

THRESHOLDS TO THE SACRED

The assimilation of indigenous traditional medicine rituals into a dormant urban public space to promote healing and transfer of healing knowledge



Site Location: 340 Helen Joseph Street, Pretoria Central Programme: Traditional Medicine Healing Centre and Market © University of Pretoria

ABSTRACT

The COVID-19 pandemic highlighted the necessity for alternative medical practices, to diversify medical provision rather than relying primarily on Western medicine. Surprisingly, according to the World Health Organization, traditional medicine is used by 80% of Africans (Booth, 2023). Its popularity in developing countries is due to its price and accessibility, as many people cannot afford private health care. However, there is a lack of documentation and spatial guidelines regarding traditional medicine and healing practices in many underdeveloped nations, including South Africa. This is partly due to the fact that present research and development work is concentrated on novel medication research, with minimal effort directed toward enhancing traditional medicine's current harvesting, production, processing, storage, and distribution (Kepe, 2007)

Even though there is a lack of research for traditional medicine, its trade in South Africa is projected to be worth R2.9 billion per year, accounting for 5.6% of the National Health budget (Mander etal, 2007). The commerce is dynamic and prevalent, with 27 million consumers. It plays an important role to many South Africans, however, there is still a lack regarding its integration into the urban environment where it can be accessible to urban dwellers.

The aim of this project is to introduce traditional medicine programmes in order to create a place within a non-place environment by adding a series of spatial layers and thresholds to the existing lost and forgotten urban space. The new building and spaces should address the current movement and flows of people by creating a legible link between place and space with the end goal of activating the public space that encourages public participation. To ultimately answer: What kind of architecture is required to support traditional medicine cultural practices within the urban environment?

Keywords: Traditional medicine, traditional healing practices and rituals, urban dormant spaces, public space regeneration, socio-economic enrichment and education



TABLE OF CONTENTS

1.	Introduction				
	1.1 Project Focus and Description	1			
	1.2 Architectural Question	2			
	1.3 Architectural Objectives	2			
	1.4 The context and micro site analysis	3			
	1.5 Theoretical background and Framing the project	7			
	1.6 Urban Vision	8			
2.	Key Theory and Design Informants	9			
	2.1 Theory and Context	9			
	2.2 Precedent studies	10			
	2.3 Programme and strategic pillars of Tshwane	11			
	2.4 Personal encounter with traditional healers as an informant	12			
3.	The Concept	13			
4.	Documentation of iterative design	14			
	4.1 Design Iteration 1	15			
	4.2 Design iteration 2	16			
	4.3 Design iteration 2- Technical Integration	17			
	4.4 Indigenous forms and spatial considerations	18			
	4.5 Design iterations 3, 4 and 5	19			
	4.6 Design iteration 6- Technical detail integration	20			
	4.7 Design iteration 7-Technical integration and design performance outcome	21			
	4.8 Design iteration 7- 3D views	22			
5.	Technical integration- design performance- daylighting systems	23			
6.	The Final Design (3D's, Site Plan, Ground and First Floor Plan, Sections, Elevations, F	Perspectives) 24			
7.	Critical reflection 1- The impact of the Mini-project	30			
8.	Critical reflection 2- The major project outcome				
9.	Conclusion				
10.	References	33			

LIST OF FIGURES

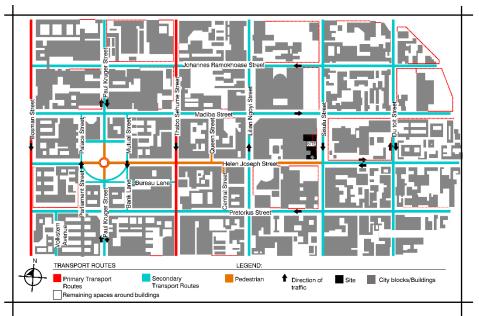
Figure 1: The urban fabric of Pretoria Central (Focus Area)	1			
Figure 2: Mapping of existing medicine sources in Pretoria Central				
Figure 3: Existing Sammy Marks Square, South East Entrance				
Figure 4: The existing site condition view from the FF Ribeiro Clinic	3			
Figure 5: Site condition east view from Sisulu Street				
Figure 6: The project location				
Figure 7: The site (highlighted in orange) and proposed programme as a consolidation of the existing programmes				
	5			
Figure 8: Micro Site Analysis	6			
Figure 9: South Africa's largest Traditional Medicine Markets	7			
Figure 10: A Diviner (Sangoma)	7			
Figure 11: Key theories as an informant	9			
Figure 12: The context as an informant	9			
Figure 13: Precedent Study Lessons	10			
Figure 14: The programme as a design informant	11			
Figure 15: Strategic pillars of Tshwane as a programme informant	11			
Figure 16: Experience from a home-based female traditional healer in Middelburg- Method of healing : Herbs a	nd Animals			
	12			
Figure 17: Personal Encounter with traditional Healers as design and ritual informant	12			
Figure 18: The Concept	13			
Figure 19: Spatial understanding of the site	14			
Figure 20: Understanding spatial elements of the site in relation to the proposed programme	14			
Figure 21: Understanding spatial elements of the site in relation to the proposed programme	15			
Figure 22: Understanding spatial elements of the site in relation to the proposed programme	16			
Figure 23: Iteration 2- Technical Investigation (Building Systems)	17			
Figure 24: Indigenous forms and spatial considerations	18			
Figure 25: Iterations 3, 4 and 5	19			
Figure 26: Iteration 6- Baseline for design performance assessment	20			
Figure 27: Design Iteration 7-Ground floor plan and 3D view	21			
Figure 28: Design iteration 7: Perspective views and materiality	22			
Figure 29: Technical Integration 2- Daylighting	23			
Figure 30: Final Design 3D views	24			
Figure 31: Site- Roof Plan	25			
Figure 32: Floor Plans	26			
Figure 33: Sections	27			
Figure 34: Section BB Detail 1	28			
Figure 34: Elevations and Perspectives	29			
Figure 36: The mini-project exhibition	30			
Figure 37: Final Model	31			

INTRODUCTION

1.1 PROJECT FOCUS AND DESCRIPTION

Rapid infrastructure projects, such as roadways and large-scale city blocks within Pretoria Central, serve the sole purpose of mobility and flow of vehicles, with little attention or integration to location and the people that occupy it. Due to a lack of urban integration throughout its execution, the urban fabric became disjointed, resulting in dead edges, restricting mobility in space, and isolating public areas (Jordaan, 1987). The remaining spaces around the infrastructural layer are lost and forgotten, contributing little to the urban environment (Trancik, 1986).

The architectural issue investigates the potential relationships between building, people and infrastructure, and the role architecture and the associated programmes have as regenerative devices to connect and activate the current barriers of lost and disconnected spaces caused by urbanisation. The intention of the design is to address the issues of thresholds and lost degrading space within the public realm.





1

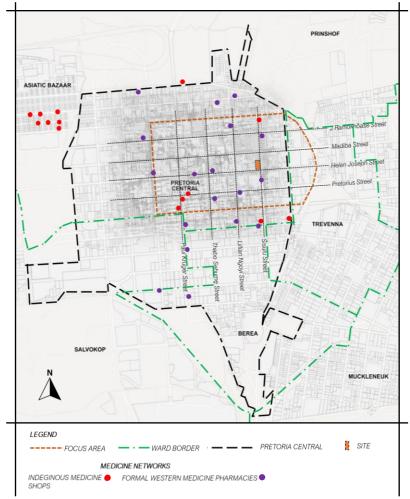
Through contextual studies, there was a clear lack of traditional medicine in Pretoria Central (see Figure 1), with western pharmacies and health care systems being more predominant. There is a need to integrate it in an environment where the urban dweller can have access to it as 80% of Africans rely on this resource (Booth, 2023). Introducing the programme in the chosen site can potentially regenerate it so that it can serve a meaningful purpose to the urban environment.

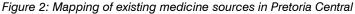
1.2 ARCHITECTURAL QUESTION

How can architecture support traditional medicine and cultural practices in the urban environment?

1.3 ARCHITECTURAL OBJECTIVES

The aim of this project is create place within a non-place environment by adding a series of spatial layers and thresholds to the existing lost and forgotten space. The new building and spaces should address the current movement and flows of people by creating a legible link between place and space with the end goal of activating the public space that encourages public participation.





1.4 THE CONTEXT and MICRO SITE ANALYSIS

The site is an existing dilapidated public space located in 340 Helen Joseph Street, Pretoria Central. It was initially intended to become a hotel (van der Walt, 1993), however the project never came to fruition, resulting in a space left abandoned and in disrepair (see Figure 3,4 and 5). This existing quality influenced the selection of the site where potential for regeneration could be possible. The site is well located within existing programmes of Sammy Marks Square in Pretoria Central which influenced the proposal for a design intervention integrating traditional medicine.



Figure 3: Existing Sammy Marks Square, South East Entrance



Figure 4: The existing site condition view from the FF Ribeiro Clinic



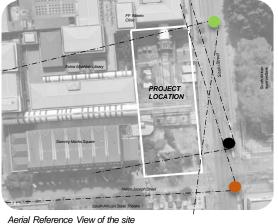
Figure 5: Site condition east view from Sisulu Street











enal reference view of the site



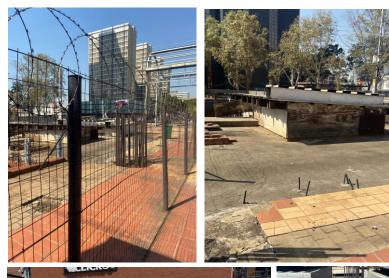
Corner of Sisulu and Helen Joseph Street View (South East of the site)



Corner of Sisulu and Helen Joseph Street View (South East the of site)



Sisulu Street View (North East of the site)









Images of the existing conditions of the site:

- Parts inaccessible and fencedoff

-Dilapidated structural elements i.e. Columns, floor area -No connection to the street edge- street edge inaccessible

Figure 6: The project location

Three existing major programmes that the proposed programme will integrate with surround the site, namely:

1. **Health Care** through the FF Ribeiro Clinic- It is the CBD's centralised primary health care provider, its existing entrance thresholds need legibility as way finding is currently not easy.

2. **Education** through the Eskia Mpahlele Library- This serves the community in accessing information or knowledge as there are not many such facilities within the CBD region, however, way finding is also not easy due to entrances being away from the street edge.

3. **Retail** through the Sammy Marks buildings- the pedestrian circulation into the Sammy Marks building is highlighted by arcades, one of which protrudes into the proposed site and simply stops in the middle of nowhere (see Figure 3). These existing pedestrian circulation networks can connect with the project. There is also an existing informal market strip along Helen Joseph, the traders mostly sell accessories and clothing items whereas moving past Lilian Ngoyi Street one can find vendors selling fruits and vegetables. The new programme can continue this language by introducing traders into the site.

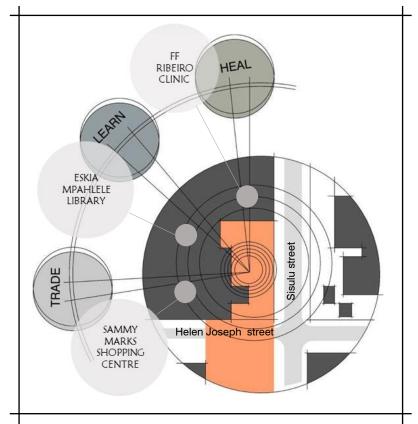
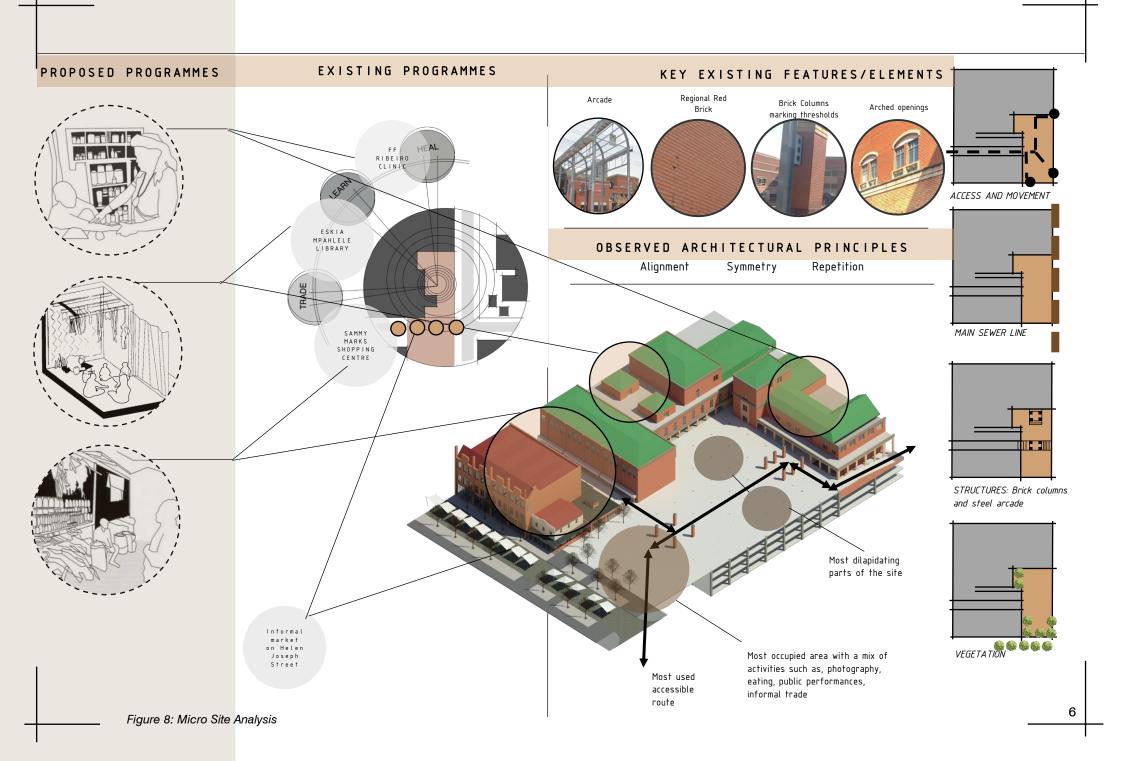


Figure 7: The site (highlighted in orange) and proposed programme as a consolidation of the existing programmes

An intervention connecting the above mentioned programmes came through finding that missing link within health care, knowledge systems and retail centrality in the urban context of Pretoria. A building to assimilate indigenous traditional medicine cultural practices serves as a link or consolidation of the above mentioned programmes.



1.5 THEORETICAL BACKGROUND AND FRAMING THE PROJECT

A GLOBAL ISSUE

Healthcare Systems

The COVID-19 pandemic highlighted the necessity for alternative medical practices, to diversify medical provision rather than relying primarily on Biomedicine. Biomedicine is currently the standardised source of treatments globally with little effort geared toward Traditional medicine (Mander etal., 2007).

China and Japan are on the forefront when it comes to the integration of traditional medicine or herbal remedies into the primary health care system. However, in the African context, traditional medicine is still under documented and remains unintegrated into the healthcare system (WHO, 2023).

A NATIONAL ISSUE

Conventional South African healthcare facilities struggle to cope with extremely high patient numbers. The failure to meet the basic standards of healthcare, with increasing morbidity and mortality rates, poses a threat to the South African economy. (Booth 2023).

On the other hand there is a dire and urgent need to develop new technologies for traditional medicinal plant harvesting, farming, processing, stabilisation, packaging, dispensing and treatment; as well as a need for assistance and support to be provided to current role players in the industry to address the challenges and opportunities that they face.

A great concern has been raised concerning their purity or possible contamination either during production, storage, or dispensing, which can be through adulteration by chemicals and biological contamination (Van Vuuren etal., 2007)

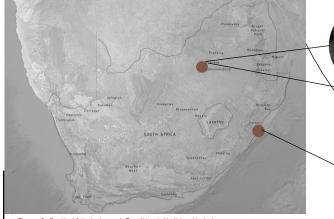


Figure 9: South Africa's largest Traditional Medicine Markets



WHAT IS TRADITIONAL MEDICINE?

Traditional medicine is an object or substance used in traditional health practice for the diagnosis, treatment or prevention of physical or mental illness; or well-being in human beings; and traditional health practice means the performance of a function, activity, process or service based on traditional philosophy, that includes the utilisation of Traditional Medicine Traditional healing is associated with herbs, remedies and advice from a traditional healer, with a strong spiritual component. For this reason, it is impossible to separate African traditional healing from African spirituality African spirituality encompasses belief and worship to God, and reverence and acknowledgement of ancestors (Mokgobi 2014).

WHAT DOES IT ENTAIL?

- Traditional medicine is physically, socially and culturally more available than biomedical treatment (Moshabela & Zuma, 2016).
- Also, the practice of Traditional Medicine is client centred and personalised, paying due regard to social and spiritual matters that are fundamental to African cultures.
- In addition to healing of the mind, body and spirit, Traditional Healers serve many roles in the community, including counselling, social mediation, cultural education and being custodians of African traditions and customs.

WHO IS INVOLVED IN TRADITIONAL MEDICINE?

There are two main types of traditional healers within the Nguni, Sotho-Tswana, and Tsonga societies of Southern Africa: and these healers are effectively South African shamans who are highly revered and respected in a society where illness is thought to be caused by spiritual imbalances or through neglect of the ancestors

who would also guide on how to specifically communicate depending on the purpose and the ritual that may be required (Fokunang etal., 2011). The sangoma may burn incense (like impepho) or sacrifice animals to please the ancestral spirits. Snuff is also used to communicate with the ancestors through prayer.

Communication with ancestors is facilitated by a Traditional Healer



It is estimated that approximately 74% of medicinal plant harvesters, street traders and traditional healers are women, with the remaining 26% of the trade role players being men . Additionally .80% are rural and 20% are urban.

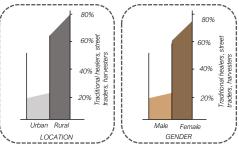
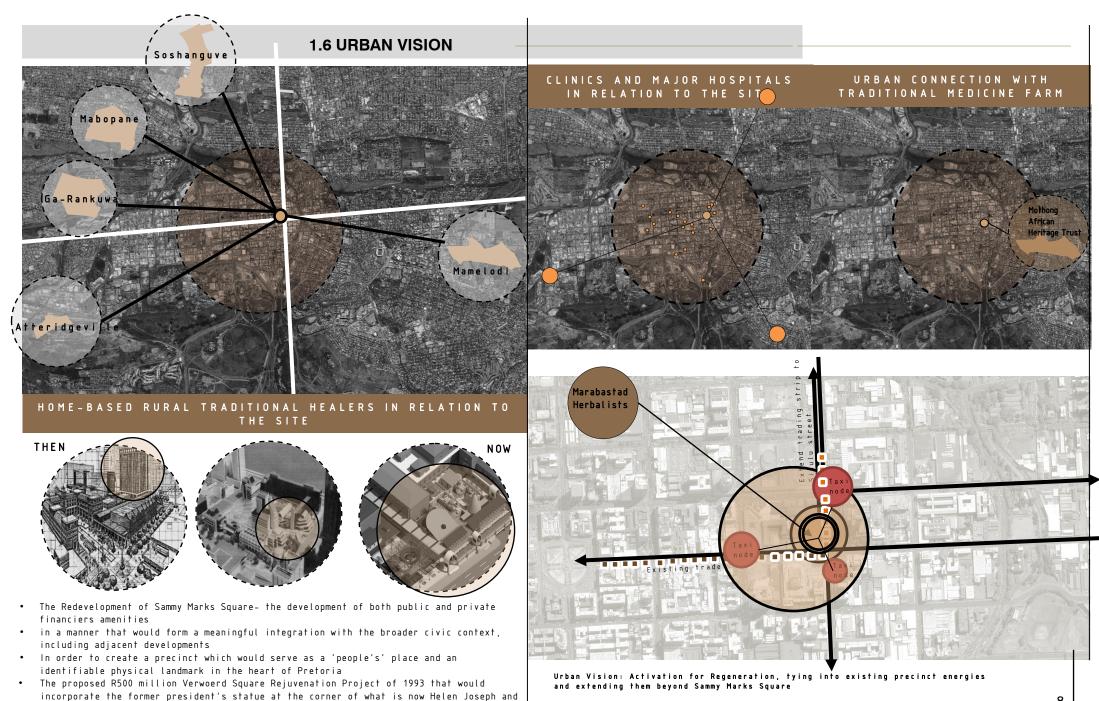




Figure 10: A Diviner (Sangoma)

7



• A City Council and Private Sector Developers collaboration

Sisulu street

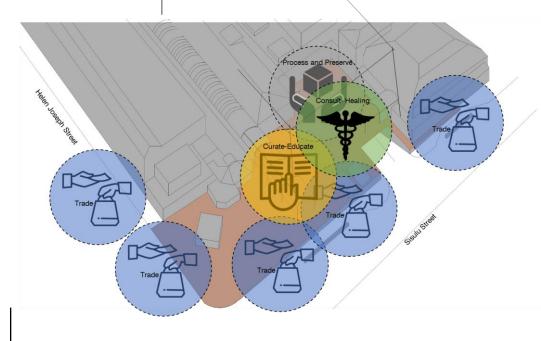
2

KEY THEORY AND DESIGN INFORMANTS

THEORY Regenerative Design Principles Public Spaces Traditional Medicine Cultural Practices from public to sacred Regenerative Design Principles: A design that is informed by an understanding of the inner workings of the ecosystem to, one that regenerates rather than depletes underlying life support systems, displaying socio-economical resilience and being adaptive in addressing contextual issues (Mang and Bill, 2012).

Public space and Place-Making: Three essential characteristics: an active street life, walkability, and affordability. The creation of successful urban public spaces requires the promotion of socially integrated, inclusive, connected, environmentally sustainable, safe, and accessible public places (UN-Habitat, 2018).

Traditional Medicine cultural practices from public to sacred: Looking at how therapeutic landscapes of traditional healing can be built relationally in the patient-healer encounter; it will also consider the strong link between the herbal component of traditional healing, the cognitive component of dialogue with the healer and the spiritual and sociocultural elements associated with rituals (Bignante, 2015).



CONTEXT Edge Condition Dormant Urban Space Public Transport Nodes Informal Retail Thoroughtare

The area around Sisulu Street used to be a vibrant place with a rich cultural diversity which is no longer as prevalent. The project aims to revive the street to restore the active nature of public life where diverse people can meet and exchange cultural knowledge.

This can be done by identifying existing urban opportunities observing activities, site movement, and spatial-material qualities as proposed by Gehl and Svarre (2013) to assist in integrating the new programme of Traditional medicine healing.

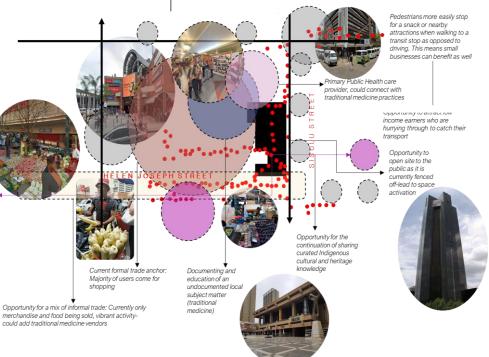


Figure 12: The context as an informant

Figure 11: Key theories as an informant

PRECEDENT STUDIES	Faraday Muti Markets	Phong Kham Yhct Traditional Clinic	Nest We Grow	Watersheds	Outreach Foundation Community Centre		

The scale and extrusion of the building should be appropriate for the context, where applicable, explore verticality to maximise natural lighting and crossventilation due to contextual constraints. There should be a provision for smaller public gathering spaces and spaces are to be organised in terms of the level of publicness on site.

The structure is to explore materials that allow for the permeability of light while maintaining structural longevity.

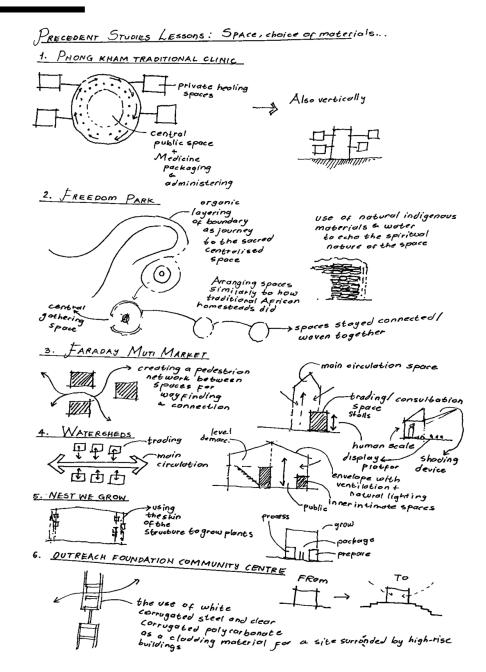
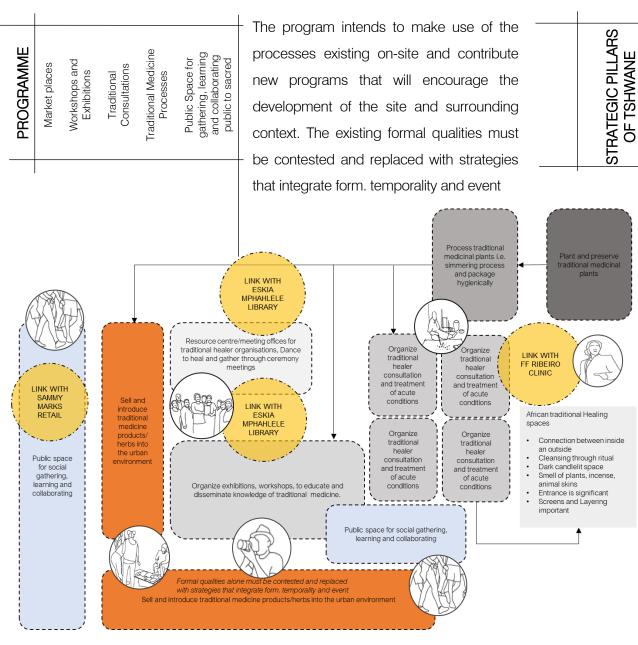


Figure 13: Precedent Study Lessons



(City of Tshwane IDP Revision for 2020/21 and SDBIP, 2020)

- A City that facilitates economic growth and job creation
- Attracting investment and encouraging growth by making it easy to do business in Tshwane
- Revitalising and supporting Tshwane
 entrepreneurs
- Empowering individuals to take
 advantage of opportunities
- Infrastructure-led growth to catalyse and revitalise existing nodal economies and fight urban decay
- Encouraging tourism and recreation









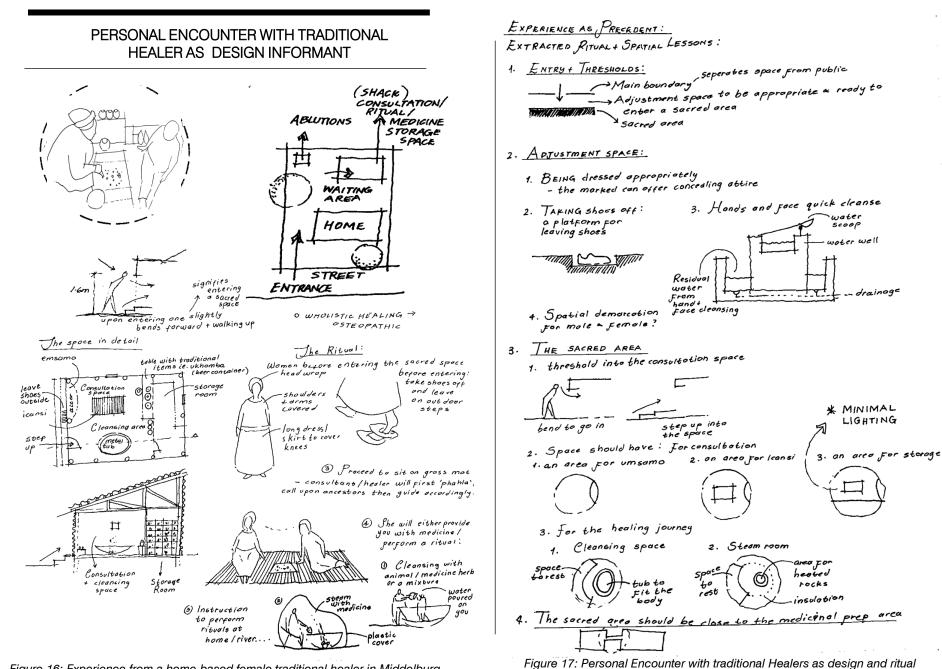




Figure 15: Strategic pillars of Tshwane as a programme informant

٠

Figure 14: The programme as a design informant

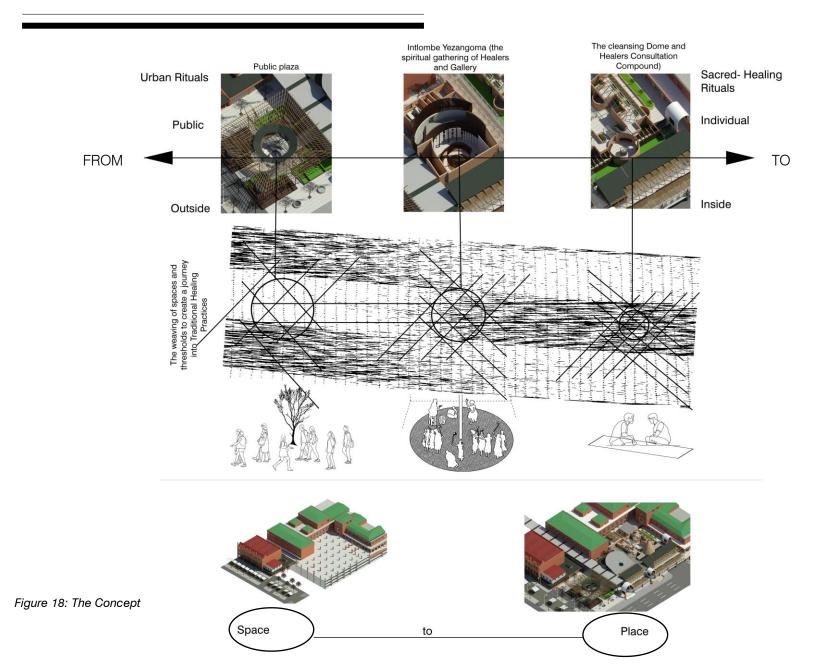


informant

Figure 16: Experience from a home-based female traditional healer in Middelburg-Method of healing : Herbs and Animals

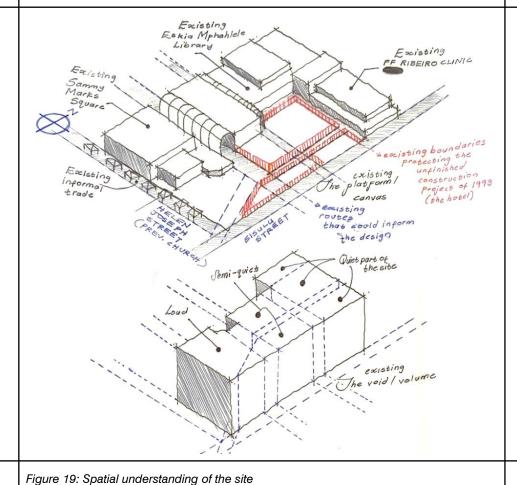
11

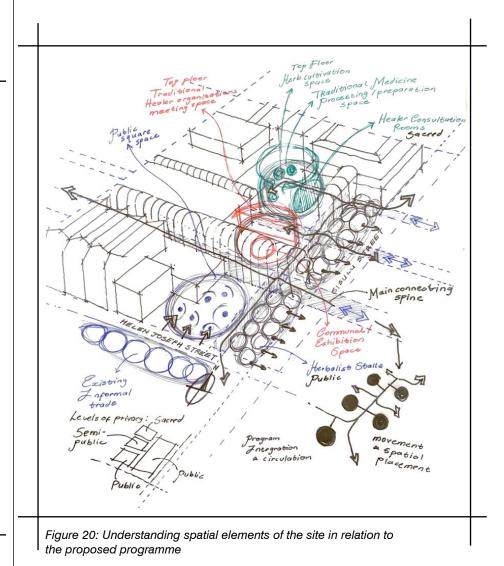
THE CONCEPT



4 DOCUMENTATION OF ITERATIVE DESIGN PROCESS

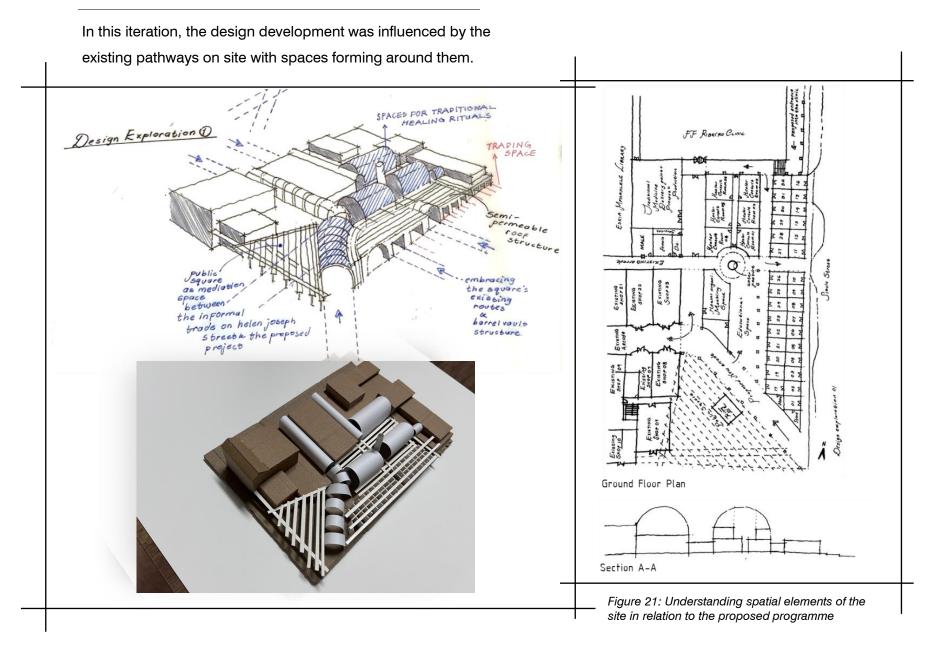
The process began with understanding the existing space and how it connects to the existing buildings and circulation routes.





erstanding of the site

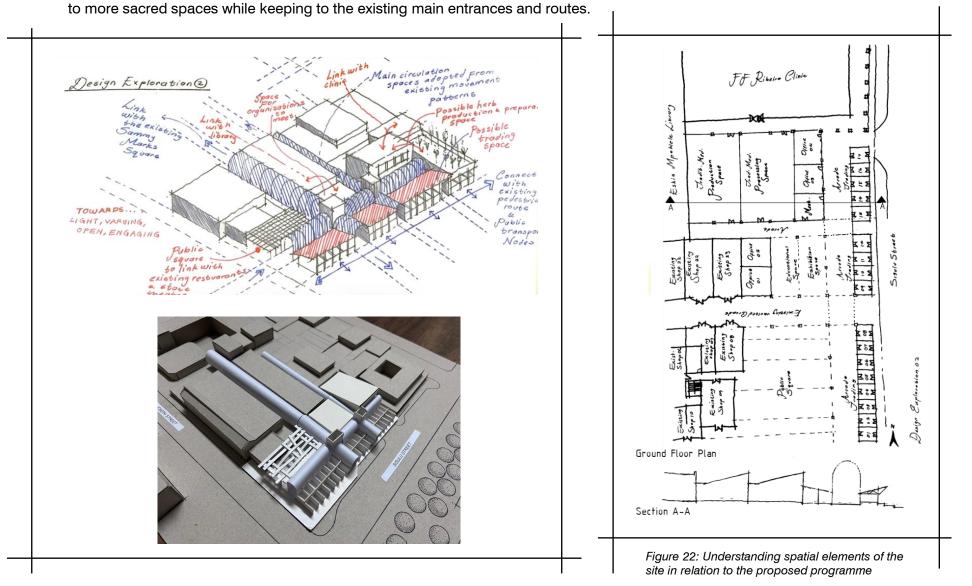
4.1 DESIGN ITERATION 1

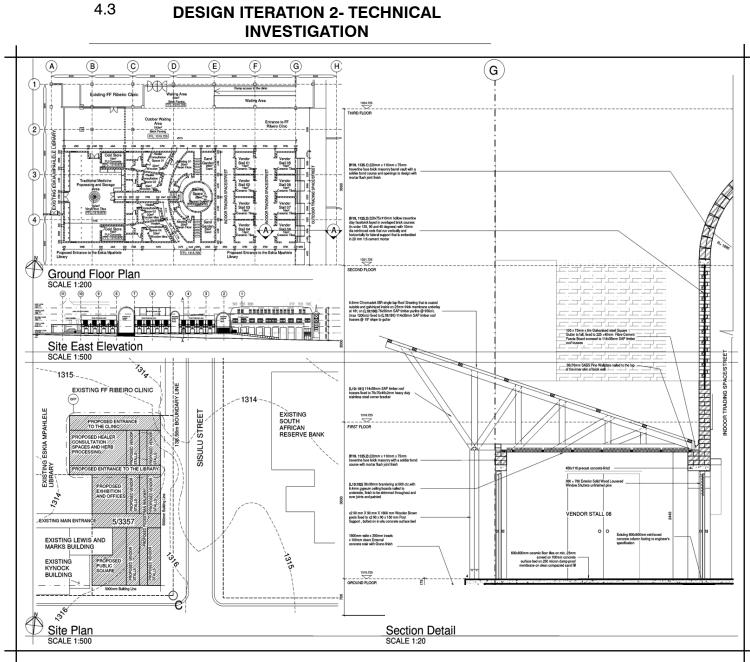


14

4.2 **DESIGN ITERATION 2**

In this iteration, the project explores creating indoor streets to create transitions between public





To inform the technical development of the project (Figure 18), these were the materials identified within and around the proposed site: red bricks, structural steel, precast concrete, brick and concrete pavers, outdoor slip-resistant tiles, and corrugated iron steel roof sheeting.

Building Systems: The canopy structure sheltering informal traders of traditional medicine is primarily constructed with timber sections. The industrial structure of the Sammy Marks arcades informed the vaulted masonry walkway which has brick infill walls between arched H-section steel columns. This forms the base structure that integrates other building systems just as the site integrates the practice of traditional medicine

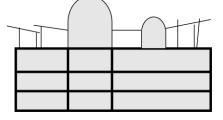


Figure 23: Iteration 2- Technical Investigation (Building Systems)

4.4 INDIGENOUS FORMS AND SPATIAL CONSIDERATIONS

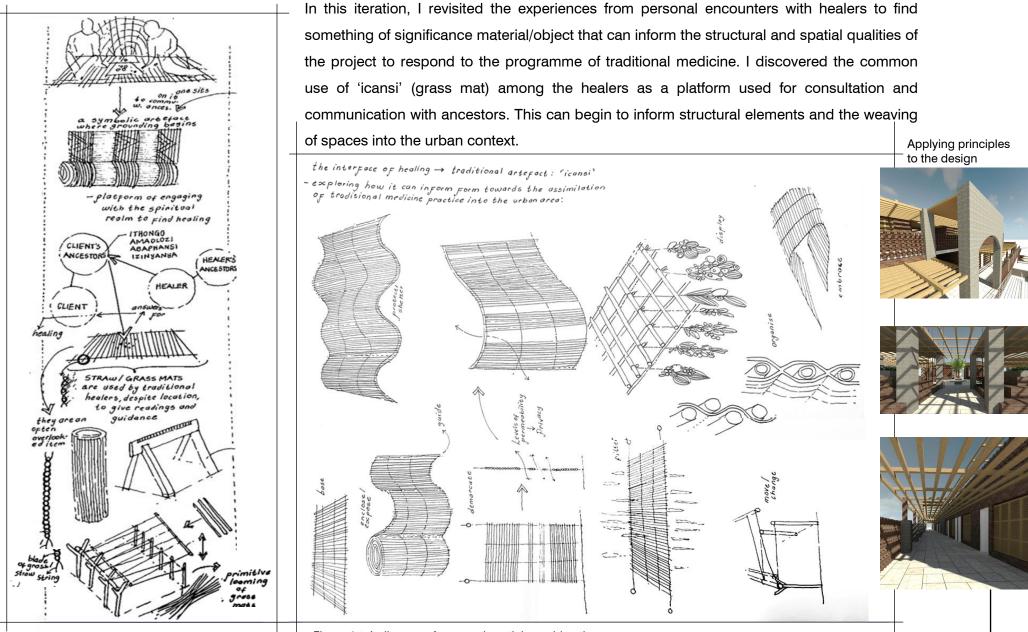


Figure 24: Indigenous forms and spatial considerations

4.5 **DESIGN ITERATION 3, 4 and 5**

In these iterations, the project explores how the spaces can be woven together to create a journey from inside to outside, guiding the user by employing appropriate structural elements. Healing spaces begin to integrate within the existing space for urban-appropriate rituals.

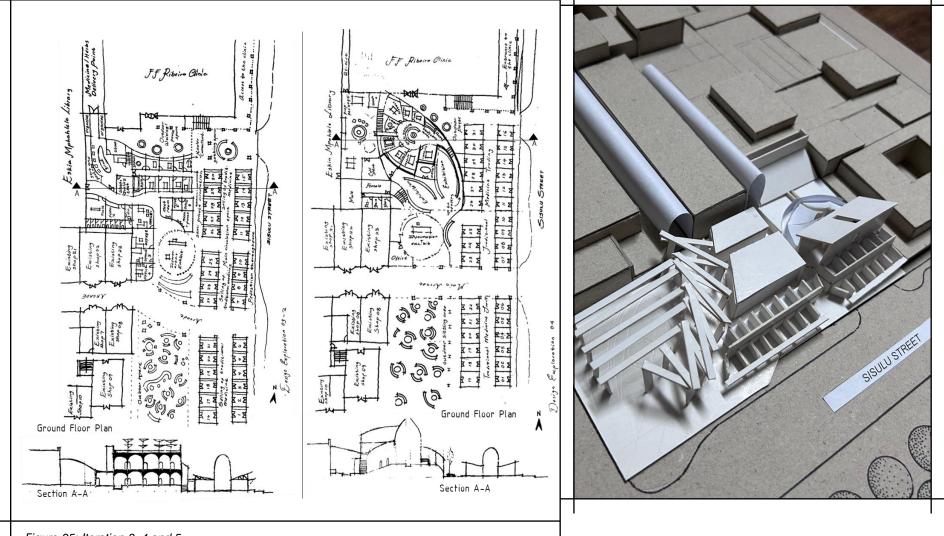


Figure 25: Iteration 3, 4 and 5

4.6 **DESIGN ITERATION 6- TECHNICAL DETAIL INTEGRATION**

The existing site sits on reinforced basement parking and therefore design decisions in this iteration had to consider the existing structure for the proposed spaces to be properly supported within the existing column grid.

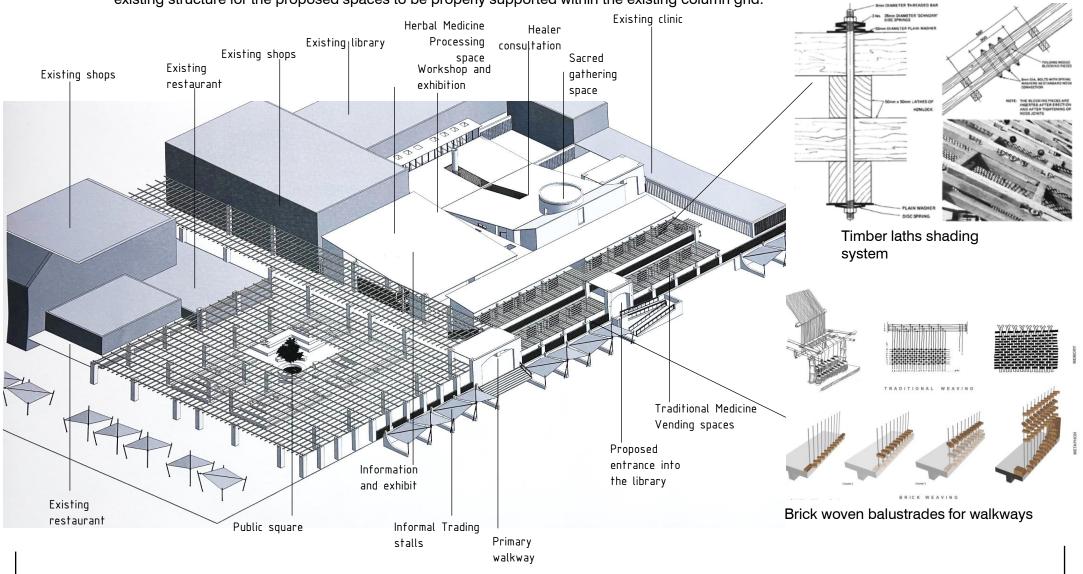
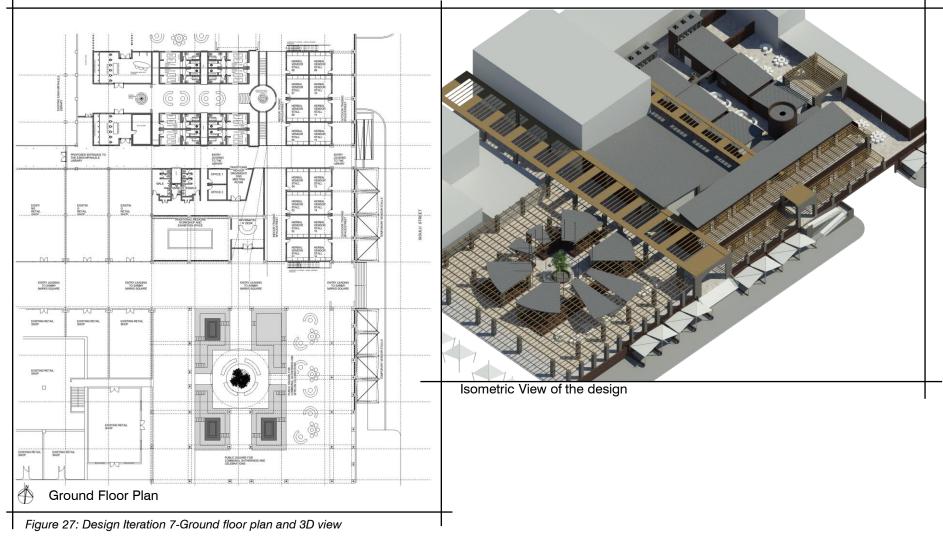


Figure 26: Iteration 6- Baseline for design performance assessment

4.7 DESIGN ITERATION 7- TECHNICAL INTEGRATION AND DESIGN PERFORMANCE OUTCOME

The design employs natural materials and weaves transitional spaces together to guide the user into the different spaces. The existing grid of structural columns serves as a guide to creating spaces that will be structurally sound, bearing in mind that the building sits on basement parking. It maintains the spatial transition between public and sacred as well as a legible link between spaces to guide the user throughout the site.



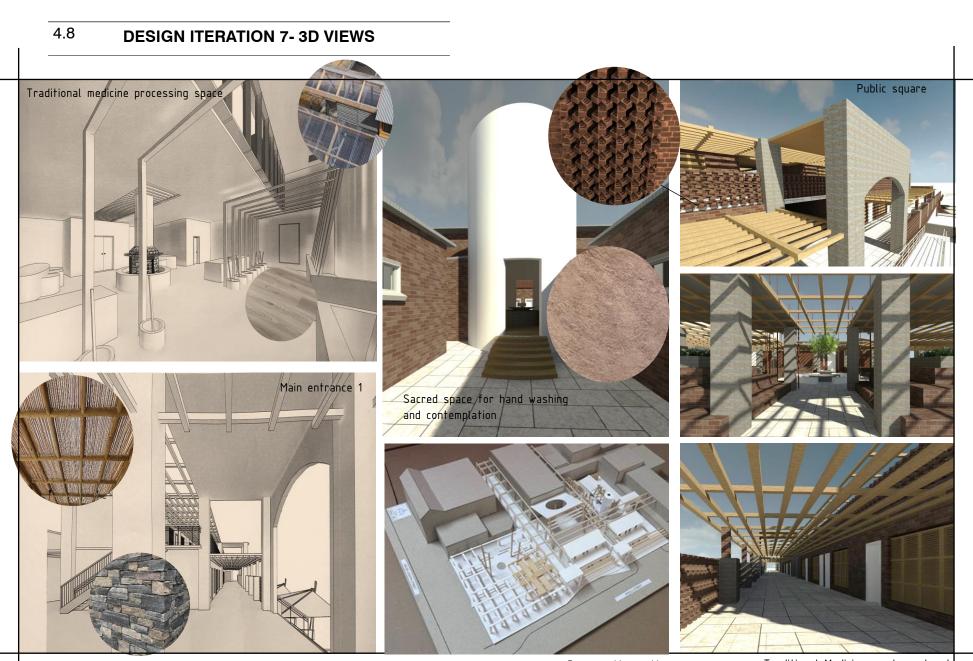


Figure 28: Design iteration 7: Perspective views and materiality

Process Marquette

Traditional Medicine vendors street

5

TECHNICAL INTEGRATION- DESIGN PERFORMANCE- DAYLIGHTING SYSTEMS

Much like vernacular architecture, indigenous traditional homesteads encompassed the following principles (Moscoso-García and Quesada-Molina, 2023): Traditional building techniques and crafts are used, traditionally established building types and forms that have been in use for a long time, environmental and climate-responsive features (i.e., passive design), features that are adaptable to social and communal use and the use of locally sourced materials that prioritise function over aesthetics. Thus natural lighting was investigated where shadows of surrounding buildings could affect its optimisation.

performance assessment and iteration 3

DESIGN DECISIONS TAKEN:

Building oriented east-west rather than north-south with a courtyard in between. The courtyard provides natural light (daylighting) in the building. The courtyard also induces natural ventilation which is an important aspect in passive design that also has energy saving benefits. Incorporating glazed door openings to maximise natural lighting and ventilation.

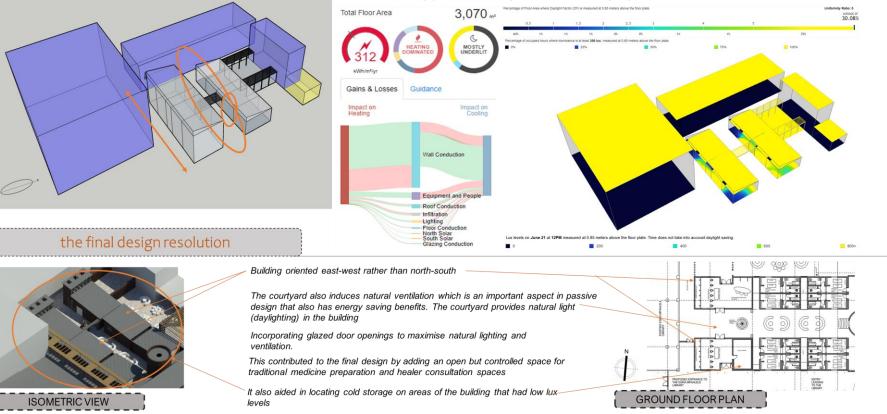
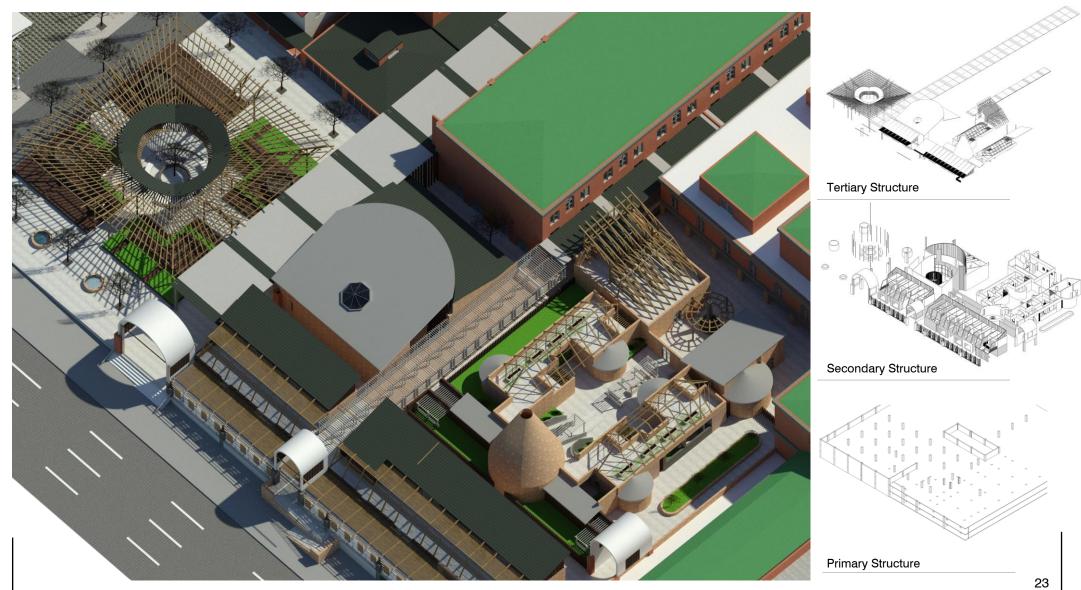
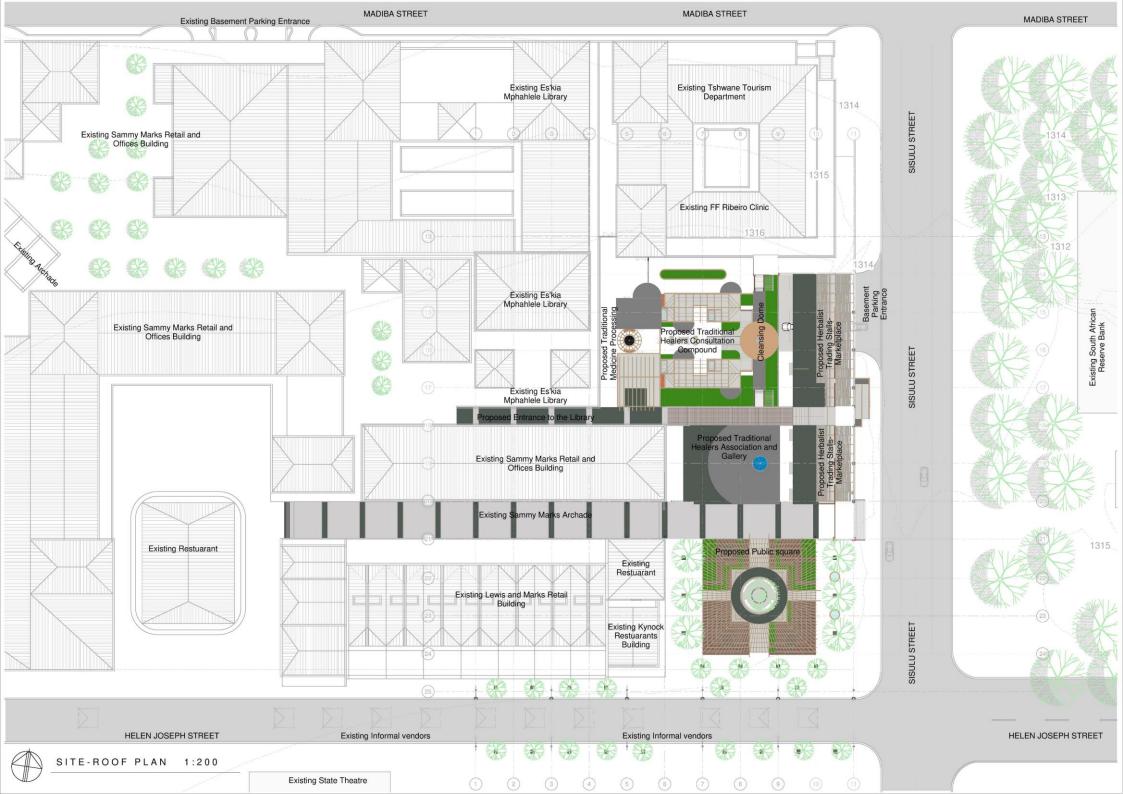


Figure 29: Technical Integration 2- Daylighting

6 **THE FINAL DESIGN- 3D REPRESENTATIONS**





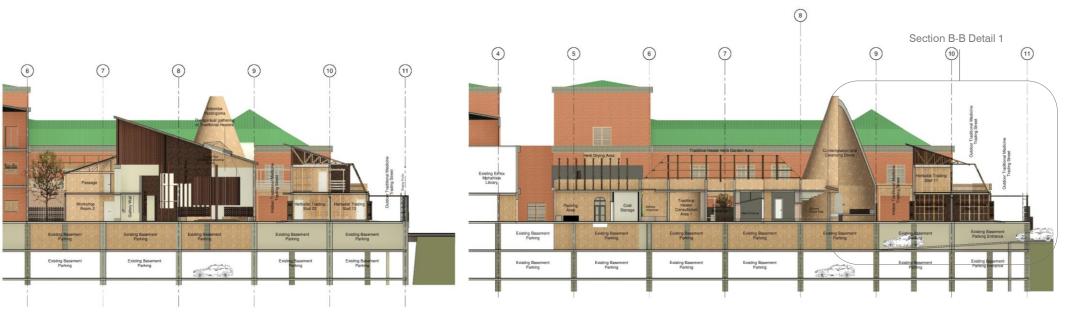






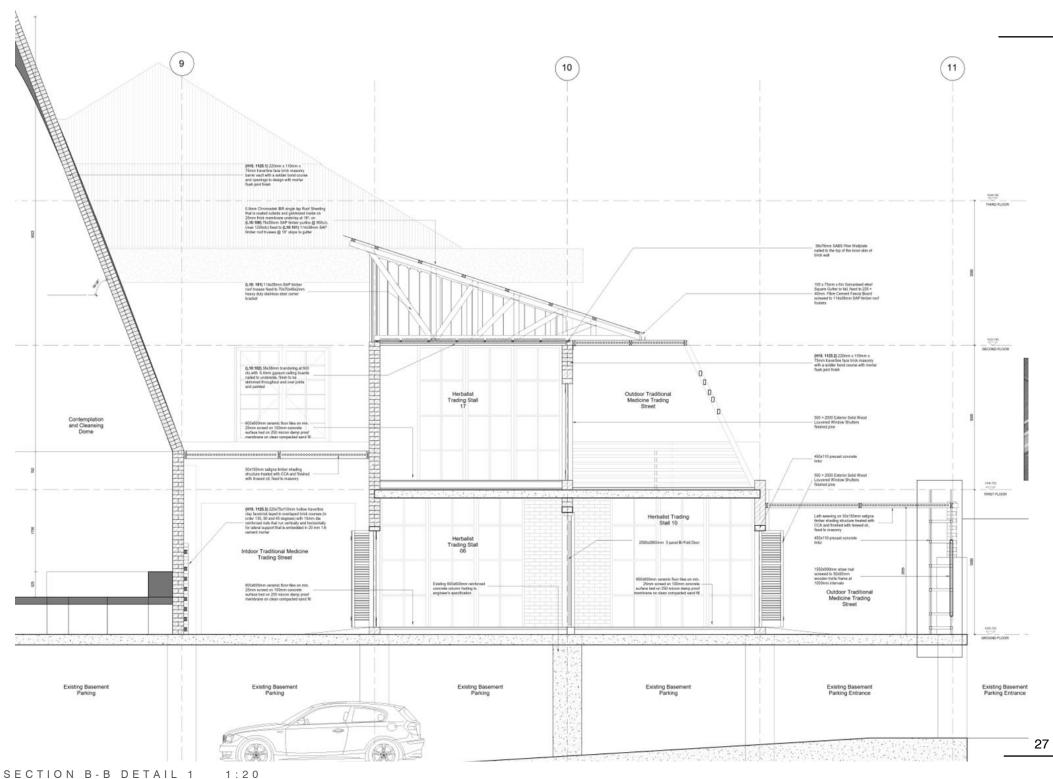


SECTION C-C 1:100

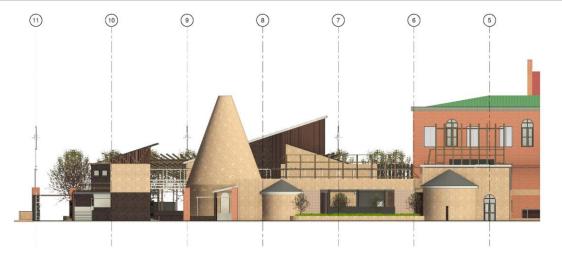


SECTION A-A 1:100

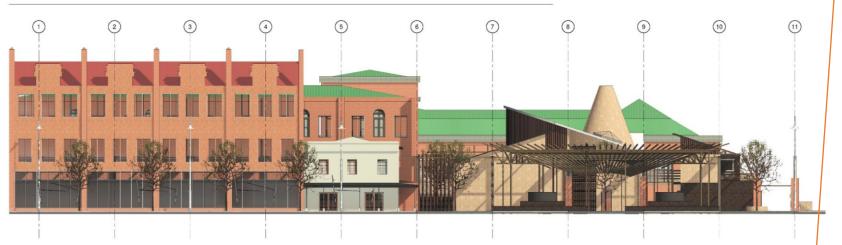
SECTION B-B 1:100



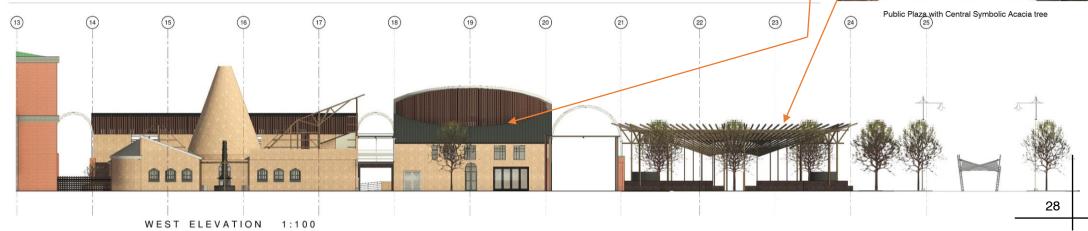
SECTION B-B DETAIL 1



NORTH ELEVATION 1:100



SOUTH ELEVATION 1:100





Intlombe Yezangoma (the spiritual gathering and dancing of Traditional Healers) and Gallery



7 CRITICAL REFLECTION 01

THE IMPACT OF THE MINI- PROJECT

The mini-project contributed immensely on the development of the project especially regarding informants that can help develop a project. To be specific, the project entailed an object (paper clips) to create a sculptural piece that became a point of provocation for an artwork (a painting). It highlighted the idea that endless possibilities of interpretations could be born from one seemingly mundane object. That what can seem ordinary can bare a unique kind of beauty that can be celebrated if observed from a different lens. The take away applicable to spatial design was that through studying the layers of what a site is typically made of, both tangible and intangible. This can reveal unique assets of a space that can prompt appropriate responsive interventions.



Figure 36: The mini-project exhibition

8 CRITICAL REFLECTION 02

THE MAJOR PROJECT OUTCOME

The project has the potential for further development beyond the current discourse because it touches on a subject matter that is currently under-documented in a country that relies on its availability. Exploring how it can be integrated in the urban environment is one step, however demystifying it might require efforts beyond the architectural discourse and a collaboration between different fields. Then comes the question of an African architectural identity and what that looks like. Perhaps in this regard, attention to how it feels to be in the proposed spaces to be mindful of the users and the programmes carried out on-site can be something that starts to respond that identity especially when introducing a project such as this one in an urban environment with an existing architectural language. For instance, healers in rural areas would traditionally operate from a round hut made from a thatched roof, however, in an urban setting, one would need to be responsive to the context and pay attention to communicating how the spaces would feel like i.e. minimal lighting, textured walls, low entryways, etc. This is what the project's development is geared towards because there is currently no blueprint on what a traditional medicine healing centre and market should look like.



Figure 37: The Final Model

CONCLUSION

9

The mini-project allowed the students creative freedom and the opportunity to produce something that can be interpreted in different ways. The major project on the other hand proved to be a lot more challenging because every design decision needed rigour and research to be applied to make intentional choices. This aspect can also highlight the responsibility of architects to produce consequential spaces. In this particular instance, the undertaking of a programme (traditional medicine practices) that is not as well documented or part of spatial policies added even more pressure because one can easily miss the mark in terms of appropriately communicating such spaces. Subsequently, integrating the programme in an urban environment added even more pressure because the sacred aspect of traditional healing requires a respectful transition from public to private. The iterative process assisted in that regard because one could begin making design decisions that overtime, begin to answer to the objectives set out in the project. However, it has been a learning experience that can hopefully contribute to the discourse, especially because there are not many projects that exist as a guideline for this kind of programme.

REFERENCES

10

Booth, K., 2023. The conversation: South Africa's traditional medicines should be used in modern health care. [url]: https://theconversation.com/south-africas-traditional-medicines-should-be-used-in-modern-health-care-211382.[Accessed 23 July 2023].

Fokunang, C. N., Ndikum, V., Tabi, O. Y., Jiofack, R. B., Ngameni, B., Guedje, N. M., Tembe-Fokunang, E. A., Tomkins, P., Barkwan, S., Kechia, F., Asongalem, E., Ngoupayou, J., Torimiro, N. J., Gonsu, K. H., Sielinou, V., Ngadjui, B. T., Angwafor, F., 3rd, Nkongmeneck, A., Abena, O. M., Ngogang, J., Kamsu-Kom. 2011. Traditional medicine: past, present and future research and development prospects and integration in the National Health System of Cameroon. African journal of traditional, complementary, and alternative medicines: AJTCAM, 8(3), 284–295. [url]: https://doi.org/10.4314/ajtcam.v8i3.65276. [Accessed 5 October 2023].

Gehl, J. & Svarre, B. 2013. How to study public life. Washington: Island Press.

Jordaan. G. 1987. An urban design strategy for place-making in city centres. Unpublished MUD discourse. Johannesburg: University of the Witwatersrand.

Kepe T. 2007, Medicinal plants and rural livelihoods in Pondoland, South Africa: towards an understanding of resource value. International Journal of Biodiversity Science and Management.

Mander M., Ntuli L., Diedrichs N., Mavundla K., 2007, Economics of the traditional medicine trade in South Africa. In: Harrison S., Bhana R., Ntuli A., editors. South African Health Review. Durban, South Africa: Health Systems Trust; pp. 189–200

Mang, Pamela & Reed, Bill. 2012. Regenerative Development and Design. Encyclopedia Sustainability Science & Technology.

Mokgobi MG. 2014. Understanding traditional African healing. African Physical Health Education and Recreational Dance. Sep;20(Suppl 2):24-34.

Mothibe, Mmamosheledi & Sibanda, Mncengeli. (2019). African Traditional Medicine: South African Perspective.

Moscoso-García P, Quesada-Molina F., 2023. Analysis of Passive Strategies in Traditional Vernacular Architecture. Buildings. [url]: https://doi.org/10.3390/buildings13081984. [Accessed 23 July 2023].

Moshabela, M & Zuma, T. 2016. Bridging the gap between biomedical and traditional health practitioners in South Africa. South African Health Review.

Semenya S, Potgieter M. 2014. Medicinal plants cultivated in Bapedi traditional healers home gardens, Limpopo Province, South Africa. African Traditional Complementary Alternative Medicine. 2014;11(5):126-132. Published 2014 Aug 23. doi:10.4314/ajtcam.v11i5.20

Trancik, R. 1986. Finding Lost Space. New York. Van Nostrand Reinhold Company

Van der Walt, J. B. 1993. Sammy Marks development- Phase 2- Facilities for the City of Pretoria. Pretoria: City Council.

Bignante, Elisa. 2015. Therapeutic landscapes of traditional healing: building spaces of well-being with the traditional healer in St. Louis, Senegal. Social & Cultural Geography. 16. 1-16. 10.1080/14649365.2015.1009852.

Van Vuuren, S.F., 2007. The antimicrobial activity and essential oil composition of medicinal aromatic plants used in African traditional healing. Ph.D. Thesis.

University of the Witwatersrand, South Africa-

World health statistics 2023: Monitoring health for the SDGs, Sustainable Development Goals. Geneva: World Health Organization; 2023. License: CC BY-NC-SA 3.0 IGO.