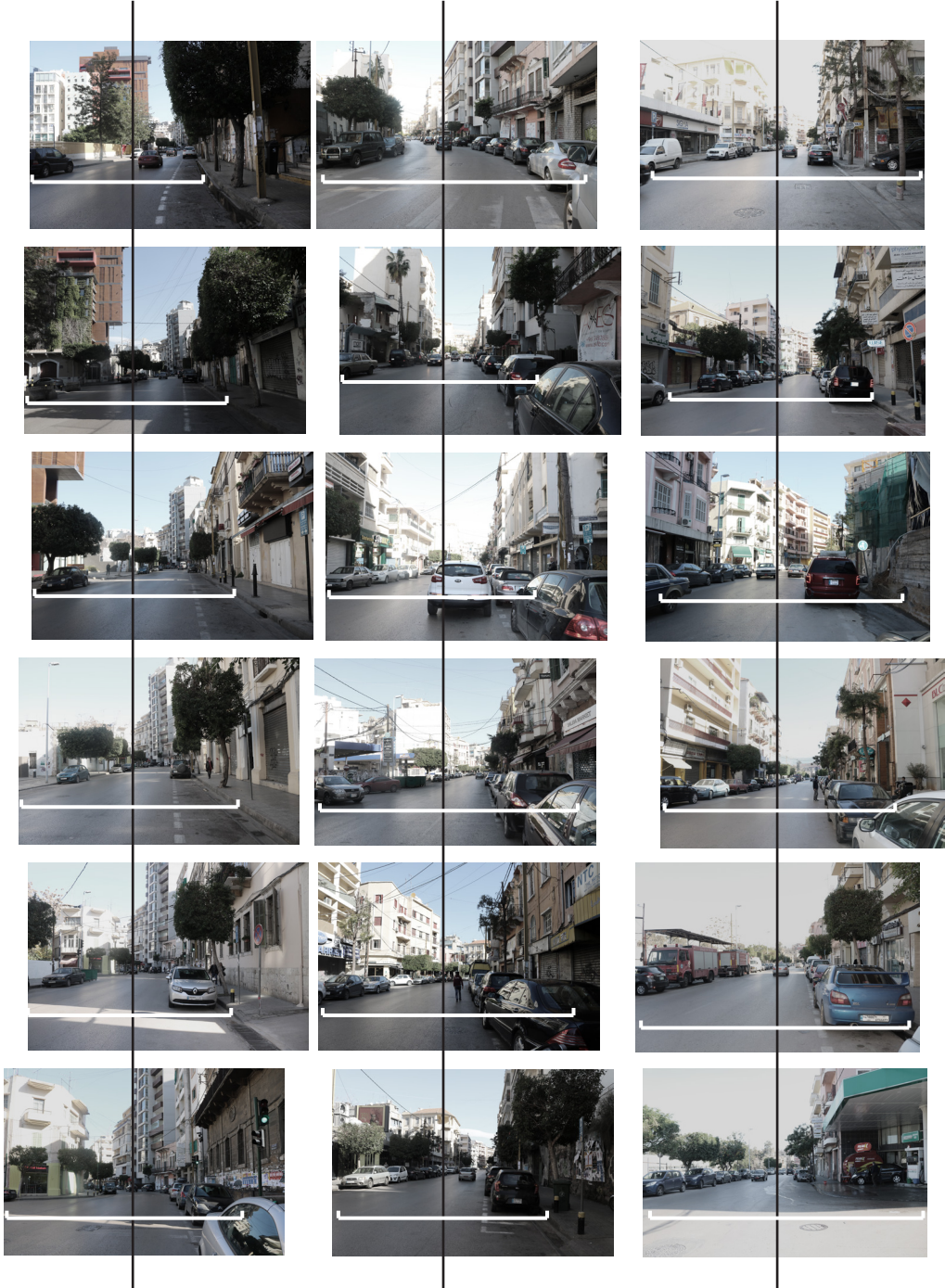
#### ▪ friendliness assessment



#### ▪ efficiency assessment



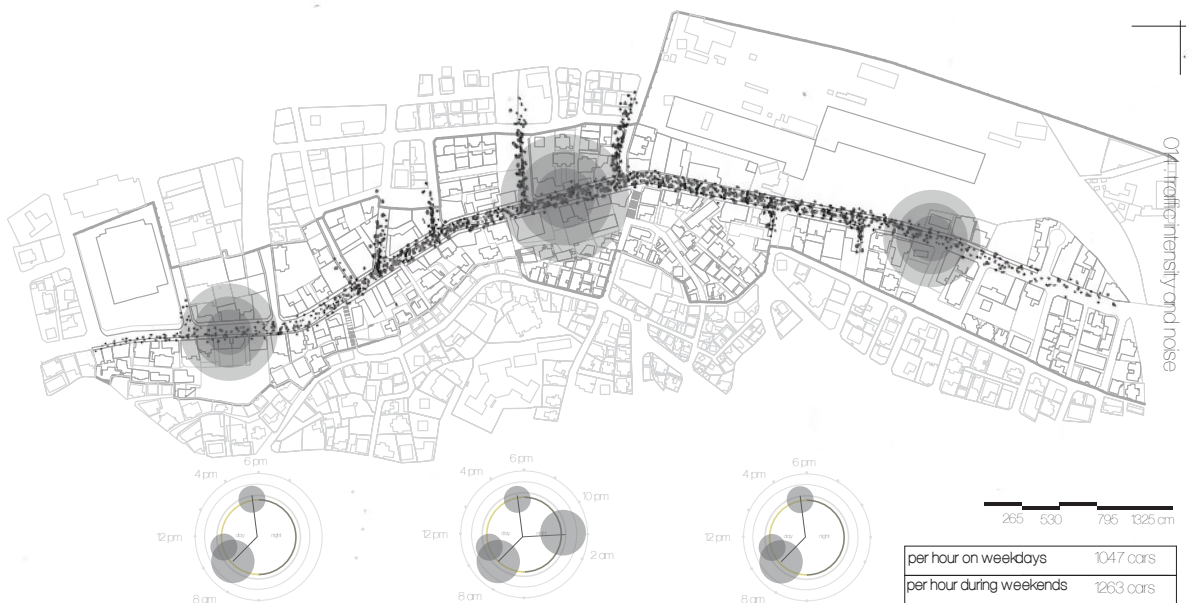
The following pictures are taken every 50 steps, in order to understand the changing width and direction of the main street of Mar Mikhael. Armenia Street is nearly a straight street with a 0 to 2% slope. The width of the street and sidewalks shift according to turning points.



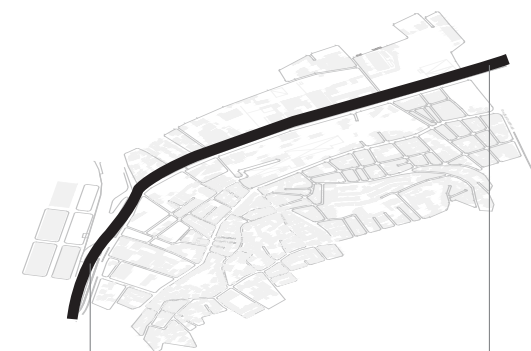
## vehicular analysis

Mar Mikhaels neighborhood is composed of both primary and secondary roads, as mentioned in the previous section. Parallel to Armenia Street lies the seaside highway known as Charles Helou Avenue leading to Tripoli. Vehicles use Armenia Street as a shortcut reaching easily the highway.

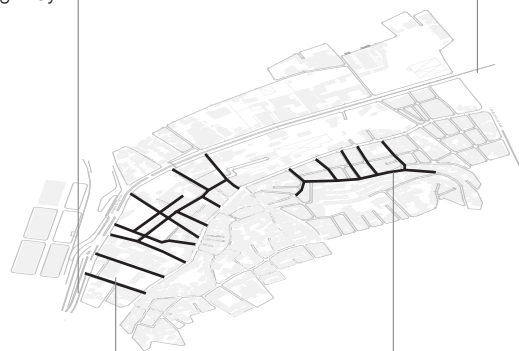
Traffic congestion occurs in specific areas, especially in the central area of Mar Mikhael, due to the intersection of streets, side parkings, traffic lights and informal pedestrian crossings. The traffic has increased with the opening of restaurants and shops. Rush hours are in the early morning throughout the street, and at night in the central zone.



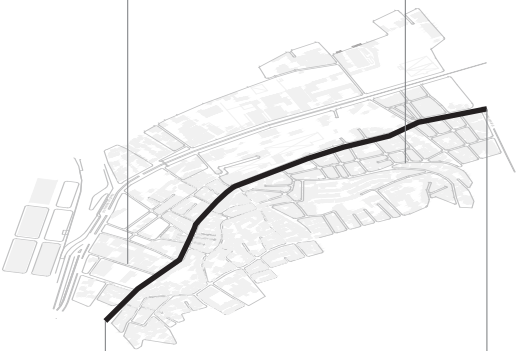




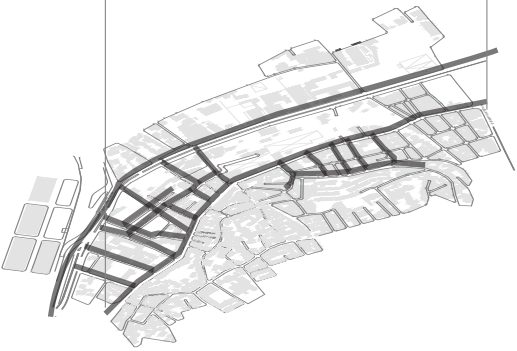
Charles Helou highway



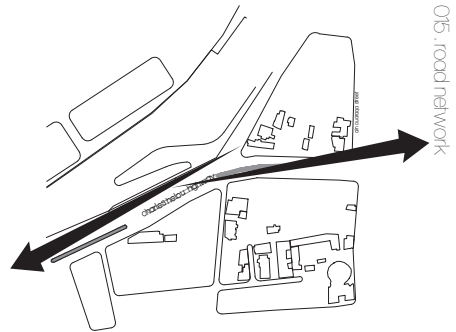
inner roads



armenia street

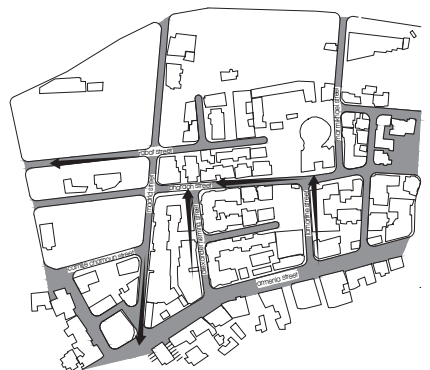


road network



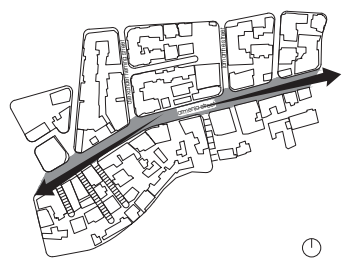
traffic stimulants  
roundabouts  
construction work

average vehicular speed  
> 40 km/h



traffic stimulants  
road intersection  
side parking

average vehicular speed  
15 - 20 km/h



traffic stimulants  
road intersection  
side parking  
traffic light

average vehicular speed  
20 - 40 km/h



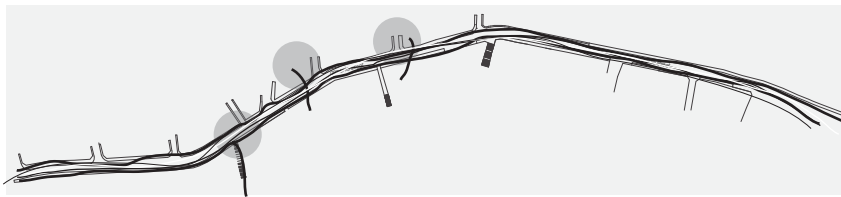
016, traffic analysis



## pedestrian movement

Similar to the vehicular pattern, the pedestrian movement shifts according to time. During the day, the movement is dispersed and spread throughout the street. However at night, it is concentrated in one area, primarily due to the presence of a stair network. The main pedestrian elements represented are the sidewalks, the pedestrian crossings, and the stairways.

As shown in the sections, there is a strong relationship between the pedestrians and the street, the pedestrians and the sidewalks and lastly the pedestrians and the stairways. The sidewalks, as well as the stairways, are not only used for walking but also for staying. The stairs are considered as public spaces, expressing people's appreciation to art. They are used as sitting areas, as art and as a platform for activism against specific political or social causes.



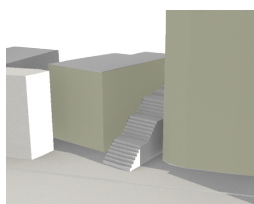
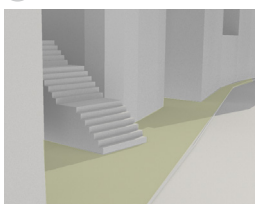
① dispersed pedestrian movement

017 pedestrian pattern

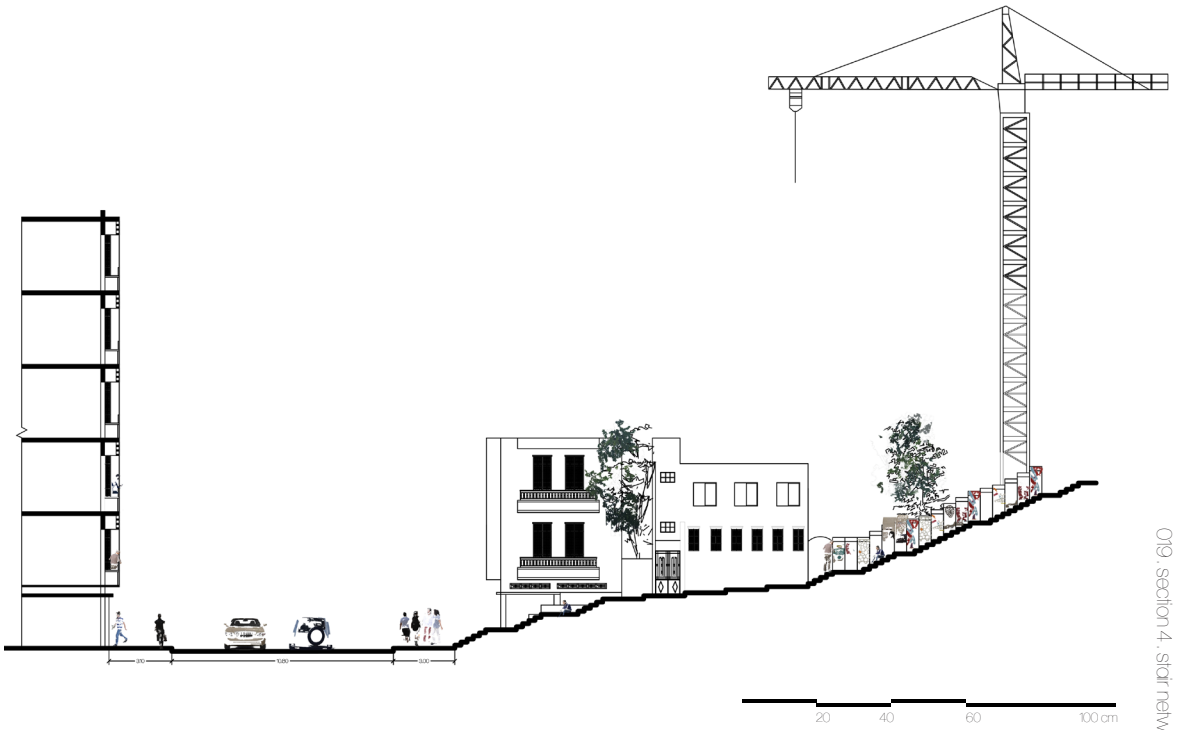


centered pedestrian movement

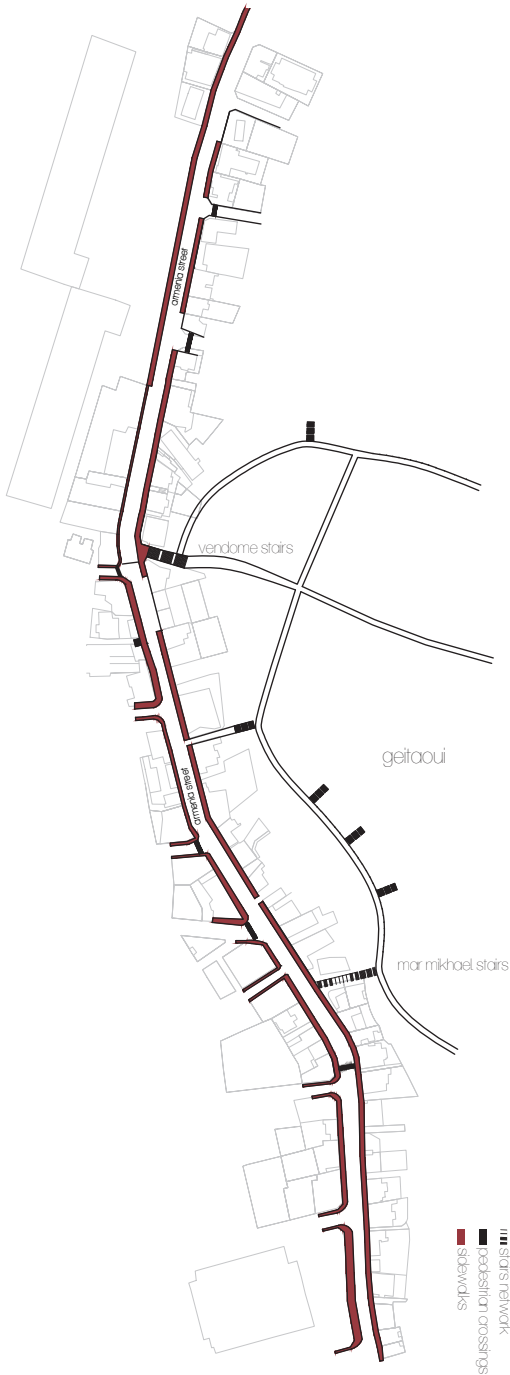
● main pedestrian element



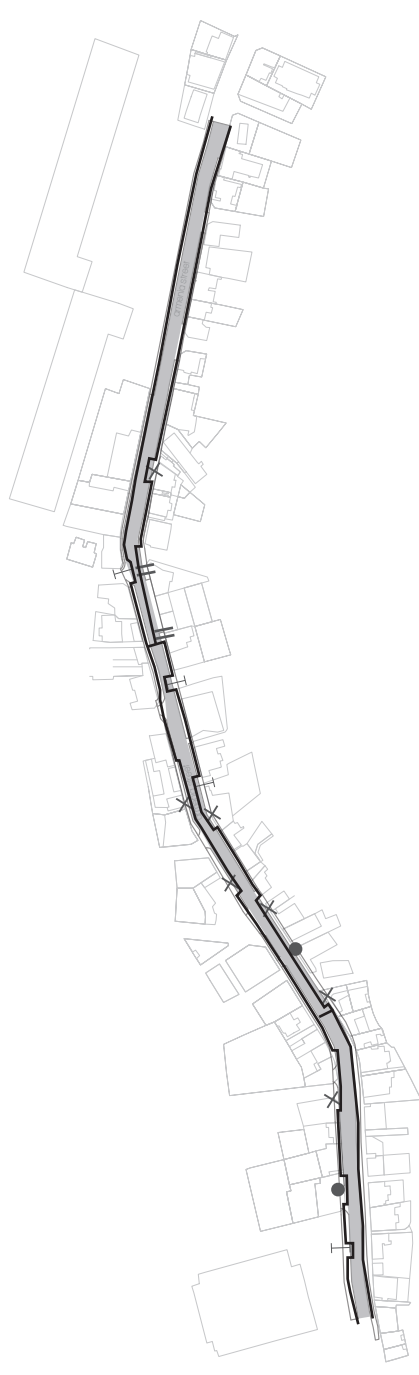
per hour on weekdays	358
per hour during weekends	522



As mentioned above, Mar Mikhael is known for its network of stairs. Three main stairways compose Mar Mikhael's pedestrian pattern, leading to the upper neighborhood of Geitaoui. The pedestrian network is strengthened by the presence of pedestrian crossings, and sidewalks. However, pedestrians cannot walk comfortably, as they always encounter obstacles along the street. Their path is frequently diverted due to informal parking, motorcycles, bicycles, and construction sites.



- ▬ stairs network
- ▬ pedestrian crossings
- ▬ sidewalks



- ▬ pedestrian path
- ▬ informal or parks
- ▬ construction sites
- X motorcycles, bicycles
- steel vendors

020 : pedestrian elements

021 : pedestrian path according to obstacles

## opportunities and threats

Following the analysis of the built and natural environment, the street investigation and the pedestrian movement, a table of opportunities and threats was constructed.

The interesting factor of the Armenia Street is the constant interaction between the people and the street. Pedestrians have created habits and have expressed themselves in different ways. Residents are directly connected to the street through their balconies. Sidewalks and stairs are considered as potential public and open spaces, whereby movable chairs and steps are used as sitting areas. Trees are not only used as a support for shade, but also as a support for bicycles. Walls represent people's expression, specifically through art. Throughout the street, interesting traces have been left, showing the strong relationship one has with the street. Art and activism have become part of Mar Mikhael's character.

The latter as defined in the introduction, is strengthened by its traditional buildings, characterizing Mar Mikhael as an old quarter. The old buildings provide a sense of scale, and an important visual connection between the pedestrians and the residents. However, as seen in the following sections, throughout the street, the sense of scale has been disrupted by high rises.

Street obstacles, and building proportions have always constituted a threat to the pedestrians and community, whilst expression through art and activism have created a sense of belonging.

opportunity people and physical space

threat street obstacles

opportunity street expression



people and balconies



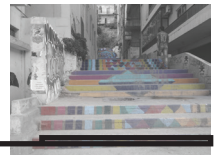
people and sidewalks



sidewalks as parkings for motorcycles and bicycles



people and stairs



expression through art



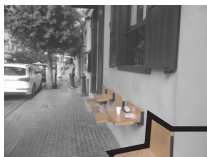
people and trees



trees as support for bicycles



expression through art



people and walls



expression through activism



people and cars



informal parkings



people and streets



street as sidewalk

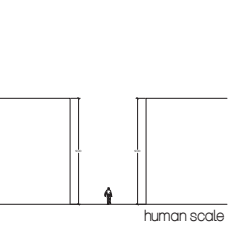
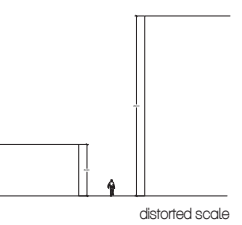
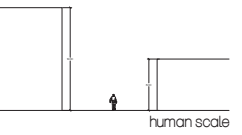
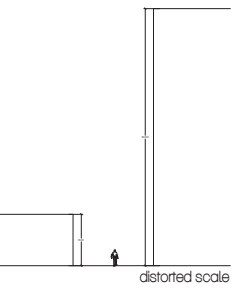
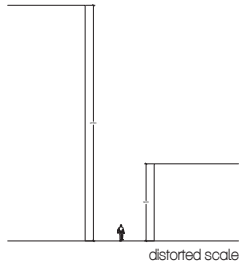


expression through movement

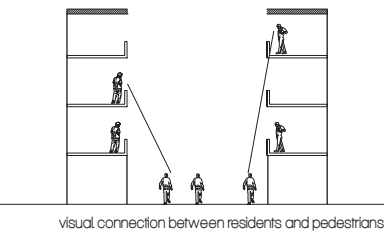
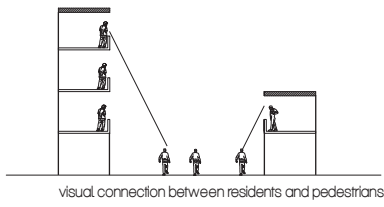
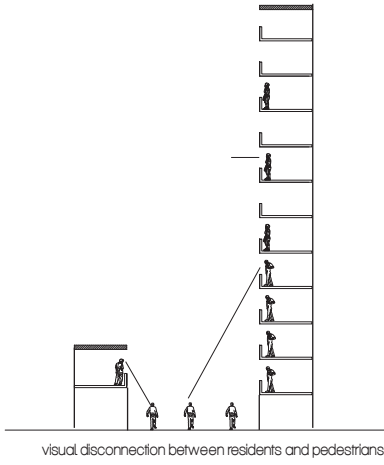


opportunity and threat buildings

building proportions



visual connection



building entrances



## VI case studies

The 4 following case studies have been thoroughly studied following the analytical phase in order to visualize different design approaches.

abstract

Different aspects discourage walkability in Beirut, which increases the use of private cars and drastically decreasing urban livability. Excessive mismanagement of the public infrastructure and the misuse of sidewalks with private usage lead to the deterioration of pedestrian - centered networks.

statement

The thesis investigates Hamra's physical structure, spatial practices and patterns of movements. The current pedestrian network includes alleys and unused open spaces blocked by obstacles such as walls, parkings, motorcycles. This network has the potential to be developed into a safe pedestrian network improving walkability and livability in the neighborhood. The case study is interesting to analyze as similar issues should be tackled in the area of Mar Mikhael.

process

**1** definition of walkability  
close  
barrier free  
safe environment  
upscale

**2** walkability problematics  
environment and health  
social  
economic

**3** design guidelines  
safety from traffic speed  
bumps, pedestrian  
crossings, raised  
crosswalks, curb  
extensions, stone  
pavements,  
comfort, convenience,  
attractiveness  
sidewalk  
zone system, street trees,  
signage, furniture, lighting.

**4** analysis  
road network  
building conditions  
land use ground floor or  
activities during the day  
activities at night  
sidewalk challenges  
typologies of open spaces  
functions of open spaces



Fig. 3-12: Total sidewalk: blockage by objects and vehicles (Source: Baha & Mait)

Fig. 3-13: Sidewalks appropriated by shop owners (Source: Baha & Mait)

enhancing walkability through urban connectivity: case of Hamra, dana balaa Lebanon, 2014



design strategy

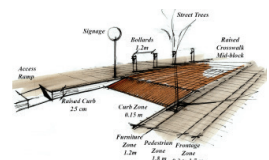
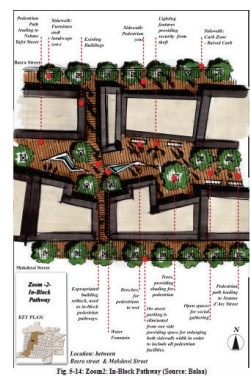
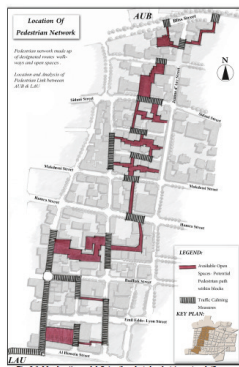
The urban design strategy is developed on three different scales: city neighborhood and block scales, whereby traffic control, street connections and removal of obstacles are important issues to tackle.

design intervention

The detailed design explores an alley in Hamra neighborhood. The intervention seeks to recover pedestrian network enhancing the density of activities while considering the movement of cars and vehicles.

- 5 strategy
- pedestrian network at city scale
- pedestrian network at neighborhood scale
- pedestrian network at block scale

- 6 detailed design
- pedestrian network
- safety features
- landscape elements



### abstract

City Garden, a plain field of grass, is located in an old part of the old neighborhood of Valby, Copenhagen. Residents and local citizens do not explore the site to its full potential, as it lacks interaction, design and activities.

### statement

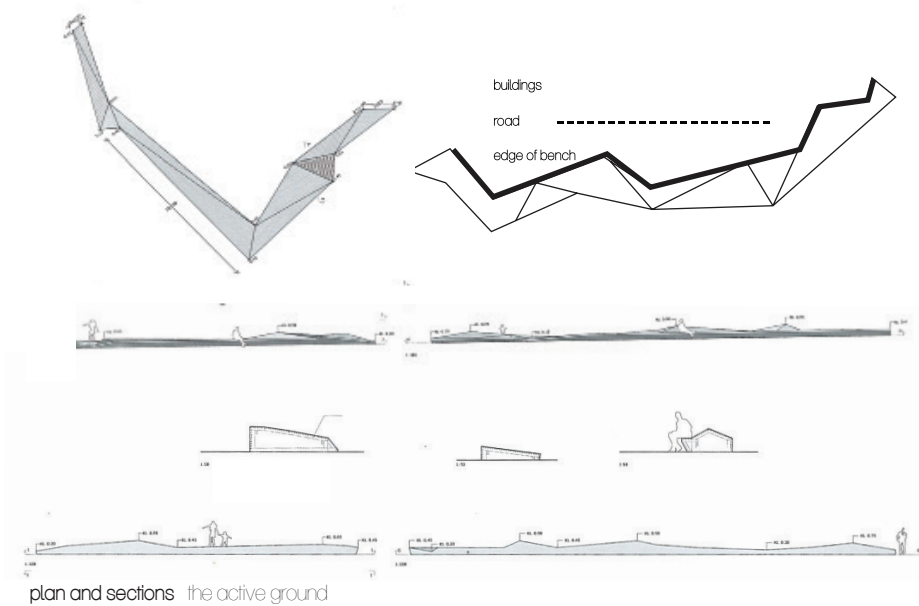
At a city scale, the municipality of Copenhagen made a plan for the city's future handling of climate changes. The creation of pocket gardens is vital for the cooling of the city on warm summer days, and for the management of stormwater on rainy ones. The City Garden is a pocket park aiming to recover the interaction between local citizens and to improve the overall climate of Copenhagen.



small city garden, landskab, denmark, 2013

design intervention

City Garden is comprised of three main parts: the Urban Forest, a space for events including markets days and local festivals; the Hilly Garden, a playful landscape; and the Active Edge, a 100 m long active furniture acting as a meeting point for the local community and stimulating childrens' imagination.



### abstract

The CaixaForum is an urban attraction, where all citizens gather. The public square connects two important landmarks, the Atocha Botanical Garden and the Paseo del Prado. The presence of the Caixa Forum and the vertical garden in the center of Madrid provides a walking experience and tackles the issue of historical preservation.

### design intervention

The CaixaForum project consists of a renovated museum and a 24 meter vertical garden designed by Patrick Blanc. Previously a power station, the layered structure consists of a historical brick wall and two renovated upper and lower parts. The topographically landscaped lower plaza provides a public space for the community and a resting spot for the pedestrians. The green wall enhances the appeal of the plaza, by bringing people together and engaging the community.



a walking experience



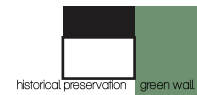
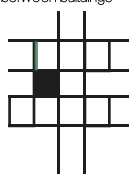
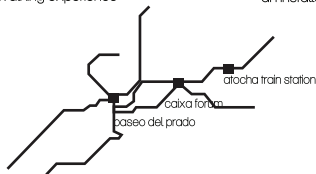
an installation between buildings



historical preservation



a communal space



historical preservation green wall



relationship between interior and exterior public space

caixaforum, herzog & de meuron, madrid, 2007

abstract

Molard Square is an urban communal space enclosed by facades of the surrounding buildings. It is joined to a series of squares, connecting the urban framework to the harbor.

statement

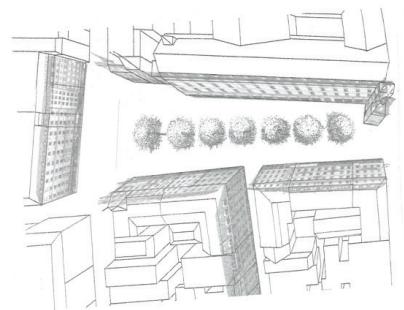
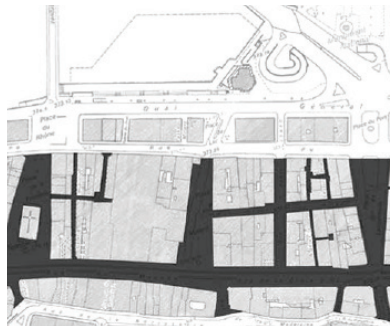
The project aims to recover the historical qualities of the square, as it was originally a lake port.

design intervention

The lighting installation reflects the connection between the place and its history. The scattered illuminated resin pavers represent the historical character of the space. The dynamics of the space change throughout the day as they are different at night than during the day.

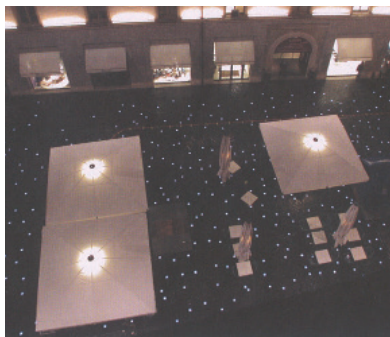


pedestrian network



changes of dynamics

during the day people are walking to reach a certain destination



at night, the installation attracts people and transforms into a gathering place

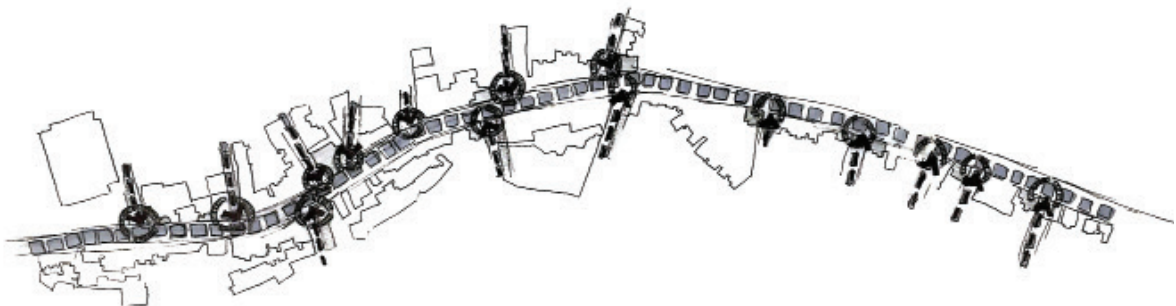
molard square, 2b architectes, switzerland, 2005

## VII the concept design

The concept design includes different features, aiming to create a total walking experience, and emphasizing on the history, the buildings, the street and the people. As Armenia street holds a true traditional character, the design enhances the preservation of this "village in the city".

The features mentioned above consist of :

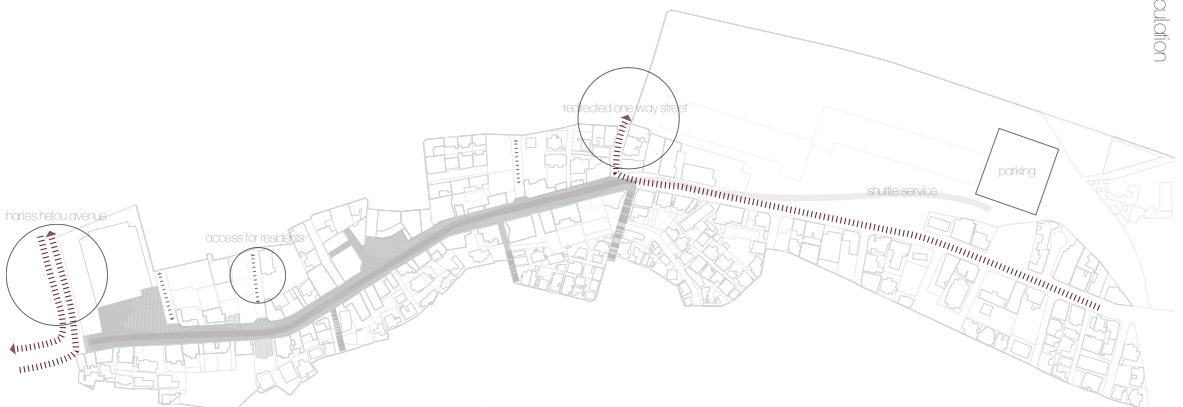
- . pedestrianizing the street
- . connecting the street to surrounding neighborhoods
- . creating nodes of attraction
- . introducing leisure and social spaces
- . enhancing the interaction between the people and the street
- . promoting the use of old abandoned buildings as potential public open spaces



## the circulation

In order to pedestrianize a street, different factors, such as parkings and alternative vehicular access points should be taken into consideration. The strategy taken involves the following:

- . Relocate vehicles into an underground parking, located in the train station. With a 4 level underground parking, all vehicles parked on the street could be managed and rearranged.
- . Provide a main access point at the Vendome intersection, which will be accessible for vehicles, in order to decrease the potential traffic congestion.
- . Offer a secondary access point from the street parallel to Armenia Street, Pharaon Street. It initially is a one way street, leading to the EDL Headquarters. Therefore, the direction of the street will not be modified.
- . Provide an access to the Charles Helou highway, from the EDL Headquarters.
- . Offer a single vehicular lane into the pedestrian street, for emergencies and services.

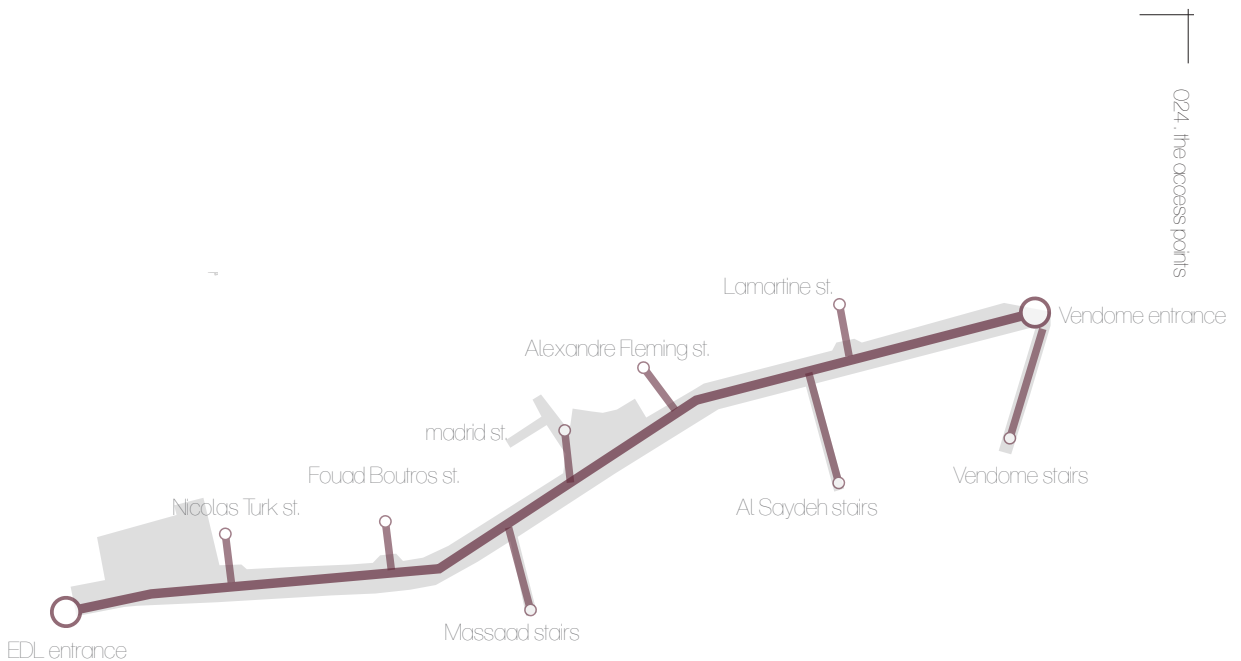


## the access points

As per the pedestrian circulation, different access points are available. Two main entrances are provided at the EDL Headquarters, and facing the Vendome stairs.

The upper neighborhood of Geitaoui extends to Mar Mikhael through three main stairways, Massaad Stairs, Al Saydeh Stairs and Vendome Stairs.

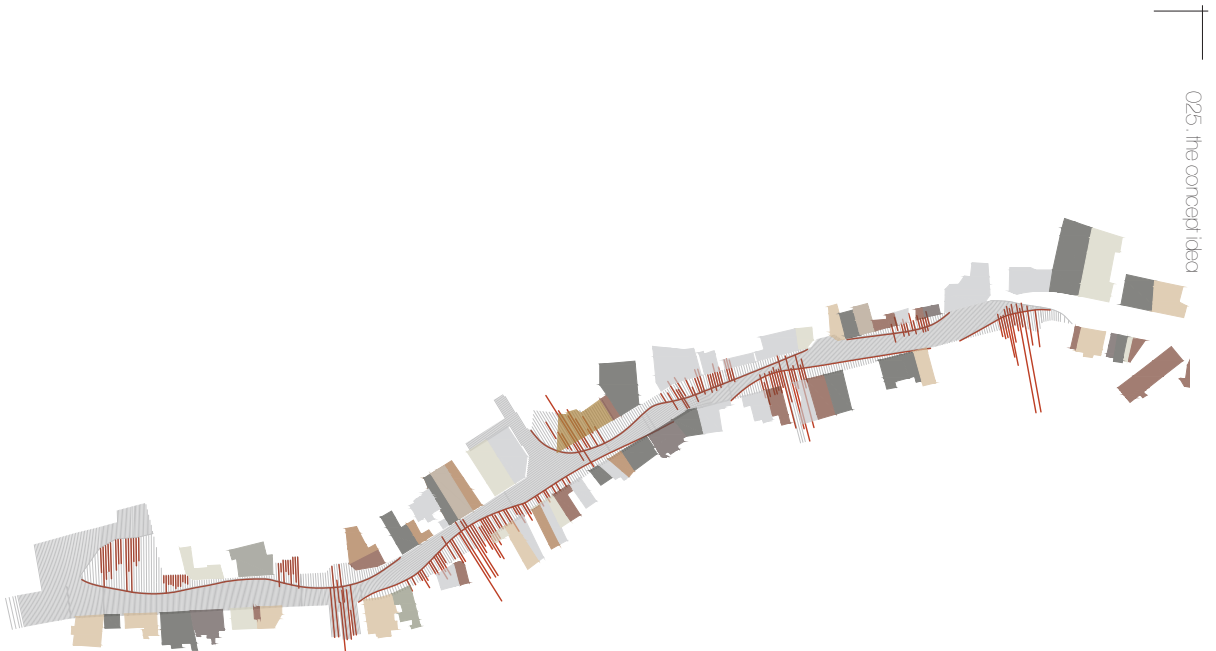
Armenia Street extends to secondary residential streets, allowing 5 access points from Lamartine Street, Alexander Fleming Street, Madrid Street, Ibn El Rabih Street and Nicolas Turk Street.





## the concept idea

In order to maintain the street life and experience, the main concept idea is to extend existing activities and ground floor land use onto the street. The extension lines vary according to the intensity of human activities and of existing nodes of attraction. Several spaces are created along the street, catering for different types of activities. For example, as the landing of the three stairways are main attraction points, the extensions lines are pushed further in order to propose a large plaza.



## the program spaces

Following the concept idea, different spaces are created:

### EDL square ساحة الشركه

The garden, currently inaccessible for the public, is proposed to be open, providing an important entrance point from the EDL Headquarters.

- . EDL garden.
- . Street vendors.

### Museum square ساحة المتحف

A public indoor library and museum are proposed in two old abandoned houses, allowing for exhibition and reading areas.

- . Public Library
- . Museum

### Massaad Square ساحة مسعد

- . Massaad stairs: Outdoor exhibition area
- . Restaurant and seating areas

### Workshop space ساحة الحرف

By pedestrianizing the street, the gas station is relocated, providing an additional pocket recreational space.

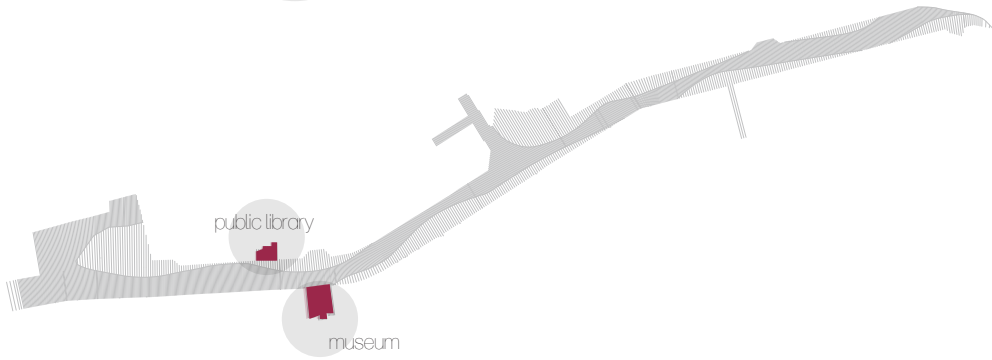
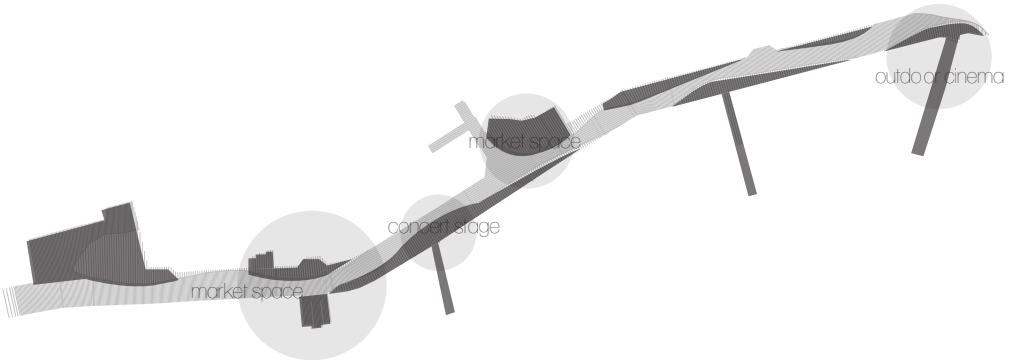
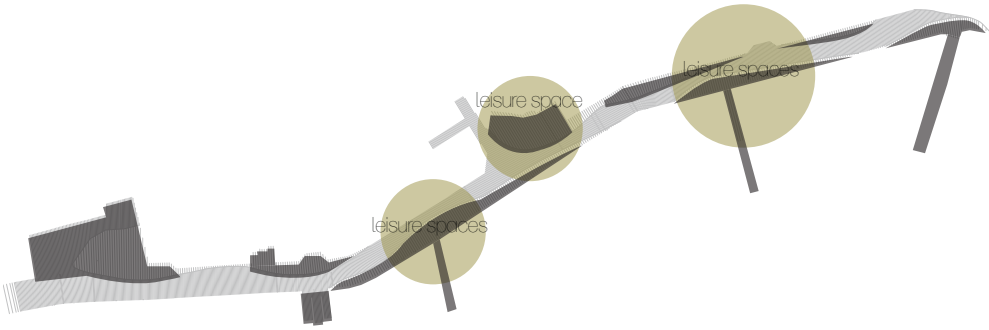
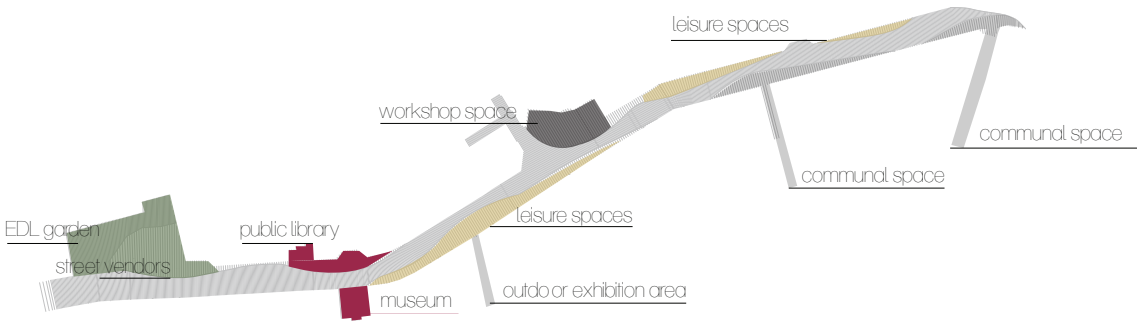
### Al Saydeh square ساحة السيده

- . Al Saydeh Stairs: a communal space
- . Two large seating areas

### Vendome Square ساحة الفاندوم

- . Vendome Stairs: Outdoor cinema area
- . A large seating area

In order to maintain the dynamism of the street, the spaces are flexible and could transform at night and during events.



## VIII the design plan

As mentioned above, the design consists of different interactive spaces, maintaining its street life. Connections and extensions to surrounding neighborhoods are provided through the three main stairways, the EDL garden and the workshop space on Madrid Street.

As mentioned earlier a single vehicular lane is accessible for emergencies and services. A specific design language, was addressed, in order to create a total walking experience. Different typologies were taken into consideration, transforming the street into a walkable, aesthetic and interactive street.



main entrance

section 1

EDL garden

street vendors

section 2

museum square

section 3

outdoor exhibition area

al-Assad square

workshop space

section 4

section 5

al-Saydeh square

section 6

vendors square

section 7

027 - the museum plan

132.5 265 397.5 662.5 cm

## **IX the design language**

The following typologies describe the detailed strategy and design language. The ground surface, site furniture, vegetation, color scheme, vertical elements, signage and lighting contribute altogether to the unique overall walking experience.

### **the paving**

Starting from the ground surface, two types of paving are proposed. The tiling changes in width in important leisure and recreational spaces.

### **the site furniture**

The site furniture is based on a single module, which changes according to the pattern of people.

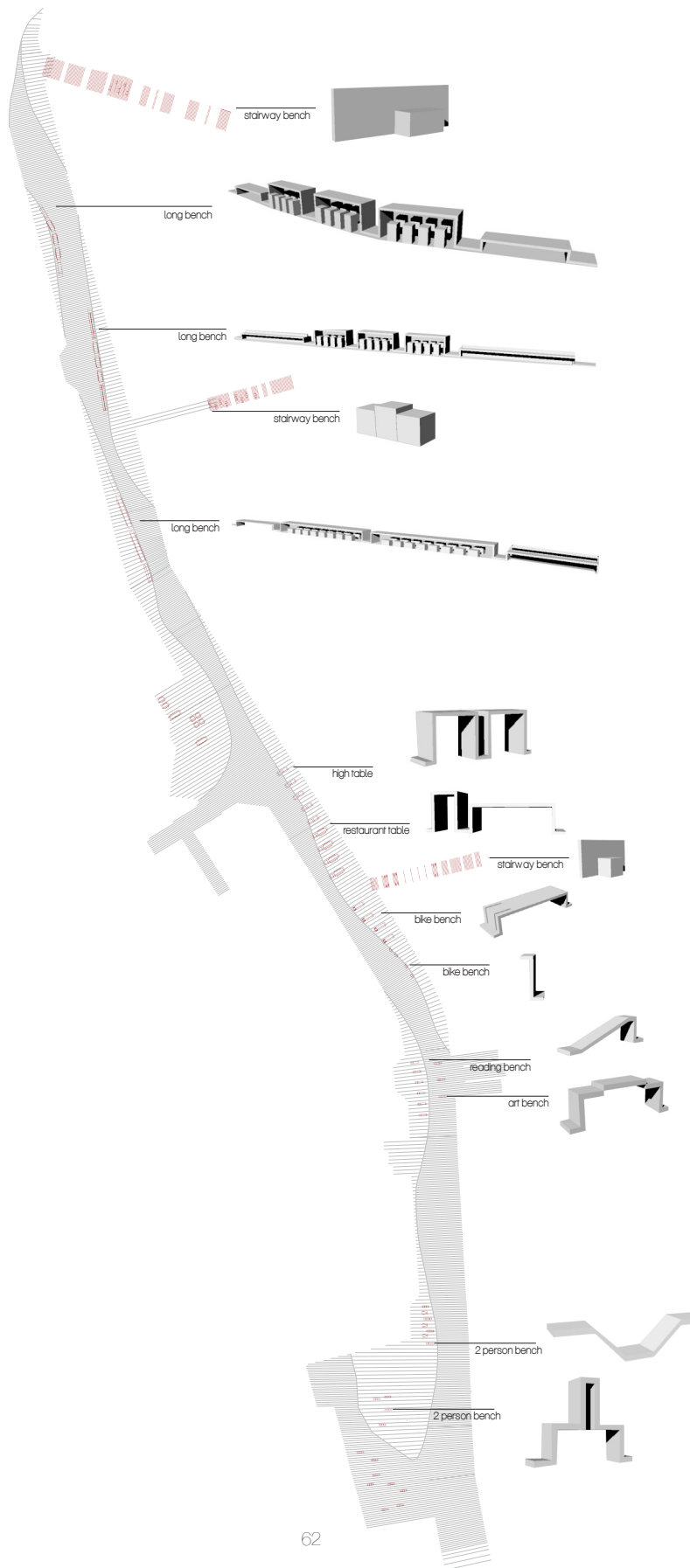
Two person benches, art benches, reading benches and bike benches are introduced starting from the EDL Headquarters till the Museum square.

In Massaad Square, restaurant and high tables are created facing restaurants and bars.

As Al Saydeh and Vendome squares are existing large gathering spaces, long structures including benches, workspaces, high and restaurant tables are created.

On the stairways, different types of seating arrangements, including backs and comfortable benches, are introduced in order to not only cater for young adults, but also for the elderly.





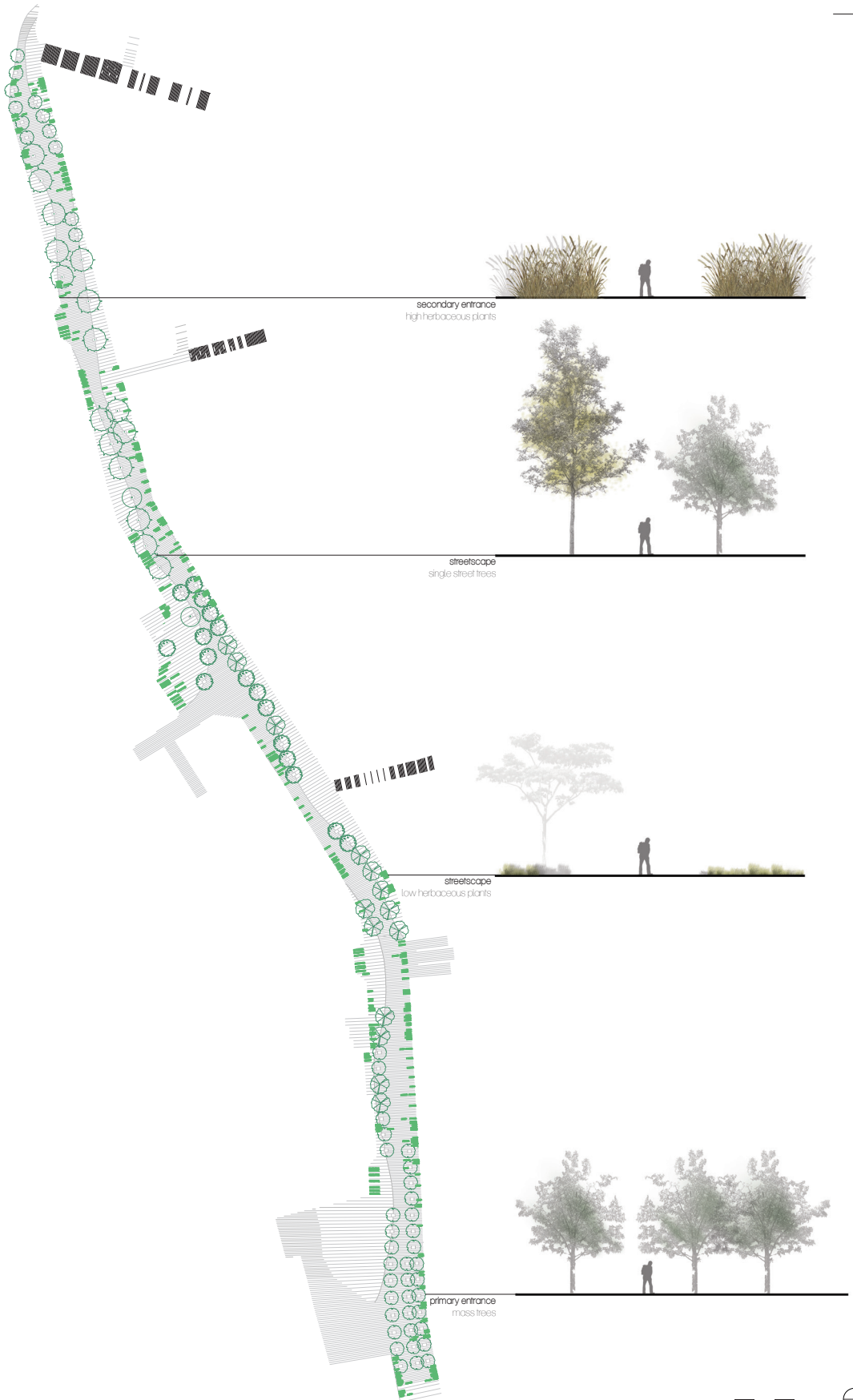


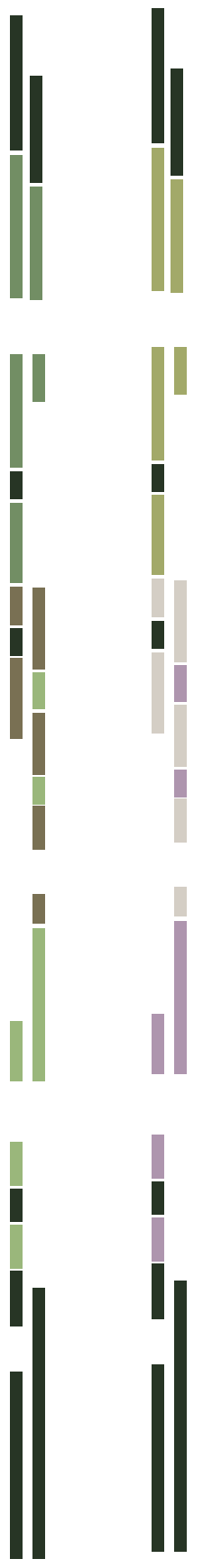
## the vegetation

As per the vegetation, its design language is used to enhance the main and secondary entrances. At the EDL Headquarters, and facing the Vendome stairs, mass trees are proposed. As per the secondary entrances, large herbaceous plants are introduced, differentiating them from the low herbaceous plants found along old houses.

## the color scheme

The seasonal color scheme is based on the type of trees and plants introduced. Evergreen trees are proposed at both main entrances, while deciduous trees are introduced along the street. During spring, deciduous trees are blooming, losing their leaves, and changing their initial colors.





autumn spring



## the vertical elements

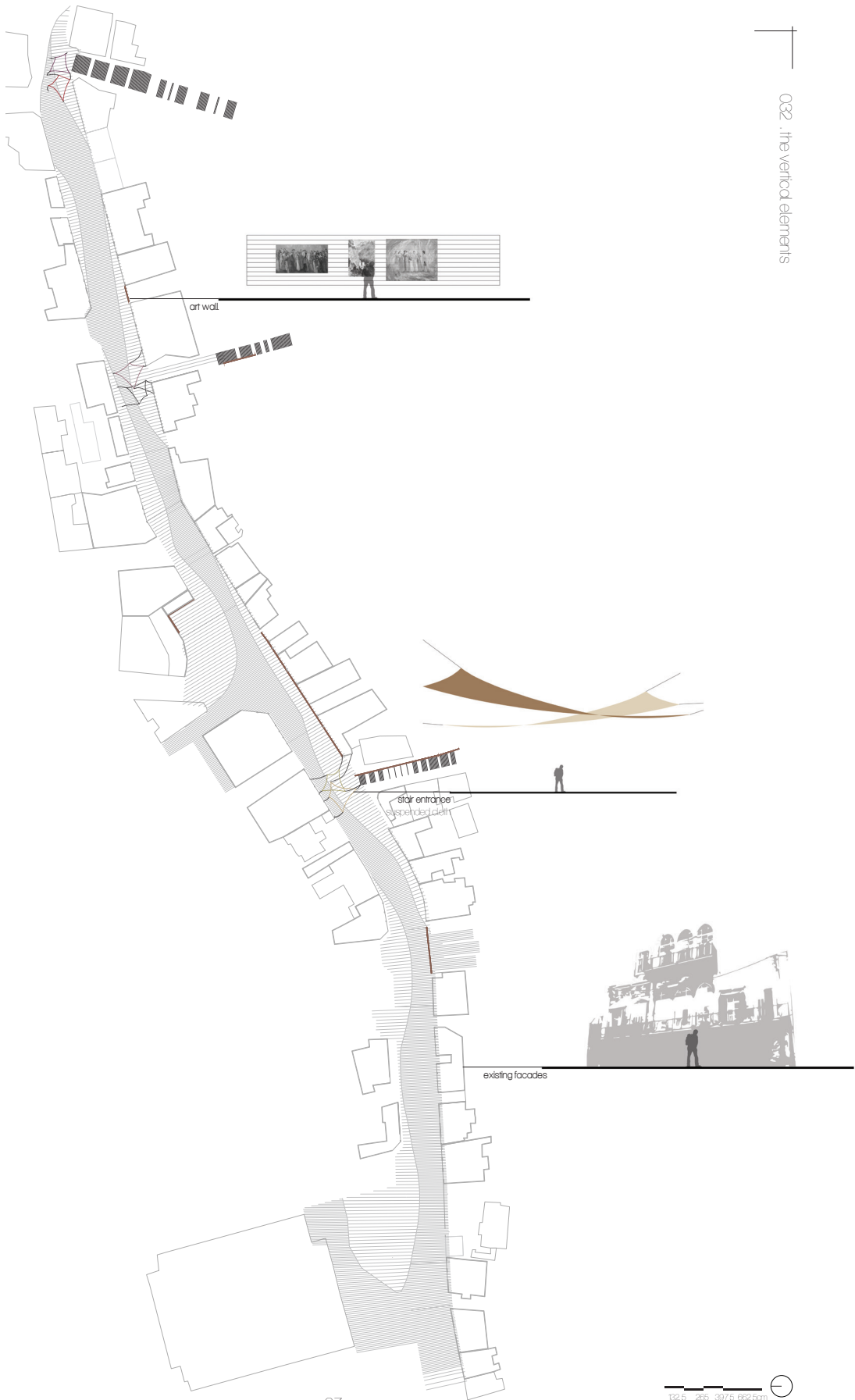
Vertical elements are introduced along the street, emphasizing on the stairs, the walls and the facades. At the landing of each stairway, suspended cloths are proposed in order to enhance the entrance from the stairs and easily locate them. Along the street, existing walls are dedicated to permanent art and exhibition walls.

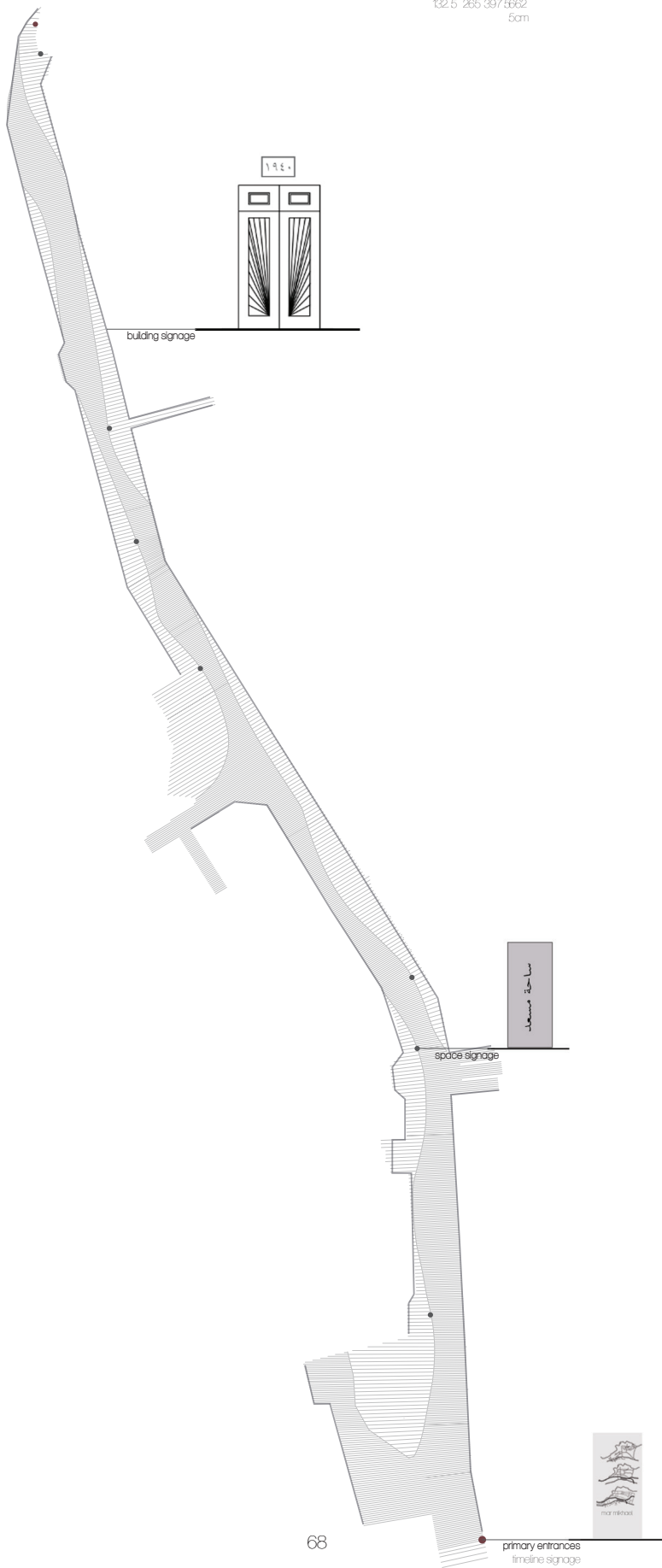
## the signage

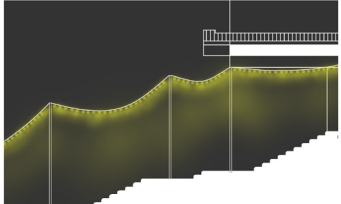
As part of the total walking experience, signage, such as street signage, timeline signage and building signage, are introduced along the street in order to enhance the old character of Mar Mikhael.

## the lighting

As per lighting, different types of lighting are proposed. On the stairway, lighting strings are introduced in order to both keep the residents safe at night, and enhance the art and entertainment scene. As per the street, light poles and surface lighting are designed as part of the street's nightlife. Lighting on the facades is also included in order to emphasize on the architectural heritage of the site.







## X the details

Hardscape elements include paving and site furniture. The tiling is composed of two different types and colors: light lychee and rattata antiqued. As per the site furniture, rustic pine wood is used for all structures.



### site furniture

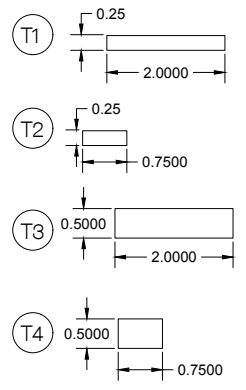
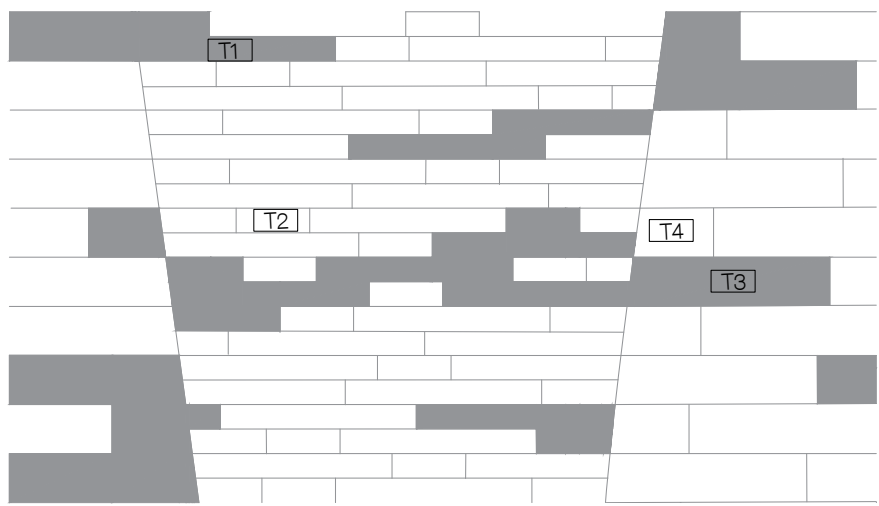
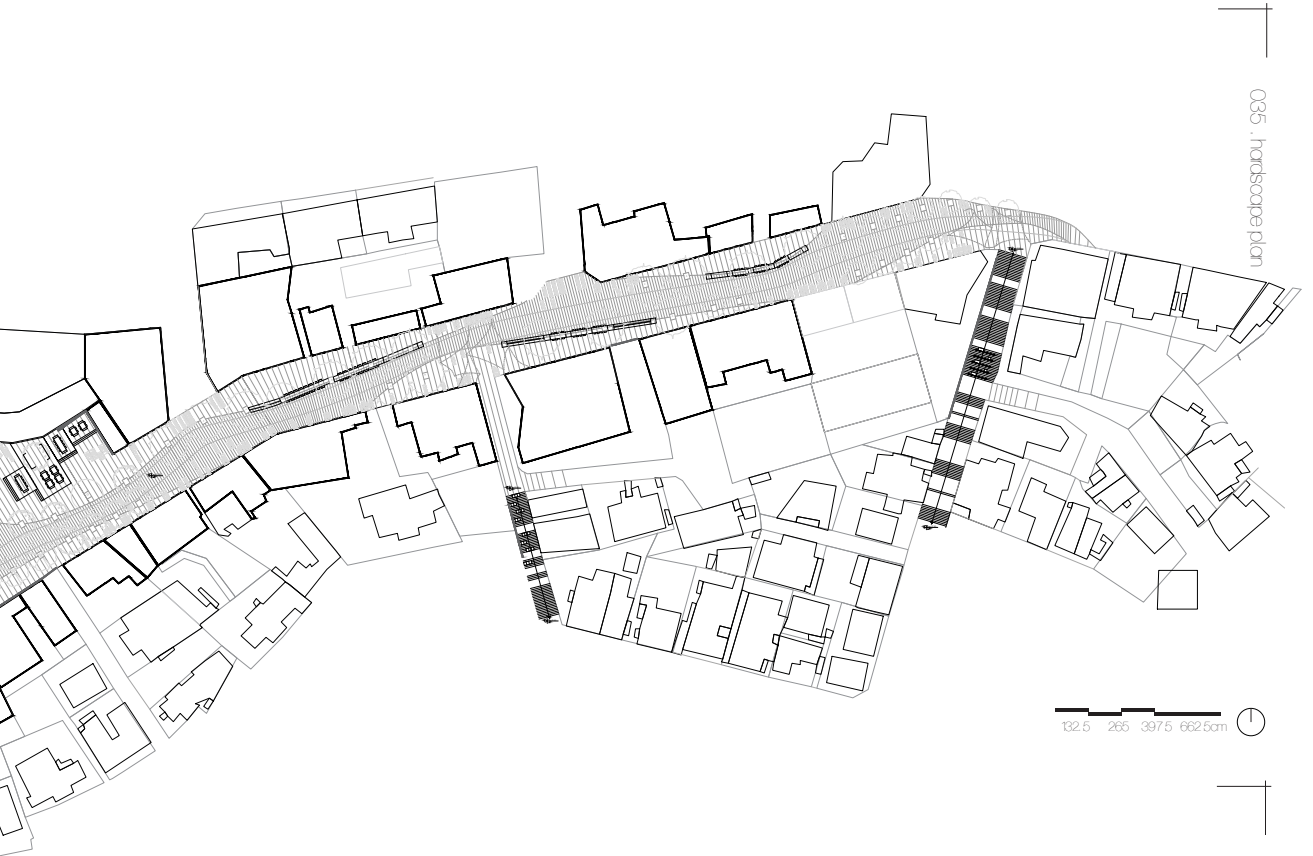
name pine wood  
texture soft  
color beige/ grey

### paving

name rattata antiqued  
texture coarse  
color dark grey

name light lychee  
texture soft  
color light grey

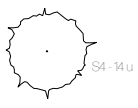




Softscape elements include street trees and herbaceous plants. The following table refers to the plant list, including name, quantity, type and size.



	S1-52u	<i>quercus coccofera</i> ssp. <i>calliprinos</i> palestine oak	evergreen	no flower	3 to 5 meters
	S2-17u	<i>bauhinia variegata</i> / <i>alba</i> orchid tree	semi evergreen	white flower	5 to 8 meters
	S3-14u	<i>albizia julibrissin</i> silk tree	deciduous	pink flower	5 to 8 meters



S4-14u

*gingko biloba*  
maidenhair tree

deciduous      yellow flower      10 to 15 meters



S5

*stipa tenuissima*  
mexican feather grass

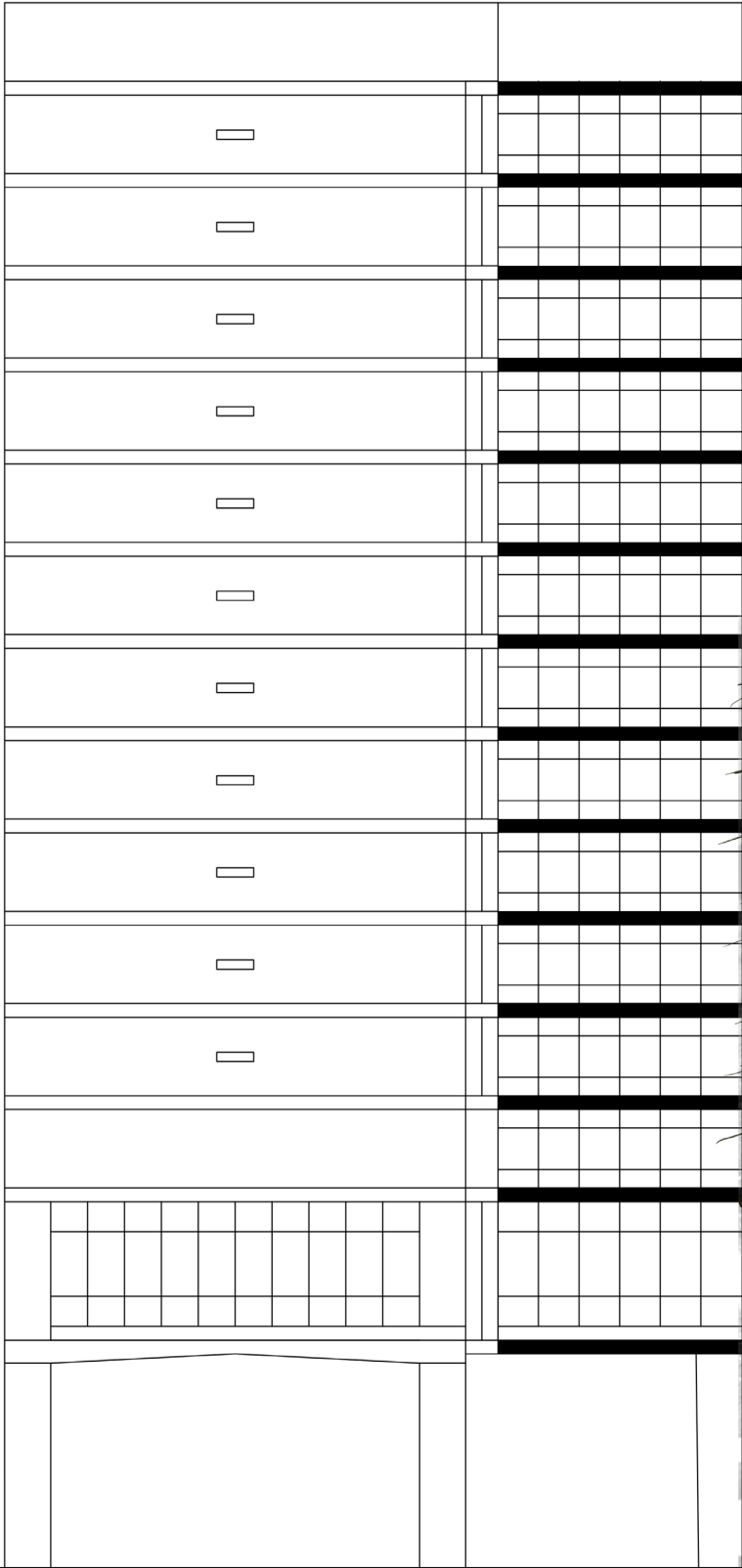
0.3 to 0.9 meters

*perisetum setaceum rubrum*  
purple fountain grass

0.3 to 0.9 meters

*stipa gigantea*  
giant feather grass

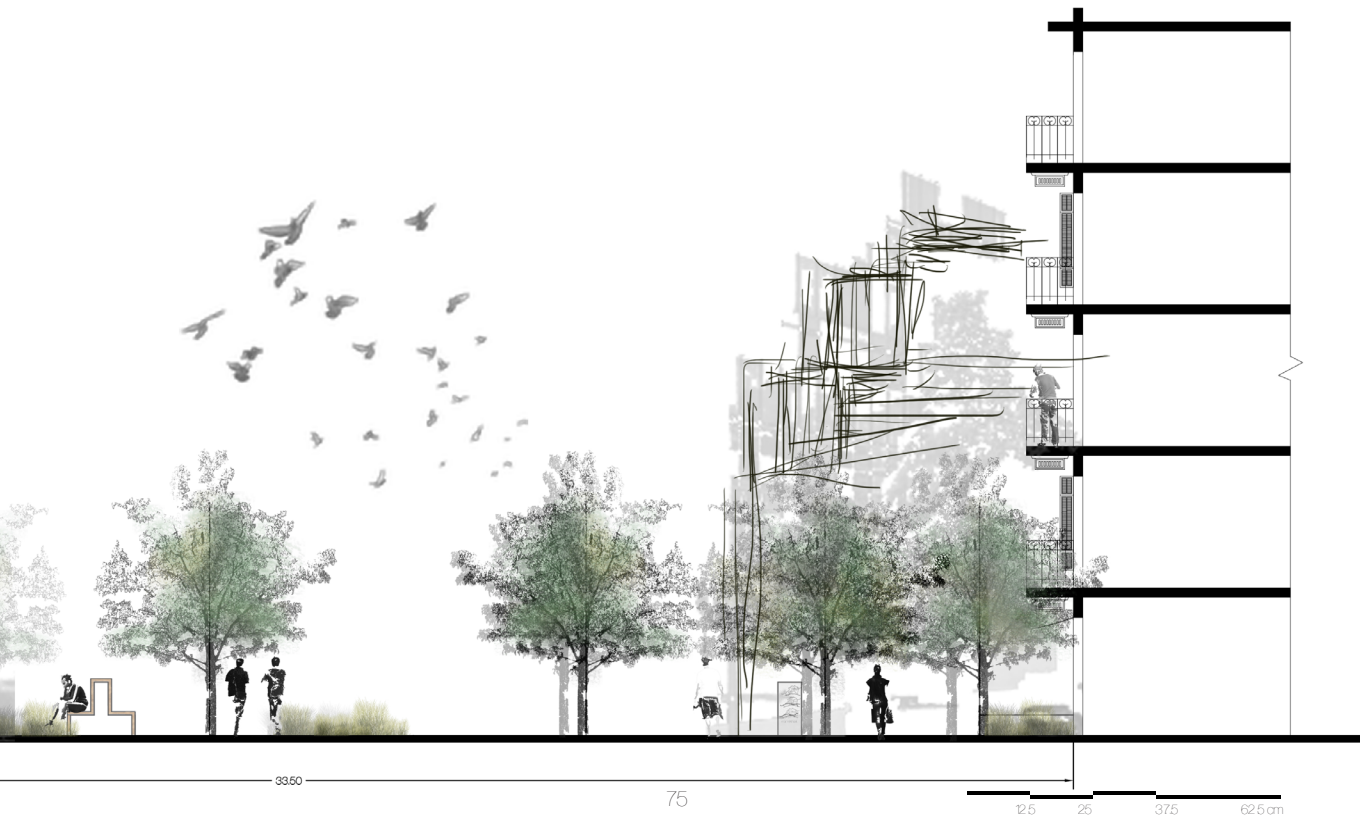
1.8 to 3.0 meters



## XI the places

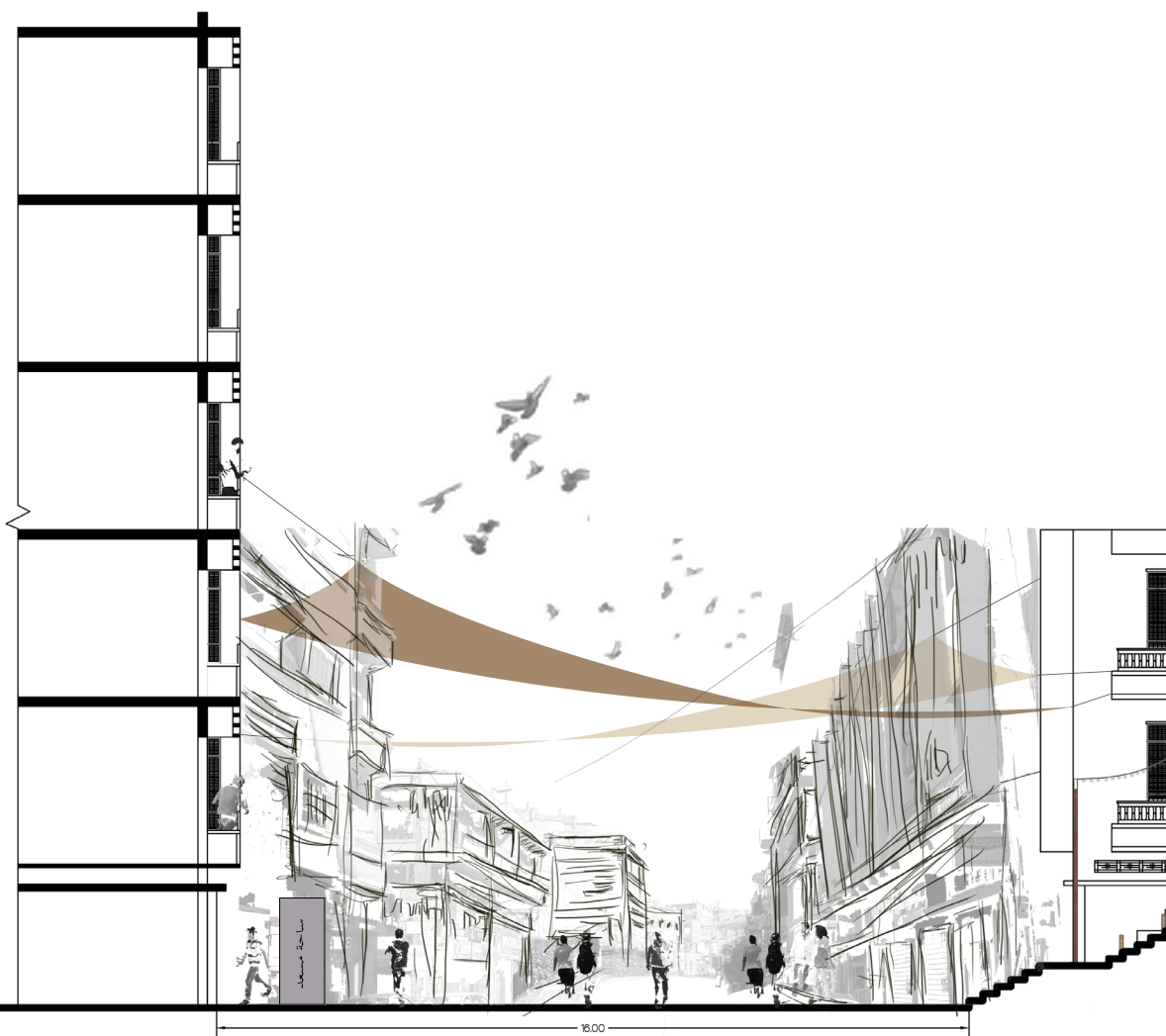
The following sections and perspectives describe the mood of the spaces, or places, created. The combination of the different typologies, including vegetation, building facades, site furniture and lighting, are shown in the sections and models, contributing to the total walking experience

038 - section 1, EDI garden





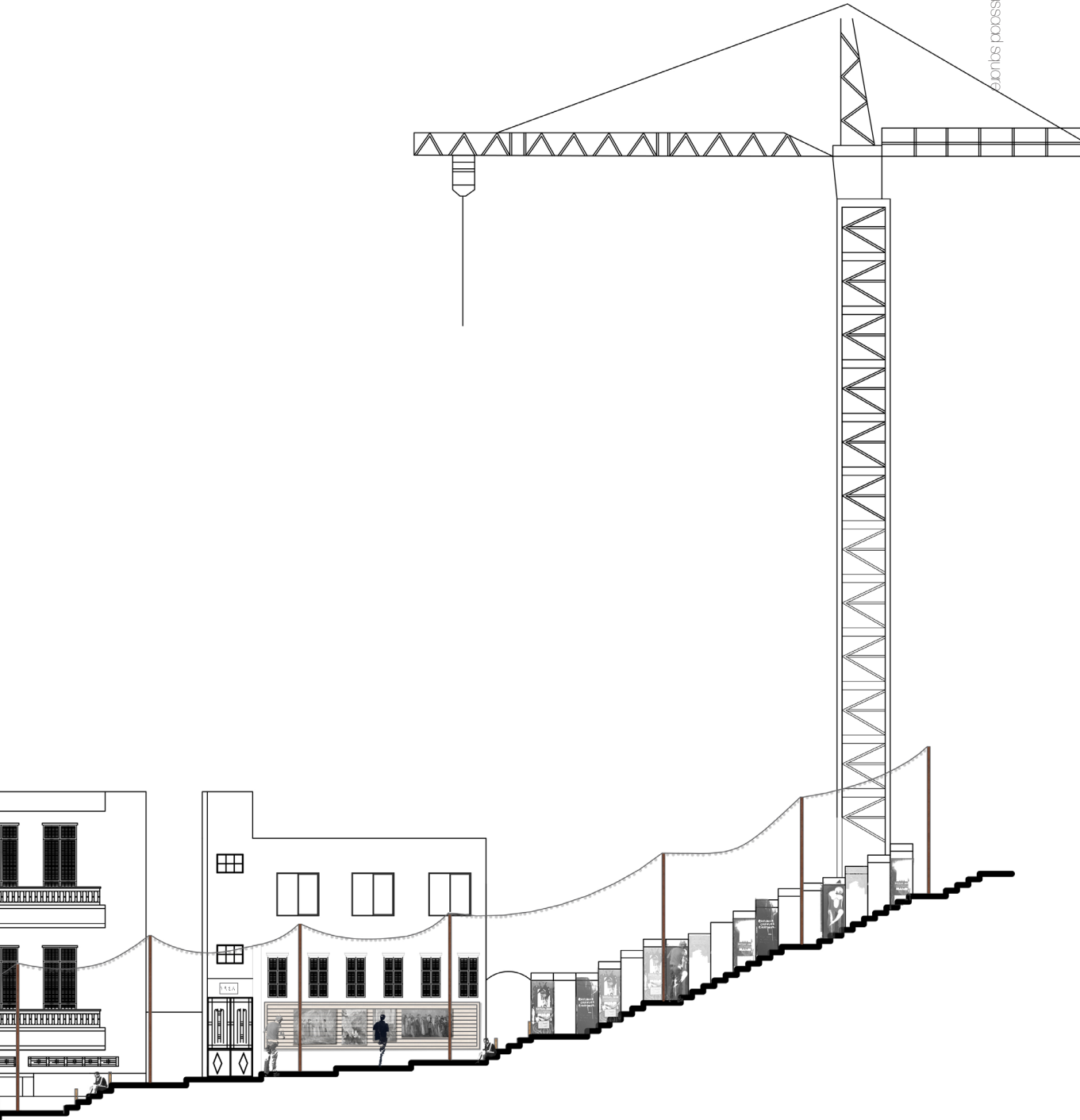




78

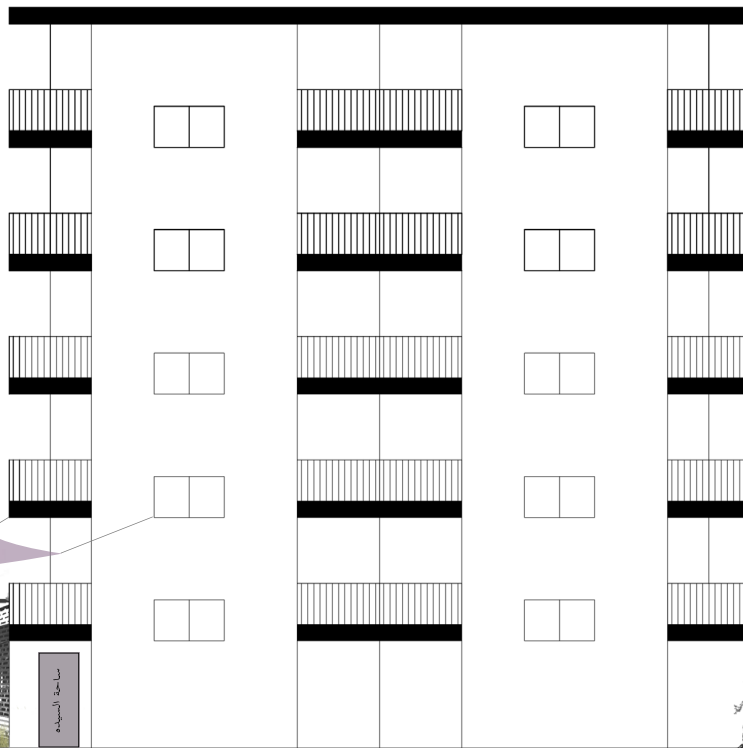
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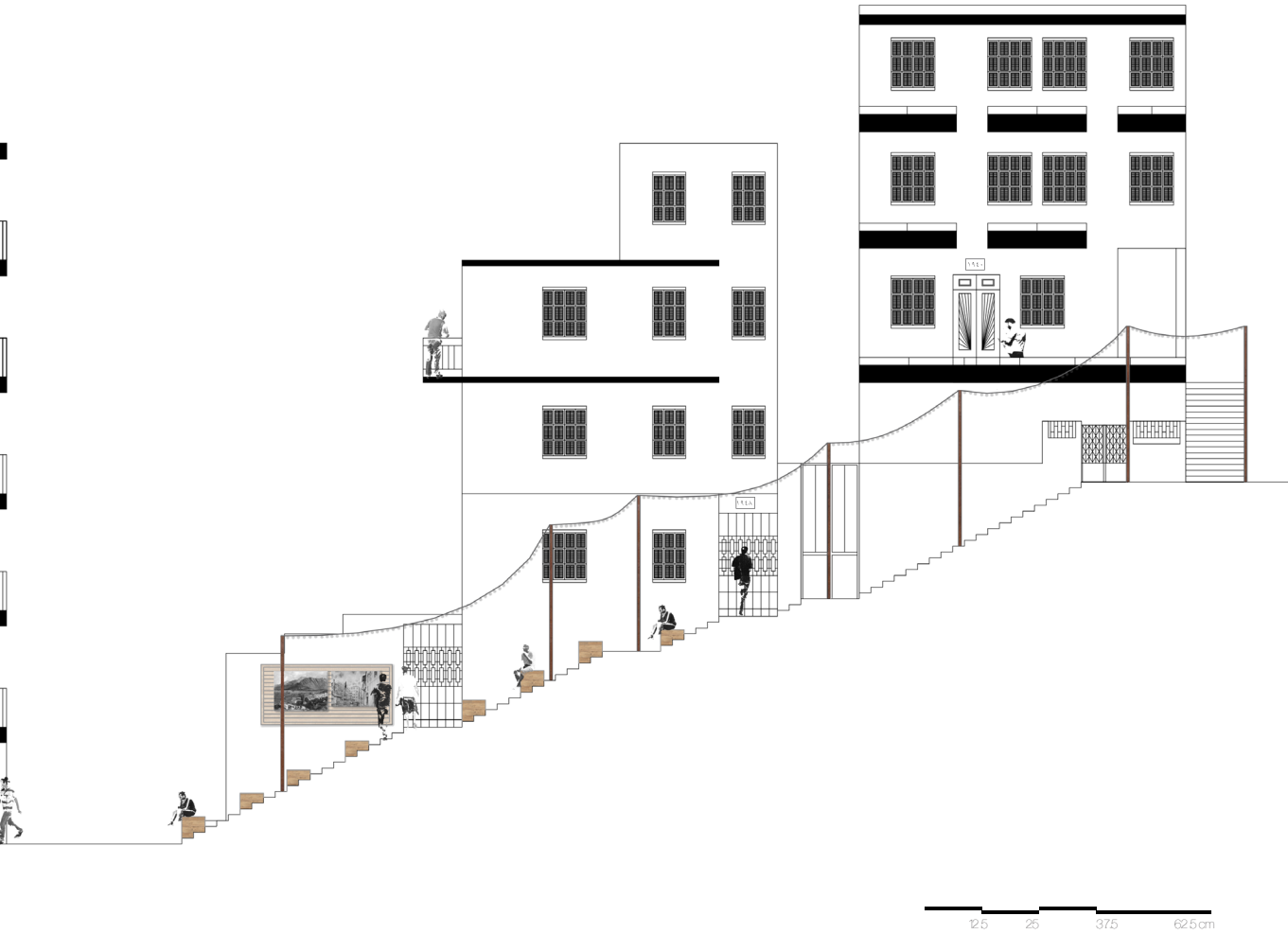














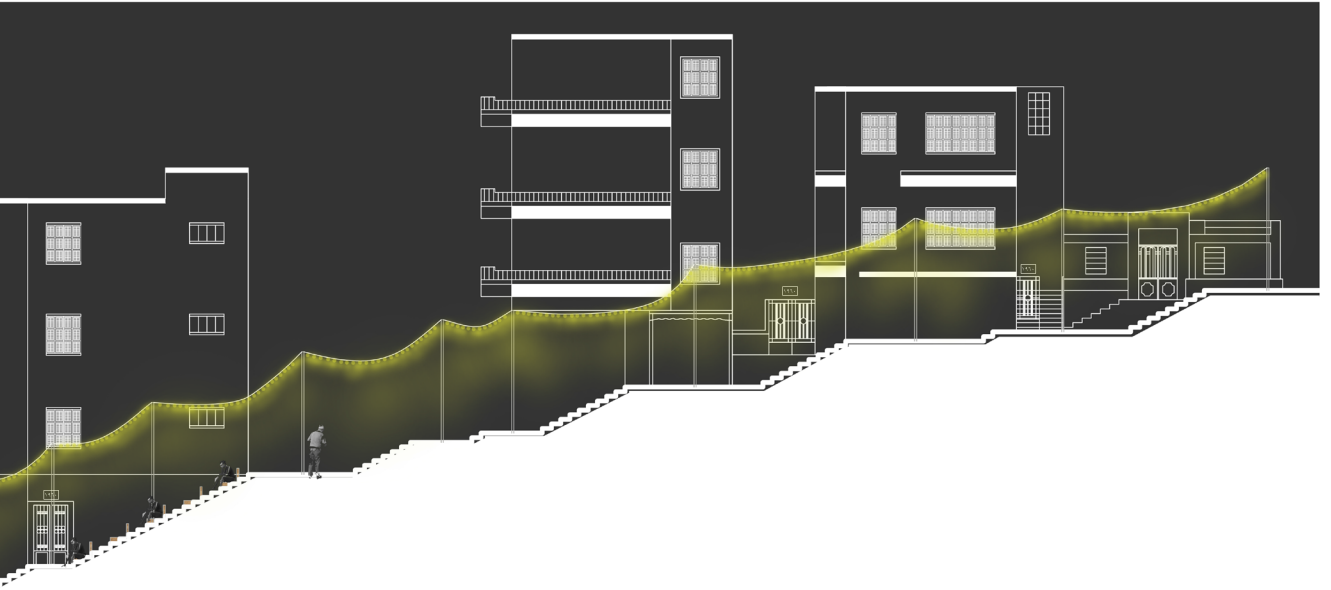
15.00



85 125 25 375 625 cm







120 25 375 625 cm











