

Our Ref: HM/ OVERBERG\ OVERSTRAND\ GANSBAAI\ ERF 210  
 Case No.: 131001TS04E  
 Enquiries: Waseefa Dhansay  
 E-mail: [waseefa.dhansay@westerncape.gov.za](mailto:waseefa.dhansay@westerncape.gov.za)  
 Tel: 021 483 9533  
 Date: 09 November 2015

Karin Neethling  
 PO Box  
 6118  
[karin@withersenviro.co.za](mailto:karin@withersenviro.co.za)



**FINAL COMMENT**  
 In terms of Section 38(8) of the National Heritage Resources Act (Act 25 of 1999) and the Western Cape  
 Provincial Gazette 6061, Notice 298 of 2003

**HERITAGE IMPACT ASSESSMENT: BLOMPARK LOW COST HOUSING DEVELOPMENT PROJECT, ERF 210, GANSBAAI, SUBMITTED IN TERMS OF SECTION 38(8) OF THE NATIONAL HERITAGE RESOURCES ACT (ACT 25 OF 1999)**

**CASE NUMBER: 131001TS04E**

The matter above has reference.

Heritage Western Cape is in receipt of your application for the above matter received on 20 October. This matter was discussed at the Impact Assessment Committee (IACom) meeting held on 04 November 2015.

**FINAL COMMENT**

The report satisfies section 38(3) of the NHR Act and the Committee has no objection to the proposed development on condition that:

- Monitoring of vegetation clearing and bulk earthworks must be carried out during the construction phase and must form part of the EMP. Monitoring must be undertaken by an archaeologist, who must visit the site once all the vegetation has been cleared and removed and inspect the site once a week during excavations or when the need arises.
- A monitoring report must be submitted to HWC for approval.
- These conditions must be included in the conditions of environmental authorization. If these conditions are not fulfilled, HWC reserves the right to request the competent authority to withdraw the authorization.

However, should any heritage resources, including evidence of graves and human burials, archaeological material and paleontological material be discovered during the execution of the activities above, all works must be stopped immediately and Heritage Western Cape must be notified without delay.

This letter does not exonerate the applicant from obtaining any necessary approval from any other applicable statutory authority.

HWC reserves the right to request additional information as required.

Should you have any further queries, please contact the official above and quote the case number.

Yours faithfully

  
 Dr. Errol Myburg  
 (Interim CEO: Heritage Western Cape)

[www.westerncape.gov.za/cas](http://www.westerncape.gov.za/cas)

FILE NO:

SCAN NO:

COLLABORATOR NO:



TR A Theart  
CS Jeld mawel



### SCIENTIFIC SERVICES

postal Private Bag X5014 Stellenbosch 7599  
 physical Assegaaibosch Nature Reserve Jonkershoek  
 website www.capenature.co.za  
 enquiries Rhett Smart  
 telephone +27 21 866 8017 fax +27 21 866 1523  
 email rsmart@capenature.co.za  
 reference SSD14/2/6/1/7/2/210\_housing\_Blompark  
 date 25 November 2015

Withers Environmental Consultants  
 P.O. Box 6118  
 Uniedal  
 7612

Attention: Karin Neethling  
 By email: [info@withersenviro.co.za](mailto:info@withersenviro.co.za)

FILE NO:	EL 210 9B
SCAN NO:	ERF 210_02
COLLABORATOR NO:	880002

Dear Karin

### Final Basic Assessment Report for the Proposed Motlekar Gansbaai – Blompark Low Cost Housing Development, Erf 210, Gansbaai (DEA&DP ref. no. 16/3/1/1/E2/10/2092/13)

CapeNature would like to thank you for the opportunity to comment on the proposed development and would like to make the following comments. Please note that our comments only pertain to the biodiversity related impacts and not to the overall desirability of the proposed development.

CapeNature commented on the Draft Basic Assessment Report (BAR) for the proposed development and we were not in support of the preferred alternative as presented, as it had not taken into account any biodiversity considerations.

Following on from this further negotiations were held between the environmental assessment practitioner, the Overstrand Municipality and CapeNature and a revised layout was developed. CapeNature provided formal comment on the revised layout, dated 11 November 2014. In summary the revised layout accommodated CapeNature's concerns to a large degree and we did not object to the proposal as revised. The previous comments should be referred to for more detail.

CapeNature has compared the preferred layout as contained in the Final BAR with the layout commented on previously on 11 November 2014. The two layouts are the same except that the informal settlement component has been divided into erven. Our previous comments therefore remain relevant.

In conclusion, we do not object to the application subject to the implementation of mitigation measures and recommendations and our previous comments should be referred to for further detail.

It is further emphasized that monitoring is required by the relevant authorities to ensure that there is no damage to or removal of the White Milkwoods (*Sideroxylon inerme*) on site, and that this should be enforced by the relevant authorities where possible. This species is included in the Notice (Notice 116 of 2015) of the List of Protected Tree Species under the National Forests Act, 1998 (Act No. 84 of 1998) administered by the Department of

The Western Cape Nature Conservation Board trading as CapeNature

Board Members: Prof Gavin Maneveldt (Chairperson), Mr Carl Lotter (Vice Chairperson), Mr Mervyn Burton, Prof Francois Hanekom, Dr Bruce McKenzie, Ms Merle McOmbring-Hodges, Adv Mandla Mdludlu, Mr Danie Nel, Prof Aubrey Redlinghuis, Mr Paul Slack

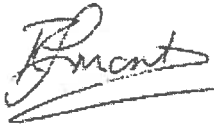
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Agriculture, Fisheries and Forestry. The latter department should additionally monitor the development and surroundings in terms of utilization of marine resources as evidenced by remains under the milkwood trees.

CapeNature reserves the right to revise initial comments and request further information based on any additional information that may be received.

Yours sincerely



Rhett Smart  
For: Manager (Scientific Services)

cc. Adrian Pietersen, Department of Environmental Affairs and Development Planning



# WorleyParsons

resources & energy

31 Allen Drive  
Loevenstein 7530 PO Box 398, Bellville 7535  
South Africa  
Telephone: +27 (0)21 912 3000  
Facsimile: +27 (0)21 912 3222  
www.worleyparsons.com  
WorleyParsons RSA (Pty) Ltd  
REG NO: 1989/002048/07

23 February 2016

Enquiries: W SNYMAN  
Other Ref:  
Ref: 280480  
File: 280480B12/TE

Overstrand Municipality  
P.O. Box 26  
GANSBAAI  
7220

Attention Mr Danie Maree

Dear Sir

## **BLOMPARK: BEVERLEY HILLS DEVELOPMENT: ELECTRICAL INFRASTRUCTURE**

The existing informal houses in the Beverley Hills community are currently being fed via a miniature substation in close vicinity to the existing dwellings. The miniature substation is on a medium voltage ring feed between Kerk and Nuwe Hawe Switching Stations.

The new planned development consisting of 539 formal houses, 100 informal houses and several business and community facilities will require additional miniature substations. This will involve extending the existing medium voltage network ring feed/s.

The electrical load estimate for the new development is as follows:

Residential (formal)	:	539 x 2kVA =	1078kVA
Residential (informal)	:	100 x 2kVA =	200kVA
Business	:	2 x 25kVA =	50kVA
Community Facilities	:	3 x 25kVA =	75kVA
<b>Total</b>	:	<b>=</b>	<b>1403kVA</b>

The existing medium voltage underground cables on the ring feed has sufficient capacity to supply the estimated load and therefore no further upstream upgrades are necessary to accommodate the planned development.

Kindly contact the undersigned for further information in this regard.

Yours faithfully  
WorleyParsons RSA

  
W SNYMAN Pr. Eng  
DISCIPLINE LEAD: ELECTRICAL

WorleyParsons RSA (Pty) Ltd •REG NO: 1989/002048/07  
Directors: •FM McNeill (CEO) (UK), •GMN Eister  
•DJ Dreyer, •MG Mfelo

EcoNomics

24 FEB 2016

### 3.3 LAYOUT PLAN

The proposed layout (refer *Figure 3.1*) is a direct response to the site and contextual informants, while also addressing the land use requirements specified by the Overstrand Municipality, in order to address the demand of local and surrounding communities.

The layout optimises the number of residential opportunities on the application area, while ensuring good access and safe environments. The layout provides 639 residential erven, which includes 539 formal new residential erven and 100 formalised UISP erven to accommodate the upgrading/formalisation of the Beverley Hills community.

The land uses and zonings reflected on the layout plan (*Figure 3.1*) are summarised in *Table 3.2*.

Land Use Table					
Land Use	Zoning	Notation	No. of Erven	Extent[ha]	% of Total
Residential (formal)	Residential Zone I		539	±5.96	42.05
Residential (Informal)	Residential Zone I		100	±1.56	8.19
Business	Business Zone III (LB)		2	±0.29	1.75
Open Space	Open Space Zone II		15	±2.13	12.83
Community Facilities	Community Zone I		3	±0.13	0.78
Road	Transport Zone II		1	±5.71	34.40
<b>TOTAL</b>			<b>650</b>	<b>±16.60ha</b>	<b>100</b>

*Table 3.2: Proposed Land Uses & Zonings*

The development is considered an integrated human settlement development as the layout plan incorporates adequate open spaces (more than 10%), includes community facility erven, provides a mix of formal and informal residential erven and there are two erven for business uses included in the layout.

The development buffer around the WWTW, determined by Messrs Demos Dracoulidous, is also indicated on the layout plan.



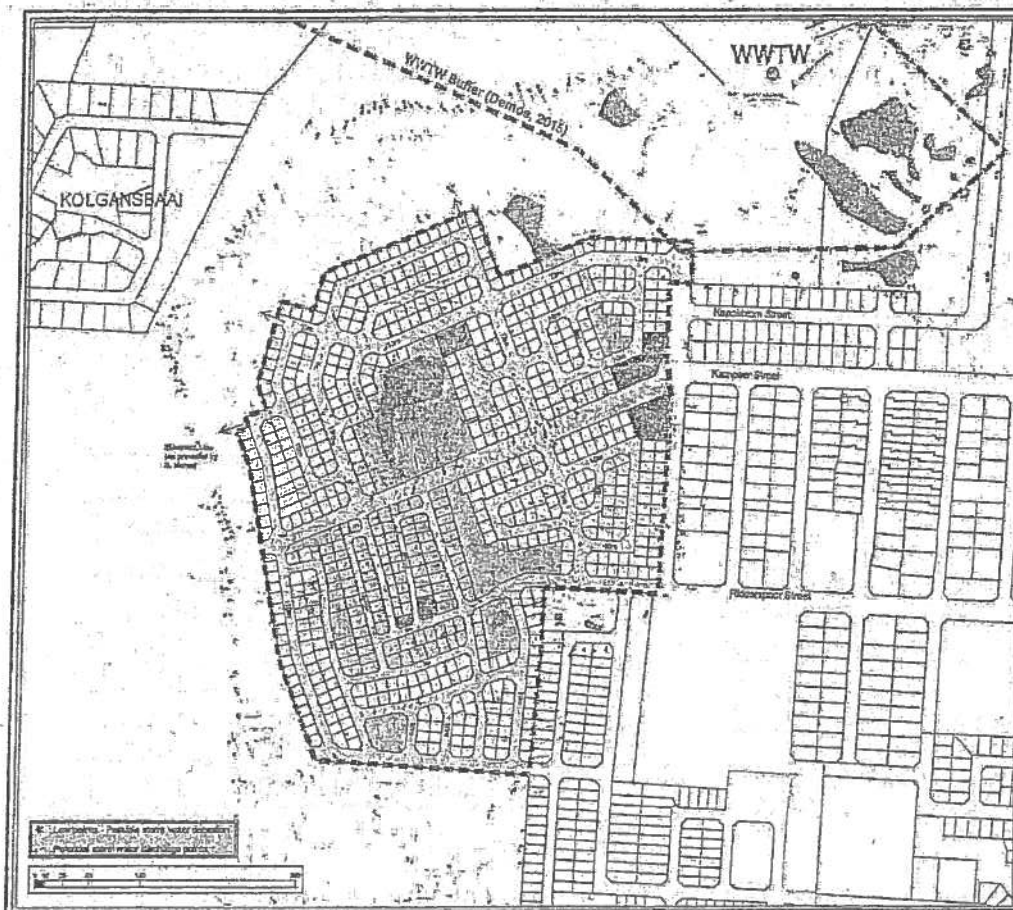


Figure B.1: Layout Plan

In conclusion, the above-mentioned layout plan is the final preferred layout, following an extensive iterative review process with relevant stakeholders, i.e. the Municipality, the Beverley Hills community, Cape Nature and DEA&DP. In our opinion, the layout now addresses all concerns raised by the above-mentioned stakeholders and is now a good response to micro and local informants affecting the application site and surroundings. The implications for provision of engineering services and motivation for the development are provided in Sections 4 & 5 respectively of this report.



## Gansbaai : Blompark Extension & Beverley Hills Civil Services Report

J31317

October 2015

Rev 3

Head Office  
14 Eglin Road, Sunninghill 2191  
Johannesburg, South Africa

Tel: +27 11 519 4600  
Fax: +27 11 807 5670

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## Blompark Extension & Beverley Hills Low Cost Housing Civil Services Report

### CONTENTS

Chapter	Description	Page
<b>1</b>	<b>Background</b>	<b>2</b>
	1.1 Terms of reference	2
	1.2 Location of site	2
	1.3 Existing roads and infrastructure	2
	1.4 Existing services around/on the property	3
<b>2</b>	<b>CIVIL SERVICES</b>	<b>4</b>
	2.1 Foul Sewer	4
	2.2 Water Supply	4
	2.3 Stormwater	5
	2.4 Roads	5
<b>3</b>	<b>CONCLUSION</b>	<b>6</b>
<b>4</b>	<b>FIGURES</b>	<b>7</b>
	Figure 1 Locality Plan	7
	Figure 2 : Layout Plan of Preferred development option showing existing services	8
	Figure 4 : Layout Plan of the Alternative development option showing existing services	9

# **1 Background**

## **1.1 Terms of reference**

GIBB was appointed to conduct the design of the bulk and internal civil services for the Blompark and Beverley Hills Low Cost Housing development. Two development options were considered for this project i.e. the preferred development layout option, dated 18 August 2015 for public participation, and an alternative layout option.

The proposed areas for the preferred development option will provide a combined total of 643 residential opportunities, 2 x business sites and 3 x community facilities and 15 public open spaces to be constructed within Blompark adjacent to an existing residential area.

The proposed areas for the alternate development option will provide a combined total of 634 residential opportunities, 1 x business site and 3 x community facilities to be constructed within Blompark adjacent to an existing residential area.

## **1.2 Location of site**

See attached Figure 1 for the Locality Plan of Blompark Extension and Beverley Hills.

### **1.2.1 Preferred development option**

The site is approximately 16.60ha located in Blompark, Gansbaai, in the Overstrand Municipality of the Western Cape. It is situated on the western boundary of Blompark. It is bounded towards the north and south by open space, the Atlantic Ocean to the west, an existing residential area to the east. The site has variable gradients with undulating dunes and valleys which drains eventually towards the southern boundary. See figure 2.

### **1.2.2 Alternative development option**

The site is approximately 17.74ha located in Blompark, Gansbaai, in the Overstrand Municipality of the Western Cape. It is situated on the western boundary of Blompark. It is bounded towards the north and south by open space, the Atlantic Ocean to the west, an existing residential area to the east. The site has variable gradients with undulating dunes and valleys which drains eventually towards the southern boundary. See figure 4.

## **1.3 Existing roads and infrastructure**

### **1.3.1 Preferred and Alternative development options**

The existing residential area that borders this site has roads that connect to the existing major access collector road (Kampeer Street) which intersects with the R43. Access to the development options can be obtained from Ridderspoor Street, Kampeer Street along the eastern boundary of the site.

#### 1.4 Existing services around/on the property

There are existing water mains in the existing roads along the eastern boundary of the site, ie: Angelier, Ridderspoor, Viooltjie and Leeubekkie Streets.

There is an existing water main running from east to west within an existing gravel road extending from Kampeer Street.

An existing gravity sewer line from the north east point of the proposed development options runs along Kampeer Street and across Kapokblom Street towards the regional waste water treatment works in a northerly direction.

An existing 160mm diameter sewer along the eastern boundary runs from Ridderspoor Street down Viooltjie Street towards an existing pump station. The rising main from the pump station runs along Viooltjie Street and down Ridderspoor Street in an easterly direction towards a gravity main which crosses Ridderspoor Street. The gravity sewer main runs towards the regional waste water works in a northerly direction.

See attached Figure 2 for a Layout Plan of the Preferred development option showing existing services.

See attached Figure 4 for a Layout Plan of the Alternative development option showing existing services.

## **2 CIVIL SERVICES**

### **2.1 Foul Sewer**

#### **2.1.1 Existing sewer infrastructure**

The existing sewer infrastructure will be upgraded as per the GLS masterplanning report for the proposed Gansbaai housing development sites. The GLS masterplanning report will be finalised upon receipt of approved town planning layouts.

#### **2.1.2 Average daily sewer flow**

##### **(a) Preferred development option**

The average daily sewer flow is estimated to be 397.62 kl/d. The expected peak design flow is about 10.70 l/s which includes an allowance of 15% stormwater infiltration.

##### **(b) Alternative development option**

The average daily sewer flow is estimated to be 388.14 kl/d. The expected peak design flow is about 10.55 l/s which includes an allowance of 15% stormwater infiltration.

#### **2.1.3 Proposed internal sewer infrastructure**

The internal sewer reticulation will consist of 110mm diameter house connection pipes discharging into 160mm diameter sewer mains, and 200mm and 250mm diameter bulk sewer mains which will drain towards a proposed pumpstation. All pipes will be heavy duty uPVC Class 34.

### **2.2 Water Supply**

#### **2.2.1 Existing bulk water supply**

The existing water infrastructure will be upgraded as per GLS masterplanning report for the Gansbaai housing development sites.

#### **2.2.2 Average bulk water supply**

##### **(a) Preferred development option**

It is estimated that the average daily water demand for this development will be 397.62 kl/d. The expected peak flow will be 23.01 l/s with a peak factor of 5 (excluding fire flow).

##### **(b) Alternative development option**

It is estimated that the average daily water demand for this development will be 388.14 kl/d. The expected peak flow will be 22.46 l/s with a peak factor of 5 (excluding fire flow).

### 2.2.3 Proposed internal water reticulation

The proposed development will be serviced by 110mm diameter uPVC class 12 supply mains. Gate valves will be installed in accordance with Overstrand Municipality criteria to allow for the isolation of pipe sections in case of ruptures. Fire hydrants will be strategically positioned to meet fire fighting requirements.

## 2.3 Stormwater

### 2.3.1 Existing stormwater infrastructure

The existing area has gradients ranging from between 3% to 13% due to undulating topography (dune areas). The stormwater runoff is expected to increase over the proposed development due to the increase in hardened surface areas.

### 2.3.2 Proposed stormwater infrastructure

#### (a) Preferred development option

The pre-developed major (1:50 year return period) stormwater runoff with an average gradient of 4% is calculated to be 2.319 m<sup>3</sup>/s. The post development minor (1:2 year return period) stormwater runoff equates to 1.255 m<sup>3</sup>/s and the major stormwater runoff equals 3.232 m<sup>3</sup>/s. The storage detention required equates to 8 460m<sup>3</sup> which includes road storage.

The attenuation of the post development flows will be implemented according to the approved stormwater master plan for Gansbaai.

#### (b) Alternative development option

The pre-developed major (1:50 year return period) stormwater runoff with an average gradient of 4% is calculated to be 2.479 m<sup>3</sup>/s. The post development minor (1:2 year return period) stormwater runoff equates to 1.289 m<sup>3</sup>/s and the major stormwater runoff equals 3.319 m<sup>3</sup>/s. The storage detention required equates to 8 819m<sup>3</sup> which includes road storage.

The attenuation of the post development flows will be implemented according to the approved stormwater master plan for Gansbaai.

## 2.4 Roads

### 2.4.1 Existing roads

The access roads in the proposed developments will all connect to Kampeer, Ridderspoor and Angelier Streets from the existing residential areas.

### 2.4.2 Proposed roads

The proposed roads will have road reserves of 8m, 10 and 13m and an asphalt width of 4.5m for the 8m road reserves, 5m for the 10m road reserves and 5.5m for the 13m road reserves.

The proposed roads will have a 2.5% crossfall with kerbs on high side and kerbs and channels on the low side.

### **3 CONCLUSION**

After the upgrading of the existing bulk civil infrastructure has been completed, there will be sufficient capacity to accommodate the additional demands of the proposed developments and that sewer, stormwater and water connections can be provided as discussed above.

# 4 FIGURES



Figure 1 Locality Plan

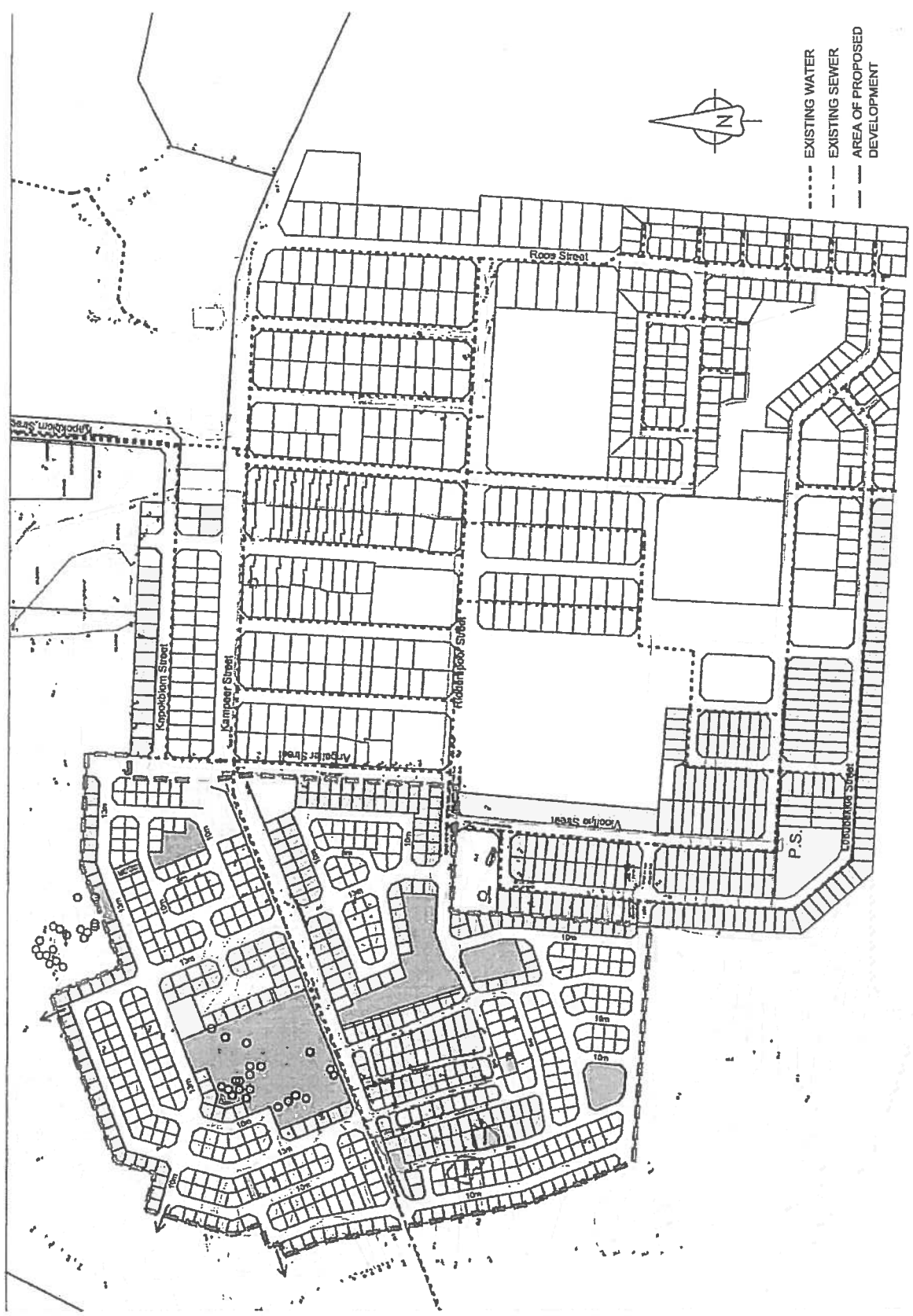


Figure 2 : Layout Plan of Preferred development option showing existing services

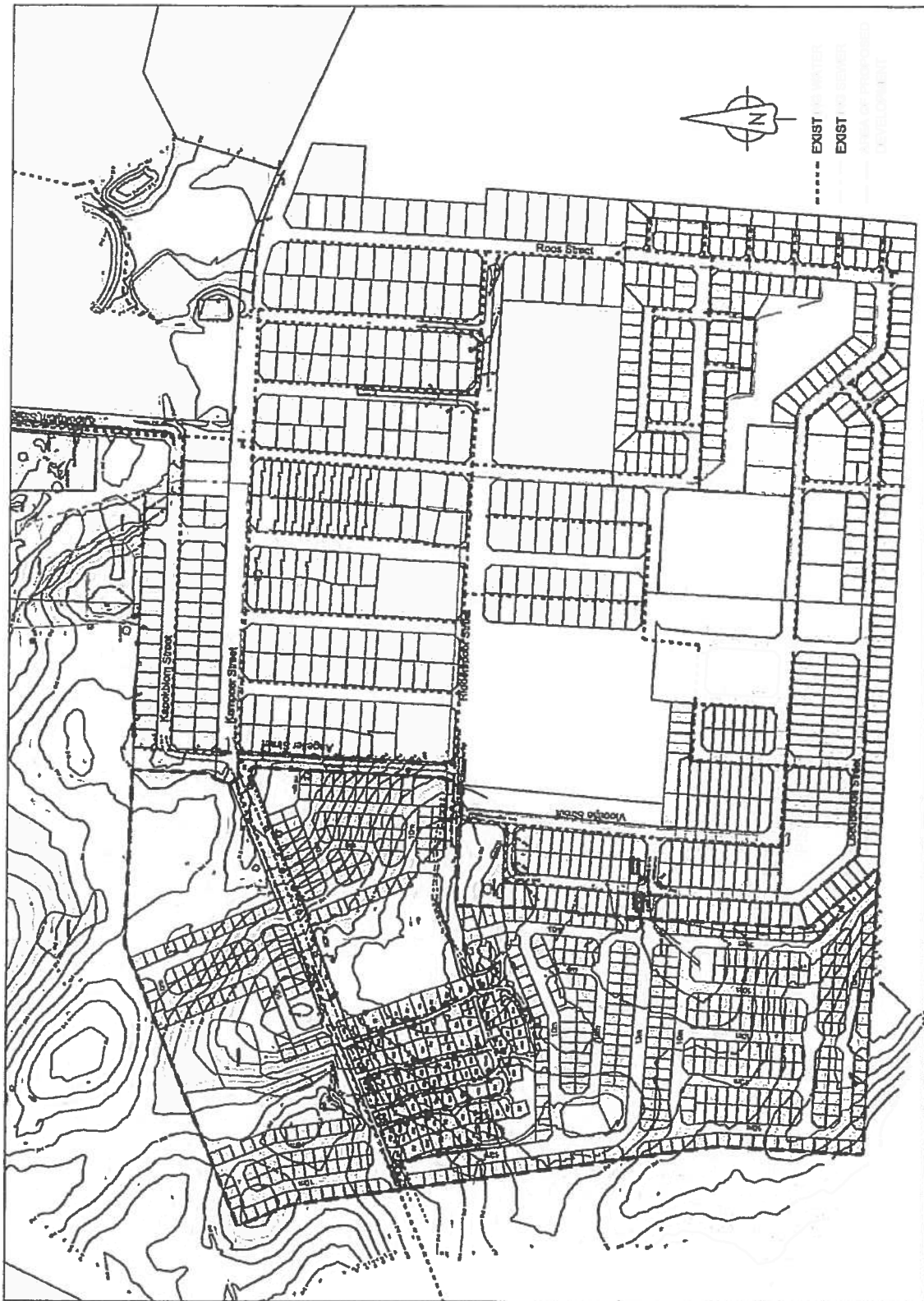


Figure 4 : Layout Plan of the Alternative development option showing existing services

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	Approved By	Reviewed By	Prepared By
<b>ORIGINAL</b>	NAME Clive September	NAME Gareth Jansen	NAME Gareth Jansen
DATE 26 November 2014	SIGNATURE	SIGNATURE	SIGNATURE

	Approved By	Reviewed By	Prepared By
<b>Revision 1</b>	NAME Clive September	NAME Gareth Jansen	NAME Mark Vollenhoven
DATE 07 April 2015	SIGNATURE	SIGNATURE	SIGNATURE 

	Approved By	Reviewed By	Prepared By
<b>Revision 2</b>	NAME Clive September	NAME Gareth Jansen	NAME Mark Vollenhoven
DATE 21 September 2015	SIGNATURE	SIGNATURE	SIGNATURE 

	Approved By	Reviewed By	Prepared By
<b>Revision 3</b>	NAME Clive September	NAME Gareth Jansen	NAME Mark Vollenhoven
DATE 08 October 2015	SIGNATURE 	SIGNATURE 	SIGNATURE 

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Postal Address	:	14 Kloof Street, Cape Town	Website	:	<a href="http://www.gibb.co.za">www.gibb.co.za</a>
Contact Person	:	Gareth Jansen	Physical Address	:	14 Kloof Street, Cape Town
Telephone No.	:	021 469 9100	Email Address	:	<a href="mailto:gjansen@gibb.co.za">gjansen@gibb.co.za</a>
			Fax No.	:	021 424 5571