

Project Name

Lodwar Referral Hospital

Architects

Habitart + Partners

Lodwar, Turkana
2025



Context

The site is located in Kanamkemur, a ward in Lodwar, Turkana Central Sub-County, Kenya. It is a developing residential and commercial area.

Site Area
23.850m²
3.1012° N
35.6015° E

Climate

Lodwar has a hot, arid climate. The area is generally sunny, hot, and dry, with occasional cloud cover.

Mean Temperature	Annual rainfall	Humidity
29.9°C-35°C	210.7mm	44%

Design philosophy

Principles of Critical Regionalism



Modern Techniques
Advanced construction methods, technology integration



Local Culture and context
Drawing from the site, local traditions and heritage



Climate Adaptation
Built to local climatic conditions



Resisting Global Uniformity
Avoiding generic styles



Local Materials
Sustainable use of available materials

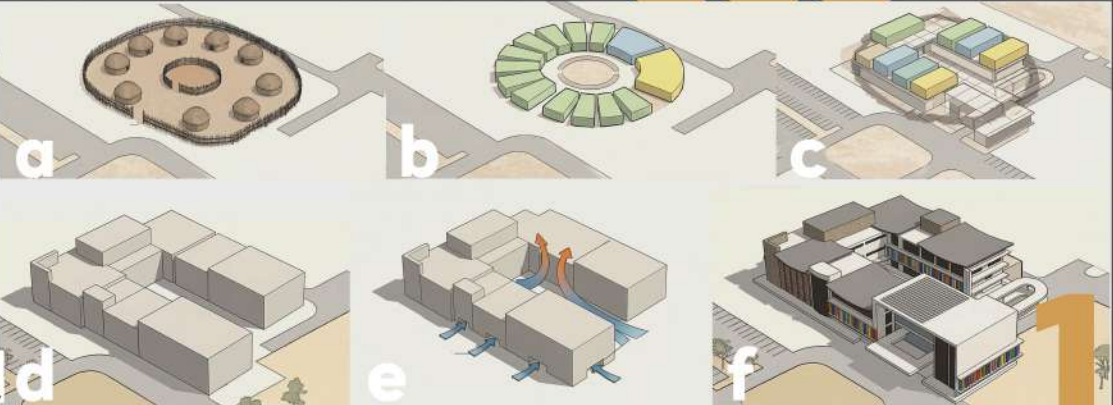
Vision

This outpatient clinic is Phase 1 of a state-of-the-art Level 5 hospital planned for Lodwar. The core design challenge was reconciling the functional demands of modern hospital architecture with the deeply rooted cultural identity of the Turkana people. To address this, the architects applied the principles of **Critical Regionalism**; blending contemporary design techniques with local climate, materials, and cultural context.

Concept

1.) Form Development

- Radial organization: A traditional Turkana homestead has hut (Ngakais) surrounding a Central Kraal (Community/Cattle area)
- Zoning: The huts evolved into programmed zones and the central public space was retained.
- Orthogonal transformation: The curvilinear forms transform into rectilinear for functionality. Hospital architecture prioritizes functionality and minimalism; Modern style. The central core is maintained.
- The volumes are more defined with reference to the client's brief.
- Openings are introduced to maximize stack effect due to the hot and dry climate.
- Once the final form was attained, surface articulation, materials and construction technology were applied.



2.) Surface Articulation, Material use and Construction Technology

Imagery

Elements of Culture and Context have been used for climatic adaptation.

- The waves formed by the sand dunes by the banks of River Turkwel inspired the curved elements of the project (Roof and sunshading elements).



- The colourful Turkana tribe neck pieces inspired the theme of some other the sunshading vertical fins.



Sensory qualities

The characteristics of Lodwar that have been Visual and Tactile.

- The visual attribute of Lodwar is the desert palette. Hues of yellow and brown dominate the land.



- The tactile attribute: Lodwar is dry and hostile. The extreme aridity can only be described as a 'rough' texture.

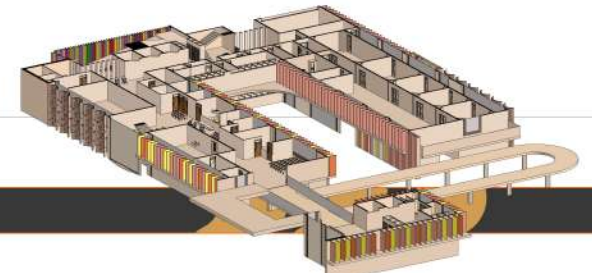
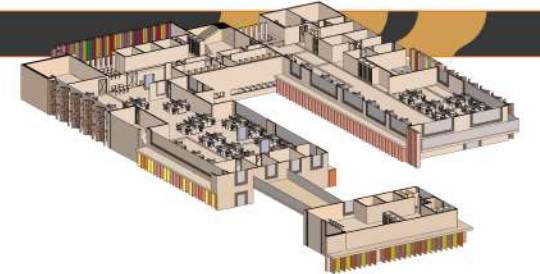
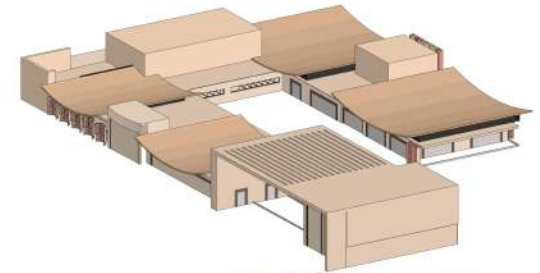


Materials and Construction technology

- Curved Clay Brick Facade Elements Anchored to RC Slab
Sculptural curved brick elements anchored to the RC slab, referencing indigenous building traditions while introducing a contemporary curvature that softens the building's massing.
-ITS Roofing Sheets on Steel Truss
Profiled metal sheets laid over a steel truss system, delivering a lightweight, durable roofing solution resilient to Turkana's extreme heat and strong winds.
- Aluminium Vertical Fins Anchored to RC Slab via RHS Beam
Extruded aluminium fins mounted to the RC slab via RHS steel beams, functioning as passive solar shading devices that control glare and heat gain while articulating the facade rhythmically.
- c.&d.) -200mm/150mm Thick Masonry Wall (Dressed/Stucco Finish)
Load-bearing and partition walls finished in dressed stone or stucco, bridging local vernacular materiality with a weather-resistant contemporary surface.
- Steel Frame Casement Windows
Operable steel-framed windows that maximize glazing area while supporting natural cross-ventilation essential in Lodwar's hot, arid climate.
- Aluminium Frame Curtain Wall
A glazed aluminium curtain wall system admitting abundant natural light into clinical spaces while maintaining thermal performance through sealed double-glazed units.



1 Site and Floorplans

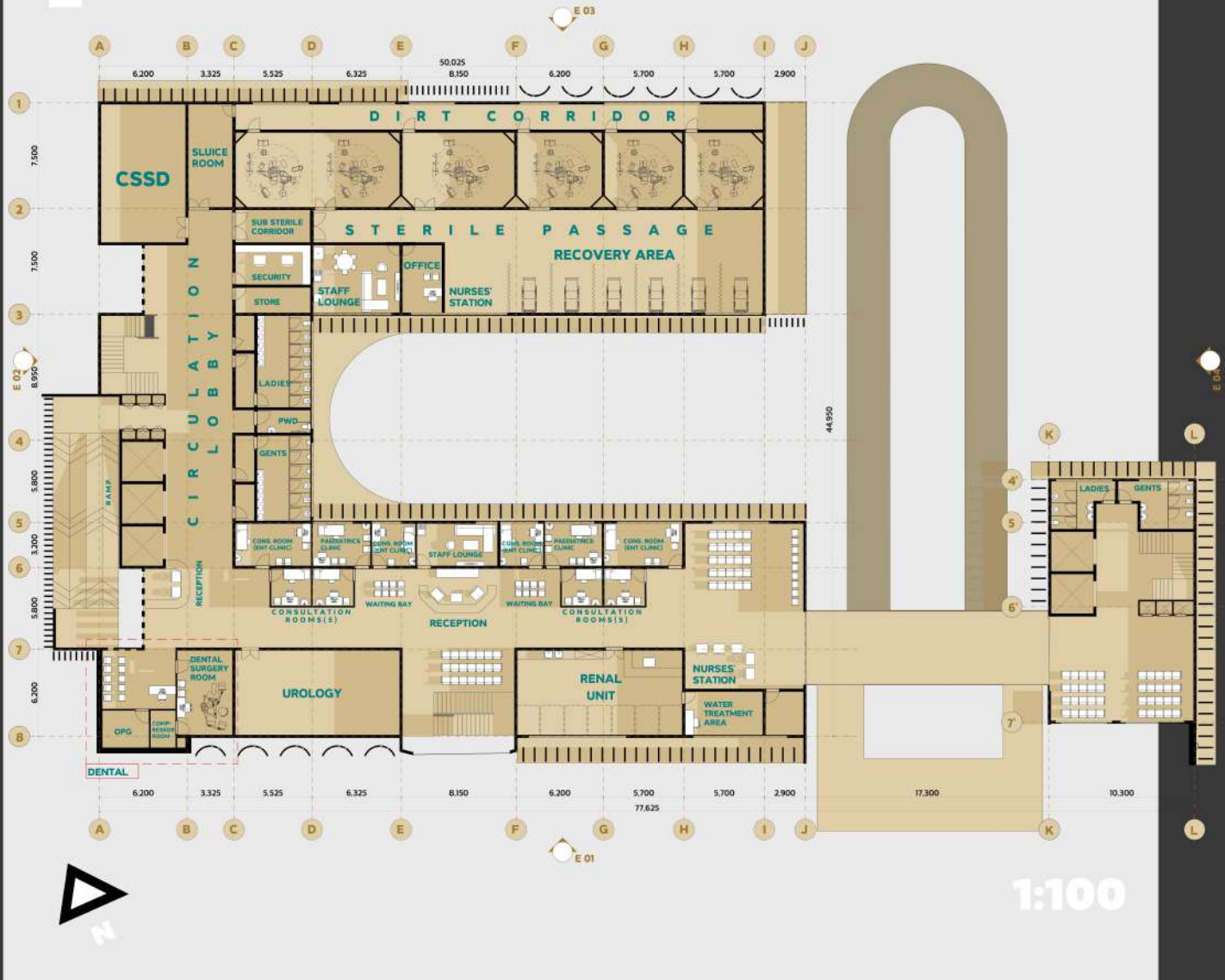


The facility consists of several departments. The Outpatient clinic is phase 1 of the project. Below is a list of departments in the project:

1. Outpatient Department (OPD)
2. Accidents & Emergency (A&E)
3. Laboratory and Research
4. Imaging Department
5. Specialized clinics

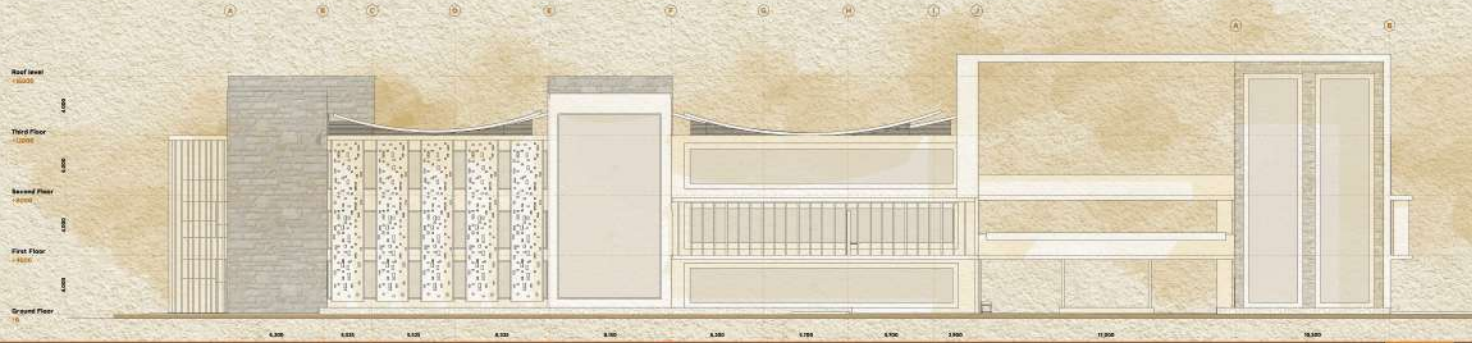


1 First Floor



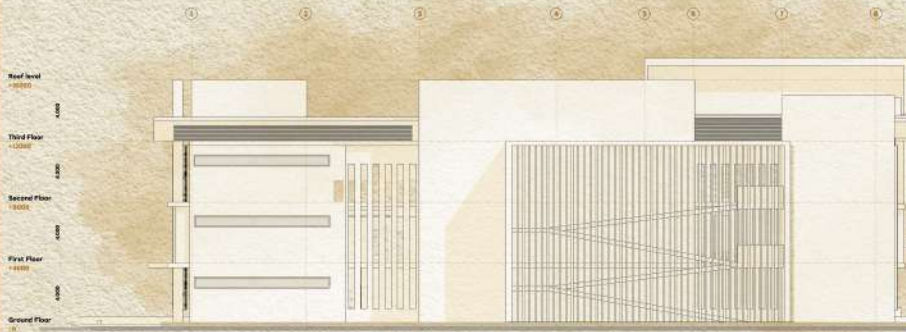
2 Elevations

E 01

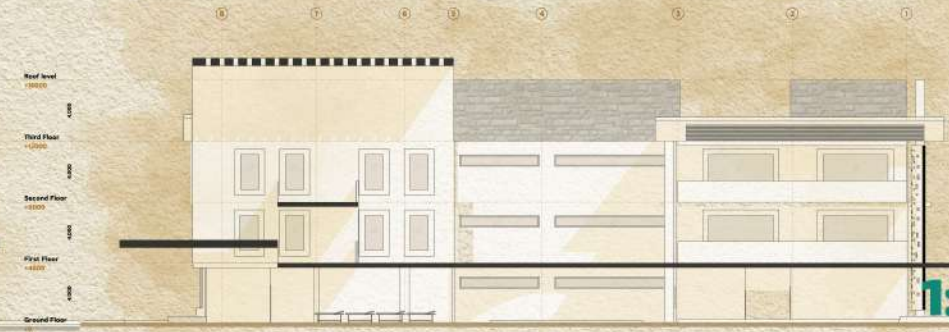


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E 02

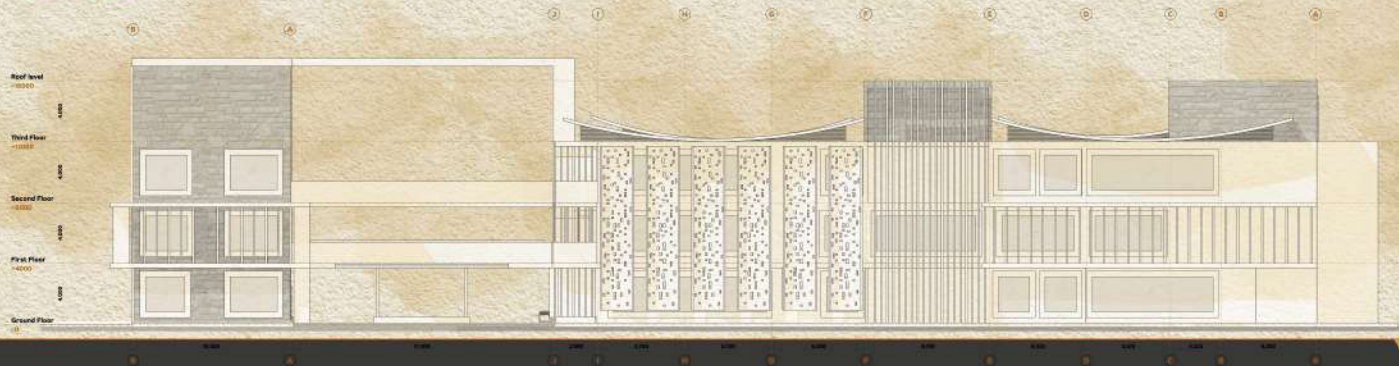


E 04



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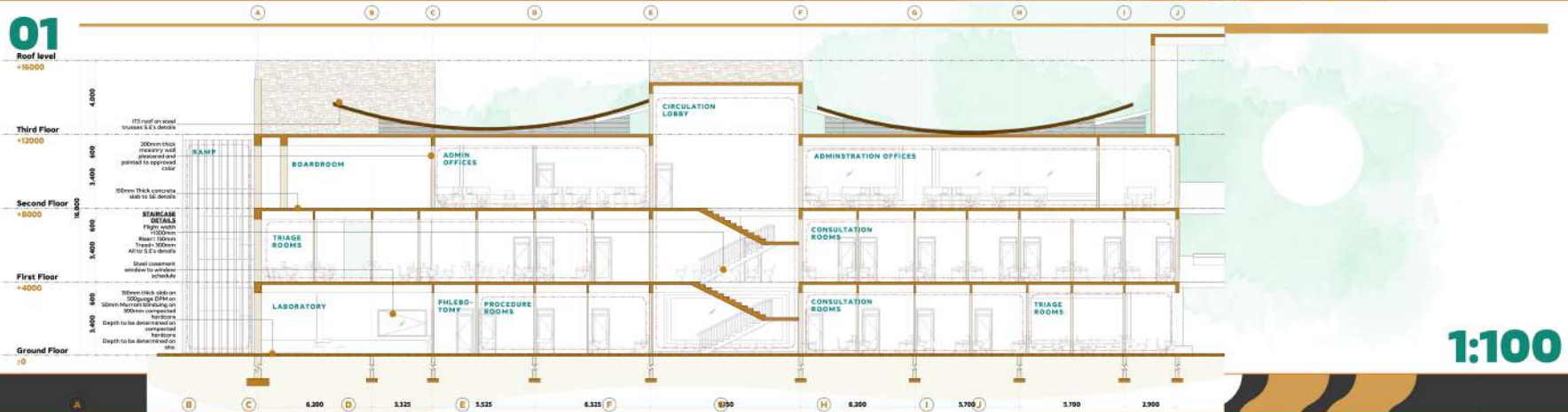
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2 Elevations & Section

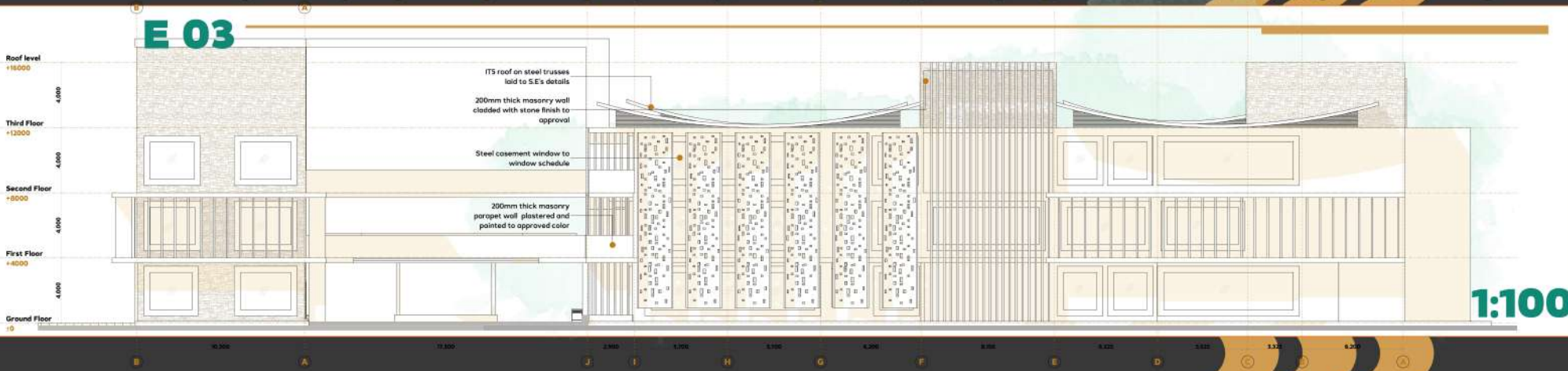
S 01



E 01



E 03



3 Perspectives

