



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



**SHOWCASING INTEGRATED HUMAN INFRASTRUCTURE AND
GREEN DESIGNS –
THE CASE OF CORNUBIA IN NORTHERN DURBAN**

Connective Cities Workshop – June 2016

CORNUBIA – PHASE 1

SUMMARY OF PROJECT

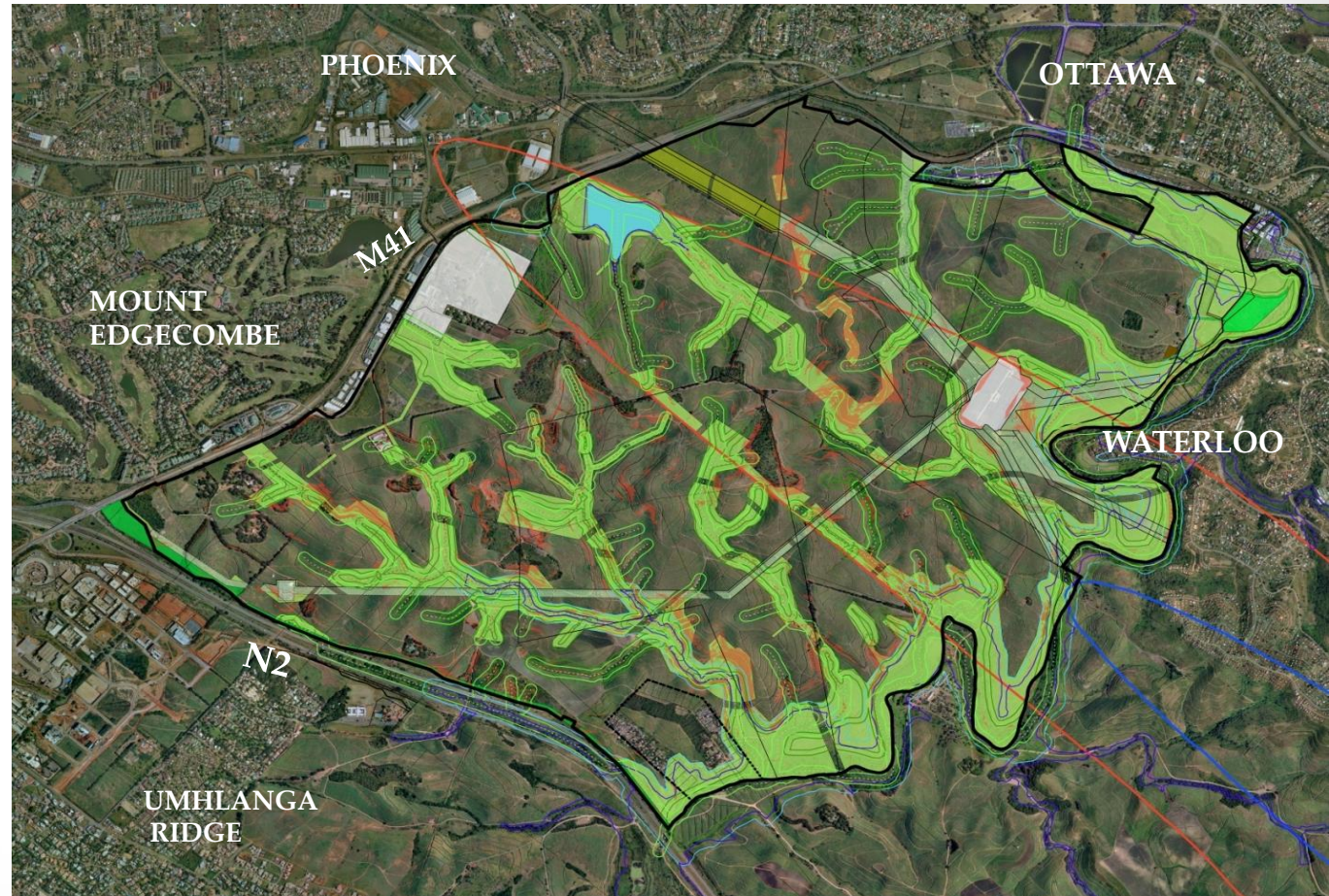
Municipality	eThekweni
Province	KwaZulu-Natal
Type of Development (Greenfield, conversion, refurbishment)	Greenfield : Total Project covers over 1300 hectares (Ph 1 and Ph 2 and Private Partner land), of which approximately 400 hectares is public open spaces
Project location	Cornubia is a strategic land holding situated within the northern corridor of Durban, and is located between Phoenix/Ottowa and Umhlanga, bordered by N2 Freeway and M41 Arterial, 7km south of the King Shaka International Airport

UNITS & BENEFICIARY PROFILE

Total number of Housing units	Cornubia has the potential to accommodate a total of approximately 28,000 dwelling units. Phase 1 consists of a total of 2668 units.
Number of units occupied	773 – balance of Phase 1 under construction. Phase 2 being planned
Total number of units targeted at Primary Beneficiaries (Earning <R3500)	All of Phase 1 (2668 units) – beneficiaries are sourced from existing informal settlements and transit camps – based on a prioritisation exercise.
% Primary Beneficiaries	100%
Special Needs Provision	The project includes 37 units for disabled persons. Entrance ramps to single storey units. Grab rails in bathrooms. Wider doorways to accommodate wheelchairs.

CORNUBIA – STARTING POINT – DEVELOPMENTAL CHALLENGES

- Mineral rights (industrial/hsg areas) covering ± 94 ha
- Electrical servitudes (63ha)
- Other services servitudes (water, sewer etc)
- Undevelopable area (395ha) – wetlands, river, forest
- Noise contours (>300ha affected by 55db 2035) – impact on low-cost housing only
- Steep topography
- Geotech constraints



STATUS QUO



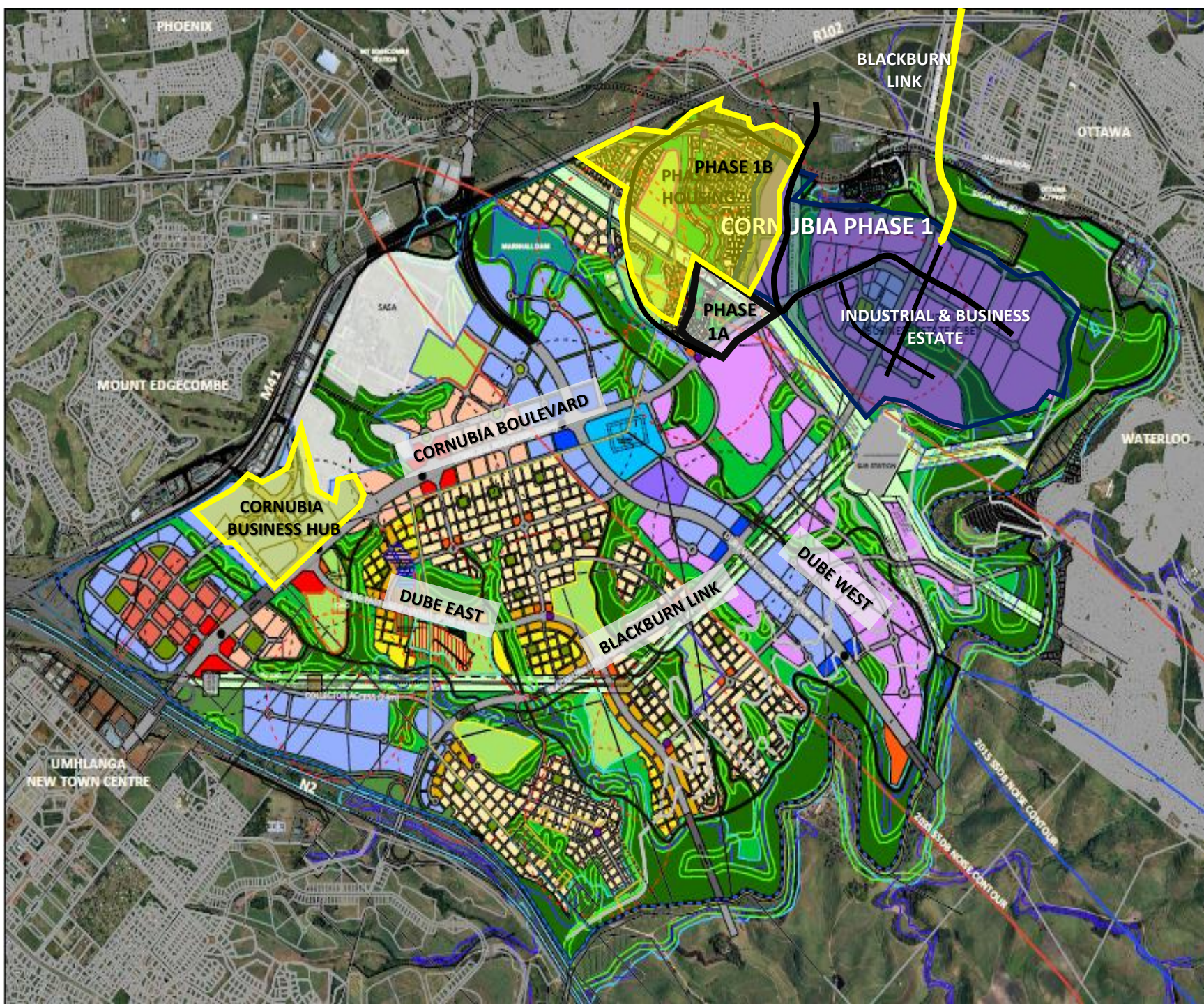
**CONSTRUCTION
COMPLETE AND
UNITS OCCUPIED**



**CURRENTLY
UNDER
CONSTRUCTION**



**SERVICES
COMPLETE
Factories and
Warehouses
in operation**



PROJECT OBJECTIVE

To maximize the delivery and transform this strategic farm landholding into a new town

FROM _____ **TO**



CORNUBIA - PROJECT APPROACH

- Most services and facilities will be within a 5 minute walk from both the workplace and home. It is important for the street design to be pedestrian friendly (i.e. tree-lined streets, narrow, slow streets, etc) In some cases, streets are only for pedestrians.
- Densities are increased which is very important in New Urbanism as it promotes ease of walking, as well as a more efficient use of resources and services.
- Public transport is promoted – The planned IRPTN and BRT Network – GO Durban will transverse the Cornubia Development.
- The promotion of pedestrian friendly design means the use of environmentally friendly transport such as bicycles, scooters and walking. Dedicated cycle tracks will be incorporated into the layout.
- A key concern is moving the sustainability agenda further than the 'green agenda'. The core objectives are establishing a framework, management and delivery system that embraces all aspects of human settlement, the natural, social and economic environments.
- An important defining quality of the site is the natural environment. A key objective therefore is the potential to enhance the regional lattice of open space opportunity and connectivity.

CORNUBIA – CHALLENGES IN PURSUING THE GREEN AGENDA

Greening options not fully explored due funding restrictions – existing subsidy does not allow for it - the City is doing the best they can, within the subsidy constraints.

Renewable materials used.

Noise attenuation measures assist with the insulating of units in Phase 1A – has heating and cooling secondary positive effects.

Attenuation ponds collect stormwater on roads. This could be stored for watering of open spaces and gardens established by co-operatives within the developments. Water harvesting would be an option, but no downpipes are provided with structures in Phase 1A – this could be successfully implemented in Ph 1B as gutters and downpipes are included.

Multiple projects are being developed within the City – whatever is provided to one will have to be replicated in the others.

If funding can be leveraged, we will be willing to explore any additional greening measures

CORNUBIA – OUTPUTS

- Is a sustainable mixed-use, mixed income development that maximises economic opportunities for future residents and investors;
- The project is being implemented in phases. Will have affordable and sustainable housing with a range of options for a range of income groups;

CORNUBIA – LESSONS

- Electric metering to individual units are clustered on verge, eliminating unsightly overhead “spider-webs” - Wider road reserves required to accommodate all services adequately required.;
- Due to multiple contractors required to work simultaneously - procurement was protracted