

## GENERAL DE LA REY DISTRICT HOSPITAL

CONCEPT DESIGN REPORT







# 1 Introduction and Background





#### Introduction

MIB Infrastructure development was appointed by the North West Department of Health ("NWDOH") to Plan, Design, and Commission the Upgrading of the General De La Rey District Hospital.

From the initial project Kick-off meeting, the client made it clear that the end product should meet the "Ideal Hospital" requirements. This will be followed by an audit to ensure that it does meet these ideals. Once audited, the appointed Health Planners would assist the NWDOH to get the hospital to be licensed for its particular services in the area.

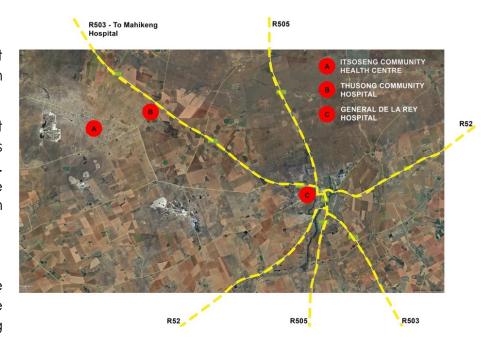
### **Project Background**

The decision to upgrade the General De La Rey District from the current 60-bed facility to a 120-bed facility was taken on the backdrop of the decommissioning of the Thusong Hospital. Thusong was built in 1968 to service communities around Lichtenburg itself, Coligny, Biesiesvlei, Itsoseng, Verdwaal and Sheila. It is approximately 27 kilometres away from General De La Rey Hospital.

Due to it being built on dolomitic soil, it presented structural risks to patients and staff alike. This condition caused severe cracks in buildings, notwithstanding various efforts by the Department to implement maintenance projects to minimise the issues.

Before its decommissioning, Thusong Hospital, together with General De La Rey Hospital and Itsoseng CHC, were part of one Hospital Complex under the leadership of a single executive management team. This also resulted in de-complexing the two remaining facilities to operate independently, each with its own executive management team. Furthermore, Itsoseng would then be recategorized as a District Hospital and its capacity increased to 100-beds.

### Introduction and Background









# 2 Client Brief

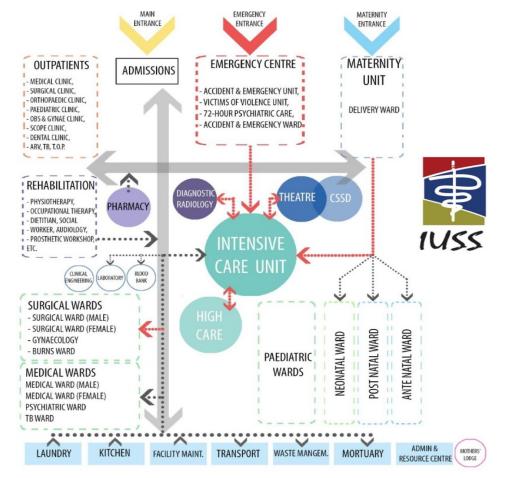






### **Project Brief**

The brief to the team is to plan, design and commission the upgrade of the General De La Rey District Hospital from the current 60-bed facility to 120 beds with associated supporting services. The newly upgraded District Hospital is to be based on the IUSS and must meet the "Ideal Hospital" Requirement of National Dept. of Health.



### General

- 24-hour Emergency Centre
- 24-hour MOU
- 2-hour Integrated Clinical Services Management (ICSM)
- Health Support Services
- 72-hour Mental Health Observation Unit
- Radiological Services
- Pharmaceutical Services
- Laboratory Services
- Allied Health Services

### **Hospital Support Services**

- Hospital Administration Offices
- Facilities Management Services
- Increase capacity of existing Kitchen, and Mortuary (to be done by other consultants)
- Bulk Stores (Consumables, Inflammables and Linen Bank)

#### **Clinical Services**

- Adult Inpatients Surgical, medical including orthopaedic, gynaecology and TB
- · Emergency Medicine
- General Surgery
- Obstetrics Maternity and Neonatal
- Gynaecology
- Paediatrics
- Internal Medicine

fundamental requirement that the hospital remain fully operational throughout the construction that work and services the delivered from site proceed with minimal disruption. It is accepted that there will be some impact on in-patient services through noise and potential relocation of services. however the team will strive to minimise the impact of the construction works through careful phasing and enabling works.





## Administration & Related Services

- CEO & Executive Management Unit
- Finance & SCM Dept
- HR Dept
- Facilities & Maintenance
- Transport & Logistics

## (OPD) • Emergency Centre

• Outpatients Dept.

**Clinical Services** 

- Adult Inpatient Wards
- Rehabilitation & Allied Services
- Maternity Care Unit
- Paediatrics Unit
- Theatres

## Clinical Support Services

- Patient Admission & Records
- (CSSD)
- Pharmacy
- Radiology
- Laboratory
- Central Sterile
   Service Dept

- Upgrade to 120 bed hospital
- Meet the "Ideal Hospital"
   Requirements
- Based on IUSS Standards

## General Support Services

- Catering Services
- Linen Bank & Bulk Stores
- Maintenance Workshop
- Medical Gas
- Waste Management

### **Residential Services**

- Doctor's Residences
- Nurse's Residences
- Com-Serve Residences









## 3 Site Analysis







Erf/Holding/Farm Portion:	Erf 582
Township/Holding Name Farm Name:	Lichtenburg Town
Street Address:	118 Thabo Mbeki Street, Lichtenburg
Ownership Of Site:	RSA Government
Land Size:	8,16 ha (81 600 m2)
Co-ordinates:	Lat: 26° 8'53.89"S Long: 26° 9'5.10"E



Site Analysis
Site Location and Property Information









Site Analysis
Orientation, Access and Services

#### **Orientation and Size**

General De La Rey District Hospital site is bounded by Thabo Mbeki Street on the Eastern side, a small residential suburb to the South, vacant land on the Northern side and a wetland on the West.. The site has a total area of 81 600 m<sup>2</sup> (8,16 ha)

### Access, Gradient and Topography

Access to the site is currently on Thabo Mbeki Street. Two access points exist – one for the general public as well as for staff and emergency vehicles. The other one is for delivery vehicles.

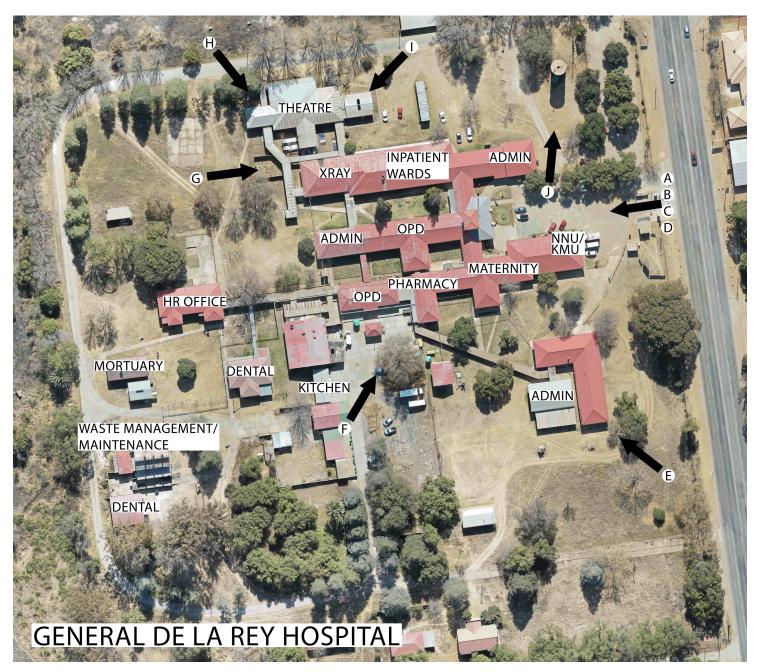
The site is fairly flat with a slight fall towards the wetland on the south-western boundary. There are indications that the site lies within a dolomitic belt and therefore poses some risk of collapsing. There may be a need to carry out an investigation to confirm this suspicion.

#### **Access to Services**

The hospital receives adequate water supply from a private borehole located 600m north of the site. The sewer capacity is sufficient to service the upgraded hospital serviced by the Ditsobotla Local Municipality. The Electricity supply is provided by ESKOM.







Site Analysis
Current Hospital Layout







# **Preliminary Concept**





# 1992 2007 1993 2006 1994 2005 1995 2004

### **Parking**

- Ideal location at the Site Entrance and along the main arterial road to Mafikeng and Zeerust.
- It is the most public area and with the highest traffic. Security control to be located here.

#### **Clinical Areas**

- Requires minimal disturbances for operation.
- Ideal location is the central away from traffic noises from the main road.
- However, due to existing building, centrality main not be absolutely achieved.

#### **Residential Area**

- Ideal location is the area in direct relationship with the existing residential area of the town.
- Future development may allow for direct secondary access through the existing suburban area.

**LEGEND** 

New clinical space

Existing clinical space

Support services space

Residential area

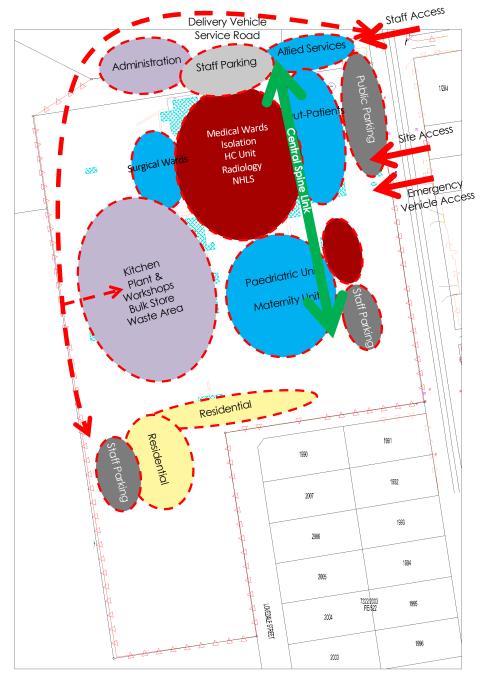
Area relationship

Parking area



2003





- Emergency Entrance next to main hospital entrance and visible from the main road.
- Central Spine linking all Clinical spaces.
- General support services to the West of site but accessible from the Central Spine.
- Residential area adjacent to existing and easily accessible by staff members.
- · Phasing is possible.







# Concept Development: Three-Dimensional Views









1. View of Current Hospital Site Entrance



2. View 1 of New Hospital Site Entrance



3. View 2 of New Hospital Site Entrance

## **Hospital Vehicular Entrance**



4. View 2 of New Hospital Site Entrance





## **Concept Development**

The Building Entrance









5. View of Existing Hospital Building Entrance

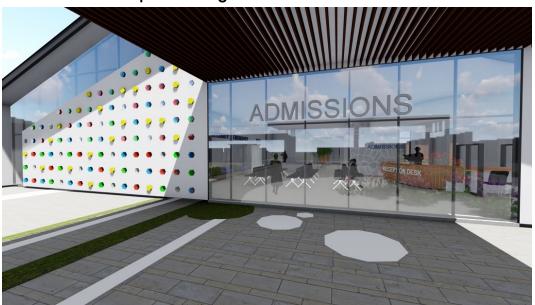


7. View of Existing Hospital Admissions Entrance





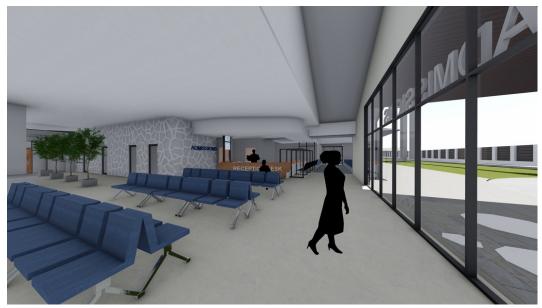
6. View of New Hospital Building Entrance



8. View of New Hospital Admissions Entrance







9. View1 of New Admissions Waiting Area



11. View 2 of New Admissions Waiting Area

### Admissions Block - Interior



10. View of Existing Admissions Waiting Area



12. View 3 of New Admissions Waiting Area







## **Concept Development**

Administration Offices





13. View of Existing Administration Offices



15. View 2 of New Administration Offices





14. View 1 of New Administration Offices



16. View 3 of New Administration Offices









17. View 1 of New Administration Offices – CEO's Office



19. View 3 of New Administration Offices – Main Boardroom

### Administration Offices - Interior



18. View 2 of New Administration Offices – Staff Room



20. View of Existing Main Boardroom







## **Concept Development**

Typical Clinical and Healing Spaces





21. View 1 of Typical Wards - New Nurse's Station



23. View 2 of Typical Wards - New Nurse's Station

## Typical Medical Ward - Interior



22. View of Existing Nurse's Station



24. View of Existing Typical Ward







25. View of New Rehab Indoor Gym



Rehabilitation Centre: Allied Services - Outdoor Gym 26. View of New Rehab Outdoor Gym







27. View 1 of New Paediatric Ward Outdoor Play Area



29. View 3 of New Paediatric Ward Outdoor Play Area

### Rehabilitation Centre: **Allied Services**



28. View 2 of New Paediatric Ward Outdoor Play Area







30. View of Existing Kitchen



31. View 1 of New Refurbished Kitchen



32. View 2 of New Refurbished Kitchen



33. View 3 of New Refurbished Kitchen







## **Concept Development**

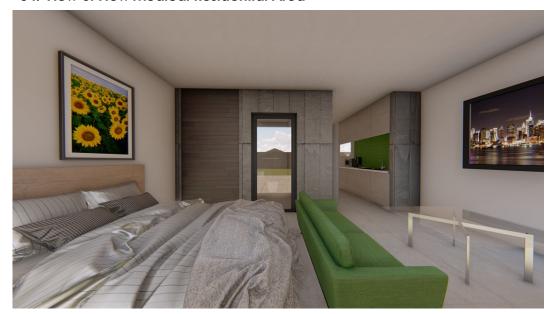
Residential Bachelor Unit







34. View of New Medical Residential Area



36. View 2 of New Bachelor Unit Bedroom

## Residential: Typical Bachelor Unit



35. View 1 of New Bachelor Unit En-suite Bathroom



37. View 3 of New Bachelor Unit Kitchenette



