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# RAMALLAH CITY REGION

INTEGRATED DEVELOPMENT  
PROJECT

**Vision and Pilot Developmental  
Projects**

Master Program;

Urban Planning and Landscape  
Architecture

**M**eran Natour

**M**isam Younis

**M**oayyad Remawi

**A**laa Natsheh

**D**ina Marbou

**M**ay Madi

**H**iba Arman

**A**ya Awani

**Supervisor:**

**Dr. Salem Thawaba**

## Introduction

Ramallah metropolitan area includes 31 communities within 230 square kilometers area (figure 01). It is considered a vital region within the West Bank. The concentration of the governmental institutions, administrative bodies, public services, commercial aspects and, hence, residential agglomeration in Ramallah city reflect the current status of this study area as a monocentric urban pattern (figure 02).

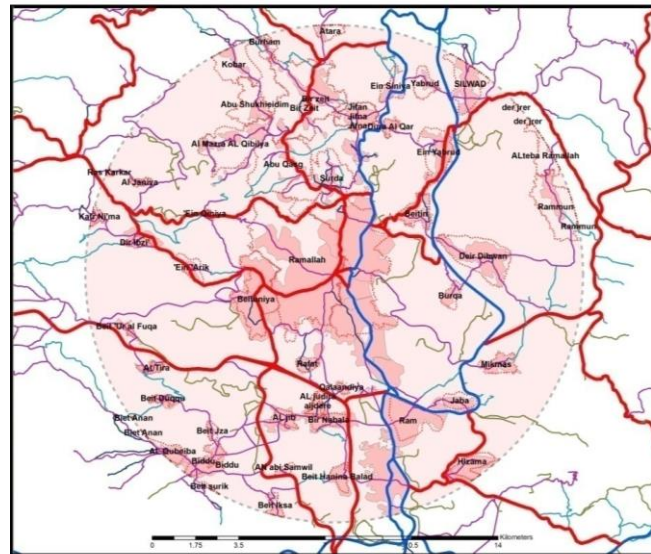


Figure 1: Ramallah metropolitan

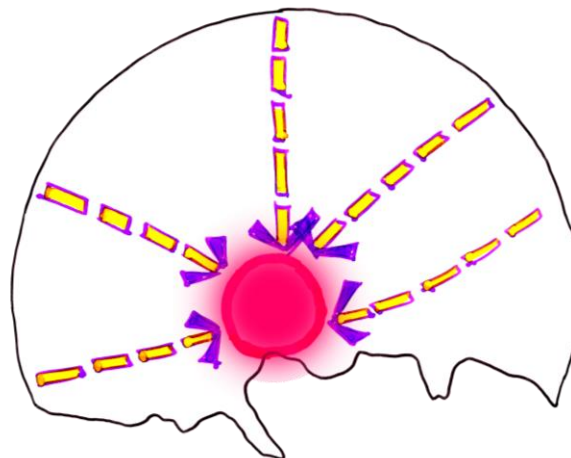


Figure 2: monocentric urban pattern

## Analysis

Traffic congestions, socio-cultural diversity, urban sprawl, un-planned inflation in residential and commercial construction activities, and modest or inadequate infrastructures are among many results of such pressure on the city within this region. By and large, planning is commonly future oriented. It draws guidelines for the community and government as well where to build and where not alike. A good plan shall be comprehensive via covering all needed components and themes within a specific context. For planning purposes, a set of assumptions had been considered for metropolitan Ramallah; (1) no political obstacles; (2) no financial constrains; (3) continuation of migration; (4) continuation of population growth (figure 03).



Figure 3: assumptions

Basically, two types of data had been identified and, consequently, gathered; (1) hard data that is related to physical characteristics such as location, area, and topography; and (2) soft data is mainly relevant to value or judgment such as site views, noise effect, human interests and activities. These data form what so called the “contextual analysis”. Later for more understanding of these data, a “consequence triangle had been formed; users, utilities, and context. (See figure 04).

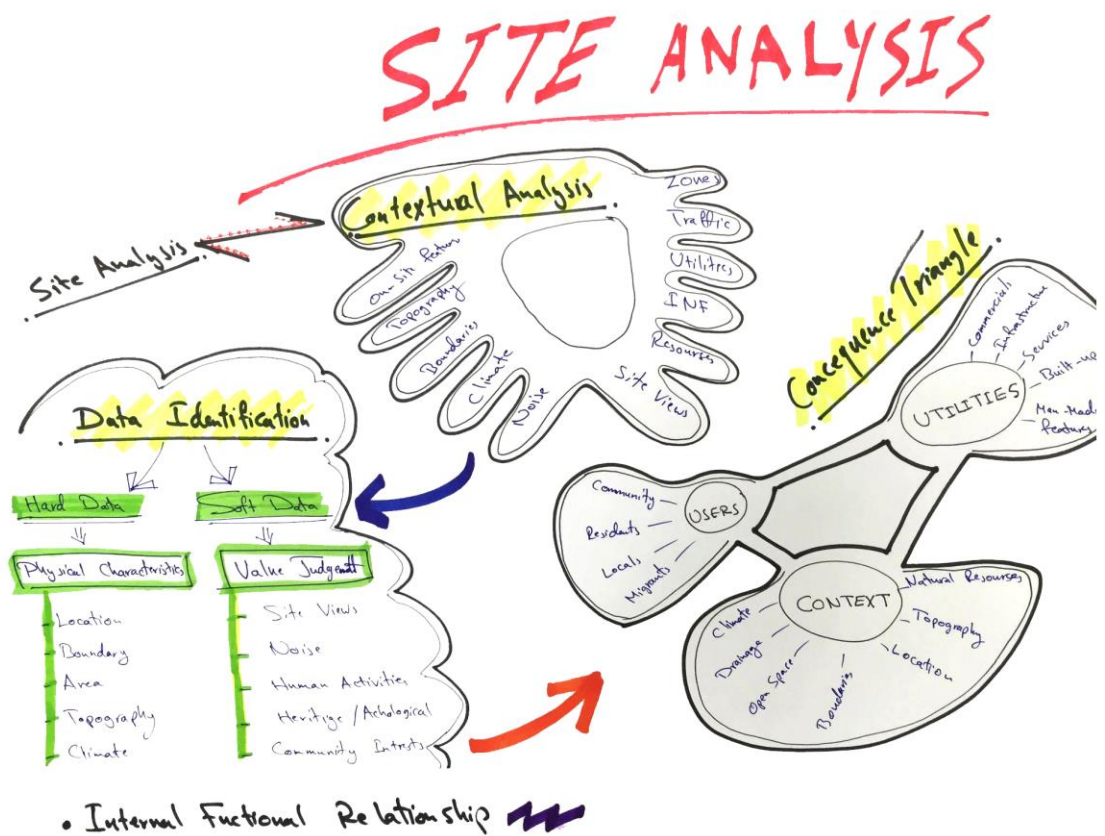


Figure 4: contextual analysis

Understanding the characteristics of both internal and external features of the site and its context, analysis the internal functional relationship, considering the effect of external functional relationship, and to be able to grasp the interaction between them helps to allocate spaces and functions in its right and best fit way (figure 05).

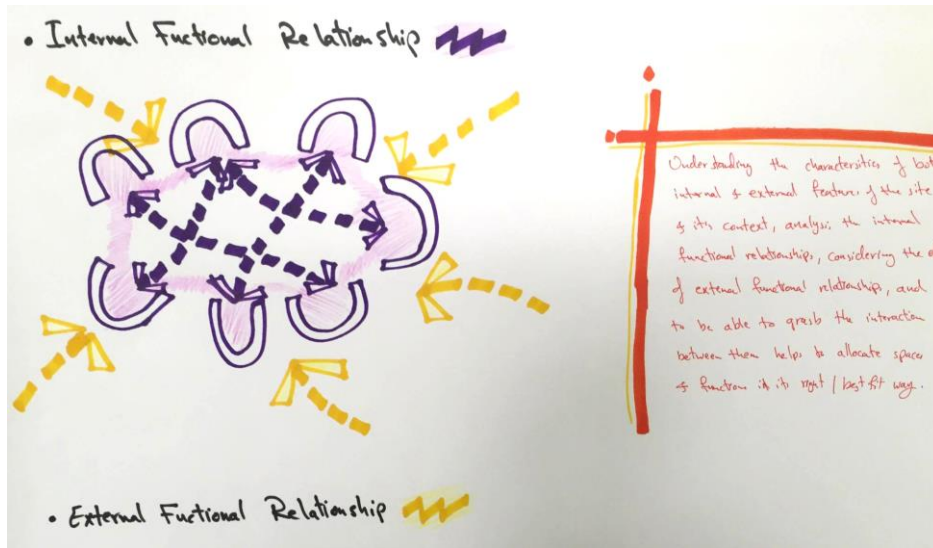


Figure 5: internal and external features

After collecting and clustering the required data, the planning for this region had started with an assessment and, then, analysis of the current themes and components that include mainly the green structures, commercial aspects, public services, industrial zones, residential areas, level of infrastructure, and natural resources. A simple bubble diagram had been integrated to present the level of connection and/or dependency between them (figure 06).

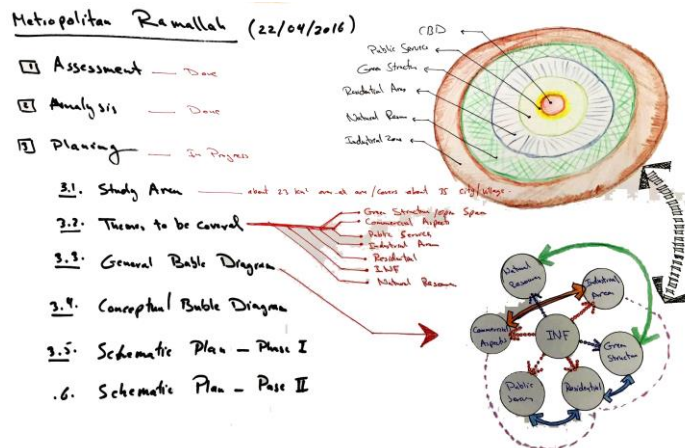


Figure 6: bubble diagram



In this context, the communities had been identified and presented including the Israeli colonies as per the aforementioned assumption (figure 07).

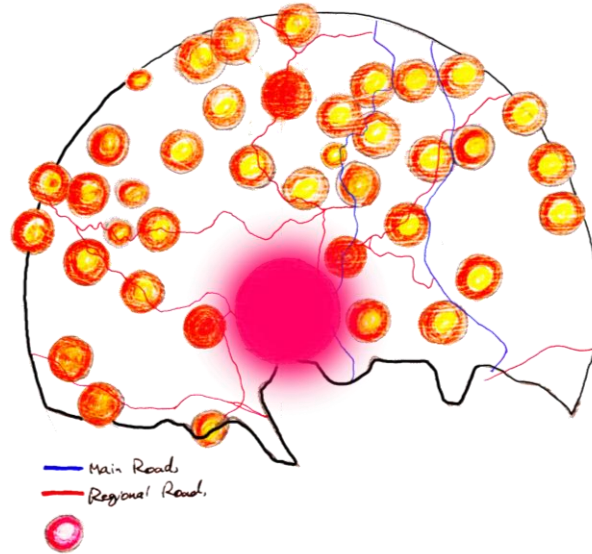


Figure 7: Israeli colonies in study site

In addition, the current corridors had been identified. Also, the topographic characteristics had been studied and analyzed as well (figure 08, 09).

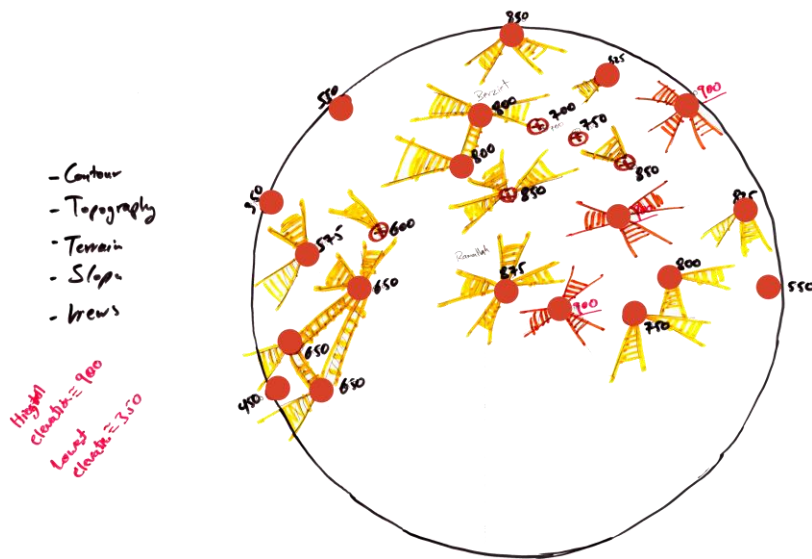


Figure 8: corridors

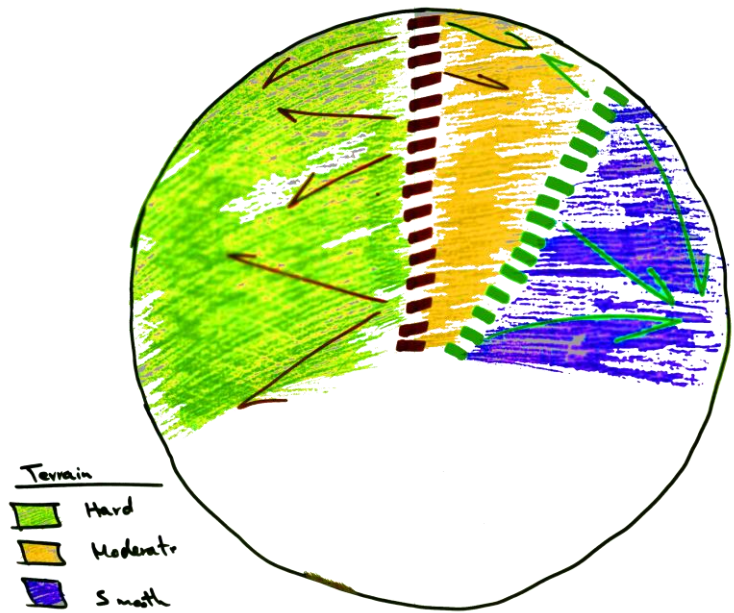


Figure 9: topographic characteristics

Referring to figures 10 and 11, the given cross sections had been helps to more understanding of the terrain physiognomies of the study area in different dimensions.

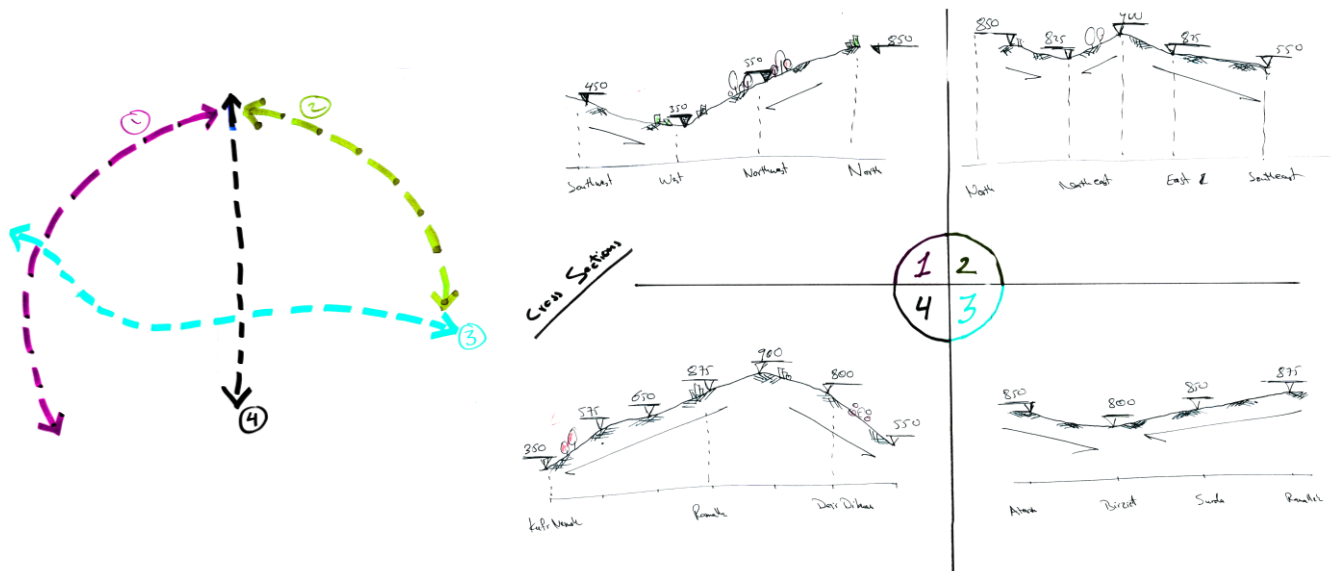


Figure 10, 11



Regarding traffic loads and circulation, it was noticeable that most loads are coming from both northern and southern regions (figure 12).

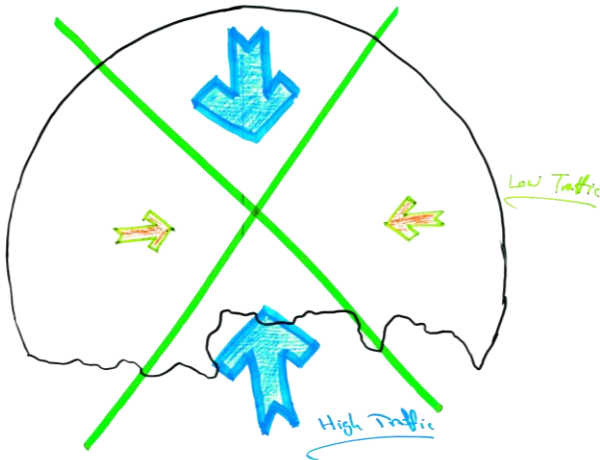


Figure 12: traffic loads and circulation

According to PCBS (2015), the dominant winds in affecting the study area are the western winds with an average speed of 9.81 meter per second. Moreover, the eastern side of the area classified as high zone of the solar radiation (figure 13). SWOT analysis had been conducted in the certain phase for more understanding and to ensure covering all sides of this region.

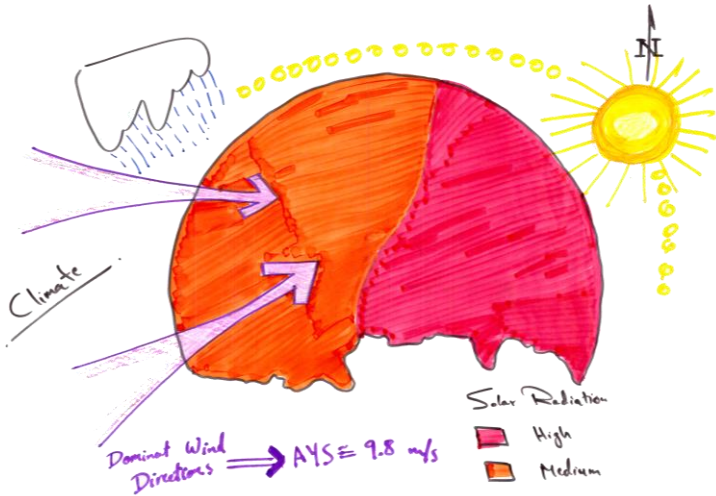


Figure 13: climate analysis

To generate and develop a polycentric urban pattern (figure 14) we need to create and/or develop satellite sub-urban centers around Ramallah city via enhancement of multiple characteristics of these sub-centers and/or create and develop specific aspects that are inadequate or even missed.

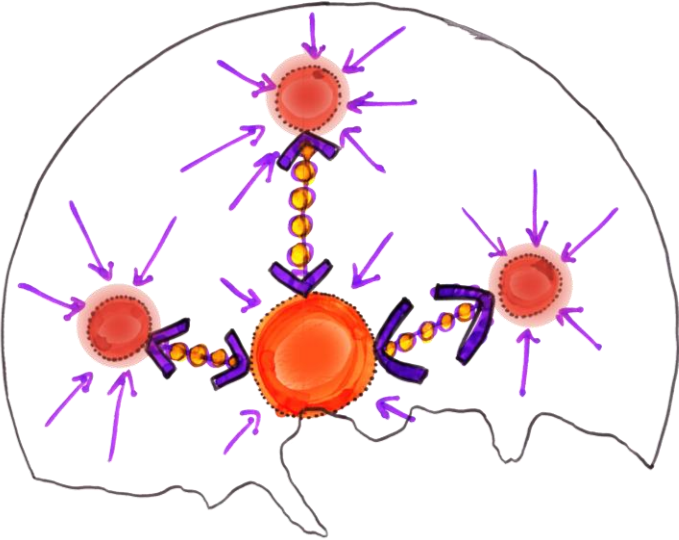


Figure 14: climate analysis

To live, life, and work within the region; to enhance the concept of affordable housing, houses choices, cultural cohesion, strong infrastructure, availability of open spaces, adequacy of public services, development projects, and growth management. In other words, Ramallah metropolitan plan to be sustainable, eco-friendly, livable, high quality of life, economically vibrant, accessible and mobile as well.

## Setting a vision

As a result, different drafts and scenarios had been presented. As figure 15 indicated, four major corridors to be established within the study area; main, regional, green, and industrial. Accordingly, a draft schematic map that indicates the above vision is prepared (figure 16).

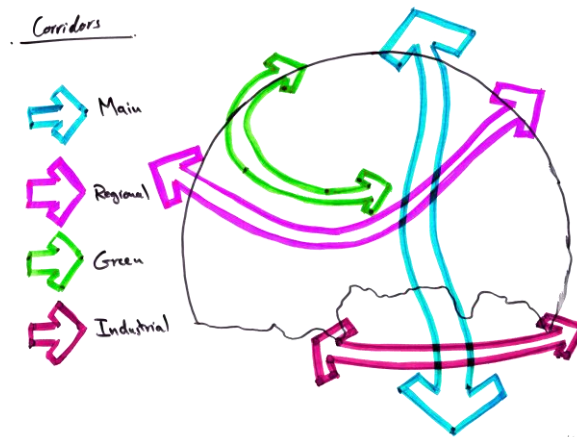


Figure 15

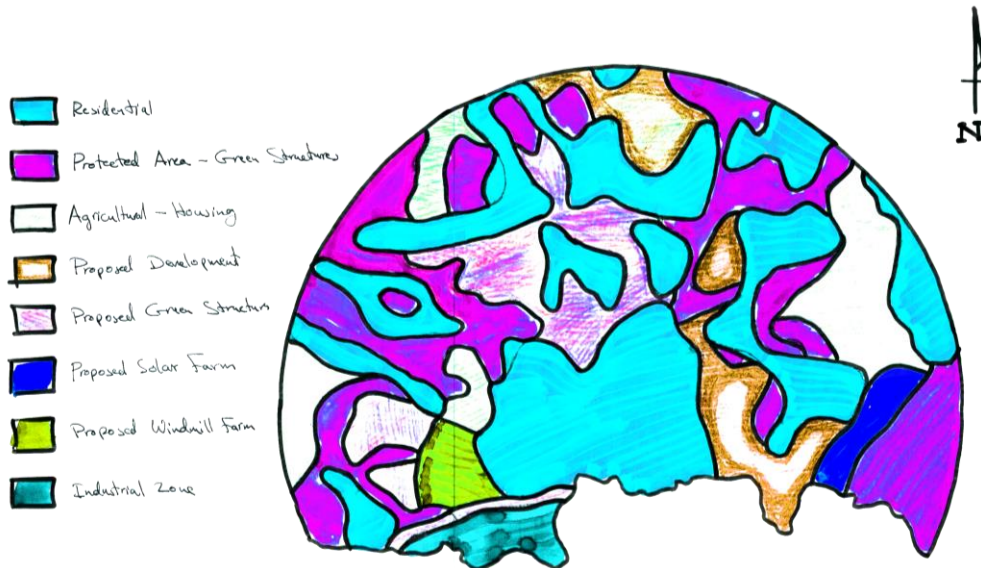


Figure 16: schematic map

Moreover, it was planned to create a new CBD/ mixed-use/ administrative public transportation center in Beit Ile locality due to its location on regional/main roads intersections, which makes it accessible to visitors since it's close to Ramallah and can absorb some of the current congestions in that zone. A commercial strip along the commercial/industrial corridor heading to Jordan through Jericho is given a priority of interest to develop. Agriculture/housing projects is recommended in a wide range of the study area, these projects have special ordinances and identity in order to control the growth and development projects in these medium/low values of green land. As one can observe from the schematic map (figure 17), the areas in yellow represent the localities future expansion, which we can't neglect, it's a necessity to decide where we recommend an expansion and in the same time where not build. High value agricultural land where bio-diversity and historic centers are distinguished in the zone, urged us to stamp it with recreational/cultural/touristic classification, with minimum intervention considering few services to enhance this kind of zoning.

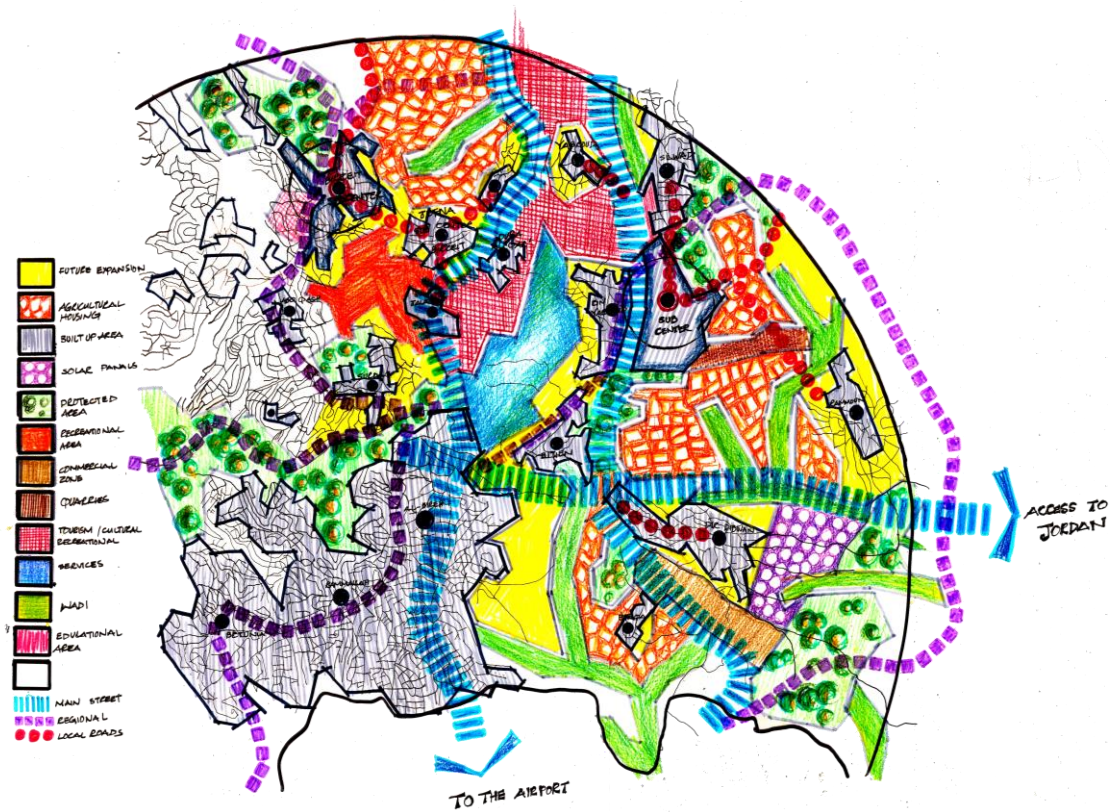


Figure 17: final map

It is worth noting that our country's topography and climatic characteristics draw our attention to the possibility of considering renewable energy projects such as wind mills and solar panels farms as it can be detected in the schematic plan. Through studying each area of the project and making SWOT analysis we found many threats like high slope areas and many potentials like the reuse of Israeli settlements (i.e. Beit Eil as a new CBD cause of its location on Crossroads - Regional and main streets). It relieves pressure on the center of Ramallah, without need to access to the center and also serving surrounding villages. The CBD shall contain services, commercial buildings and a health hub for all the surroundings areas. While Ofra colony can be as sub center in the east serving Silwad ,Yabrod , Al-Teba , Betin , Dir Dibwan , Burqa and Ein sinia with commercial and common services. Moreover, Birzeit is recommending being a sub center that includes an educational hub, a commercial center, and public services. Not to mention including it in the tourism path.

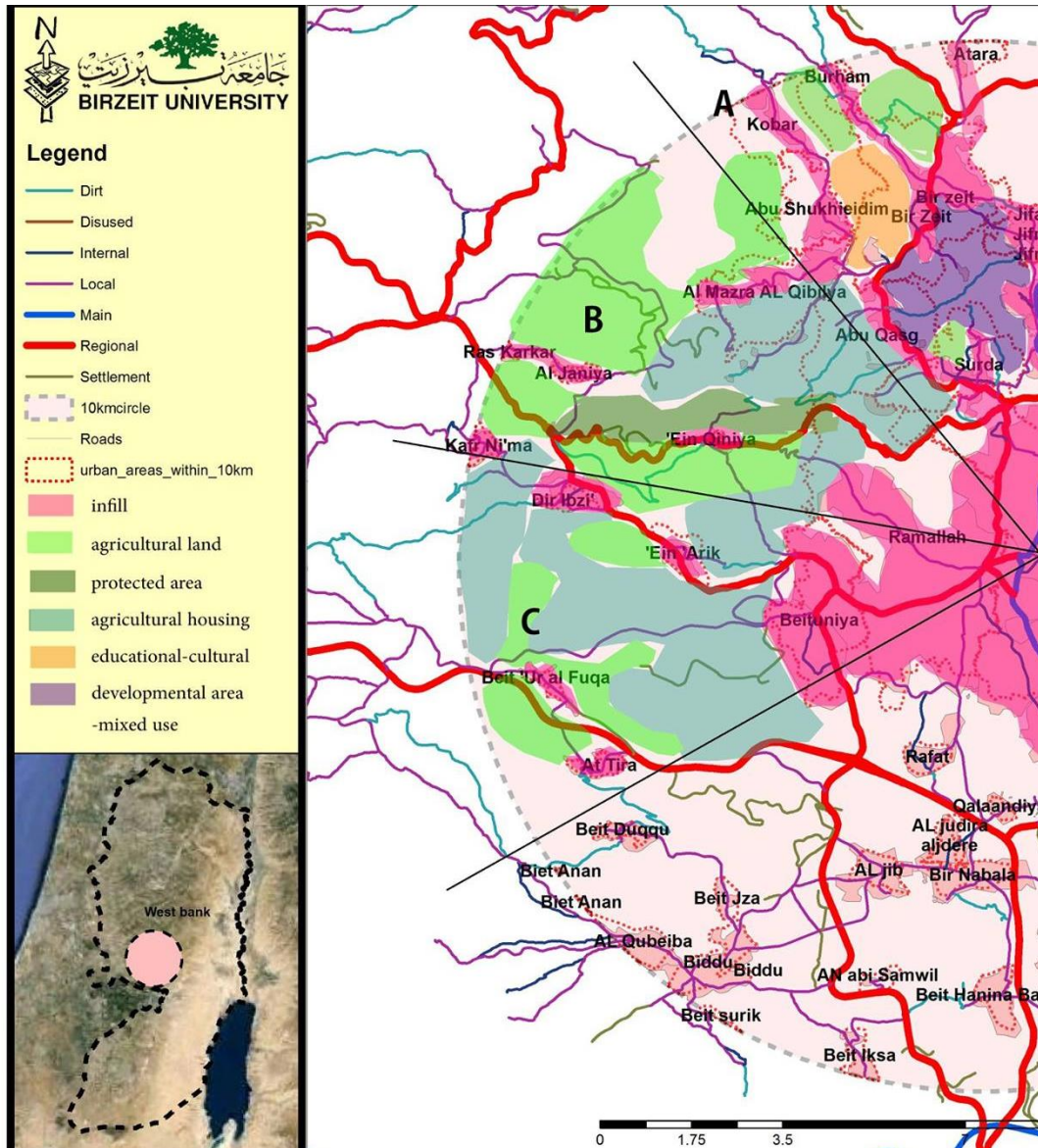
Other potentials were existed in north of Betin with a site of landscape and biodiversity archeology and agriculture which could be a good location for tourism activities. The site between Beirzit, Jifna, and Surda present a good place for recreational activities for its middle location between many villages and open space suitable for development. Through studying master plans of each area of the project we find some villages that could contain the growth through use infill strategy and other which should go toward compact and high density strategy, and for protecting agricultural areas and open space we recommended to classify some places as agricultural housing with low density. Quarries are very important so we recommend keeping the already quarries and cutting factories with the possibility of future expansion from Beitin to Al-Teba. However, it is important to highlight the need to stop the expansion of Ramallah city at the Northwest side and because there is a high value of the green land. Consequently, we suggest preserving this green wedge from the urban expansion.

We suggest also some options as follow: (Figure 18)

1. The first point for our vision is mainly focus on the protection and maintains of biodiversity and agricultural lands to avoid the development in this areas, like the area which lies to the north of EinQinaya which is a biodiversity high value agricultural lands, also some areas suggested to control the development in it to avoid sprawl and un planned development in this areas so we decided to be agricultural housing

2. The second point mainly focus on the arrangement and controlling the development of the new separated suburbs which is appears surrounding Ramallah such as Al Ghadeer suburbs near Abu Qash, Our vision for this area is to include these suburbs within a planned area for future developmental project to organize and control the development in this area within a framework for the whole area.
3. The third point is about creating a new jobs and opportunities, after the analysis and study of our area, the area have a good potentials for recreational – tourism development, so we suggested to have areas for recreation facilities and tourism.
4. The Fourth is about promotion of the historical areas in these communities. There is historical churches and the old city in Ein-Arik, in Rar-Karka there Samhan castle, in Al-Janiya there is a number of Shrines, Castles in Ein-Qinya, and finally the old city in Birzeit. Then we create a tourist path connected the recreational centers and the historical areas.
5. We suggested three recreational areas, the first one lies in the east of Al-Janiya and Ras-Karkar, the second one lies in the west on Ein-Qinya, and the third one lies in Ein-Arik. Then we connected theses three recreational areas of with a pedestrian path started from Ein-Arik then continued to Ein-Qinya, then to the east of Al-Janiya and Ras-Karkar. Then it continued through the cultural center in Birzeit, and finally till reach Jifna. The three recreational areas we created are functionally suitable for characteristics of each area created in. with respect to Ras-Karkar and Al-Janiya they are special of agriculture and grazing so we create an Agricultural museum and livestock fields. Ein-Qinya has Water spring and Rich in natural areas with the historical castle spread in which Visited by tourists from different regions. So we think to Maintain and strengthen its rich nature by making it better for tourists. And because of Ein-Qinya lies in the middle of the areas we working on to developed it as tourist areas and because of the Low economic level for its residents we create hostel and facilities center in to serve the tourists and from the other hand create job opportunities. Finally, in order of Diversification of recreational centers we create as port center in Ein-Arik and it also create a good job opportunity.

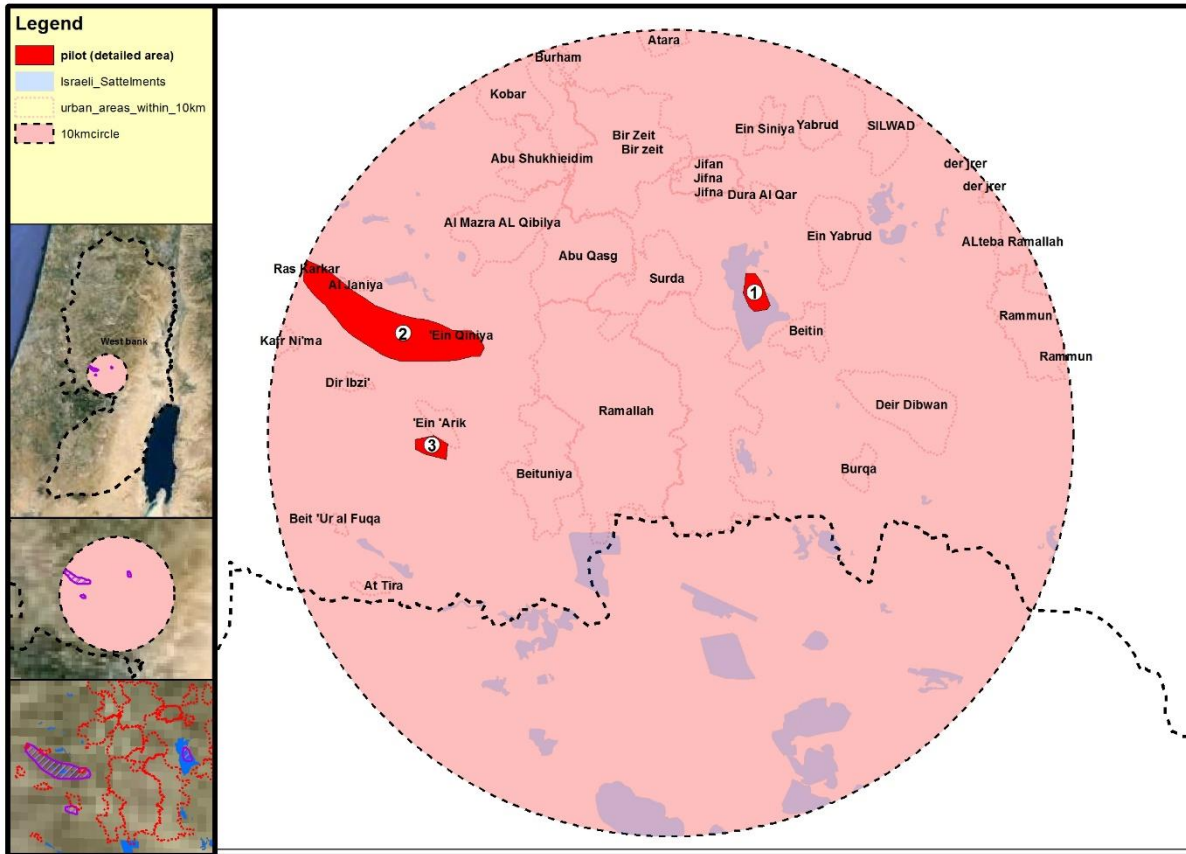




(Figure 18) : the suggestions of zoning

## Urban Design in Detailed Area (Beit Eil, Dolev, Ein Arik)

### 1. The Proposed New Hub in Beit Eil Locality



(Figure 19) : Pilot Location

Within the presumed vision for the project of Metropolitan Ramallah, a new hub was recommended and an urban design for it had been suggested in order to serve the related objectives of that vision; to lower the current urban pressure on Ramallah. This hub shall include a public transportation, recreational, commercial, and health care centers. The public transportation center consists of a train, light tram, and bus stations.

The train station shall be one of multiple regional millstones that connect the major cities in Palestine from North to South. The presumed rail networks shall not pass parallel main roads or through major cities or towns. On the contrary, a specific routes shall be designated to be away from the built up area for safety, noise, and topographic considerations. This station shall be

mainly for passengers. However, there is no obstacle to include bays for loading and conveying cargos. Moreover, it has to include some essential facilities such as maintenance zone, waiting area, and commercial offices.

On the other hand, the light tram station shall be designated to serve the internal periphery of Ramallah city. The tracks of its networks shall be parallel to major roads networks within a specific lane. The bus station shall cover the rest of the metropolitan towns and villages. When the passenger's movement comes to minimum in evening, the light trams shall be annulled and make use of buses instead of it.

These public transportation modes shall enhance users to become less dependence of their private vehicles. Hence, a free central parking facility had been suggested in this hub near to these modes' stations. Small shuttles are suggested to transport users from this parking to their destination within the transportation hub boundary. This central parking can be constructed underground. However, above ground can be used either as a small commercial center or open space. In addition, public services facilities had been recommended to be placed to save time and money on users.





Figure (20): Area 1 Reuse plan for Beit Eil Locality

Relaying on the assessment results in phase one, the urgent need of a health care complex to serve the eastern side of Ramallah city region. We have our vision about the complexity in function of this particular sector. A specialized hospital with a complex of masses with assigned function is designed, added to an extension of health education center, laboratories, and clinics. Accordingly, health students, interns, and doctors' dorms and/or dwelling is designed in the same spirit and close to their health school and job practices taking into consideration the concept live, work and life, all services and life style is accessible within a walking distance. A civic center with a pool, picnic area, restaurants, library and rehabilitation center is located near to the residential zone to meet the needs of the workers, students and the community around this complex. An elderly or a nursing home is placed near the hospital with activities zones.



Figure(21) Health Care Complex



The recreational area set in the east of Beit Eil locality, close to the green area in the site and not far from the residential area, the purpose of the design of the recreation area Plan is to provide sufficient recreation facilities to the residential in the locality and the nearby areas, such as Ramallah and Al Beirh, Beitin, Al Jalazon, Surda and Ein yabrud.

the plan contain constructing of, gym, cinema, museum, theater, indoor games, circus, library, swimming pool, hotel, football stadium, playground, kids zone, gardens, amphitheater, as located in figure 22.



Figure (22) Recreational Detailed Area



The design includes handicap requirements and it is also integrated with nature , respect the environment and topography with suitable roads and buildings orientation, protecting the greenery inside the area.

The design includes Infrastructure , linkages to adjacent or nearby trails, linear parks, greenways, etc, signs, fencing (as needed), landscaping (trees and other plant materials ) , preferably native, park area (exclusive of parking spaces, roads, footprints of restrooms and other structures and other areas committed to non-recreational purposes).

functional recreation area surfacing, including recreation-grade artificial turf, etc., vehicular barriers (as needed) , parking , bicycle racks bicycle rack (4 bike capacity) necessary, park benches, and other additional features like lighting , public art ,water fountain .

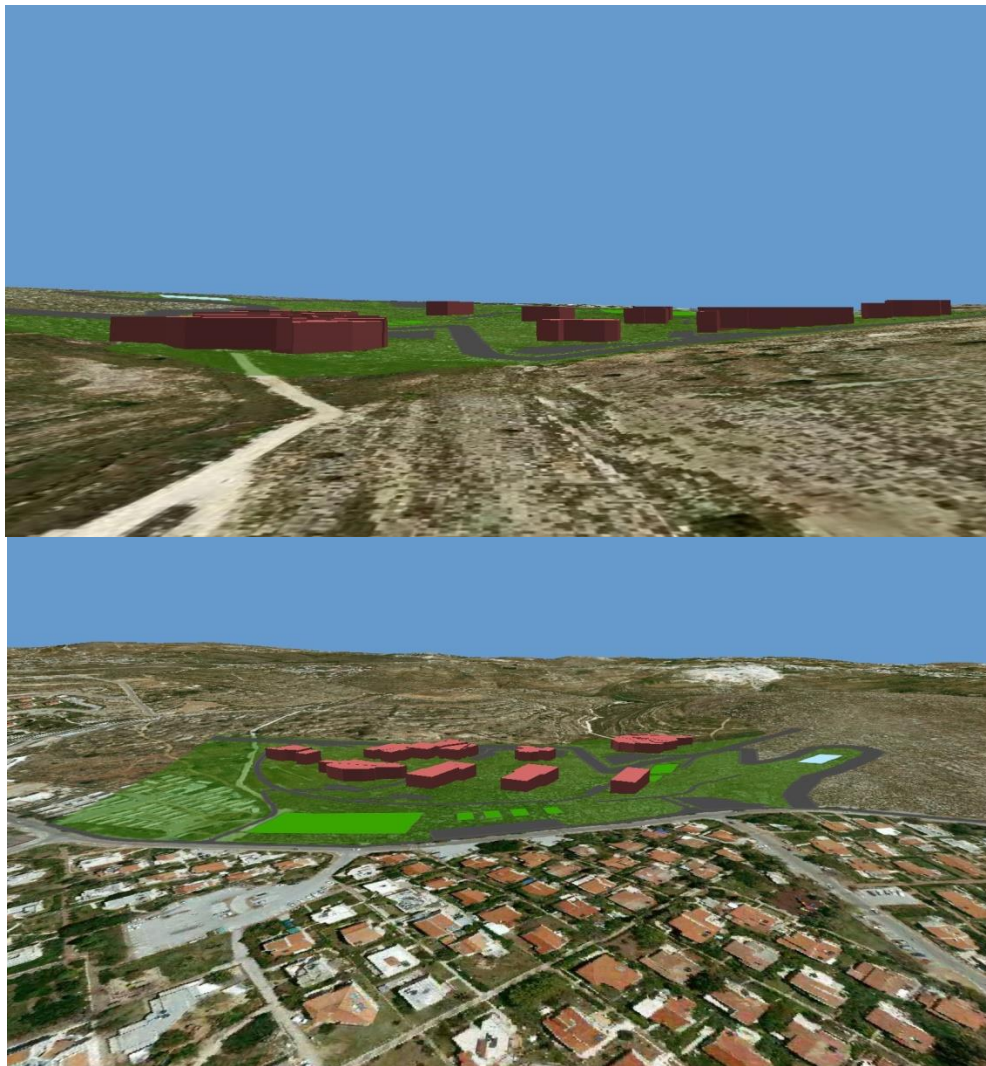


Figure (23) Recreational Area integration .

## Detailed Area 2 Rethinking of Dolev Settlement

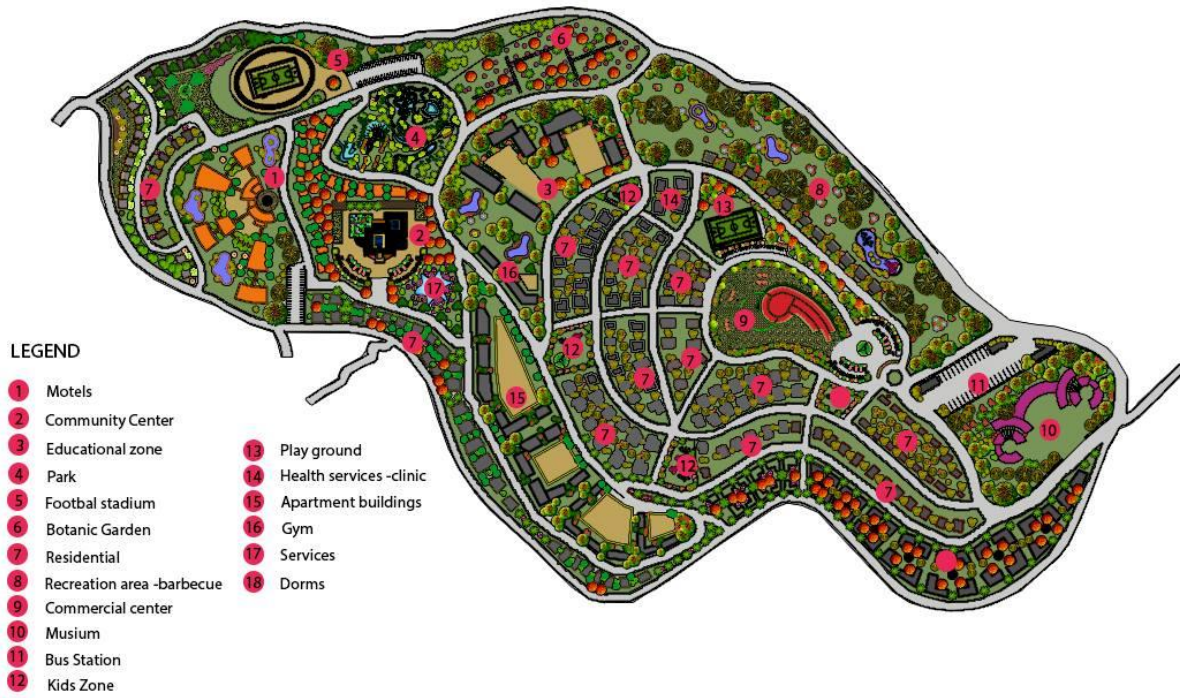


Figure (24) detailed area 2 Rethinking of Dolev Sattelment

## **The Proposed rethinking of Dolev settlement**

in this project of Metropolitan Ramallah, and within our study area; the main idea is to developed the study as a Recreational tourism area to serve the surrounded areas, and at the same time to Strengthen the tourism and agricultural sectors . and to create job opportunities for its residents. This concept strengthens the area characteristic and maintains its identity as green areas.

As suggested in the vision one major path for pedestrian and tok tok ( small bus) (see Figure 25) which show the path has been created, passes through the main activities which was suggested. The attached draft schematic map indicates these activities and path (see Figure 26).

Within this area it suggested to rethinking of Dolev settlement (see figure 27,28), by trying as possible utilizing the existed infrastructure, Moreover new essential facilities is suggested to serve our vision and objectives.

The residential area is created by using the existed building, then creation children playgrounds for each neighborhood.some areas were completely demolished then redesigned such as the motels zone, and the community center, and finally new areas are designed such as commercial offices, , educational and cultural zones, Museum and theatre, services, children play grounds, courts, bus station and finally parks.



Figure (25) area 2 Rethinking of Dolev Settlement



Figure 2

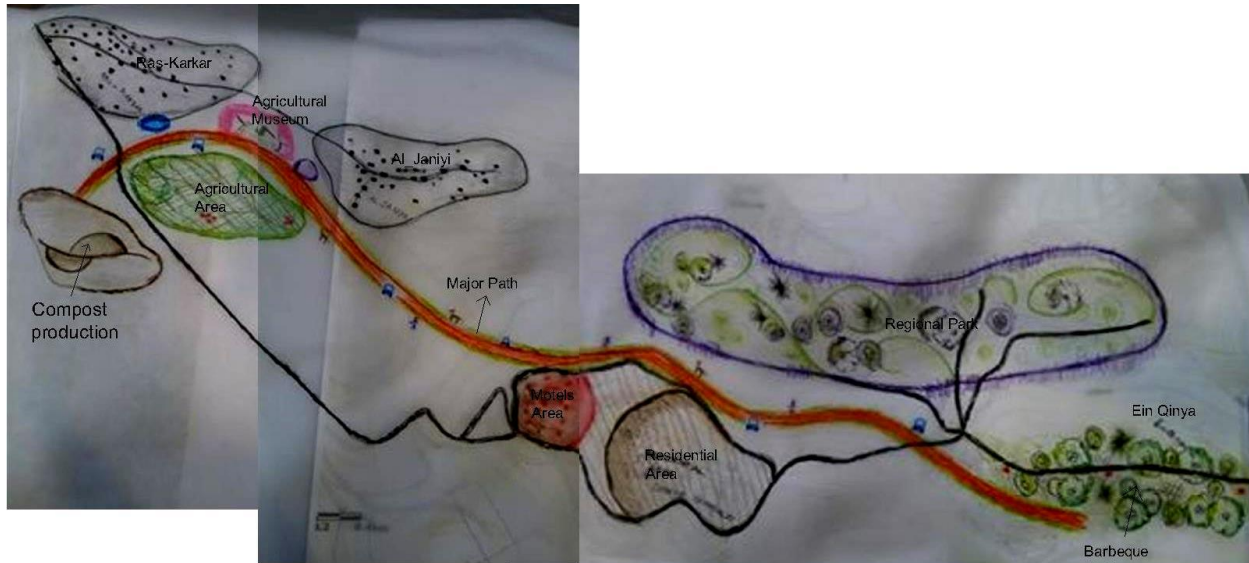


Figure (26) area 2 conceptual Rethinking of Dolev Settlement



Figure (27) Arial photo of Dolev Settlement



Figure (28) photo of Dolev Settlement



### Detailed Area 3: Ain Arik

Detailed area 3 located in the south of Ein Ariak. This area has high value agricultural lands. In urban design of area 3, we mainly focus on the protection and maintains of biodiversity and agricultural lands to avoid the development in this area. (Figure 29)



Figure (29): detailed area

The design tries to preserves the largest number of agricultural areas and provides places to live and work for residents. (Figure 30)



Figure (30) conceptual analysis for detailed area 3



The design includes farm houses, a central park, commercial area serving the detailed area and lowest number of roads that link the designed area with the context. (Figure 31)



Figure (31) zoning of detailed area 3



Figure 4 show the final urban design of the detailed area 3.



Figure (32) final design