



Rock Hounds (Pty)Ltd

| Geology | Geotechnical

Mr Daniel Sevenster
Sedgefield area, Cola Beach, Garden Route,
Erf 79/205 Ruygte Vally
Knysna Municipality
Knysna, 6570

10 September 2025

RE: Summary geotechnical and geomatic findings report RH160524, as support for the pre-application basic assessment: Procedural, Landscape, Geotechnical

The scope for the study included: Preliminary geomatic study of proposed dwellings positions to determine: Dune stability and morphology over time. Soil characterisation and DCP measurements for foundation purposes, samples to determine the soil consistency, characteristics and soil structures for the purpose of future development and the building of dwellings. Dune position and vegetation coverage in relation to coastal zone over time. Climatic factors influencing dune morphology over time, temperature, rainfall, flood zones, slope, geology and risk projections for future sea level rise with possible flooding risk at the proposed dwelling positions.

The conclusions were as follows: Refer to full report RH160524 for details

- The dune morphology is stable north of the property's coastal border, as indicated by well-established vegetation and thick organic layers in the soil. Thick vegetation protects the dune from wind erosion. Cyclic wave erosion is present at the high tide mark in the coastal zone and it is projected to move 30m inland over 100 years.
- Foundation design has to allow for soft, uncompressed highly erodible sandy material at all sites, allow for a compacted zone of 1,5m around the foundations of any outside walls, and has to be designed and signed off by an ECSA registered structural engineer
- The proposed dwellings at location PE, is not in the current erosion zone, nor in the projected low or high risk 100-year coastal flooding zones, nor in the measured projected 100-year zone and not located on position D7. It is located 15m north (inland) of the 100-year high risk projection zone.
- The border line, low risk projection 100-year coastal flooding zone, and the measured 100-year coastal zone movement overlaps. The 30m building line and the high-risk projection 100-year coastal flooding overlaps.
- The 100m line above the high-water mark is located north of location PE. Locations BM and HW2 is north of the 100m line above the high-water mark.
- Existing dwellings in the adjacent developed areas of Sedgefield have been built between the 100-year low and high-risk projection lines, and south of the 100m high water mark.
- Should the local authority change building regulations and move the 30m building line to the 100m line above the high water mark, the municipal authority has to first give permission for the proposed dwelling at the PE location, irrespective of the above findings and observations, Then the BM location is the next best option for a dwelling as it is located on the 100m line above the high water mark and above all the other risk projection lines.

Please notify me if you need additional information before we proceed with further steps. Please note that final positions to be confirmed by land surveyor and final designs be confirmed by a structural engineer.

Kind regards

Esme Spicer

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