

# Worlds best sustainability practice at Kogarah Town Square

Rod Simpson

194 apartments

2500sqm of retail space

2500sqm of commercial space

224 space public carpark

240sqm civic exhibition space



## Worlds best sustainability practice at Kogarah Town Square

Rod Simpson?+, Peter Smith, Ross Chalmers  
and dedicated team at Allen Jack + Cottier Architects

Enlightened Bureaucrats at Kogarah

Elected politicians prepared to be swayed

Urban design by Civitas, Russell Olsson, Chip and Wendy, AJ+C

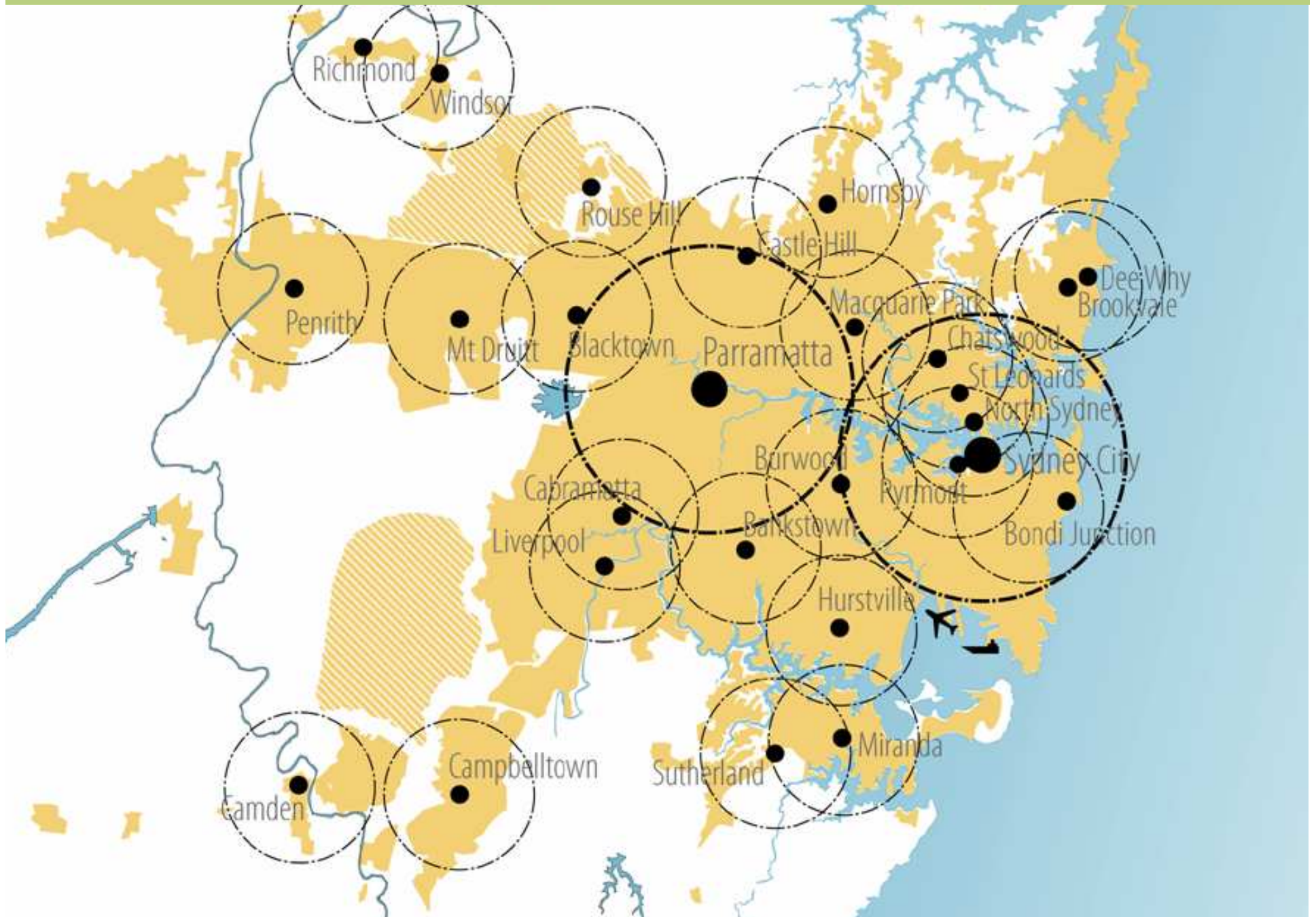
A developer keen to establish a presence in Oz  
(and probably didn't fully appreciate what they had got into)

Tradesmen who couldn't understand why the drawings should take  
precedence over what they did yesterday

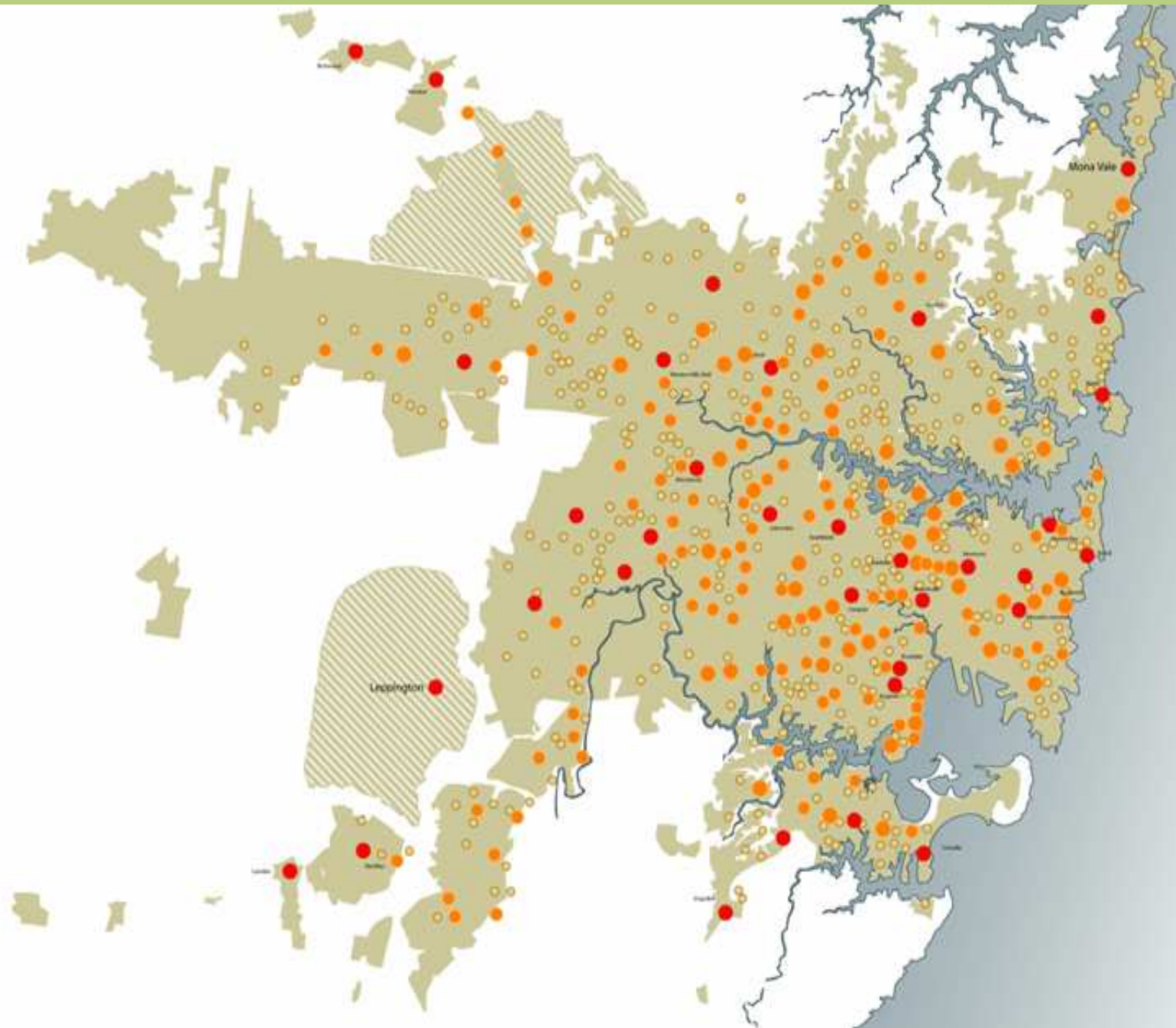
A Commonwealth Government very interested in  
“demonstration projects” rather than systemic change

The momentum of the project that became unstoppable  
- building a constituency and a project that was longer than a political term

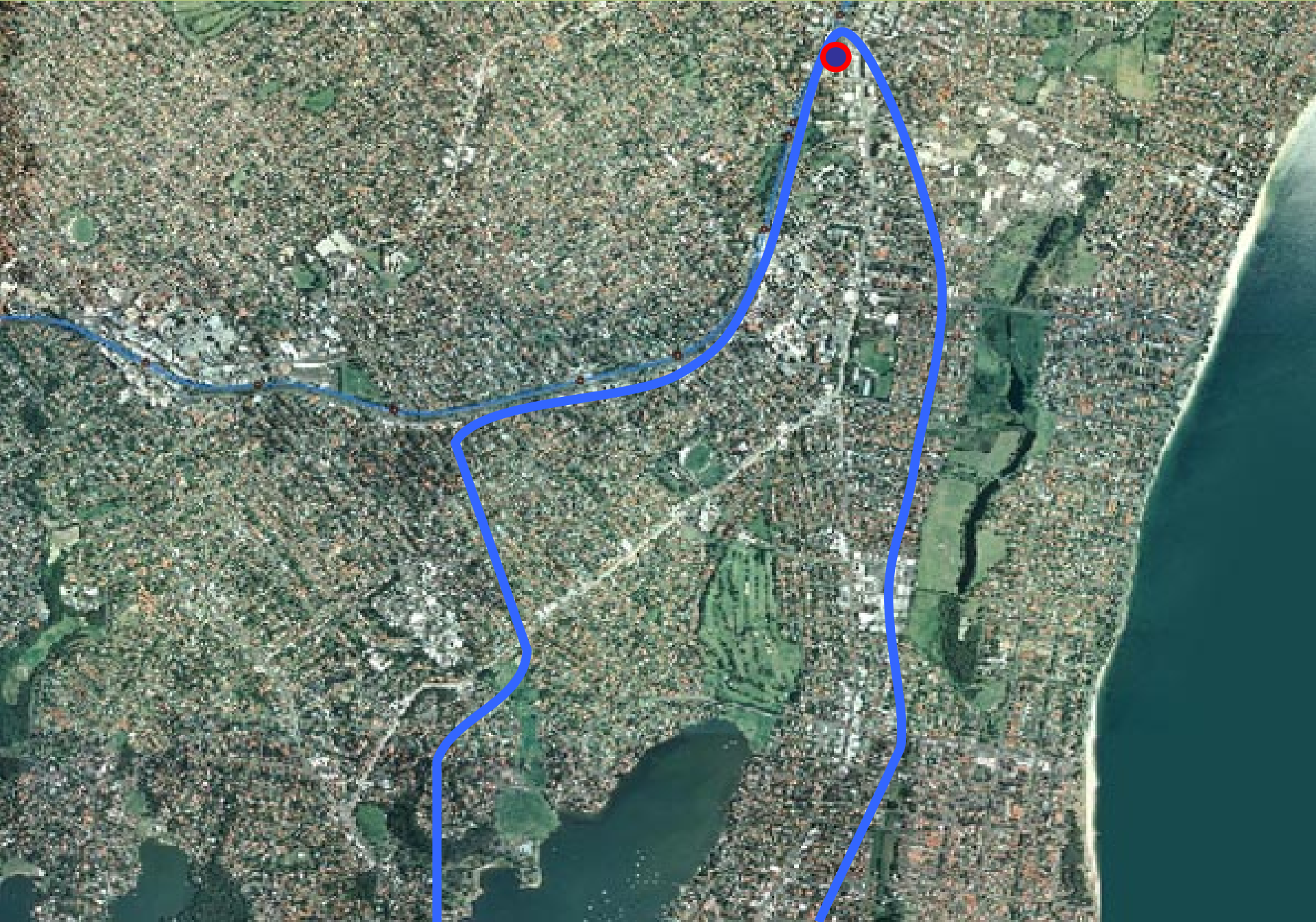
# Major centres in Sydney



# Towns villages and neighbourhoods



# Kogarah and its sub-catchment



Town centre



# The site: sacred parking site, houses and churches



- Hospital
- Presbyterian Church
- Dept Health
- Car Park
- Orthodox Church
- Council Offices
- TAFE
- St George Bank
- Rail Station

# Varying Objectives

Council

Test DCP

Return on equity

Model

Community

Carparking

Identity (not Hurstville)

Developer

Profit and Profile

Architects

Fame and Fortune





# Process

Community Consultation

Town Centre DCP

Detailed DCP for Site

Combined commercial and architectural tender

Council risk averse- tender collapses

Good money but not preferred design

Marriage of convenience

Project promotion- model development

Detail in Development Approval crucial to quality

Developer objectives - detailed design

Council implementation - seeing it through

# Urban Design



## Town Centre Precincts



The Town Centre consists of eight precincts based on the individual physical urban characteristics of each area. We have identified the existing character of each precinct and have set a desired future of the character for the areas.

- Railway Parade Precinct
- Premier Street Precinct
- Montgomery Street Precinct
- Belgrave Street Precinct
- Kensington Street Precinct
- The Hospital Precinct
- Chapel Street Precinct
- Princess Highway Precinct

### DESIRED FUTURE CHARACTER

The community wants Railway Parade to continue to be the main street of Kogarah Village, with retail and associated residential and commercial uses. Historical buildings will be protected and enhanced by centring programs.

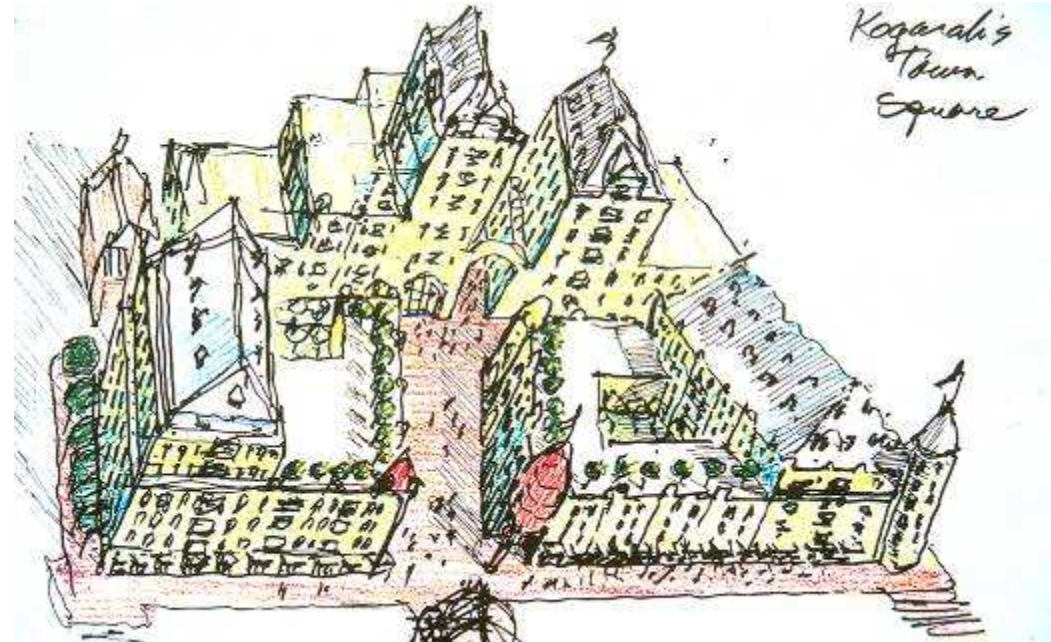
Montgomery Street will be reinforced as a major mixed use precinct with retail, commercial and residential uses.

Belgrave Street is an important pedestrian route between the railway station and hospitals and new civic, medical, retail and residential uses will be encouraged. A new open space is planned opposite the Great Orthodox Church, which will provide new views for people to enjoy lunch.

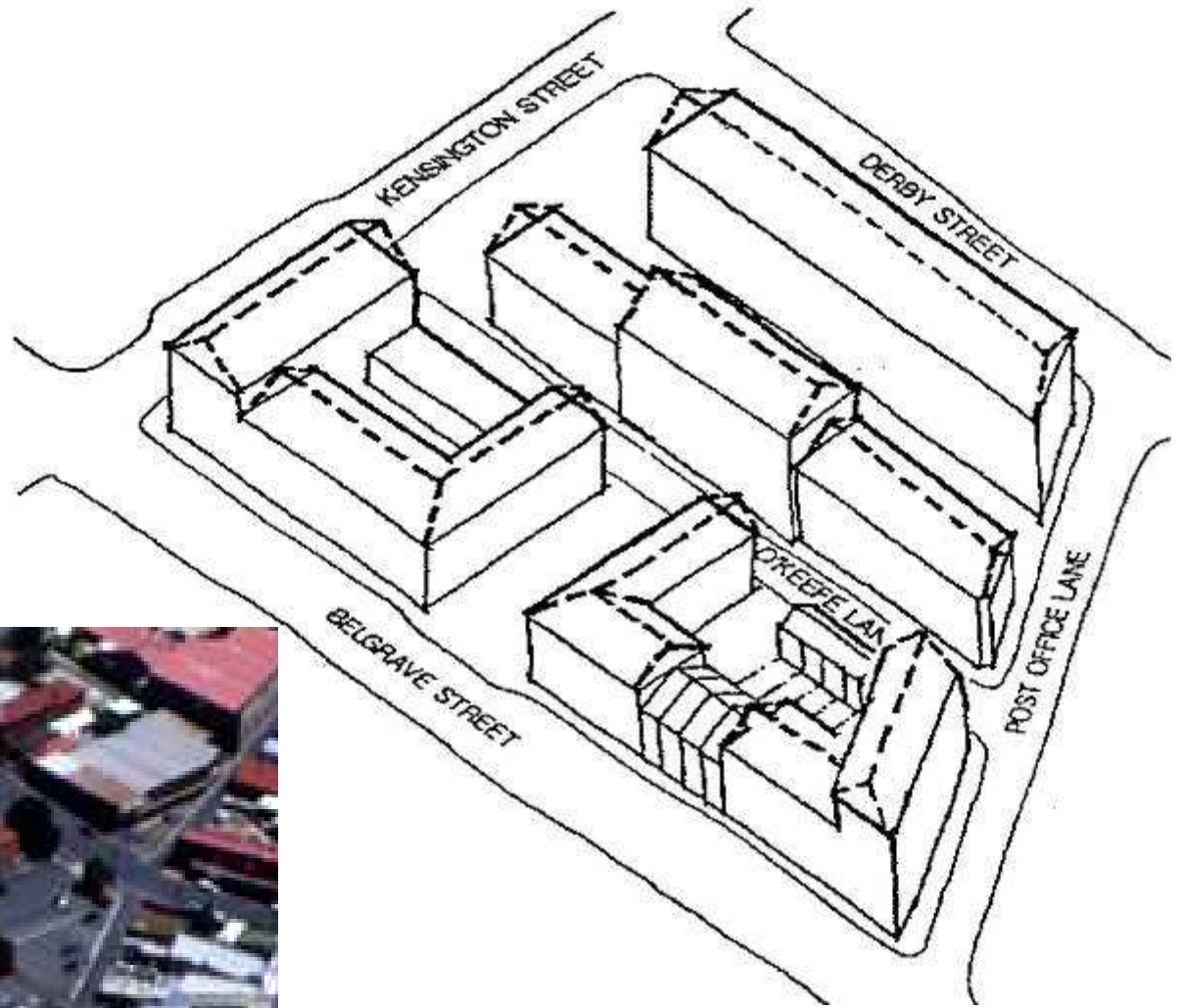
Kensington Street is proposed to become the new backbone of the town centre, lined with deep planted trees, settings and new medium density housing. The interactions will be emphasized with building articulation and taller and denser structures on the corner.

The Princess Highway, Premier Street, Chapel Street and The Hospital precincts have also defined future characters that build upon their existing characters and preserve the Kogarah urban village atmosphere.

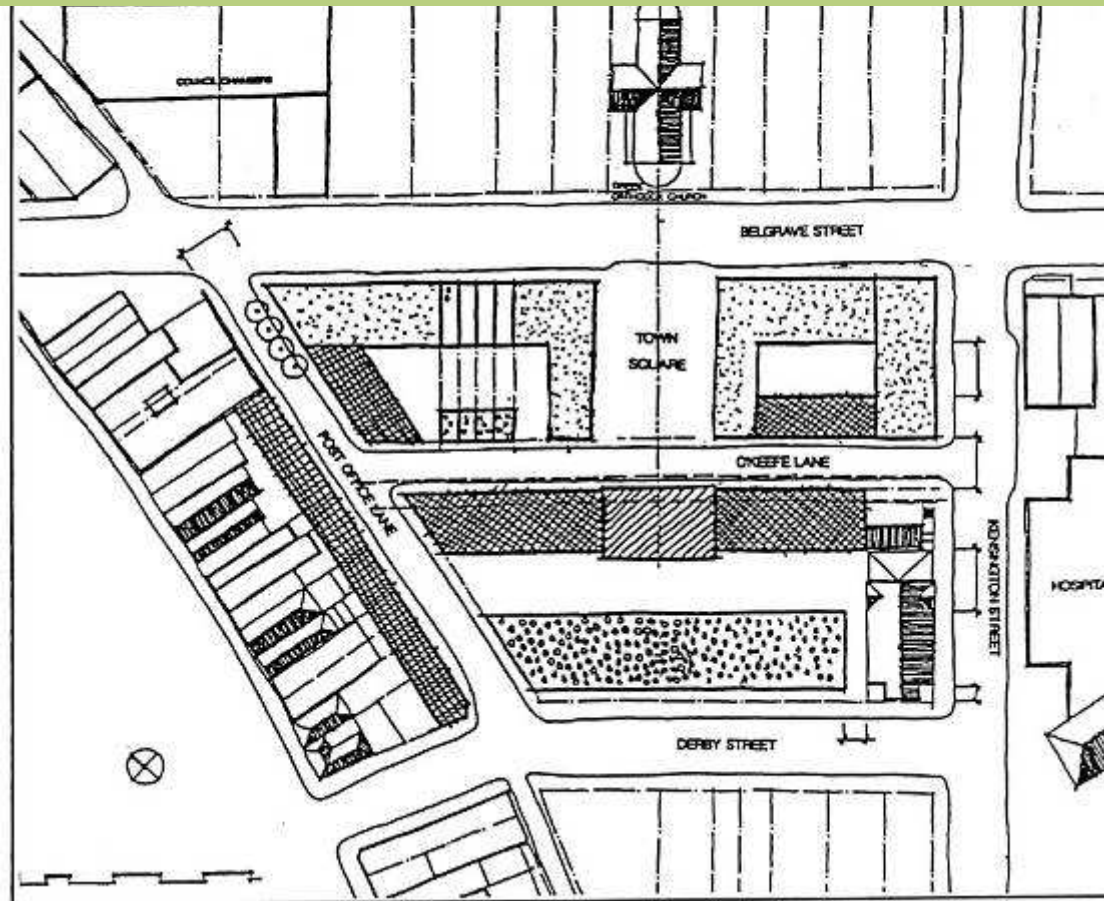
Have your say








# Urban Design- Built form



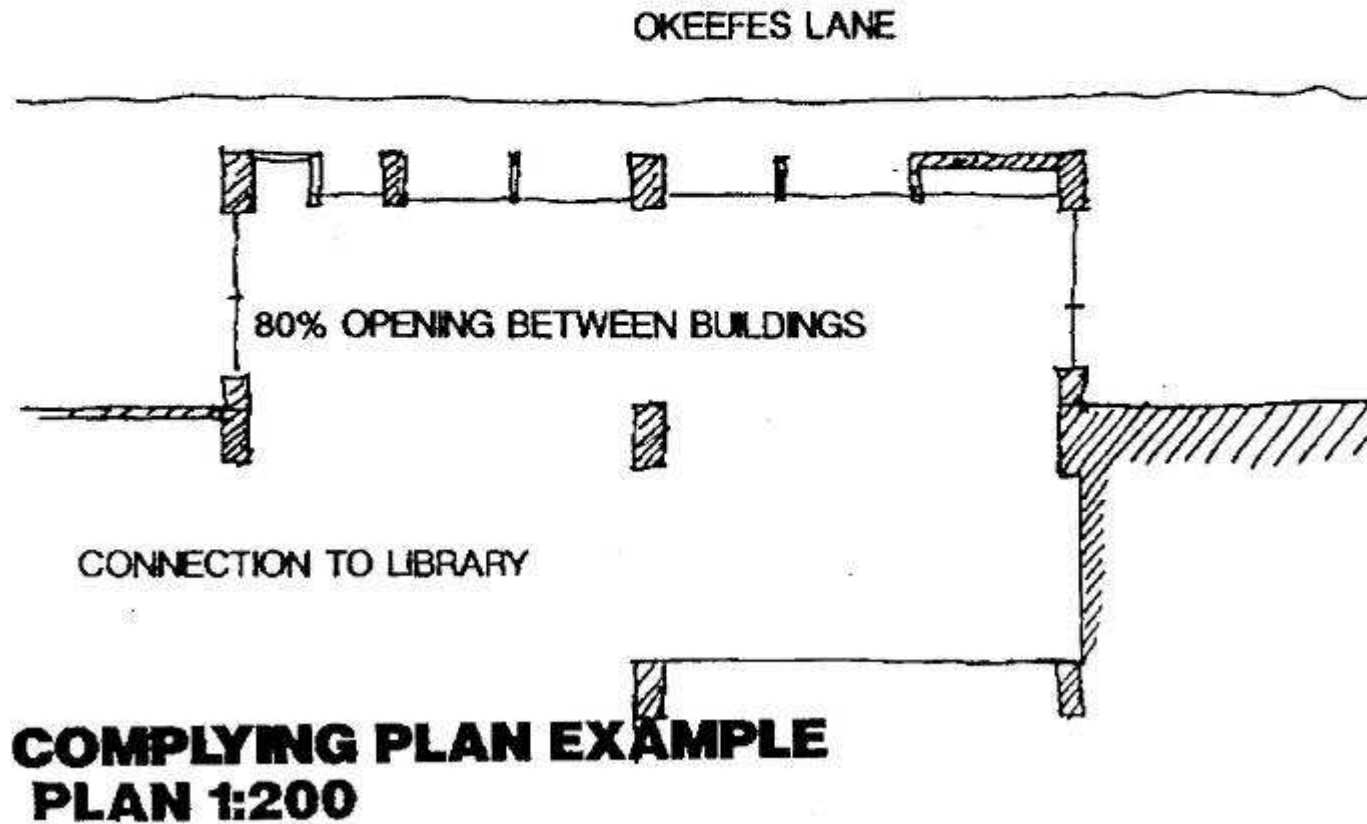
# Urban Design - specification of uses



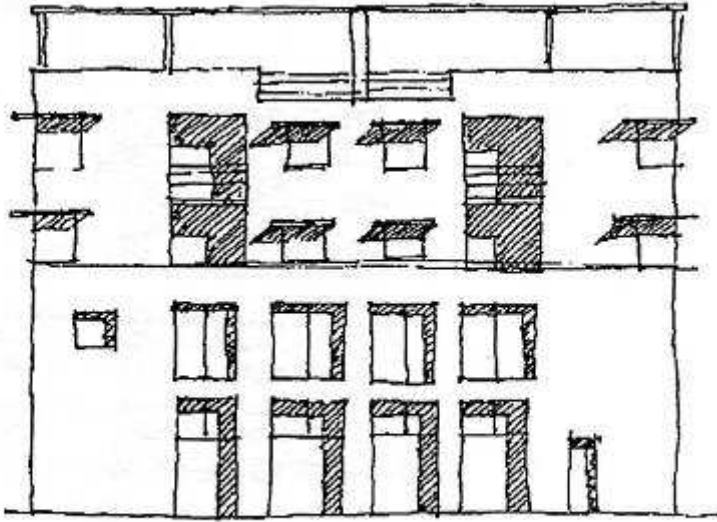
-  RESIDENTIAL  
RETAIL ON GROUND FLOOR
-  RESIDENTIAL  
COMMUNITY FACILITIES  
ON GROUND + FIRST FLOOR
-  RESIDENTIAL
-  GARAGES WITH  
STUDIOS OVER
-  RESIDENTIAL  
GROUND FLOOR MAY  
BE SMALL BUSINESS



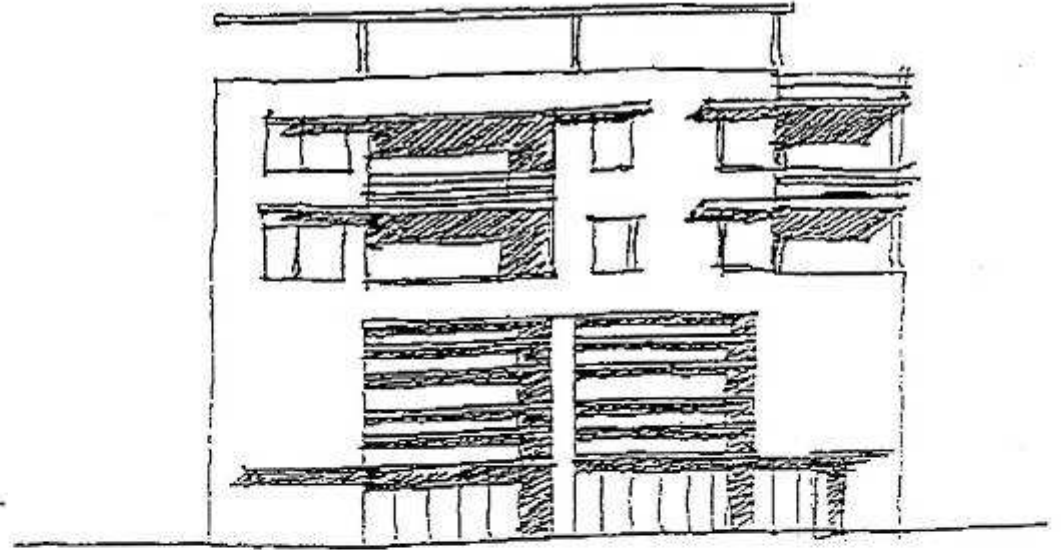
# Urban Design - using development control as a last resort



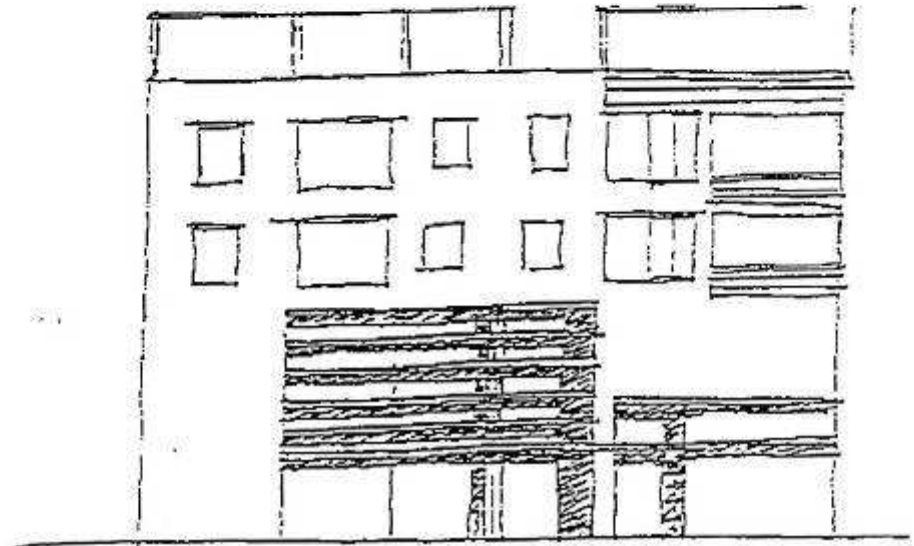
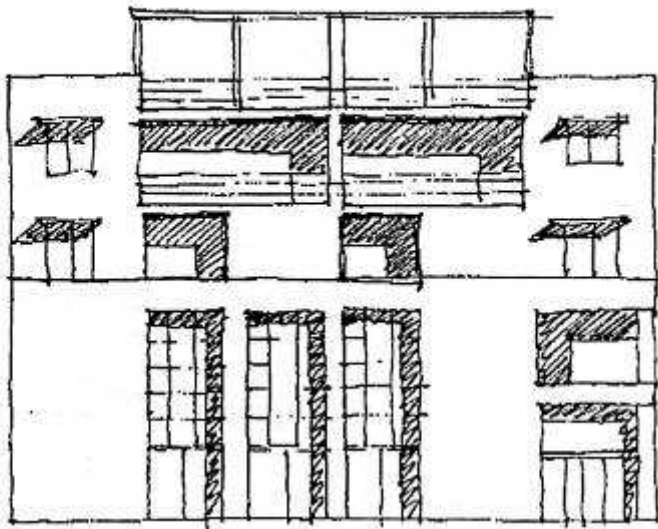
# Urban Design - the last resort facade



**POSSIBLE FACADES**



TOWN SQUARE



# Urban Design - responding to context



**KOGARAH POST OFFICE, c.1892.** The early office at Kogarah was in Rocky Point Road, but with the coming of the railway soon moved to rented premises, first in Regent Street then in Railway Parade. The first vested post office building, shown here soon after completion in 1892, was on the corner of Railway and Belgrave Street. The building has been preserved because of its unusual and interesting architecture.





# Urban Design - design OK money not so good



The sponsors get their day in the sun



## Urban Design- the last resort as built



## Urban Design - re-graded and activated lane - stratum



## Urban Design - home office/ professional suite in operation



## Architectural expression - minimal redundancy



## Architectural expression - minimal redundancy



## Urban Design - the DCP applied





# Passive Design

75% of apartments cross-ventilated

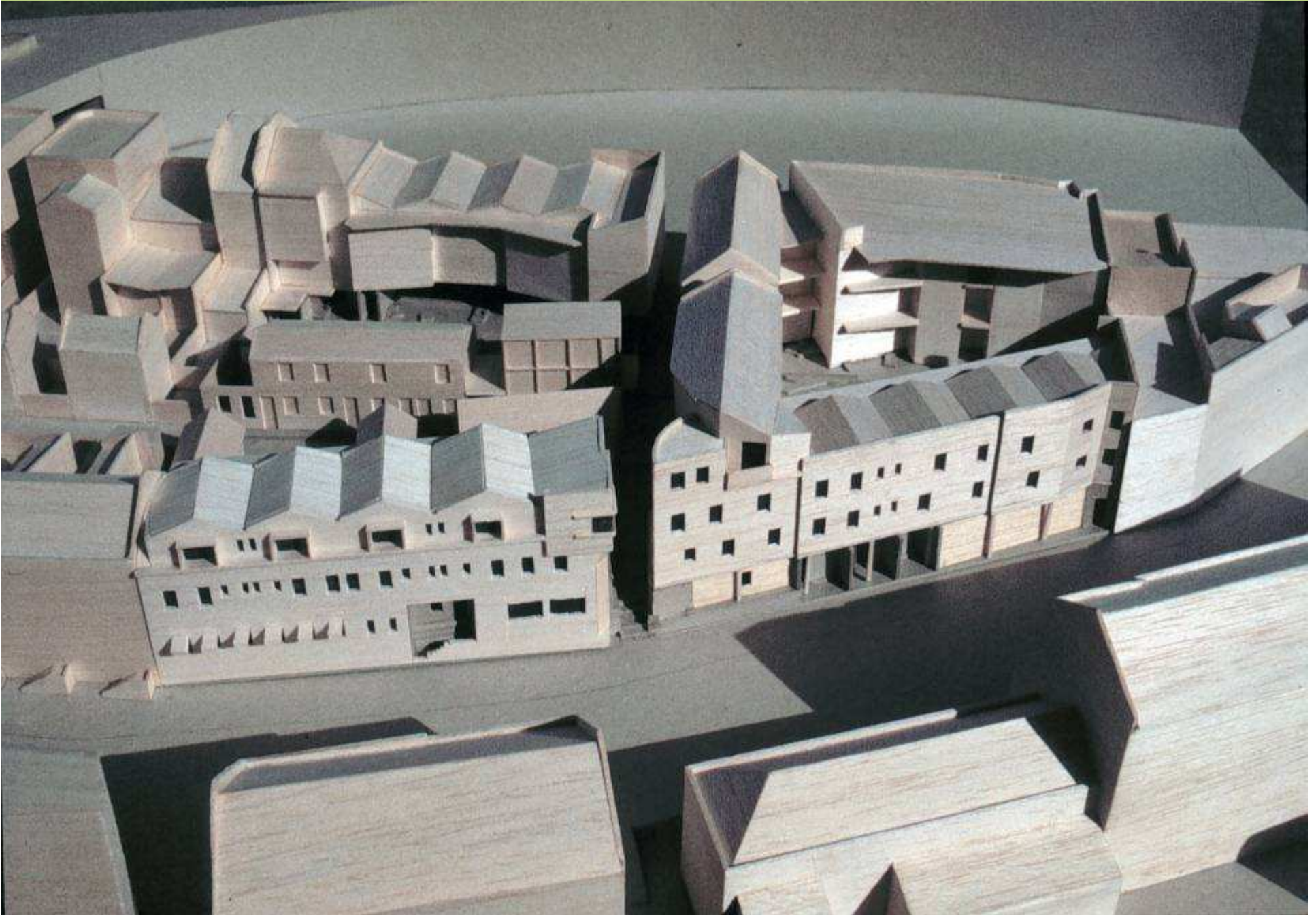
87% northerly aspect

60% naturally vented+lit baths

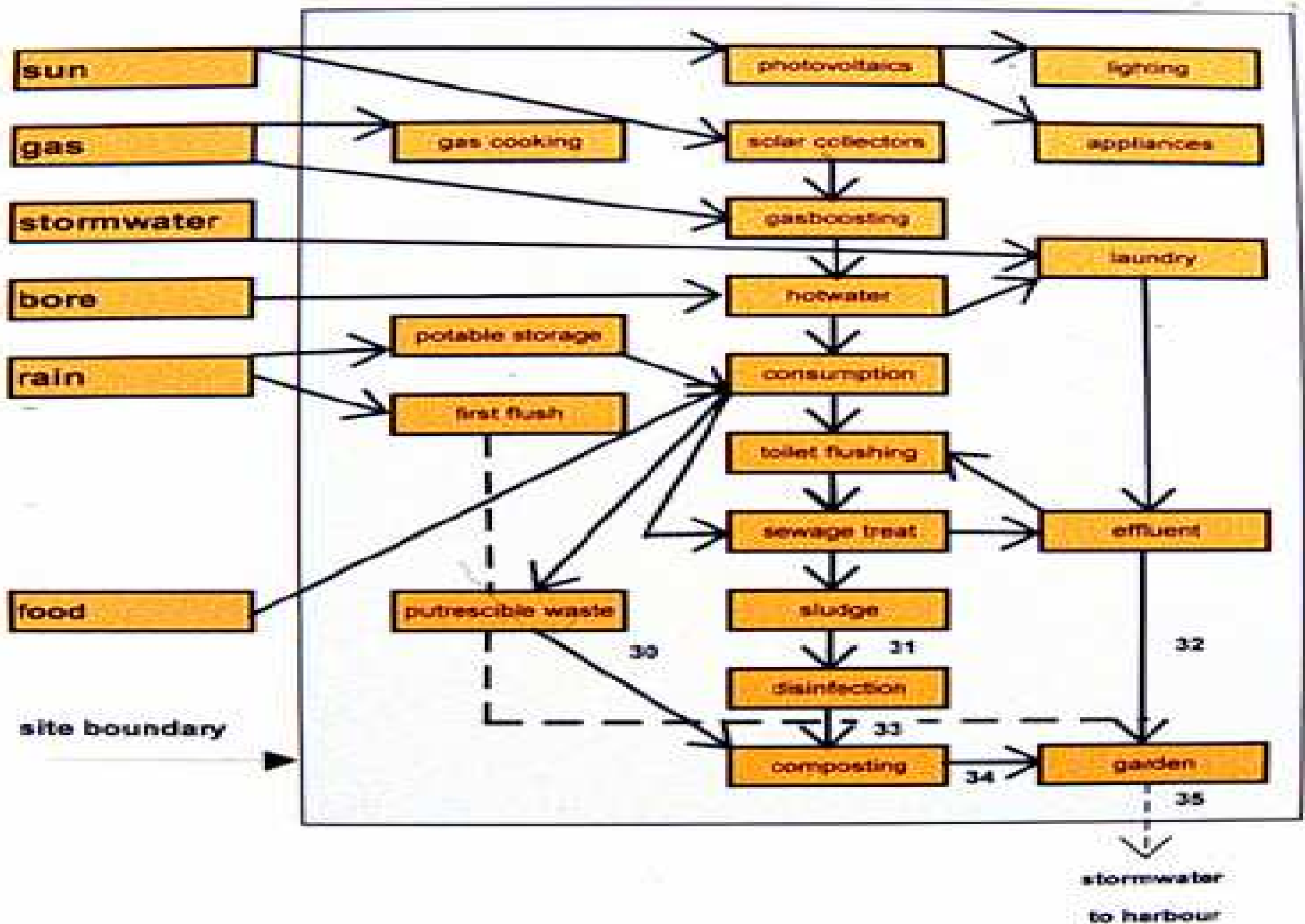
most kitchens on outside wall



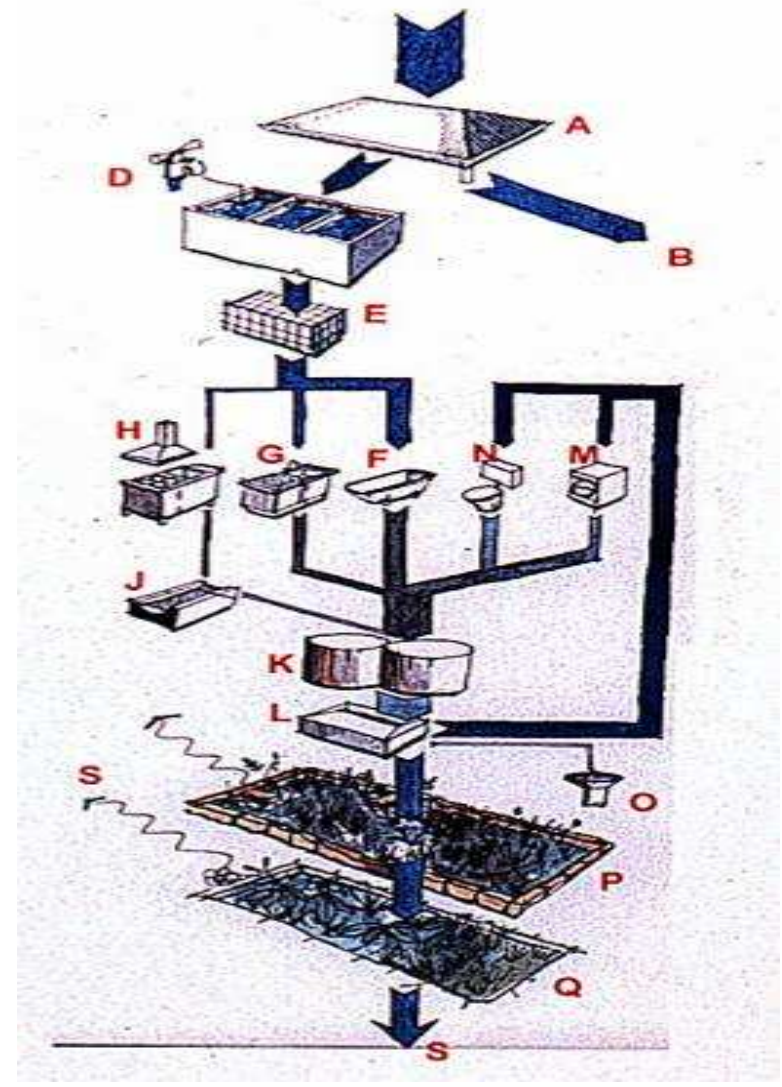
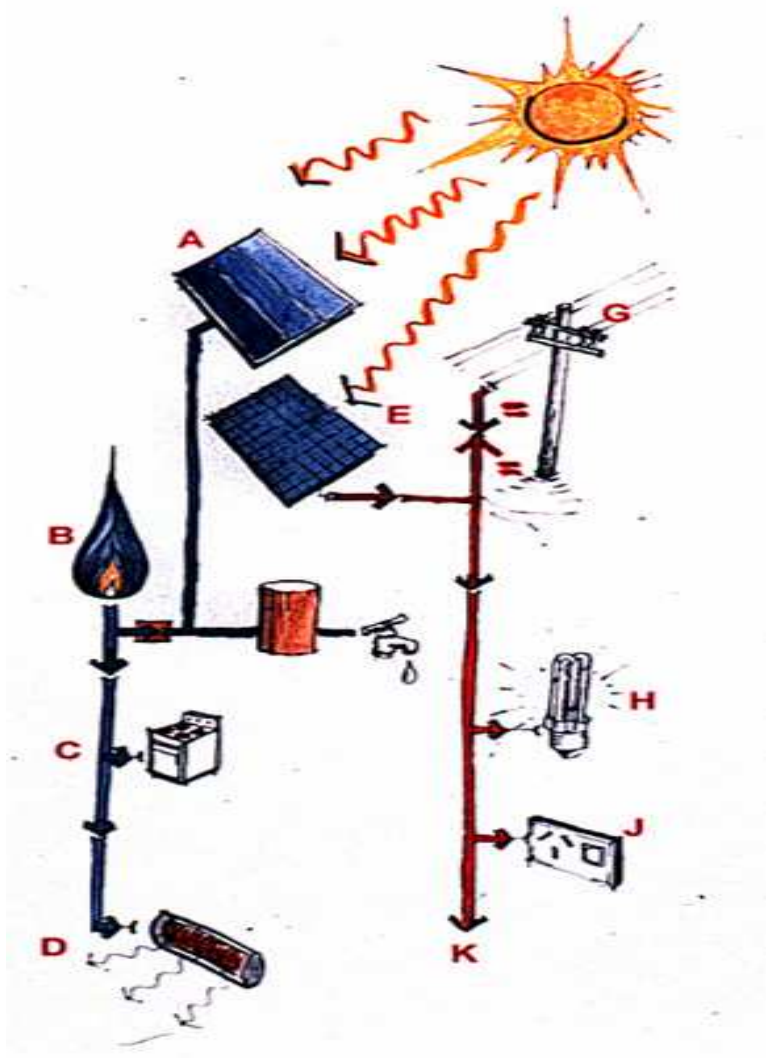
# Environmental Design



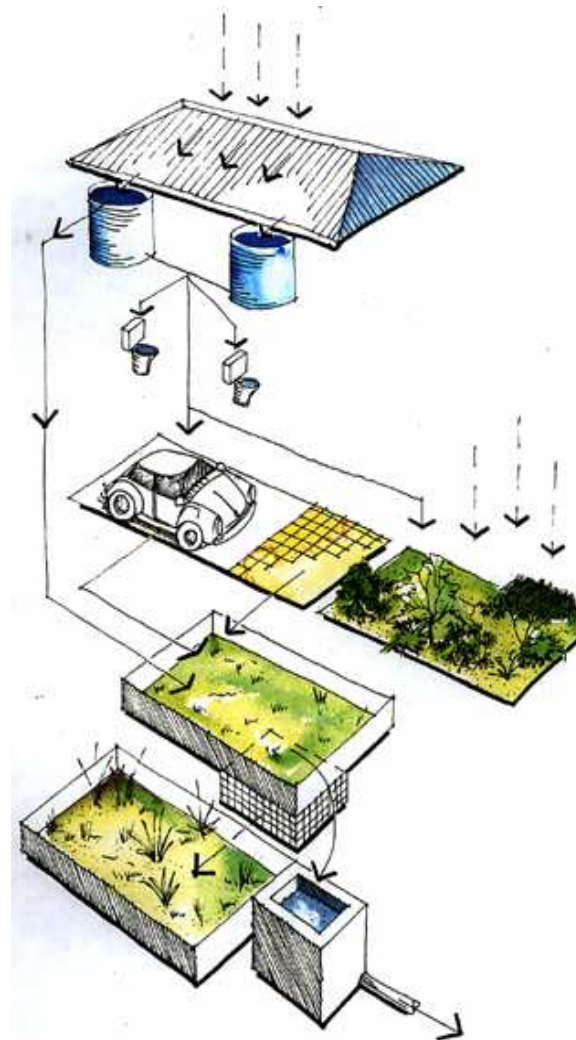
# Integrated systems



# Integrated systems



# Integrated Water and Landscape Design- Allawah Model



- tertiary treatment for up to 1: 3 month

- flood control

- rainwater for irrigation, carwashing, toilet flushing for 38 of 42 bathrooms

## *EQUALS*

- 600,000 litres of potable water saved

- 93% of stormwater treated to tertiary standard

# Integrated Water Management

48% less mains water

\$2 per sqm for treatment

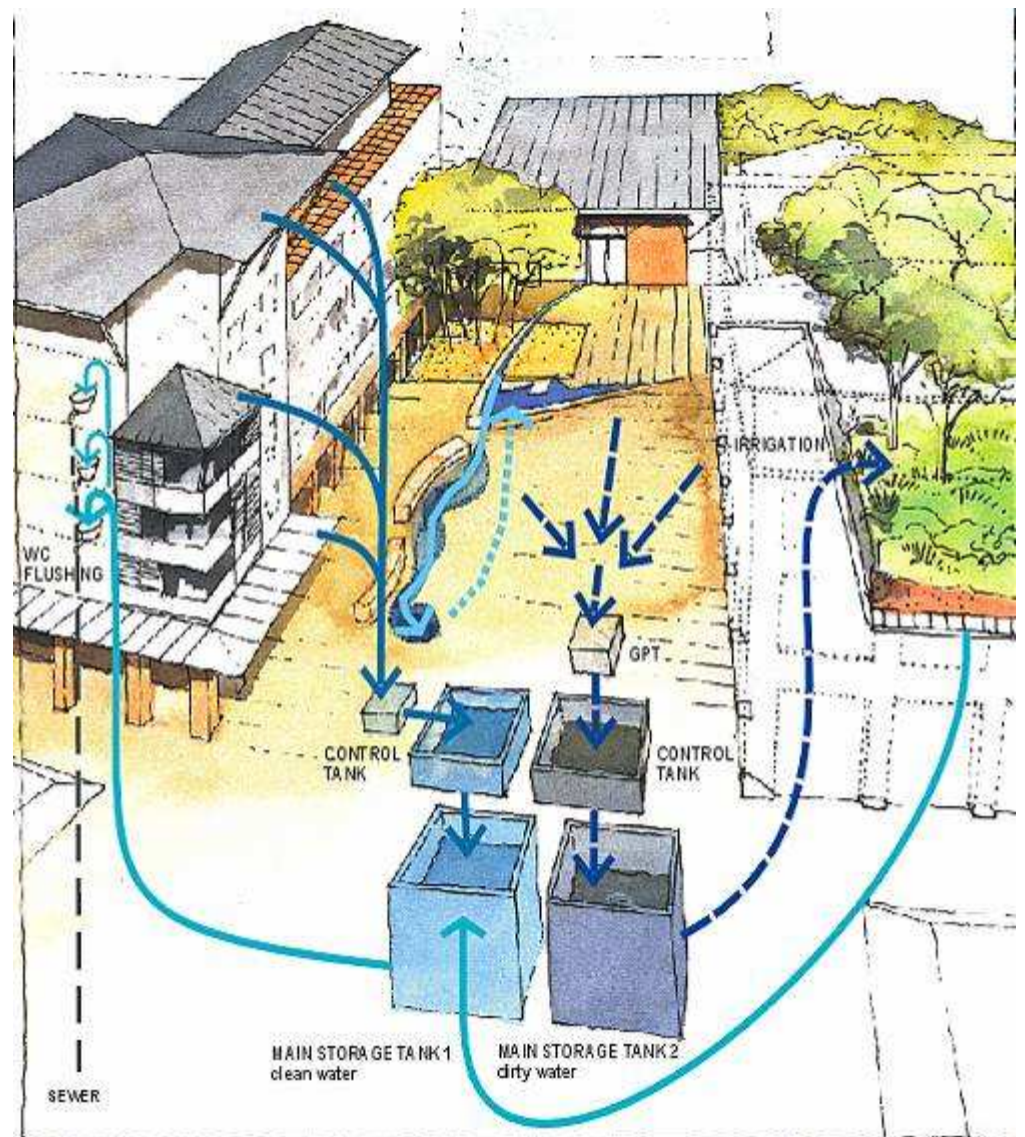
\$10 per sqm for reuse

Saving 5789kL per annum of potable town water that would otherwise be used for irrigation.

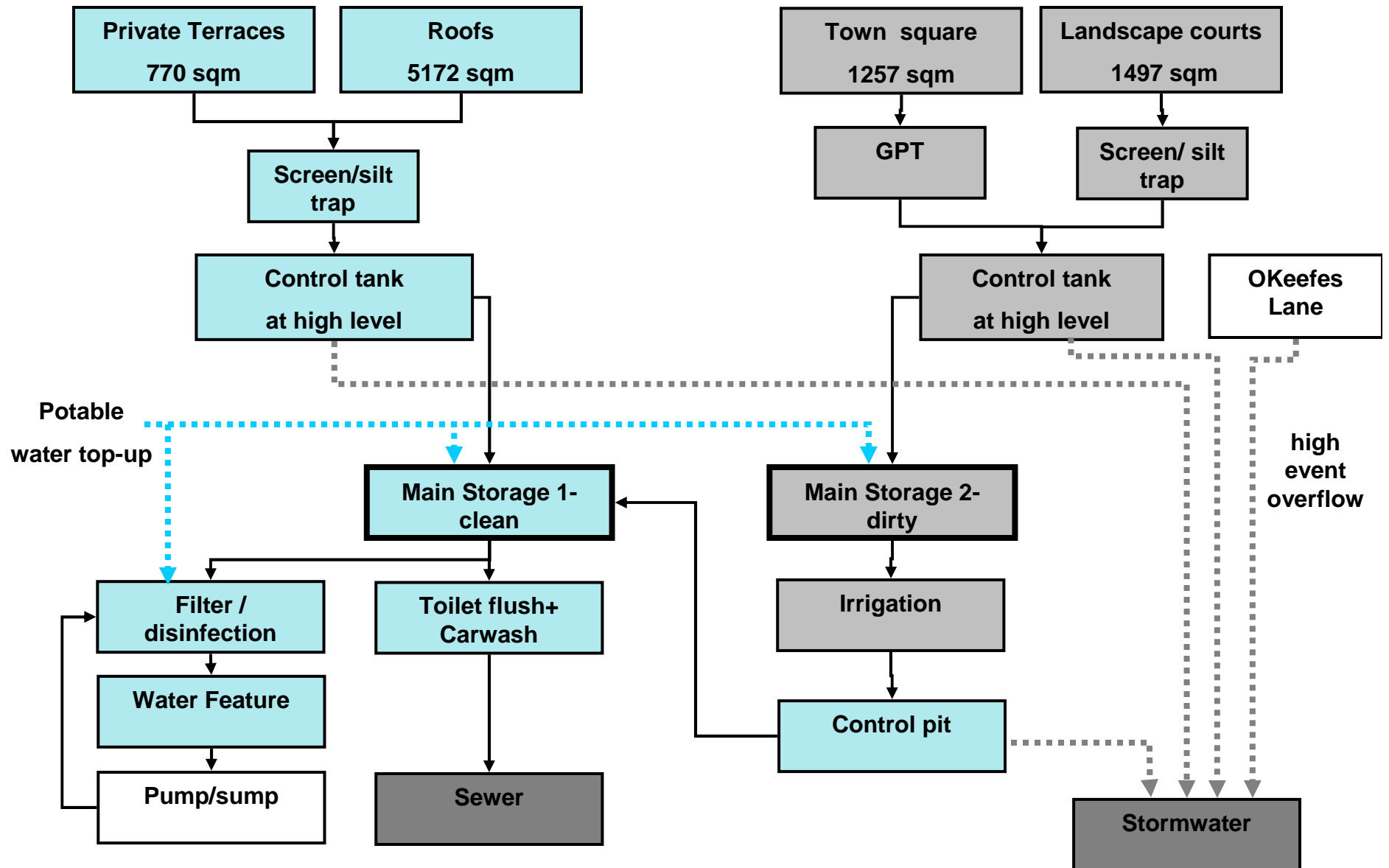
85% of the 8,230 kilolitres of rainwater annually is captured and used;

60% is used to flush toilets and irrigate;

25% of the water is stripped of most of the nutrients it contains.



# Integrated water management- source separation and fit for purpose



## Integrated Water management and Landscape design





# Integrated Energy Systems



1659 photovoltaic cells  
integrated into the roof,

153MWh of electricity.

143 tonnes of carbon dioxide  
emissions

Further savings through passive  
solar design

No air-conditioning



## Critical success factors

Equity: Council car park opportunity

Inspiration: Enlightened General Manager

Committed staff: Brian Bell, Mike Mouritz, Bruce Taper

Strategic necessity: SEPP 53 residential strategy

Zeitgeist: green Olympics, “demonstration project”

Longevity: project longer than political term

Renewal: Critical mass of employment & changing demographic

Context: part of a bigger picture

Marketing: Developer differentiation

Market: on the upward slope of a boom

## Conclusions

Can't rely on such an alignment of the stars

No more demonstration projects- time now for the real thing

Streamline the process eg BASIX

Industry doesn't innovate (much) without regulatory environment

Community benefits must be visible and obvious

Concentrated significant change may be easier than scattered moderate change- contain the pain

Timing- time for change

Build as broad a constituency as possible- win win win

Innovation should be in anticipation of need