



**By 2030 eThekweni will be Africa's
most caring and liveable city**



**Place identity & the urban arboretum of the Durban Botanic
Gardens:
the role of cultivated public gardens in influencing meanings of
Nature within the city**



Contacting nature

“Man is an outdoor animal. He toils at desks and talks of ledgers and parlors and art galleries but the endurance that brought him these was developed by rude ancestors, whose claim to kinship he would scorn and whose vitality he has inherited and squandered. He is what he is by reason of countless ages of direct contact with nature.’

James H. McBride, MD, 1902

Journal of the American Medical Association

What is the future of urban 'Nature'?



No Park, Just Parking...
They paved paradise...
www.banksy.co.uk

Nature?

- 'Nature is culture; science is art. We don't ever "see nature" in the raw, but always cooked in categories and clothed in the garments of **language** and **representation...**'



WJT Mitchell

The Last Dinosaur Book

Defining a botanic garden...

A botanic gardens may delight the eye and the aesthetic senses, satisfy idle curiosity and excite wonder, but the capacity to produce these reactions is of only secondary importance to its basic function: accumulating botanical and horticultural knowledge (research) and disseminating that knowledge (information and education). Prof Donal McCracken

THE SWEET POTATO

ONE VERY WELL TRAVELLED VEGETABLE

HOW DID IT GET TO POLYNESIA AROUND 1000 YEARS AGO?

- A. Ocean currents
- B. Canoe

WHO KNOWS ?!!



Sweet-potato

CONVOLVULACEAE
Ipomoea batatas

8000 species of Ipomoea worldwide, including 'Murrey Glory' native to Central America and domesticated at least 5000 years ago. Spread to Polynesia by the Spanish (16th century) and then to New Zealand by the Maori, introduced to Europe by Columbus.

Finding meaning in urban nature



Trees, being rich in symbolic meanings, have a natural intergenerational connection with visitors in an old garden space that can develop an almost sacred dimension.

Place attachment & meaning

*Attachment and meaning emerge from a variety of experiences and situations, and are often related to **parks, green spaces, and natural areas**. Attachment may serve to promote and encourage environmentally responsible behavior using appeals to individuals' self-identity and dependence.*

Wolf, Krueger & Flora (2014),



Metro nature: Durban's first public institution



- A1 Main Entrance & Parking
- A2 Tea Garden Entrance & Parking
- A3 Pedestrian Entrance (Closed on Weekends)
- Visitors' Complex & Information Centre
- KwaZulu-Natal Herbarium
- Curator's Office
- Parks, Leisure & Cemeteries Admin Office
- Reservoir
- Lake
- Indigenous Grassland
- Palm Walk
- Fern Dell
- Herb Garden
- Wood's Cycad
- Amphitheatre
- Japanese Garden
- Garden of the Senses
- Monocotyledon Garden
- Sunken Garden
- Alien Alley
- Brunellid Garden
- Permaculture Garden
- Living Beehive
- Indigenous Forest
- Ernest Tharp Orchid House
- Discovery Room
- Biodiversity Display House
- Currie's Fountain
- Sculpture "Family"
- Sculpture "Earth Mother"
- Sculpture "Greatest Shell on Earth"
- Sculpture "Standing Parker 1"
- SA Flag
- Dr John Medley Wood Bust
- Bell Tower
- "Casabe"
- Lily Pond
- Sculpture "Captive of the Beginning"

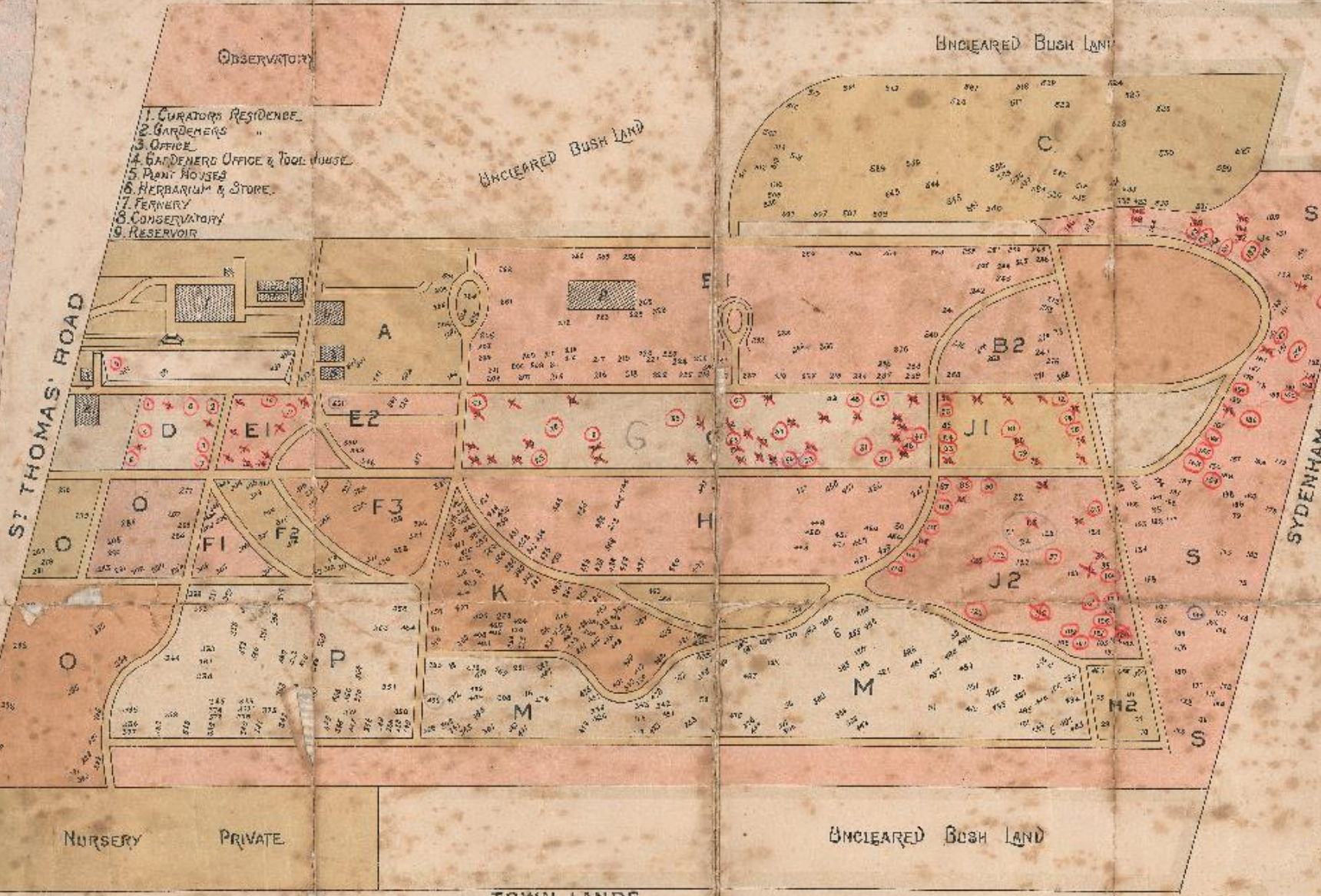
SKETCH PLAN OF NATAL BOTANIC GARDENS.

1. CURATORS RESIDENCE.
2. GARDENERS "
3. OFFICE
4. GARDENERS OFFICE & TOOL HOUSE.
5. PAINT HOUSES
6. HERBARIUM & STORE.
7. FERNERY
8. CONSERVATORY
9. RESERVOIR

ST THOMAS' ROAD

UNCLEARED BUSH LAND

UNCLEARED BUSH LAND



SYDENHAM

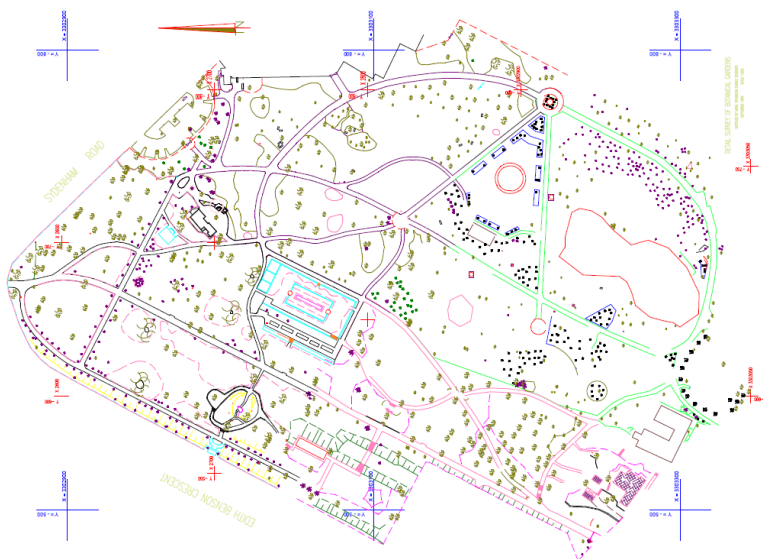
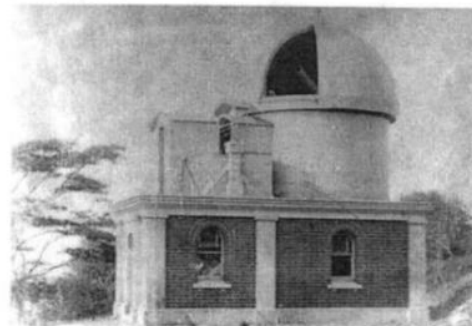
TOWN LANDS

UNCLEARED BUSH LAND

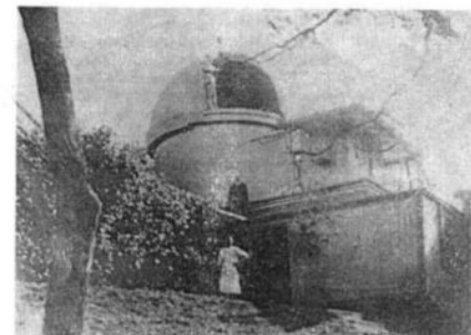


The Natal Observatory Land

In 1884 The Natal Observatory officially opened. The dome and 8 inch Grubb telescope had been erected specifically for the observation of the transit of Venus that year. Back then this was an event of particular significance as it allowed for the accurate measurement of the Earth's distance from the Sun. The land secured for the Observatory was then 2 acres of Lot A, Botanic Gardens 2602. Today this is 230 Currie Road. This land was officially transferred on the 7th of January 1884 from the Durban Botanic Society "unto the Colonial Secretary of Natal and the Surveyor General of Natal for the purposes of The Natal Observatory ". It is interesting to note that this property was never transferred at Union in 1910, as many properties were, and the original 1883 title deed still states that the land is owned by The Colony of Natal. (See Appendix A.) The Natal Observatory was not an entity in the form of a company or society - with only a single, ill-funded astronomer, no such organisation existed in this period. The provision was rather an expressed purpose for this site. The land was specifically sold for zero pounds by the Botanic Society for the purposes of an observatory.

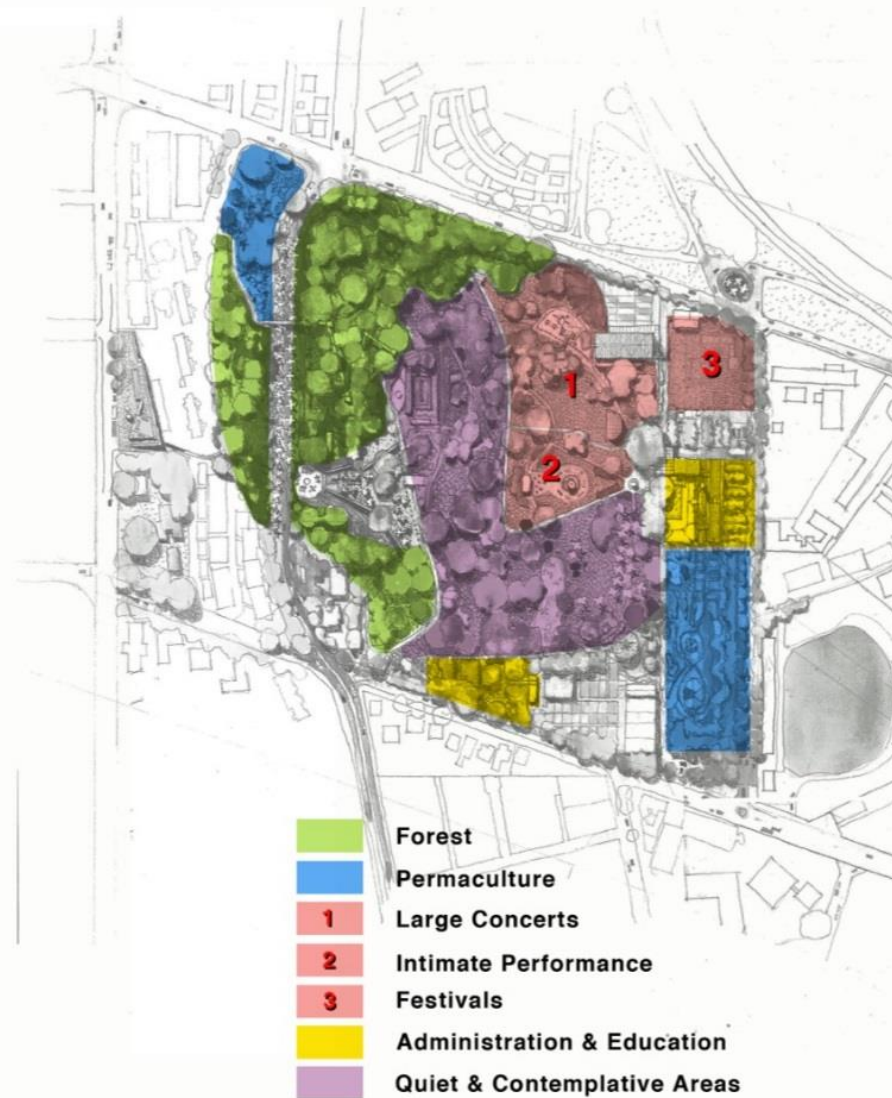


Photographs of the Observatory and 8 inch Grubb telescope.





VISION



ZONING

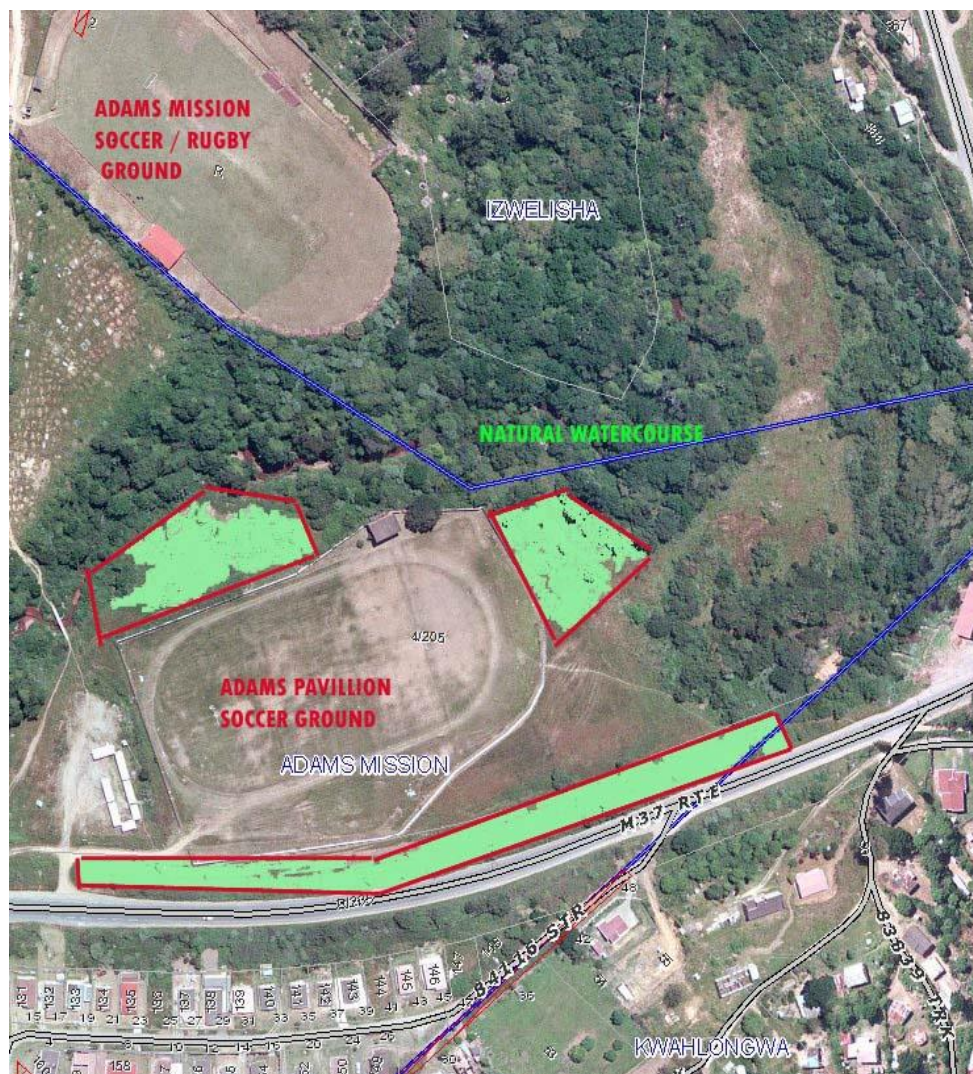
Topophilia

...bond between people and place needs to be recognized and better researched in locale to inform urban character and planning.



How Long Park, Umlazi founded by Michael Fana Mlangeni in 1976

Forest of Remembrance





Place making & environmental care

*‘Most people, however, fail to minimize their environmental impact, or make choices that help protect and conserve our natural environment (Halpenny, 2010). Therefore, it is important to investigate what it is that makes people more environmentally conscious, and motivates them to live a more sustainable lifestyle. One of the ways it has been suggested for people to become motivated to live sustainably is through developing a **relationship to their ‘place’***

(Lewicka, 2010, p. 209; Rogers Bragg, 2012:307) .

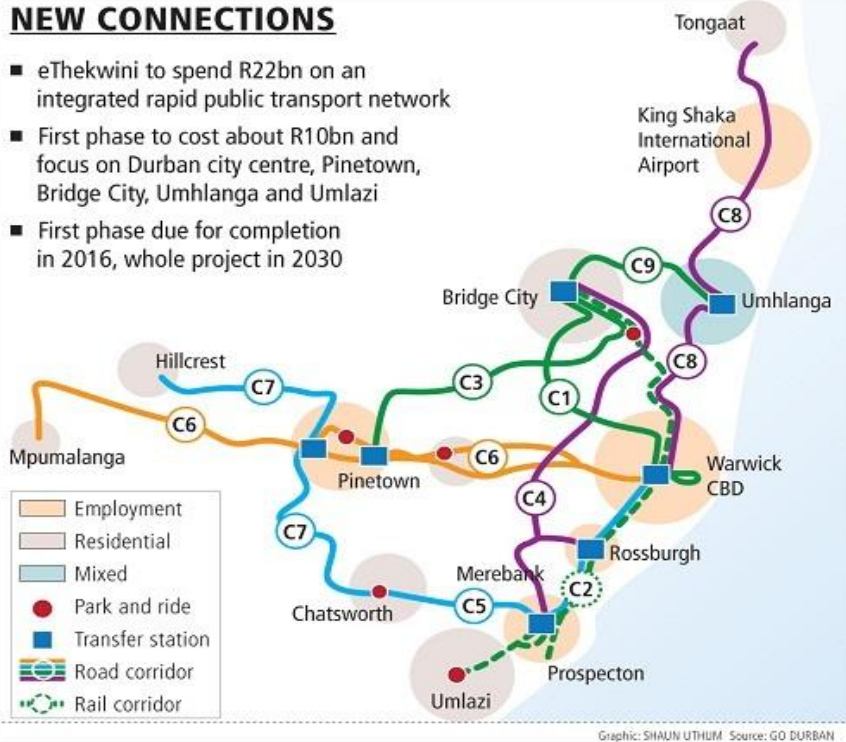


MEASUREMENTS INTANGIBLES KEY ATTRIBUTES

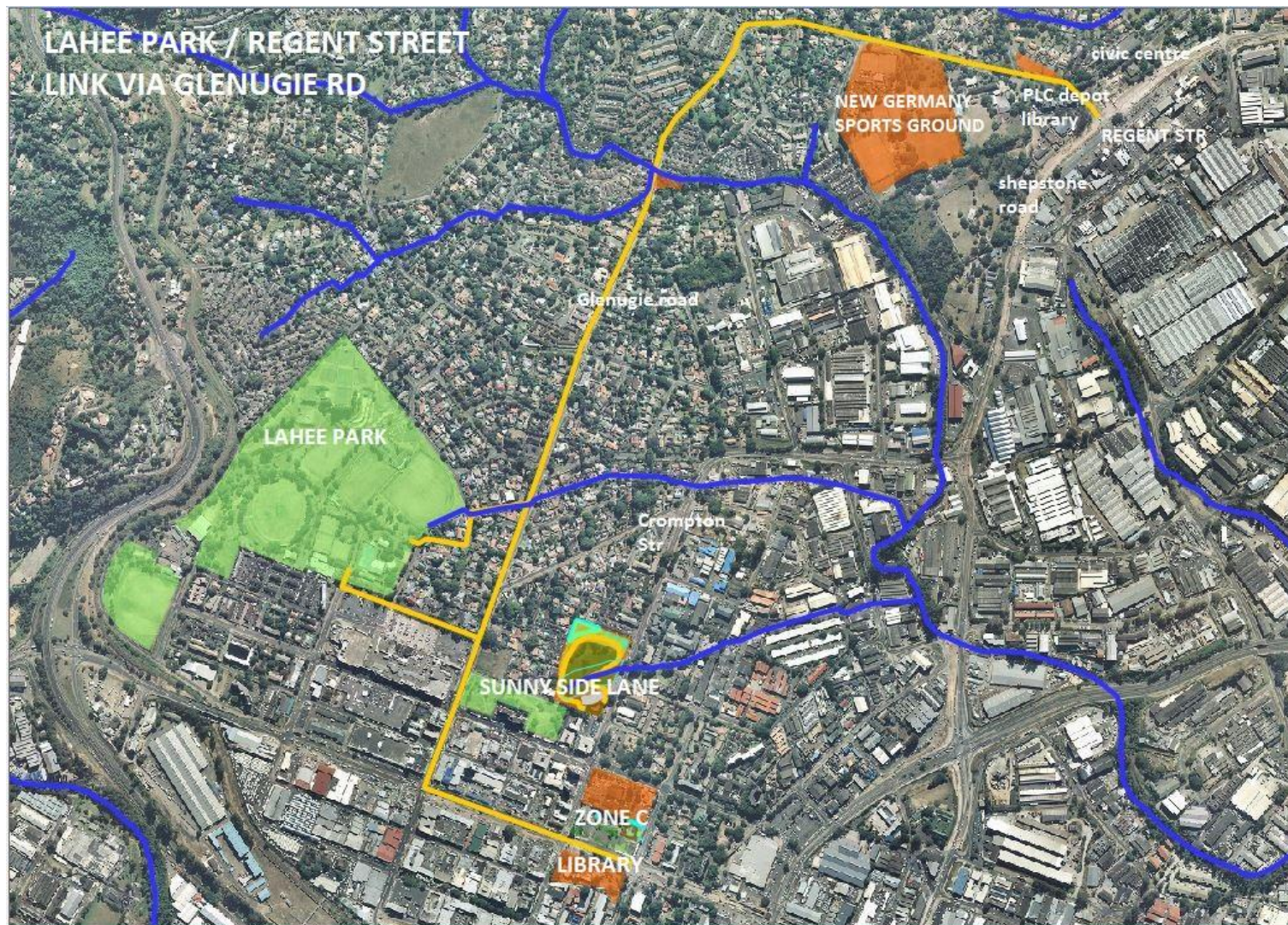
Greening public transport

NEW CONNECTIONS

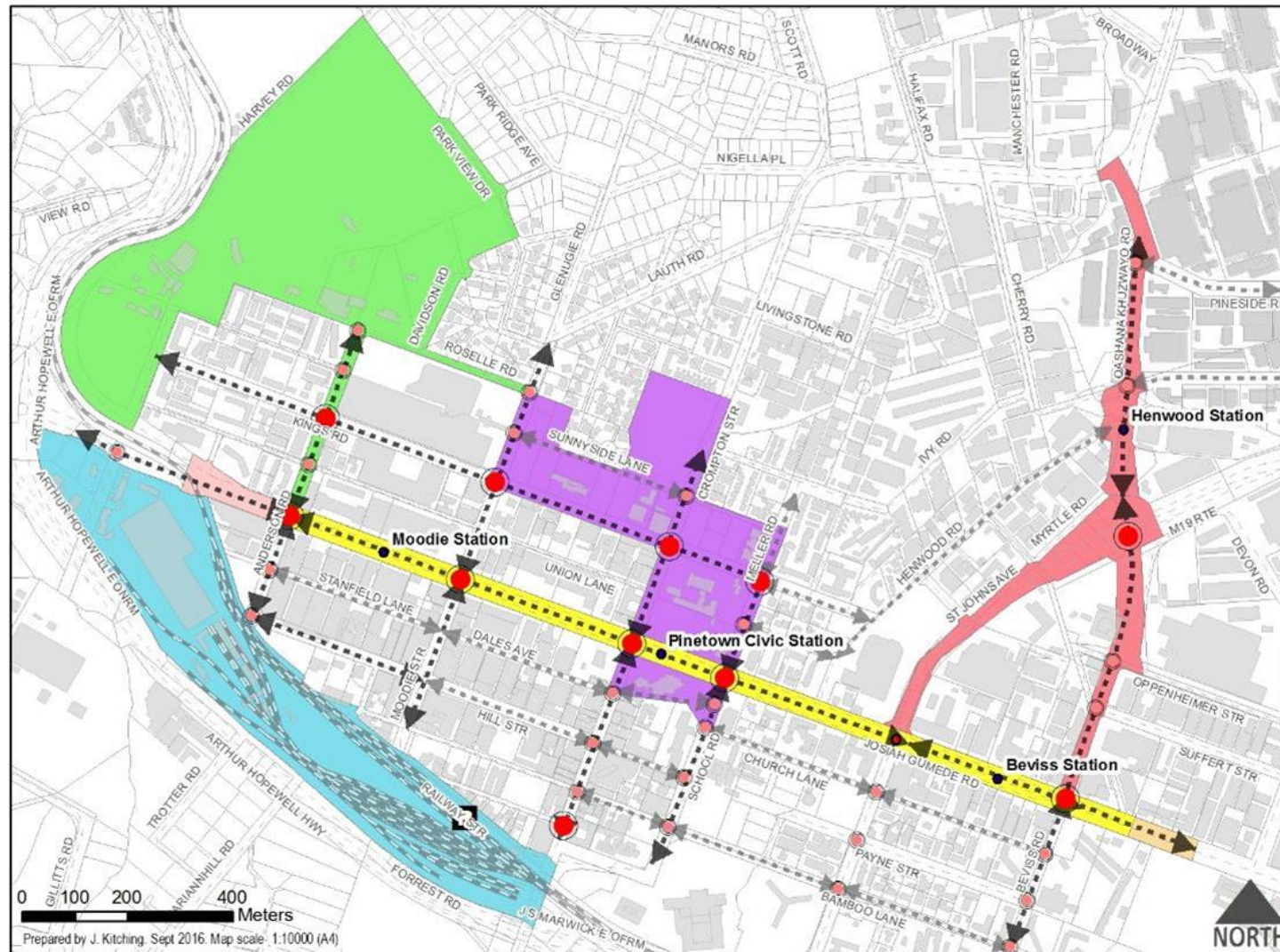
- eThekweni to spend R22bn on an integrated rapid public transport network
- First phase to cost about R10bn and focus on Durban city centre, Pinetown, Bridge City, Umhlanga and Umlazi
- First phase due for completion in 2016, whole project in 2030



Interlinking open space catchments



Go!Durban Pinetown Transport Precincts



C3 CORRIDOR: PINETOWN STATIONS

Legend

- Other
- Minor Link Intersection
- Major Intersection
- Railway Station
- Stations & Stops
- Feeder Routes (Rev 7)
- Land Parcels
- IYER Built form

Proposed Work Packs

Name	Color
Beviss	Green
Beviss (Addition?)	Yellow
Civic and Route	Purple
Honwood	Red
Lahee park	Light Green
Pinetown Main Road	Yellow
Old Main Road (Addition?)	Pink
Station Node (BSU)	Light Blue
Building footprint	Grey

Pinetown Routes

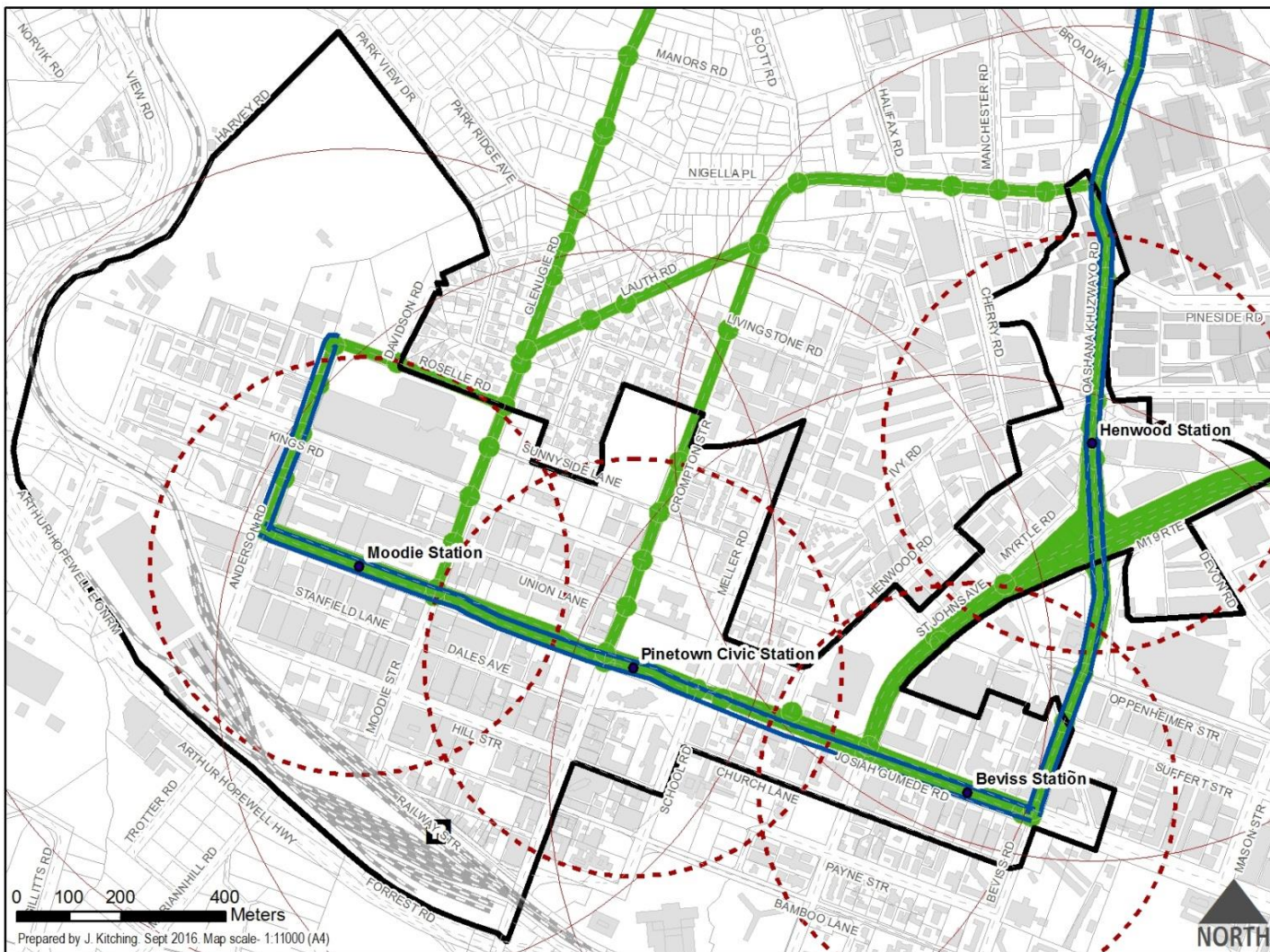
Type1

- ▲ Major
- ▲ Minor
- Railway

Note:
 Not shown are Package: Non-motorized Transport, Package: Signage and Wayfinding and Package: Greening Corridors

The extent of work of the above, overlap all other areas.

PROPOSED WORK PACKAGES



C3 CORRIDOR:
PINETOWN STATIONS

Legend

- R** Railway Station
- Stations & Stops
- Railway
- Feeder Routes (Rev 7)
- ≡ C3 Route
- Distance radii**
- 400m
- 800m
- ▭ Pinetown CBD Boundary
- Greening Corridor
- Land Parcels
- Available Building footprint

Note:
Not shown are the proposed work package islands.

The extent of the corridors overlaps and connects the work package areas.

PROPOSED GREENING CORRIDORS

0 100 200 400 Meters

Prepared by J. Kitching, Sept 2016. Map scale: 1:11000 (A4)



Greening principles for urban planning that enable place attachment

- **Topophilia** - bond between people and place
- **Space becomes place** when people give significant places meaning that is then articulated in various forms of cultural practice by various groups of people.
- **Metro nature** or nearby nature within an urban context will likely have a meaning for people living within close proximity. Can potentially serve as a 'unifying concept' of both cultural and ecological landscapes.
- **Biological perspectives:** place attachment readily occurs when places are perceived as attractive, calming or safe.
- **Sociocultural perspectives:** place attachment enabled by shared cultural ideologies of various groups having shared interactions with specific places.



- **Restorative places:** green places that evoke a sense of peace and restoration foster human attachment due to their resulting therapeutic benefits.

Recreation: parks that are viewed as the best place for favoured recreational activities tend to develop a strong place attachment.

Regular interaction: the greater the frequency of use and interaction, the stronger the place dependence.

Familiarity: strength of attachment is increased in parks and green spaces & places that are familiar, especially if the landscape type is one that people have grown up in and feel most at home in.

Nature improves communities: access to nearby nature is generally beneficial for community health and collective place attachment and neighbourhood satisfaction.

- **Values:** values associated with nature can be quite complex.
- **Length of residence** increase in place attachment is directly linked to length or residence in or near a place.
- **Childhood experiences of place:** especially during middle childhood, place attachments and meaning tend to form as a consequence of place-based activities
- **Environmental responsibility:** often as a consequence of Place attachment
- **Biophilic design** makes use of nature to create a positive emotive experience and provide for a holistic human experience with social and nature connection opportunities.





umPhafa

tree campaign