



## Khuri, Rajasthan

<b>Climate:</b>	Arid Desert	<b>Rainfall:</b>	209.5mm
<b>Maximum Temperature:</b>	49°C (Summer)	<b>Minimum Temperature:</b>	25°C (Summer)
	23.6°C (Winter)		5°C (Winter)

### Transport:

**Nearest Airport** -Jaisalmer (50 kms), Jodhpur (327 kms), Bikaner (375 kms)

**Nearest Railway Station** - Jaisalmer (50 kms), Pokhran (170 kms), Barmer (200 kms)

### Geography:

Khuri is surrounded by Jaisalmer Tehsil towards East , Sheo Tehsil towards East , Sankra Tehsil towards East , Barmer Tehsil towards South .

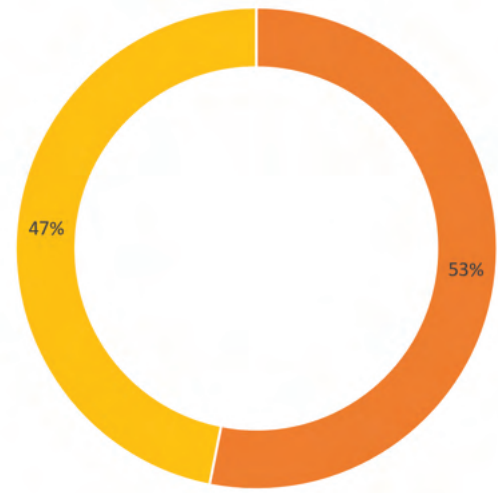
Jaisalmer , Barmer , Jodhpur , Sanchore are the near by Cities to Khuri

## VILLAGE PROFILE

Khuri is a small village which is about 40 kms south-west of Jaisalmer – an hour and a world away from the fort's swarming trade. Khuri is a Village in Sam Tehsil in Jaisalmer District of Rajasthan State, India. It belongs to Jodhpur Division . It is located 52 KM towards west from District head quarters Jaisalmer. 619 KM from State capital Jaipur. Khuri has its own desert sand dunes, and it remains a peaceful place apart from during holiday periods, as it's popular with Indian holidaymakers, with houses of mud and straw which are decorated like the patterns on Persian carpets. There are abundance of camps of mud huts, and camel drivers who are eager to take you on the dunes, but no shop-lined streets or pancake restaurants. Once the excitement of sunset is over, there is desert solitude and the brilliant star-studded sky at night to look forward to.

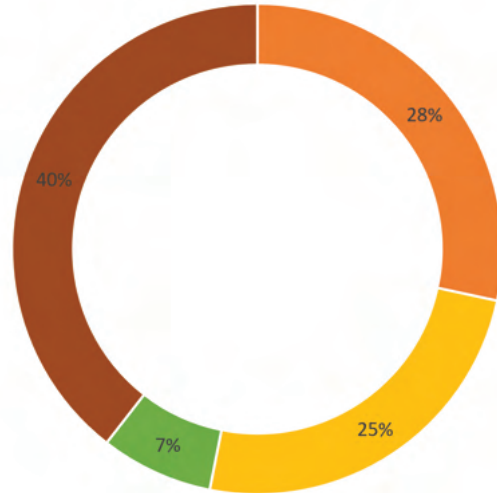
26.6133° N, 70.7150° E

Population



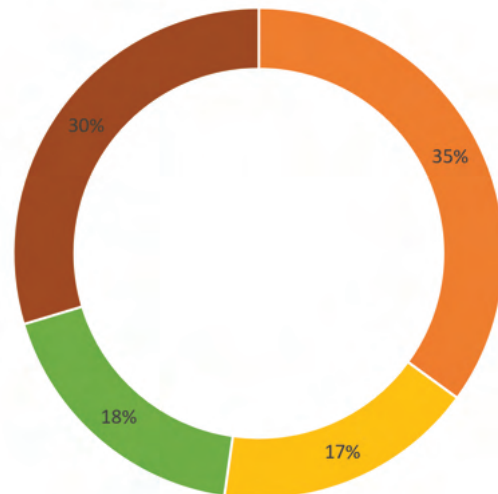
Male Female

Working Population



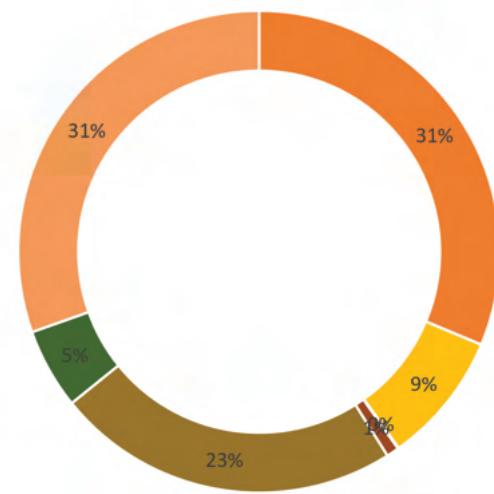
Male Workers Male Non-Workers Female Workers Female Non-Workers

Literacy Rate



Male Literates Female Literates Male Illiterates Female Illiterates

Working Population



Main Workers Other Workers Marginal Workers Non Working Persons Agriculture Labourer Household Industries

# Demographics

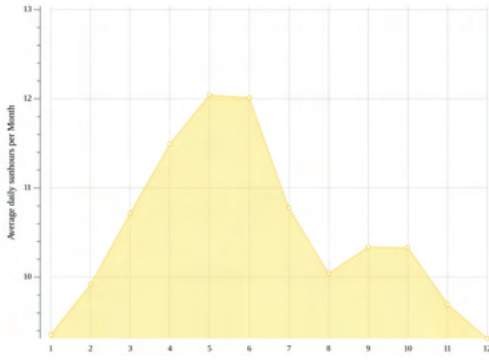
## Census Data 2011

Description	Census 2011 Data
Village Name	Khoohri
Teshil Name	Jaisalmer
District Name	Jaisalmer
State Name	RAJASTHAN
Total Population	1956
Total Area	7350 (Hectares)
Total No of House Holds	357
Total Male Population	1039
Total Female Population	917
0-6 Age group Total Population	361
0-6 Age group Male Population	194
0-6 Age group Female Population	167
Total Person Literates	1022
Total Male Literates	685
Total Female Literates	337
Total Person Illiterates	934
Total Male Illiterates	354
Total Female Illiterates	580
Scheduled Cast Persons	509
Scheduled Cast Males	252
Scheduled Cast Females	257
Scheduled Tribe Persons	5
Scheduled Tribe Males	11
Scheduled Tribe Females	5

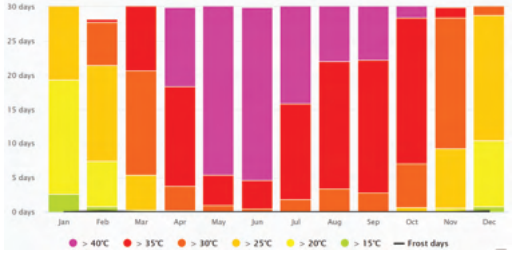
## Working Population 2011

	Total	Male	Female
Total Workers	700	555	145
Main Workers	597	513	84
Main Workers Cultivators	169	130	39
Agriculture Labourer	1	0	1
Household Industries	16	9	7
Other Workers	411	374	37
Marginal Workers	103	42	61
Non Working Persons	1256	484	772

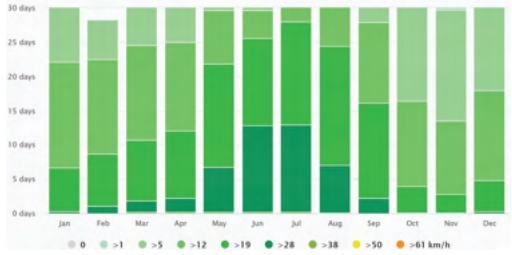
# Climatical Analysis



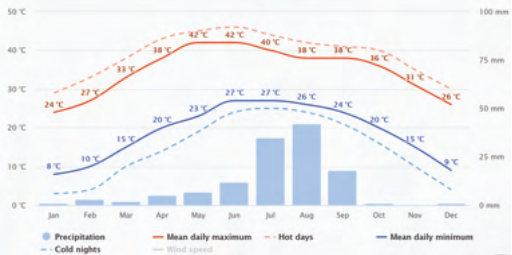
Avg. Hours of Sunshine



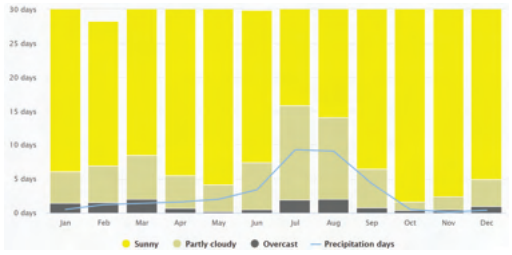
Maximum Temperature



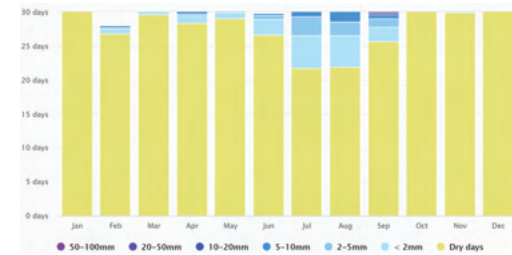
Wind Speed



Avg. Temperature & Precipitation



Cloudy, Sunny & Precipitation Days



Precipitation Amount

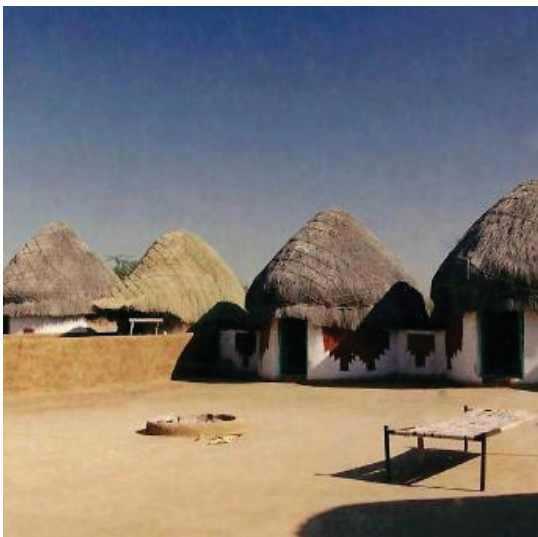
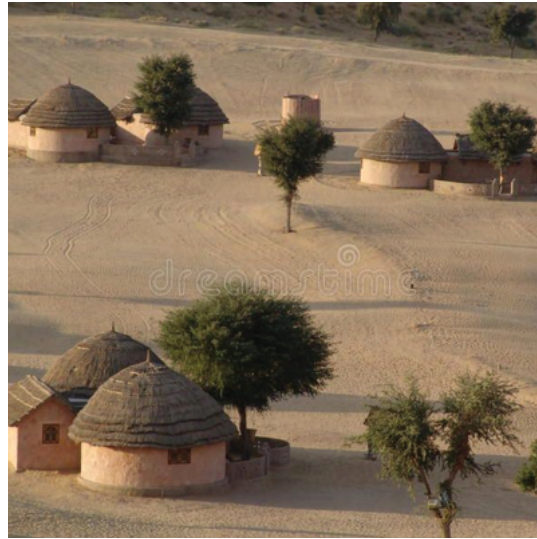
	January	February	March	April	May	June	July	August	September	October	November	December
Avg. Temperature °C (°F)	15.9 °C (60.7) °F	19.5 °C (67.1) °F	25.8 °C (78.5) °F	31.4 °C (88.6) °F	34.2 °C (93.5) °F	33.9 °C (93.1) °F	32 °C (89.6) °F	30.3 °C (86.5) °F	30.6 °C (87) °F	29.4 °C (84.9) °F	23.5 °C (74.3) °F	17.6 °C (63.6) °F
Min. Temperature °C (°F)	9.5 °C (49.1) °F	12.4 °C (54.3) °F	18.1 °C (64.6) °F	23.3 °C (74) °F	26.2 °C (79.1) °F	27.4 °C (81.3) °F	26.9 °C (80.4) °F	25.7 °C (78.3) °F	25.1 °C (77.2) °F	22.7 °C (72.8) °F	16.9 °C (62.4) °F	11.2 °C (52.1) °F
Max. Temperature °C (°F)	22.2 °C (71.9) °F	25.9 °C (78.7) °F	32.3 °C (90.2) °F	38.1 °C (100.6) °F	41 °C (105.7) °F	39.8 °C (103.6) °F	37 °C (98.6) °F	35 °C (94.9) °F	35.7 °C (96.3) °F	35.4 °C (95.8) °F	29.7 °C (85.5) °F	24 °C (75.2) °F
Precipitation / Rainfall	3	6	2	3	8	15	48	58	23	7	2	1
mm (in)	(0.1)	(0.2)	(0.1)	(0.1)	(0.3)	(0.6)	(1.9)	(2.3)	(0.9)	(0.3)	(0.1)	(0)
Humidity(%)	43%	35%	25%	20%	29%	43%	55%	62%	49%	29%	31%	40%
Rainy days (d)	1	1	1	1	2	1	5	5	2	1	0	0
avg. Sun hours (hours)	9.4	9.9	10.7	11.5	12.0	12.0	10.8	10.0	10.3	10.3	9.7	9.3

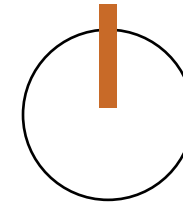
Climate by Month

## INFERENCES

- The average annual temperature in Jaisalmer is 27.0 °C | 80.6 °F. The rainfall here is around 176 mm | 6.9 inch per year.
- The driest month is December, with 1 mm | 0.0 inch of rain. Most precipitation falls in August, with an average of 58 mm | 2.3 inch.
- May is the warmest month of the year. The temperature in May averages 34.2 °C | 93.5 °F. In January, the average temperature is 15.9 °C | 60.7 °F. It is the lowest average temperature of the whole year.
- There is a difference of 57 mm | 2 inch of precipitation between the driest and wettest months. The average temperatures vary during the year by 18.2 °C | 32.8 °F.
- Operable windows, especially those that are properly shaded, can keep the interior nice and cool.
- Courtyards and verandahs can be used to create pockets of outdoor space protected from high winds.
- High Temperature is observed from June to September, The outdoor activities will be allocated according to these observations.
- The air that's lower to the ground is going to be cooler. So having some awning windows down low that can capture this air will keep the space interior cooler.
- Perhaps add a pergola or other shading device as well to keep the area even cooler. And make sure all the rooms that front the courtyard have big windows and doors to take advantage of the cooling effects of this space.
- The orientation of the building should help in minimizing sun exposure during summer and provide warmth during winter, for which the longer walls of the buildings should face the North and South and avoid west orientation.
- usage of thick and high walls with insulation.
- A double roof or single white roof is preferred as they reflect heat to the maximum extent along with a damp roof.
- Other than water, plants act as a cooling element in the regions of the hot and dry climate,

# Site Context // Village Snapshot





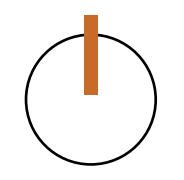
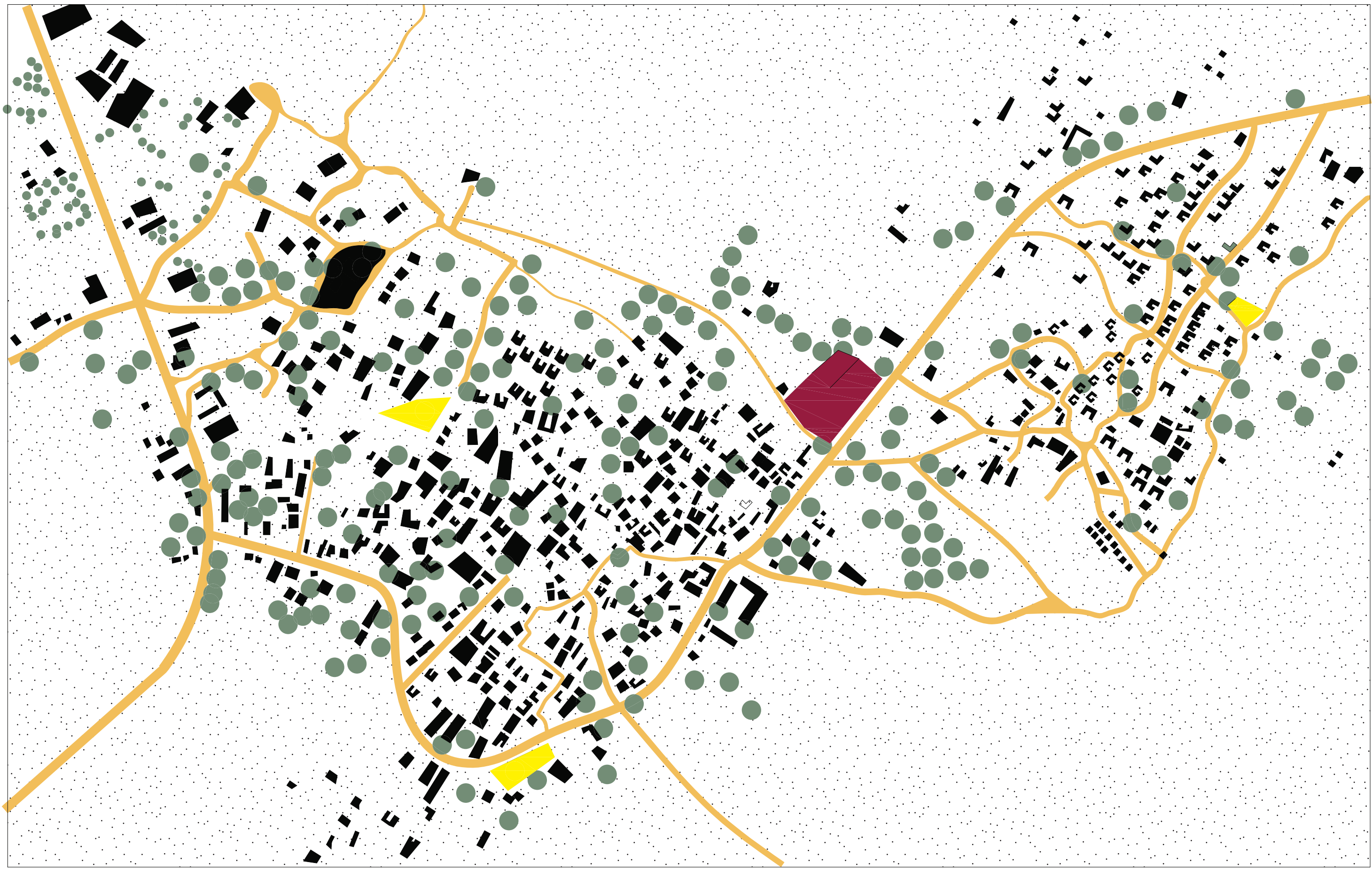
## NODAL SITES

The project has been divided into 4 parts consisting of 1 Main Site and 3 Nodal Sites throughout the village to get the maximum out of the village.

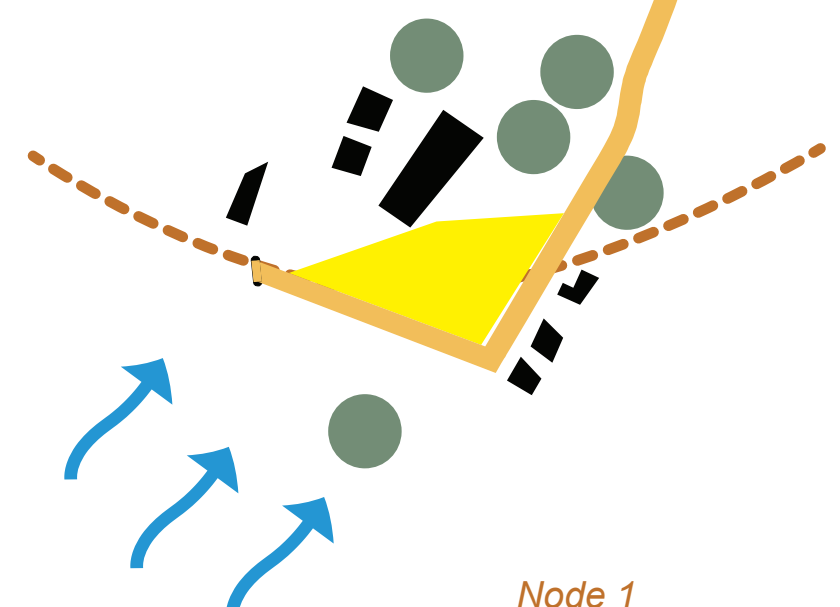
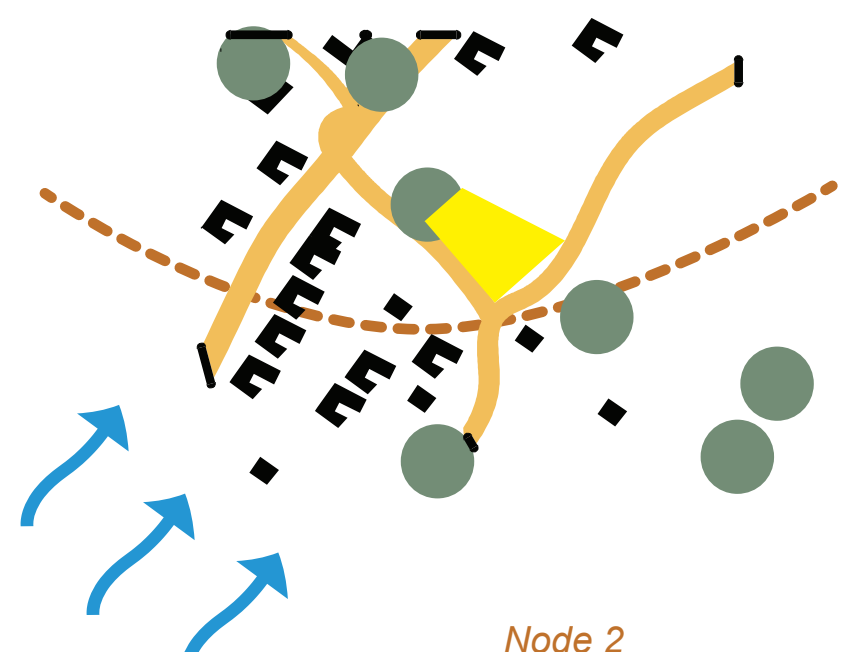
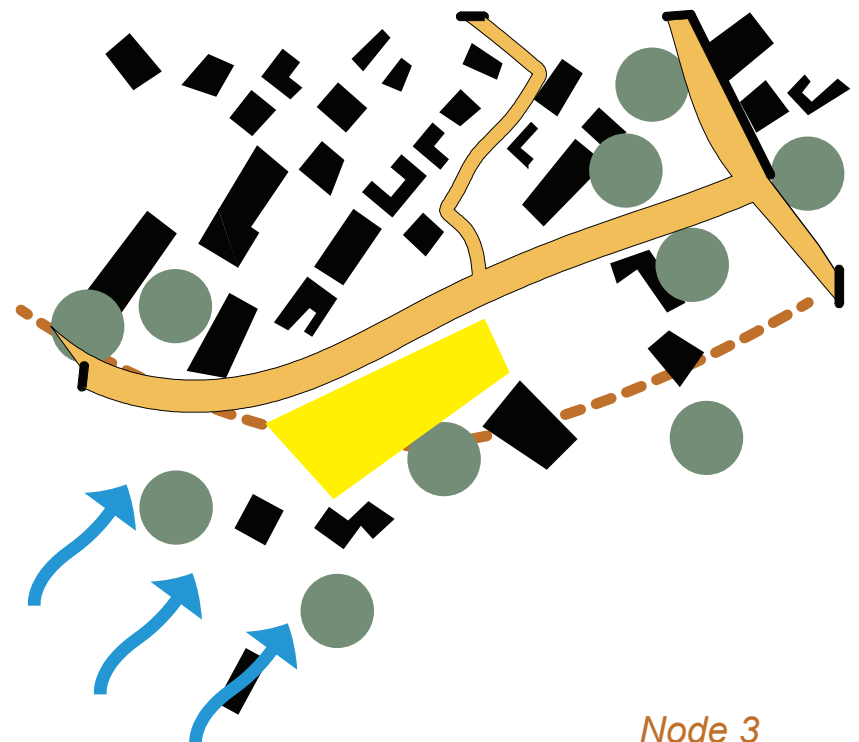
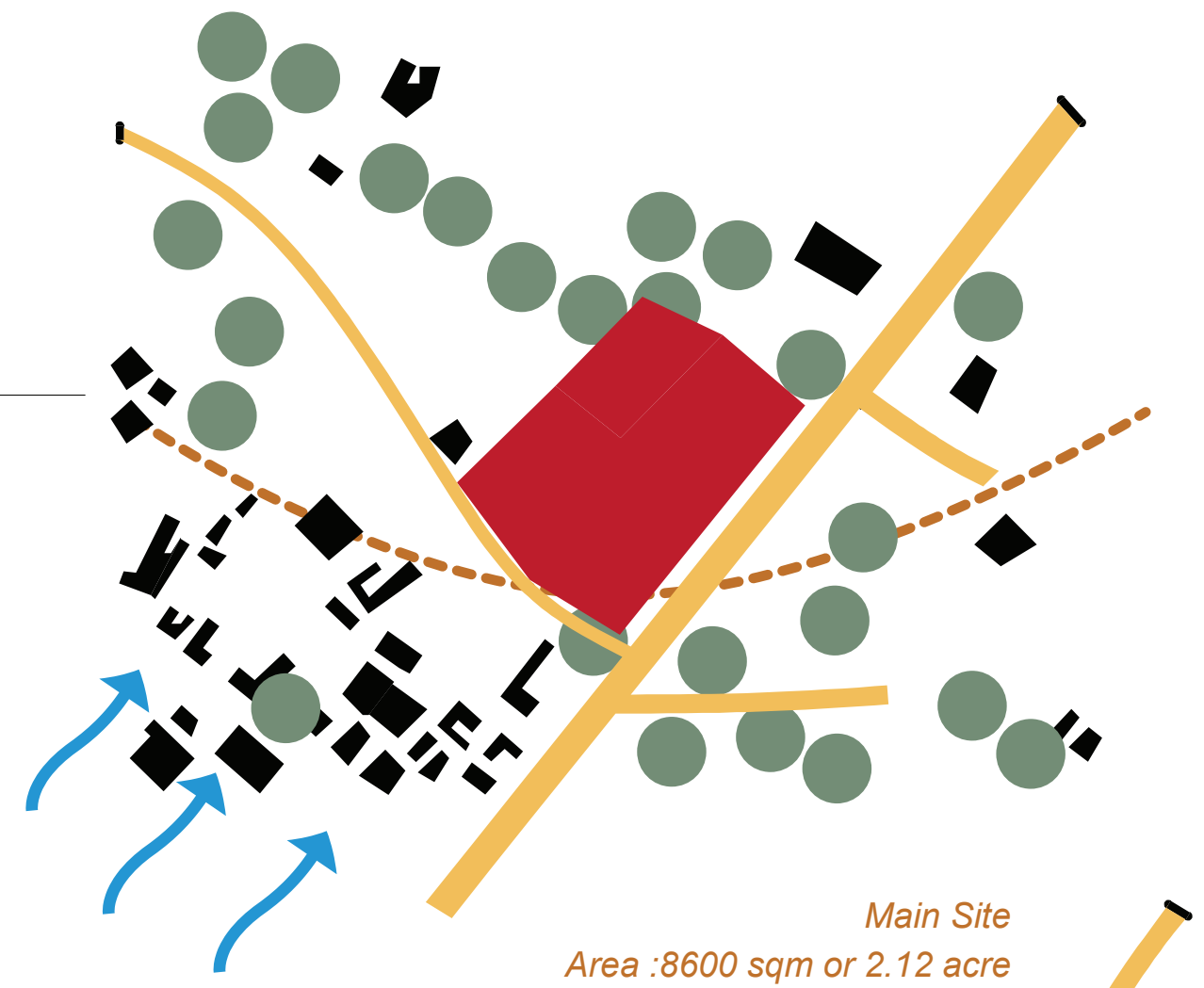
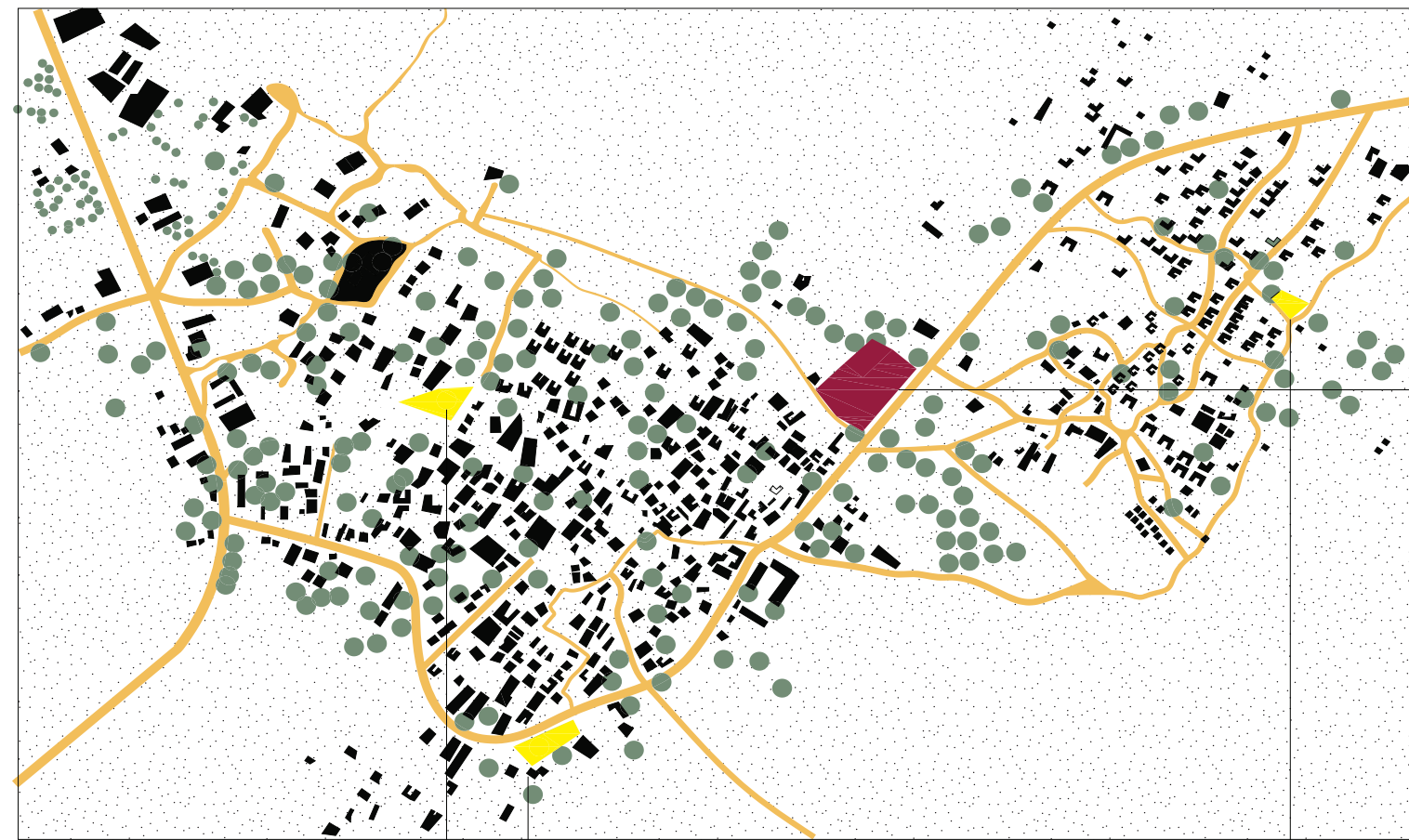
Nodal Sites has been chosen in such a way so that every part of the village is in radius of 250m from the Nodal Site and 500m from the Main Site. This has been done to ensure safety to the women at any hour as the project will be near their house and they can visit it at any time inspite of being involved in household chores.

Smaller Activities like gathering, learning craft, spreading awareness, women to men talk etc. can take place.

The Main Site will be used for major gathering, exhibition of their creation, cultural events, sports facilities, awareness centre, and learning different skills to go hand in hand with the modern world but also preserving their tradition.



- Built-Up Mass
- Nodes
- Roads within the Village
- Main Site



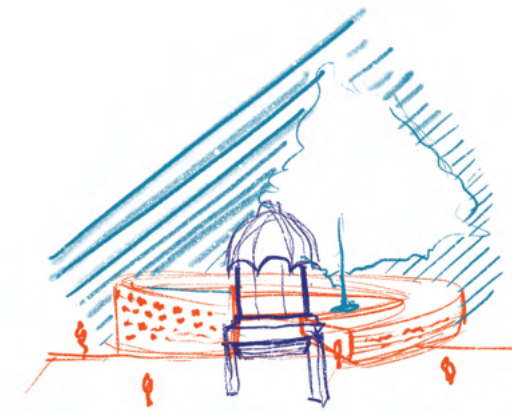
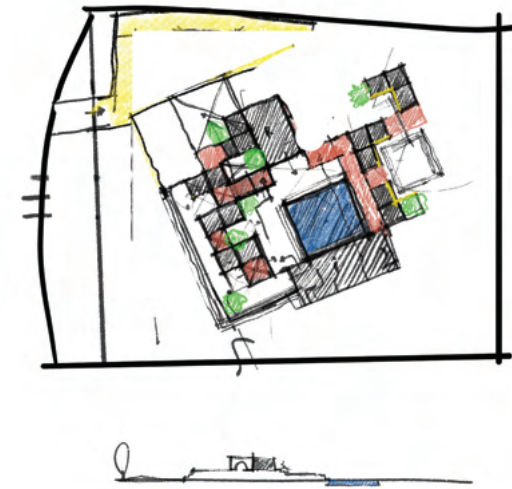
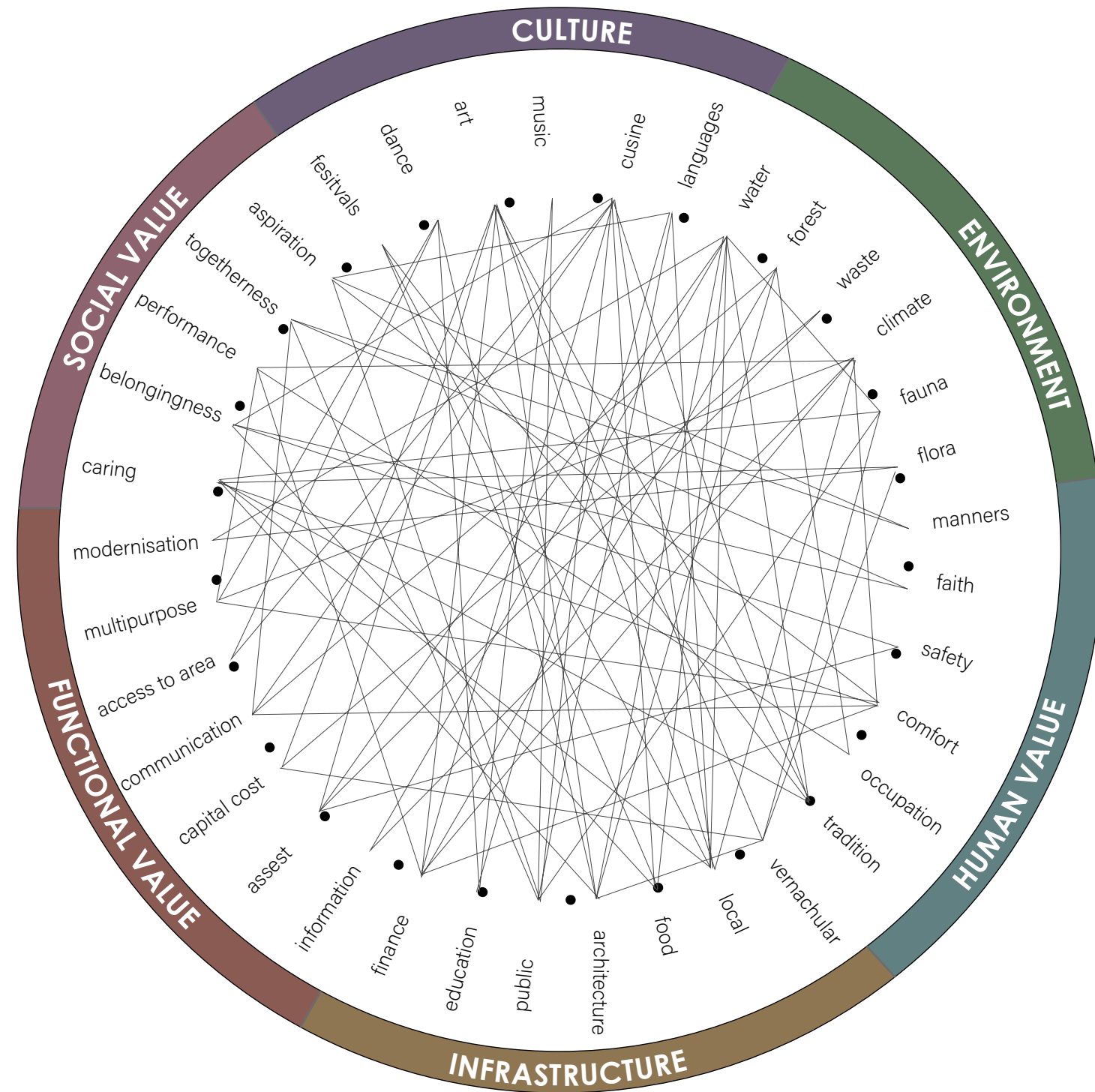
Node 3  
Area :2377 sqm or 0.56 acre

Node 2  
Area :1068 sqm or 0.3 acre

Node 1  
Area :2772 sqm or 0.7 acre

Main Site  
Area :8600 sqm or 2.12 acre

# Ideology

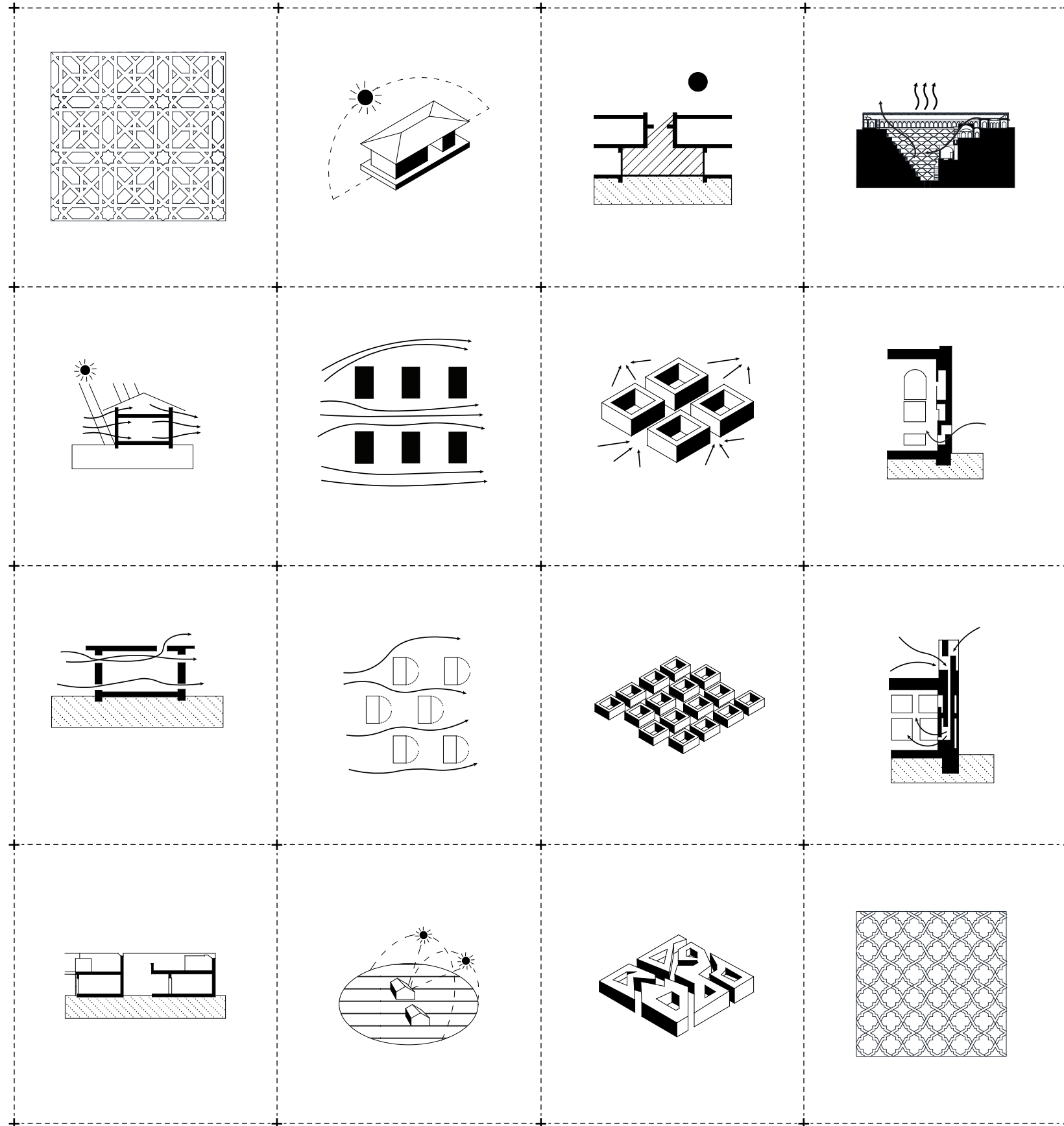


Khuri village has been placed 50km from Jaisalmer and is mostly dependent on it for basic need. The village is also dependent on tourist for their financial growth. My project revolve around the empowerment of women in the village which could become the module for the nearby villages as well. The thought is to gather them in the initial stage of the project (NODE) which automatically make them more feel more secure as they are alone living in the house when their mens go for work. The Nodes has been spread across the village so that anyone can access it from anywhere at anytime. To make the node more appealing to the women, the Chattrii similar to the Jaisalmer Temple has been created which also give the hierarchy and make them want to come there. They can work, talk, learn skills, or play in that Space. The 2nd part of the project is the Dehleez (Main Site) which is accessible to everyone and has local market which can benefit villagers for their basic need and during the tourist season women can also sell their craft which they have created in the Nodes. There is a Workshop which will be utilized by the women to learn craft and then when there is tourist season the spaces will be converted into homestays which will be run by women itself.



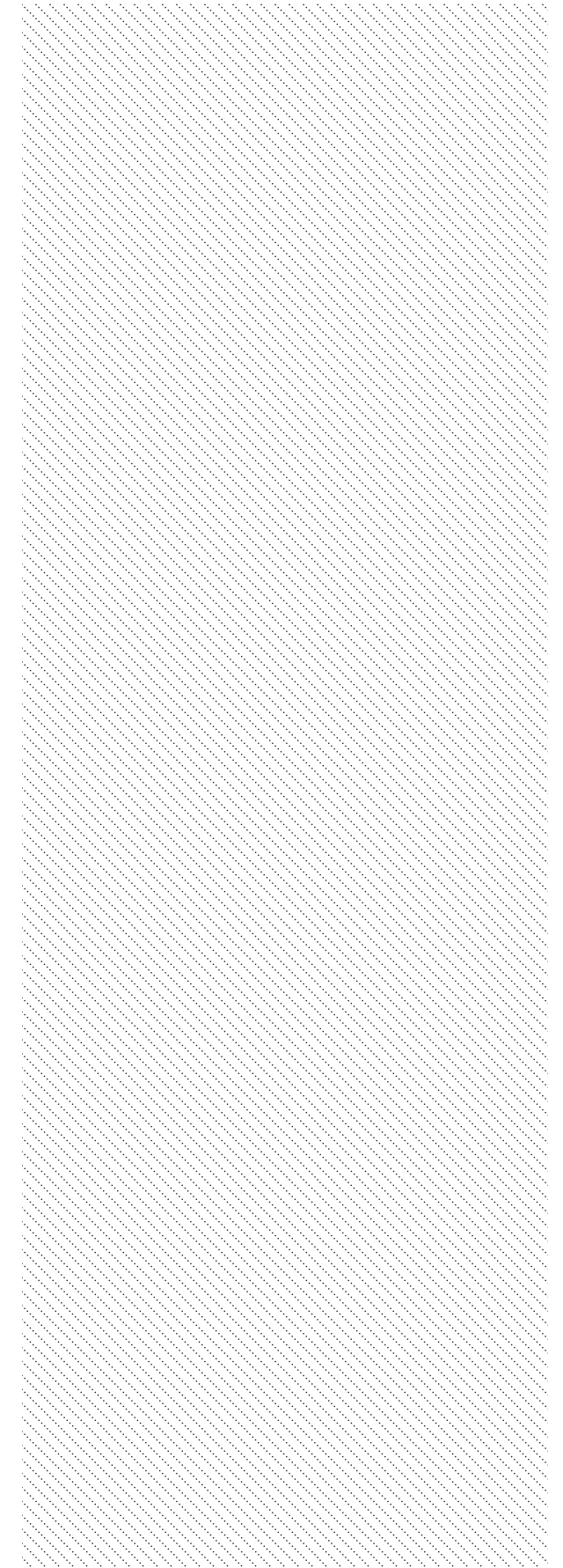
# Vernacular Elements

Final Submission



## ARCHITECTURAL PRINCIPLES

- Cluster formation
- Sun orientation
- Shading
- Cross ventilation
- Passive cooling via baori
- thermal impact
- wind flow through streets
- diffused natural light
- ventilation through openings
- passive cooling
- solar reflectivity and thermal insulation
- topography
- clusters of built mass
- wind path
- massive premises of the temple
- solar absorption through walls and roofs
- placement according to sun path
- randomly shaped cluster
- cross ventilation through built mass
- levels created inside the premises
- Islamic jaalis for aesthetic purposes
- brackets supporting the structure
- Islamic arch
- Indian arch
- Indian jaali



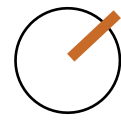
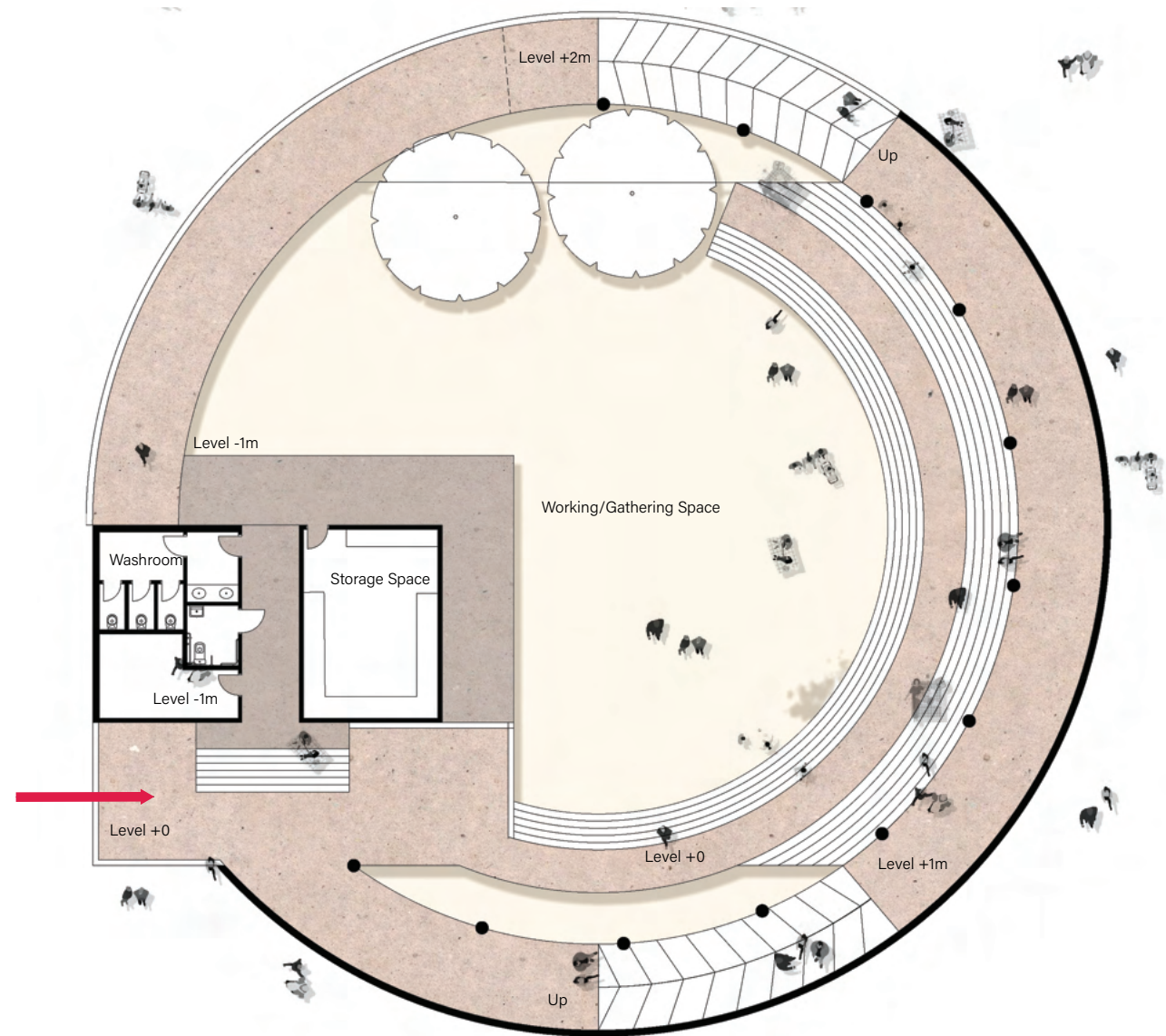
Vernacular Study of Rajasthan / 2021



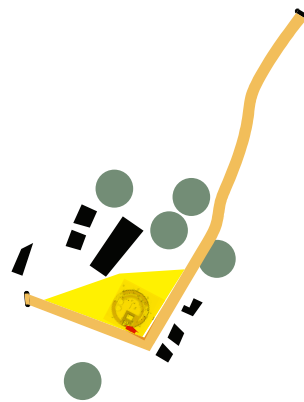
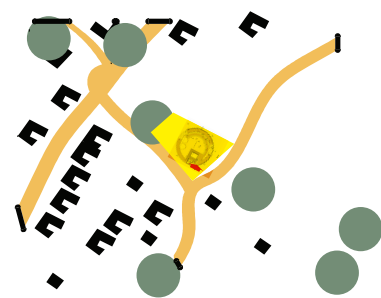
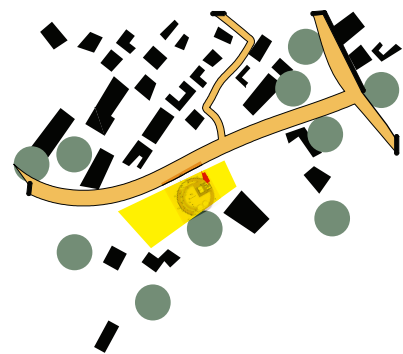
# NODES

# Nodes

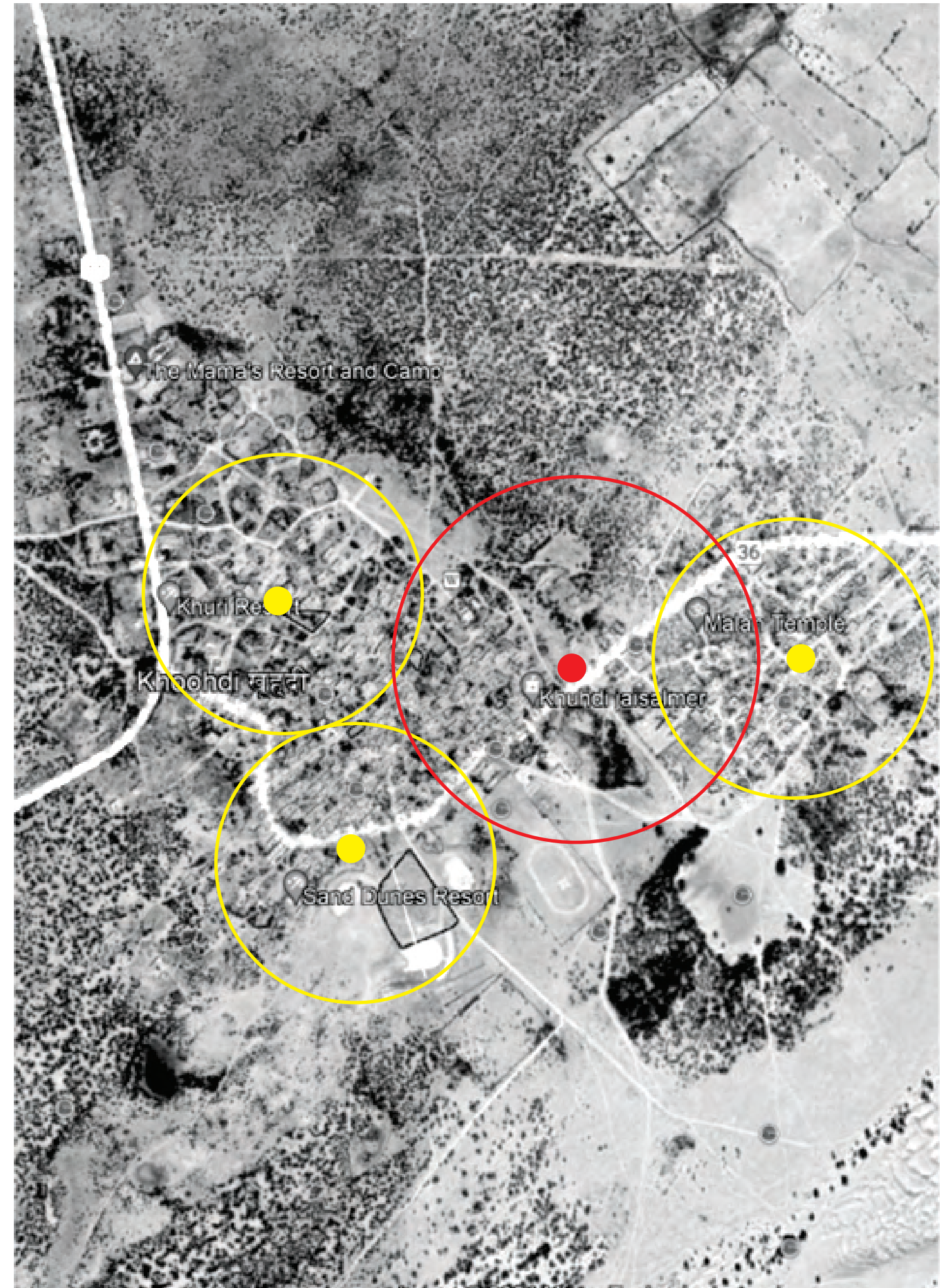
Final Submission



PLAN

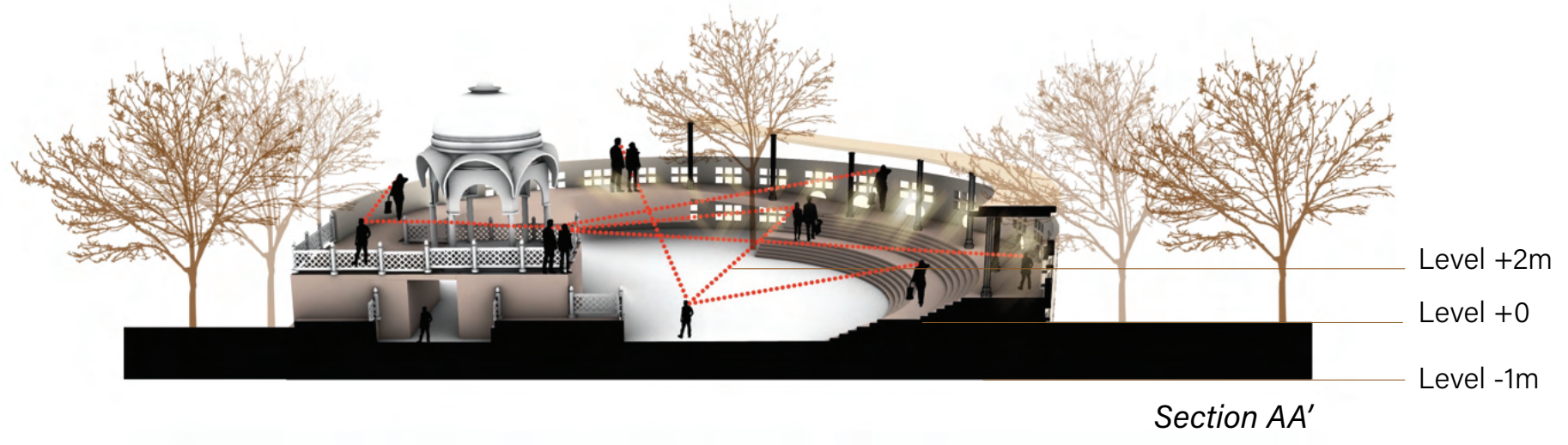


Sites for Nodes

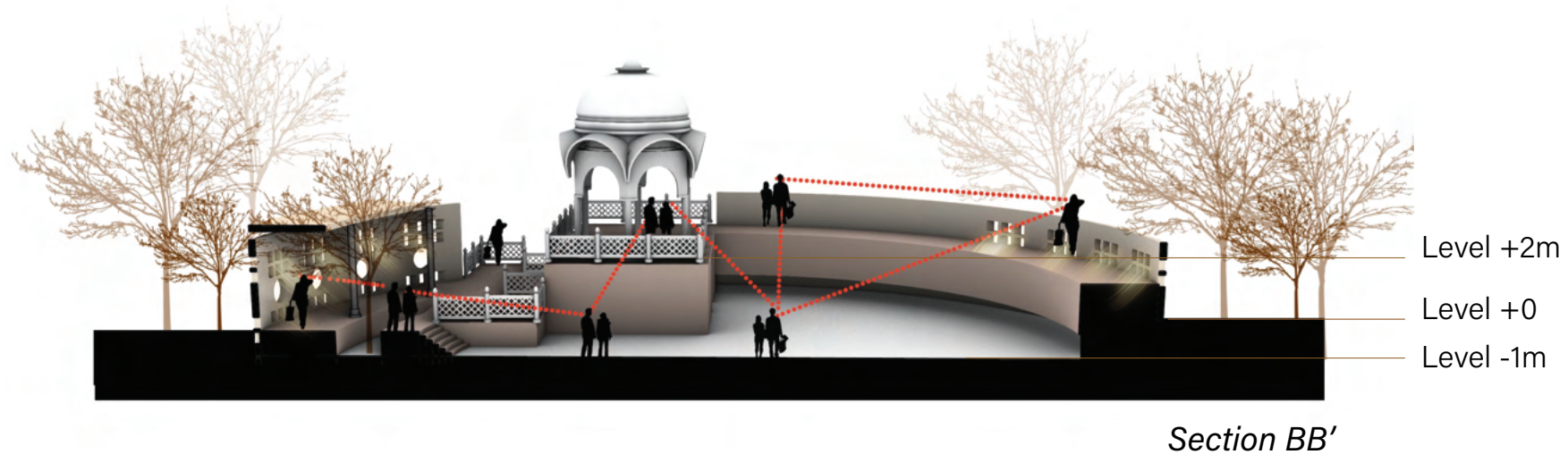
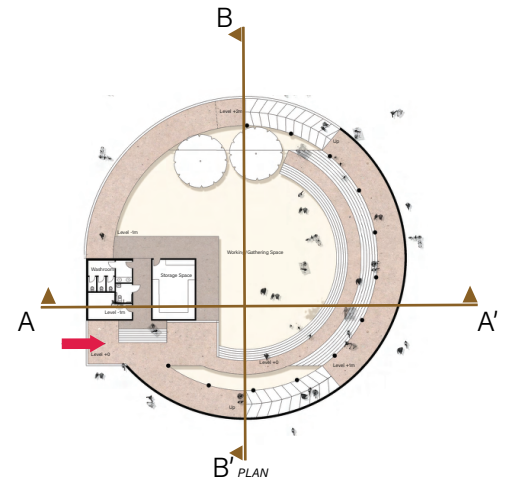


Vernacular Study of Rajasthan / 2021

# Nodes



Final Submission



Vernacular Study of Rajasthan / 2021



# Gallery

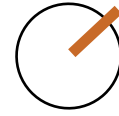


# Gallery

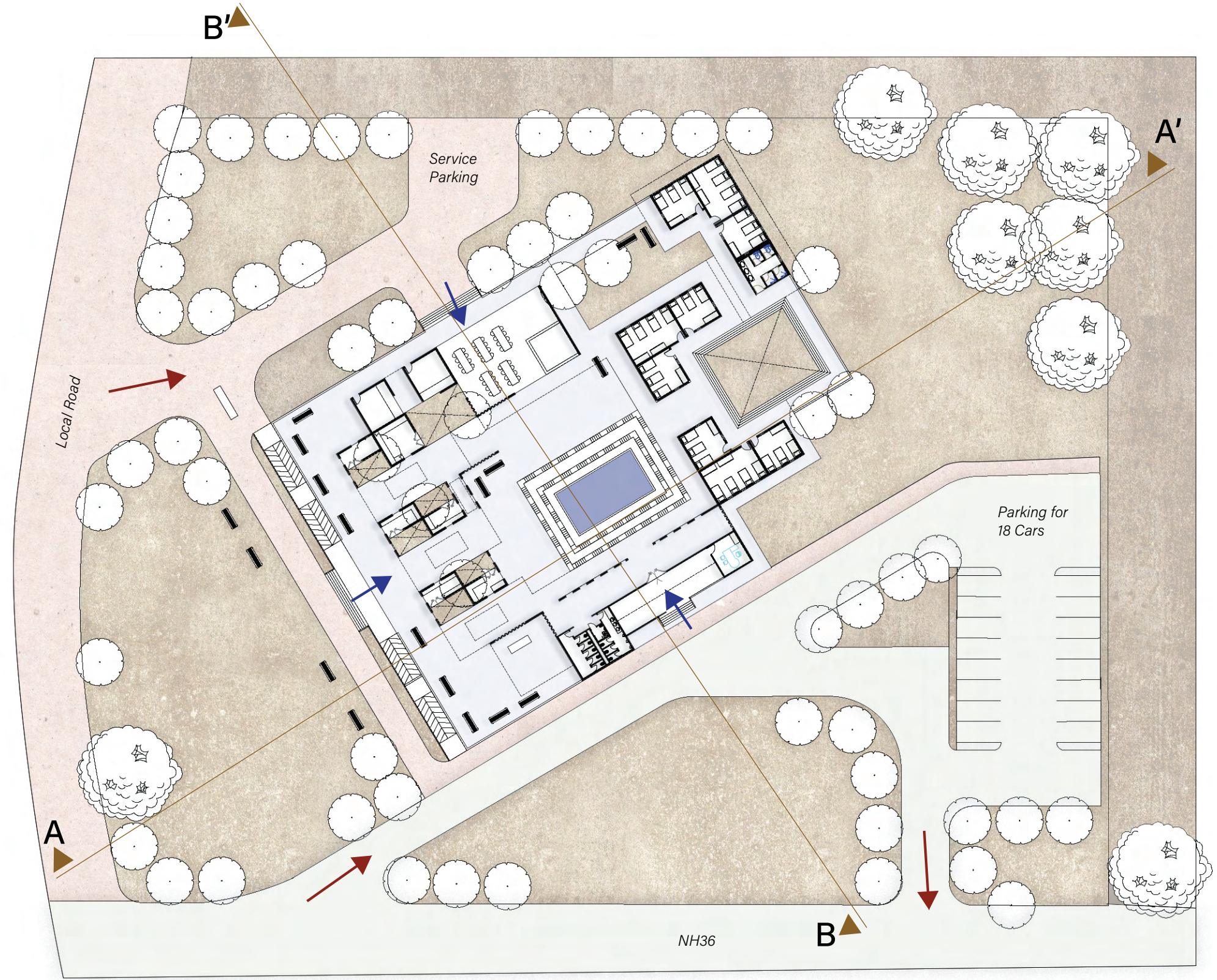


# देहलीज

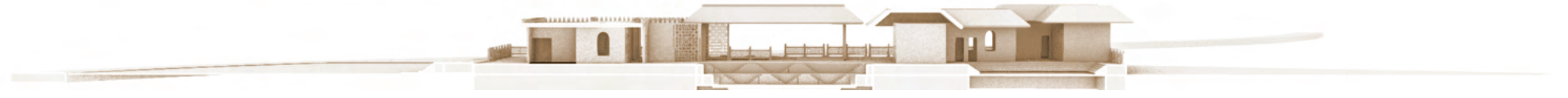
# Site Plan



Final Submission



- Pedestrian Road also Connected to village
- Vehicular Road connected to NH36
- Built Up Area
- Unbuilt Up Area



Site Section AA'



Site Section BB'

Vernacular Study of Rajasthan / 2021



# Main Site



Final Submission



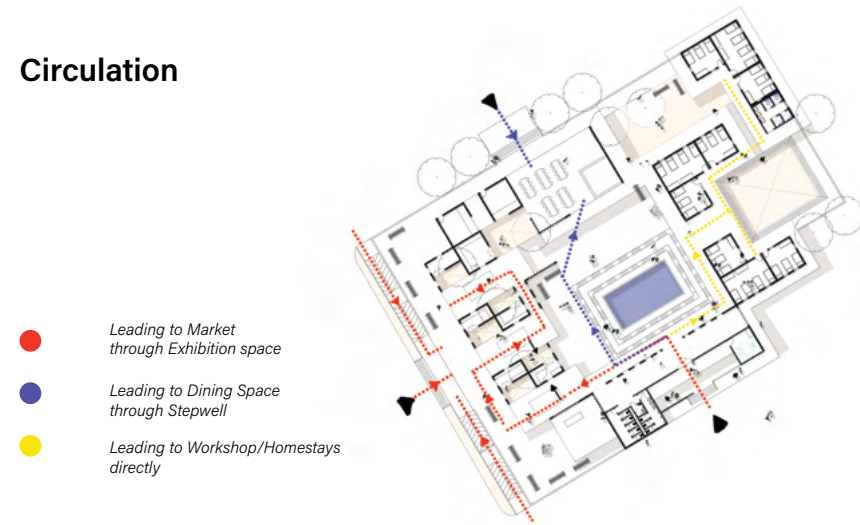
- Courtyard
- Water Body
- Built Up Area



PLAN

# Decoding the Plan

## Circulation



The Circulation has been planned in such a way that from entering into the foyer, the visitors can go to multiple spaces (market/-dining/homestays) as per their wish.

The Circulation for Market has been designed like an exhibition space for the craft they sell, so you are moving by **seeing them work their work and then purchasing their work**

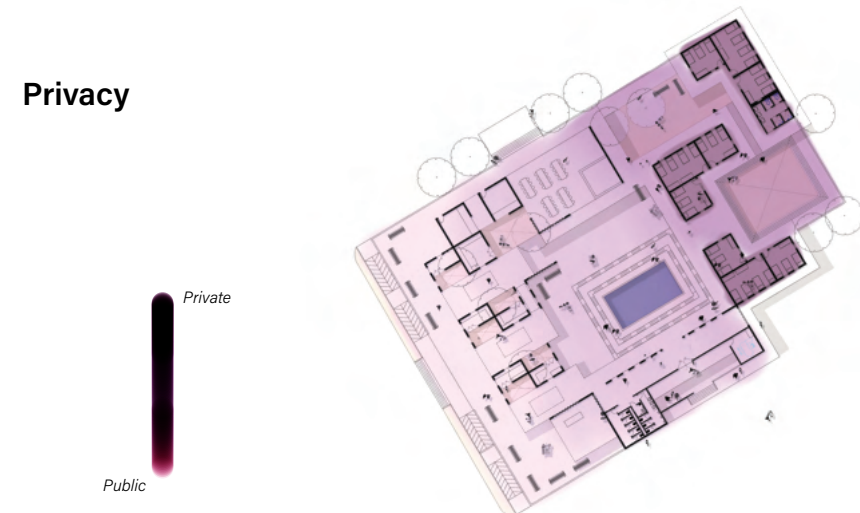
## Zoning



The Spaces has been placed in such a way that compliments their corresponding space.

Workshop space can be used as workshop for women during March to August (no tourist) & will be used as Homestays during Sept. to Feb. when there is tourist season.

## Privacy

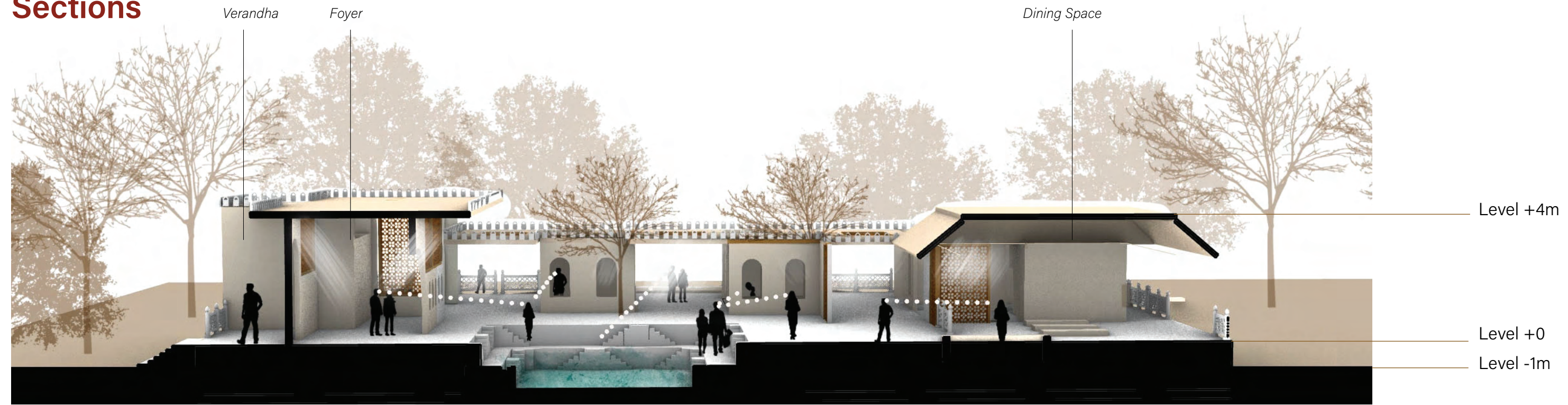


Market being the public Space has been placed in one side and Homestays and Workshop being the private space has been placed on the other corner which is connected by stepwell/openarea which is used for gathering and also act as a transition space.

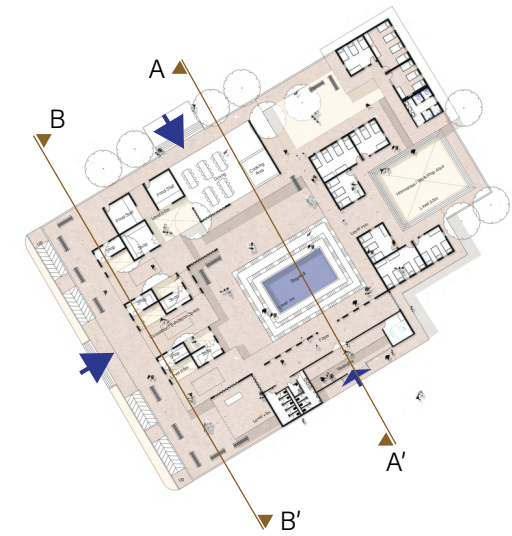


*Exploded View*

# Sections



## Section AA'

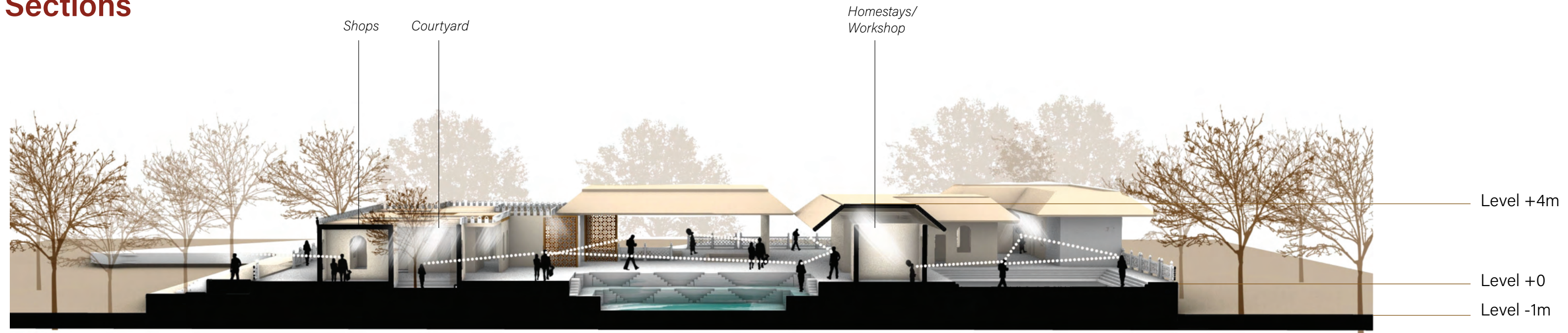


## Section BB'

Final Submission

Vernacular Study of Rajasthan / 2021

# Sections

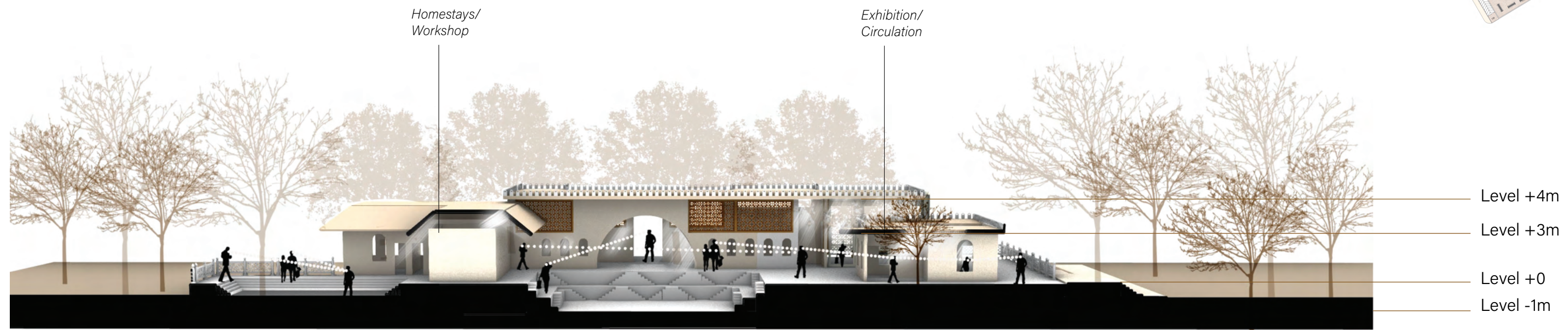


Section AA'



Vernacular Study of Rajasthan / 2021

Final Submission



Section BB'

# Elevation



*Front Elevation (East)*



*Side Elevation (South)*

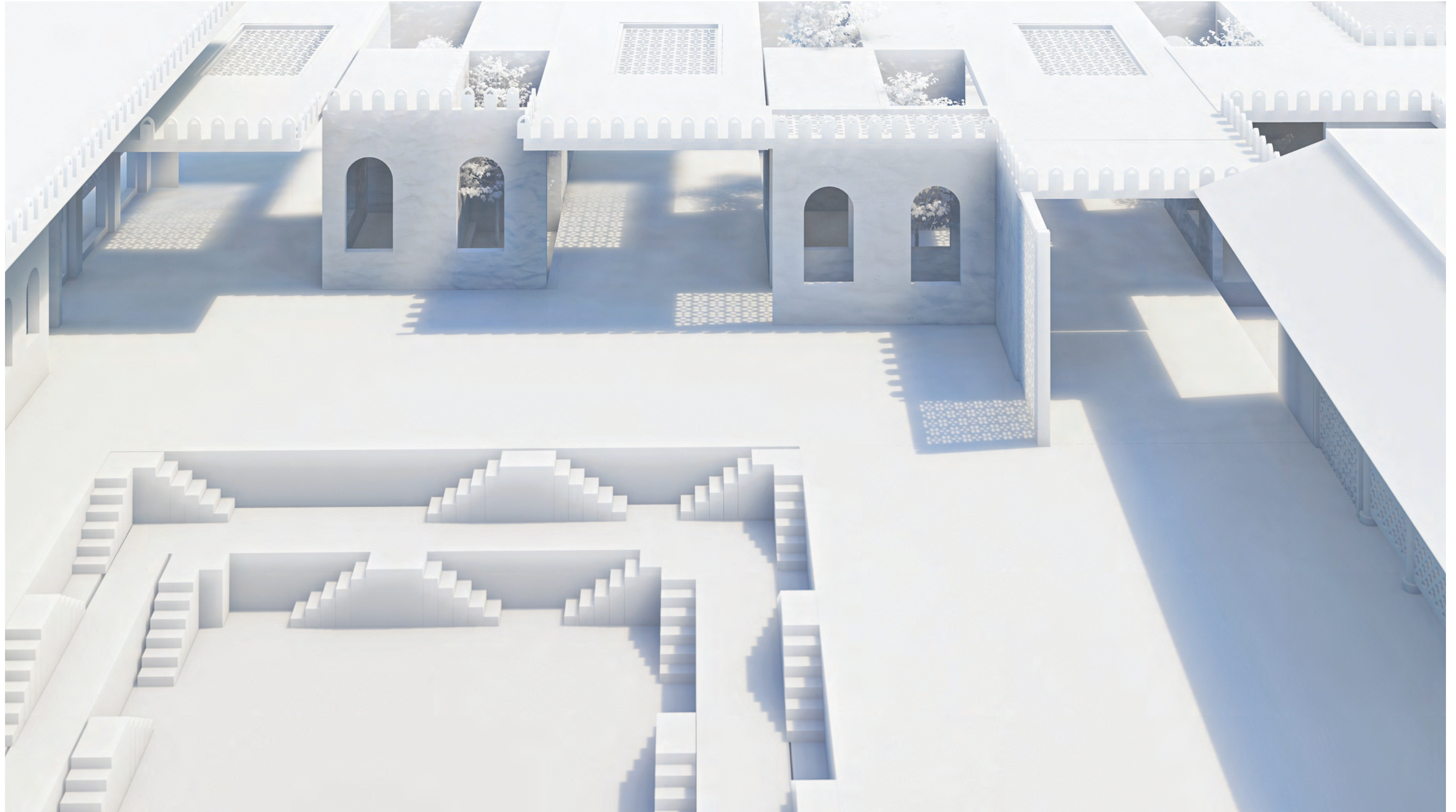
# Elevation



*Front Elevation (West)*



*Side Elevation (North)*



# Gallery

