



PROJECT	: UPM165
DATE	: 2018 - 2022
CLIENT	: JT Ross Development Group
CONTRACTOR	: Action Asphalt, Sealcoat, Dartat
PROJECT VALUE	: R18,900,000

## The Avenues



Umsunguli Project Management cc was appointed by Hilton Devco on behalf of the JTRoss Property Development Group to undertake a phased development on 25ha in Hilton comprising 56 residential sites, 176 PUD sites, a 12,000m<sup>2</sup> retail facility and office space on 2,7ha, being responsible for the design, tendering, contract administration and supervision of the various phases over a number of years, as guided by the respective market requirements. The development is located on the P19 or Hilton College Road, within 500m of the N3 Hilton Interchange. A more detailed description of the respective services is:

### Internals Roads and Intersections

The internal roads to the respective retail, office and residential components gains access off Spine Road and a Type B2 intersection off the P139, which forms part of the bulk infrastructure and developer contributions. The 12,335m<sup>2</sup> of internal roads which varies between 3-6m are all asphalt roads, with cobbled, paved circles and sidewalks. The residential component is gated with a large gatehouse to provide a safe environment, with stunning view over the wetland and newly constructed stormwater attenuation ponds which forms part of the landscaping plan. The main road upgrade and Type B2 intersection was designed and approved by the Department of Transport.

### Storm water

The stormwater system along the roads and within each zone is managed by catchpits, grin inlets and stormwater pipes, conveying all surface run-off to the lower boundary of the site. A series of three, large attenuation ponds were constructed along the lower boundary of the site, all linked together by large, open grass swales, diverting surface run-off to the last attenuation pond with a capacity of 3,600m<sup>3</sup>, where an outlet structure controls the outlet via a 1200mm stormwater pipe. The outlet crosses the access road of neighbouring private estate with a box culvert and headwall into the wetlands – velocity is reduced and managed with a series of gabion baskets and mattresses.

### Water Reticulation

The development is linked to the potable municipal water reticulation system, controlled by a 160mm bulk water meter and distributed to each zone and component, which are individually measured. A total length of 1475m watermains have been laid, varying from 75 – 160mm uPVC pipes to service each stand and provide each residential site with a metered connection.

### Sewer Reticulation

The internal sewer reticulation comprises 2278m of uPVC Class 34 sewer pipes varying from 110 – 160 – 200mm pipes with 1m precast concrete manholes at placed at a maximum spacing of 80m or at a change in direction throughout the development. House connections are provided to each residential site and the entire sewer system gravitates to a central collection area where a 36,000litre Calcemite conservancy has been installed. The conservancy tank will be emptied daily with effluent carted to Darvill WWTW in Pietermaritzburg until the new sewer pumpstation, outfall sewer and Hilton WWTW is operational in 12 months time, which is managed by Umgeni Water.