

Urban design

Assisted living and mobility -- project: hybrid living unit

Course: Urban Design

Student Name: Kang Ning

Student Number: 1542036

Master Plan



master plan

blue structure

green structure



service distribution

street net

community net



public transportation system



housing distribution

Master Plan and strategy:

In our formal group work, the method to doing the research of the site is including two aspects. The first aspect is to find the emergent problem of the site. And the other aspect is to find the opportunities and problems for the assisted living. We intend to make good use of the existing opportunities and the projects for assisted living to give this area new blood for regeneration.

We made transformation plan for this site to provide enough assisted living houses, healthcare and culture service facilities, public transportation, communication space for elderly people according to the changed demands of the elderly people these days.

Life style of the target group



Project Location



Historic Blocks

Housing:

ideal housing type:

historict building in the city centre + cozy house in a cluster

part of a small community

family:



single / with partner



with children / with children + with grand children

health condition:



stable health condition

Activity:

will for sports:



short biking



short walking



gardening



watching / reading

communication:



willing to communication

Mobility:

mobility:

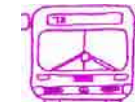
traval midium distance



by foot



by bike



by tram / bus / shulter bus



by car

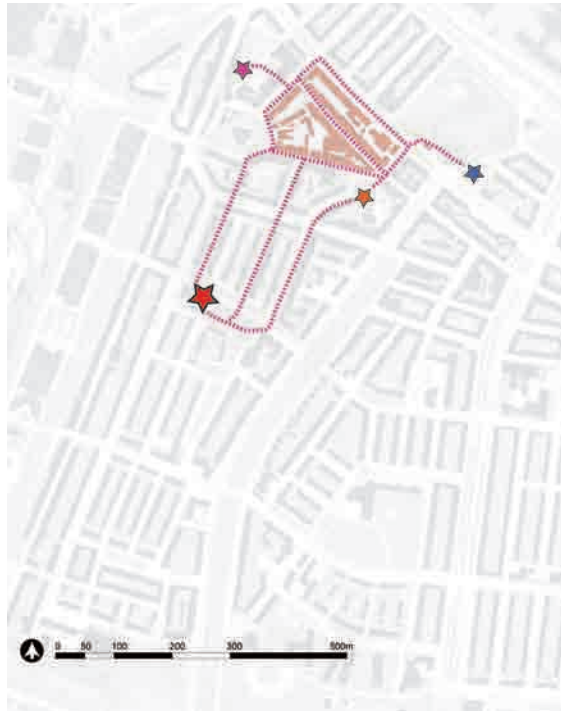
In the elderly living structure, the patterns are including integrated service cores and integrated elderly living units.

This project is an elderly living unit. According to the synergy analysis, the north part of Oud-Charlois is suitable for independent living. For the independent elderly people, we categorized them into different groups by life styles. For this project, I choose the group called “anchored” which have a special like of living in the historic buildings near city centre.

In the north part of Oud-chalois near the church, there two blocks are clusters of old / historic buildings. So the precise design site is the two blocks. And the target group is the so-called “anchored group”.

The working method is to compare the characters of other aspects of the life styles of the target group to the existing physical quality of the site, to find the shortage and the opportunities. The design goal is to provide suitable houses and semi-public places for the target group.

Context - Routing



- medical care centre
- mental care centre
- physical health care centre
- main health care service core

Routes for health care



- super market
- shops
- coffee / bars

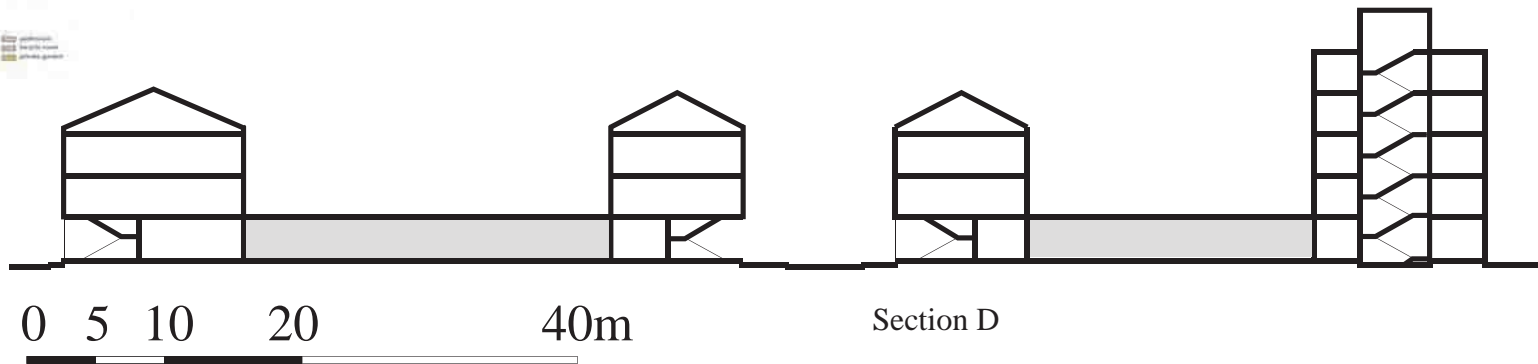
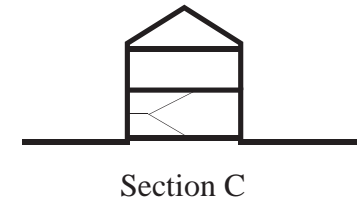
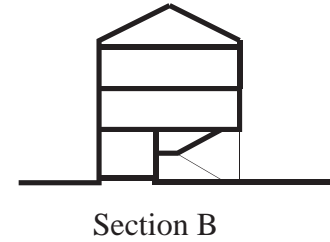
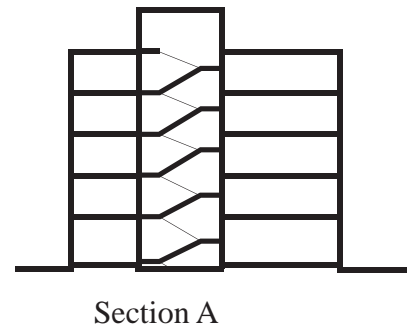
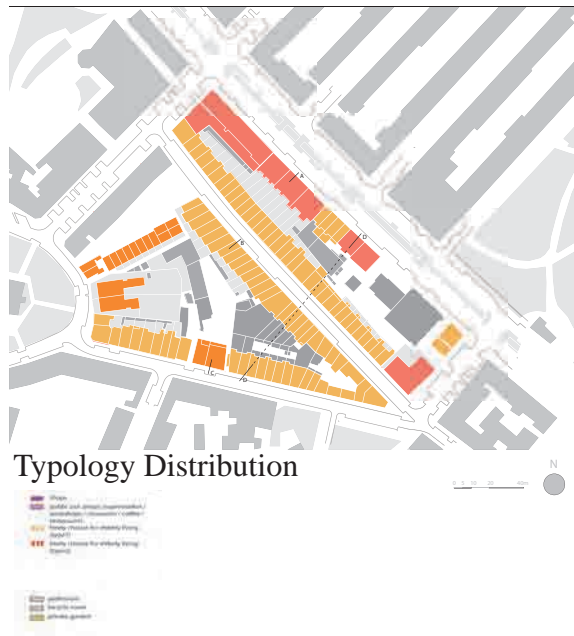
Routes for daily shopping



Routes for recreation

According to the whole strategy, I made an assumption of the circuits of the target group. The routes are including going for health care, going for daily shopping, and going for recreation or other activities.

Problem Statement - Housing Typology



In the two blocks, there are three types of buildings. The first type is row house which is more than three floors and there are several houses share one stair room in a building unit. The second one is the building which has four houses in it and each floor has two houses. Also, the houses in the ground floor have their own entrance directly facing the street. The third type is the typical town house which is only one house in the two or three floor building. According to the different typology of the houses I will give three different kinds of interventions to provide more houses for the target group.

Also, in the neighborhoods, there are several flat buildings with luxurious indoor spaces. That is a good opportunity for provide indoor public place for the residents here.

Problem Statement - Public Space



Residents are eager to communicate to each other but no semi-public space for them.



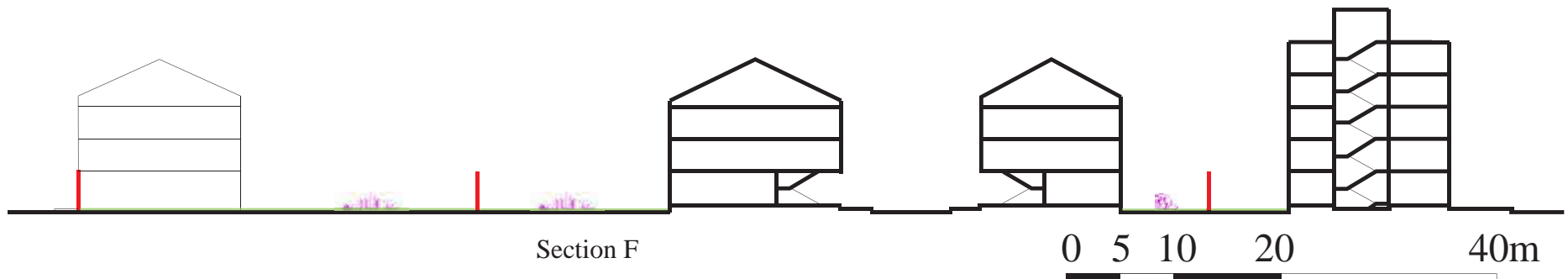
The outdoor space is sharply divided into pure public space and private space.



The shopping street is dominated by cars and not friendly to elderly people.



Residents like gardening but there are only small balconies for them.



Judging the quality of the public space there according to the life style of the target group, there is a lacking of great shortage of gardening place near the houses, especially for the upper floor houses. The houses on the upper floor always have very small or no balconies. Also, the out-door space is sharply divided into private and public space by walls and doors. The third problem is that the residents there are willing to communicate to each other but there is no semi-public place for them. And then because of the residents seldom go to stay or have a fun on the streets around the neighborhood, the street is always unsafe.

The shopping street always have market which is a good opportunity to provide vitality public palce. But it is dominant by car and lack of greenery.



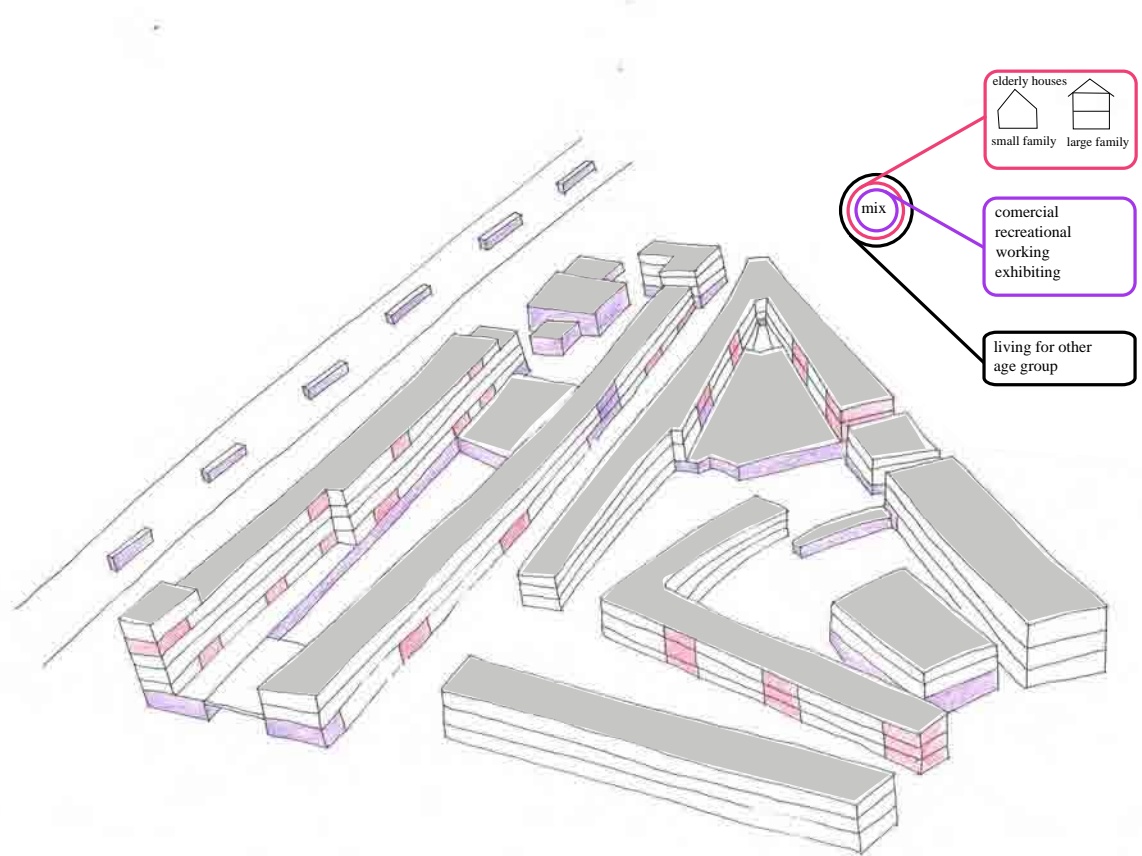
For the first type of the houses, I propose to adding elevator and corridor at the upper floor.



For the second type of the houses, I propose to change the ground floor to elderly living house.



For the third type of the houses, I propose to provide the multiple store houses to the elderly people who has a big family to live with.



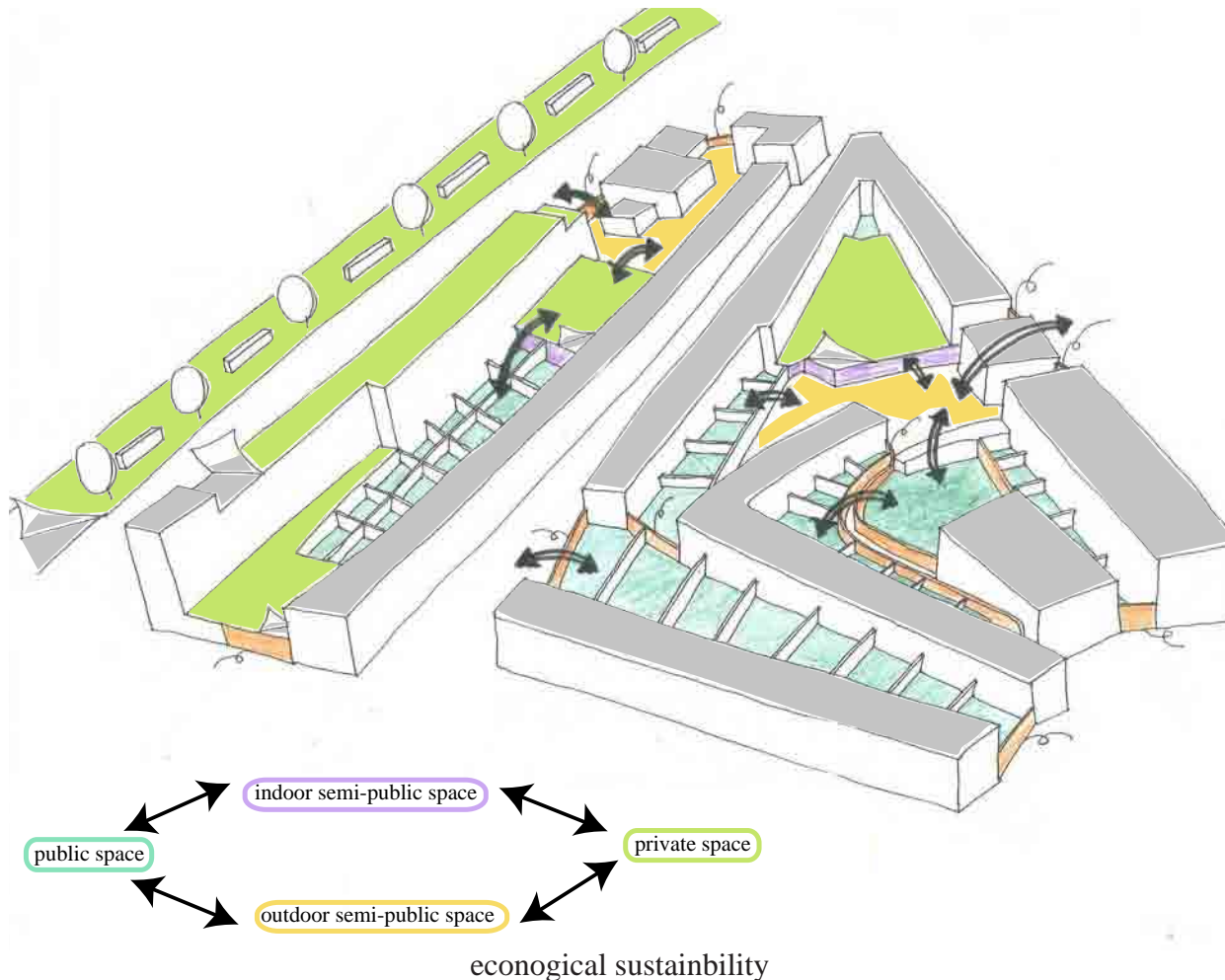
social sustainability + economic sustainability

For the housing aspect, the strategy is to provide more houses for elderly people as multi-levels and mixed with commercial, exhibiting, working and other types of living in the block.

For the mixed using, the first is to adding small shopping units in the middle of the shopping streets. The second is adding commercial, exhibiting, working functions in the ground of the buildings facing the shopping street or at the corner. And also add commercial, exhibiting, working functions in the big flat building in the blocks.

For the elderly houses, we have different interventions for different typology of houses to provide more houses for elderly people in two types of families. Some houses can be suitable for smaller family which is combined by single or two elderly people. And some other houses can be suitable for bigger family which is combined by the elderly people and their children or grand children.

Strategy- Public Space



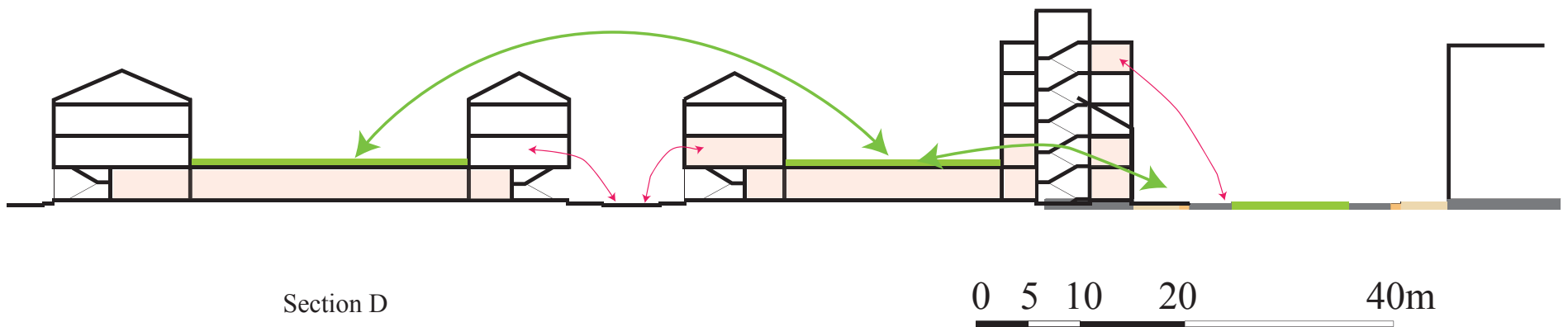
The strategy of the public space is to providing a system of multi-level of out-door and indoor semi-public place. The semi-public is a bridge between houses and public space and also a node of the different functions in the block.

For the multi-level public space, we intend to adding green roof and roof gardens on the building.

For the outdoor semi-public space, we intend to join several private garden into courtyard gardens and open it to the street as semi-public place in the blocks.

For the indoor semi-public space, we intend to adding semi-public space combined with commercial, exhibiting and working places in the big flat buildings.

For the shopping street, we also suggest to adding pedestrian and greenery combined with the comercial and recreational used units.



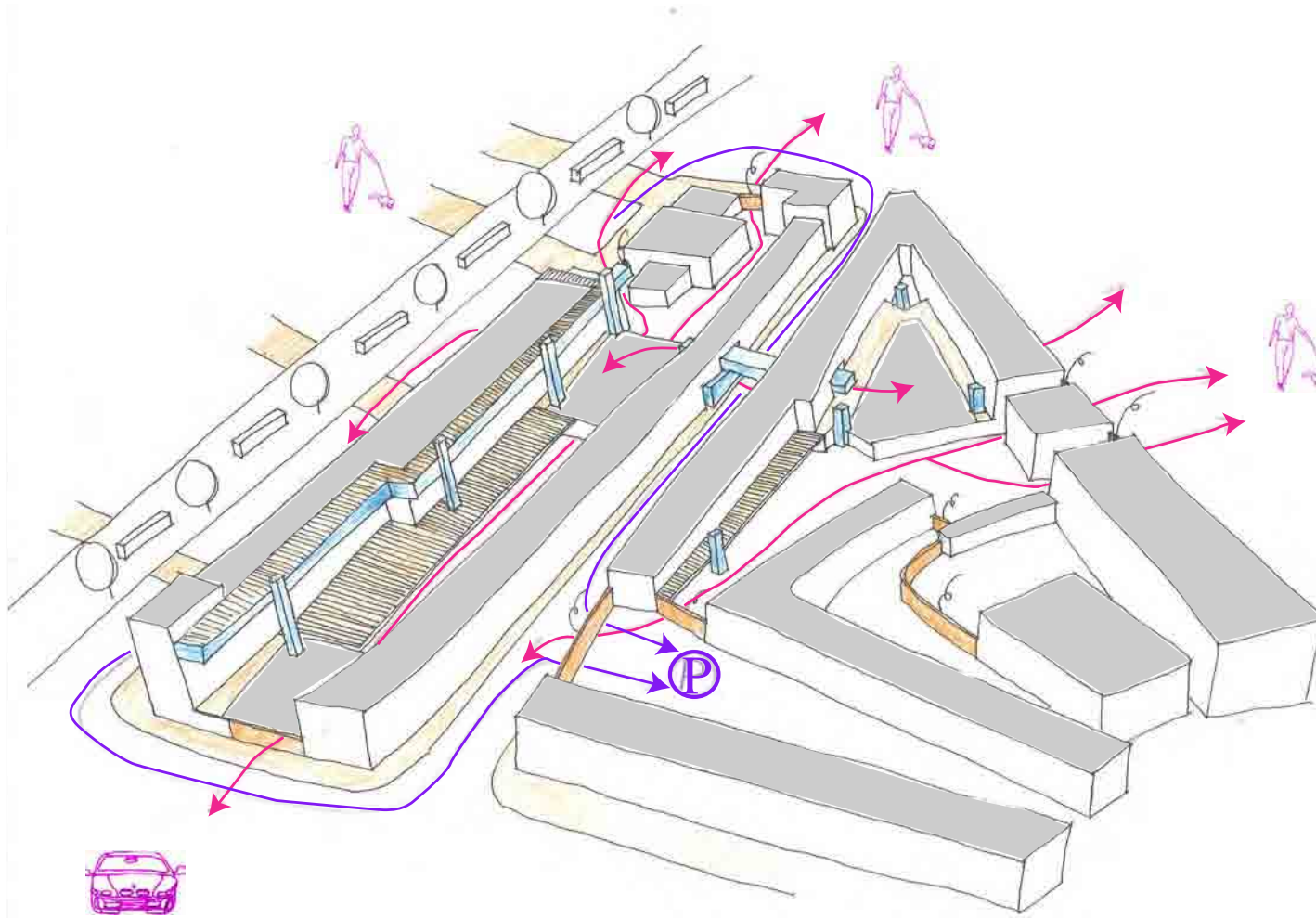
There are also problems of the mobility for the target group in these two blocks.

For the houses, the upper floor houses are hard to reach for the elderly people. And also the upper floor houses are lacking connection to the public and semi-public place at the ground floor.

For the public space, the upper floor semi-public places are lack of connection to ground floor semi-public and public places. And also the upper floor semi-public places are lack of connection to each other.

For the street, the main shopping street is dominant by cars. There are no bicycle routes in that street. And also the pedestrians are not friendly to elderly people. Further more, that is unsafe to cross the shopping street because of the heavy motor traffic.

Strategy- Mobility

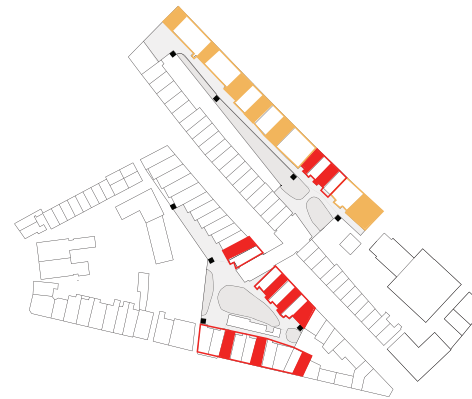


The strategy of mobility is provide a elderly friendly walking system to connect the multi-level housing and semipublic place, the public space and the street.

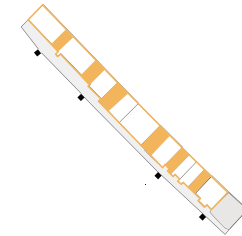
The interventions I proposed to do are including adding elevators, adding upper floor corridors, remove the car parking place beside the shopping street, adding elderly friendly pedestrians, extending the pedestrians in to the semi-public place in the blocks and improve the safety of the crossing on the shopping street.



ground floor level

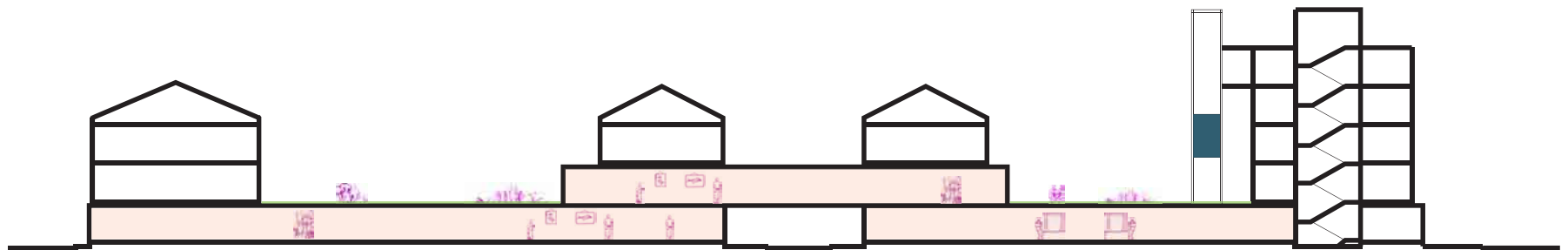


level 2



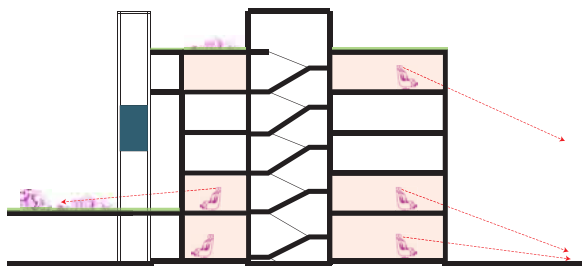
level 3

- public use: shops / supermarket / workshops / museums / coffee / restaurants
- freely choose for elderly living (type1)
- freely choose for elderly living (type2)

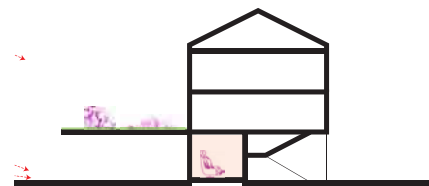


Section G

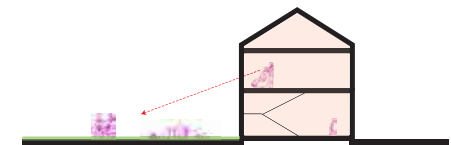
0 5 10 20



Section A

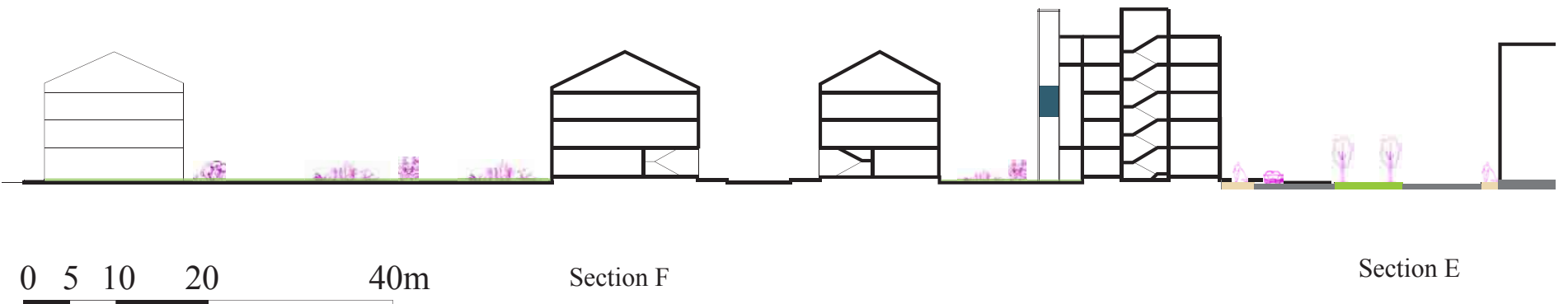


Section B



Section C

Design - Public Space



small courtyard



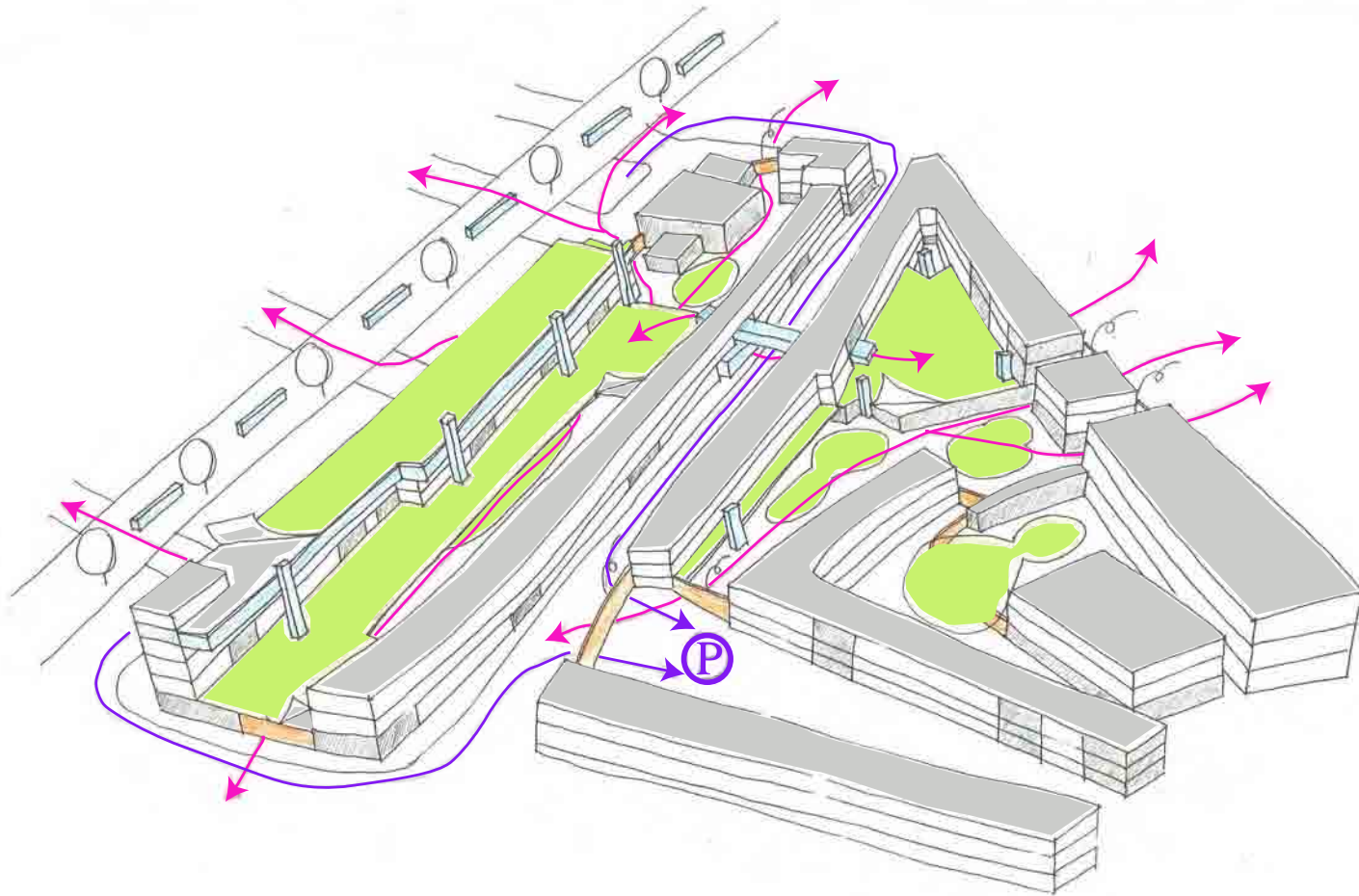
roof garden



outdoor semi-public space



indoor semi-public space



Conclusion of the interventions

Combine all the interventions on the housing, public space and mobility aspect,,this picture shows what interventions we will do in this site.

Perspective



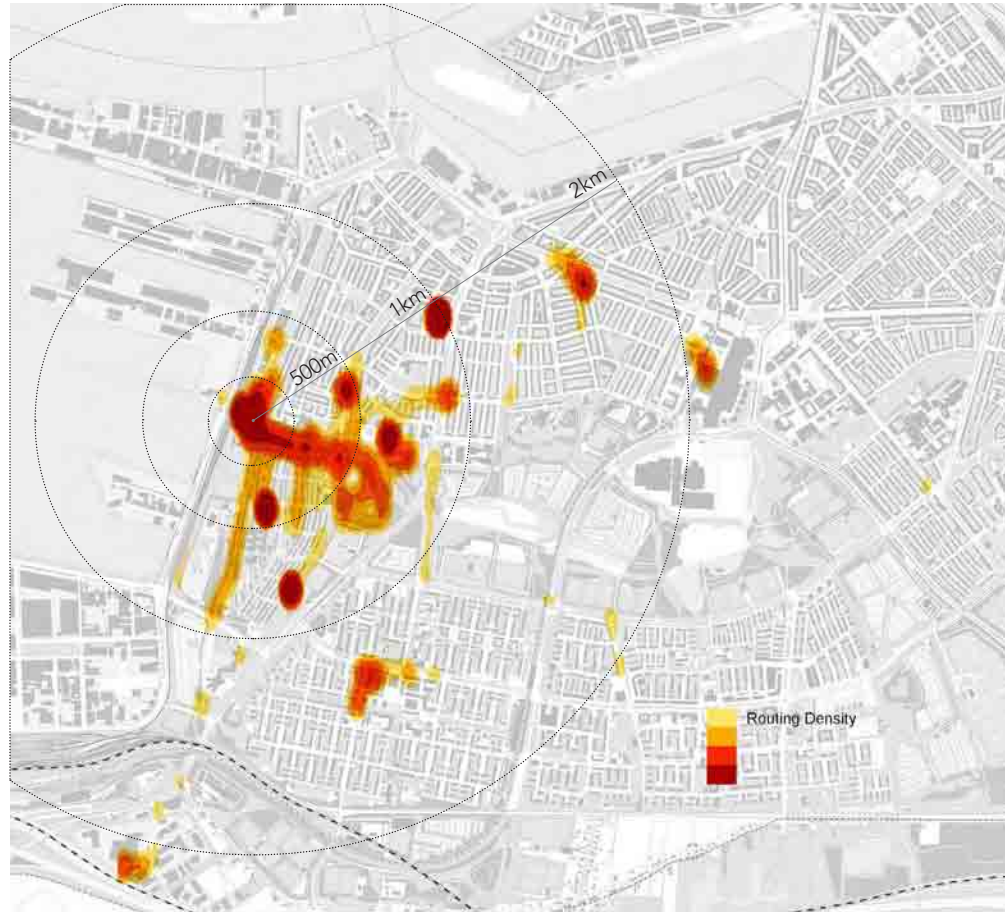
perspective

After all the interventions on the housing, public space and mobility aspect, these two blocks will become a multi-level mixed used and sustainable elderly living units.



In our group design work and individual project for the elderly people, there is a very important aspect of what we intend to do is how to make the elderly people go out of their own houses to make good use of the public space in Oud-chalois. We have made a fine integration transformation plan of this site to make good use of the existing public space and service facilities. Before the design, we have made several researches. Some of these researches are based on assumptions. After the GPS research has been done. I made a compare of the research results and the assumptions we have done to find what is fit and what is not true.

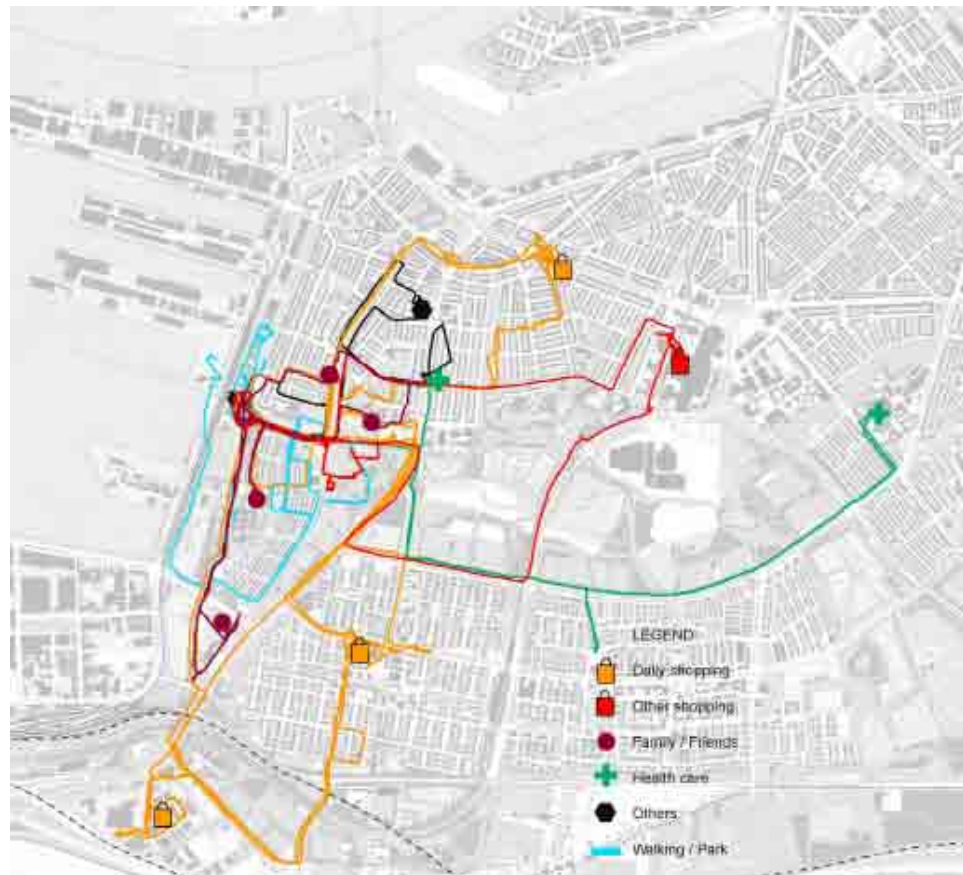
Density and distance



(1)Density and distance

For the density and distance aspect, in the research, we found that the highest density of the mobility is within 700 meters from their houses. For our site, the distance between north and south is about 1 kilo meters. So we made them subdivided into two parts. One is suitable for more independent living and the other is suitable for more dependent living. The two parts are working as a synergy to each other. That was fitful for the results of the GPS research.

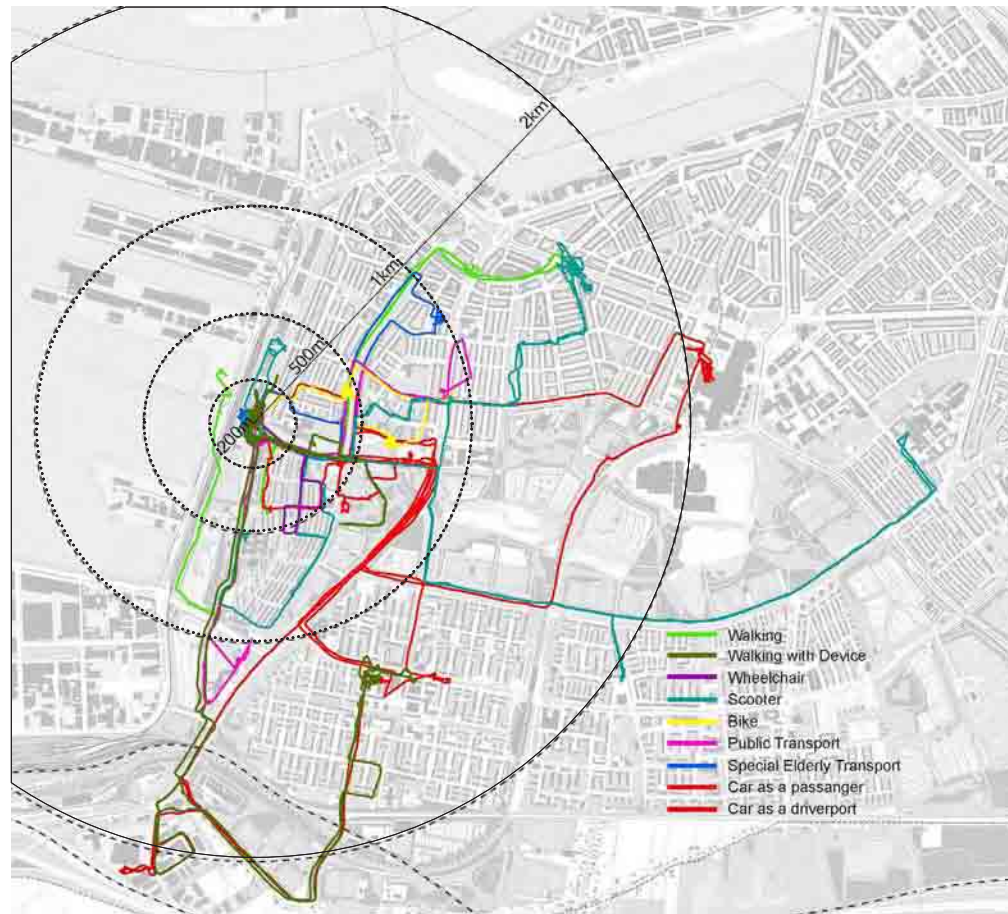
Also, there is another conclusion for this aspect is that the elderly people travel more distance for shopping and healthcare. That means shopping and health care service are important orientation of the mobility of the elderly people. I our design, we located the service core and sub-cores combined with the public green to make more efficient use of the public green, That will be a useful intervention according to the results of GPS research.



(2) Destinations

For this aspect, we have conclusions that most of their destinations are out of Oud-chalois. They choose to go shopping in the other neighborhood instead of the nearest one. In my project, I make use of the supper market and nearest shopping street as an important opportunity for orientated the mobility of the elderly people. So, if I want to make these effective, more research should be taken on why they don't use the nearest shopping area so often.

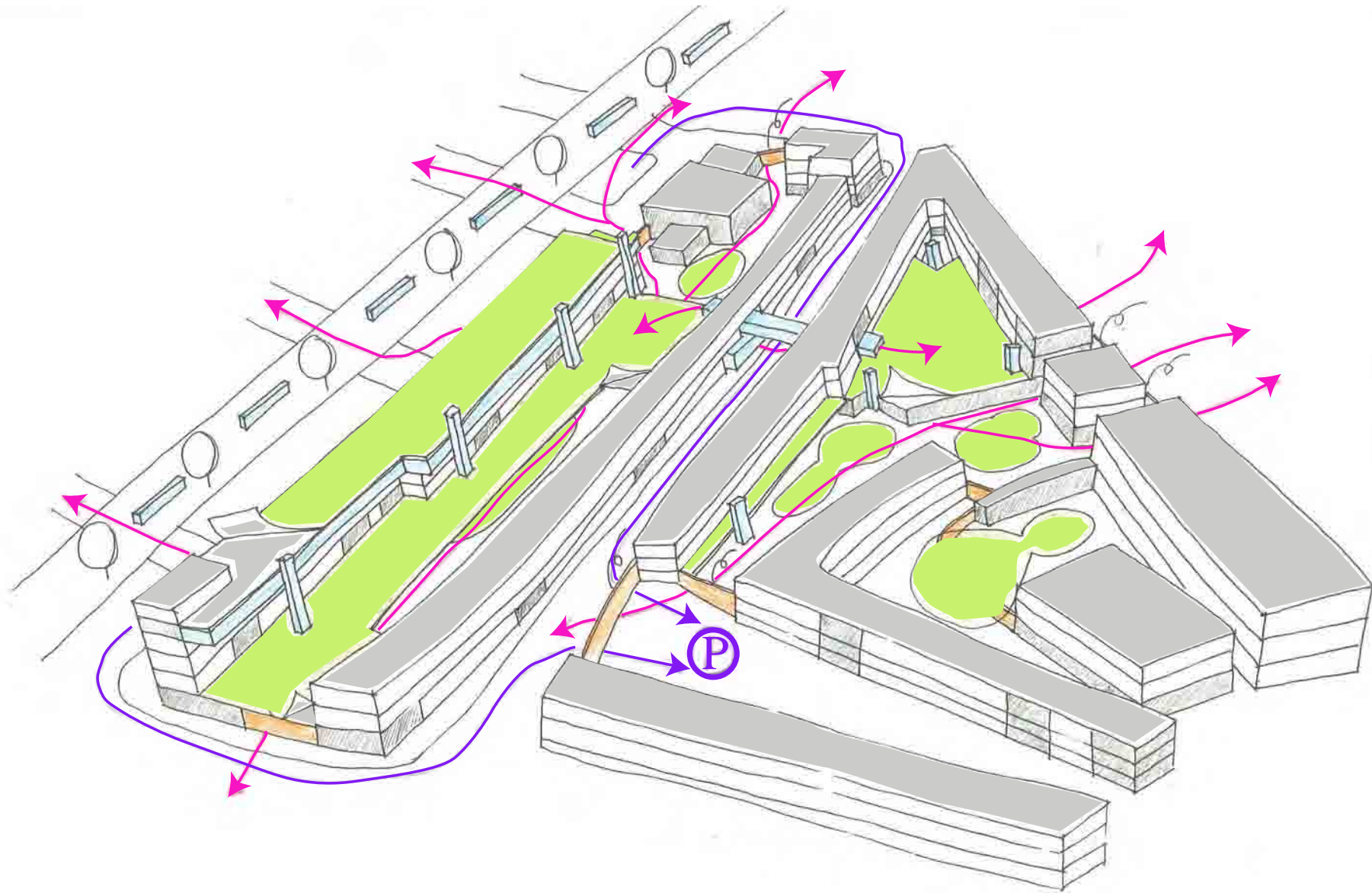
Another conclusion is that the social network is an important reason for traveling. That means we should make good use of the social network to build a strong circuit in Oud-chalois. In my design, I provide a lot of semipublic place in the neighborhood and make close connection to the public place. That will be sufficient space for the elderly people to build their social network.



(3) Mobility

For this aspect, the GPS research gives the conclusion that most elderly people are willing to travel by foot. But bike is not often used, they usually use scooter instead. I have considered the bike as a very important transportation tool, but not the scooter.

Another conclusion is that the tram stop is too far to walk to, and the residents there use neighborhood bus as a supplement to normal public transport but not very often. In our research, we also found out that problem, and make some solutions such as change one tram stop to make it easier for reach. We also provide several shelter bus to make the elder people easier to get to the tram/bus stop.



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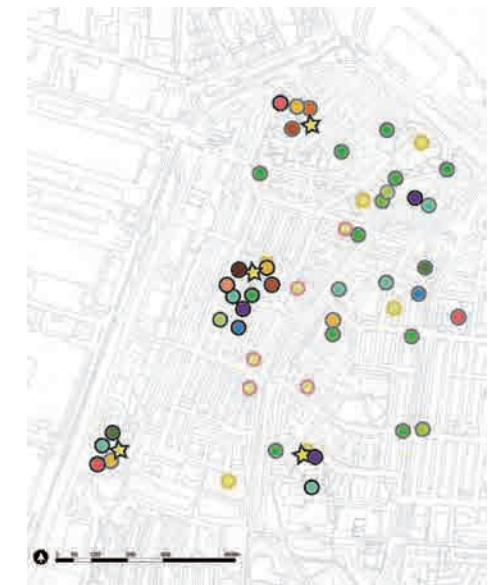
Master Plan



master plan

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service distribution

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housing distribution

Mater Plan and strategy:

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Life style of the target group

Housing:

ideal housing type:

historict building in the city centre + cozy house in a cluster

part of a small community

family:



single / with partner



with children / with children + with grand children

health condition:



stable health condition

Activity:

will for sports:



short biking



short walking



gardening



watching / reading

communication:



willing to communication

Mobility:

mobility:

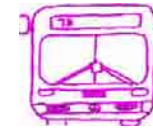
traval midium distance



by foot



by bike



by tram / bus / shulter bus



by car



Project Location



Historic Blocks

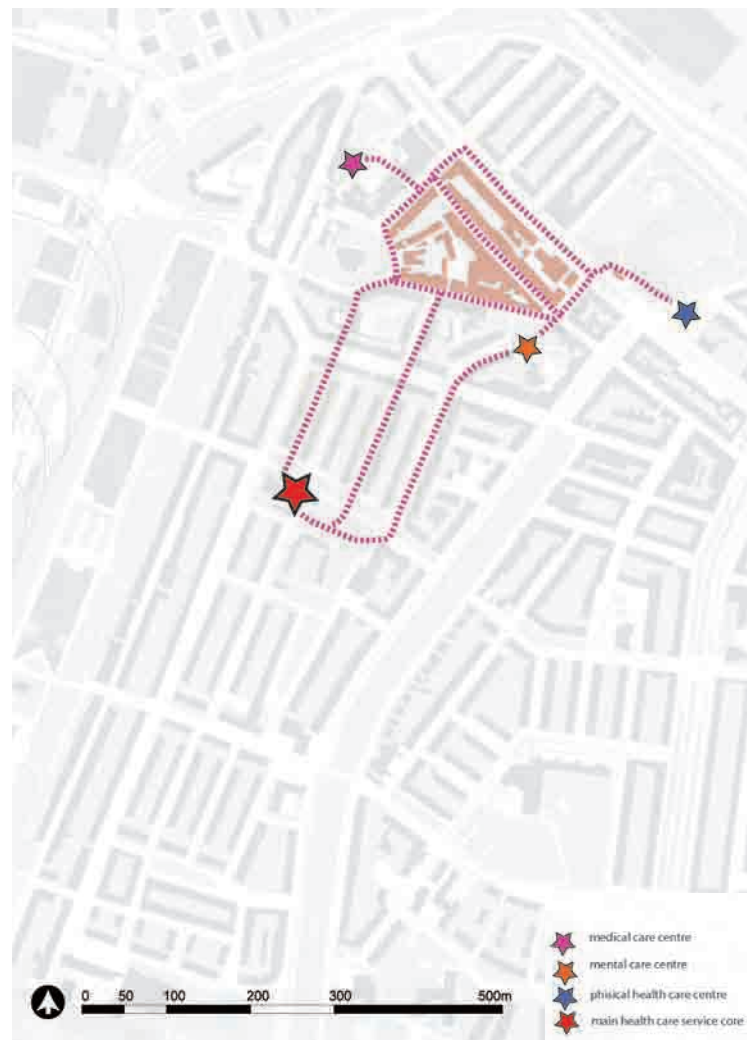
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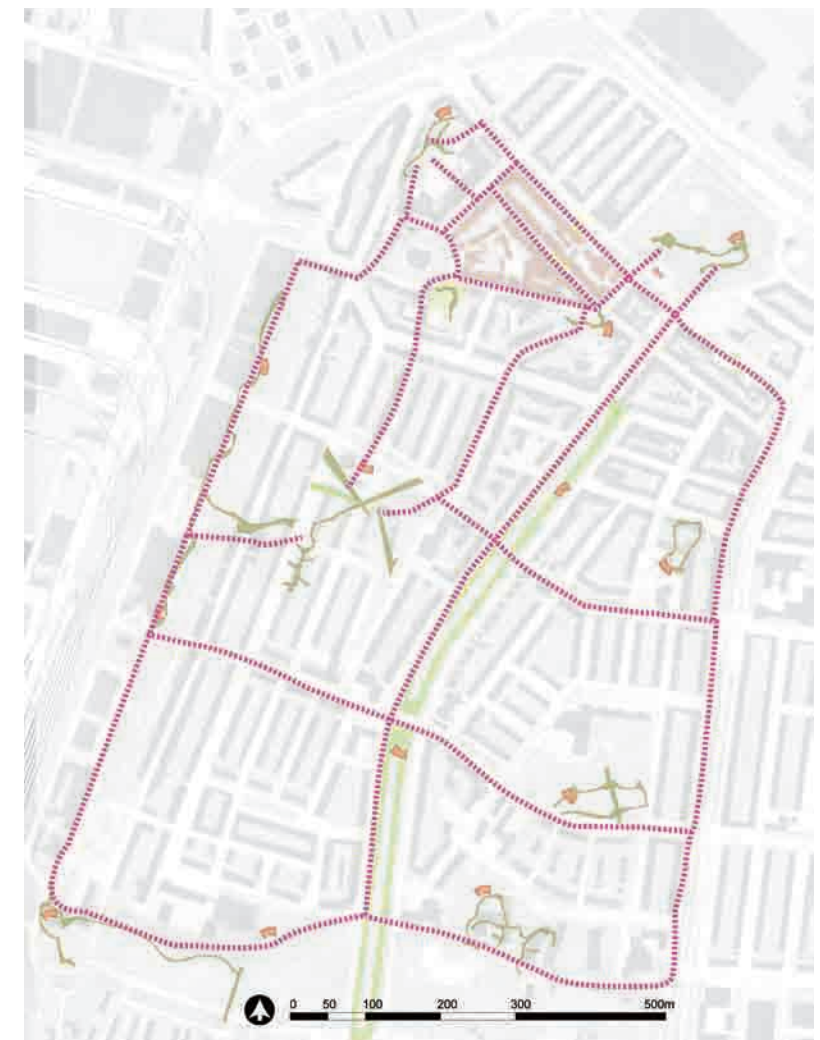
Context - Routing



Routes for health care



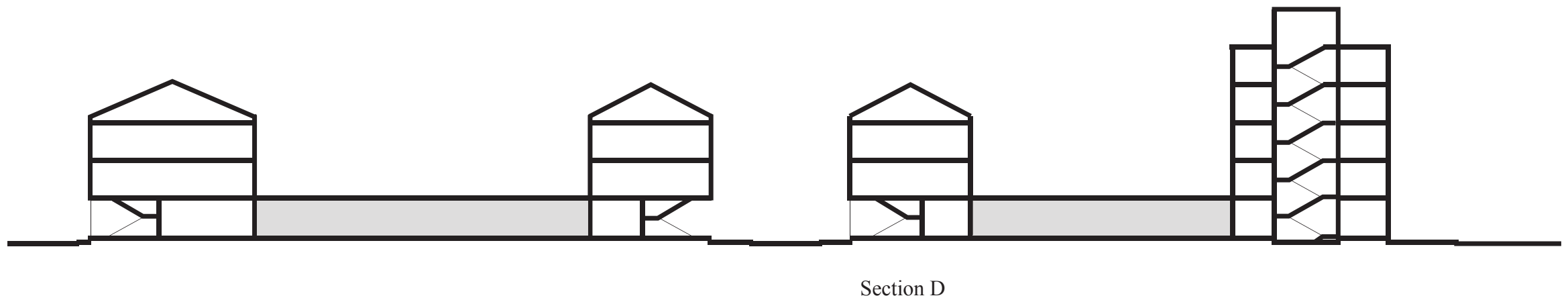
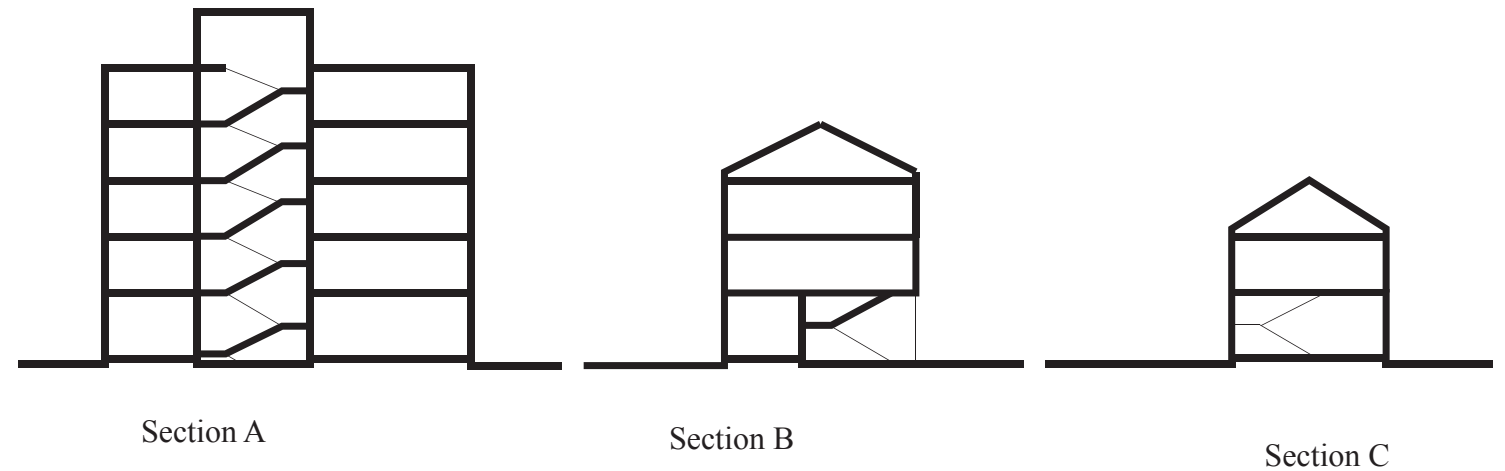
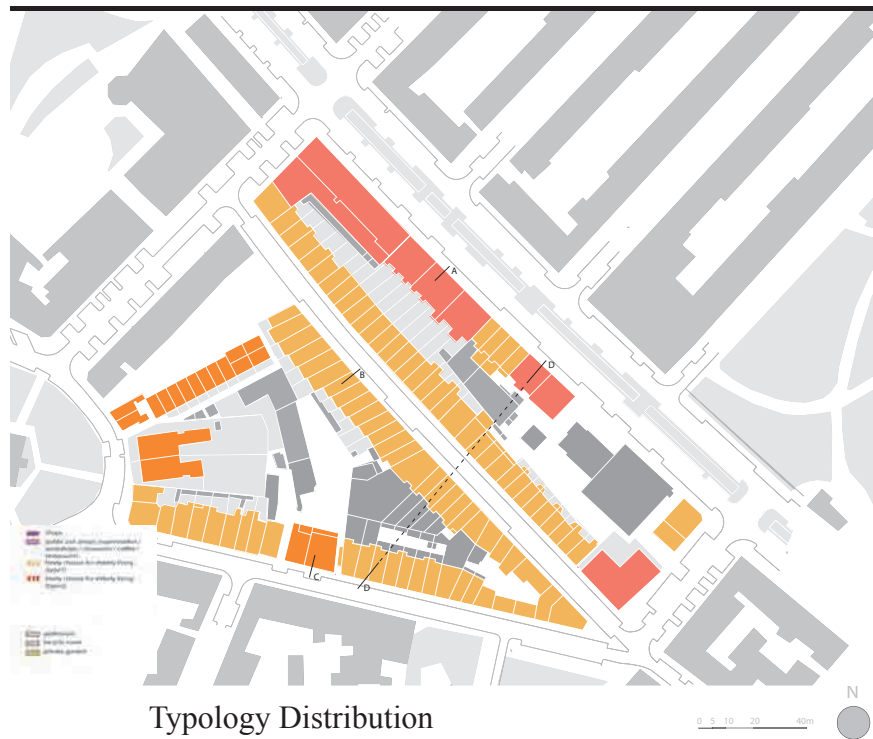
Routes for daily shopping



Routes for recreation

According to the whole strategy, I made an assumption of the circuits of the target group. The routes are including going for health care, going for daily shopping, and going for recreation or other activities.

Problem Statement - Housing Typology



In the two blocks, there are three types of buildings. The first type is row house which is more than three floors and there are several houses share one stair room in a building unit. The second one is the building which has four houses in it and each floor has two houses. Also, the houses in the ground floor have their own entrance directly facing the street. The third type is the typical town house which is only one house in the two or three floor building. According to the different typology of the houses I will give three different kinds of interventions to provide more houses for the target group.

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Problem Statement - Public Space



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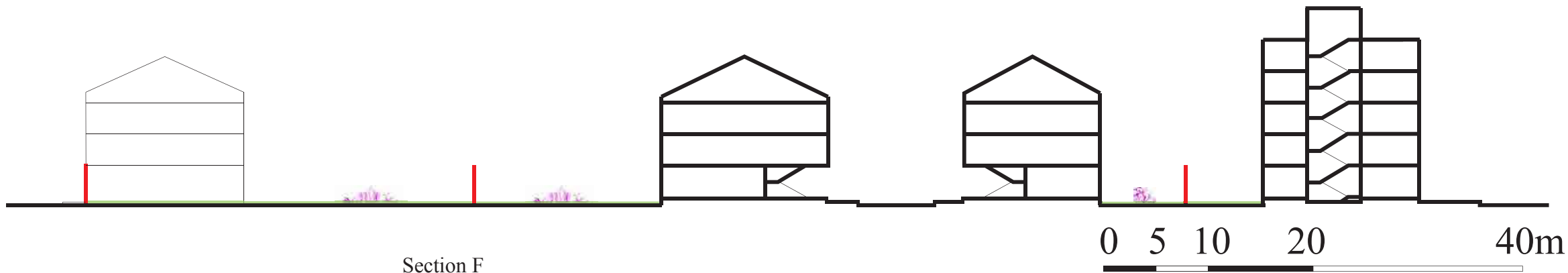
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Strategy - Housing Typology



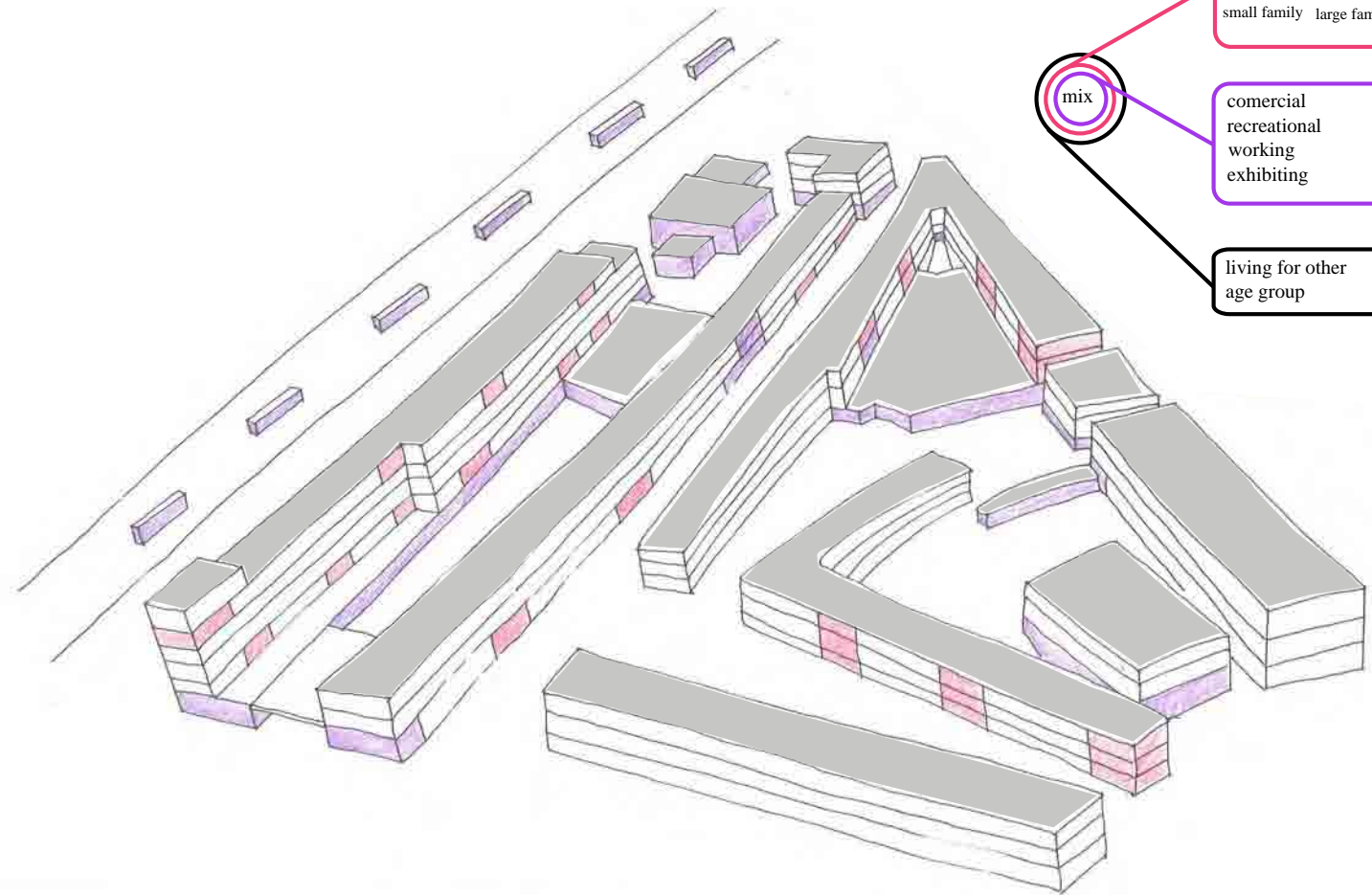
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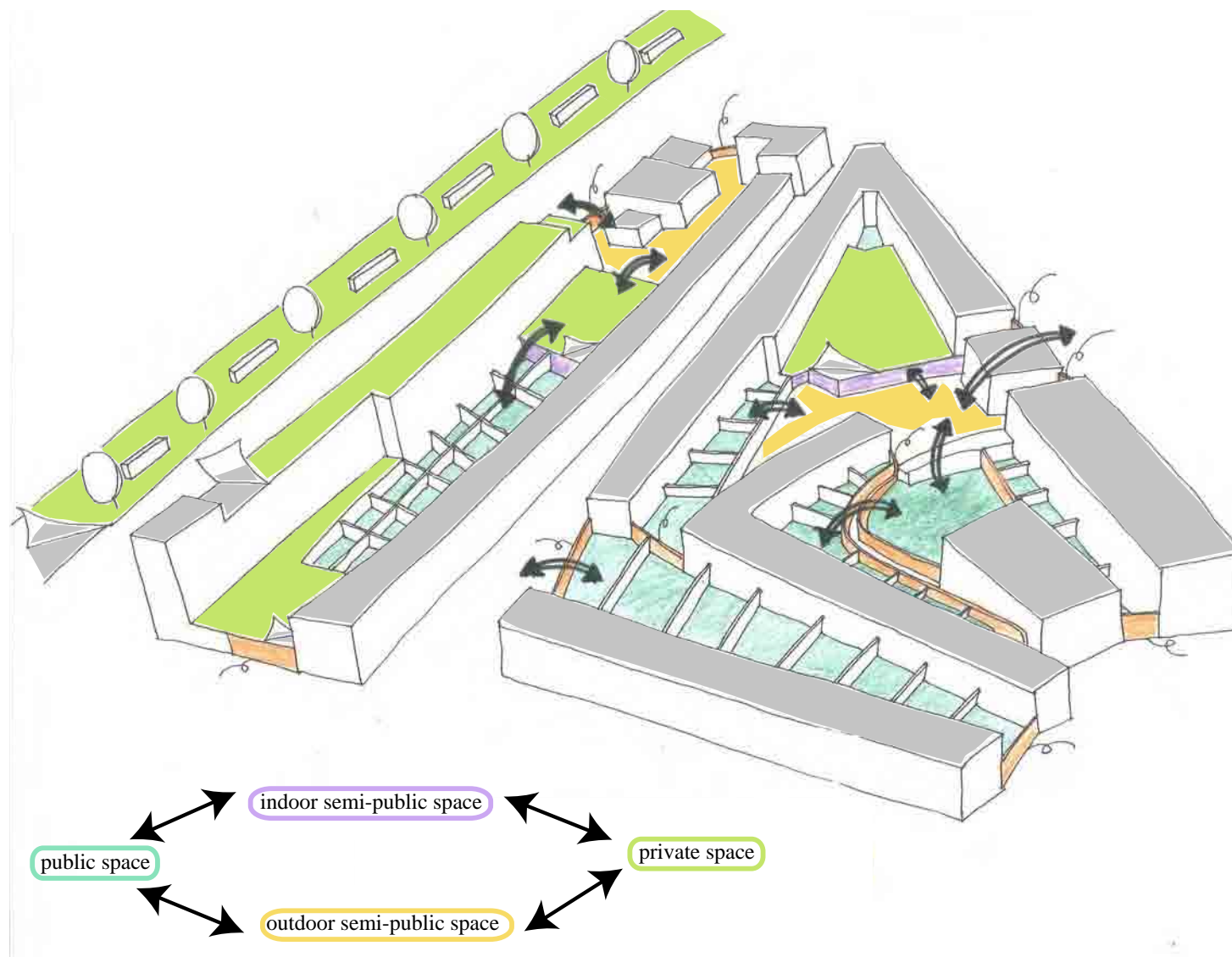
social sustainability + economic sustainability

For the housing aspect, the strategy is to provide more houses for elderly people as multi-levels and mixed with commercial, exhibiting, working and other types of living in the block.

For the mixed using, the first is to adding small shopping units in the middle of the shopping streets. The second is adding commercial, exhibiting, working functions in the ground of the buildings facing the shopping street or at the corner. And also add commercial, exhibiting, working functions in the big flat building in the blocks.

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Strategy- Public Space



econogical sustainability

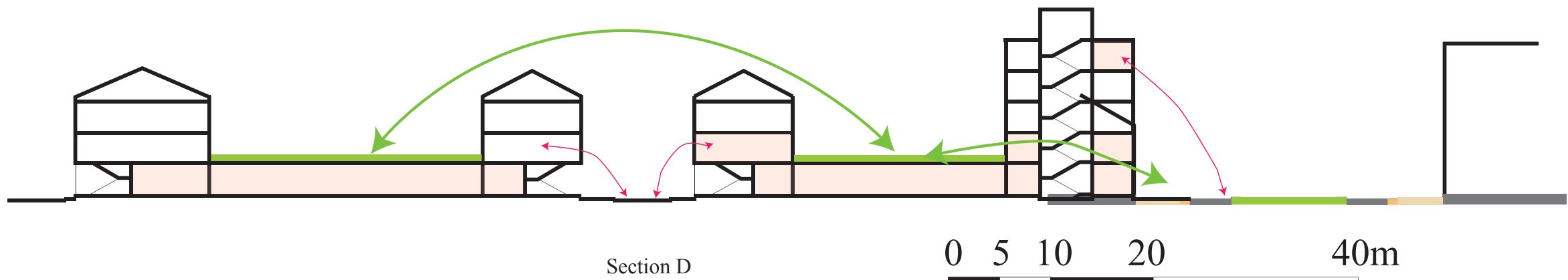
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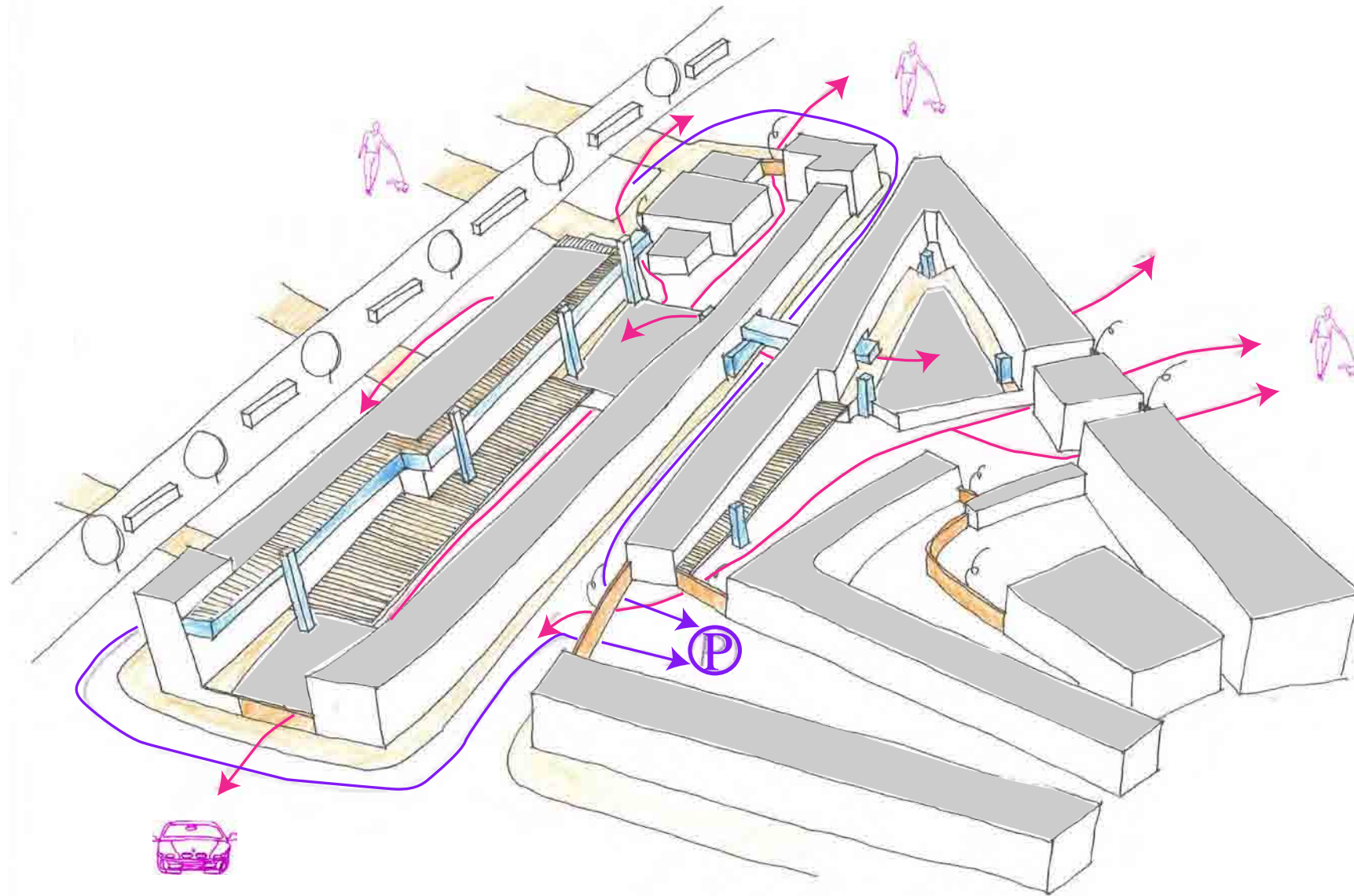


There are also problems of the mobility for the target group in these two blocks.

For the houses, the upper floor houses are hard to reach for the elderly people. And also the upper floor houses are lacking connection to the public and semi-public place at the ground floor.

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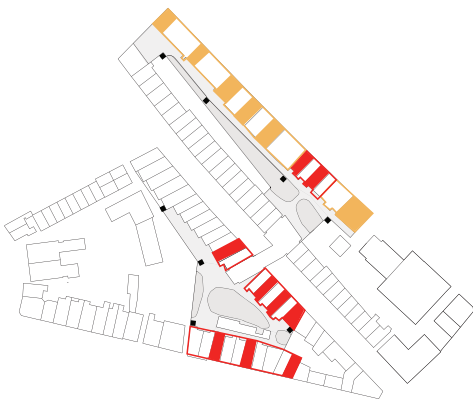


The strategy of mobility is provide a elderly friendly walking system to connect the multi-level housing and semipublic place, the public space and the street.

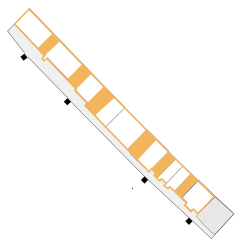
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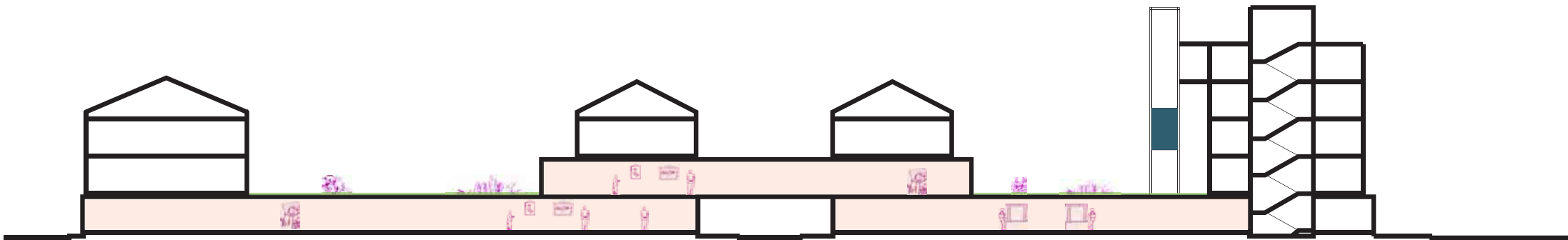
ground floor level



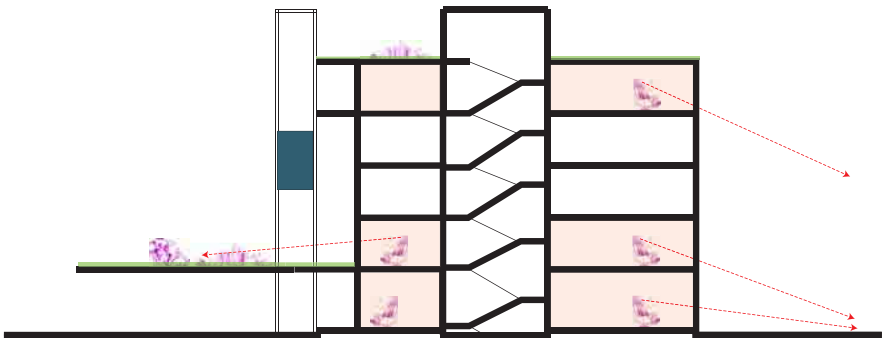
level 2



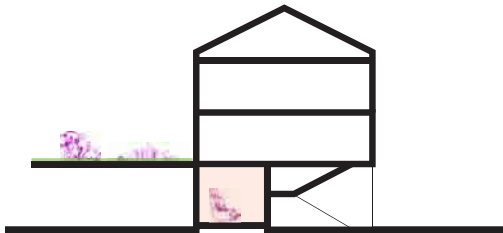
level 3



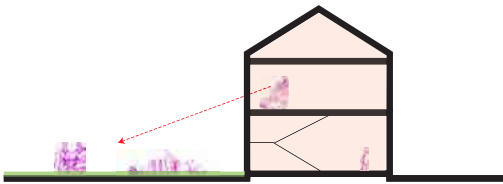
Section G



Section A

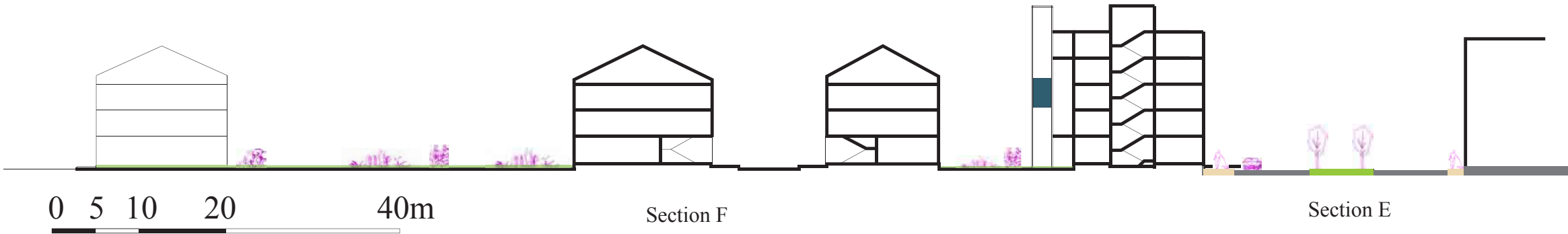


Section B



Section C

Design - Public Space



small courtyard



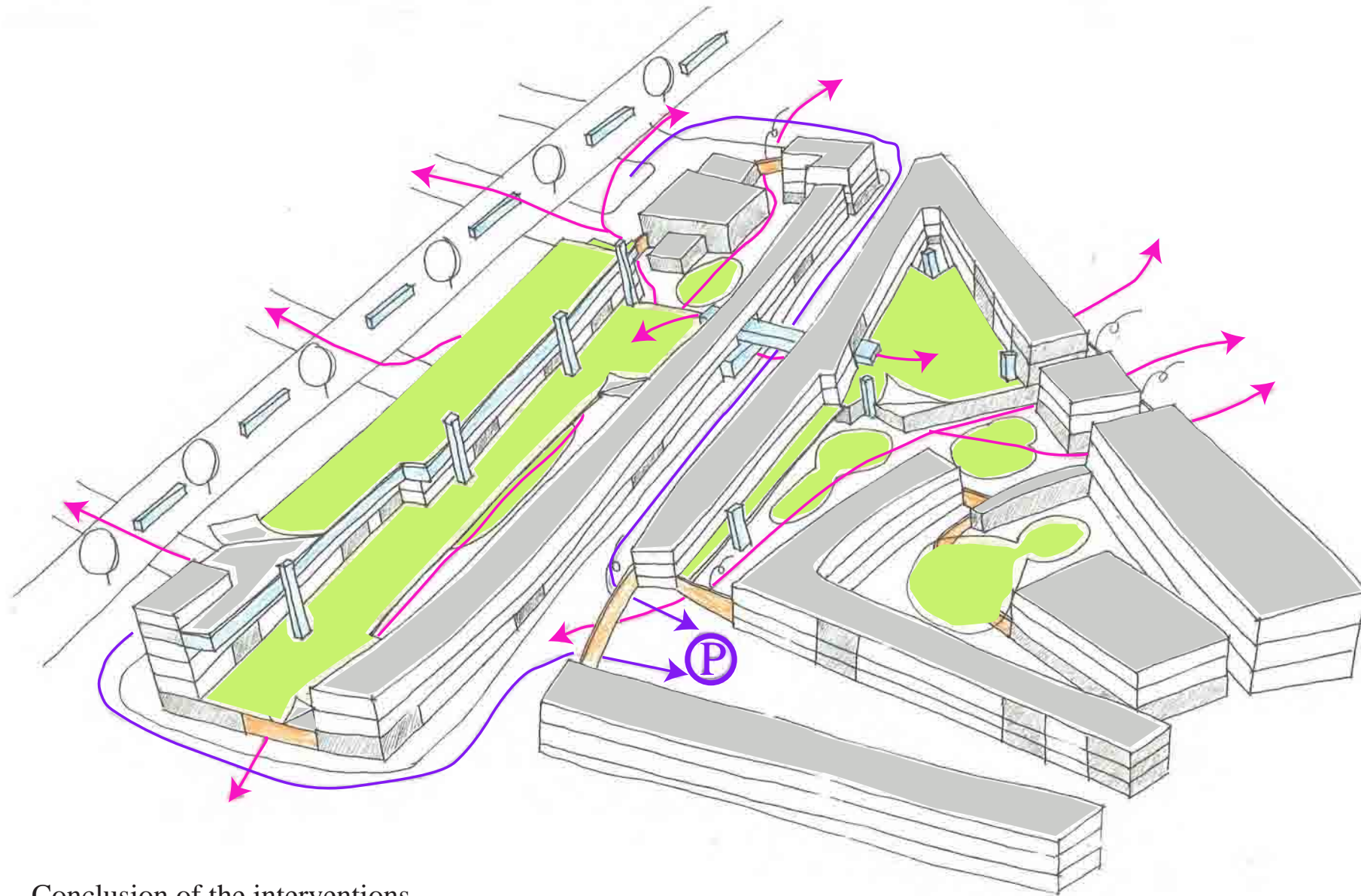
roof garden



outdoor semi-public space



indoor semi-public space



Conclusion of the interventions

Combine all the interventions on the housing, public space and mobility aspect,,this picture shows what interventions we will do in this site.

Perspective



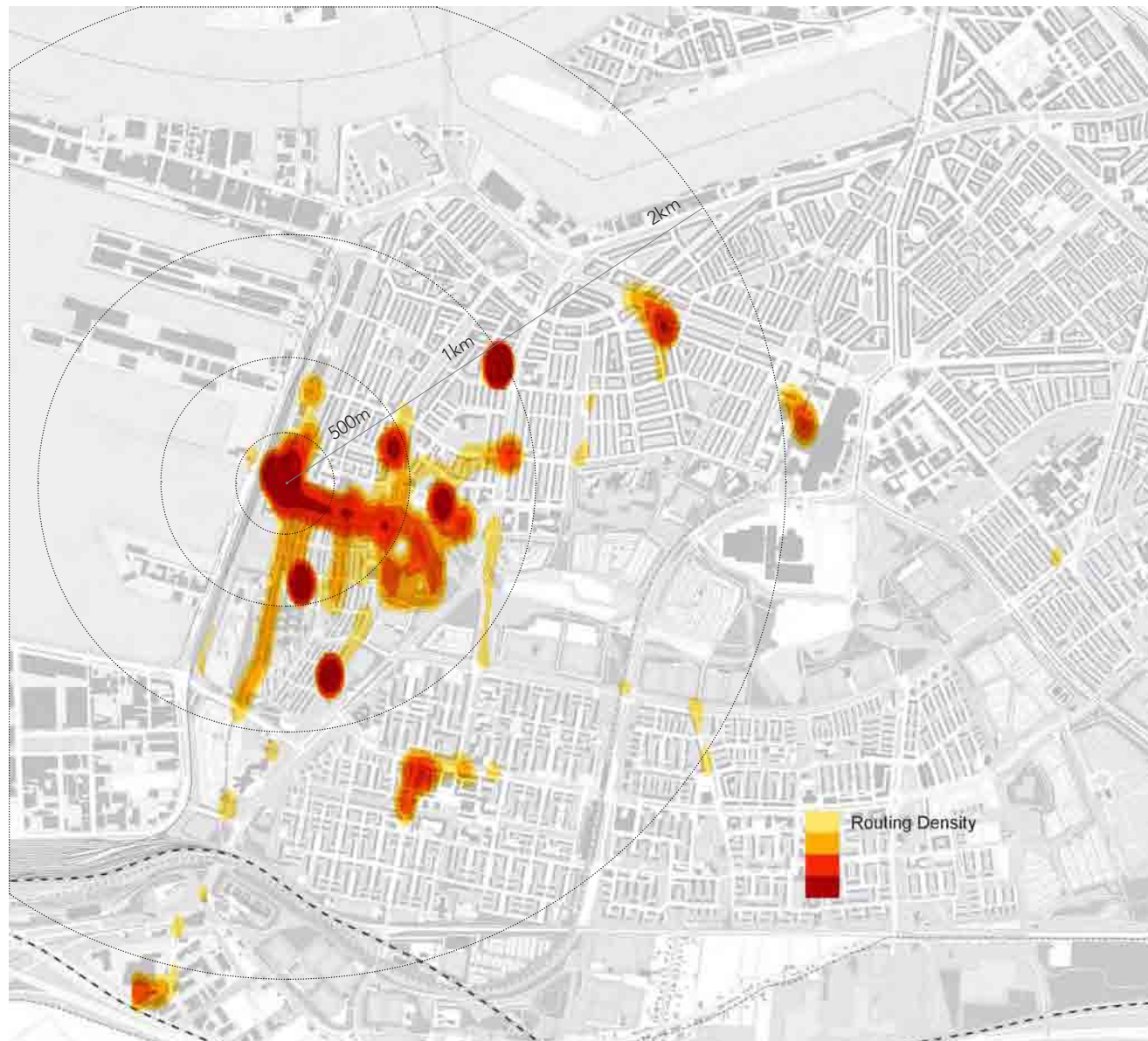
perspective

After all the interventions on the housing, public space and mobility aspect, these two blocks will become a multi-level mixed used and sustainable elderly living units.



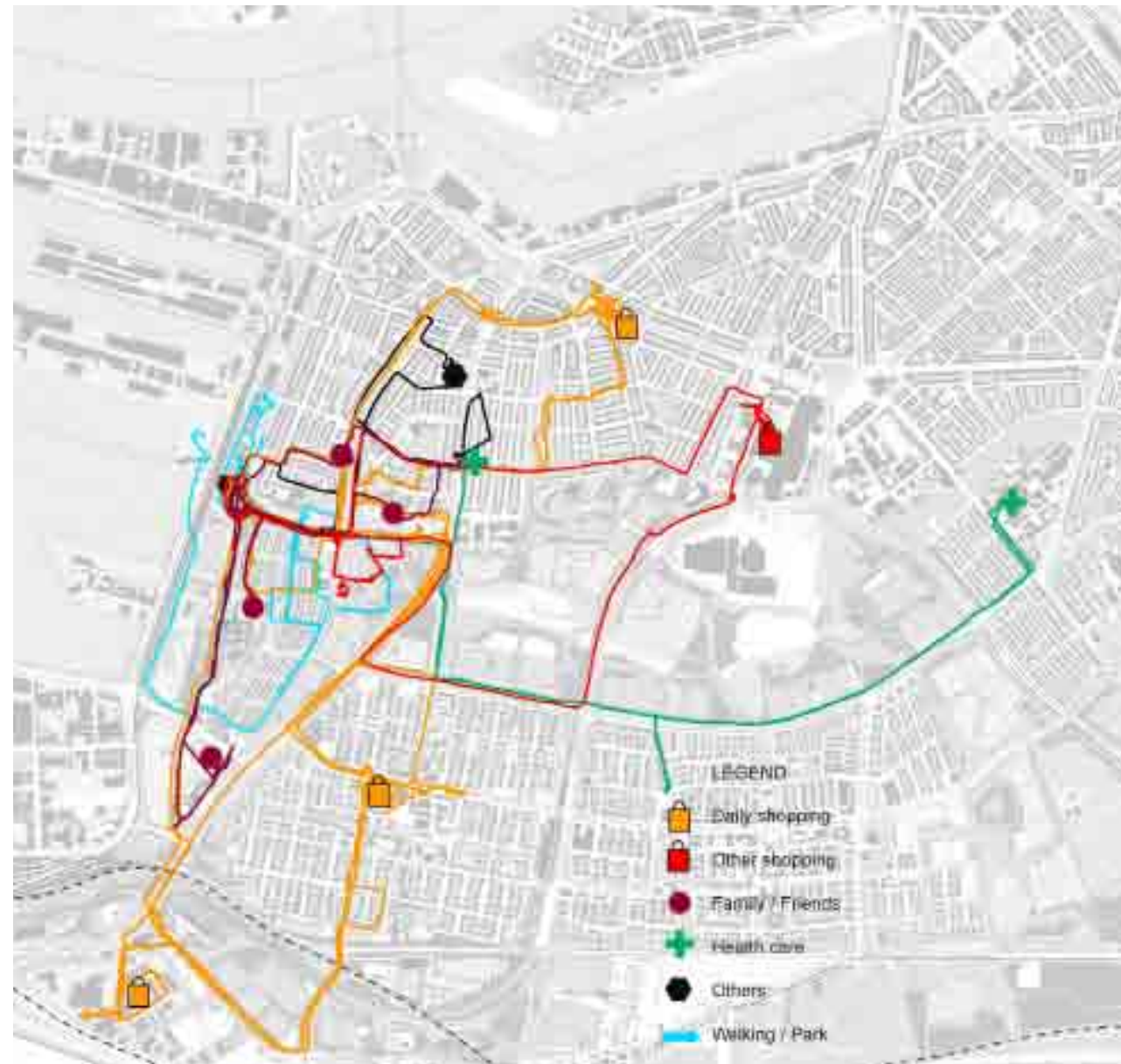
In our group design work and individual project for the elderly people, there is a very important aspect of what we intend to do is how to make the elderly people go out of their own houses to make good use of the public space in Oud-chalois. We have made a fine integration transformation plan of this site to make good use of the existing public space and service facilities. Before the design, we have made several researches. Some of these researches are based on assumptions. After the GPS research has been done. I made a compare of the research results and the assumptions we have done to find what is fit and what is not true.

Density and distance



(1)Density and distance

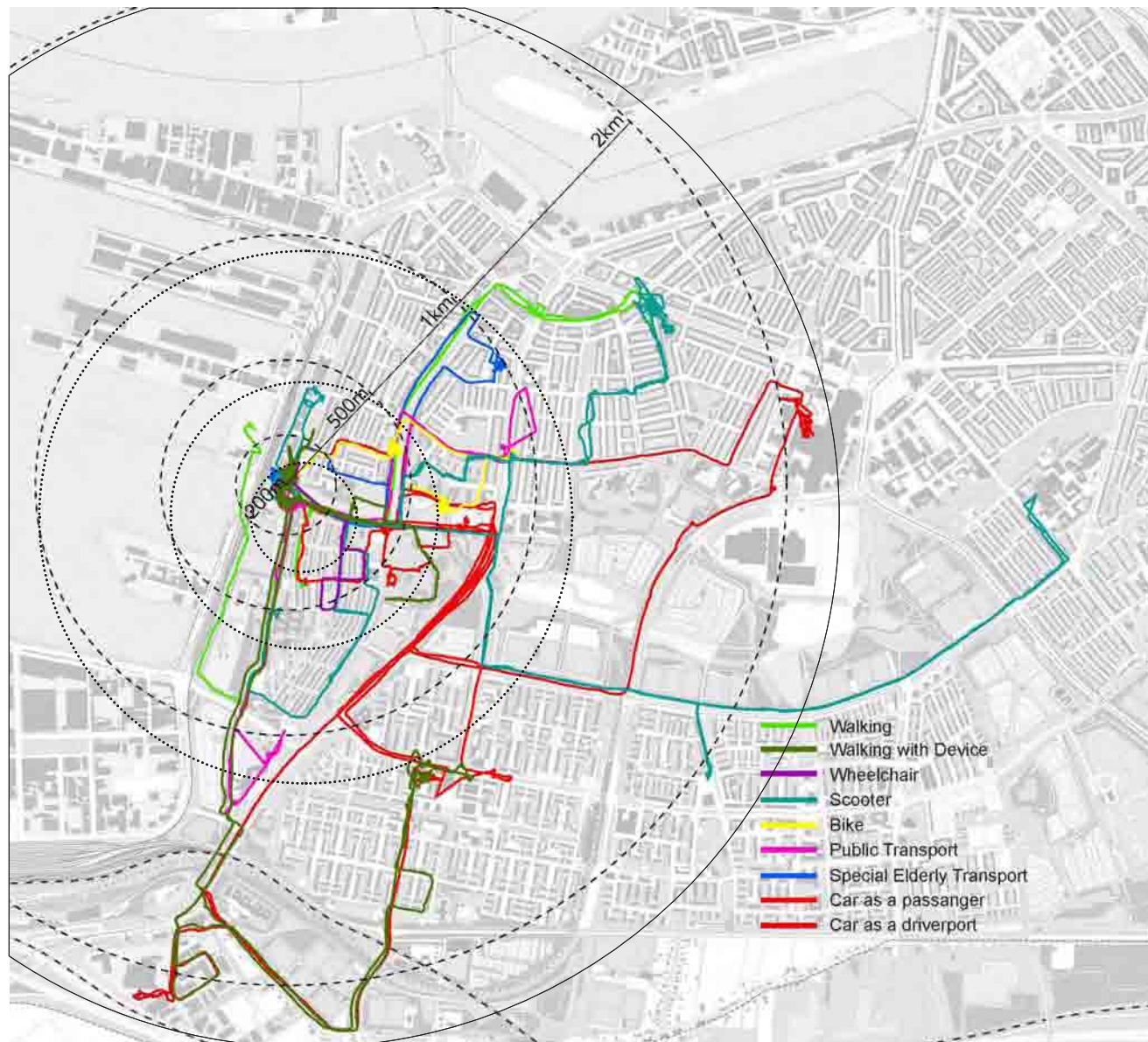
For the density and distance aspect, in the research, we found that the highest density of the mobility is within 700 meters from their houses. For our site, the distance between north and south is about 1 kilo meters. So we made them subdivided into two parts. One is suitable for more independent living and the other is suitable for more dependent living. The two parts are working as a synergy to each other. That was fitful for the results of the GPS research. Also, there is another conclusion for this aspect is that the elderly people travel more distance for shopping and healthcare. That means shopping and health care service are important orientation of the mobility of the elderly people. I our design, we located the service core and sub-cores combined with the public green to make more efficient use of the public green, That will be a useful intervention according to the results of GPS research.



(2)Destinations

For this aspect, we have conclusions that most of their destinations are out of Oud-chalois. They choose to go shopping in the other neighborhood instead of the nearest one. In my project, I make use of the supper market and nearest shopping street as an important opportunity for orientated the mobility of the elderly people. So, if I want to make these effective, more research should be taken on why they don't use the nearest shopping area so often.

Another conclusion is that the social network is an important reason for traveling. That means we should make good use of the social network to build a strong circuit in Oud-chalois. In my design, I provide a lot of semipublic place in the neighborhood and make close connection to the public place. That will be sufficient space for the elderly people to build their social network.



(3) Mobility

For this aspect, the GPS research gives the conclusion that most elderly people are willing to travel by foot. But bike is not often used, they usually use scooter instead. I have considered the bike as a very important transportation tool, but not the scooter.

Another conclusion is that the tram stop is too far to walk to, and the residents there use neighborhood bus as a supplement to normal public transport but not very often. In our research, we also found out that problem, and make some solutions such as change one tram stop to make it easier for reach. We also provide several shelter bus to make the elder people easier to get to the tram/bus stop.