



Between the Known and the Possible

**Reconstructing Identity Through Architecture in
Sana'a, Yemen**

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Between the Known and the Possible

**Reconstructing Identity Through Vernacular Architecture and
Post-Conflict Design Frameworks in Yemen**

Old city of Sana'a



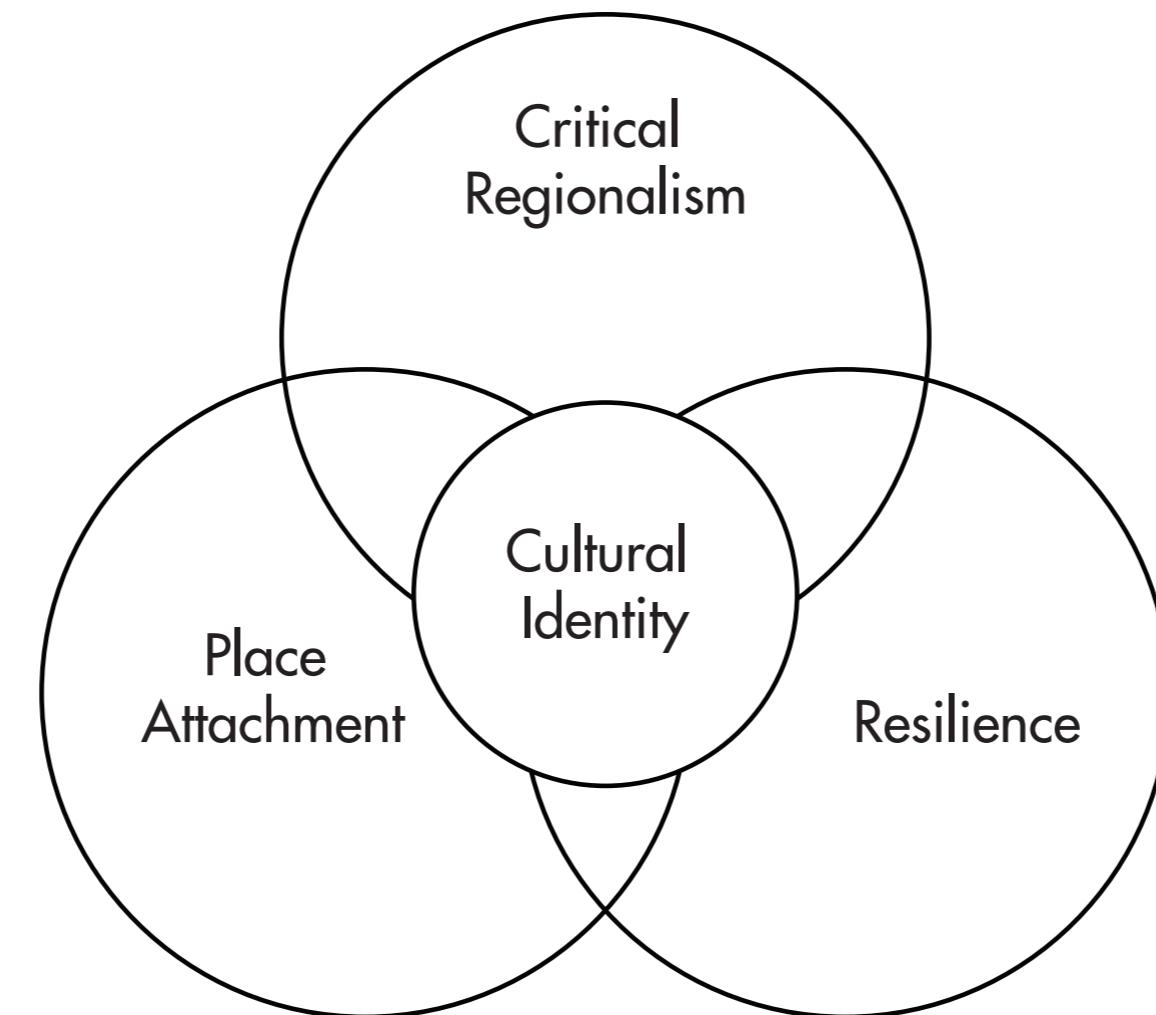
Sana'a post destruction

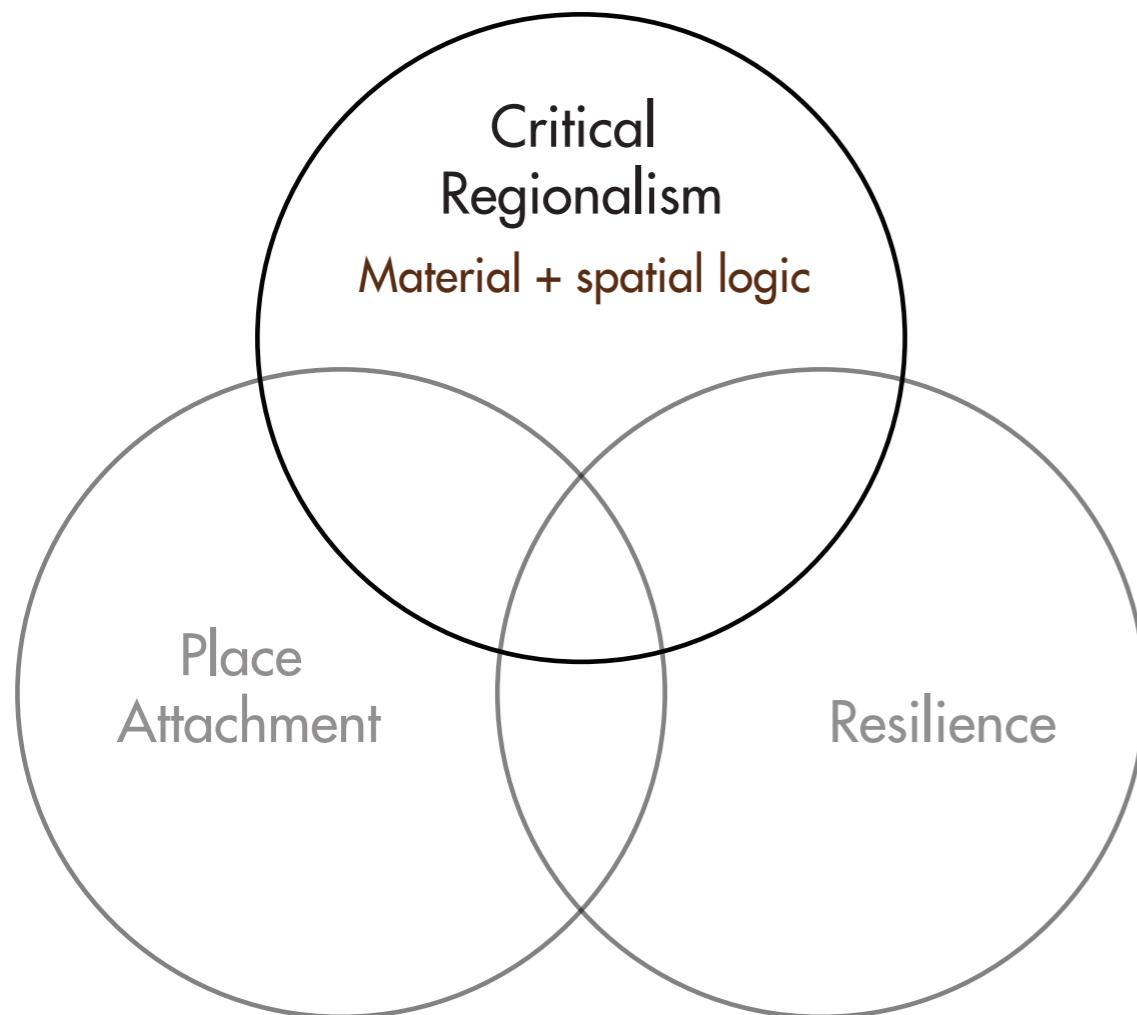


Sana'a today

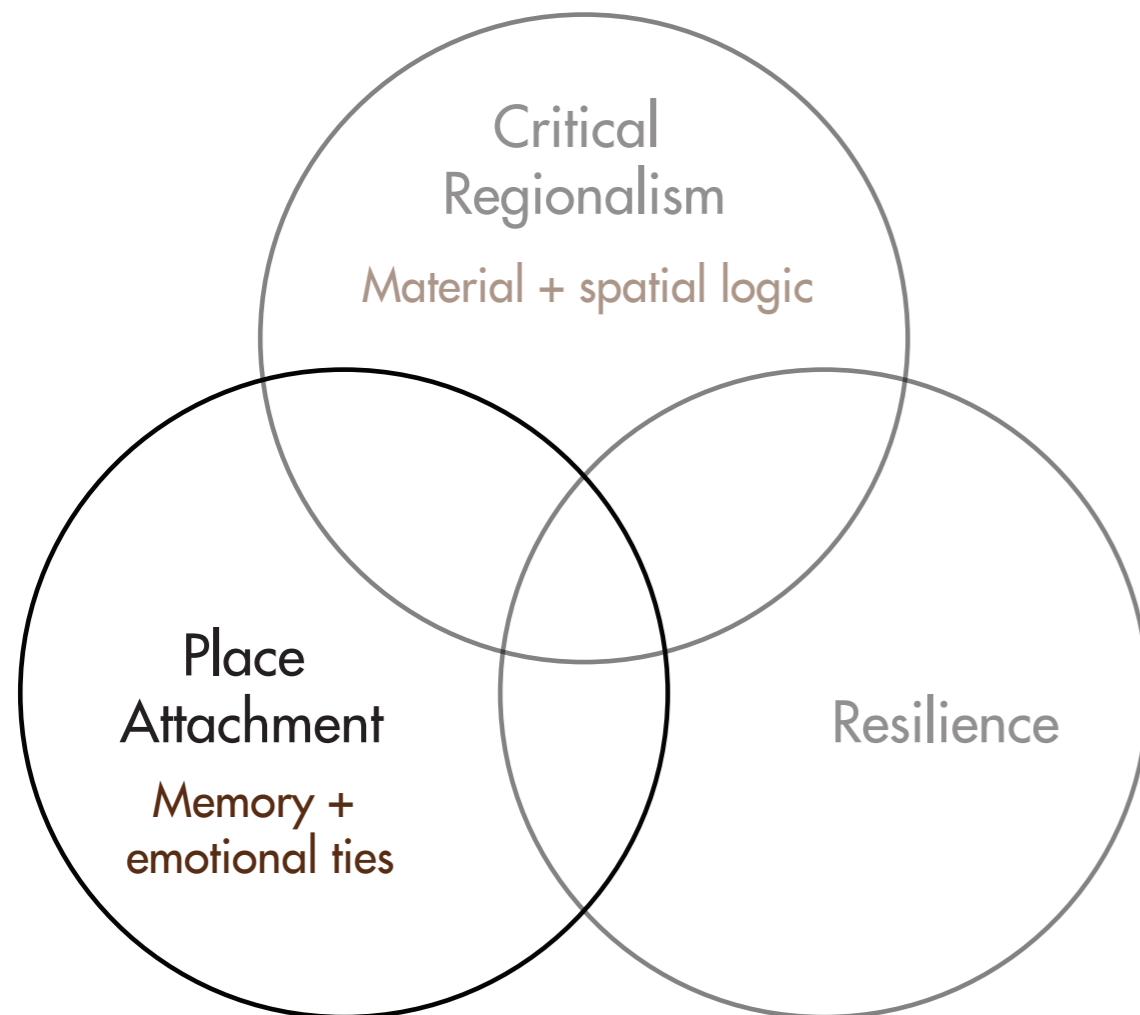


How can vernacular elements contribute to a more sustainable, culturally and contextually sensitive reconstruction of Sana'a, Yemen?

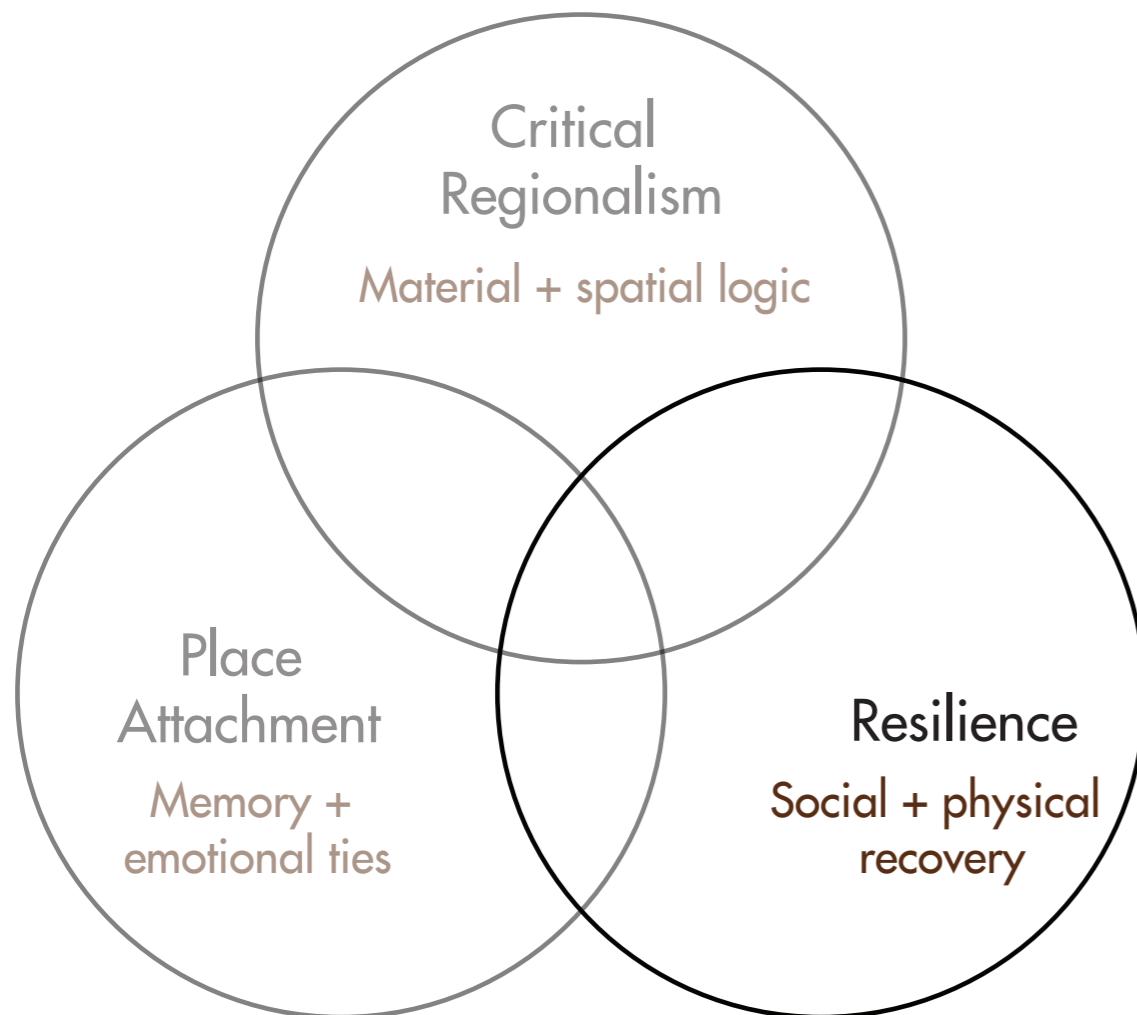




Critical regionalism is an architectural approach in which the importance of cultural, historical, and environmental context is emphasised throughout the design process.



Place Attachment Theory is the emotional and psychological bonds that people form with their physical environments.



Resilience can be described as the ability of a city or community to recover from trauma and rebuild itself.





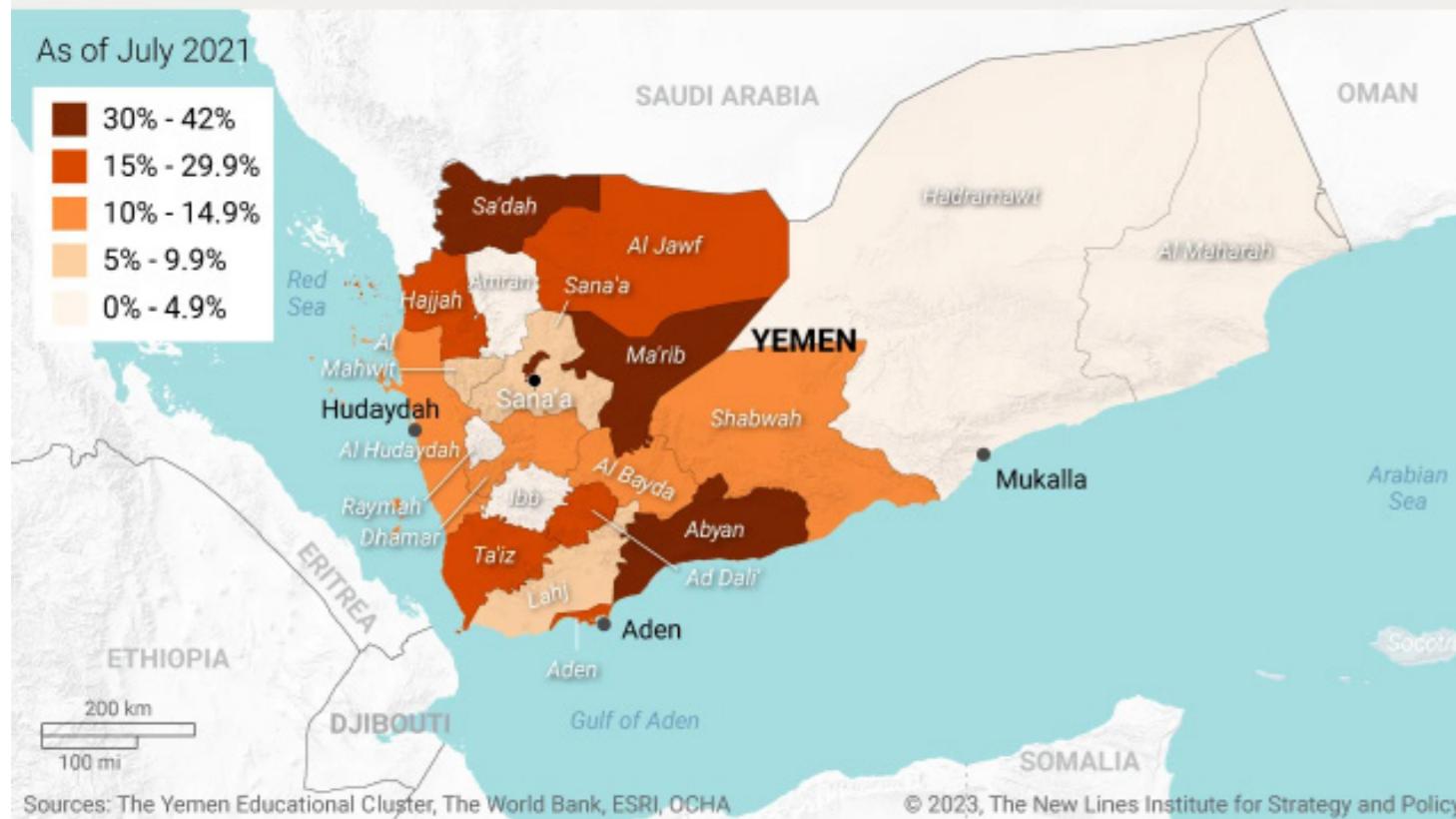
Beirut, Lebanon



Aleppo, Syria

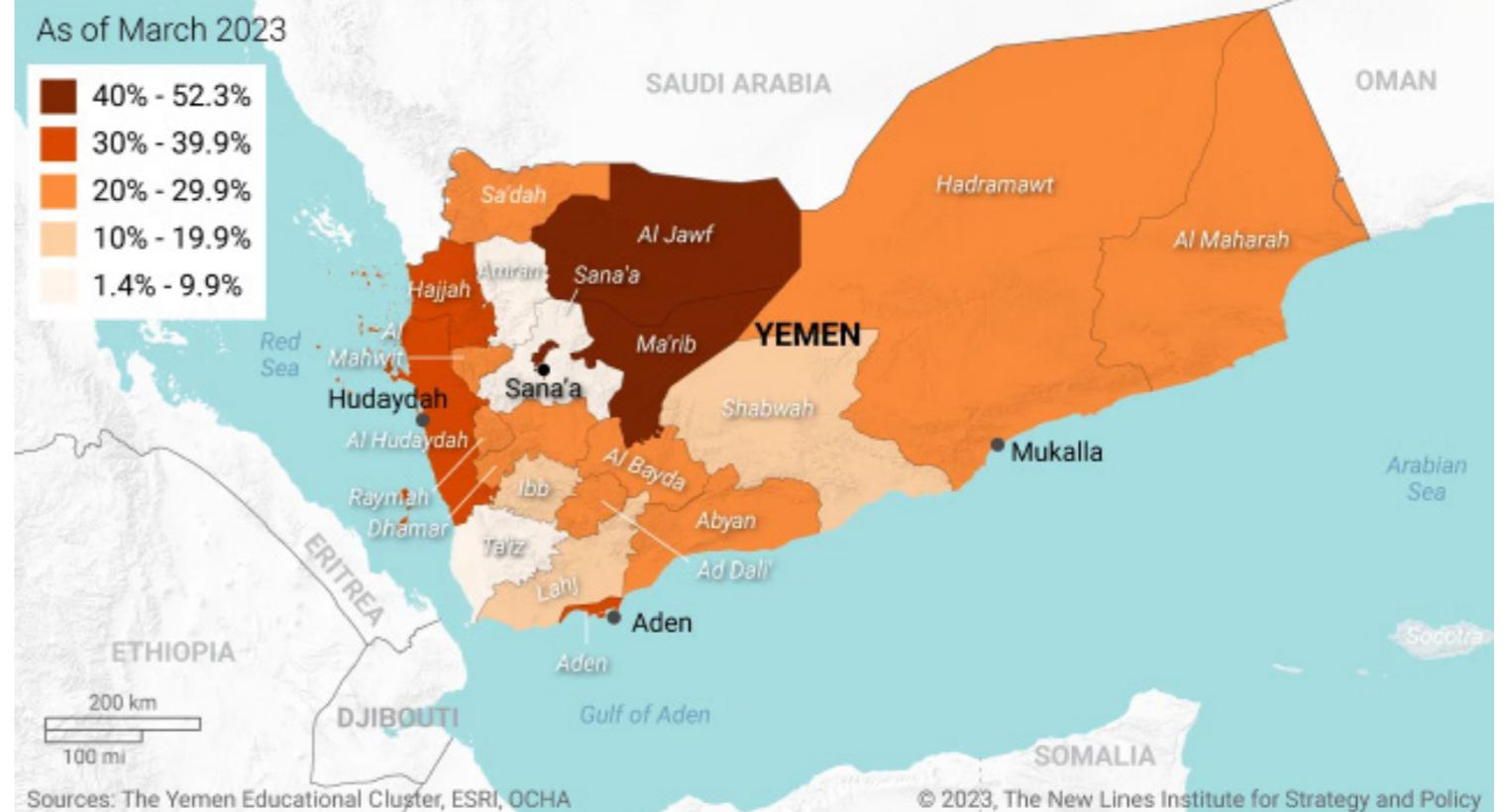
Yemen's Schools Affected by War

This analysis uses damage estimates from the Yemen Educational Cluster and school locations from the World Bank to show which governorates have sustained the greatest damage to educational facilities from the country's conflict.



Eligible Girls and Women Not Attending School

Data from the Yemen Educational Cluster shows that the percentage of young women and girls not attending school is high across the country, and exorbitantly so in certain governorates.



Between the Known and the Possible

**Al-Qaws Girls Primary School - A Hybrid Vernacular Learning
Environment in Sana'a**

1**Culture continuity**

Respecting and reinterpreting Yemeni Vernacular traditions to preserve identity after conflict.

- **Earth based buildings**
- **Courtyards**
- **Local craftsmanship**

2**Community & belonging**

School as a social anchor to rebuild Collective identity.

- **Shared courtyards**
- **Multi-purpose community halls**
- **Visual connections**
- **Gathering spaces**

3**'Human scale' environment**

Promoting comfort, safety, and familiarity for students in and outside the classroom.

- **Transitional spaces**
- **Private nooks**
- **Low rise clusters**

4**Adaptability & resilience**

Designing spaces that can evolve, adapt, transform. Responding to social and environmental needs.

- **Shaded outdoor learning spaces**
- **Space for growth or adaptation**
- **'Consistent' layout**

5**Climate responsiveness**

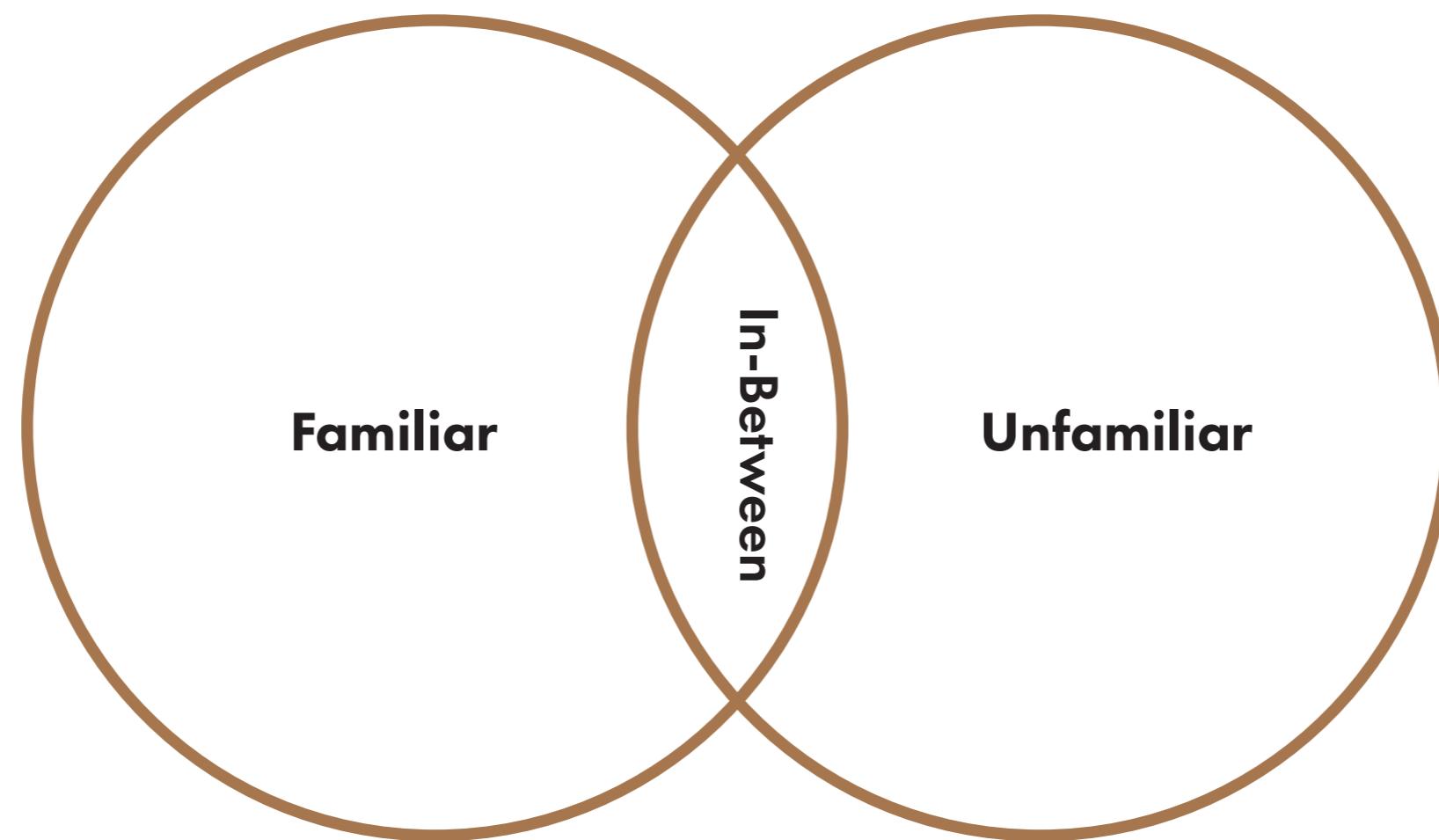
Using passive design to ensure comfort and reduce energy reliance.

- **Thick earthen walls**
- **Courtyards**
- **Shaded walkways**
- **Cross-ventilation**

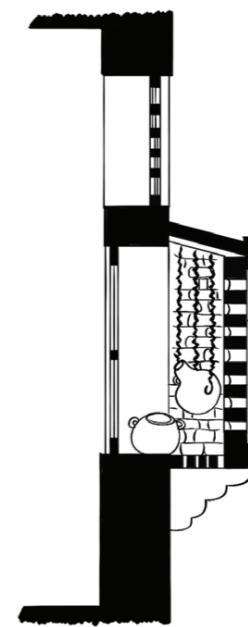
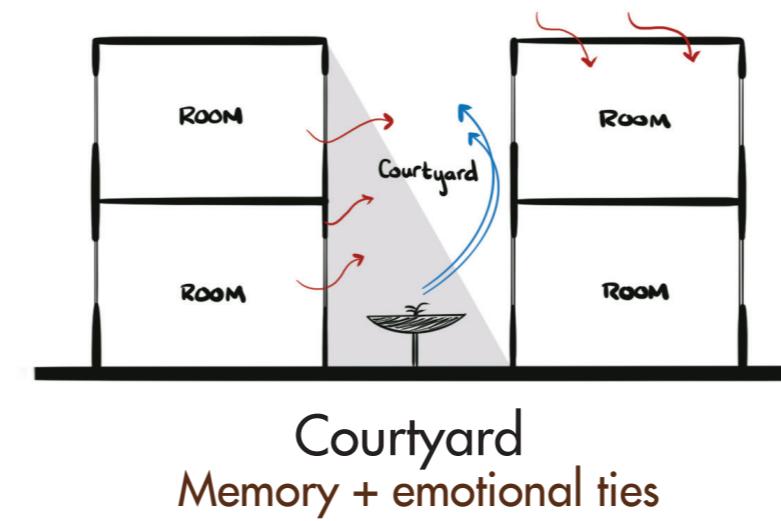
6**Inclusivity & gender sensitivity**

Reflecting Yemeni social customs while Promoting equality and adaptability.

- **Girls-only school**
- **Visual privacy screens**
- **Community focused spaces**
- **Room for expansion**

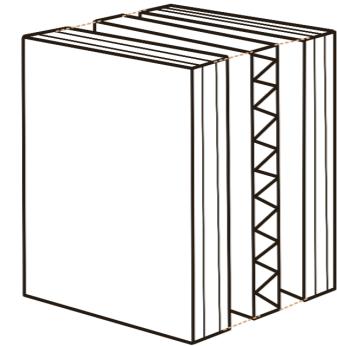


Familiar

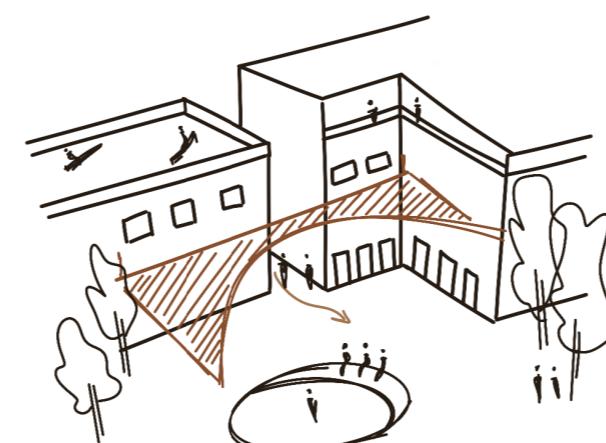


Thick walls
Material logic

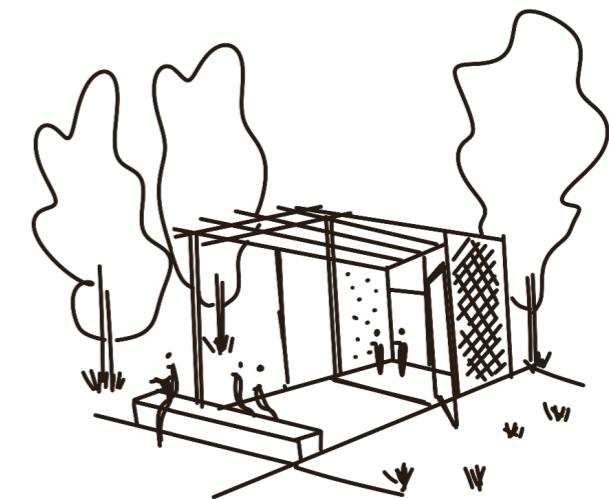
Unfamiliar



Modular timber systems
Material logic

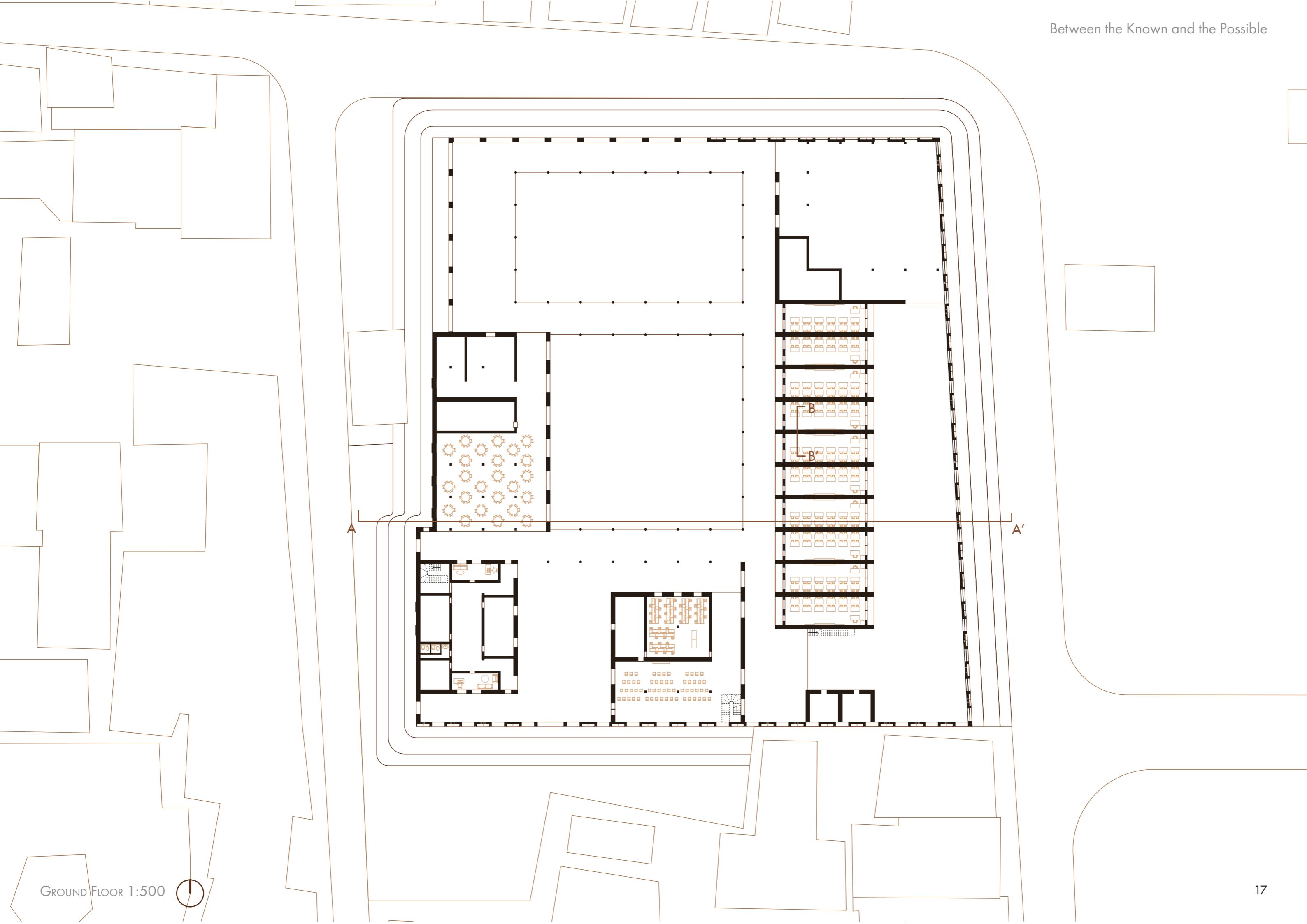


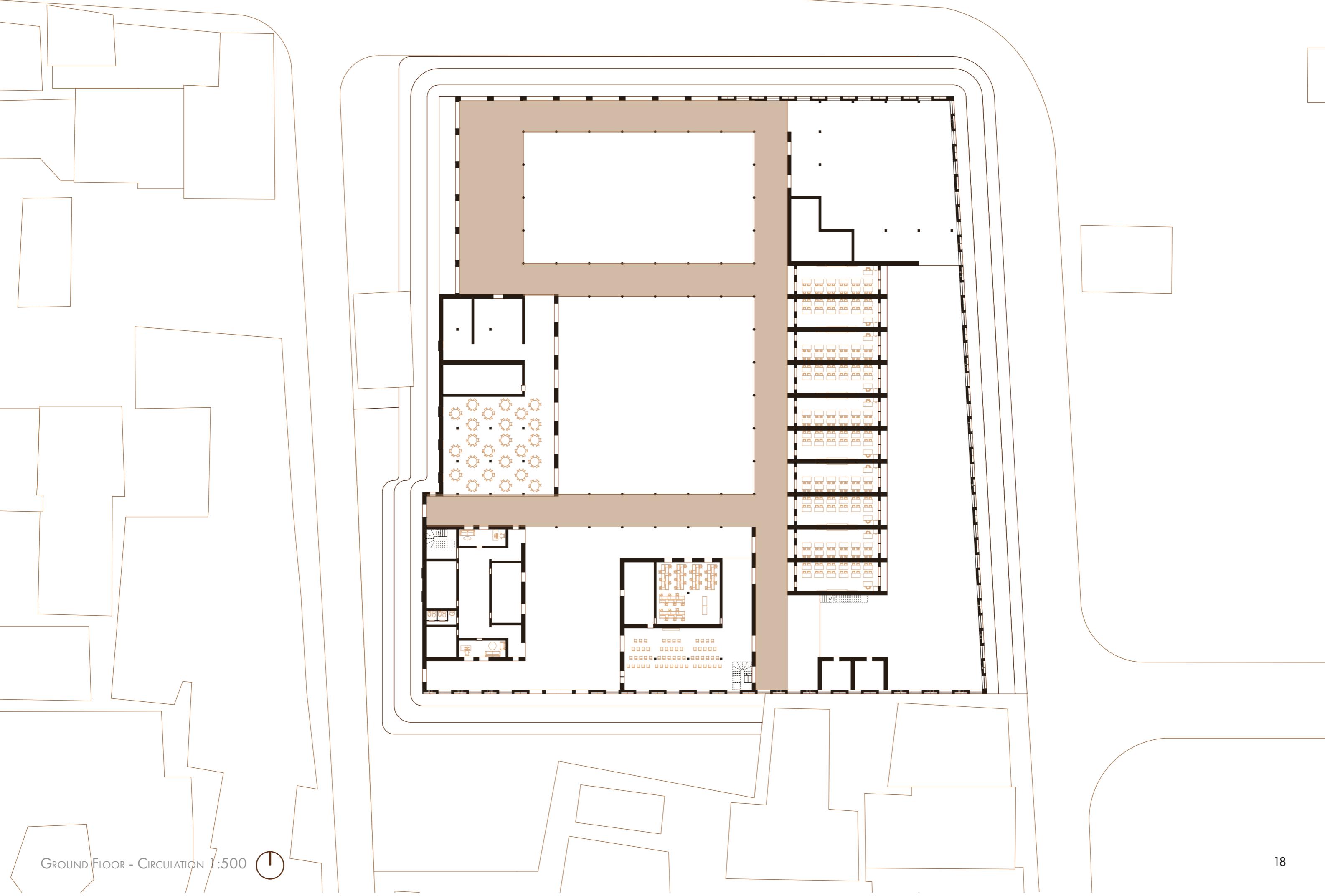
Community access
Emotional ties

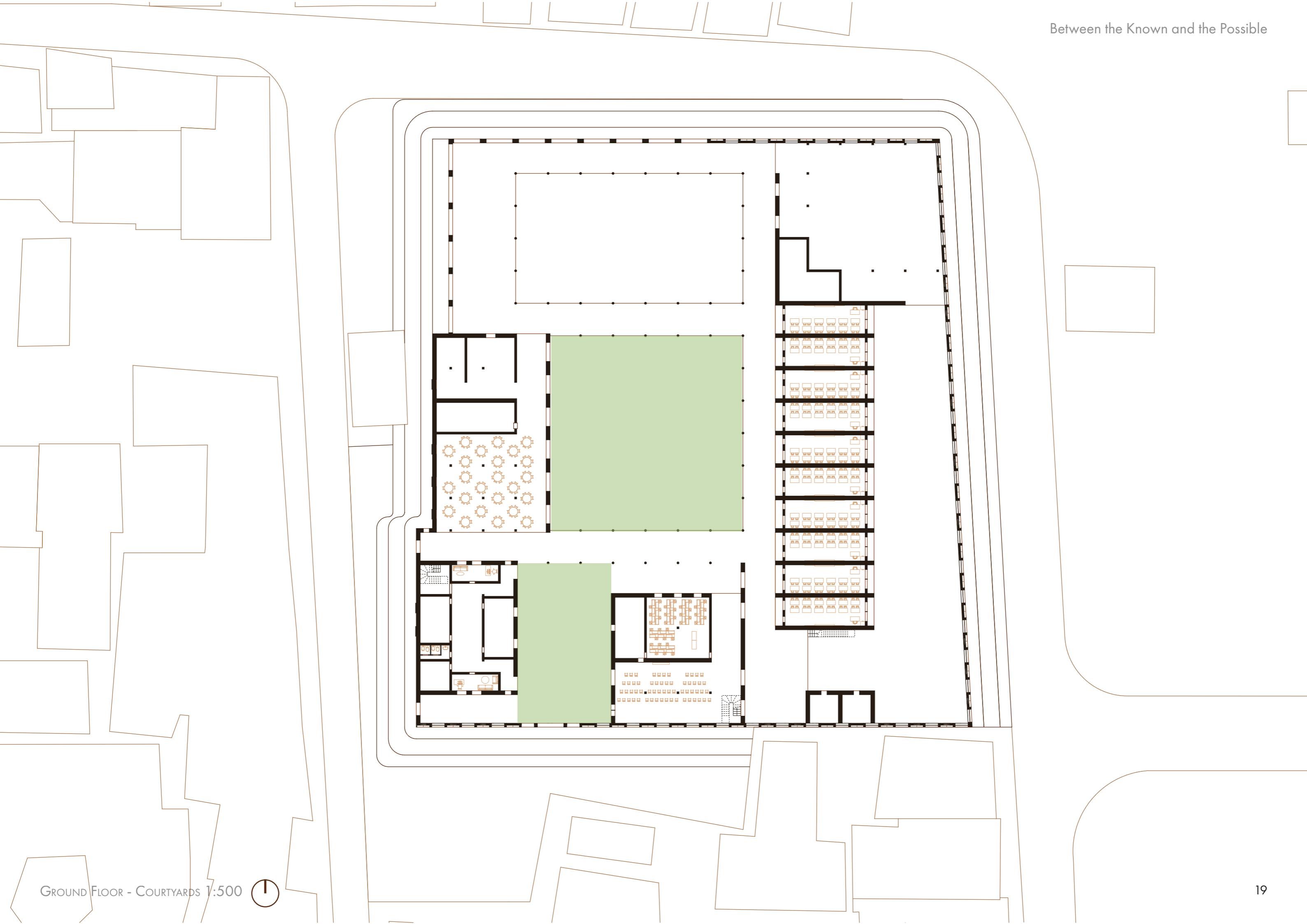


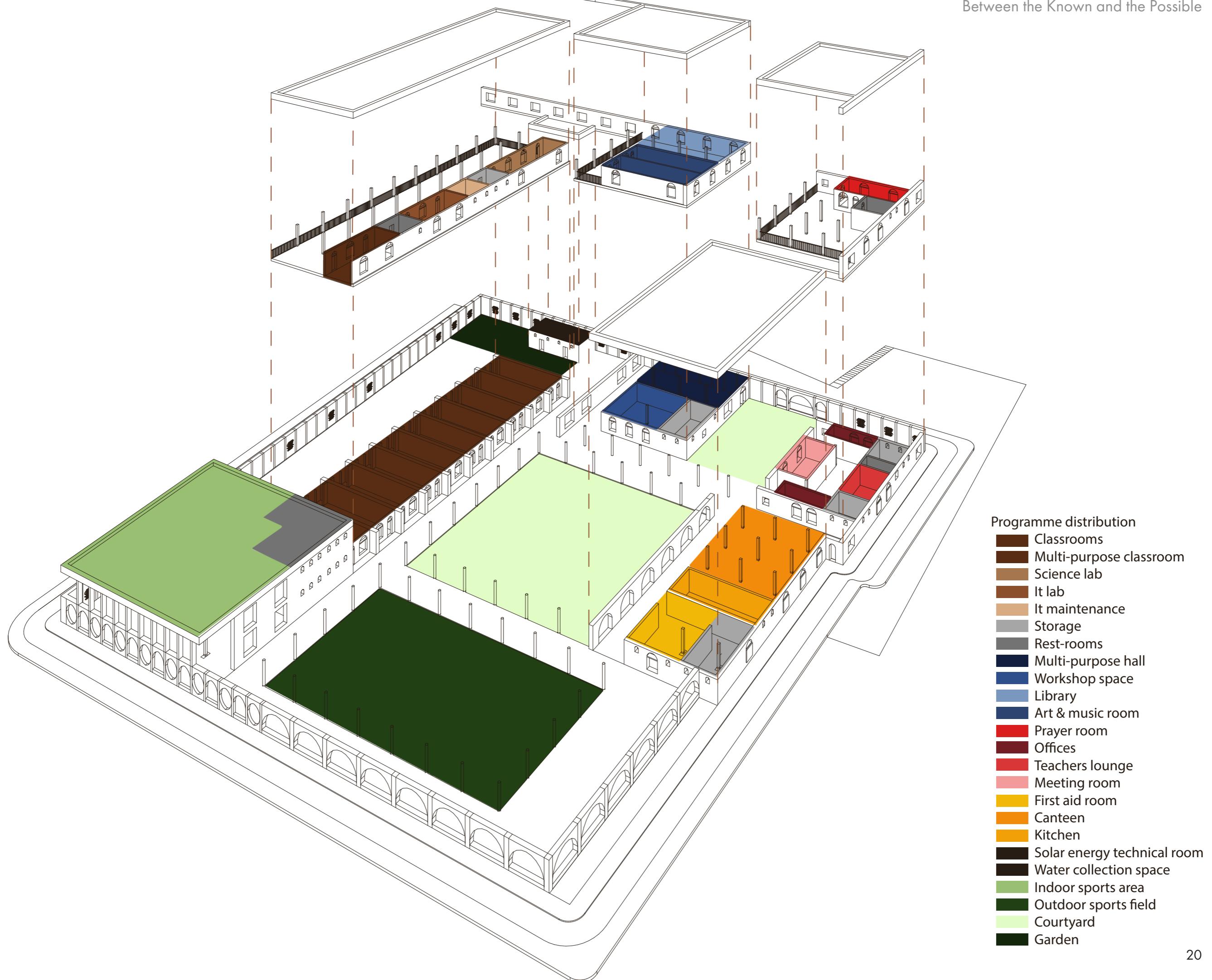
Flexible learning space
Spatial logic

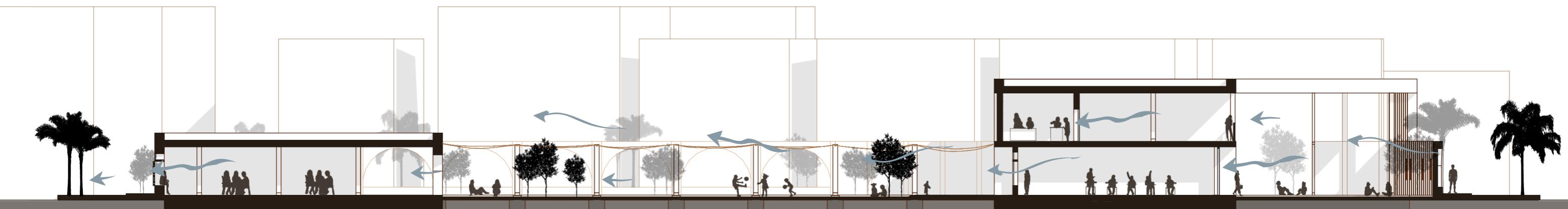












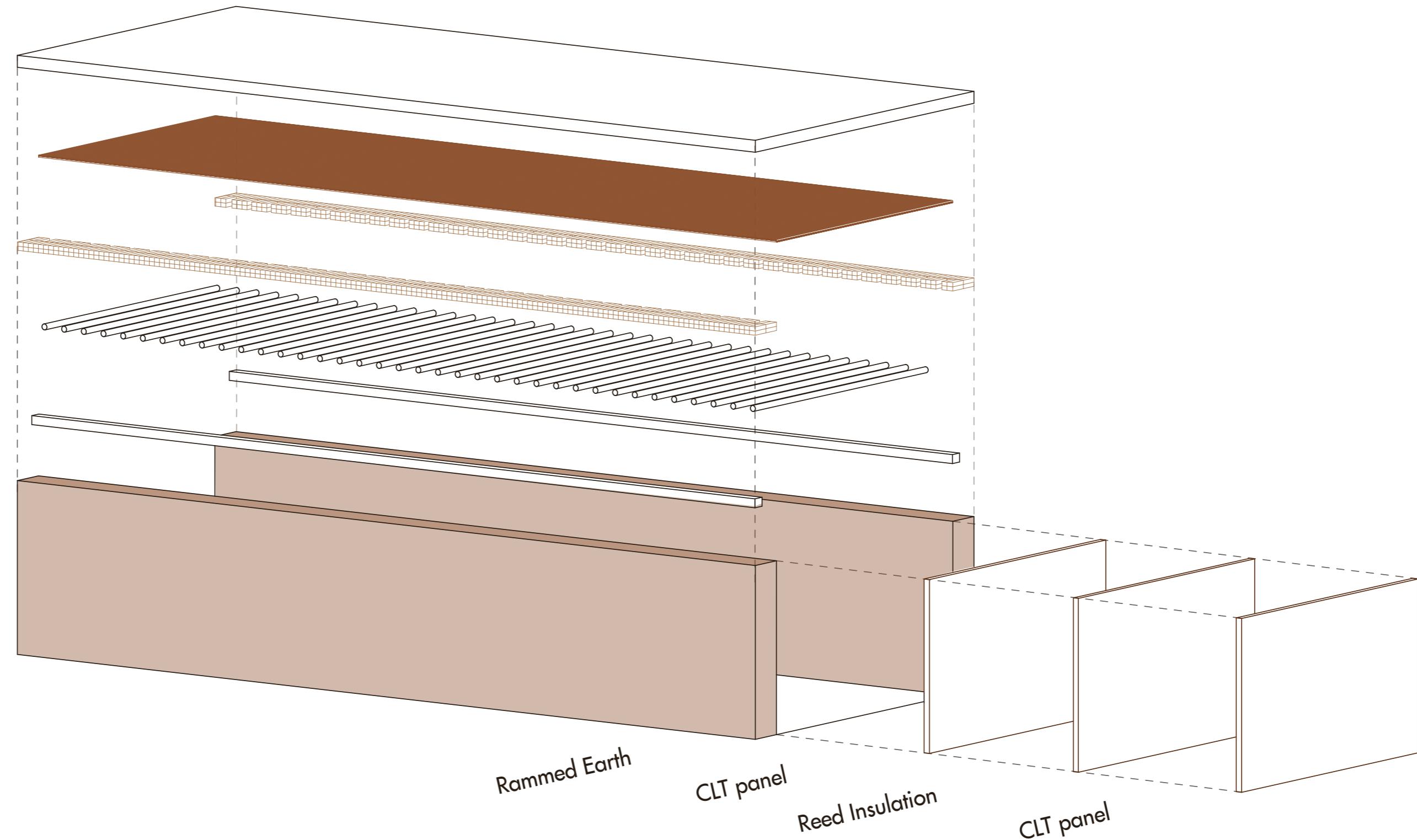
Compressed earth floor

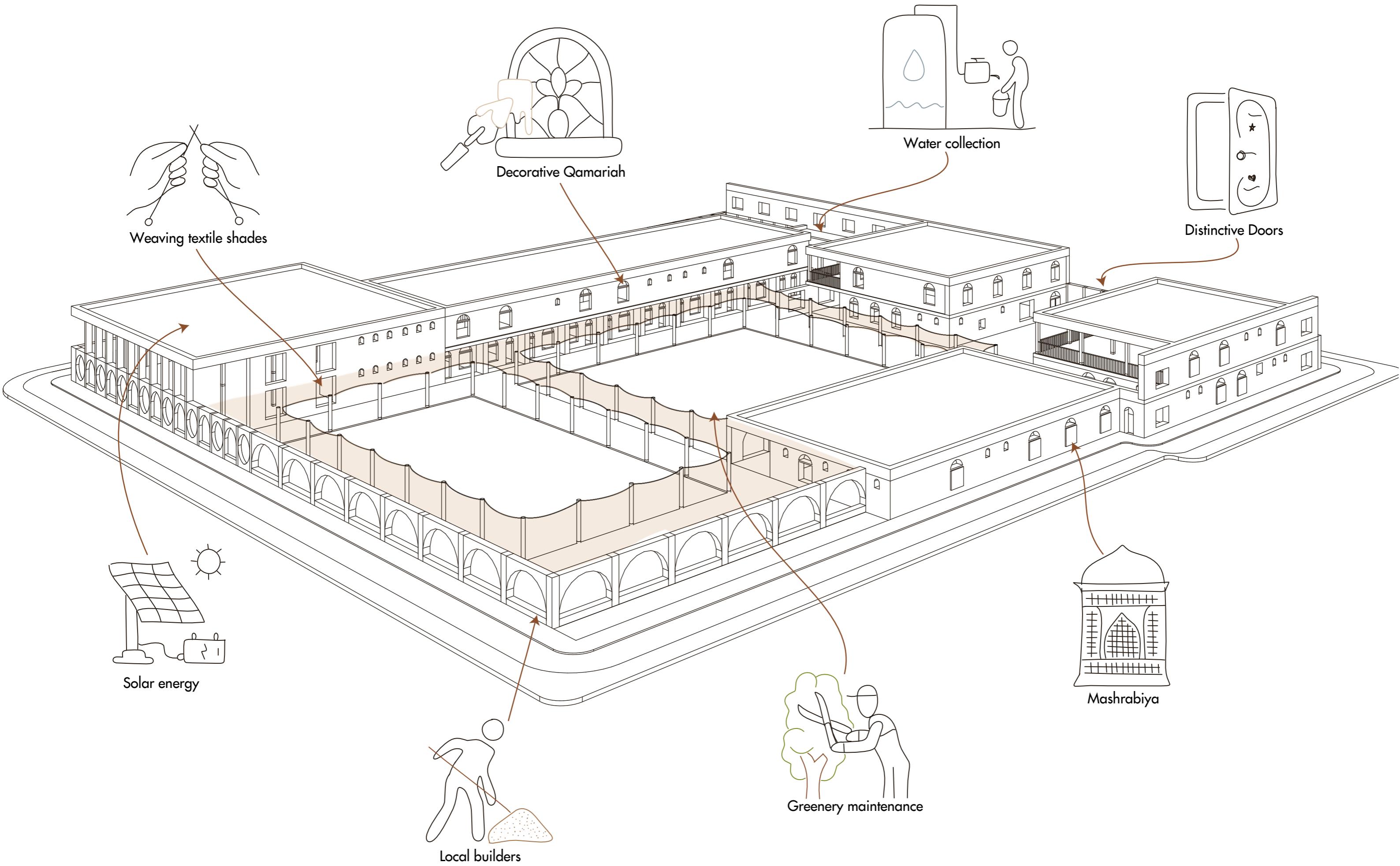
Reed Branches

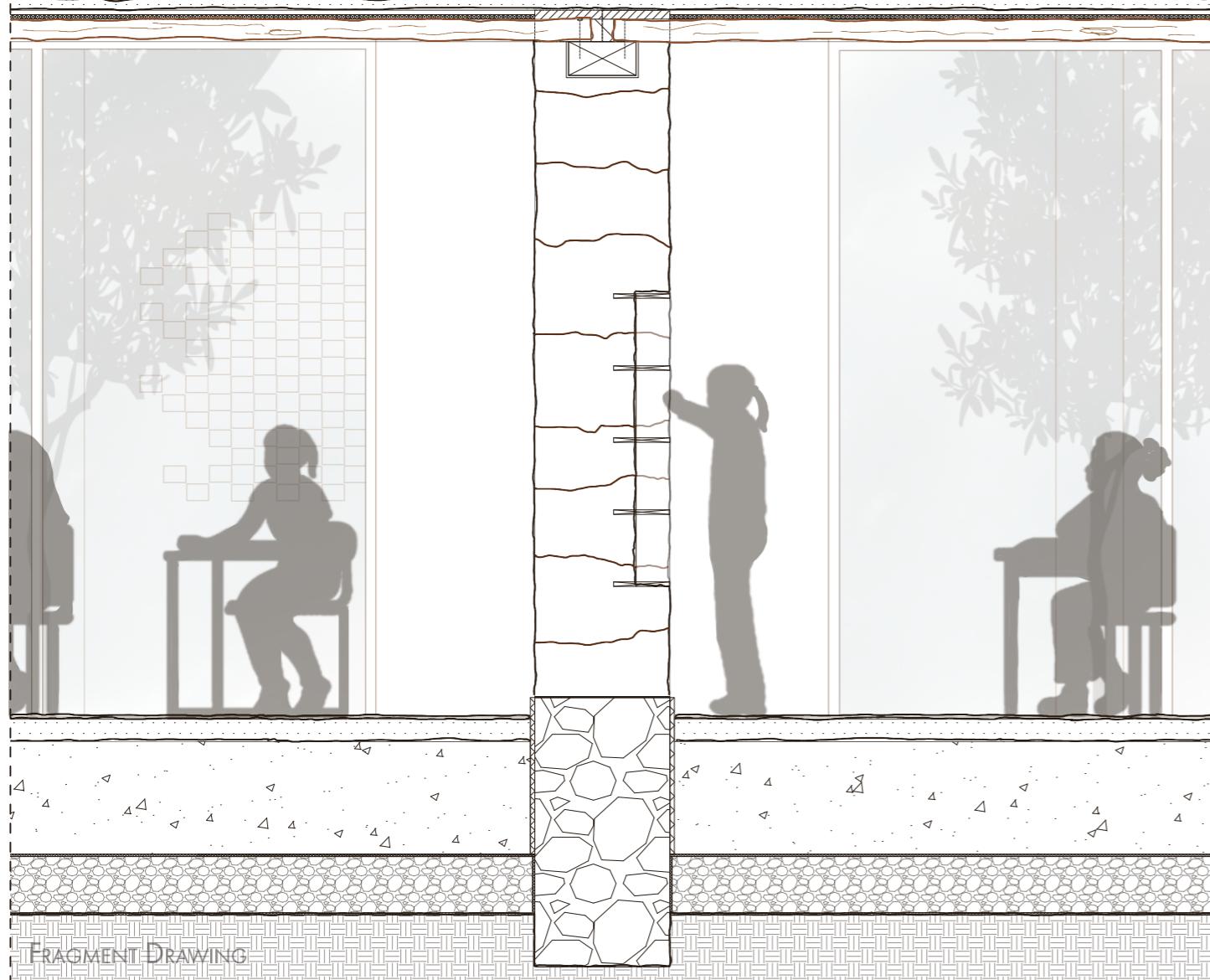
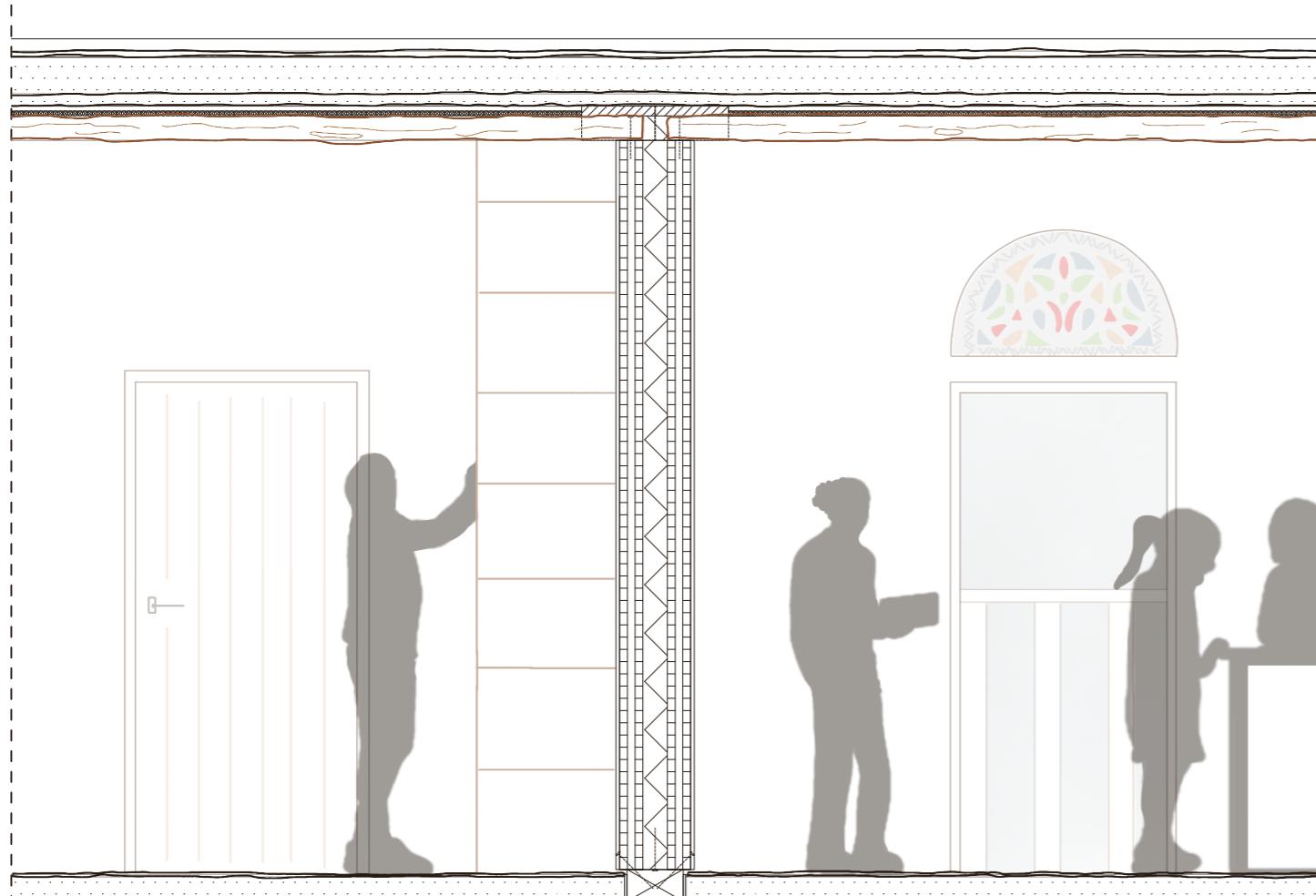
Insulated adobe brick

Wood purlin

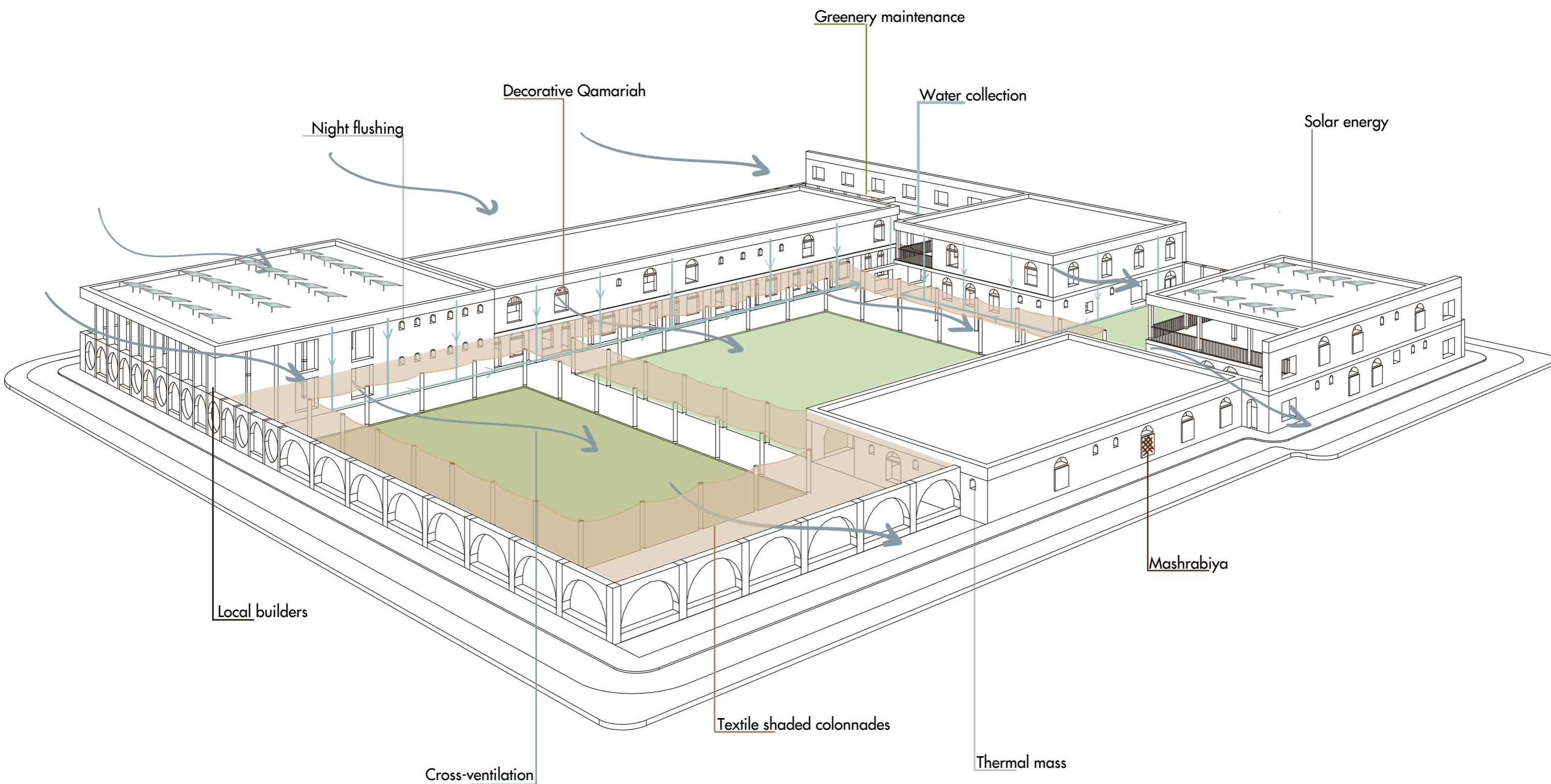
Timber ring beam











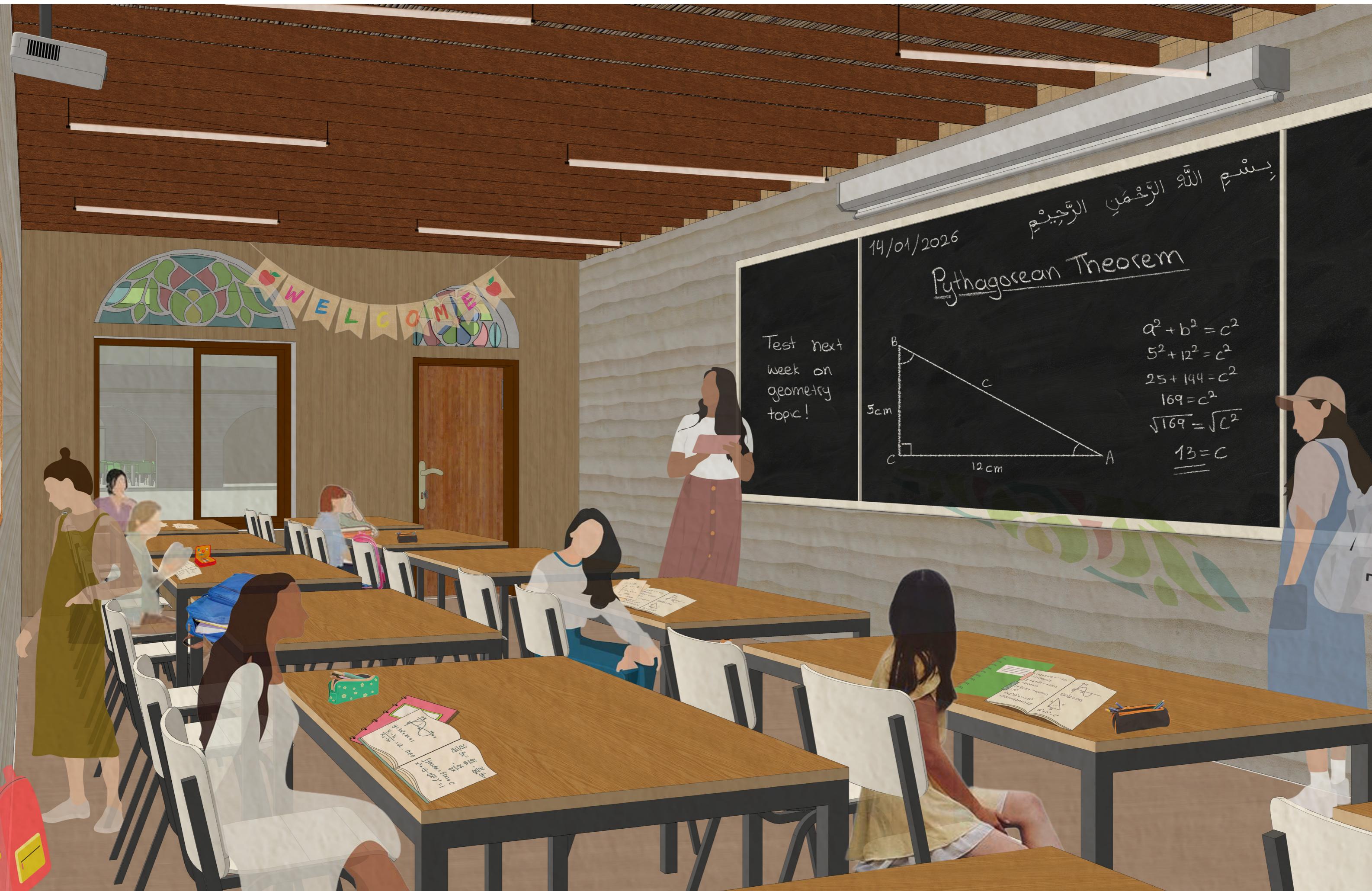
Current Primary School Schedule

	8:00-8:30 Assembly and Drills	8:30-8:50 National Anthem	9:00-9:45	9:45-11:00	11:00-12:00	Break	12:10-13:10	Break	13:15-14:05	14:05-14:50	14:50-15:30
SUN			Maths	English	Science		Geography		History	Social studies	Maths
MON			English	Maths	IT		Quran		Islamic studies	History	English
TUE			Maths	English	Social studies		Science		PE	Arabic	Maths
WED			Quran	Islamic studies	Arabic		Geography		History	English	Homework
			9:00-9:40	9:40-10:20	10:20-11:00		11:10-11:45		11:55-12:40	12:40-13:00	Homeroom
THU			PE	Islamic studies	Geography		Social studies		Science	Homeroom	

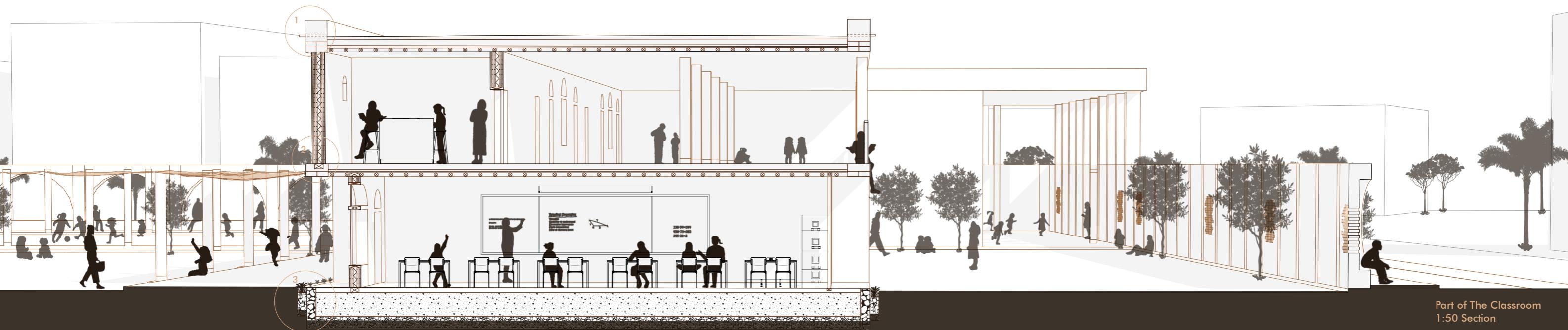
Proposed Primary School Schedule

	8:30-8:50 Assembly and Drills	8:50 National Anthem	9:00-9:45	9:45-11:00	11:00-12:00	Break	12:10-13:10	Break	13:15-14:05	14:05-14:50	14:50-15:30
SUN			Maths	English	Science		Geography		History	Social studies	IT
MON			English	Maths	PE		Quran		Islamic studies	History	Geography
TUE			Maths	English	Social studies		Science		IT	Arabic	Geography
WED			Quran	Maths	Arabic		Islamic studies		History	English	Music/Art
			9:00-9:40	9:40-10:20	10:20-11:00		11:10-11:45		11:55-12:40	12:40-13:00	Music/Art
THU			Maths	English	Music/Art		Social studies		Science	PE	

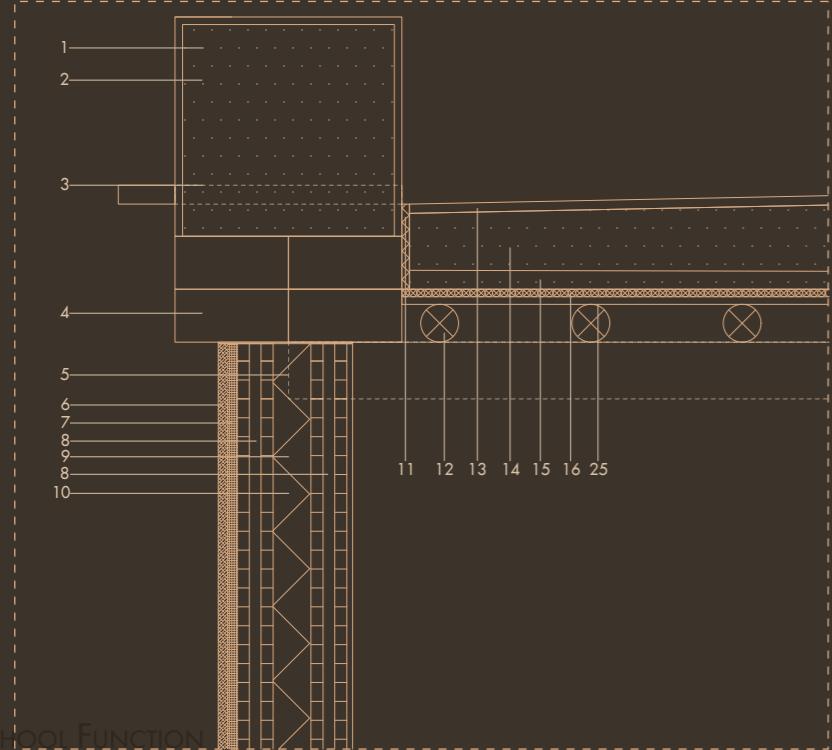




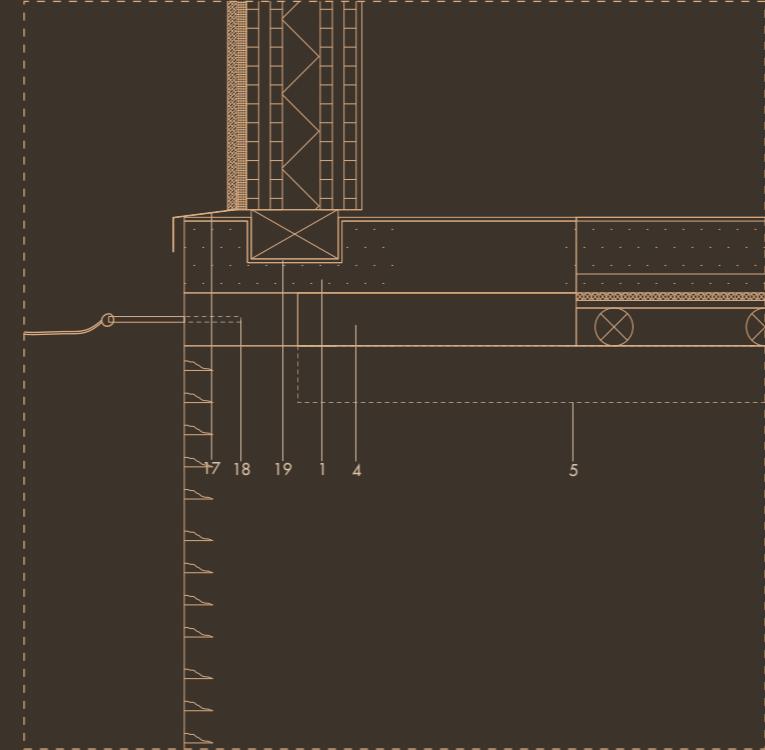




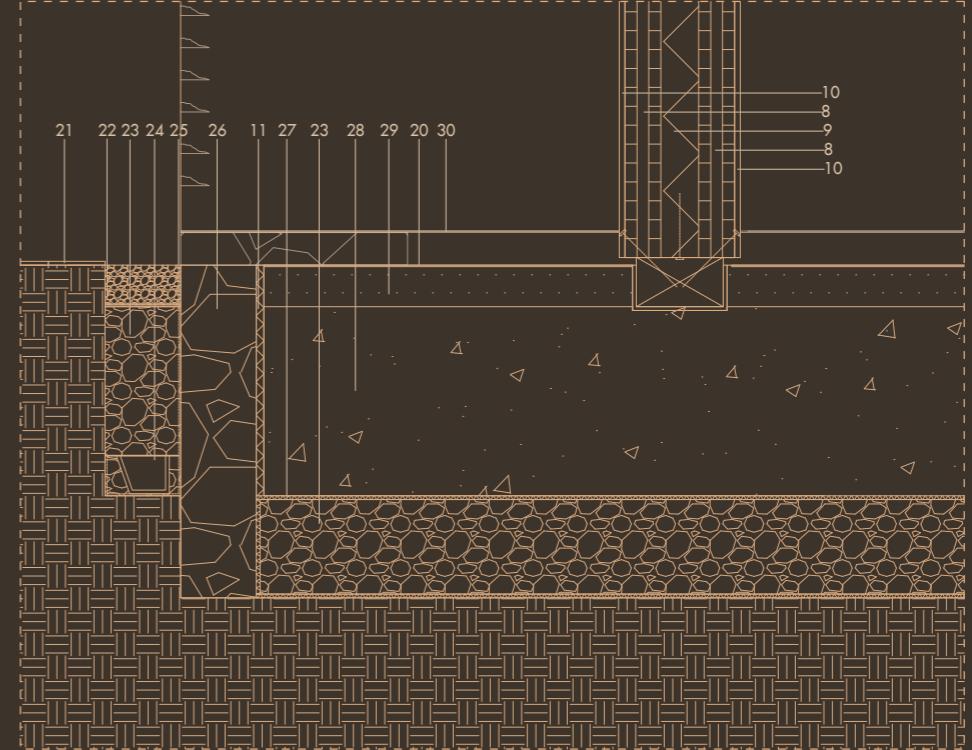
1. Roof Detail - 1:10



2. Wood Meets Earth Detail - 1:10



3. Foundation Detail - 1:10



Material catalogue:

1. Compressed earth
2. 20mm Lime render
3. Rain pipe
4. Insulated adobe brick
5. Timber ring beam
6. 25mm Lime render
7. 25mm Wood wool board
8. 95mm CLT wall
9. 100mm Reed insulation
- 10.15mm Plasterboard
- 11.20mm Cork board
- 12.100mm Wood purlin
- 13.25 Lime render
- 14.150mm Compressed earth floor
- 15.5mm Insulated earth floor
- 16.2x20mm Reed branches
17. Aluminium drip cap
18. Textile shade
19. Lime mortar
- 20.10mm Lime render
21. Ceramic tiles
22. Fine gravel
23. Coarse gravel
24. Drain
25. Tarp
26. Large stones in lime mortar
- 27.10mm Geotextiles
- 28.500mm Lime creed
- 29.100mm compressed earth floor
30. Bitumen layer

