SERVICES REPORT

FOR CAVA MOLA MINING (PTY)LTD CONSOLIDATION OF ERVEN RE/141 & 390 KEURBOOMSTRAND PLETTENBERG BAY

ROADS, STORMWATER, WATER AND SEWER

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PO Box 2862 Knysna 6570 TK1591

Phone: 044 382 3474 E-mail: serett@tuiniqua.co.za

INDEX

Item

Description

- 1 Introduction
- 2 Location
- 3 Topography and Access
- 4 Supply Authority
- 5 Bulk Services
 - 5.1 Water Reticulation
 - 5.2 Sewer Reticulation
 - 5.3 Roads
 - 5.4 Stormwater
 - 5.5 Electrical

6 Internal Services

- 6.1 Outline Scheme
- 6.2 Water Reticulation
- 6.3 Sewer Reticulation
- 6.4 Internal Roads
- 6.5 Internal Storm water
- 6.6 Waste Management

Annexure

- A Locality Plan
- B Site Plan

1. INTRODUCTION

This report has been prepared by Tuiniqua Consulting Engineers at their Knysna office, who have been appointed by the Developer, Cava Mola Mining (PTY)LTD, as the Civil Consultants for this project. The purpose of this report is to provide the necessary information on the proposed civil services within this Development and the connections to the bulk infrastructure in the area.

2. LOCATION

The erven to be consolidated are the remainder of erf 141 and erf 390, Keurboomstrand, Plettenberg Bay (attached as Annexure A). The two erven are approximately 749m² and 870m² in extent, respectively. Main Street runs along the northern boundary of RE/141, while Read Street is located on the eastern boundary, as indicated on the Site Plan. Erf 373 borders erf 390 on the eastern boundary, and erf 140 on the western boundary. The RE/152 is located on the southern boundary.

3. <u>TOPOGRAPHY AND ACCESS</u>

The property is located in an existing residential township. Access to the property will be provided from the existing tarred municipal road i.e. Main Street. One access will be provided for the consolidated erf. The existing access to RE/141 will be utilized for access to the consolidated erf. The property has a gradual slope in a southern direction towards the beach.

4. <u>SUPPLY AUTHORITY</u>

The supply authority for the area is Bitou Municipality, and therefore comment was requested from their Technical Services Department, on all matters relating to the civil services. However, no reply was received from the Municipality, by the time this report was compiled. Existing connections will be utilized for the consolidated erf, the fact that the Municipality has not commented should not be an issue. If any increase in civil services demand is required, augmentation fees and capital contributions in this regard will be calculated and payable in accordance with Council's policy.

5. <u>BULK SERVICES</u>

Bitou Municipality was requested to comment on the proposed connection points for water and sewer. The existing water and sewerage connection for RE/141 will be utilized for the consolidated erf. No new services connections will be required.

5.1 WATER RETICULATION

The existing waterline along Main Street will supply the consolidated erf with potable water, the existing water connection will be utilized for the consolidated erf. The proposed development will consist of one residential dwelling.

5.2 SEWER RETICULATION

The existing municipal bulk sewer line runs on the northern boundary of RE/141 and the existing connection will be utilized for the proposed consolidation.

5.3 ROADS

There is an existing road network servicing this area, the road leading to this property is tarred and of good quality.

5.4 STORMWATER

The runoff from the road drains into a natural drainage system which will have no influence on the proposed development.

5.5 ELECTRICAL

The existing electrical connection for RE/141 will be utilized for the consolidated erf.

6. **INTERNAL SERVICES**

6.1 OUTLINE SCHEME

The design of the services for the development will be based on the principles contained in the Guidelines for Human Settlement Planning and Design published but the Department of Housing and to the Council's requirements for engineering services. The services will be installed according to SANS 1200 and materials will comply with ISO standards. Internal services will be located within the boundaries of the property.

6.2 WATER RETICULATION

There is an existing Municipal water main located on the southern side of Main Street. The existing and proposed water demand is taken from the "GUIDELINES FOR THE PROVISION OF ENGINEERING SERVICES AND AMENITIES IN RESIDENTIAL TOWNSHIP DEVELOPMENT". Fig 9.9 – for erven not exceeding 2000m²

Existing		
Erf	Demand	
	kl/day	
RE/141 (749m ²)	0.8	
390 (870m ²)	0.8	
TOTAL DEMAND	1.6	

Proposed consolidation	
Erf	Demand
	kl/day
Consolidated erf (1619m ²)	1.5
TOTAL DEMAND	1.5

The annual average daily water demand for the consolidated erf will be 1.5kl/day and will not increase the existing water demand. The existing Municipal connection will be sufficient for the proposed development.

6.3 SEWER RETICULATION

The calculated expected sewage flow for the proposed consolidation will be as follows:

Table: Sewage Discharge

Existing		
Erf	Flow	
	kl/day	
RE/141 (749m ²)	0.67	
390 (870m ²)	0.67	
TOTAL DEMAND	1.33	

Proposed consolidation	
Erf	Flow kl/day
Consolidated erf (1619m ²)	1.5
TOTAL DEMAND	1.25

A full waterborne sanitation system is envisaged for the proposed development. Internal sewer drainage will be provided, by means of Class 34x110 mm diameter pipes that gravitates to the municipal system on the northern boundary of the property.

6.4 INTERNAL ROADS

Not applicable.

6.5 INTERNAL STORMWATER

Storm water will not be concentrated and will be discharged in an acceptable manner.

6.6 WASTE MANAGEMENT

Disposal of waste shall be done via normal municipal domestic waste collection.

ANNEXURE A

Locality Plan



ANNEXURE B

Site Plan

