



FRAMEWORK  
PLATFORM

↑ Exit

URBAN FRAMEWORK

04:00

- Group framework
- Urban criteria analysis
  - Opportunities
  - Key interventions
- District establishment
  - Streetscapes





## Group Framework

The following framework was done as a group effort

Throughout this chapter, the application of the movement theory is reputed and supported by analysis of the surroundings and strategic placement of key interventions.

Framework proposal:

"FOR THE PEOPLE"

Vision Statement

Integrating the University and Hatfield CBD precincts into one functioning network of innovation and social cohesion, amongst public, private and academic sectors. The transformation is a twofold interdependent proposal with the single vision as driving force:

UNI-R-CITY

Unified Research City

S.T.A.R.T

Social Transition through Activating Regeneration Techniques

Establishing the Hatfield precinct as a multi-dimensional node. A place of continual social, cultural and civic regeneration. A place that defines itself as vibrant and multi-functional. Hatfield's continual transformation will be driven by the creation of interdependent mixed-use nodes - including transport, mixed use, culture, commerce and political, allowing a dynamic interface for social expression.

Hatfield must become a place for the people; a place for all ethnic and social groups.

KEY INDICATORS:

- \_ VITALITY
- \_ ACCESSIBILITY
- \_ DIVERSITY
- \_ EQUITY
- \_ CONTROL

A. Performance Criteria:

(CABE, 2006:5)

According to CABE in the United Kingdom - successful cities all around the world all have the same qualities in common. Some of these qualities have been analysed according to the study area within the University and Loftus city block and have been graded as Good, Average and Poor. In the respective performance criteria each block was surveyed and analysed to ultimately give the respective block an overall rating. (See appendix A)



A. Performance Criteria consisting of 7 categories:

### 1. Character: Sense of place and history

A place that responds to and reinforces locally distinctive patterns of development and landscape:

- \_ Distinctive landscapes
- \_ Natural features
- \_ Locally distinctive buildings
- \_ Streets and street patterns
- \_ Special spaces
- \_ Skylines and roofscapes
- \_ Building materials
- \_ Local culture and traditions
- \_ Avoiding standard solutions



fig. 4.1

## 2. Continuity and enclosure: Clarity of form

A place where public and private space are clearly distinguished

- Enclosing streets and other spaces by buildings and trees of a scale that feels comfortable
- Streets, footpaths and open spaces overlooked by buildings
- No leftover spaces unused and uncared for
- Avoiding gaps in the line of buildings

fig. 4.2



## 3. Quality of the public realm: Sense of wellbeing and amenity

A place with public spaces and routes that is lively and pleasant to use

- Suited to the needs of everyone, including disabled and elderly people
- A feeling of safety and security
- Uncluttered and easily maintained
- Carefully detailed with integrated public art
- Well-designed lighting and street furniture
- Attractive and robust planting



fig. 4.3

## 4. Ease of movement: Connectivity and permeability

A place that is easy to get to and move through

- Roads, footpaths and public spaces connected into well-used routes
- Density highest where access to public transport is best
- Direct routes that lead to where people want to go
- A choice of safe, high quality routes
- Easy accessibility

fig. 4.4

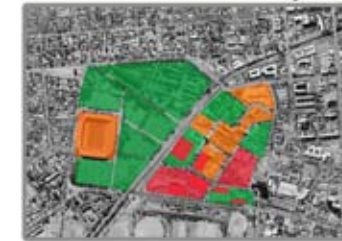


## 5. Adaptability: Ease of change

A place that can change easily

- Buildings and areas adaptable to a variety of present and future uses
- Possibilities for gradual change
- Flexible uses

fig. 4.5

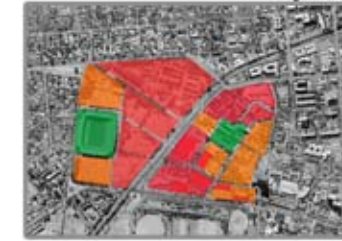


## 6. Legibility: Ease of understanding

A place that has a clear image and is easy to understand

- Landmarks and focal points
- Clear and easily navigable routes
- Gateways to particular areas
- Works of art and craft
- Signage and waymarkers
- Lighting
- Views

fig. 4.6



## 7. Diversity: Ease of choice

A place with variety and mixed uses

- A mix of compatible uses and tenures
- Variety of layout and building form
- Diverse communities and cultures
- Variety of architectural styles
- Biodiversity

fig. 4.7





## B. Performance criteria according to the Built Environment

The form of development is the physical expression of urban design. It consists of the relationships, shape and size of buildings, structures and spaces. It will influence the user's activity and movement in a place and so is fundamental to the success of a place. The most important elements of development form are listed here. Each of these elements are informed by the eight urban design qualities described to create the physical components of a plan. (Commission of Architecture and the Built Environment)

### 1 Urban structure: The essential diagram of a place showing:

- The relationship between new development and nature, land form and existing buildings
- The framework of routes and spaces that connect locally and more widely, and the way developments, routes, open spaces and precincts relate to one another

fig. 4.8



### 2 Urban grain: The nature and extent of the subdivision of the area into smaller development parcels showing:

- The pattern and scale of streets, blocks and plots
- The rhythm of building frontages along the street as a reflection of the plot subdivision



fig. 4.9



### 3 Density and mix: The amount of development and the range of uses this influences, to include:

- The intensity of activity relative



fig. 4.10

### 4 Height and massing

The scale of a building in relation to:

- The arrangement, volume and shape of a building or group of buildings in relation to other buildings and spaces
- The size of parts of a building and its details, particularly in relation to the size of a person



fig. 4.11

### 5. Building type

- The size of the building footprint its storey heights and means and location of access
- The relationship of the building to adjacent buildings and how it relates to external space at ground floor level
- The nature and extent of the building's setback at upper floors and roof treatment



fig. 4.12

## 6 Facade and interface

The relationship of the building to the street:

- \_ The rhythm, pattern and harmony of its openings relative to its enclosure
- \_ The nature of the setback, boundary treatment and its frontage condition at street level
- \_ The architectural expression of its entrances, corners, roofscape and projection



fig. 4.13

## 7. Details and materials

The appearance of the building in relation to:

- \_ The art, craftsmanship, building techniques and detail of the various building components true to local context
- \_ The texture, colour, pattern, durability and treatment of its materials
- \_ Materials sourced from local and/or sustainable sources, including recycled materials where possible
- \_ The lighting, signage and treatment of shopfronts, entrances and building security



fig. 4.14

## 8 Streetscape and landscape

The design of route and spaces, their microclimate, ecology and biodiversity to include:

- \_ Paving, planting and street furniture
- \_ The integration of public art, lighting, signing and waymarkers
- \_ The treatment of parks, play areas, natural features and recreation areas
- \_ Consideration of long term management and maintenance issues



fig. 4.15

Average rating of each block:

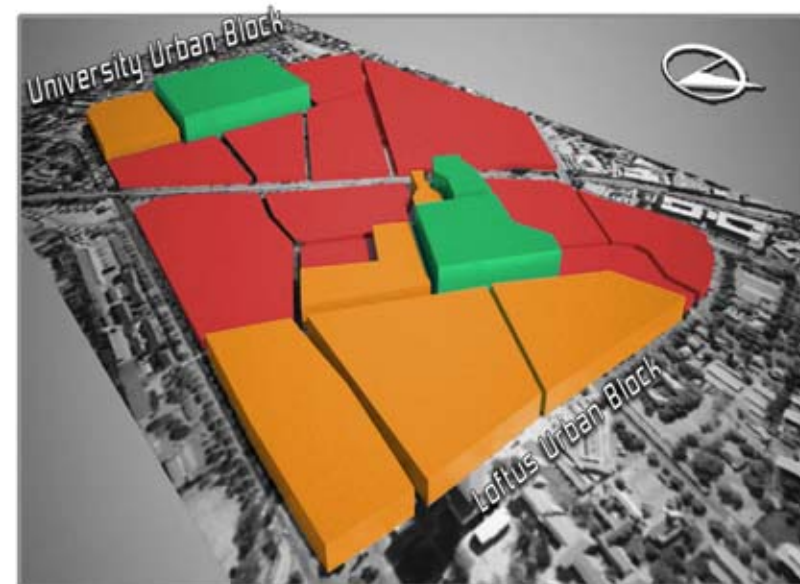


fig. 4.16



### Conclusion:

Subsequently it is clear from the 20 blocks analysed, 11 of these blocks are below standard (fig. 4.16). Most of which are concentrated around the project area under investigation. This is due to the lack of continuous street edges, mixed uses and permeability.



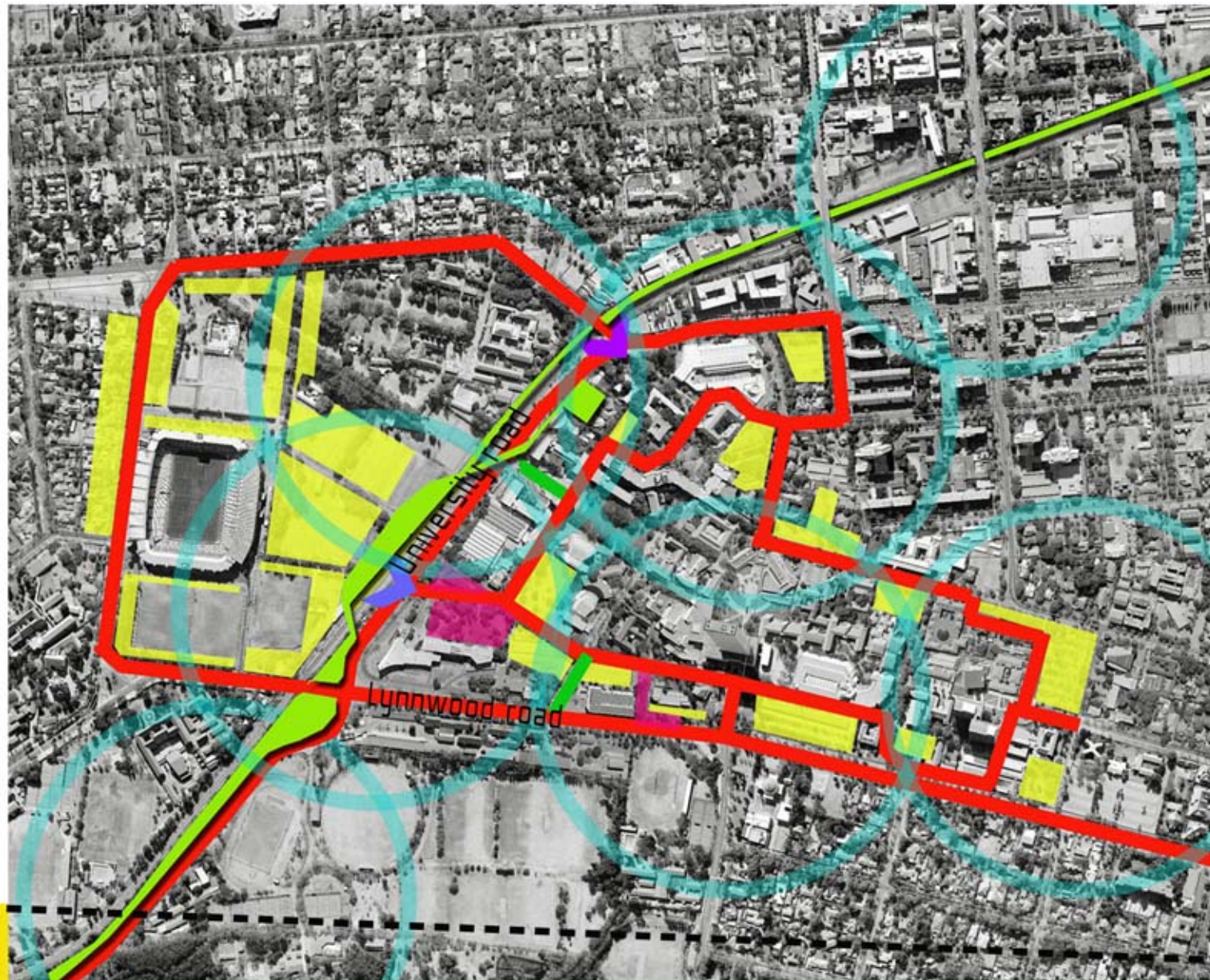
# Opportunities

- Gateway/Landmark
- Visual Arts Extension
- Education Development
- Botany Extension
- Residential & Mixed-use
- Research & Mixed-use
- Commerce & Mixed-use
- Modal Interchange
- Refurbishment

04:05



The opportunity for a modal interchange linking to Loftus Versfeld Stadium via a new mixed development within the new city grid.



## Key Interventions

-  Pedestrian only routes
-  New vehicle & pedestrian entrance
-  New pedestrian entrance
-  400m walking circles
-  New improved green threshold areas
-  Improved pedestrian & vehicle routes
-  Densification
-  New public green route linked between Gautrain Station & Magnolia Dall Park

04:06



The establishment of the Green activity route stretching from Magnolia Dell urban park to the new Gautrain Station. Reinforcing the existing movement routes of pedestrians



#### Urban design proposal:

"...the relationship between different buildings; the relationship between buildings and streets, squares, parks and waterways and other spaces which make up the public domain; the nature and quality of the public domain itself; the relationship of one part of a village, town or city, with other parts; and the patterns of movements and activity which are thereby established: in short, the complex relationships between all the elements of built and unbuilt space"  
(Department of the Environment: 1997)

Initial key interventions comprise the implementation of various urban design strategies and protocols. The guiding objectives behind these principles are as set out in the "Vision Statement" for the areas proposed future development strategy.  
The interventions at the urban level include the implementation of pedestrian network development guidelines, proposal and guidelines for densification and development as well as the reuse of underutilized threshold green spaces.

#### District identification and densification:

The specific Study area is riddled with low density low efficiency land use in the form of parking areas and unused threshold green spaces. These areas have been identified as areas that are underutilized and have good development potential without impacting on the community environment that is being developed on campus and surroundings.

#### Proposed district establishments:

The improvement of integration in terms of access and connection to enhance sport, scientific and academic collaboration and interaction is the key driver to a successful precinct development. The new precincts will serve to develop and sustain a community where interaction and interdisciplinary processes with the community is implied. The new precincts located in close proximity to one another in the framework is to encourage design that facilitates interaction between these diverse fields of study, opening up new avenues of study and collaboration, streamlining these interdependent processes by, cross pollination and allowing for resource, facility allocation and sharing.

The identified precincts in the study area include:

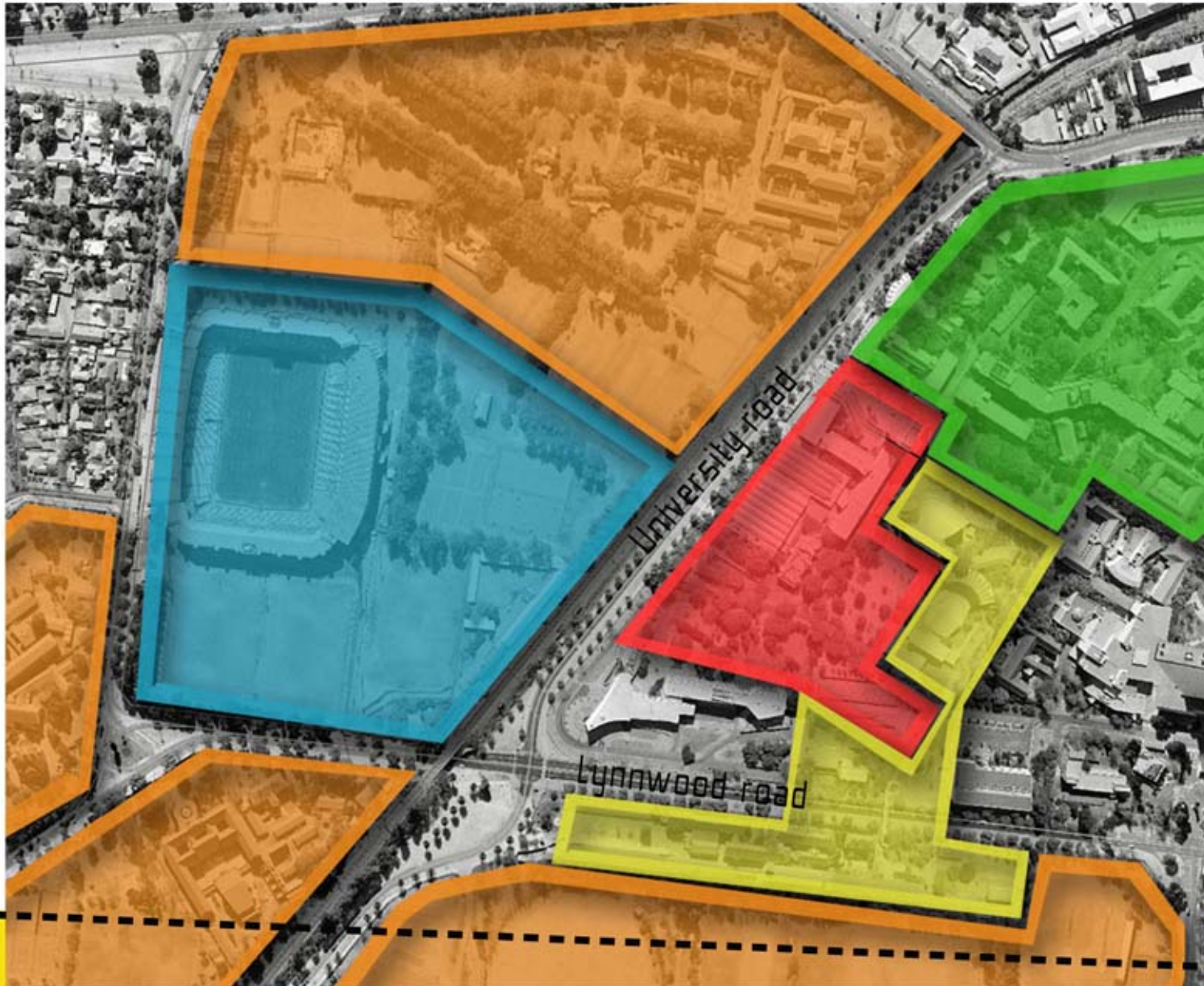
- \_ Research Precinct
- \_ Arts Precinct
- \_ Sport and recreation Precinct
- \_ Secondary Academic Precinct
- \_ Natural Science Precinct

#### Districts:






"...sections of the city , which the observer mentally enters 'inside of', and which are recognizable as having a some common, identifying character." (Lynch,1960:47)

04:07





## District Establishment

-  Sport & Recreation
-  Natural Science
-  Research
-  Arts & Culture
-  Education

04:08





## Pedestrian streets

"Streets are the arteries of our communities - a community's success can depend on how well it is connected to local services and the wider world. However, it is all too easy to forget that streets are not just there to get people from A to B. In reality they are the tissue that connects and keeps the urban body of the campus alive. They form vital components of residential areas and greatly affect the overall quality of life for local people." Streets aren't just routes from A to B, they are spaces serving a civic function.

We have proposed four scales of intervention at street level, each of them suited to a different pedestrian environment. One at a main artery scale (fig. 4.20), to accommodate pedestrians comfortably with high speed traffic, secondly traffic calming is introduced around campus (fig. 4.19), thirdly at campus ring road scale (fig. 4.17) to accommodate both intercampus vehicle and pedestrian traffic with prominence being given to pedestrians and lastly at a secondary artery scale to accommodate users within the Loftus precinct (fig. 4.18).

fig. 4.18

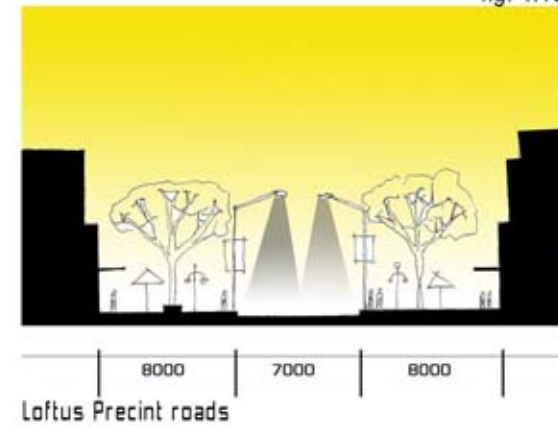


fig. 4.17

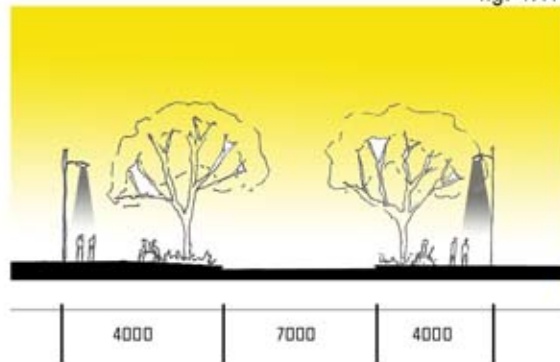


fig. 4.19

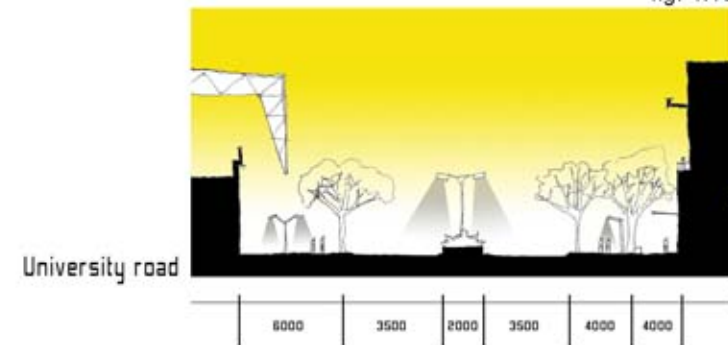
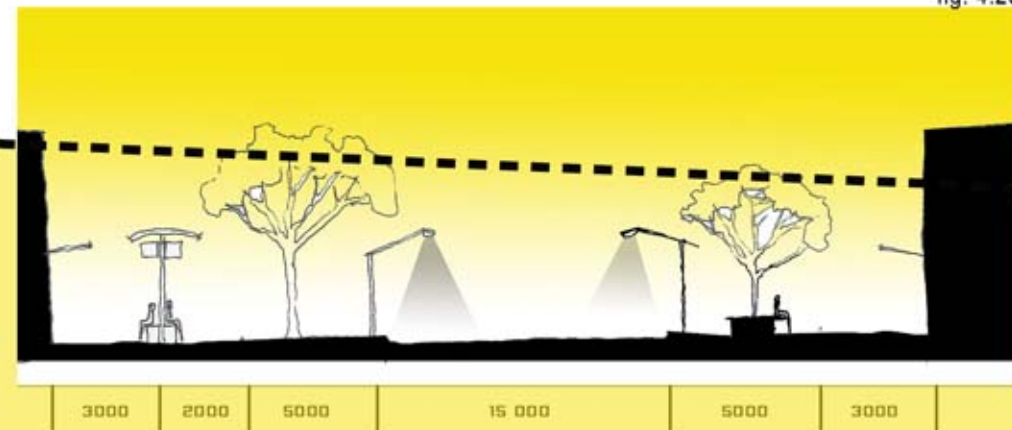
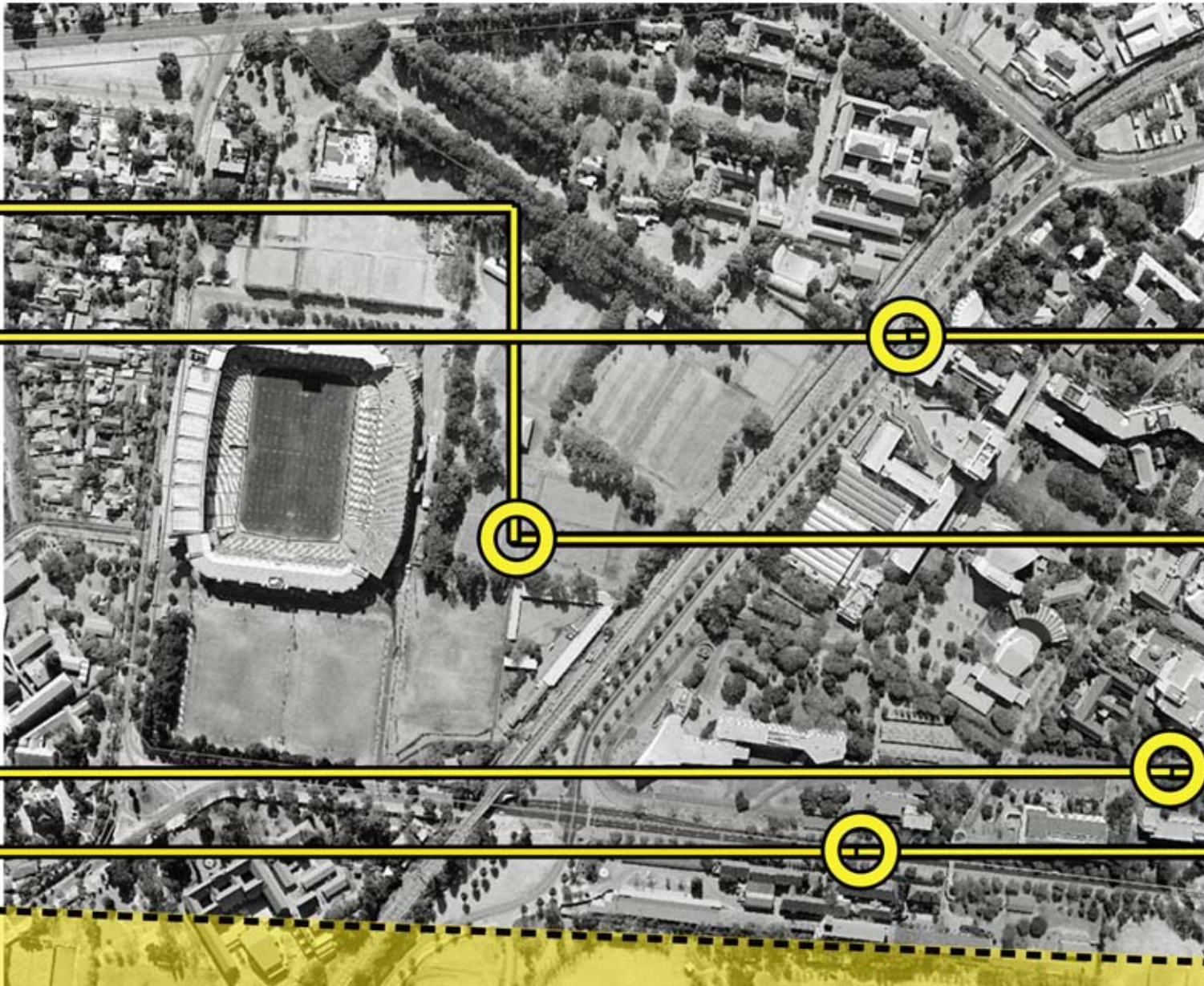


fig. 4.20

Lynnwood road





University road

04:10

Loftus Precinct roads

University ringroad

Lynnwood road

