

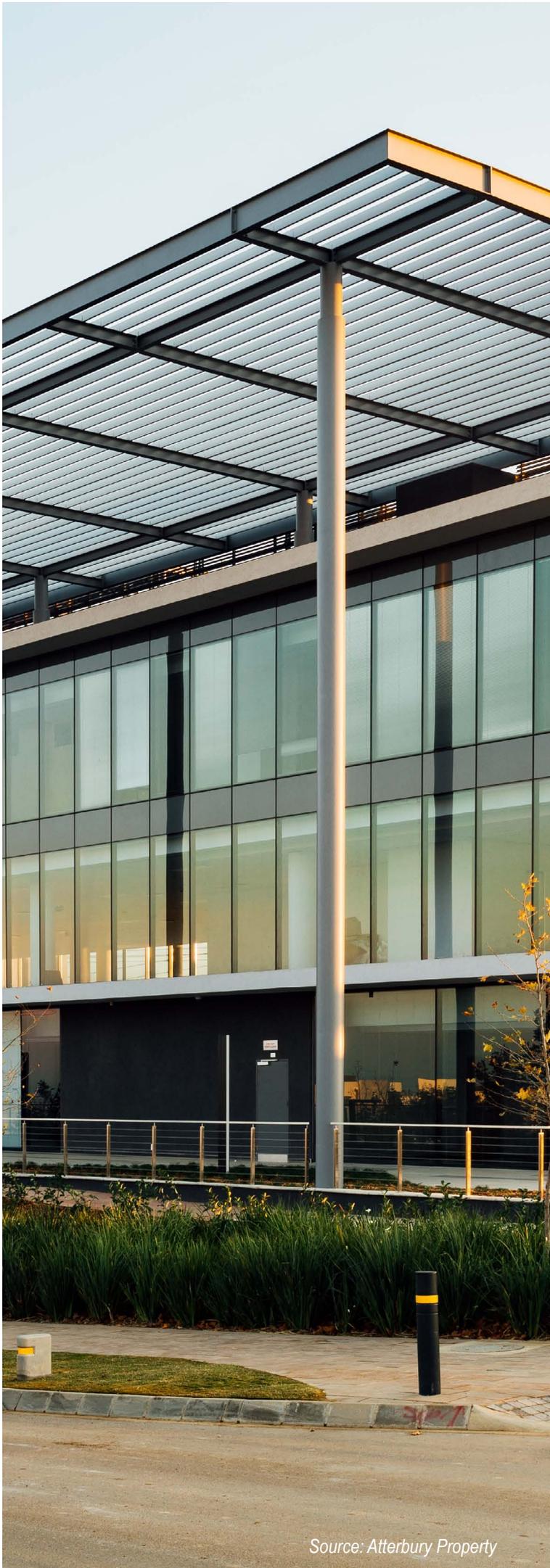
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*Nodes that revolutionised cities:
case study of Waterfall Business
Estate in Johannesburg*

Cities research



Source: Atterbury Property



Introduction

Just over a year ago, Waterfall had not yet officially become a business address. Fast-forward a few months, and Waterfall Business Estate hosts over 15 major corporates in South Africa. While the economy has not taken off since the 2009 recession, Waterfall Business Estate has beaten the odds, with its investor, Atterbury, strategically positioning itself to attract occupiers from all over the city. The result is a development success story in an economic time that is less than ideal.

Waterfall, conveniently located between Midrand and Sandton, is favoured for its locational advantage; and its accommodation features of improved efficiency, high-tech and green facilities are revolutionising the Johannesburg office market. Unlike other nodes, which may feature one or two advanced and contemporary buildings, Waterfall has been designed to offer this as a fundamental part of its holistic experience.

The question that arises from the presence of such a node is the impact that it will have on existing nodes, which together combine to make up the City of Johannesburg. This research looks at the long-term impact of Waterfall Business Estate in the broader context of the Johannesburg real estate market. With the comparison of Waterfall Business Estate with other nodes domestically and internationally that have been added to cities, we consider the potential impact that Waterfall has had on Johannesburg since its introduction and the influence that it may have in the future.

Long-term advantages: the potential of Waterfall Business Estate

Research illustrates that new nodes have been able to revolutionise cities in both the domestic and international real estate market. The success of a new node can either elevate a city to new heights or contribute to the degradation of older nodes. Our interest is on the features that elevate cities, and some of these reasons are reviewed below.

A growing city responds

Domestically, Century City and Sandton are additional nodes which had very different effects on the cities which they formed part of. New nodes develop with the growth of any city as was the case with both these nodes. However, while the attraction of Sandton as a prime node gradually pulled interest away from the Johannesburg CBD, the Cape Town CBD fed off the pressure brought on by Century City to avoid the degradation of the inner city.

Century City in Cape Town has been able to attract the access demand developing from the inner city just as Sandton in Johannesburg came as a natural expansion of the Johannesburg CBD. The difference is that Century City motivated reinvestment into the inner city. Having the advantage of time, Century City has been built with hi-tech connectivity and improved security. Nevertheless, these are not features that cannot be incorporated into other parts of the city and following the City Improvement District, which saw Cape Town reinvesting and upgrading existing buildings and infrastructure in the inner city, Century City has come to complement the Cape Town CBD. Century City, along with the V&A Waterfront, compelled a new standard in the greater City of Cape Town, causing an overall improvement to the city at large. This prevented the degradation of the Cape Town inner city in contrast to the degradation of the Johannesburg CBD during the growth period of Sandton. To date, Century City now houses over 500 companies, while Cape Town CBD maintains a manageable vacancy rate of just 11.7% to overall stock in the CBD. The Johannesburg CBD, on the other hand, is experiencing large vacancies rates (20.8% in Q3 2015), the majority of which is driven by the impact of the older accommodation that makes up the CBD.

Waterfall - a competitive reaction to a growing city

To date, Waterfall has added a total of just under 50,000m² of Grade P office accommodation to its tenant mix. The node plans to develop a total of 800,000m² of commercial and retail accommodation, including the Mall of Africa which will account for 131,000m². In size, Waterfall still falls short of the 1.5 million square metres of Sandton's office accommodation, 30.0% of which is Grade P stock. Waterfall is described by the developer as having the potential to become the new CBD of Gauteng. However, Sandton has not lost its popularity amongst corporates and the growth of Waterfall is occurring simultaneously with the upgrading of Sandton, which emerged as the 'rebirthing' of the Johannesburg CBD several years ago. It is new competition for some of the most well established nodes in the greater Johannesburg area, but its presence could work to enhance existing nodes, as Century City has done for the City of Cape Town, provided that they are able to maintain attractiveness by remaining current with building facilities of a high modern standard and upgraded public infrastructure.

Although still a smaller player in the commercial space, Waterfall has the advantage of naturally accommodating the latest infrastructure additions, as well as learning from the mistakes of Johannesburg's past which will give it competitive advantage. The urban design of the node supports a modern lifestyle, incorporating the close proximity of residential and recreational uses with commercial and light industrial use in a harmonic way. Over R400 million has been spent on road infrastructure upgrades, contributing to the prevention of the traffic congestion that is problematic in Sandton. Established in the midst of a power crisis in the country, Waterfall makes provisions for renewable energy and improved efficiency in buildings.

As a city in constant growth due to the continued urbanisation and internal migration of South Africans, Waterfall may well in time become a model to emulate for Johannesburg's commercial nodes.

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Harnessing locational advantage

International examples show that the development of new nodes has not only catered for the natural growth of a city, but has also come about with greater strategic thinking, elevating the economic potential of these cities. On the one side, there are features which are easily adaptable to other nodes, including design and the incorporation of certain technologies. However, there are some features which are not. Strategic location, by way of example, is what **Songdo** has contributed to **South Korea**. In addition to being a city built on high environmental and sustainability standards, it has centralised business activity by providing a key network between China, Russia and Japan, offering access to these three cities within three and a half hours from Songdo. Hence, Songdo has provided a strategic feature to South Korea as the centre of a key economic 'triangle', enhancing the city's overall demand for other forms of commercial real estate as a deliberate consequence.

Waterfall's location advantage

In terms of location, Waterfall does not add anything significantly new in comparison to the nodes of Sunninghill and Woodmead which are in close proximity to the new business estate. The difference is that Waterfall has harnessed the advantage of the road networks in close proximity, providing centrality between Sandton, Centurion and Pretoria and the West Rand. This attribute, particularly attractive to the logistics enterprise, has allowed some businesses to consolidate warehousing and office space in the same location without producing a node that feels like an industrial area. Tenants such as Colgate have also been attracted to Waterfall due to the larger, younger and varied skills-pull within the radius, drawing talent from the northern, eastern and western suburbs – all with similar distances to Waterfall.

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Hafen City, Germany

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Responses to structural economic change and sector focused nodes

There are also nodes that have responded to shifts in economic structure. Said to be an 'idealistic dream' in its initial planning, **Hafen City** in **Germany** has been able to convert a degenerated industrial zone into a mixed use business node with offices making up 48.0% of available accommodation. Initially an industrial zone, Hafen lost businesses as more efficient larger scale accommodation became available in a new industrial zone west of the node. Instead of competing with the more successful industrial zone, Hafen became a response to a structural change in the economy, away from light scale industrial to a much needed office node. The harbour city now plays host to over 45,000 jobs (35,000 of which are office based) with all of the buildings built to high environmental standards and technological advancement. Hafen complements Hamburg City by providing a much needed 40.0% expansion to the city.

In a similar fashion, **22@** of **Barcelona** responded to economic change by converting an old industrial area into a mixed use node dominated by offices. However, given the lack of information technology centres in Barcelona, the new node was developed into a technology and innovation hub, providing facilities that would attract businesses in this sector. 22@ facilitates collaboration between companies and institutions by locating these in close proximity to each other. It has also fostered the growth of an entirely new industry to the city, limiting a negative effect on existing business nodes. In addition to 22@, other examples of nodes that introduced sector-focused locations into the mix include Mission Bay of San Francisco, which has developed into a biotechnology hub, and Marina Bay in Singapore, positioned to be a financial hub.

Sector gravitation in Waterfall

Although Waterfall has not been designed to attract a particular sector, the developers have noticed a growing interest from pharmaceuticals businesses, as well as the information and communications technology (ICT) industry. Johannesburg's nodes are not formally divided into economic sectors and a healthy mix of industries is also visible in Waterfall. Nevertheless, analysis points to a gravitation of financial, legal and insurance institutions to Sandton, media companies to Bryanston, and management consulting firms to Woodmead. Time will tell if the node will develop into a pharmaceuticals and ICT hub. Such a development would provide increased harmony between Waterfall and other nodes around the city.



22@ Barcelona

"Central business district of Barcelona (2)" by Frank Müller under CC BY-SA 2.0



Source: Atterbury Property

Public Private Strategic Planning

No matter the reason for the new node, a common lesson that can be drawn from the examples in this report is that they often added a new feature to the city, which then worked to enhance the overall profile and economic potential of the city. Key to this success has been government buy-in, relevant to most of the international examples discussed, particularly if government was the initial major driver of the new development. Public sector interest in these nodes allowed for strategic planning at the outset of development, allowing for a more congruent addition than a competitive one. In some cases, public sector interest resulted in reduced red tape during the development process, allowing for swifter completions of new developments.

Strategic planning and collaboration with the public sector at Waterfall

With regard to public sector partnership, some collaboration between Atterbury and public sector institutions is visible in terms of transportation networks and mobility, but is limited in terms of economic planning. Although not by design, the urban planning of Waterfall Business Estate falls in line with Johannesburg's Integrated Development Plan, including the encouragement of non-motorised transport and public transportation. Waterfall has engaged with Gautrans (Gauteng Department of Transport and Public Works) and SANRAL (South African National Roads Agency Limited) to enhance mobility and connectivity with the rest of the city. The developers have also collaborated with Eskom and receive energy supply directly from Eskom.

A lack of deliberate strategising with the City may limit the economic gain that Waterfall could contribute to Johannesburg. Leveraging off the locational advantage, as seen in Songdo by way of example, is something that would have required greater partnership with the City of Johannesburg's economic planners, enhancing demand for the node and its value to the city.

On the flip side, the efficiency of the business estate also comes from its greater independence which has allowed for features that may not otherwise have been financially justifiable. Targeted investment has contributed to improved security, utilising technological systems and CCTV. The presence of smart traffic monitoring (the automatic adjustment of traffic lights in response to traffic congestion) is yet another feature which could be replicated in other nodes in the city to improve movement.

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Conclusion: the future of Johannesburg - a growing city

Is Waterfall setting the new standard?

In comparison to international examples, Waterfall incorporates some of the features that have been key in the nodes that have revolutionised cities across the globe. However, there are advantages, like location, which cannot be transferred to other nodes, whilst others, such as the gravitation of certain sectors to the node, are not a deliberate consequence of the developer's planning.

A key feature of Waterfall Business Estate lies in its urban design which provides a 'live, work and play' environment. This is gradually taking form with executives working in the node choosing to relocate their homes into the Waterfall vicinity. Nevertheless, the culture change for such a framework to be successful takes time. By way of example, tenants continue to request more parking in a node which is trying to encourage public transportation and non-motorised transportation methods. It can therefore be noted that, although likely to change live-work patterns in Johannesburg, Waterfall's urban design is not the strongest feature attracting tenants.

It is clear that the use of technology, innovation and green features hold definite appeal and remain elements that can be incorporated into other parts of the city. Incorporating these features in other nodes will subsequently elevate their value to tenants, reducing the degradation of nodes with the presence and growth of newer nodes.

Despite slower economic activity at present, Johannesburg continues to grow, and an upturn in business activity will foster a recovery in the demand for commercial real estate. Waterfall responds to the long-term growth of Johannesburg and the standard of supply which it is introducing may be the change that compels the rest of the city into action. A good indicator of the long-term prospects of commercial real estate is the potential demand which the supply needs to satisfy. In the case of commercial real estate, a useful indicator is the employment trend. Despite ongoing economic challenges, Johannesburg remains a major driver of GDP and employment in South Africa, contributing to the internal migration of individuals from other provinces and cities to Johannesburg. The city's economic potential is a major draw card, with Johannesburg contributing to 1.6 million jobs, more than 18.0% of total employment in the country, let alone the province.

The Johannesburg population is said to grow at 1.5% to 2.0% per annum, and is anticipated to double by 2040 from the current estimate of 4.4 million. Johannesburg is largely populated by individuals of a working age, partly driven by the city's need for a large skills pool. With the financial and business services sector playing a key role in driving GDP and employment activity in the city, it is not surprising that one has seen stable investor confidence in the office market. Almost 500,000m² of confirmed developments are expected to come up by 2017.

Be that as it may, it should be borne in mind that the office market is continually changing, and satisfying office demand will mean different things for different businesses in the long term. It is here that Waterfall is most likely leading the curve in the current climate. In 2006, Johannesburg office stock included 12.3% of Grade C stock and 34.0% of Grade B stock, with the remainder consisting of Grade A and P stock. To date, the overall portion of Grade C stock has more than halved to 6.0% in a period of 10 years at a vacancy of 26.8%. Grade B office stock has shown a slightly lower decline to a proportion of 32.0% while also showing upward trending vacancies which are currently at 14.7%. In contrast, Grade P accommodation has seen a notable rise from contributing only 5.2% to total stock in 2006, to 11.01% in 2015. Grade P accommodation maintains a vacancy rate below 5.0%.

Johannesburg office stock breakdown - structural change in demand preference

	2006	2015
Grade P	5.0%	11.0%
Grade A	58.0%	51.0%
Grade B	34.0%	32.0%
Grade C	12.3%	6.0%

These figures highlight an important trend in the Johannesburg office market, which probably applies to the rest of the country just the same. Although there are segments of the market that can be serviced by Grade B and Grade C offices, the overarching trend is a shift towards higher quality in the office market. Gradually, one is likely to see diminishing demand for Grade B and C accommodation in favour of Grade A and Grade P accommodation. This is partly explained by technological advancement and the need for innovative ways of dealing with business challenges.

Hence, a new 'minimum requirement' is developing in the market, which is likely to make some stock even more irrelevant while making new stock more attractive. Given the trend in vacancies, one could even argue that Grade P accommodation is experiencing a shortage in comparison to other segments of the market, which would further justify the growing stock in Sandton and Waterfall, among others. Stock has to grow not only for the anticipated growth in demand, but also to 'replace' stock which no longer meets the newly defined 'basic' requirements.



JLL Offices:

Johannesburg

Office 303, 3rd Floor, The Firs
Cnr Biermann & Cradock Ave
Rosebank, South Africa, 2196
Tel +27 11 507 2200

Zandile Makhoba

Head: Research
South Africa
Johannesburg
Tel +27 11 507 2200
zandile.makhoba@eu.jll.com

Craig Hean

Managing Director:
JLL South Africa
Johannesburg
Tel +27 82 444 9598
craig.hean@eu.jll.com

Tatiana Dinwoodie

Head: Marketing and PR
South Africa
Johannesburg
Tel +27 11 507 2200
tatiana.dinwoodie@eu.jll.com

www.jll.co.za

www.jllpropertysearch.co.za

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