



Keurbooms Rock (pty) ltd  
Farm No 296, Rem 5  
Keurboomstrand  
Western Cape

**Date:** 28 Aug 2020  
**Reference:** 20106 ~ REP01  
**Client:** Keurbooms Rock

## KEURBOOMS ROCK, ptn 5 of Farm 296 – SERVICES REPORT

### 1. General description of the site

The site for the proposed works is situated on portion 5 of a remainder of farm 296 (Arch Rock) in the district of Knysna.

There are several existing structures on the site, all of which will be demolished and re-built. The site also has a large number of trees between the structures. Some of these trees will have to be removed and some will be protected in line with environmental guidelines. An environmental consultant would have to advise on these guidelines.

The land surrounding the property consists of existing dwellings, other resorts of similar nature and a restaurant. An existing gravel road is located on the Northern site boundary which will serve as access to the site. This gravel road also services other properties towards the East.

The new development encompasses the demolition of the current chalets and bungalows and re-construction of new chalets in the same position. A parking area will be created on the northern site boundary next to the existing gravel road and an existing gravel road traversing the site will also be surfaced.

Refer to figure 1 below for the locality of the property and separately refer to the architect's SDP plan.



Figure 1 – Site location

#### DIREKTEURE / DIRECTORS

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### **1.1 Topography**

A topographical survey of the site was done by Beacon Survey. As depicted on the survey, there is a general fall (1.2%) across the site from the north to the south, with a steep slope (42%) on the south down towards the beach.

As described above, the current landscape features many trees, existing structures and gravel roads. A servitude road runs along the east of the property and then cuts across the property to service a single property towards the south. The general site topography will not be altered by the proposed development.

Refer to Annexure A for the Topographic Survey.

### **1.2 Soil conditions**

Based on the initial face value opinion of a Geotechnical Engineer, the in-situ soils will be aeolian sand on bedrock. The depth of the bedrock would have to be determined by further investigation, but this will become very relevant when we consider the proposed basements. The depth of the water table would also have to be established.

It is recommended that a formal geotechnical investigation be conducted prior to commencement of detail design and tendering. This will confirm the existence of near-surface bedrock, the suitability of excavated material as fill material and also the depth of the ground water table.

### **1.3 Earthworks**

The proposed works will include the construction of 8 basements to the various units. This will generate around 1050m<sup>3</sup> of excavated material, in addition to the grub and clearing which might add around 600m<sup>3</sup> of topsoil and gravel to be stripped. Some of the excavated material might hopefully be used for backfilling under the new units. If favorable material is excavated, around 320m<sup>3</sup> of excavated material could then be re-used on the site. The rest would have to be spoiled off site. Other approved engineering fill material will be imported from commercial sources.

## **2. Roads and Access**

The property (portion 5 of farm 296) forms part of a greater farm, subdivided in the 90's. Formal roads have not been built traversing the historic farm, but road servitudes are in place and gravel roads services the various portions of the greater farm 296.

Portion 5 (the relevant property) has access from a gravel road cutting through the north of the property. A 5m road servitude is registered to the benefit of portion 10 of farm 296.

See below figure 2 for a graphical depiction of the roads and access to and through the property.



Figure 2 – Roads and access

### 3. Water supply

The site is currently serviced with municipal water.

The new development has an expected maximum total water demand of 8250 ℓ/d. This demand is generated by the various cottages, along with the laundry and pool house. The existing municipal feed is assumed to be sufficient, but this will have to be confirmed during further consultation with the municipality. We have requested confirmation of the availability of municipal water capacity on 17 August 2020 but have not received any feedback on the date this report have been compiled.

### 5. Sewerage

The availability of municipal bulk sewerage infrastructure would have to be confirmed during consultation with the municipality. As with the water supply, information is currently unavailable. A design flow rate of 5500ℓ/d is expected. Due to the location of the site it is likely the sewer will be collected in a small sump and pumped into the municipal system.

### 6. Storm Water

No existing formal stormwater drainage infrastructure exists on site.

The roofs of the new buildings will generate some storm water run-off which will directly infiltrate the surrounding soils. The proposed new stormwater runoff will not exceed the existing.

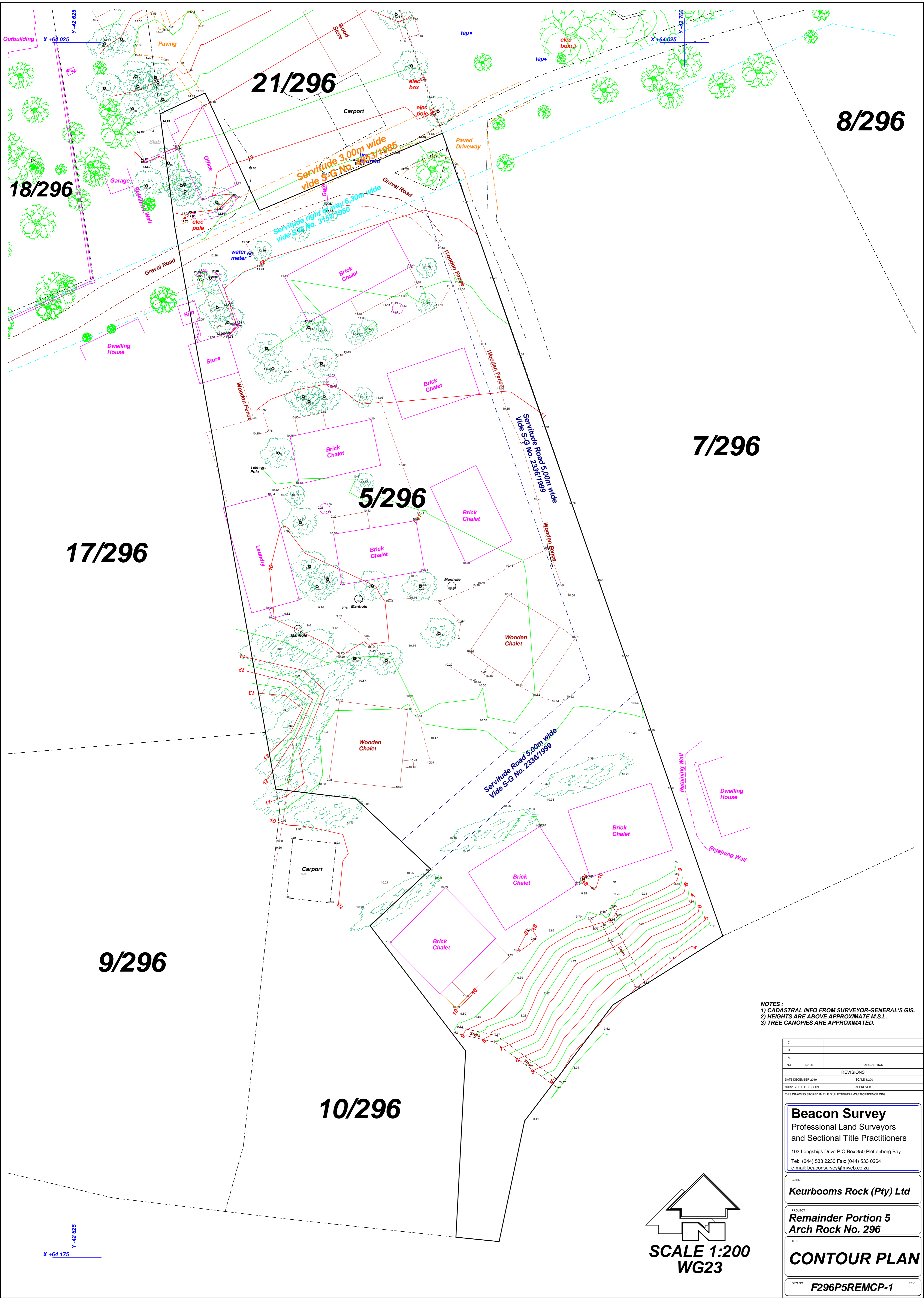
On-site rainwater harvesting for use in the pool can be considered. The other runoff will infiltrate the surrounding soft landscaped areas.

### 7. Solid waste refuse collection

Adequate, on-site provision will be made to store refuse bins. The collection and removal of refuse will be in line with the municipal guidelines.

Report by Danie de Wet dated 28 August 2020.

ANNEXURE A  
TOPOGRAPHIC SURVEY



8/296

7/296

5/296

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NOTES:  
 1) CADASTRAL INFO FROM SURVEYOR-GENERAL'S GIS.  
 2) HEIGHTS ARE ABOVE APPROXIMATE M.S.L.  
 3) TREE CANOPIES ARE APPROXIMATED.

NO	DATE	DESCRIPTION
REVISIONS		
DATE	DECEMBER 2019	SCALE 1:200
SURVEYED P.G.	TEGIN	APPROVED
THIS DRAWING STORED IN FILE D:\PLETTBERGFARMS\F296P5REMCP.DWG		

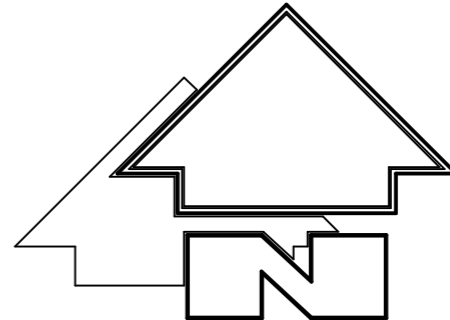
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CLIENT  
**Keurbooms Rock (Pty) Ltd**

PROJECT  
**Remainder Portion 5  
 Arch Rock No. 296**

TITLE  
**CONTOUR PLAN**

DRG NO **F296P5REMCP-1** REV



SCALE 1:200  
 WG23

X+64 175  
 Y-42 625

X+64 025  
 Y-42 709