Design is a powerful tool that can trigger the imagination and visualize the invisible potentials of the site. It can coordinate and manage the different aspects of urban life and transform them into relevant and usable physical forms.” Dr. Omar Yousef.

This the fourth design studio IPCC completed, where Palestinian young Architects and Urban planners gathered together to solve some of the issues facing the planning process in the Palestinian neighborhoods of East Jerusalem through the case study of Jabal al Mukabber and as Sawahreh al Gharbieh neighborhood (hereinafter called ‘Mukaber-Sawahreh’). The main general rule was to “Think Green”; In all design solutions it was imperative to think green and to provide solutions of green sustainable architecture.

For the last seven years, IPCC has been working with the Palestinian community in twelve neighborhoods in East Jerusalem in order to empower the community, strengthen its sense of right to the city and to create alternative physical plans. Urban design studios has become a tool which IPCC adopted to engage students and young professionals in the planning process and to look at specific design problems faced when planning Palestinian neighborhoods.

Mukaber-Sawahreh, is a Palestinian neighborhood in East Jerusalem, located about four kilometers south of the Old City, this area was chosen as a location for many reasons, it had many potential for development opportunities in the southern part of Jerusalem, the availability of the Kedron-Wadi en Nar-valley which is an important historical green area which connects the old city of Jerusalem and the dead sea through a historic-religious-green path. From a design point of view, Jabal al Mukabber area offered the potential to design new projects in the vacant land, rehabilitation projects within the existing built area, in addition to a recreational and touristic project in the valley.

In focus, along and around the American road in Mukaber-Sawahreh many of the studio activities will take place, the American road has the potential to form a spine for the neighborhood and act as a linear hub for civic, commercial and transport uses. If the road and adjacent development was finished to a high standard there might also be the potential to exploit the proximity to other tourist centers and attractions by creating new leisure or tourist-focused spaces along its length.

Many thanks to IPCC team:
Dr. Rassem Khamaisi
Dr. Omar Yousef
Dr. Yara Saifi
Arch. Wasim Abu el Hija
Eng. Rawan Naser Eddin
Mr. Murad Natsheh
Areas of Design

a) ECO TOURISM:
Part of the neighborhood’s rich diversity is Wadi en Nar. It is a valley that reaches the Dead Sea and is the catchment area for south-east part of the city. This site was developed into a recreation park and a model for Eco-tourism.

Concepts of ecological solutions were researched and suitable architectural solutions, and urban plans were provided.

b) IN FILL and REHABILITATION:
One of the major problems of planning East Jerusalem are our build up neighborhoods. They are mostly unplanned or their planning schemes do not satisfy the urban needs of the inhabitants and their natural growth. Consequently, they suffer from inadequate infrastructure, lack of green spaces, narrow roads and the proper public services.

They are also overwhelmed with un-authorized buildings and are under the threat of demolition.

To improve the quality of life, concepts of neighborhood rehabilitation and urban improvements were researched and solutions for neighborhood upgrade and housing additions and in fill were provided.

c) MIXED USE and HOUSING DEVELOPMENT:
East Jerusalem suffers from a crisis of affordable housing for Palestinians, and the lack of large vacant lands for new developments.

Along the American road; Muk-aber-Sawahreh offers some opportunities of open spaces for new housing developments. The sites are hilly with high slopes.

The assigned site challenges the designers to look for suitable typologies for building on slopes as well as the need for mixed use developments along the main street.

Concepts of building on slopes and mixed use developments were researched and solutions for high quality housing were provided. This implied producing adequate parking and proper services and road connections as well as typologies of green architecture (solar / water).
GROUP MEMBERS
Christine Khoury
Omar Akkawi

Rami Totah
Sahar Sharabati

SUPERVISORS
Amaal Abu Ghoush
Haya Mani
Wadi en Nar or the “Qederon Valley” is the catchments area for the rain water coming from the old city, mount Scopus and the olive mountain and its surrounding, through this valley the rain water goes all the way to the Dead sea. This path is a tourist, religious path through the valley, passing many convents and a unique landscape.

East Jerusalem in general lacks places for recreation and parks, the neighbourhoods are very dense and there are few places where the whole family can enjoy a day together, hence the need of such a park that can serve east Jerusalemites on a city scale is essential.

The proposed eco-park is located in one of the most valuable areas in the southern part of East Jerusalem, just 5 km walkable distance to the old city. The Park posts a potential for many recreational and educational activities. Wad En Nar Park targets both residents and those in the Jerusalem area.
The design of the park focused on the following main concepts:

**REGIONAL ECOTOURISM**
The importance of this area within a tourist track between Jerusalem and Jericho will be brought into focus with the eco-park to attract visitors from the local area as well as the region (EJ) and globally.

**THINK GREEN**
Not only that the park will offer opportunities for the resident to farm and sell their organic products, and the opportunity for protected wild life, furthermore any structures built in the area (the restaurant, the bridges, games, etc.) should be environment friendly!

**ACCESSIBILITY**
The current roads and infrastructure in the area represent the major challenge for this park; they are neither suitable nor equipped to absorb the number of people who will visit the area. The project proposes to enhance the road network, parking spaces for the inhabitants and the visitors as well as the busses, lanes for biking as well as good walkable sidewalks.

**PARK for ALL**
The proposed park is intended to address all family members, and people from different categories. It will have activities for all age groups and a variety of sports and games. Paths for walking, biking and hiking as well as horse tracks.

**SUSTAINABILITY & a SENSE of BELONGING**
It is a major issue to guarantee the involvement of the community in this park. The Sawahreh-Mukaber residents will have the opportunity to farm and sell their product, have in-house shops, restrooms, restaurants and any other project they may suggest to the benefit of the project.

**EDUCATIONAL PARK**
The park will have many activities and features about organic agriculture, horses, hiking, water that can be used for school trips.

The implementation of such a park as Wadi en Nar Eco - Park will provide the city with a recreational, environmental, sport, and educational experience for all family members and all age groups!
Surrounding Green Areas
Wadi en il Nar
Agricultural Areas
Schools
Potential Connection Paths

Old City

Wadi el Nar

Tayelet

Surhurme al Sharkeia

Armon hanatsiv settlement

Sur Baher

Holy Sepulchre
Church of the Dormition
Sultan Pools
Cinematique
Suq al Qattanin
Dome of the Rock
Al Aqsa Mosque
St. Peter Gallicantu Monastry
Haceldama Monastry
St. Calir’s Convent
St. Andrew’s Monastry
The First Railway
St. Peterin Gallicantu Monastry
Haceldama Monastry
St. Andrew’s Monastry
Site Analysis

- Hospital
- School
- Housing
- Agricultural Areas

Rain Water Channel

Potential Open Public Space

Agricultural Areas

Housing 3

View 1
Zoning

- Street Expansion
- Housing
- Housing Expansion
- Agricultural Areas

View 2
Sections
Sections

RESTAURANTS

SECTION A-A with STREET SECTIONS
GROUP MEMBERS
Ahmad Jamal
Anwaar Jabr

Ala’ Shweiki

SUPERVISOR
Abed Shabaneh
In proposing development plan for already-existing neighbourhoods, it is always necessary to understand the existing situation in the site itself. In Jabal Al Mukabber infill site, we were able to identify several design aspects through data collection and site visits. After that, we were able to set five main strategies as a major development approach for the project. These strategies include:

1. To benefit from the existing features of the site as much as possible.
2. To take into consideration the municipal regulations in the site.
3. To propose a prototype-kind of intervention that could be duplicated in other neighbourhoods in East Jerusalem.
4. To provide better circulation in the site.
5. To work side by side with the inhabitants (*unfortunately this was not able in this studio due to limited time available)*.

The total area of the site is 38 donums, composed of nearly 120 apartments and with a building percentage of approximately 40%.

Through site visits, we were able to identify several development aspects that should be considered in our development proposal, based on the strategies mentioned above. Those aspects include:

**THE AMERICAN STREET**

The American Street suffers from very bad conditions. The street lacks sidewalks for pedestrians, street signs, clear vehicular lanes and sunshades. On the other hand, it enjoys an active traffic next to a relatively densely populated area in the neighbourhood. Hence, commercial development would be a reasonable suggestion when proposing a development plan in the street—such as supermarkets, bakeries and pharmacies. Further, the location of the site is close to the green area, so touristic developments—such as restaurants, gift shops, cafes—could also be considered when developing the street. Finally, the street’s frontage could be decorated with recycled materials, as will be explained below.
INFFILL

ACCESSIBILITY vs TOPOGRAPHY
The site suffers from very steep topography that makes it inadequate for both vehicular and pedestrian circulation. The first step in dealing with this issue is to adopt the street network proposed by the municipality in the area. These streets will form main guidelines through which other streets could be proposed. The second step is to adopt the pedestrian paths in the site, including stairs and ramps, that would help develop a network of paths for pedestrians – mainly for the use of the residents in the neighbourhood, taking into consideration accessibility for the physically-challenged people. Finally, the steep topography may allow two different levels for the two lanes of the segment of the American street that is next to steep topography. Further, some greatly steep streets that are inadequate for vehicular circulations may be transformed into stairs for pedestrians only.

PARKING
It is pretty clear that the neighbourhood lacks parking lots. Cars currently park on the edges of the street in an unorganized manner, causing traffic congestion and occupying large spaces. One way to solve this issue is through designing parking pockets in the site on empty lands that would serve ten houses or more. These spaces will adopt the Park and Play concept, that is, these parking pockets will serve as play areas for kids and parking space through careful design. Further, since the site enjoys a steep topography to an extent that some buildings’ roofs are on the same level of upper street, parking pockets thus may be located on these roofs. If this is done, a certain compromise has to be reached with the citizens. In return, existing private parking lots inside the houses could be transformed into private gardens for private consumptions, also with the use of the recycled materials.

GARBAGE
Garbage collection process seems to be very poor in the site. Garbage bins are not well distributed and are rarely collected by the municipality. One way to deal with this issue is first by a careful design and integration of garbage bins in the street development. The second way is through re-using part of the garbage itself in the beautification of the site. For example, empty tanks, old cars, thrown electrical appliances – which all were clearly seen in the site- might be used as planting pots or boxes in the site, especially on the steep, high street frontages.

NEW DEVELOPMENTS
The site should allow for future developments to take place, such as residential units to accommodate the population growth in the neighbourhood in parallel with the municipal regulations.

EXISTING BLOCKS
The design should provide flexible options for the unauthorized existing built blocks in the site so that they would be eventually authorized. This is a very important aspect of the development plan as the demolition of existing blocks should be minimized, if not even completely avoided.

The ideas mentioned above are still under development, and need further research and analysis. For that purpose, case studies of already existing projects worldwide will be helpful, specifically in parking and vehicular circulation on steep topography.
### Accessibility

<table>
<thead>
<tr>
<th>Issue / Problem</th>
<th>Proposed Vision</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Street Elevations</td>
<td></td>
</tr>
</tbody>
</table>
| • Commercial-touristic to support the green site (cafes, restaurants, gift shops),
  • Commercial-supermarkets, bakeries, pharmacies,
  • Decorative recycled elements, |
| Garbage           |
| • Garbage collections points,
  • Social initiatives-recycling garbage or garbage collection, |
| Green Corridors   |
| • Pedestrian-only accessibility to increase penetration through the site (stairs or paths), |
| Parking           |
| • Green parking pockets,
  • Parking on the top of the buildings, |

<table>
<thead>
<tr>
<th>Issue / Problem</th>
<th>Proposed Vision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Network and Accessibility</td>
<td></td>
</tr>
</tbody>
</table>
| • Adopt the municipal plans,
  • Changes the street orientation if needed in some locations,
  • Lanes on two different levels,
  • Consider physically-challenged inhabitants (lifts, ramps, special parking lots),
  • Consider accessibility to the eco site and the larger context, |
| Environmental Aspects |
| • Recycled material,
  • Solar panels (an existing three floors building),
  • Solar panels for street lights,
  • Increase private green areas (for residential consumption), |

### Municipal Plan

The site is accessible mainly through the American street that connects Jabal AlMukabber, Ras Il-Amood and Talpiyot road together. The site is also served through other narrower internal streets.

The municipal plan for the neighbourhood widens the American street to thirty meters and proposes a new street in the neighbourhood. Most of the buildings in the neighbourhood do not have building license and thus are under the threat of demolition by the municipality.

The proposed intervention - as explained in this layout - works towards preventing the demolition threat by providing urban solutions to the problems in the neighbourhood. The solution includes providing parking lots, spaces for future development and green paths that allows for better circulation within the site.

The main connections in the site were based on connections between three focal nodes as illustrated below in the layout.
Existing Situation

Spaces of potential development

Empty pockets

American Street
### Surveying Data

**AREA A**

<table>
<thead>
<tr>
<th>Building plot no</th>
<th>No of families</th>
<th>size of plot m²</th>
<th>Building cover m²</th>
<th>No of floors</th>
<th>No of units</th>
<th>Total built up area m²</th>
<th>Building cover m²</th>
<th>No of units</th>
<th>Total built Parking</th>
<th>Current setback</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>177</td>
<td>92</td>
<td>1</td>
<td>1</td>
<td>91.5</td>
<td>51.6</td>
<td>4</td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>355</td>
<td>151</td>
<td>3</td>
<td>6</td>
<td>454.2</td>
<td>127.9</td>
<td>2</td>
<td>3.7/1.6/2/7.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td>888</td>
<td>383</td>
<td>3</td>
<td>9</td>
<td>1149</td>
<td>129.4</td>
<td>6</td>
<td>7.7/8/1/3.2</td>
<td>There's an extension</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>205</td>
<td>87</td>
<td>3</td>
<td>3</td>
<td>261</td>
<td>127.3</td>
<td>3</td>
<td>1.6/3.5/1.2/2</td>
<td>Parking area is shared with #4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>264</td>
<td>83</td>
<td>3</td>
<td>3</td>
<td>249</td>
<td>94.3</td>
<td>0</td>
<td>0/6/2/4</td>
<td>No accessibility for cars</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>500</td>
<td>257</td>
<td>4</td>
<td>7</td>
<td>1028</td>
<td>205.6</td>
<td>6</td>
<td>3/3.5/2/7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>467</td>
<td>168</td>
<td>3</td>
<td>4</td>
<td>504</td>
<td>107.9</td>
<td>7</td>
<td>0/2/1/14</td>
<td>Parking area is shared with #4</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>200</td>
<td>110</td>
<td>3</td>
<td>3</td>
<td>330</td>
<td>165</td>
<td>0</td>
<td>1/0/1.5/2</td>
<td>No accessibility for cars/attached with #7</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>5</td>
<td>427</td>
<td>221</td>
<td>4</td>
<td>5</td>
<td>884</td>
<td>207</td>
<td>0</td>
<td>0/3/1.6/4</td>
<td>No accessibility for cars</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>226</td>
<td>107</td>
<td>2</td>
<td>2</td>
<td>214</td>
<td>94.7</td>
<td>2</td>
<td>1.6/1/1.6/2.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>726</td>
<td>115</td>
<td>2</td>
<td>2</td>
<td>230</td>
<td>31.7</td>
<td>3</td>
<td>0/4/3/2.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>4</td>
<td>480</td>
<td>266</td>
<td>3</td>
<td>4</td>
<td>798</td>
<td>166.3</td>
<td>3</td>
<td>1.3/1.5/1.5/1.1</td>
<td>on the American Street</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>160</td>
<td>80</td>
<td>1</td>
<td>1</td>
<td>80</td>
<td>50</td>
<td>0</td>
<td>3/0/2/2.5</td>
<td>on the American St./attached with #14</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>1</td>
<td>220</td>
<td>115</td>
<td>1</td>
<td>1</td>
<td>115</td>
<td>52.3</td>
<td>0</td>
<td>0/2/5/1</td>
<td>No accessibility</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>2</td>
<td>326</td>
<td>115</td>
<td>2</td>
<td>2</td>
<td>230</td>
<td>70.6</td>
<td>2</td>
<td>1/5/1/2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>8</td>
<td>412</td>
<td>223</td>
<td>5</td>
<td>8</td>
<td>1115</td>
<td>270.6</td>
<td>0</td>
<td>2.5/1/0/6</td>
<td>on the American Street</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>4</td>
<td>705</td>
<td>350</td>
<td>4</td>
<td>4</td>
<td>1400</td>
<td>198.6</td>
<td>4</td>
<td>5/7/2/1.5</td>
<td>on the American Street</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>1</td>
<td>200</td>
<td>77</td>
<td>1</td>
<td>1</td>
<td>77</td>
<td>38.5</td>
<td>4</td>
<td>1.5/2.5/2/3</td>
<td>on the American Street</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>1</td>
<td>173</td>
<td>146</td>
<td>1</td>
<td>1</td>
<td>145.6</td>
<td>84.2</td>
<td>1</td>
<td>0/2/2.5/3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>1</td>
<td>209</td>
<td>166</td>
<td>1</td>
<td>1</td>
<td>166</td>
<td>79.5</td>
<td>3</td>
<td>0/2/22.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>1</td>
<td>322</td>
<td>173</td>
<td>1</td>
<td>1</td>
<td>173</td>
<td>53.7</td>
<td>1</td>
<td>0/0/10/2.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>1</td>
<td>463</td>
<td>152</td>
<td>1</td>
<td>1</td>
<td>152</td>
<td>32.8</td>
<td>0</td>
<td>2/3/1/2</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>70</td>
<td>8105</td>
<td>3637</td>
<td>70</td>
<td>9846.3</td>
<td>121.5</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**AREA B**

<table>
<thead>
<tr>
<th>Building plot no</th>
<th>No of families</th>
<th>size of plot m²</th>
<th>Building cover m²</th>
<th>No of floors</th>
<th>No of units</th>
<th>Total built up area m²</th>
<th>Building cover m²</th>
<th>No of units</th>
<th>Total built Parking</th>
<th>Current setback</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>1000</td>
<td>270</td>
<td>4</td>
<td>6</td>
<td>1080</td>
<td>108</td>
<td>2</td>
<td>9/3/3.5/7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>1462</td>
<td>220</td>
<td>3</td>
<td>3</td>
<td>660</td>
<td>45.1</td>
<td>2</td>
<td>2.5/0/14/14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>848</td>
<td>120</td>
<td>3</td>
<td>3</td>
<td>360</td>
<td>42.5</td>
<td>4</td>
<td>0/0/3.5/7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>540</td>
<td>120</td>
<td>3</td>
<td>3</td>
<td>360</td>
<td>66.7</td>
<td>0</td>
<td>1.5/4/10/2.2</td>
<td>They have difficult vehicular accessibility</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>224</td>
<td>120</td>
<td>2</td>
<td>2</td>
<td>240</td>
<td>107.2</td>
<td>2</td>
<td>0/3/3/1.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>467</td>
<td>160</td>
<td>4</td>
<td>2</td>
<td>640</td>
<td>137.2</td>
<td>2</td>
<td>0/4/3/8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>629</td>
<td>160</td>
<td>3</td>
<td>3</td>
<td>480</td>
<td>76.4</td>
<td>2</td>
<td>4/2.5/12/4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>413</td>
<td>130</td>
<td>2</td>
<td>2</td>
<td>260</td>
<td>63</td>
<td>3</td>
<td>4/3.2/4.7/3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>24</td>
<td>5583</td>
<td>1300</td>
<td>24</td>
<td>4080</td>
<td>73.1</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Area C

<table>
<thead>
<tr>
<th>Building plot no</th>
<th>No of families</th>
<th>size of plot m²</th>
<th>Building cover m²</th>
<th>No of floors</th>
<th>No of units</th>
<th>Total built up area m²</th>
<th>Parking</th>
<th>Current setback</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>472</td>
<td>214</td>
<td>4</td>
<td>6</td>
<td>1284</td>
<td>272</td>
<td>6</td>
<td>0/0/8-12/1.5-4.5</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>269</td>
<td>163</td>
<td>4</td>
<td>4</td>
<td>650</td>
<td>241.8</td>
<td>1</td>
<td>0/0/0/1.9</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>254</td>
<td>112</td>
<td>1</td>
<td>1</td>
<td>112</td>
<td>44.2</td>
<td>2</td>
<td>2.5/2.5/3/2</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>511</td>
<td>239</td>
<td>3</td>
<td>4</td>
<td>956</td>
<td>187.3</td>
<td>4</td>
<td>4.5-11.5/1.5-1.5-3/0</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>121</td>
<td>81</td>
<td>2</td>
<td>2</td>
<td>161</td>
<td>133.8</td>
<td>1</td>
<td>0/0/0/0</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>596</td>
<td>234</td>
<td>3</td>
<td>3</td>
<td>703</td>
<td>117.9</td>
<td>2</td>
<td>13/3.5/3.5/4</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>402</td>
<td>188</td>
<td>2</td>
<td>4</td>
<td>753</td>
<td>187.2</td>
<td>4</td>
<td>7.8/2.73/2.7/0</td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td>659</td>
<td>223</td>
<td>3</td>
<td>4</td>
<td>893</td>
<td>135.5</td>
<td>3</td>
<td>0/0/18.5/10</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>236</td>
<td>91</td>
<td>3</td>
<td>3</td>
<td>274</td>
<td>116</td>
<td>0</td>
<td>2.8/1.6/2.5/0</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
<td>513</td>
<td>239</td>
<td>3</td>
<td>5</td>
<td>1193</td>
<td>232.8</td>
<td>0</td>
<td>5/4/0/2.6</td>
</tr>
<tr>
<td>11</td>
<td>5</td>
<td>738</td>
<td>255</td>
<td>3</td>
<td>5</td>
<td>1275</td>
<td>173</td>
<td>5</td>
<td>7/8.3/8.5/0</td>
</tr>
<tr>
<td>12</td>
<td>4</td>
<td>1016</td>
<td>266</td>
<td>2</td>
<td>4</td>
<td>1065</td>
<td>104.8</td>
<td>8</td>
<td>11/10/4.5/3.5</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>1010</td>
<td>113</td>
<td>2</td>
<td>1</td>
<td>113</td>
<td>11.2</td>
<td>10</td>
<td>7/4/10/24</td>
</tr>
<tr>
<td>14</td>
<td>3</td>
<td>1178</td>
<td>248</td>
<td>4</td>
<td>5</td>
<td>1238</td>
<td>105.1</td>
<td>7</td>
<td>0/0/5/3</td>
</tr>
<tr>
<td>15</td>
<td>4</td>
<td>700</td>
<td>165</td>
<td>3</td>
<td>4</td>
<td>657</td>
<td>93.8</td>
<td>7</td>
<td>6.5/5/3.5/0</td>
</tr>
<tr>
<td>16</td>
<td>5</td>
<td>916</td>
<td>191</td>
<td>3</td>
<td>5</td>
<td>952</td>
<td>104</td>
<td>8</td>
<td>16/10/3.5/2</td>
</tr>
<tr>
<td>17</td>
<td>1</td>
<td>2050</td>
<td>150</td>
<td>1</td>
<td>1</td>
<td>150</td>
<td>7.3</td>
<td>2</td>
<td>0/2.5/5/4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>11644</td>
<td>3175</td>
<td>61</td>
<td>12431</td>
<td>106.8</td>
<td>70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- The building percentage may be increased.
- There is a joined open plaza/space between building 6 and 7.
- There is a difficult vehicular access.
- There is a potential for additional housing units.
- Buildings number 11, 12, 13 seem to belong to the same family and there is a potential for additional units.

**Parking on Site**

![Parking on Site Diagram](image)
Compact Design

**EXISTING CASE**

- Site area: **100 m²**
- Build up area: **144 m²**
- Build up percent: **110%**
- Free ground level: **36% occupied solid**
  **64% almost for parking and green**

**SOLUTION**

- Site area: **400 m²**
- Build up area: **144 m²**
- Build up percent: **140%**
- Free ground level: **10% occupied solid**
  **90% almost for parking and green**
Development Scheme

View to Green

- Focal node
- Green pocket
- Green path
- Commercial development
- Parking lots
Proposed Conceptual Plan

**PROPOSED**

**EXISTING**

- Authorised streets by the municipality
- Proposed streets
- Public building
- Residential development
- Mixed-use development
- Green Zone
- Parking lot
- Green paths & stairs
Street Proposal
Vertical circulation

Vehicular rails

Garbage collection unit

Recycled garbage
Extension Case

Case Location
Existing Situation
Conceptual Sections

SOLUTION

Parking & Playing Area
Building Extension
Green Path

Three buildings (11, 12, 13) that seem to belong to the same family. Part of the setback was taken for pedestrian paths and they were compensated by allowing them to build extra floors.
Building number 7 in area C is located next to an open space that feeds in an existing street. The proposal suggests turning the open space into a parking and play plaza and allowing for further commercial development.
GROUP MEMBERS
Hiba Al-Ayoubi
Oday Aweida
Ismail Salah
Rein Sawalha

SUPERVISOR
Erhan Yavuz
The idea of the project is based on integrating the people to an environmental sustainable site from the surrounding regions to improve the quality conditions of their lifestyle, educational levels, knowledge and experience; while providing affordable housing solutions that will also help decreasing the costs of living inhabitants. The eco-social hub is the linkage node between Wadi Alnar, Green Area 2 and the playground around the site. Also, it’s a gathering point for the social activities including community workshops, meetings, recreational and production services.

DISTRIBUTED FUNCTIONS
The project consists of four main functions which are residential buildings, public services, green areas, and commercial services. They are distributed on the site in which the green area contains many olive trees that acts as a buffer zone providing partial privacy and noise isolation for the residential buildings from the Main Street and public services. Moreover, the commercial services are allocated along the enlarged main street serving the surrounding neighborhoods. However, the public services like community center and workshops are the common functions in the core of the site for everyone. Residential buildings are placed in respect to the topography, and the main façade is towards south which is the best view also.

GREEN PATHWAYS
The green is the main circulation element that connects and integrates the residential buildings with natural environment and surrounding. Green pathways are divided into;
1. Main green pathway that connects green areas with triangular relationship.
2. Secondary green pathways:
   a. A mixed use green service road that connects the main green pathway with the residential.
   a. Green pedestrian pathway (passage) work as shortcuts between residential area, the social hub and the surrounding neighbors.

PARKING SOLUTIONS
There are two main proposals that can solve parking problems;
1. A car parking solution under the extension of the enlarged main road with pedestrian pathways for the residential area.
2. A green service road under the ground for the cars surrounded by parking lots. This road which divides the site into two parts is partially covered by green bridges.

ORGANIC FARMING
The project is trying to promote organic farming as a new way of thinking so that people can live healthier and happier while learning how to protect their environment.

ROOF & VERTICAL GARDENS
Continuation of the greenery in the site will be achieved by green roofs on various building types. They can be used as organic farms,
private home gardens and public spaces. These gardens will also act as an insulator for heat and noise issues while creating an attractive and comforting environment.

**USAGE of NATURAL RESOURCES**
The project promotes the idea of taking the advantage of natural resources such as sun angle, direction, rainfall, wind flow and even composting solutions. This will create environmental friendly -sustainable- living conditions, with reduced running and maintenance costs.

**RAIN WATER HARVESTING**
It’s proposed to collect water from the site and from the roofs of the buildings, which then can be used to irrigate plants and green areas depending only on the slope of the topography.

**GREY WATER SYSTEM**
This project is proposing to separate black water from grey water. The grey water collected from the kitchen sinks, showers etc. can be filtered and reused in toilets.

**RECYCLING**
The waste will be collected and separated in designed containers. Plastics, bottles, paper, metals will be sent to the facilities to be recycled. The organic waste will be collected and turned into compost that will be used in the site as fertilizers and may also be sold in the commercial spaces.

**VENTILATION SYSTEMS**
Al-Malqaf may be used as a traditional natural ventilation system in the buildings instead of using artificial HVAC systems. It may contain more than one opening in order to let air circulate in the apartment that provides weather comfortable living conditions with no additional costs of electricity.

**MASHRABIYA & EXTRUDED WINDOWS**
Mashrabiya is a traditional architectural element that provides privacy and cooling effect in arid climates. Extruded windows combined with Mashrabiya functions are extended elements from the façade of the building; they both act as sun breakers during summer time.
Site Analysis
Section A-A
Site Plan

- Children’s Playing Area
- Secondary Entrance
- Car Parking Entrance
- Main Entrance
- Public Green Area
- Bazaar
- Residential
- Community
- Commercial

Playing & Water Collection Areas
Conceptual Layers

GREEN AREAS

ROADS

PARKING AREAS

GREEN PATHWAYS

REGIONS

BUILDING MASSES
Site Section

SECTION B-B
Residential Sections
Apartment Typology

**A Type**
100 m² {1st floor + 2nd floor}

**B Type**
80 m²

**C Type**
120 m²

**D Type**
120 m² {1st floor + 2nd floor}

**E Type**
68 m²

**F Type**
80 m²
The International Peace and Cooperation Center (IPCC) is a Palestinian research, training, and planning organization based in Jerusalem. Founded in 1998, IPCC’s activities have focused on Jerusalem issues; many IPCC projects seek to establish data and information bases that bear on the complex problems that will inevitably impinge on future negotiations on the final status of Jerusalem; these projects frequently result in publications that are distributed to a broad array of local, national and international decision-makers within governmental and NGO organizations. IPCC also conducts training projects designed to raise the information, competency and involvement levels of various civil society groupings, including journalists, urban architects and planners, youth, labor and women. IPCC is a nonprofit organization whose efforts are supported by various international foundations. IPCC frequently partners with European and American universities and Middle East institutions in its projects.