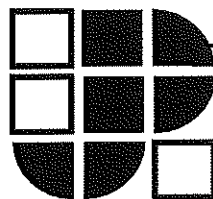


# MEMORANDUM

**MOTIVATION OF MERIT OF PROPOSED  
TOWNSHIP ESTABLISHMENT ON  
CONSOLIDATED PORTION 756  
(COMPRISING PORTIONS 287 TO 291,  
295 & 296), FARM MOOIPLAATS 367-JR  
IN TERMS OF SECTION 16(4) READ  
WITH SECTION 7 OF THE CITY OF  
TSHWANE LAND USE MANAGEMENT  
BYLAW, 2016.**

**- PROPOSED ZWAVELPOORT EXTENSION 15 -**



**J PAUL VAN WYK**

**URBAN  
ECONOMISTS  
& PLANNERS CC**

**MEMORANDUM**  
**MOTIVATION OF MERIT OF PROPOSED  
TOWNSHIP ESTABLISHMENT ON  
CONSOLIDATED PORTION 756 (COMPRISING  
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MOOPLAATS 367-JR IN TERMS OF SECTION  
16(4) READ WITH SECTION 7 OF THE CITY OF  
TSHWANE LAND USE MANAGEMENT BYLAW,  
2016.**

**- PROPOSED ZWAVELPOORT EXTENSION 15 -**

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TSHWANE

**AUGUST 2021**

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**SITE AND LOCATIONAL REQUIREMENTS FOR NEW HIGHER EDUCATION INSTITUTION ON  
PORTIONS 287 TO 291, 295 & 296, FARM MOOIPLAATS 367-JR**

**- AN INTRODUCTORY PERSPECTIVE -**

When considering the introduction of a highly prestigious tertiary academic land-use activity in the administrative Capital City of the country that would serve to enhance and reinforce its status as such, and its status as educational heartland of the Province of Gauteng, it follows that the process would be preceded by meticulous research to ensure the best possible result. It therefore comes as no surprise that during the conceptualization stage of the envisioned private higher education institution in the City of Tshwane the applicant embarked on an extended research undertaking locally and abroad, including literature reviews and personal fact-finding excursions and tours, to view and assess similar and / or comparable facilities for higher learning. This was done to assist with, and guide decision-making on the development concept and to determine baseline requirements towards a desired outcome.

From the research conducted it became vividly clear that a location within the developed urban structure would not be feasible, nor conducive to the envisaged peaceful tranquillity of an academic campus nestled in nature where study / learning and teaching could take place undisturbed in a safe and secure environment with minimal 'bright light' urban distractions and adversities. While universities and other higher learning institutions have historically elected a preferred centralized locality within the CBD or other growth nodes of cities / towns internationally, the unavailability of land to expand as the demand for student enrolment inevitably increases, and the exorbitant cost of land as a scarce resource in such localities have over time been the primary cause of the forced decentralization of certain components of such facilities to the urban periphery, with mostly their administrative functions remaining centralized. This of course has had profoundly negative impacts on its functioning as a cohesive whole and the efficiency of operations being seriously compromised due to e.g. the duplication of functions at different decentralized campuses, like security, administration and recreation centres.

From the lessons learned from a centralized locality, many higher education facilities subsequently located on the urban periphery, just to over time be encroached upon and engulfed by urban development. Examples include the Oxford University, Cambridge University and Harvard University, as alluded to in more detail in the accompanying Market Study in support of the current application. The Market Study continues to describe the relationship of the proposed new facility on the subject properties with the City of Tshwane as being tangent to, or in a 'touches'- relationship. Other examples mentioned that compare to this relationship are the Oklahoma State University, the Washington State University, University of Sussex and the Durham University. Closer to home in South Africa, the Sefako Makgato Health Sciences University has such a 'touches' or tangent relationship with the developed urban structure of Tshwane to the north of the City. From all case studies considered it is evident that a peripheral locality at the outset makes the most sense and that the facility would over time be surrounded by development and fully integrated in the urban structure, after having had sufficient time to grow and reach maturity in its operations and spatial requirements.

The vast site area requirement of around 20 hectares (as per the official guidelines of the National Department of Higher Education of SA) for a higher education institution with a 2 500 student capacity, speaks to the virtual impossibility of finding a suitable *locale* within the developed urban milieu at an affordable cost to still render the project sustainable. Hence the proposed 'greenfields' development of the properties known as Portions 287 to 291, 295 & 296 (to be consolidated as Portion 756), farm Mooiplaats 367-JR for the envisaged facility. After a thorough assessment of various contending development sites in- and outside the developed urban periphery it was the following very unique and rich physiographic characteristics package which swayed the final decision in favour of the mentioned properties as the ideal development site, *viz* –

- Mountainous ridge and abundant exceptional rock outcrops and escarpment
- Varied pristine indigenous vegetation endemic to the area associated with the ridge, portraying a sought-after Bushveld ambience
- Section of Steekriet Spruit and associated riverine corridor and environmental buffer being host to various bird and animal species
- Interesting topographical undulation and variation, with different elevated plateau areas for positioning of particular uses, e.g. expansive sports fields
- Various cultural historic sites providing spatial context and opportunity for preservation
- High potential agricultural land (approx. 33ha) for experimental farming education and operations
- Non-dolomitic soil conditions suitable for the proposed development.

It is the unique landscape defined by the varied topography in combination with the unsurpassed environmental attributes of the development site that convinced the applicant to harness these for its mutually beneficial and sustainable symbiotic relationship for the establishment and operating of an appropriately-scaled and blended higher education facility on the premises, anchored in nature. The environmental milieu is ideal for the desired sense of place, at the same time satisfying the requirements for peaceful tranquillity for psychological enhancement and wellbeing conducive to study / learning but also to a healthy lifestyle (jogging, exercising, walking, mountain biking). The study of international trends and tendencies has revealed that nature-based tranquillity serves to enhance a milieu ideal for study / learning, where minimal urban distractions are prevalent and where students could focus on their studies and equip themselves as knowledgeable and balanced individuals to make a valuable contribution to society after completion of their studies.

The locality decision was furthermore informed by the excellent accessibility (present and future) of the site in local and regional context, available land for incremental on-site expansion in the medium term and in the immediate surrounds in the longer term, the rustic atmosphere of surrounding land-uses and the absence of noise and other forms of pollution often associated with hard core urban environments – serving the purpose of creating a country feel environment conducive to study / learning and teaching on the premises. Another locational factor considered

was the proximity of the site to the fast-growing eastern suburbs of the City where a number of economic nodes and corridors are in existence or will in future manifest here. The new higher education facility development will serve to complement this particular urban dynamic and in itself form an anchor for future compatible development in its surrounds.

The locality decision would be ill-explained without reference to the need for the envisaged higher education institution to be situated in relative close proximity to similar other institutions (e.g. University of Pretoria) as well as innovation and research institutions (e.g. CSIR and The Innovation Hub) for the agglomeration economies to be fully capitalized on, to facilitate collaboration to ensure world class educational outcomes. Also with regards to large business corporations and government departments straining under structural employment inadequacies in the labour market. Tshwane has several large business / industrial areas as well as an array of government departments which could benefit from a graduate solution tailored to their labour market needs, by the proposed new higher education institution.

Of course a locality outside the urban development periphery will have certain potential challenges which would have to be addressed / mitigated, as necessary. One such aspect is the relative unavailability of infrastructural services necessary to render the project sustainable. Although municipal services are (with the exception of water) not readily available to the area and site, the applicant has heeded the desperate call in the relevant forward planning policies discussed in the town planning memorandum, for the accelerated transitioning towards a low carbon or green economy by adopting various environmentally sustainable engineering service solutions. Examples include water demand management, grey water purification and recycling, and waste reduction, recycling and sustainable disposal. The proposed township will thus be sustainably serviced in the end.

It has never been the purpose of the Tshwane Metropolitan Spatial Development Framework (MSDF) or the Regionalized Municipal Spatial Development Framework - Region6 (RMSDF) to pinpoint particular localities in the City for each and every future land-use activity, and especially not for higher-order uses like tertiary education institutions. The role of the City in this regard is therefore not absolute, and should be viewed against the purpose of spatial policies to merely guide and inform locality decisions. Such localities for e.g. higher education institutions could on no reasonable basis, land-use or otherwise, have been foreseen, planned or provided for in terms of any prevailing normative planning policies of the City. Since many of these are provided by the public sector the positioning of same is a function of a planned national network by a central government department, over which municipalities have little (if any) control. A further example is hospitals – once again planned and established by a provincial or national government department in accordance with a planned overall network roll-out. The RMSDF however does include a generic provision for accommodation of these “space-hungry” high-order land-use activities under its Management Zone which determines the following: *“Within these Management Zones land uses and densities which do not fit into the denser urban complex, should be permitted...”*(pp90, 91). The subject properties are indeed located in a designated Management Zone.

As evident from the above discussion the proposed development project on the subject properties may at a first glance be construed as so-called leap-frog development, which is being discouraged for normal incremental growth and development of a City, but which in the present circumstances for this very unique, rare and extraordinary land-use activity is by design and purpose fully justified by virtue of its nature, and its vast spatial requirements. It follows also that due to the particular site and locational requirements explained above, a locality in support of the various Compaction & Densification 'smart growth'-, RMSDF- and SPLUMA development principles, although fully considered in the planning / design process, could not be either partially or fully served with the present land development application. Examples include nodal and corridor intensification / densification, better utilization of existing municipal infrastructure and support of public transport orientated development, integrated walkable / liveable mixed-use neighbourhoods and more. These are simply not achievable, for which a departure from the provisions of the MSDF and RMSDF is being sought – fully explained and motivated on special merit in the memorandum to follow.

The City has formulated particular guidelines for development in designated Future Urban Development Areas in the RMSDF as applicable here, which were duly considered in formulating the development proposal on the subject properties. Although clear that not all of these could be obliged (e.g. proximity to public transport routes / facilities, complete liveable communities) others which will be complied with *par excellence* include the contribution of the proposed higher education institution to the City vision and strategy, the environmental structuring concept, environmental sustainability of service provisioning and proximity to other linked social facilities, urban design guidelines and more, as explained in detail in the memorandum to follow. There can thus be no doubt that the development proposal is in substantial compliance with the forward planning policies and development guidelines for the City.

The fact that the locality of the site in a comprehensive specialist scientific model in the Market Study earned a rating of 83,2 being 'exceptional' confirms that the advantages of the locality by far outweighs the disadvantages and that the proposed development of a higher education institution in this position and context should be embraced and supported.

These observations are only meant to serve an introductory purpose and it is important for the reader to peruse the contents of the Town Planning Memorandum in its entirety in detail, for a full understanding of the merit of the proposed new higher education institution on the subject properties.



J Paul van Wyk (Pr Pln)

J PAUL VAN WYK URBAN ECONOMISTS AND PLANNER cc

**TOWNPLANNING MEMORANDUM**  
**MOTIVATION OF MERIT OF PROPOSED TOWNSHIP ESTABLISHMENT ON**  
**CONSOLIDATED PORTION 756 (COMPRISING PORTIONS 287 TO 291, 295 & 296),**  
**FARM MOOIPLAATS 367-JR IN TERMS OF SECTION 16(4) READ WITH SECTION 7 OF**  
**THE CITY OF TSHWANE LAND USE MANAGEMENT BYLAW, 2016.**

**-PROPOSED ZWAVELPOORT EXTENSION 15-**

---

**1. INTRODUCTION**

**1.1 APPLICATION**

**1.1.1 Township establishment**

Application is hereby made for the establishment of a low-intensity township for purposes of the establishment and operating of a tertiary higher education institution on the (to be) consolidated Portion 756 (comprising Portions 287 to 291, 295 & 296) of the farm Mooiplaats 367-JR. The application is being made in terms of Section 16(4) of the City of Tshwane Land Use Management Bylaw, 2016 ("Bylaw"), read with the relevant provisions of the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) ["SPLUMA"].

**1.1.2 Departure**

The application also entails a departure from the provisions of the City of Tshwane Metropolitan Spatial Development Framework, 2012 read with the provisions of the Regionalized Municipal Spatial Development Framework – Region 6, 2018 as allowed for in Section 7 of the Bylaw.

**1.1.3 Consolidation (notification)**

The City of Tshwane Metropolitan Municipality is hereby furthermore notified that Portions 287 to 291, 295 and 296 of the farm Mooiplaats 367-JR will be consolidated to form the development site of the envisaged higher education facility. The consolidated property will be known as Portion 756 of the farm Mooiplaats 367-JR, as reserved from the office of the Surveyor General on 01 December 2020 (refer Annexure 'K').

**1.2 PURPOSE**

**1.2.1 Township**

The *rationalé* for township establishment is to procure the necessary use-rights to allow the lawful establishment and operating of a tertiary higher education institution ("HEI") for study and teaching on the premises.

**1.2.2 Memorandum**

The Townplanning Memorandum has the purpose of-

- collating all essential information on the land development application in a single report with annexures;
- formulating and presenting the township development concept and layout proposal; and

- motivating the merit of the application as guided and directed by the relevant townplanning statutes.

### 1.3 APPLICANT

#### 1.3.1 Registered owners

The applicant in this matter is the registered owners of the properties concerned, being a private company registered at the Companies and Intellectual Property Commission ("CIPC") as Platinum Mile Investments 542 (Pty) Ltd (Reg No 2002/022011/07).

#### 1.3.2 Authorized representatives

The firm J Paul van Wyk Urban Economists and Planners cc herein represented by registered town & regional planners Paul van Wyk and Ulrike (Ola Schumacher-) Malan has been appointed to undertake the land development application on behalf of the registered land-owners.

#### 1.3.3 Specialist consultants

The firm is assisted by various specialist consultants, the input of which is required to address all the matters of importance in related specialized fields to inform the application and render it complete in terms of the requirements of the Bylaw and SPLUMA. These consultants / professional disciplines are the following:

- |                               |  |
|-------------------------------|--|
| (1) Land surveyor             | : Isazi Surveys (mr Willem Coetzer)  |
| (2) Civil engineer            | : D G Consulting Engineers (mr Boshoff Taljaard / mr Johan du Plessis)               |
| (3) Electrical engineer       | : Geopower (mr Robert Zietsman)  |
| (4) Transportation engineer   | : Techworld Consulting Engineers (mr Pieter Kruger)                                  |
| (5) Environmental consultants | : Bokamoso Environmental Consultants (ms Adèle Drake / ms Lizelle Gregory)           |
| (6) Engineering geologist     | : Geo Buro Geotechnical Surveys (mr Emüel Kok)                                       |
| (7) Architects                | : New Urban Integrated Design (mr Gary White / mr Gerrit Jordaan / ms Dalena Beyers) |
| (8) Conveyance attorney       | : Prinsloo Bekker Attorneys (mr Anton Bekker)  |
| (9) Market analyst            | : Demacon Market Studies (dr Hein du Toit)   |
| (10) Floodline specialist     | : Sivist (mr Richard Hirst)  |
| (11) Palaeontologist          | : Banzai Environmental (ms Elize Butler)   |
| (12) Heritage consultant      | : A Pelser Archaeological Consulting (mr Anton Pelser)                               |
| (13) Quantity surveyor        | : G K Projects (mr Danie Koen)   |

[ANNEXURE 'A' : COMPANY RESOLUTION, CIPC CONFIRMATION OF DIRECTORS & SPECIAL POWER OF ATTORNEY]

**1.4 JURISDICTION**

The properties on which the township is being established are situated within the municipal area of the City of Tshwane Metropolitan Municipality ("CTMM"), with decision-making authority on unopposed and opposed land development applications in terms of Section 15 of the Bylaw vested in an Authorized Official assigned to the particular Planning Region, and the Tshwane Municipal Planning Tribunal ("MPT") respectively.



## 2. PROPERTY PARTICULARS

### 2.1 DESCRIPTION

#### 2.1.1 Current

The seven properties forming the subject of the present application, together with three other properties, are registered at the Deeds Office under deed of transport T90886/2004. The following is a *verbatim* description of each as reflected in the deed of transfer:

- (1) Portion 287, farm Mooiplaats 367-JR  
*"GEDEELTE 287 ('n Gedeelte van Gedeelte 13) van die plaas MOOIPLAATS 367, Registrasie Afdeling J R, PROVINSIE VAN GAUTENG;"*(p2)
- (2) Portion 288, farm Mooiplaats 367-JR  
*"GEDEELTE 288 ('n gedeelte van Gedeelte 13) van die plaas MOOIPLAATS 367, Registrasie Afdeling J R, PROVINSIE VAN GAUTENG;"*(p4)
- (3) Portion 289, farm Mooiplaats 367-JR  
*"GEDEELTE 289 ('n gedeelte van Gedeelte 13) van die plaas MOOIPLAATS 367, Registrasie Afdeling J R, PROVINSIE VAN GAUTENG;"*(p4)
- (4) Portion 290, farm Mooiplaats 367-JR  
*"GEDEELTE 290 ('n gedeelte van Gedeelte 13) van die plaas MOOIPLAATS 367, Registrasie Afdeling J R, PROVINSIE VAN GAUTENG;"*(p5)
- (5) Portion 291, farm Mooiplaats 367-JR  
*"GEDEELTE 291 ('n gedeelte van Gedeelte 13) van die plaas MOOIPLAATS 367, Registrasie Afdeling J R, PROVINSIE VAN GAUTENG;"*(p5)
- (6) Portion 295, farm Mooiplaats 367-JR  
*"GEDEELTE 295 ('n gedeelte van Gedeelte 13) van die plaas MOOIPLAATS 367, Registrasie Afdeling J R, PROVINSIE VAN GAUTENG;"*(p7)
- (7) Portion 296, farm Mooiplaats 367-JR  
*"GEDEELTE 296 ('n gedeelte van Gedeelte 13) van die plaas MOOIPLAATS 367, Registrasie Afdeling J R, PROVINSIE VAN GAUTENG;"*(p7)

Reference in the balance of the memorandum to these properties individually will respectively be as 'Portion 287', 'Portion 288', 'Portion 289', 'Portion 290', 'Portion 291', 'Portion 295', and 'Portion 296' and collectively as 'the Properties', 'subject properties', 'site' or 'development site'.

The reasons for excluding Portions 292, 293 & 294 of the farm Mooiplaats from the township confines are as follows:

- Portions 287 to 291, 295 & 296 are sufficiently large to accommodate the proposed tertiary higher education institution, still representing a low-intensity land-use activity in relation to the extent of the development site.

- Portions 292 to 294 are located higher-up against the ridge traversing these properties forming part of an existing sensitive ecosystem not to be burdened unnecessarily by introducing people frequenting same as part of a formalized land-use activity.
- Only limited parts of Portions 292 and 293 will be utilized to accommodate private water reservoirs and associated infrastructure works to serve the proposed township on Portions 287 to 291, 295 & 296 for which a separate "spot zoning" application for rezoning will be undertaken in parallel to the township establishment application here under consideration

Portions 292, 293 & 294 will derive access from Boschkop Road *via* the new public access road to be constructed for the proposed Zwavelpoort Extension 15 township, and across Erf 152 along its eastern boundary by way of right-of-way servitudes, as explained in more detail later in the Townplanning Memorandum. These three properties will furthermore be owned, maintained and managed by the township owner with due regard to its environmental sensitivities, the private infrastructure works accommodated on same and the requirements for fire breaks along its boundaries for veldfire control / management purposes.

### 2.1.2 Future

Once consolidated the subject properties will be known as Portion 756 of the farm Mooiplaats 367-JR, referred to in the balance of the memorandum as "Portion 756").

[ANNEXURE 'B' : TITLE DEED COPY]

## 2.2 EXTENT

The extent of each of the subject properties is summarized in table 1.

TABLE 1 : EXTENT OF SUBJECT PROPERTIES

PROPERTY DESCRIPTION	AREA	
	(Ha)	(%)
Portion 287	22,1573	14,5
Portion 288	21,6149	14,0
Portion 289	21,4193	13,9
Portion 290	21,4206	13,9
Portion 291	21,4209	13,9
Portion 295	23,9015	15,6
Portion 296	21,9227	14,2
<b>TOTAL</b>	<b>153,8572</b>	<b>100,0</b>

As evident from the table the development site will extend to 153,8572 hectares.

## 2.3 LOCALITY

### 2.3.1 Regional context

The subject properties are located approximately 16 kilometres due east of the N1-National Road (Danie Joubert Freeway) intersection with the R21 (Albertina Sisulu)

Freeway, and 8,7 kilometres southeast of the N4-National Road / Solomon Mahlangu Drive intersection, immediately west of the landmark Waterlake Farm Lifestyle Estate. The site can be reached from the intersection of Lynnwood / Graham Road and Solomon Mahlangu Drive along Graham Road southeastwards for 5 kilometres, then left (north / northeastwards) along Boschkop Road (also known as Rooireier Road) for 4,2 kilometres before arriving at the site (Portions 287 & 296) on the right hand side.

The Properties are located in the southernmost parts of the Mooiplaats farm complex, to the east of the farm Zwavelpoort 373-JR complex, to the north of the Tiegerpoort 371-JR farm complex, to the west of the Boschkop 369-JR farm complex and south of Donkerhoek 365-JR and Zwartkopies 364-JR farm complexes.

[FIGURE 1(a) : LOCALITY IN REGIONAL CONTEXT]

### 2.3.2 Local context

The locality of the development in local context is shown on a larger scale on the accompanying figure 1(b), which reflects not only all surrounding higher-order roads, the different farm complexes and Waterlake Farm, but also the particular land-portion numbers of each of the surrounding properties.

[FIGURE 1(b) : LOCALITY IN LOCAL CONTEXT]

### 2.3.3 Site context

- Adjoining properties

As evident from figure 1(c) the development site abuts the following neighbouring properties, all portions of the farm Mooiplaats 367-JR, viz:

- North (opposite Boschkop Road) : Portions 13, 438 & 352.
- Northeast : Portions 356, 402, 180 to 188
- South : Portion 292
- West / southwest : Portions 293, 294 & R/88
- West / northwest : Portions 79, 80, 417, 84, 86, 722, R/87 & 725.

- Registered address: The address of the subject properties as registered at the CTMM is as follows: 3817 and 3813 Rooireier Road, Mooiplaats.

- Global positioning reference: The existing access on Boschkop Road to the development site is referenced as:-  
 South : 25° 49' 14.0"  
 East : 28° 24' 55.5"

[FIGURE 1(c) : SITE LOCALITY]

## 2.4 SHAPE AND DIMENSIONS

The development site displays an oblong shape, elongated in a south/southeast - north / northwestern direction with irregular sides and dimensions. The average length and

width of the site approximate 2 448 metres and 621 metres respectively. For more information on the shape and dimensions of the development site refer figure 4: Township Layout Plan *infra*.

## 2.5 OWNERSHIP

The subject properties are all registered at the Deeds Office under title deed T 90886/2004 in name of Platinum Mile Investments 542 (Pty) Ltd (Reg No 2002/022011/07), herein represented by director J P F du Toit (ID 690926 5296 08 3) (Refer Annexure 'A').

## 2.6 MORTGAGE BONDS

As confirmed in the Conveyancer's Report, Para 10, p11 the subject properties are not encumbered by any mortgage bonds at present.

[ANNEXURE 'C' : CONVEYANCER'S REPORT]

## 2.7 MINERAL RIGHTS

The properties are in terms of Condition 3 of deed of transfer T 90886/2004 (pp 2, 3) subject to the reservation of a particular share in mineral rights in favour of a third party. The condition reads as follows:

*"ONDERHEWIG aan die voorbehoud van EEN-SESDE (1/6de) aandeel van die minerale regte ten gunste van die eienaars van die voormelde Resterende Gedeelte van Lot B, groot as sodanig 751,6982 hektaar, welke voorbehoud gemaak was ten opsigte van die genoemde plaas MOOIPLAATS Nr 367, geleë in die distrik BRONKHORSTSPRUIT"*

All mineral rights have however pursuant to the provisions of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) reverted to the State, under the auspices of the Department of Minerals & Energy, unless timeously protected by historic mineral rights owners.

The applicant has applied to the Department for confirmation whether the mineral rights under Condition 3 of the deed of transfer have indeed been protected within the grace period allowed for same *circa* 2002, as well as for its written consent in terms of Section 53 of the mentioned Act to proceed with the township development.

The Conveyancer's Report finally confirms that the reservation of mineral rights will be omitted from the title deed for the subject properties pursuant to the directives in this regard of the Chief Registrar's Circular 2 of 2011 read with Para 4.3.3 of the Chief Registrar's Circular 11 of 2004.

[ANNEXURE 'D' : NOTIFICATION LETTER TO DEPARTMENT MINERAL RESOURCES & PROOF OF SUBMISSION]

## 2.8 CONDITIONS OF TITLE & SERVITUDES

Apart from Condition 3 (mineral rights) discussed above, all other conditions of title / servitudes contained in title deed T 90886/2004 for the subject properties are assessed

in this subsection for its relevance and / or potential impact on future erven in the township.

### 2.8.1 Condition 1

- This condition reads as follows:

*"De eigenaren van Gedeelte Lot "A" van het Resterend Gedeelte van gezegde plaats, groot als zulks 676,2420 hektaar, of hun rechtverkrygenden zullen behouden en blyven bezitten het recht tot al het water komende uit de Streekrietspruit op gemelde Gedeelte 2 met de tans bestaande dam en watervoor, met recht om op de grond te komen voor doeleinden van schoonmaken or dergelike" (p2).*

- As confirmed in the Conveyancer's Report (Para 1.1, p3), the subject properties are entitled to water from a certain dam in the Steekriet Spruit and use of a water furrow and ancillary rights on a former portion 2 which no longer exists. It furthermore confirms that the entitlement has never been exercised by the current land-owners and is no longer applicable.
- The Conveyancer's Report furthermore states that this condition has been superseded subsequently by the provisions of the National Water Act, 1998 (Act 36 of 1998). Since the Property owners have not applied to the relevant controlling authority for consent in terms of this Act to retain such entitlement, this condition is obsolete / redundant / of no use or effect and can therefore be disposed of by refraining from transferring same to the titles of erven in the township.

### 2.8.2 Condition 2

- The condition is quoted from deed of transfer T90886/2004 *verbatim* as follows:

*"ONDERWORPEN aan de rechten van de eienaar van Lot "C" van gezegde plaats of zyn rechtverkrygenden tot 1/3de aandeel van het water komende uit de Zwavelpoortspruit met de tans bestaande dam gelegen op Gedeelte 3 van Lot "B" voormeld, getransporteerd op ANNA SUSANNA JOUBERT, geboren Bantjes, Wedewe, krachtens Akte van Verdelings Transport Nr. 21930/1939, is gemelde dam en de dam gelegen daarop tussen de bakens M.N. op Kaart Nr. A.1917/27 geheg aan Akte van Verdelings Transport Nr. 21929/1939 en op en over de zuidelike grens van het Resterend Gedeelte van Lot "B" voormeld, groot als zulks 257,2480 hektaar, getransporteerd op Francois Gerhardus Joubert kragtens Akte van Verdelingstransport Nr. 21931/1939, voor het gezamentlike gebruik en genot van de eigenaren van het Gedeelte mits deze gehoud en Gedeelte 3 van Lot "B" voormeld, getransporteerde op Anna Susanna Joubert, geboren Bantjes, weduwe, krachtens Akte van Verdelings Transport Nr. 21930/1939 en het Resterend Gedeelte van Lot "B" voormeld, groot as zulks 257,2480 hektaar, of hyn rechtverkrygendes, zullende zy gesamentlik gerechtigd zyn tot tweederden (2/3den) van het water daarin en zal het water uit gezegde*

*dammen naar en over gezegde gedeelten geleid worden door middel van de bestaande watervoren, zullen gezegde gedeelten onderling en wederkerig gerechtigd tot en onderhevig zyn aan een servituut van waterleiding met gezegde bestaande watervoren.”(p2).*

- According to the Conveyancer’s Report this condition bestows an entitlement on the subject properties to a share of water from the Zwavelpoort Spruit and a dam situated on Portion 3 of Lot “B”, which are no longer in existence or use. This is corroborated by the fact that the existing land-owners have never exercised this entitlement, rendering it redundant.
- The Report furthermore confirms that this condition of title has been superseded by the statutory provisions of the National Water Act, 1998 (Act 36 of 1998), and the fact that the Property owners have not applied to the controlling authority to retain this entitlement, now renders it obsolete.
- The Conveyancer’s Report confirms that the condition of title furthermore does not affect the subject properties and due to its nature of being an entitlement, is unnecessary to transfer to the titles of future erven in the township.

### **2.8.3 Condition 4**

- This condition in deed of transfer T90886/2004 reads as follows:

*“DIE voormalige Gedeelte 2 van Lot B van die genoemde plaas MOOIPLAATS Nr. 367, Registrasie Afdeling J.R., geleë in die distrik BRONKHORSTSPRUIT (waarvan die eiendom hieronder gehou 'n geldeelte uitmaak) is ONDERHEWIG aan en gerechtig tot die volgende voorwaardes:*

*(a) De eigenaar van het gedeelte hieronder gehouden is uitsluitend gerechtigd tot al het water in de Streekrietspruit onderkant de Dam in deze Spruit, vermeld in paragraaf 1 van deze Akte, en indien hy mag besluiten om een dam te maken in de Streekrietspruit onderkant de gezegde bestaande dam daarin, dan zal hy gerechtigd zyn sulks de doen, maar zodra hy deze nuwe dam in de Streekrietspruit zal voltooid hebben dan zal al zyn recht om water te nemen uit de dam gelegen op Gedeelte 3 van Lot “B” voormeld, getransporteerde op Anna Susanna Joubert, geboren Bantjes, weduwe, krachtens (sic) Akte van Verdellingstransport Nr. 21930/1939 vervallen en zal al dit water toekomen in gelyke delen aan de eigenaar van het Resterend gedeelte van Lot “B” voormeld, groot als zulks 257,2480 hektaar, getransporteerd op Francois Gerhardus Joubert, krachtens Akte van Verdellingstransport Nr. 21931/1939 en de eigenaar van Gedeelte 3 van Lot “B” voormeld getransporteerd op Anna Susanna Joubert, geboren Bantjes, weduwe, krachtens Akte van Verdellingstransport Nr. T.21930/1939.*

*(b) DIE eiendom hieronder gehoude is onderhewig aan 'n bevel van die Waterhof gedateer die 27ste Junie 1949, gebêre onder Nr. 620A/1949-S."*(p3)

- The Conveyancer's Report confirms the rights to the dam in the Steekriet Spruit as well as the Court Order of 1949 relating to certain water rights being no longer in use, nor in existence.
- The National Water Act, 1998 (Act 36 of 1998) today regulates all water rights, rendering these provisions in the deed of transfer obsolete and redundant, especially since the Property owners have not applied to the controlling authority to retain these entitlements and / or rights.
- This condition will not be transferred to the titles of future erven in the township as recommended in the Report, due to same having become obsolete and also not affecting the subject properties.

#### **2.8.4 Condition 5**

- Condition 5 of title deed T90886/2004 reads as follows:

*"ONDERHEWIG aan die volgende voorwaardes opgelê deur die Beherende Gesag kragtens Artikel 11(6) van Wet 21 van 1940, naamlik:*

*BEHALWE met die skriftelike toestemming van die Administrateur as Beherende Gesag soos omskryf in Wet Nr. 21 van 1940:*

- (i) Mag die grond slegs vir woon- en landbou-doeleindes gebruik word. Op die grond, of op enige behoorlike goedgekeurde onderverdeling daarvan, mag daar nie meer geboue wees as een woonhuis tesame met die buitgeboue wat gewoonweg vir gebruik in verband daarmee nodig is en sulke geboue en bouwerke as wat vir landbou-doeleindes nodig mag wees nie.*
- (ii) Mag geen winkel of besigheid of nywerheid van watter aard ook al op die grond geopen of gedryf word nie.*
- (iii) Mag geen gebou of bouwerk van watter aard ookal binne 'n afstand van 94,46 meter vanaf die middellyn van enige publieke pad opgerig word nie."*(p3)

- These conditions have been imposed by virtue of the Advertising on Roads & Ribbon Development Act, 1940 (Act 21 of 1940), with Condition 5(i) and (ii) affecting all the subject properties, and Condition 5(iii) only Portions 287 and 296.
- These conditions need to be cancelled / removed from the deed of transfer to the subject properties, by virtue of a separate application in terms of Section

16(2) of the City of Tshwane Land Use Management Bylaw, 2016 as allowed for under Section 11(8) of Act 21 of 1940.

### 2.8.5 Condition 6

- This condition alludes to a right-of-way servitude over Portion 287 in favour of the general public which reads as follows:

*"ONDERHEWIG aan 'n serwituut van reg van weg ten gunste van die Algemene Publiek, welke serwituut van reg van weg 16 meter wyd, aangedui word deur die figuur a A B b a op Kaart L G Nr. A.3686/70, geheg aan Sertifikaat van Geregistreeerde Titel Nr. T.36613/1971 en soos meer ten volle sal blyk uit Notariële Akte van Serwituut van Reg van Weg Nr.1297/1971-S, geregistreeer op 29 Oktober 1971."*(pp 3, 4)

- To safeguard the future higher education campus from random access by the general public, the existing servitude will be uplifted / cancelled. The cancellation will be undertaken in terms of Section 16(2)(a) of the Bylaw read with Section 63 of the Local Government Ordinance, 1939 (Ord 17 of 1939).

### 2.8.6 Conditions 7 and 10B

- Condition 7 (p4) and Condition 10B (p7) of title deed T90886/2004 apply to Portions 287 and 296 respectively, and reads (in both instances) as follows:

*"Kragtens Notariële Akte K.1801/1974 is die reg aan Eskom verleen om elektrisiteit oor die hierinvermelde eiendom te vervoer, tesame met bykomende regte, en onderworpe aan voorwaardes soos meer volledig sal blyk uit gesegde Notariële Akte"*

- Due to the right bestowed on ESKOM to convey electricity over Portions 287 and 296 not being defined by an accompanying Surveyor General Servitude Diagram it is uncertain if and how this right affects any of the future erven in the proposed township.
- Due to the above situation both erven in the township will be made subject to this right.

### 2.8.7 Condition B: Portion 288

- This condition pertains to Portion 288 representing a 16m wide right-of-way servitude in favour of the general public. It reads as follows:

*"VERDER ONDERHEWIG aan 'n serwituut van reg van weg ten gunste van die Algemene Publiek, welke serwituut van reg van weg 16 meter wyd aangedui word deur die figuur a A B C D b c d a op Kaart L.G. Nr. A.3687/70 geheg aan Sertifikaat van Geregistreeerde Titel Nr. T.36613/1971 en soos meer ten volle sal blyk uit Notariële Akte van Serwituut van Reg van Weg Nr. 1297/1971-S geregistreeer op 29 Oktober 1971"*(p4).



- This servitude will have a profoundly negative effect on the proposed higher education institution campus site if retained in position as it will allow random access to the general public.
- The servitude will be uplifted / cancelled following the procedure in Section 16(2)(a) of the Bylaw, read with Section 63 of the Local Government Ordinance, 1939 (Ord 17 of 1939).

#### 2.8.8 Condition B: Portion 289

- This condition describes a 16m right-of-way servitude over Portion 289 in favour of the general public:

*"VERDER ONDERHEWIG aan 'n serwituut van reg van weg ten gunste van die Algemene Publiek, welke serwituut van reg van weg 16 meter wyd aangedui word deur die figuur a A B b a en d c C D d op Kaart L.G. Nr. A.3688/70 geheg aan Sertifikaat van Geregistreeerde Titel Nr. T.36613/1971 en soos meer ten volle sal blyk uit Notariële Akte van Serwituut van Reg van Weg Nr. 1297/1971-S geregistreeer op 29 Oktober 1971"* (pp4, 5).

- The servitude will become redundant pursuant to the consolidation of the subject properties and the township development proposal. Retaining the servitude in position will furthermore allow unwanted access to the general public to and across the campus of the proposed higher education institution.
- The servitude will be removed / cancelled following the process described in Section 16(2)(a) of the Bylaw read with Section 63 of the Local Government Ordinance, 1939 (Ord 17 of 1939).

#### 2.8.9 Condition B: Portion 290

- Portion 290 is similarly subject to a 16m wide right-of-way servitude in favour of the general public, described in Condition B, p5:

*"VERDER ONDERHEWIG aan 'n serwituut van reg van weg ten gunste van die Algemene Publiek, welke serwituut van reg van weg 16 meter wyd aangedui word deur die figuur a A B b a en D d c C D op Kaart L.G. Nr. A.3689/70 geheg aan Sertifikaat van Geregistreeerde Titel Nr. T.36613/1971 en soos meer ten volle sal blyk uit Notariële Akte van Serwituut van Reg van Weg Nr. 1297/1971-S geregistreeer op 29 Oktober 1971"*

- The servitude, if left in position, will have a seriously negative impact on the proposed development of a higher education institution on the subject properties for *inter alia* its granting of access to the general public. It therefore needs to be removed / uplifted.
- The cancellation of the servitude will be done in accordance with Section 16(2)(a) of the Bylaw, read with Section 63 of the Local Government Ordinance, 1939 (Ord 17 of 1939) in a separate process.

**2.8.10 Condition B: Portion 291**

- Portion 291 is also subject to a 16m right-of-way servitude in favour of the general public, described in Condition B on Page 5 of deed of transfer T 90886/2004, as follows:

*"VERDER ONDERHEWIG aan 'n serwituut van reg van weg ten gunste van die Algemene Publiek, welke serwituut van reg van weg 16 meter wyd aangedui word deur die figuur a A B b a en D e d c C D op Kaart L.G. Nr. A.3690/70 geheg aan Sertifikaat van Geregistreeerde Titel Nr. T.36613/1971 en soos meer ten volle sal blyk uit Notariële Akte van Serwituut van Reg van Weg Nr. 1297/1971-S geregistreeer op 29 Oktober 1971."*

- As with Portions 287 to 290 the right-of way servitude in favour of the general public will for the same reasons have to be removed / cancelled.
- The cancellation will be done in terms of the provisions of Section 16(2)(a) of the Bylaw, read with Section 63 of the Local Government Ordinance, 1939 (Ord 17 of 1939).

[ANNEXURE 'E': LAND SURVEYOR CERTIFICATE]

### 3. ZONING AND LAND-USE

#### 3.1 HISTORIC LAND DEVELOPMENT APPROVAL

- The firm has previously in late March 2008 applied to the erstwhile Gauteng Development Tribunal ("GDT") for the establishment of a rural residential estate on Portions 287 to 296 of the farm Mooiplaats 367-JR. The land development application included the following land-use rights applied for:
  - 221 single residential dwelling-houses (± 38ha)
  - 98 cluster / group housing units (± 5ha)
  - Equestrian facility (0,5ha)
  - Hospitality facility (0,3ha)
  - 3 rural residential dwellings (± 26ha)
  - Open space, conservation, recreation (± 139ha)
  - Helipad
  - Public and private roads & engineering services (± 13ha)
- The development theme pursued at the time entailed a nature-based residential lifestyle estate with a country "look & feel". The symbiotic relationship between wholesome family living (peace, happiness, joy) and the enriching tranquility of the natural environment was seen as a core value of the land development project where families could raise their children in a safe and secure environment conducive to psychological enhancement and quality living.
- Of the total of 221, 63 single residential dwelling erven were approved on the southeastern parts of the development site designated as environmentally sensitive. A hospitality facility including conference rooms / recreation / sports / clubhouse was approved on the crest of the ridge to capitalize on the spectacular views from this vantage point on site.
- The GDT in the end approved the application on 12 February 2010 with the exclusion of the cluster / group housing component which it viewed at the time as being inconsistent with the relevant forward planning policy as embodied in the Kungwini Integrated Development Plan & Spatial Development Framework, 2002.
- The steep economic decline and ensuing lack of demand for up-scale residential properties in 2008 / 2009 and the prolonged sluggish economic recovery in the following decade have served to prevent the implementation of the project subsequently.

#### 3.2 CURRENT ZONING

The CTMM in a Zoning Certificate dated 28 April 2020 confirms the subject properties to currently be zoned Undetermined, in terms of the Tshwane Town Planning Scheme, 2008 (Revised 2014) ["TTPS"]. This Undetermined zoning bestows the following use-rights on each of the subject properties, *viz*:

- Agriculture
- Farm stall (subject to Schedule 10)
- One dwelling-house

Schedule 10 stipulates that the farm stall shall not exceed 35m<sup>2</sup>, excluding vehicular manoeuvring and parking space.

At an approved coverage factor of 50 percent and a height-restriction of two storeys (10m) it follows that a theoretical 1 538 572m<sup>2</sup> gross floor area ("GFA") of buildings may be erected on the total area of 153,8572 hectares of the subject properties. Since only seven dwelling-houses (i.e. one each on the seven constituent land-portions) and associated agricultural buildings may be erected on same as of right, the actual extent of buildings will be much more conservative. At an average extent of (say) 500m<sup>2</sup> per dwelling-house and 1 500m<sup>2</sup> of agricultural buildings per land-portion, the total gross floor area for the entire land assembly would be around 14 000m<sup>2</sup> GFA.

The Zoning Certificate does not specify a floor area ratio ("FAR") for properties zoned Undetermined, and furthermore only a street building-line of 10 metres, and other building-lines as per Clause 12 of the TTPS. Table A of Clause 12 specifies for non-street boundaries a 5 metre building-line for properties zoned Undetermined.

[ANNEXURE 'F' : ZONING CERTIFICATE]

### 3.3 EXISTING LAND-USE

The subject properties are for the most part undeveloped, i.e. no dwelling-houses, with only remnants of a previous cattle farming endeavor comprising derelict / abandoned agricultural buildings and staff accommodation. These were only temporary structures which will all be demolished to make way for the proposed new higher education institution.

Portions 287 to 291, 295 and 296 are not being put to any productive use at present. It does however, apart from the minimal derelict temporary agriculture-related structures mentioned sponsor the following elements worth mentioning:

- A proliferation of historic Ndebele kraals (i.e. stacked stone cattle enclosures)
- A variety of late iron age heritage sites manifesting in a largely linear fashion across the site.
- A small burial yard of fairly recent origin (59 detected graves)
- A short section of the Steekriet Spruit traversing Portions 287 and 296 along its north / northwestern parts in a northeastern direction.
- Encroachment of a small part of the existing Boschkop Road (Provincial Road D631) on the northern extremes of Portions 287 and 296.
- An overhead ESKOM transmission-line traversing Portions 287 and 296 in an essentially east / west direction, within a servitude of 30 metres wide.

- An unprotected (i.e. no servitude) telecommunication mast on the eastern boundary of Portion 289 shared with Portion 183 of the farm Mooiplaats 367-JR. Since the telecommunication mast has been erected on a future municipal road alignment along the eastern boundary of the development site between points G (north) and E (south) of the township layout plan (figure 4), it will have to be relocated to a position yet to be determined elsewhere in the proposed new township.

These elements have all been meticulously geo-referenced and will with the exception of the abandoned and derelict former agriculture-related structures and the telecommunications mast to be relocated, for the most part be honoured in position and accommodated in the layout and design of the proposed development project. The numerous Ndebele kraals and late iron age heritage sites may be an exception where only certain of the better specimens may be retained, subject to specialist archaeological advice in this regard.

### 3.4 FUTURE LAND-USE

The future use of the subject properties comprises a private tertiary higher education institution similar / comparable to the land-use of a public university.

The development site will function as a campus accommodating an array of academic, administrative and sport related facilities on the one hand and subservient dormitory facilities to accommodate a proportion of future students attending the institution, on the other.

For a more comprehensive inventory and elucidation of future uses, refer to Section 4 of the Townplanning Memorandum *infra*.

### 3.5 ZONING REQUIRED

This subsection should be read with Section 4: Development Proposal *infra*, especially with regards to the configuration of the township layout proposal. The use-rights applied for described, will here be paired to the particular erven in the envisaged township.

The township proposal entails two erven for which official erf-numbers have been reserved at the office of the Surveyor General (refer Para 4.3.4 *infra*). These are Erven 152 and 153, Zwavelpoort Extension 15 referred to in the balance of the memorandum simply as "Erf 152" and "Erf 153".

#### 3.5.1 Proposed Erf 152: Academic & sports campus.

With the exception of the student hostels, all other land-use activities comprising the campus for the proposed new higher education institution will be accommodated on proposed Erf 152 of the township. The erf therefore has to be appropriately zoned to enable the lawful establishment and operating of the wide array of land-use activities comprising the higher education facility.

Therefore, the zoning applied for on Erf 152 is Special (Use-zone 28 of the TTPS), for purposes of a place of instruction, telecommunication mast, infrastructure works (private), transport terminus and ancillary & subservient uses.

While a place of instruction, telecommunication mast and ancillary & subservient uses are defined concisely in Clause 5 of the TTPS the applicant has formulated its own, customized definition for infrastructure works (private) and transport terminus, the latter being different from the transport terminus definition in Clause 5 of the TTPS. These customized definitions read as follows:

(1) Infrastructure works (private)

*"For the purpose of this Scheme infrastructure works (private) means land, buildings and other structures / elements / equipment used for the provision, abstraction, generation, processing, storage and reticulation (as applicable) of water, electricity, sanitation, and stormwater engineering services owned and operated by the township owner. This includes inter alia sewerage and water treatment plants and storage facilities. It furthermore includes the storage and compaction of solid waste, and its sorting for recycling and / or disposal elsewhere."*

It should be explained that the reason for inclusion of private infrastructure works as land-use rights to accrue to Erf 152, is because Erf 153 will also make use of these infrastructural facilities which will not be lawfully possible if Erf 152 did not have the rights to accommodate these shared infrastructural facilities.

(2) Transport terminus

*"For purposes of this Scheme a transport terminus means land and buildings designed and used as a terminus or gathering place for various forms of transport arriving and departing from different directions or routes and may include ablution facilities."*

This definition differs from that for transport terminus in the TTPS, by deliberate exclusion of wash bays for vehicles and a place of refreshment. The exclusions have been necessitated by *inter alia* water supply constraints as part of a larger water management strategy to ensure the sustainable servicing of the overall new higher education institution.

For a complete understanding of the remaining use-rights applied for Clause 5 of the TTPS provides more clarity.

(3) Place of instruction

*"Means land and buildings used as a school, college, technical institute, Tertiary Institution, academy, lecture hall, monastery, convent, public library, art museum, museum, other educational centre including ancillary and subservient Hostel for persons attending anyone of the afore-mentioned and may include a Place of Child Care and a Cafeteria ancillary and subservient to the main use on the property" (p22).*

From the alternative places of instruction identified in the definition, the development proposal here being put forward is for a Tertiary Institution as defined in Clause 5 of the TTPS (see below). Due to different references to tertiary institutions in various other relevant pieces of legislation, the applicant refers to same in the balance of the Town Planning Memorandum as well as the accompanying specialist reports as either a "Higher Education Institution", "Higher Education Facility" or similar other description / reference appropriate to the development proposal at the base of the present land development application.

Ensuing from the definition of place of instruction are further land-use activities also defined in Clause 5 of the TTPS with some of these identifying even further land-use activities, the applicable ones being highlighted below.

a. Tertiary institution

*"Means land and buildings used for tertiary education, related research, related sports management and sport coaching, including a high performance centre, agricultural education and related research and farming activities, medical and psychological care of students and employees, Hostels, sport-fields, swimming-pools and pavilions, Fitness Centres, multi-purpose halls, administration offices, staff accommodation and may include ancillary and subservient Shops, ATMs, Places of Refreshment, overnight accommodation for guests and visiting sport teams and with the Permission of the Municipality a biogas plant or alternate energy production" (p27).*

b. Hostel

*"Means a Boarding House for persons attending a Place of Instruction or Institution and which is owned or managed by or on behalf of the said Place of Instruction or Institution" (p17).*

Hostels have been included in the development proposal and land development application under a customized definition of Student Housing Establishment. This was necessitated by the definitions in Clause 5 of the TTPS for Hostel and Boarding House dating from 2008 and revised somewhat in 2014 (Boarding House) and these not reflecting the important changes which took place subsequently in *inter alia* student market requirements. The shortcomings of the definition of a hostel were revealed when the private sector became involved to provide suitable student accommodation to assist in alleviating the huge shortage for same in recent years, pursuant to the exponential growth in student demand and enrolments at tertiary institutions countrywide.

c. Boarding house

*"Means land and buildings consisting of habitable rooms with or without a kitchenette and / or ablutions, which are let or rented to persons and where one or more meals may be provided in a communal dining-room and a communal kitchen and may include a Caretaker's Flat on the property and*

*other communal ancillary and subservient facilities for the residents only"* (p10).

d. Cafeteria

*Means a building or part of a building used for the preparation and sale of food and refreshments for the exclusive use of the employees and their guests or patrons of the building provided it is ancillary and subservient to the main use on the same property"* (p11).

e. Fitness centre

*"Means a building where people exercise with or without exercise apparatus"* (p15).

f. Shop

*"Means land and buildings used for the purpose of Retail Trade or renting of household equipment / tools directly to the public, including inter alia retail sale and display of products, "off-sales" facilities on properties licensed in terms of any liquor law, pet shops, a pharmacy, a confectionary, a take-away, swop shop, pawn shop, auctioneers business, hire / rental shop, drive-thru restaurant and may include a Retail Industry ancillary and subservient to the main use and with the Permission of the Municipality a Builder's Yard ancillary and subservient to a hardware shop"* (p24, 25).

g. Place of refreshment

*"Means land and building used for the preparation, sale and consumption of refreshments on the property such as a restaurant, café, coffee shop, tea room, Tea Garden, sports bar, pub and may include take-aways and a maximum of two table games, two dartboards, two electronic games or two limited pay-out gambling machines, television screens and soft background music for the customers, which shall not be audible outside the boundaries of the property and excludes live music and a Place of Amusement. The kitchen layout shall comply with the Municipality's health requirements"* (p22).

h. ATM

*"Means land and buildings used for an automatic teller machine of a bank or other financial institution"* (p9).

It is important to note that the hostels, cafeteria, fitness centre, shops and places of refreshment in the township will all be for the exclusive use of students, employees, visiting lecturers, sports teams, overnight guests and other patrons to the higher education institution to be established on the premises. These facilities will therefore not be open for patronage to the general public.

(4) Telecommunication mast

*"Means a structure in the form of a tower and a base station, which is designed for telecommunication purposes, which includes inter alia radio and or*



*microwave technology or other technology as may be permitted in terms of the relevant legislation. Telecommunication Masts are regarded as infrastructure and not as a land-use" (p26).*

The creation of the rights on proposed Erven 152 and 153 to erect a telecommunication mast stems from the requirement for relocation of the existing telecommunication mast on Portion 289 to clear the road-servitude along the eastern boundary of Erf 152 as described on the township layout plan (figure 4).

The registered owners of the subject properties have on 22 April 2021 entered into an "Occupation Agreement for Mast and Ancillary Equipment" with messrs Swiftnet SOC Limited (Reg No 1994/009541/30) ("Occupier") for the establishment and operating of a telecommunication mast and appurtenant equipment in a position on the eastern boundary of Portion 289 ("Designated Site"). Although the agreement in Clause 12 reserves the right for the Occupier to register a protecting servitude over the Designated Site, this has to date not been done, as evident from both the Conveyancer's Report and the Land Surveyor Certificate submitted to form part of the present land development application. The agreement in Clause 16 allows the Occupier to sublet the electronic communications facilities on the Designated Site. Due to a confidentiality clause in the agreement a copy of same could not be incorporated as part of the present application.

The applicant is presently in negotiations with representatives of the Occupier, messrs Gyro Group (Pty) Ltd for the required relocation of the existing telecommunications mast elsewhere on the subject properties. Due to uncertainty as to the exact position to which the installation will be moved, the applicant is at this stage obliged to create appropriate use-rights on both Erven 152 and 153 in the township. Since the existing telecommunications mast is located in a position earmarked for a section of a future public road along the eastern boundary of Erf 152 it would have to be relocated before the erven in the township become registerable. It is for this reason that this requirement has been incorporated in Para 3.4 under Part 3 of the draft Conditions of Establishment for the township.

(5) Ancillary & subservient uses

*"Means uses and activities which support and complement the main use on the property and which shall not exist on its own when the main use on the property is discontinued" (p9).*

**3.5.2 Erf 152: Campus capacity**

- (1) As incorporated as a condition of approval under "Density" in the draft Annexure T for Erf 152 the maximum daily attendance of 2 500 students may not be exceeded. The 2 500 capacity attendance of the campus will comprise of 1 750 day-students and 750 resident hostel students (i.e. 70% and 30% of 2 500 respectively as empirically derived by the applicant).

- (2) To accommodate the 2 500 students per day on site, provision has been made for a gross floor area (GFA) for buildings on Erf 152 of 31 000m<sup>2</sup>. This area excludes an additional 21 000m<sup>2</sup> GFA to be provided on Erf 153 for student housing purposes. Thus 52 000m<sup>2</sup> GFA in total for the overall township.
- (3) The Department of Higher Education & Training (DHET) has published a manual titled-

*"Space and Cost Norms for Buildings and Other Land Improvements at Higher Education Institutions, 2009"*

to essentially provide a framework or guideline for the calculation of building and site requirements for the planning and establishment of new higher education institutions.

- (4) Based on these DHET guidelines messrs Demacon in its Market Study Report for the proposed township (refer Annexure 'L') have undertaken a space modelling exercise for the maximum number of students to be accommodated on site, with the following conclusions:
- Building space requirement : 64 140m<sup>2</sup>
  - Site requirement (extent) : 20,2 hectares

- (5) The DHET guidelines acknowledge that its space norms -

- *"... provide a broad framework within which institutions, with proper planning, have ample room to creatively erect suitable, quality buildings."*
- *"They (space norms) are applied to the overall space and cost of a building only. This allows institutional planners to allocate space differently from that implied by the present set of space norms."*
- *"The norms in this manual will need to be updated and revised on a regular basis."* (Preface dated 2007 in Manual dated 2009).

These guidelines are indeed not prescribed minima, as evident from these extracts from the DHET manual.

Synthesis:

- (1) The applicant has spent several months during the planning phase for the present application: -
- to decide on the particular academic faculties to incorporate in the higher education facility and to determine in detail the spatial building requirements for each;
  - to configure and position the proposed buildings, with due consideration to the characteristics of the development site; and

- drawing on the vast expertise of a seasoned multi-disciplinary professional team;

to arrive at the total gross floor area for buildings in the township of 52 000m<sup>2</sup>.

- (1) The proposed GFA of 52 000m<sup>2</sup> is less than the ±64 000m<sup>2</sup> based on the space norms of the DHET for the same number of students present on site at any point in time because of the reasons stated above. The 52 000m<sup>2</sup> is a customized, practically derived figure for the specific circumstances.
- (2) With the proposed 52 000m<sup>2</sup> GFA being 12 140m<sup>2</sup> less than DHET guideline for the same number of students, it confirms the impossibility for the capacity of 2 500 students to be exceeded at any point in time.

### 3.5.3 Proposed Erf 153: Student accommodation

Proposed Erf 153 will accommodate the student housing establishment (hostels) to serve the higher education facility. Provision in the use-rights has also been made for a telecommunication mast, since it is as yet unsure to which part of the subject properties the existing telecommunication mast on Portion 289 will be relocated. The locality decision for same involves an intricate set of factors including the topography of the terrain, sphere of influence / coverage requirements, etc.

Due to evolution of the concept of student accommodation facilities in private ownership over time, and especially since the adoption of the TTPS, the applicant has opted for a customized definition for what is described as a student housing establishment. This definition reads as follows:

*"For purposes of this Scheme a student housing establishment (hostel) shall mean land and buildings comprising habitable bedrooms for single or multiple person occupation, and may provide for head of residences dwelling-units. A habitable bedroom shall specifically exclude habitable rooms as defined in Clause 5 which are designed and used for purposes other than for overnight sleeping on beds.*

*The student housing establishment may include ancillary and subservient uses all for the exclusive use by residents and employees on the property.*

*Private kitchenette and / or bathroom facilities may be exclusive to or shared by a number of habitable bedrooms, or substituted by communal facilities."*

The definition of a telecommunication mast has been quoted in Para 3.4.1 (4) above from Clause 5 of the TTPS and is not again repeated here.

### 3.5.4 Synthesis: Amendment Scheme Map and Annexure T

The Amendment Scheme Map and Annexure T are the core components of the amendment scheme to be promulgated together with the proclamation of the township in the Provincial Gazette for the proposed use-rights and zoning controls

to originate and accrue to the respective erven in the township. Annexure T is defined in Clause 5 of the TTPS as follows:

*"Means the set of documents showing details of rights permitted and conditions imposed on certain erven and land marked with a black number within a black circle on the Map 3 which rights and conditions shall prevail over any other Clause or provision of the Scheme except that if rights and conditions are not stipulated the provisions of the Scheme Clauses shall apply as read with Clause 4(2) and includes any approved Annexure B, Annexure or Schedule of a former Town-planning Scheme applicable in the Tshwane municipal area" (p9).*

The Annexure T for the proposed erven in the township has been informed by the required use-rights discussed above, as well as by the discussion on the scale / extent of the proposed development in Section 4 below. For more detailed information, refer to Annexure 'G' hereto.

[ANNEXURE 'G' : DRAFT AMENDMENT SCHEME MAP & ANNEXURE T]

### 3.6 TERMINOLOGY CLARIFICATION

Since no reference is as such made in the definition of Place of Instruction and Tertiary Institution in Clause 5 of the TTPS, it should be noted that these institutions / facilities can be either "public" or "private", for which the following explanation serves to elucidate:

- Public versus private status of higher education institutions

The difference between public and private higher education institutions lies in the method of funding of these. Whereas public higher education institutions are funded by means of government grants / subsidies (i.e. taxpayer money through government budgeting), private higher education institutions are funded by non-government means, which may include –

- capital investment by shareholders
- financial contributions by private benefactors for specific causes (e.g. library)
- financial institutions
- donations

The above methods of funding are in both cases supplemented by student enrolment fees.

- Public / social facilities

Social facilities, also in literature referred to as public facilities, serve a support function to households and families in a neighbourhood, community, village, town, city or region and include *inter alia* tertiary education facilities (e.g. universities, colleges, technicons), schools (primary, secondary), child care facilities (crèche, nursery), old age homes, health care facilities (hospitals, clinics), police stations and post offices (refer Para 6.5 *infra* for more detail).

Although referred to as public facilities, these land-use activities are being provided by both the public sector (national or provincial government, metro / district / local municipalities) and the private sector (business concerns (for-profit) and non-governmental organizations (NGOs) (non-profit)). With the exception of police stations, the private sector is increasingly participating in providing these social / public facilities, partly due to public sector failure in this regard but also for humanitarian reasons as well as the profit motive.

## 4. DEVELOPMENT PROPOSAL

### 4.1 CONCEPT

#### 4.1.1 Description

The development concept being pursued is one of a privately owned and operated low-intensity higher education institution in a nature-based environment conducive to study and teaching on tertiary education level. The peaceful tranquillity of the proposed campus is foreseen to make a major contribution to the psychological enhancement and wellbeing of future students enrolled at the education facility.

The proposed higher education institution on the premises will strive to provide innovative and state-of-the-art world-class academic education and scientific research, while accommodating a sizable proportion of students enrolled at the facility on the campus site. The student housing component will serve to provide a place of residence exclusive to a homogenous group of individuals of a youthful age with a common focus on personal advancement through tertiary education of an academic nature in a safe, secure and modern contextual environment while experiencing a healthy and care-free student life. The management model for the student accommodation will be similar in many respects to that of campus residences owned and operated by public universities and technicons elsewhere, including house rules for resident students.

The proximity of the academic campus, student accommodation (hostels), sports grounds and a variety of support functions will serve to encourage non-motorized transport (NMT), notably walking and cycling on the campus site.

The low-rise nature (varying between 2 and 3 storey buildings), human scale and very low development intensity of the campus environment will see to the creation of a much-desired 'country feel' student community. The 'return to nature' theme will be reinforced by a combination of natural and landscaped green space elements varying between informal, undisturbed natural areas to agricultural research farming activities and more formal sports fields and landscaped gardens. Add to this the envisaged blending initiatives of the built environment component into the contextual natural environment through fragmenting of buildings ('breaking up' in small units) and applying of natural and earth-tone colours to same and it becomes evident that the development will have exceptional aesthetic locational appeal and very low visual impact.

The development concept being pursued is therefore that of a rural village where students will be able to follow their academic ideals with opportunity for living on site, participating in sports and to generally lead a healthy lifestyle of clean air, physical fitness / well-being while forging valuable social relationships to last them a lifetime.

#### 4.1.2 Conceptual presentation

The site plan prepared to inform the application is a draft at this stage, to be replaced at the post-approval stage of the township by a formal site development plan (SDP) prepared and submitted for approval by the CTMM Economic Development and Spatial Planning in terms of the provisions of Clause 31 read

with Clause 30 of the TTPS. It should however be noted that the draft site plan ("DSP") herewith presented has been developed over a period of several months by the client, in conjunction with the multi-disciplinary professional team identified in Para 1.3.3 *supra*, to ensure the desirability, functionality and sustainability of the envisioned rural village for study and teaching on the development site.

#### 4.1.3 Draft site plan

The project architects messrs New Urban Integrated Design have collated the various specialist contributions in a draft site plan (DSP), serving to showcase the development proposal spatially in context of the subject and surrounding properties. The DSP has been included here as figure 2 (overleaf).

[FIGURE 2 : DRAFT SITE PLAN]

As evident from the DSP provision has been made for the following development components:

##### (1) Academic precinct

The core academic precinct comprises various special purpose buildings to serve as lecture halls, auditoria, library, administrative offices and buildings to accommodate various academic faculties (e.g. economic science, social science, education, physical science, engineering, health sciences).

These buildings and associated structures will be fashioned in a linear pattern along a pedestrian concourse, to double-up as conduit for periodic deliveries to these buildings. The pedestrian concourse will serve to anchor the buildings in a south / southeast - north- / northwestern direction forming a vista from the north to draw the eye in to this core component of the campus.

The academic centre will be positioned on an elevated plateau immediately east / northeast of the natural north / south reaching ridge encroaching on the development site. The ridge escarpment will therefore form the backdrop to the academic precinct when viewed from the east. Special care has been taken by the project architects to ensure that the natural ridge-line not be disturbed by the built environment (site elevation, height of buildings), thereby complying with the requirement by GDARD during a pre-application consultation by messrs Bokamosa Environmental Consultants.

##### (2) Student accommodation precinct

The second constituent component of the village comprises hostel accommodation for 1 500 students on site. The accommodation will be configured in various smaller, three-storey buildings designed to lower the bulk perception (fragmentation principle). The accommodation precinct will be positioned in relative close proximity to the academic precinct, immediately northwest of the latter, within easy walking distance.

The hostel buildings will be clustered around certain informal social gathering squares linked by pedestrian walkways between the squares. The aim is to

encourage social mingling and pedestrianisation in the precinct. These will be finalized and formalized on the site development plan stage to follow the successful township establishment.

(3) Sports and recreation precinct

The sports precinct is being proposed to the northeast of the accommodation precinct, near the centre of the campus village development. It will comprise both in- as well as outdoor sports facilities and fields arranged around a focal square with pedestrian / cyclist links to the accommodation precinct, the academic precinct as well as the agricultural precinct north / northwestwards.

Indoor sports may include squash courts, volley ball, table tennis, badminton, basketball and more which will typically be accommodated in two-storey buildings, while outdoor sports fields may include a soccer field, netball, athletics track and more, accompanied by appropriate seating facilities for spectators.

Jogging / cycling and walking trails will be provided strategically across the campus site for recreational use as well as to exercise. These will be carefully laid out with cognisance to distance, gradient, receiving environment, proximity to other on-site uses etcetera. Existing foot- and vehicular paths criss-crossing the site will be used as point of departure, so as to minimise possible negative impacts on the natural environment.

(4) Agricultural precinct

The Agricultural & Natural Sciences Faculty will be seated in a small building complex to the northwest of the sports & recreation precinct, close to the western boundary of the development site. The experimental farming activities will be established across the full width of the site from the mentioned building complex east- and northwards up to the main entrance to the township, where the agricultural potential of the soils is highest.

It should be noted, as elaborated more comprehensively in the Environmental Executive Summary (Para 4.5 pp 19, 20), that the approximately 33 hectares of the subject properties being considered to be high-potential agricultural land will be utilized by the proposed higher education institution for experimental farming and education-based agricultural research purposes, seated in its Faculty of Agricultural & Natural Sciences (refer Annexure 'T').

#### 4.1.4 Access and circulation

(1) Vehicular movement

- Vehicular access to the township will be gained off Boschkop Road (Provincial Road D631) at a position negotiated with Gauteng Department of Roads & Transport (GDRT) prior to embarking on the present land development application (Refer GDRT letter of approval dated 2 June 2021 appended hereto as part of Annexure 'R'). The access will be implemented in a position southeast of the Steekriet Spruit on the northern-most parts of the development site, across the adjoining Portion 356 of the farm



Mooiplaats 367-JR. A right-of-way servitude has been negotiated with the owner of the latter.

- Erven in the township will derive access from a new public municipal road to be constructed by the applicant from the access position on Boschkop Road on to the development site. The access road will include a traffic circle from which a private right-of-way servitude will serve to create a new access to the abutting Portion 356 as well as to the further south / southwest lying Portions 292 to 294, Mooiplaats 367-JR land-portions. The new public access road will be known as Kampus Boulevard.
  - Access to proposed Erf 152 will be gained directly off Kampus Boulevard in a position further southwestwards from the traffic circle while access to proposed Erf 153 will be indirect by way of a right-of-way access over Erf 152 between the main entrance to the latter and the envisaged entrance to Erf 153 in future.
  - A sophisticated / advanced access control system will be implemented to the campus of the higher education institution comprising both the proposed Erven 152 and 153, in a position on proposed Erf 152 immediately south of and abutting the termination point of the public access road from Boschkop Road. The access control system will be designed specifically to deal with high traffic and pedestrian volumes in an efficient way.
  - The on-site vehicular movement pattern will in essence follow a linear route, strategically positioned in response to particular site characteristics and vistas / focal points in the campus design. Visual experience and connectivity of campus components served to inform the route alignment of both the main spine / artery as well as the secondary road connections to the sport, accommodation and agriculture precincts.
  - Internal vehicular movement on the main connecting routes between the entrance position and the four campus precincts will take place on dust-free road carriageways.
- (2) Non-motorized movement
- The primary on-site movement system envisaged for students attending the higher education institution is defined by walking and cycling, i.e. non-motorised transport (NMT). It is for this reason that special care has been taken to ensure close proximity and appropriate linking of the main precincts on the campus village.
  - Proper and appropriate NMT facilities will be provided, including *inter alia* pedestrian walkways and cycling lanes along the shortest routes between campus activities, with cognisance to site characteristics (gradient, shade trees, visual experience), strategically positioned park benches (rest, read) and illumination.

- It is foreseen, and students will be encouraged to use NMT exclusively as movement method between classes, accommodation and sports & recreation facilities.
- On-site segregation of vehicular and NMT movements will be of highest priority for safety of pedestrians and cyclists.
- Apart from the functional NMT routes and facilities discussed above, provision will also be made for hiking / jogging / mountain bike trails for fitness / proficiency training, exercising and recreation purposes.

#### 4.1.5 Provisional building accommodation schedule

Table 2 depicts the provisional building area requirements for the higher education institution, excluding the proposed student housing / hostels component.

TABLE 2 : BUILDING ACCOMMODATION SCHEDULE

CAMPUS COMPONENT	GROSS GLOOR AREA (m <sup>2</sup> )
1. Administration	4 300
2. Cafeteria	7 750
3. Library	450
4. Student centre	1 950
5. Central lecture blocks	4 150
6. Economic science*	0
7. Legal	300
8. Social science*	0
9. Music	250
10. Art	650
11. Education	200
12. Physical science	2 400
13. Engineering	750
14. Health sciences	400
15. Sports facilities	4 350
16. Experimental farm	2 000
17. Staff accommodation	200
18. Technical services & security	900
19. Overnight guest accommodation	550
<b>TOTAL: BUILDINGS</b>	<b>31 550</b>

(Say 31 000m<sup>2</sup>)

[\*NOTE: The Gross Floor Areas ("GFA") for Economic Science and Social Science have due to sharing of building space for calculation purposes been incorporated under other campus components listed above, and therefore form part of the 31 000m<sup>2</sup> GFA applied for]

The table serves to provide more exact information on the nature and extent of the constituent components of the campus for the land-use activities to be accommodated on proposed Erf 152. The GFA figures reflected in the table have been derived at following a robust / vigorous iterative prior process between the future operator of the higher education institution and the multi-disciplinary project

team of which the project architects should be singled out and also the project civil and electrical engineers to ensure a feasible and sustainable development solution.

The ultimate gross floor area (GFA) of 31 000m<sup>2</sup> for future buildings on Erf 152 has been incorporated as such under floor area ratio (FAR) in the draft Annexure T for proposed Erf 152 accompanying the present application.

The proposed GFA for the student housing establishment on Erf 153 is 21 000m<sup>2</sup>, a figure also duly debated / considered and professionally informed during the preparatory stages of the draft site plan. This figure has similarly been incorporated in the draft Annexure T for Erf 153 in the proposed new township.

## 4.2 SITE CHARACTERISTICS

As elaborated in more detail in the Project Overview preface *supra* as well as other sections of the Town Planning Memorandum *infra*, the locational and physiographic attributes of the site played a major role in the land selection and acquisition process for the proposed higher education institution. Although these advantages by far outweigh the few disadvantages it would be prudent to discuss the latter briefly for complete information on the "facts and circumstances" of the land development application (refer Section 42(1)(c)(iii) of SPLUMA). The following bears relevance:

### 4.2.1 Access position

- The present access to the development site directly from Boschkop Road is suitable and may only be used for agricultural / very low density rural residential development in accordance with its Undetermined zoning at present.
- A new position for access to the development is required, slightly eastwards from the current agricultural access position. This will result in the access road from Boschkop Road traversing the abutting Portion 356 of the farm Mooiplaats 367-JR. Some of the reasons for its relocation eastwards include the minimum distance requirement between accesses on Boschkop Road (Provincial Road D631), the position of the Steekriet Spruit on site and its associated floodplains and environmental buffer areas, sight-distances along Boschkop Road from the access position, and more.
- The applicant has successfully negotiated a servitude of right-of-way over Portion 356 of the farm Mooiplaats 367-JR of appropriate size and configuration to accommodate the road-link between Boschkop Road and the development site. The servitude extends to 4 604m<sup>2</sup> as shown on the Servitude Diagram prepared by the project land surveyor and approved by the Surveyor General on 11 November 2020, appended hereto as Annexure 'H'.
- A formal Servitude Agreement informed by the mentioned Servitude Diagram had been entered into between the applicant and the owner of Portion 356 of the farm Mooiplaats 367-JR to secure the access to the development site. Once the present application has been approved the applicant will proceed to

register the servitude at the Deeds Office to confirm the traversing rights in perpetuity.

- The access position in the northern extremes of the development site and the elongated shape of the latter in a north / south direction of approximately 2,4 kilometres (refer Para 2.4 *supra*), serve to cause exceptionally long internal route / connectivity requirements between the access position and the different campus components.

[ANNEXURE 'H' : SERVITUDE AGREEMENT COPY AND SURVEYOR GENERAL APPROVED RIGHT-OF-WAY SERVITUDE DIAGRAM S G No 2215/2020]

#### 4.2.2 Watercourse, floodplains and environmental buffer

There is a small section of the Steekriet Spruit traversing the north / northwestern parts of the development site. The riverine corridor alongside the watercourse defined primarily by the 1:100 year floodplains but also by the 32-metre environmental buffer where the floodlines are narrower, presents a building constraint within which development is prohibited without the necessary authorizations in terms of environmental and water-use related legislation. This regulated area has been meticulously delineated by the project environmental consultant, duly informed by appropriate specialist inputs like a scientifically calculated and plotted flood-line determination. No development is being planned within the affected area.

Due to the vast overall extent of the development site of ±154 hectares and the total gross floor area of 52 000m<sup>2</sup> for future buildings on site it follows that this limited restriction of the nett developable part of the site would have a negligible effect on the planning and development of the proposed higher education institution.

Also, the value which the watercourse, floodplains and environmental buffer of the section of the Steekriet Spruit traversing the site adds to the desired ambience of the proposed development by far outstrips the restriction of development on same.

#### 4.2.3 Servitudes

There are certain right-of-way servitudes registered against Portions 287 to 291 in favour of the general public which have the potential to seriously thwart the purposes of a higher educational facility with reservation of rights to access the premises (refer Paras 2.8.5 and 2.8.7 to 2.8.10 *supra*). The route of these servitudes serves to bisect the development site in a northern and southern section approximately halfway between the northern and southern site boundaries.

These servitudes will lose its function as originally intended when the subject properties are consolidated, with no reason for access to the general public to the consolidated Portion 756 in the end. The applicant will therefore in a parallel process to the township establishment application apply to the City of Tshwane Metropolitan Municipality for the removal / cancellation of these servitudes. The

successful removal / cancellation will see to the removal of this site restriction and the threat that it presently poses for dividing the campus site in a non-viable north and south component.

#### 4.2.4 Ridge

Similar to the Steekriet Spruit watercourse, floodplains and environmental buffer discussed in Para 4.2.2 above, the Class 1 Ridge that encroaches the development site in the southwest adds vastly more value to the proposed development than the restrictions ensuing from environmental legislation on building within associated affected / protected areas. The building restrictions ensuing from these environmental sensitivities need to be acknowledged and complied with.

The proposed development will take place on an upper-plateau area to the immediate northeast of the ridge, a mid-plateau area further northeast and a lower-plateau area covering the northern parts of the development site (refer report titled Urban Design: Proposed Education Hub by NewUrban Architects & Urban Designers, p6). It should be noted that the development footprint being proposed on the upper-plateau area coincides to a large degree with that of the previous residential lifestyle estate approved by *inter alia* GDARD at the time.

Once again, due to the vast overall extent of the development site of  $\pm 154$  hectares and the total gross floor area of 52 000m<sup>2</sup> for future buildings on site it follows that the restriction on development in the environmentally sensitive areas associated with the ridge would have a negligible effect on the planning and development of the proposed higher education institution. In this regard the Demacon Market Study accompanying / informing the application on p142 confirms in its "space modelling" findings that only around 20,2 hectares of nett developable land would be required to successfully establish the proposed higher education institution.

Further value added by the ridge on the subject properties lies in its availability for passive recreation (e.g. bird watching), hiking jogging and mountain biking.

[ANNEXURE 'I': URBAN DESIGN REPORT]

#### 4.2.5 Burial ground

A single burial ground of fairly recent origin accommodating 59 graves has been identified in the northern parts of the development site immediately south of the overhead ESKOM transmission-line traversing Portions 287 and 296 here in an east / west direction. The burial ground will be honoured in position and accommodated in the design of proposed Erf 152. It will as such be fenced-in neatly with supplementary landscaping initiatives befitting of its dignified status of cultural importance. The relevant professional specialist has recommended that a buffer of 20 metre radius be imposed around the burial ground to protect it from undue encroachment.

It should be noted that family members of the deceased interred here will be afforded controlled access to the burial ground from time to time as needed, to attend to the grave sites and for mourning / meditation purposes.

#### **4.2.6 Heritage sites**

A proliferation of Ndebele Kraals and late iron age heritage sites, apart from the burial site discussed above, were found to be present on site, presenting in a...

*"historic axis of settlements running parallel to the ridgeline";*

as described on page 6 of the Urban Design Report in Annexure 'I'.

These were all mapped and provided with a 20 metre radius protective buffer around each.

Although restrictive in a geographical sense the project architects have through an innovative design approach managed to "weave" these sites into the proposed open space network for the campus facility.

#### **4.2.7 ESKOM transmission-line**

The site is furthermore affected by a 30 metre wide ESKOM servitude protecting an existing overhead line traversing Portion 287 and 296 essentially in an east / west direction. The transmission-line is visually obtrusive presenting in line of sight shortly after entering the site from the north.

The servitude and transmission-line will remain in position as accommodated on Erf 152 of the proposed new township.

#### **4.2.8 Boschkop Road**

A relatively small section of Boschkop Road (D631-route) encroaches on to Portions 287 and 296 ( $\pm 0,5$ ha), which in terms of the provisions of the Gauteng Transport Infrastructure Act, 2001 (Act 8 of 2001) has to be excluded from the township confines. Since the road encroachment in essence takes place in an area of the mentioned two properties already impacted upon by the Steekriet Spruit and its associated riverine corridor, its impact has for the most part already been accounted for.

### **4.3 DETAILED PLANNING**

#### **4.3.1 Township name and extension**

The Toponymy Section of the CTMM Department of Economic Development & Spatial Planning has in a letter dated 17 July 2020 confirmed the name and extension number reserved for the proposed township on Portion 287 to 291, 295 and 296, farm Mooiplaats 367-JR to be-

Zwavelpoort Extension 15

The firm has furthermore requested a new street name for the planned future connecting public road between Boschkop Road and the development site from

the Toponymy Section as well – i.e. a name with an educational / academic connotation. We were subsequently in June 2021 informed that Ward Councillor Michael Strange has approved the name Kampus Boulevard for the new access road to *inter alia* the proposed Zwavelpoort Extension 15 township.

[ANNEXURE 'J' : TOWNSHIP AND STREET NAME RESERVATION  
CONFIRMATION]

#### 4.3.2 Contour survey

A detailed contour survey of the site at 2 metre vertical intervals were prepared by messrs Delta Plan on behalf of Isazi Surveys, which served to provide the necessary topographical information to *inter alia* identify the ridge and stream on the subject properties as base information necessary for the proper planning of the future campus on the development site. The contour survey furthermore played an important role to identify the upper-plateau, mid-plateau and lower-plateau areas on site as alluded to earlier, where particular development components would be located as these respond to the physiography of the terrain.

The contour survey also played a guiding role in the planning and positioning of gravitation-led engineering services – notably stormwater and sewer reticulation and facilities, but also to determine the position of certain private water reservoirs at high points where the pressure gradient would be optimal for servicing of the higher education institution.

#### 4.3.3 Site sensitivities

Apart from the vast proportions of the subject properties of almost 154 hectares it was also the unique natural attributes of the site together serving to create interest in same for purposes of the envisaged higher education facility. It was realized from the beginning that the design of the proposed development would have to be cognizant of and respond fully to the attributes and sensitivities of the site. Put differently, the development site was specifically selected for its appropriate size to accommodate the proposed country-style tertiary education facility, but also for its environmental variance and richness, and the valuable contribution that it would make towards creation of the required ambience for the successful establishment and operating of this one-of-a-kind educational facility.

The project environmental practitioners messdames Bokamoso Environmental Consultants have prepared a composite sensitivity map for the site primarily informed by natural and culturally sensitive elements. These include *inter alia* the prominent ridge area and its associated rich variety of indigenous and endemic to the area fauna and flora, various Ndebele Kraal structures in varying degrees of disrepair and a proliferation of late iron age heritage sites manifesting in a more or less linear pattern in a southeast / northwestern direction central to the site boundaries. The sensitivity map was also informed by the presence of a small section of the Steekriet Spruit flowing in a northeastern direction across the northernmost parts of the site, as well as its riverine / riparian corridor flanking the watercourse on both sides.

These site sensitivities have been a major inspiration in the planning and design phase of the project where members of the multidisciplinary professional team engaged in an iterative process over several months to ensure that the development proposal and its constituent components would respond appropriately and positively to the constraints and potential on offer by the site.

[FIGURE 3 : COMPOSITE SITE SENSITIVITY MAP]

#### 4.3.4 Township layout proposal

- (1) Land area: Due to Boschkop Road encroaching on to Portions 287 and 296 and the requirement for Provincial Roads to be excluded from township areas, the township layout proposal only covers the unaffected parts of these two properties. The township is therefore being established on certain parts of Portions 287 and 296 as well as Portions 288 to 291 and 295 of the farm Mooiplaats 367-JR. Since these properties will all be consolidated to form Portion 756, the township will in the end be established on a certain part of Portion 756 of the farm Mooiplaats 367-JR.
- (2) Erf numbers: A two-erf township is being proposed, for which official numbers 152 and 153 have been reserved at the office of the Surveyor General.

[ANNEXURE 'K' : SURVEYOR GENERAL RESERVATION  
CONFIRMATION OF CONSOLIDATED LAND-  
PORTION AND ERF NUMBERS FOR TOWNSHIP]

- (3) Configuration: The draft site plan (DSP), duly informed by *inter alia* the site sensitivity map, has served to guide the township layout configuration to the two-erf presentation on figure 4: Township Layout Plan.

[FIGURE 4 : TOWNSHIP LAYOUT PLAN]

While Erf 152 will be the biggest erf in the township to accommodate the main campus of the proposed higher education institution, the smaller Erf 153 has been appropriately sized and configured to accommodate the student accommodation facilities (hostels).

- (4) Access: Direct access to the public road network will be possible for proposed Erf 152, i.e. from the new Kampus Boulevard to be constructed by the applicant between Boschkop Road and the township. Erf 153 will derive indirect access to the public road system *via* a right-of-way servitude over proposed Erf 152 in favour of Erf 153, for the most part 16m metres wide, with the two erven sharing the entrance and access control facility on Erf 152 just south of the termination of the yet to be constructed Kampus Boulevard.
- (5) Servitudes: Apart from the right-of-way / engineering services servitude in favour of Erf 153 mentioned above, proposed Erf 152 will also be subject to various other servitudes as formulated in detail under Servitude Notes on figure 4: Township Layout Plan. Some of these include the following:



- A right-of-way servitude over Erf 152 in favour of Portions 356, 292, 293 and 294, farm Mooiplaats 367-JR.
  - A right-of-way servitude along a certain part of the eastern boundary of Erf 152 in favour of the general public, for future boundary road purposes.
  - Certain engineering services servitudes in favour of proposed Erf 153.
- (3) **Geology:** Also reflected on the township layout plan are the multiple test-pit positions where soil samples were sourced for analysis by a soils laboratory, as well as the resultant NHBRC-Zone delineations as culmination of the geotechnical investigation of the site. Five such NHBRC Zones were identified and demarcated on the township layout, i.e. Zones A to E, each of which has been described in detail on the plan.
- (4) **Flood-lines:** The township is affected by the 1:100-year flood-lines of the Steekriet Spruit traversing Portions 287 and 296, farm Mooiplaats 367-JR. The flood-lines were scientifically calculated and plotted on site by messrs Sivest and certified for correctness by their mr Richard Hirst, a qualified, registered engineer.

#### 4.3.5 Zoning and land-use

The proposed zoning for each erf in the township was informed by the specifics of the accommodation schedule provided by the applicant to the project architects for preparation of the draft site plan (DSP) for the development project. As mentioned, this was an iterative process involving several role players, with the end-result being well thought-through and largely customized to the requirements of the applicant and the attributes of the development site.

- (1) **Proposed Erf 152:** This erf in the township will accommodate the main campus of the higher education institution comprising the following functions:
- Administration: Reception, ablutions, security, academic staff offices, support services (e.g. human resources), marketing & communication, operational services and shared building support.
  - Cafeteria: In-door & outside seating, cold storage, supply rooms, kitchen & scullery, staff room, ablutions, waste disposal facility, etc.
  - Library: Reception, books & magazine display areas, specialist sections (e.g. law library), student study area, secure exhibition area, server room, librarian & admin offices, cleaners room, storerooms, ablutions, etc.
  - Student centre: Reception, exhibition area, open plan study area, audio-visually equipped rooms, student support rooms, student council rooms / offices, club / association facilities, book store, coffee shop, kitchen, ablutions, store rooms, sick bays, server room and more.

- Central lecture blocks: Various lecture halls with entrance lobbies, student / lecturer consultation rooms, ancillary rooms, store rooms, ablutions and more.
- Economic science: Offices for dean, heads of department and lecturers, lecture halls / rooms reception desk, etc.
- Legal science: Various offices for dean, head of department and lecturing staff, lecture halls / rooms, reception desk and simulation court.
- Social science: Offices for dean, heads of departments and lecturers, lecture halls / rooms, reception / help desk, sound-proof rooms (music) and art halls.
- Music: Offices for lecturers, music practice rooms (various sizes), equipment store rooms, general storage, ablution, etc.
- Art: Offices for lecturers, lecture halls, several studios (painting, sculpture, metal, photography, etc), various specialized store rooms, cleaner room & storage, ablutions, etc.
- Education: Offices for dean, departmental head & other lecturers, reception desk, simulation lecture rooms, reception desk, lecture halls, etc.
- Physical science: Offices for dean, departmental head, lecturers and support staff, reception desk, laboratories, support rooms to labs, various store rooms (equipment, chemicals, general), server room, hazardous materials shower facilities, ablutions, etc.
- Engineering: Offices for dean, head of department lecturers and assistants, lecture rooms, ablutions, server room, workshops (mechanical, electric) support rooms for workshops, store rooms, etc.
- Health sciences: Offices for dean, head of department, lecturers and other staff, lecture rooms / halls, ablutions, store rooms, simulation laboratory, equipment stores, etc.
- Sports facilities: In-door sports hall, various equipment stores, showers / change rooms, ablutions, cleaning store rooms, medical offices / facilities, squash courts, sport bureau office, fire control room, security and various sports fields (e.g. cricket, soccer, tennis, athletics, hockey, Olympic swimming pool).
- Experimental farm: Operations buildings, study yard, change room (showers, ablutions), etc.
- Staff accommodation: Staff quarters for up to 10 employees.

- Technical services and security: Maintenance workshop and store rooms, garden store, various store rooms / garages for furniture, vehicles, equipment, generator plant, staff room and kitchen, cleaner stores, change rooms & ablutions, refuse yards, etc.
- Overnight guest accommodation: Guest lodge with up to 20 double *en-suite* rooms / suites, lounge / bar, kitchen, boardroom, staff and cleaning rooms / facilities, storerooms (e.g. linen)

The zoning elected to create the required use-rights on Erf 152 to lawfully host the land-use activities listed above, is as follows:

Special (Use-zone 28 of the TTPS) for purposes of place of instruction.

Due to an existing telecommunication mast on the premises as well as certain private engineering services infrastructure works (to be shared by uses on Erf 153) and a transportation terminus (customized definition) the final zoning being proposed for Erf 152 is therefore-

"Special" (Use-zone 28 of TTPS) for purposes of place of instruction, telecommunication mast, infrastructure works (private), transport terminus and ancillary & subservient uses.

- (2) Proposed Erf 153: The dormitory function of Erf 153 where up to 1 500 students will reside is subservient to that of Erf 152 described above. Only students enrolled at the higher education facility on Erf 152 will be accommodated here, where they will sleep, study and socialize. For sports and recreation these students will be dependent on the facilities on Erf 152, and of course also for learning / study.

Furthermore is there a possibility of the existing telecommunication mast on Portion 289 to be relocated to Erf 153, for which appropriate use-rights also need to be created. The zoning therefore applied for on Erf 153 is the following:

"Special" (Use-zone 28 of the TTPS) for purposes of student housing establishment (hostels) and telecommunication mast. A student housing establishment has been specifically defined as evident from the draft Annexure T for Erf 153 in Annexure "F" hereto.

The Land-Use Table on figure 4: Township Layout Plan contains more detail on the proposed zoning for each of the erven in the township, including the extent of each of the erven as well as its proportion (%) of the overall land assembly.

#### 4.4 DEVELOPMENT CONTROLS

This subsection of the Town Planning Memorandum elucidates on only certain of the proposed development controls in the respective Annexure Ts for Erven 152 and 153. For a full comprehension kindly refer to Annexure 'F' hereto.

#### 4.4.1 Proposed Erf 152

- Extent : 132,6434 ha
- Coverage : 10 percent
- Height : Two storeys (15m); except telecommunication mast
- Gross floor area : 31 000m<sup>2</sup>
- Parking requirement : \* Students 700 bays  
\* Staff 200 bays  
\* Visitors 100 bays

##### (1) Coverage

With Erf 152 extending to 132,6434 ha (subject to final survey) a coverage of 10 percent would allow a total building area under roof of approximately 132 643m<sup>2</sup>. It was decided to create sufficient coverage capacity for especially experimental farming purposes which may require large proportions of the activities to be covered by roofs. The proposed coverage factor will also allow for possible future stand-alone solar energy installations on the premises which may serve to count towards coverage of the site.

In this regard with reference to Section 3.2 *supra* and the current Zoning Certificate in Annexure 'F' it follows that the proposed coverage is in actual fact being reduced from an existing 50 percent to only 10 percent. If the current zoning of Undetermined had therefore been retained for Erf 152, the coverage of 50 percent would have amounted to a potential 663 200m<sup>2</sup> covered by roofs. This is around 530 500m<sup>2</sup> more than here being applied for.

##### (2) Height

All new buildings on Erf 152 will be either single or double storey, with two storeys not to exceed a total of 15 metres. This height-restriction will see to a low-rise development complex, easily blended with its environmental context. The 15-metre height being proposed for the envisaged two-storey buildings includes any possible roof-mounted solar installations in as far as these may protrude above the roof-line.

##### (3) Gross floor area

The carefully calculated gross floor area (GFA) for Erf 152 of 31 000m<sup>2</sup> will translate on the 132,6434ha erf to a floor area ratio (FAR) of a mere 0,0234 and hence the assertion of a low-intensity development project.

##### (4) Parking requirement

Since the TTPS, table G determines that the parking requirements for a "tertiary education place of instruction" has to be to the satisfaction of the Municipality, it has become trite practice for applications like these to be substantiated by a professional specialist transportation study with regards to parking requirements and for officials considering the applications to be guided by such specialist studies.

In this instance messrs Techworld Consulting Engineers have, in conjunction with the client and other relevant members of the multi-disciplinary professional team, investigated the parking requirement carefully and conscientiously with the following findings / recommendations for the total number of formal parking spaces to be provided on site:

- Students : 700 bays (1 750 students @ 2,5 students / vehicle)
- Staff : 200 bays (250 staff @ 1,25 persons / vehicle)
- Visitors : 100 bays
- TOTAL : 1000 bays

#### 4.4.2 Proposed Erf 153

- Extent : 19,9015ha
- Coverage : 10 percent
- Height : Three storeys (17m)
- Gross floor area : 21 000m<sup>2</sup>
- Parking requirement : Students 600 bays

##### (1) Coverage

A coverage factor of 10 percent on the 19,9015ha extent of Erf 153 (subject to final survey) translates to an area of ±19 900m<sup>2</sup> GFA that could be covered by roofs. This is approximately 79 600m<sup>2</sup> GFA less than the scenario with the zoning of the erf being retained as Undetermined with a coverage factor of 50 percent.

The applicant has opted for a somewhat higher coverage factor to allow for possible future stand-alone solar energy installations on the premises which may serve to count towards coverage of the site.

##### (2) Height

The proposal will see to a limited number of smaller blocks of three storeys each for student accommodation purposes. The 17m height being proposed for the three-storey buildings includes the vertical extension of any possible roof-top solar energy installations.

The project architects in conjunction with the environmental assessment practitioner and the applicant have gone to great lengths to ensure that the height of buildings on Erf 153 (as well as Erf 152) does not cause any visual impediment or contextual adversities which may serve to negate the overall aim of harmonizing the built and natural environments *in loco*.

##### (3) Gross floor area

Similar to that of Erf 152, the gross floor area for Erf 153 has been calculated meticulously to allow for the envisaged structures to accommodate 1 500 students. The 21 000m<sup>2</sup> GFA translates to an FAR of 0,1055 considering the extent of Erf 153 as being 19,9015 ha.

The actual FAR confirms the low-intensity nature of the proposed development on Erf 153.

(4) Parking requirement

Similar to that for Erf 152, the parking requirement for Erf 153 has been determined professionally by an expert transportation engineer for the overall student housing establishment operation (hostels) on Erf 153. The findings / recommendation in this regard was that a total of 600 parking spaces should be provided on site, which includes visitor and staff parking.

This requirement can be expressed as a ratio of 0,4 parking spaces per bed, which is higher (i.e. more bays required) than for student accommodation in e.g. the Hatfield area. Here the required parking ratios vary between 0,21 and 0,3 parking spaces per habitable bedroom, with some habitable bedrooms accommodating 2 students each.

#### **4.4.3 Synthesis**

The particular development controls selected for the proposed zoning of each of the erven in the township development has each been carefully considered for *inter alia* its role in ensuring the desired outcome of a country look-and-feel with a rustic ambience tertiary higher education campus, where the prevalence of natural elements will serve a psychologically calming purpose on students, conducive to study / learning firstly, but also for physical well-being through availability of appropriate passive and active recreation opportunities as well as a selection of choice sports facilities available to all patrons to the development project.

## 5. NEED / NECESSITY

### 5.1 STRATEGIC PLANNING POLICY CONTEXT

When investigating the strategic planning policy context on national, provincial and metropolitan levels as captured in Section 7 *infra* it became abundantly clear that there is a significant and irrefutable need for higher education institutions like the one being proposed on the subject properties. The need in essence stems from the following:

#### 5.1.1 Structural unemployment

The high rate of unemployment and concomitant high poverty and inequality levels in society cannot be sustainably reduced over the medium to longer term without raising the levels of education and skills on offer by the labour market substantially and appropriately to alleviate / neutralize the current prevailing mismatch between skills on offer in the labour market and skills demanded by the business and government sectors. The majority of the population has low to no formal education with little to offer in relation to market requirements for labour in the economy.

#### 5.1.2 Capacity constraints

Severe capacity constraints at all public universities and its inability to accommodate the huge demand for especially first-year enrolments every year. Supply offerings at public universities and other tertiary education institutions have only increased marginally in recent years, in relation to the exponential growth in demand for same, denying thousands of prospective students annually the opportunity to improve their skills-sets and associated developmental prospects.

The Demacon Market Study has, based on *inter alia* historic data between 2008 and 2018 modelled a projection of the capacity constraints at public universities in South Africa referred to as "unmet demand". The following extract elucidates:

*"The data shows that the unmet demand for university education with 2020 as the baseline is 17 647 students. By 2024 the estimated accumulated unmet student demand could reach as much as 85 611 students. By 2029 the estimated accumulated unmet student demand could be more than 149 000 students. The data suggests that the unmet demand for tertiary education does compounds cumulatively over time, which continues to widens the gap between supply and demand."* (p 140)

#### 5.1.3 Economic development

The product of higher learning has a direct bearing on economic growth and development, apart from its beneficial effects on unemployment. More graduates in the specialized fields of e.g. project management, engineering, economics, social work, environmental management, etc. have been proven to serve as catalysts for economic growth and development. It also leads to formation of new businesses, innovation and other entrepreneurial endeavours in the formal economic sector which serve to grow and develop the economy.

#### 5.1.4 Social inclusion and integration

The policy context investigation furthermore divulged that education, and especially tertiary / higher education, makes a huge contribution to social inclusion. Armed

with knowledge and skills pursuant to such education, individuals and their families find themselves on an accelerated socially upward mobility trajectory with full social inclusion at the workplace and in society in general. The authorities therefore promote higher education as an important imperative for socio-economic inclusion and transformation towards a more equitable and sustainable society.

It has also been found that there exists a positive correlation between higher education levels and lower birth rates, with smaller families being the result of higher education. This will serve to relieve the pressures of government grants / subsidies to provide in the needs of the vast and growing unemployed component of the population living in abject poverty and hopelessness on the outskirts of metropolitan cities in Gauteng.

It should be cautioned that the proposed language-based (Afrikaans) higher education institution on the subject properties should not be confused with a race-based institution. In this regard the Demacon Market Study Report confirms the race profile of Afrikaans speaking individuals (first language) as being the following (p161):

• White	: 39,7%
• Black African	: 3,9%
• Coloured	: 56,2%
• Indian / Asian	: 0,2%
TOTAL	100,0%

It concludes as follows:

*"The data indicates that Afrikaans speaking people are diverse in the sense that many sections in racial groups have adopted Afrikaans as primary language medium."* (p161)

The agenda of social inclusion and integration is therefore applicable and will be achieved by the proposed higher education institution in the following way:

- through attendance by Afrikaans speaking students of all races; and
- through Afrikaans speaking students at public universities relinquishing their demand for space at these universities in the primary market area in favour of the proposed institution where they would be tutored in their home language as language of choice. These 'abandoned' spaces at existing public universities will then be filled by students of all races with English (and other applicable language) as preferred medium of tuition.

Finally, as evident from the first paragraph of the subsection above, the most noticeable impact of social inclusion and integration manifests predominantly in the post-education phase where the qualifications / knowledge attained by individuals at whichever higher education institution serve to accelerate upward social mobility and integration in the workplace, but also in society as a whole.



### 5.1.5 Synthesis

From an official point of view as corroborated by various statutes, policies and plans there exists an incontestable need for additional institutions of higher learning like here being applied for. Such institutions fulfill a variety of transformation goals to assist the transitioning of our cities to more equitable, inclusive and efficient living environments where socio-economic growth and development spurred by higher education levels will see to a positive impact on the reduction of unemployment, poverty and inequality in society.

## 5.2 MARKET FEASIBILITY STUDY

### 5.2.1 Specialist study

As abundantly clear from the literature review in Section 7 *infra* alluded to in Para 5.1 above, there is a substantial need for more institutions of higher learning in Gauteng, being the economic hub of the country. In the context of the proven need in general, the applicant appointed a specialist market analyst messrs Demacon Market Studies under guidance of dr Hein du Toit to conduct a more in-depth market investigation to determine *inter alia* the need / necessity for the proposed new higher education institution on the subject properties more concisely.

The resultant report titled "Proposed Higher Education Institution in the Tshwane Metropolitan Municipality. Market Study Report" should be read for more information and a complete understanding, as it forms an integral part of the present land development application. The balance of this subsection was gleaned from the Market Study Report.

[ANNEXURE 'L' : MARKET FEASIBILITY STUDY FOR HIGHER EDUCATION INSTITUTION]

### 5.2.2 Target market

The Market Study Report confirms the pre-segmented target market of the proposed new higher education institution on the subject properties to be individuals in the 17/18 to 34-year old age group. This age grouping has been derived from national indicators, confirming that nearly 75 percent of students enrolled at such institutions resort under this age group. For more information on the demographics of the target market, refer to page 74 of the Market Study Report where language profile, race profile, gender profile and education profile are some of the characteristics described more fully. Of interest is the finding that 34,5 percent of the targeted age group is of the youthful age between 18 and 22 years.

With Afrikaans as the intended tuition medium at the proposed higher education institution the pre-segmented national demographic analysis by Demacon revealed the following:

- First-language Afrikaans speaking individuals represent 11,8% of the national population, of which White and Coloured races represent 39,7% and 56,2% respectively (p 161).

- In excess of 60% of the Afrikaans speaking population is older than 15 and younger than 65 years of age (p 161).

Annexure A: Language Specific Focus of the Demacon Market Study Report starting on p160 contains more specifics on the national language profile, Afrikaans race profile, gender profile, education profile and average household income profile.

### 5.2.3 Market area

The Market Study Report identifies a primary and secondary market area from which future students at the proposed higher education institution would *ceteris paribus* hail / originate. The primary market area is defined by an approximate 200km radius around the development site and the secondary market area comprising the balance of South Africa. The focus is on individuals in the age group 17/18 to 34 years residing in this catchment area.

For more information on the size, composition, growth trends and employment profile in the primary and secondary target market areas (i.e. socio-economic composition) refer to pp 71 to 89 of the Market Study Report. Some relevant findings include the following:

- *"In essence, the age and gender profile shows a positive outlook when considering potential enrolments at the proposed HEF. The proposed HEF should primarily focus on age groups 17/18 to 34 as the core target market of the institution. When considering the age and gender profile, in excess of 30% of the target market fall within this age grouping"*(p88).
- *"Ultimately, the data suggests that the youthful proportion of the target market are driven to achieve a tertiary education and could be enticed by the proposed HEF to enrol as first-time undergraduates or further their studies"*(p88).
- *"The employment profile shows that the employed target audience are primarily employed in skilled and semi-skilled occupations which could be a core focus of the proposed HEF. When considering the nature of skills trends from an economic perspective, a drive exists towards skilled technologically driven professions which could be one of the key focus areas for the institution"*(p89).
- *"The data suggests that target market households do, for the most part, have financial wellness and could afford tuition fees at the proposed HEF"*(p89).

The market area analysis has been further refined with Afrikaans speaking students in mind. The following results provide insight into the target market population in the market areas, as evident from the Demacon Market Study (pp 165, 166):

- There are 6 423 619 Afrikaans speaking people in South Africa of which 3 112 789 fall within the LSM 4 to 10+ income range. Of these approximately 1,17 million reside in the primary and 1,94 million in the secondary market areas.

- The number of people in the targeted age group of 17/18 to 34 years in the primary and secondary market areas are 278 317 and 533 705 respectively (i.e. 812 022 total). Of these 125 052 (primary market area) and 112 607 (secondary market area) attend higher education institutions.
- Around 27,5% of Afrikaans speaking individuals enrolled at higher education institutions prefer Afrikaans as their language of instruction / tuition.

The foregoing analysis concludes by confirming the following:

*"The market segment thus indicates that in 2019 approximately 65 356 Afrikaans speaking persons could be targeted by the HEF. The primary market area represents 34 389 persons whilst the secondary market area represents 30 967 people"* (p 166)

#### **5.2.4 Market demand**

Market demand is a function of market potential which is here discussed as expected to be exerted by the target population in the geographic catchment comprising the primary and secondary market areas defined in the Market Study Report. The findings are then related to the particular higher education institution to be established on the subject properties.

The Market Study Report assesses the relationship between population growth, student numbers and existing capacities of universities and other tertiary education facilities to determine the existing shortfall in the provision of such facilities. The Report proceeds to then quantify the extent of the demand with conclusions on how this bears relevance to the proposed new development. The following extracts serve to elucidate:

- *"Historically, the space available to new students have been and continues to be limited due to the physical capacity constraints of universities. A gap thus exists between demand for university education and the supply of spaces available for new students. Demand is moderately taken-up by colleges and the private sector but, the overall capacity of the tertiary education system of the country is insufficient to accommodate ever growing demand. It is thus necessary to consider the possible market gap that exists between the growth of potential students as well as the capability of HEFs to absorb demand. The market demand gap that exists thus provides an opportunity to the proposed HEF to functionally contribute to the higher education infrastructure of the country and to absorb a proportion of residual demand"* (p 138).
- *"The data shows that the unmet demand for university education with 2020 as the baseline is 17 647 students. By 2024 the estimated accumulated unmet student demand could reach as much as 85 611 students. By 2029 the estimated accumulated unmet student demand could be more than 149 000 students. The data suggests that the unmet demand for tertiary education compounds cumulatively over time, which continues widens the gap between supply and demand"* (p 140).

With reference to the proposed new higher education institution and the particular target market and market areas, the Market Study Report provides the following information:

- The target market population has been further segmented in Chapter 9 of the Report (pp 132 to 144) to consider *inter alia* people in the LSM 4 to 10+ income range (i.e. ±5,9m people) reducing the potential market to approximately 1,6m individuals which could be targeted by the proposed new higher education institution (2019), should all language mediums have been accommodated and not Afrikaans only.
- Based on the above, two probable market demand scenarios were calculated:

*"The first scenario is a baseline scenario which is focused on the most likely capturing of the segmented target market, whilst the second scenario is focused on an optimistic scenario which considers an above average capture of the target market segment"* (p 137)

- The market demand for the baseline scenario depicted in figure 9.2 (p 137) of the Market Study Report identifies the following excess demand, viz:

→ For 2020	: Low – 10 477 persons High – 20 954 persons
→ For 2024	: Low – 17 172 persons High – 34 344 persons
→ For 2029 (Maturity)	: Low – 18 604 persons High – 37 208 persons

- The market demand for the optimistic scenario depicted in figure 9.3. (p 137) identifies the following excess demand, viz:

→ For 2020	: Low – 20 954 persons High – 31 432 persons
→ For 2024	: Low – 34 344 persons High – 51 516 persons
→ For 2029	: Low – 37 208 persons High – 55 812 persons

Since the proposed new higher education institution will at any point in time cater for only 2 500 students attending classes on the campus it is evident that the particular demand therefore is much lower than even the "low" estimate of the "baseline scenario" of 10 477 prospective students for 2020, 17 172 for 2024 and 18 604 for 2029. The actual student enrolment figure envisaged is therefore only a fraction (25% in 2020) of the projected "low" baseline demand scenario. For the more realistic "high" baseline scenario and the probable "low" and "high" demand estimates of the optimistic scenario, the proportion of the actual demand *versus* potential demand becomes minimal, i.e. the actual demand represents only a minor

portion of the estimated demand for student enrolment at higher education institutions for the short to medium term future.

However, with due cognizance to the preferred language medium of Afrikaans for the proposed higher education institution the target market as set out above is reduced in magnitude, but still convincingly substantive to prove the need for the proposed higher education institution unequivocally. With reference to the Demacon Market Study (pp 165 to 167) the following synopsis bears relevance:

- The market demand for the baseline and high-level scenarios depicted on figure A.0.3 (p 166) identifies the following excess demand, viz:
  - For 2020 : Low - 3 294 persons  
High - 4 118 persons
  - For 2024 : Low - 6 801 persons  
High - 8 502 persons
  - For 2029 : Low - 14 155 persons  
High - 17 694 persons
- The Report concludes with the following confirmation of the demand (and hence need) for the proposed higher education institution, should tuition only be offered in Afrikaans:

*"Based on demand estimates, the HEF could sustainably attract the total target student population of 2 500 in the near future, with the opportunity to expand the student population over the short- to medium-term"*(p 166)

### 5.2.5 Synthesis

Ensuing from the preceding discussion, duly informed by a range of relevant prevailing planning policies as well as the more focused Market Study Report by Demacon, it follows that: -

- the objective need / necessity for a new tertiary higher education institution in respect of all languages within the primary and secondary catchment areas has been proven and cannot be disputed; and
- in the content of the current language offering of the existing 26 universities in South Africa which are all, except for one according to Demacon, English medium universities, even the proven demand for a restricted Afrikaans speaking component of the primary and secondary market areas by far exceeds the maximum intended student capacity of the envisaged development.

## 5.3 LOCALITY ASSESSMENT

The particular need for the proposed new higher education institution also relates to its proposed locality in spatial context and the necessity for it to be established on the particular properties concerned. The assessment of the locality in this subsection of the memorandum was for the most part gleaned from the Market Study Report by Demacon.

### 5.3.1 Agglomeration economies

As demonstrated in Section 7 *infra* the City of Tshwane is being regarded as the tertiary educational capital of South Africa with its position as such being reinforced by an array of associated innovation and research & development institutions scattered throughout the municipal area. Examples include the CSIR and SABS with the provincial Blue IQ The Innovation Hub providing further substance to the conglomerate of associated institutions with potential and actual forward and backward research and innovation linkages (connectivity advantages).

The proposed new higher education institution will form part of this education and research / innovation network, with excellent proximity and accessibility advantages derived from its locality.

Higher education institutions are encouraged for maximum impact on socio-economic growth and development, to not only form linkages between similar such institutions and research organisations but also between the higher education institution and "big business". This is to ensure that the educated workforce to result from the institution be appropriately trained with applicable knowledge and skills immediately employable by the business and government sector. The proposed new higher education institution is sensitized towards this market (and policy) requirement as evident from the following extract from the Market Study Report:

*"The proposed PHEF (private higher education facility) considers the relationship between theoretical studies and practical implementation essential in student development"* (pp ii, xxi – Executive Summary and pp 5, 156).

The City of Tshwane has various "big business" conglomerates located within its municipal boundaries which would serve the connectivity requirement based on *inter alia* its locality in relation to these ideal. An example includes the Waltloo / Despatch / Silverton industrial node anchored by the automotive industry which is currently receiving a major investment injection to stimulate its growth and development. Tshwane is also the Administrative Capital City of South Africa with most of the national government departments located here for which the higher education institution could serve to produce appropriately qualified employees required for its proper functioning to ensure enhanced service delivery to especially the poor and vulnerable communities and to bolster social inclusion and economic development maximally.

### 5.3.2 Proximity and accessibility

The necessity of the establishment and operating of the proposed new higher education institution on the subject properties is further proven in the Market Study Report, which considered its envisaged locality in relation to-

- access to regional markets;
- proximity to business nodes, growth areas and target markets;
- spatial development trends and high-growth areas; as well as
- expansion potential.

Refer Chapter 8, pp 112 to 131 for a very thorough assessment – all in support of its proposed establishment in position on the subject properties. The reader is reminded that the Market Study Report forms an integral part of the documentation at the base of proving the merit of the proposed new higher education institution and should be read in its entirety for a full comprehension.

One of the findings of the locational assessment that draws the attention is that the development site is situated in relative close proximity to approximately 300 secondary schools, i.e. –

- "\* *61 secondary schools can be found within a 25 km radius of the proposed HEF (±41 000 learners – all grades).*
- \* *284 secondary schools can be found within a 50 km radius (± 245 100 learners – all grades)"* (p 119)

### 5.3.3 Locational site rating

Based on a very thorough and highly scientific locational assessment model developed by Demacon (dr Hein du Toit) the development site was evaluated and scored with an overall score rating of 83,2. The score rating allows for four possible categories, viz:

- Below 60 : Insufficient site rating not recommended for consideration
- Between 60 and 70 : Site rating sufficient, but some critical requirements may be lacking but could possibly be rectified.
- Between 70 and 80: High site rating indicating that the most important fundamentals for successful development are in place.
- Above 80 : Exceptional site rating.

The proposed locality of the higher education institution on the subject properties has received on "exceptional" rating.

### 5.3.4 Synthesis

The exceptional location rating awarded to the site by the project market feasibility analyst has taken various important factors into account before arriving at the score rating of 83,2. These include the contextual environmental in relation to its target market and offering of the proposed higher education institute, access to regional markets, proximity to high-growth areas and spatial development trends, proximity to target market, proximity to well-established primary and secondary education system, visibility of the site, proximity to key transport infrastructure and future expansion potential of the site.

It follows that some of the determinants evaluated will be less favourable than others and some more. When viewed together however the positive factors by far outweigh the somewhat less ideal factors, as evident from the exceptional rating awarded to the site for its intended usage as a higher education institution.

## 6. MERIT OF DEVELOPMENT PROPOSAL: DESIRABILITY & SUSTAINABILITY

### 6.1 MERIT OF APPLICATION

With cognisance to Section 42 of SPLUMA the applicant has already apprised the CTMM of a comprehensive motivation of the proposed establishment of a new higher education institution on the subject properties in the eastern parts of Pretoria elsewhere in the memorandum. This section addresses those matters of desirability and sustainability not yet sufficiently illuminated and motivated. It is therefore important to note that the entire memorandum, together with all annexures to same (of which the respective specialist reports are especially important) should be read for applicability of each section and subsection to the merit of the application and the development proposal underpinning same.

### 6.2 DEVELOPMENT CONTEXT AND IMPACT

#### 6.2.1 Land-use pattern

The area where the envisaged higher education facility will be established displays a typical peri-urban character where a mix of urban and rural land-use activities coexist in seeming harmony. The urban activities prevalent are for the most part of a small scale and manifest as smaller businesses, home offices / industries and extensive business operations which, similar to the proposed higher education institution, require large land surfaces for its operations which are either not available, or affordable in the built-up areas of the eastern extensions of the City. Examples of these include a construction / earth works concern, a boat manufacturer, a taxidermy and metal / engineering works. These are within a one kilometer radius supplemented by a police station, a venue for celebratory functions and more.

The Waterlake Farm Residential Estate is a most prominent residential development anchored in nature by a sizeable dam in the Pienaars River and sponsoring free-roaming game and smaller wildlife in the estate. At capacity the estate will *ceteris paribus* accommodate around 400 families in single residential and townhouse developments in same.

Rural residential land-uses comprising smaller farm-portions accommodating a single family often dabbling in some form of subsistence agriculture or a home industry of sorts (or both) predominate in the area. Some families furthermore only live on these farm-portions for the clean air, natural beauty and psychologically pleasing environment on offer, but work in town.

Figures 5 (a) and (b) (overleaf) provide a high-level overview of the land-use pattern in a one kilometre radius around the entrance to the development site on Boschkop Road, and a one kilometer distance from the outside perimeter of the development site respectively.

[FIGURES 5 (a) & (b) : LAND-USE MAP]

These figures furthermore depict vast vacant land-portions in proximity to the development site, some of which sponsor pristine natural areas, including a Class 1 ridge with associated ecological and aesthetic attributes.



Boschkop Road anchors many urban and urban-related land-use activities outside the one kilometer radius discussed above, with increase in prevalence and intensity when approaching Graham Road along Boschkop Road from the development site, and even more when approaching Solomon Mahlangu Drive along Graham Road from the Boschkop Road intersection. Examples include the Kitty Hawk aerodrome facility, various wedding venues and guest houses, mini-storage facilities and vehicle repairs and sale uses.

In summary, the prevailing land-use pattern in proximity to the development site is characterized by a variety of uses including small-scale urban-type uses, larger (more extensive) urban-related uses, smaller rural occupation farm-portions often with associated subsistence farming, larger vacant farm-portions with sensitive environmental attributes and a prominent, established residential estate. The land-use pattern is being influenced by Boschkop Road for its advantages on offer in terms of visibility / exposure and accessibility.

### 6.2.2 Prevailing zoning

Save for the Waterlake Farm Residential Estate most other properties in the area are zoned Undetermined. An Undetermined zoning bestows the following primary use-rights on a property, viz:

- \* Agriculture
- \* Farm stall (35m<sup>2</sup> building area max)
- \* One dwelling-house

The Waterlake Farm development sponsors a variety of zonings ranging from Residential 1 for the 324 single residential land-portions of ±1 000m<sup>2</sup> each, to Residential 2 (2 land-portions currently being developed as townhouse developments - ±80 units total) to Special-zoned land-portions for equestrian activities, a gymnasium, a guest-lodge, open space & recreation, nature conservation and private roads.

[FIGURE 6 : ZONING MAP]

It is important to note that any use other than agriculture, a limited-in-size farm stall and a single dwelling-house, can be permitted to be established and operated from an Undetermined zoned property with the consent of the CTMM. Such other rights can be obtained by means of a consent-use application as allowed for in the TTPS and Bylaw. These "secondary uses" are however not shown on the Zoning Map which means the latter may not be a true reflection of the approved use-rights (zoning) dispensation for the area.

The predominant Undetermined zoning for the area is commensurate with its locality on the outskirts of the City in the vicinity of the official urban edge.

### 6.2.3 Future planning policy outcomes

Of importance here is the vision for the City as embodied in the RMSDF as applicable to the area. The first point to note is that the subject properties are located within

the urban edge with the surrounding area inside the edge having been earmarked for future urban development.

Of further importance is that it falls in a Management Zone where the RMSDF indeed confirms the suitability of the typology of the proposed higher education facility in this locality, as evidenced from the following extract:

*"Within these Management Zones **land uses and densities which do not fit into the denser urban complex, should be permitted...** The availability of services and the ease of access to major roads will play an important role in the evaluation of residential uses as mentioned above"* (own emphasis) (p90).

The particular area has finally been earmarked as a Future Urban Development Area which basically entails areas identified for development in the near future (p90) as soon as infrastructural service can be sustainably provided to same. A Low Density Zone designation in the RMSDF for the subject properties and surrounds allows for less intense and more expansive residential neighbourhoods to be established here.

The area outside the urban edge eastwards towards Bronkhorstspuit has in the Gauteng Spatial Development Framework, 2030 (2017) been designated for agricultural purposes, due to large parts of this area sponsoring high-potential agricultural land which are being actively farmed at present. As confirmed in the Executive Summary for the proposed Zwavelpoort Extension 15, p20 prepared by Bokamoso Environmental Consultants (refer Annexure 'T'), GDARD has identified seven Agricultural Hubs in Gauteng earmarked for food production. It has been determined that the development site falls outside these identified Agricultural Hubs and that the following two such hubs are the nearest to the site:

- \* Nokeng Agricultural Hub: ±5km east of the development site; and
- \* Ekurhuleni-Kungwini Agricultural Hub: ±10km south of the development site.

The area also sponsors various tourism-related facilities which are indeed being encouraged in the RMSDF in the more natural and undisturbed high-quality environmental areas.

The area within the urban edge is therefore destined to be transformed over time from its present predominantly peri-urban / rural character to an urban character guided and informed by the provisions of the RMSDF.

#### **6.2.4 Synthesis: Accordance of development proposal with land-use pattern**

The applicant has in Section 7 *infra* demonstrated the suitability of the proposed higher education facility on the particular development site as a strongly preferred land-use over the low-density residential development typology promoted for the site and for the immediate surrounds within the urban edge. This paragraph should be read with this section for a better understanding of the accordance of the development proposal with the current and future land-use pattern in the area.

The applicant furthermore submits that the low-intensity well blended / harmonized non-intrusive, dignified and prestigious nature of the proposed higher education facility would be fully commensurate with the land-use pattern of the area, now and in future. It is also foreseen that none of the existing land-use activities in the area and neither those planned for the future as confirmed in the RMSDF, would exert an adverse impact on the higher education institution.

The proposed locality of the new higher education institution has finally also been canvassed scientifically and comprehensively in the Market Study by messrs Demacon, and found to be highly compatible and feasible in local and provincial context. The "exceptional" score rating of the site as per the Demacon Site Evaluation Model for spatial context analysis of 83,2 is the highest category achievable, confirming the suitability of the proposed higher education facility being established here unequivocally.

### 6.3 POLICY IMPERATIVES

Before the new democracy townplanning decisions were for the most part regulatory in nature, a system which had subsequently been replaced by a normative approach. The new approach finds traction in a suite of legislation and associated policies serving to direct applicants and decision-makers towards the desirable outcome. The desired outcome is people-centred with almost exclusive focus on improving the lives of the previously disadvantaged – especially that of the poor and vulnerable.

Most of these normative guidelines have been discussed in Section 7 *infra* from which the essence of the present subsection was derived.

#### 6.3.1 SPLUMA directives

Section 42(1)(c) of SPLUMA determines the following:

- "In considering and deciding an application a Municipal Planning Tribunal must –*
- (a) ...*
  - (b) ...*
  - (c) take into account –*
    - (i) the public interest;*
    - (ii) the constitutional transformation imperatives and the related duties of the state;*
    - (iii) the facts and circumstances relevant to the application;*
    - (iv) the respective rights and obligations of all those affected;*
    - (v) the state and impact of engineering services, social infrastructure and open space requirements; and*
    - (vi) any factors that may be prescribed, including timeframes for making decisions."*

With regards to Section 42(1)(a) and (b) as well as (c)(iii), (v) and (vi) these have been discussed in detail elsewhere in the memorandum and are not repeated here. Each of the remaining requirements are henceforth discussed below to assist the CTMM decision-makers with the township decision.

### 6.3.2 Public interest

The matter of public interest relates strongly to the SPLUMA Development Principles and the Norms and Standards discussed in Section 7, Paras 7.3.1 and 7.3.2 *infra*. It is important to view the present discussion in this context. We nevertheless wish to hereby highlight the following pertinent contributions which the proposed higher education institution can be expected to make in public interest:

- \* Provide the opportunity for young adults to improve their knowledge and skills which will enable them to participate more fully and add value on a variety of levels in society.
- \* Equip young individuals with appropriate skills sets to enable them to find employment in business or government, in a labour market presently characterized by "structural unemployment". The mismatch between the requirements of jobs on offer and qualifications of job-seekers in the market place is huge and is the cause of so many individuals between the ages of 17/18 and 34 being unemployed.
- \* Tertiary education graduates find employment readily after successfully finalizing their studies, which is usually the case where the higher education institution is attuned to market requirements. In the case under consideration this will definitely be the case. As employed members of society they then participate actively in growing the economy and developing society in tandem.
- \* A sizeable proportion of graduates with entrepreneurial inclination proceed to start their own business in due course. This not only serves to diversify the economy (most often in favour of a technology based economy) but also to create new employment opportunities.
- \* Further studies at the higher education institution will see to graduates landing decent / quality jobs of a sustainable nature. This is partly because of the particular skills set requirement but also because of less competition for the same job due to the structural unemployment phenomenon.
- \* Increased employability of the young individual pursuant to a tertiary education will lead to a more secure and higher income than would otherwise be the case, leading to higher welfare levels and thus a better quality of life.
- \* Tertiary education will also lead to upward social mobility of graduate families in society and associated increased levels of social inclusion and integration.
- \* Several policy documents suggest that increased / enhanced / improved health and education of the population would make a mammoth contribution to socio-economic growth and development of the country.
- \* Students are taught or led to discovery of critical thinking, setting them apart from the lay-person without this opportunity / advantage. This social skill gained through tertiary education equips the graduate with confidence in addition to

knowledge gained to participate constructively in all facets of life and living with a legitimate expectation to make a positive difference.

- \* Social development at higher education institutions find expression in *inter alia* participation in sports, cultural / social clubs, associations and more which in the end serve to produce a more well-rounded / balanced individual with vastly enhanced probability of social inclusion, integration and excellence following attendance of a higher education facility. The proposed higher education institution has made provision for all of these opportunities, of which participation in sports in its exceptional facilities being planned deserves mention.

Thus investing in opportunities for young individuals to capitalize on themselves, is a sound strategy to serve the public interest. The proposed higher education institution on the subject properties represents just such an opportunity.

Other ways in which the public interest would be served by the proposed new higher education institution include the following:

- \* Investment in a highly prestigious project alongside other acclaimed tertiary education and research and technological innovation institutions to strengthen Tshwane's position as educational heartland of the Province and as the Capital City of the country.
- \* The new higher education institution will serve to create various new employment opportunities, ranging from highly skilled managers / registrars to semi-skilled and low / no-skill opportunities. The Market Study report by Demacon confirms in this regard that around 2 400 employment opportunities would be created by the new higher education institution during the construction phase and a further ±1 180 during the operational phase of the project. (p150)
- \* It is foreseen that the new higher education institution would *ceteris paribus* contribute to the strengthening of the property market in its direct vicinity, especially with regards to those properties inside the urban edge. As confirmed in the Demacon Market Study this is a phenomenon experienced worldwide where new universities or satellite campuses of same have been established in "greenfields" context.
- \* With the environment being regarded as a "public good" despite it being situated on private property, the proposed new higher education institution is foreseen to make an exceptionally valuable contribution to the public interest by assuming custody of its wellbeing and management through *inter alia* an official EMP for the site in perpetuity. The applicant contends that there are few other institutions better qualified / suited to undertake this all-important public service prudently and sustainably for future generations.

### 6.3.3 Constitutional transformation imperatives

In compliance with Section 42(1)(c)(ii) of SPLUMA cognizance should be taken of the so-called constitutional transformation imperatives to be derived from land development applications.

- In essence the future planning policies and plans discussed Section 7 *infra*, have a recurring theme in common, being the plight of the poor and vulnerable and the pressing need for socio-economic upliftment of previously disadvantaged families and communities. The dire need for improved living conditions and a better quality of life forms a golden thread throughout these.
- The heart of the problem lies in the three enormous challenges today facing society, namely unemployment, poverty and inequality, with concomitant inadequacies of human dignity, freedom of movement and association, safety / security, health and more.
- Although the term 'transformation' is nowhere to be found in the Constitution, the Constitutional Court has coined the phrase 'constitutional transformation imperatives' to deal with the Bill of Rights issues, to *inter alia* heal divisions of the past, enhance social justice, weed out unfair discrimination and redress imbalances of the past.
- Constitutional transformation imperatives find application mostly in the public sector and bigger private business concerns where e.g. affirmative action policies have been devised to increase owner / employee representivity in line with the race and gender composition of the population. It thus essentially relates to more black ownership and more efforts towards employment equity.
- The on-going dire circumstances of the majority of the population have in recent times led to a call for so-called radical transformation which has created the public perception that everything "white and / or colonial" should be replaced by "black and indigenous", currently serving to increase socio-political tension and divisions.
- In the People's Guide to the 2017 Budget, the National Treasury on radical economic transformation for inclusive growth however stated the following:

*"The alternative to raising taxes is faster economic growth. This will require economic transformation. Government's objective is to transform the economy, not simply transfer ownership or hand out tenders. Transformation must aim to **build a new economic momentum, mobilize new investments, create new jobs and create new resources to support social change.**"*(p1) (own emphasis).

- Unfortunately redress through representivity has in many public bodies and parastatals led to a reduction in efficiency and effective service delivery, as evident from a multitude of dysfunctional municipalities today countrywide. This state of affairs is in stark contrast to the Constitutional role of municipalities

which should be that of developmental agencies in pursuance of growth and development.

- Economic growth and development is seen as the ultimate prerequisite for socio-economic transformation, i.e. the catalyst to propel transformation into an achievable goal to culminate in job and income creation, enhance dignity / pride, increased welfare and a better quality of life for all.
- The applicant has in Para 6.3.2 *supra*, based on a wealth of supporting future planning and development policies, demonstrated the most valuable link between the proposed higher education facility and socio-economic growth and development. Socio-economic growth and development will be the facilitator of increased social inclusion and integration as well as higher economic growth as measured in GDP with concomitant positive effect in terms of the reduction in unemployment and poverty levels and an increase in welfare and quality of life.

#### **6.3.4 Rights and obligations of affected parties**

- \* First and foremost is the right of the land development applicant to due process and consideration of the application in terms of existing statutory provisions of the relevant townplanning legislation and policies. In this regard the applicant contends that it has discharged its responsibility to prove the merit of the development proposal in the selected locality unequivocally and decisively.
- \* The rights of parties potentially affected by the land development proposal will be honoured by affording them the opportunity to participate in the decision-making process as interested and / or affected parties. This is usually done by registering an objection during the public participation phase of the application process, followed by pro-active engagement between the parties to endeavor finding common ground.
- \* Furthermore has the "duties of state" (which include municipalities) been well documented in various pieces of townplanning legislation, including in the Development Principles of Section 7 of SPLUMA. These are not repeated here, save for the reminder that the CTMM is obliged to factor into the decision-making equation the vast benefit of the proposed new higher education facility towards the transformation agenda of government through economic growth advantages for the local economy and social advancement of graduates.

#### **6.3.5 Object of Bylaw**

- \* The object of the City of Tshwane Land Use Management Bylaw, 2016 as part of a uniform approach to municipal planning is to act as instrument *inter alia* –
 

*"...to maintain economic unity, equal opportunity, equal access to government services and to promote social and economic inclusion"*
- \* Also relevant is the Land Use Scheme as a practical tool to give effect to the Vision of the City as contained in the Municipal Spatial Development Framework and its constituent Regionalized Municipal Spatial Development Frameworks

through appropriate land development applications as guided / directed by the Bylaw. In this regard Section 9(1)(b) of the Bylaw describes the purpose of the Land Use Scheme (in this instance the Tshwane Town Planning Scheme, 2008 (Revised 2014)) and the outcomes of a land development application in terms thereof and / or to amend the Scheme, as follows:

*"(1)... provided that:*

*(a) ...*

*(b) The Municipality utilizes the process to ensure municipal planning finds applicability in development that is co-ordinated and harmonious in such a way as to most effectively tend to promote the health, safety, good order, amenity, convenience and general welfare of the area in which the scheme is proposed as well as efficiency and economy in the process of such development" (pp 26,27).*

The applicant has gone to great lengths to prove compliance with the object and principles of the Bylaw, these which to a large degree derive from and coincide with *inter alia* the SPLUMA development principles, transformation imperatives and the Development Guidelines of the RMSDF. The following explanation serves to elucidate.

- \* *Economic unity, equal opportunity, equal access to government services and to promote social and economic inclusion.*

It is the role and function of the CTMM to maintain economic unity and ensure equal access to government services. The applicant has furthermore alluded to the occurrence at public universities where preference is given to members of previously disadvantaged communities to access specialized courses with limited capacity in terms of student numbers.

With regards to social and economic inclusion the applicant has demonstrated elsewhere in the memorandum the exceptional contribution the product / outcomes of the proposed higher education facility can be expected to make to socio-economic growth and development with concomitant advantages of increased welfare and quality of life for all. This application therefore complies with the object of the Bylaw in this regard.

- \* The applicant has furthermore demonstrated compliance with all of the following criteria with special reference to the discussion of the planning and design criteria of the RMSDF and the Urban Design Report included hereto as annexure:
  - Co-ordinated and harmonious development: Suitability of the proposed development in this particular locality in relation to surrounding land-use activities – current and future.
  - Principle of a healthy environment through introduction of a compatible development typology properly planned to be developed guided by official



norms and standards. The proposed use is clean, with no noise or air pollution and to a large degree NMT-based in respect of on-site movement / circulation, with concomitant reduction in emission of greenhouse gases.

- Safety of future patrons to the facility and dormitory inhabitants will be ensured by adoption of CPTED-principles for the township and patrons will furthermore not be a threat to the safety of the surrounding community of which it will ultimately form an integral part.
- The balance of the prevailing good order will not be disturbed. The proposed development complex will contain a self-sufficient 'community' within the surrounding community, yet with certain integrative factors like recreation, shopping, worshipping, etc. together.
- Likewise will the prevailing amenity of the area not be adversely affected. The new development will *inter alia* contribute to an enhanced urban environment through infrastructure improvement (e.g. road upgrades, street lighting). The buildings and other structures will furthermore be architect's designed and the site and sidewalk areas landscaped and maintained, making a huge contribution to the amenity and sense of place of the area in process of transition from rural residential to urban in form and function.
- Convenience relates amongst others to proximity to other urban facilities like places of public worship, education institutions, parks, shopping facilities and more. This has been discussed in more detail elsewhere in the memorandum.
- The proven desirability and sustainability of the development proposal in various sections / sub-sections of the memorandum prove unequivocally the nett contribution of same to the general welfare of the area.
- Efficiency and economy are two requirements which private sector developments automatically strive for, in pursuance of the profit motive at the base of our capitalistic system. Whereas the developer will in this regard strive to minimize inefficiency to maximize economy, it is the municipality's role to optimize the end-result of the development in favour of the general wellbeing and proper functioning of the surrounding community. This process plays itself out in *inter alia* the negotiations and conclusions of engineering services agreements between the CTMM and the developer.

## **6.4 STATE AND IMPACT OF ENGINEERING SERVICES**

### **6.4.1 Spatial efficiency and sustainability**

#### **(1) Official goals and guidelines**

The global movement to accelerated transitioning towards a low carbon or green economy has in recent months gained exponential momentum, with increased focus on the reduction of greenhouse emissions and adoption of environmentally sustainable solutions to the ever increasing demand by consumers in especially metropolitan cities worldwide. There is a vast body of knowledge in support of this movement proving the urgency of finding non-conventional engineering

service provision solutions to satisfy the needs of families and business in a sustainable way.

Although corporate innovation and technological advancement are generally viewed as the backbone of this sustainability drive (where the proposed new tertiary education facility is expected to make a valuable contribution), it is on grassroots level with the implementation of projects like the one here under consideration that the transitioning to a green economy finds practical value.

The Gauteng Provincial Government places huge emphasis on environmental sustainability principles to move the transformation agenda forward efficiently and expeditiously, the success of which is dependent on same, as evident from the following extract from the Gauteng Employment Growth and Development Strategy, 2009 (GEGDS):

*"The extent to which the green economy and the sustainable utilization of natural resources can be entrenched by promoting the use of **more energy efficient methods, managing the demand for energy and water, reducing waste** and reducing carbon emissions in the provincial economy"(p11) (own emphasis)*

With regards to water as a scarce resource, the GEGDS emphatically reiterates this policy imperative as follows:

*".. there is a need to look at **better management of water resources, and the minimisation of biological and chemical pollution of water resources. Failure to address the water suppliers and the management and treatment of waste, will affect the cost of living in the province by 2025 as well as the health and well-being of the people in the province"***(p27) (own emphasis)

The RMSDF similarly promotes sustainable developments with least impact on climate change (i.e. maximum reduction of carbon footprint towards the ultimate goal of an "eco-city") (pp 67, 68). The following excerpt serves to elucidate:

*"A sustainable city, or eco-city... is a city designed with consideration of environmental impact. These cities are inhabited by people who are dedicated to minimizing required inputs of energy, water, food, waste, output of heat, air pollution... and water pollution."*(p68)

The applicant indeed comprises individuals dedicated to these goals of the City, especially with regards to water and waste management, as will become evident from further discussions later in this section of the memorandum.

The RMSDF explains further, as follows:

*"Spatial sustainability means **sustainable patterns of consumption and production should be supported and ways of living promoted that do not damage the natural environment.** It is important to keep awareness of future impact of climate change in existing and future policies and plans of the City"* (p68) (own emphasis)

The applicant contends that the development proposal indeed -

- \* would see to environmentally sustainable consumption and production patterns in the operations of the education facility; and
- \* the proposed engineering solutions would make a valuable contribution to the prevention of harm to the environment.

The RMSDF furthermore lays down "some common principles" for the practical achievement of such spatial sustainability (pp 68, 69). These include the following:

- i. Promote the use of green energy, buildings and infrastructure  
*"The municipality will become more resource-efficient, with low emissions, zero waste and conservation of agricultural land. All green and blue spaces will be harnessed for the provision of ecosystem services. **Waste will be properly and almost fully recycled. The principle of sustainable urban drainage systems that ensures that water is captured and re-used must be practiced throughout the region.**"* (p68) (own emphasis)
- ii. Promote energy conservation in buildings
- iii. Promote the reduction of waste, and recycling on site level.  
*"Developments should take recycling into account at the design phase and provide for adequate space on site"* (p68)
- iv. Promote alternative transportation and non-motorised transport.
- v. Promote urban forestry and urban agriculture
- vi. Promote water conservation and water harvesting.  
*"Water harvesting and storage will become more relevant to individual households and communities in future. Building designs will have to incorporate water harvesting and storage in order to address food and water scarcity. **Design for the recycling of grey water and rain water"*** (p69) (own emphasis)

Synthesis: Official goals and guidelines: The relevance and importance of these policy directives relate to the foundational principles for sustainable provision of infrastructural services in the region as a whole, and to individual projects in the City. It is no secret that municipalities countrywide are struggling to provide engineering services to the growing population, necessitating the movement

away from conventional methods and archaic practices, towards more dynamic and sustainable solutions which include *inter alia* –

- \* Water harvesting and recycling
- \* Waste reduction and recycling
- \* Stormwater attenuation for groundwater recharge
- \* Energy reduction and substitution by e.g. solar and wind solutions

The movement toward sustainable infrastructure solutions will require a cognitive and deliberate mind shift by service delivery authorities to:-

- \* realize and accept the absolute necessity for private sector involvement in the provision of infrastructural services; and
- \* accept non-conventional solutions for service provision and delivery serving the sustainability goals of the Municipality as communicated above.

In this regard there appears to be an unfortunate disconnect between the engineering services departments and the environmental management department of the City which serves to result in *inter alia* unnecessarily stringent and expensive engineering services requirements, often leading to the demise of development projects which could otherwise contribute to the reduction of unemployment, poverty and inequality if the engineering services stumble-blocks could be overcome.

#### (2) Project contribution

As evident from the discussion to follow, the contribution of the project to achievement of the policy directives with regards to sustainable servicing is substantial. It is on the township establishment level especially noticeable in refuse, sewerage and water delivery.

### **6.4.2 Water and sanitation**

#### (1) Specialist reports

The discussion in this subsection represents a synopsis of relevant information gleaned from various specialist reports, including the following:

- \* Civil Engineering Services Report for the township prepared by messrs D G Consulting Engineers.
- \* Water Reticulation System Report by Sewtreat
- \* A municipal water availability report prepared by messrs GLS Consulting Engineers.

#### (2) Water demand

Based on an envisaged capacity of 1 500 students residing on-site (Erf 153) and 2 500 students on campus attending classes (Erf 152) (comprising 1 750 day-students and 750 hostel students) on any weekday, as well as staff accommodation for 10 employees and overnight guest accommodation for up to 40 people in 20 double suites the project civil engineers messrs D G Consulting

calculated the total demand for water to be 573 kilolitres per day, which gives rise to a -

- \* peak demand of 30,51 litres per second; and
- \* fire-flow demand of 50 litres per second.

The demand for water in the proposed development will be satisfied by means of a combination of Municipal and recycled purified sewer sources. These are discussed in more detail below.

(3) Municipal water

The development site has a 160mm diameter water connection to the bulk municipal reticulation system, the latter which comprises a 315mm diameter bulk supply line traversing the area immediately north of Portions 287 and 296 (northern part of development site). The 315mm diameter line feeds off a 500mm diameter bulk Rand Water connection northwestwards.

This bulk water infrastructure system serving *inter alia* the nearby Waterlake Farm Residential Estate east / southeastwards was originally championed by a private consortium of prospective property developers and after successful implementation transferred to the CTMM for *inter alia* maintenance purposes. The applicant was at the time a member of the consortium who contributed financially to the planning / design / implementation of this bulk water system thereby earning the right to now rely on same as integral component of its "water provision plan" for potable water for human consumption.

(4) Recycled sewer water

Commensurate with the sustainability principle directives of the RMSDF detailed in Para 6.4.1 *supra* the applicant envisages servicing a major part of the overall water demand for the higher education facility from recycled grey water. The capture, purification, storage, and use of the recycled water form the focus of the Sewtreat Water Reticulation System Report for the project attached to the civil engineering services report (Annexure 'M').

(5) Sewerage treatment plant

As confirmed in the civil engineering services report by messrs D G Consulting Engineers a sewerage treatment plant will be implemented on Portion 293, to accept and treat sewerage effluent generated in the township development. The principle had been tested with the CTMM Sanitation Division of the Water and Sanitation Department and found favour with the relevant official. The CTMM agreed to this proposal due to its nearest bulk sewer lines being almost 10 km distanced from the development site.

The treatment plant will be appropriately sized to accommodate the following effluent flows as calculated by the project civil engineers for the envisaged capacity of the township:

- \* Total load : 573 kl/day (6.63 l/s)

- \* Peak outflow : 16,57 l/s

(6) Identification and positioning of infrastructure

The new infrastructure facilities for the township to provide in its water and sanitation requirements include *inter alia* the following:

- \* Sewerage treatment plant
- \* Grey water retention pond
- \* Pipeline reticulation system

The first two components will be located in an appropriately-sized designated area at a low point on proposed Erf 152 immediately south of the Steekriet Spruit, outside the 1:100 year flood-line and the 32 metre environmental buffer, and to the west of the entrance route to the south-lying facilities. The designated area will be protected by a private infrastructure works and solid waste recycling servitude to be registered against Erf 152 in favour of Erf 153 to secure access and use by activities on the latter of these support-installations.

The pipeline reticulation system will traverse the development site along predetermined routes / alignments to / from all strategic connectors as depicted on the accompanying Map of Servitudes for engineering services reticulation (overleaf).

[FIGURE 7 : MAP OF SERVITUDES]

A further element of the new infrastructure requirements for the township to provide water and sanitation services to the proposed new higher education institution entails a water treatment plant, including storage facilities. The constituent components of the water treatment plant comprise the following:

- \* Private reservoir for storage of municipal water (1,2 ML with AADD storage capacity of 48 hours).
- \* Private reservoir for storage of purified / treated water (2,4 ML with AADD storage capacity of 72 hours, plus fire water)
- \* Related water treatment / purification plant infrastructure (e.g. special purpose holding & buffer tanks, filtration pumps and tank, backwash water storage tank, booster pumps, etc.)
- \* Control room
- \* Pipeline reticulation system.

Save for the pipeline reticulation system, these infrastructure components will all be located off-site, outside the confines of the proposed Zwavelpoort Extension 15. It will as such be positioned on the adjacent Portion 293 of the farm Mooiplaats 367-JR ("Portion 293") to the south / southwest of the southern-most corner of Erf 152 of the township. It should be noted that a separate application for rezoning of the particular part of Portion 293 affected by the positioning of these infrastructural components has been prepared to be considered by the CTMM concurrent with the township application.

The proposed positioning off-site is necessitated by pressure gradient challenges for water supply, which can be resolved by locating the water reservoirs on a sufficiently elevated position to resolve the water pressure issues satisfactorily. The calculations in this regards by the project engineer have served to inform the locality choice for the water reservoirs as discussed.

The pipeline reticulation system will be traversing particular parts of both Portions 292 and 293 of the farm Mooiplaats 367-JR outside the township along predetermined routes to be protected by servitudes. Also along particular predetermined route alignments within the township, protected by appropriate servitudes (as required).

(7) Water usage

Municipal water will be pumped on site from the entrance near the northern boundary of Erf 152 where a single Municipal water connection to the township will be provided in the road-serve of the new public access road to be constructed to the township from Rooireier Road (D631), to the 1,2 ML private reservoir on Portion 293, as discussed above.

The recycled water from the waste water treatment plant will, after having gone through the purification process, be accommodated in the 2,4 ML private reservoir on Portion 293.

Some of the water in the grey water retention pond (i.e. part of the waste water treatment facility) on the northern parts of Erf 152 will be utilized for irrigation purposes – notably irrigation of the sports fields as well as the agricultural pursuits on the experimental farm to be established on the northern-most parts of Erf 152 in the township. The balance will be pumped to the water purification plant on Portion 293 for treatment purposes.

The idea is then to utilize the treated potable water as main source to service the educational campus, with the municipal water only used to “top up” shortages from recycling. The project civil engineer confirms that around 70 percent of all sewerage generated will be purified and transformed to potable water.

(8) Water use authorization

The matter of water use authorization requirements by Department of Water and Sanitation in terms of the National Water Act, 1998 (Act 36 of 1998) is being addressed in the parallel environmental authorization process by Mesdames Bokamoso Environmental Consultants, in as far as it may be applicable to the water and sanitation recycling process and consequent utilization of the water in the proposed new project.

(9) Synthesis

As evident from the information on water and sanitation discussed above, the project can indeed be sustainably serviced.

### 6.4.3 Roads and stormwater

#### (1) Specialist reports

The discussion in this subsection relies on information gleaned from the following two specialist reports:

- \* The traffic impact assessment report (TIA) by Techworld Consulting Engineers; and
- \* The civil engineering services report by D G Consulting Engineers, including a stormwater management report.

[ANNEXURE 'M' : CIVIL SERVICES AND STORMWATER MANAGEMENT REPORT]

The TIA and all its facets have been discussed in detail in Para 6.9 *infra* and reference here pertain only to the recommended road improvements in relation to the requirement for payment of bulk service contributions.

#### (2) Roads

The civil engineering services report provides a brief synopsis of the required road improvements pursuant to the TIA for the project. These include the following:

- \* Implementation of the new public access road to be known as Kampus Boulevard between Boschkop Road and Erf 152 in the township in accordance with both Provincial and Municipal requirements and standards;
- \* Implementation of a new signalized intersection (i.e. installation of traffic lights / robot) with exclusive right-turn lanes on all four approaches as well as a shared left-turn slip-lane on the southern approach to establish a new intersection on Boschkop Road at the planned access road to the new campus position.
- \* Implementation of right-turn lanes on all approaches and a left-turn slip-lane on the western approach, as well as the signalisation (i.e. installation of traffic signals / robot) of the Boschkop Road / Graham Road intersection northwestwards; and
- \* Implementation of a "butterfly" road intersection with exclusive turning lanes on the northern and eastern approaches at the Boschkop Road / Road D223 intersection northeastwards.
- \* Implementation of two public transport embayments (one on each side of Boschkop Road) downstream from the new traffic lights at the yet to be constructed new access road to the proposed township on Boschkop Road.

The estimated costs for these road upgrades have been calculated and included in the civil engineering services report, which add up to around R28,8 million (excl VAT). The report furthermore confirms that boundary road contributions



will furthermore be payable on the future public road along a certain section of the eastern boundary of Erf 152 in the township.

The project engineers did not calculate the bulk service contributions that will be payable on roads and indicate that these calculations will be conducted by the CTMM in accordance with its latest policy for same. In practice, after approval of the township the applicant will enter into negotiations with the CTMM Roads Department to determine which of the required road improvements costs can be off-set against the bulk service contributions payable to the City.

(3) Stormwater

The civil engineering services report describes the stormwater discharge methods for a major and minor stormwater drainage event as follows:

\* "Major Stormwater System

*The major storm flow will surface discharge into Steekriet spruit situated on the northern boundary of the proposed development, as well as a sheet flow over the portion along the eastern boundary of the township. No concentrated stormwater will be discharged onto any of the neighbouring properties."*

\* "Minor Stormwater System

*New field inlet connections will be constructed to convey the minor 1:2 RI storm discharging into the open field areas. Erosion protection measures such as gabion mattresses and energy dissipaters will be implemented to prevent any erosion on these discharge points. Earth shaped berms will also be constructed to divert stormwater runoff around buildings, instead of implementing sub surface conduit systems."*

A detailed Stormwater Management Report has been prepared for the proposed development, incorporated as an annexure to the civil engineering services report by D G Consulting Engineers. The report confirms the above information and concludes that no stormwater attenuation dams would be required. The report is informed by various drawings of *inter alia* the different catchment areas considered and a geographical presentation of the discharge solutions being proposed. (For more detailed information refer Annexure 'M').

The estimated costs to provide the township with these solutions amount to R1,53 million (excl VAT). None of the stormwater components will be handed over to the CTMM. It will remain a private service to be maintained by the future higher education institution on the premises.

[ANNEXURE 'N' : FLOODLINE ASSESSMENT REPORT]

#### 6.4.4 Refuse removal

##### (1) Service provider

Although located in the municipal area of the City of Tshwane Metropolitan Municipality where the latter renders refuse removal and disposal services to its rates payers, the latter would presumably not be in a position to render this service to the applicant sustainably due to *inter alia* the distance from other similarly serviced rate payers in the localized service delivery area. The applicant has therefore opted for a private service delivery agent, duly licenced / registered with the relevant authorities and renowned for its passion for reduction in waste, recycling and re-use. One such service provider with a proven track record is The Waste Group, which has upon request provided the applicant with an Integrated Waste Management Plan ("IWMP") dated April 2021.

[ANNEXURE 'O' : INTEGRATED WASTE MANAGEMENT PLAN]

##### (2) On-site facility

Provision has been made on the northern-most parts of Erf 152 for a dedicated area for solid waste storage and compaction, and sorting for recycling. The dedicated area will also accommodate the waste water purification plant or sewerage treatment plant and its associated grey water retention pond. An area thus set aside for private infrastructure and waste storage / recycling purposes. A servitude over this area against Erf 152 in favour of Erf 153 will ensure access to same by all components of the future higher education institution campus.

##### (3) Registration and licencing

Confirmation of the registration of the service provider at the Companies and Intellectual Property Commission ("CIPC") is found in the certificate issued by the latter on 18 July 2012. The operating vehicle is a private company styled The Waste Group (Pty) Ltd (Registration No 1998/015079/07) registered more than two decades ago.

Also included as part of Annexure 'O' is the official proof or certificate of registration of its waste and landfill sites, and registration of The Waste Group as waste transporter of general and hazardous materials.

The Waste Group is a Top 500 Company with decades of appropriate experience, employing state-of-the-art technologies to ensure effective and quality waste management services to its clients. The company is legally compliant in all respects with regards to *inter alia* its transport and disposal facilities and its operations in general.

##### (4) Environmental sustainability

The Waste Group appears to be highly attuned to the governmental policy directives of the better and more efficient management and treatment of waste, towards better health and wellbeing of people in support of spatial / environmental sustainability and efficiency of the province and city (refer Para

6.4.1 (1) *supra*). This is evident from the following statement gleaned from its IWMP submitted to the applicant for consideration (refer Annexure 'O'):

*"The Waste Group is committed to a clean, healthy environment. We provide our Clients with a safe, reliable environmentally friendly and responsible solution to the waste and recycling management activities. The Waste Group fully complies with the requirements of the NEMWA, and strives to continuously improve the effectiveness of our environmental management methodology"* (preamble to IWMP report).

(5) Service delivery proposal

Some of the salient features of the private service delivery proposal under consideration include the following:

- \* Non-recyclable waste will be removed from site on a fixed schedule and disposed of at the company's licenced / registered Bon-Accord landfill facility. The frequency of service will be determined by the volume of waste generated and the concomitant need for removal.
- \* Medical waste to be collected on demand and transported in an enclosed vehicle with recommended incineration at least once a month at a dedicated specialist facility.
- \* Fat traps to be emptied on demand, but at least once a month by specialized vehicle and discharged at the Rooiwal water treatment facility.
- \* Recyclable refuse to be separated by client on site (Erf 152) will be collected, transported, treated and disposed of at one of the company's registered / licenced recycling facilities or landfill site.

The service will be tailored through hands-on management to ensure an efficient, continuous and uninterrupted service flow which will ensure that the designated site on campus remains clean, hygienic and tidy at all times.

(6) Private *versus* municipal service delivery

The varied nature of anticipated waste streams as well as the specialized requirements for some of these, serve to favour the anticipated service delivery by a private contractor. The private sector is generally more responsive to particular needs of prospective clients and can tailor its waste management programme to the exact needs of clients which more often than not result in a better and more efficient service. This in turn enhances the environmental sustainability of the waste management solution in line with the policy directives / requirements of *inter alia* the RMSDF.

## 6.4.5 Electricity

(1) Service report

A specialist electricity service report has been prepared by the project electrical engineers messrs Geopower (Pty) Ltd to inform the present township application

for a higher education institution on the subject properties. The well constructed report contains a wealth of information on the way the township will be supplied with electricity and the sustainability of the particular method of supply. This information will not be repeated here, and for more information hereon and all other aspects of electrification of the erven in the township it is important to study the entire report.

[ANNEXURE 'P' : ELECTRICITY SERVICE REPORT]

(2) Service provider

The City of Tshwane Metropolitan Municipality is the licenced provider for electricity supply and distribution to the area, including the subject properties at the base of the township proposal. The CTMM will eventually take over the township electrical services once installed and tested.

(3) Electricity demand

At a zoned demand factor of 5 kVA / 100m<sup>2</sup> and 1,5 kVA per hostel room, the 31 000m<sup>2</sup> GFA for Erf 152 and the 1 500 student rooms for Erf 153 translate to a zoned demand of 1 550 kVA and 2 250 kVA for each erf respectively, together adding up to total zoned demand for the township of 3 800 kVA or 3,8 MVA.

At 13,8kVA per land-portion the seven land-portions on which the township is being established contribute to a credit of 96,9kVA, effectively reducing the electricity demand procurement to the township from 3 800 kVA to 3 703,4 kVA.

(4) Bulk supply of electricity

The electrical service report gives a comprehensive account, illuminated by a very insightful geographical representation in its Annexure C, of *inter alia* the existing and future electricity satellite switching and primary substations involved in the supply of bulk electricity to the proposed new township. The description includes the routes of the proposed connections with mention of the required servitudes to be facilitated for implementation of the envisaged facility network. This is quite an intricate system and the electrical engineering service report should be consulted for more details on same.

In brief, the supply to the township will be sourced from the Wapadrand Primary Substation *via* the Lombardy Satellite Switching Station until such time as the Mooiplaats Primary Substation has been implemented.

(5) Bulk service contributions

The project electrical engineers have calculated the estimated bulk electricity contribution that would be payable to the CTMM pursuant to the present application as being approximately R3,1 million based on current CTMM policy and tariffs. The amount of the bulk service contribution for electricity will for the most part be offset against the implementation costs of the external upgrades required to service the township sustainably, as will be negotiated with CTMM Energy and Electricity at the post-approval stage in an electrical service agreement to be entered into between the applicant and the CTMM.

**(6) Recommendation**

The electrical service report concludes with the following recommendation:

*"It is recommended that the proposed Zwavelpoort Extension 15 township be supported in terms of electricity as sufficient electricity supply capacity can be made available through the construction of the proposed external electricity services to serve this Township on a sustainable basis, initially from the Wapadrand primary substation and ultimately from the Mooiplaats primary substation, in both cases via the planned Zwavelpoort satellite switching station" (p18).*

**6.5 STATE AND IMPACT OF SOCIAL FACILITIES****6.5.1 Hierarchy of social facilities**

There exists a hierarchy of social facilities, also commonly referred to as public facilities, based on the sphere of influence it exerts in the spatial continuum around them. It therefore follows that each particular social facility requires a certain minimum population threshold to justify its existence in a particular locality or spatial context.

The proposed new higher education institution on the subject properties classifies as a high-order social facility due to its vast sphere of influence defined by the market area it serves. With the primary market area delineated as a 200 km radius around the development site and the secondary market area being the balance of South Africa, it is clear that its sphere of influence is wide, which can be ascribed to the required high population threshold to render it a viable educational entity (For more on the market area for same refer Para 5.2.3 *supra*).

Examples of other social facilities serving to provide a service to communities and society as a whole include universities, colleges, technikons, schools, child care facilities, old age homes, post offices, police stations, children's homes, various disability care facilities, specialized schools and more. While universities, technikons and other higher-order social facilities require a larger population threshold its sphere of influence is usually quite wide. The same goes for a specialized school catering for a particular infirmity (e.g. the hearing impaired) which will have a wide sphere of influence due to the limited number of hearing impaired individuals per 1 000 of the population.

Social facilities like schools (pre-school, primary and secondary), libraries, police stations, post offices (or similar) and the like are usually more community and neighbourhood bound, requiring a lower population threshold to render it viable. These social facilities all contribute to the livability concept of integrated human settlements and should be spatially distributed to be reached on foot within a guideline 20 minute walk or cycling (i.e. the "20 minute neighbourhood" concept).

**6.5.2 Surrounding social facilities**

The applicant has proceeded to map as many of the existing social infrastructure facilities it could identify in the surrounding vicinity. These for the most part occur west / northwestwards, closer to or within the urban fabric. The latter phenomenon

comes as no surprise since especially the lower and medium order social facilities tend to predominantly serve individuals, families, neighbourhoods and communities, and therefore demonstrate strong links with established residential neighbourhoods. As evident from the map there are especially several primary and secondary schools in the area, as well as religious centres. The schools will of course serve an important learner-supply function to the proposed new higher education facility on the subject properties.

[FIGURE 8 : DISTRIBUTION OF SOCIAL FACILITIES AROUND DEVELOPMENT SITE]

### 6.5.3 Impact of higher education facility

The development proposal on the subject properties does not entail a residential development where future inhabitants would exert an increased demand for social infrastructural facilities / services. It will as such not have any negative impact on the identified existing social facilities in the area.

The proposed new higher education institution in the particular locality will instead have a positive effect on especially secondary schools in the vicinity, as it will serve a forward linkage function where school leavers at the end of matric can continue their studies on tertiary educational level in the same "wider neighbourhood". It can therefore be concluded that the proposed new higher education institution would:-

- \* complement and expand the existing number of social facilities in the area.
- \* place little (or no) additional load on existing other social facilities in the area.
- \* not detract from the viability or sustainability of any existing social facility in its sphere of influence.
- \* contribute to the strengthening of the social facility contingent in a fast developing residential area with an eastward growing direction.

## 6.6 STATE AND IMPACT OF OPEN SPACE REQUIREMENTS

### 6.6.1 Open space review

Much attention has been awarded to the assessment and discussion of open space in other sections of the memorandum which should be read and considered in conjunction with the present subsection for a full comprehension. Especially important in this regard is-

- \* Para 7.13.3 : Environmental structuring concept; and
- \* Para 7.13.5 : Urban design considerations.

The importance of open space as land-use and its importance for contributing to a balanced urban environment where it plays a major role to enhance liveability and psychological well being of city dwellers is well documented in the Tshwane Open Space Framework, 2005 ("TOSF"), the concepts and principles of which have been taken forward by inclusion in *inter alia* the MSDF and the RMSDF for each region.

### 6.6.2 Role of open space in proposed development

The applicant has demonstrated in Para 7.13.3 *infra inter alia* that the proposed new higher education campus and the natural environment on site represent two sides of a coin, i.e. are inseparable and will have a mutually beneficial, reinforcing effect on each other. The development site has been identified exactly for this reason, namely that the proposed new higher education institution could be nestled into nature while not only enjoying the advantages of open space proximity and use, but simultaneously and proactively protecting and enhancing the open space asset for future generations.

It has furthermore been demonstrated how the development site inside the urban edge would link to the natural environment outside the urban edge in a structured and protective manner. The provisioning of open space on the proposed new academic campus is of paramount importance and has been acknowledged for that, and incorporated into the planning concept as such.

### 6.6.3 Hierarchy of open space

The proposed hierarchy of open space provisioning on the higher education campus site has been documented in the project architects' report titled Urban Design: Proposed Education Hub (refer Annexure 'H'), ranging from high-order sensitive environmental features with limited access to pedestrians / joggers / cyclists, to lower-order informal open space squares to be framed by future buildings, where students will interact socially and mingle as part of a "local community".

The following extract explains this in more detail:

*"Green, open space typologies and treatments support accessible, inclusive, and comfortable open space networks. The hub framework identifies the following types of green structures:*

- *Protected landscape; natural and untouched.*
- *Accessible wilderness: threshold areas where the natural and manmade landscapes meet and transition.*
- *Primary green structure: Formal structures framing processional movement routes and celebrated, axial, vista alignments.*
- *Secondary green structure: Spaces for leisure, rest, and comfort.*
- *Village green: formally edged and landscaped spaces for gathering and movement.*
- *Spill-out spaces: landscaped pocket parks and gardens located adjacent to primary movement routes in between buildings.*
- *Courtyards: shape the most private of open space typologies within the network of open spaces"*(p13).

The more structured open space components in proximity of and linking the different development precincts and buildings on site, will only be formalized later, at time of the detailed planning for the development project in the form of the Site Development Plan (SDP).

#### **6.6.4 Protection and conservation**

The higher education institution will in the end have full control over the utilization of all open space elements in the township. The statutory instrument of control will be an approved Environmental Management Plan ("EMP"). The campus site will furthermore not be open for random access by outsiders not attuned to the sensitivities of the environment and other such cultural amenities sensitive to high frequency visitations and misuse.

#### **6.6.5 Synthesis: Impact**

The development proposal has been designed to see to the reinforcement of the City's open space concept in a noticeable way. The open space structuring concept as policy directive in the RMSDF will be reinforced and strengthened beyond the normal requirement of conventional similar development elsewhere.

Furthermore will the proposed new higher education facility on the subject properties have no negative impact on open space facilities or functions outside the township. The campus will in this regard be self-sustaining with a varied range of open space uses available to patrons to the premises.

### **6.7 GEOLOGICAL CONDITIONS**

Messrs Geo Buro Geotechnical Surveys were appointed to conduct a geological investigation on the subject properties. The findings on the properties have been compiled into a Geology Report titled:

*"Portions 287 to 291, 295 and 296 of the farm Mooiplaats 367-JR – Geotechnical Investigation"* dated March 2021.

This report is based on a previous report by messrs Louis Kruger Geotechnics cc prepared in February 2008.

Some of the salient features and findings of the report are as follows:

- 48 test pits were excavated at certain positions over the development site and the soil was scientifically tested for its suitability for township establishment for the envisaged purposes. The test pit positions were selected to ensure that the results of the investigation would be representative of the entire site.
- The site is underlain by diabase (dolerite) with shale intrusions from the Silverton Formation of the Pretoria Group of the Transvaal Super Group, as well as a southwest / northeast striking syenite dyke. The soil profiles across the development site consist of colluvium or hillwash to a depth of between 0,6m and 1,6m before the diabase or shale is encountered. This means that excavations on site will be quite difficult with such a shallow soil profile but the sidewalls of excavations will remain fairly stable unsupported.
- Although no groundwater was found, a shallow perched water table can be expected during and after high rainfall occurrences. This is proven by the presence



of ferricrete in the soil profiles taken, and also the shallow bedrock found on the development site.

- The soil tests confirmed that there is a heave potential of less than 30mm due to the liquid limits, plasticity indices and linear shrinkage results being quite high.
- The excavated soil will not be suitable for road construction due to the high fine clay and silt material content. Furthermore, the bearing capacity of the near-surface materials will be less than 80kPa and the soft rock diabase and shale will have a bearing capacity of more than 400kPa.
- The soil was classified as follows in terms of the NHBRC specifications and requirements:

<b>Zone</b>	<b>NHBRC Class</b>
A	H3/P (Perched water table)
B	H2-H3/P (Perched water table)
C	H2-H3/R/P (Perched water table, steep slopes)
D	H2/P (Perched water table)
E	P (Flood line)

The above zones have been demarcated and shown on the township layout plan.

- The report recommends that a more detailed zonation be done once construction for the installation of services commences.
- The potential for heave of near-surface materials require appropriate engineering solutions for the foundations of buildings, including soil raft, stiffened strip footings, stiffened or cellular raft, or a combination of deep strip foundations and compaction underneath. Further recommendations are made with regards to mitigation measures to protect engineering services and above-ground structures.
- The engineering geologist has superimposed the draft site plan (which served to inform the township layout proposal) over the NHBRC Zonation Plan and made the following findings:

*"It is concluded that the site is suitable for the proposed use i.e. tertiary education facility with associated uses, including residential facilities (student accommodation / hostels) of up to 2 to 3 storeys on erf 152 and 153 respectively.*

*The proposed township of Zwavelpoort Extension 15 as indicated on the J Paul van Wyk Township Plan is supported.*

*The layout plan (Site Development Plan) as indicated on drawing number 9769-04: Zonation Plan is supported" (p12)*

[ANNEXURE 'Q' : GEOLOGICAL INVESTIGATION REPORT]

## **6.8 ROAD PLANNING, ACCESS AND TRAFFIC IMPACT**

### **6.8.1 Specialist report**

Messrs Techworld Consulting Engineers undertook a traffic impact assessment (TIA) for the envisaged higher education institution on the subject properties, the findings of which were published in July 2021.

[ANNEXURE 'R' : TRAFFIC IMPACT ASSESSMENT]

The TIA report forms an integral part of the application documentation serving to prove the merit of the proposed development project on the subject properties and should be read and considered in its entirety for this purpose.

The study served to address not only the physical impact and mitigation measures on the surrounding public road network, but also the all-important aspect of access to same, future road planning in the area as well as on-site parking requirements for the proposed higher education institution. The matter of public transport and associated pedestrian facilities were also investigated and reported on. The discussion in the balance of this subsection of the memorandum is for the most part based on information gleaned from the Techworld TIA for the project.

### **6.8.2 Access**

Access by the envisaged higher education facility to the surrounding public road network will be facilitated by means of a new public access road to be constructed between Boschkop Road (D631) and Erf 152 in the township under application to be known as Kampus Boulevard. The exact position of the access on Boschkop Road coincides with that of a similar access approval granted by the Gauteng Department of Roads and Transport (GDRT) in 2008 for a previous land development application on the subject properties which, although approved at the time, was never implemented. The position was again canvassed with GDRT for the present application with no opposition raised at the time. The GDRT approved the proposed access position formally in a letter dated June 2021 included in the TIA (refer Annexure 'R').

The position of the access on Boschkop Road requires the access road to the township to traverse the adjacent Portion 356 of the farm Mooiplaats 367-JR ("Portion 356"). The applicant has therefore negotiated with the owner of Portion 356 and agreed to the registration of an appropriately configured right-of-way servitude over his property in favour of the general public. The servitude, extending to 4 604m<sup>2</sup> as depicted on Servitude Diagram SG No. 2215/2020, was approved by the Surveyor General on 11 November 2020 and will be registered at the Deeds Office at time of opening the Township Register for the proposed Zwavelpoort Extension 15. A copy of the servitude agreement has been, together with the approved Servitude Diagram, appended hereto as Annexure 'H'.

The applicant will be responsible for the construction of the public access road between Boschkop Road and the higher education facility, for which detailed

proposals had been formulated in the TIA. The road will be positioned in a 35m wide road-reserve and will contain a traffic circle approximately 120 metres distanced from Boschkop Road. A  $\pm 50$  metre *cul-de-sac* section after the circle will terminate at the proposed entrance to the higher education facility in the township, transitioning into an access control facility positioned on Erf 152 through which both erven in the township will gain access to the public road system – Erf 152 direct access, and Erf 153 indirect access *via* a right-of-way servitude over Erf 152 between the main entrance and Erf 153.

Access to the adjacent Portion 356 over which the access road to the township will be built will have to be from the new access road in future, for which provision has been made in the form of a 16 metre wide right-of-way servitude to be registered over Erf 152 between the traffic circle in the access road and the southwestern boundary of Portion 356 (For more information, refer figure 4: Township Layout Plan *supra*).

Access to Portions 292 to 294, Mooiplaats abutting the township on its south and southwestern boundaries will also be facilitated by means of private access / right-of-way servitudes to be registered against Erf 152 in favour of same. The access servitude has two segments, *viz*:

- A shared segment, 16 metres wide, coinciding with the configuration and confines of the servitude between the traffic circle on the new access road and Portion 356; and
- A new segment, 10 metres wide, along the eastern boundary of Erf 152 from the mentioned servitude to Portion 356 (north) to the east / southeastern boundary of Erf 152 where it meets up with an extension of the servitude over Portions 292 and 293 up to 294 comprising reciprocal servitudes in favour of each other (Refer figure 4: Township Layout Plan for more concise description and route alignment).

It follows from the above that the two erven in the proposed Zwavelpoort Extension 15 can be provided with acceptable access to the existing public road network feasibly and sustainably, while simultaneously ensuring appropriate and acceptable access to Portions 356 and 292 to 294 of the farm Mooiplaats 367-JR affected by the township application.

### 6.8.3 Public road network

The TIA investigates and reports on both the existing as well as the future planned public road network in the wider vicinity around the development site. This includes information on higher-order provincial, as well as lower-order municipal roads – existing and planned. For details on these refer to the TIA. Suffice it to mention here that:-

- The development site is not affected by any future high-order roads *per se*, save perhaps for the planned amended K147–route to traverse the area northwards less than 500 metres away. Since its amended alignment has not

been officially promulgated yet it is not possible, or legally required of the applicant to report on same in more detail.

- The application has necessitated certain minor amendments to the Tshwane Road Master Plan to *inter alia* remove any future public roads being planned on / over the development site, and to provide concomitant solutions to the consequent optimisation of the future municipal roads network in the vicinity of the development site.

Ensuing from this is the requirement for provision of a road servitude in favour of the general public along a particular section of the eastern boundary of Erf 152. A 10 metre wide right-of-way servitude in favour of the general public will therefore be registered as part of the township establishment process along the eastern boundary of Erf 152, from the southern boundary of the abutting Portion 356 (north) to the south boundary of the township (refer figure 4: Township Layout Plan).

#### **6.8.4 Traffic impact and mitigation**

The main purpose of the TIA was to determine the potential impact which the proposed new higher education institution in the particular locality would exert on the surrounding public road network in terms of *inter alia* the level of service (LOS), and what mitigation measures would be required to counter these impacts and restore the LOS (and other determinants) acceptably and sustainably.

The study revealed that certain improvements would have to be effected on the road system to accommodate the additional traffic to be generated during peak hour periods on the surrounding public road network. The following improvements bear relevance, *viz*:

- Implementation of the new public access road (Kampus Boulevard) between Boschkop Road and Erf 152 in the township in accordance with both Provincial and Municipal requirements and standards;
- Implementation of a new signalised intersection (i.e. installation of traffic lights / robot) with exclusive right-turn lanes on all four approaches as well as a shared left-turn slip-lane on the southern approach to establish a new intersection on Boschkop Road at the planned access road position to the new campus.
- Implementation of right-turn lanes on all approaches and a left-turn slip-lane on the western approach, as well as the signalisation (i.e. installation of traffic signals / robot) of the Boschkop Road / Graham Road intersection northwards; and
- Implementation of a "butterfly" road intersection configuration with exclusive turning lanes on the northern and eastern approaches at the Boschkop Road / Road D223 intersection northeastwards.

The applicant will furthermore be required to implement two public transport embayment facilities for pick-up / drop-off of passengers) in the downstream position on Boschkop Road at the new access road to the intersection.

### 6.8.5 Public transport facilities

In line with official policies the applicant will provide the following public transport facilities on and around the proposed new township, as recommended in the TIA:

- Public transport terminus of  $\pm 1500\text{m}^2$  to be provided on Erf 152 in the vicinity of the entrance control structure, to the west of the termination point of the new public road to be constructed. This will primarily serve a holding function for up to 30 minibus taxis at particular times of day.
- The two bus / taxi pick-up / drop-off embayments to be constructed downstream from the new intersection on both sides of Boschkop Road at the turn-off to the higher education institution.
- The implementation of 2 metre wide pedestrian walkways along both sides of the yet to be constructed access road, between the embayments on Boschkop Road and the entrance position to the development site.

### 6.8.6 Parking requirement

A particular parking requirement for tertiary education institutions is not prescribed in the TTPS. The principal of Techworld Consulting Engineers has however, based on his exceptional knowledge and vast experience with tertiary education facilities formulated a well-founded and most feasible parking solution. The result has been summarised in Table 3: parking requirements on page 31 of the TIA, of which the following information was gleaned.

TABLE 3: PARKING PROVISION TO THE TOWNSHIP

LAND USE	NUMBER OF PERSONS	VEHICLE OCCUPANCY	PARKING FACTOR	REQUIRED PARKING BAYS
Sub-total day students	1,750	2.5	N/A	700
Sub-total personnel	250	1.25	N/A	200
Sub-total visitors	100	1.00	N/A	100
<b>TOTAL CAMPUS</b>	<b>2,500</b>	<b>N/A</b>	<b>0.40</b>	<b>1,000</b>
<b>TOTAL BEDROOMS</b>	<b>1,500</b>	<b>-</b>	<b>0.40</b>	<b>600</b>
<b>TOTAL</b>				<b>1,600</b>

It follows from the above, as also discussed in paras 4.4.1 and 4.4.2 *supra* the parking to be provided per erf in the township, is as follows:

- Erf 152 : 1 000 parking spaces
- Erf 153 : 600 parking spaces

### 6.8.7 Additional information

The TIA contains other information and details which should be read for a full comprehension. It also contains various figures and sketch-plans of which the proposed upgrades of the different intersections have been prepared and included in detail.

## 6.9 TOPOGRAPHY AND VISUAL IMPACT

### 6.9.1 Unique physiography

It is the unique landscape defined by its varied topography in combination with the exceptional environmental attributes of the development site that piqued the interest of the applicant to harness these for the establishment and operating of an appropriately-scaled and blended higher education facility on the premises. The physiography is ideal for the desired sense of place of the facility, simultaneously satisfying the requirements for peaceful tranquility for a psychological milieu conducive to study / learning and teaching.

### 6.9.2 Topography

The project architects have gone to great lengths to ensure that the development proposal as reflected on the draft site plan (DSP) responds appropriately to the site topography. The following excerpt from their Urban Design Report (refer Annexure 'I') explains:

*"Entering from the north, the site gently slopes up in a southern direction. The ridgeline forms a natural backdrop to the site. Clusters of trees and rocky outcroppings contribute to the established site characteristics and conceptual framework approach. The lower plateau along the watercourse is ideal for a productive, agricultural landscape. Plateaus form a natural hierarchy for processional movement between development pockets of the hub. At the highest point of the proposed development, the ridgeline remains visible and protected."(p5)*

The topography of the terrain presents as three plateaus namely a lower-, mid- and upper plateau. The upper plateau area higher up on the ridge will not be developed. The main campus will for the most part be positioned on the mid-plateau and partially on the lower-plateau, while the lower-plateau will be primarily used for the agriculture-related pursuits of the envisaged experimental farm (For more information refer to Para 3 of New Urban Architect's Urban Design Report for the project).

### 6.9.3 Views and sightlines

Exceptional care has been taken with the configuration and positioning of buildings on site to ensure the following outcomes:

*"\* Development pockets must include visual connections from the east to the western ridgeline through sightline corridors.*

- \* *Development to be cognizant of built form heights and ensure minimum visual impact” (Urban Design Report, p8).*

The presence and elevations of the lower- and mid-plateau areas on site assisted greatly in achieving these goals.

#### **6.9.4 Visibility / exposure**

It is quite important for the prestigious and stately nature of the proposed higher education institution to exert a noticeable presence on site to serve a landmark function with regards to status and legibility. The challenge therefore lies in achieving the goal of visibility / exposure of the facility from surrounding roads and strategic vantage points without imparting a negative visual impact by e.g. disturbing the ridgeline as back-drop to the development project. In this regard special care has been taken to ensure blending of the built environment component into nature with minimum residual visual impact.

Messrs Demacon in its Market Study under the discussion on locational analysis have also assessed the position of the site from a surrounding “view shed” perspective and determined that the visibility / exposure component of the site analysis has a positive effect on the suitability of the site for its intended purposes.

The project architects have addressed this matter comprehensively in their Urban Design Report, proving unequivocally the achievement of an optimized balance between visibility and blending.

#### **6.9.5 Synthesis**

The importance of this matter has prompted the applicant to spend a disproportionate amount of time on investigating especially views from the developed facility into nature and *vice versa*, but also to ensure visibility of the facility from strategic surrounding vantage points for the prestige value on offer but also for legibility purposes. The latter aim has been achieved while simultaneously ensuring that the built environment blends into the natural environment and that the ridge be reinforced through sound design principles in its position as majestic natural backdrop to the development.

The applicant therefore contends that the proposed development would not have a negative visual impact but, on the contrary, would serve an important and less intrusive transient land-use typology along the official urban edge in this position compared to the low-density residential development reminiscent of “sprawl” as being promoted in the RMSDF.

### **6.10 ACCESSIBILITY**

#### **6.10.1 Context**

The proposed higher education institution will be situated on Portions 287 to 291 and 295 & 296 of the farm Mooiplaats 397-JR approximately nine kilometres along Graham Road and Boschkop Road from the intersection of Solomon Mahlangu Drive

with Graham / Lynnwood Road. This locality choice was based on two critical factors, viz:

- the large land area requirement (extent); and
- the quality of natural environmental requirement (sense of place and country character)

The subject properties are located neither in a Linear Zone, nor in a Concentration Zone with no plans for any improved / accelerated public transport facilities by the CTMM to serve the area in the short to medium term. The accessibility of the development site is therefore a function of the use of private cars / vehicles and minibus taxis. A locality in either a Concentration or a Linear Zone as defined in the Tshwane Compaction and Densification Strategy, 2005 would serve to thwart the intent and purposes of these, due to the vast proportions of land the higher education institution would consume and the negative effect on surrounding land prices it would have in terms of housing provision for previously disadvantaged households.

#### **6.10.2 Public transport facilities**

As alluded to elsewhere in the memorandum the applicant will be required to improve certain road intersections, build a new public access road, provide pick-up / drop-off embayments on Boschkop Road, implement 2m wide sidewalks along both sides of the new access road and provide a minibus taxi holding area / terminus on the campus premises to assist with traffic and transport congestion and management as part of the student and employees daily commute.

#### **6.10.3 Public road network**

Accessibility of the higher education campus is a function of existing and planned future roads in the area, linking the facility to strategic parts of the City.

##### (1) Existing road network

Messrs Techworld Consulting Engineers in its TIA confirms the regional and local accessibility of the subject properties to be facilitated as follows:

*"Graham Road and Boschkop Road provide regional accessibility to the development via the N4 in the north, R25 to the south and Lynnwoodroad which is the extension of Graham Road to the west" (p12)*

And on local level:

*"Boschkop Road provides accessibility to the development, which will be supported in future by several planned new road linkages according to the Tshwane Road Master Plan" (p12)*

##### (2) Future road network

A distinction is made between higher-order (national / provincial) roads and lower-order (municipal) roads being planned for the area. Messrs Techworld elucidates as follows:



- Route K34  
*"Route K34 is a planned future Class 2 route on the current alignment of Graham Road. This route is "accepted" in terms of the GTIA of 2001."*(p11)
- Route K54  
*"Route K54 is a planned future Class 2 route with an east west alignment, which will intersect with Route K34 near the current intersection position of Graham Road & Boschkop Road. This route is "accepted" in terms of the GTIA of 2001"*(p11).
- Route K147  
*"The application site is located nearer than 500m from planned Route K147. This route is a planned future Class 2 route that will connect planned Route K54 in the north with the Rietvlei Nature Reserve in the south. Addendum C to the Route Determination for this route was done in 2005."*(p21)

The above three are higher-order roads under the auspices of the Gauteng Department of Roads & Transport ("GDRT"), of which the first (Graham Road) is already existing and playing a paramount role in the accessibility of the development site. It is mentioned here as future K-route, yet to be upgraded to K-route status.

On municipal level, the following extract from the TIA explains:

- Tshwane Road Master Plan  
*"To optimize the site development plan, and road planning for the area, minor changes are proposed to the Tshwane Road Master Plan. These changes were discussed with both the City of Tshwane and Gautrans which did not have any objections. The proposed changes will only affect Class 5 roads and the circulation of local traffic on and near the site. The proposed Class 5 road within the township boundaries is replaced by another internal circulation road that will serve the development site while the planned boundary road between the application site and Portion 356 (Tshwane Road Master Plan) is replaced by a right-of-way servitude which is connected to the planned Campus Access Road.*

*The proposed minor changes to the Tshwane Road Master Plan as well the proposed access arrangements of the application site will not affect any other properties or the road planning in the area."*(p12)

Although there is at present not much evidence of municipal roads serving local traffic needs / requirements it is only natural for these to follow further developments in the area within the urban edge in the medium to longer term. These have been proven to not be a requirement for *inter alia* accessibility to the development site.

For more information on these regional and local roads responsible for accessibility of the higher education development site, refer to the TIA – Annexure 'R'.

#### **6.10.4 Market area perspective**

It is furthermore important to note the demarcation of the primary market area of the higher education facility to be a 200 kilometre radius around the development site, and the secondary market area being the balance of South Africa. Students will therefore originate from areas too far afield for daily commute, for which occurrence student accommodation will be provided on site. Provision has been made for a student housing establishment comprising 1 500 rooms on Erf 153 in the proposed new township.

On-site accommodation for a vast proportion of the planned student attendance campus capacity serves to reduce the importance of accessibility requirements to the site. This will see to traffic surges on Friday and Sunday afternoons when a proportion of hostel dwellers return home or visit elsewhere for the weekend.

Messrs Demacon in its Market Study report for the project discusses the regional context and concomitant accessibility matters in more detail and concludes that the development site is well-located and highly accessible especially in Gauteng context *vis-à-vis* Ekurhuleni, Johannesburg and the rest of Tshwane.

#### **6.10.5 Synthesis**

As evident from the above the development site enjoys acceptable accessibility in local, but also in regional context. Accessibility will be enhanced through upgrading and improvement of the three key intersections *en route* to the site from the eastern suburbs of the City westwards.

The importance of accessibility for the daily commute is substantially reduced by provision of on-site accommodation for a large proportion of students enrolled at the higher education facility. Roads are all in a good condition. Finally are no new roads on municipal level necessary for implementation to improve accessibility, except for the new access road to be implemented by the applicant between Boschkop Road and the township.

### **6.11 ARCHAEOLOGICAL AND PALAEOLOGICAL IMPACTS**

#### **6.11.1 Specialist reports**

Three investigations undertaken by appropriately qualified specialist consultants for the development site have resulted in reports with particular recommendations which served to inform the present application. These reports are the following, *viz*:

- Cultural Heritage Resources Impact Assessment by dr Udo Küsel dated 28 August 2007;
- Palaeontological Desktop Assessment by Banzai Environmental dated 25 January 2020; and

- Report on Assessment of Grave Site and Historical Water Furrow by A Pelsler Archeological Consulting ("APAC") dated 05 January 2021.

The South African Heritage Resources Agency ("SAHRA") has already responded to the first-mentioned report by dr Udo Küsel on 21 August 2008 and again on 30 January 2020. It should be noted that this report was originally prepared for another project that was planned on the subject properties which was never implemented. The information contained in the report and the recommendations made are however not project sensitive and therefore still applicable to the development site.

The discussion in the balance of this subsection is based on information gleaned from these reports.

### **6.11.2 Burial ground and water furrow**

#### **(1) Burial ground**

The development site is host to an existing burial ground of recent origin (i.e. less than 60 years) which will be preserved *in situ*. The site accommodates around 59 individual graves. In this regard the APAC Report recommends the following:

*"It is recommended that the site be properly cleaned and the vegetation cut under supervision of the Heritage Specialist. Once this has been done all the graves on the site can be finally counted and recorded individually for inclusion in a Grave Site Register as part of the Grave Site Management Plan. Once the cleaning has been completed a proper fence with access gate needs to be erected as a matter of urgency to protect the graves against any further damage" (p5).*

Controlled access will be available to proven members of families of the deceased interred here for visits to graves in the burial ground for memorialization and meditation purposes.

#### **(2) Water furrow**

A potentially preservable water furrow on site near the Steekriet Spruit was identified as part of the Cultural Heritage Resources Impact Assessment by dr Küsel in 2007. It's apparent historical value lies in it being reminiscent of furrows (canals) found in typical Boer farm settlements and could date back to the 1860's. Further investigation of same by messrs APAC in January 2021 has led to the recommendation that a further detailed assessment of the furrow be undertaken. The recommendation reads as follows:

- "1. Removing grass and other vegetation around and on the feature under supervision of the Heritage Specialist.*
- 2. Once the feature has been thoroughly cleared the feature will be mapped and photographed in detail and a report on it submitted*
- 3. A final decision on the sections of the furrow that will be preserved and / or demolished will then be taken" (p14)*

Messrs APAC indicated as part of its terms of reference for a Phase II Archeological Study of the site that:-

*"...(i)t is intended that a section of the furrow will be demolished while the rest will be preserved in situ" (p2).*

### **6.11.3 Archaeological finds**

APAC was appointed by the applicant to undertake a Phase II Archaeological Assessment of the development site after dr Kusel in his report of 2007 has identified / recorded 30 archaeological sites, including the mentioned burial ground and water furrow feature. These sites were identified as Stone Age and Iron Age (Late Iron Age Stone-Walled Ndebele) Sites. The purpose of the Phase II investigation is to investigate these sites further, to identify 2 or 3 well-preserved specimens for preservation and possible incorporation in the design of the development proposal. This investigation was still on-going at time of finalization of this memorandum.

The project environmental consultants in liaison with the project architects have in the interim proceeded to plot all these archeological sites on plan and to incorporate these provisionally in the detailed design concept for the proposed higher education institution. Indeed has the linear pattern in which these archaeological sites manifests on site served as inspiration for the proposed linear or axial configuration of the buildings on the main campus. The following extract from the Urban Design Report by the project architects explains:

*"Late Iron Age sites and a burial site were mapped for preservation. The linear settlement pattern of heritage sites shows a historic axis of settlements running parallel to the ridgeline. This historic settlement formation is celebrated in the proposed framework. A 20m radius of development-free land surrounds all historically significant sites. Historically significant elements are woven into the proposed open space framework." (p6)*

Thus, at the moment these sites have all been considered and incorporated in the draft site plan. Upon finalization of the Phase II Archaeological Assessment these will be reduced to only those preservation-worthy specimens, at which time the DSP will be revisited. The sites to be preserved will ultimately be incorporated in the final design at the formal Site Development Plan (SDP) stage for the project.

[ANNEXURE 'S' : CULTURAL HERITAGE RESOURCES IMPACT ASSESSMENT & PALAEOLOGICAL DESKTOP ASSESSMENT]

## **6.12 ENVIRONMENTAL CONSIDERATIONS**

### **6.12.1 Environmental impact assessment**

Messdames Bokamoso Environmental Consultants ("Bokamoso") confirmed that a full environmental impact assessment (EIA) is required for the project, a process which has already been commenced with. This requirement stems from the Regulations (2014) (as amended) to the National Environmental Management Act,

1998 (Act 107 of 1998) (as amended). The first phase scoping process has been concluded and the final scoping study submitted to GDARD on 07 July 2021.

#### **6.12.2 Listed activities investigated**

Bokamoso in its Executive Summary on environmental matters prepared for inclusion in the townplanning application for township establishment, compiled an extensive list of possible listed activities that may be triggered by the proposed new higher education institution on the subject properties. These may be viewed in their report appended hereto as Annexure 'T'.

[ANNEXURE 'T' : ENVIRONMENTAL EXECUTIVE SUMMARY]

#### **6.12.3 Water use licence requirements**

The Executive Summary by Bokamoso furthermore contains a summary of all potential activities on site that might require a water use licence or authorization from the Department of Water and Sanitation ("DWS") in terms of the provisions of the National Water Act, 1998 (Act 36 of 1998). The application process has already commenced.

#### **6.12.4 Environmental sensitivities identified**

Bokamoso has assessed various elements on site in terms of sensitivity to assist with the layout planning of the proposed higher education institution and how the latter should respond to these to ensure a sustainable development. These include *inter alia* the topography, ridges, geology & soils, agricultural potential, fauna & flora, hydrology, geohydrology and cultural historical aspects. The assessment culminated in a Composite Site Sensitivity Map which in the end served to inform the draft site plan (DSP) for the proposed development.

#### **6.12.5 Sustainability**

The project environmental consultants on sustainability of the development proposal confirmed as follows:

*"As mentioned, the applicant formerly received a Town Planning and Environmental Approval for a residential development on the study area, but eventually decided that a residential land-use is not the best development alternative for the study area. The applicant is of the opinion that a residential development would have caused the fragmentation of the study area and would have jeopardized the "unique" characteristics and "Sense of Place" of the attractive study area. The applicant is of the opinion that a development such as a Higher Education Institution will be more sustainable to the environment, considering that sensitive environments, such as the burial ground, watercourse, ridge and high agricultural potential soils, have been incorporated into the proposed development" (p28).*

#### **6.12.6 Synthesis**

The environmental and water use licence / authorization applications have already commenced and will be processed by the relevant controlling authorities (GDARD and DWS respectively) in parallel to the present land development application for

township establishment. The Bokamoso Executive Summary concludes with the following statement:

*"Based on our preliminary assessment of the environmental aspects of the proposed development site, Bokamoso is of the opinion that the proposed Zwavelpoort x 15 higher education institution development will promote sustainable development and that the GDARD and the DWS will be in support of the project"* (p30).

### **6.13 ECONOMIC IMPACT**

Demacon in its Market Study report confirms the economic impact of the proposed higher education institution for 2 500 attending students to be substantial. The impact considers both the construction as well as the operational phase of the project, including direct, indirect and induced impacts (refer pp 145 to 151). The following results deserve mentioning:

- Establishment of the institution will see to a ±R770 million capital investment which will serve to create 2 400 employment opportunities (p149).
- The operational phase turnover of ±R288 million per annum will see to the creation of 1 180 employment opportunities (p150).

The following extract elucidates:

*"The preceding economic impact analysis and Diagram 10.4 above shows that an estimated capital investment of approximately R770 million is required to implement the proposed HEF. The capital investment during the construction phase could generate an estimated R2.6 billion in additional business sales, R1.3 billion in additional GGP and 2 400 new employment opportunities throughout the Gauteng provincial economy... Although the construction phase impacts are not sustained impacts, the economic benefit derived from the implementation of the project is sizable.*

*Based on the operational phase of the proposed HEF, an estimated R288 million is required for operational stability per year. The operation of the proposed HEF could generate additional business sales of R697 million, additional GGP of R333 million and 1 180 new employment opportunities throughout the Gauteng provincial economy... The operational phase represents sustained economic impacts thus can impact on local, regional and provincial economies more fluently. The proposed HEF could contribute 0.1% to the Eastern Suburbs and 0.4% of the Tshwane economy during operation"* (pp 150, 151)

### **6.14 LAND CLAIMS**

- The Commission on Restitution of Land Rights ("Commission") in response to an enquiry, on 11 April 2019 confirmed in writing the following:

- Land claims have been lodged against the subject properties, in terms of the Restitution of Land Rights Amendment Act, 2014 (Act 15 of 2014) ("Amendment Act").
- The Amendment Act was however ruled invalid by the Constitutional Court subsequently due to the absence of public participation and the Amendment Act... *"ceased to be law on 28 July 2016"*.
- Land claims lodged between 1 July 2014 and 27 July 2016 were ruled valid by the Constitutional Court, but the latter resolved that these may not be processed prior to the Commission finalizing all claims lodged before or on 31 December 1998, or until Parliament passed a new law for reopening of the lodgment of claims. Parliament has not done so yet and has missed a deadline for doing same.
- The letter concludes with the following:  
*"As a result the Commission will, unless directed otherwise by the Constitutional court, not be processing claims lodged between 1 July 2014 until 27 July 2016 until all the claims lodged on or before 31<sup>st</sup> December 1998 are finalized and or a new Act is passed by Parliament and signed into law by the President..."*

*The Commission will contact you directly and communicate widely once we have been granted permission to begin dealing with these claims."*

- The Commission has not communicated with the applicant further since.
- The Commission in its mentioned letter does not acknowledge any claims on the subject properties lodged before 31 December 1998.
- It follows that with the Commission being unable to process these claims, they could not have been Gazetted yet as per Section 11 of the Restitution of Land Rights Act, 1994 (Act 22 of 1994), and therefore have no legal status.
- With the validity of the land claims lodged thus being unconfirmed as yet they do not serve to impede the proposed development of the subject properties.

[ANNEXURE 'U' : LETTER BY LAND CLAIMS COMMISSIONER]

## 7. INSTITUTIONAL SUSTAINABILITY

### NATIONAL STATUTES, POLICIES & DIRECTIVES

#### 7.1 CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA, 1996

The Constitution of the Republic of South Africa, 1996 (Act 108 of 1996) ["Constitution"] under the Bill of Rights in Chapter 2, Section 29 on Education confirms the following:

- "(1) *Everyone has the right-*  
*(a) to a basic education, including adult basic education; and*  
*(b) to further education, which the state, through reasonable measures, must make progressively available and accessible.*
- (2) ...
- (3) *Everyone has the right to establish and maintain, at their own expense, independent educational institutions that-*  
*(a) do not discriminate on the basis of race;*  
*(b) are registered with the state; and*  
*(c) maintain standards that are not inferior to standards at comparable public educational institutions".*

The proposed new private institution of higher education is thus statutorily mandated to establish and operate in terms of Section 29(3) of the Constitution.

#### 7.2 NATIONAL DEVELOPMENT PLAN 2030

The National Planning Commission in its policy report titled "National Development Plan 2030: Our Future – Make it Work" confirms the following important facts, *viz*:

- Education is the most important investment a country can make in its people.
- There is a dire need to build national institutions for science, technology and innovation to develop intellectual capital and spur economic growth and development (pp 315, 316).
- The quality of university education needs to improve.
- University infrastructure and capacities are under strain due to funding challenges accompanying exponential increases in enrolment figures in recent years.

The following extracts confirm the need and *rationalé* for increased private sector involvement in the provision of quality educational services on tertiary education level:

- *"Expand university infrastructure. University enrolments have almost doubled since 1994 and infrastructure has not kept up. This has a major impact on the quality of teaching and learning. Student accommodation in universities needs urgent attention"*(p319).
- *"The state and private sector both have a role to play in providing post-school education and training"*(p321).
- *"Private and public institutions must work together to create the education infrastructure needed to support a thriving economy"*(p324).



Higher education institutions are not only workforce developers but play an important role in developing the nation socially, politically and economically, making it a more resilient, informed and adept society, better equipped to deal with the prevailing challenges of poverty, inequality and unemployment.

### **7.3 SPATIAL PLANNING AND LAND USE MANAGEMENT ACT, 2013 (ACT 16 OF 2013) ["SPLUMA"] DEVELOPMENT PRINCIPLES AND NORMS & STANDARDS**

#### **7.3.1 SPLUMA Development Principles**

The Development Principles in Section 7 of SPLUMA derive from certain 'overarching principles for spatial development' identified in the NDP (refer Para 7.2 *supra*), developed to address the constitutional imperatives to transform society from its previous state of exclusivity to that of being integrated, inclusive and united. The present application is evaluated against these principles, as follows:

##### **(1) Principle 7(a): Spatial justice**

This principle has six requirements, i.e.:-

- to redress past development imbalances to improve access to and the use of land;
- state duty to prepare future planning documentation and policies to include persons and areas previously excluded, particularly informal settlements, former homelands as well as areas where poverty and deprivation are widespread;
- state duty for land-use schemes to provide for redress in access to land;
- state duty to prepare land use management systems that include all areas of the applicable municipality and to have flexible provisions for disadvantaged areas;
- accommodate access to secure tenure and incremental upgrading of informal areas; and
- officials considering the application can not limit its decision on the matter based solely on the value of the property and its related impact / effect on the area.

The development proposal will contribute positively to the achievement of spatial justice as measured against these requirements, as follows:

- With the proposed institution of higher learning / education being a public / social facility it will as such be accessible and available for attendance by all employees and Afrikaans speaking students enrolled at the facility. The additional capacity created by the proposed new facility may serve to relieve pressure on existing such institutions elsewhere in the primary market area, with the potential for a positive impact in terms of redressing past

development imbalances (refer Para 5.1.4 *supra* for a more detailed discussion).

- Public universities have since 1994 in a process substantially escalated in the last decade, through policies of preference to previously disadvantaged individuals contributed to the principle of redress and spatial justice by allocating the majority of available capacity in especially scarce / specialized study fields to students from disadvantaged backgrounds. Veterinary studies is an example.
- The envisaged development will not serve to displace any previously disadvantaged individuals / families / communities from the subject properties. The properties are presently in private ownership and have been for many decades.
- The township development will lead to the better, focused use of the properties concerned and create the opportunity for improved access to, and the use of land.
- In terms of the Municipality's duties, the spatial development frameworks for the Municipality as well as the region and the land-use scheme have been prepared with due consideration of the public's inputs through participation in the review and preparation process of same. Furthermore the public will have an opportunity to participate in the process of the evaluation of the present application during its public participation process.
- The proposed development is not foreseen to affect property values negatively in the area. On the contrary it can be expected that a prestige development of the nature and extent being planned would serve to rather enhance the value of surrounding properties in the area. This is a phenomenon observed at several international tertiary education institutions in many countries worldwide.

**(2) Principle 7(b): Spatial sustainability**

This principle has seven requirements, i.e.:-

- promote development within the fiscal, institutional and administrative means of the State;
- protect prime and / or unique agricultural land;
- be consistent with regards to environmental management;
- ensure effective and equitable function of land markets;
- consider current and future costs for infrastructure and social services and those impacted by the development;

- promote development where it is sustainable in context and limits urban sprawl; and
- create viable communities.

The present application will comply with the requirements for spatial sustainability as follows:

- The project is a private initiative which will not require public sector funding for its establishment and development.
- With exclusion of the various environmental sensitivities of the terrain the nett remaining part of the subject properties do not form a viable entity for extensive commercial farming purposes. An agricultural potential study previously conducted by messrs Index for the subject properties revealed that approximately 33 hectares on certain parts of Portions 287, 288 and 289 can be classified as high potential agricultural land, which has led the project team during the planning phase to allocate these to the future Faculty of Agricultural and Natural Sciences of the proposed higher education institution for purposes of experimental farming and scientific research on all matters agricultural.
- The development site also does not form part of the Nokeng Agricultural Hub identified in the Gauteng Spatial Development Framework 2030 (2017) commencing 5km east of the development site, eastwards, up to Bronkhorstspuit. This area contains high potential agricultural land within the Tshwane Municipal Area to be preserved for its contribution to food security in the City and region.
- The entire farm Mooiplaats 367-JR (of which the subject properties form part) has in any event been excluded from the provisions of the Subdivision of Agricultural Land Act, 1970 (Act 70 of 1970) by promulgation in Government Gazette No 5979 No 18186 dated 01 August 1997, as evident from a copy of the letter by the Department of Agriculture addressed to the Registrar of Deeds dated 09 October 2006 appended hereto.

[ANNEXURE 'V' : LETTER OF EXCLUSION OF FARM MOOIPLAATS  
FROM ACT 70 OF 1970]

- The matter of consistency with regards to land use measures in accordance with environmental management instruments has been dealt with comprehensively in accordance with the relevant legislation and policies. Environmental sensitivities have been identified and the necessary authorization process initiated to ensure full compliance with all environmental requirements.
- The applicant has furthermore, in full compliance with the "environmental structuring concept" set out in the Regionalized Municipal Spatial

Development Framework – Region 6, 2018 (refer Para 7.13.3 *infra*) planned and designed the proposed new higher education institution with the utmost sensitivity to nature and the ensurance of blending of the built and natural environments with minimal (if any) impact on on-going ecological processes *in loco* and wider. The natural environment and associated attributes of same are being regarded as the Unique Selling Point (“USP”) of the proposed new institution, where the environment will be paramount for its psychologically pleasing and conducive effect on the desired ambience for study / learning and teaching.

- The proposed development will see to a public or social facility being established and operated on the subject properties. The new land-use activity will not have any negative effect on the equitable functioning of land markets. It is expected that the locality of the proposed higher education facility here would rather see to the stimulation of the property market in the surrounding area, as has been experienced by many similar campuses in other countries.
- The only civil Municipal engineering service available to the development at present is bulk water, which has historically been paid for by a private consortium of land-owners in the area, before transferring ownership of the pipeline to the CTMM. The applicant will also at own cost provide all other required engineering services to the development project, with no cost to the CTMM.
- The main cause for urban sprawl in Tshwane is presently, and has been for a long time, the effect of rural-urban migration of the population, aggravated by immigration of large numbers of people from neighbouring countries in search of a better life (i.e. employment, social services, education). This has been the reason for the inability of the Municipality to transform and integrate the historic dormitory (“Apartheid”) townships on the urban boundary to sustainable urban settlements.
- The development site is located within the official urban edge, although somewhat distanced from the actual urban development edge further westward. This could not be prevented due to *inter alia* the vast proportions of the site requirement and the locational requirements for the proposed new higher education institution. The applicant contends that the proposed development will be sustainable in context, and that it would in the medium to long run not contribute to urban sprawl.
- A viable community is one comprising not only residential uses, but also a variety of social / public services like schools, a post office, library, police station and more. The proposed higher education institution represents one such social facility which contributes to the liveability of the wider community.

**(3) Principle 7(c): Efficiency**

This principle comprises three components, *viz*:

- land development should optimize the use of existing resources and infrastructure
- decision-making procedures should strive to minimize negative financial, social, economic and environmental impacts.
- development application procedures should be efficient and streamlined, and time-frames adhered to.

The present application will comply with the efficiency requirements of this development principle in the following way:

- The proposed development will see to the better utilization of development land as a scarce and non-renewable resource within the urban edge. It will also see to the preservation of sensitive environmental and agricultural resources as part of the development proposal. The development project will furthermore be to a large degree self-sufficient with regards to infrastructure requirements to render it sustainable, with a huge beneficial impact through adoption and implementation of low carbon / green economy solutions.
- The two remaining requirements for efficiency are largely duties of the Municipality. It is however important to note that-
  - the applicant has motivated the merit of the application for township establishment with due consideration to these requirements; and
  - the applicant is committed to compliance with official time-frames and to facilitate / streamline responses as best as possible to obtain a positive outcome in the shortest possible time.
- Spatial efficiency will be substantially enhanced by providing of student accommodation for a large proportion of students on the premises in the township. The proximity of uses to result will see to *inter alia* a reduction in travelling time and traffic congestion on surrounding roads, i.e. increased spatial efficiency.
- In the spatial vision of the NDP the 'unlocking of development potential' of land is being promoted as spatial efficiency. There can be no doubt that the proposed new higher education institution on the subject properties would serve to unlock the development potential of same sooner than would have been the case if a low-density residential neighbourhood development would have been pursued. It will similarly also see to the unlocking of the development potential of surrounding properties within the urban edge.

**(4) Principle 7(d): Spatial resilience**

This principle has one requirement, i.e. to have flexibility in spatial plans, policies and land use management systems to accommodate sustainable livelihoods for those most affected / made vulnerable by economic and environmental shocks.

This is largely a responsibility of the municipality as a public / government entity. As the preparation of frameworks and policies are the responsibility of all spheres of government, the vulnerable are the main focus and have been accommodated in same. These policies and frameworks are normative, based on the very principles being discussed in this section. Evidence of same is manifested in the changing character of the province and the city.

**(5) Principle 7(e): Good administration**

This principle has five requirements, i.e.:-

- all spheres of government are to subscribe to an integrated approach of land-use and management guided by SPLUMA;
- all government departments must participate during the preparation of forward planning documentation;
- responses to land-use and / or development in terms of all laws must be dealt with timeously;
- all forward planning and land use management scheme preparation should include transparent public participation processes; and
- members of the public should be provided with information on policies and procedures that are clear and which empowers them.

The above relate to duties of the state in compliance with the requirements of Sections 153 and 195 of the Constitution. The applicant agrees that the current future planning documentation that guides applications in the CTMM have been informed by the various spheres of government, the documents have been public participated and that the information contained in same is for the most part clear.

**7.3.2 Norms and standards**

- Section 8 of SPLUMA deals with the norms and standards for land use management and land development which are consistent with the provisions of *inter alia* SPLUMA and have yet to be prescribed by the Minister of Rural Development and Land Reform.
- With no such norms and standards having been adopted yet, it is not possible to measure the proposed new higher education institution in detail against same. Considering the criteria for such norms and standards set out in Section 8(2)(a) to (g) of SPLUMA the following however find application:

- Ad Section 2(a): This is a public sector function with no requirement from the applicant
- Ad Section 2(b): The norms and standards must:
  - o Provide social inclusion: The facilities of the higher education institution as well as the accommodation on the premises will be open and available to all Afrikaans speaking students enrolled at the facility on the subject properties. The academic and subservient sports & recreation facilities will similarly be open and available to lecturers and other employees attending the premises. Once again it should be kept in mind that the new facility will be language based, and not race based – open to the Afrikaans speaking component of all race groups in the market area.
  - o Spatial equity: Since the proposed development represents a social / public service and not a residential development, the matter of spatial equity is not as prevalent. Redress of historic spatial imbalances are addressed by public sector universities and colleges by prioritizing previously disadvantaged prospective students for first year enrolments, for hostel accommodation at the institution and for access to scarce / specialized fields of study with limited faculty capacity.
  - o Rural revitalization: Since the development site is located within the urban edge, the proposed development is not foreseen to make a direct contribution to rural revitalization.
  - o Urban regeneration: Being a greenfields development on an as yet undeveloped site the proposed development project would not directly lead to the regeneration of a previous developed area. It will however contribute to the formalisation of the urban environment *in loco* through appropriate architecture and landscaping and an enhanced sense of place with distinct and sought-after nature-based character.
  - o Sustainable development: Spatially sustainable development requires a balanced approach between economic, social, environmental and institutional considerations, including the protection of unique and productive agricultural land. Official future planning policies, plans and frameworks are all underpinned by sustainable development goals to ensure *inter alia* that society reaps the benefit of economic growth and development while the latter be undertaken with minimal impact on the environment and maximum social benefit to reduce the three major challenges of unemployment, inequality and poverty in the country.

The entire motivation for approval of the proposed higher education institution is based on this principle.

- Ad Section 2(c): The principle of efficiency has been discussed under Development Principle 7(c) of SPLUMA *supra*.
- Ad Section 2(d): This subsection relates to the responsibilities of the controlling authorities responsible for planning and development. Some aspects have nevertheless been addressed by the applicant, e.g. the analysis of existing land-use patterns in the local area.
- Ad Section 2(d) to (g): These norms and standards criteria are the responsibility of the government sector, with no direct application here.

#### 7.4 WHITE PAPER FOR POST-SCHOOL EDUCATION & TRAINING, 2013

The White Paper for Post-School Education and Training ("White Paper") is a policy document to achieve the vision of the Department of Higher Education and Training ("DHET") for a desired post-school education and training system for South Africa by 2030. It states its main policy objectives as being the following:

- "\* *a post-school system that can assist in building a fair, equitable, non-racial, non-sexist and democratic South Africa;*
- \* *a single, coordinated post-school education and training system;*
- \* *expanded access, improved quality and increased diversity of provision;*
- \* *a stronger and more cooperative relationship between education and training institutions and the workplace;*
- \* *a post-school education and training system that is responsive to the needs of individual citizens, employers in both public and private sectors, as well as broader societal and developmental objectives.*" (Executive Summary, p xi).

The White Paper propagates collaboration between different higher education institutions as well as between the latter and businesses / employers. The idea is to build strong partnerships with especially employers to ensure the development of appropriate skills that would serve the purposes of not only growth and development but also the transformation of the socio-economic dispensation towards a more just, equitable and sustainable society.

The White Paper acknowledges the importance and role of private higher education institutions to assist in achieving its developmental objectives, but laments the fact that very little reliable information on same was available at time of adopting the policy in 2014. It however emphasizes its focus to be on public universities and other public post-school institutions (e.g. TVET Colleges, Community Colleges) and the way in which public money should be spent to *inter alia* improve access to and throughput rates at public universities.

The outcome of the public education system is seen as an important instrument to facilitate sustainable social justice to transform the lives of previously disadvantaged individuals towards better employment and a higher quality of life. Put differently, individuals from previously disadvantaged backgrounds who complete their tertiary



education successfully stand a better chance of finding well-paid, quality employment and enhanced opportunity for upward socio-economic mobility and inclusion and a better quality of life compared to individuals without a tertiary education. This will serve the aim of lower unemployment and inequality rates as well as lower poverty levels.

One of the three main functions of universities as quoted in the White Paper from the NDP is to:-

*"... provide opportunities for social mobility and strengthen social justice and democracy thus helping to overcome the inequities inherited from our apartheid past" (p27).*

The product of tertiary education at universities is seen as a way of reducing the effects of poverty, unemployment and inequality. Access differentiation policies has furthermore supported redress by giving preference to previously disadvantaged race groups and genders in terms of enrolment to certain scarce training courses as well as to hostels at these public universities and other public tertiary education facilities.

Finally, on private post-school institutions the White Paper states as follows:

*"A role for private post-school education and training is provided for in terms of the Constitution and various other policies and legislation. Private post-school institutions help to meet the rising demand for post-school opportunities for an increasing diverse society and economy. They assist in diversifying and expanding the post-school sector as a whole" (p42).*

The proposed higher education institution will therefore contribute to the tertiary education system, in line with the White Paper. It will as such provide an additional facility for higher education, attuned to market demand for particular employment requirements by large employers and sensitized toward forging relations with other higher education institutions and research and development organizations, to maximize its contribution to the overall body of information in industries and economic sectors poised to make the most valuable contribution to socio-economic growth and development in future.

## **PROVINCIAL STATUTES, POLICIES, DIRECTIVES & GUIDELINES**

### **7.5 GAUTENG SPATIAL DEVELOPMENT FRAMEWORK 2030 (2017).**

- The Gauteng Spatial Development Framework 2030 (GSDF)-

*"... seeks to (i) direct, guide, focus and (ii) align, coordinate and harmonise all development spending in the province, to ensure rapid, sustainable and inclusive provincial economic growth and township redevelopment, therefore enabling decisive spatial transformation" (p3).*

- The GSDF does not promote tertiary / higher education *per se* as a solution to reduce unemployment and increase wealth through socio-economic development,

but does emphasize the need for focused growth in predetermined areas (e.g. nodes, corridors) where agglomeration economies and economies of scale can contribute to greater returns on especially public investment in infrastructure and public transport facilities. The GSDF laments the perpetuation of urban sprawl on the outskirts of major cities caused by mostly a nett in-migration from rural areas as well as from surrounding African countries.

- A "skills mismatch" and inadequate "human capital" development are blamed for the inability of many people in the Province where economic and social opportunities abound, to access these opportunities. This speaks to inappropriate and / or inadequate education. One of the 10 "high priority provincial spatial development proposals" which find application in this regard, is the following:

*"Provide multi-pronged sustained support to outlying residential areas developed during colonial and Apartheid years, including **human capital development**, mobility support and local economic development programmes"* (p xi) (own emphasis).

- The GSDF acknowledges Tshwane as the education and skills development heartland of the Province, viz:

*"The Northern Development Corridor has the City of Tshwane as the nation's administrative capital city and the **hub of the automotive sector, research, development, innovation and the knowledge-based economy**"* (p43) (own emphasis)

- All of the transformation imperatives at the base of *inter alia* the NDP, SPLUMA as well as several provincial policy documents form part of the desired outcomes of the GSDF, the latter which refers to so-called radical transformation several times, to impress the urgency of improving the quality of life of the previously disadvantaged communities drastically, over the shortest period of time.

The following extract serves to elucidate:

*"Urbanisation could fuel major societal and political upheaval and turmoil, or it could be the catalyst for significant economic and social development and transformation. To move from a negative to a positive scenario, cities need to become the drivers of rapid, inclusive and sustainable economic growth as well as societal and spatial transformation"* (p43)

- The "Spatial Development Principles" to adhere to to reach the spatial development vision of the Province include the following: Liveability, Concentration, Connectivity, Conservation, Diversity and Viability. When measured against these the proposed higher education institution on the subject properties would comply with at least the following of these:

→ Concentration: Establishing in a broad environment of education, training, research, innovation and development in Tshwane where high levels of human

/ intellectual capital prevail. As such the proposed new development would serve to reinforce existing agglomeration economies and clustering in this wider contextual milieu (p46).

→ Diversity: "Allow the development of various types of urban spaces and places with unique qualities and attractions, to provide for the full spectrum of activities for those living, working, studying, doing business and relaxing in the province" (p46).

The proposed new higher education institution is indeed such a unique 'country-feel university' in an unsurpassed environmental milieu where the urban and natural environment components will coexist sustainably in symbiosis to provide a much-desired study / learning and teaching destination for students in the province attuned to market demand for same.

→ Viability: "Facilitate and support sustainable, inclusive and equitable economic growth" (p46). It has already been demonstrated elsewhere in the memorandum how a tertiary higher education institution serves to facilitate socio-economic growth and development through *inter alia* the development of a skilled / educated workforce.

- There can therefore be no doubt that the development proposal on the subject properties would serve to support the transitional aspirations of transformation of the GSDP to a large degree, but as an absolute minimum, not serve to militate against the spatial development vision for Gauteng in its wider context.

## 7.6 GAUTENG EMPLOYMENT, GROWTH AND DEVELOPMENT STRATEGY, 2009

- The Gauteng Employment, Growth and Development Strategy ("GEGDS") in acknowledgment of the vast proportion of the provincial population living on the outskirts of towns and cities in abject poverty, divorced from the various social and infrastructural facilities and economic opportunities on offer in the core areas of same, identifies and promotes certain interventions ("drivers") required to alleviate the plight of these poor and vulnerable communities and create a more equal and inclusionary society.
- The policy document states that although progress has already been made on various fronts since 1994, the challenges of poverty, unemployment and inequality have been perpetuated and are being aggravated by the continuous wave of rural-urban migration as well as the immigration of foreign nationals to the metropolitan cities of Gauteng for survival and in search of a better life. This latter phenomenon has escalated exponentially since publication of the GEGDS in 2009, leaving provincial administrators and metropolitan councils with challenges far exceeding its fiscal and monetary abilities to deal with without private sector involvement / participation.
- The purpose of the GEGDS is evident from the following extract:

*"...the GEGDS is an overarching framework that aims to progressively promote decent work and the development of a growing, innovating, green and inclusive economy" (p13).*

- The GEGDS confirms a "mismatch" between human capital in the labour market and the requirements of the productive sector – both public and private. This is a major structural deficiency in the economy which causes it to underperform while simultaneously not assisting towards alleviating the unemployment problem in the province. Put differently, there are too many people in the job market with too little education / training / skills to provide in the specific needs of the business and government sectors. The document acknowledges the requirement for proper and appropriate education to achieve its goal of "decent" (quality) employment opportunities, without which poverty and inequality will not be diminished or eradicated.
- The importance of *inter alia* appropriate higher education as intervention towards alleviating structural unemployment is evident from the following extract:

*"The quality of health and wellbeing promotes a productive labour force allowing people to participate actively in the labour market. In South Africa, inequalities regarding access to primary and tertiary healthcare and to education diminish the capacity of the country to build a robust services sector, grow the knowledge economy, enhance skills and expertise and contribute consistently to GDP. These inequalities, particularly the low participation rate in higher education (15 percent)... and post-graduate studies, creates (sic) a major barrier to the ability of the current and future generations to participate in the evolution of an innovative production system with the potential to increase household income per capita GDP." (p26).*

The GEGDS emphasises the importance of proper health care (e.g. hospitals) and education (e.g. universities) to facilitate sustainable, inclusionary socio-economic growth and development (p58).

- With a very high proportion of the population being in the age group 15 to 35 and largely unskilled and vulnerable (p30), the GEGDS confirms that...

*"structural unemployment affects young people disproportionately" (p54)*

Based on their disconnect to the job market, and concerns about increased social ailments of crime, mental health problems, violence, drug abuse and social exclusion (p54), the GEGDS promotes the following:

*"The aim of the school leavers programme, is to increase their employability and connect them to the job market as soon as possible and therefore increase their prospects of employment and encourage their further skills development, training or migration into tertiary education. " (p54)*

- It is proclaimed on page 31 that Gauteng will only enable an economy providing quality employment and economic opportunities for all if it can become:-

- an innovation-based economy whereby *inter alia*:-

*"... the knowledge-based economy is continuously strengthened and intensified. 'Innovating' is used in the broad sense of the word. It is necessary to encourage science and technology innovation, socio economic innovation, environmental innovation and even the innovating spirit of the everyday entrepreneur in both formal and informal sectors of the economy." (p31)*

- a low-carbon, environmentally friendly economy –

*"... based on green technologies, green jobs, renewable energy, and green manufacturing sectors that reduce the ever higher input costs stemming from unsustainable resource use." (p31)*

- an inclusive economy, with access to economic opportunities for all.

It should be pointed out here that one of the most significant interventions promoted in the GEGDS to achieve an innovative, green and inclusive economy permeating the entire report is higher education (e.g. universities, colleges). It refers to a strategy of "investing in people" and "promoting quality education and skills development" (p34)

*"... promoting quality education is crucial in promoting sustainable employment creation while poor quality education has longer term impacts on the ability for government and the economy, whether directly or indirectly, to create decent work" (p35).*

And furthermore:-

*"... skills development and capacity building affect green jobs, strategic, socio-economic and bulk infrastructure as well as local economic development ..." (p36)*

- As part of the "innovation drive" the GEGDS views education of paramount importance, which requires –

*"(i) mproving the exchange of information and knowledge between the public sector, private sector, academia, and the citizens of Gauteng" (p45)*

Without meaningful and focused liaison between higher education institutions and business, the former will not be able to tailor its curriculum to the needs of the productive sector of the market economy. This is crucially important to reduce the matter of structural unemployment presently contributing to the high unemployment rate of especially the youth.

- Higher education facilities are included in the GEGDS under "socio-economic infrastructure" like schools, hospitals, clinics, libraries and more, including "private universities" as here being applied for (p45). It continues on p46 confirming its role in the socio-economic transitioning of the province towards a more equitable and sustainable society:

*"Socio-economic and bulk infrastructure ... both contribute to the upliftment of society and enhance the infrastructure network and inclusiveness of the economy. Socio-economic infrastructure contributes to the inclusive economy indirectly and has long-term benefits through education and health, which ensure that people have the capacity and capabilities to access and participate in the economy"*(p46)

- Quality education as an intervention of paramount importance is underlined by the following appropriate and most significant excerpt from the GEGDS.

*"South Africa has amongst the highest levels of poverty and inequality in the world. Thus, in order to address poverty and inequality, shorter term solutions need to focus on skills development and vocational training, capacity building and re-skilling (especially the sectors in distress). For the medium- to long-term emphasis needs to be placed on **quality** early childhood development, primary, secondary and **tertiary education, if poverty and inequality are to be reduced materially.**"*

***Education** and skills development is necessary for ensuring a **more inclusive and productive economy and for enhancing social mobility.** Clearly the focus on skills development is a strategy aimed at addressing the current mismatch of skills supplies relative to those demanded and the lack of skill and work readiness for school leavers. Quality education underpins the success of all government strategies as skills and capacity play a crucial role in an effective and highly productive labour force. **Quality education is a challenge currently facing the Gauteng province.** This in turn has long term repercussions for the economy's ability to absorb the magnitude of people with low skills levels, implying that unemployment will continue to affect the national and provincial economy."*  
(p47) (own emphasis)

The proposed new higher education facility will therefore serve to assist the Gauteng Provincial Government in providing quality tertiary education attuned to the needs in the market economy to reduce structural unemployment by increasing the absorption rate of employable youth, with a concurrent reduction in unemployment and poverty levels as well as in inequality.

- Tertiary higher education will not only produce appropriately qualified, employable individuals. It will also produce entrepreneurs who will start their own businesses which will in turn grow and develop providing appropriate market-demand goods and services, employing people increasingly as the business grows and develops over time. The GEGDS furthermore states that –

*"...the economy must shift to more knowledge-based production in order to compete internationally and continually improve conditions and welfare".*  
(p52)

- On economic ownership and equity the GEGDS relies on education, and especially quality tertiary education to ensure more broad based economic ownership by previously marginalised members of society.

*"Broadening access to quality education and ensuring that higher-education is based on merit rather than income. This is a very long term strategy but is ultimately critical for ensuring social mobility and legitimacy as well as broader economic equality"* (p55)

- The GEGDS policy acknowledges that the Gauteng government can not achieve these interventions and outcomes without the involvement and help from *inter alia* labour organisations, business, academia, NGOs and communities whereby their skills, expertise, knowledge and resources are mobilised to implement the interventions of the GEGDS to achieve the desired new growth path of the province (p73).

## **7.7 GAUTENG INNOVATION AND KNOWLEDGE ECONOMY STRATEGY, 2012**

- The Gauteng Innovation Strategy Statement reads as follows:

*"To accelerate innovation in all its forms, in order to bolster and support the broader strategic objectives of sustainable social and economic development, and sustainable employment."*(p16)

- Quoted from South Africa's Research and Development Strategy, 2002 the Gauteng Innovation and Knowledge Economy Strategy, 2012 ("Innovation Strategy") confirms the definition of innovation to be the following:

*"Innovation is the key process by which products, processes and services are created, and by which businesses generate jobs and wealth. In addition, in the social sphere, effective innovation has a direct impact on the reduction of poverty and the improvement of the quality of life of our people. It is critical, therefore, to increase the rate and quality of innovation in South Africa."*(p68)

- The Innovation Strategy states that the Gauteng Provincial Government is striving towards ... *"balanced growth that lays the foundations for continuous prosperity"*:

*"This balanced growth can only come from one place: the knowledge economy. The challenge is to create a knowledge economy that provides jobs for everyone, both high-skilled and low-skilled, in all regions of the province."*(p7)

- The report continues to discuss various interventions to support the shift towards an advanced knowledge-based economy and points out that the province is already host to an array of quality public universities and private higher education institutions, innovation, research and development agencies / organisations, these being "coordinated" by The Innovation Hub (TIH) in the City of Tshwane. The TIH was being restructured to *inter alia* –
  - strengthen collaboration between research and development institutions in Gauteng and between the latter and industry;
  - strengthen entrepreneurial incubation initiatives ... *"that provide(s) a conduit for R & D from universities and state owned enterprises in Gauteng"*;
  - ... *"to ensure that innovation contributes to the socio-economic development of the Gauteng citizenry"*;
  - ... *"contribute to creation of business opportunities to existing enterprises"*

[Innovation Strategy, pp 26,27]

- The importance of universities / higher education institutions in realising these goals is evident from the Gauteng Provincial Government assigning this responsibility to the Minister and Department of Higher Education (for human capital development through higher education institutions) and the Minister and Department of Science and Technology (for research and development of a more scientific basis through *inter alia* higher education institutions) (p10).
- The Innovation Strategy promotes a System of Innovation comprising a network of public and private institutions collaborating towards achieving the goals of the strategy, of which socio-economic is an unconventional but most important one to achieve. In this regard it states the following:
 

*"... the innovation system adopted should be the one that meets the needs of low-income earners and supports the small and medium-sized enterprises, especially those in low-income and migrant communities."*(p13)
- The Innovation Strategy confirms that the relationship between innovation and employment can be either positive or negative, depending on whether the innovation is product-specific or process-specific. In general, however innovation leads to an increase in the productivity in an economy that leads to economic growth and development (p45). It continues to confirm that:-
  - *"... process innovation leads to a substitution of capital for labour"* - this is a reduction in employment. The same can happen with product innovation as less competitive products are terminated (p48)
  - on the other hand ... *"(m)ore efficient production processes (may) lead to an expansion of production, and hence increase in employment"*(p48).



After deliberation discussions on the positive / negative effect that innovation might have on employment in South Africa and with due consideration to the country hosting only medium- and low-tech industries as identified as an important differentiator by research by Merikull, the Innovation Strategy concludes as follows:

*"Merikull found 'innovation positively affects employment growth resulting from the strong effect of process innovation in the medium- and low-tech industries'.*

*This is an important differentiator, because it illustrates that in medium- and low-tech industries which are dominated by semi- and unskilled workers, process innovation lead to growth and employment.*

*Although additional research should be undertaken to understand the Gauteng-specific relationship between innovation and employment it is clear that there is strong evidence to show that innovation, if correctly channelled, can be a strong driver of employment growth." (p48)*

- A further example of a somewhat decentralized developed innovation hub is the Riverside Incubation Hub developed in Fourways, Gauteng.

## **METROPOLITAN STATUTES, POLICIES, DIRECTIVES & GUIDELINES**

### **7.9 TSHWANE VISION 2055**

- This policy document acknowledges the triple challenges of poverty, inequality and unemployment resulting in the perpetuation of social and economic exclusion and an unacceptable quality of life for the majority of families in Tshwane. To alleviate these challenges and to accelerate transformation towards a better quality of life for all the document proposes various interventions towards a more equitable, spatially sustainable and socially integrated society for the City of Tshwane.
- The Vision document furthermore acknowledges the prevalence of a young / youthful population in Tshwane of which 64 percent is younger than 35-years of age (2011, p55). A predominantly youthful population beleaguered by poverty, unemployment on inequality can easily lose hope and turn to socially unacceptable practices to survive. The following extracts explain further:

*"Considering the high numbers of young people in the City of Tshwane, addressing youth-related issues – unemployment, **education**, security and participation – undoubtedly presents one of the most critical development challenges for the City" (p41) (own emphasis).*

and

*"The extent to which the City of Tshwane can take advantage of its large youthful population will depend on whether it is able to prioritize*

*programmes to allow them to participate meaningfully in the economy” (p57).*

and furthermore:

*“The generation of young people in Africa can be an asset to fuel growth in the continent and with proper education and skills that are demanded by the market” (p159).*

and finally:

*“Unemployment is not only an issue of insufficient tertiary education, but also an issue of the skills mismatch in the labour market” (p161).*

- Although a complex matter requiring multiple interventions as alluded to in the Vision policy, education, and especially tertiary / higher education can play a crucial role in the combatting of poverty, unemployment and inequality. Despite the fact that Tshwane is home to world-class universities, technicons and other private higher education institutions, only 17 percent of the population of Tshwane has attained higher education levels post-matric in 2011 (Vision, p60). The following extracts find relevance:

*“As part of Tshwane Vision 2055, we will develop into a local and continental centre of excellence by anchoring itself within its knowledge institutions, especially its institutions of higher learning. The City of Tshwane has a strong knowledge base, being host to four higher education institutions in Gauteng. The City of Tshwane is host to a number of science councils, such as the Council for Industrial and Scientific Research (CSIR) with a number of multi-disciplinary research programs; Agricultural Research Council (ARC) with a strong focus on agricultural and animal health research; South African Bureau of Standards (SABS); Nuclear Energy Corporation of South Africa (NECSA); Water Research Commission and Council for Geoscience.*

*The Innovation Hub, the first Science and Technology Park in Southern Africa... to foster the growth of smart industries... is located within the City of Tshwane...*

*The collaboration between the City, these institutions and the private sector will be key in unlocking potential for innovation, growth and sustainability in the City for the next few decades. In line with the potential for a productive young workforce, the education sector and private business in the City need to play a crucial role in educating and providing the right skills that are demanded by the market to ensure that they get the right jobs in the market and also be incubated into successful entrepreneurs” (p163).*

- Smaller, private higher education institutions like the one here being proposed are usually more streamlined and responsive to the particular academic courses to provide and the contents of same, to ensure a better equipped graduate appropriately qualified to serve a definite need in the market place.
- The City of Tshwane in its Vision 2055 sees higher education as an important component of its transformation agenda to reduce socio-economic inequalities. Higher education institutions present an opportunity for the large youthful population segment to improve / capitalize on themselves by study and learning, and thereby improving their chances of being gainfully employed in the formal sector, or starting their own businesses and creating additional employment opportunities through entrepreneurship. As such higher education will not only contribute to economic development, but also to post-graduation social development and inclusion, and furthermore to political inclusion and participation in the governing of their own futures.
- The Vision 2055 policy laments the almost uncontrolled population growth of the City due to *inter alia* natural increase, rural-urban migration and immigration from neighbouring countries by people in search of employment and a better life. This phenomenon manifests in and serves to perpetuate urban sprawl on the City outskirts, effectively neutralizing the huge advances already made towards 'smart city' development initiatives. The dismal living conditions of these poor and vulnerable communities have the potential to lead to political instability and a further downward spiral in the three untenable challenges of poverty, unemployment and inequality. Since education, and especially higher / tertiary education, will lead to increased employment and a reduction in social and economic inequalities, the City should embrace the present development proposal for the positive contribution it would make towards a better quality of life for inhabitants of the City.
- The City of Tshwane sees the research and development institutions and the higher educational institutions established and operational in the City as important partners in its transformation drive, the interventions of which would serve to not only expand human capacity development but also to discontinue the cycle of poverty, unemployment and inequality of many past generations, to ultimately contribute to a sustainable urban transition.
- The Tshwane Vision 2055 confirms the City as having a comparative advantage in the knowledge and skills sector and encourages its expansion for the agglomeration advantages it has to offer. The proposed new higher education institution is indeed a response to these numerous advantages, constituting an expansion and reinforcing of this valuable asset of the City.
- The importance of tertiary education is again emphasized as one of a suite of interventions required to improve the quality of life of the large proportion of young individuals in the City:

*"Structural barriers related to poverty hampers the chances for social mobility of the poor. Without targeted programmes to accelerate the upward mobility of young people from poor regions of the municipality, social cleavages will grow wider, and the benefits of a smart city will be lost to this section of Tshwane's population, further increasing their marginalization" (p213).*

Higher education on tertiary level is, together with other "targeted programmes" like access to health facilities, infrastructural services, safety & security, seen as a very important "game changer" that would contribute to the reduction in poverty, inequality and unemployment towards a better life for all. The Tshwane Vision 2055 underlines this importance, concluding with the following:

*"Cities best placed for economic growth are those that invest in building knowledge and innovation institutions" (p235)*

### **7.10 ROAD MAP TOWARDS TSHWANE 2030**

Spatial, economic and ecological transformation lie at the base of the Road Map Towards Tshwane 2030 ("Road Map"), as explained in the RMSDF with source document the Integrated Development Plan 2017 / 2021 ("IDP") (refer RMSDF, p11).

The RMSDFs for the seven Administrative Regions of Tshwane deal with all spatial aspects pursuant to the provisions of the Roads Map and the IDP on a regional level, including the matters of:-

- spatial transformation (guidance on direction / position of development and sustainable urban planning and development guidelines to follow);
- economic transformation (provide an integrated framework for sustainable development and direction on where public investment interventions would most likely manifest)
- ecological transformation (integrate development with urban movement systems for spatial sustainability and efficiency).

[refer RMSDF, p11]

### **7.11 TSHWANE INTEGRATED DEVELOPMENT PLAN 2017 – 2021 ("IDP")**

- The Tshwane IDP is a strategic planning document, the purpose of which is to identify particular projects to be implemented towards achievement of the vision of the City as captured in *inter alia* the Tshwane Vision 2055 (refer Para 7.9 *supra*). The IDP is thus the summation of the particular programmes and projects identified and prioritized for implementation by the City in furtherance of the goals of the official vision of the City, and includes the spatial referencing of such projects / programmes as well as its budgeted costs.
- The five year IDP 2017 / 2021 approved on 30 May 2016 has been reviewed and updated recently as the IDP 2019 / 2020 Review, approved on 30 May 2019. The

review document stipulates a few differences from the original IDP 2017 / 2021 document, of which the following have been noted:

→ *"The vision for the City of Tshwane which was adopted on 25 May 2017 for 2030 is as follows:*

*'Tshwane: A prosperous capital city through fairness, freedom and opportunity'"(p7).*

→ Achievement of the City Vision requires the embracement of the following "strategic pillars" for development, viz:

- 1. Advancing economic growth and job creation;*
- 2. Creating a caring environment and promoting inclusivity;*
- 3. Delivering excellent services and protecting the environment;*
- 4. Keeping the residents safe; and*
- 5. Being open, honest and responsive" (p7)*

- It should be noted that the amended vision statement and 5 "new" strategic pillars identified do not detract from the information and argument proffered in Para 7.9 *supra*. The contents of the Tshwane Vision 2055 document is factually correct and *mutatis mutandis* applicable to *inter alia* achievement of economic growth and job creation, as well as achievement of social inclusivity.
- As evident from the Municipal budget and the projects identified in the IDP the focus is for the most part on the improvement of the quality of lives of the poor and vulnerable. This is being done through programmes for the provision of basic services (e.g. water, sanitation), social facilities (e.g. clinics, sports fields, libraries) and improvement of the commuter transport systems. A sizable proportion of the budget has been allocated to implementation phases of the Tshwane Bus Rapid Transit System ("BRT") to increase convenience of travel at shorter travelling times between places of residence and employment.
- Scrutinizing of the relevant projects and associated budgets for same has divulged that none of these would be affected by the proposed new higher education institution on the subject properties. Put differently: The proposed new project would not have a negative impact on the Municipal budget, or require of funds to be redirected away from existing pro-poor allocations, to the higher education project.
- Apart from the particular projects and the budgeted costs for same contained in the IDP, the latter also includes the Municipal Spatial Development Framework ("MSDF") for the City of Tshwane which according to the RMSDF:-

*"... represents the spatial interpretation of desired growth and development directions for the City. It spatially focuses economic and infrastructure development and gives spatial expression to the development plans above (CDS and IDP), both for the long-term and the medium terms" (p12)*

With the current MSDF being quite dated (approved 2012), the RMSDF confirms that it has for all practical purposes been replaced by the RMSDFs for the seven Regions together:

*"The Regionalized Spatial Development Frameworks for the different Regions in Tshwane collectively form the sum of the SDF. The SDF is considered to be the implementation mechanism of the spatial component for the Roadmap Towards Tshwane 2030, Municipal Spatial Development Framework, as well as other strategic policies with a spatial emphasis..."*  
(p1).

### **7.12 TSHWANE METROPOLITAN SPATIAL DEVELOPMENT FRAMEWORK, 2012**

- The City of Tshwane Metropolitan Spatial Development Framework, 2012 ("MSDF") was approved (adopted by the Metro Council on 28 June 2012) as a core component of the IDP, serving as a management instrument providing strategic spatial guidance to achieve the City's vision. The MSDF had been informed by an array of existing policies, plans / frameworks and other statutory and institutional documents at the time almost nine years ago, many of which have subsequently been replaced by newer versions containing more focused / pointed strategies to achieve a remade City based on *inter alia* the Development Principles of SPLUMA.
- This policy document identifies Tshwane as being the African Capital City of Excellence which is the gateway to Africa, as such providing opportunity for investment and trade. Viewed together with Johannesburg and Ekurhuleni it forms a major urban conurbation and a major component of the emerging Gauteng City Region. With the developmental system of local government the mission of the MSDF is to improve the quality of life of all people in Tshwane in a sustainable way (p10).
- The MSDF identifies seven Planning Regions of which Region 6 is where the subject properties are located on which the proposed higher education institution will be established and operated. The northern-most parts of Region 6 is described as being... *"less developed and having less economic opportunities and thus a higher unemployment rate."*(p26). This is where Mamelodi is located.
- The MSDF describes its purpose as being to provide a spatial representation of the City Vision and serving as instrument to integrate all aspects of spatial planning, e.g. land-use, pedestrian, vehicular and other movement patterns, planning regarding built-up areas, open space systems and road & other infrastructure services, as well as to guide all decision-making regarding spatial planning (p34). Furthermore –

*"It is the intention of the MSDF to restructure our fragmented, inequitable and inefficient urban form to create a more equitable, efficient and environmentally and financially sustainable urban dispensation in line with current legislation and policy"*(p59).

- Informed *inter alia* by the NDP and the Gauteng Spatial Development Framework at the time the MSDF proceeds to adopt various growth management techniques and concepts which have since become well-ingrained in subsequent policies and frameworks, these all designed to improve urban efficiency, spatial justice / equity, socio-economic growth, development and inclusion and environmental sustainability. The overall spatial development concept comprises three spatial building blocks, *viz*:
  - Nodes and activity areas
  - Movement and connectivity
  - Environmental structuring concept (p167)

These concepts have since been refined, updated to a more contemporary interpretation, described and explained in more detail in the RMSDFs for the seven Administrative Regions of Tshwane.

- There are several matters of importance contained in the MSDF that serve to support the proposed new higher education institution in the locality on the subject properties. A few of these are highlighted below:
  - One of the important aspects of a sustainable human settlement is its walkability, which contributes to the livability of the development. In this regard the MSDF refers to the "20 Minute Neighbourhood" describing its virtue as follows:

*"Quite simply put, this is a neighbourhood in which all required services and facilities are to be found no further than a 20 minute walk from where one lives. The goal of a 20 minute neighbourhood is to encourage pedestrianism over the use of private vehicles" (p76).*

Although not applicable here on neighbourhood level as meant by the MSDF, the campus site of the proposed new higher education institution will function similarly as an autonomous micro-cosm ("village") where resident students in hostels will indeed be within easy / comfortable walking and cycling distance of all required facilities while attending the institution. The detailed planning and design of the campus allows for appropriate pedestrian and cycling ways to facilitate on-site NMT. Examples of the facilities involved include lecture halls / rooms, restaurant / cafeteria, library, student centre, sports grounds / facilities, specialized shops (e.g. book store), gymnasium and recreation facilities.

- The MSDF has identified the concepts of Future Urban Areas and Management Areas (pp 94, 95) as commonly used in the seven RMSDFs for the City at this stage, which are discussed in more detail Para 7.13 *infra*.
- The MSDF has furthermore identified various objectives to ensure that development projects respond creatively and appropriately to the existing and future context of the area (i.e. character, scale, streets, views, solar access,

surveillance of public spaces, privacy, walkability, etc.) (p107 – 111) as well as to open space and the environment (pp 116, 117). The applicant has taken all these on board, as evident from the detailed discussion on Urban Design Considerations under Para 7.13.5 *infra*.

- The Environmental Structuring Concept as discussed in the MSDF (pp 159-166) has also been adhered to in the development proposal, as evident from Para 7.13.3 *infra*.

*"The Environmental Structuring Concept is built around creating linkages between the city's built form, its cultural heritage, symbolic locations, landmarks and natural structuring elements"*(p159)

Also:

*"A well-defined open space network is an important and integral part of the Spatial Development Concept of the MSDF (p162).*

And finally:

*"To ensure the sustainable use of the Open Space network, it is clear that land use planning should be done in relation with the network. **It is thus important that land uses with the potential to generate positive activity in the open space be located adjacent to the network.** It is further important that attention is not only given to land uses per sé, but specifically also to **land use typologies** and the manner in which they impact on the quality of public open space"*(p163) (own emphasis).

The applicant contends that the proposed higher education facility as a unique and highly appropriate land use typology would contribute to generate positive activity in the adjacent on-site natural open space and furthermore that the preservation of nature and particular sensitive natural attributes would be better served by the proposed higher education institution than most (if not all) other potential land-uses for the site.

- The MSDF finally confirms that investment in education, and especially higher education institutions and research & development (i.e. knowledge economy) would contribute to socio-economic growth and development of the City.

## **7.13 REGIONALIZED MUNICIPAL SPATIAL DEVELOPMENT FRAMEWORK, 2018 – REGION 6**

### **7.13.1 Site designation**

The subject properties are located within the officially demarcated urban edge in an area designated in the Regionalized Municipal Spatial Development Framework, 2018 – Region 6 ("RMSDF") as Future Urban Development Area earmarked for Low Density residential development on a site characterized by varying environmental sensitivities ranging from high (i.e. Ecological Support Area 1 associated with a sensitive ridge area), to medium (i.e. other natural areas), to low (i.e. no natural



assets remaining), according to the Biodiversity Map of the RMSDF dated 03 April 2018.

The Rural Plan of the RMSDF furthermore classifies the development site as being situated in a Management Zone.

The terms / concepts underlined above are explained in the RMSDF as follows:

(1) Urban edge

The urban edge is one of several spatial planning growth management instruments adopted by the CTMM in the RMSDF to assist with achieving the spatial vision and strategic objectives of the City. As such it serves to assist by-

*"...conserving valuable environmental areas which would otherwise be compromised by development and promoting the use of existing infrastructure through redevelopment, infill development and densification within the edge thus achieving development that is sustainable... The edge also ensures the protection of land – an exhaustible resource – by encouraging Brownfield developments instead of Greenfield developments."*(p17)

The subject properties are located within the official urban edge, as evident from the various relevant maps in the RMSDF, e.g. the Biodiversity Map, the Rural Plan, the Nodes and Corridors Map the Density Map as well as the map depicting the Regionalized Municipal Spatial Development Framework for Region 6.

[ANNEXURE 'W' : RELEVANT MAP EXTRACTS FROM RMSDF]

(2) Future Urban Development Area

On designated future urban development areas like the properties concerned, the RMSDF states the following:

- *"These areas that results (sic) from the non-availability of services will form part of the Urban fabric in the future but needs (sic) to be planned for and preserved as Rural areas in a sensible way that will not constrict its incorporation when needed"*(p90)
- *"The Future Development areas are identified for development in the near future."*(p90)

**Official guidelines for development of properties in designated Future Urban Development Areas are summarized in Para 4.10.4 of the RMSDF, p90. These guidelines are the following:**

- i. ***"The contribution of the proposed development towards the goals of the City strategy and Metropolitan Spatial Development Framework"***

The proposed higher education institution will equip graduates for better, higher quality sustainable employment and will see to the creation of additional employment by qualifying entrepreneurs. Also new business ventures as well as new innovation and research in technology and other research endeavours. Graduates who qualify will add to a better informed component of the population with advantages of better inclusion and participation in political processes and outcomes.

ii. ***"The availability of bulk engineering services – especially water and sanitation."***

The proposed new development project will be provided with all necessary infrastructural services, as set out comprehensively Paras 6.2, 6.9 and 6.10 *supra*.

iii. ***"The environmental sensitivity of the area – obvious considerations such as water courses, ridges."***

Apart from the fact that the applicant has embarked on a comprehensive environmental authorization process for the proposed new higher education facility as required in terms of prevailing environmental legislation, it has also proven later herein that the proposed development project would serve to complement, enhance and protect the natural environment of the development site. The land-use typology of a social / public facility with a vested interest in its environment goes a long way toward ensuing long-term sustainability of the receiving environment.

iv. ***"Proximity of site to public transportation routes / facilities such as stations."***

The development site is not located close to earmarked or declared public transportation routes or stations. Its spatial and amenity requirements, amongst others, have out-weighed the need to be located in close proximity to such. The proposed development will however be served by minibuss taxis for which appropriate facilities on and in the vicinity of the educational campus will be established (e.g. drop-off / pick-up embayments on Roolreier Road and a transport terminus facility on Erf 152 of the proposed new township development).

v. ***"Proximity of other supporting social facilities, economic opportunities, retail."***

The proposed higher education institution will not be dependent on any external social and economic opportunities to render it functional / sustainable. The nature of the institution and the use-rights to accrue to same will provide for adequate such facilities to render it more or less autonomous. Examples include a cafeteria, automatic teller machines, place

of refreshment, shops, sports fields and more – all being subservient and ancillary to the main use of a place of instruction.

- vi. ***"Physical features that may define the development – such as railway lines / watersheds / provincial roads / environmental areas."***

The physical features of the development site, both opportunities and constraints, have been duly researched and documented in this memorandum, and as such informed the development proposal in detail. These physical features were paramount in the decision to establish and operate the proposed higher education facility in this locality, on the particular development site.

- vii. ***"Liveable communities will have to be developed by means of social services such as schools, police stations and other amenities."***

Although not entirely applicable to the development proposal, the latter would nevertheless serve the principles of liveability by means of focused pedestrianisation and cycling on campus (NMT), up-scale architecture and urban design concepts / principles, appropriate landscaping as well as employment of the environmental structuring concept as encouraged in *inter alia* the MSDF, and RMSDF for the Region.

- viii. ***"Aesthetics and urban design guidelines will have to be provided with a diversity of housing typology which breaks from the tradition of monotonous housing schemes which have dominated the South African landscape for too long."***

Again not quite applicable, although the proposed higher education institution will be a unique, architect-designed project, fully responding to the receiving natural environment and surrounding landscape, blending where necessary and contrasting as required.

- ix. ***"The provisions (sic) of sustainable economic opportunities within these areas."***

As alluded to more fully elsewhere the higher educational nature of the facility will see to the creation of various sustainable economic (and other) opportunities in Tshwane, and wider. Qualified graduates will *ceteris paribus* create new employment opportunities and / or contribute to a reduction in unemployment due to tailor-made skills sets obtained through further studies at the higher education institution.

### (3) Low Density Zone

Based on the findings and recommendations of the Tshwane Compaction and Densification Strategy, 2005 ("CDS") four key density zones have been identified

to facilitate appropriate higher-density housing opportunities at particular localities across the City for all income groups to promote the aims of spatial and social integration. These are:-

- Concentration zones
- Linear zones
- Suburban densification zones
- Low density zones

The subject properties are located in an area earmarked in the RMSDF as Low Density Zone.

In Para 4.7.4 of the RMSDF, p78 Low Density Zones are described as follows:

- *"Low Density Zones are so called because those are the areas in the city where lower densities are actually more desirable, either because of location or bona fide special circumstances."*
- *"The majority of these zones are the peripheral areas that are removed from opportunities such as economic and employment nodes and mass transportation opportunities and is characterized by long traveling distances to areas of employment... These include areas along ridges, where lower densities are more conducive to a built form that is sensitive to the ridge quality from a visual point of view, ..."*

#### (4) Management Zone

It is only on the Rural Plan of the RMSDF that the subject properties have been shown as being located in a Management Zone. This appears to be an anomaly, since the Rural Plan is supposed to serve a planning management tool function for properties located outside the urban edge. The subject properties are located squarely within the official urban edge.

However, the RMSDF under Para 4.10.5 discussing Management Zones confirms a very important locality determinant in support of the current development proposal, viz:

*"Within these Management Zones **land uses and densities which do not fit into the denser urban complex, should be permitted...** The availability of services and the ease of access to major roads will play an important role in the evaluation of residential uses as mentioned above."*  
(own emphasis) (p90).

#### **7.13.2 Infrastructure requirement**

One of the criteria listed in the RMSDF, p58 to prove the suitability of a particular site for permitted land use change is the availability of infrastructural services. In this regard the availability of especially water and sewer services had been singled out in the development guidelines for Future Urban Development Areas on page 90 of the RMSDF. The following extract from the RMSDF furthermore bears relevance:

*"Land development proposals, whether in line with these documents or on merit, should only be supported if infrastructure to the satisfaction of the Municipality with reference to Section 40 of the SPLUMA can be provided in line with the overall IDP. This should include the provision of infrastructure by developers that may have an impact on the operational budget of the Municipality" (p3).*

As discussed more comprehensively elsewhere, the proposed new higher education facility can be fully serviced in a manner cleared with the CTMM engineering services departments beforehand, without any negative impact on the development priorities identified in the IDP for Tshwane.

### **7.13.3 Environmental structuring concept**

The RMSDF, duly informed by the Tshwane Open Space Framework, 2005 ("TOSF") identifies various environmental elements serving to provide structure to the open space system underpinning the City of Tshwane. Amongst others are sensitive ridge areas, heritage and cultural sites as well as regulated areas of watercourses which in this instance all affect the development site.

It should here be emphasized that the applicant has deliberately selected the development site for its vast proportions, but also for its physiographical richness and the contribution of the environment to the desired character / ambience of the proposed new tertiary higher education facility on same. The proposed development (academic campus and student accommodation) and the receiving natural environment are indeed two sides of the same coin – i.e. inseparable and co-joined to the benefit of both.

In terms of environmental sustainability (of which the spatial vision of ecological transformation in the Road Map Towards Tshwane 2030 forms part) the proposed development will serve to permanently "lock in" the preservation of sensitive and conservation-worthy areas / elements for current and future generations. The duty of upgrading, maintenance and care of the natural assets on site assigned to the higher education institution by way of a formal Environmental Management Plan ("EMP") will serve to enhance the probability of a successful symbiotic relationship between the built and the natural environment exponentially.

The RMSDF explains the Spatial Development Concept of the Municipal Spatial Development Framework as follows:

*"The development of an open space network is an integral part of shaping the city. Ecological resources are irreplaceable and should thus be one of the major structuring elements guiding the development of the city instead of unplanned urban growth taking precedence and open space becoming merely land that is not desirable for urban development and thus 'left over' space" (p27).*

Furthermore:-

*"The open space network is concerned with the spatial structure of green areas in the urban landscape and with all planning activities that are essential to create conditions for green areas to perform ecological services and to contribute to the quality of life" (p27)*

A portion of the southwestern parts of the development site has been designated Ecological Support Areas 1 status according to the CBA-map. These in essence comprise the higher-lying areas of the ridge area traversing the local area in a south / north direction. An Ecological Support Area 1 is described in the RMSDF as follows:

*"Natural, near natural and degraded areas required to be maintained in an ecologically functional state to support Critical Biodiversity Areas" (p98).*

The land management objective for these areas is for ecological processes to be maintained – an objective which will be reached by careful positioning of the urban footprint on site to ensure minimal impact on the particular area and especially on the ecological processes at work here. It is however important to point out the support in the RMSDF for the following "compatible land-uses", viz:

- \* *Conservation and associated activities*
- \* *Extensive game farming and eco-tourism operations*
- \* *Extensive livestock production*
- \* *Urban open space systems*
- \* *Low density rural residential, small holdings or resorts where development design and overall development densities allow maintenance of ecological functioning" (p98).*

With only a relatively small portion of the development site in its southwestern parts being classified on the Biodiversity Map for the area in the RMSDF as Ecological Support Areas 1, and with the list of compatible land-uses quoted above, it follows that the impact of the proposed new higher education facility on the subject properties would not exert a potentially detrimental influence on *inter alia* the ecological processes at work in this more sensitive area. The latter will only be utilized for passive recreation purposes – notably for hiking, mountain biking, jogging and bird watching – the potential impact of which will be far less than some of the "compatible land-uses" listed as the extract from the RMSDF above.

The project team furthermore took its cue from the RMSDF during the design stages of the project, especially with regards to the following:

*"The mountain ranges and ridges, and large conservancy and protected areas in particular, and rivers and water courses to a lesser degree, are responsible for Tshwane's **unique Africa character and identity**, which is being best described as 'nature within a city' and 'a city within nature'. There is the positive contrast between the built-up and natural environments everywhere... **This uniqueness must be protected, enhanced and celebrated at all costs in future.** The protection of*

*ridges as habitats of red data and endemic species is of utmost importance.” (p28) (own emphasis).*

It continues by emphasizing that-

*“Land-use planning must be done in relation to the open space network where possible, which creates the opportunity to place various urban land uses or developments **inside or adjacent** to the network. The full potential of the open space network can therefore be exploited for **unique projects** which otherwise would not be feasible” (p28) (own emphasis).*

The proposed development being a greenfields endeavor within the urban edge provided the applicant with a clean slate for the positioning, planning and design of this unique and highly compatible development project, in full response to the attributes and sensitivities of the receiving natural environment. The opportunity is reminiscent of the Garden City concept by Ebenezer Howard of old, with a clean canvass and no need for forced “retro-fit” solutions to overcome pre-existing challenges.

#### **7.13.4 Cultural and heritage sensitivities**

The RMSDF cautions that cultural and heritage sites should be approached with circumspection, for reason of which the applicant has commissioned certain relevant specialist studies to inform the present application. For more information refer to Para 6.11 *supra*.

#### **7.13.5 Urban design considerations**

The Urban Open Space Guidelines in the RMSDF, p66 were heeded and further refined by the project architects in their report titled “Urban Design: Proposed Education Hub” (refer Annexure ‘I’). The following RMSDF Guidelines in particular were taken on board in the planning and design of the proposed new higher education institution:

- i. ***“To enable urban (re)development to engage with and take relevant stewardship of adjacent open space” (p66)***

It is envisaged that the higher education institution would take stewardship of all environmental management and care matters through an approved EMP. The built and natural environments are viewed as being intertwined and complementary to each other. The utilization of the more sensitive components of the environment will be done responsibly and with minimal overall impact.

- ii. ***“To increase the overall physical and spatial value and quality of both the development project and the surrounding urban landscape” (p66)***

The natural attributes of the development site were paramount in the site selection process for exactly this reason. It is firmly believed that the receiving environment would add tremendous value to the proposed new educational

facility and that the development of the latter in symbiotic relationship with nature would likewise serve to strengthen / reinforce the natural component through sustainable management practices. The ultimate aim is to have a development in nature and nature in the development.

iii. ***"Improve interface edge conditions" (p66)***

The purposeful blending of the built environment component with the natural environment component will see to ideal interface edge conditions where the actual edge would present as an informal "blurr".

iv. ***"To improve or provide walkable access to non-motorised transport (NMT) such as cycle lanes and pedestrian walkways" (p66)***

Although probably meant for more hard-core urban settings, it can be confirmed that walkability and NMT have received the highest priority in the preparation of the DSP for the project. Not only will all the functional components comprising the overall higher education facility be linked by way of pedestrian / cycling ways, but also will the balance of the development site be accessible on planned routes for jogging, hiking and mountain biking. This aspect is seen as one of the unique selling points (USPs) of the proposed facility with internal planning and design focused on the absolute minimization of on-site motorized vehicular movement.

v. ***"Developments must also have generous sightlines" (p66)***

Sightlines have indeed served to inform the positioning of buildings on site as well as in relation to each other. This include sightlines from vantage points from the east towards the buildings and ridge as backdrop to same as well as sightlines into the natural environment from the future buildings on site.

A further related aspect is the positioning of the on-site entrance road to the campus facilities which has been positioned to serve a vista function focused on a focal point, being the northern facade of the academic buildings. The urban design response by the project architects in collaboration with the applicant as documented in their mentioned Urban Design Report demonstrates full compliance with the RMSDF guidelines, as evident from the following excerpts:

- *"This document communicates the site reading, interpretation and spatial rationale towards identifying developable pockets to address the client's brief. It is mindful of the height of the proposed development areas and their relationship to the ridge on the site. The resulting framework demonstrates sensitivity to its context and landscape. This is important not only for the ridge that is present but also to help preserve archaeologically significant sites..." (p3)*



- *"The hub's spatial character is informed by its agricultural context which includes a proposed, productive landscape as an entrance threshold. The framework subtly integrates development pockets with defined boundaries into the landscape. This approach avoids a single, monolithic built form that would dominate the site and detract from the landscape. It also ensures compact and respectfully scaled developments with defined boundaries. The nature of the resulting framework is also highly driven by the site's topography, vistas and a series of plateaus."*(p3)
- *"Plateaus form a natural hierarchy for processional movement between development pockets of the hub. At the highest point of the proposed development, the ridgeline remains visible and protected"*(p5)
- *"Late Iron Age sites and a burial site were mapped for preservation. The linear settlement pattern of heritage sites shows a historic axis of settlements running parallel to the ridgeline. This historic settlement formation is celebrated in the proposed framework. A 20m radius of development-free land surrounds all historically significant sites. Historically significant elements are woven into the proposed open space framework"*(p6)
- " \* *Development pockets must include visual connections from the east to the western ridgeline through sightline corridors.*  
\* *Development to be cognisant of built form heights and ensure minimum visual impact."*(p8)
- " \* *The framework proposes a new axial procession of open spaces that run parallel to late iron age heritage axes.*  
\* *Significant sites are protected and interwoven with the new axes, adding richness to the open space network.*  
\* *The framework proposes the inclusion of a variety of open space typologies and spatial treatments to establish a hierarchy of open spaces of varying scales."*(p10)
- " \* *Clearly defined development pockets protect the landscape from unnecessary sprawl.*  
\* *Pocketed developments ensure that the agricultural and natural landscape characteristics of the development are maintained.*  
\* *Edge conditions are defined by new and existing soft structures (natural edges (grid-of-trees)), as well as proposed built forms."*(p11)
- *"The hub framework identifies the following types of green structures:*
  - \* *Protected landscape: natural and untouched.*
  - \* *Accessible wilderness: threshold areas where the natural and manmade landscapes meet and transition.*
  - \* *Primary green structure: Formal structures framing processional movement routes and celebrated, axial, vista alignments.*

- \* *Secondary green structure: Spaces for leisure, rest and comfort.*
  - \* *Village green: formally edged and landscaped spaces for gathering and movement.*
  - \* *Spill-out spaces: landscaped pocket parks and gardens located adjacent to primary movement routes in between buildings.*
  - \* *Courtyards: shape the most private of open space typologies within the network of open spaces.”(p13)*
- On a balanced movement network and parking strategy the Urban Design Report confirms the following approach:
    - “\* *Pedestrian and cycling routes (green) are prioritized throughout the hub.*
    - \* *Vehicular and non-motorised modes of movement are separated for safety as well as to enhance the experience of the agricultural and natural character of the hub.*
    - \* *Existing dirt roads support the network where extraordinarily little need for access is required.*
    - \* *Decentralized parking areas reduce the impact of the traditional ‘parking lot’.*
    - \* *Parking areas to be treated as part of the natural landscape, harnessing permeable surface treatments for effective stormwater treatment.*
    - \* *Where possible, on-street parking reduces the effect of larger parking surfaces.”(p14)*
  - *“Vista lines draw users toward, through and into destinations across the hub.”(p15)*
  - *“A linear procession starts from the entrance and is framed by an agricultural landscape positioned on land previously disrupted and used for agriculture. The network proceeds to weave together areas of varied uses:*
    - \* *Agricultural hub*
    - \* *Sport and recreation hub*
    - \* *Accommodation hub*
    - \* *Arts and culture hub*
    - \* *Administration and shared, education facilities hub.”(p16)*
  - The Urban Design Report concludes with the following remarks:
 

*“The development is relatively small in relation to the site it occupies. It aims to harmonise rather than compete with its natural setting. This conceptual framework responds to the lay of the land and its contours that rise and fall. The architectural and spatial coding developed further down the line will continue with this approach of settling into and harmonizing with the landscape.”(p18)*

It is abundantly clear from the above that the development proposal complies in all respects with the environmental structuring as well as the urban design concepts put forward in the RMSDF, two aspects of exceptional importance for the locality of the site on the outer periphery of the official urban edge for the City.

## **8. CONSISTENCY WITH REGIONALIZED MUNICIPAL SPATIAL DEVELOPMENT FRAMEWORK, 2018 – REGION 6**

### **8.1 RMSDF DESIGNATION**

It has been demonstrated in previous sections of the memorandum that the present land development application and its underlying development proposal are predominantly supported by *inter alia* the Tshwane Integrated Development Plan (IDP) and the Tshwane Metropolitan Spatial Development Framework (MSDF) being its spatial framework for implementation of the Tshwane Vision, and also by the more updated region-based presentation of the latter in the form of the RMSDF.

In terms of the RMSDF the subject properties have been assigned a Low Density Zone designation in a Future Development Area (i.e. areas destined for urban development in the near future once infrastructural services are available). It is in the interim however incorporated in a Management Zone which has particular significance with regards to the present application as well.

### **8.2 CONSISTENCY**

The matter of consistency with the RMSDF has been canvassed comprehensively in Para 7.13 *supra*, with only the salient features here being summarized.

#### **8.2.1 Future Urban Development Area**

- The applicant has demonstrated in Para 6.4 *supra* unequivocally that the required infrastructural services (water, sanitation, roads, stormwater, electricity and refuse removal) required to render the establishment and operating of the proposed higher education institution sustainable, can be provided to the township, and furthermore that it can be provided without detracting from the IDP goals for the City. This means that urban development on the subject properties may indeed proceed.
- The Future Urban Development Area designation furthermore provides for urban development in the near future as long as *inter alia* the development can be sustainably serviced. The implementation schedule for the proposed higher education institution is indeed of short / medium term nature with end of 2024 being the target date for completion of the project, for commissioning of the institution in January 2025 to coincide with the new academic year.

#### **8.2.2 Urban edge**

The subject properties are located within the urban edge where urban developments are being promoted.

#### **8.2.3 Urban residential use**

With engineering services available to the subject properties and the latter situated inside the urban edge, development on same of an urban nature may now proceed. The RMSDF guides property owners and developers towards residential development of a low-density nature in the area under a Low Density Zone designation. This means that residential densification is being encouraged on the subject properties from the existing one dwelling-house per ±21,5 hectares (translating to 0,047 dwelling-units per hectare) to around 10 dwelling-units per

hectare, representing an approximate 21-fold densification. The RMSDF in this regards confirms that:-

*"(a)reas targeted for densification should be well served by social facilities such as education, open space, recreation etc. or should have the potential to be well served by social facilities"(p72)*

The extract confirms that areas earmarked for future residential development should not be developed as mono-functional dormitory townships (similar to the previous race-based "townships" on the outskirts of the City), but rather as fully functional neighbourhoods which include, schools, parks, sports fields, shops, hospitals, etc. With densification in the order of the day, residential properties in established neighbourhoods / townships are regularly rezoned throughout the City to accommodate such public / social facilities to serve the people.

The inclusion of *inter alia* social / public facilities in residential neighbourhoods is also corroborated in the Guideline for Human Settlement Planning and Design – Chapter 5: Public Facilities of the CSIR, of which the following extract finds relevance:

*"This sub-chapter gives guidance on the planning of public facilities **within residential settlements**"(p1) (own emphasis)*

The CSIR emphasizes that all public facilities are people-centred confirming that it finds relevance and acceptance in residential areas – existing and future.

[ANNEXURE 'X' : EXTRACT FROM HUMAN SETTLEMENTS GUIDELINES]

#### **8.2.4 Greenfields development**

The Human Settlement Guidelines by the CSIR distinguish between higher-order, middle-order, lower-order and mobile public facilities based on the sphere of influence exerted by same, i.e. the size of the area served. The proposed higher education institution on the subject properties classifies as a higher-order public facility due to its primary market area defined by a 200km radius around the development site, supplemented by a secondary market area comprising the balance of South Africa.

Being a high-order public facility to be established in a designated residential area in a greenfields milieu provides the opportunity for structuring of the future residential area of which the envisaged higher education institution would form an integral part and exert a specific influence on the residential development typology to manifest within its immediate vicinity in future. Other than in a brownfields development milieu, this establishment and operating of the proposed higher education institution in this particular locality on the development site would not exert any potentially negative impacts on established residential uses and associated facilities in an already developed area with vested rights.

The selection of the subject properties for the envisaged higher education facility was partially influenced by its future-use residential designation in the RMSDF, for the implied compatibility of uses. It should be kept in mind that several other properties in the immediate vicinity to the south, east and southeast including the still developing Waterlake Farm Residential Estate, have all been earmarked for future residential development and use in the RMSDF.

### **8.2.5 Spatial planning for public facilities**

Education is one of a wide variety of facilities rendering a service to the public at large, which can be provided by either the public or the private sector. Other examples include health facilities (e.g. clinics, hospitals), recreational facilities (e.g. sports fields), cultural facilities (e.g. libraries, community centres, religious centres), administrative facilities (e.g. cemeteries, magistrate court, post office, police stations, old age homes, fire stations). Education facilities include crèches / nursery schools, primary schools, secondary schools, tertiary institutions (e.g. colleges, technicons and universities) and adult learning centres.

Comprehensive planning for the provision of public facilities is only found in greenfields developments comprising new townships for integrated mixed-use human settlement developments on a neighbourhood or community level. Public facilities provided here include for the most part lower-order (neighbourhood) and middle-order (community) social facilities / services like clinics, schools, sports fields, libraries and cemeteries.

Provision for such integrated mixed-use human settlement developments are not made in the RMSDFs *per se*, and are these developments usually accommodated under a residential designation in same. They are provided on an *ad hoc* basis, especially in brownfield developments.

Greenfields developments are however the exception, with the rule rather revolving around brownfields developments where existing residential neighbourhoods are being transformed from a previous mono-functional dormitory function to vibrant mixed-use multi-functional precincts where public facilities of all levels (high-order, middle-order and lower-order) are provided in an integrated, spatially efficient and sustainable way consequential to the densification and intensification goals of the City.

While the City would prefer to see public facilities accommodated in identified development nodes, a centralized locality is not desirable or even possible for many such facilities / institutions, especially those with higher-order market areas. Due to the vast spatial requirements of the proposed higher education facility and the desired nature-based character for same, a high-intensity urban spatial milieu would be wholly inappropriate.

Therefore, due to the 'smart growth' based on-going and escalating densification / intensification phenomenon and the fluidity it causes in the urban spatial dynamics, it is impossible for the City to pinpoint particular localities for public / social infrastructure on all levels (i.e. high- middle- and low-order). It is only in exceptional

cases where pertinent direction could be given, like for the immediate vicinity around the Unitas Hospital in Centurion where a “medical precinct” has been identified as a specialized area for accommodation of hospitals and related public / social infrastructure.

A further reason for municipalities being unable to indicate in its spatial frameworks where public facilities should be established in its area of jurisdiction, is due to such higher-order and medium-order facilities often resorting under national and provincial governments, which plan its distribution networks autonomously in accordance with unrelated criteria to spatial determinants of the City. On higher-order public facilities the Human Settlements Guidelines confirm as follows:

“These facilities generally serve the entire region, metropolitan area or city (e.g. hospitals, **universities**) and are **not provided for in the layout planning process for single residential settlements**. The location of these public facilities is determined by analyzing the most suitable and accessible location for the greatest number of people. **Essentially, these facilities are planned in terms of an overall development framework.**”  
(p1) (own emphasis)

#### 8.2.6 Management Zone

As alluded to in Para 7.13.1 *supra* the RMSDF also depicts the subject properties as being located in a Management Zone, of which the following extract from Para 4.10.5 of the RMSDF confirms a crucially important point.

*“Within these Management Zones **land uses and densities which do not fit into the denser urban complex, should be permitted...** The availability of services and the ease of access to major roads will play an important role in the evaluation of residential uses as mentioned above”*  
(own emphasis) (pp 90, 91).

The proposed new higher education facility is one such land-use which does not fit in within the denser urban complex.

#### 8.2.7 Other criteria

The assessment of the development proposal against various other criteria and guidelines in the RMSDF has confirmed the following (for details on these refer Para 7.13 *supra*):

- Contribution of the development to the goals of the City strategy and MSDF in terms of sustainable quality employment, new business formation, economic growth and development and social mobility in the post-graduation phase.
- Expansion by applicant of available infrastructural services.
- Environmental conservation, sustainable use of resources and integration of development and open space system of the City (i.e. compliance with environmental structuring principle).

- Expansion of supply of public / social facilities.
- Acknowledgement and incorporation of physiographic features of the development site (e.g. ridge / ridge-line, provincial roads, river and floodplains, heritage / archeological artefacts).
- Liveable communities concept through incorporation of NMT on site.
- Aesthetics and functionality of urban design, including:-
  - stewardship of adjacent open space
  - enhancement of quality of landscape
  - improving interface edge conditions
  - promote walkability and liveability on site
  - provide "generous" sightlines.

### 8.2.8 Synthesis

As evident from the above evaluation read with Section 7 of the foregoing memorandum, it is clear that the development proposal on the subject properties is to a very large degree commensurate with the provisions of the Tshwane IDP, MSDF and RMSDF – Region 6. The provisions of these policy documents / plans / frameworks not entirely satisfied / complied with relate to requirements in conflict with the foundational site and locational requirements of the proposed higher education institution.

## 8.3 MERIT-DEPARTURE FROM RMSDF

### 8.3.1 Compliance with RMSDF

- The applicant contends that it has demonstrated unequivocally and convincingly in previous sections of the motivating memorandum the predominant consistency of the development proposal with the provisions of the RMSDF (and IDP & MSDF). The application is therefore for the most part compliant with *inter alia* Section 42(1)(b) of SPLUMA.
- However, there are certain matters of potential contestation of compliance of the development proposal with the provisions of the applicable future planning policies alluded to earlier (notably the MSDF as integral part of the IDP and RMSDF – Region 6 as geographical refinement of the MSDF) which require to be addressed as a departure from these policy documents. The applicant will therefore here demonstrate how the application qualifies to be considered favourably based on a departure on merit from the provisions of these policy documents (informed by other related policy documents like the Compaction & Densification Strategy, etc.), as allowed for under Section 7 of the Bylaw.

Bylaw Section 7(1)(a) and (b) reads as follows:

*"(1) Nothing contained in Sections 5 or 6 of this By-law shall be construed as prohibiting a Municipality from taking a decision on a land development application, which decision in the opinion of the*



*Municipality, departs from the adopted Municipal Spatial development Framework, provided that:*

- (a) *it must motivate site specific circumstances that may justify the departure;*
- (b) *subject subsection (1)(c) such departure does not materially change the Municipal Spatial Development Framework;”*

The CTMM therefore has discretionary powers to deviate from the RMSDF based on merit and providing the deviation does not serve to impede / thwart the purposes and intent of the IDP, MSDP and RMSDF as applicable here. A material departure may require the amendment of the RMSDF, which is not the case with the present application.

- Matters of potential dispute regarding compliance by the proposed land-use activity with the provisions of the mentioned applicable future planning policies for which a departure is required include *inter alia* the following:

- (1) Insufficient engineering service infrastructure
- (2) Deviation from certain “smart growth” principles, e.g. concentrated development in nodes, corridors, specialized and activity areas.
- (3) Inadequate connectivity
- (4) Enactment of leapfrog development and / or urban sprawl.
- (5) Defeating the purposes of spatial transformation and efficiency
- (6) Lack of broadening of access to education and social inclusion.

These are so-called institutional impediments which may be regarded as eroding the institutional sustainability of the development proposal in the particular locality on the subject properties - some more, and others to a lesser extent. These are discussed in more detail in the subsection below.

### **8.3.2 Non-compliance matters**

With the development project being proposed on Properties situated somewhat distanced from actual urban development in an area yet to be developed as such, it raises the concerns as summarized in Para 8.3.1 above, despite its locality being in a designated Management Zone in the RMSDF;

where –

*“... land uses... which do not fit into the denser urban complex, should be permitted...” (p 90)*

These concerns are addressed more fully below:

#### **(1) Insufficient engineering service infrastructure**

The provision of municipal engineering services has, with the exception of bulk water supply, not yet been extended to the area where the subject properties are situated. However, as strongly promoted in policy imperatives of both the Gauteng Province and the Tshwane Municipality (refer Para 6.4.1 *supra*) the applicant has heeded the call and obliged by these by putting together

appropriate non-municipal engineering solutions to service the proposed township for a higher education facility sustainably. The township will in summary be supported by the following combination of municipal and private infrastructural services, viz:

- Water: Bulk municipal supply supplemented to a large degree by purified water from an on-site private sewerage treatment plant, grey water retention dam and an off-site private water purification plant and storage facilities.
- Electricity: Municipal supply, with the applicant participating financially to implement certain bulk and link installations required to service the township sustainably.
- Sanitation: Private sewerage treatment plant and associated grey water retention dam.
- Roads: Construction by the applicant of a municipal road (Kampus Boulevard) between a GDRT – approved access position on Boschkop Road (Provincial Road D631) and the township, and provision of a servitude of right-of-way in favour of the general public along a certain section of the eastern boundary of Erf 152 in the township.
- Stormwater: Various on-site private installations, to the satisfaction of the CTMM Stormwater Division.
- Refuse disposal: Private solution to collect, store, reduce, recycle and remove all refuse generated in the township to a registered landfill site.

Thus, although there might be insufficient municipal services readily available, the applicant has proven that the proposed township can indeed be fully and sustainably serviced from an infrastructure point of view.

(2) Deviation from certain "smart growth" principles

The "smart growth" principles not being adhered to include the deviation from the concentration of development in nodes, along corridors and identified specialized and activity areas, thereby incurring agglomeration advantages and optimizing the utilization of existing infrastructure. The following explanation bears relevance:

- The Demacon Market Study has, based on official South African guidelines, found that a 20,2 hectare site would be required for the proposed new higher education institution for improvements, infrastructure and recreational space (p 154). A development site of this extent is simply not available in existing development nodes and corridors in the City of Tshwane, and even if it could be assembled on a brownfields base, would be too expensive, thereby rendering the project financially unsustainable.

- Accommodating a ±20 ha development site for higher education institution within an existing development node or corridor would serve to effectively thwart the purposes of same regarding –
  - intensification goals
  - pedestrianisation (adverse effect of long street boundaries without e.g. shop fronts to retain pedestrian interest)
  - redress and social justice (less land available for “inclusionary” housing in close proximity to other supporting land-uses).
  - public transport usage (hostels serve to negate the need).
- Denying the applicant the opportunity to establish a prestigious institution with a country ambience and rustic ‘look & feel’ which would serve to reinforce Tshwane as the educational heartland of the Gauteng Province and also to bolster the image of the City as Capital City of Excellence.

(3) Inadequate connectivity

- The provision of on-site hostels serve to substitute the need for high-frequency, high-speed public transport services / facilities in support of the proposed development project to a large degree.
- The area is indeed well served by an existing and planned future hierarchy of public roads which provide adequate accessibility for the envisaged capacity of the proposed higher education institution as well as for future expansion (served by existing and future roads)
- With connectivity in cyber space increasing in quality, availability, affordability and usability in leaps and bounds pursuant to continual technological advances, it follows that “manual connectivity”, be it by private car or public transport, will over time diminish in relative importance. Electronic communications have become the norm and it is foreseen that this will be the main medium of connectivity between the proposed higher education institution and other such tertiary institutions and innovation and research organization in the Tshwane and wider Gauteng area.

(4) Leapfrog development and / or urban sprawl

- The applicant contends that the perceived leapfrog development to result from the present application will be justified, based on especially the –
  - absence of a sufficiently large site adjoining the actual urban development periphery; with
  - the required site and locational characteristics which are paramount to the successful implementation of the higher education institution.
- Leapfrog development within the official urban edge is a commonplace occurrence finding acceptance in knowing that the entire area inside the urban edge will be developed fully over time.

- Leapfrog development to a position outside the urban edge can be problematic for its encroachment on protected agricultural and conservation resources. This is not the case here.
- Considering that a low-density residential township has previously been approved on the subject properties (refer Para 3.1 *supra*) and the comparison drawn between the current and residential development proposals, the proposed higher education institution will represent a much lesser sprawl impact than the residential concept (refer Para 8.3.3 (2) *infra*). Be that as it may, the applicant in any event contends that the proposed development on the subject properties will eventually be surrounded by other urban developments inside the urban edge and that its present position somewhat distanced from other urban developments should not form the basis for viewing the application in a negative light at this stage.
- The Demacon Market Study in Chapter 8 explains the *rationalé* for tertiary higher education institutions requiring to be located outside the actual development periphery in a decentralized as opposed to a centralized position. Several examples are cited of such institutions historically setting out in CBD-settings, others in peripheral settings and over time overtaken by development and absorbed within the urban fabric (pp 124, 125). It quotes from certain literature sources confirming the existence today of five distinct relationships between higher education institution campuses and the urban fabric of cities / towns. These relationships are the following:
  - Equals: City and campus the same integrated development
  - Disjoints: City and campus share no communalities, but campus not an independent 'city'.
  - Touches: City touches the campus, i.e. the two are tangent – sometimes separated by a feature like a river or highway.
  - Contains: City contains the campus although campus has own boundaries, etc.
  - Overlaps: City and campus share various points in common integrated in the urban fabric, with a blur between city and campus boundaries in many instances.

The Market Study concludes that the proposed higher education institution on the subject properties has a "touches" relationship with the City of Tshwane due to it not being contained in the urban fabric and due to its close proximity to existing urban spaces (pp 124, 125). The Market Study furthermore confirms the following:

*"In South Africa... nearly all universities, as well as their decentralized campuses are either touching or contained in urban areas."(p125)*

and

*"It thus becomes apparent that the proposed campuses' relation with the city is that it is directly in the path of the city's eastward expansion. The location is similar to the positioning of other major universities across the globe."(p 125)*

- From the above it can be deduced that the Sefako Makgato Health Sciences University in the northern in parts of Tshwane has a similar "touches" relationship with the city, being situated outside the urban fabric, yet sufficiently close to existing urban spaces to render it a functional whole. This is viewed as an existing precedent, in support of the present development proposal.

(5) Spatial transformation and efficiency

Although the development proposal on the subject properties will be spatially sustainable as per Development Principle 7(b) of SPLUMA (Para 7.3.1 (2) *supra*), it will not directly contribute to spatial transformation of Tshwane's urban structure towards a more accessible and equitable integrated whole. This is due to the nature and extent of the of the proposed land-use activity.

It should be noted that not all land development applications will be able to comply with each and every development transformation requirement, for various reasons. In the present instance the land requirement of 20 hectares as well as the very specific locational requirements necessitated the applicant to consider a locality outside the "norm", not necessarily in compliance with the normative directives of spatial transformation and urban efficiency.

(6) Access to tertiary education and social inclusion

With reference to Para 5.1.4 *supra* we need to here reiterate the following:

- Access by previously marginalized individuals to higher education may be perceived to be hampered due to the proposed higher education institution envisaged to be a language-based facility where teaching will take place in Afrikaans. This is however not an impediment, and will only affect enrolment by individuals not fluent in Afrikaans or refusing tutoring in Afrikaans.
- The establishment of an Afrikaans-medium higher education institution in Tshwane with a campus capacity of 2 500 students will serve to relinquish an equal number of student enrolment spaces of 2 500 at existing public (and other) higher education institutions in the primary market area available to students of other language preferences. Put differently, it can be foreseen that students with a preference for learning / studying in

Afrikaans will migrate from existing higher education institutions with English as predominant tutoring language to the proposed new one on the subject properties. This will create the opportunity for e.g. previously disadvantaged individuals to enroll at the former in the void left, thereby indeed broadening access to existing higher education institutions.

- Although the matter of social inclusion at the proposed higher education institution may turn out to perhaps be less-optimal in terms of official expectations and / or requirements due to the prevailing race profile of Afrikaans speaking individuals (refer Para 5.1.4 *supra*), it should be emphasized here that a higher education institution is merely a means to an end, and not an end in itself. By our reading of the various national, provincial and municipal policies on transformation, it is the product or outcome of tertiary education that equips the graduate for better quality and remunerated employment, social integration / inclusion and upward socio-economic mobility in the workplace, and in society as a whole.

### 8.3.3 Synthesis

Full compliance with all relevant policies / plans / frameworks in land development applications is simply impossible. The nature and extent of the proposed land-use activity on the subject properties have contributed to the inability of the present application to fully comply. It is for this reason that the opportunity for a departure from these policies / plans / frameworks has been created in the Bylaw and SPLUMA, and is here being pursued by the applicant.

Although the list of deviations from the prevailing policies / plans / frameworks discussed above is by no means exhaustive, the principles remain the same for other possible deviations not mentioned *per se*. Also the Town Planning Memorandum in preceding sections follow a recognizable theme throughout in this regard, and should the merit of the application, including the merit for the departure, be considered as a comprehensive whole.

### 8.3.4 Site specific requirements and circumstances

#### (1) Property extent

Being a high-order public / social facility (as per the classification of the CSIR in its Guidelines for Human Settlement Planning and Design) with a national sphere of influence (refer Para 5.2.3 *supra*), it follows that the proposed higher education facility would require a large land-area to accommodate its activities physically, functionally and aesthetically. It is only after a long and arduous search for a property / properties in Tshwane in various locations that the applicant has found the seven congruent properties concerned which comply fully with its spatial requirements.

With the subject properties extending to approximately 154 hectares total it follows that-

- \* there are no properties of such extent available for development within the development boundary of the City

- \* the cost of land with such extent, even if available within the urban development boundary, would be prohibitive, unaffordable and a death knell to the viability (economic sustainability) of the project.

(2) Development theme

The desired rustic "country-feel" campus for the proposed higher education institution where its character will be defined by a healthy natural environment and vast open spaces reinforced by the agricultural fields of the envisaged research-driven experimental farm and by expansive sports grounds, could only be satisfied on the subject properties. The development site is host to the most unique landscape, open space, natural attributes and more, to ensure the sense of place and ambience being envisioned for this very prestigious, landmark facility.

(3) Natural environment

A primary drawcard for selection of the subject properties for establishment and operating of the proposed new higher education facility was the pristine natural attributes on offer on the development site. The mutually beneficial relationship between the higher education institution and the natural environment has been demonstrated extensively and convincingly in preceding sections of the memorandum. Suffice it to reiterate here that the educational campus needs the natural environment and landscape for its peaceful tranquility and psychologically calming and enriching effect, conducive to study / learning and teaching to achieve its educational and human development goals.

(4) Site locality

The specific locality of the subject properties to the east of the development periphery of the City is paramount for the successful implementation of the proposed new higher education facility. As alluded to previously it requires to be located in Tshwane, the heartland of education in Gauteng and the country at large, in proximity to other such higher education institutions and research & innovation concerns for the agglomeration economies on offer. It will also as such contribute to the status and acclaim of Tshwane as the Capital City of the country and the gateway to Africa.

(5) Future expansion

The particular development site offers the possibility of limited future expansion of the activities of the higher education institution *in loco*. There is furthermore also a possibility of expansion onto adjacent properties which are as yet undeveloped from an urban perspective.

Extension possibilities for similar such facilities within the urban development boundary are extremely difficult due to various reasons of which availability of adequately-sized property prospects at an affordable price is one of the most challenging.

(6) Comprehensive planning

The development site affords the opportunity of "clean slate" comprehensive and integrated planning and design, which is seldom the case with brownfields developments. The latter most often requires "retro-fit" solutions, influenced by vested rights and other surrounding impediments (e.g. architectural style). A fresh *de novo* approach leads to increased efficiency and a wholesome balance between the natural and built environment components. This can be achieved on the specific site selected for the proposed new higher education institution.

(7) Safety and security

The particular locality of the development site is outside the so-called "hot-spot" areas for criminal activity within the developed areas of the eastern suburbs of the City. The site offers a safe and secure environment which will be enhanced by adoption of CPTED-principles.

(8) Synthesis

It therefore follows that the development site for the proposed establishment and operation of a new higher education institution is uniquely appropriate in all relevant ways for the sustainable implementation of this exceptional and prestigious landmark project. Where all other properties investigated have fallen short dismally, the specific site circumstances and attributes of the subject properties have proven to be a perfect match for the locality and operational needs of the higher education institution. These include the ability of the site to

- 
- \* be sufficiently large to accommodate the development project with allowance for incremental expansion in future and with cognisance to the ambience requirements of a spacious campus.
- \* accommodate and complement the desired development theme of a rustic, "country feel" campus in a rural landscape
- \* satisfy the need for a higher education campus nestled in nature with natural elements shaping and permeating all aspects of the development.
- \* be in close proximity to other supporting urban functions, yet sufficiently distanced to warrant the unique setting outside the conventional urban clutter and congestion.
- \* provide for clean slate "garden city" planning and design without retro-fit and other pre-existing conditions and challenges as prevalent within the urban development periphery.
- \* host a safe and secure teacher / learner community where patrons can thrive in a wholesome, clean environment without criminal or other threats.



### 8.3.5 Effect of departure on Municipal Spatial Development Framework

#### (1) Substitution of complementary land-use

- \* The proposed higher education institution on the subject properties will serve to substitute future residential development with a low intensity high-order public / social facility. Since public facilities are, due to its people-centred nature, highly compatible with and generally associated with residential developments, the envisioned substitution of these future land-use activities is not foreseen as a particularly noteworthy aspect with important bearing on the MSDF / RMSDF for the area.
- \* Private initiatives for the provision of public / social facilities due to *inter alia* municipal budget priorities and constraints are encouraged in all official frameworks and policies, which confirms that the proposed higher education facility would be commensurate with these initiatives and not militate against the RMSDF for the area in this regard.

#### (2) Scale and transition

- \* It is an accepted principle to provide for low-density / low-intensity land-uses near and along the urban edge to provide an appropriate urban transition zone towards farmland and conservation areas outside the urban edge. It is also advisable to link urban space systems in this transition zone to the rural environment outside the urban edge.
- \* The applicant contends that the development proposal on the subject properties would serve this principle of an appropriate urban transition zone towards / along the official urban edge, and that the principle would be served better by the proposed new higher education facility than by low-density residential development as presently being earmarked for in the RMSDF.

Residential development scenario: Assuming only 50 percent of the ±154ha site is developable due to environmental sensitivities and other constraints and that roads would consume a further 20 percent of the developable land in the residential township, this would leave around 62 hectares nett developable land for housing purposes. At an allowable density of 10 dwelling-houses per hectare a total of 620 dwelling-houses could be developed. At an average extent of 350 m<sup>2</sup> per dwelling-house, the gross floor area ("GFA") could amount to around 217 000m<sup>2</sup>.

Higher education institution: Application is being made for a total of 52 000m<sup>2</sup> GFA only, broken down as follows:

- Academic campus	: 31 000m <sup>2</sup>
- Student accommodation	: 21 000m <sup>2</sup>

With a "cluster-and-space" type development for the higher education institution (i.e. concentrated footprint and fragmented building composition) and a development footprint of 52 000m<sup>2</sup> only, compared to a widely spread out residential development of up to 217 000m<sup>2</sup> GFA there can be no doubt

that the current development proposal constitutes a much better development alternative in this particular locality in proximity to the urban edge.

- \* On the matter of scale of a development the RMSDF stipulates the following:

*"Scale is about the relationships between... a human being and their built environment. While being a quality that cannot be easily defined it is critical to the psychological well-being of an individual. Design associated with the public realm should always use the person on foot as measure of appropriateness"*(p66).

The proposed new higher education institution on the development site will not only be appropriately scaled for maximum well-being of the future patrons of the facility, but also to serve an appropriate transition between the urban and rural divide along the urban edge. Whereas the low-density residential development scenario could be perceived as being reminiscent of further spreading sprawl, the higher education development scenario would be much more contained, environmentally-centred and much less visually obtrusive on the affected landscape.

### (3) Locality in urban environment

- \* The vast spatial requirements of the proposed higher education institution precludes it from an alternative locality in a hard-core urban environment. There is simply not enough space to accommodate the facility in e.g. the CBD or other high-order development nodes like Hatfield, Menlyn or Brooklyn where developable land is a scarce resource being encouraged for optimized ("highest-and-best") use. It is also not possible to sever the agricultural research and sports fields components from the other campus facilities and to relegate these to a locality on the outskirts, due to these forming an integrated instrument in the training and education of students in the fields of agriculture and sport.
- \* A locality in a concentration zone, linear zone or other preferred locality to increase efficiency and spatial sustainability is not practical. The higher education institution will have an imposing and "intimidating" presence in such a locality with various accompanying adversities which will be avoided / negated by acceding to its presently proposed locality on the subject properties. Examples of such adversities include:-
  - a reduction in available space to accommodate mixed-uses
  - long street fronts to impede pedestrian experience
  - sub-optimized use of land and infrastructure as scarce resources.
  - negating of the aims of spatial sustainability and urban efficiency.
- \* Exorbitant land-prices in such areas combined with the vast space requirements render a project like this in a hard-core urban locality

economically unsustainable. The proposed development in such a locality is therefore a still-born notion with zero prospects of implementation.

(4) Impact on overall objectives

(1) MSDF Strategic Objectives

The following extract from the MSDF confirms the seven strategic objectives of the City.

*"The Vision of the City of Tshwane is to become The African Capital City of Excellence. Seven strategic objectives have been identified in order to respond to the vision:*

1. *Provide basic services, roads and stormwater*
2. *Stimulate economic Growth and Development and Job Creation*
3. *Sustainable communities with clean, healthy and safe environment and integrated social services*
4. *Foster Participatory Democracy and Batho Pele*
5. *Promote Sound Governance*
6. *Ensure financial sustainability*
7. *Organizational Development and Transformation"* (p35)

And furthermore-

*"The MSDF responds primarily to*

- **Strategic Objective 2** *(Economic growth and development):*
  - *Provide strategic direction around infrastructure provisions*
  - *Guide developers and investors as to appropriate investment localities*
  - *Initiate rural management programmes to improve livelihoods and stimulate employment*
- **Strategic Objectives 3** *(sustainable communities with clean healthy and safe environment and integrated social service):*
  - *Restructure the spatially inefficient City through compaction, densification and TOD*
  - *Promote sustainable use of land resources*
  - *Growth management"* (p35)

It is clear from these extracts that the proposed higher education institution on the subject properties would not militate against or undermine Strategic Objectives 1 and 4 to 7 and that it will serve the purposes of supporting Objectives 2 and 3. The undeniable causal link between higher education and economic growth and development has been demonstrated in previous sections of the memorandum, and its positive effect on unemployment, poverty and inequality. Higher education leads to *inter alia* a reduction in unemployment as a solution to "structured unemployment", upward socio-economic mobility, post-graduate social and economic inclusion and diversification of the economy.

As also canvassed in preceding sections of the memorandum the present development proposal will -

- \* provide in its own infrastructural requirements at own cost without laying claim to infrastructure or budgets for infrastructure intended for servicing of the less affluent communities in the northern parts of the Region and City.
- \* serve to create a clean, healthy and safe environment for the teacher / student community in future on the higher education campus.
- \* implement the sustainable use of land and infrastructure as scarce resources.

(2) RMSDF objectives

The RMSDF is in essence an extension of the MSDF, with similar strategic objectives as alluded to above. It states the following:

*"The Regionalized Spatial Development Frameworks for the different Regions in Tshwane collectively form the sum of the SDF. The SDF is considered to be the implementation mechanism of the spatial component for the Roadmap Towards Tshwane 2030, Municipal Spatial Development Framework, as well as other strategic policies with a spatial emphasis..."(p1)*

And furthermore-

*"The IDP, SDF and RSDFs focuses (sic) on spatial transformation, economic transformation and ecological transformation as specific objectives envisioned in the Roadmap Towards Tshwane 2030"(p1)*

These objectives coincide to a large degree with *inter alia* the SPLUMA Development Principles and various other directives and imperatives in the future planning policies of the country on national, provincial and municipal level as discussed in more detail in foregoing sections of the memorandum. Suffice it to here reiterate the following:

- \* The development proposal will not thwart or impede the goals and objectives of the IDP, MSDF and RMSDF as applicable here.
- \* The proposed higher education facility will add to the supply of presently under-provided public / social facilities for post-school education purposes.
- \* It will contribute indirectly to achievement of the "smart growth" principles of the City by locating outside areas earmarked for densification and intensification, mixed-use developments and pedestrianization. The large land requirement of the proposed higher

education facility of around 20 hectares would need to be satisfied outside the urban development boundary so as to allow for these principles to be achievable inside the urban development boundary for other more appropriately-scaled land-use activities.

- \* The proposed higher education facility on the subject properties will be to a large degree self-sufficient in the provision and maintenance of infrastructural services, without appeals on municipal infrastructure (or budgets for same) earmarked in the IDP for previously disadvantaged communities.

(5) Non-material nature

The proposed departure from the MSDF and RMSDF to establish and operate the envisaged low-intensity higher education institution on the subject properties cannot be regarded as being material. Public / social facilities are complementary to residential uses in residential neighbourhoods and forms an integral part of the residential amenity. Education facilities as such contribute to the shaping of residential neighbourhoods in terms of urban landscape and sense of place, unequivocally confirming the non-material nature of the proposed new higher education institution on the subject properties as part of the future residential neighbourhood envisaged by the City for this area in the near future.

We have already discussed how the scale of the proposed higher education institution compared to the development footprint of a low-density residential development on the subject properties would serve the intent and purposes of the RMSDF better by being less obtrusive and providing a better transition between urban and rural development along the urban edge.

The development proposal will in no way impact on the RMSDF to the extent of requiring it to be amended.

(6) Infrastructure requirements

The CTMM has a "pro-poor" budget aimed at spending its revenue primarily on inhabitants of the City in less well-off areas on improvement of basic services, provision of public facilities and social support. There are various such projects underway as identified in the IDP and other related documents / policies approved by the Metro Council, aimed at improvement of the quality of life of those most vulnerable members of society.

It is therefore important to note that the proposed new higher education institution on the subject properties would not make any appeals on the municipal budget that would redirect or diminish the budget allocation to these previously disadvantaged focus areas. In this regard the applicant has demonstrated that all infrastructural requirements for the higher education facility would be paid for by the applicant in line with municipal policy requirements and by prior agreement in formal civil and electrical engineering services agreements between the CTMM and the applicant.

### **8.3.6 Synthesis**

As clear from the foregoing information and argument the proposed departure from the RMSDF will not have the effect of amending the RMSDF materially, or undermining the provisions of the IDP (including MSDF) for the City. The merit of the deviation is clear from the compliance with and support of the land development application with the overall objectives of the policy directives of the various policy instruments as incorporated in the RMSDF. There can therefore be no doubt that the proposed higher education institution on the subject properties would make an important contribution to the realization of the Vision of the City.

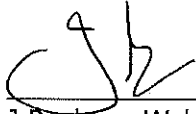
## **9. CONCLUSION AND RECOMMENDATION**

### **9.1 CONCLUSION**

As evident from the facts and reasoning in the preceding memorandum the applicant has successfully discharged its responsibility to prove the merit of the proposed new higher education institution on the subject properties.

### **9.2 RECOMMENDATION**

Based on the contents of the motivating memorandum and supplementing annexures to same and the positive conclusion reached, the City of Tshwane Metropolitan Municipality is hereby requested to award the application its favourable consideration and to approve it as applied for.



J Paul van Wyk (Pr Pln)  
AUGUST 2021