

brief development

context analysis

precint design

precedents

design development

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fig.b

fig.c

fig.a

fig.d

Netcare Hospital Group Laundry, Jetpark

This facility launders an average of 1.5 million items per month for the Netcare Private Hospital Group, with a 24 hour work cycle.

Situated in an converted engineering workshop, the facility is composed of six parts:

- 1 Delivery road:** Drivers collect and deliver linen in sealed cages [fig.a] daily from the hospitals. Trucks are loaded with these cages in the delivery road, with is covered and allows light through by means of skylights. The floor finish is floated concrete, which allows for easy movement of the trolleys, as well as cleaning.

Requirements:

- Smooth floor finish.
- Adequate lighting during day and night.
- Wash-down and water drainage system.

- 2 Dirty linen area:** The sealed trolleys containing dirty and soiled linen, are opened by workers wearing protective garments. Dirty linen is sorted and placed into open plastic trolleys [fig.b]. Bundles of up to 50 kg each are into a conveyor which delivers the bundles into the continuous batch washer [washing machine]. At the end of the batch washer, the linen is loaded into a cell, where a hydraulic press forces the remaining water out.

Requirements:

- Smooth, washable floor finish.
- Wash-down and water drainage system.
- Mechanical equipment requires special foundations.

- 3 Clean linen area:** The clean linen, compacted by the hydraulic press, is transferred into tumblers, to separate the linen. It is then transported by a conveyor to the ironing area. Roller irons [fig.c], each containing three 1.5m diameter rollers, iron the linen, which is fed into it either by hand or mechanically. Ironed linen is folded mechanically and stacked, awaiting packing.

Requirements:

- Smooth, washable floor finish.
- Wash-down and water drainage system.
- Mechanical equipment requires special foundations.

- 4 Clean linen packing area:** The folded linen is packed into disinfected trolleys and send to the linen dispatch area in the delivery road.

Requirements:

- Smooth, washable floor finish.
- Wash-down and water drainage system.
- Adequate lighting during day and night.

- 5 Boiler room [fig.d]:** The boiler converts water into steam, required by the batch washers, tumblers and iron. Two boilers are installed and their use alternated every six months to allows for maintenace.

Requirements:

- Washable floor finish.
- Wash-down and water drainage system.
- Adequate lighting during day and night.
- Boilers requires specially designed foundations.
- Boiler room needs to be in close proximity to water supply and storage.
- Ventilation and high ceiling level to prevent heat build-up.

- 6 Office block:** Five offices and uni-sex toilet fulfils the needs of the facility. A new linen store and cleaning storage completes this component.

Requirements:

- Offices with adequate ventilation, lighting and floor finishes.
- Toilets and showers for five to ten personel.

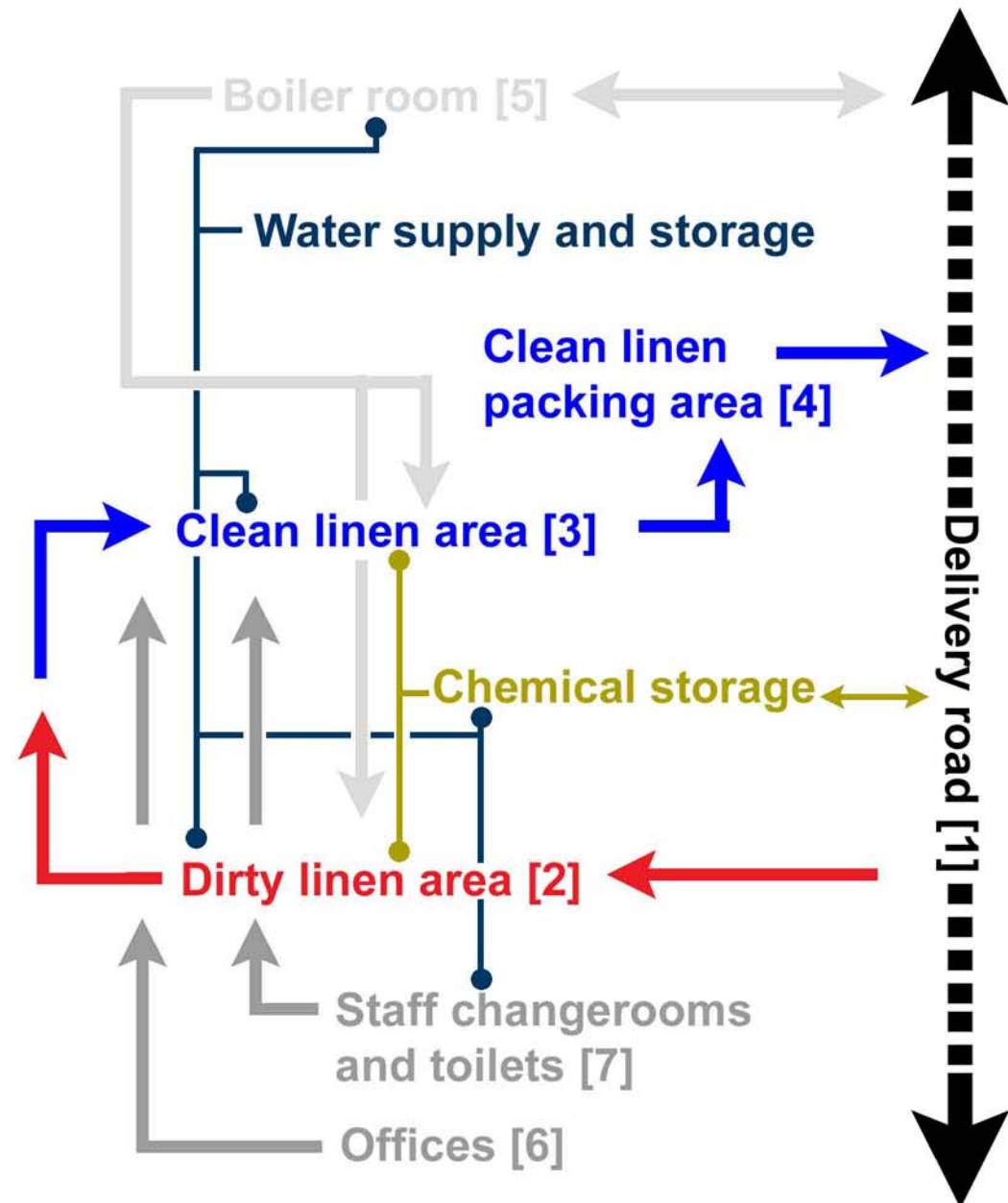
- 7 Staff changerooms and toilets:** The requires between 35 and 45 staff, more than 75% female. Nine uni-sex toilets, seperate changerooms and showers completes this component.

Requirements:

- Toilets and showers for 35 to 45 personel.
- Separate changerooms and lockers.
- Dinning room and kitchen.

Additional requirements:

- Chemical storage with access to the delivery road. This closed room should be well ventilated and placed in close proximity to the clean and dirt areas.
- Water storage allowing for three day's water supply.





Virology laboratory, University of Pretoria

This facility is one of the leading research facilities in the country, with its focus on indigenous African diseases, including AIDS, rabies and the micola virus.

Situated in a campus tower building, the facility is composed of three parts:

1 Reagent preparation room: In this room, reagents and control agents are prepared. Personnel are required to wear gloves and lab coats and hand wash basin are located at the entrance.

Requirements:

- Smooth, wash-down floor finish with rounded connection to walls
- Adequate lighting and ventilation during day and night.
- Wash-down and water drainage system.
- Dedicated hand wash basin.

2 Specimen preparation room: Specimen samples are added to the reagents prepared in area 1. This room contain several small, desk-top mechanical machines, including various centrifuges.

Requirements:

- Smooth, wash-down floor finish with rounded connection to walls
- Adequate lighting and ventilation during day and night.
- Decontamination and water drainage system.
- Dedicated hand wash basin.

3 Amplification and detection room: The prepared specimens are amplified and result given electronically. The room is divides into two areas: one contains instruments required in the amplification process, the other contain workstations, computers and printers.

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Requirements:

- Smooth, wash-down floor finish with rounded connection to walls
- Adequate lighting and ventilation during day and night.
- Decontamination and water drainage system.
- Personnel workstations

Additional requirements:

- A dedicated, ventilated enclosed space for temporary hazardous waste storage.
- A laminar flow cabinet and exhaust system.

In order to avoid carryover contamination, it is imperative that a one way flow is followed from the Preparation room to the Detection area

The Detection room should be as far away as possible from the Specimen and Reagent Preparation rooms.

