A Urban Design Report for the Development of a Portion of the Remainder of Erf 464, George for Purposes of a University / Research Institute / Academy



Linc Architecture | Urban Design | April 2019

Consulting for:



Client:



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Figure 1: Vision for the George campus

INTRODUCTION

This report forms part of the process for the preparation of an application for the rezoning and subdivision for the development of a Portion of the Remainder of Erf 464, George, for the purposes of a university/research institute/academy.

A previous application was submitted in 2014 which comprised of a residential and business component. This was only in part approved by DEADP and the George municipality subsequently appointed **Aurecon** South Africa (Pty) Ltd to prepare and submit an application for rezoning (including departure and consent use, if required) with the above mentioned amended uses to **promote social integration** and provides a **solution** to the **management** of the **open areas**.

This report by **Linc Architecture and Urban Design** deals with the **urban design vision** of this project to guide the process as described above.

LOCATION

The project is located on the southern banks of the Garden Route Dam on the eastern edge of the town. The study area of approximately 118 Hectares edges the dam on the north. This edge, is identified being the approximate level of the dam at maximum capacity. The western edge is guided by the established neighbourhoods of Eden George and Loerie Park. The southern edge is guided by the generous setback principle on Madiba Drive, as established by the existing neighbourhoods.

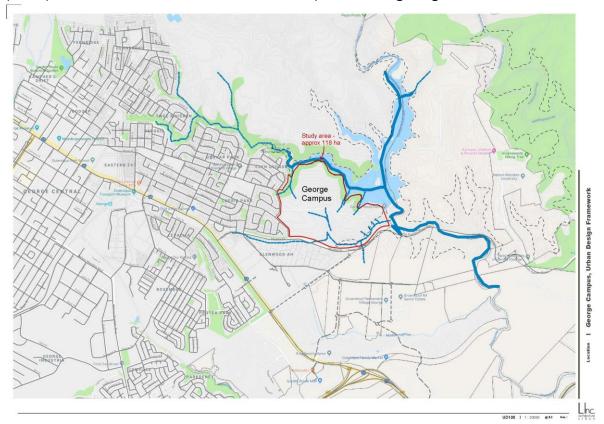


Figure 2: Campus location

CONTEXTUAL ANALYSIS

A high level contextual analysis revealed the following elements as guiding elements during the process:

- 1. The river and dam as well as the major watercourses on the south as very sensitive environments.
- 2. Riparian corridors and minor water courses were identified using aerial photography, drawings and contours. A riparian corridor (here indicated in a green line) was later received from the specialists and is included.
- 3. High points on the property is indicated.
- 4. A red line denotes the study area as described before
- 5. A dark red line indicates the 2014 Urban Edge
- 6. The yellow access points into the site as per the previous submitted layout is indicated.
- 7. Yellow dots indicate the current and/or planned Go-George bus stops on Madiba Drive and towards Kraaibosch.
- 8. The access point form the Kraaibosch roads masterplan is indicated on Madiba Drive.
- 9. An underground water line crossing the study area is indicated in cyan.
- 10. An affluent line crossing from south to north is indicated in brown.
- 11. The proximity to the start of the activity spine on Courtenay Street is indicated in a thick black dash.

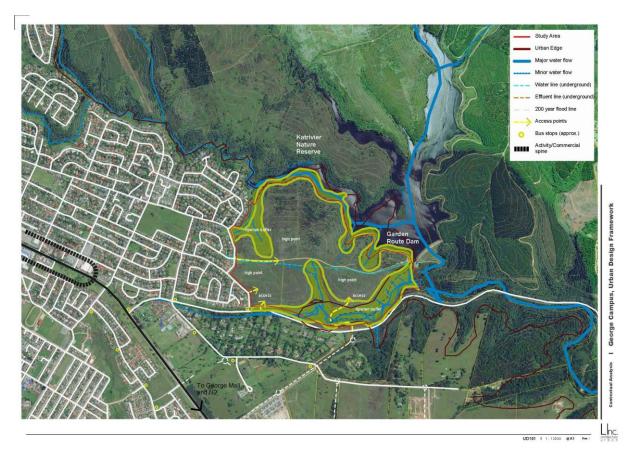


Figure 3: Contextual analysis

OPTIONS PRESENTED

3 options were prepared by the design team to present to a workshop, held in George on the 8th of February 2019, with stakeholders and consultants. These were presented and created a healthy discussion on what would be preferable for the client as well as accommodate the social needs, economic needs as well as the environment.

Several negatives and positives on the layouts were identified and will be listed below.

Option 1

Positives:

- Good connectivity
- Connecting green belts along the riparian corridors
- Sports Oval
- Waterfront position
- Residential mirroring the established houses

Shortcomings:

- Sports fields too close to established housing
- Campus is not prominent
- Unnecessary green belts along Western residential edge

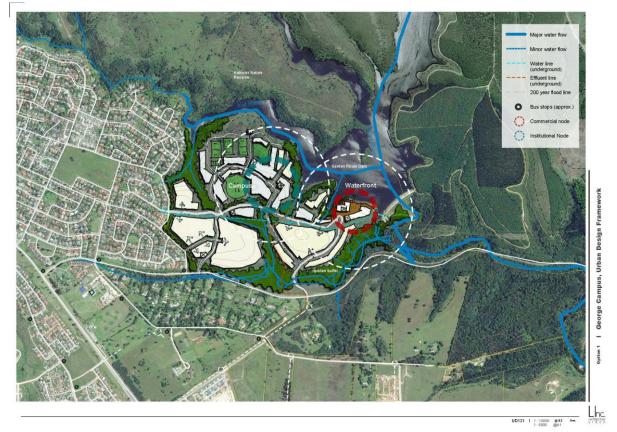


Figure 4: Option 1

Option 2

Positives:

- Good connectivity
- Connecting green belts along the riparian corridors
- Circular route through Campus
- Public Area
- Residential mirroring the established houses

Shortcomings:

- Sports fields too close to established housing
- Campus is not prominent
- Public area should rather be a business node

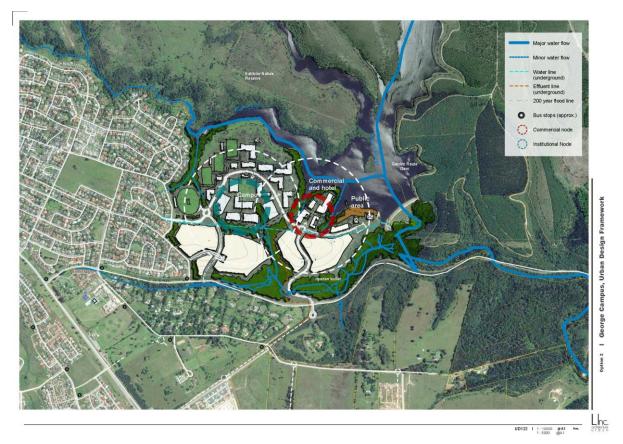


Figure 5: Option 2

Option 3:

Positives:

- Good connectivity
- Connecting green belts along the riparian corridors
- Campus has a prominent position
- Circular route through Campus
- Waterfront and Hotel position
- Residential mirroring the established houses

Shortcomings:

- Sports fields not taking full advantage of the scenic opportunities.
- Sport facilities could be in closer proximity to the business core.

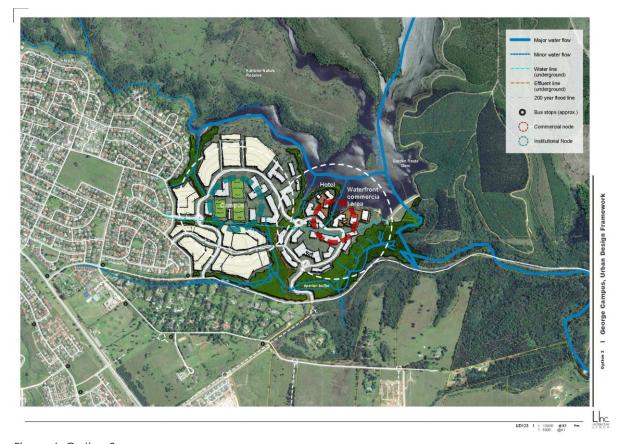


Figure 6: Option 3

PREFERRED OPTION

The identified pros and cons resulted in the preparation of a preferred vision for the development. This vision sees the campus as central to the development with supporting uses and mutually beneficial functions. The residential land uses should be first and foremost to support the campus environment and could also evolve and grow into various products that can be used for students during term and holidaymakers during the holidays. A variety of types of housing could also cater for undergrad students, lecturers, visiting lecturers, post grad students through to single residential erven. The varied public uses, which takes full opportunity of the scenic nature of the site, are accessible to the community of George as well as the campus users. The concept provides for the project to be realised by varied service providers which allows for the balanced mix of use areas and open space to be managed better and as part of the developments non-motorised network. A few key concepts listed below:

- 1. The **Campus** is located on a high point with some visibility from Madiba Drive.

 This allows for the main buildings to be more prominent as you drive up the hill.
- 2. This area is connected to the business area and the sport and student housing area with a **Campus Walk**.
- Additional walkways and pathways should be planned to run throughout the
 development and to use the opportunities alongside the green belts to create
 strong connections to the various precincts of the development.
- 4. The Main campus is in close proximity to both the **Waterfront** business area, the hotel area and the sport facilities.
- 5. Other departments and/or other symbiotic academies are dotted in groups along the Campus Walk.
- The Hotel area can be linked to the business area with a pedestrian bridge and this precinct could also include a Business School and possible tourism related training facilities.
- 7. The sport facilities and a possible **Sport Science Centre** are located on the flatter areas.
- 8. A sports oval that can accommodate an athletics field as well as a cricket field are located on the rise with framed views through from the residences and the road.
- 9. The soccer/rugby fields are set into the slope with embankments on the one side and a slight raise on the other to benefit from the scenic position as well as to screen the fields partially from the residential areas.
- 10. The areas on the edge of the dam and sports fields present great opportunities for **public parks**, **picnic areas and recreational activities**. These are connected to the Waterfront business area via walkways and paths.
- 11. Parking areas a broken up into small pockets throughout the development to avoid large unsightly parking lots.
- 12. Residential uses decrease in intensity towards the existing residential neighbourhood where they would mirror the typologies.

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Figure 7: Preferred Concept

URBAN FRAMEWORK

To ensure a cohesive and legible scheme a strong framework is proposed. Within this framework there would be several ways to allow for flexibility, but this should not compromise the key urban elements.

- 1. A connected and functional green system are essential. The riparian corridors and green belts firstly and fore mostly are seen to play an important role in the attenuation and polishing of storm water as it flows down towards the river edge and dam. These corridors also play an important role in protecting appropriate vegetation as well as providing corridors for small fauna. The edges of the connected green network can also create a non-motorised network for safe movement of pedestrians in a scenic relief space. The appointment of a landscape architect and landscape management plan would be imperative and a good balance of preserve versus development would be key to allow these spaces to be well managed and funded.
- 2. A mobility network that connect and enable. This network allows for a strong circular connection through the development and to Madiba Drive. This network could be included in the Go George bus system to enable students and residents to access the facilities and the George CBD with public transport. A connection to the NMMU Saasveld campus is also possible via Madiba Drive/Seven Passes if required. The hierarchy of streets enables the formation of various parts and precincts to the campus. This could allow for areas with a similar character and use as well as pockets that can have appropriate levels of security control as an entity.
- 3. The built fabric as a final layer need to be appropriately placed and at a suitable scale. This need to allow for foreground buildings to be seen and experienced as legible markers as well as the infill and supporting uses. A Campus walk is seen to connect the main administration complex of the campus to a Campus square with supporting student facilities, cafeterias and a proposed auditorium. This walk then further connect to the hotel and business area along the waterfront as well as west to the Sport Science complex and the bulk of the student housing. Various departments and possible mutually beneficial service providers are positioned alongside this promenade. Please see the Campus detail for a more in depth graphic explanation.

It is proposed that a detailed urban framework should be developed into a strong design code for the implementation of the campus.

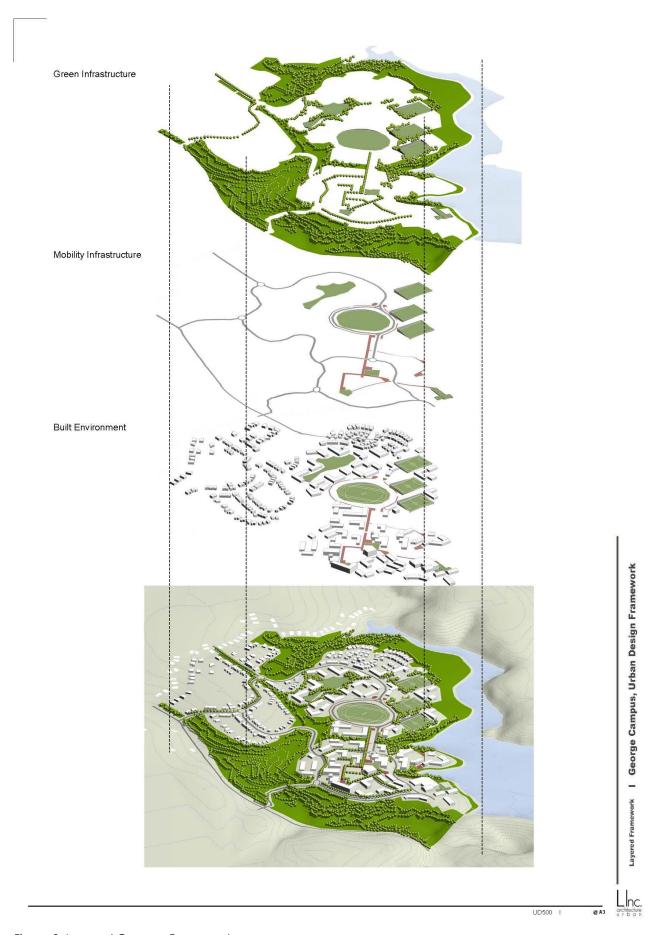


Figure 8: Layered Campus Framework

CAMPUS DETAIL

The campus should allow for a variety of **fundamental operations** to support the management and backbone of the facility. These built structures and spaces should be well defined and prominent to enable a legible and functional framework. Some of these spaces and prominent buildings area envisaged to be the main administration building, the library, a student centre/cafeteria and a proposed multifunctional auditorium.

The main management operations should be sustained by appropriate mutually beneficial and complimentary programmes and courses. These are perceived to be hosted in the various departments, a potential business school/tourism training/culinary schools adjacent to the hotel and the Sport Science Institute. Student housing are positioned not only alongside the sports fields but also throughout the development to allow for activity throughout the day and evening. These housing products should vary to cater for the different needs of different students and can most definitely be versatile to allow for holiday rentals or other.

The campus concept is illustrated below:



Figure 9: Campus vision

Buildings should be appropriately scaled to compliment the surrounding structures, environment and fulfil the requirements of the Land-Use Planning By-Law for George Municipality. There should however be an appropriate design code to allow for the prominent buildings and structures that function as markers and foreground buildings (as defined above) to have possibly higher and stronger features and defining elements, such as a tower.

Some of these buildings are highlighted below, with some campus precedent further down.



Figure 10: Foreground buildings and prominent structures.





Figure 11: Monash, Australia from https://higherediq.wordpress.com/2015/10/01/monash-masterplan-taking-campus-design-into-the-future/

Figure 12: Monash, Australia Campus green from https://worldlandscapearchitect.com/reinventing-the-university-campus-green





Figure 13: Sol Plaatjie, Kimberly outside learning spaces, from https://www.habitatlandscapearchitects.com/

Figure 14: Titan Integrity Campus, Indie from https://www.archdaily.com/908221/titan-integrity-campus-mindspace

HIGH LEVEL LAND USE | OPTIONS

A high level test to inform the rezoning and subdivision application was prepared and to illustrate the flexibilities within the urban framework. 3 options were explored to illustrate the evolution and opportunities that for example, an expanded sports complex as well as an ancillary innovation campus/hub could afford. These are shown below.

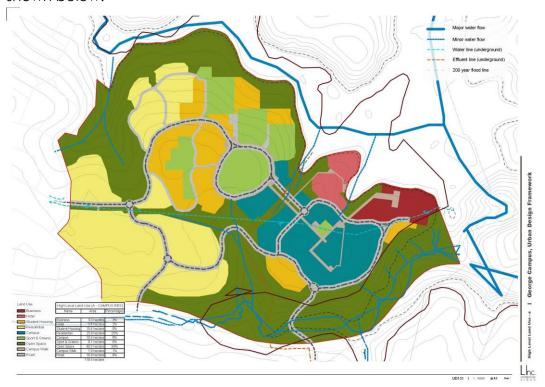


Figure 15: a – High level land use, Campus and residential.



Figure 16: b – High level land use, Campus and extended sport fields

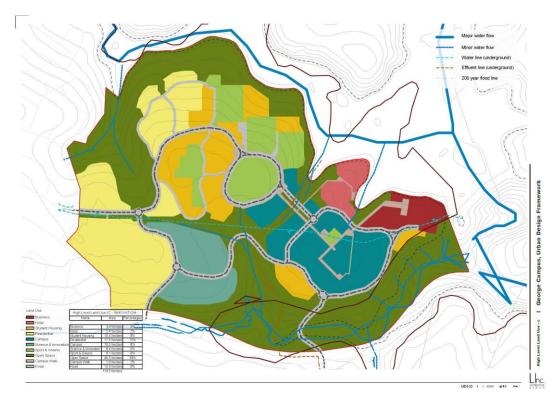


Figure 17: c – High level land use, Campus and Science/Innovation Hub

CONCLUSION

This property affords many opportunities in terms of its scenic location, its topography, the proximity to George CBD and the Saasveld campus. A campus as the key catalyst for this development could provide a sustainable long term land use that can grow and broaden its economic base and resources over time. This can also form the strong foundation of a diverse and well used development, not only for the students but also for the people of George.

A sensible balance of development versus open space will enable the operators to provide a well managed green riparian system. This will not only provide welcome relief space, but also protect the water resources. It can also form the base of a green connection structure for public walkways, cycleways and good connections between the different parts of the site. Opportunity then also exist to connect it through to Kraaibosch and the rest of George with the Go-George system, which will further its sustainable footprint. All these elements can form the foundation of a sustainable development that can grow into a world class facility with innovative and supportive structures and systems.

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