

4th March 2022

The Chief Executive Officer

AMAFI Institute

195 Langalibalele Street

Pietermaritzburg

3200

Dear Sir

**NOTIFICATION OF INTENT TO DEVELOP AT THE UNIVERSITY OF ZULULAND MAIN CAMPUS,
RESERVE No. 9, 22/15829 GU, KWADLANGEZWA, KWAZULU-NATAL**

Please find out report attached herewith, which outlines the Notification of Intent to Develop at the above property, in terms of Section 38 (1) (c) (i) of the National Heritage Resources Act (Act 25 of 1999).

The proposed development is for the densification of the University of Zululand main campus through the addition of new structures on the site.

This Notification of Intent to Develop identifies heritage resources likely to be impacted by the proposed development and makes recommendations as to the specialist studies that may be required, if the AMAFI Institute consider that a Heritage Impact Assessment is required, in this case.

Please do not hesitate to contact us should you require any further information or wish to discuss any of the above in more detail.

Best regards,



Mishkah Collier



Claire Abrahamse

Heritage Practitioners

Annexure A: Photographic Survey of the Site.

Annexure B: Mapping of Heritage Resources and Significant Features.

Annexure C: SG Diagram and Deed of Transfer/Title Deed.

APPLICATION

NOTIFICATION OF INTENT TO DEVELOP IN TERMS OF SECTION 38 (1) OF THE NATIONAL HERITAGE RESOURCES ACT, ACT 25 OF 1999

FOR THE PROPOSED DENSIFICATION AND UPGRADES TO THE UNIVERSITY OF ZULULAND MAIN CAMPUS, EMPANGENI, KWAZULU NATAL

March 2022

APPLICABILITY OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (NEMA):

This application is made in terms of Section 38(8) of the NHRA and NO application under NEMA has been made.

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.
Property Use:	Education – University Campus.

See Figure 1 and Figure 2.

DEVELOPMENT DETAILS:

The proposed development is for the densification of the university campus through the addition of new structures on the site.

This triggers Section 38 (1) (c) of the National Heritage Resources Act as it constitutes a development that will "change the character of a site (i) exceeding 5000m² in extent.

The proposed development will change the character of the site in the following way:

- In 2019, the Department of Higher Education and Training (DHET) was tasked to take forward a planning process for the future development of the University of Zululand, in KwaZulu Natal. Following this, Ludwig Hansen Architects and Urban Designers was appointed to prepare an Integrated Spatial Design and Development Framework (SDDF) for the campus, which was adopted in 2020.
- The resultant SDDF proposes a significant quantum of additional building footprint on the site, including academic, residential and administrative structures. The proposed implementation plan will see a further 294449 m² of new building footprint integrated into the campus environment between 2022 and 2030.
- Although the use of the property remains the same, the spatial transformation of the site that will be brought about through the proposed densification of the campus is seen to constitute a change in character, and so Section 38 of the National Heritage Resources Act is triggered.

See Figure 3A & B - 5-year Site Development Plan for the campus, and Priority Projects Plan.

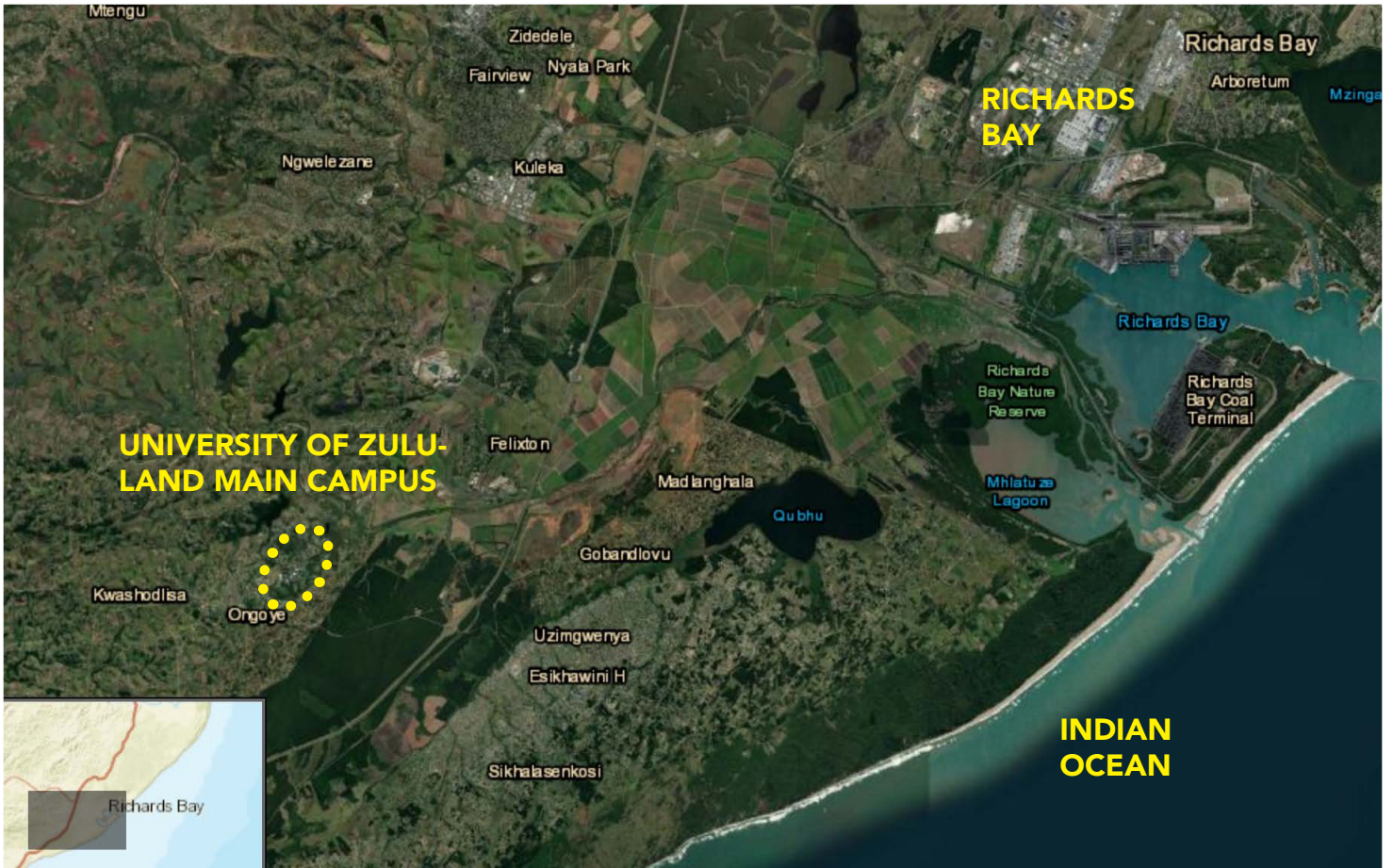


Figure 1: Locality Plan (Source: Cape Farm Mapper).



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

5-Year Building Implementation Plan



Figure 45 - Kwadlangezwa Campus: Building Implementation Plan.

Figure 3A: 5-Year Site Development Plan showing proposed infill buildings on the campus (Source: Ludwig Hansen Architects and Urban Designers).

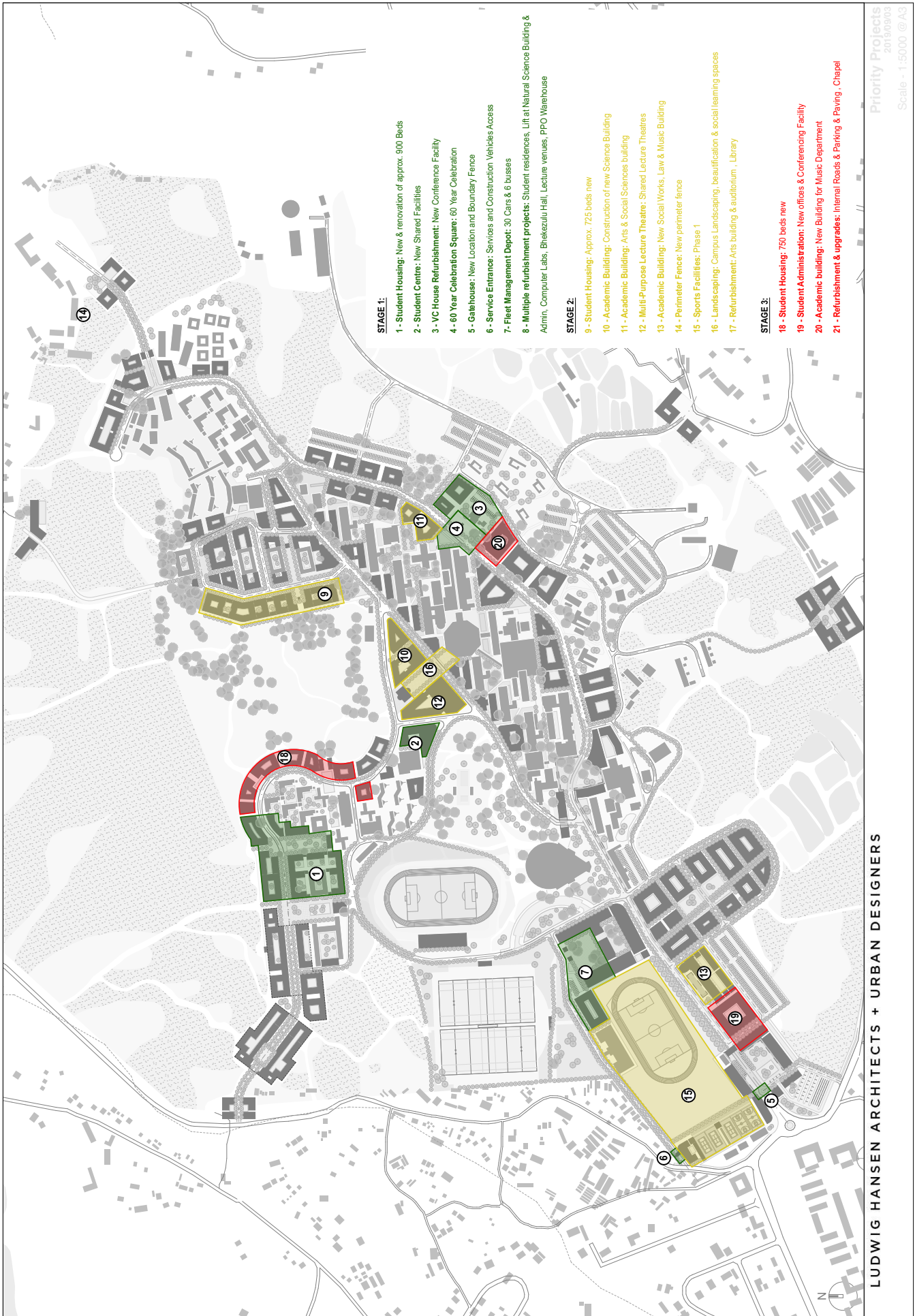


Figure 3B: The priority areas within the 5 year SDDF plan (Source: Ludwig Hansen Architects and Urban Designers).

ANTICIPATED IMPACTS ON HERITAGE RESOURCES:

A short history of the site.

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). This Act was a divisive law that enforced segregated tertiary education, regulating the education received by the exclusively black South African students at the time (and branding the university college, or 'Bush College' as inferior).

The concept of university apartheid that had prevailed since the early 1950s was crudely grounded in the principle of segregation: the desire was simply to separate white from black students. By the late 1950s apartheid policy-makers considered the homelands project to be essential for the long-term security of white political and economic control in South Africa, and it was in the context of this fundamental reappraisal that the role of university apartheid was redrafted (Beale, 1990: 1).

As early as 1951 the Eiselen commission on education linked university apartheid to "development": the report proposed the "eventual founding of an independent Bantu university" in accordance with "the Development Plan and the employment possibilities which evolve from it". By 1959, however, when the Extension of University Education Act and the Fort Hare Transfer Act were finally passed, the concept of university apartheid had been thoroughly integrated into the ethnically divisive homelands project, and a more complex role had been defined for, in particular, the African university colleges (Beale, 1990: 1).

The University of Zululand was one of three African university colleges established at the time - the university colleges of the North (Turfloop), Zululand (Ngoye) and Fort Hare (Alice) – which were to serve separate clusters of ethnic groups. These institutions were expected to perform a dual function which was viewed as central to the success of the homelands: first, they should produce a corps of administrators, skilled in a practical range of disciplines, and second, the institutions should mould intellectuals who would channel their energies into the homelands (Beale, 1990: 2).

However, in this context, the supposed inferior education taught at UniZulu made the institution unappealing to black intellectuals and caused a great deal of uproar by the local community of Zululand during the time of its establishment (Ndimande, 2018).

The University of Zululand was founded on land belonging to the Royal family in the KwaDlangezwa village, donated by the Mkhwanazi Traditional Authority, under the directive of King Muntongenakudla Mkhwanazi (Thulani Mbuli, 2004; University of Zululand, 2010). Chief Mangosuthu Buthelezi assisted in the establishment of this University and went on to become the first chancellor of the institution when it was established. Despite its tumultuous beginning, which led to only 41 students registering at in its first year, and a period of extensive student unrest in the 1980s, the University has gone on to become a significant South African tertiary institution.

UniZulu is the only comprehensive tertiary educational institution north of the Tugela River in KwaZulu-Natal, South Africa.

IDENTIFICATION OF HERITAGE RESOURCE ON THE SITE AND WITHIN ITS ENVIRONS, AND DESCRIPTION OF THE ANTICIPATED NATURE OF ANY IMPACT UPON THEM (IF ANY):

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 4A-4F). It is clear that the campus developed around a central spine, 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, although it has been densified with successive "waves" of university building, while some of the older structures have been demolished and replaced.

Nevertheless, clear architectural "eras" of building are still legible on the campus (Figure 6), from the single storey rather modest "bungalow" type buildings with decorative brises soleils, to the mid-century taller and rather austere red brick structures, to the 1980s era construction, which clearly referenced avant garde university precedents by James Stirling, among others, in the United Kingdom. The architects of this era of construction were William Prescott Ormon and Barry Lange of Osmond Lange Inc. Architects. 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).

As a whole, and while the original planners and architects have not yet been established, 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.

Anticipated Impact: The SDP that has been provided is very high-level, with little indication of the architectural guidelines or landscaping planned for the new structures. Therefore, it must be concluded that further investigation is necessary.

Cultural Landscape/Campus Environment Significance.

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)



Figure 4A: 1957 aerial photograph with the campus area outlined in red. There was no campus development on the site at the time, but traditional homes are evident, all joined by a path that would become the campus movement spine. (Source: NGI Mowbray).

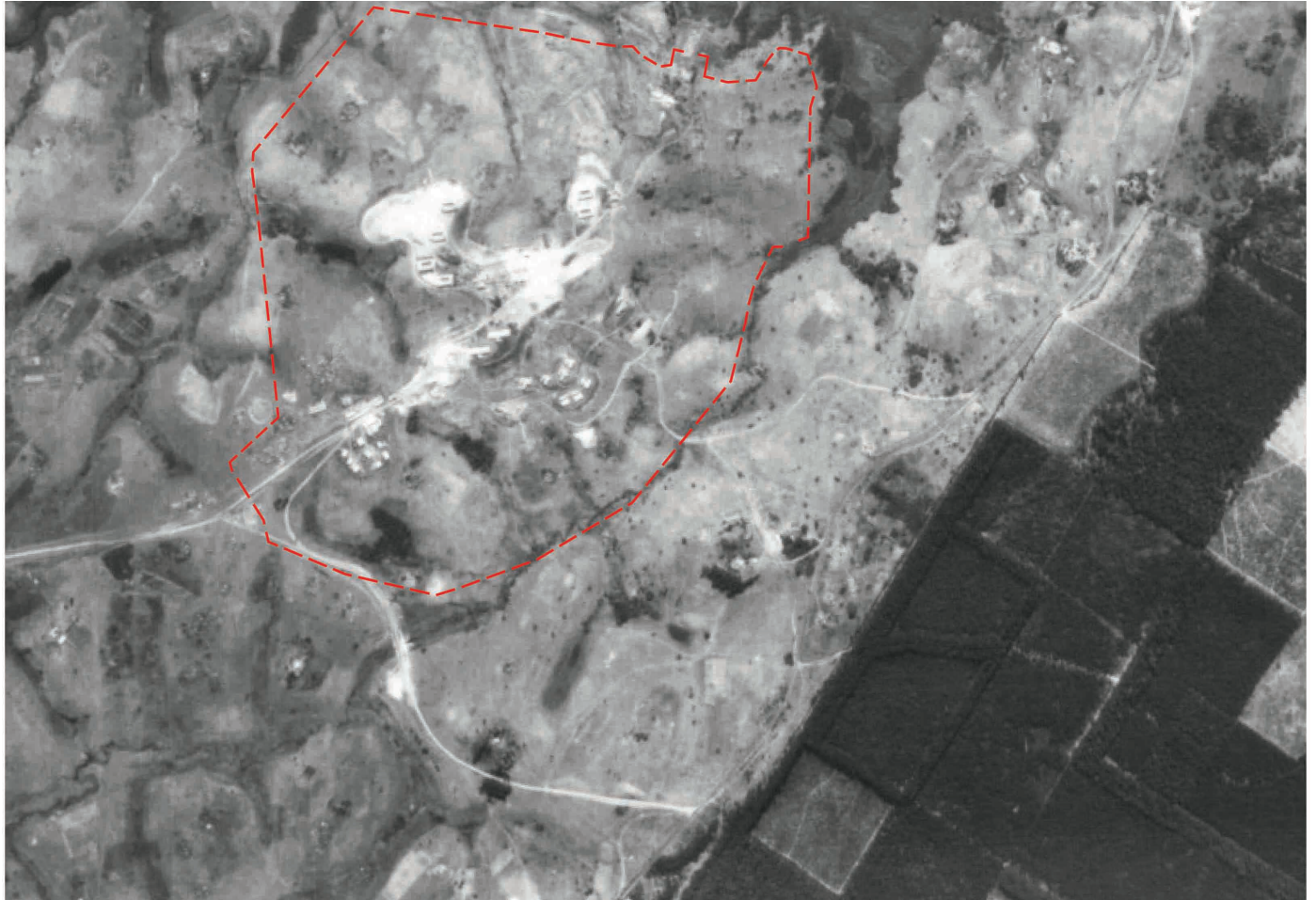


Figure 4B: 1960 aerial photograph with the campus area outlined in red, showing the earliest buildings. (Source: NGI Mowbray).



Figure 4C: By 1969, the core campus area had been established. The campus area outlined in red. (Source: NGI Mowbray).



Figure 4D: 1977 aerial photography, showing the infill of more academic buildings on the campus, outlined in red. (Source: NGI Mowbray).



Figure 4E: 1984 aerial photography indicates substantial infill in both the residential pockets, as well as new academic structures such as the King Buthelezi Hall. The campus is outlined in red. (Source: NGI Mowbray).



Figure 4F: 1997 aerial photography indicates the current library and further residences. The campus is outlined in red. (Source: NGI Mowbray).

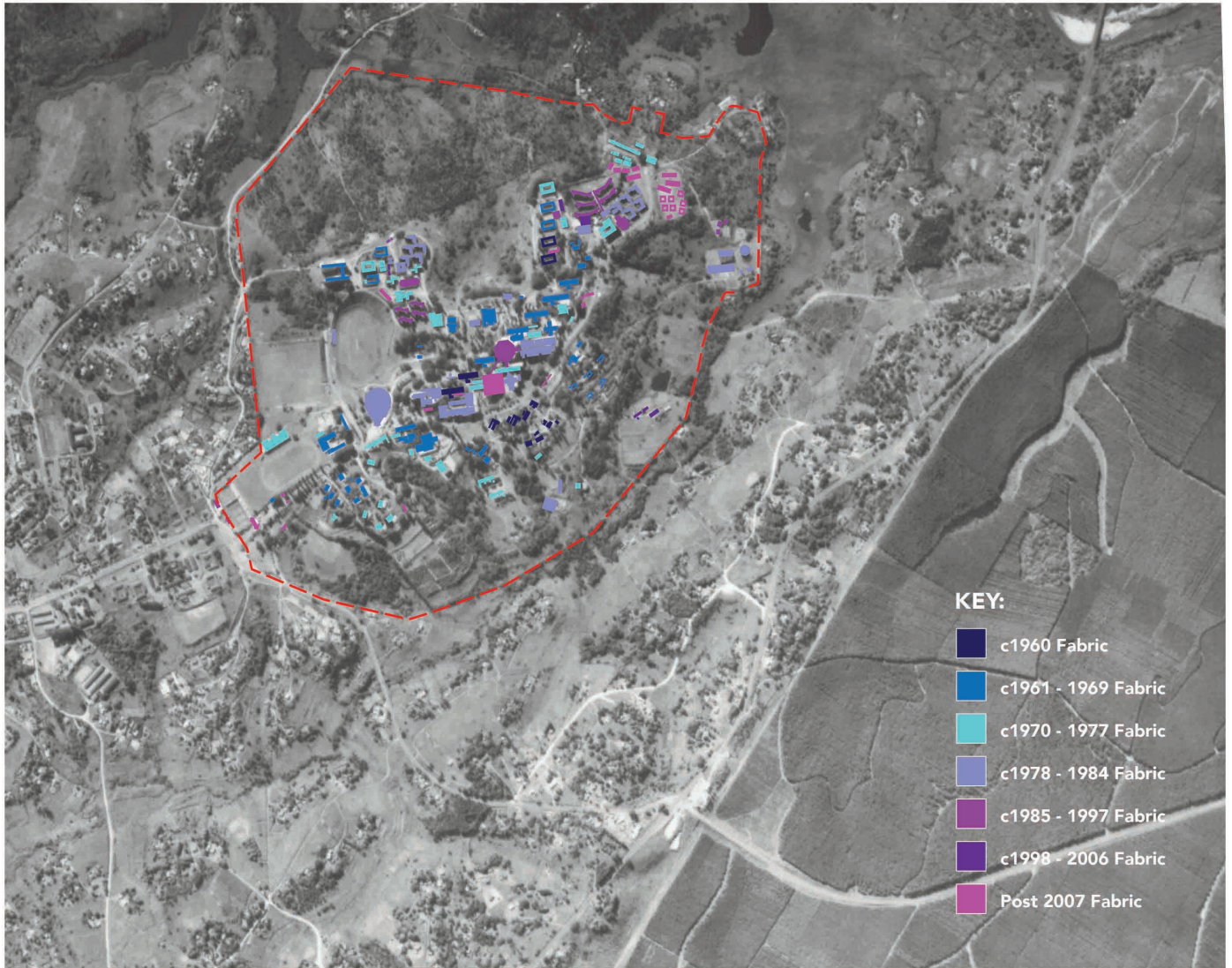


Figure 6: Age of fabric diagram, showing the various layers of campus development from 1960 to the present day.

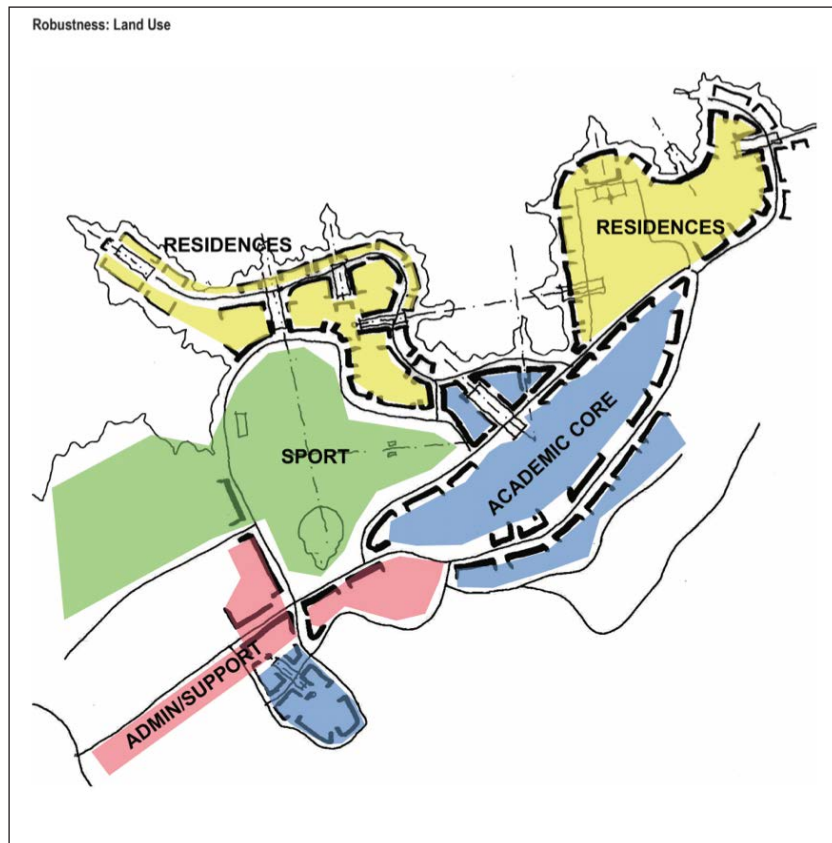


Figure 5: Diagram showing the organisation of the campus. (Source: Ludwig Hansen Architects & Urban Designers, 2006: 39).

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.

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 4A) indicates the landscape of traditional homes, connected along a pathway, that preceeded the university. 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.

Anticipated Impact: New development at the university must be cognisant of and responsive to the cultural landscape, built environment and landscape "patterns" that preceed it. While the site is admittedly "layered" from a heritage perspective, and new additions must therefore be discernable 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 current information provided is insufficient to properly determine likely impact, and so further assessment is necessary.

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.

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 the 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.

Anticipated Impact: None.

Social and Cultural Heritage Significance.

The construction of this University was fundamental to the social history of tertiary education of black people in KwaZulu Natal. Before 1958, tertiary education was not open to black people in South Africa, making UniZulu one of the first of its kind in the country. 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 be a reflection of their true identity (Thulani Mbuli, 2004).

Starting off as a University College, UniZulu was 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.

Anticipated Impact: None.

Archaeological Significance.

Substantial archaeological monitoring has occurred in the vicinity of the site between 1995 and 2012 (see <https://sahris.sahra.org.za/>: 2831DD). Most of the fieldwork seems to have occurred to the east, towards Felixton. It is presumed that the degree of disturbance of land previously undertaken in the construction of the university campus has also disturbed any remaining archaeology on the site.

Anticipated Impact: Low to none.

SEE FIGURE 7A - 7j FOR A PHOTOGRAPHIC SURVEY OF THE CAMPUS - pages 14 to 21, Annexure A.



Figure 8: The memorial that exists just outside the university gates.

HERITAGE RESOURCES IN THE VICINITY OF THE SITE:

At the entrance to the university is a memorial to the uDlangezwa regiment, created by King Shaka in 1823, and after which KwaDlangezwa is named. The memorial also notes three battles in which the regiment fought (all c1879). In addition, it memorialises the Zulu people in general and becomes a tangible place for the recognition of the intangible, social and cultural importance of the site to the Zulu People.

Figure 8.

SUMMARY OF ANTICIPATED HERITAGE IMPACTS (IF ANY):

The SDP information that has been provided is very high-level, with little indication of the architectural guidelines for individual building, nor for the landscaping framework planned for the new structures and their campus setting.

Additionally, university campuses are significant spaces from an academic and cultural perspective. At University of Zululand, there is a heightened socio-historical associational significance, as the university has always been a condenser for student activism and Zulu culture throughout apartheid and into the present day.

New development at the university must be responsive to the cultural landscape, the symbolic significance of many of the spaces making up the campus, and the built environment and landscape "patterns" that precede it. While the site is admittedly "layered" from a heritage perspective, and new additions must therefore be discernable as such, there remains a need to assure an understanding of the underpinning logic and spatial patterns/materiality of the university, and to recognise and reinforce such patterns in new developments.

The current information provided is insufficient to properly determine the likely impact of the planned densification of the campus. Therefore, further investigation is necessary.

RECOMMENDATION:

In light of the above, a Heritage Impact Assessment is necessary, with the following specialist studies required:

1. A specialist built environment study, which must establish the significant spatial patterns across the site, and assess the urban design framework/landscape framework and architectural guidelines that form part of the 5-year Site Development Plan for the university.
2. A specialist cultural landscape study, with particular emphasis on the socio-historical layers of the site, and an assessment of the impact of the 5-year Site Development Plan's sensitivity and responsiveness to this.
3. Proof of consultation with heritage/conservation bodies, as well as the local municipal planners/heritage officials. AMAFA to indicate bodies to be consulted in this process.
4. Provision of an integrated assessment of heritage impact, mitigation measures and integrated recommendations.

This is in addition to the general requirements of Section 38 of the National Heritage Resources Act, namely:

- a. The identification and mapping of all heritage resources in the area affected;
- b. an assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 6(2) or prescribed under section 7;
- c. an assessment of the impact of the development on such heritage resources;
- d. an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development;
- e. the results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;
- f. if heritage resources will be adversely affected by the proposed development, the consideration of alternatives; and
- g. plans for mitigation of any adverse effects during and after the completion of the proposed development.

Recommendation made by:

Claire Abrahamse, Heritage Practitioner, PRArch 21114, Member of UDISA, Member of APHP
Mishkah Collier, Heritage Practitioner, PRArch 28972463

REFERENCES:

Beal, M. A. 'The Task Of Fort Hare In Terms Of The Transkei And Ciskei': Educational Planning At Fort Hare In The 1960's. Paper Presented At The Wits History Workshop: Structure And Experience In The Making Of Apartheid, 6-10 February, 1990.

Biyela, S. E. The Historical Development Of University Of Zululand Library, With Particular Reference To Buildings, Staff, Collection, And Computerization (1960 – 1987). Unpublished MA Thesis, University Of Zululand, 1988.

Ludwig Hansen Architects and Urban Designers. University Of Zululand: Towards An Integrated Spatial Design And Development Framework Kwadlangezwa Campus And Richards Bay Campus. Unpublished report prepared for the the Department of Higher Education and Training. July 2019, Revision 1.

Mbuli, T. J. Ucwangingo Olunzulu Ngomb Ono Wenkosi Umuntongenakudla Mkhwanazi Ngokuhlathwa Kwesoyi Lakwangqondonkulu "Ungoye" Kwadlangezwa. Unpublished MA Thesis, University Of Zululand, 2004.

National-GeoSpatial Institute.

Cape Farm Mapper.

ANNEXURE A

PHOTOGRAPHIC SURVEY OF THE CAMPUS

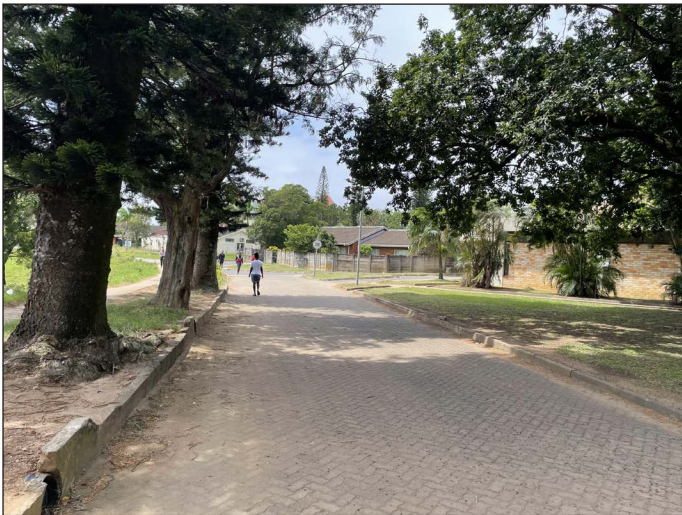


Figure 7A: A typical tertiary road, to the west residential area.



Figure 7B: View of the west residential area from the east.



Figure 7C: The University chapel.



Figure 7D: The link between west res and main academic core.



Figure 7E&F: The established Norfolk Pines contribute greatly to the campus, and line the main pedestrian, academic spine.





Figure 7G: An original academic buildings, with brise soleil.



Figure 7H: Original physics block, with original detailing.

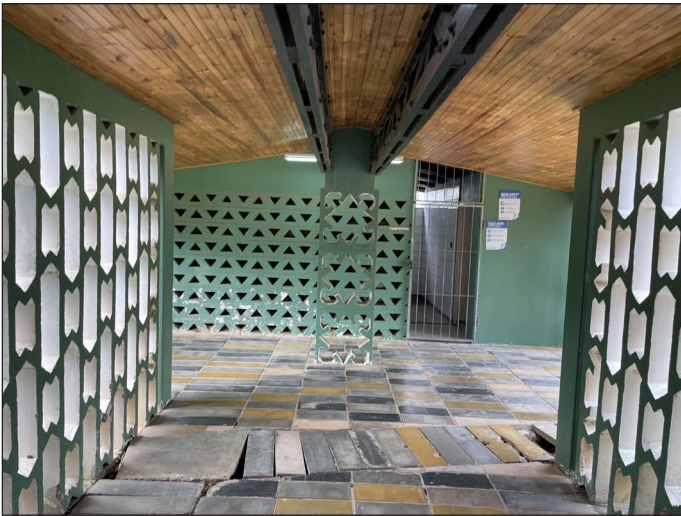


Figure 7I: The interior of the physics block is intact.



Figure 7J: An admin building, part of the original campus.



Figure 7K: A c1980s academic building, with brutalist influences.



Figure 7L: This building is a landmark, on a key corner.



Figure 7M: The King Buthelezi Hall is architecturally interesting.



Figure 7N: The same building as in Fig. 7L, is a gateway structure.



Figure 7O: The southern roadway is more vehicular in orientation.



Figure 7P: Faculty of Education, with typical architectural details.



Figure 7Q: A more recent academic building.

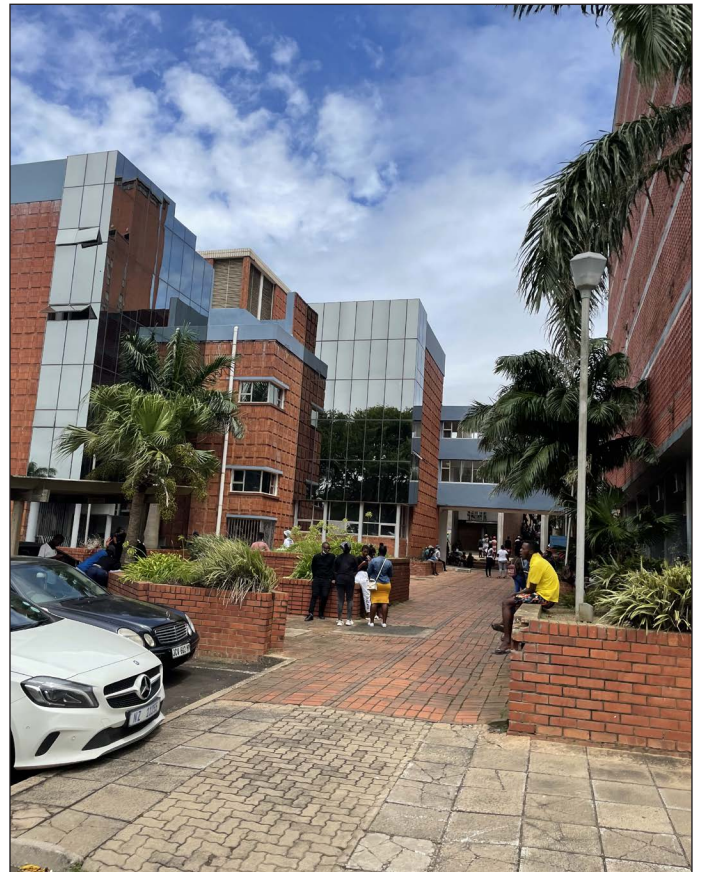


Figure 7R: A pedestrian route through the academic core.



Figure 7S: The 1987 library, designed by Osmond Lange Inc. Architects, with clear reference to the academic buildings of James Stirling, designed around the same time in the UK.



Figure 7T: Library entrance.

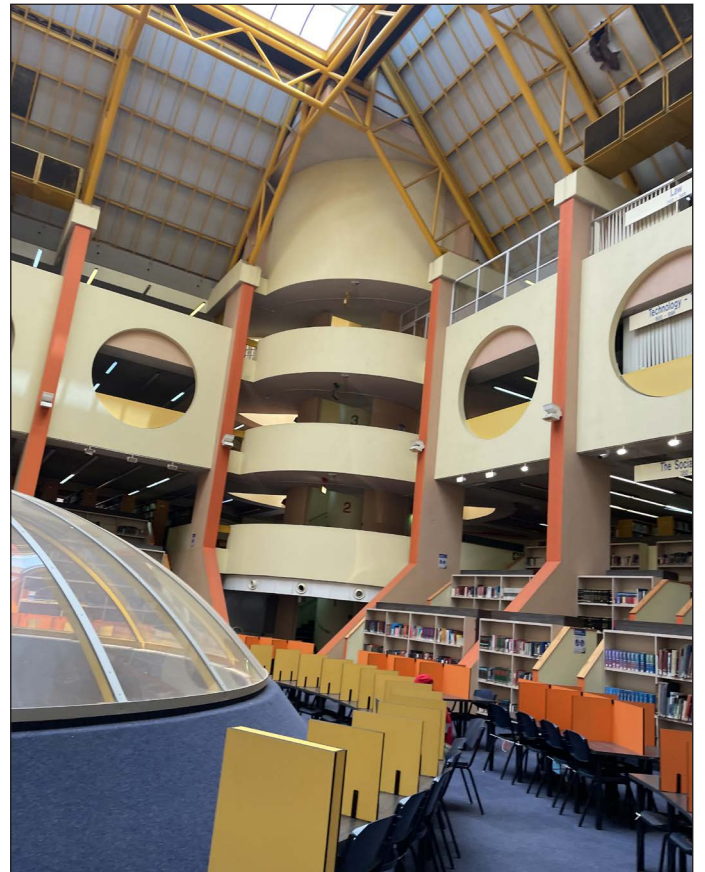


Figure 7U: Inbrary interior.



Figure 7U: Gateway to east residential campus.



Figure 7V: Residential building, east campus.



Figure 7W: Some of the original residential structures.



Figure 7X: 1970s residential building, east residential area.



Figure 7Y: Approach to the historic hostels of the east residences.

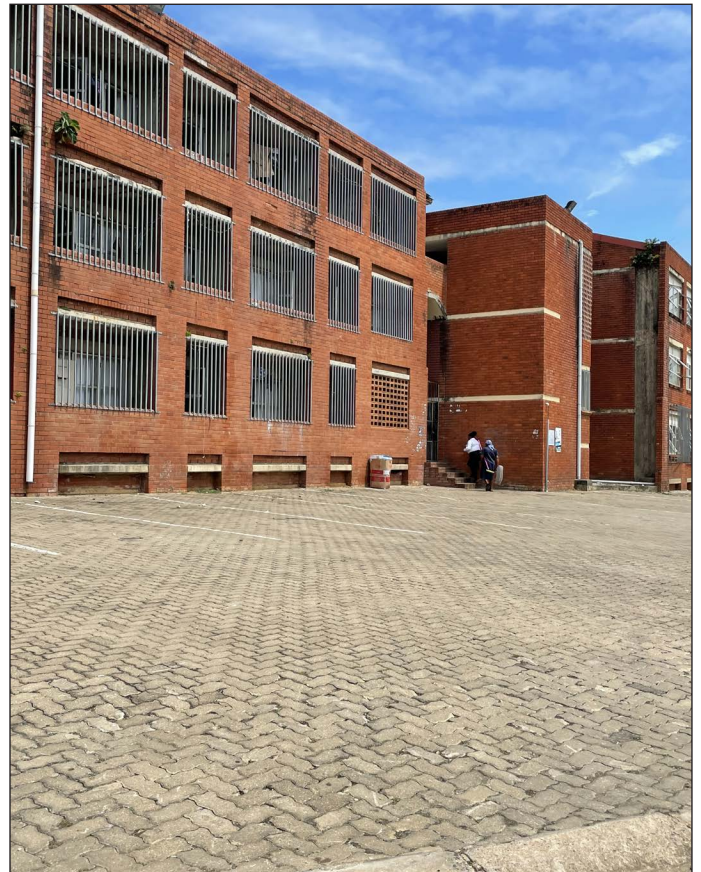


Figure 7Z: Late 20th century residential infil.



Figure 7a: Gateway into the western residential area.



Figure 7b: Warden's house, west residential area, c1960s.



Figure 7c: Warden's house, west residential area, c1960s.



Figure 7d: Residential infill in the west area, c1970s.



Figure 7e: 1980s residential infill, west campus.

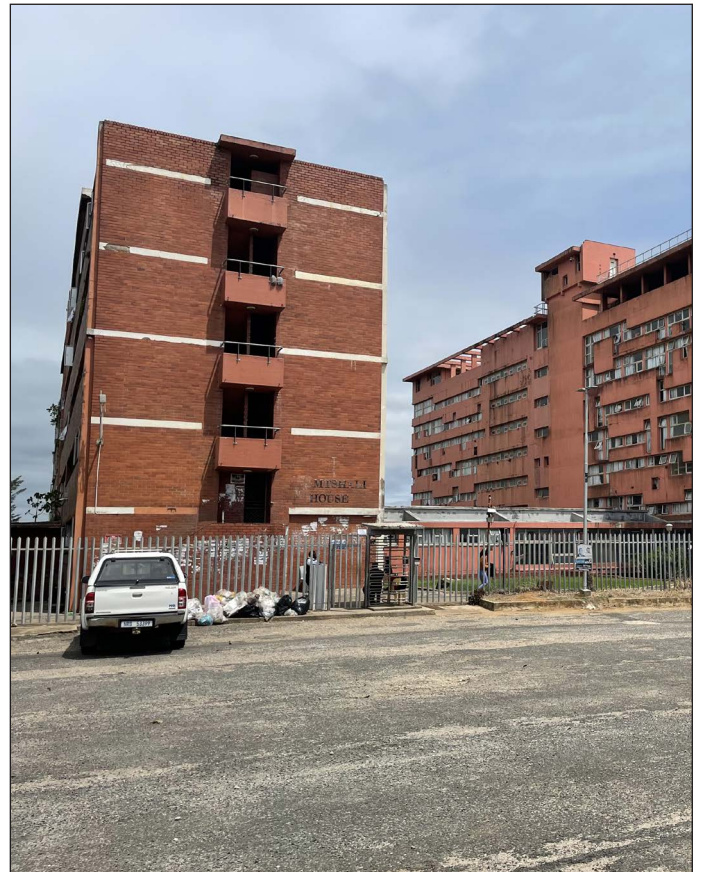


Figure 7f: "New York" residences, c1960s, in the west area.



Figure 7g: Residences in the western residential area comprise hostels of various ages and architectural styles.



Figure 7h: "New York" residences, with views to the north. The position of the campus atop a hill is evident in this image.



Figure 7i: View looking south from the west residential area, over the sportsfields and with the King Buthelezi Hall in the background. These facilities are located within an enclosed "hollow" in the otherwise prominent, hilltop campus area.



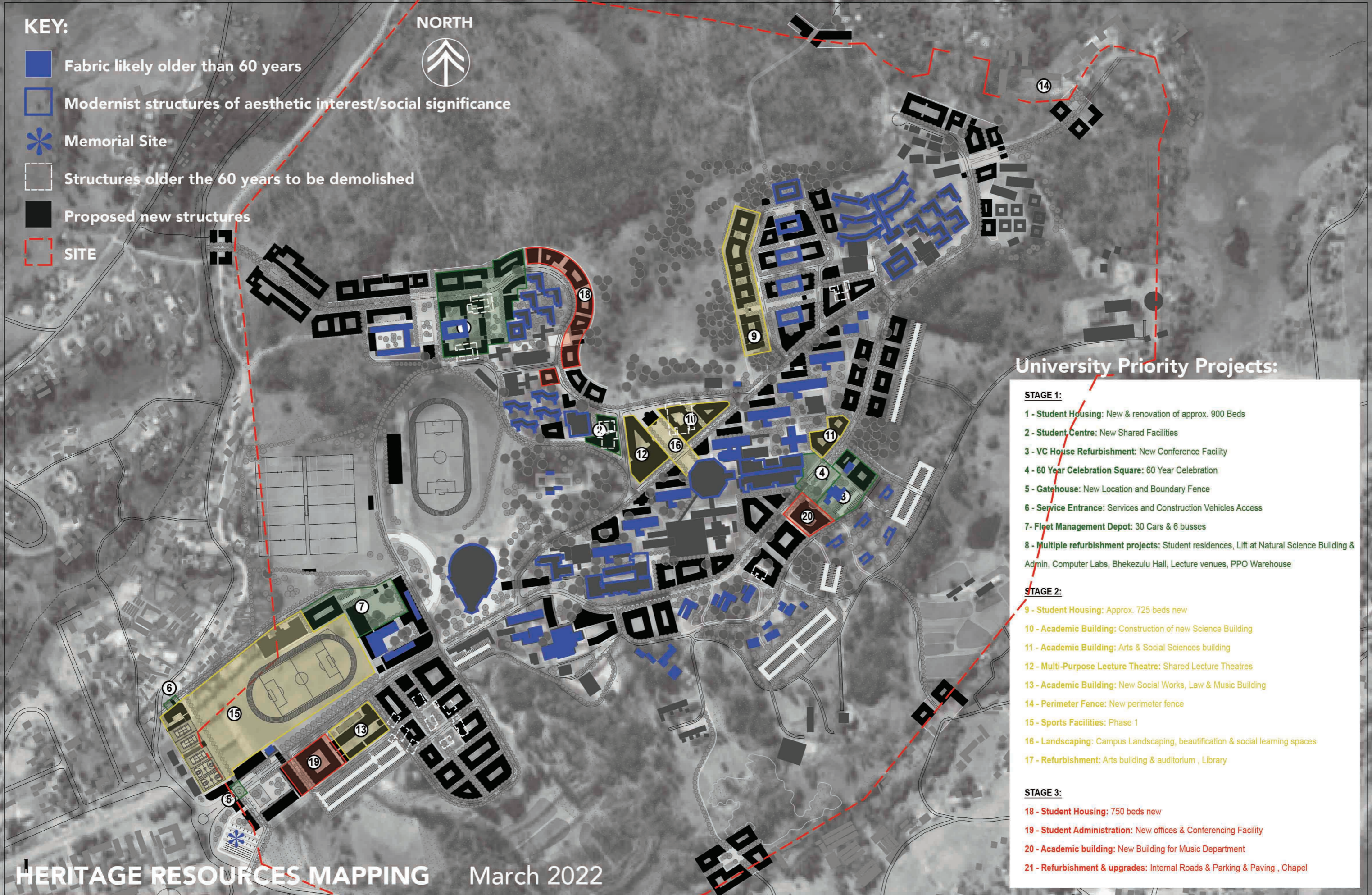
Figure 7j: Aerial view of the campus from the west, taken prior to the construction of the King Buthelezi Hall and Library, so pre-1987, so likely during the 1970s.
(Source: Facilities Management, University of Zululand).

ANNEXURE B
MAPPING OF HERITAGE RESOURCES AND SIGNIFICANT
FEATURES

KEY:

- Fabric likely older than 60 years
- Modernist structures of aesthetic interest/social significance
- Memorial Site
- Structures older the 60 years to be demolished
- Proposed new structures
- SITE

NORTH



University Priority Projects:

STAGE 1:

- 1 - Student Housing: New & renovation of approx. 900 Beds
- 2 - Student Centre: New Shared Facilities
- 3 - VC House Refurbishment: New Conference Facility
- 4 - 60 Year Celebration Square: 60 Year Celebration
- 5 - Gatehouse: New Location and Boundary Fence
- 6 - Service Entrance: Services and Construction Vehicles Access
- 7 - Fleet Management Depot: 30 Cars & 6 busses
- 8 - Multiple refurbishment projects: Student residences, Lift at Natural Science Building & Admin, Computer Labs, Bhekezulu Hall, Lecture venues, PPO Warehouse

STAGE 2:

- 9 - Student Housing: Approx. 725 beds new
- 10 - Academic Building: Construction of new Science Building
- 11 - Academic Building: Arts & Social Sciences building
- 12 - Multi-Purpose Lecture Theatre: Shared Lecture Theatres
- 13 - Academic Building: New Social Works, Law & Music Building
- 14 - Perimeter Fence: New perimeter fence
- 15 - Sports Facilities: Phase 1
- 16 - Landscaping: Campus Landscaping, beautification & social learning spaces
- 17 - Refurbishment: Arts building & auditorium , Library

STAGE 3:

- 18 - Student Housing: 750 beds new
- 19 - Student Administration: New offices & Conferencing Facility
- 20 - Academic building: New Building for Music Department
- 21 - Refurbishment & upgrades: Internal Roads & Parking & Paving , Chapel

HERITAGE RESOURCES MAPPING March 2022

claire abrahamse
architecture | urban design | heritage

SMArchS Urbanism (MIT), BArch (UCT), BAS (UCT), SACAP, CIA, APHP, UDISA

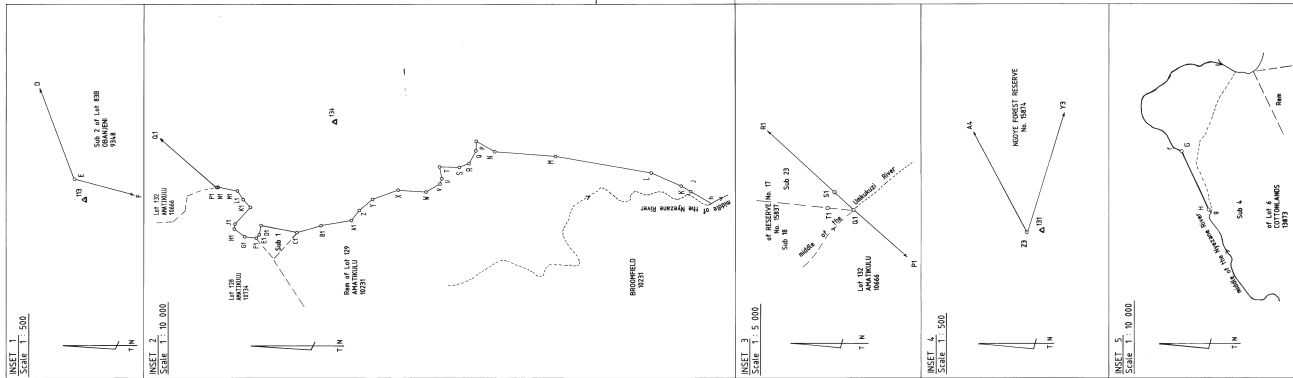
2nd Floor, Wale Street Chambers, 38 Wale Street, Cape Town 8001
E: claire@claireabrahamse.co.za T: 021 426 2668 M: 083 718 1919

ANNEXURE C

TITLE DEED AND SURVEYOR GENERAL DIAGRAM

SHEET 1 OF 2 SHEETS
 S.G. No. 2376/1995
 APPROVED
 For SURVEYOR-GENERAL
 1995-08-24

SUBSTITUTIONAL DIAGRAM



INSET 1
 SCALE 1:500

INSET 2
 SCALE 1:500

INSET 3
 SCALE 1:500

INSET 4
 SCALE 1:500

INSET 5
 SCALE 1:500

INSET 6
 SCALE 1:500

INSET 7
 SCALE 1:500

DATA BLOCK		CO-ORDINATES	
MAIN FIGURE		EXCLUDED FIGURE 1	
SERIES	IMAGE OF	SERIES	IMAGE OF
A	15829.00	A	15829.00
B	15829.01	B	15829.01
C	15829.02	C	15829.02
D	15829.03	D	15829.03
E	15829.04	E	15829.04
F	15829.05	F	15829.05
G	15829.06	G	15829.06
H	15829.07	H	15829.07
I	15829.08	I	15829.08
J	15829.09	J	15829.09
K	15829.10	K	15829.10
L	15829.11	L	15829.11
M	15829.12	M	15829.12
N	15829.13	N	15829.13
O	15829.14	O	15829.14
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Q	15829.16	Q	15829.16
R	15829.17	R	15829.17
S	15829.18	S	15829.18
T	15829.19	T	15829.19
U	15829.20	U	15829.20
V	15829.21	V	15829.21
W	15829.22	W	15829.22
X	15829.23	X	15829.23
Y	15829.24	Y	15829.24
Z	15829.25	Z	15829.25
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AB	15829.27	AB	15829.27
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AD	15829.29	AD	15829.29
AE	15829.30	AE	15829.30
AF	15829.31	AF	15829.31
AG	15829.32	AG	15829.32
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AI	15829.34	AI	15829.34
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AK	15829.36	AK	15829.36
AL	15829.37	AL	15829.37
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AO	15829.40	AO	15829.40
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BF	15829.57	BF	15829.57
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BH	15829.59	BH	15829.59
BI	15829.60	BI	15829.60
BJ	15829.61	BJ	15829.61
BK	15829.62	BK	15829.62
BL	15829.63	BL	15829.63
BM	15829.64	BM	15829.64
BN	15829.65	BN	15829.65
BO	15829.66	BO	15829.66
BP	15829.67	BP	15829.67
BQ	15829.68	BQ	15829.68
BR	15829.69	BR	15829.69
BS	15829.70	BS	15829.70
BT	15829.71	BT	15829.71
BU	15829.72	BU	15829.72
BV	15829.73	BV	15829.73
BW	15829.74	BW	15829.74
BX	15829.75	BX	15829.75
BY	15829.76	BY	15829.76
BZ	15829.77	BZ	15829.77
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CP	15829.93	CP	15829.93
CQ	15829.94	CQ	15829.94
CR	15829.95	CR	15829.95
CS	15829.96	CS	15829.96
CT	15829.97	CT	15829.97
CU	15829.98	CU	15829.98
CV	15829.99	CV	15829.99
CA	15829.00	CA	15829.00
CB	15829.01	CB	15829.01
CC	15829.02	CC	15829.02
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CI	15829.08	CI	15829.08
CJ	15829.09	CJ	15829.09
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CM	15829.12	CM	15829.12
CN	15829.13	CN	15829.13
CO	15829.14	CO	15829.14
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CR	15829.17	CR	15829.17
CS	15829.18	CS	15829.18
CT	15829.19	CT	15829.19
CU	15829.20	CU	15829.20
CV	15829.21	CV	15829.21
CW	15829.22	CW	15829.22
CX	15829.23	CX	15829.23
CY	15829.24	CY	15829.24
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EJ	15829.61	EJ	15829.61
EK	15829.62	EK	15829.62
EL	15829.63	EL	15829.63
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EQ	15829.68	EQ	15829.68
ER	15829.69	ER	15829.69
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ET	15829.71	ET	15829.71
EU	15829.72	EU	15829.72
EV	15829.73	EV	15829.73
EW	15829.74	EW	15829.74
EX	15829.75	EX	15829.75
EY	15829.76	EY	15829.76
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FL	15829.89	FL	15829.89
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FO	15829.92	FO	15829.92
FP	15829.93	FP	15829.93
FQ	15829.94	FQ	15829.94
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FS	15829.96	FS	15829.96
FT	15829.97	FT	15829.97
FU	15829.98	FU	15829.98
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FX	15829.01	FX	15829.01
FY	15829.02	FY	15829.02
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GI	15829.12	GI	15829.12
GJ	15829.13	GJ	15829.13
GK	15829.14	GK	15829.14
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GN	15829.17	GN	15829.17
GO	15829.18	GO	15829.18
GP	15829.19	GP	15829.19
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GS	15829.22	GS	15829.22
GT	15829.23	GT	15829.23
GU	15829.24	GU	15829.24
GV	15829.25	GV	15829.25
GW	15829.26	GW	15829.26
GX	15829.27	GX	15829.27
GY	15829.28	GY	15829.28
GA	15829.29	GA	15829.29
GB	15829.30	GB	15829.30
GC	15829.31	GC	15829.31
GD	15829.32	GD	15829.32