HERITAGE IMPACT ASSESSMENT

SUBMITTED IN TERMS OF SECTION 41 (1) (c) (i) OF THE KWA-ZULU NATAL AMAFA AND RESEARCH INSTITUTE ACT No. 5 OF 2018, FOR THE PROPOSED DENSIFICATION AND UPGRADES TO THE UNIVERSITY OF ZULULAND MAIN CAMPUS, EMPANGENI, KWAZULU NATAL

September 2022, Finalised February 2023.

Prepared by Claire Abrahamse Architecture, Urban Design, Heritage,
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on behalf of the Department of Higher Education and Training.
AMAFA Ref: 21/415.

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TABLE OF CONTENTS

(Cover graphic source: https://www.corruptionwatch.org.za/unizulu-midst-procurement-controversy/).

LIST OF FIGURES

ANNEXURES

Annexure 1: Referral Letter from AMAFA.

Annexure 2: Inventory of Heritage Resources on the Campus.

Annexure 3: Title Deed.

Annexure 4: Surveyor General Diagram.

Annexure 5: The Campus Development Proposal/Spatial Design and Development Framework.

Annexure 6: Public Consultation.

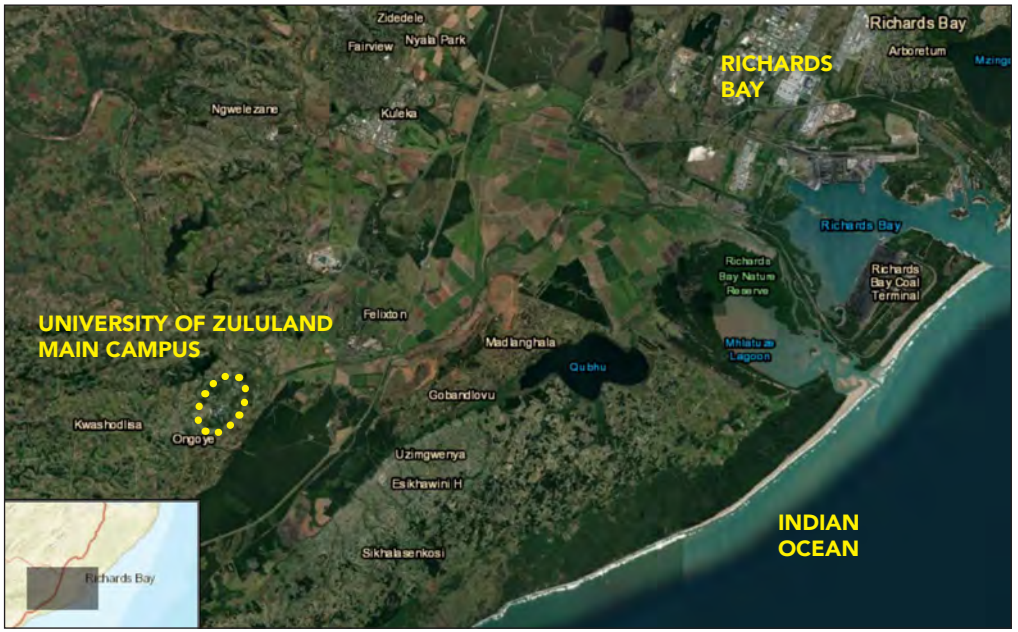
EXECUTIVE SUMMARY

SITE NAME
University of Zululand Main Campus.

SITE LOCATION

Location:	1 Main Road Vulindlela, KwaDlangezwa, Empangeni, KwaZulu-Natal.
Municipality:	Umhlathuze Municipality.
Co-Ordinates:	S 31°84'38.7"; E 28°85'63.9".
Property Number:	Remainder of Reserve No. 9 No. 15829, Registration Division GU, Province of KwaZulu-Natal.
Property Area:	39365.8618 Hectares.
Property Use:	Education – University Campus.

LOCALITY PLAN



Locality Plan (Source: Cape Farm Mapper).

DEVELOPMENT DESCRIPTION
In 2019, the Department of Higher Education and Training (DHET) commissioned an Integrated Spatial Design and Development Framework (SDDF) for the future development of the University of Zululand, Kwadlangezwa Campus. Following this, Ludwig Hansen Architects and Urban Designers was appointed to prepare the SDDF for the campus, which was adopted in 2020. This 5-year site development plan proposes the realisation of an additional 293 339 square metres of building footprint on the campus, with academic, student housing and administrative buildings proposed.

The SDDF has been structured around key elements of public structure, which are green spaces, movement nodes, shared public facilities (libraries, meeting places, sports facilities and recreation, performance and display spaces), hard open space, housing and utility services. These have been woven together into a coherent framework that also allows for a much-needed upgrade of existing university facilities. South African universities continue to grow and change. UniZulu, in particular, is located in isolation from many of the other large universities and has, therefore, faced great pressure to accommodate the students from the surrounding areas.

Over the recent years, UniZulu has undergone an accommodation crisis, which has led to immense pressure to provide more residences and on-campus accommodation for the growing student body. In addition to this, the existing university residences are in need of upgrade in order to provide students with dignified accommodation. The SDDF has, therefore, been set up to provide a clear spatial future planning framework that still allows enough flexibility to accommodate change.

Campus Plan (Source: NGI Mowbray).

HERITAGE RESOURCES IDENTIFIED
The primary significance and value of the University of Zululand resides in its role as a place of academic study, both in research and teaching, and in its legacy of academic achievement.

The University of Zululand has historical and socio-political significance as one of the so-called "Homeland Universities" in South Africa, at the forefront of political resistance and in the fight for academic freedom during the apartheid era, and during the broader process of democratization in the years preceding 1994.

It also has socio-political and historical significance in relation to the Royal donation of land that was instrumental to the establishment of the University, and the relationship the University has had with the Zulu Royal Family since then, which has in many ways also reflected the relationship between the Monarchy and the Zulu People.

The University of Zululand campus, as a formal architectural set-piece located on top of a hill within the rolling, hilly landscape of the Zulu Kingdom powerfully combines an internationally-recognised spatial typology (a "townscape" of higher learning set apart within an Arcadian environment) with the particular sense of place that is evoked by the green, rolling hills of the KwaZulu landscape. It is therefore of high contextual and associational significance.

The University of Zululand is notable for being a rare example of a highly intact grouping of Modernist institutional buildings that in many ways reflect the contradictions and challenges inherent in adopting a Modernist style in South Africa in the latter part of the 20th Century. From a built-environment and architectural perspective, the campus is a layered site, and the architectural approach to the various structures at various times relates to the changing political and cultural context within which the various projects were conceived.

As a whole, the campus has significance as an academic institution with a strong association with political resistance and activism during the apartheid era.

The clarity of the urban design concept in the spatial realisation of the campus, and the consistency of its architectural expression, set in a green frame above the Zulu Kingdom and yet also part of it, creates a cultural landscape that is distinctive and representative, as well as rare.

The campus has a high degree of significance in the history and the present-day intellectual and cultural landscape of the Zulu Kingdom. It is worthy of the highest degree of heritage protection in the context of the region. It should be Graded II, and formally proclaimed as a Provincial Heritage Site.

ANTICIPATED IMPACTS ON HERITAGE RESOURCES

Visual Impacts

At the largest scale, it is very clear that adherence to the existing townscape and landscape character of the campus **would ensure an acceptable degree of visual impact**.

A major principle of the urban design proposal for the campus is the consolidation of edge, and this is key in ensuring low impacts with respect to visual intrusion, landscape integrity and the ability of the environment to visually absorb new development (Figure 62). Due to the relative containment and low-rise nature of the proposed development infill, when viewed from the rural surrounds, the densification of the campus will have a **low visual impact**.

From the identified "far views" it is only the removal of the Norfolk Pines, positioned as they are along the ridge-line as spatial landmarks and markers, that would have a visual impact on the way the campus is perceived from the surrounds. It is noted that some of the proposed building footprints would involve the removal of mature Norfolk Pines. *In these instances, the building lines must be set back to protect these trees, which are so key to the character of the campus. See Areas "A" and "B" on* Figure 63.

Other than the removal of Norfolk Pines, it is otherwise only within the campus environment that the proposed infill development has been ascertained to have visual impact. Many of the inter-campus visual impacts, established through the visual study, are also reinforced by the heritage-based design indicators (see Indicators 1, 2 and 3). The following conflicts between the urban design proposal and the visual character of the campus have been confirmed, and the following would need to occur to bring the proposal to within an acceptable level of visual impact:

- *At Area "C", the proposed inclusion of a building footprint in front of the "corner turret" of the Admin Building would reduce the landmark nature of this structure, and the sequence of arrival to the campus. The building footprint proposed here should therefore be removed.*

- *Areas "D.1" and "D.2" as well as "E.1" and "E.2" are points within the campus from which important vistas between the various sections of the campus, as well as out towards the rural, Arcadian surrounds to the campus, are gained. The proposed building footprints positioned in these viewcones, or which would truncate or constrain them, should be removed from the development proposal.*

Impacts Related to the Heritage-Based indicators

The heritage-based indicators establish that the open lawned areas between buildings and movement routes that have been identified as curtilages to graded structures should be retained. The urban design layout proposes the infill of the spaces identified as significant to the campus character and original campus concept at UniZulu. Although they are almost all part of the post-2025 phase of work, it is important that they be removed from the development proposal, as their heritage impact would be severe.

- *These areas for exclusion of proposed building footprint are: Areas marked "F" in front of the original academic buildings, and Areas marked "G" in front of the original eastern residences to the west.*

Finally, the heritage-based design indicators emphasise the prevalence of linear building forms for academic buildings on the UniZulu campus. The urban design proposal indicates courtyard-type buildings throughout the campus. Within the academic core,

it is proposed that these structures instead be articulated to emphasise linearity, without necessarily impacting the overall building placement. See Areas marked "H".

The urban design proposal is not yet at a level of resolution that the architectural appropriateness of the proposals can be assessed. It is suggested that this is addressed by making the relevant design indicator a condition of any heritage approval that may be granted.

RECOMMENDATIONS AND CONCLUSION

It is recommended that this integrated Heritage Impact Assessment be endorsed as fulfilling the requirements of Section 41(1) (c) (i) of the KZN Amafa & Research Institute Act No. 5 of 2018.

It is further recommended that the heritage-based design indicators and significances and gradings outlined in Part C of this report be endorsed by AMAFA. The University is encouraged to commence a nomination process, for the wider campus to be formally protected as a Provincial Heritage Site.

Further, it is recommended that the following mitigatory measures be implemented to limit impacts to the campus character:

A. That in Areas "A" and "B" identified in Figure 66 building lines must be set back to protect the mature Norfolk Pine trees.
B. That at Area "C" in Figure 66, the proposed inclusion of a building footprint in front of the "corner turret" of the Admin Building be removed.
C. That at areas "D.1" and "D.2" as well as "E.1" and "E.2" in Figure 66, building footprints positioned in these viewcones, or which would truncate or constrain them, should be removed from the development proposal.
D. That Areas marked "F" in front of the original academic buildings, and Areas marked "G" in front of the original eastern residences (in Figure 66) to the west be kept free from building, and retained as landscaped forecourts.
E. Within the academic core proposed structures must be articulated to emphasise linearity, without necessarily impacting the overall building placement. See Areas marked "H" in Figure 66, Figure 67.

Architecturally-speaking, it is suggested that the following design indicator be made a condition of any heritage approval that may be granted:

F. The University of Zululand has a very clear and consistent architectural palette. New building must respond to and interpret the prevailing architectural elements evident on the campus within new designs, namely: the predominant surrounding building lines and heights of existing buildings; the use of oversailing eaves on slightly pitched roofs or of flat roofs; the positioning of entrances and gathering spaces; the use of exposed red brick masonry, brise soleils of bricks or blocks, and exposed concrete; and the screening and position of windows.
G. The infill development within the campus that is proposed after 2025 (in terms of the urban design plan – see Figure 57) remains highly conceptual and must be subject to a re-submission to AMAFA at a later date, and once further design development has occurred.
H. Densification and bulk should be prejudiced towards the southeast of the campus rather than around the northern and northwestern edges. Any new buildings along these edges (N and NW) are to be placed so as to allow views over or through new blocks.
I. The HIA recommends a landscape plan be developed for the campus as a whole, which must include a review and upgrade of fencing on the campus to address visual permeability, setbacks, material consistency and compatibility with the predominant screen-wall typologies.
J. Any Modern buildings earmarked for demolition must be recorded photographically beforehand, and that such recording be sent to Docomomo South Africa.

AUTHORS AND DATE

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16th September 2022, revised and finalised on the 24th February 2023.

PART A: PROJECT AND SITE INTRODUCTION

1) BACKGROUND

1.1 Purpose of this Report

Claire Abrahamse Architecture, Urban Design, Heritage (with lead consultants Claire Abrahamse and Mishkah Collier), have been appointed to undertake the heritage approval process pertaining to the proposed redevelopment of the University of Zululand (hereafter "UniZulu") KwaDlangezwa Campus, at Ongoye in Kwa-Zulu Natal (Figure 1).

The campus area forms an area that is part of Remainder of Reserve No. 9 No. 15829, Registration Division GU, Province of KwaZulu-Natal. The property measures 39365.8618 hectares, while the area zoned education and making up the university campus measures approximately 155 hectares in area (Figure 2)

The proposed development is for the densification of the university campus through the addition of new structures on the site. This triggers Section 41(1) (c) (i) of the KZN Amafa & Research Institute Act No. 5 of 2018, as it constitutes a development that will "change the character of a site (i) exceeding 5000m2 in extent".

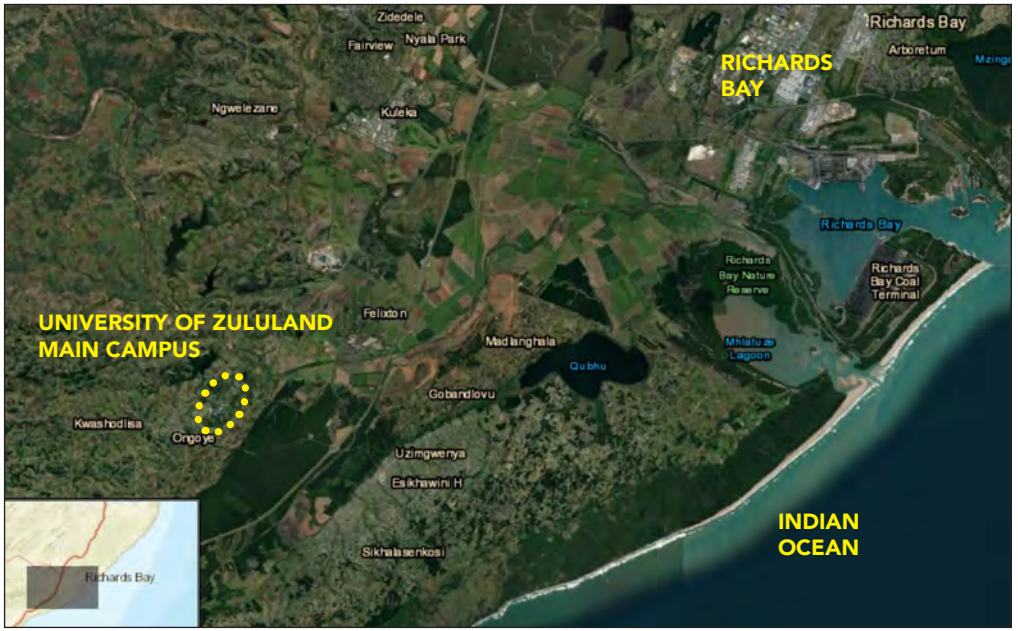


Figure 1: Locality Plan (Source: Cape Farm Mapper).

Figure 2: Campus Plan (Source: NGI Mowbray).

1.2 Processes to Date

A Notification of Intent to Develop/Part 1 HIA was submitted to AMAFA in March 2022. The application was discussed at the AMAFA Committee Meeting on the 6th April 2022, and the Referral Letter received from the Heritage Authority on the 4th May 2022.

The Referral Letter noted the following:

The committee agrees with the recommendations made in the phase 1 Heritage Impact Assessment dated 04 March 2022, further to the recommendation, the following is required:

1. Design indicators required to show that the new work would not dominate the existing work and that the character of the existing context is maintained.

2. Cultural landscape study of the campus should be done and should inform the short-

term and long-term projects.

3. Visual Impact Assessment of the new proposed structures.

4. The HIA should refer to Section 41(1) (c) (i) of the KZN Amafa & Research Institute Act No. 5 of 2018 instead of the Section 38(1) (c) (i) of the National Heritage Resources Act (Act 25 of 1999).

This report addresses the requirements of AMAFA, as outlined in their Referral Letter and to meet the requirements of Section 41(1) (c) (i) of the KZN Amafa & Research Institute Act No. 5 of 2018.

1.3 Statutory Context

THE NATIONAL HERITAGE RESOURCES ACT AND KZN AMAFA & RESEARCH INSTITUTE ACT.

The site is protected under the general protections of the above Acts, due to the size of the property in question, and the quantum of infill development contemplated, which would reasonably constitute a "change in character" of the site.

THE LOCAL MUNICIPAL ZONING SCHEME.

This portion of the site is zoned as "Education" in terms of the Umhlathuze Municipality's Land Use Scheme Regulations of the 25th September 2019 (Figure 3). Work is subject to the parameters outlined in the Scheme.

1.4 Study Methodology

The methodology used to undertake this study includes:

- Site visits have been undertaken to inspect the wider campus and the various parcels of land proposed for development;
- Extensive research has been undertaken of primary sources relating to the development and history of the University and the College that preceded it;
- Review of historical documents housed on the campus, especially within the library;
- Review of existing heritage reports pertaining to development applications and previous archaeological investigations within the area have been consulted;
- Mapping and analysis of historic plans, surveys, topographical maps, photographs and aerial imagery has been undertaken;
- Specialist input has been sought from individuals conversant with development applications in the area as well as on the campus.

This methodological approach has allowed for an understanding of the history of the campus to be built up, and the features, structures and landscape elements that defines its character. The social and historic significance of the campus has been assessed, and an understanding of the cultural landscape distilled. These analyses have underpinned the proposed heritage management guidelines suggested in this study.

1.5 Limitations to the Study

There have been few limitations experienced during the compilation of this document, but the following should be noted:

The heritage consultants are not Zulu-speakers, and some of the documentation consulted had to be translated to English. It is understood that some of the nuances of the meanings of various texts have likely been lost through this process;

The heritage consultants are cognisant, and were reminded by the University librarians, that much of the literature and journalism about the campus during the 20th Century was written with an "outside-in" lens, and further under the apartheid system. The consultants have tried to bear these prejudices in mind when examining these texts, so that they can be more fully interpreted.

1.6 Statement of Independence

Neither Claire Abrahamse nor Mishkah Collier, or any other professionals involved in the compilation and submission of this document, have any legal ties to the University of Zululand, nor the project management and professional teams appointed to undertake the campus construction projects. There is no financial gain tied to the positive (or other) outcome of this application.

Figure 3: The zoning map and land use regulations that apply to the university of Zululand campus, zoned as Educational and outlined above in red (Source: https://www.umhlathuze.gov.za/images/1462229-C.pdf).

5.2 ZONE CATEGORY: CIVIC AND SOCIAL

5.2.1 ZONE: EDUCATION

STATEMENT OF INTENT: A zone that provides for a full range of educational facilities, including infants, pre-primary, primary, secondary, tertiary and adult education and training with associated buildings and recreational facilities.

PERMITTED USES	CONSENT USES	PROHIBITED USES
• Caretaker Accommodation • Coffee Shop / Tea Garden (<or = 20m²) • *Community Garden • Day Care Facility • Educational Building • Municipal Purposes • Place of Assembly • Place of Worship • Private Recreational Use • Recreational Building • **Tuck Shop • Canteen • ****Rooftop Telecommunication Infrastructure	• Agricultural Building • Agricultural Land • Conference Facility • ***Residential Building • ****Freestanding Telecommunication Infrastructure • Institution • Residential-Medium Density • Public Office • Restricted Building (limited to an educational facility) • Special Use • Utility Facility	Buildings and land uses not included in Columns 1 and 2.

ADDITONAL CONTROLS

- Minimum standards for schools and higher education institutions as determined by the relevant government departments shall apply.
- **Tuck Shop - Limited to serving staff and learners.
- ***Residential building shall be limited to student and/or staff accommodation and must comply with Policy on the Minimum Norms and Standards for Student Housing at Public Universities (Government Gazette No. 39236)
- For provisions relating to parking and loading refer to Clause 6 and Clause 6.3
- ****All telecommunication infrastructure are subject to submission of Building plans for municipal approval.
- Private School, proof of registration and accreditation with Department of Education and Independent Association of Southern Africa.
- Sites for the care of children shall comply with Council's Childcare Services Bylaws.
- Drop-off and pick up areas shall be located on-site and, where possible, shall not be located adjacent to a major arterial road to avoid traffic congestion and pedestrian and vehicular conflict.
- Where provided for under a relevant zoning, the accommodation of a caretaker or emergency personnel may be allowed. The size of such dwelling unit may be restricted at the sole discretion of Council.
- *The use of land for urban agriculture / community gardens is supported within the context that it will not degrade the quality of life of surrounding landowners, will not impact harmfully on public health and/or the natural environment and will contribute to the social and economic well-being of people.
- Applications for the use of land for the purpose of producing crops will be subject to Council's consent process and shall be accompanied by:
  - a) A site plan showing the extent of the use of land and where water for irrigation will be obtained from;
  - b) A motivation indicating how the use of land will be managed (including details regarding irrigation and fertilisation) and how the use of land will contribute to the social and economic well-being of people; and
  - c) An environmental and agricultural assessment and/or letter of support from relevant environmental and agricultural authorities.
- The use of land in environmentally sensitive areas such as floodlines, wetlands, etc. is not in line with environmental legislation and shall therefore not be supported.

DEVELOPMENT CONTROLS

LAND USE ZONE	MINIMUM ERF SIZE	FRONTAGE (WIDTH)	BUILDING LINES			HEIGHT	COVERAGE	FAR
			STREET	SIDE	REAR			
Crèche	500m²	18m	4m	2m		UR	40%	2.5
Primary school:	2.4ha without dedicated sport facilities.	18m	7,5m	4,5m or 1,5m per storey, whichever is the greater		UR	50%	1
	4.8ha with dedicated sport facilities.							
Secondary School :	4.8ha without dedicated sport facilities.	18m	7,5m			UR	50%	1
	8-10ha with dedicated sport facilities							
Tertiary Institution	Size - At the sole discretion of council	18m	7,5m			UR	80%	3
Private Schools	Size - At the sole discretion of council	18m	7,5m			UR	50%	1

The primary contributors to this report are as follows:

Mishkah Collier, MPhil Conservation (UCT) 2021, MArch (UCT) 2017, BAS (UCT) 2013, completed her Bachelor of Architectural Studies (BAS) degree at the University of Cape Town in 2013. In 2017, she obtained her Master of Architecture (Prof.) degree at UCT, and finally she obtained a Master of Philosophy in Conservation degree at UCT in 2021, expanding her knowledge in the field of heritage and conservation. She has served on the Built Environment and Landscape Committee at Heritage Western Cape.

Claire Abrahamse, SMArchS Urbanism (MIT) 2009, BArch (UCT) 2005, BAS (UCT) 2002, completed her Bachelor of Architectural Studies (BAS) degree at the University of Cape Town in 2002. In 2005, she obtained her Bachelor of Architecture degree at UCT, and finally she obtained a Master of Science in Architecture and Urbanism degree at the Massachusetts Institute of Technology in 2009. She has practiced independently in the heritage field in Cape Town and the Western Cape since 2010, and has undertaken heritage inventories for both the University of Cape Town (2019, ongoing) and Stellenbosch University (2013). She is a member of the Urban Design Institute of South Africa, sits on the Heritage Committee of the Cape Institute for Architecture, and is a member of the Association of Heritage Practitioners in South Africa.

Both Mishkah and Claire are registered professional architects with the South African Institute for Architecture (SACAP).

1.7 Naming of Parts

The university campus at the University of Zululand is a complex environment, and it is therefore necessary to identify the names of buildings at the beginning of this report. The campus map that follows identifies the current naming of structures and spaces (Figure 4). This report adheres to this system of naming.

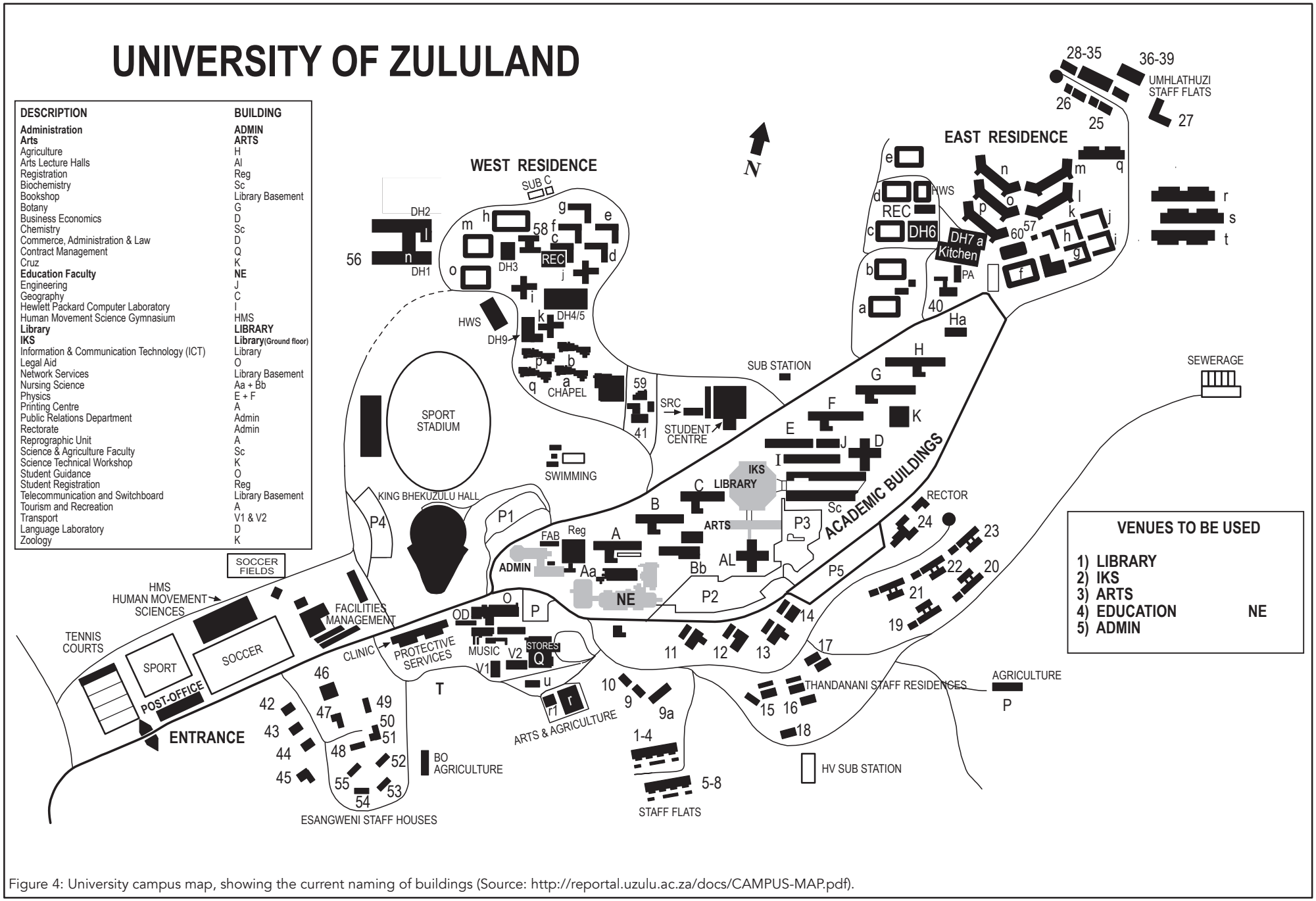


Figure 4: University campus map, showing the current naming of buildings (Source: http://reportal.uzulu.ac.za/docs/CAMPUS-MAP.pdf).

2) OVERVIEW OF THE SITE AND ITS CONTEXT

PROPERTY DETAILS:

Name of Property:	University of Zululand Main Campus.
Location:	1 Main Road Vulindlela, KwaDlangezwa, Empangeni, KwaZulu-Natal.
Municipality:	Umhlathuze Municipality.
Co-Ordinates:	S 31°84'38.7"; E 28°85'63.9".
Property Number:	Remainder of Reserve No. 9 No. 15829, Registration Division GU, Province of KwaZulu-Natal.
Property Area:	39365.8618 Hectares.

The "site" in this instance is the University of Zululand main campus at KwaDlangezwa. It is located on the ridge-line of a hill, encircled by two tributaries of the Mhlatuze River to the north and south of the campus.

The town of Vulindlela is located to the west of the university camps, but "town" and "gown" are distinct (Figure 5A and 5B).

The campus is strung out along the ridge-line of the hill so that the views obtained are largely rural, with the bright green hills forming an encircling backdrop to the campus. The academic buildings are arranged in a long "spine", with the residential buildings in two enclaves to the east and west.

The campus was established in the 1960s, and therefore the architecture making up the campus environment is distinctively Modernist. In this fertile area, the landscaping is distinctive, with large Norfolk Pine trees defining the primary routes and paths through the campus environment (Figure 6A - 6H).

The University of Zululand campus is located on land owned by the Zulu Royal Family. It is a small parcel within a far larger extent of land, and in some ways forms a "gateway" into this larger site, being located close to the coastal "sugar belt" that stretches up the coastline from Durban, and within which the N2 and other major transport routes run.

The campus itself measures around 155 hectares in area, whereas Reserve No. 9 No. 15829, Registration Division GU, Province of KwaZulu-Natal measures 39365.8618 hectares, and has formed part of the historic Zulu Kingdom for centuries.

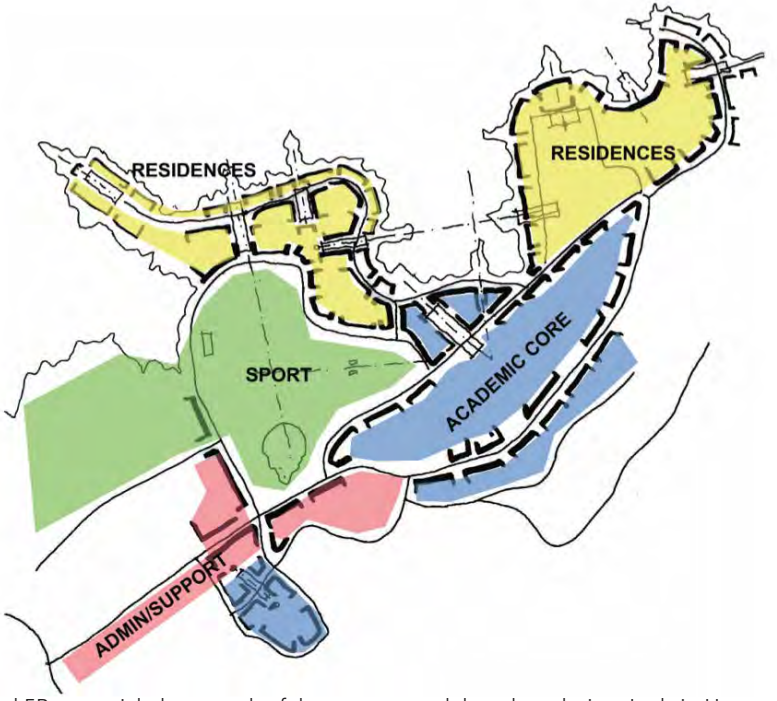


Figure 5A and 5B: an aerial photograph of the campus, and the urban design, Ludwig Hansen's analysis of the various components of the campus (Source: Cape Farm Mapper and Ludwig Hansen).

Figure 6A: View of the Admin Building from the approach road. The mature Norfolk Pines are evident.

Figure 6B: Vista to the north of the site, showing the Mangeza dam.

Figure 6C: One of the original academic buildings with an intact brise soleil.

Figure 6D: The Education Faculty Building, one of the c1980s additions to the campus.

Figure 6E: The Science and Agriculture building and "Cruz" Building on the western edge of the campus.

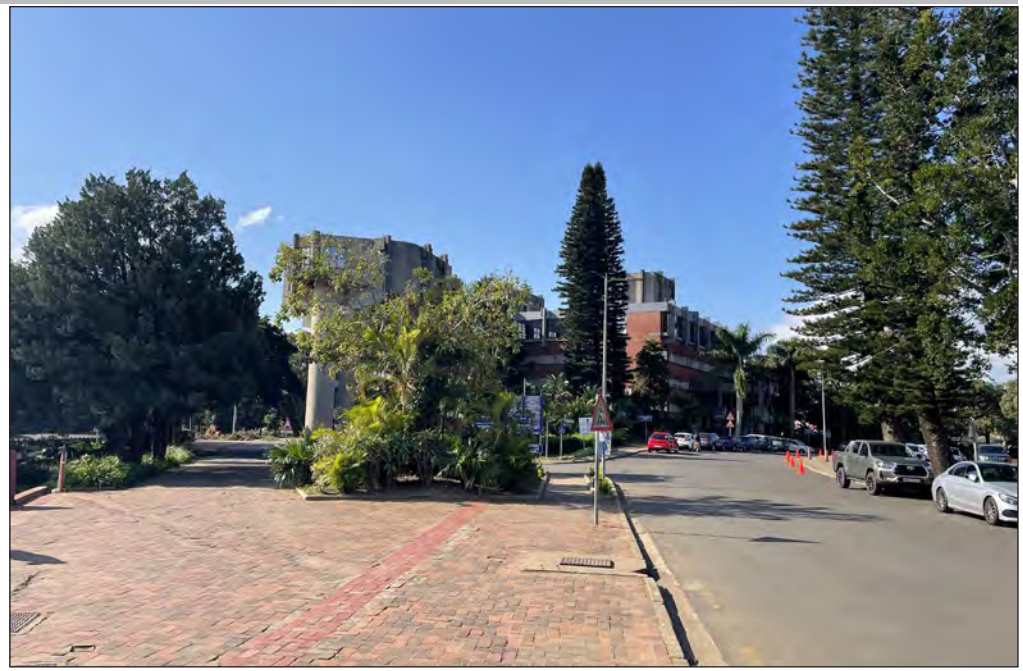


Figure 6F: The Admin Building is a landmark, and marks the divergence of routes through the campus.

Figure 6G: The library building is a primary landmark and the "heart" of the campus.

Figure 6H: The King Bhekuzulu Hall is the ceremonial heart of the campus, and a noteworthy building.

PART B: SPECIALIST STUDIES

1) IDENTIFICATION OF HERITAGE RESOURCE ON THE SITE AND WITHIN ITS ENVIRONS:

Places, Buildings, Structures and Equipment of Cultural Significance.

The University of Zululand campus is an interesting collection of buildings, laid out on rural land in the 1960s. The campus was established on top of a hill, with steep sides dropping away to the north, south and east. Although the adjacent town of Vulindlela developed rapidly during the latter half of the 20th century, the University has maintained green surrounds on all sites, and the campus is therefore spatially distinct.

The choice of site was deliberate: "The ideal site was to choose the heart and soul of the Zulu people and an inaccessible place for those from above and below, even those from overseas" (Mbuli, M., quoting King Bhekuzulu at the official opening of the 1961 Congress). Mbuli reports that the decision to found a university and the intake of students in the first year left little time for construction, and the first structures realised were two classrooms, followed shortly by residence buildings for men and women - the campus being very isolated from most student's homes (2004).

Aerial photographs indicate the development of the campus over time (Figure 8A-8F). It is clear that the campus developed around a prominent footpath of the Kwadlangezwa Village. This historic footpath became the central spine of the university campus, with linear academic buildings facing northwards, and with residential areas to the east and west (presumably male and female residences - see Figure 5). This essential campus "pattern" can still be discerned today and is reinforced by the established trees and landscaping that were planted at the time of the establishment of the campus.

Figure 7: Aerial image of university prior to 1980. Taken from the entrace at the southern end of the university campus.n

Cultural Study of Architectural Eras

The campus has a clear architectural character and materiality, with red brick and a brise soleil architecture being the predominant elements, all set within a verdant environment. It is a layered site, architecturally speaking, and the architectural approach to the various structures at various times relates both to the political and cultural context within which the projects were conceived.

Although only the oldest buildings were constructed over 60 years ago, and therefore are protected under Section 34 of the National Heritage Resources Act (see Annexure B: Mapping of Heritage Resources and Significant Features), the university campus is nevertheless still a significant contributor to the cultural landscape of KwaZulu Natal. This makes the existing buildings all worthy of heritage analysis, with some holding greater heritage significance than others.

The campus has been densified with successive "waves" of university building, with some of the older structures demolished and replaced. Nevertheless, clear architectural "eras" of building are still legible on the campus (Figure 6). These eras are defined by the following architectural styles that were popular throughout KwaZulu Natal at the time:

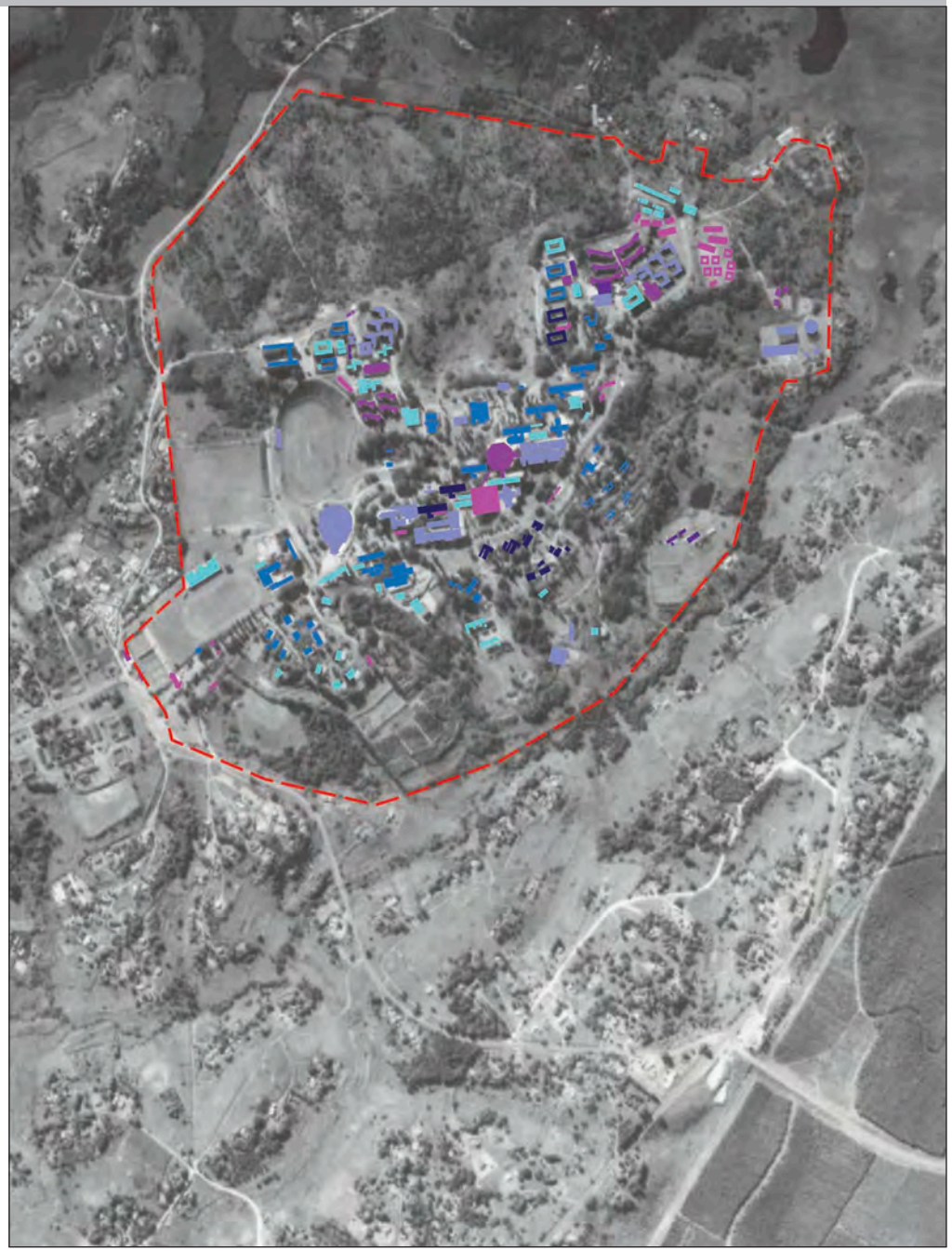


Figure 8A: Age of fabric diagram, showing the various layers of campus development from 1960 to the present day.

1960s Critical Regionalism

The university was established in 1960, when regionalist architecture was popular amongst the architectural fraternity of South Africa as a variant within the Modern Movement (Clarke & Fisher, 2014). Modernism emerged from the Bauhaus school of art in the early 20th century, with the construction of their prominent Dessau University building, which was designed by its founder, Walter Gropius, along with the student body and staff. The school was established to improve the living conditions of people during the modern age and was characterised by the following key features: freeing up the ground floor plane – often with a spatial connection between internal and external spaces; staying true to materiality in terms of both aesthetic and structure; the elimination of decoration; and staying true to function. South African architectural schools, however, soon saw Modernism as a placeless architecture that that lacked a strong connection to its site, which led to Critical Regionalism as a popular architectural style in the mid-20th century (Jonas, 1962).

Critical Regionalism adopted many principles from the Modern Movement but placed great emphasis on the siting of individual buildings – carefully responding to the local climate of the region and the materials and building techniques that were readily available within those regions. In Durban, Regionalism was still rooted in European building practice but drew aesthetic inspiration from African patterns, traditions, and architectural vernaculars, which included basketry, beadwork and existing Zulu homesteads. Architects Norman Eaton and Adriaan Louw Meiring were best known for designing 'African inspired' architecture for Black users in the 1950s, shortly after apartheid, when segregated institutions were first built.

The architectural character of the University is tied together by the implementation of brise-soleils, an element that is repeated in the buildings constructed on the University campus over time. Brise-soleils are an inherently Modernist element and technique that originated in Brazil in 1936 and which uses external screens to protect the windows from the sun. The tropical climate in the coastal cities of Brazil is similar to that of coastal KwaZulu Natal, and the brise-soleil is the first of many comparisons to be made between the architecture of UniZulu and that of Brazil.

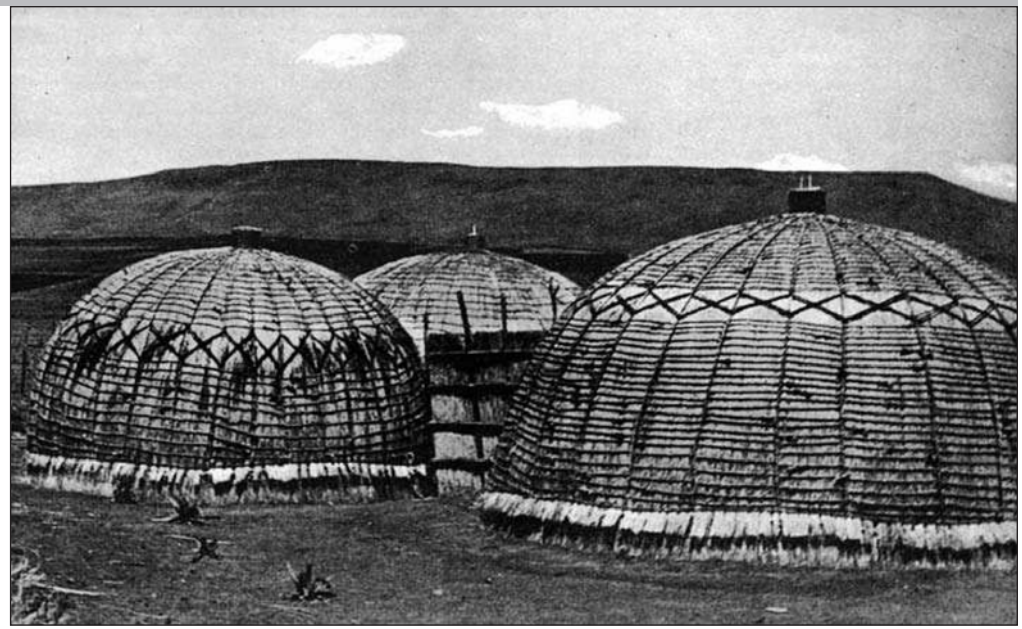


Figure 9: Indigenous Zulu huts in Natal ("Native Housing," Architectural Review 96, no. 574 [Oct. 1944], 107).

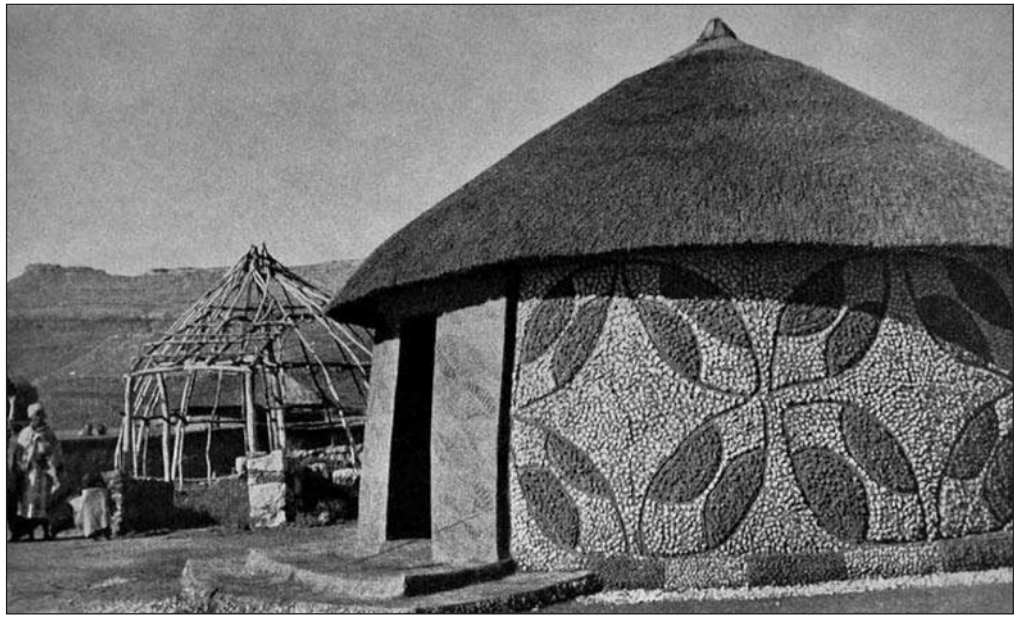


Figure 10: Taung hut with pebble mosaic decoration, Basutoland (James Walton, "South African Peasant Architecture: Southern Sotho Folk Building," South African Architectural Record 34, no.1 [Jan. 1949], 2; 247.A.1.H[12b]).

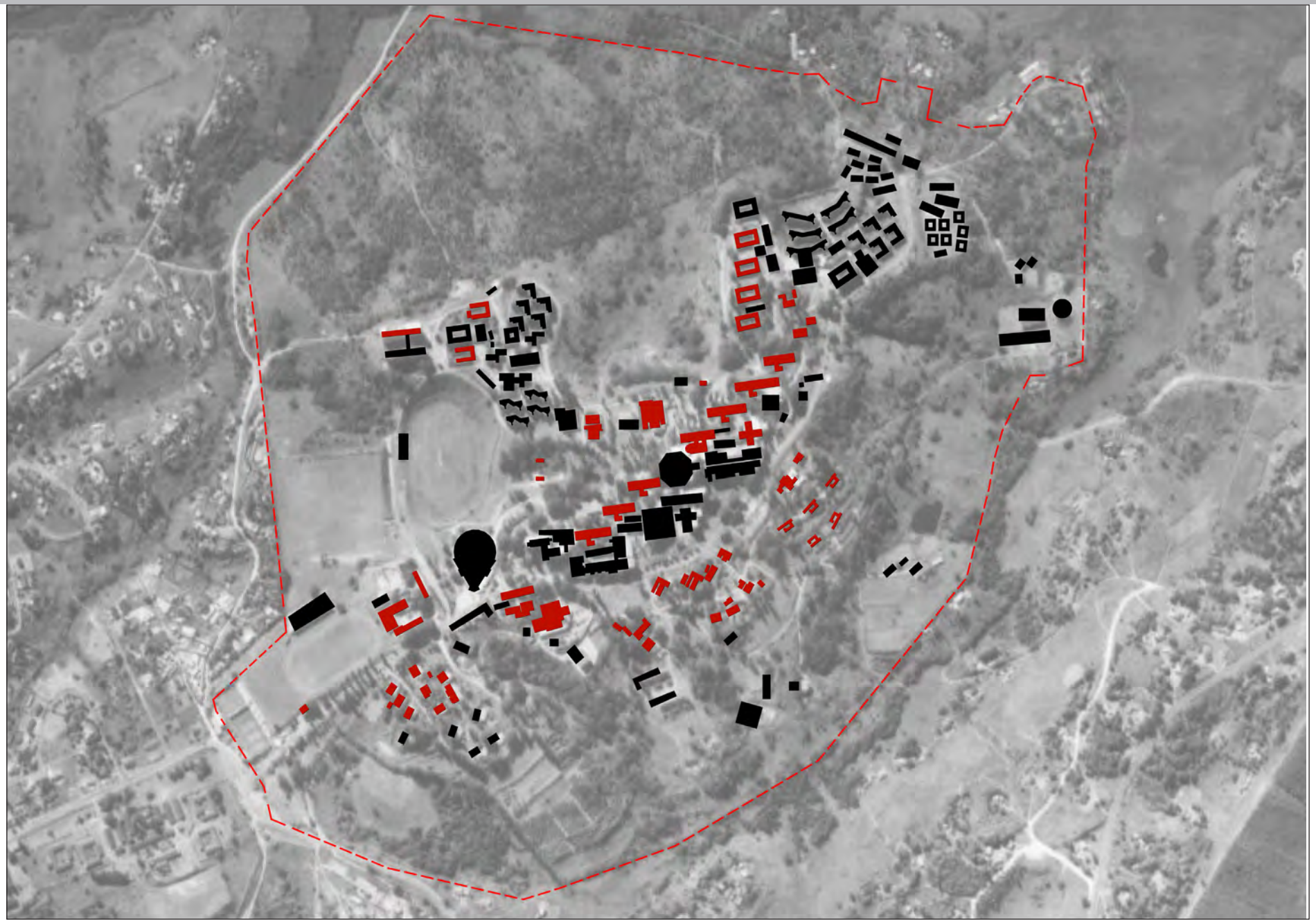


Figure 8B: Diagram showing the buildings constructed in the 1960s in red and all existing buildings shown in black.

The first buildings constructed on the university campus are the single storey, rather modest "bungalow" type buildings with decorative brise-soleils, plasterwork patterns, and some with internal courtyards and circular "lapas" at the building entrances. The architect of the spatial development plan and earlier buildings on the UniZulu campus was Piet van den Berg, an Afrikaans architect from Pretoria (South African Architectural Record, 1968).

Van den Berg also designed the University-college of the North (Turfloop), now the University of Limpopo. He was, therefore, responsible for two of the three first Black university-colleges.

It is immediately evident from both the campus layout and the use of African inspired brise-soleil patterns that the two universities were designed by the same architect at the same time. The patterns of the plasterwork and brise-soleils were clearly based on generic African patterns in order to 'Africanise' the 'Bush College' for its Black students, given the differences between Mankweng, Limpopo, which is home to Sotho, Venda and Tsonga people and Ngoye, KwaZulu Natal, which is home to predominantly Zulu people.

Piet van den Berg's own home in Pretoria was a prominent architectural example of its time, designed with brise-soleils panels and the same resultant "dissolving" of exterior and internal spaces, although on a much grander scale.

The architectural fraternity of South Africa in the 1960s consisted only of White South Africans, until 1969, when Aziz Tayob graduated from the University of Witwatersrand as the first Black architect. This further problematised the use of African vernacular influences in architecture dating back to the 1960s. Sabine Marschall notes that architects in the 1960s, who were designing for racially segregated institutions were encouraged to use 'ethnic design' as a way to distinguish the users of these institutions (Marschal, 2001). This resulted in the appropriation of African culture by White architects in institutions designed for Black users, where the users had no say in the superficial use of their (or other African groups') cultural art-types and architecture. To further highlight the gap between the architects who designed the African-inspired buildings at UniZulu and the users of these buildings, despite the student body being made up of Zulu and Sotho speaking students, the names of each of the earlier academic buildings are written on the structures in English.

Figure 11A: An example of the brise-soleil around academic buildings. (Authors own).

Figure 11B: An example of the patterned brise-soleil around the early academic buildings. (Authors own).

Figure 11C: Patterns of the brise-soleil, plaster detail and painting on early residential buildings. (Authors own).

Figure 11D: Large residential block from the late 1960s. Facades with patterned window designs. (Authors own).

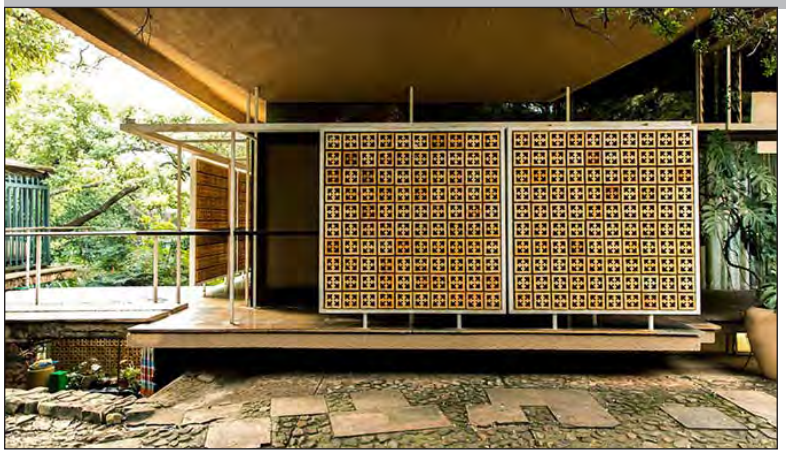


Figure 12A: House Van den Berg brise-soleil panels. (Image from Artefacts, taken by Cameron Forder, 2021).

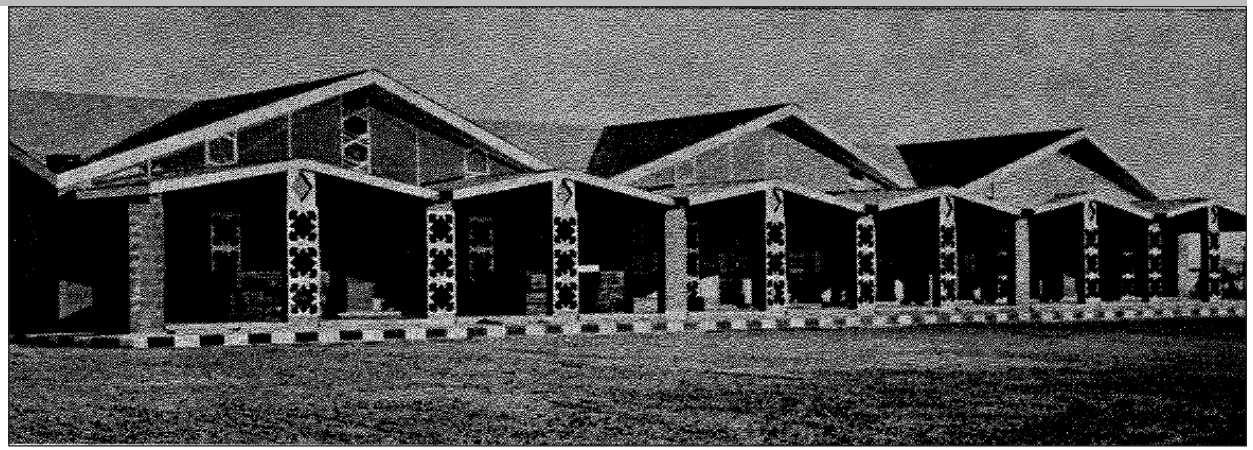


Figure 12B: Student Centre at the University of the North (Turfloop), designed by Piet Van den Berg; Campus layout of the University of the North (bottom left) (South African Architectural Record [March 1968], Pg 22-23).

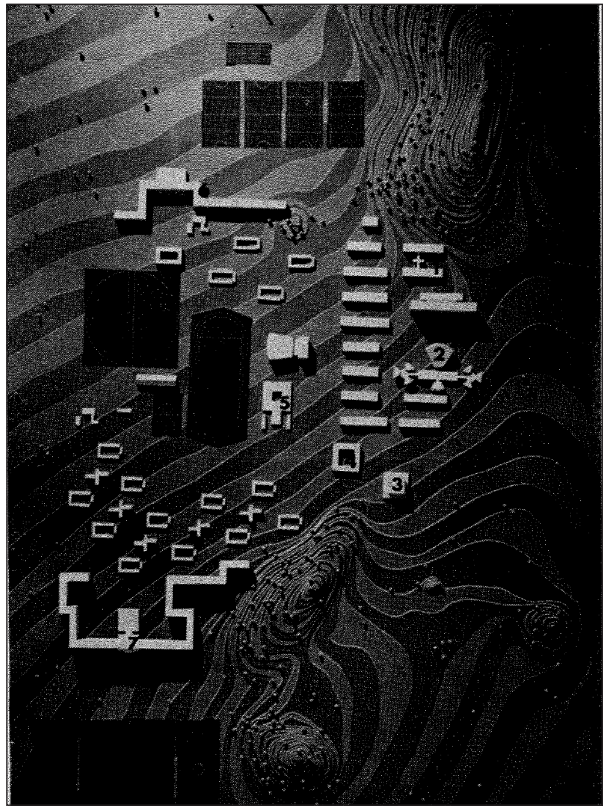


Figure 12C: Campus layout of the University of Zululand, designed by Piet Van den Berg. (South African Architectural Record [March 1968], Pg 21).

This earlierst "wave" of university construction and its inherent aethetic and stylistic conflicts also links to the broader, national theme of the use of the Modernist style in the design of public structures to further the Nationalist Party's agenda.

Hobson writes that, in the Global South, Modernist planning was the dominant post-1945 model of development: modernisation, the assumed universal path to progress, was closely associated with post-colonial state-building (1999: 2).

The design of the early academic buildings at the University of Zululand certainly exhibits the evolution of architecture in South Africa in the two decades after the Second World War "which were characterised by a far greater diversity within the modern movement.... The planarity of the International Style gave way to a more scuptural and robust form of expression in which bare... concrete, textured facades and the density of walls played a greater role" (Curtis, 1994: 492).

Peters points out that during the 1950s South African architects drew inspiration from Brazilian modernism and Californian mid-century modernism, which developed ways of dealing with hot climates and strong light (2004: 538). Typical architectural features included upswept roofs, curvaceous, geometric shapes, and bold use of glass, steel and neon or polychromatic colours. These infuences can be seen in the use of decorative tiles, coloured tiling, the brise soleli with individualised patterning for each structure, and projecting horizontal eaves.

In all, the design of these early buildings seems to highlight the political negotiation that marked the establishment of the University from the very beginning, namely the contestation between the National tier of government, who controlled the University, and the local authorities, students and Zulu Royal Household, who were the land-owners and responsible for the day-to-day functioning of the space.

The use of a Modernist style - even one with Regionalist influences - reflects the shift towards more centralised political power within the country under the National Party, and the political will to assert control within the campus space.

1970s Regionalism

During the 1960s, the Pretoria and Witwatersrand Schools of architecture both began to criticise the Modern Movement, moving away from the Modernist ideologies that the Witwatersrand University students understood to be a "complacent perception of standards and concepts that are no longer valid" (Jonas, 1962).

By the 1970s, Critical Regionalism in South Africa, and on the UniZulu campus, progressed towards a regionalist style that no longer borrowed 'Africanised' aesthetics from African cultural architypes but still responded to the local climate of the region. In doing so, buildings could not immediately be identified as buildings constructed for Black users, as was the case in the 1960s. The architectural response retained architectural elements from the 1960s such as the brise-soleil and overhanging eaves, and still made use of simple building technology and locally available materials such as masonry. However, instead of plastering the finished building, as was popular in the 1960s, the progressing style of regionalism remained true to the face-brick and exposed concrete building materials used.

Very few buildings were constructed at UniZulu between 1970 and 1977, and the architecture constructed during this era were largely generic with very few notable examples. Two notable buildings from this era are the W Gcabashe Chapel, the Arts block, and the Zoology building - three very different face-brick buildings that successfully respond to their respective uses and contextual surrounds on campus.

Figure13A: W. Gcabashe Chapel (Authors own).

Figure 13B: Residential block with generic brise-soleil details and overhanging eaves. (Authors own).

Figure13C: Face-brick residential block with generic detailing. (Authors own).

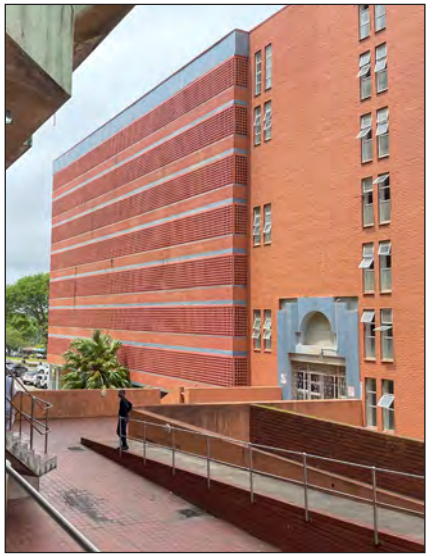


Figure 13D: Arts block with face-brick and generic brise-soleil type of this era. (Authors own).

Figure 13E: Zoology building with face-brick and generic brise-soleil type of this era. (Authors own).

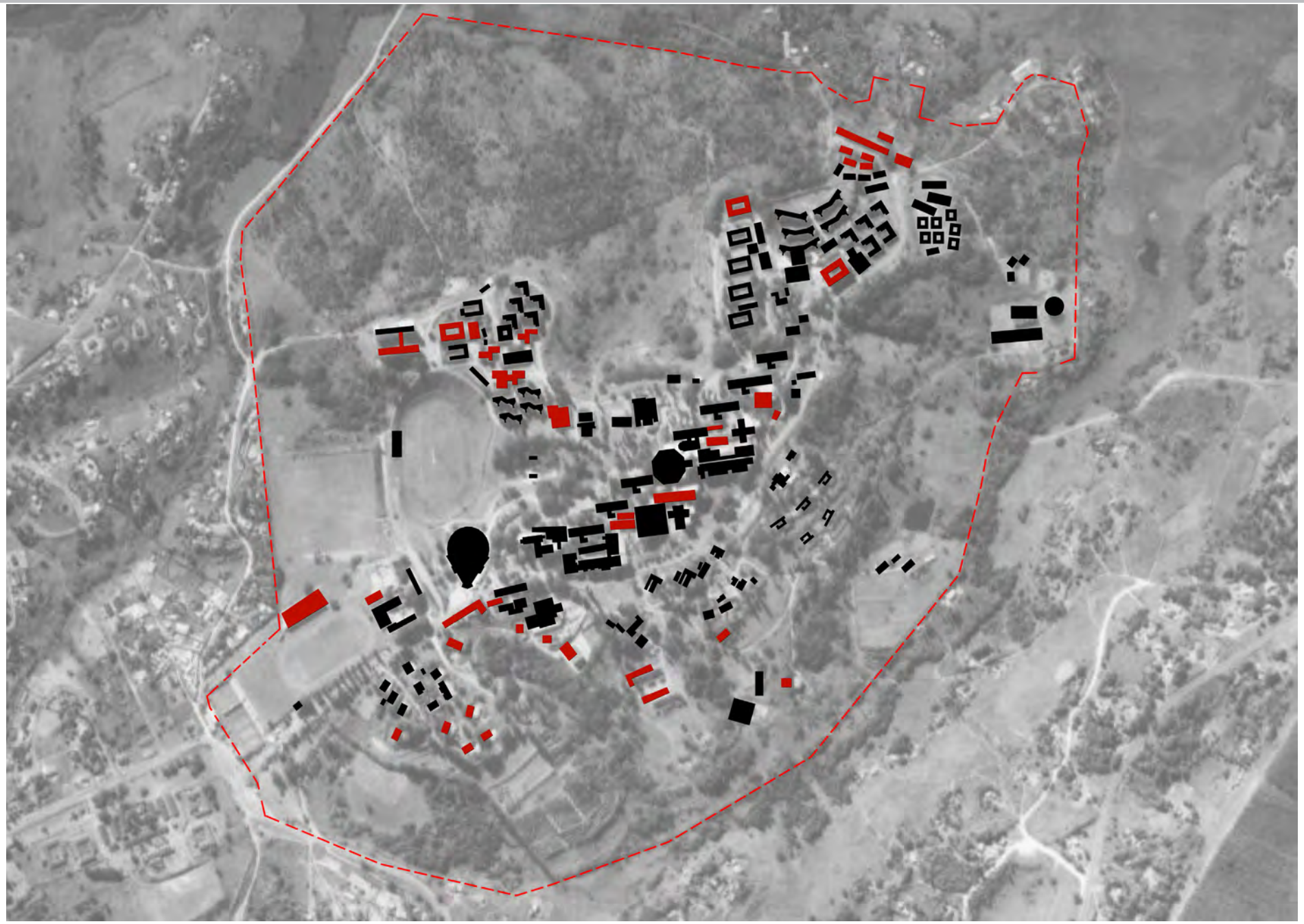


Figure 8C: Diagram showing the buildings constructed in the 1970s in red and all existing buildings shown in black.

Late 1970s and 1980s New Brutalism

New Brutalist architecture gained popularity in Europe in the 1940s with the work of Louis Kahn and Le Corbusier. The movement gained traction in South Africa in the late 1960s, with the rise in Nationalism after South Africa became independent of the Commonwealth. The term 'New Brutalism' was coined by Raynar Banham. Its origins are in the French term 'béton brut', which was used to describe Le Corbusier's use of 'raw concrete'. Brutalism emerged as a nostalgic ode to Modernism, true to its structure and materiality, but with little desire for decorative aesthetic.

New Brutalism was used in university campuses throughout the UK, Europe and the America's during the 1950s and 1960s as a response to the economic depression of the time. In much of Latin America - Brazil in particular - the New Brutalism style was derived as early as the 1920s as an architecture that emerged out of freedom and symbolised the country's prosperity.

In direct contrast to Brazil, New Brutalism became the architectural style of oppression in South Africa and many Eastern European countries. The Brutalist style of architecture was used between the 1960s and 1980 in civic centres and university campuses throughout South Africa, where the Apartheid government utilized it as a new national architectural

Figure 14A: Rectory building at the Federal University of Rio Grande do Norte. (Image from Wikipedia).

Figure 14B: Unité d'Habitation by architect Le Corbusier. (Brutalist buildings by Amy Frearson, 15 September 2014, Dezeen)

Figure 14C: Merensky 2 building at the University of Pretoria, by TECTURA. (Image from Artefacts, by Puleng Ntohla, 2021).

Figure 14D: Building Sciences at the University of Pretoria. (Image from Artefacts, taken by Cameron Forder, 2021). Meiring & Naude.

Figure 14E: Neville Alexander Building at University of Cape Town by Julian Elliot. (Image from Artefacts, by Mike Louw, 2016).

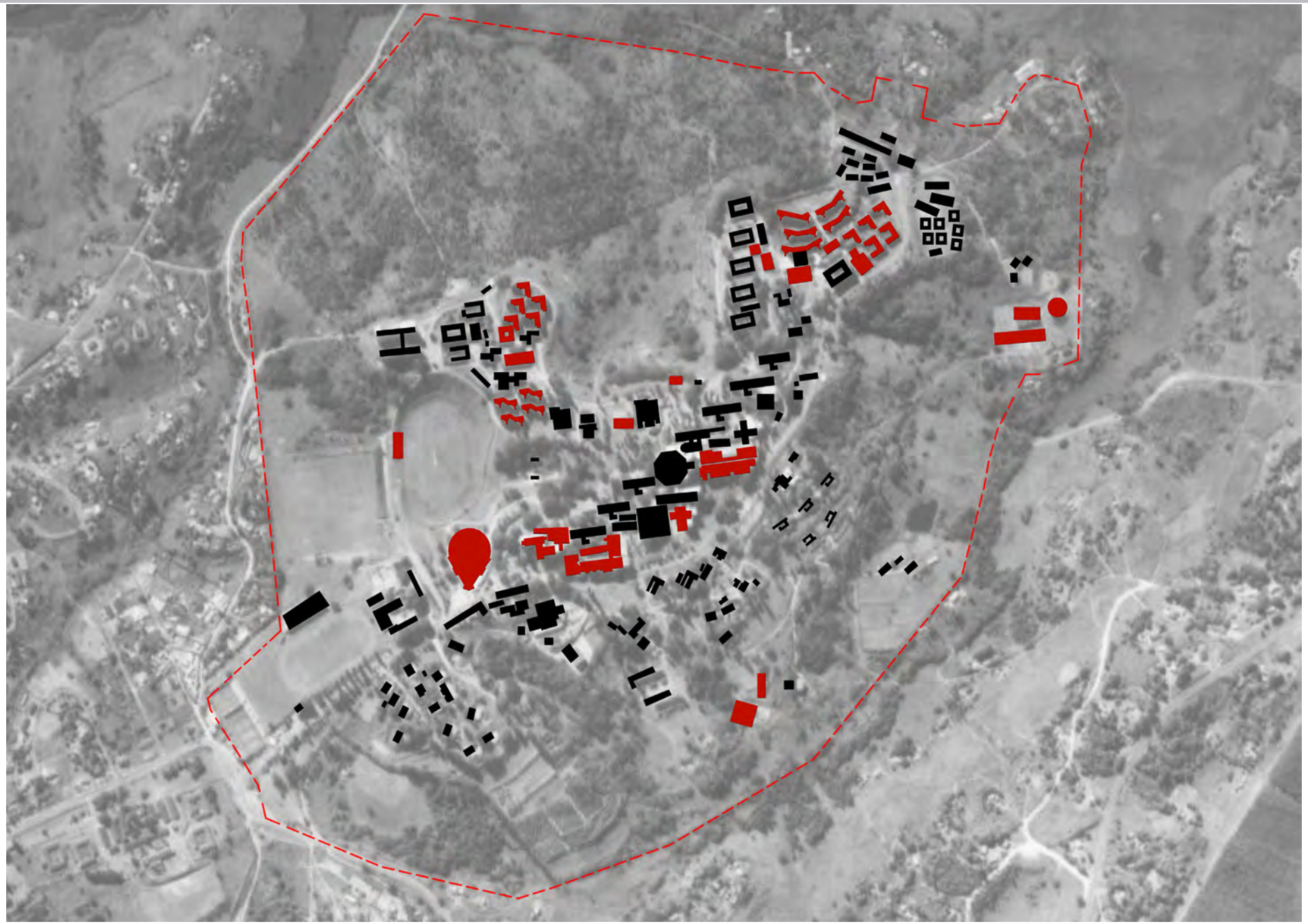


Figure 8D: Diagram showing the buildings constructed between the late 1970s and early 1980s in red and all existing buildings shown in black.

style in order to assert dominance and control of the new ruling White State. New Brutalism was seen to denounce South Africa's ties to its European history and further separate the state from its architectural history of African influence. As editors Nicholas Clarke and Roger C. Fisher note in thire *Architectural Guide: South Africa*, New Brutalism "was employed by the government in service of ideology and most architects of the time were happy to oblige" (Clarke & Fisher, 2014. p. 15).

Unlike the architecture at UniZulu that came before it, Brutalism showcased exposed concrete and brick, while also exposing the building's internal service logic. One of the more jarring differences of Brutalism in comparison to Regionalism in South Africa was its aversion to respond to the local context, climate and building traditions. The respective Brutalist buildings constructed at UniZulu, and various other university campuses throughout South Africa during this time, did little to respond to the surrounding contexts of these campuses and could easily be placed anywhere else in the world. Despite its oppressive symbolism, the architecture of this era was consistent in all universities throughout South Africa, whether they catered to White, Black or Coloured users.

Figure 15A: Education building with face-brick, brise-soleil and concrete detailing. This building is surrounded by tropical vegetation, much like Brazilian Brutalism. (Authors own).

Figure 15B: Admin building with face-brick, brise-soleil and concrete detailing. This building is surrounded by tropical vegetation, much like Brazilian Brutalism. (Authors own).

Figure 15C: King BekhuZulu Hall with face-brick, brise-soleil and concrete detailing. (Authors own).

Although the buildings constructed during this era are not older than 60, they contribute significantly to the architectural history of South African Universities and represent a particular moment in time both, globally and locally.

A large percentage of the buildings on the university campus were constructed during this time, and although not all of them are worth conserving, those within the academic core,as well as specific residential building typologies on the campus are important to preserve.

They represent one of the most well-preserved and architecturally competent collections of Brutalist structures in South Africa, and contribute significantly to the campus character: much like their counterparts in Brazil, these buildings contribute to the tropical aesthetic of the campus, "hidden" on the pedestrian plane behind the sub-tropical foliage that grows throughout the university campus.

Figure 16A: Cullen Bowles House at Rhodes University by RUSHMERE REID Architects. (Image from Artefacts, taken by William Martinson, 2014).

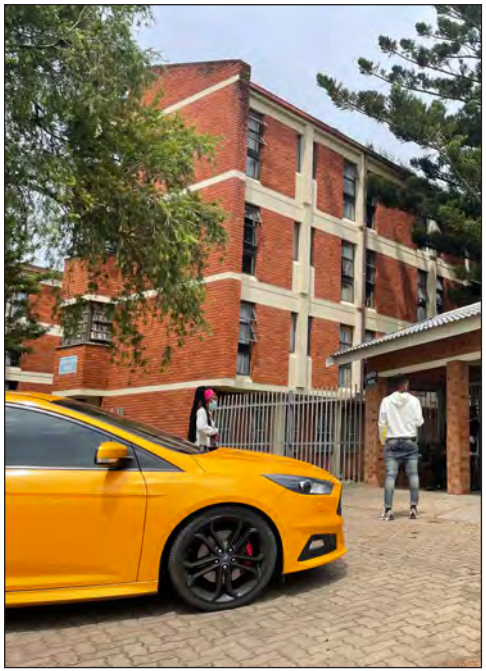


Figure 16B: Residential buildings with face-brick, brise-soleil and concrete detailing. Similar to university residences built throughout the country at the time (Authors own).

Figure 16C: Womens' Hall of Residence - Scully and University Club, University of Natal by HALLEN and DIBB Architects (Image from Artefacts, taken by Roger Fisher, 2014).

1990s Postmodernism

The buildings constructed between the mid-1980s and the 1990s clearly referenced avant garde university precedents by James Stirling, among others, in the United Kingdom. The architects of this era of construction at UniZulu were William Prescott Osmond and Barry Lange of Osmond Lange Architects.

Osmond and Lange were amongst the architects that prepared a research masterplan for the Department of Bantu Education for the proposed extensions to be made to the University of Fort Hare - another historically black university college. Although the office no longer has a record of the documentation produced for UniZulu, they were able to supply us with a copy of the formerly-mentioned report. This document was presented in 1976, and the buildings designed by Osmond Lange Architects were only constructed at the University of Fort Hare between 1985 and 1990, the same timeframe during which the Library and numerous residential buildings that they designed for UniZulu were constructed.

The research document studied university campuses in the United Kingdom that were constructed during the uptick in university institution demand that took place in the 1960s after the wa. It also studied the University of Zambia campus and Rand Afrikaans University. The following universities were used as precedent for their urban design and the placement of particular buildings on campus: Sussex, East Anglia, York, Lancaster, Kent, Essex, Warwick, Loughborough, Surrey and Stirling.

Despite Osmond Lange Architects studies on universities from the 1960s, the buildings constructed during this era are best described as Postmodern, an architectural style that was popular in the 1980s and 1990s and became the architectural style for many university buildings throughout Europe and America. The term Postmodern was first introduced in *Learning from Las Vegas*, a book authored by American architects Denise Scott Brown and Robert Venturi.

Postmodernism, according to Heidegger, was yet another reaction to Modernism, leading to "schematic and characterless environments with insufficient possibilities for human dwelling" (as cited in Nesbit, 1995: 48). Kate Nesbit, an architectural theorist, notes that Postmodernism therefore related back to the necessity of place by addressing the following four key concepts: "man, architecture and nature; place and genius loci; confrontation and dwelling; as well as place and regionalism" (as cited in Cloete & Yusuf, 2018: 36). These four concepts clearly illustrate the similarities between Postmodernism and Regionalism,

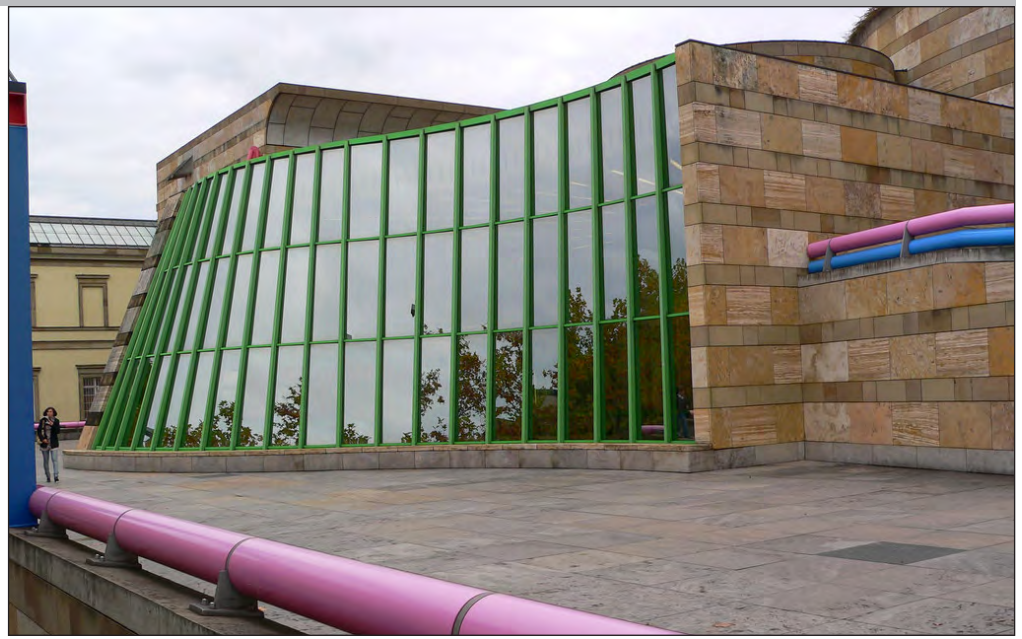


Figure 17A: The Neue Staatsgalerie by architect James Stirling in Stuttgart, Germany (1977–1984). (Wikipedia).

Figure 17B: North-West University, Sports Centre, Potchefstroom, North West by architects Bannie Britz. (Image from Artefacts, taken by Bannie Britz).

Figure 8E: Diagram showing the buildings constructed between the mid 1980s and 1990s in red and all existing buildings shown in black.

and furthermore coincided with the necessity for a new architectural identity in South Africa that no longer related back to an oppressive Nationalism. In the years leading up to Democracy, public and academic architecture in South Africa became more rooted, adopting Postmodern influences in an attempt to establish a new architectural identity.

More broadly, by the mid-1980s, the Modernist approach has been seriously challenged, firstly by urban realities (in South Africa the State of Emergency and numerous protests in cities made this abundantly clear), and by the rise of neo-liberalism, which promoted the open market as the primary distributive mechanism and reduced the state's role in planning (Beauregard, 1996; Sandercock, 1998).

Along with the necessity to respond appropriately to place, Postmodernism allowed for a decorative architecture that borrowed architectural features from the earlier eras, experimenting with colour, form and symmetry. This approach is apparent in the design of the UniZulu Library, with it's hexagonal forms, green plastered decorative concrete elements and symmetrical internal sphere that is heavily influenced by Louis Khan's Exeter Library in the USA. Creating an environment that was pleasant to its users, with concern for natural light and colourful elements throughout, was clearly a priority of the design.

Figure 18A: Arthur M. Sackler Museum, Harvard University, USA by architect James Stirling. (Image taken by Alastair Hunter in the RIBA Collections, 1986).

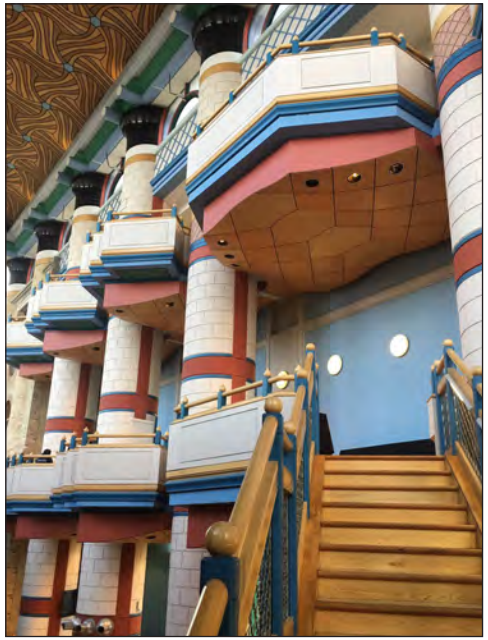


Figure 18B: Interior of the University of Cambridge Judge Business School, USA by architect John Outram. (Wikipedia).

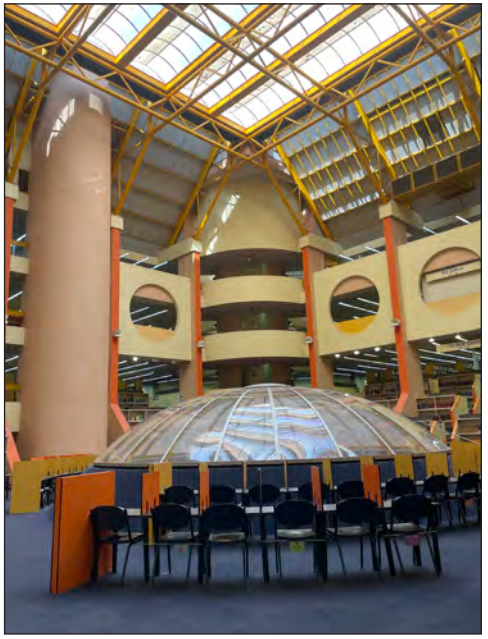


Figure 18C: Post-modernist library building with face-brick and colour concrete detailing. Colourful interior reminiscent of university buildings designed by James Stirling and John Outram. (Authors own).

Cultural Landscape/Campus Environment Significance.

In the pursuit of information on this University, it became increasingly clear that very little prior research exists on both its social history and on the establishment of the University itself. There is no clear record available indicating the architects of any of the buildings at the university prior to 1985, and even then no official records are available. Given the fraught history linked to "Bush Colleges" and "Homeland Universities", it can be speculated that earlier architects may have been reluctant to showcase their association with the University due to the divisive laws under which the University was established.

While so-called 'White Universities', which included the University of Cape Town, the University of Witwatersrand and the University of Natal, were not subject to direct governmental control, these 'Black Universities' were under the direct jurisdiction of the Ministry of Bantu Education, which gave the apartheid government full authority (Meyer, 1972). Therefore, as noted earlier in this report, the apartheid government had full authority to commission architects to design what they thought to be Black or African architecture for institutions for Black patrons.

UniZulu, and the KwaDlangezwa campus specifically, is significant to the cultural- and social-history of KwaZulu Natal. The Zulu nation, along with their centuries-old royal dynasty, has longstanding roots within the landscape of Zululand, and KwaDlangezwa in particular. At the University graduation ceremony in 1996, Chief Buthelezi noted that the chosen site of the university was sacred, as it was there that King Shaka's Dlangezwa army trained. The significance of both the site and its layered history is confirmed in his speech:

> …the redevelopment of the battlefield in the form of an educational institution meant that war would no longer be fought with shields and spears but would be fought with pen and ink (Extract from Thulani Mbuli, 2004).

The memorial at the entrance gates to the University confirms the significance of this landscape to the Zulu People. In terms of the apartheid State Constitution the Zulu Royal Family was 'established' on August 1, 1959, in the Ngoye area of KwaDlangezwa village (of course, the Royal Family is much older). While the royal donation of the land that followed was instrumental to the establishment of the University, the people of Kwadlangezwa were hesitant to allow the development of their sacred landscape.

The University still upholds a good relationship with the Chief of the Ngoye area, as the Mkhwanazi Traditional Authority remain the custodians of the land. The University's Social

Figure 19A: The undulated hills of the site on which the university is located. (Authors own).

Figure 19B: The memorial that exists just outside the university gates. (Authors own).

Facilitation Office are tasked to keep the Royal Family informed of any plans that the University may have for the development of infrastructure on the campus.

From a built-environment perspective, the campus is a layered site, and the architectural approach to the various structures at various times relates both to the changing political and cultural context within which the various projects were conceived. The 1957 aerial photograph (Figure 8F) indicates the landscape of traditional homes, connected along a pathway, that preceded the University. The landscape of the Kwadlangezwa region, and its surrounds, is made up of undulating hills, with homes and pathways located along ridgelines. The main pedestrian route through the campus still follows this pathway today, and in this way, the cultural landscape still underpins the physical landscape very strongly.

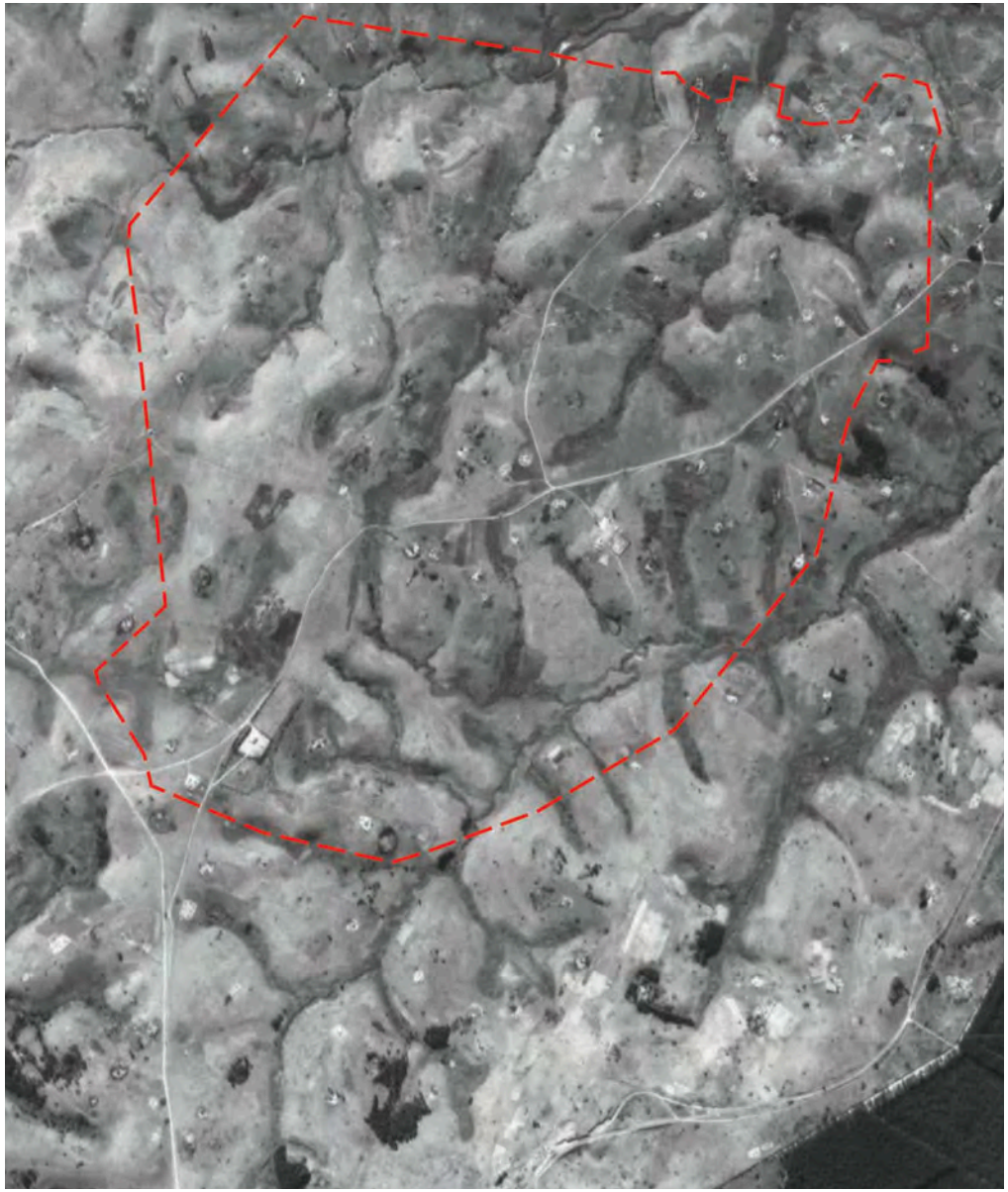


Figure 8F: 1957 aerial photograph with the campus area outlined in red. This image shows the traditional homes, all joined by a path that would become the campus movement spine. (Source: NGI Mowbray).

Associative Heritage Value

The site presents strong association with Chief Buthelezi and King Muntongenakudla Mkhwanazi, both of whom were instrumental in the establishment of the University. With persuasion from Chief Buthelezi, King Muntongenakudla Mkhwanazi donated his own land for the establishment of the University of Zululand.

Chief Buthelezi played a key role in the university politics of the greater KwaZulu during the 1980s and was responsible for awarding KwaZulu Government bursaries to Zulu students during this time. Chief Buthelezi came under fire after he and the 'Homeland' Government of KwaZulu made bursary holders sign a petition that forbid them from criticising Chief Buthelezi, the KwaZulu Government, and the Inkatha Freedom Party (Newspaper cuttings sourced at the University of Zululand Library).

In October 1983 Chief Buthelezi planned a commemoration of King Cetshwayo at UniZulu, where he was the chancellor at the time. As a result of a petition that was said to infringe on students' rights of speech, the lead-up to this event resulted in protests at UniZulu, where students sang songs that criticised Chief Buthelezi. These protests ended in the murder of 5 UniZulu students by Inkatha supporters in Ongoye, a town just outside of the University, and became a pivotal event in social history regarding the education of Black South Africans in KwaZulu Natal.

Social and Cultural Heritage Significance.

As mentioned before, the University of Zululand (UniZulu) was established in 1960 as the University College of Zululand for Zulu and Swazi speaking students, after the Extension of University Education Act of 1959 was proclaimed (Nkabinde, 1981; Ndimande, 2018). The construction of this University was fundamental to the social history of tertiary education of Black people in KwaZulu Natal.

Educational segregation was in force long before the establishment of tertiary education was open to Black people in South Africa, with the Bantu Education Act of 1953. This law was enacted upon the advice of the Eiselen Commision, an advisory board that investigated so-called "native education", and aimed to provide young, Black South Africans with an inferior education, funded by only a fraction of the amount of money made available to White educational institutions. This law was met with objection from Black communities and teachers alike, leading to the resignation of both Desmond and Leah Tutu from their professions as teachers. Before 1958, tertiary education was not open to Black people in South Africa, making UniZulu one of the first institutions of its kind in the country.

In 1959, following the segregation laws of primary and secondary education, and the divisive 'homelands project', the Extension of University Education was enacted, upon the recommendation of the Eiselen Commission once again. The Eiselen Comission insisted that creation of segregated tertiary institutions would enable "the development of the Bantu and their homelands", which was to be "firmly rooted in their own cultural institutions and customs" (Horrell, 1968). This was evidently not the case, and in fact just enforced segregated tertiary education, regulating the education received by the exclusively Black South African students at the time. The further categorisation of these historically Black Universities as 'University Colleges', or 'Bush Colleges' was essentially branding them as inferior. These institutions limited the education Black students were allowed to pursue.

The University of South Africa determined the standards of instruction for all University Colleges until 1969. During this period, exclusively White Governing Councils were appointed to determine the faculty appointments and curricula, while a separate Black Advisory Council, made up of chiefs without a tertiary education and government appointees, were treated as "window dressing" and had no say in the running of the institution. The Kwazulu Executive Council and South African leaders continually requested Zulu representation on the White Governing Council of UniZulu. This request was appeased by the Minister of Bantu Education and Development at the time, with the promise of gradual election of Black advisory members onto the governing council. This action would in effect continue to isolate Black voices within the governing council, ultimately resulting in no progress in the inferior education taught at the University (Meyer, 1972). Even the teaching staff at the University was wholly unbalanced, with 14 Black staff members and 80 White staff members in 1972 (Black Review 1972, 1973).

Despite the reservations held by many of the surrounding residents, Chief Buthelezi and the Zulu Royal Family were adamant that this University would be an asset to the Zulu people and provide them with a gateway to eradicate poverty. They saw the University as a chance for the development of an African university, one that would reflect their true identity (Thulani Mbuli, 2004). After 1969, these institutions obtained academic autonomy, allowing them to design their own curricula, conduct their own examinations and grant degrees (Meyer, 1972). UniZulu was then given University status in 1971 and has continued to grow and prosper on the sacred hills of Kwadlangezwa. The University continues to teach in isiZulu but has been open to all races since 1986.

Despite the problems faced by the students within these institutions, as Professor Lysle E. Meyer notes in his article titled "The Report on South Africa's Black Universities", "within the tight intellectual strait jacket of South Africa's system of separate development, black universities do represent opportunities" (Meyer, 1972). Reinforcing this belief, chief research specialist in the Democracy and Governance Programme of the Human Sciences Research Council (HSRC) in Pretoria, Seán Morrow, goes on to note the significance of historically Black Universities such as UniZulu as "symbol(s) of the culture and of the intellectual achievements of a particular society or class within society" (Morrow, 2002).

Much like Fort Hare is a significant symbol of Black Consciousness in South Africa, contributing to the intellectual and urban landscape of the Eastern Cape, UniZulu remains as a significant contributor of both the history and the intellectual and urban landscape of KwaZulu Natal (Morrow, 2002).

4) UNIVERSITY OF ZULULAND TOWNSCAPE STUDY AND VISUAL IMPACT STUDY

INTRODUCTION AND METHODOLOGICAL APPROACH

This study analyses and assesses the visual setting and architectural character of the wider University of Zululand Campus, located at Vulindlela. Through this, it also establishes the predominant urban patterns and associated visual absorption potential of the campus.

It is important to note that, although it is located within a rural setting, a university campus is a kind of "townscape", modelled on an urban, institution typology. Therefore, the methodologies used are more typical of the analysis of an urban area than a rural setting.

The study sets out to:

- Establish the Townscape and Visual Assessment Methodology
- Analyse the Receiving Environment and underling Landscape Character of the Site. This is done at tree scales:
    - The Coastal Context,
    - The Local Setting of the Campus: Field of View and Outward Vistas, and
    - The "Townscape" Setting of the Campus, and Major Character-Giving Elements.
- This allows for the Establishment of the University of Zululand Campus Character, which in turn influences the visual impact assessment of the proposed development of the Campus.

The findings of this study greatly influence the establishment of heritage-based guidelines and indicators in Part C of this report.

In Part D, Section 8 of this report, visual criteria are established and the visual impact assessment of the proposed development of the Campus is undertaken.

A NOTE ON TOWNSCAPE AND METHODOLOGY

In the case of UniZulu - a campus environment - it is clear that a "visual study" must include aesthetic, cultural and spiritual/genus loci aspects of the environment, which taken together contribute to the local character of an area and its sense of place.

A university campus is a particular type of place, with a particular townscape character.

The University of Zululand, like almost all university campuses in South Africa, is an American university-type campus, described by Le Corbusier in the 1930s as an environment within which: "each college or university is an urban unit in itself, a small or large city. But a green city... a world in itself" and by Turner as "(t)he romantic notion of a college in nature, removed from the corrupting forces of the city, (which) became an American ideal" (Turner, 1984: 4, quoted in Townsend, 2019: 9). The University of Zululand can be understood as "an urban unit of low-rise but large buildings, inter-connected and dominated by open space and set in an encircling 'parkland'" (Townsend, 2019: 10).

Although its isolation can as much be attributed to the apartheid ideology within which it was founded as the decision to create the sheltered "ivory tower" conditions of a place of higher learning, the University does relate to the international campus typology in this regard. Such campuses "can be seen as micro urban units which were assemblies of buildings on large sites, under single land ownership, unconstrained by the myriad regulations affecting urban development" (Elliot, 2004).

In this way, a visual analysis of a campus environment has substantial overlap with a townscape analysis, and in this HIA it is deemed to be essential that the visual analysis incorporate, and indeed be built upon, a methodology that would more commonly be found as part of a townscape analysis.

In urban literature, the idea of "townscape" emerged at the same time as the resurgence of historic preservation of towns following the Second World War, and the eventual creation of "conservation areas" in the late 1960s (Kostof: 1991: 90). At the time, townscape literature had been centred in England, and Gordon Cullen's 1961 book, "The Concise Townscape" looked at the city as a series of relationships between urban fabric, to create axes, viewcones, focal points, edges, repetition and so on, and his "Casebook Precedents" are largely analyses of older cities and towns. In this way, the idea and method of "townscape" analysis is closely tied to the analysis of historic towns and cities, and in understanding the various components that make up their particular characters.

This study utilises Cullen's approach for assessing townscape character and the character-giving elements present on the University of Zululand main campus. In so doing, it also establishes the parameters for infill development that would be visually consistent with the existing campus environment.

THE RECEIVING ENVIRONMENT

The landscape character of a place is made up of the "distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape, and how this is perceived by people. It reflects particular combinations of geology, land form, soils, vegetation, land use and human settlement" (UK Institute of Environmental Management and Assessment). Taken together, these elements make up the essential place character of a site.

The Coastal Context

Reserve No. 9 of Zululand is located to the south of Richard's Bay. It is characterised by rolling, green hills, frequently bisected by rivers that run towards the coastline. The sea is often visually obscured by a coastal hill system that separates the coast and the "band" of flat land behind it, after which the fertile, rolling hills extend into the interior (Figure 20).

The various layers studied at the largest scale (1: 50000) show the rolling nature of the topography, with a ridge of land effectively creating a barrier to the coastline, and with the land forming part of Reserve No. 9 being extremely hilly (Figure 21). This landscape is bisected by many rivers, with numerous tributaries running into them. In the case of the University of Zululand, the Mlhatuze River forms the major watercourse running to the east of the campus, with the Mangeza tributary encircling the campus, which is perched on a ridge-line, to the north (Figure 22).

To the south, the relatively flat land between the rolling hills and the coastal ridge is defined by parallel systems of transportation: the old main road, the national road (N2) and the railway line. These transportation systems fall outside the land owned by the Zulu Royal Family (Figure 23).

The relative ease of access of these flatter lands also makes them far more marked by agriculture and settlement. Since the 1950s, the area has been used for forestry plantations. Felixton is the local centre, with its sugar mill, while Empangeni was also in evidence as another industrial hub in the 1950s. In terms of settlement within the Zulu Kingdom's landholdings, only Ngwelezana existed as an urban settlement in the 1950s, while the "University College of Zululand" was an isolated campus on the hill, surrounded by villages and agriculture. Today, both of these areas are parts of urban nodes, with the Port Dunford and Mtunzini areas towards the coastline being far more urbanised (Figure 24).

A reading of maps from the 1950s to the present day reveals several "themes" in the cultural landscape that tie into larger, provincial historical narratives (Figure 25A – 25E). Firstly, the land making up part of the Zulu Kingdom shows comparatively less urbanisation throughout the map series than the surrounding areas, with labels such as "Chief's Kraal" and "Mission Station" indicating "other-ness" on the part of the map-makers. Even before apartheid, this land was seen as a distinct territory, held by the Zulus (Figure 25F).

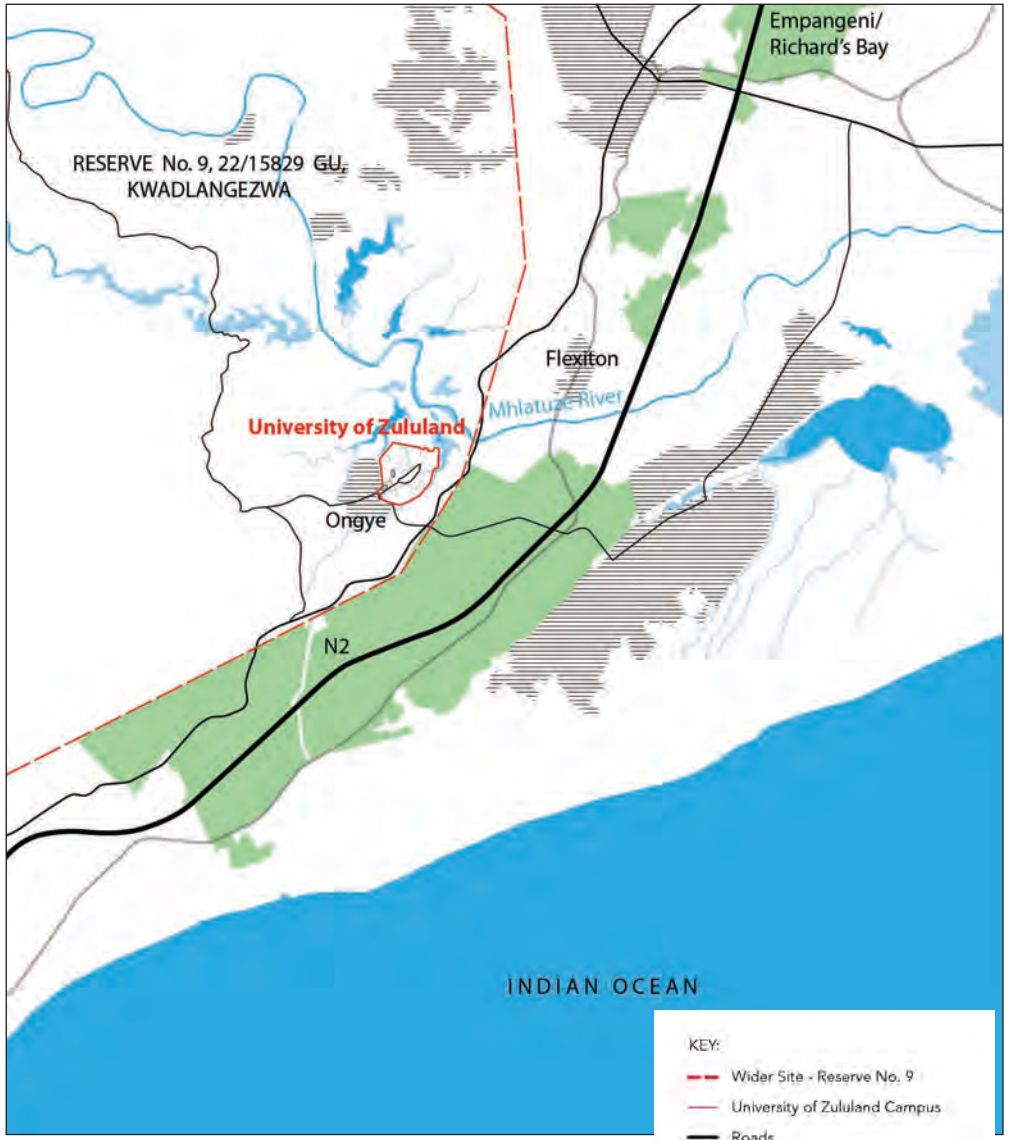


Figure 20: Diagram showing the major elements surrounding the site at the "coastal scale" (1: 50 000). The wider cadastral boundary is indicated in the red dashed line, while the campus boundary for the University of Zululand is shown in a solid red line.

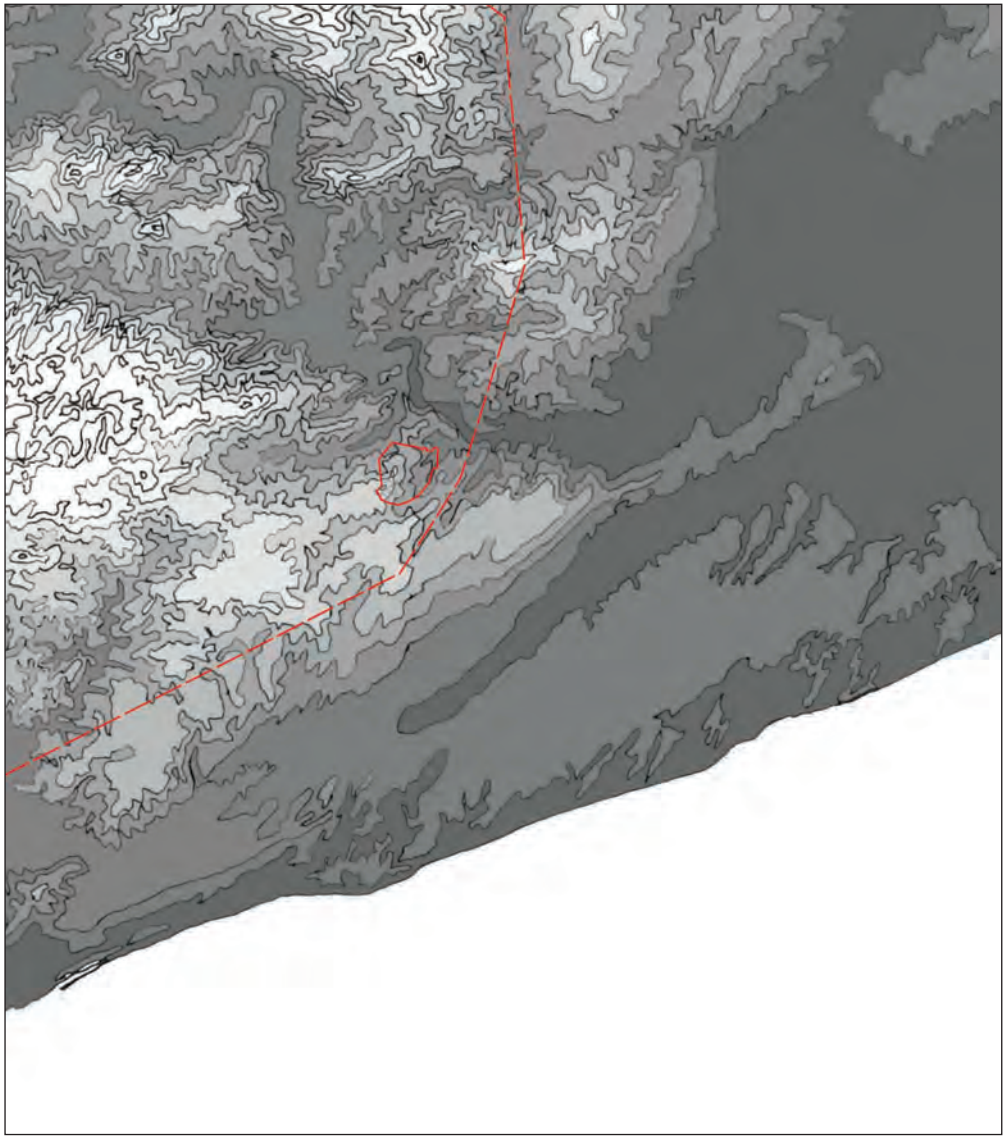


Figure 21: Diagram showing the topographic structure underpinning the site at the "coastal scale" (1: 50 000).
A clear difference between the hill landscape - on which the UniZulu campus is located - and the coastal area is evident.

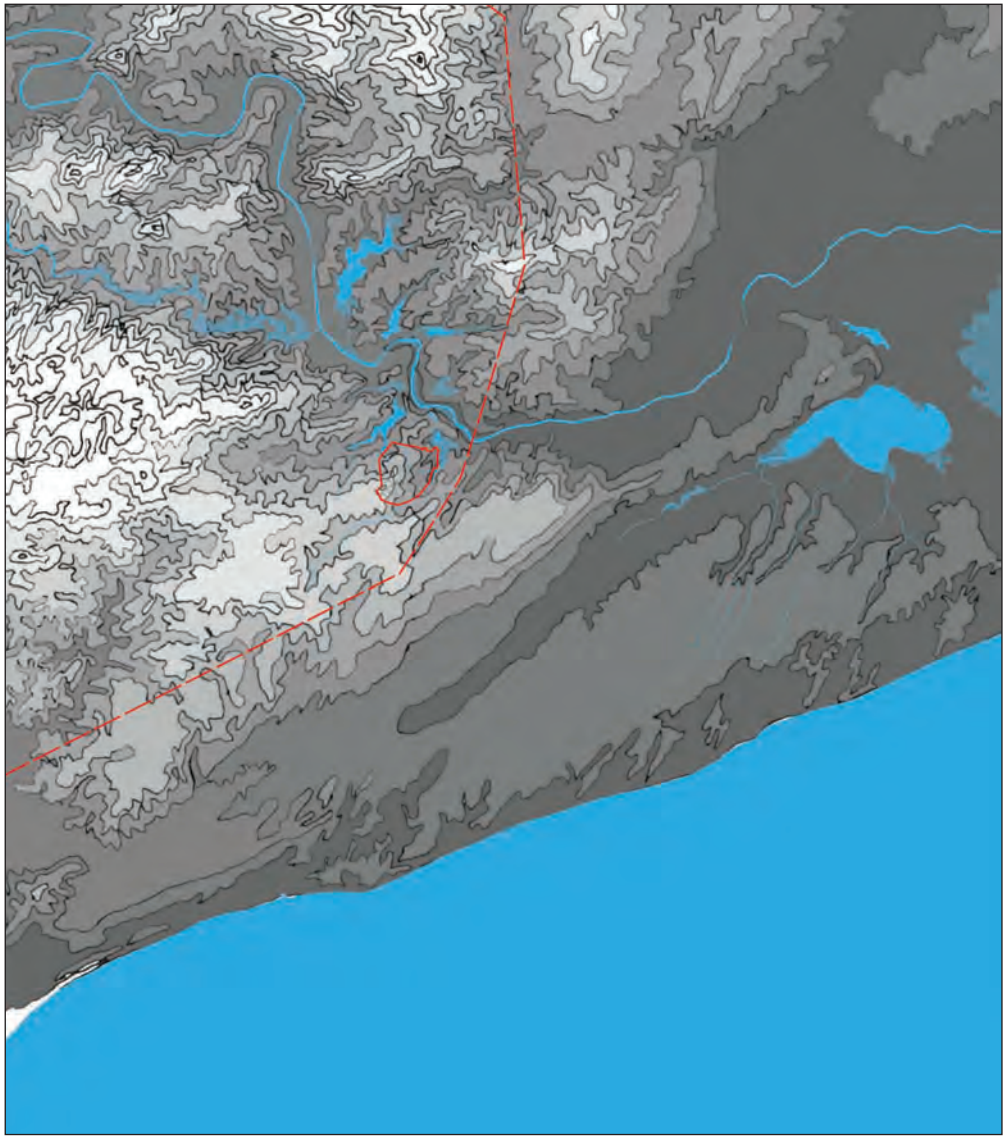


Figure 22: Diagram showing the primary river system at the "coastal scale" (1: 50 000).
The major river is the Mhlatuze River, which flows to the north-east of the campus.

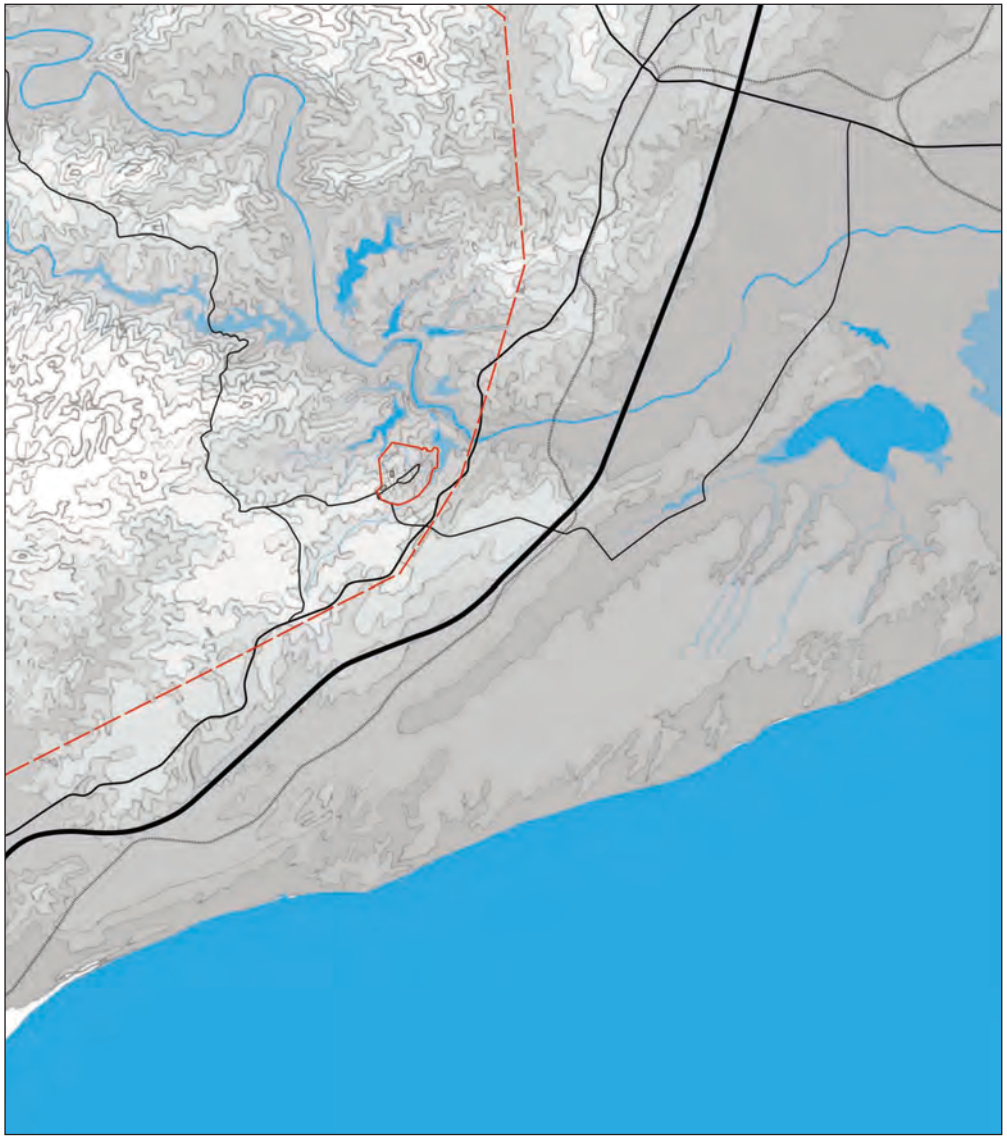


Figure 23: Diagram showing the primary transportation system (railway and roads) at the "coastal scale" (1: 50 000).
The major road is the N2, connecting Durban to Richard's Bay.

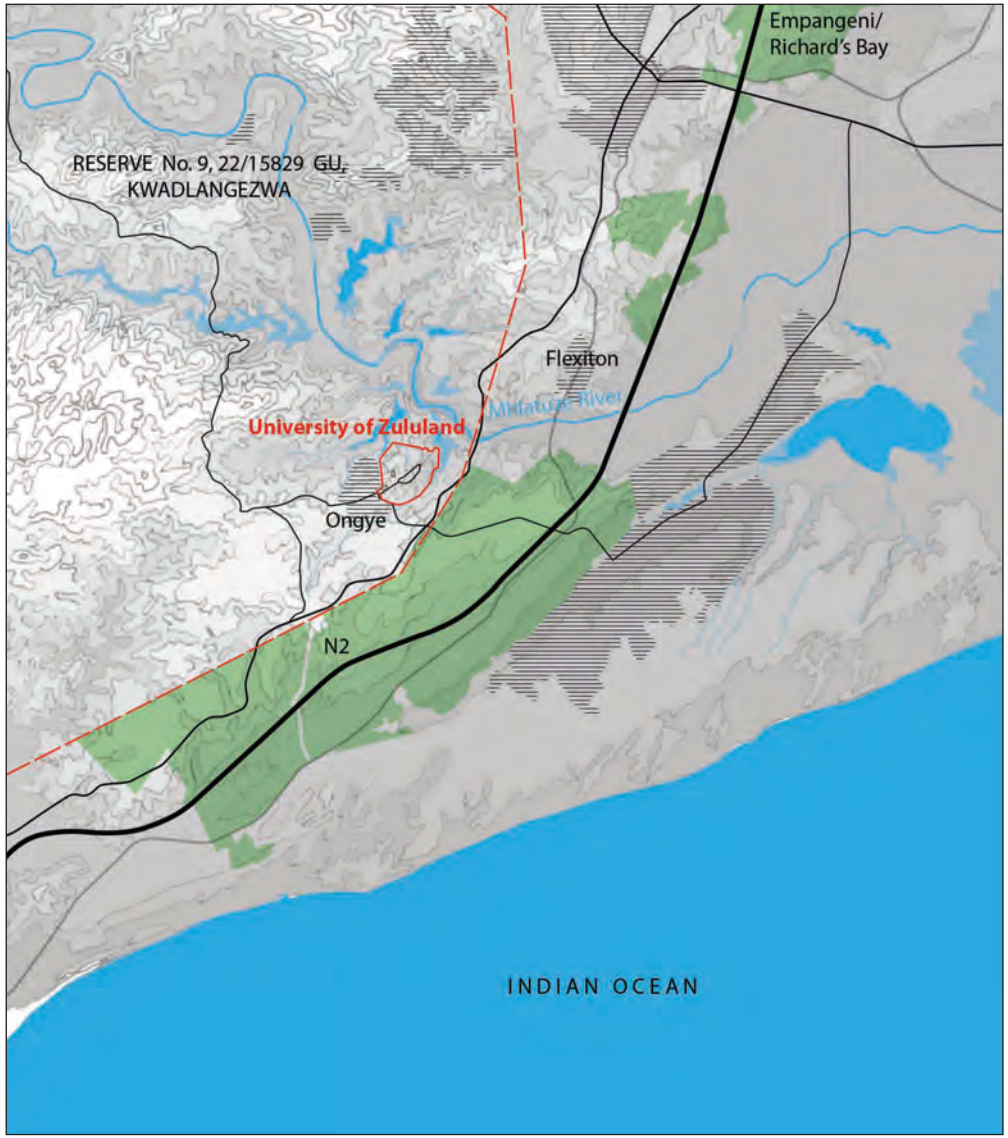


Figure 24: Diagram showing the location of forestry (in green) and settlement (hatched) at the "coastal scale" (1: 50 000).

Related to this, the "threshold" nature of this cultural landscape is marked by the location of two forts on the outskirts of the land held by the Zulu Royal Family, with Fort Argyle marking the crossing over the Mhlatuze River. These defensive structures presumably date to the 1879 Anglo-Zulu War.

Secondly, the plantations and sugar cane-fields are interspersed with sugar mills, with several "compounds" noted within the landscape.

The area know as the "sugar belt," running along the Zululand coastline, was first opened up to White settlers for agriculture relatively late – around 1905 (Lincoln, 1988: 1). It soon became part of the system of British colonial expansion in the area, with some of the first centralised sugar mills appearing within this landscape, able to process larger quantities of sugar at a more rapid pace. Lincoln has written about how the "sugar belt" gave rise to a highly capitalised agri-industrial sector that produced a wealthy "sugarocracy" within the then-Colony of Natal in the first half of the 20th century (1988). The Hulett family - one of the sugar magnates - established their mill at Felixton, and "initiated an extensive cane-growing estate in the Umhlatuzi valley" (Lincoln, 1988: 5).

The development of this industry to the south of the wider site brought with it a demand for labour. Although indentured labour practices ended before the First World War, the 1913 strike of Indian labour in the sugar industry precipitated a labour crisis. The sugar millers' quandary over labour resulted in the development of schemes intended to recruit young Zulu men to fill the positions of the Indian workers who chose not the re-indenture themselves (1988: 27). It is interesting to note the sentiment of one of these sugar magnates, in 1908: "To educate a Native or an Indian, without teaching him to work, is to give him a weapon which he will use against us…" [direct quote] (NLA Debates, Vol. 44, 25th June 1908 in Lincoln, 1988: 27). The Cultural Landscape Study outlines how a similar sentiment persisted well into the latter decades of the 20th Century in the establishment of the University of Zululand under the auspices of so-called "Bantu Education" – highly controlled by the apartheid government.

The broader landscape still bears the traces of a colonial industrial network centred on the manufacture and trade of sugar, that relied on the labour of Black bodies, but sought to limit their agency: "There in a nutshell [was] the principal contradiction which the sugarocracy sought to resolve both by practical and ideological means: to foster a protected and progressive industrial environment while simultaneously prevention the de-colonisation, in body and mind, of black workers" (Lincoln, 1988: 31).

Figure 25A: 1957 topographical map of the area, with the UniZulu Campus in red.

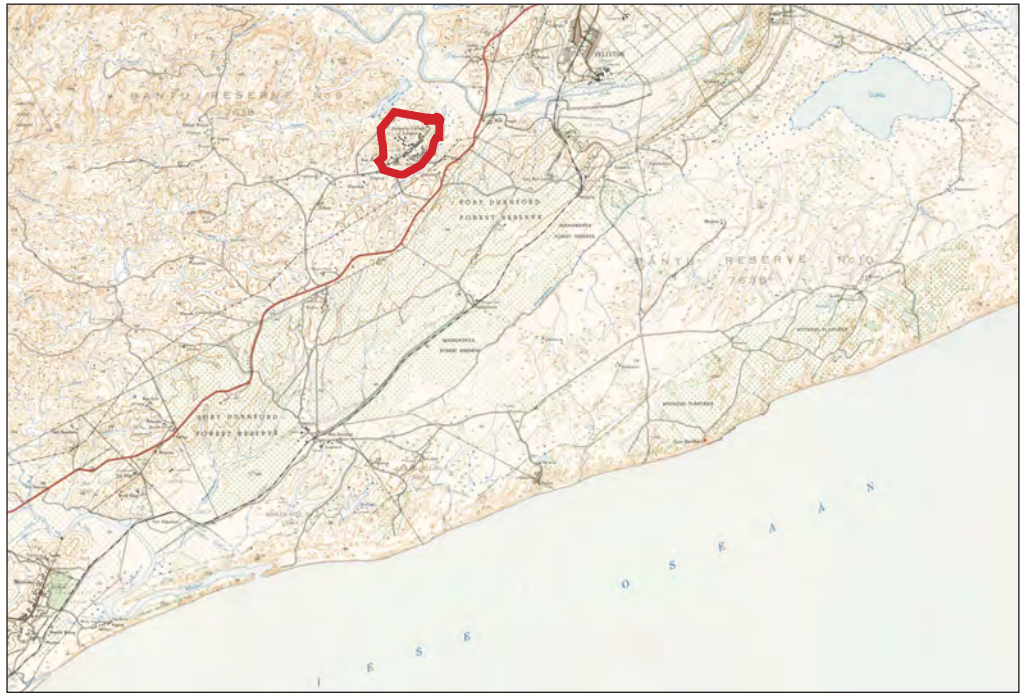


Figure 25B: 1983 topographical map of the area, with the UniZulu Campus in red.

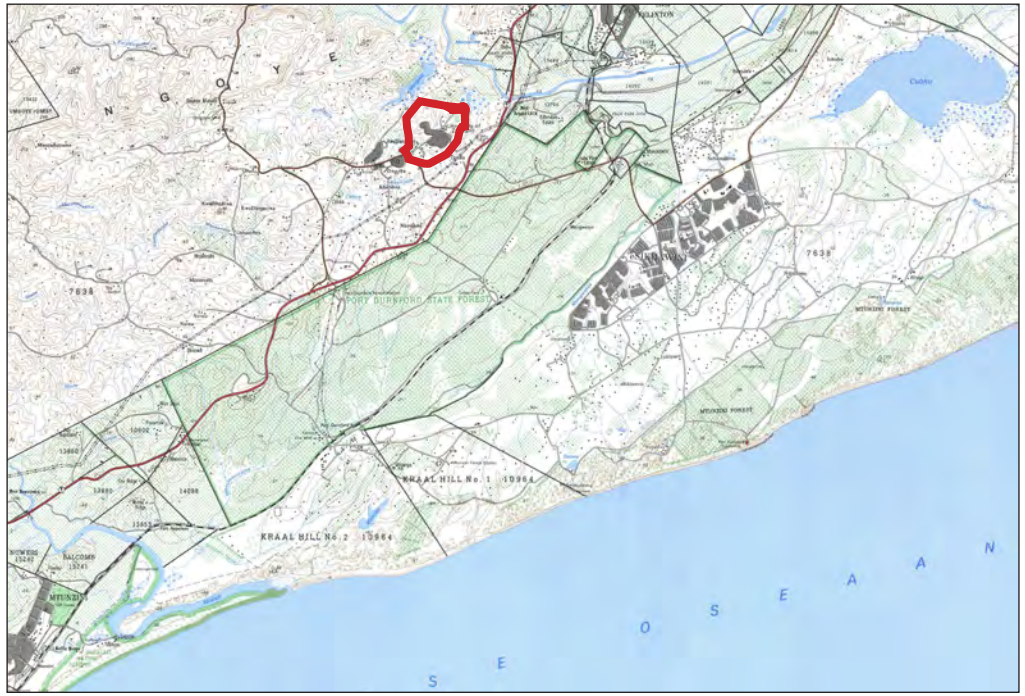


Figure 25C: 1996 topographical map of the area, with the UniZulu Campus in red.

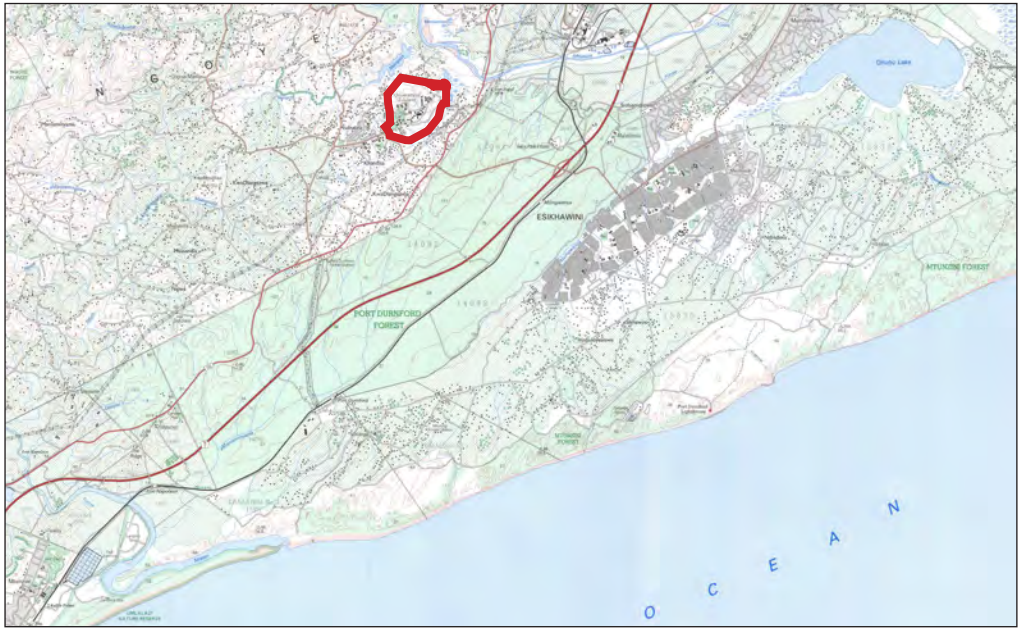


Figure 25D: 2005 topographical map of the area, with the UniZulu Campus in red.

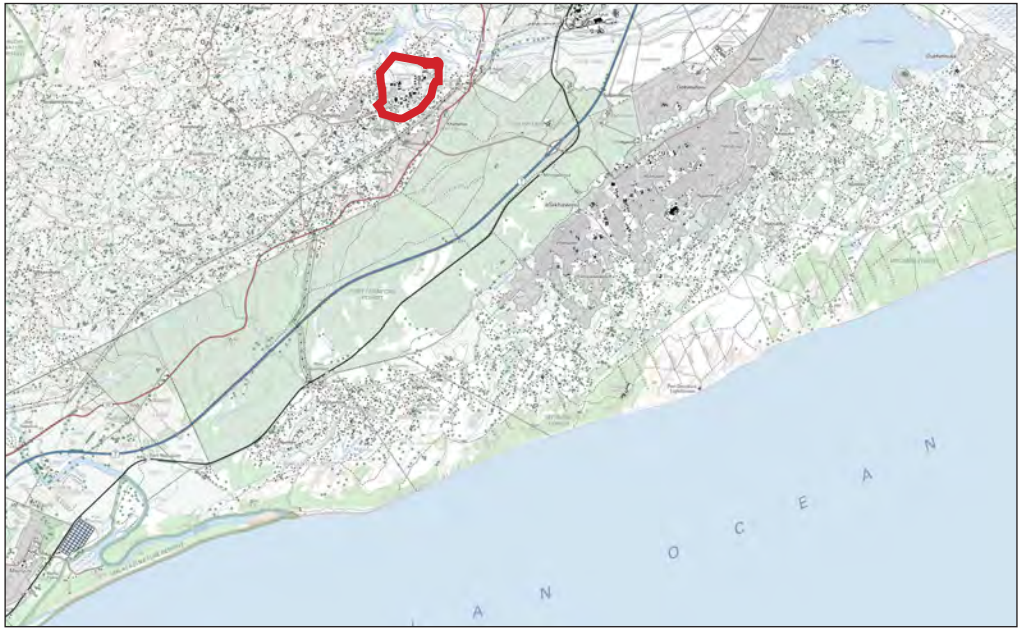


Figure 25E: 1996 topographical map of the area, with the UniZulu Campus in red.

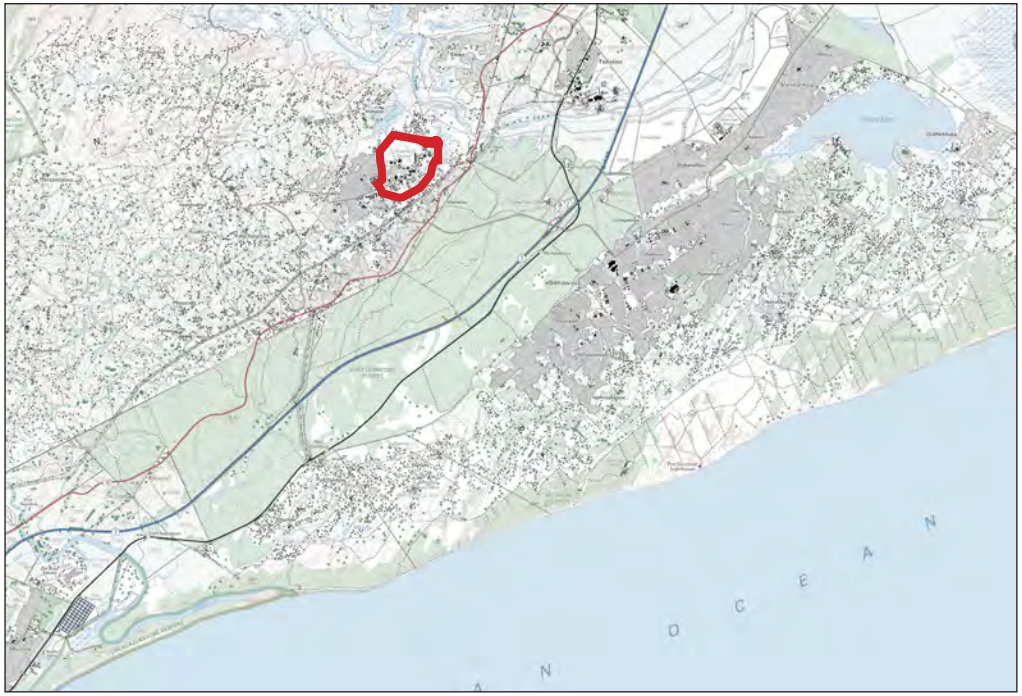


Figure 25F: British Army military map of Zulu Land, 1879. (Source: https://en.wikipedia.org/).

The Local Setting of the Campus: Field of View and Outward Vistas

The University of Zululand is located within the Zulu Kingdom - a fertile area typified by rolling, grassy hills (Figure 26). The University is, itself, located on one of these hills, with the buildings making up the campus strung out along the ridge-line of the hill (Figure 27A & B).

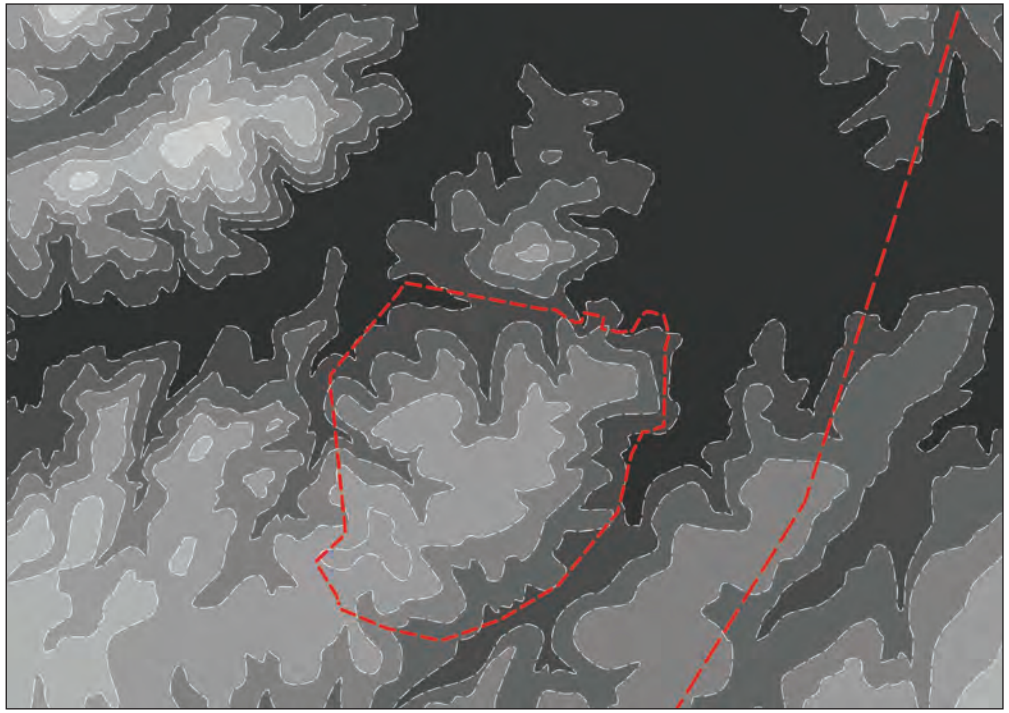
Although this elevated area is located close to the Mhlatuze River, the river cannot be seen from the University campus. Instead, the main outlook is to the north of the campus, towards the Mangeza Dam, which is part of a tributary system to the Mhlatuze River. A smaller tributary – the Nkonjane River – runs to the south of the University campus, and creates a wetland area to the east (Figure 27C).

The hill on which the University is sited extends, like a peninsula, eastwards towards the Mhlatuze River. This is clearly illustrated in the location of roads around the University site, positioned exclusively on the higher ground to the west of the University campus, and with only one gateway into the campus, with all internal campus roads being "loops" along the ridge-line of the hill (Figure 27D).

Figure 26: Arthur Elliot photograph taken in Zululand in c1910s, showing the hilly landscape (CA).

Figure 27A: The contours underpinning the University of Zululand campus.

Figure 27B: The campus (outlined in red) show that the campus is located on a hill.



The identification of ridge-lines surrounding the site reveals that the site is also highly visually contained (Figure 28). The primary gateway into the campus occurs at the highest point of the hill underpinning the town of Vulindlela. This ridge falls away to the north and south, creating a visual barrier between the campus and the town.

To the north and south, the neighbouring hills on the opposite side of the Mangeza (north) and Nkonjane (south) tributaries create the edges of the field of vision of the campus, with the ridge-line of a smaller hillock that is part of the University's hill system creating a visual edge to the north-east.

Taken together, it is clear that the campus is visually contained by the closely-located neighbouring hills, and that the Field of Vision is therefore also significantly contained (Figure 29). The only "long views" are to the north, which is also the natural visual orientation of the campus as a whole. This is reinforced by the primary viewpoints experienced from within the campus, which are almost exclusively north-facing. These are illustrated in Figure 28, along with the associated panoramic photographs taken from each vantage point (Figure 30-37).

In terms of prominent viewpoints obtained from outside the campus, only two higher-order public viewpoints were identified (Figure 38). The P743 is the highest order road, linking the N2 to Vulindlela and the interior of Zululand. At the point that the road crosses the Nkonjane River, a viewcone uphill and to the north-east allows for a view of the campus in its totality, largely marked by the mature Norfolk Pine Trees that line the primary avenue, rather than by the building environment making up the campus (Figure 39).

Similarly, a view at the circle when the road emerges from the pine plantations along the N2 allows for both the Norfolk Pines and some of the university buildings to be viewed (Figure 40). While the hills to the north are settled, albeit at a very low density, no higher-order roads lead to these houses, and there are no major, public vantage points/vistas obtained from them. As a result, visual impacts would be sufficiently moderate if the established campus built environment patterns were followed in the densification of the campus.

The "ground-truthing" of the Field of Vision within the campus environment identified several key visual vantage points, from which the surrounding landscape could be seen. The vegetation surrounding the campus is lush and the topography rolling, and so the vistas attained are somewhat limited. However, it is also clear that in the siting of buildings on the campus, a cognisance of where these vistas could be obtained influenced the positioning of structures as the campus developed, and so are key to its "sense of place".

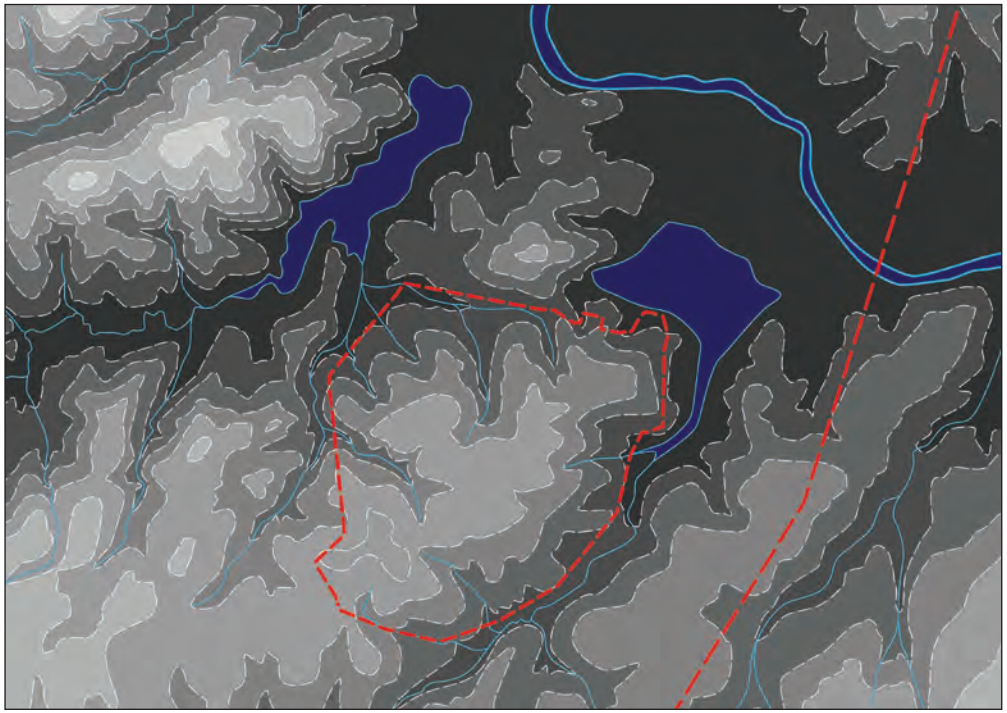


Figure 27C: The campus (outlined in red) is encircled by river tributaries to the north and south.

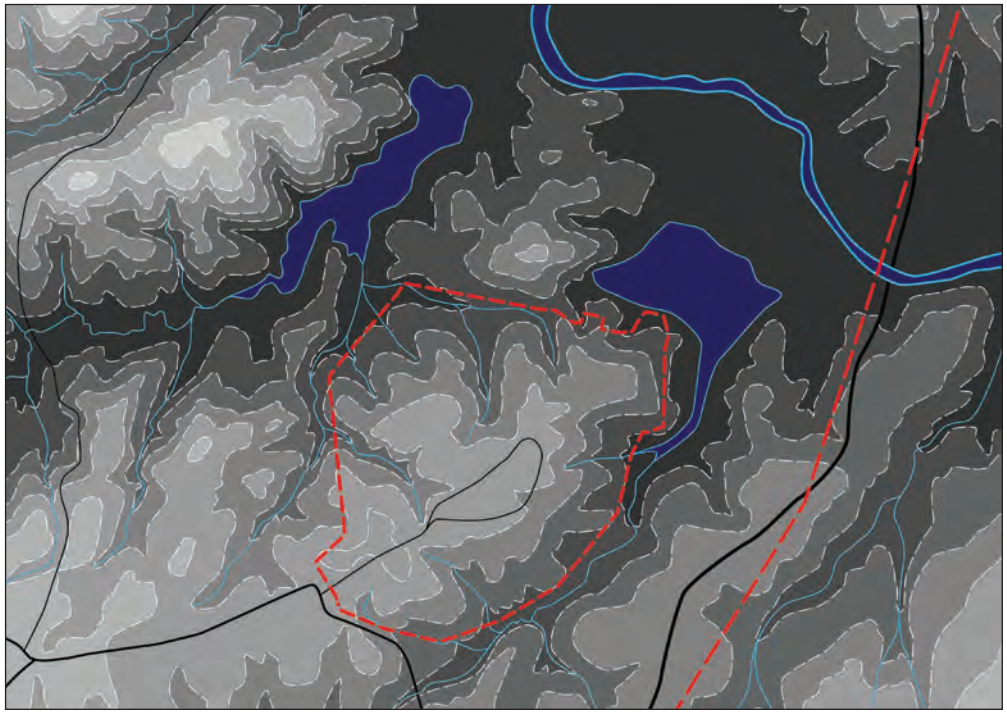


Figure 27D: The campus (outlined in red) is accessed via a "ring road", with only one gateway.

Figure 30: The vista identified as "VIEW 2" in Figure 28. The "long vistas" obtained from the campus are exclusively to the north, as the surrounding hills truncate views in all other directions.

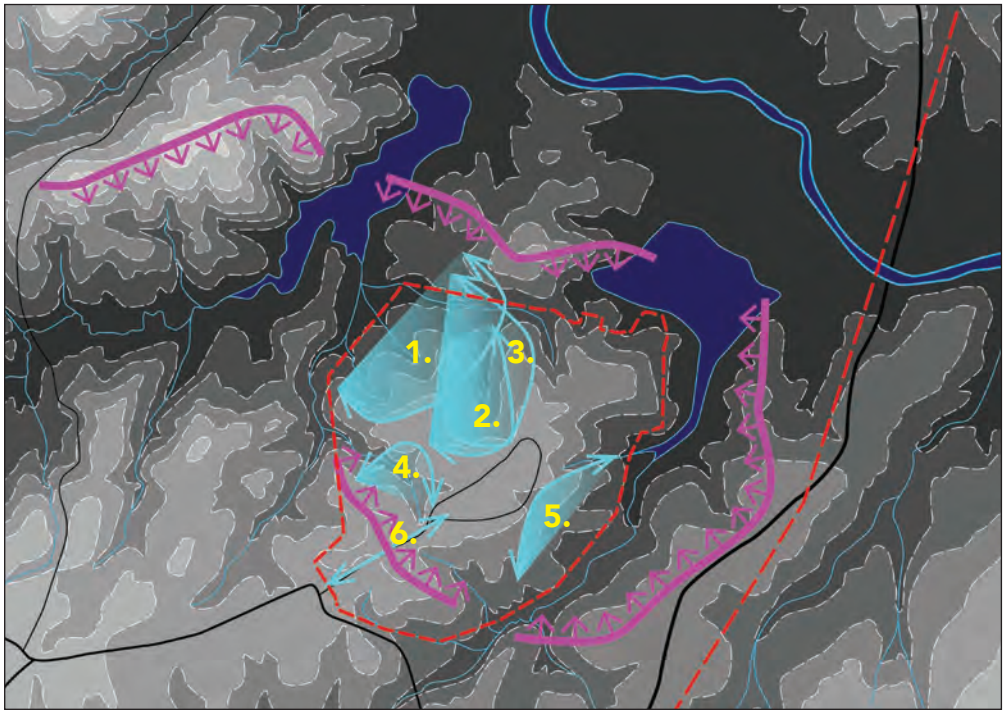


Figure 28: The campus (red outline) is highly visually contained by ridge-lines of surrounding hills (in pink).

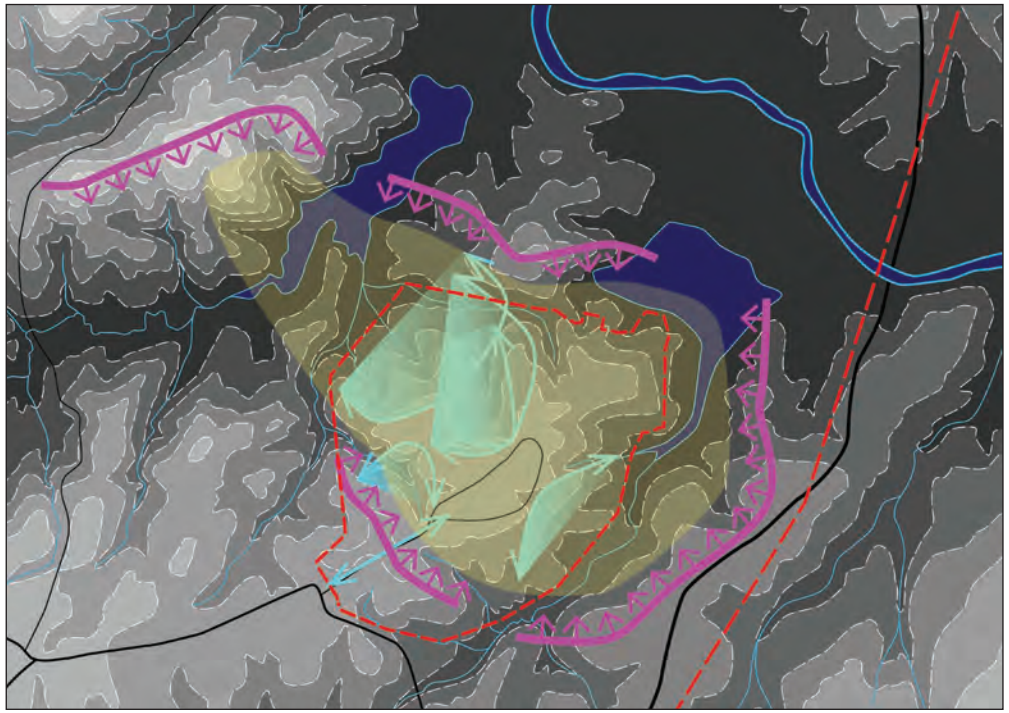


Figure 29: The campus' Field of Vision (in yellow) is limited by the ridge-lines, with "long" views to the north.

Figure 31A: The vista identified as "VIEW 1" in Figure 28. The "long vistas" obtained from the eastern residential campus towards the western residential campus also take in the Mangeza River valley. The "new York" residence is evident to the left of the image.

Figure 31B: The space between the "New York" and "Madiba" residences is unique because it frames two important vistas: the view over the Mangeza River valley to the north, and the view across the sports fields to the King Bheku

Figure 32: A section of the vista identified as "VIEW 1" in Figure 28. The "long vistas" obtained from the campus are exclusively to the north, and the wider Mangeza River and dam allow for a more "open" landscape here.

Figure 33: A section of the vista identified as "VIEW 1" in Figure 28. The Mangeza River dam is visible in this image.

Figure 34: The vista identified as "VIEW 3" in Figure 28. The "long vistas" obtained from the eastern residential campus towards the western residential campus also take in the Mangeza River valley. The red brick buildings in the distance are residences within the western residential campus. The Norfolk Pines line the avenue connecting the residential area to the academic core of the campus.

Figure 34: At the end of the eastern residential campus, a small hill to the north-east creates a foreground ridge-line that screens the Mangeza River dam and Mhlatuze River course from view.

Figure 35: The vista identified as "VIEW 2" in Figure 28. This "long vistas" shows the eastern residential campus from the academic core. Again, the Norfolk Pines are key visual markers.

Figure 36: The vista identified as part of "VIEW 5" in Figure 28. The views to the south are limited.

Figure 37: The vista identified as part of "VIEW 5" in Figure 28. The views to the south are limited.

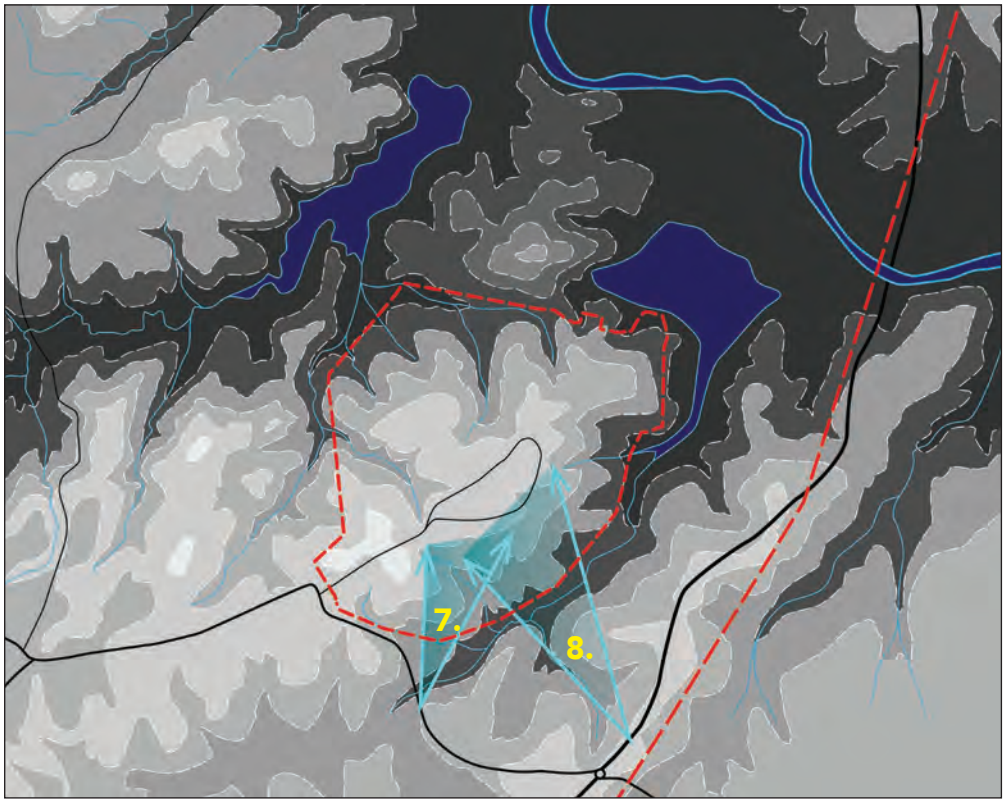


Figure 38: Two significant views of the campus from the surrounding public roads have been identified.

Figure 39: The vista identified as "VIEW 7" in Figure 38. The Norfolk Pines are the main visual markers.

Figure 40: The vista identified as "VIEW 8" in Figure 38. The Norfolk Pines are again the main visual markers of the campus, although some of the academic buildings are visible, notably the Education Faculty Building.

The "Townscape" Setting of the Campus, and Major Character-Giving Elements

The townscape patterns of the University of Zululand are physical devices or spatial arrangements which enrich the built environment and ensure the appropriate relationship of component parts to each other. They suggest how the environment may be used. Patterns are inherited from the past, both through top-down planning and building projects and through the incremental changes made by generations of university students and staff.

The benefit to identifying and working with these townscape patterns today is to enhance, in a contemporary idiom, the richness and quality of experience suggested by the inherited patterns. The patterns of the core of the University of Zululand main campus are defined by:

- The location of the university along the ridge-line of a hill;
- The buildings positioned to take advantage of views, particularly to the north;
- The central "ring road" of the university, encircling the ridge and with only one gateway point. This avenue is reinforced by a row of mature Norfolk Pine Trees.
- The linear arrangement of university buildings along this route, almost always with a landscaped area between the roadway and the building.
- A generally consistent rhythm of buildings and linkage spaces along the street edges.
- An internal pedestrian "street".
- A "skirt" of green, open spaces, be they sports facilities, "parkland" or natural areas on the lower, steeper slopes of the hill.
- Buildings that are generally low-rise (no more than 3 stories) with oversailing eaves, brises soleil screens, and a use of red brick which is strongly visually offset against the verdant tropical vegetation surrounding the buildings.
- A strongly Modernist architectural expression, with buildings representing the various approaches to Modernism in South Africa since the 1960s.

<u>Gateways</u>

Because the University has only one access point, there is an extremely clear sequence of approach to the campus.

- From the gateway, the Avenue - already marked by mature Norfolk Pines – descends slightly along the ridge towards the academic core. The Admin Building, with its corner tower, forms a local landmark and termination point for the axial approach (Figure 42A and B).

- Initially, the route is flanked by green open space to either side: sports fields to the north and the slopes of the hill to the south. Structures along this length are low-rise and fairly small.

- The route descends slightly to the main ceremonial space of the University: the King Bhekuzulu Hall, with its plaza adjacent to the campus Avenue, and its domed roof reminiscent of the hills surrounding the campus.

- This space "pivots" the pedestrian and the driver to the north, along the main Avenue. However, the Admin Building tower and the splitting of the roadway here affords a moment where multiple views are presented to the pedestrian/driver (Figure 41).

- The roadway "loops" around the apex of the hill, with the academic core being encircled to the centre (along the ridge), and with more sparse development to the outside edges, with the land falling away and affording long views towards the surrounding hills.

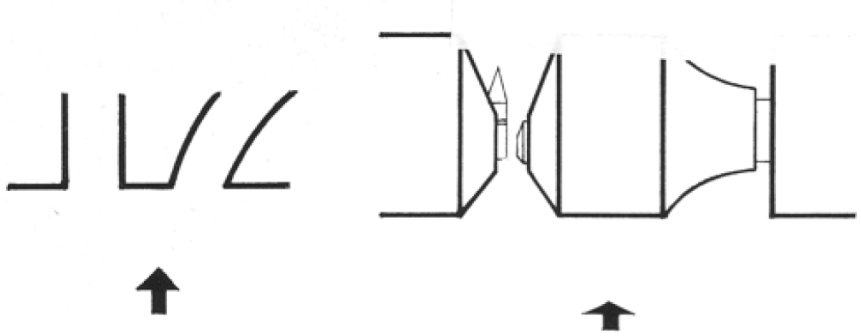


Figure 41: Cullen's "multiple views" diagram, illustrating being able to see two places at once, and allowing for comparison and orientation of the viewer (1961).

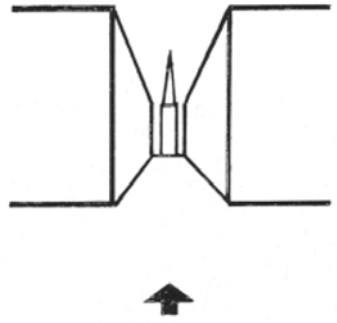


Figure 42A: Cullen's "landmark" diagram, with and axial approach (1961).

Figure 42B: The approach to the Admin Building from the entrance to the campus has landmark qualities.

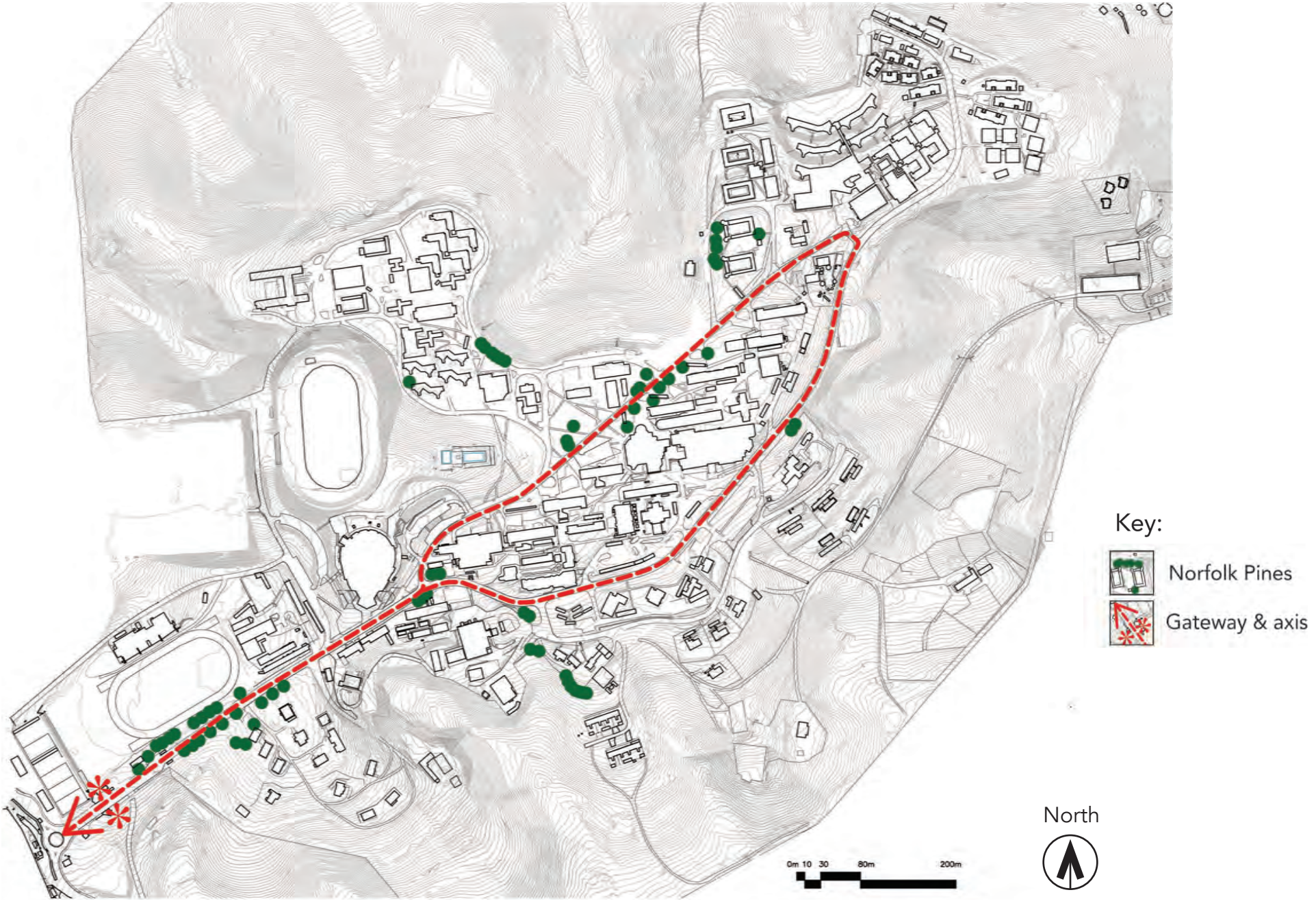


Figure 43: The single gateway into the campus creates an axial approach, with an internal "ring road" encircling the academic core. The mature Norfolk Pines, which are landmarks, follow the circular route.

Streetscapes and Edges

The original sequence of University buildings set up a sequence of "deflection" along the primary, northern edge of the Avenue.

- Along the northern Avenue, academic buildings, of identical width and height, are placed at an angle to the primary direction of the Avenue, and "deflect" the academic community into the central campus area (Figure 44A-D).
- The gently sloping front laws, differently patterned brise soleil and large central openings through the buildings allow for a clear legibility from Avenue into building.
- Although becoming larger in scale, taller and more Brutalist in style, all of the academic buildings lining the Avenue have a similar relationship to edge.
- In the residential areas, the oldest four residences on the east residential section of the campus have a very similar, position relationship to the edge. However, this is of a more domestic scale: the pathway passing in front of the structures is pedestrian in nature, and the front "stoep" spaces have projecting, seated, "lapa"-like corners, rather than the brise soleil seen in the academic structures. These residences, together with the mature Norfolk Pines and spectacular views to the north-west, and their typological courtyard arrangement, contribute greatly to establishing the campus character.

Grain/Linearity

- The angle of deflection between the original academic buildings and the campus Avenue have set up the alignment for all academic buildings clustered on the ridge-line, and creating the academic core of the University.
- Buildings are largely of a similar width and length (rectangular), run parallel to one another, and allow for oblique pathways through the fabric (Figure 45, 46 and 47).
- Buildings have tended to be realised in "clusters" with footprints repeated in close proximity to one another. This also contributes to the "grain" and "layering" of the fabric.

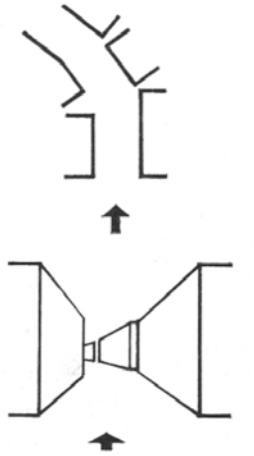


Figure 44A: Cullens' diagram of "deflection", where structures are arranged at an angle to the primary direction of a route (1961).

Figure 44B: The original building are arranged in such a way that they create deflection from the primary route into the centre of the campus.

Figure 44C: The oldest eastern residences, with mature Norfolk Pines and spectacular views to the north-west, contribute greatly to establishing the campus character.

Figure 44D: The academic buildings are all highly linear in form, and orientated in the same direction, and parallel to each other.

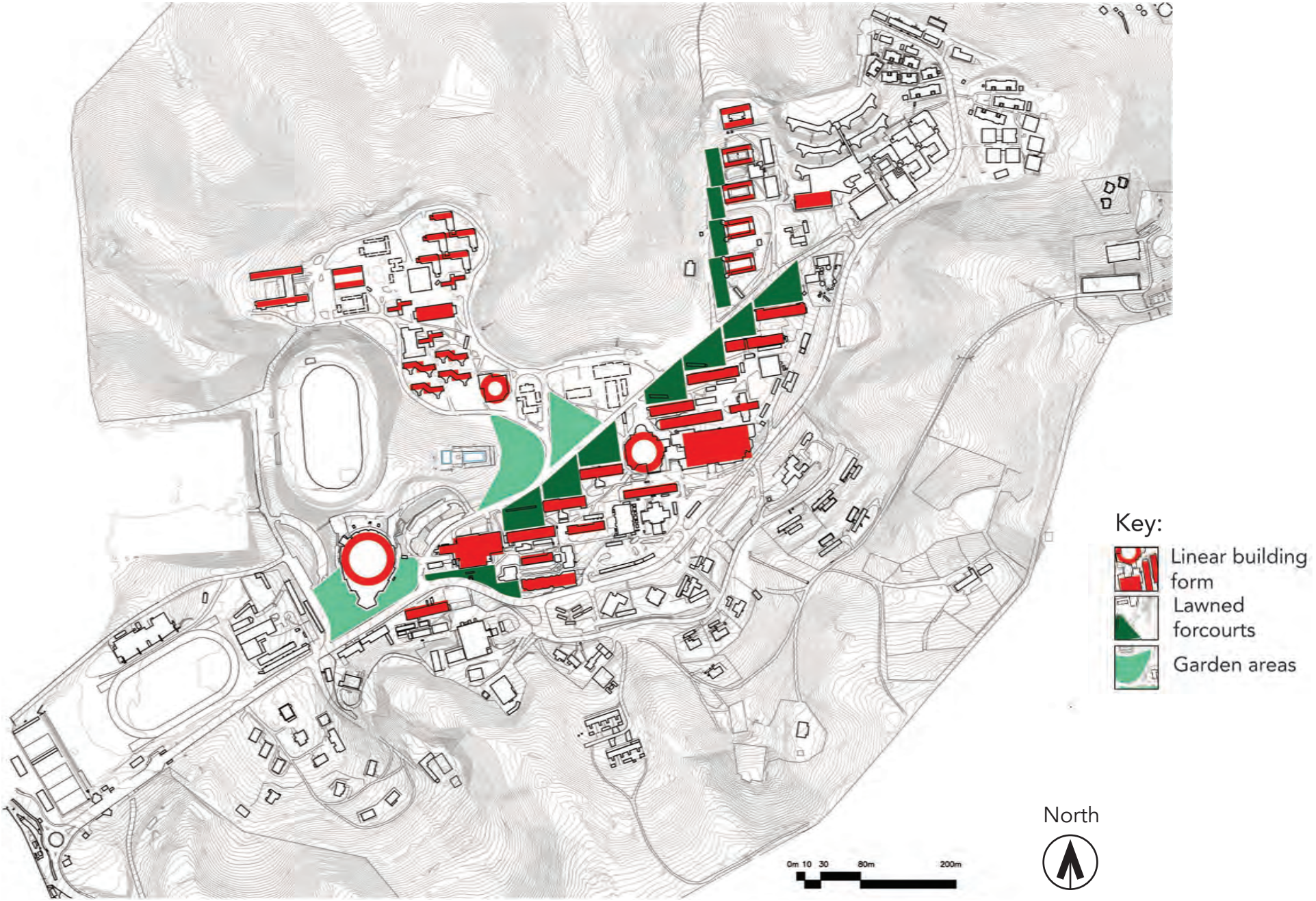


Figure 45: The academic buildings are largely of a similar width and length (rectangular), and run parallel to one another. Three buildings "in the round" are the library, King Bhekuzulu Hall, and university chapel.

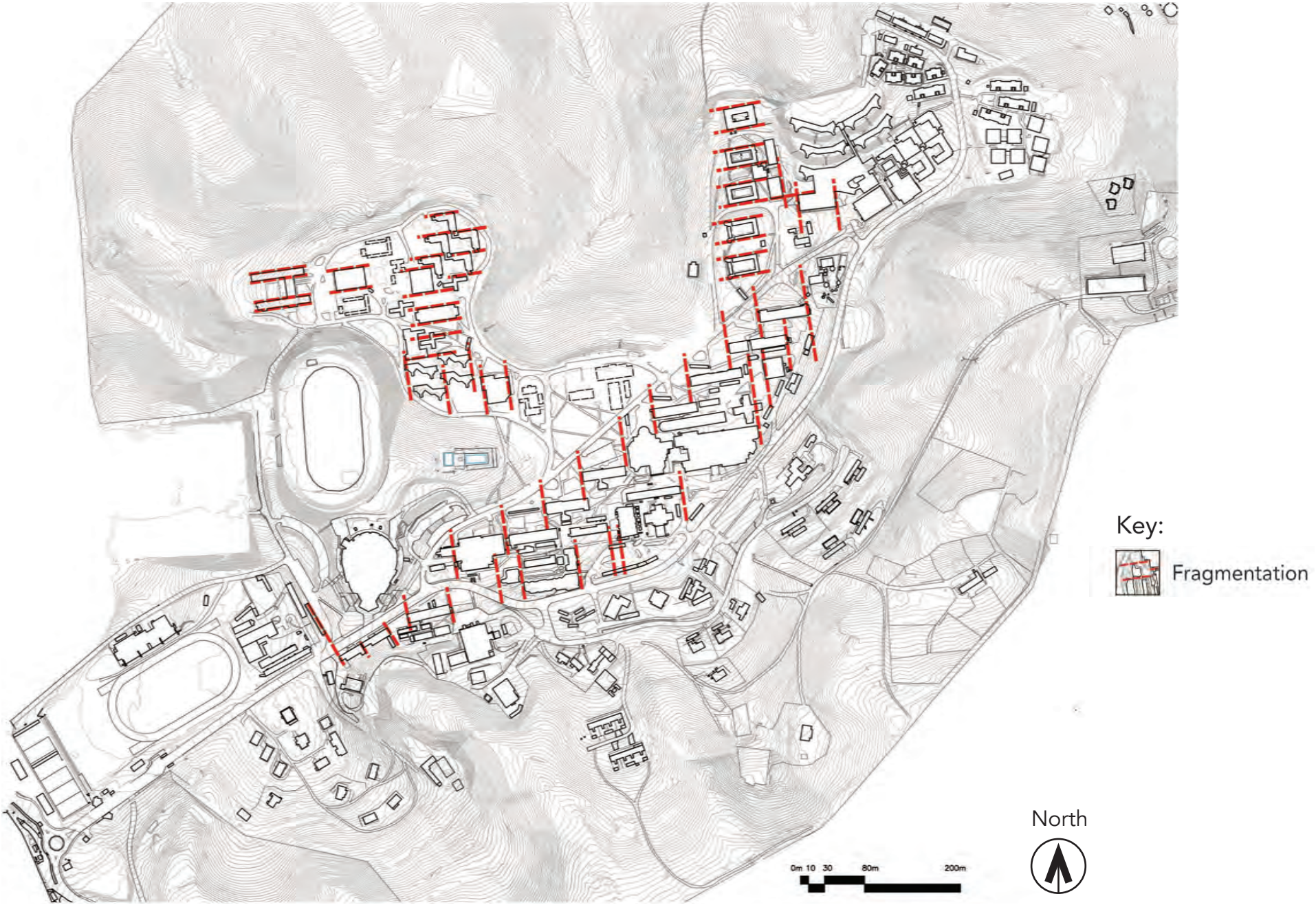


Figure 46: The parallel buildings are rectangular with their long edges addressing the avenue. This allows for breaks between them (especially with the deflection), which creates fragmentation of the edge.

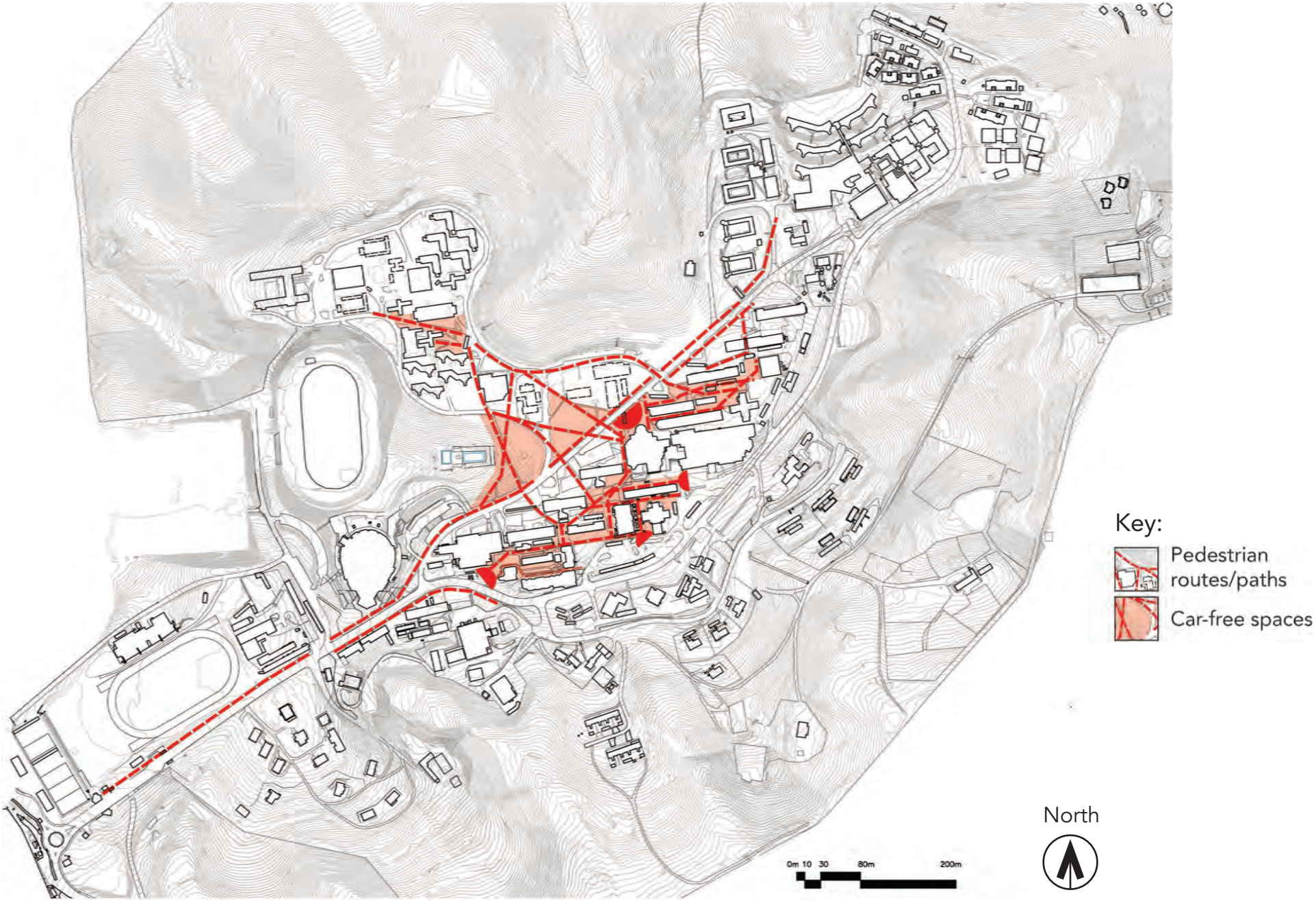


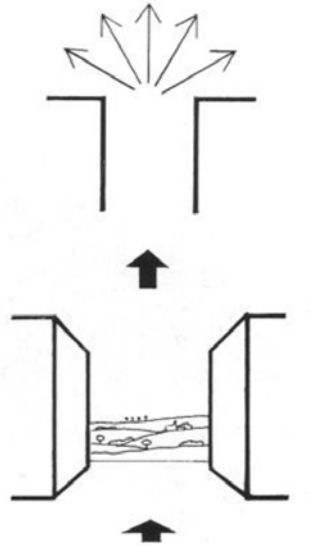
Figure 47: The primary pedestrian pathways through the campus, and where they intersect with car-exclusive areas. There is an internal pedestrian route within the academic core.

Landscape Morphology: Avenues, Open Spaces, Forecourts (Figure 49)
There are three, highly significant landscape "types" on the campus. The highest order is visually perceptible from furthest away and is a key spatial-orientating element, while the lowest-order is key to the experience of place when within the campus itself.

- The most significant landscape pattern on the campus is undoubtedly the avenues of established Norfolk Pines. These trees mirror the patterns of movement across the campus (due to their lining the main streets), but they also create very tall, linear elements on the ridge-line that contrast the surrounding, verdant vegetation. In this way, they are key landmarks and the major external signifiers of the campus within the wider landscape.

- The second "order" of landscaping is the "infill planting" – the rich and dense canopy of medium-sized trees and shrubs that are planted in and around buildings, and provide the landscape context when on the campus. These green spaces also include the key "forecourt" spaces between the Avenue and university/residence buildings, which deflect the used from movement route into the academic realm.

- The final layer is the open space system, which comprises the sports fields as well as the unplanted, un-built lower slopes of the hill upon which the University is located. These areas are largely position on the lower slopes, and so form a clear "skirt" to the academic core on all sides. There are very few areas of the University where a traditional "vista" between "townscape" and the surrounding countryside is not obtained. There is something inherently contemplative about this relationship, befitting a university campus.



View to positive landmark

Figure 48: Cullens' diagram of "vistas", where structures are arranged to frame views to the countryside.

Figure 49A: View towards the sports fields.

Figure 49B: Lawned and treed areas on the campus.

Figure 49C: Norfolk Pines line the main avenue.

Landmarks
The campus also has three "tiers" of landmark.

- The most significant landmark on the campus is undoubtedly the avenues of established Norfolk Pines. They are key landmarks and the major external signifiers of the campus within the wider landscape.

- The memorial to Shaka Zulu, the Admin Building, the King Bhekuzulu Hall and the Library are the higher-order landmarks that are internal to the campus environment.

- The university chapel and high-rise "New York" residential block on the west residential campus (Building DH2) are local landmarks in the western residential "wing" of the campus.

Vistas and Viewpoints (Figure 48, 51, 52A & B)

- There is only one discernible, axial viewpoint on the campus, and that is the framed view between the campus gateway and the Admin Building. The Norfolk Pines frame this viewcone.

- Instead, the major visual experiences on the campus are "vistas", moments when the urban fabric clearly directs your view into the surrounding countryside. From a townscape perspective, this is most deliberately and formally done to the north of the campus. Three particular "campus balconies" exist to the central, library space, the west residential campus and the east residential campus.

- A secondary "vista" occurs from the west residential campus across the sports complex and back towards the academic core, while a similar, opposite vista is achieved from King Bhekuzulu Hall.

Figure 50: The key green areas on campus, as well as the trees.

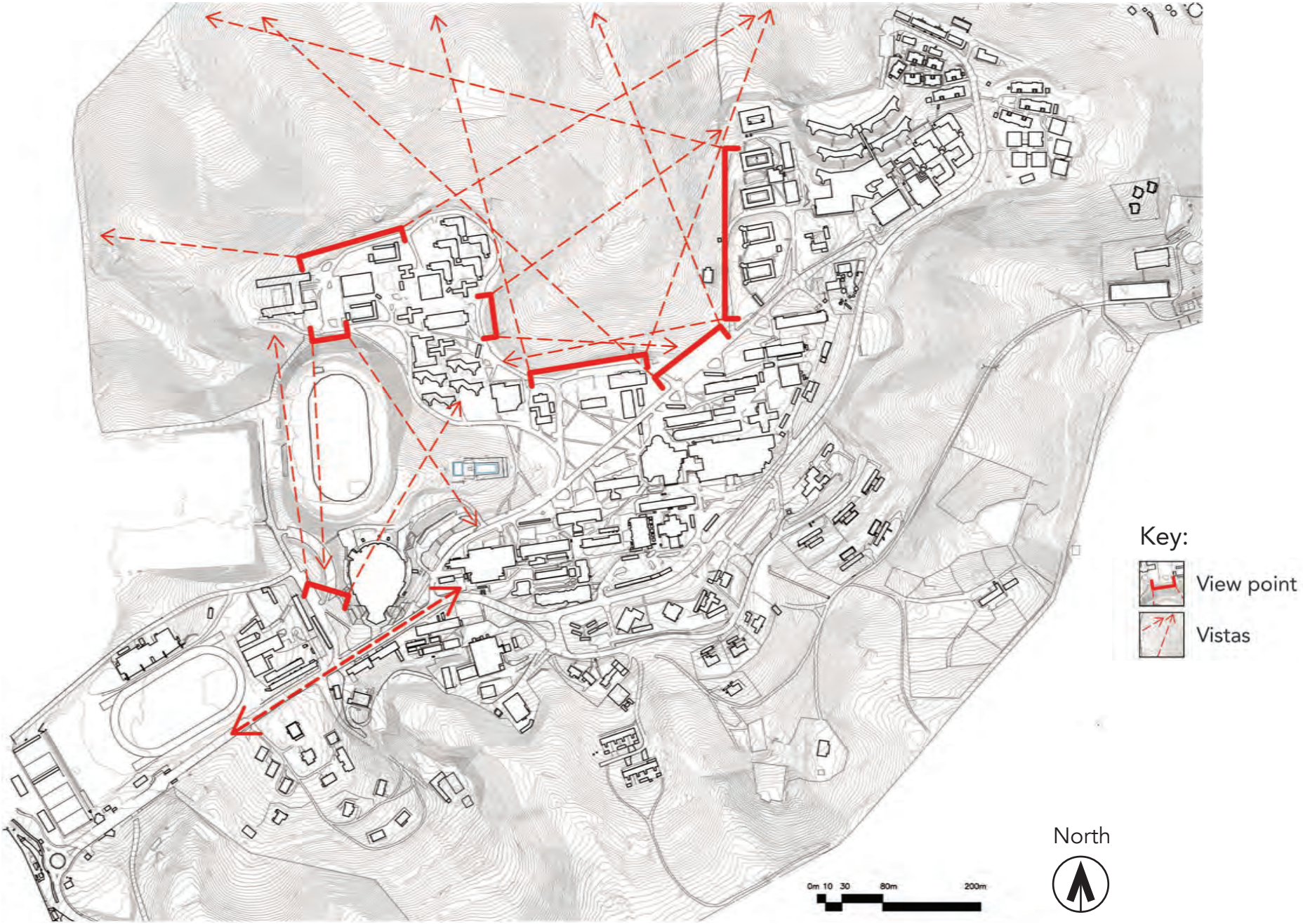


Figure 51: The major viewpoints and vistas within the campus.

Figure 52A: View over the sports field towards the King Bhekuzulu Hall from the western residential area.

Figure 52B: View past the King Bhekuzulu Hall, across the sports fields and towards the western residential area.

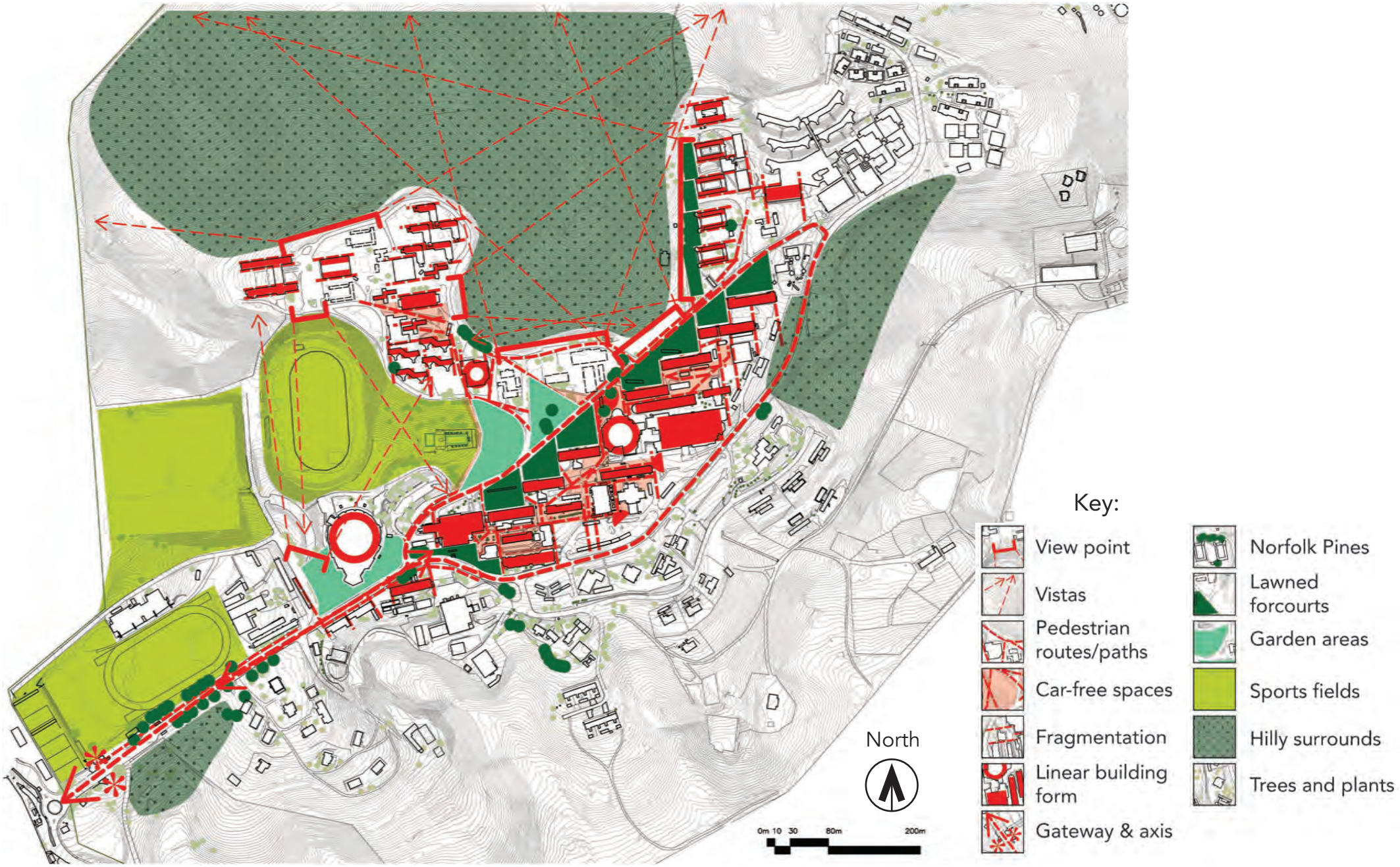


Figure 53: Collation of the major townscape elements making up the UniZulu campus.

Architecture

Worskett (1969) noted the following architectural elements as key to the design of infill buildings within an established townscape:

- Building line,
- Height and skyline,
- Width of unit,
- Quality of detailing,
- Materials and colour;
- Proportion of solid to void.

The ***building line***, as Worskett understood it, is the plan shape that is the basis of continuity within a group of buildings – mainly the line of facades along a street or around a space will condition the relationship between buildings. A changing building line creates points of interest within the street.

At UniZulu, building line is most strongly perceived along the northern avenue, where the earliest academic buildings are located. The Admin Building and library are examples where the strong building line is broken to create spatial enhancement of these important university nodes.

Similarly, the original buildings within the eastern residential campus create a similar building line pattern along the western ridge-line of the hill.

The ***Height and Skyline*** patterning of a place is related to the way the eaves of buildings are detailed. At Unizulu, there are two clear types: the single storey building with oversailing eaves, and the 4+ storey building with a flat roof and a parapet-type eave.

The ***Building Width*** Worksett refers to is as much a measure of the rhythm of building than of its overall width. At Unizulu, the widths of academic buildings are largely consistent (and surprisingly narrow) creating linear forms with short ends and long facades. The facades are almost always "broken" centrally, where the entrances to structures are located.

However, in the campus environment, it is the rhythm of open space to built form that is most consistent aspect of Building Width.

The ***Quality of Detailing, Materials and Colour*** are an important aspect of the UniZulu campus. There are strong architectural "themes" in the detailing of buildings on the campus. The use of brise soleil, often of decorative bricks or blocks, is a common façade treatment and shelters the window and door openings beyond from the sun. Indeed, the repetition of pattern in buildings is evident across the campus.

In roof form, roofs are generally not highly significant (they are often of a low pitch), but rather it is the extending eave line, or the expressed beam at the parapet, that is consistent in the architectural language of the campus, and which creates a strong, horizontal sequence of datum lines.

In addition, the use of red brick is prevalent throughout the campus, and across the structures of various ages. Aside from weathering well in the tropical climate, the red brick contrasts visually with the lush and verdant vegetation surrounding the buildings. A similar contrast is exploited on the library building, where the red brick contrasts with the Verdigris, copper green colour applied horizontally along the sides of the building, and vertically at its corners. This visually enhances the building's important role within the campus environment, and adds to its landmark qualities.

The expression of structure, particularly concrete frames and beams, is also notable in the later 20th century architecture. This adds a grey colour to the built environment, that is seen in limited areas in cladding applied to the buildings.

Finally, the ***Proportion of Solid to Void*** refers to groups of buildings that have a continuous and regular proportion or "rhythm" of openings to walls. This aspect has less significance at UniZulu, as the use of brise soleil obscures the expression of punctured openings. This allows for a remarkable "solid" expression of architectural form, which leads the buildings a monumentality and "scaleless-ness", befitting a campus environment and the strong architectural forms that have been selected over its 60 year history.

Refer to Figure 54A - 54H.

Figure 54A: Patterned brise soleil.

Figure 54B: Oversailing eaves and stoep area.

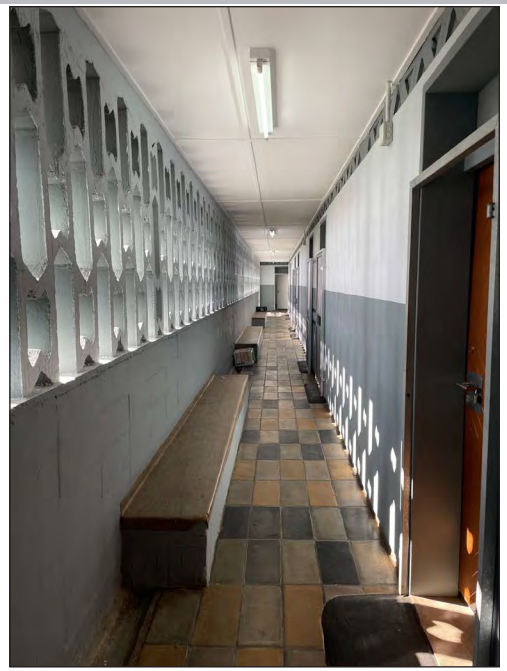


Figure 54E: Original tiled floors and screen.

Figure 54F: "Lapa"-inspired entrances.

Figure 54C: Brise soleil and eaves on faculty bldg.

Figure 54D: Brutalist architecture.

Figure 54G: More recent brises soleil.

Figure 54H: Red brick & concrete features throughout.

THE UNIVERSITY OF ZULULAND CAMPUS CHARACTER.

From a townscape perspective, the University of Zululand campus is a layered site, and the architectural approach to the various structures at various times relates both to the changing political and cultural context within which the various projects were conceived.

The Royal donation of the land was instrumental to the establishment of the University, and so the site had earlier agricultural uses before being gradually occupied by the University. As a consequence, the northern avenue of the campus, which followed the old farming "track", is an element of significance that still marks the experience of the site today.

The image of the university campus as a formal architectural set-piece located on a hill and set within a parkland, is an internationally recognised symbol of higher learning. Whatever the ideological underpinnings of its founding, the University of Zululand strongly embodies this institutional typology in its spatial layout.

The clarity of the urban design concept and the consistency of the architectural expression, set in a green frame above the Zulu Kingdom and yet also part of it, creates a cultural landscape that is distinctive.

The campus is set up around discrete townscape "moments" that enhance the campus typology: axial approaches, landmarks, deflected edges, linearity of building footprint, avenues of distinctive Norfolk Pines, transitions between inside and outside (wall, brise soleil, landscape forecourt, avenue) and framed vistas allow for a continual engagement between the structured campus environment and its arcadian surroundings. In this way, the University of Zululand is a good example of the realisation of the American-type campus in the 20th Century: although the architecture may be very much of its time, the underpinning townscape principles of a relatively low-rise but dense academic "settlement" skirted by green space is clearly evident.

While there may be four precincts within this campus (the core campus, the west residential area, the east residential area and the approach road) the character is continuous enough across them for a single townscape and campus character to be discerned.

PART C: HERITAGE RESOURCES, GRADING & DESIGN INDICATORS

5) Identification of Heritage Resources on the Site and Within its Environs: Places, Buildings, Structures and Equipment of Cultural Significance.

Statement of Significance

Cultural significance is defined in the National Heritage Resources Act as "aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance" (NHR Act, Section 30).

Given that a campus has significance as a typology that is both about the built form and its surrounding landscaping, many of the heritage resources at the University of Zululand have a "heritage curtilege": "the immediate surrounds of a heritage resource, site or structure which are dominated by that heritage resource or, should that space be developed in any way, would effect the appearance or significance of that heritage resource; and, as a consequence, should be regarded as part of the heritage resource" (Townsend, 2019: 25).

Of course, the heritage significance of the University of Zululand is not only embodied in its physical fabric: the values that contribute to or determine cultural significance are also subject to cultural associations and historic events, and a variety of interpretations that may change over time as new information is uncovered and as new associations develop will influence heritage significance. The intention is that the Statements of Significance articulated here will start a conversation about the University's significance, help to develop a broad-based consensus on this significance and enable relatively straight-forward and sensible management of heritage resources and realisation of new development in a way that enhances heritage significance.

The significances articulated in the Inventory (Annexure B) assessing the individual buildings and landscaping elements, but the Statement of Significance looks at the totality of these elements.

The primary significances of the University of Zululand are:

Academic significance:

The primary significance and value of the University resides in its role as a place of academic study, both in research and teaching, and in its legacy of academic achievement.

Historical and socio-political significances:

The University of Zululand has historical and socio-political significance as one of the so-called "Homeland Universities" in South Africa. These institutions were often at the forefront of political resistance and activism during the apartheid era.

The University of Zululand contributed to the intellectual and urban landscape of the KwaZulu Natal and has a socio-political significance in relation to its role in the fight for academic freedom during the apartheid era and the broader process of democratization in the years preceding 1994.

It also has socio-political and historical significance in relation to the Royal donation of land that was instrumental to the establishment of the University, and the relationship the University has had with the Zulu Royal Family since then, which has in many ways also reflected the relationship between the Monarchy and the Zulu People.

The University of Zululand as a paradigmatic campus environment/Contextual Significance:

The University of Zululand campus, as a formal architectural set-piece located on top of a hill within the hilly landscape of the Zulu Kingdom (removed the comma) powerfully combines an internationally-recognised townscape typology (a "townscape" of higher learning set within an Arcadian environment) with the particular sense of place that is evoked by the green, rolling hills of the KwaZulu landscape.

The clarity of the urban design concept and the consistency of the architectural expression, set in a green frame above the Zulu Kingdom and yet also part of it, creates a cultural landscape that is distinctive.

Key to this is the interplay between the built environment and the landscape that surrounds it, encompassing formal tree planting, recreational green spaces, and surrounding natural and agricultural areas. It is the combination of these, together with the buildings and their siting, that gives the University its strongly iconic and associational significance as a university campus.

The University of Zululand as an exemplary collection of Modernist Architectural Buildings/ Architectural Significance:

The design of the Modernist buildings that make up the University of Zululand campus seem to highlight the political negotiation and contestation between the National tier of government, who controlled the University, and the local authorities, students and Zulu Royal Household, who were the land-owners and responsible for the day-to-day functioning of the space.

The use of a Modernist architectural style - even one with Regionalist influences - reflects the shift towards more centralised political power within the country under the National Party, and the political will to assert control within the campus space. While this is a fraught inheritance, the University of Zululand is notable for being a rare example of a highly intact set of institutional buildings that in many ways track the contradictions and challenges inherent in adopting a Modernist style in South Africa in the latter part of the 20th Century.

From a built-environment and architectural perspective, the campus is a layered site, and the architectural approach to the various structures at various times relates both to the changing political and cultural context within which the various projects were conceived.

Given these institutional, socio-political, contextual, architectural and associational significances of the University, the assessments of significance of the individual buildings, spaces and landscape elements must be cognisant of their relationships with and as part of the greater whole (Figure 55).

As a whole, the campus has significance as an academic institution with a strong association with political resistance and activism during the apartheid era. The clarity of the urban design concept in the spatial realisation of the campus, and the consistency of the architectural expression, set in a green frame above the Zulu Kingdom and yet also part of it, creates a cultural landscape that is distinctive and representative, as well as rare.

The campus has a high degree of significance in the history and the present-day intellectual and cultural landscape of the Zulu Kingdom. It is worthy of the highest degree of heritage protection in the context of the region. It should be Graded II, and formally proclaimed as a Provincial Heritage Site.

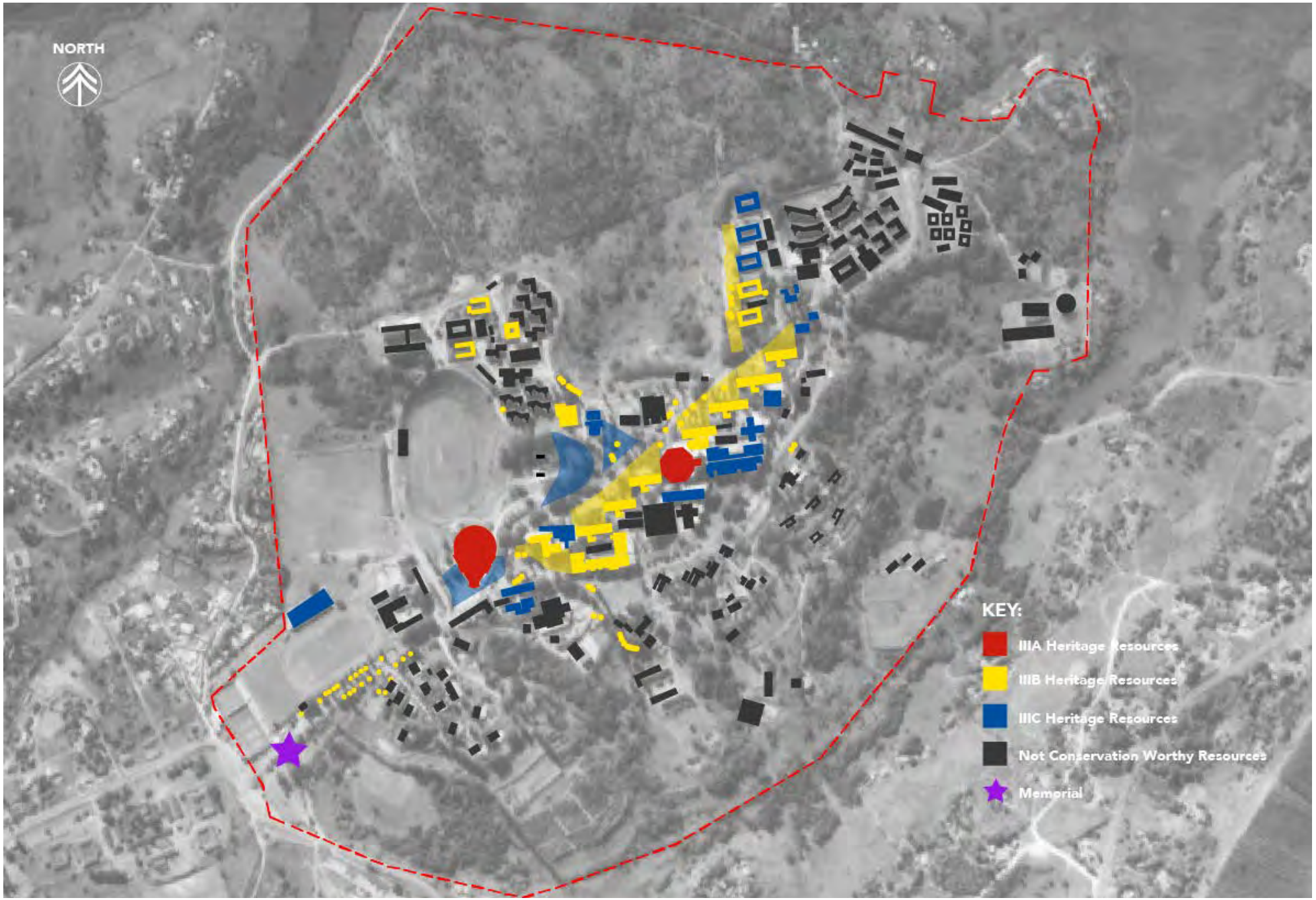


Figure 55: Grading Map for the University of Zululand.

A NOTE ON GRADING

In addition to Grade I sites of national heritage significance, and Grade II sites of provincial heritage significance, common practice subdivides Grade III heritage resources into IIIA, IIIB and IIIC. These 'sub grades' have not yet been formalised by means of a regulation published in either the Government or Provincial Gazette.

- Grade IIIA (Metropolitan/Regional): Heritage resources that have a high intrinsic significance in terms of the significance criteria identified by the NHRA. Such heritage resources are outstanding examples or representations of a typology and may demonstrate a high degree of intactness.
- Grade IIIB (Neighbourhood/Suburb): Heritage resources that have considerable intrinsic significance in terms of the significance criteria identified by the NHRA.
- Grade IIIC (Streetscape): Heritage resources that have significance within their immediate context. They contribute to the streetscape and historical character of the surrounds. Alterations and additions may be evident, but the building remains representative example of the typology. Heritage value can be improved or rehabilitated.
- Not conservation worthy: Buildings that have no intrinsic value and that do not contribute the streetscape and/or historic environment or have a negative impact.

GRADING	**EXPLANATION**	**MANAGEMENT LEVEL**	**MANAGEMENT IMPLICATIONS**
Grade I/1	Heritage resources with qualities so exceptional that they are of special **national** significance.	South African Heritage Resources Authority (SAHRA)	• Conserve and protect. • Interpretation. • Permit of approval required for any demolition, alteration or change in planning status.
Grade II/2	Heritage resources which, although forming part of the national estate, can be considered to have special qualities which make them significant within the context of the **province or a region**.	Provincial Heritage Resources Authority (AMAFA).	• Conserve. • Remedial action to enhance significance. • Minimal intervention. • Interpretation. • Permit of approval required for any demolition, alteration or change in planning status.
Grade IIIA/3A	Heritage resources which are significant in the context of a **region**: • Outstanding local architecture, aesthetic, social and historical value • Outstanding intrinsic value for social, historical, scenic, aesthetic values either individually or as part of a group at a local level • Local significance	Local Authority (if delegated, otherwise AMAFA).	• Conserve. • Remedial action to enhance significance. • Minimal intervention. • Interpretation. • Permit of approval required for any demolition, alteration, addition.
Grade IIIB/3B	Heritage resources which are significant in the context of a **townscape** (in this case a campus): • Considerable local architecture, aesthetic, social and historical value. • Considerable intrinsic value for social, historical, scenic, aesthetic values either individually or as part of a group. • Local significance.	Local Authority (if delegated, otherwise AMAFA).	• Conserve • Remedial action to enhance • Permit of approval required for any demolition, alteration or addition. • Retain historical fabric (predominantly building exterior).
Grade IIIC/3C	Heritage resources which are significant in the context of a **streetscape**: • Local contextual value for social, historical, aesthetic value.	Local Authority (if delegated, otherwise AMAFA).	• Conserve wherever possible. • Retain historical fabric wherever possible (exterior only). • Conserve and enhance contribution to overall character and streetscape (predominantly public/private interface). • Permit of approval required for any demolition, alteration or addition.
NCW	Not-Conservation Worthy		

6) Heritage Indicators and Guidelines for Development.

The Cultural Landscape Study and Visual-Townscape Study of the campus have revealed elements within the campus that are fundamental to its character. It follows that, to preserve heritage significance (and, in particular, tangible heritage significance associated with physical elements) these fundamental elements must be identified, protected and enhance in the course of the future development and densification of the campus.

Heritage indicators and guidelines give direction to new developments. New development at the University must be cognisant of and responsive to the cultural landscape, built environment and landscape "patterns" that precede it.

While the site is admittedly "layered" from a heritage perspective, and new additions must therefore be discernible as such, there remains a need to understand the underpinning logic and spatial patterns/materiality of the University, and to recognise and reinforce such patterns in the new developments.

The specialist studies and resultant establishment of the heritage significance of the campus has given rise to 9 heritage-based indicators and guidelines to development. The assessors believe these must be stringently followed to ensure that campus character and the heritage significance of the site is preserved and enhanced, but which they believe are not so onerous as to significantly limit the much-needed development and densification of the campus.

HERITAGE INDICATORS AND GUIDELINES FOR THE UNIVERSITY OF ZULULAND

1. The **Norfolk Pines** on the campus are the higher-order landmark elements on the campus. They are the established "avenue tree" within the space and help to structure the campus and spatially orientate students on site. The trees are mature, and older than 60 years. The existing Norfolk Pines should be retained. A plan for the staggering of replacement planting of younger Norfolk Pine trees to take the place of the existing ones once they reach senescence must be put in place.

2. The campus has significance in typifying the universal, institutional model of a university as a "townscape" set within Arcadian surrounds. The **green, open spaces surrounding the campus** and within it are recognised as equally significant to the built fabric and must be protected. A landscape plan for the campus should be developed to protect the remarkable trees and green areas on the campus, and to ensure the planned new open spaces are landscaped in a way that enhances the existing campus character.

3. The views attained from the University campus towards its largely rural surrounds are significant and establish a physical, **visual relationship between the Zulu Kingdom that encircles the University and the academic community** within it. The important vistas that have been identified in the Heritage Impact Assessment are key to the campus' "sense of place" and must be protected from densification and building infill. The visual significance of these places should instead be enhanced within the campus environment.

4. The **graded heritage structures on the campus and their graded curtilage areas should be retained and restored** as far as possible. Alternations must be subsidiary to the historic buildings and must ensure that notable original building fabric is retained.

5. Historic buildings whose demolition is required for the greater development of the campus should have their **notable architectural elements, particularly decorative brise soleils, carefully removed, stockpiled, and used for the restoration of other buildings** dating from the same time. The restoration of the seven grade 3B academic buildings facing northwards should be undertaken.

6. The **open lawned areas between buildings and movement routes that have been identified as curtilages** to graded buildings are part and parcel of the heritage site, and must be retained and restored, as the development of these spaces would effect the appearance or significance of the adjacent heritage resource and of the campus pattern and character as a whole.

7. The buildings within the academic core of the University of Zululand are notable for their **consistently linear grain or form**. They are long, rectangular structures, rather than courtyard structures. New development within the academic core (inside the ring road) should respond to the prevailing linear pattern of the campus. Courtyard building forms are more appropriate for student residences.

8. The University of Zululand has a very **clear and consistent architectural palette** across all the buildings making up the campus. New building must respond to and interpret the prevailing architectural elements evident on the campus within

new designs, namely: the predominant surrounding building lines and heights of existing buildings; the use of oversailing eaves on slightly pitched roofs or of flat roofs; the positioning of entrances and gathering spaces; the use of exposed red brick masonry, brise soleils of bricks or blocks, and exposed concrete; and the screening and position of windows.

9. The infill development within the campus that is proposed after 2025 (in terms of the urban design plan – see Figure 57) remains highly conceptual and must be subject to a re-submission to AMAFA at a later date, and once further design development has occurred.

Norfolk Pines line the avenue, and define the major movement routes within the campus, as well as providing the major landmark on the approach to Vulindlela.

PART D: DEVELOPMENT PROPOSAL AND IMPACT ASSESSMENT

7) THE DEVELOPMENT PROPOSAL

In 2019, the Department of Higher Education and Training (DHET) commissioned an Integrated Spatial Design and Development Framework (SDDF) for the future development of the University of Zululand, Kwadlangezwa Campus. Following this, Ludwig Hansen Architects and Urban Designers was appointed to prepare the SDDF for the campus, which was adopted in 2020. This 5-year site development plan proposes the realisation of an additional 293 339 square metres of building footprint on the campus, with academic, student housing and administrative buildings proposed.

The SDDF has been structured around key elements of public structure, which are green space, movement nodes, shared public facilities (libraries, meeting places, sports facilities and recreation, performance and display spaces), hard open space, housing and utility services. These have been woven together into a coherent framework that also allows for a much needed upgrade of existing university facilities.

South African Universities continue to grow and change. UniZulu, in particular, is located in isolation from many of the other large universities and has, therefore, faced great pressure to accommodate the students from the surrounding areas. With the change in the curriculum from 1960, when the university was first established, and its growing list of available degrees, the university is in need of more academic facilities and lecture theatres.

Over the recent years, UniZulu has undergone a housing crisis, which has led to immense pressure to provide more housing for the growing student body. In addition to this, the existing university residences, are in need of an upgrade in order to provide students with dignified housing. This SDDF has, therefore, been set up to provide a clear spatial future that still allows enough flexibility to accommodate change.

The Integrated Spatial Design and Development Framework is broken into yearly phases spanning between 2020 and 2025. These phases include the following proposals:

2020/2021:

- Student Housing: New proposed three-storey residences & renovation of existing residences. The two oldest residences on the western side of campus have already been partly demolished due to the discovery of asbestos.
- Student Centre: Demolition of the Old Warden's House, much of which has been burnt during student protests. This building is to be replaced with three-storey high new Student Centre building.
- Public Open Space: Landscaped public space proposed to the east of the proposed Student Housing.
- 60 Year Celebration Square: Landscaped public space proposed to span across the road between the Vice Chancellor's House and the Natural Sciences Building.
- Fleet Management Depot: New building and parking space to allow for 30 Cars & 6 buses.

Work on this phase of the project has started this year, with separate Section 34 applications submitted to AMAFA for work to be done on the buildings older than 60.

2021/2022

- Student Housing: Three-storey proposed residences along the north-western edge of the campus, with a new road to continue from the existing road. Buildings orientated towards Public Open Space Squares
- Public Open Space: Landscaped public space proposed between the two existing residences, Madiba Flat and Mtshali House Residences.
- Multi-Purpose Lecture Theatre: Demolition of existing Student Centre, much of which has been burnt and vandalised during student protests. This building is to be replaced with three-storey building with shared lecture theatres, and landscaping & social learning spaces to the east of the proposed building to frame the main Library Square and the entrance to the Library.
- VC House Refurbishment: Building to be refurbished to allow for new conference facilities.
- Academic Building: Three-storey Post Graduate Centre proposed north of the VC House.

Figure 56: Spatial Design and Development Framework (SDDF) for the future development of UniZulu, Kwadlangezwa Campus. Image by Ludwig Hansen Architects and Urban Design.

- Multi-Purpose Lecture Theatre: Three-storey conferencing facilities, teaching and academic administration proposed north of the VC House.
- Academic Building: New three-storey Social Works, Law & Music Building located across the road from the existing soccer field.
- Gatehouses: New gatehouse at the main entrance to the campus and north of the existing tennis courts for the services and construction vehicles access.
- Multiple refurbishment projects: Western student residences, Lift at Natural Science Building & Admin, Computer Labs, Bhekezulu Hall, Lecture venues, PPO Warehouse.

2022/2023

- Student Housing: New proposed three-storey residences located on the sloped land east of the existing looping road along the north-eastern edge of the existing western residence.
- Shared Facilities: New three-storey shared facilities located around the existing southern-most residences of the western residence.
- Academic Building: New three-storey Science Building to the east of the existing Student Centre.
- Academic Building: New three-storey Science Building and shared lecture theatres to the east of the existing Student Centre.
- Student Administration: New three-storey offices located across the road from the existing sports field, with new landscaped public space to the west of the proposed building.
- Multi-Purpose Facilities: New two-storey Kitchen and Dining facilities for the new proposed conferencing facilities at the VC House.
- Academic Building: New three-storey Arts and Social Sciences Building located east of the proposed 60-year Celebration Square, along the vehicular road.
- Academic Building: New three-storey Academic facility located south of the Natural Sciences Building, along the vehicular road.
- Refurbishments and Upgrades: Arts building & auditorium, Library, Tennis Courts, Internal Roads & Parking & Paving, Chapel.

2023/2024

- Student Housing: New residences located west of the existing north-western edge of the campus, with a new road to continue from the existing road.
- Admin: New three-storey staff support offices and registration located east of the existing Education Faculty, along the vehicular road.
- Academic building: New three-storey building for Music Department located south of the vehicular road, opposite the academic core.
- Academic Support: Existing Facilities Management Buildings to be demolished and replaced with new two-storey L-shaped building for academic support facilities with new landscaped courtyard.
- Student Administration: New three-storey offices located south of the proposed Student Administration across the road from the existing sports field.
- Multi-Purpose Facilities: There are several new two-storey multi-purpose facilities proposed around the main entrance to the university campus, with new landscaped public space. These buildings include the following: market and retail facilities; Taxi rank waiting facilities, trade and taxi offices; Satellite police station, land clinic and health practitioners.
- Upgrade sports field

2024/2025

- Academic building: Two new three-storey buildings located south of the vehicular road, opposite the academic core.
- Student Housing: New proposed three-storey residences located on the sloped land west of the existing road along the western edge of the existing eastern residences.

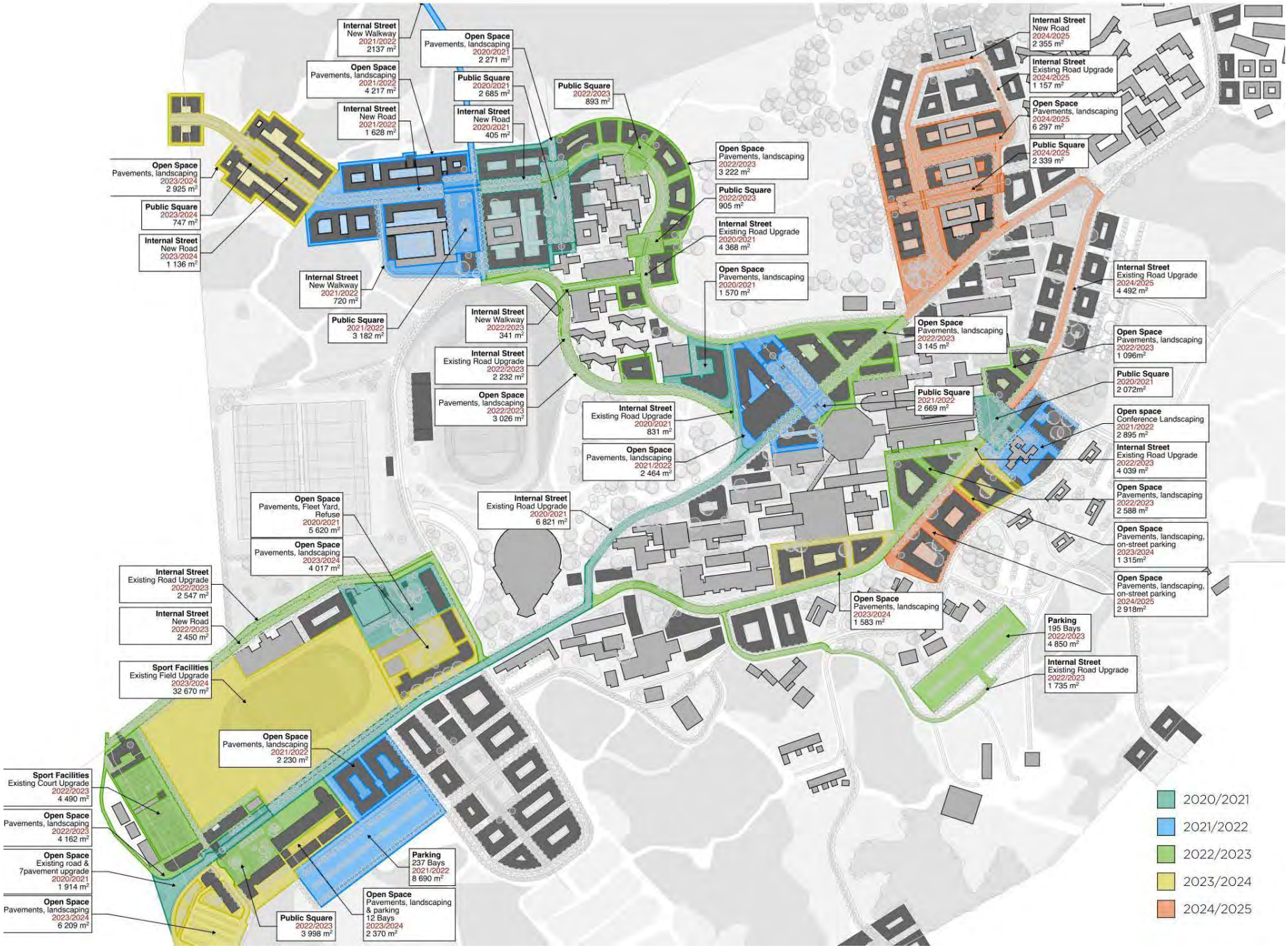


Figure 57: Spatial Design and Development Framework for the future Landscape Design of UniZulu, Kwadlangezwa Campus. Image by Ludwig Hansen Architects and Urban Design.

- Student Housing: New proposed three-storey residence extensions to oldest eastern residences & proposed renovation of these existing residences.

- Public Open Space: Landscaped public space proposed to the western end of the western residence area.

Along with the 5-year site development plan, the proposed implementation plan also establishes a framework that identifies lead projects and phasing methods over a more long-term basis, to ensure a holistic approach through the lifespan of the university and avoid ad hoc additions. This long-term phasing plan will be integrated into the campus environment between 2022 and 2030. Despite the projects proposed to take place between 2025 and 2030 already forming part of the Integrated Spatial Design and Development Framework, it is recommended that an updated application be made to AMAFA before commencing with the long-term phasing plan. This ensures that the heritage resources are protected throughout the process of development.

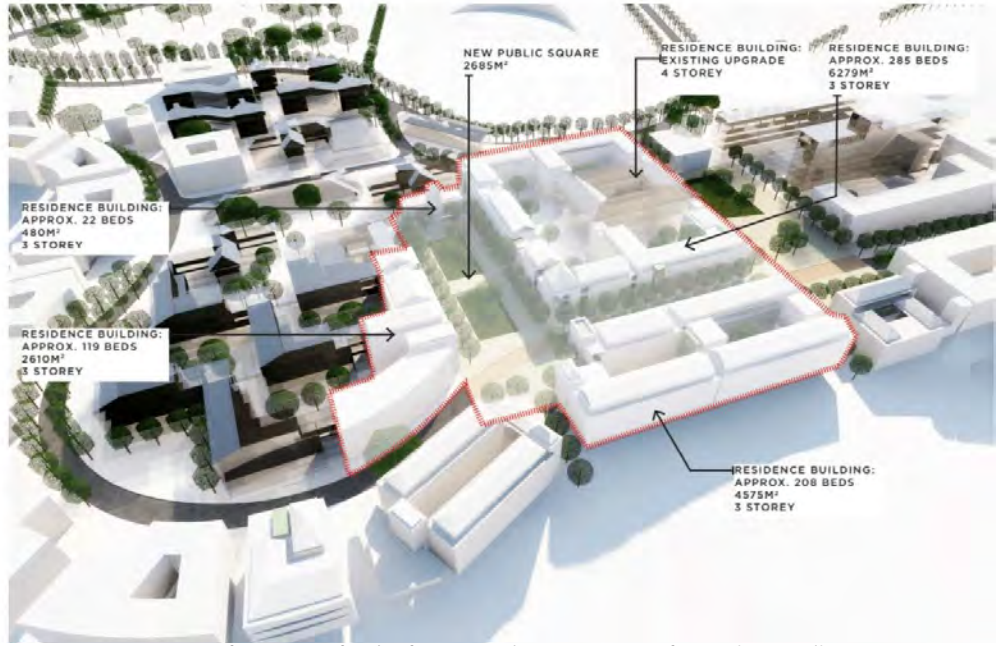


Figure 58: A 3D render of the SDDF for the future Landscape Design of UniZulu, Kwadlangezwa Campus - Housing Cluster Aerial Perspective. Image by Ludwig Hansen Architects and Urban Design.

Figure 59: A 3D render of the SDDF for the future Landscape Design of UniZulu, Kwadlangezwa Campus- Academic Cluster Aerial Perspective. Image by Ludwig Hansen Architects and Urban Design.

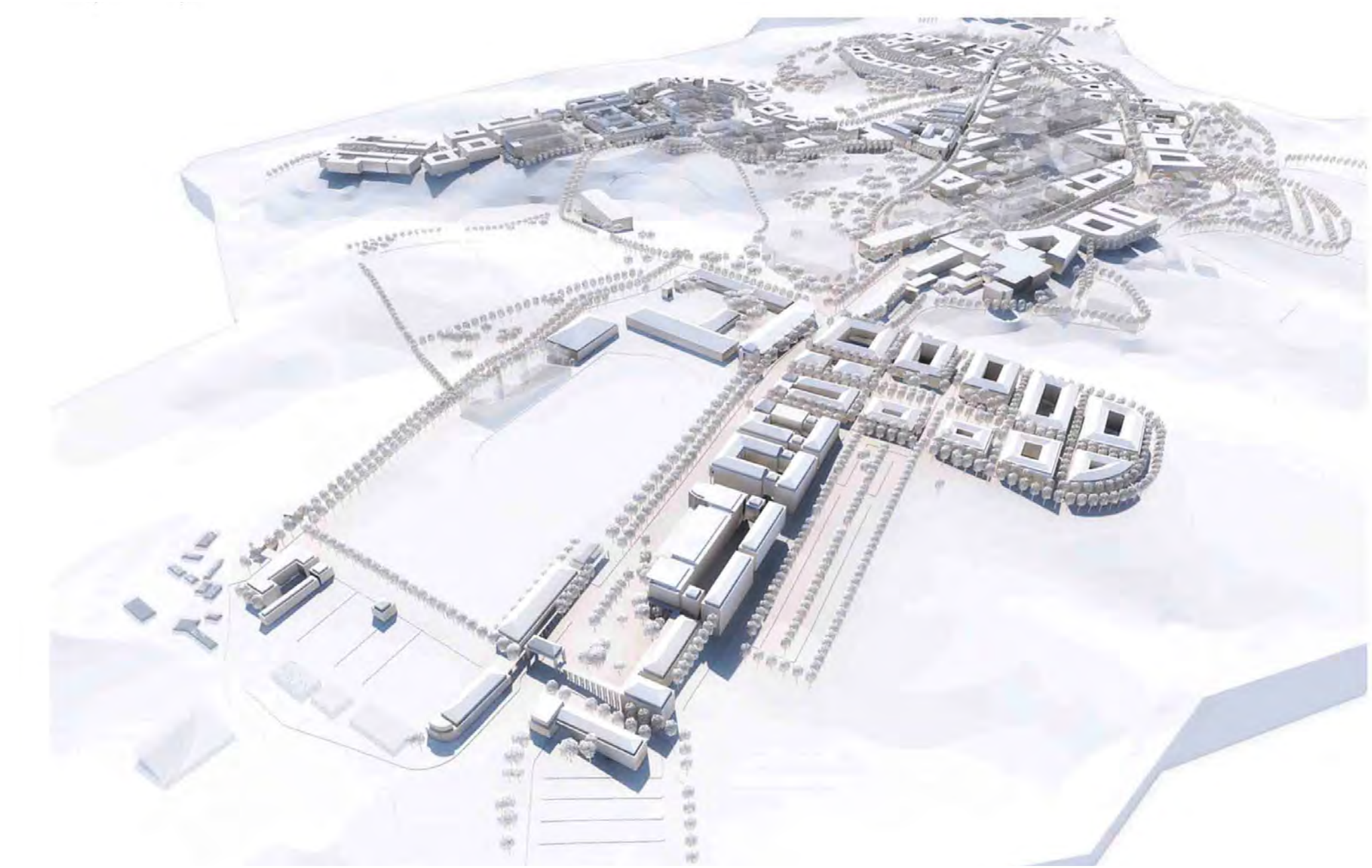


Figure 60: A 3D render of the SDDF for the future Landscape Design of UniZulu, Kwadlangezwa Campus - view from the west. Image by Ludwig Hansen Architects and Urban Design.

Figure 61: View of the campus from the south. (Source: https://www.corruptionwatch.org.za/unizulu-midst-procurement-controversy/).

PART D: DEVELOPMENT PROPOSAL AND IMPACT ASSESSMENT

8) Heritage Impact Considerations.

CULTURAL LANDSCAPE ASSESSMENT CRITERIA

The Cultural Landscape Specialist Study noted that new development at the University must be cognisant of and responsive to the cultural landscape, built environment and landscape "patterns" that precede it.

While the site is admittedly "layered" from a heritage perspective, and new additions must therefore be discernible as such, there remains a need to understand the underpinning logic and spatial patterns/materiality of the University, and to recognise and reinforce such patterns in the new developments.

The heritage indicators have been strongly influenced by this outcome.

VISUAL ASSESSMENT CRITERIA

The Impact Assessment Criteria identified by Obholzer in his 2005 "DEA&DP Guideline for Involving Visual and Aesthetic Specialists in EIA Processes" was consulted. The visual criteria and considerations that inform a visual impact assessment are as follows:

Visual Exposure and Viewshed Area

The visual exposure of the area is the geographic area form which the project will be visible (the "view catchment area"). It analyses the degree to which the site is visually apparent from the identified key viewpoints surrounding the site. Visual exposure and resultant impact tends to diminish with distance: the further away you are away from the development, the lower its visual impact. Visual exposure is defined as follows:

- High exposure: Dominant or clearly noticeable, visible from a large area.
- Moderate exposure: Recognizable to the viewer, visible from the intermediate area only.
- Low exposure: Not particularly noticeable to the viewer, continuing the existing visual character or patterns, visible from a small area around the project site.

The University of Zululand is already a **visually secluded site**, due to the surrounding topography and vegetation. Therefore, the zones of visibility are already limited. It is already clear from the foregoing analysis of the receiving environment that **no areas of "high visibility" exist in and around the site**.

Visual Absorption Capacity (VAC)

The VAC indicates the potential of the landscape to conceal the proposed development, and indicates how much of the project would be visually "absorbed" or "disappear" into the receiving environment. VAC is defined as follows:

- High VAC: Effective screening by topography and vegetation.
- Moderate VAC: Partial screening by topography and vegetation.
- Low VAC: Little screening by topography or vegetation.

Visual Sensitivity of the Area and the Viewpoints

The level of visual impact considered acceptable is dependent on where the site is located in the

receiving environment and the sensitivity of its location to development. Visual sensitivity can be defined as follows:

- High visual sensitivity: Highly visible and potentially sensitive areas in the landscape (seen from residential areas, natural reserves, scenic routes etc.)
- Moderate sensitivity: Moderately visible areas in the landscape (visible from typical "town" spaces, with a mixed-use and varied environment).
- Low visual sensitivity: Minimally visible areas in the landscape (for instance seen from degraded area or industrial sites)

Visual Intrusion/Landscape Integrity

The visual intrusion that could potentially be caused by the proposed project is related to the level of compatibility or congruence of the proposed project with the particular qualities or sense of place of the surrounding areas – in this case the "townscape" of the UniZulu Campus. Visual intrusion relates to the concept of placing appropriate development typologies within their context to maintain landscape integrity and sense of place and is defined as follows:

- High visual intrusion: Noticeable change or conflicts with the surroundings.
- Moderate visual intrusion: Partially fits into the surroundings, but clearly noticeable.
- Low visual intrusion: Minimal change or blends in well with the surroundings.

ASSESSMENT OF IMPACT

Visual Impacts

At the largest scale, it is very clear that adherence to the existing townscape and landscape character of the campus **would ensure an acceptable degree of visual impact**.

A major principle of the urban design proposal for the campus is the consolidation of edge, and this is key in ensuring low impacts with respect to visual intrusion, landscape integrity and the ability of the environment to visually absorb new development (Figure 62). Due to the relative containment and low rise nature of the proposed development infill, when viewed from the rural surrounds to the campus, the densification of the campus will have a **low visual impact**.

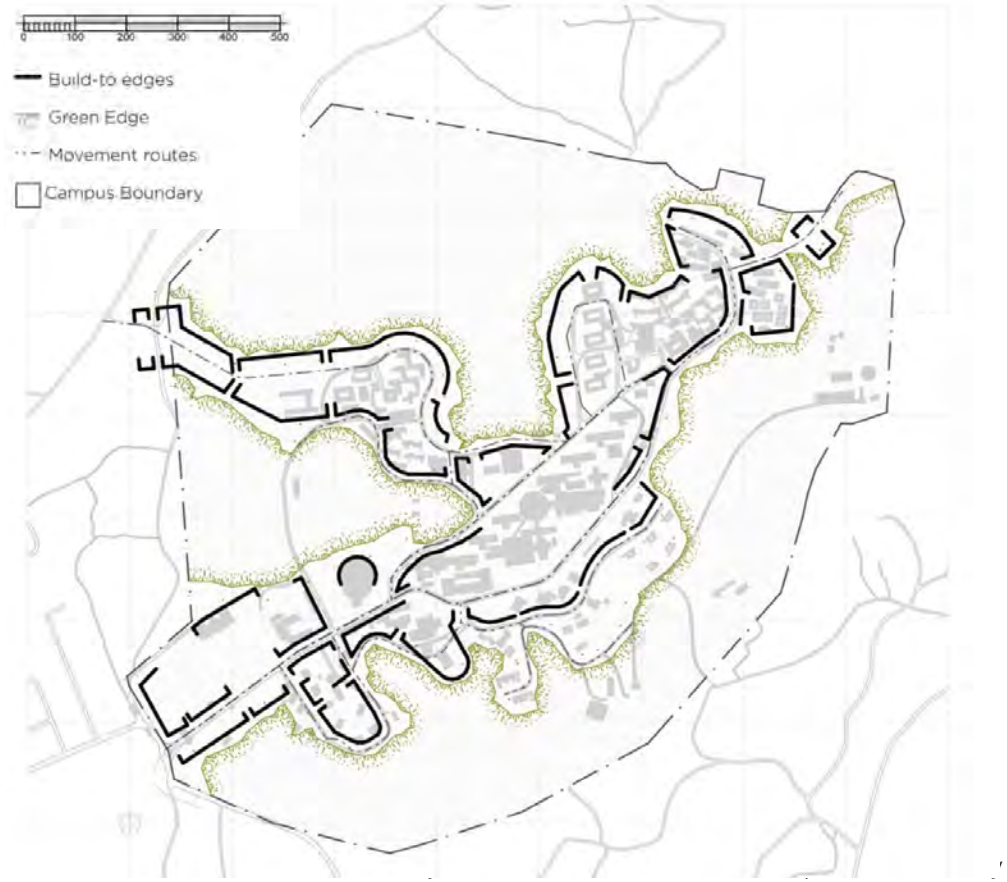


Figure 62: An underpinning concept of the urban design proposal is Edge Consolidation. (LHA&UD).

are on the ridgeline as spatial landmarks and markers, that would have a visual impact on the way the campus is perceived from the surrounds. It is noted that some of the proposed building footprints would involve the removal of mature Norfolk Pines. *In these instances, the building lines must be set back to protect these trees, which are so key to the character of the campus. See Areas "A" and "B" on* **Figure 65**.

Other than the removal of Norfolk Pines, it is otherwise only within the campus environment that the proposed infill development has been ascertained to have visual impact. Many of the inter-campus visual impacts, established through the visual study, are also reinforced by the heritage-based design indicators (see Indicators 1, 2 and 3). The following conflicts between the urban design proposal and the visual character of the campus have been confirmed, and the following would need to occur to bring the proposal to within an acceptable level of visual impact:

- *At Area "C", the proposed inclusion of a building footprint in front of the "corner turret" of the Admin Building would reduce the landmark nature of this structure, and the sequence of arrival to the campus. The building footprint proposed here should therefore be removed.*

The building that currently exists in this area is a low, brick structure that seems to accommodate services/infrastructure. Ideally it should be removed over time to "open up" this visually important corner on the campus. Ludwig Hansen's urban design proposal shows proposed new structure in that area, and this is the structure that should be removed in order to ensure that the landmark qualities of the Admin Building from the approach road are retained. A cursory Google of the University of Zululand brings up many images that show the front section of the Admin Building as iconic and representative of the university (Figure 63). This view must be protected, and so no building should be permitted in this area.

Figure 63A. The Admin Building is a key part of the University's image, and is used by the University for many of its official, public documents. The construction of any buildings in the foreground of this structure, with its landmark corner tower, would erode the legibility of the campus.

Figure 63B. SDDF proposal with the relevant proposed buildings outlined in red.

Figure 63C&D. There is a brick building in the foreground of the Admin Building at present, and ideally should be removed and the corner properly landscaped, given the iconic view.

- *Areas "D.1" and "D.2" as well as "E.1" and "E.2" are points within the campus from which important vistas between the various sections of the campus, as well as out towards the rural, Arcadian surrounds to the campus are gained. The building footprints positioned in these viewcones, or which would truncate or constrain them, should be removed from the development proposal.*

We understand that this heritage indicator represents the biggest loss of built area as these are quite big stands representative of 573 student beds, but we have carefully considered the impact and it is very clear to us that any development here would substantially impact views.

The panoramic view below (Figure 64) shows the single storey building located in the vicinity of the proposed new building footprints. The extrusion of this structure, in the image below, shows how even a small-scale structure divorces the east residential wing from the views to the surrounding, rural/arcadian surrounds. The interplay of these is key to the character of UniZulu, and is characteristic of the university campus typology. It should be protected.

Figure 64: Exploration of the visual impact of developing at area D.1.

Impacts Related to the Heritage-Based indicators

The heritage-based indicators establish that the open lawned areas between buildings and movement routes that have been identified as curtilages to graded structures should be retained. The urban design layout proposes the infill of the spaces identified as significant to the campus character and original campus concept at UniZulu. Although they are almost all part of the post-2025 phase of work, it is important that they be removed from the development proposal, as their heritage impact would be severe.

- *These areas for exclusion of proposed building footprint are: Areas marked "F" in front of the original academic buildings, and Areas marked "G" in front of the original eastern residences to the west.*

The exception is the first, most western forecourt closest to the Admin Building, where the landscape forecourt has already seen substantial change. The intent here is to create a linear academic centre building, which would allow for "home" for various departments on the campus. The building here must be linear, must preserve mature trees, and must scale down in height from the Admin building (tallest) to the east (single storey historic building).

Ideally, it should allow for views through from the avenue towards the historic building behind, and it must activate the edge of the avenue (Figure 65)

Finally, the heritage-based design indicators emphasise the prevalence of linear building forms for academic buildings on the UniZulu campus. The urban design proposal indicates courtyard-type buildings throughout the campus. Within the academic core, it is proposed that these structures instead be articulated to emphasise linearity, without necessarily impacting the overall building placement. See Areas marked "H".

The urban design proposal is not yet at a level of resolution that the architectural appropriateness of the proposals can be assessed. It is suggested that this is addressed by making the relevant design indicator a condition of any heritage approval that may be granted.

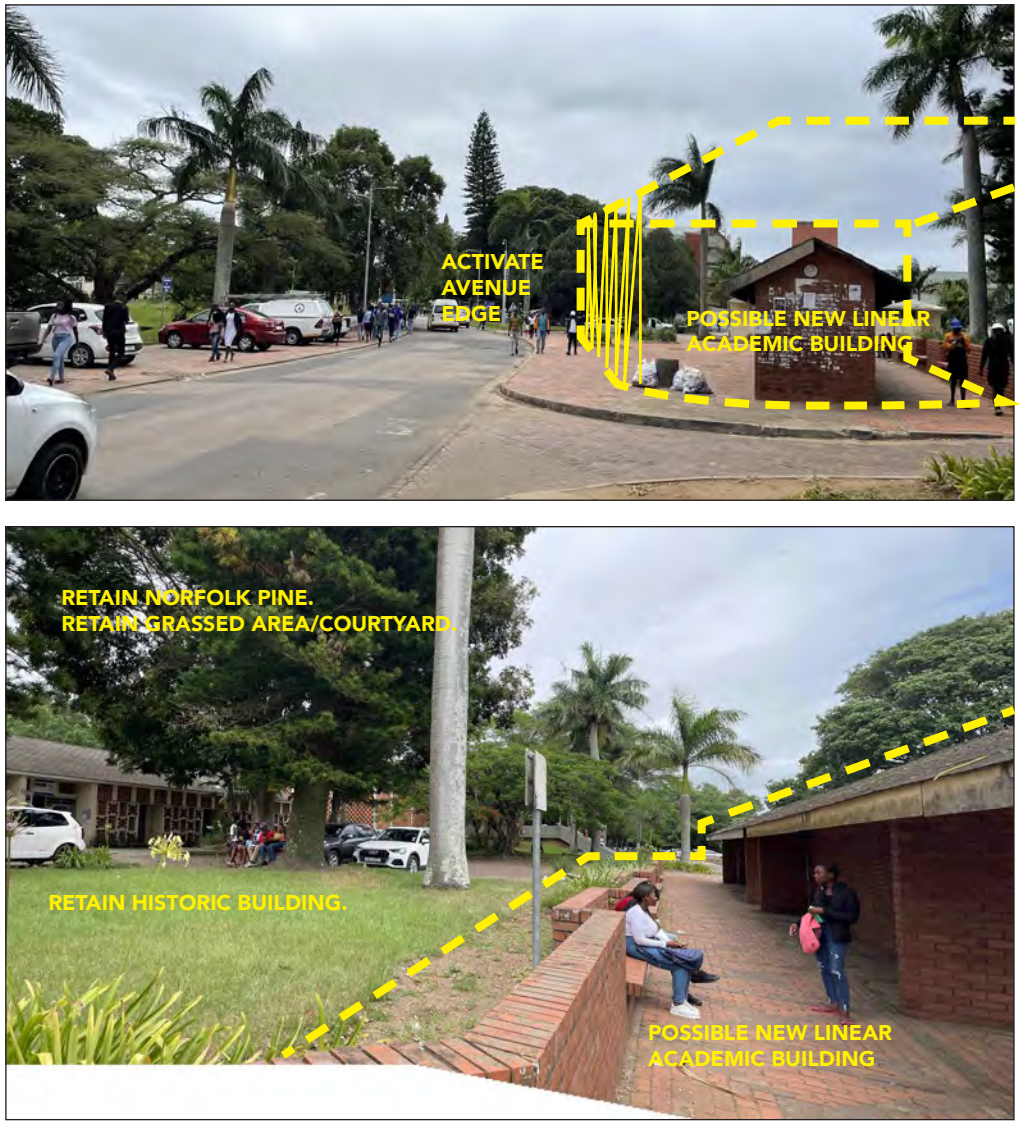


Figure 65: The forecourt closest to the Admin Building is the only one that could see some limited development. The other forecourt areas must remain undeveloped as they are key to the historic campus character, and must be subject to a landscaping plan for the campus as a whole.

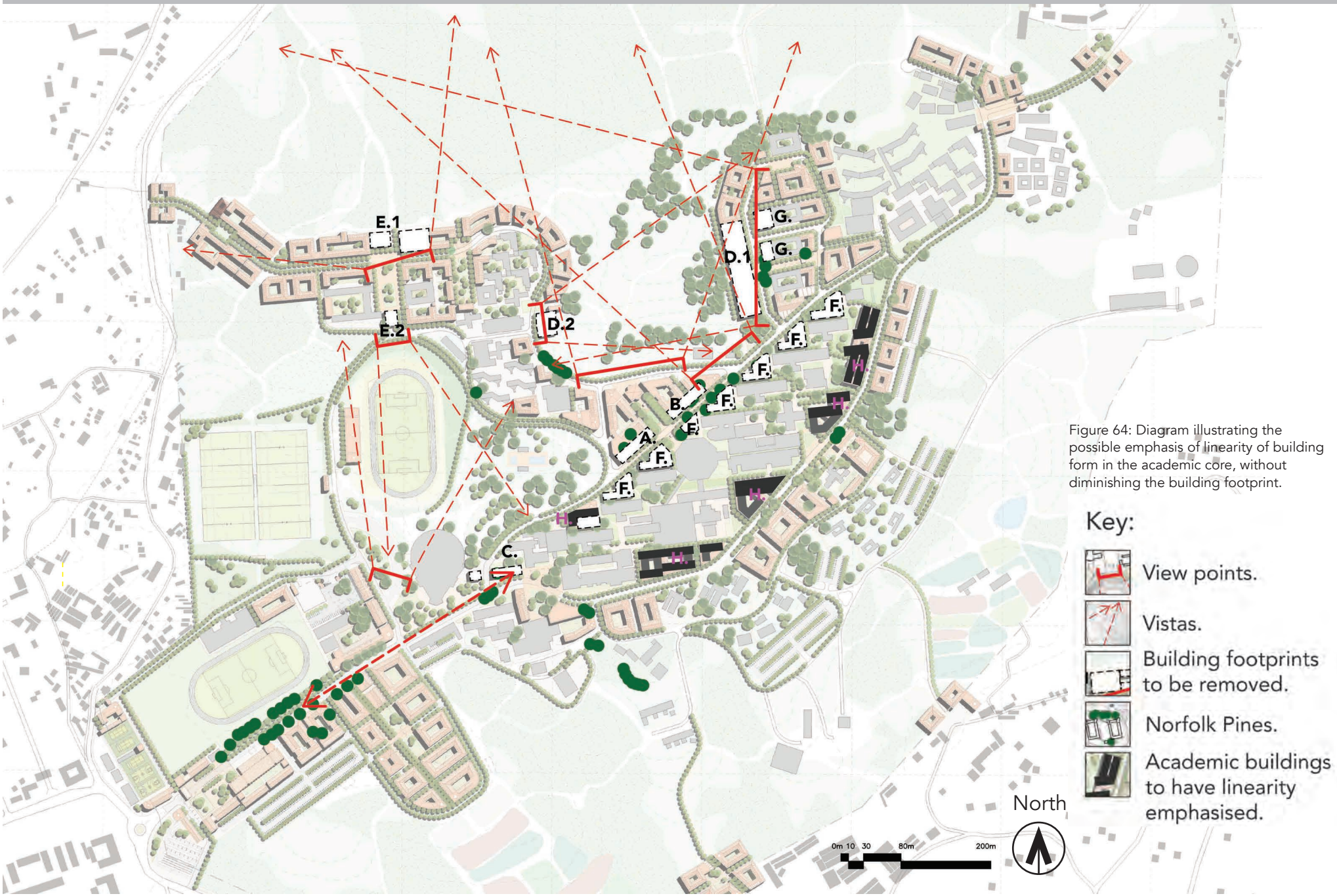


Figure 64: Diagram illustrating the possible emphasis of linearity of building form in the academic core, without diminishing the building footprint.

Figure 66: Assessment of the proposed Urban Design Plan for the campus, with areas of mitigation indicated.

PART E: PUBLIC CONSULTATION

AMAFA's Guidelines for the Completion of the Public Participation Process have been consulted in order to proceed with public participation for this project. As per the guidelines, the following steps will be followed in order to adhere to the process:

1. The heritage consultants notified an official from the municipality directly and provided them with a link to the application submitted for this project.

2. Upon receiving this application, the Institute's Council or its appointed Review Committee will determine the consultation process to be followed, in this case:

    a. Given the stature of the UniZulu Kwadlangezwa campus, the heritage consultants recommended that extensive consultation should occur, to contact as many relevant stakeholders as possible (the users of the university, municipal officials, and heritage societies or known interest groups).

    b. A list of these relevant stakeholders was made available to AMAFA following this review process, to ensure agreement of the parties to be consulted. This was duly done, with the following parties identified:

No.	ORGANISATION	CONTACT PERSON	CONTACT DETAILS
1.	Zululand Historical Museum		vukanimuseum@lantic.net, 035 474 5274
2.	The Gallery and Museum at Empangeni		035 902 5888, 035 901 1617
3.	uMhlathuze Local Municipality	Mr. Mthokozisi Mhlongo	MhlongoMS@umhlathuze.gov.za, 073 406 3400
4.	University Properties	Ms. Ntombenhle Bakako – Project Manager for Infrastructure	BokakoN@unizulu.ac.za, 073 652 5829 or 035 902 6480
5.	University liaison with the Zulu Royal Family	Dr. Paul Bigali Bokang	Paul@bokang.africa, 076 228 8042
6.	DOCOMOMO	Ms. S. van der Merwe	info@docomomo-sa.org

    Each of these parties was directly emailed, to inform them that an application was to be made in terms of Section 38 of the NHRA, with a link to the Heritage Impact Assessment report. The emailed were sent on the 15th November, informing all parties that comments would close on the 15th December 2022. However, on the 13th December the parties were informed of an extension of the commenting period to the 5th January 2023.

    The heritage official at AMAFA was copied into all emails.

    Parties who did not comment were given a final reminder on the 5th January 2023 to submit all comments.

    Only one comment was received, from Docomomo-SA.

    c. In order to notify the users of the University (the student body and staff), the link to the documentation was put on the University website, informing them of the process, and inviting them to make comment. This notice appeared from the 17th January with comments closing on the 10th February 2023.

    No comments were received via the website. The University's official who organised the website advertisement confirmed that she had not received any comments up to and on the 17th February 2023.

4. Annexure 6 of this report provides proof of consultation, and comments received are dealt with below.

COMMENTS RECEIVED

The following parties were required to be consulted, as per the AMAFA case officer's request: The Zululand Historical Museum and the Gallery and Museum at Empangeni.

The heritage consultants further decided to circulate the document to:

The local municipality, care of Mr. Mthokozisi Mhlongo; University Properties, care of Ms. Ntombi Bakako; Dr. Paul Bokang from Unizulu, to engage with the Zulu Royal Family (as landowners) to whatever degree is required; DOCOMOMO South Africa, the Documentation and Conservation of the Modern Movement in South Africa.

Finally, the invitation to comment was placed on the University's website from the 17th January 2023, inviting comment before the 10th February 2023. By the 17th February 2023 no comment had been received via the website.

The only comment received was from Docomomo South Africa, a registered heritage interested group with a particular interest in Modern Architecture in this country. Their comment is attached in full to the right. The main comments that have been made by them are agreed with, and have been incoporated into the HIA. They are as follows:

DOCOMOMO-SA COMMENT:	RESPONSE IN HIA:
The King Bhekuzulu Hall deserves a grading of IIIA, in forming the campus gateway with the Admin building to the main movement spine, and a counterpoint to the post-modern Library Building.	This grading has been adopted in the HIA, with the grading of the King Bhekuzulu Hall being elevated from IIIB to IIIA.
We suggest densification and bulk is prejudiced towards the southeast of the campus rather than around the northern and northwestern edges and/or for new buildings along these edges to be placed so as to allow views over or through new blocks.	This point has been included in the recommendations of this HIA.
There are many fence-types and -placements (for example heavy, visually obscuring palisade fences) that detract from the legibility of the campus public spaces. It is proposed that the HIA includes heritage guidelines for the review/upgrade of fencing to address visual permeability, setbacks, material consistency and compatibility with the predominant screen-wall typologies.	The HIA recommends a landscape plan for the campus as a whole, which must include a review and upgrade of fencing on the campus to "address visual permeability, setbacks, material consistency and compatibility with the predominant screen-wall typologies". This landscape framework plan must also take environmental and communal/agricultural factors into account, which are beyond the scope of this HIA. However, the heritage consultants would gladly provide inputs to this process.
We request that any Modern buildings earmarked for demolition are recorded photographically beforehand, and that Docomomo South Africa may access these photographs and drawings (where available) to support our records of modern movement sites in the region.	This point has been included in the recommendations of this HIA. Any recordings shall be sent to Docomomo South Africa for their records.

docomomo_
south africa

05 January 2023
Claire Abrahamse
Via email: claire@claireabrahamse.co.za

Comment on the Heritage Impact Assessment for the Proposed Densification and Upgrades to the University of Zululand Main Campus, Empangeni, KwaZulu Natal.

Dear Claire
Thank you for the opportunity to comment on the University of Zululand Main Campus densification and upgrade proposal, and for making us aware of the Modern buildings within the campus.

Heritage significance
Docomomo SA generally agrees with and supports the proposed heritage gradings assigned to the individual buildings and the campus as a whole. Of the larger, imposing buildings, the King Bhekuzulu Hall deserves a grading of IIIA, in forming the campus gateway with the Admin building to the main movement spine, and a counterpoint to the post-modern Library Building. Although many of the earlier buildings lining the main movement spine are relatively modest typologies, they are significant in the context of the historical development of the campus and the broader social and political informants of the time (for example the 1959 Extension of University Act, which enforced segregation not only by race but by ethnicity). The 1950s to 1960s saw huge investment in and the rapid development of new and existing university campuses in South Africa but also in Africa, as countries gained their independence. Modernism was the chosen architectural language to embody notions of power and aspiration on these campuses, for example, locally, the University of Pretoria, the Rand Afrikaans University and UNISA, and abroad, the Kwame Nkrumah University of Science and Technology (Kumasi, Ghana, 1952/1961), the University of Lagos (Lagos, Nigeria, 1962), and the University of Nigeria (formerly Nigeria College of Arts Science and Technology) (Nsukka, Nigeria, 1950s). It is therefore significant to compare the University of Zululand with its contemporaries, and observe the intentional toned-down scale and cultural appropriation of ethnic motifs (in the patterned brise-soleils and curved wall enclosures) applied in the architectural language of the bulk of the university buildings.

Development and upgrade proposal
We support the proposed heritage-related development indicators and proposed adjustments to the densification plan. It is important to retain the proposed "curtilages" along the main spine to retain the legibility of the low-rise "bungalow" teaching spaces lining the spine and provide appropriate forecourt spaces to the Hall, Admin and Library buildings. Similarly, we agree that the densification of the campus must not detract from the campus's connection to its setting within the broader landscape, and therefore suggest that densification and bulk is prejudiced towards the southeast of the campus rather than around the northern and northwestern edges and/or for new buildings along these edges to be placed so as to allow views over or through new blocks.

Furthermore, the photographs included in the report show that there are many fence-types and -placements (for example heavy, visually obscuring palisade fences) that detract from the legibility of the campus public spaces. It is proposed that the HIA includes heritage guidelines for the review/upgrade of fencing to address visual permeability, setbacks, material consistency and compatibility with the predominant screen-wall typologies.

Lastly, we request that any Modern buildings earmarked for demolition are recorded photographically beforehand, and that Docomomo South Africa may access these photographs and drawings (where available) to support our records of modern movement sites in the region.
We request to be kept informed of AMAFA's decision on the application and any significant developments to the proposal affecting the identified modernist heritage buildings on the campus.

Thank you and kind regards

Sandra van der Merwe
On behalf of Docomomo-SA, written in partnership and in discussion with Docomomo-SA members.

Contact details:	Ilze Wolff (Co-chair)	Sandra van der Merwe (Co-chair)
info@docomomo-sa.org	0724480848	0849518625

Invitation to Comment: Heritage Impact Assessment for the Proposed Densification and Upgrades to the University of Zululand Main Campus, Empangeni, KwaZulu Natal.

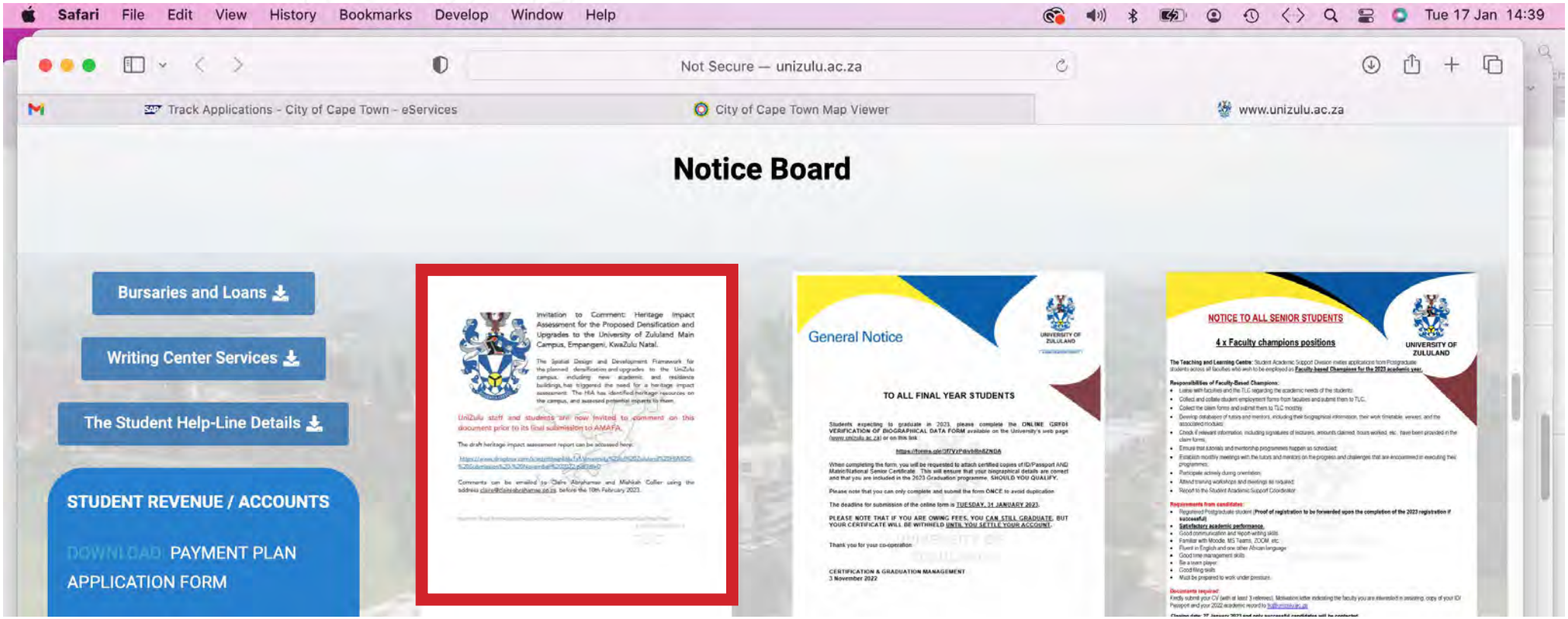
The Spatial Design and Development Framework for the planned densification and upgrades to the UniZulu campus, including new academic and residence buildings, has triggered the need for a heritage impact assessment. The HIA has identified heritage resources on the campus, and assessed potential impacts to them.

UniZulu staff and students are now invited to comment on this document prior to its final submission to AMAFA.

The draft heritage impact assessment report can be accessed here:

https://www.dropbox.com/s/edyrhtwjnbdu1xf/University%20of%20Zululand%20HIA%20-%20Submission%20-%20November%202022.pdf?dl=0.

Comments can be emailed to Claire Abrahamse and Mishkah Collier using the address claire@claireabrahamse.co.za, before the 10th February 2023.



PART F: RECOMMENDATIONS AND CONCLUSION

It is recommended that this integrated Heritage Impact Assessment be endorsed as fulfilling the requirements of Section 41(1) (c) (i) of the KZN Amafa & Research Institute Act No. 5 of 2018.

It is further recommended that the heritage-based design indicators and significances and gradings outlined in Part C of this report be endorsed by AMAFA. The University is encouraged to commence a nomination process, for the wider campus to be formally protected as a Provincial Heritage Site.

Further, it is recommended that the following mitigatory measures be implemented to limit impacts to the campus character:

A. *That in Areas "A" and "B" identified in* **Figure 66** *building lines must be set back to protect the mature Norfolk Pine trees.*
B. *That at Area "C" in* **Figure 66**, *the proposed inclusion of a building footprint in front of the "corner turret" of the Admin Building be removed.*
C. *That at areas "D.1" and "D.2" as well as "E.1" and "E.2" in* **Figure 66**, *building footprints positioned in these viewcones, or which would truncate or constrain them, should be removed from the development proposal.*
D. *That Areas marked "F" in front of the original academic buildings, and Areas marked "G" in front of the original eastern residences (in* **Figure 66***) to the west be kept free from building, and retained as landscaped forecourts.*
E. Within the academic core proposed structures must be articulated to emphasise linearity, without necessarily impacting the overall building placement. See Areas marked "H" *in* **Figure 66**, **Figure 67**.

Architecturally-speaking, it is suggested that the following design indicator be made a condition of any heritage approval that may be granted:

F. The University of Zululand has a very **clear and consistent architectural palette.** *New building must respond to and interpret the prevailing architectural elements evident on the campus within new designs, namely: the predominant surrounding building lines and heights of existing buildings; the use of oversailing eaves on slightly pitched roofs or of flat roofs; the positioning of entrances and gathering spaces; the use of exposed red brick masonry, brise soleils of bricks or blocks, and exposed concrete; and the screening and position of windows.*
G. The infill development within the campus that is proposed after 2025 (in terms of the urban design plan – see Figure 57) remains highly conceptual and must be subject to a re-submission to AMAFA at a later date, and once further design development has occurred.
H. Densification and bulk should be prejudiced towards the southeast of the campus rather than around the northern and northwestern edges. Any new buildings along these edges (N and NW) are to be placed so as to allow views over or through new blocks.
I. The HIA recommends a landscape plan be developed for the campus as a whole, which must include a review and upgrade of fencing on the campus to address visual permeability, setbacks, material consistency and compatibility with the predominant screen-wall typologies.
J. Any Modern buildings earmarked for demolition must be recorded photographically beforehand, and that such recording be sent to Docomomo South Africa.

Mishkah Collier
PR Arch 28972463

Claire Abrahamse
Pr Arch 21114

September 2022, finalised February 2023.

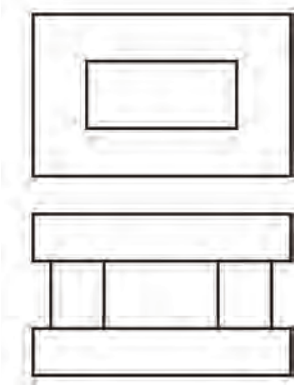


Figure 67: Diagram illustrating the possible emphasis of linearity of building form in the academic core, without diminishing the building footprint.

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