



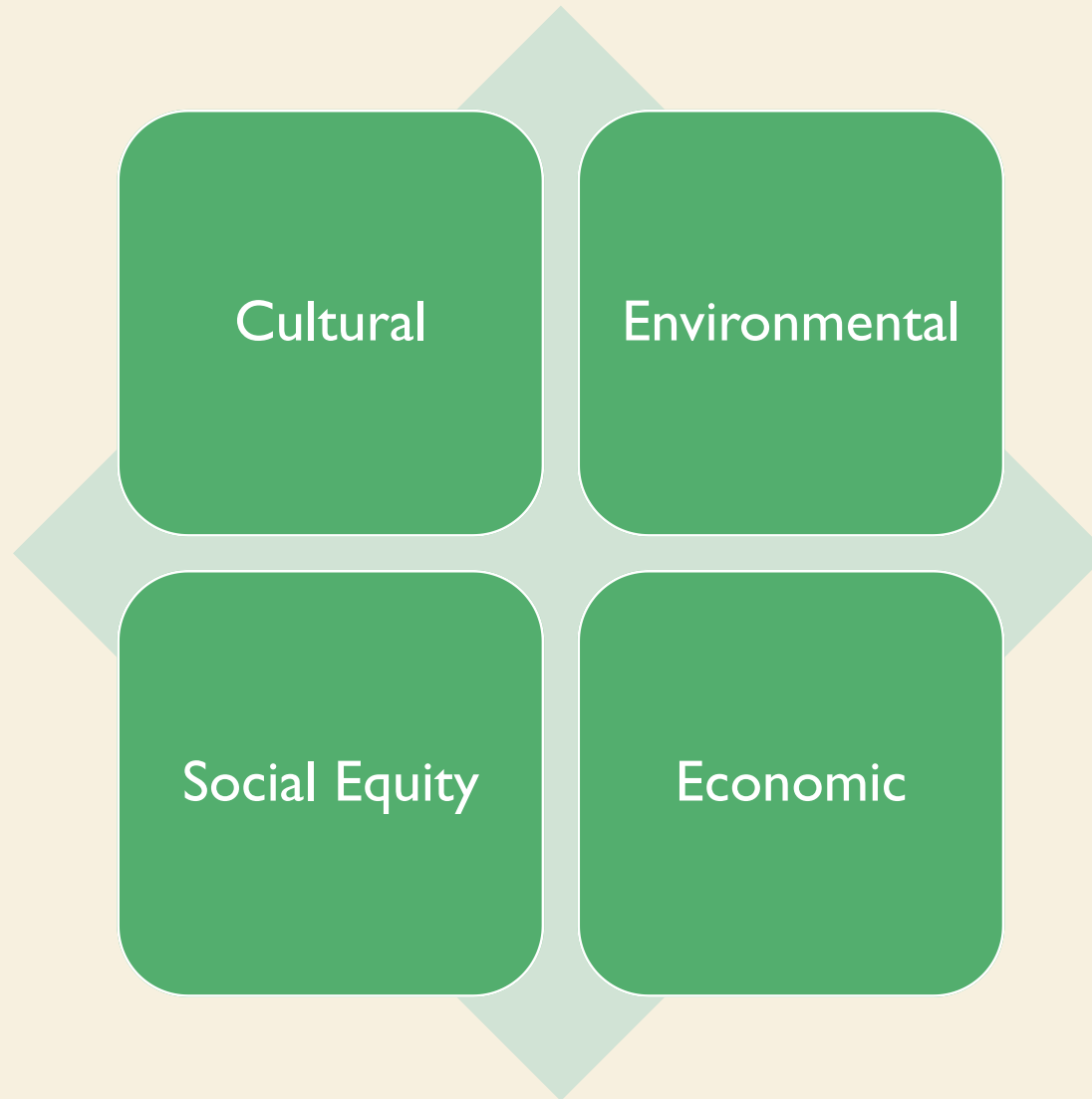
SUSTAINABLE CITY - JENIN -

**GRADUATION PROJECT DISCUSSION
PREPARED BY: WALAA ABU ALRUB**



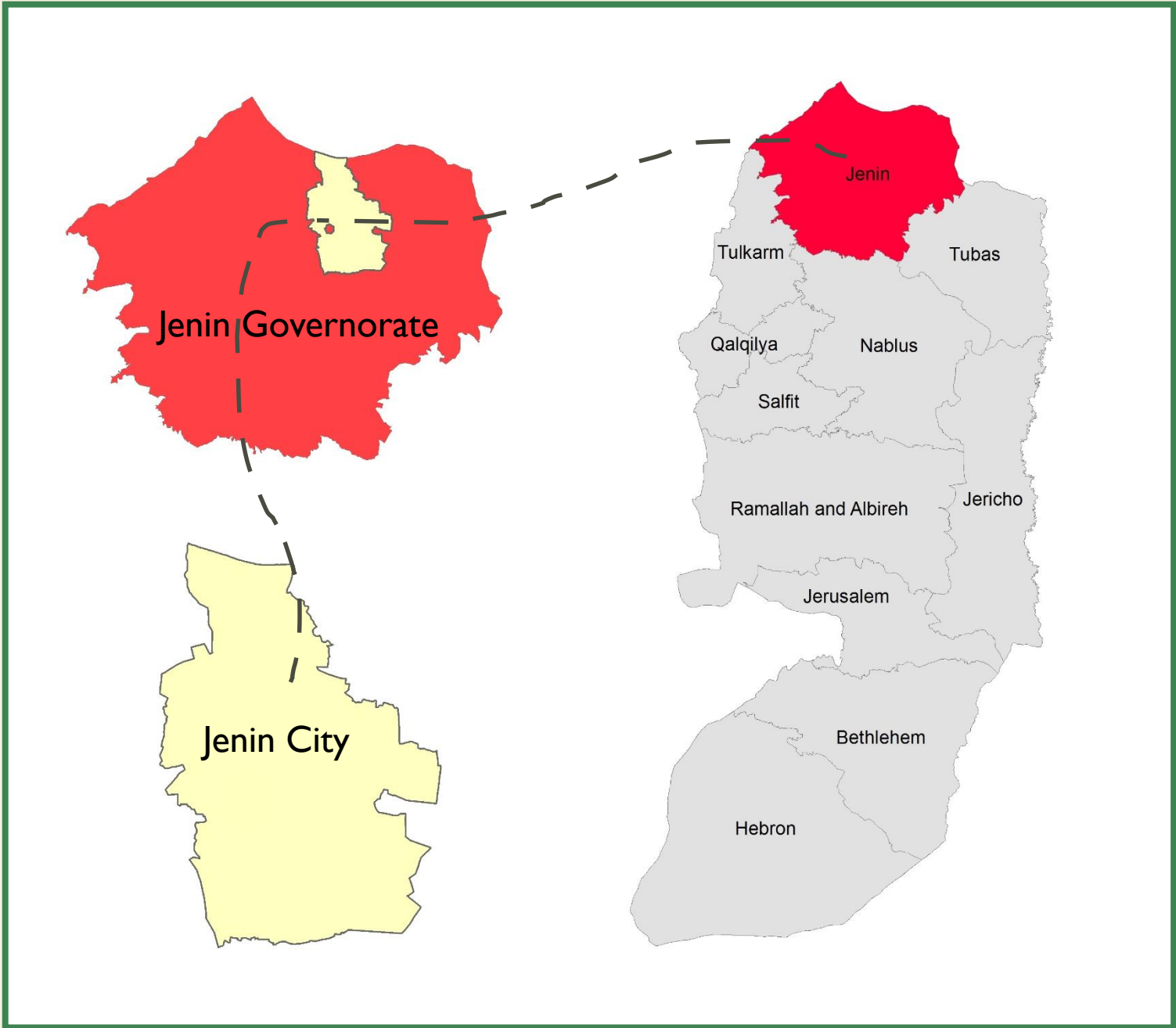
DEFENTION OF SUSTAINABILITY

SUSTAINABLE PILLARS





ABOUT JENIN



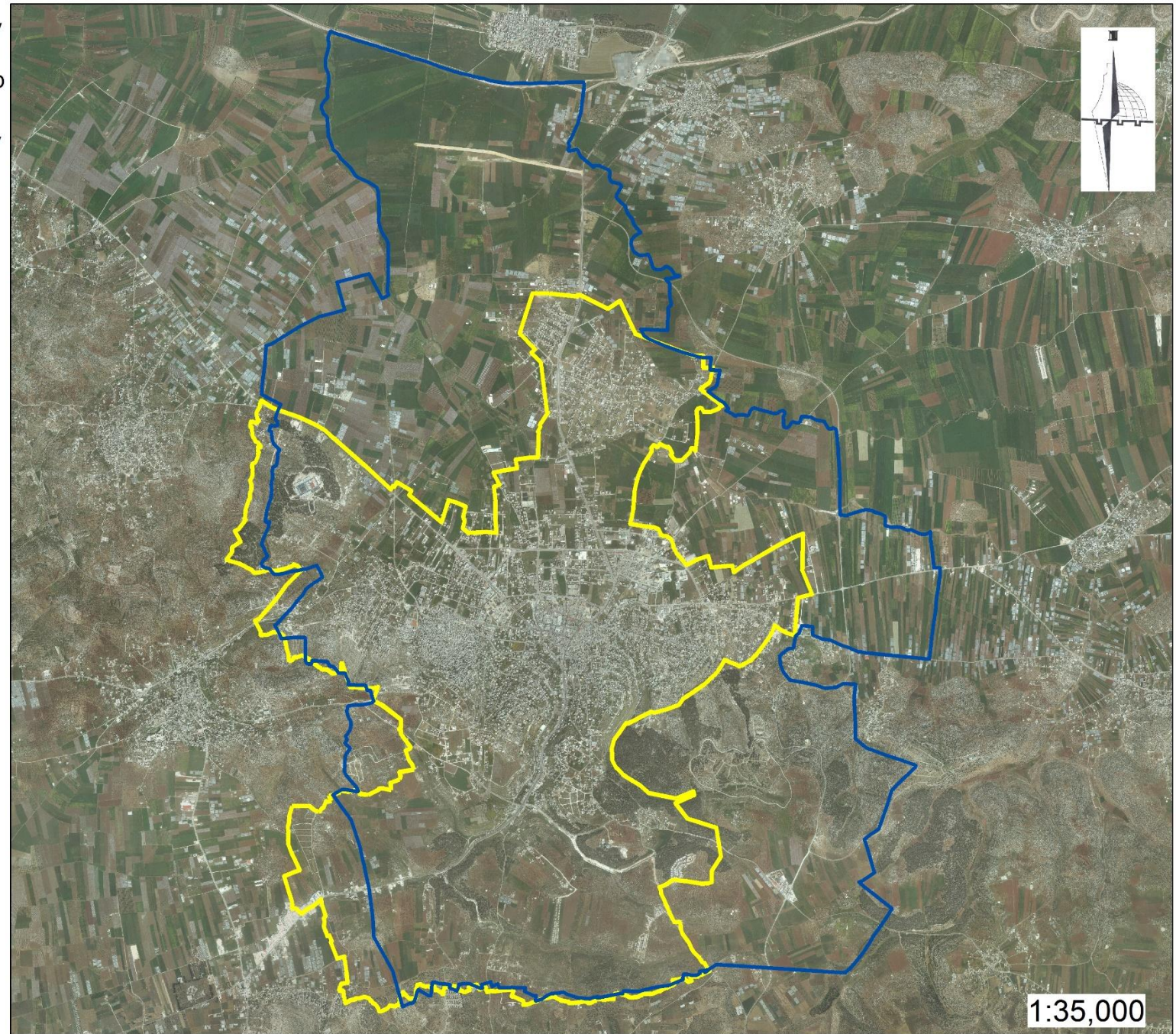
Location of Jenin city

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Urban Planning Department
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Jenin City Boundary

Legend

- Master Plan Boundary
- Jenin City Boundary



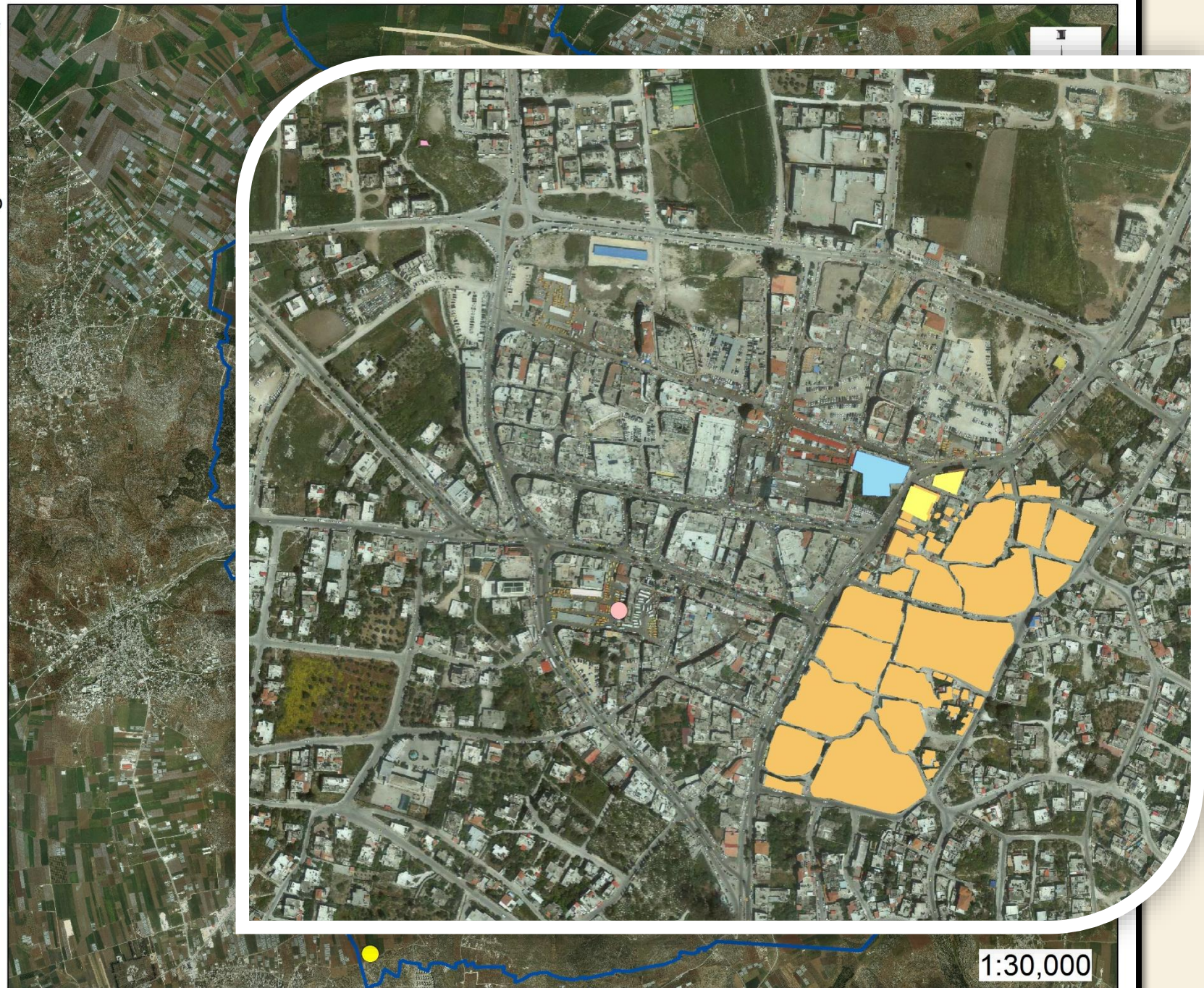
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Cultural and Heritage sites

Legend

-  Kh. Bal'ama
-  Khallet et-Tabaiheh
-  Khirbet Abu Ghannam
-  Khirbet Burqin
-  Khirbet Sab'ain
-  Khirbet en Najjar
-  Tell Jenin
-  Ottoman Buildings
-  الجامع الكبير
-  قناطر ماء تاريخية
-  Old Town
-  Jenin City









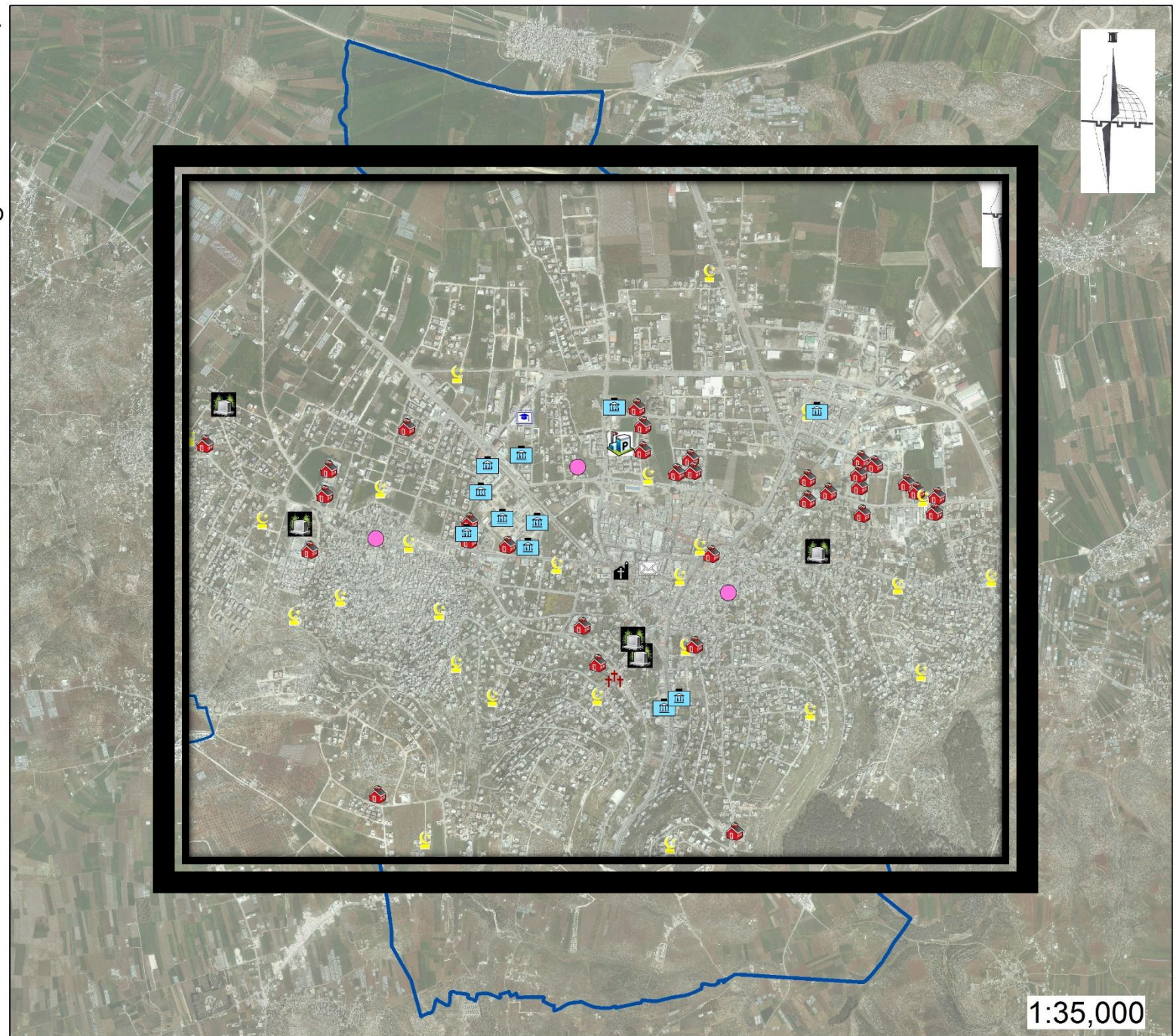
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Major Services

Legend

-  Police Station
-  Educational
-  University
-  Governmental
-  Tourist
-  Church
-  Mosque
-  Islamic Cemetery
-  Christian Cemetery
-  Post Office
-  Jenin City Boundary



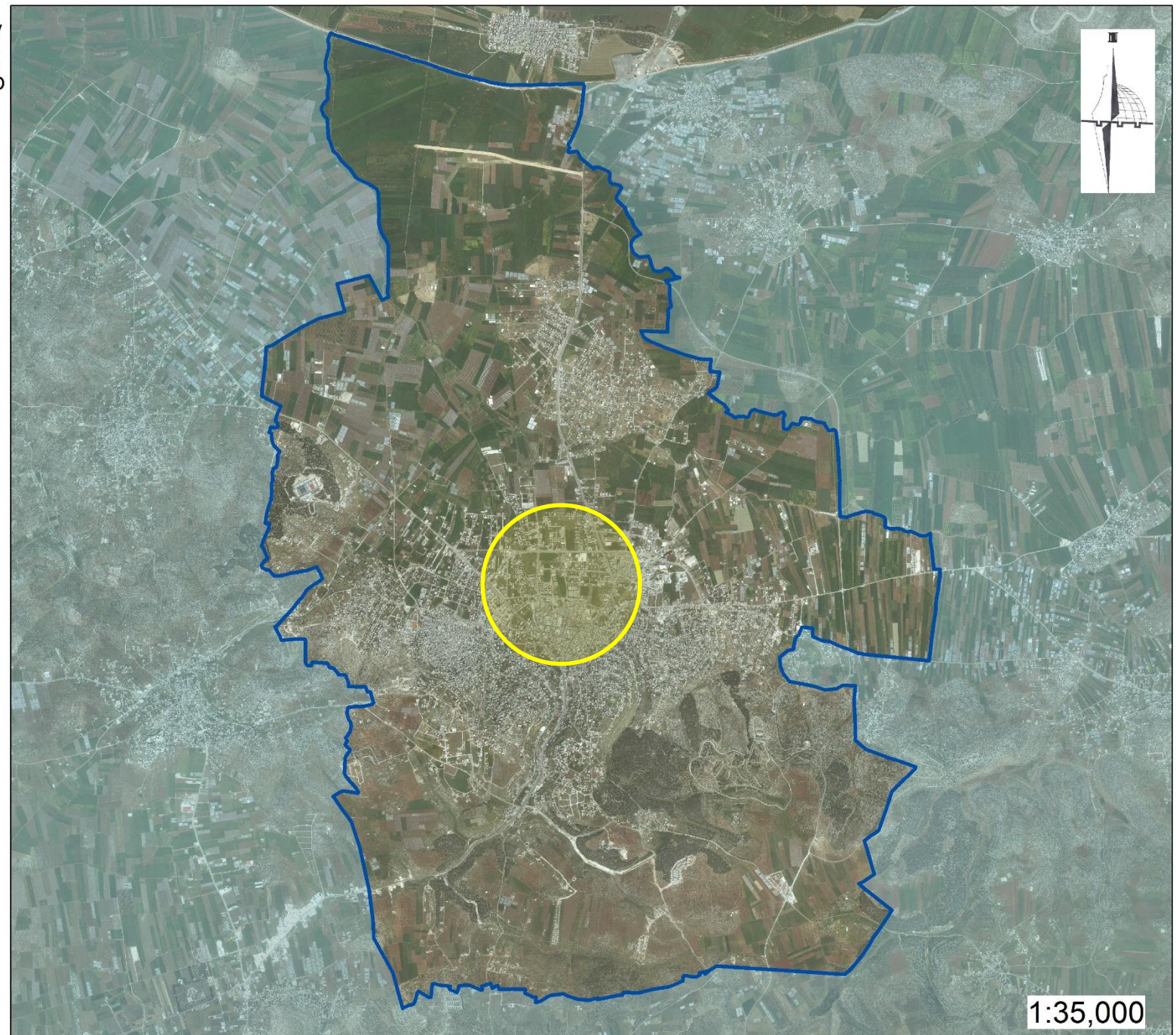


SITE SELECTION

Jenin City
























Legend

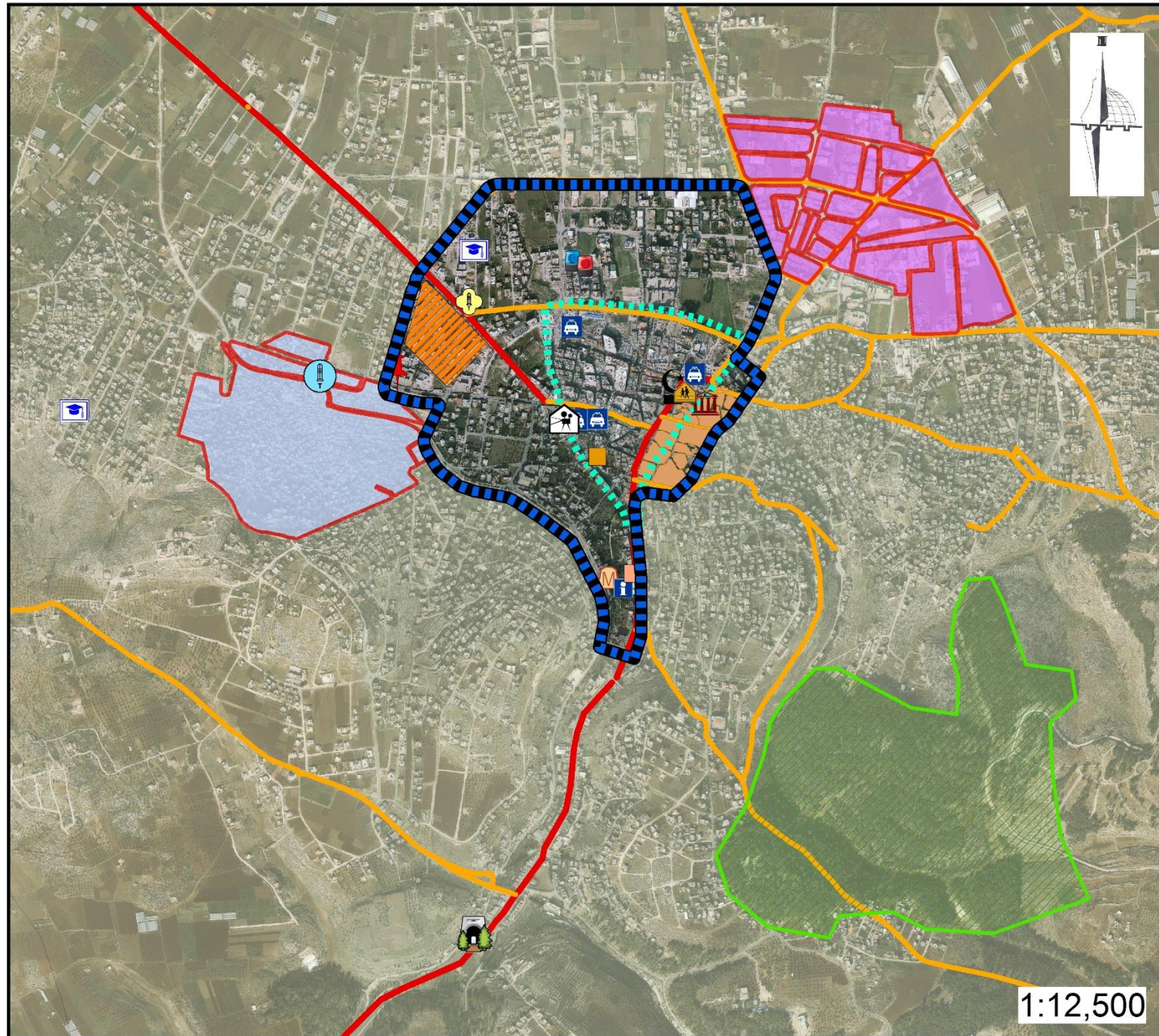
 Jenin City Boundary



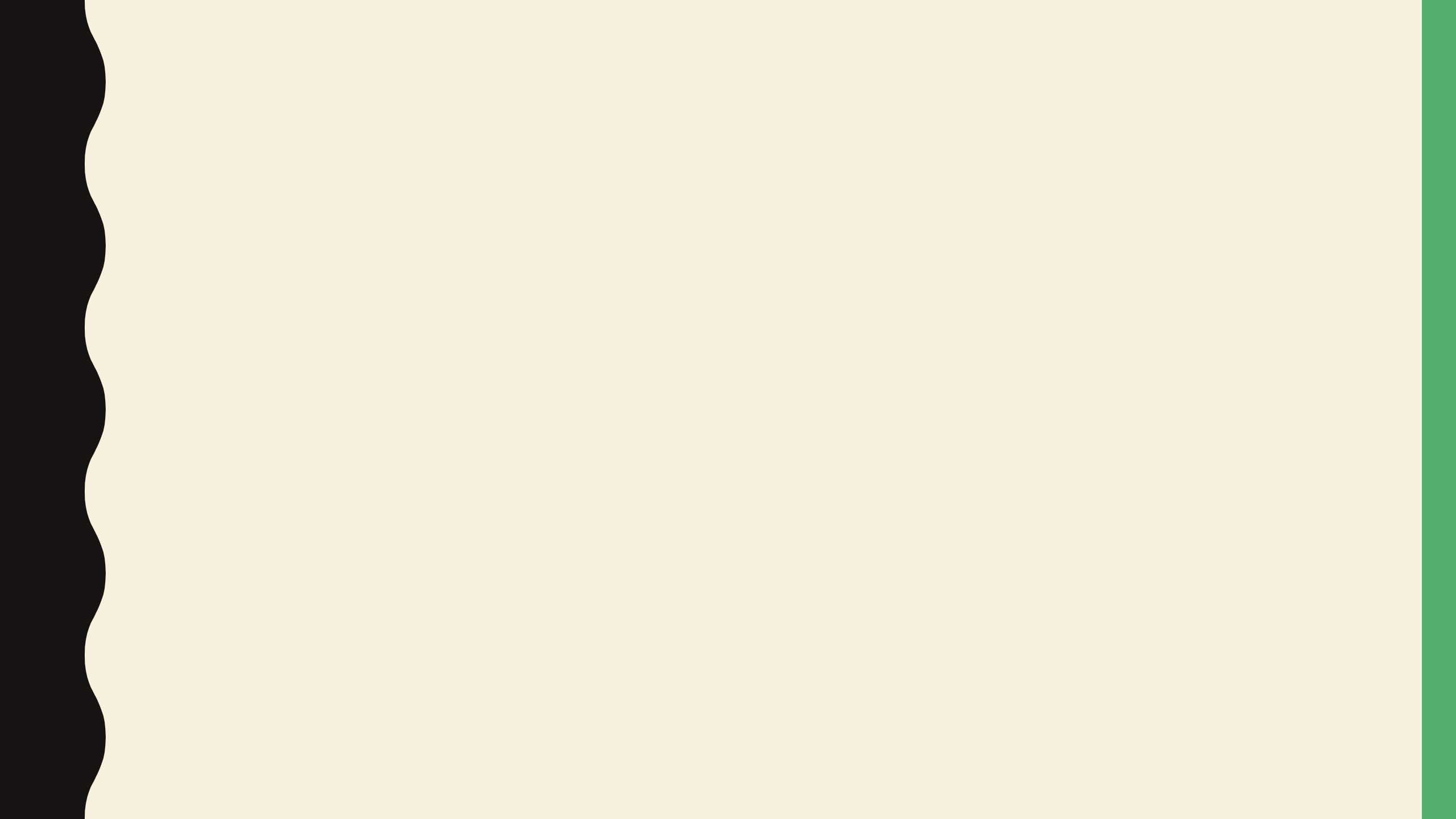
Site Selection

Legend

-  Civil Defense
-  Bal'ama Tunnel
-  Jenin Cinema
-  Fatima Khatoun School
-  Freedom Theatre
-  New Freedom Theatre
-  Jenin Visitors Center
-  Municipality
-  Old Palace
-  Red Crescent Society
-  Tell Jenin
-  The Grand Mosque
-  University
-  Taxi Terminal
-  Police Station
-  Main Road
-  Regional Road
-  CBD_bound
-  Suweitat Forest
-  Industrial Zone
-  Old Town
-  Governmental District
-  Jenin Camp
-  Study Area



1:12,500

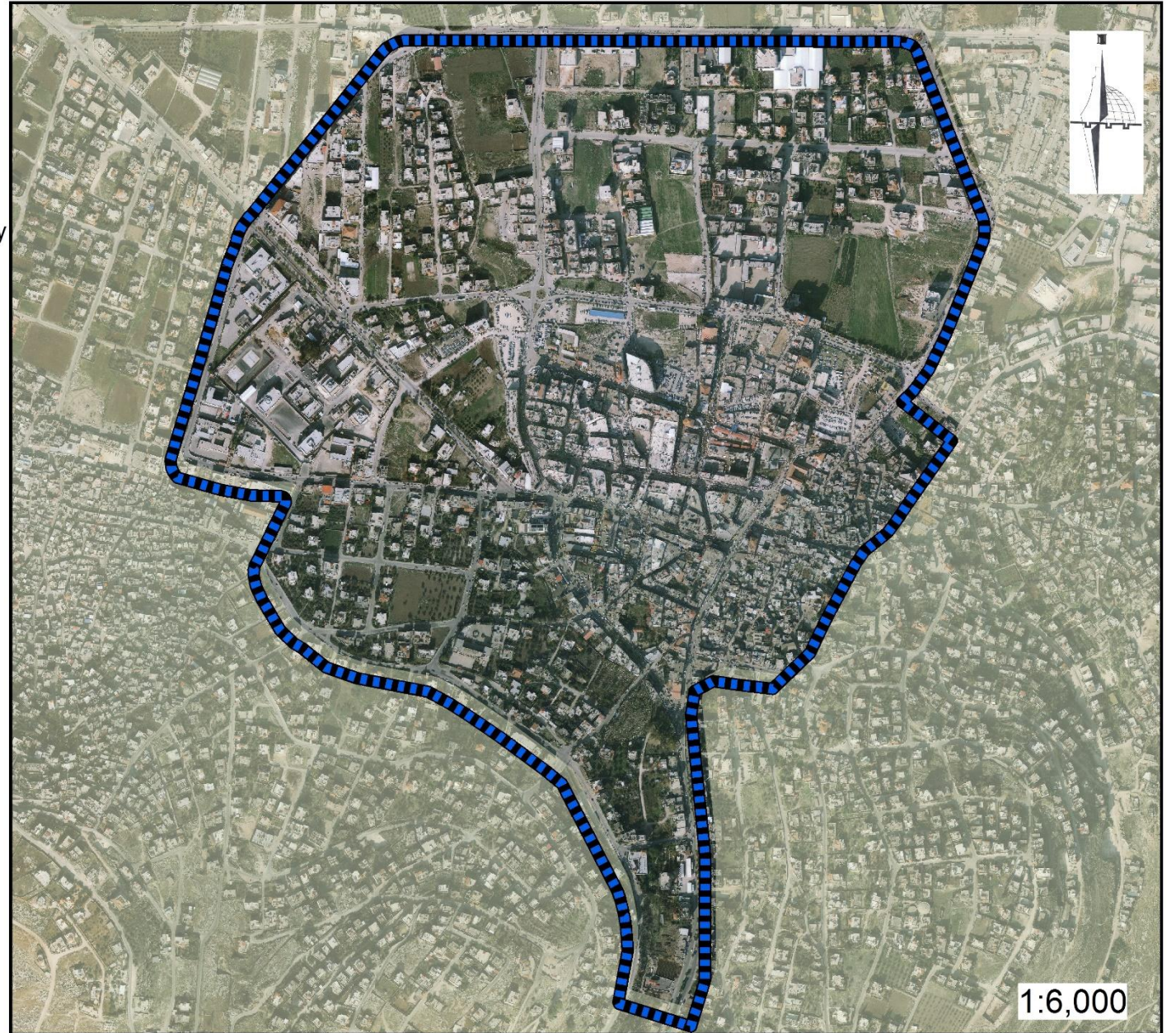


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Study Area

Legend

 Study Area Boundary



Final Boundary
The Study Area

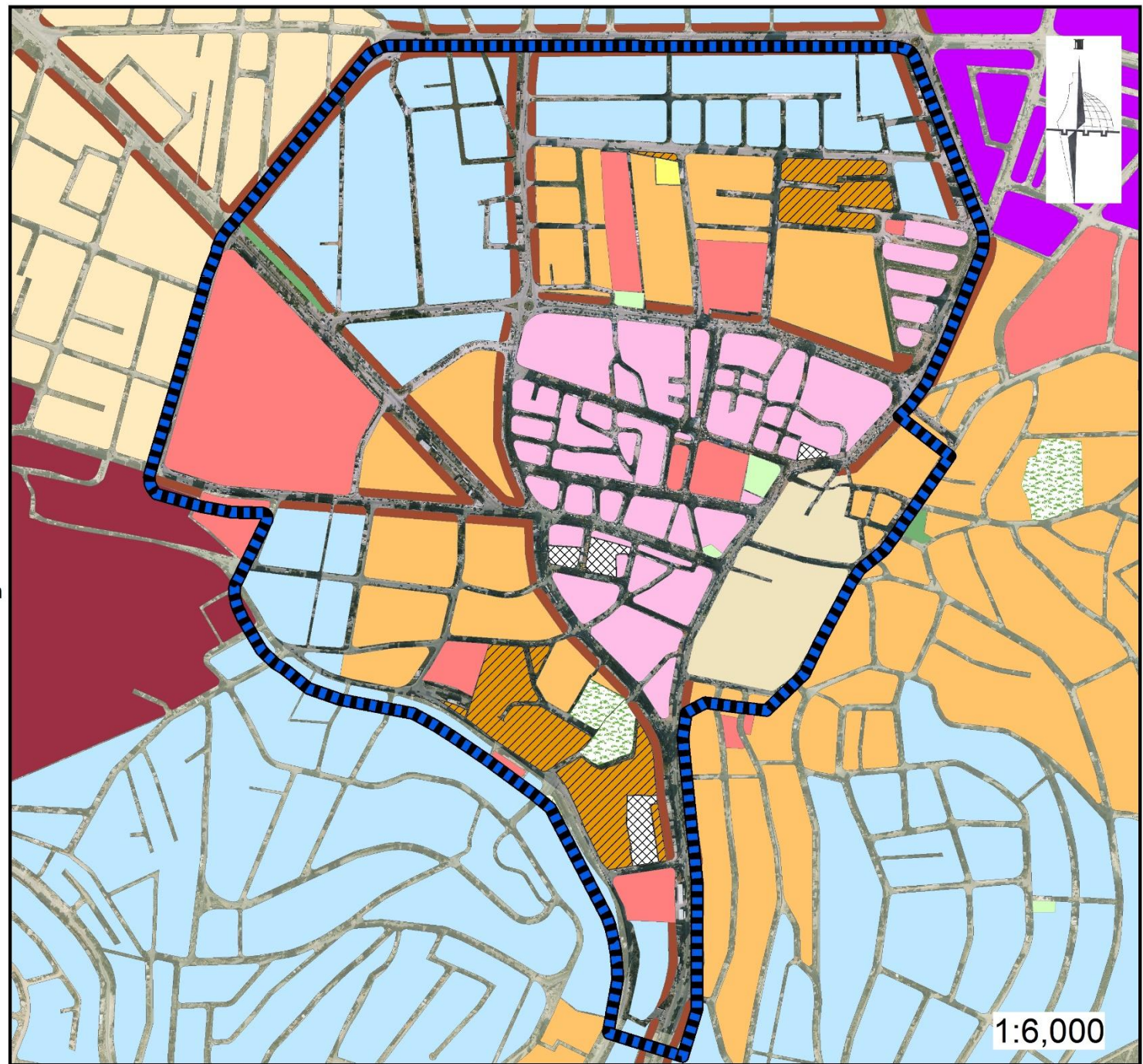


SITE ANALYSIS

Master Plan

Legend

-  Cemeteries Areas
-  Commercial Centers Class
-  Green Area Class
-  Helath Senter, Public Services
-  Housing Class C Special
-  Jenin Camp
-  Parking Class
-  Public Services Class
-  Oldtown, Historical Town
-  Religious, Moqsues and Church
-  Longitudinal Commercial Class
-  Industrial Class
-  Housing Class A
-  Housing Class B
-  Housing Class C
-  Study Area Boundary

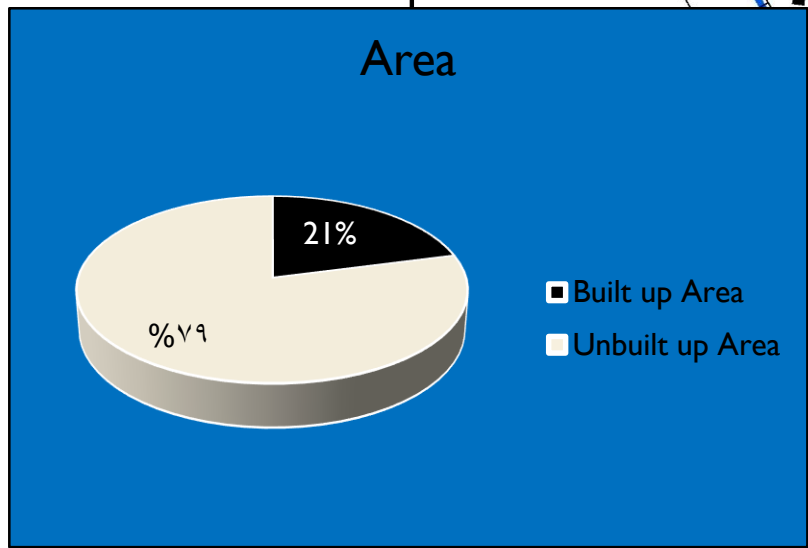
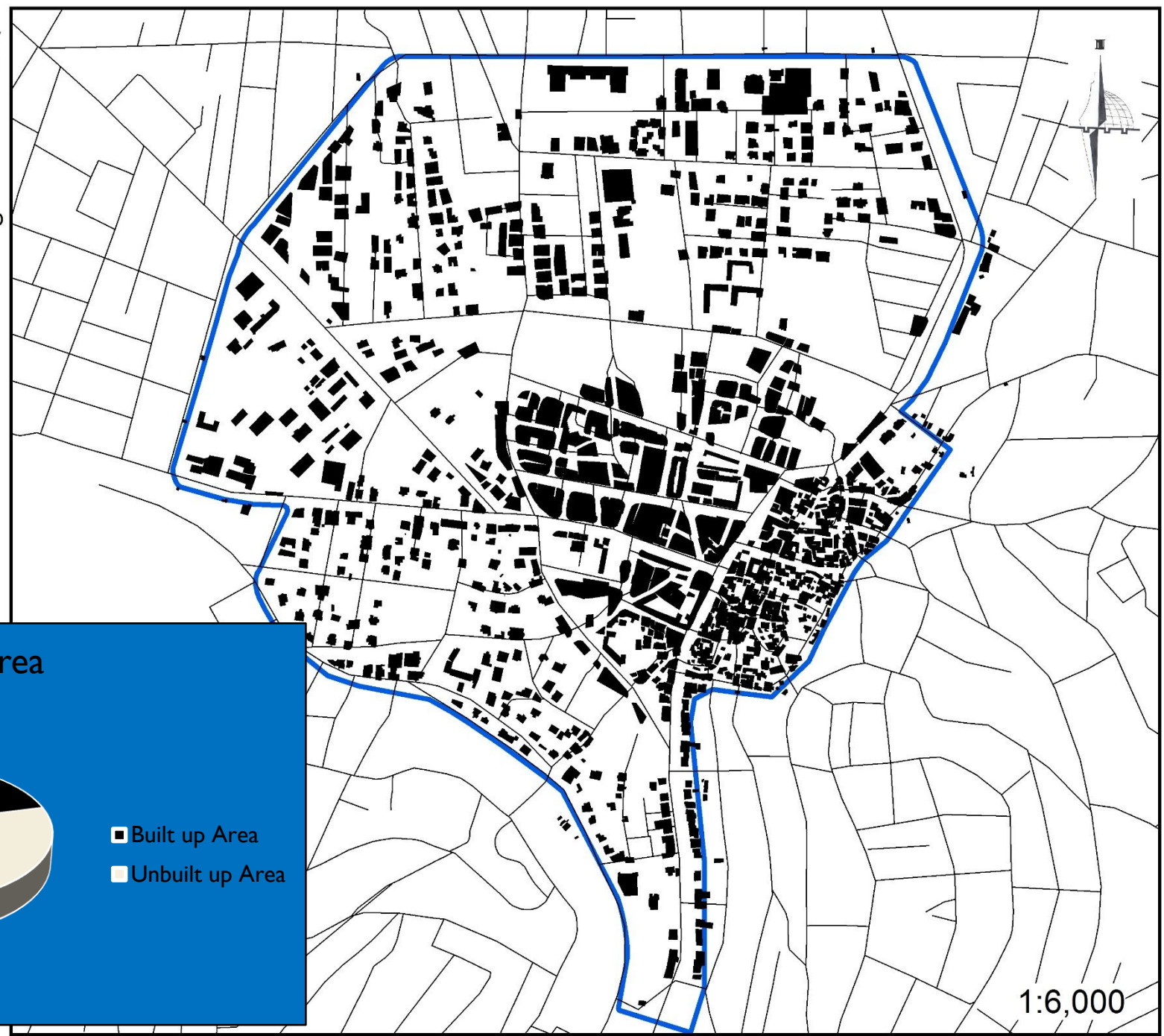


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Figure Ground Plan

Legend

- Buildings
- Roads_Data
- Study Area



1:6,000

SURVEY SHEET

#Buildings

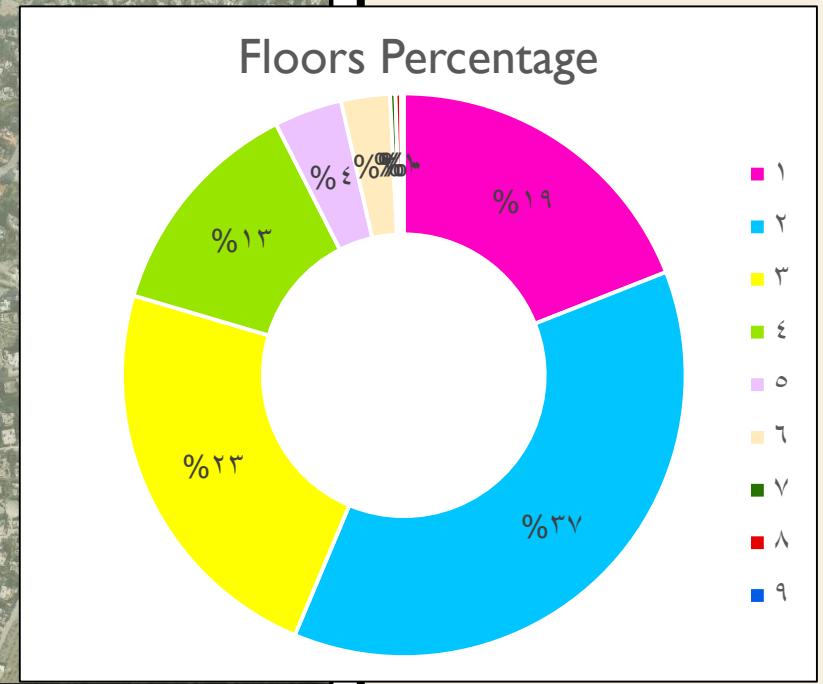
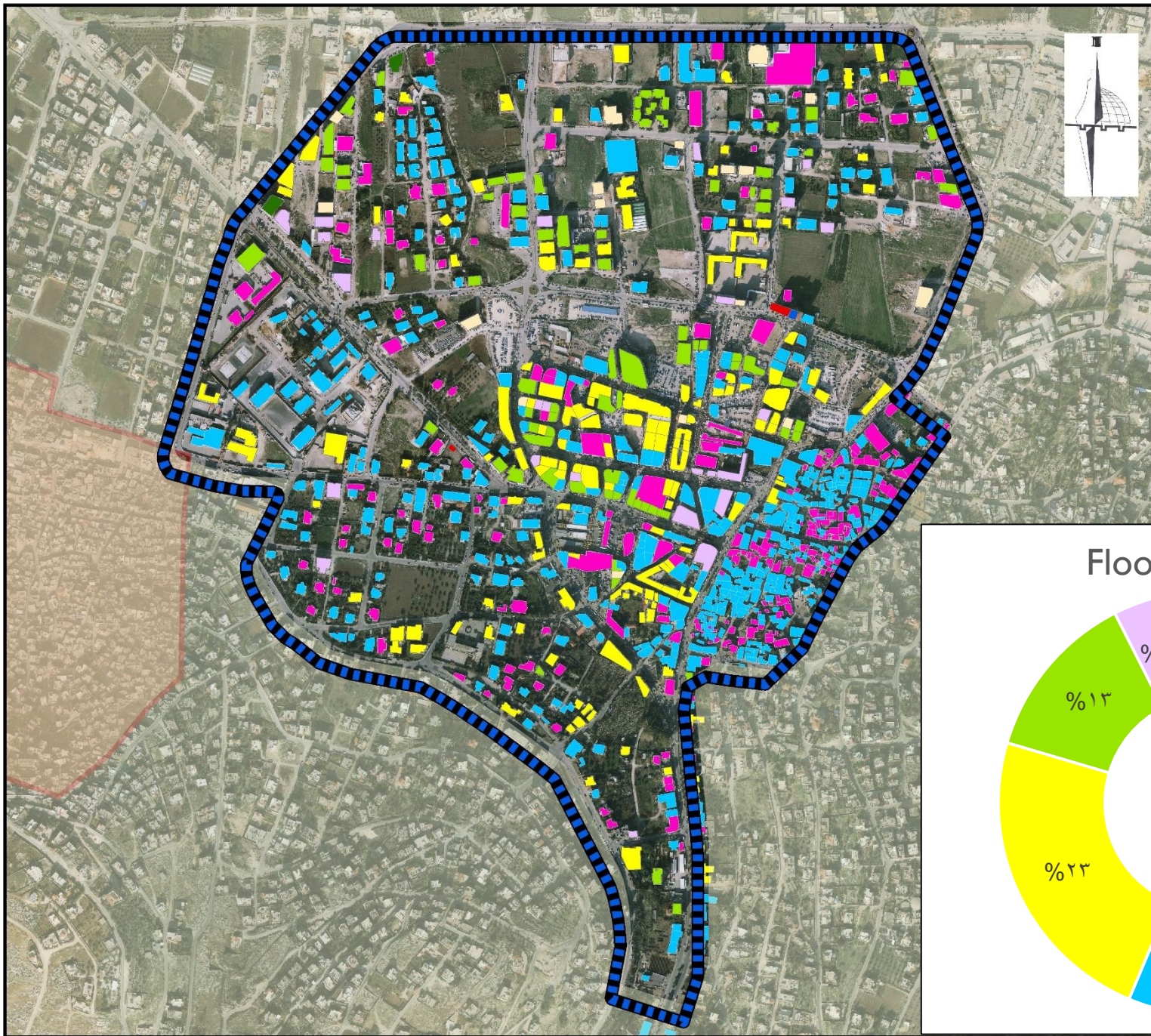
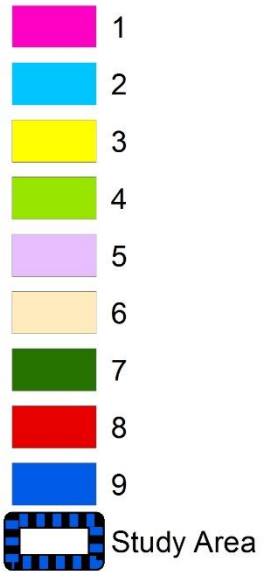
#NUM	#floors	Type	Condition	Use 1	Use 2	Use 3	Use 4	Use5

#Streets

Street name	condition	Availability of sidewalks	Sidewalks condition	Sidewalks width	Street greenery

Number of Floors

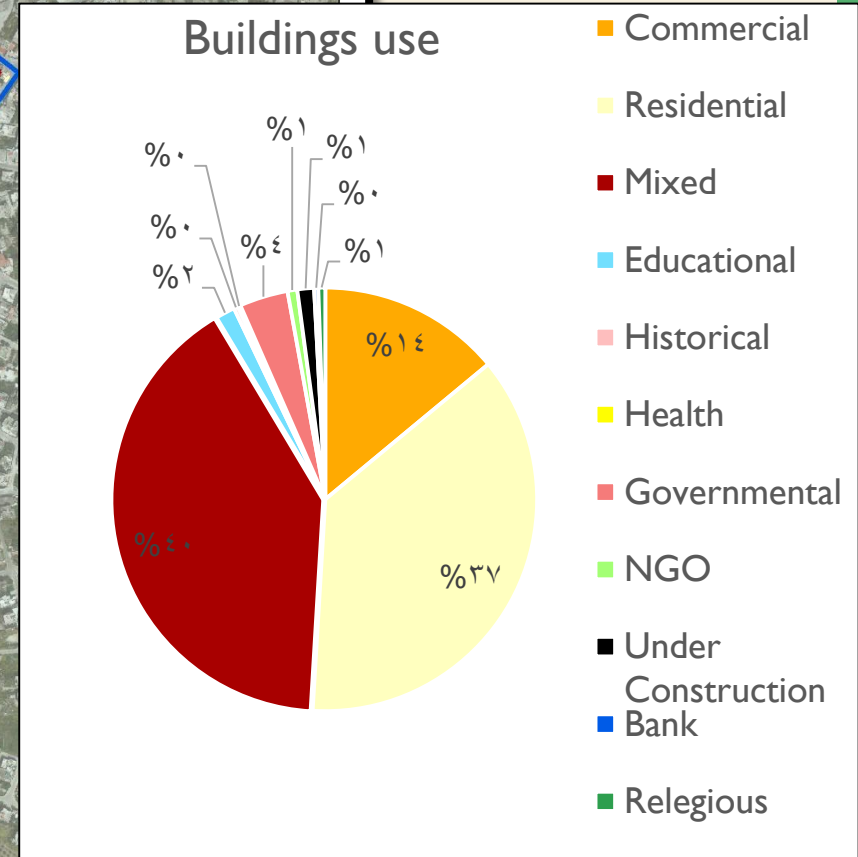
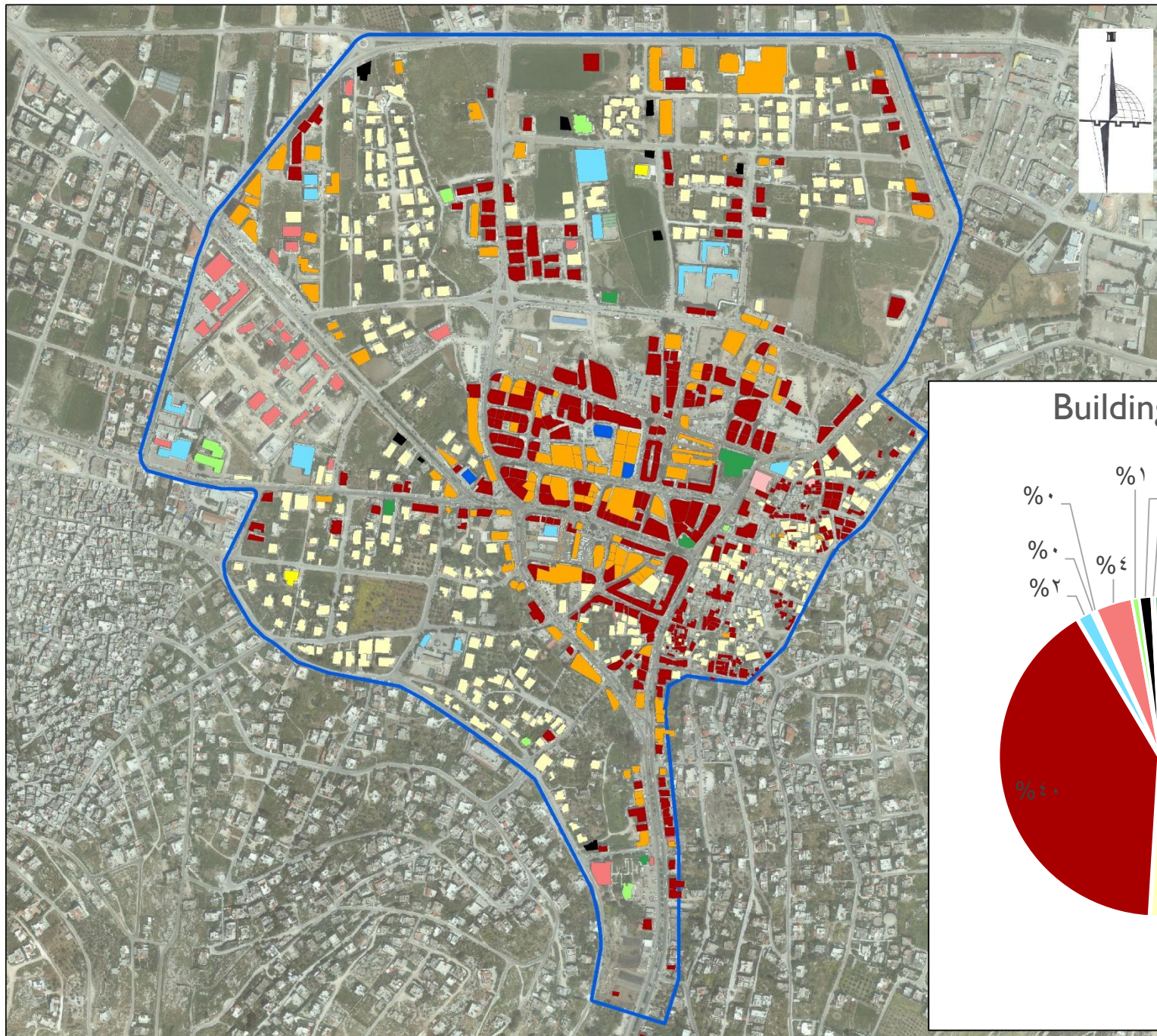
Legend



Buildings Use

Legend

- Bank
- Commercial
- Educational
- Governmental
- Health
- Historical
- Mixed Use
- NGO
- Religious
- Residential
- Under Construction
- Study Area



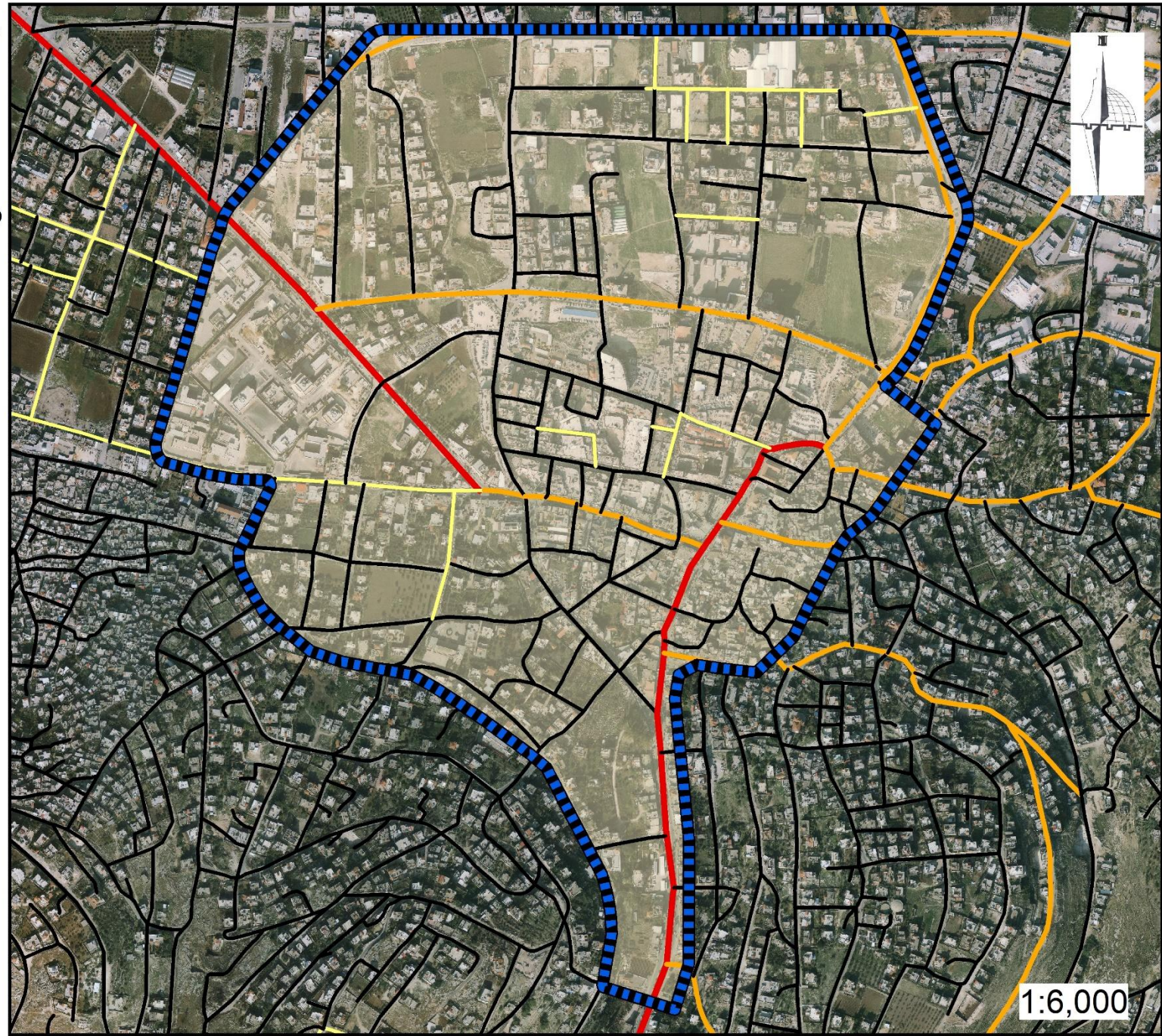
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Roads Classification

Legend

















- Internal
- Local
- Main
- Regional
- ▭ Study Area

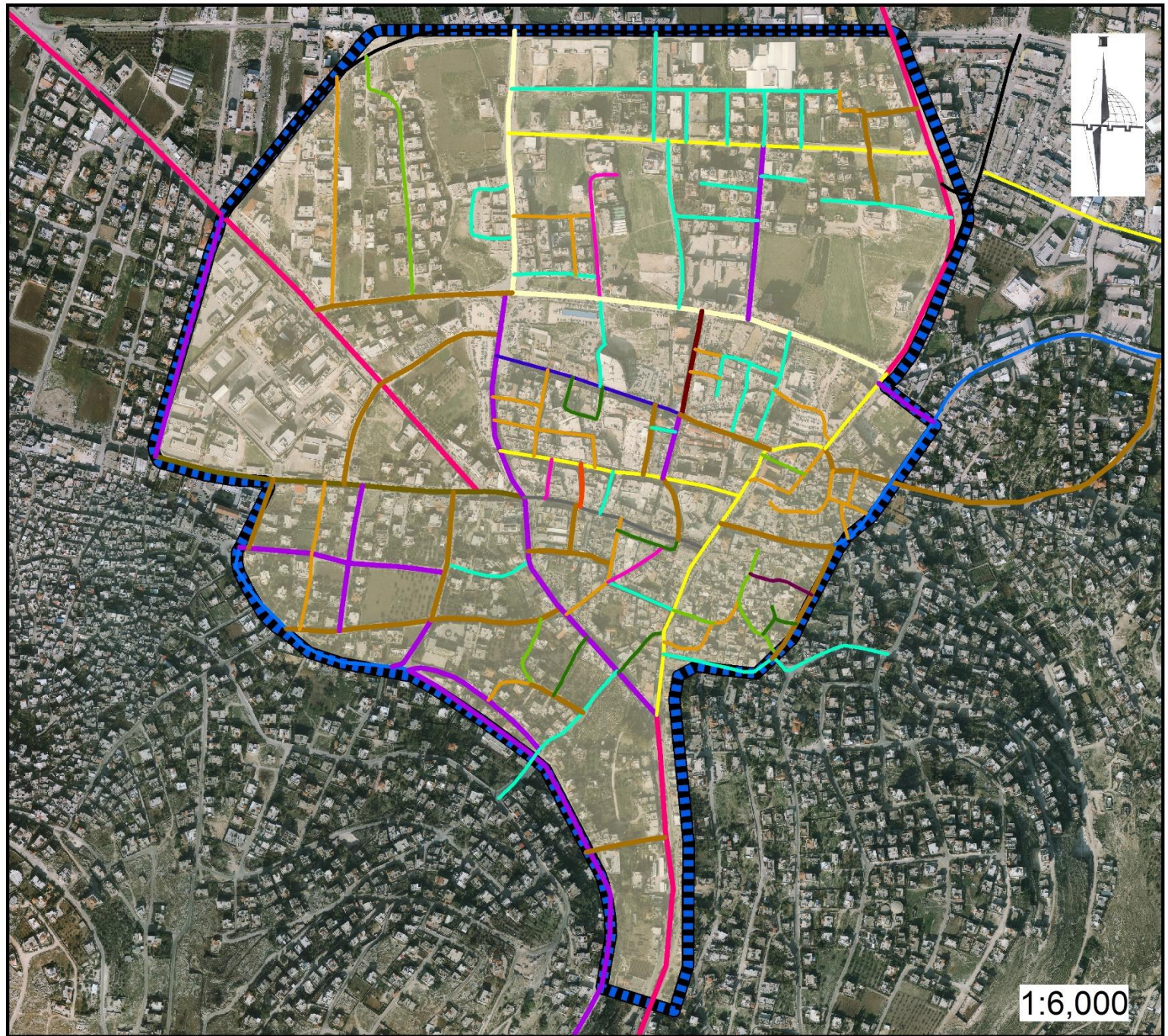


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Existing Roads Width

Legend

	Study Area		13
	3		14
	4		15
	5		16
	6		17
	7		18
	8		20
	9		24
	10		25
	12		

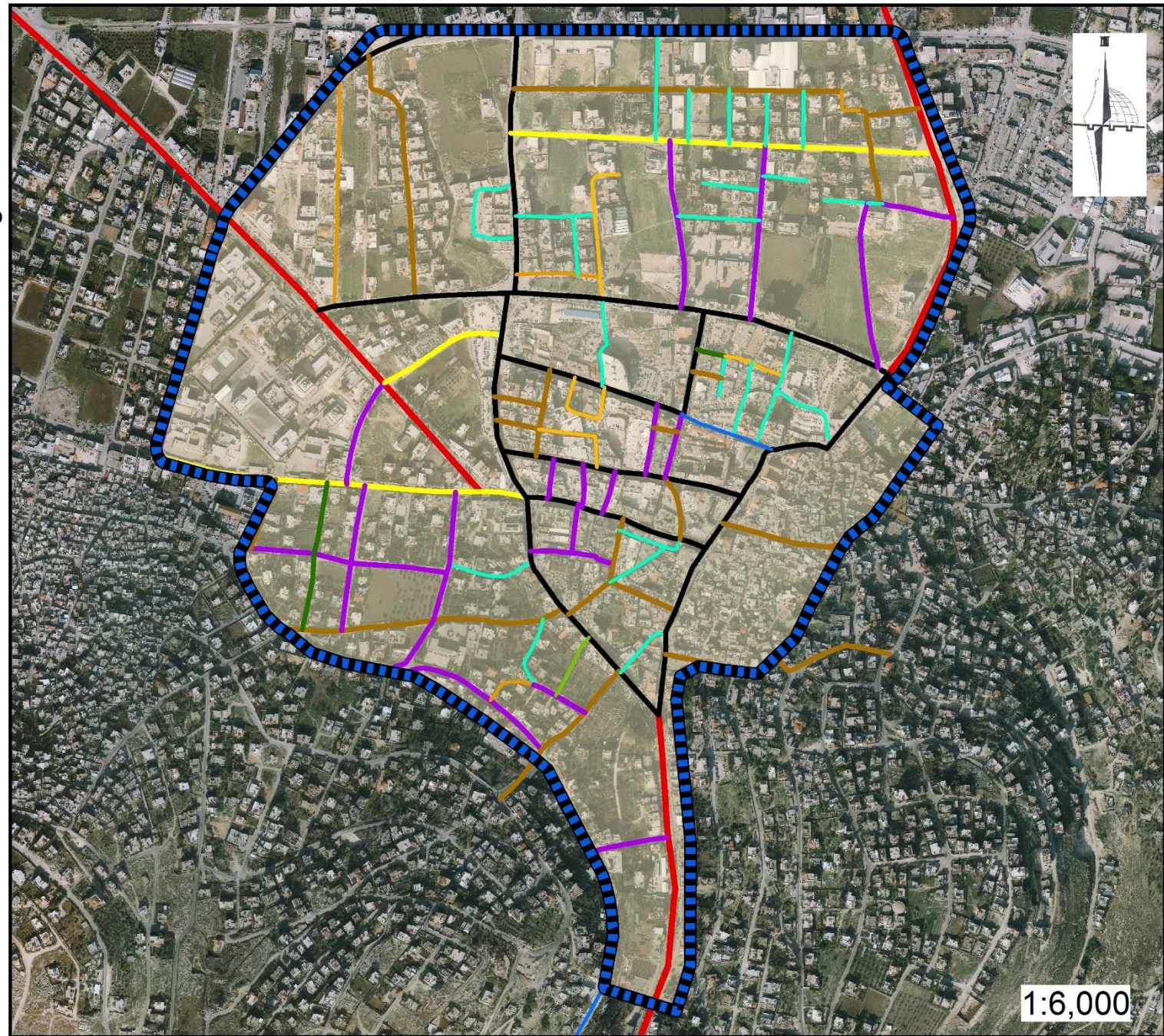
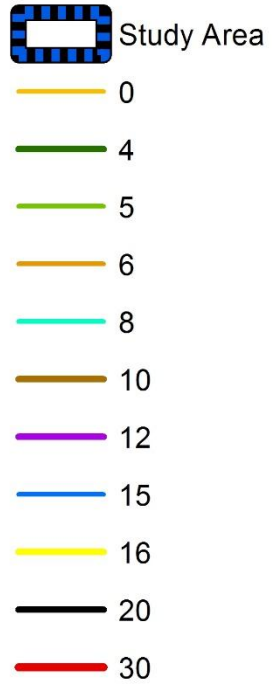


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Master Plan Roads Width

Legend



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Availability of Sidewalks

Legend

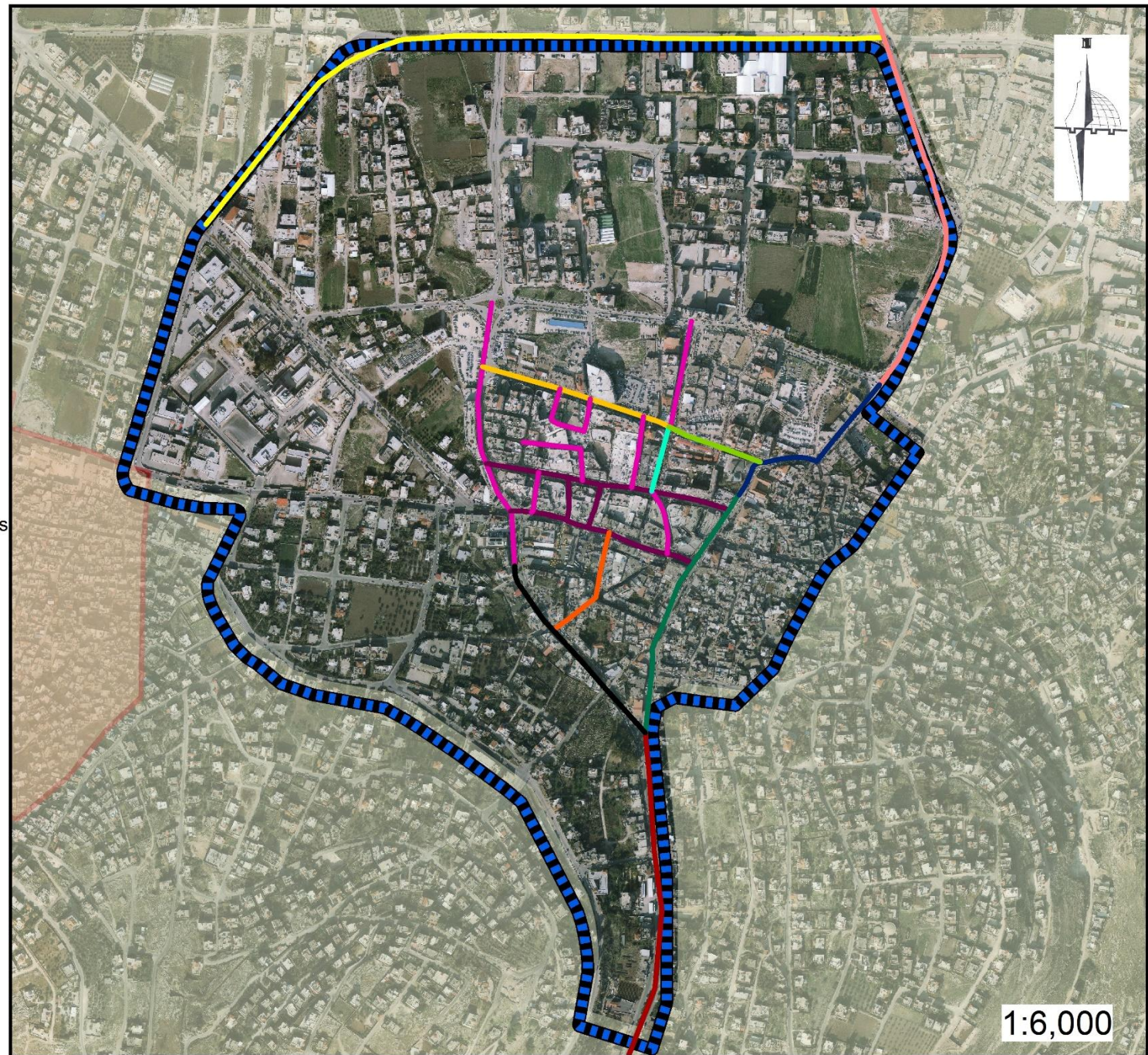
- Street with Sidewalk
- Street with bad Sidewalk
- Street without Sidewalk



Roads Commercial use

Legend

-  Bakeries + Restaurants
-  Bakeries + Supermarkets
-  Car Services
-  Clothes Shops
-  Clothes Shops + Restaurants
-  Furniture Gallery
-  Household products shops
-  Industrial and Agricultural Stores
-  Restaurants
-  Restaurants + Offices
-  Vegetable Market
-  Vegetable Stalls
-  Study Area



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Study Area Parking

Legend

-  On Street Parking
-  Off Street Parking
-  Study Area



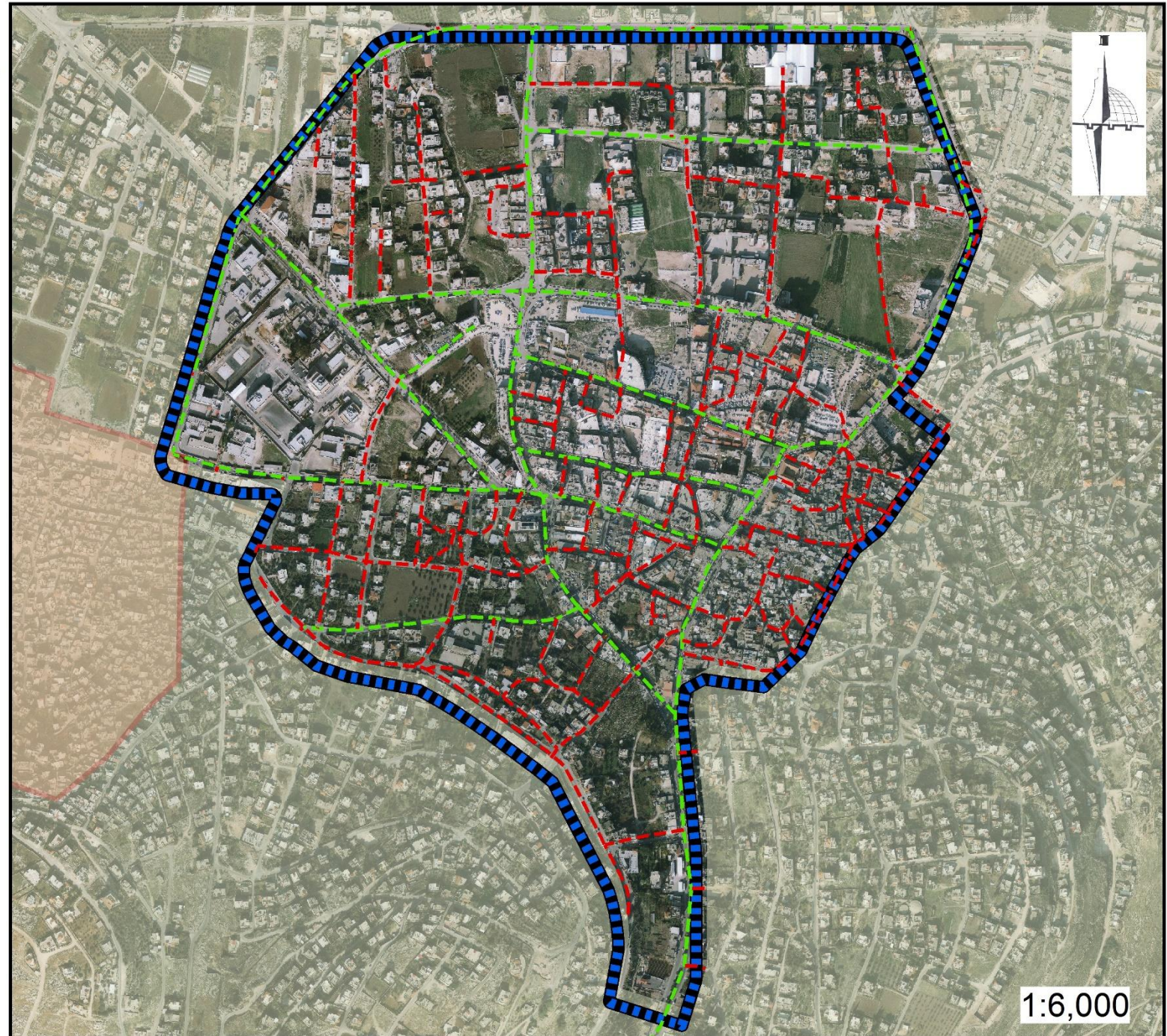
Streets Greenery

Legend

--- Without Greenery

--- With Greenery

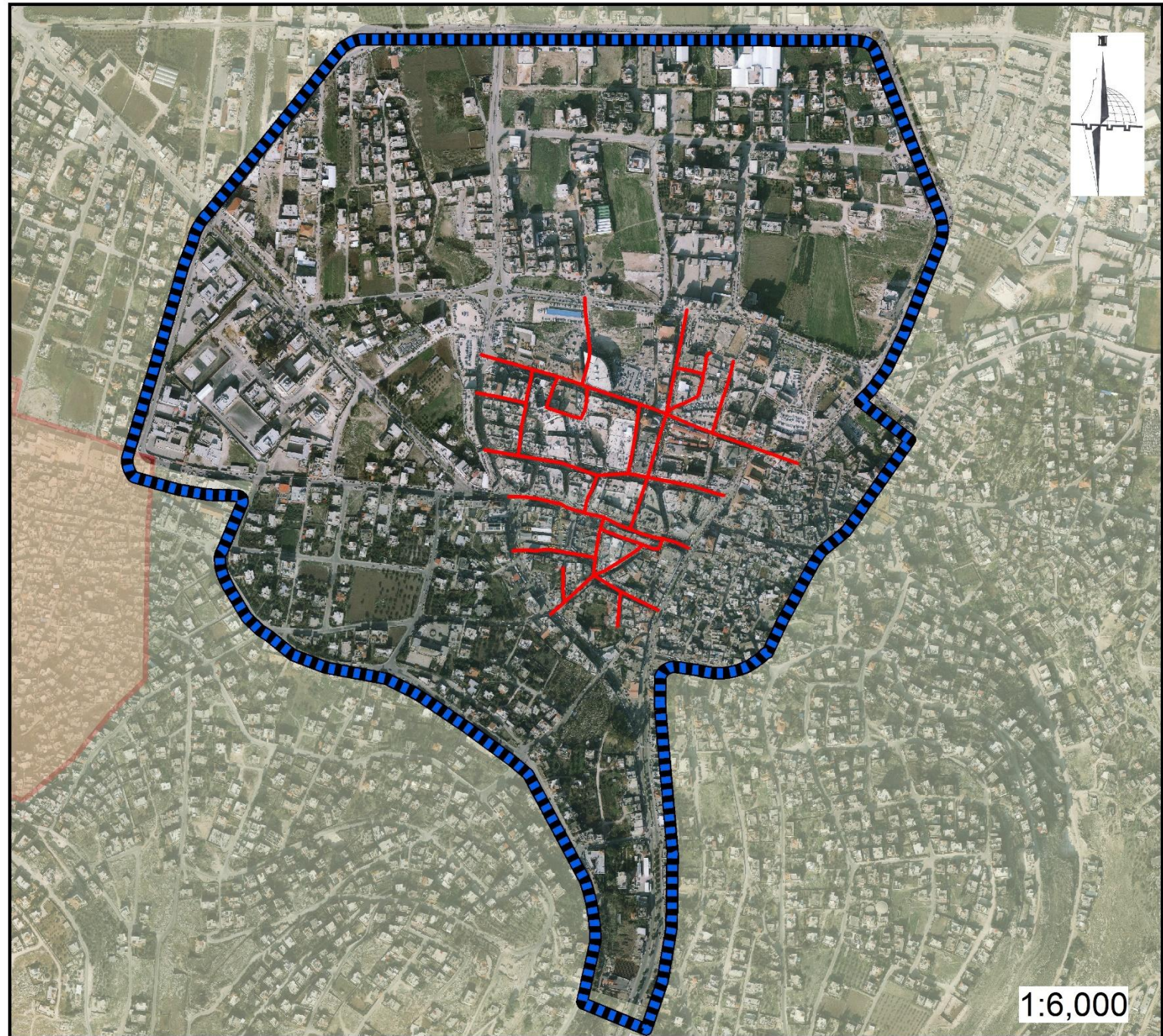
 Study Area



Roads hygiene

Legend

- Dirty Street
- ▭ Study Area





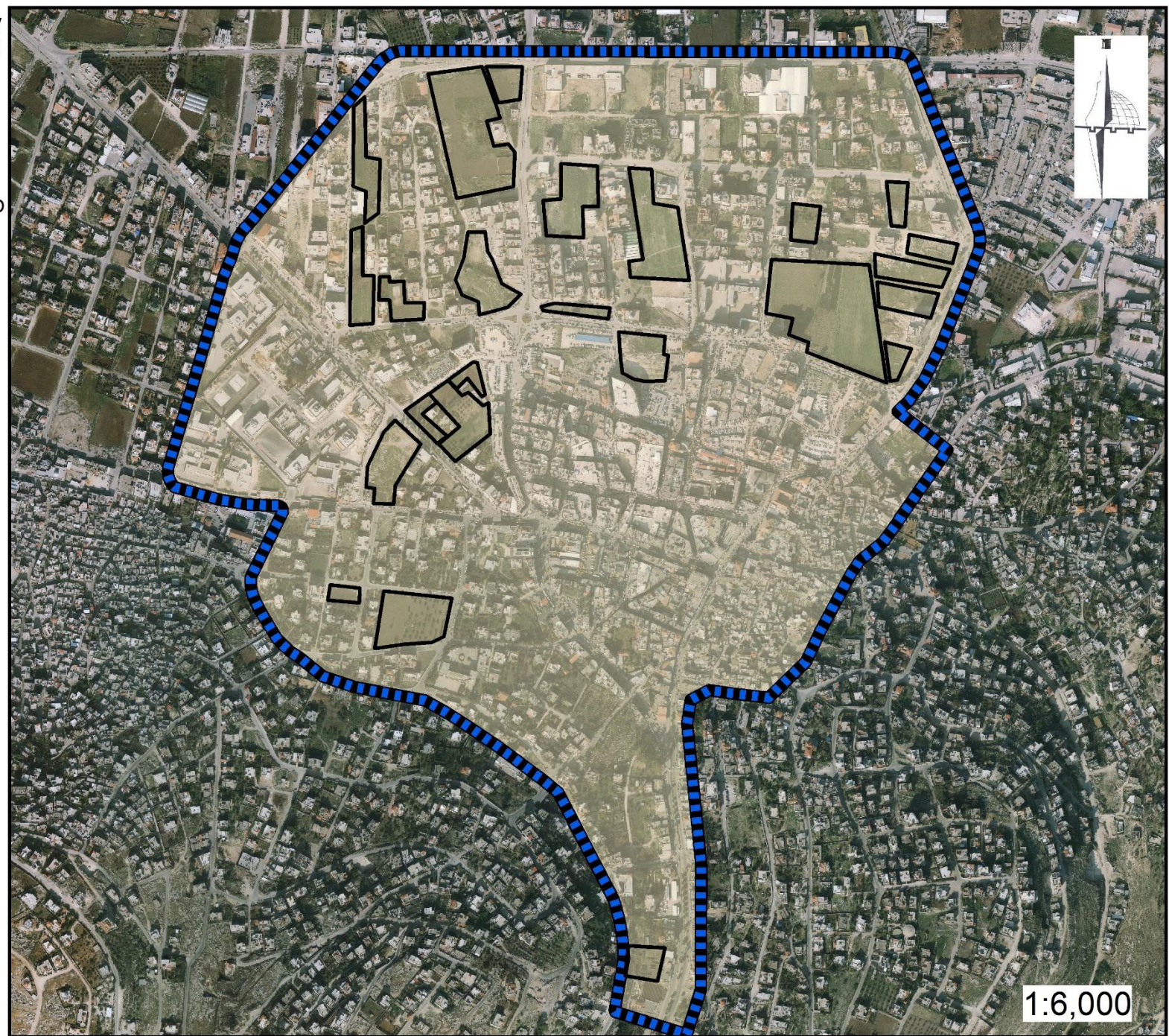


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Open spaces

Legend

-  Open spaces
-  Study Area






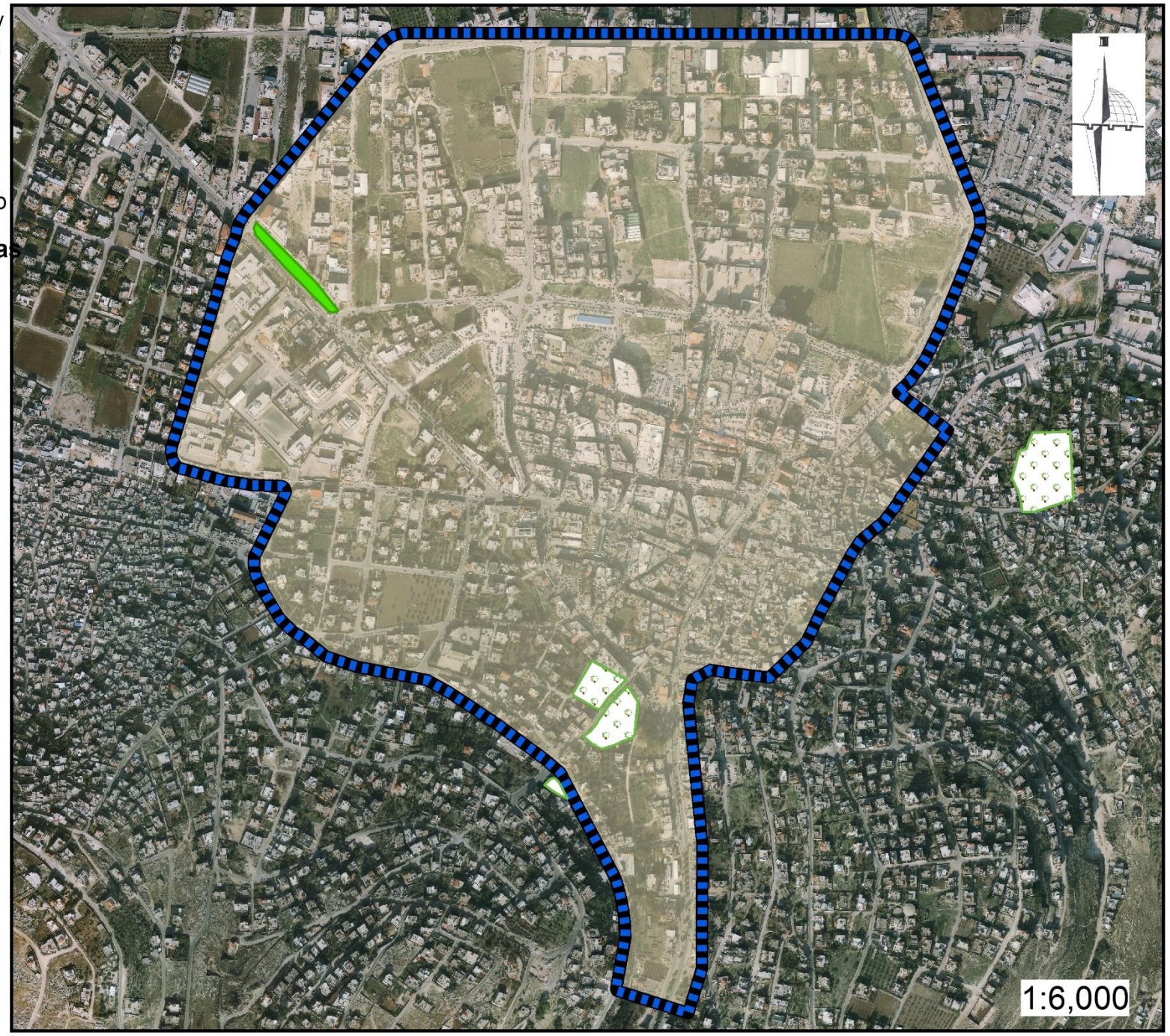
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Cemetery and Green Areas

Legend

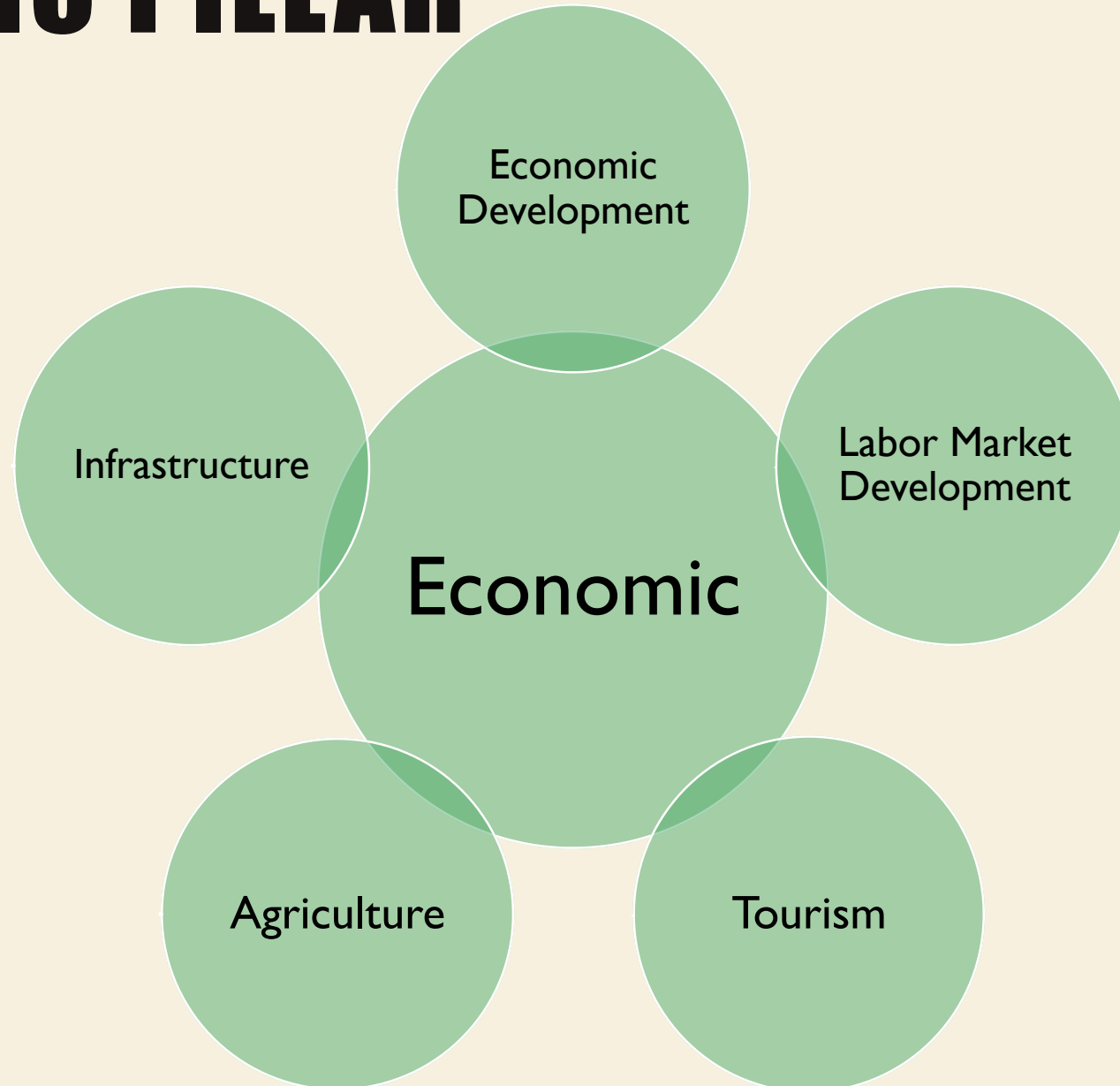
-  Cemetery
-  Green Area
-  Study Area





ANALYSIS RESULT

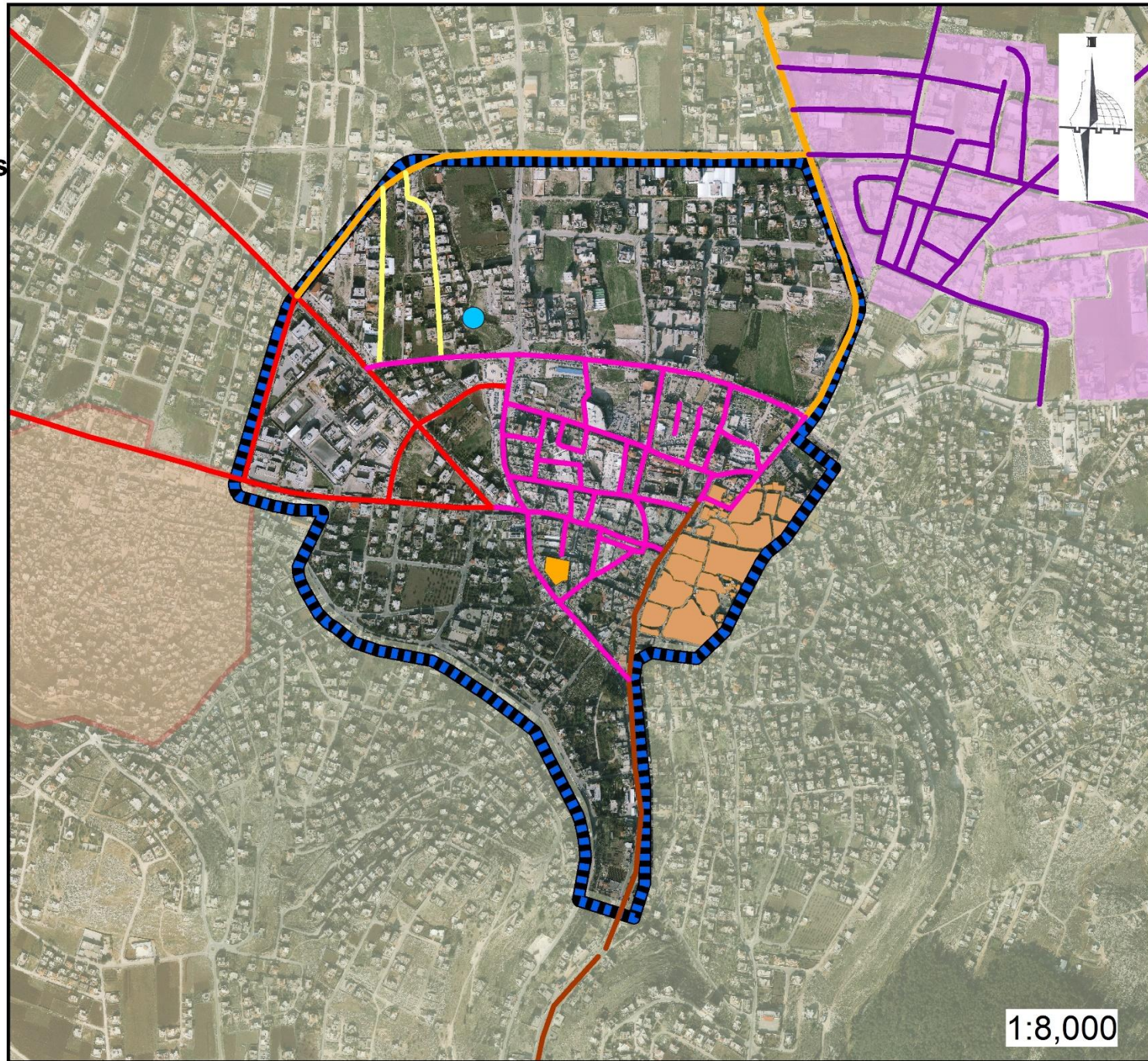
ECONOMIC PILLAR



Economic Pillar Opportunities & Strengths

Legend

- Historical Aqueduct water
- Commercial
- Commercial + Residential
- Commercial + Services
- Commercial + Tourism
- Industrial
- Residential + Services
- Neglected Old Town
- Industrial Zone
- ▭ Study Area

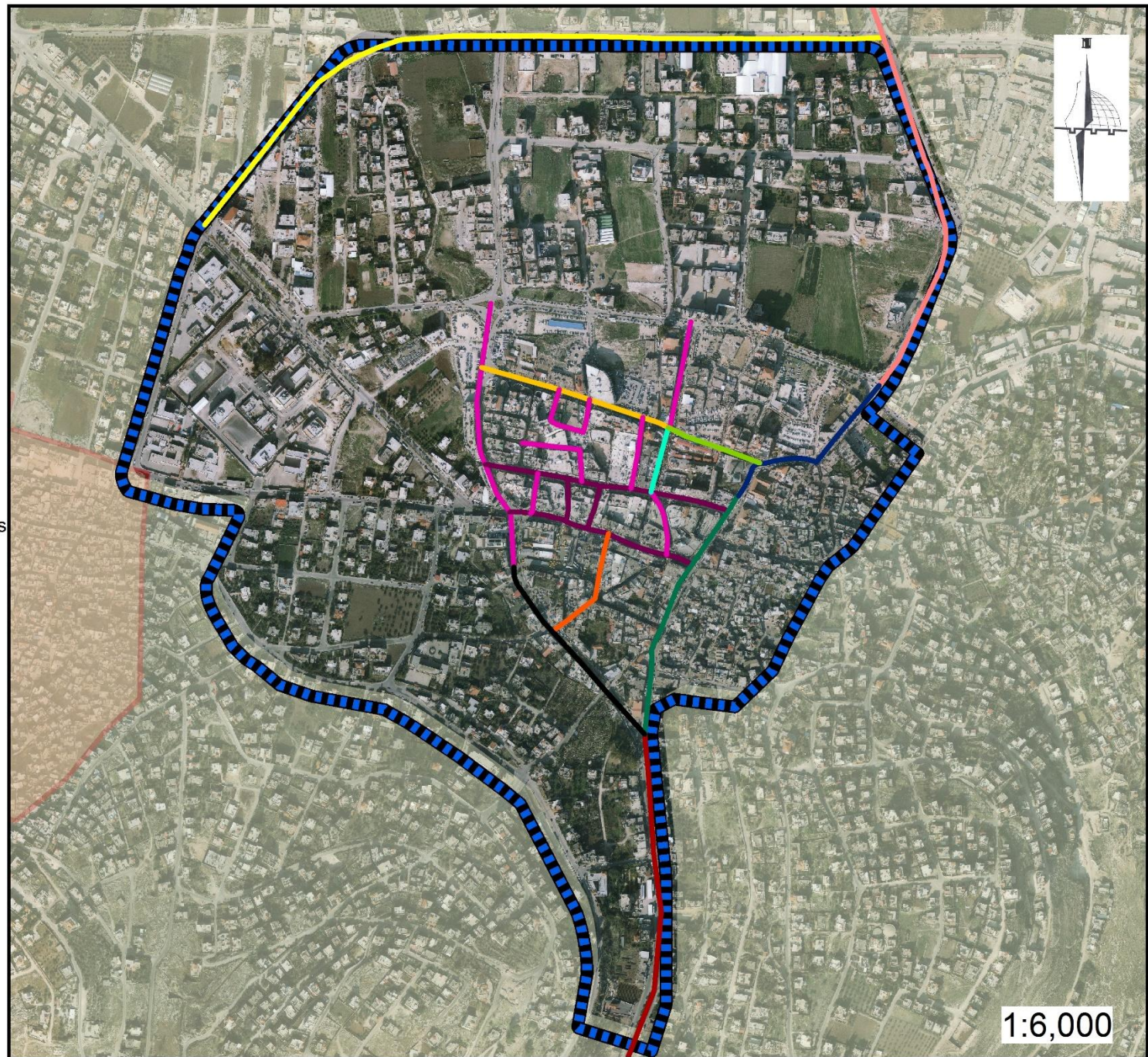


1:8,000

Roads Commercial use






Legend

-  Bakeries + Restaurants
-  Bakeries + Supermarkets
-  Car Services
-  Clothes Shops
-  Clothes Shops + Restaurants
-  Furniture Gallery
-  Household products shops
-  Industrial and Agricultural Stores
-  Restaurants
-  Restaurants + Offices
-  Vegetable Market
-  Vegetable Stalls
-  Study Area

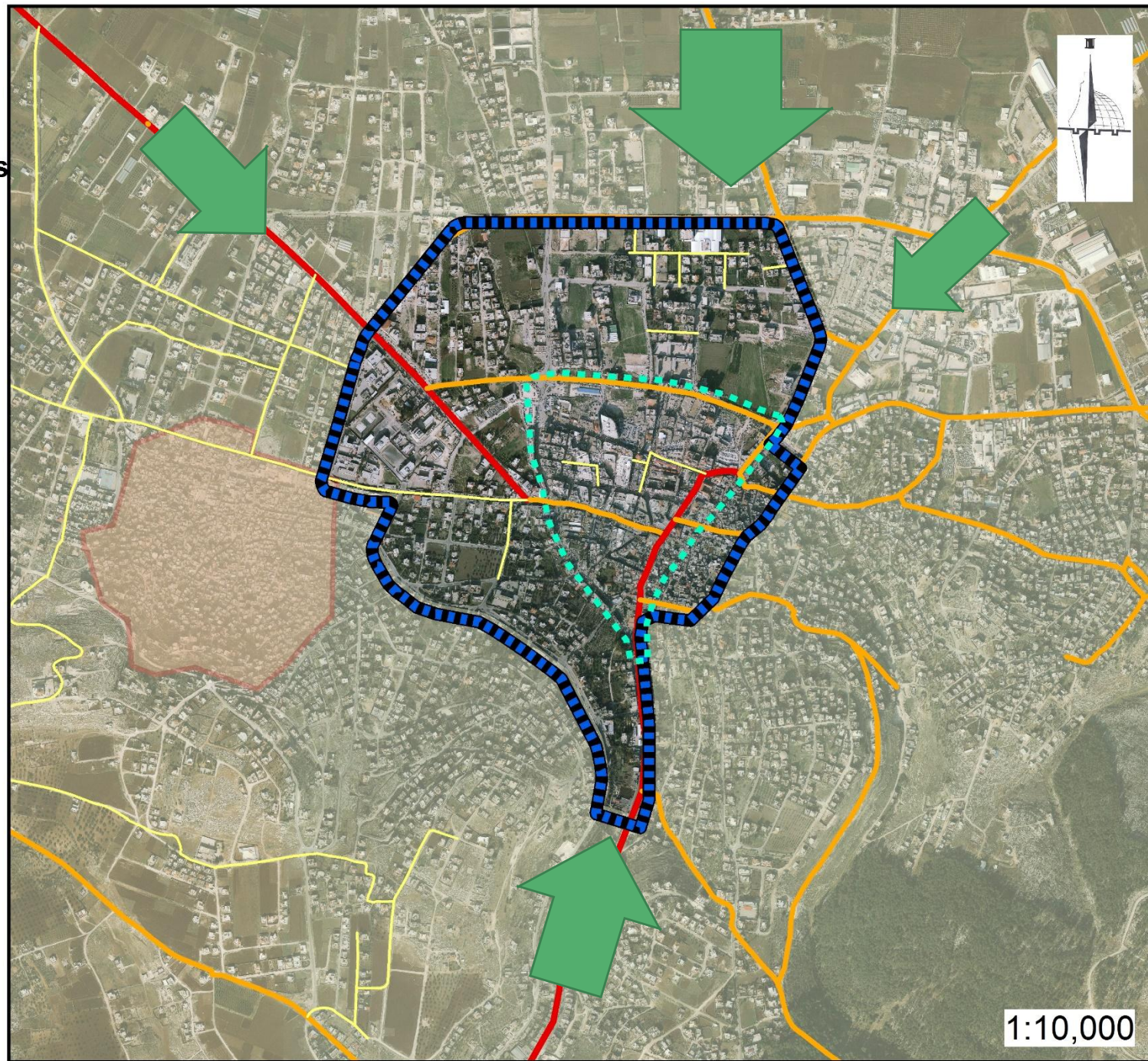
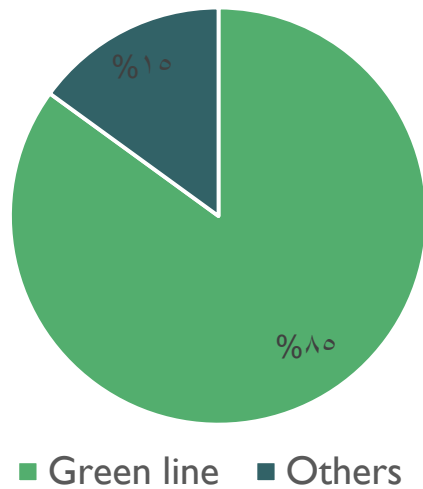


Economic Pillar Opportunities & Strengths

Legend

-  CBD Boundary
-  Study Area
-  Local
-  Main
-  Regional

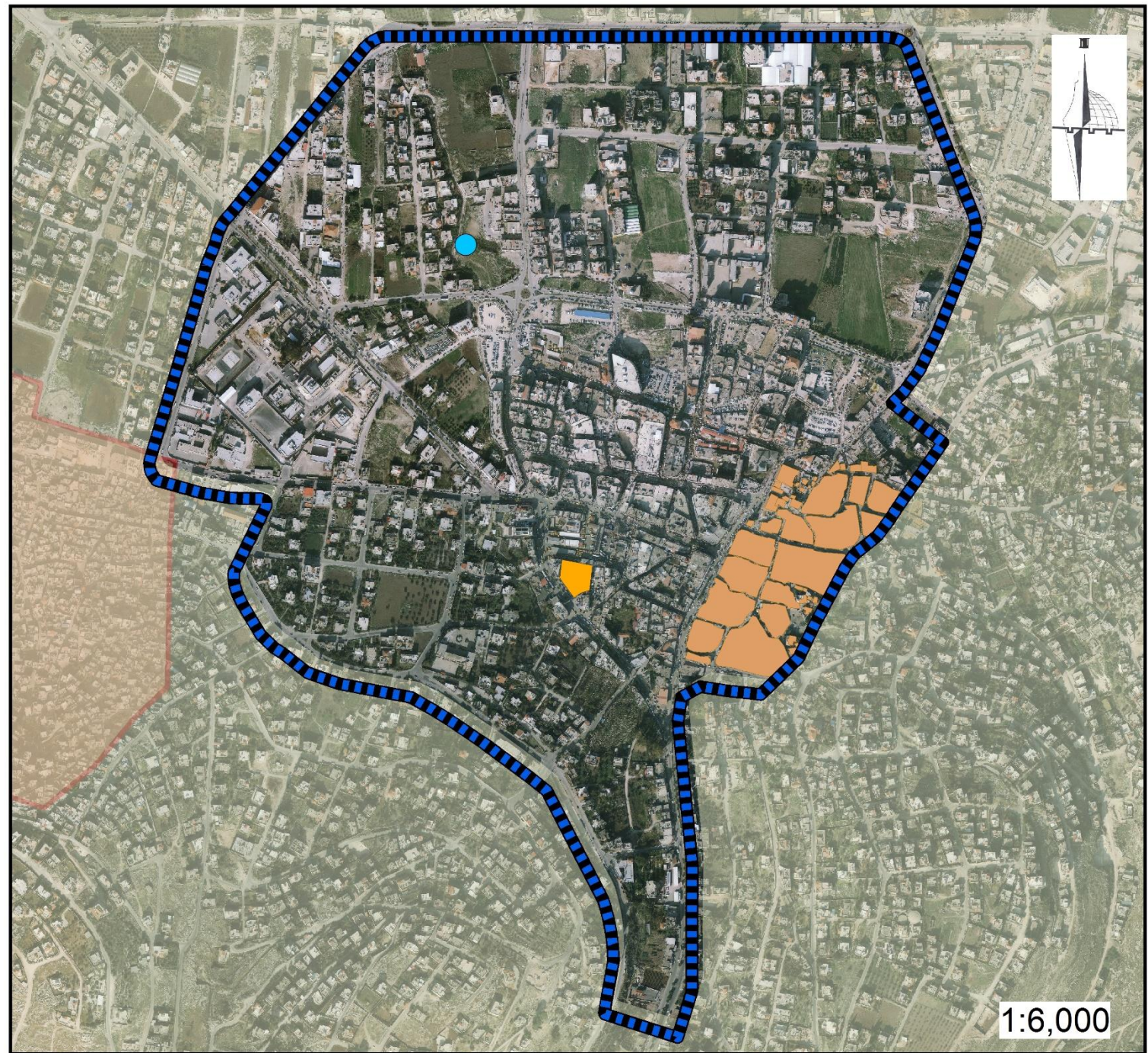
Purchasing power



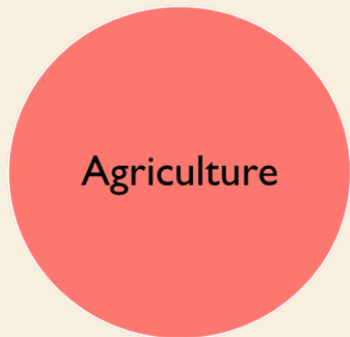
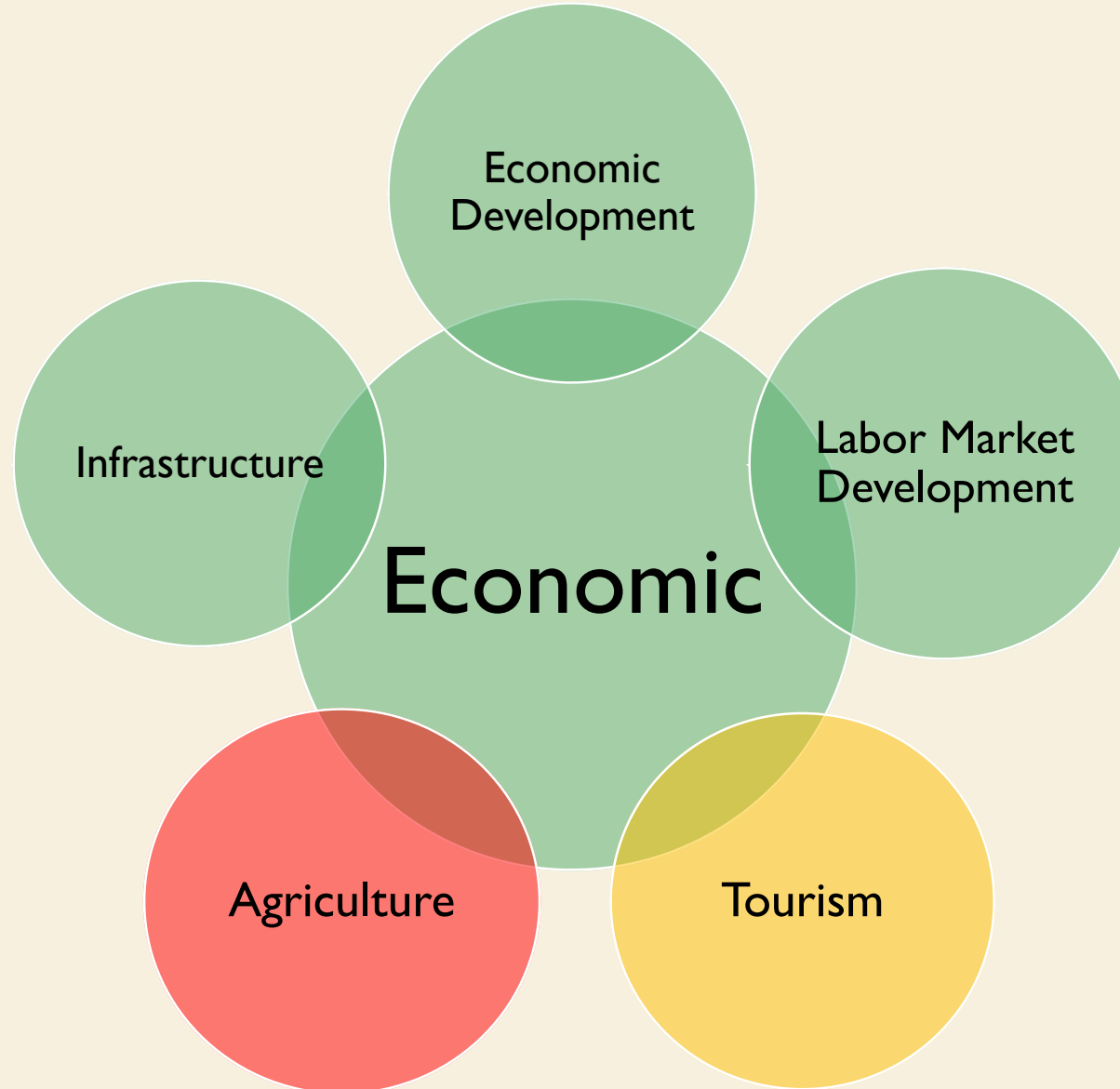
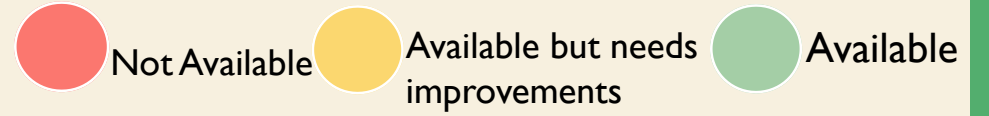
Economic Pillar Threats & Weakness

Legend

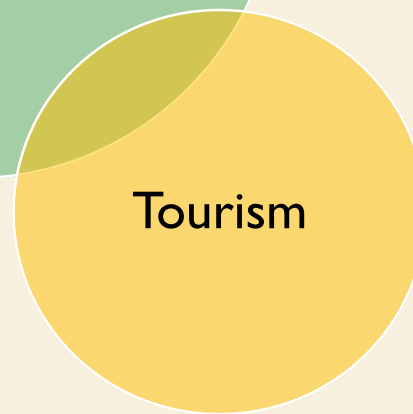
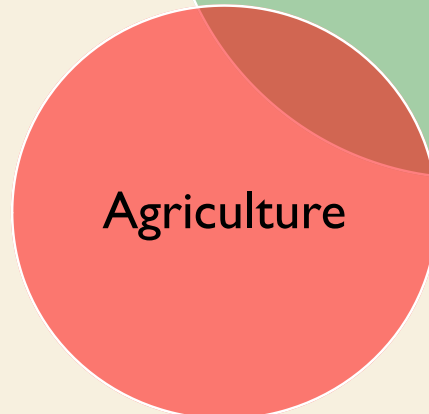
-  Threatened Historical Aqueduct water
-  Threatened Tell Jenin
-  Neglected Old Town
-  Study Area



ECONOMIC PILLAR



-Outside the study area



-Needs improvement








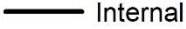





SOCIAL EQUITY PILLAR

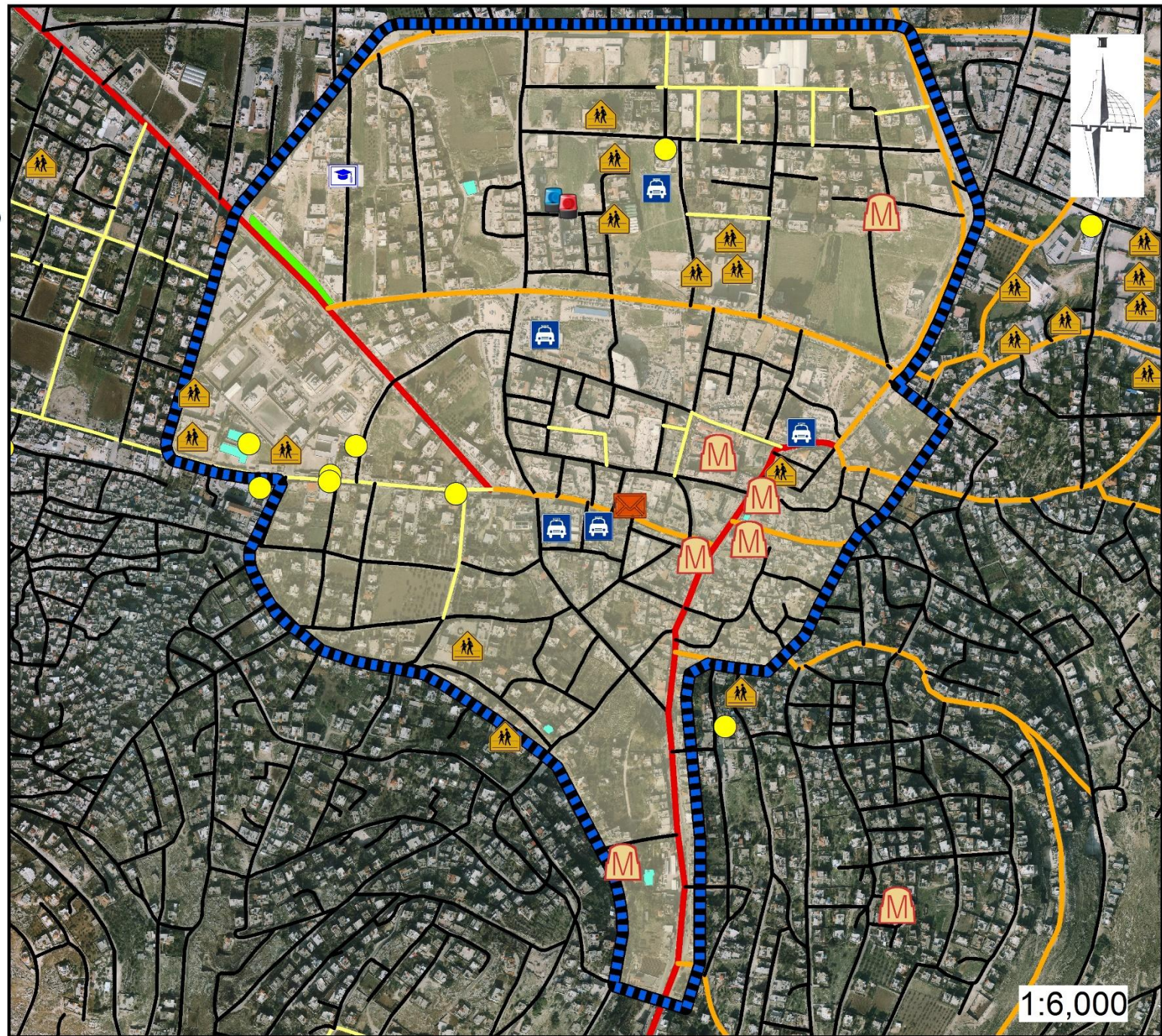


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Social Pillar
 Opportunities & Strengths

Legend

-  University
-  Police Station
-  Municipality Buildings
-  Availability of taxi terminals
-  Post Office
-  Health Facilities
-  Schools
-  Internal
-  Local
-  Main
-  Regional
-  Study Area
-  Green Area
-  NGO Buildings

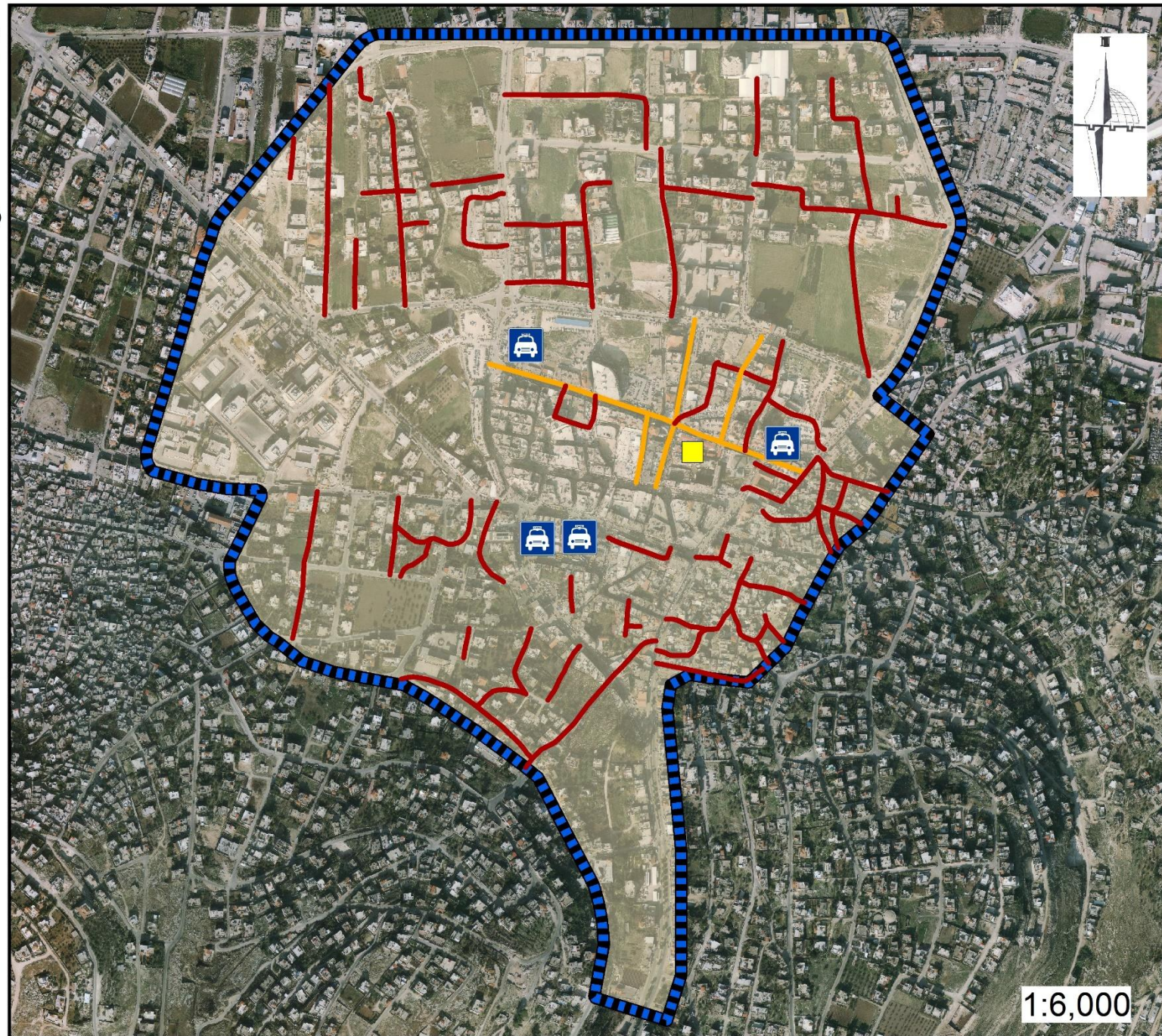


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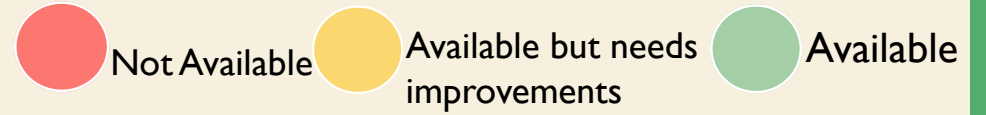
Social Pillar
Threats & Weakness

Legend

-  Vegetables market
-  Taxi Terminal
-  Street with bad Sidewalk
-  Street without Sidewalk
-  Study Area



SOCIAL EQUITY PILLAR



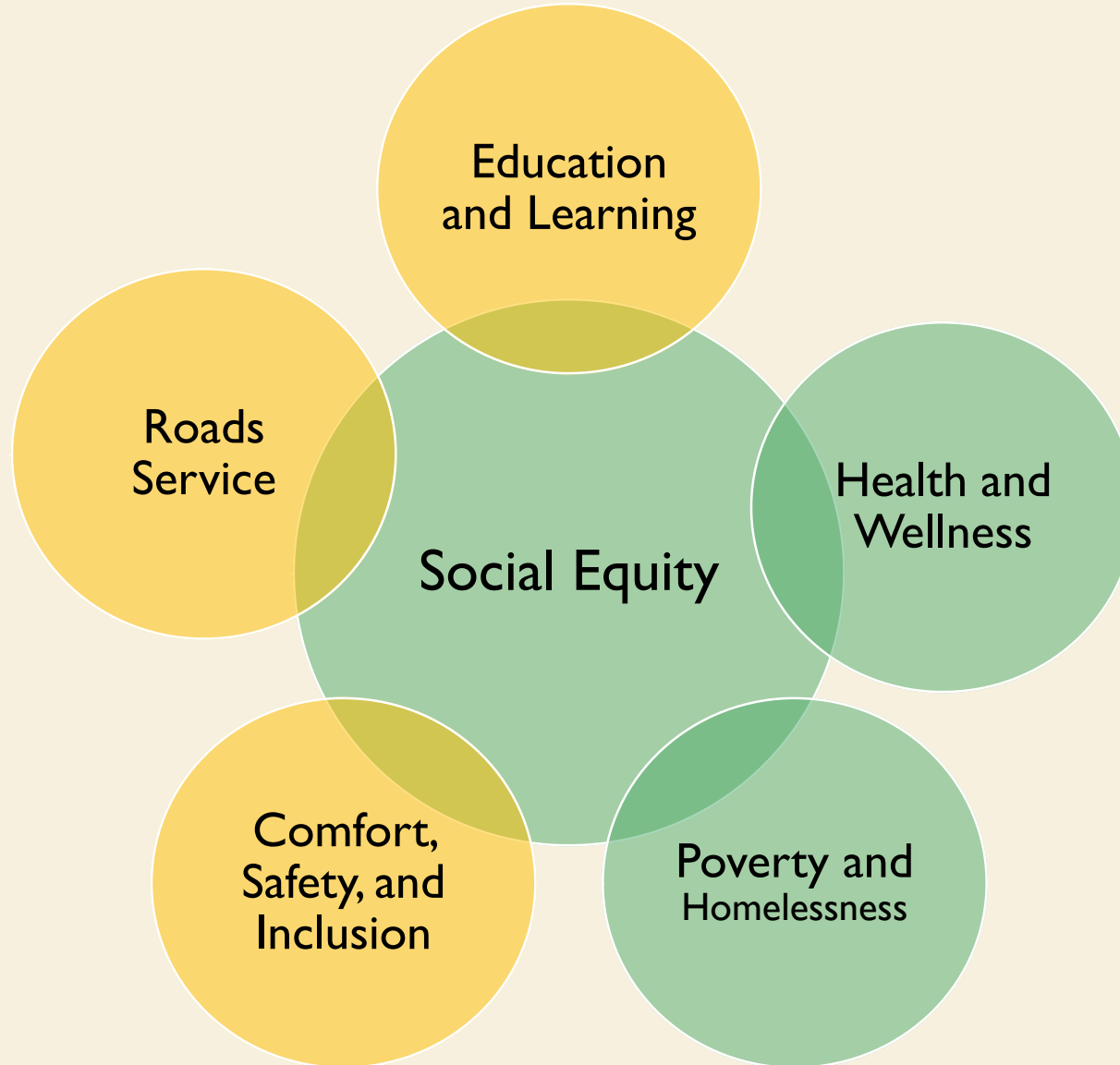
-Fatima khatoun need to be relocated



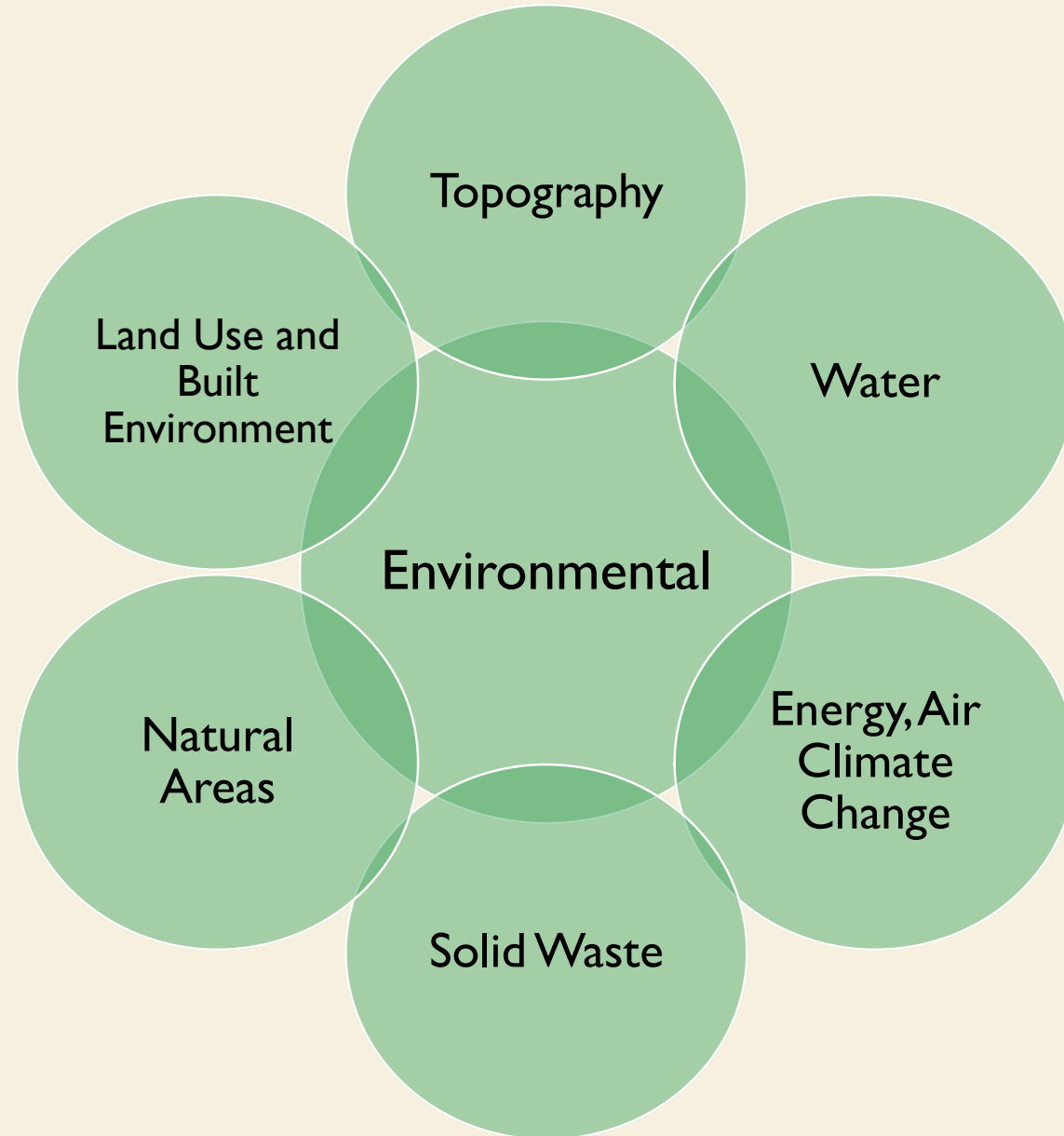
-No pedestrian rights
-No efficient street furniture
-Roads needs to be maintained



-There is no pedestrian friendly environment



ENVIRONMENTAL PILLAR






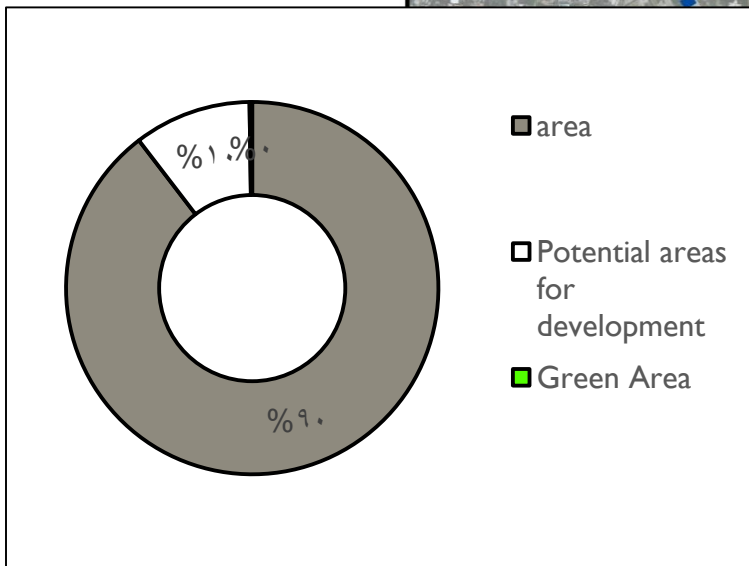
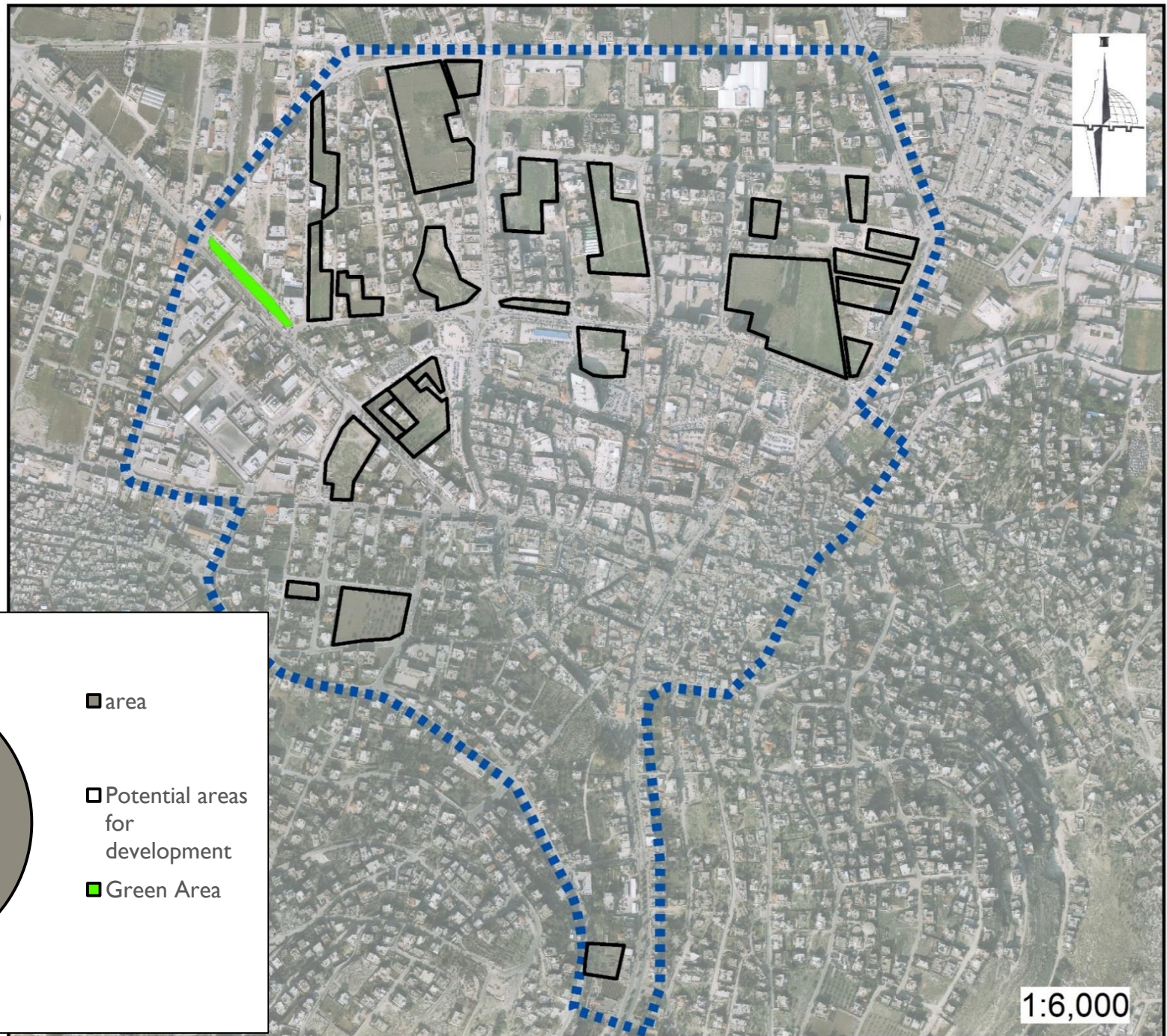
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Environment Pillar
Opportunities & Strengths

Legend

-  Open space
-  Green Area
-  Study Area



1:6,000











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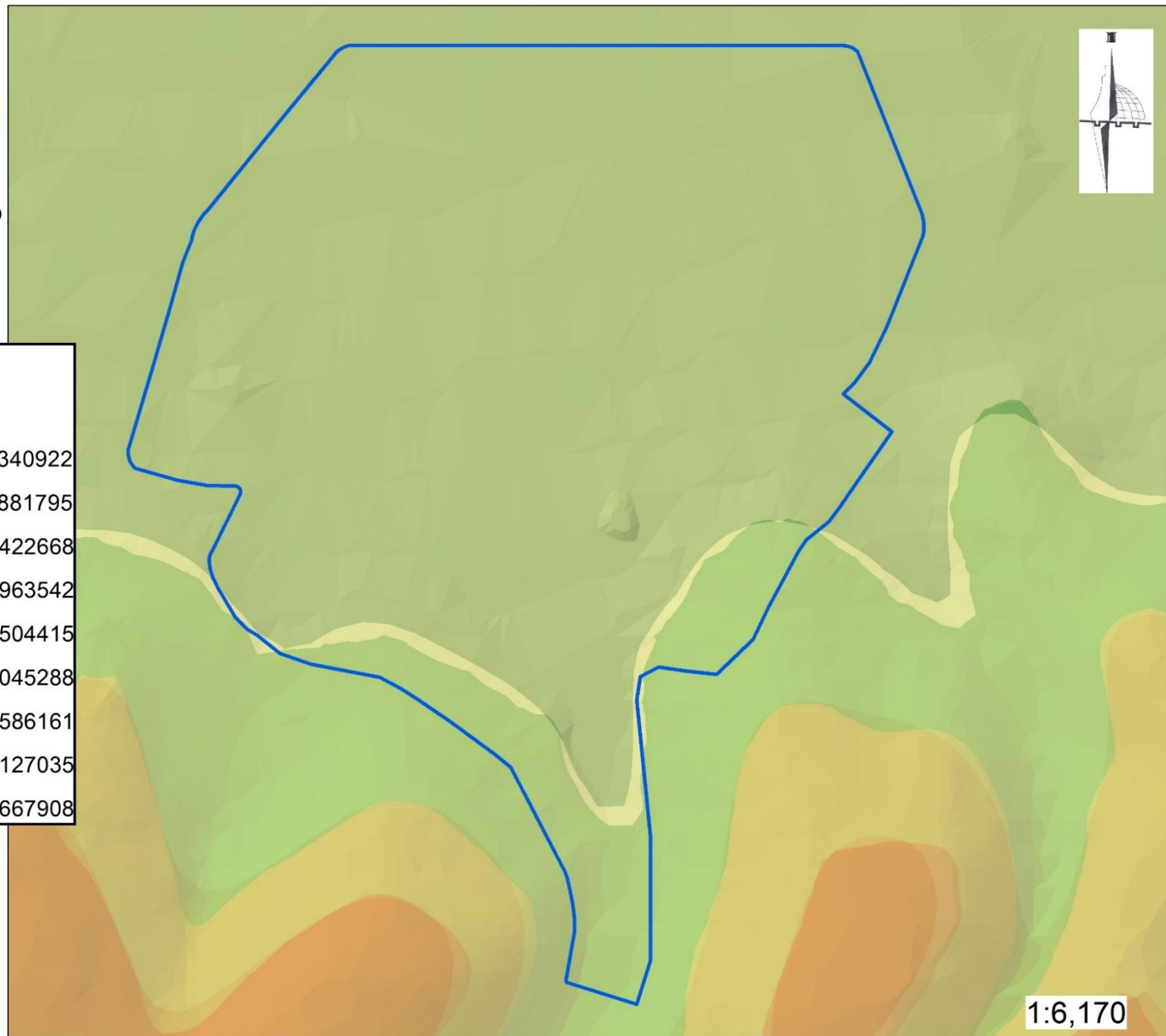
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Environment Pillar
Study Area Topography



Legend

	Study Area
	74.38000488 - 113.4340922
	113.4340923 - 152.4881795
	152.4881796 - 191.5422668
	191.5422669 - 230.5963542
	230.5963543 - 269.6504415
	269.6504416 - 308.7045288
	308.7045289 - 347.7586161
	347.7586162 - 386.8127035
	386.8127036 - 425.8667908

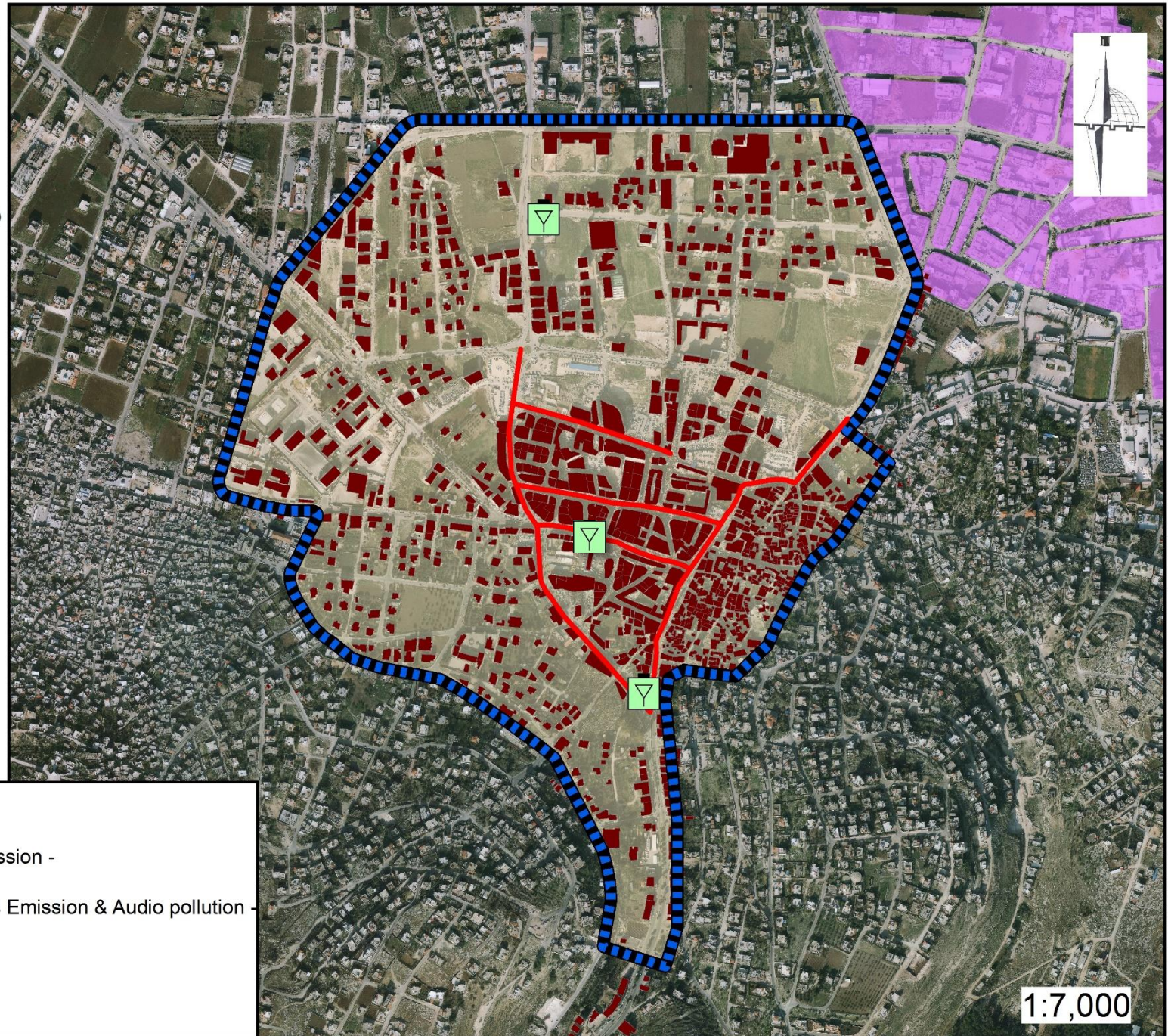


1:6,170






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Environment Pillar
Threats & Weakness



Legend

-  Petrol Station - Gas Emission -
-  Congested Streets - Gas Emission & Audio pollution -
-  Industrial Zone
-  Dense Buildings
-  Study Area

1:7,000

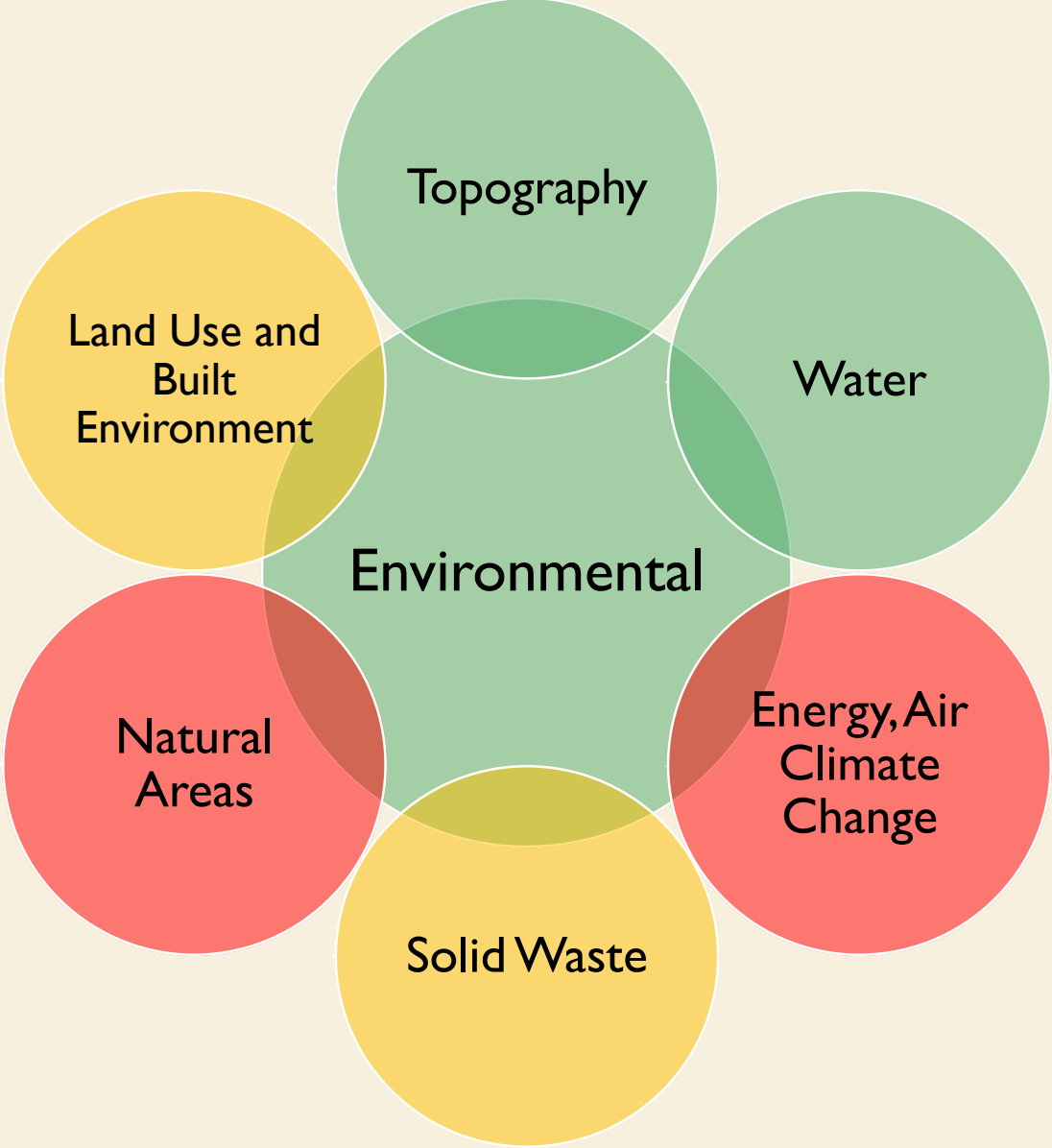
ENVIRONMENTAL PILLAR

● Not Available ● Available but needs improvements ● Available

Land Use and Built Environment
-Dense Buildings in the CBD
-No regulation on heights based on sustainable aspects

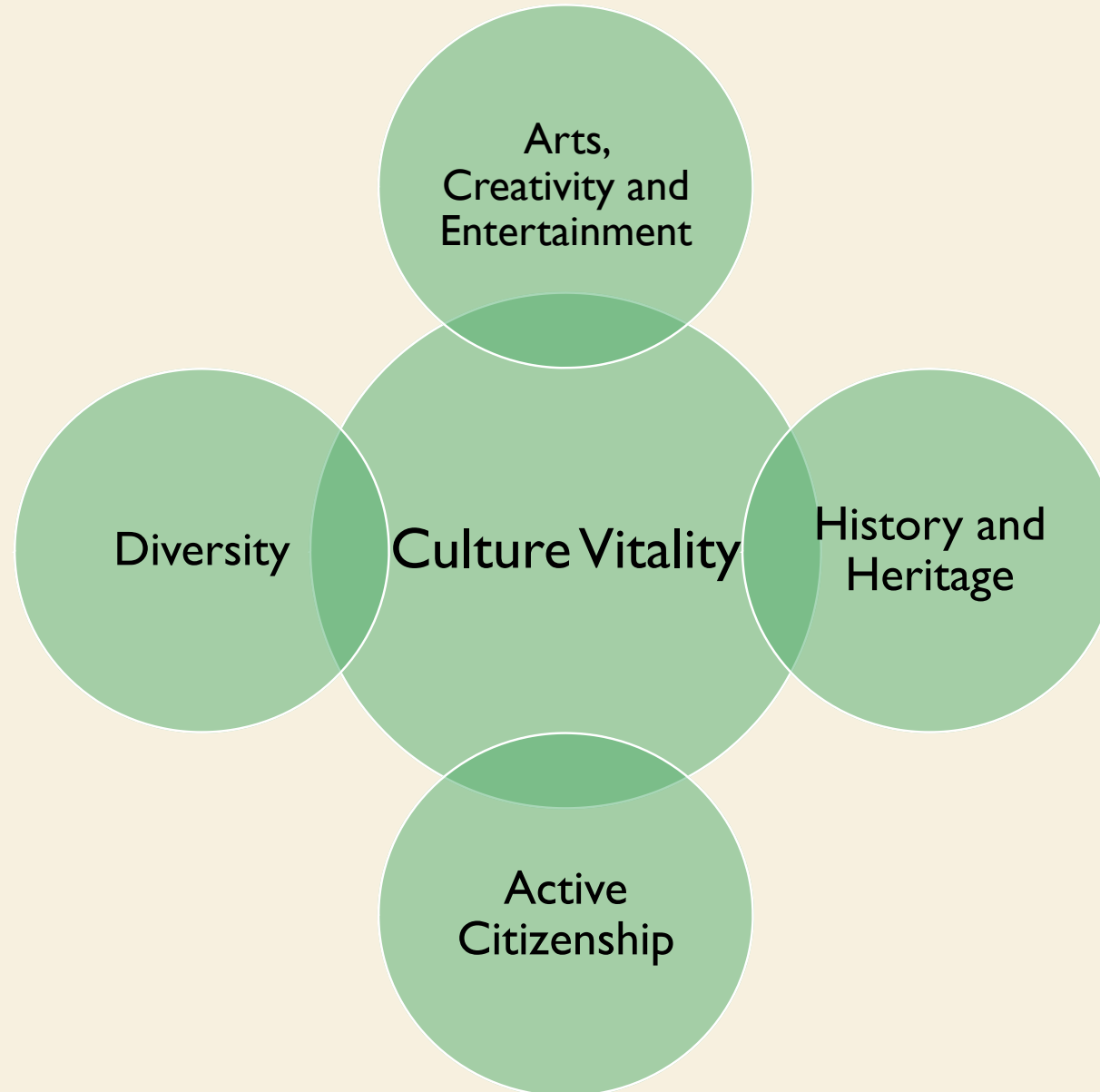
Natural Areas
Outside the study area

Solid Waste
No sorting system of the waste
No waste collection areas



Energy, Air Climate Change
There is no reliance on renewable energy

CULTURE VITALITY PILLAR



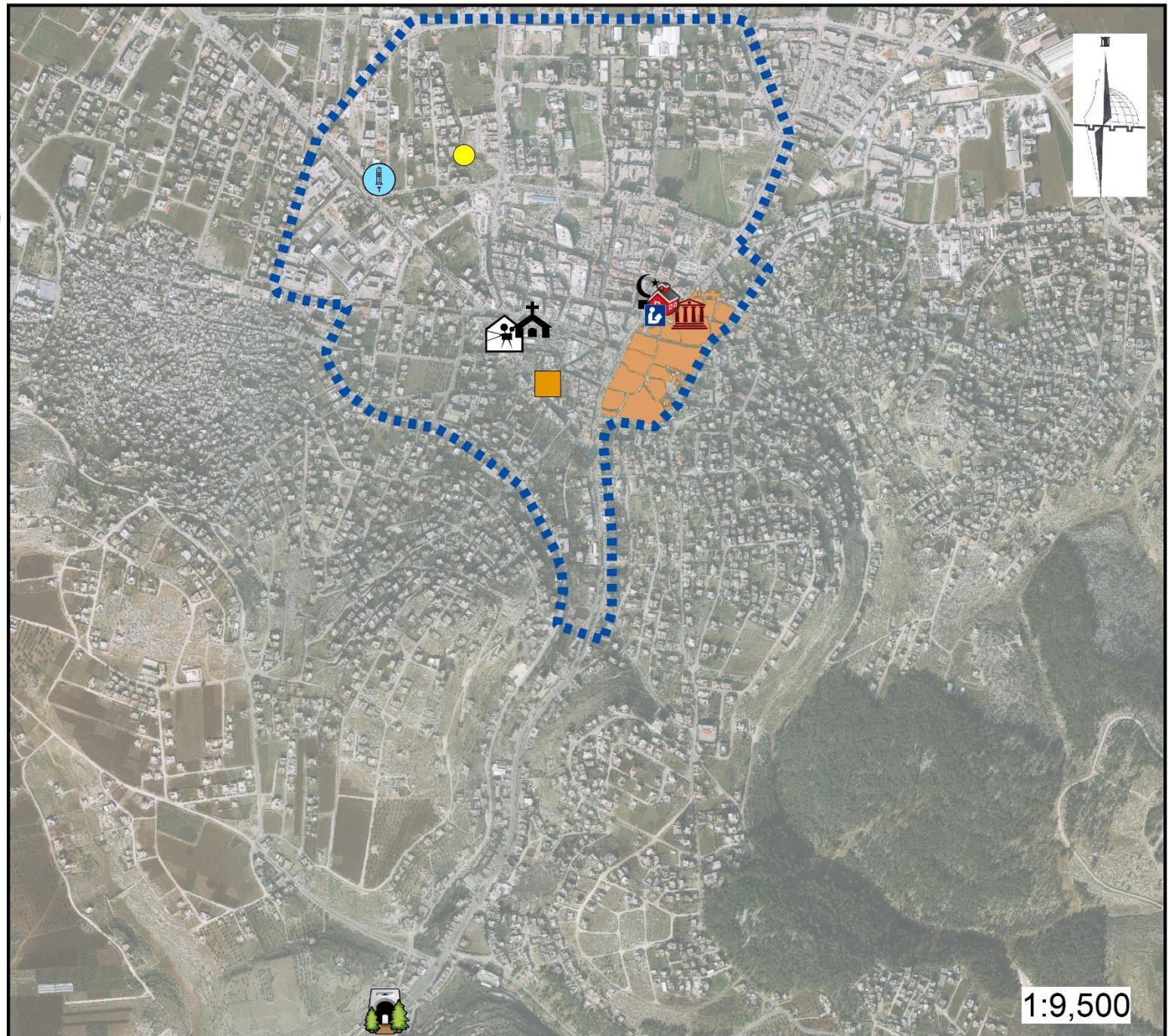
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Culture Pillar
Opportunities & Strengths

Legend

-  Municipality Library
-  Aqueduct water
-  Bal'ama Tunnel
-  Cinema
-  Fatima Khatoun School
-  Freedom Theatre
-  Old Castle
-  Tell Jenin
-  The Grand Mosque
-  Old Town
-  Study Area





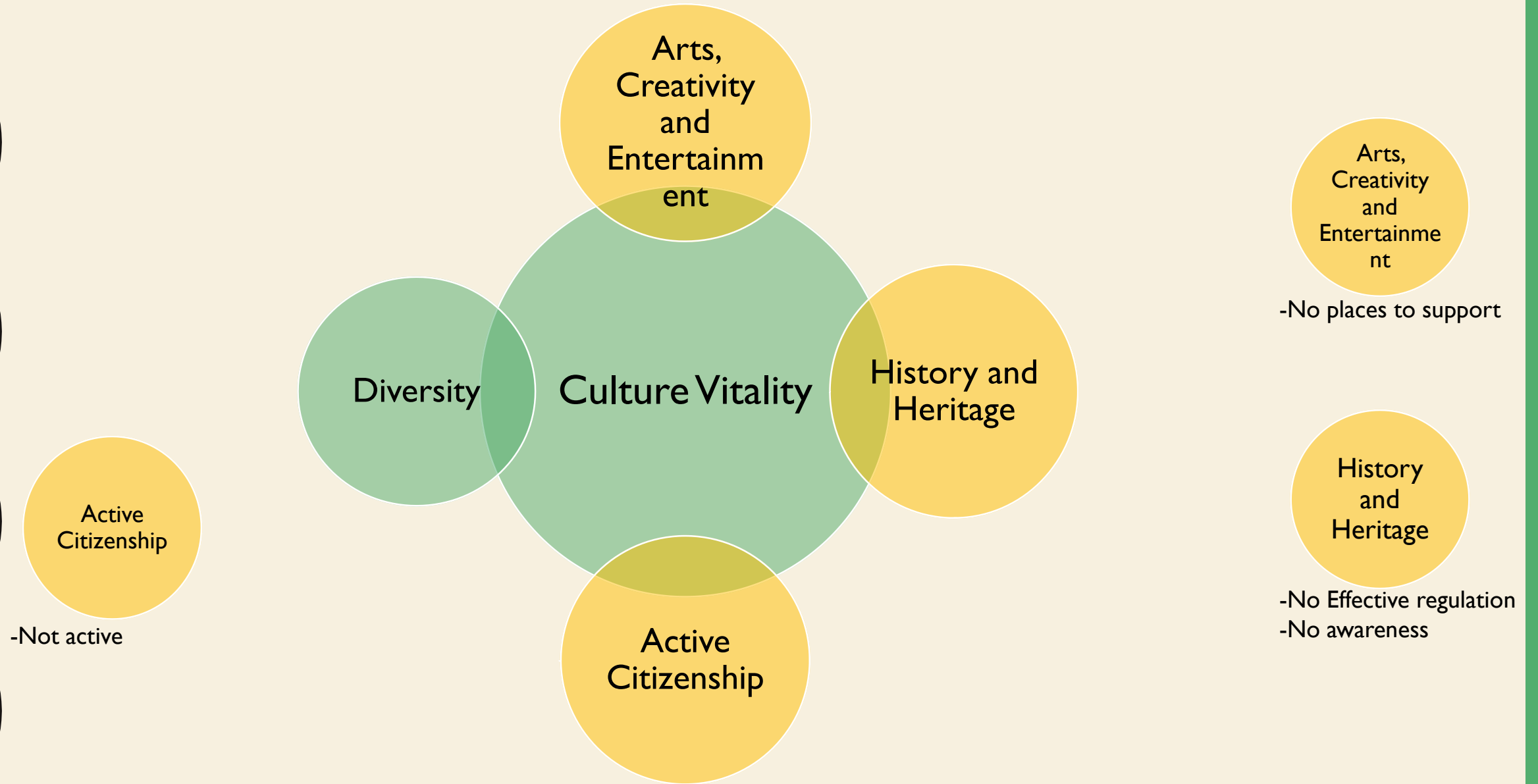
- Tell Jenin - Commercial class -
- Aqueduct water - Development area for Resident

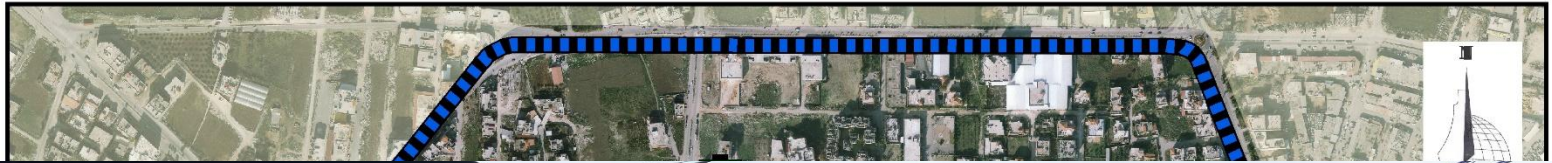


1:6,000

CULTURE VITALITY PILLAR

● Not Available ● Available but needs improvements ● Available





1:6,000

VISION

- "Sustainable city, economically prosperous that combine past and future, raising cultural awareness and prevail social justice."



GOALS & STRATEGIES

Economically Prosperous

- Protection the historical and cultural heritage to enhance the local economy.
- Organizing events and periodic festivals to increase economic returns.

Environmentally Friendly

- Encourage sustainable land use
- Reducing the causes of pollution in the region and prevent the creation of new causes
- Exploitation of alternative and renewable energy sources

Cultural Awareness

- Providing Service facilities to support the historic tourist centers
- Occupying historical and cultural centers with the optimum use
- Improve and raise the value of the cultural side of the city

Social Justice

- Creating a suitable environment for entertainment.
- Developing Social infrastructure and facilities for children and youth.
- Raise awareness in society
- Enhance community participation.






MASTER PLAN

Master Plan

Legend Existing



-  Hostel
-  Jenin Cinema
-  Roads
-  Study Area
-  New Freedom Theatre
-  Jenin Visitors Center
-  Commercial Centers Class
-  Oldtown, Historical Town
-  Governmental District
-  Al kamandjati center

Transportation

-  proposed_parking
-  Proposed Terminals
-  streets with sidewalks

Social & Environment

Existing needs Development



-  Buildings with Green roofs
-  Zones with policy

Projects

-  public park
-  plaza

Economic Activities

Existing needs Development






-  Commerical Lane
-  Service Lane

projects

-  Stalls For Clothes
-  Stalls For Traditional food & drinks
-  Stalls For Vegetables

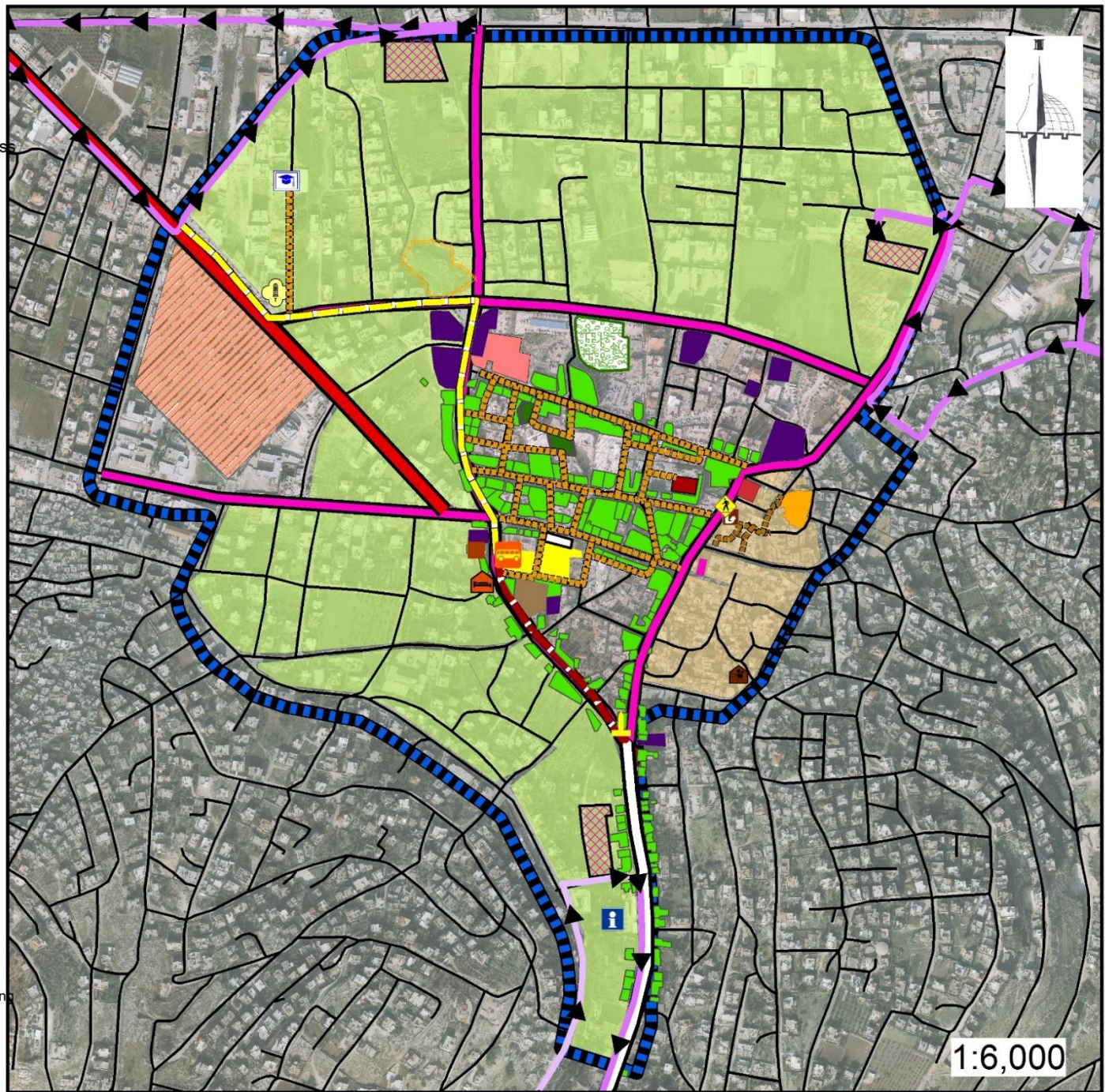
Cultural Assets

Existing needs Development

-  Municipality Library
-  Old Cinema for old movies
-  cultural tourist pedestrian path
-  Cultural Tourist Bus path
-  Tell Jenin
-  Old Castle
-  Fatma Khatoun Cultural Center

projects

-  bus stop symbol
-  Monument
-  Pedestrian Sebat Market
-  Covered Pedestrian Path
-  Pavement for Pedestrian Crossing
-  Cultural area
-  Archalogical Park



1:6,000

Economic activities

Legend

Existing

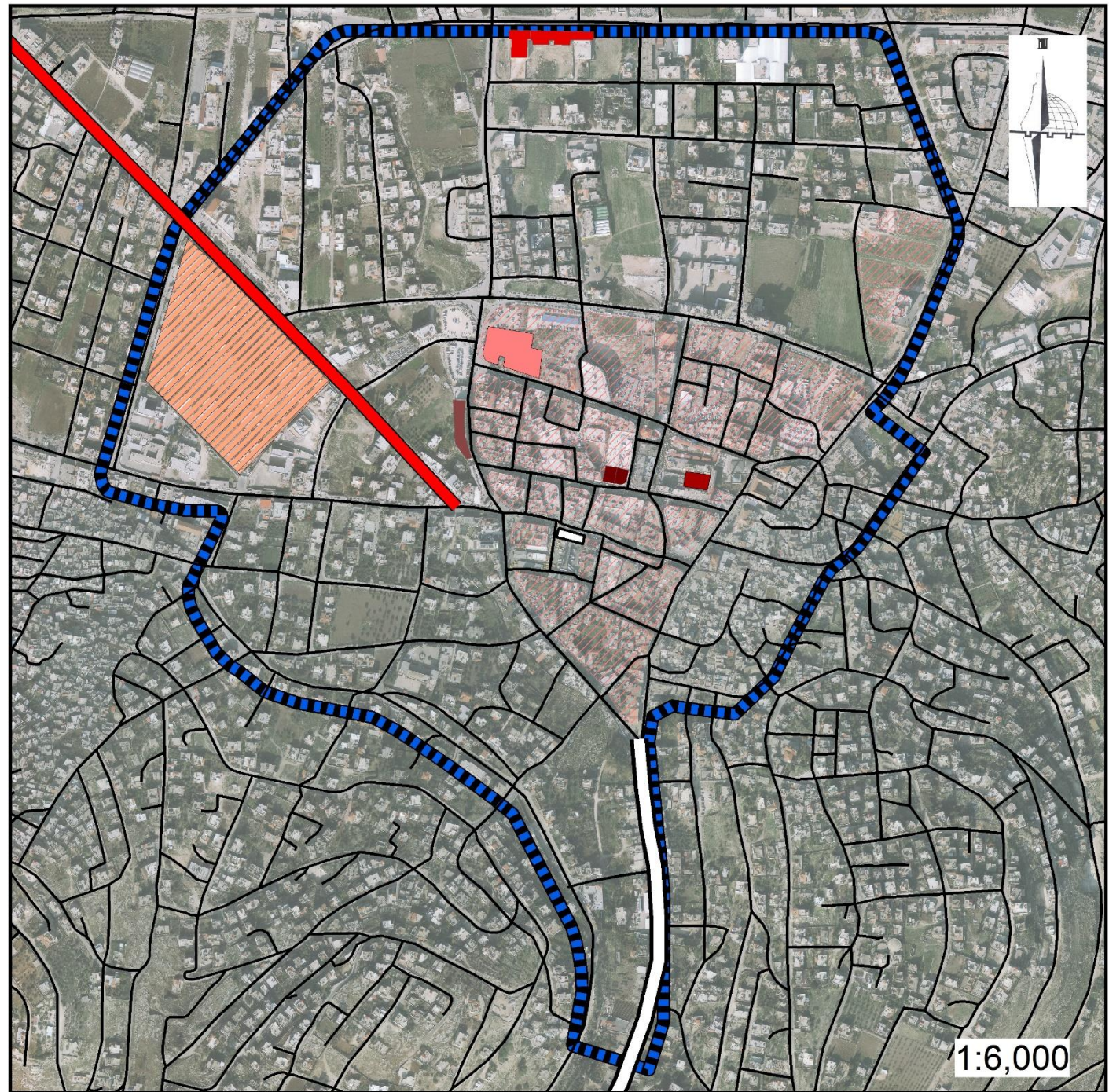
- Al Nfa' Mall
- Al Baraka Mall
- Al Nimer Mall
- Roads
- Commercial Centers Class
- Study Area
- Governmental District

Existing needs Development

- Commerical Corridor
- Service Corridor

Projects

- Stalls For Clothes
- Stalls For Traditional food & drinks
- Stalls For Vegetables



STALLS DESIGN





Jenin a Walkable center



Legend

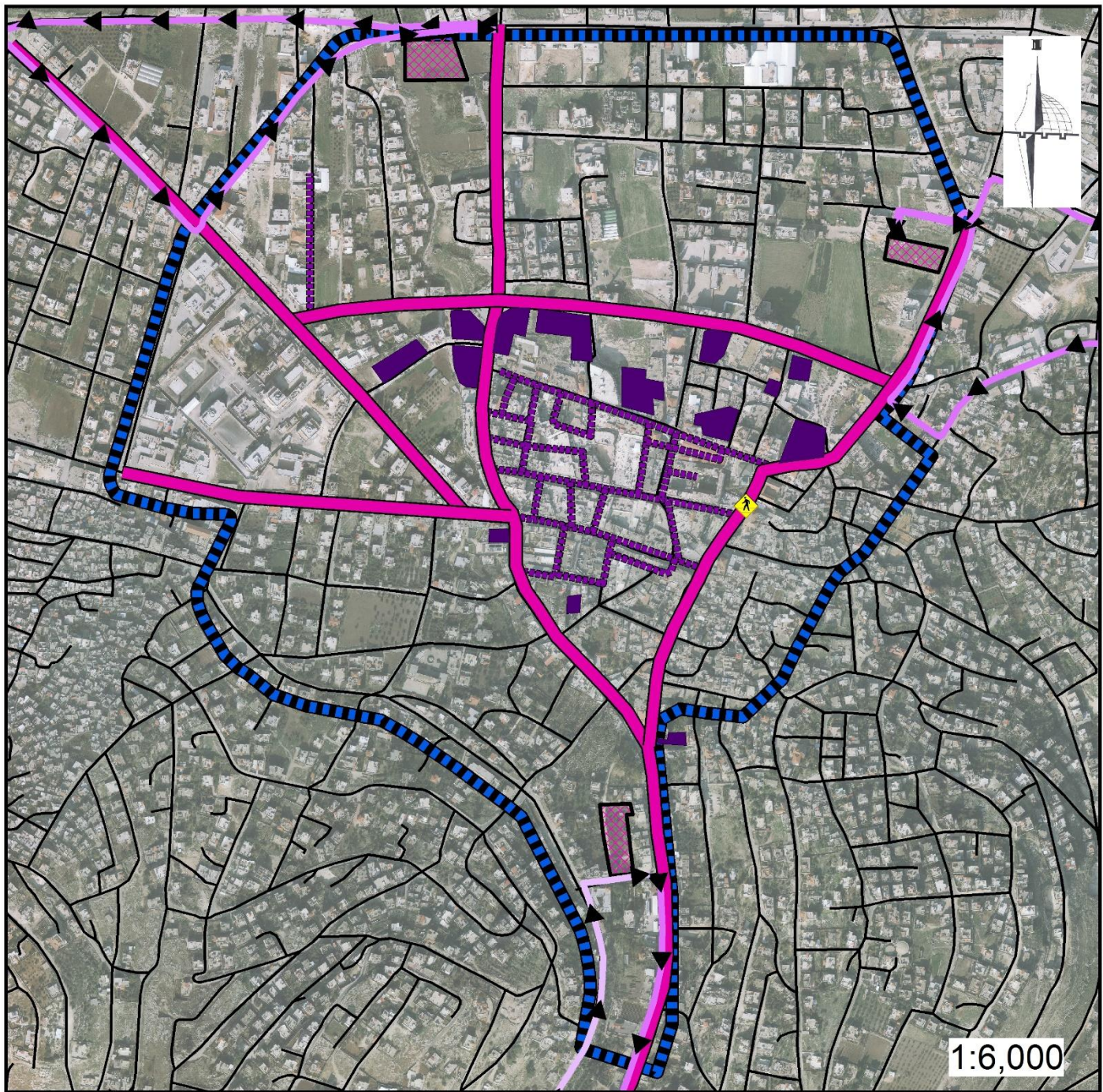
-  Study Area
-  Roads

Existing needs Development

-  Parking lot
-  streets with sidewalks

Projects

-  Pavement for Pedestrian Crossing
-  Bus Exit
-  Bus Entrance
-  One Way Street Bus Entrance
-  Covered Pedestrian Path
-  Proposed Terminals





Jenin a Walkable center




Legend

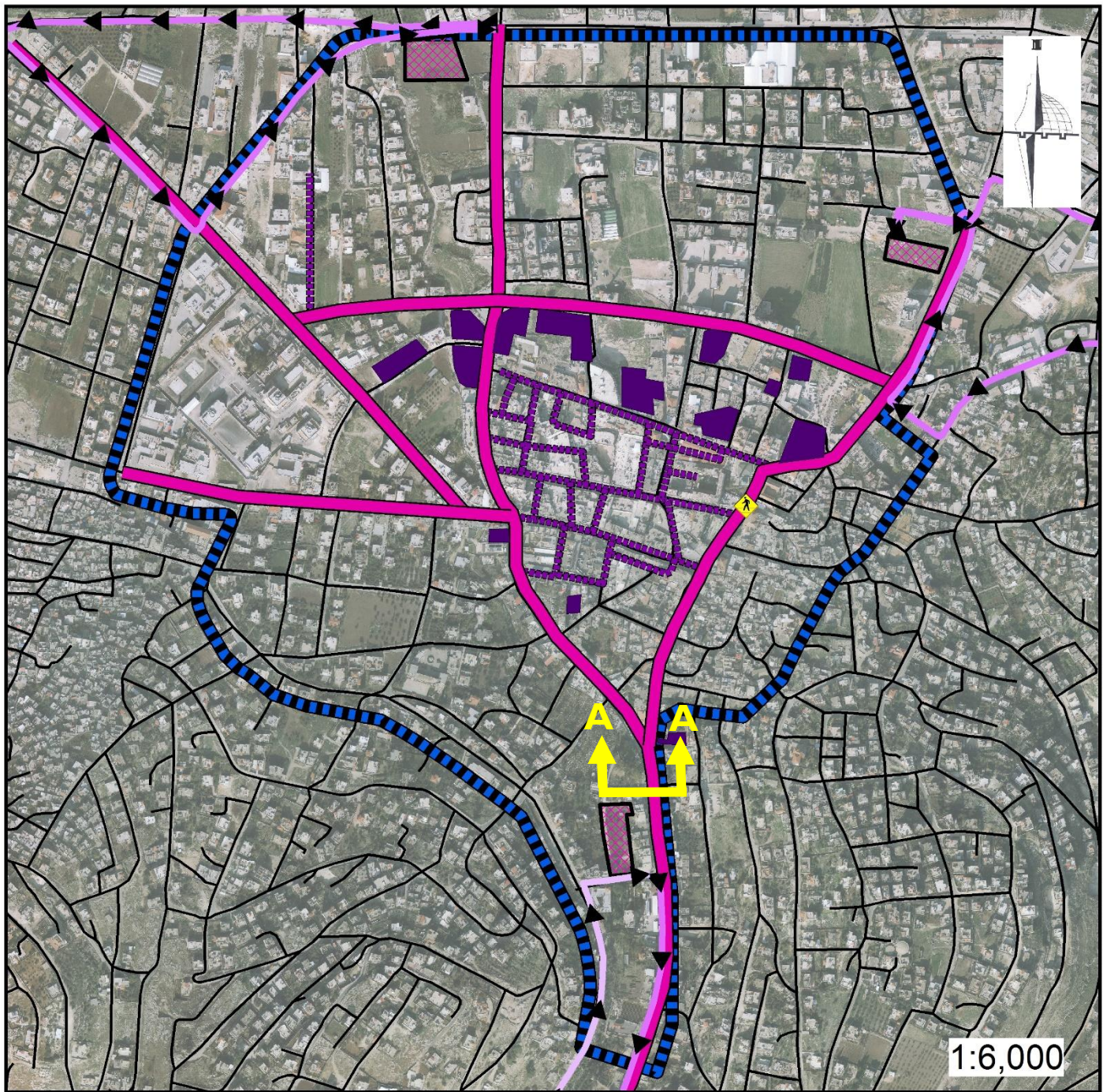
-  Study Area
-  Roads

Existing needs Development

-  Parking lot
-  streets with sidewalks

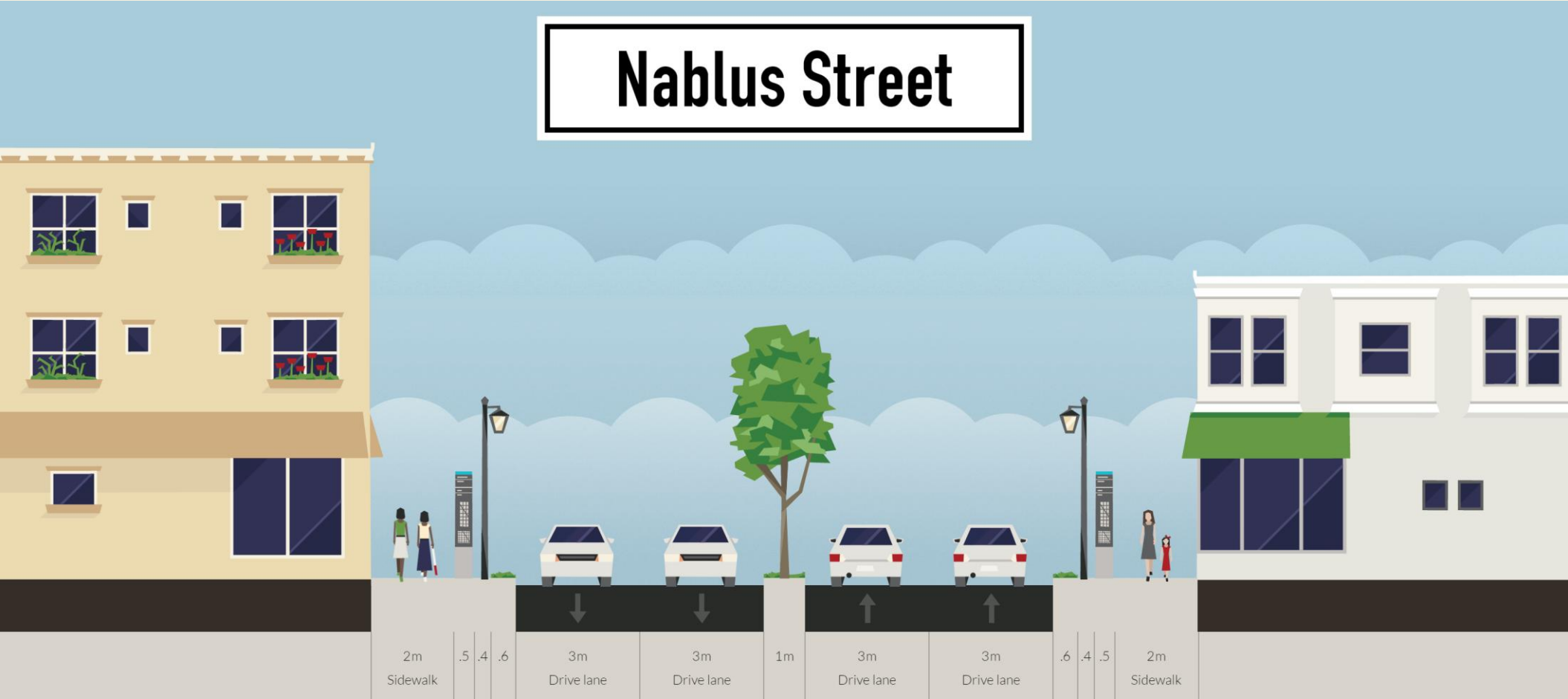
Projects

-  Pavement for Pedestrian Crossing
-  Bus Exit
-  Bus Entrance
-  One Way Street Bus Entrance
-  Covered Pedestrian Path
-  Proposed Terminals



STREETS DESIGN

Section A-A





Jenin a Walkable center

Legend





Existing

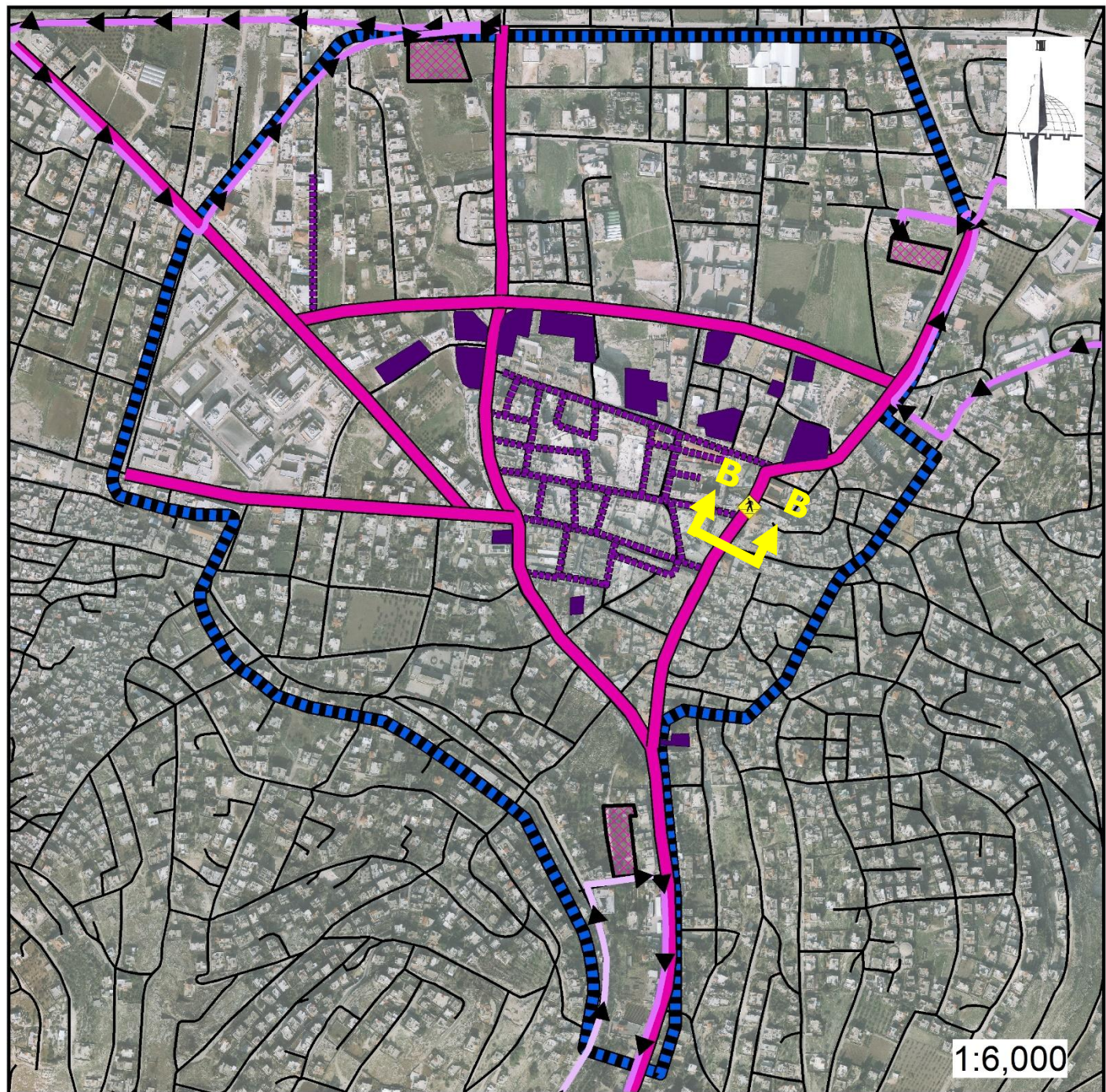
-  Study Area
-  Roads

Existing needs Development

-  Parking lot
-  streets with sidewalks

Projects

-  Pavement for Pedestrian Crossing
-  Bus Exit
-  Bus Entrance
-  One Way Street Bus Entrance
-  Covered Pedestrian Path
-  Proposed Terminals



1:6,000

KING FAISAL STREET

Section B-B

Shading Summary Table over 100.0 m Left Through Zone Right Through Zone

	Trees at 5 Years Growth after Planting			Trees At Full Maturity		
	% Achieved	Requirements		% Achieved	Requirements	
1.8m of the Trough Zone	0%	Primary Walkway	35% ❌	0%	Primary Walkway	75% ❌
		Secondary Walkway	25% ❌		Secondary Walkway	60% ❌
Seating Areas	0%		30% ❌	0%		70% ❌

Shading Legend

- Shading Object
- Shading from tree after 5 years
- Shading from tree at full maturity

Legend

- Pass
- ❌ Fail

[Export to PDF](#)

Shading Summary Table over 100.0 m Left Through Zone Right Through Zone

	Trees at 5 Years Growth after Planting			Trees At Full Maturity		
	% Achieved	Requirements		% Achieved	Requirements	
1.8m of the Trough Zone	3.9%	Primary Walkway	35% ❌	42.7%	Primary Walkway	75% ❌
		Secondary Walkway	25% ❌		Secondary Walkway	60% ❌
Seating Areas	0%		30% ❌	0%		70% ❌

Shading Legend

- Shading Object
- Shading from tree after 5 years
- Shading from tree at full maturity

Legend

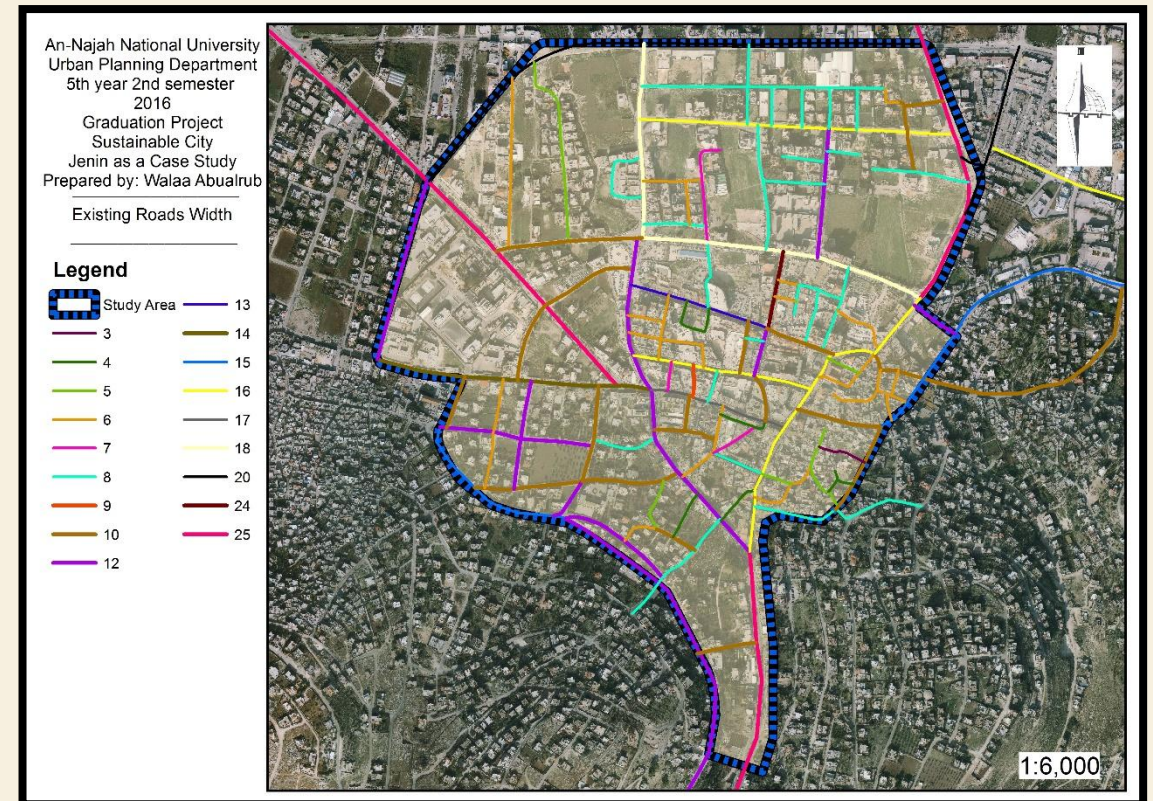
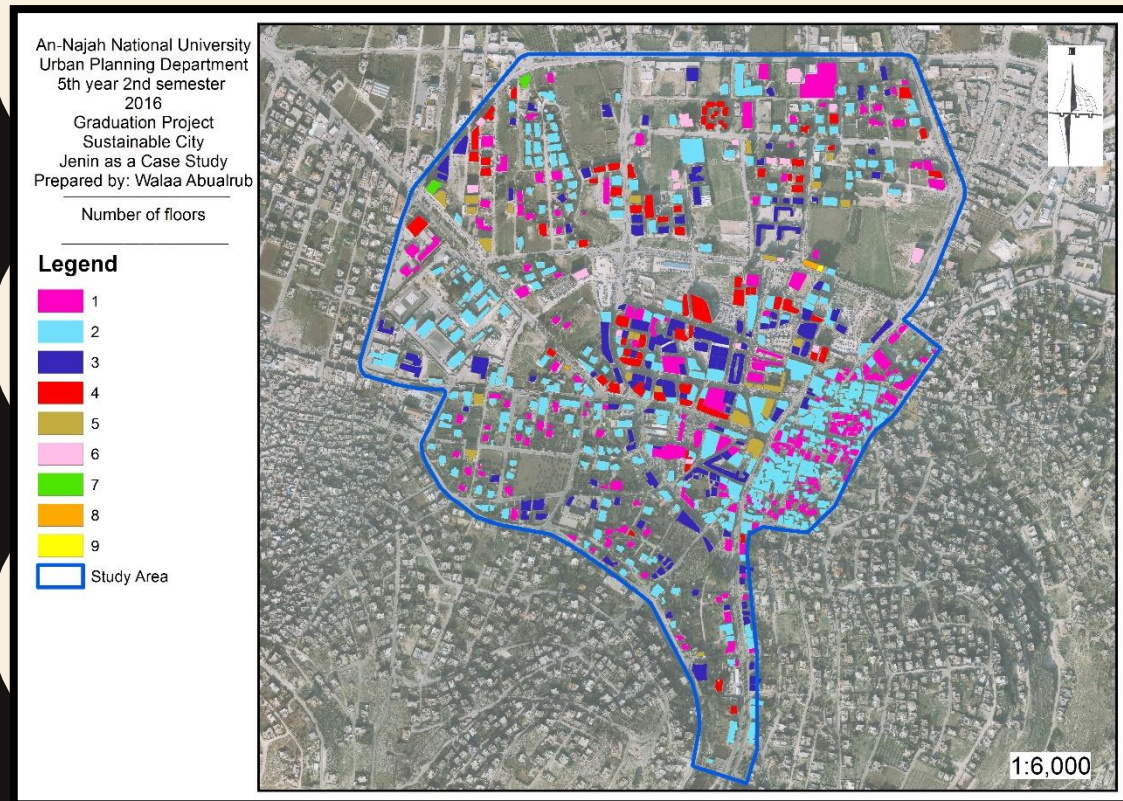
- Pass
- ❌ Fail

[Export to PDF](#)



COVERED STREETS

- Based on the 1:2 ratio That is the desirable ratio of height to width for good street spatial definition.




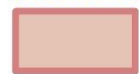


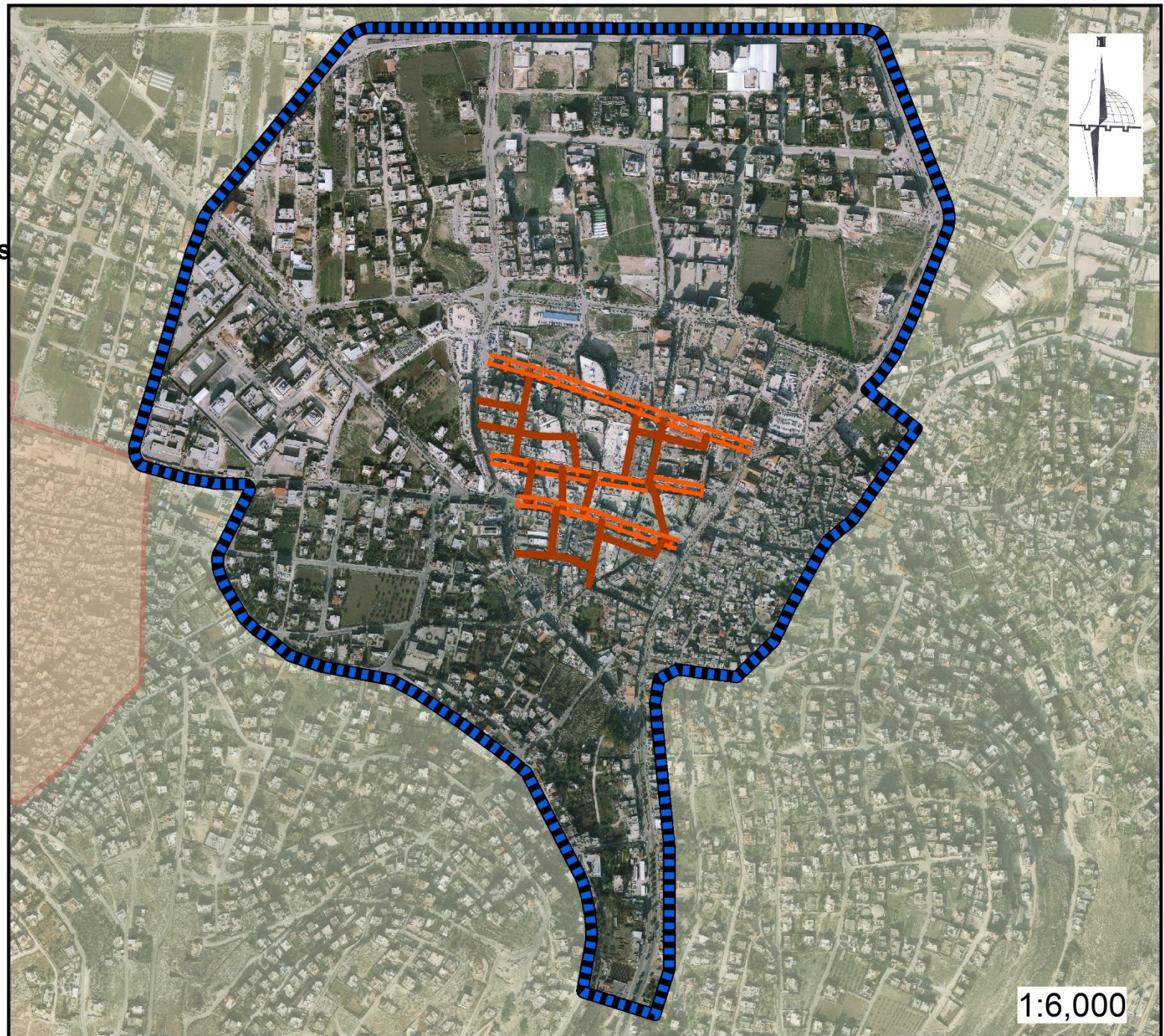
An-Najah National University
Urban Planning Department
5th year 2nd semester
2016

Graduation Project
Sustainable City
Jenin as a Case Study
Prepared by: Walaa Abualrub

Final Suggested Projects Covered Streets

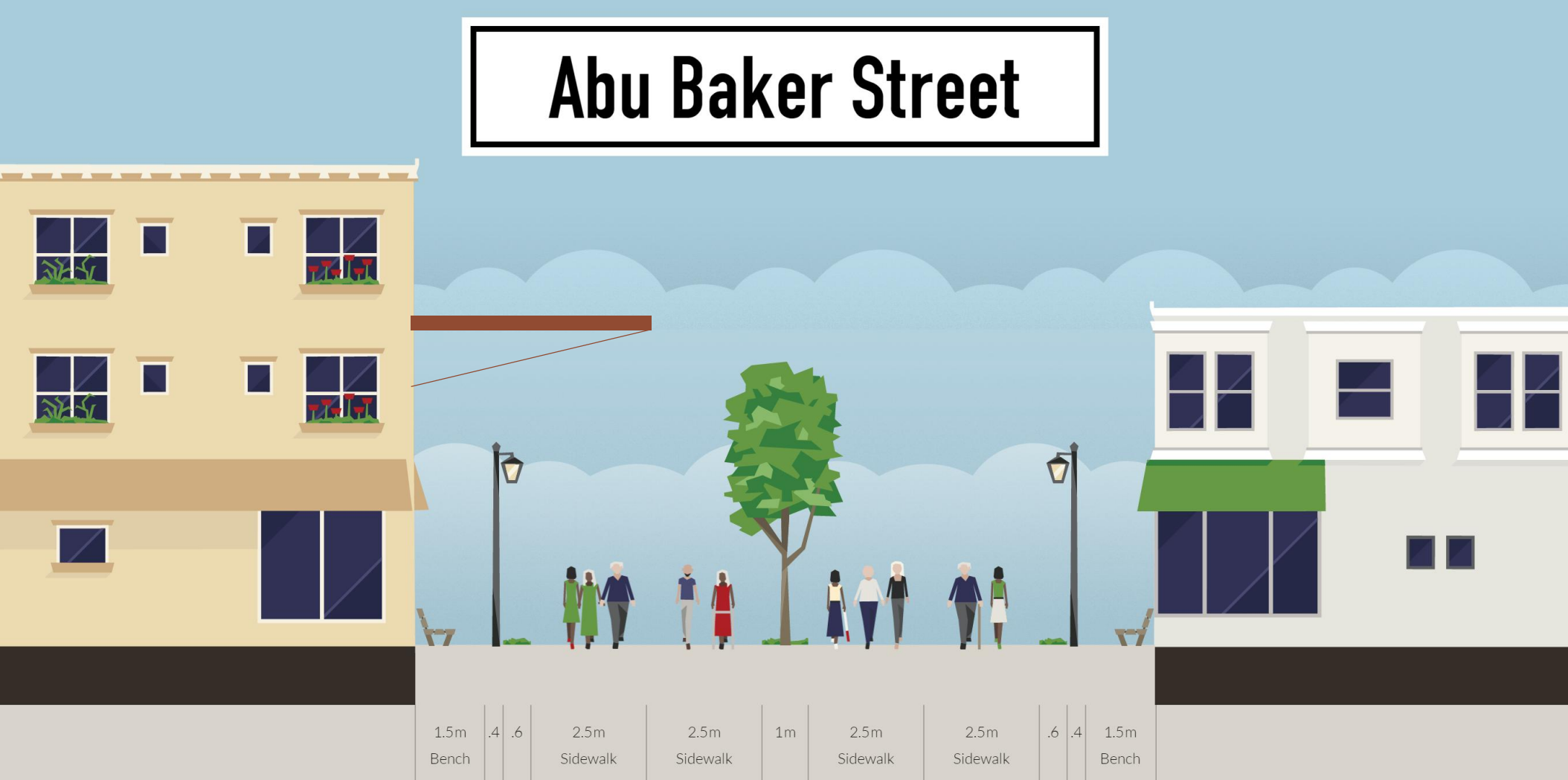
Legend

-  Fully Covered
-  Semi Open
-  Study Area
-  Jenin Camp



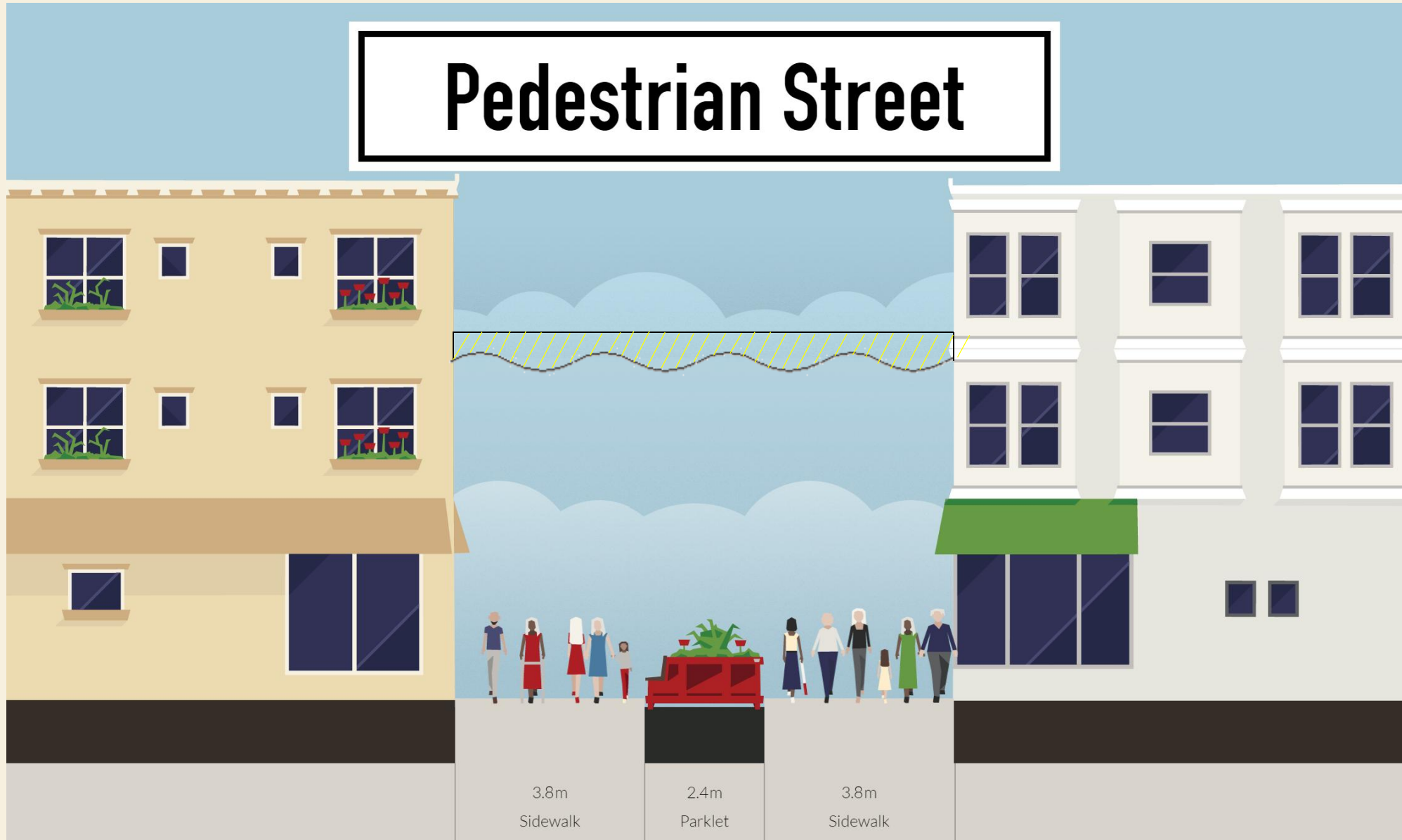
SEMI COVERED PEDESTRIAN STREET

Abu Baker Street






FULLY COVERED PEDESTRIAN STREET

Pedestrian Street




Environment

Legend Existing

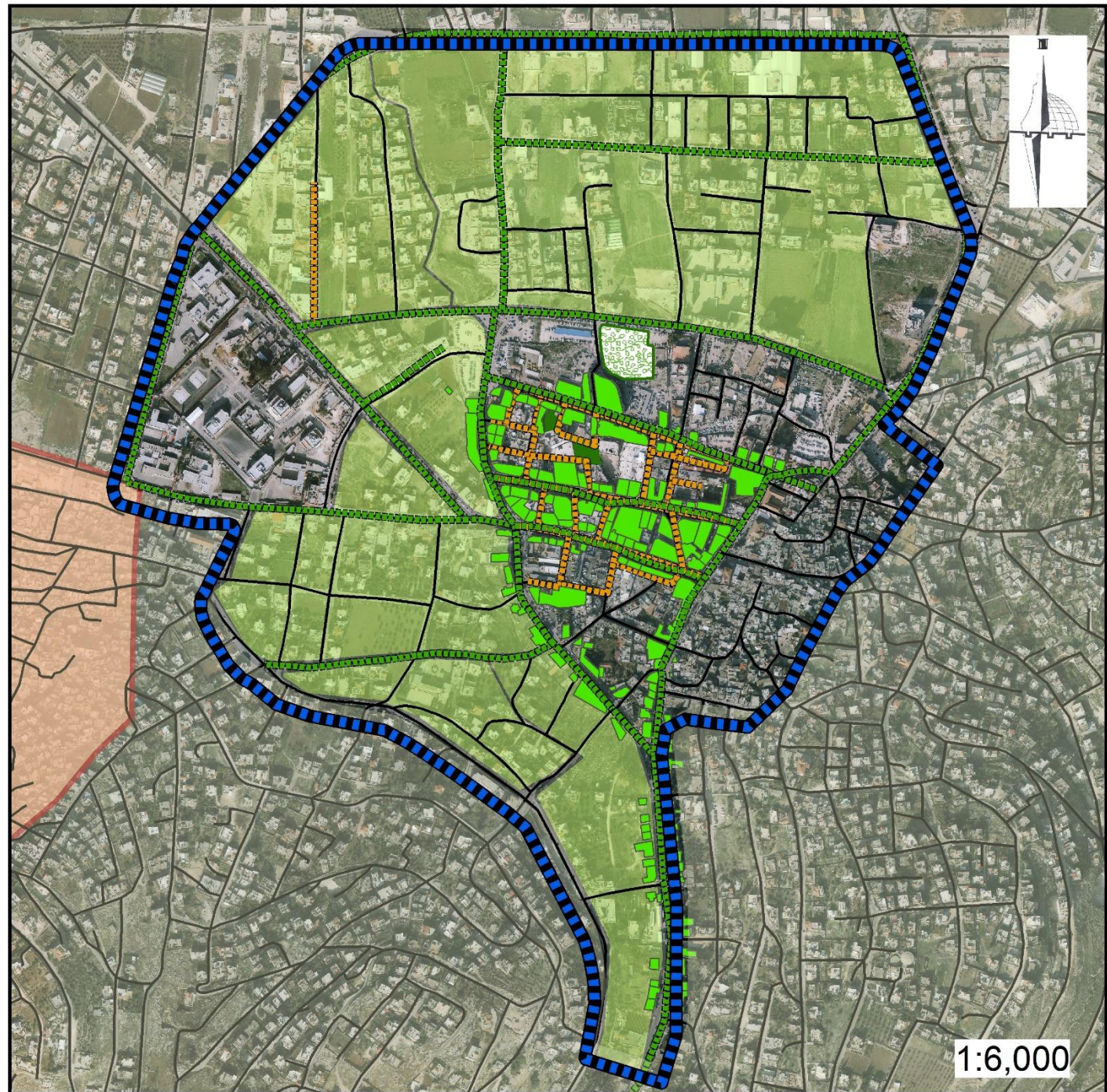
-  Study Area
-  Roads
-  Jenin Camp

Existing needs Development

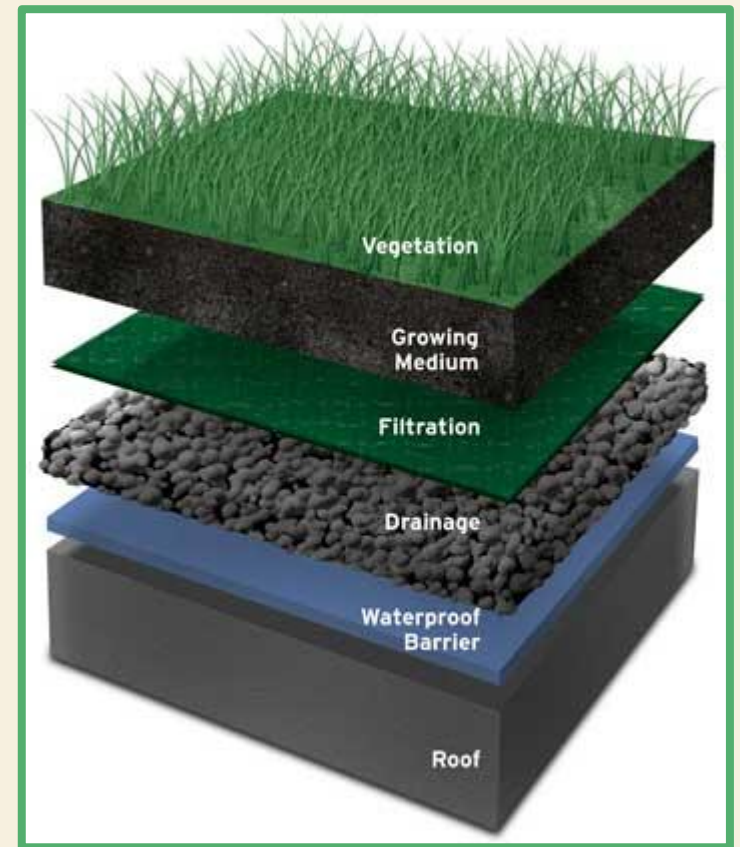
-  Streets with trees
-  Buildings with Green roofs
-  Zones with new regulation

Projects

-  Pedestrian Path
-  Public Park
-  Plaza



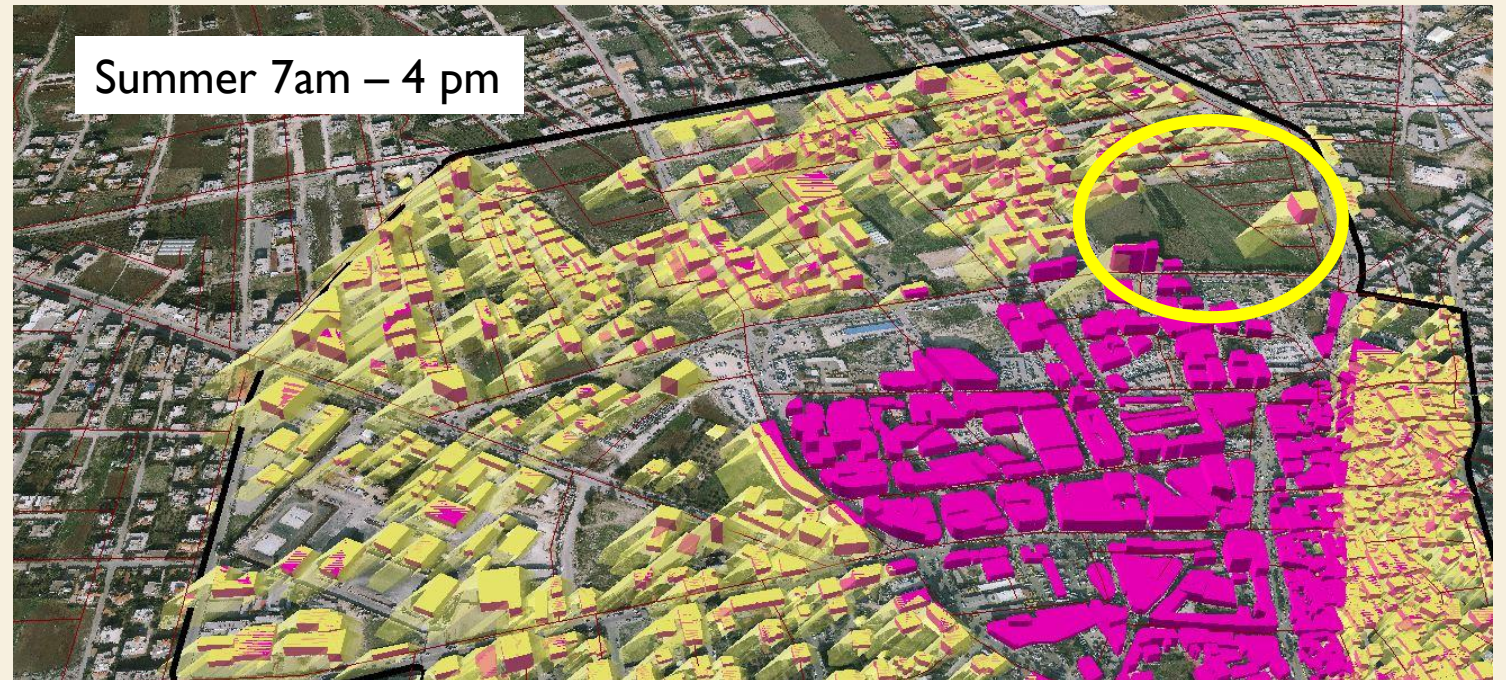
GREEN ROOF BUILDINGS



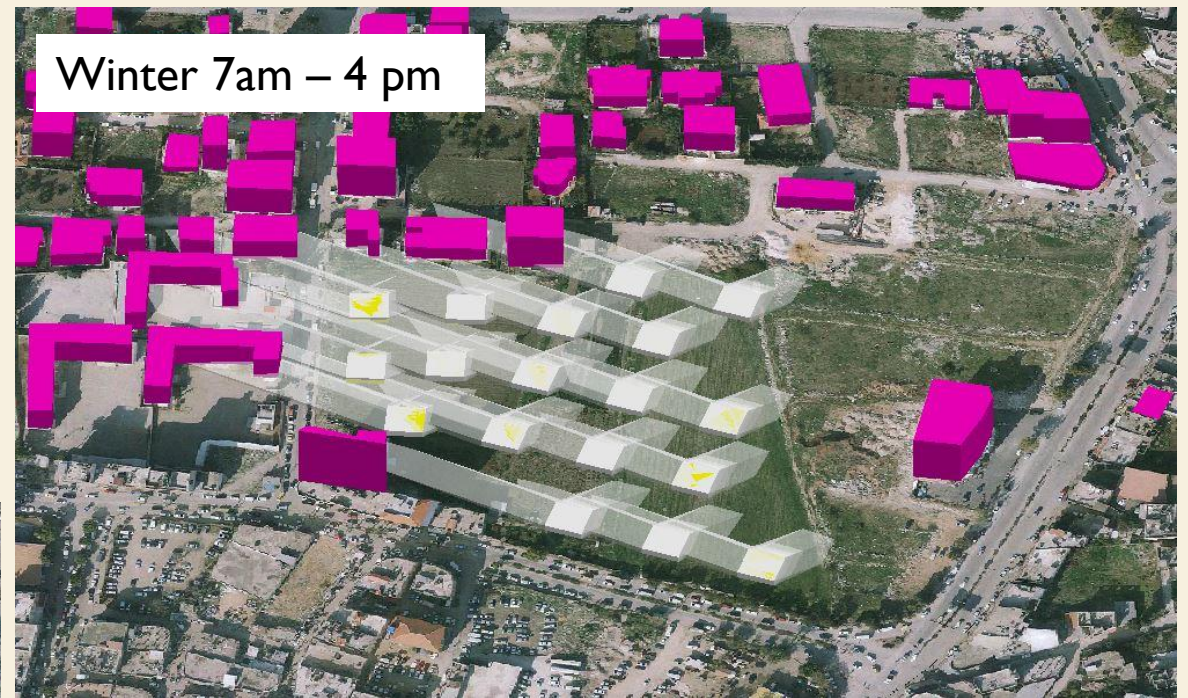
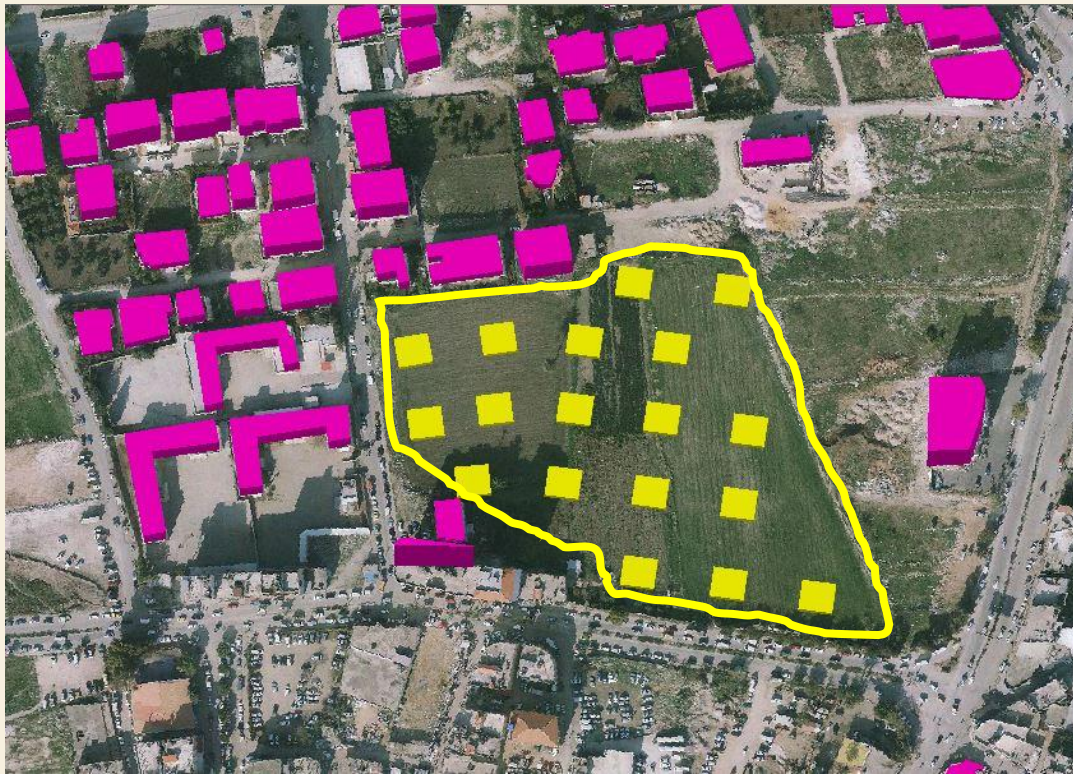
PLAZA



THE EFFECT OF THE EXISTING BUILDINGS SHADOW



REGULATIONS OF NEW BUILDINGS



Social & Cultural Assets

Legend

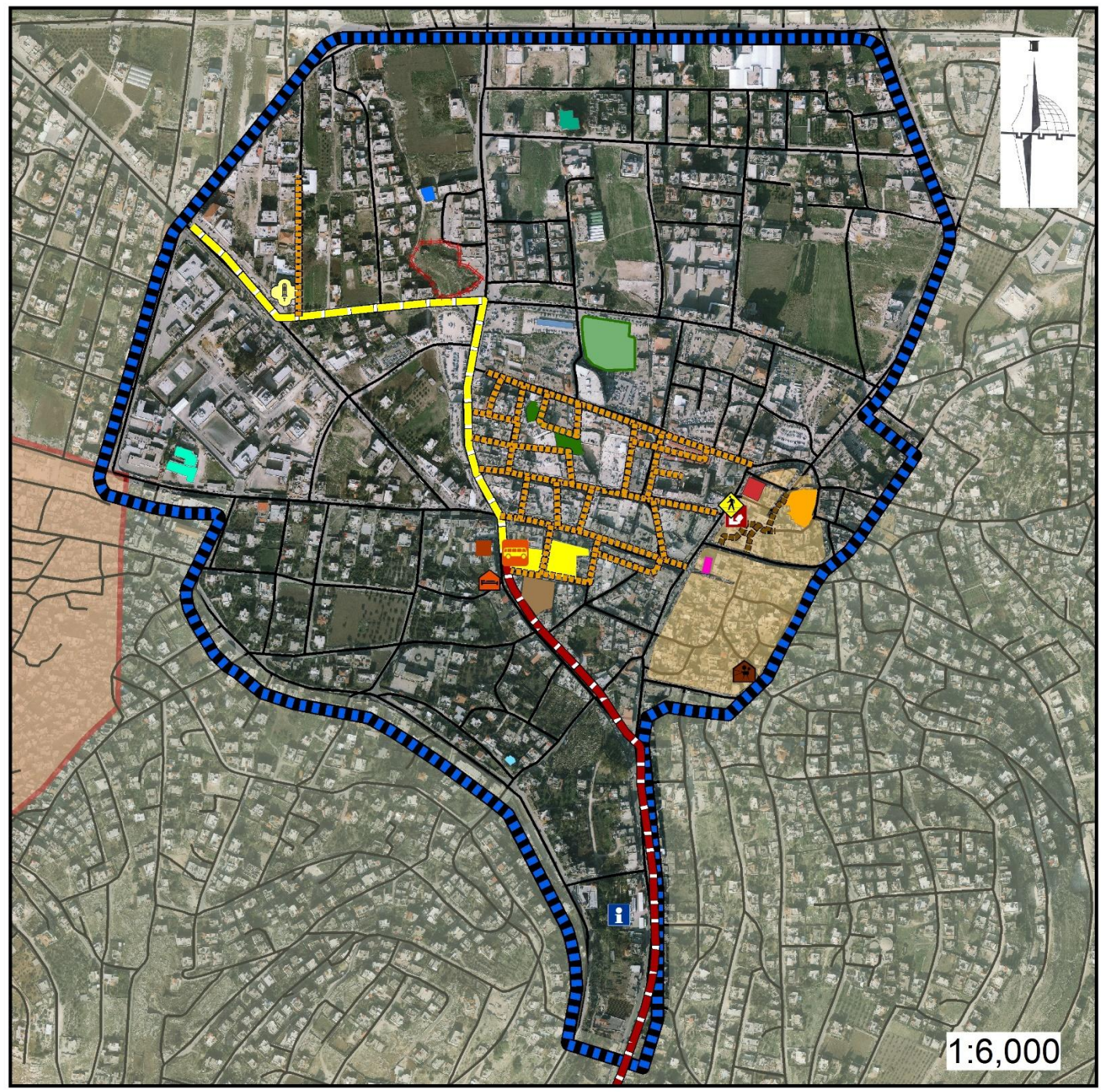
- Existing**
-  Hostel
 -  Jenin Cinema
 -  New Freedom Theatre
 -  Jenin Visitors Center
 -  Roads
 -  Social Rehabilitation Center for Youth
 -  Red Crescent Society
 -  Jenin Charity Association
 -  Najdeh Social Women Association
 -  Al kamandjati center
 -  Old Town
 -  Study Area

Existing needs Development

-  Municipality Library
-  Old Cinema for old movies
-  Archalological Site -Tell jenin-
-  Old Castle
-  Fatma Khatoun Cultural Center
-  cultural tourist pedestrian path
-  Cultural Tourist Bus path

Projects

-  Pavement for Pedestrian Crossing
-  bus stop symbol
-  Pedestrian Sebat Market
-  Covered Pedestrian Path
-  Cultural area
-  Archalological Park
-  plaza
-  public park

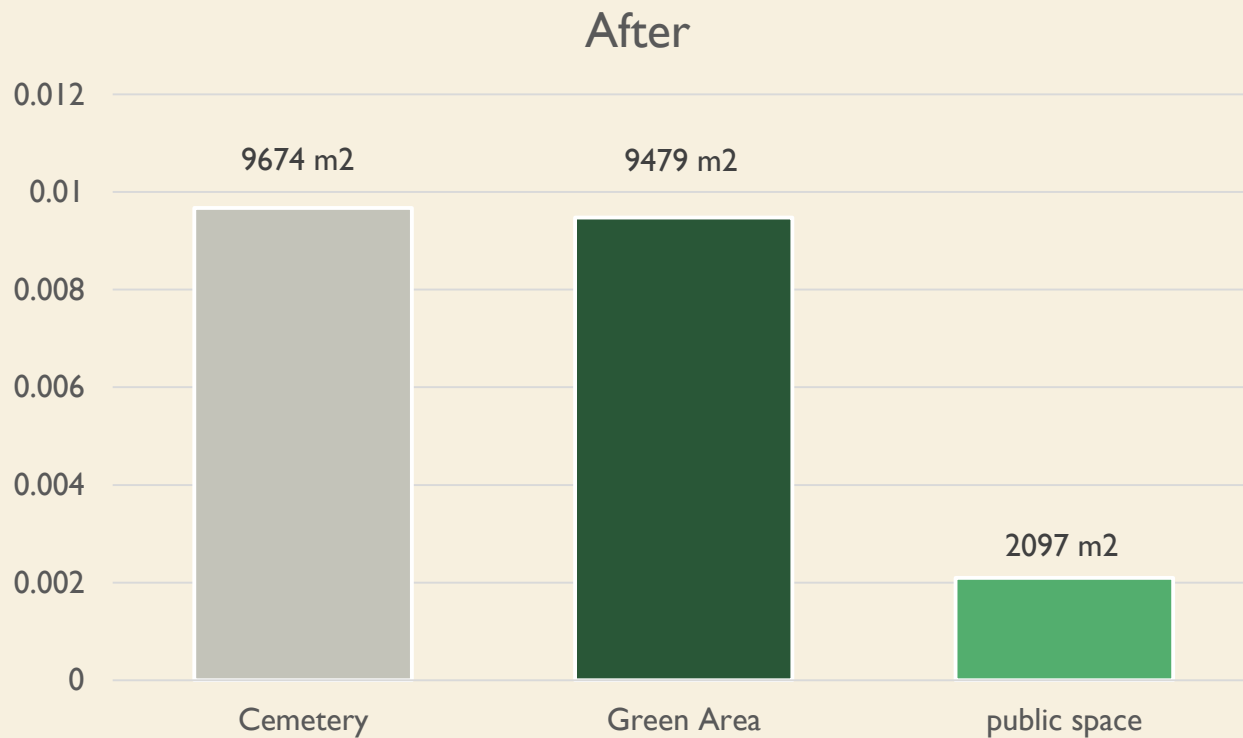
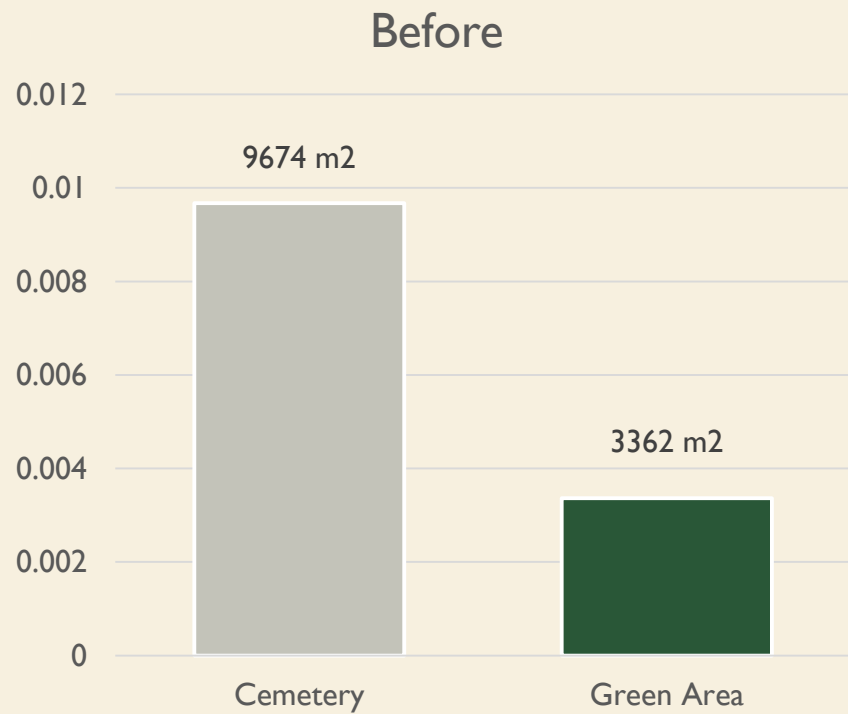


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CULTURAL AREA DESIGN

Goal	Area	Surrounding	Component	Demonstration
Improve the value of the cultural aspect of the city	4189.84 m ²	<ul style="list-style-type: none"> Jenin cinema Hostel Suggested traditional stalls area Tell Jenin Parking for tourists buses 	<ul style="list-style-type: none"> Exhibition area 	<ul style="list-style-type: none"> An area for a public display of works of art or items of interest, characterized by flexible division to more than Hall using moving walls adjustable according to the nature of each event, conference or meeting.
			<ul style="list-style-type: none"> Theatre 	<ul style="list-style-type: none"> A simple designed stage for live shows or performances.
			<ul style="list-style-type: none"> Seating area Cafes 	<ul style="list-style-type: none"> Seating area and cafes for people to rest and enjoy the ongoing events

GREEN AREAS & PUBLIC SPACE



WALKABLE STREETS

BEFORE



AFTER

