“SHATANA IS A SMALL SETTLEMENT IN JORDAN THAT SEEMS TO BE ISOLATED FROM THE WORLD, IN THIS PLACE I WAS HAPPY LEARNING TO WORK WITH THE WIND.”

LUCAS DI PASCUALE — ARGENTINE.
I. SITE AND NEIGHBORHOOD LOCATION

TRAVELING IN A WESTERN DIRECTION FROM HOSON YOU PASS THROUGH A VAST AND DEEP QUARRY, COVERING A LARGE AND EXPANSIVE HILLY AREA. THE ROAD RISES FROM THIS ROCKY MOONSCAPE INTO A VERY PLEASANT, PASTORAL LANDSCAPE. SUDDENLY YOU FIND YOURSELF IN THE SMALL, PICTURESQUE, PEACEFUL VILLAGE OF SHATANA, SURROUNDED BY OLIVE GROVES. SET IN HISTORIC STONE HOUSES AND CHURCHES, SHATANA WITH A POPULATION OF APPROXIMATELY 150, IS A BOUT 70 KILOMETERS FROM THE CAPITAL AMMAN.
II. MAIN ROAD ARTERIALS

The main road arterials are

JORDAN STREET/ TAREEG ALBAGA’A_JERASH_IRBID

70 KILOMETER.
III. ZONING AND NEIGHBORHOOD
III. ZONING AND NEIGHBORHOOD

SITE LOCATION IN NEIGHBORHOOD
V. SIZE AND ZONING
SITE BOUNDARIES AND DIMENSIONS

SITE DIMENSIONS

PERIMETER : 767.5
AREA : 23000 M2
It’s the environment that encompasses all living and non-living things occurring naturally on Earth or some region thereof. The natural environment includes the land area, elevations, natural drainage basins, flood plains and slopes, water features, soil, vegetation, environmentally sensitive areas, etc.

Natural Physical Environment Analysis
I. TOPOGRAPHY

MAJOR GEOGRAPHIC POINT

- High Point
- Valley
- Relatively Flat Area
- Steep Topology
- Steac
II. Land Topography

Contour Lines

Contour Interval: 5 Meters
II. LAND TOPOGRAPHY

SITE SECTION

SECTION A-A

SECTION B-B
III. Climatic Analysis

Sun, Wind and Noise Analysis

Sun Movement Path:
- June 21: Summer Solstice
- March 21 & September 21: Equinox
- December 21: Winter Solstice

Azimuth at Sunrise:
- 122 degrees

Azimuth at Sunset:
- 56 degrees

Noise Concentration

- Noise from Stone Excavation
- Prevailing Wind Flow
- Sun Movement Path
- Proposed Site
III. Climatic Analysis

Shade and Shadow Diagram

Winter

Summer

09:00 AM

03:00 PM
IV. WATER AND DRAINAGE

DRAINAGE PATTERNS IN AREA SURROUNDING THE PROPOSED SITE, LEADING THE WATER FROM TWO HIGH GROUNDS TO A LOW GROUND VALLEY-LIKE STRIP.

DRAINAGE DIRECTION WITHIN THE PROPOSED SITE.

PRECIPITATION LEVELS INDICATE A FAIR AMOUNT OF RAINFALL, SPECIFICALLY THROUGHOUT WINTER AND SPRING. WATER DRAINAGE AND GATHERING MAKE AN IMPORTANT ISSUE TO ADDRESS, ESPECIALLY WHEN THE BUILDING SITE IS LOCATED ON A SLOPING LAND WITH A 25% SLOPING PERCENTAGE.

<table>
<thead>
<tr>
<th>Days with Precipitation</th>
<th>Precipitation (MM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>Feb</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>
V. ECOLOGY ANALYSIS

EXISTING VEGETATION

* Punica granatum
  * Pomegranate

* Quercus calliprinos
  * Palestinian Live Oak

* Hordeum
  * Barley

* Triticum
  * Wheat

* Vitis vinifera
  * Grape

* Olea europaea
  * Olive Tree

* Ficus carica
  * Common Fig
VI. SENSORY QUALITIES

PANORAMA VIEWS

1

2
VI. SENSORY QUALITIES
PANORAMA VIEWS

3

4
VI. SENSORY QUALITIES

VIEWS TO AND FROM THE PROPOSED SITE
VI. SENSORY QUALITIES
SHATANA SKYLINE

RESIDENTIAL CULTURE
CATHOLIC CHURCH
LATIN CHURCH
QANDAH FAMILY SOCIAL ASSOCIATION
MAJOR ROAD INTERSECTION
MOKBEL STREET LEADING TO AL HOSON
VI. SENSORY QUALITIES

SHATANA SKYLINE

ENTRANCE TO SHATANA

OLD HOUSE REMAINS DATING BACK TO THE EARLIER PHASE

RESIDENTIAL CULTURE

ORTHODOX MAJOR ROAD INTERSECTION

CATHOLIC CHURCH
The techno-physical environment here refers to the existing man-made environment; that includes physical structures, public infrastructure, parks, mines and rock quarries. This section examines some of the key features of the physical environment of Shatana as a whole.

Techno – Physical Environment Analysis
I. NEIGHBORHOOD CONTEXT

GOVERNMENT LANDS
II. Sold-Void and Land Use

Sold and Void

Land Use

- Residential
- Religious
- Administrative Center
- Public Garden
- Health Center
- Proposed Site
III. CIRCULATION

STREETS WITHIN THE BUILT AREA OF THE VILLAGE
**IV. APPROACH AND ACCESSIBILITY**

**Hoson Street:** The most used, it’s 7 km north.

**From Al-Naimeh:** It’s used less than Al-Hoson Street, but more than Al-Khanoq Street, it’s 5 km east.

**Al-Khanoog Street:** The western road, the least frequently used, it’s almost impossible for.
III. Circulation

Ring Road and Network

- Ring Road Surrounding Shatana
- Dead End Roads
- Circulation Roads
- Main Road Intersections
IV. Building Typology

Figure - Ground Relationship

The village houses scattered without any particular order with highest density is present in the surrounding of the Orthodox Church. The houses have irregular form due to continuous extension in order to accommodate expanding families.
IV. BUILDING TYPOLOGY

LAND TYPOLOGY
### IV. Building Typology

<table>
<thead>
<tr>
<th>Phase</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Phase</td>
<td>1886-1920</td>
</tr>
<tr>
<td>Latest Phase</td>
<td>1990-2009</td>
</tr>
<tr>
<td>Middle Phase</td>
<td>1920-1990</td>
</tr>
<tr>
<td>Middle Phase</td>
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<td>Middle Phase</td>
<td>1920-1990</td>
</tr>
</tbody>
</table>
# IV. Building Typology

<table>
<thead>
<tr>
<th>Name of Stage</th>
<th>Period</th>
<th>Materials</th>
<th>Building Techniques</th>
<th>House Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caves</td>
<td>1850-1886</td>
<td>ROUGH STONE MUD</td>
<td>- The used kanater (arches) as a structure and divider of the house and it was covered with mambo soil and water. - Walls are composed of thick-heavy and multilayer components.</td>
<td>Living room Sleeping room</td>
</tr>
<tr>
<td>Early Phase</td>
<td>1886-1920</td>
<td>ROUGH STONE MUD</td>
<td>- They used simple steal beams as a structure for the ceiling - The floor is made out of smoothed clay - New rooms appeared according to their needs. - House was surrounded by 2 meters height walls.</td>
<td>In addition to the above dad Khoshe Hosh Lewan Bayke Kitchen An exterior furnace And an exterior furnace</td>
</tr>
<tr>
<td>Middle Phase</td>
<td>1920-1990</td>
<td>ROUGH STONE MUD CEMENT WHITE SOIL INSTEAD OF COLORING</td>
<td>- Steel beams for ceiling - Floors is tiled these days with different kinds. - In 1950 they have built a room for the bathroom.</td>
<td>Some of room were omitted and altered by: Living room Kitchen Bedrooms Bathroom Storage</td>
</tr>
<tr>
<td>Latest Phase</td>
<td>1990-2009</td>
<td>SMOOTHED STONE CONCRETE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
IV. BUILDING TYPOLOGY

**Middle Phase House and the Noticeable Change in Materials** shows the different building stage.

**Latest Phase House,** we can see some art work on its walls.

**The Second Church Built in the Middle Phase,** acts as a center of the village dividing the village into two sides with its location on the village’s main intersection.

**Early Phase House Ruins.**

**Latest Phase House, and Another Art Work Appears on the Wall.**
IV. BUILDING TYPOLOGY

MATERIALS

In the early stages basic materials were used for building, such as rough stone and mud, the ceiling was covered with bamboo stems, mud, rubble and water.

In the middle stages smoother stone and mud were used in the exterior walls. White sand was introduced as a new material for coloring the inner walls.

Well finished houses appeared in later stages. A variety of materials is used in building. Smoother stone patterns are most commonly used in exterior walls.
IV. BUILDING TYPOLOGY

DOORS

The doors were basically ARCH SHAPED made out of a rough stone frame and basic materials as wood for the door. The arch usually consisted of 5 or 7 blocks. The middle stone is called the KEY STONE.

Both arch and rectangular doors were used, stone was smoother than the one used in the earlier stage. Wood and steel doors and well cut stone.

Large variety of doors materials and shapes are now used. Less openings are made.

Early Phase
1886-1920

Middle Phase
1920-1990

Latest Phase
1990-2009
IV. BUILDING TYPOLOGY

WINDOWS

IN THE EARLY PHASE WINDOWS WERE SMALL IN SIZE Framed with wood or rough stone. Later on larger sized openings became present because of the relatively advanced insulation techniques used for security. Issues in the latest stages were taken into consideration as we can see the window steel rods are becoming a basic element in the windows.
IV. BUILDING TYPOLOGY

ROOFING AND COURTYARDS

1886
EARLY PHASE

1920
MIDDLE PHASE

1990
LATEST PHASE

2009

ROOFING TECHNIQUES

ARCHES (KANATER) AND LOAD BEARING WALLS

LOAD BEARING WALLS AND BEAMS

COLUMN AND BEAM

COURTYARDS EXISTENCE

COURTYARD

BUILT UP AREA

COURTYARD

BUILT UP AREA

COURTYARD

BUILT UP AREA
IV. BUILDING TYPOLOGY

VEHICULAR AND PEDESTRIAN PATH

As we can see the pedestrians and vehicular share the same path.
The houses fences define the street the pavement.
The socio-cultural dimensions of the environment consist of customs, lifestyles, and values that characterize the society. Socio-cultural components of the environment influence the ability of our design to function within the society. Population demographics, rising educational levels, norms and values, and attitudes toward social responsibility are examples of socio-cultural variables.
I. Sensory Qualities

Site Elements and Forces

Some forces result from neighboring dynamic nodes, and other forces result frequently from focal points within the village itself.

Main elements within the village affecting the life of villagers on daily basis, varying in description: educational, religious, commercial, and social.
II. Past and Future

History and Visible Traces of the Site

- **Paleolithic Period** (500000-17000 bc)
  - No Architectural Evidence from this Era

- **Neolithic Period** (8500-4500 bc)
  - Living in Small Villages
  - Change in the Weather
  - Pottery-Making

- **Bronze Age** (5000 bc)
  - Increasing of Migration Patterns in the Middle East

- **Demote and Ammonite** (1200-500 bc)
  - Irbid Emerged as a Significant City
  - Decapolis

- **Hellenists** (64 BCE - 636 AD)
  - Romans - Greeks

- **Christians** (200 AD)
  - Ghassanids

- **Islamic Openings** (634 AD)
  - Rashidun Empire
  - Umayyad Empire
  - Abbasid Empire
  - The Weather
  - Pottery-Making

- **The Mukluks**
  - Strategic Area
  - Intermediate Area Serving Pilgrims Coming from the North

- **Ottoman Empire** (1500 AD)
  - Its Area Was Less Than 0.1 km²

- **The Hashemites** (1921-present)

1930
Area increased because Irbid became a part of Ajloun City

1950
Area increased with the Palestinian Refugees
II. Past and Future
Churches

1. Orthodox Church
2. Catholic Church
3. Latin Church
III. Resident and Using Population

Number, Composition and Patterns of Change

There are 278 person living in Shatana. 115 males, 163 females.

The majority of Shatana’s population is over the age of sixty since the youth are moving out to more developed city for work and education.

Almost all of Shatana’s families are extended families.

Pattern of Change
III. Resident and Using Population

Education, Economical Status and Employment Patterns

Apparently Shatana’s main problem is transportation; specially for the fact that Shatana is very much integrated with nearby cities; most importantly Hosen there is no public transportation and most people use their private cars.

Shatana has a high level of education the majority of people finished high school. Shatana’s main income is from agriculture, olive oil produce approximately 100,000 JD year, plenty of people work in jobs outside of Shatana, most likely Hosen or Irbid.
IIII. RESIDENT AND USING POPULATION

HERITAGE RESOURCES

IRBID GOVERNORATE IS CHARACTERIZED BY: ITS STRATEGIC SITE, ITS HISTORICAL AND ARCHAEOLOGICAL SIGNIFICANCE, ITS ECONOMICAL ROLE IT PLAYS, ITS FERTILE AGRICULTURAL LANDS.

SHATANA AT THE TOP OF THE JORDANIAN AGRICULTURAL REGIONS SPECIALLY IN THE PRODUCTION OF OLIVES AND WHEAT. THOUGH NOT USUALLY A MAJOR TOURIST DESTINATION ITSELF, IRBID’S STRATEGIC LOCATION IN NORTHERN JORDAN MAKES IT A CONVENIENT STARTING POINT FOR TOURIST INTERESTED IN SEEING THE NORTHERN JORDAN VALLEY.
IV. SITE VALUE AND RESTRAINTS

LAND OWNERSHIP
IV. SITE VALUE AND RESTRAINS

LAND OWNER SHIP
IV. Site Value and Restrains

Shatana happens to be a very quiet place, vehicular movements is very little, no major gathering spots within the villager present to generate any noise. Worth mentioning, nearby large scale areas generators of noise, yet due to the green lands and the landscape the noises interrupted.