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CASA MARIS ECO ESTATE
PTNS 8&9 FARM 830 KNORHOEK; REM FARM 838;
FARMS 839, 843, 862, 1052, 1100 AND 1369
SOMERSET WEST

Heritage Impact Assessment Annexures 1-11

September 2010

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Casa Maris Eco Estate

PORTIONS OF FARM KNORHOEK 830 & FARMS 838, 839, 843, 862, 1052, 1100 & 1369,
STELLENBOSCH DIVISION

Heritage Impact Assessment

CONDUCTED IN TERMS OF SECTIONS 38(8), 34 & 35 OF THE NATIONAL HERITAGE
RESOURCES ACT 25:1999

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Executive Summary

This document constitutes a draft heritage impact assessment for Casa Maris, Estate, situated against the slopes of the Hottentots Holland Mountains above Somerset West and close to Sir Lowry's Pass. This heritage assessment forms part of an over-arching environmental impact assessment submitted to Heritage Western Cape in terms of Section 38 (8) of the National Heritage Resources Act 25:1999.

The cultural landscape forming the context of the study is of outstanding local significance due to its strategic, landmark and historical qualities. The site itself contains significant portions of the historic Gantouw Pass that served as a main route into the interior until the opening of Sir Lowry's Pass in 1830. The old toll house that served this pass still survives and is located on the estate. The property has high botanical significance, although heavily degraded through previous neglect and alien infestation.

The owner/developer of Casa Maris wishes to develop portions of the estate for residential and environmental conservation purposes. A significant portion of the funds derived from this development are intended to be used for the social upliftment of the community of Sir Lowry's Pass Village, one of the poorest communities in the metropolitan area. The money released by the development is likely to be unprecedented for at least the sub-region, and would promise significant benefits to the local community through a written partnership agreement. The development would also release funds for the rehabilitation of approximately 90% of the estate as a nature area that would secure its future, as well as that of the community.

The property is, however, located well beyond the urban edge and the proposed development would not be in accordance with local planning policy. It is also adjacent to a Scenic Drive (Sir Lowry's Pass). The proposals are, therefore, motivated heavily on social and environmental conservation grounds, with the proposals heavily mitigated by landscaping.

This assessment considers three development alternatives and an 'existing rights' alternative. All are predominantly residential in nature, the highest density option being for 400 units located on the mountain slopes to the north of Sir Lowry's Pass. This alternative has been screened out from further consideration due to its impacts, which are regarded as unacceptably high. The other two development options involve 200 units and are, therefore, considerably lower in density. This study does not consider a 'No-Go' option as the estate, comprising **9 separate farms** does have development rights in terms of its agricultural zoning. Instead, an 'Existing Rights' option is considered as a fourth alternative.

This study finds that none of the alternatives perform particularly well in their present forms, including the 'Existing Rights' option. It finds that significant additional mitigation would be needed for the development alternatives to perform acceptably in terms of the study's key development informant priorities. The performance of the alternatives need however to be seen in the light of the strong socio-economic benefits. However such benefits cannot be used exclusively as motivation for the development without net benefits to the environment and cultural landscape.

The study finds that a development option greater as "of right" would be possible on the site subject to appropriate mitigation. This is further analyzed in the report.

Statement of independence

Melanie Attwell and Associates and ARCON Architects & Heritage Consultants, hereby declare that they have no conflicts of interest related to the work of this report. Specifically, they declare that they have no personal financial interests in the property and/or development being assessed in this report, and that they have no personal or financial connections to the relevant property owners, developers, planners, financiers or consultants of the development. They declare that the opinions expressed in this report are their own and a true reflection of their professional heritage expertise.

2. INTRODUCTION

Moxba Property Investment (Pty) Ltd is proposing the development of an eco-estate on the lower to intermediate slopes of the Sir Lowry's Pass Mountain. The site lies east of Sir Lowry's Pass Village and to the west of the Hottentots Holland Mountains. The total area for the site is 430ha and involves the following land units:

- Portion 8 of Farm Knorhoek 830 27.6107 ha.
- Portion 9 of Farm Knorhoek 830 25.1420 ha.
- Remainder Farm 838 Stellenbosch division 84.8999 ha.
- Farm No. 839 Stellenbosch Division 3.5460 ha.
- Farm No. 843 Stellenbosch Division 57.9566 ha.
- Farm No. 862 Stellenbosch Division 3.7605 ha.
- Farm No. 1052 Stellenbosch Division 21.4903 ha.
- Farm No. 1100 Stellenbosch Division 35.948 ha.
- Farm No. 1369 Stellenbosch Division 162.8149 ha.

The area is currently zoned "Agricultural". A single site Farm 1369 has an existing approved Agriculture Zone 2 and will be used for the purposes of a commercial bottling plant.

The owner of the consolidated estate wishes to develop the property into the Casa Maris Eco-estate which will have some parts developed for housing and tourism facilities and a large portion set aside for ecological reasons.. A main house, a guest house has already been approved and constructed on Portion 9/830 Knorhoek. Approval has been granted, for the development a water-bottling plant on the lower portion. The remaining area will be managed as a conservation area. In addition significant resources arising from this development will be used for socio-economic upliftment in Sir Lowry's Pass Village.

The proposal involves the following statutory applications:

- Consolidation of existing 9 farms with a total measuring 430ha
- Removal of title deed restriction prohibiting subdivision of Farm 830 portion 9 Knorhoek;
- Rezoning of land from Agriculture to subdivisinal area for 202 dwelling units and associated development and infrastructure
- Subdivision
- Compliance with conditions of approval.

In addition the proposal will involve the amendment to the urban edge of the Eastern District (City of Cape Town), as currently identified and an amendment to the Provincial Spatial Development Framework.

It should be noted that the site does not currently lie within the existing urban edge.

The estate is situated to the east of Sir Lowry's Pass Village. The railway line bisects the site and Sir Lowry's Pass runs through the site. The site is situated against the slopes of the Hottentots Holland range with extensive views both from and towards the site. Two properties currently exist on the upper slopes of the site, with one used as a residence for the developer and the other used as a guest house. The site is heavily overgrown in wattle gums and pine and experienced a extensive fire in 2009 in which both areas of tree infestation and newly restored indigenous plants were affected. The intention is to remove as much as possible of the alien tree growth and "restore" the intermediate slopes to indigenous vegetation.

The proposal is to consolidate such properties, rezone a portion to sub-divisional area and use for a development consisting of 200 housing units on individual erven. The remainder of the property will be used as an eco-estate.

A further key component for the development is the cross subsidization of the sale of the 200 units for investment in social and physical infrastructure with the community of Sir Lowry's Pass village, which suffers from high levels of poverty and employment.

The application therefore is for a rezoning to sub-divisional area in terms of the Land Use Planning Ordinance. The proposal also requires an application to remove a title deed condition in terms of the Removal of Restrictions Act for one of the properties, namely Portion 9 of the Farm Knor Hoek. Further as the proposed development falls outside the current urban edge as identified, the proposal is to amend the urban edge

The application triggers an Environmental Impact Assessment. Guillaume Nel of GNEC has been appointed by Moxba Property Investment to run the Environmental Impact Assessment process for submission to the Department of Environment Affairs and Development Planning. Melanie Attwell and ARCON cc have been appointed to undertake the Heritage Impact Assessment which is submitted as one of a series of specialist studies intended to identify and advise on environmental constraints, and assess alternatives and mitigatory measures. The Heritage Impact Assessment is undertaken in terms of Section 38(8) of the National Heritage Resources Act (Act 25 of 1999) and is submitted to Heritage Western Cape for comment.

A Notification of Intent to Develop was submitted to Heritage Western Cape's Built Environment and Landscape Committee in March 2009. In agreeing to the undertaking of a full HIA the Committee required that careful consideration be given to cultural landscape and planning issues in particular the appropriate response to the urban edge issue

The Heritage Impact Assessment is required to fulfil all statutory obligations in terms of the National Heritage Resources Act, in particular Sections 34 Section 38(4) and 38 (8) of the Act and well as the regulations published by DEAP for the undertaking on heritage assessments within an EIA process

The draft HIA is submitted to Heritage Western Cape for comment in terms of Section 38(8) of the NHRA and to the Department of Environment Affairs and Planning approval.

In addition approval is sought from the City of Cape Town and the Provincial Government for the amendment to the urban and the approved Helderberg Structure Plan, in order to amend the urban edge

3. BRIEF AND PURPOSE OF WORK

The brief as identified by Guillaume Nel Environmental Consultants was to undertake a specialist heritage study in order to fulfil the requirements of both the National Heritage Resources Act and the regulations attached to the National Environmental Management Act (Act 107 of 1997).

The current proposals have spanned almost 2 years of work and planning; and have been through a number of iterations. Throughout this process it has been a requirement of the brief to ensure that heritage and other specialist's requirements are responded to in the finalising of the proposal. It has been the intention to develop a unique proposal in terms of response to the landscape character both domestic and wilderness, ensure ecological sustainability; and crucially to ensure that the poor socio-economic conditions of the neighbouring Sir Lowry's Pass Village are improved in a measurable and sustainable way. Mechanisms have been built into the sale process and continuing on-sales of the properties as well as levies to ensure that this commitment is met. Consultations with the community have already taken place.

The developer, Moxba Property Investments has pledged to contribute over a period of time approximately R100m to the upliftment of the community. This involves a key role for the Casa Maris project as a lead agent in the development of the Sir Lowry's Pass Business Development Centre and the development of a new economic hub for the local community. For further information regarding the nature of this proposal refer to **Annexure 4**.

The purpose of this study is to fulfil the requirements of Section 34, 38(3) (Section 38(4) and 38(8) of the National Heritage Resources Act. In addition the brief requires that cultural landscape analysis inform the development of heritage related design informants. Such informants are required to be used in the heritage and cultural landscape assessment of the proposal.

The heritage consultants also undertook professional meetings and consultation with the planners, urban designers and other specialists. In the course of this 2 year long process a number of options were put forward some abandoned and some have been refined over a period of time. The following were the proposals which were proposed and reviewed in this period. They have been assessed accordingly in this report.

1. The first proposal is the "as of right" proposal. This allows development of units and infrastructure in accordance with existing the agricultural zoning. There are nine farm portions which allows for nine development proposals falling within this zoning. This option has no economic benefits on the Sir Lowry's Pass Village community and because of the position of some of the land portions in relation to the mountain may have focussed by high visual impact.

2. The second proposal involved the development of over 400 low density units with a significant visual impact and cultural landscape impact. It soon became obvious that this proposal would significantly affect the character of the environment at a variety of scales and distances.

3. The third proposal was a subsequent urban design undertaken by Comrie Wilkinson Architects & Urban Designers. It was based on a careful analysis and response to the landscape. The Comrie Wilkinson proposals of 200 mostly cluster units were placed in areas of higher visual absorption capacity. In this proposal, only 10% of the land extent was used. The urban design was based on the assumption that different qualities of landscape required differing design and urban design responses. The urban design proposal was unique and considered; and had the least visual impact on the landscape as well as creating places of interest. It was not considered able to raise the development opportunities and funding required by Moxba however.

4. Consequently, a fourth option of 202 units on separate erven was developed by Planning Partners. Option 4b is the developer's preferred option as a compromise between the high impact, high return initial proposal of 400 units; and the cluster option, lower return of Option 3.

Option 4b has 202 units on 750sm erf sizes mostly in the lower and intermediate portions of the site, but also in elevated mountain areas east of the railway line. The proposal allows two ecological corridors which follow the major streams on site. Architectural design would ensure that buildings respond to the character of the site and various visual mitigation measures have been proposed. General restrictions wouldll include height controls and a building footprint of 250 sqm. For more specifics regarding these proposals, refer to **Section 14**.

The Heritage Impact Assessment report consists of the following

- A review of related planning and policy material affecting the site;
- An mapping and assessment of the heritage resources,
- Documentary, archival and deeds office research for historical background and information;
- Identification of structures older than 60 years;
- The development of a statement of cultural significance for the site based on recognised criteria;
- The development where necessary of heritage related design indicators affecting future proposals for the site.
- The application of impact criteria to the affected site and the review of options. Assessment of options impact on heritage resources
- Assessment of options relative to heritage informants
- Examination of and recommendations for mitigation required in order to protect and enhance the heritage resources, the cultural landscape and heritage significance
- Cost benefit analysis of impact of heritage resources relative to socio-economic impact

The method of work has included taking into account a number of other specialist reports including the following

- The Visual Impact Assessment Report undertaken by Albert van der Stok
- The Amendment of the Urban Edge report undertaken by Planning Partners
- The rezoning application and application to amend the structure plan by Planning Partners
- The Archaeological study undertaken by J Orton Archaeology Contracts Office, UCT
- The Social Impact Assessment report (SIA) undertaken by Urban Issues Consulting September 2010
- Draft Architectural Design Controls CJ Nelia Botha September 2010

4. ASSUMPTIONS AND LIMITATIONS

4.1 The following Assumptions have been made

- The public participation process has been managed by GNEC as part of the EIA. There has been little input in terms of heritage at this stage
- The urban edge issue requires a planning resolution and although it influences the cultural landscape assessment, the application to amend the urban edge and amend the structure plan is not part of the heritage assessment process.
- Information and assessments supplied are deemed to be accurate
- The assumption is that the mountain slopes of the site are a cultural landscape, at a variety of scales but particularly at a regional scale as a defining element in the landscape and topography of the eastern edge of the Cape Peninsula
- A visual impact assessment has been undertaken as a separate study by Albert van der Stok (**refer Annexure 11**). The VIA and HIA studies are to be regarded as complementary, notwithstanding differences in emphasis for interpreting visual impacts. It is these authors' experience that VIA's place greatest emphasis on measuring degree of visibility and contrast. HIA's tend to place greater emphasis on nature of visibility/contrast in relation to the cultural landscape.

- The financial and infrastructural commitments made by the developer Moxba Property Investment to the community of Sir Lowry's Pass Village will be implemented and lead to the upgrading of the socio-economic context. This commitments will be implemented in an ongoing, sustainable and long term manner
- Further detailed design guidelines will be developed in order to respond to issues of visual impact of the building development
- Further detailed archaeological controls will be built into the Conservation Management Plan

4.2 The following are the Limitations

- The full site has not been examined owing to its extent, steepness and dense vegetation
- The landscape is a complex one with many different views at a variety of scales both to and from the site. Only those accessible by road have been reviewed
- The site for the bottling plant has already been decided
- This report does not address heritage impacts resulting from the proposed small sewerage plant and service structures on the lower portions of the site given that these proposals still have to be developed. The report also does not address heritage impacts resulting from the potential laying of pipeline services and other related infrastructure, including between the affected site and elsewhere.
- Assessment is dependent on available specialist reports and available research material
- The public participation process is not yet complete. There have been concerns raised by members of the community regarding cultural landscape and urban edge issues, where responses are being negotiated with the relevant authorities.
- No consultation has been entered into by the heritage consultants. All public participation has been undertaken by Guillaume Nel Environmental Consultants

5. SITE LOCATION AND CONTEXT

5.1. General:

The farms identified as part of the Casa Maris Estate are magnificently situated on the lower and intermediate slopes of the Hottentots Holland Mountains east of Sir Lowry Village and Somerset West.

The site is situated close to the Helderberg Basin which extends from the Hottentots Holland range towards the west and south west in a series of hills and intermediate slopes.

The Casa Maris site itself consist of low hills and ridges facing north and northwest framed to the east and south east by the backdrop of the mountain range. To the south east is Gordon's Bay and to the south west the farms and settlements of Somerset West extending to the Cape Flats. The context is defined by mountains with the Hottentots Holland and the distant mountains of the Cape Peninsula providing defining edges and contributing to a strong sense of place.

The N2 (Sir Lowry's Pass) defines the site on its southern edge and the railway line from Somerset West bisects the properties. The site consists of a number of farms and farm portions (see above).

Of heritage significance is the fact that the site includes a section of the historic Gantouw Pass which was the forerunner to Sir Lowry's Pass, first built in the 1830's. Visible portions of the early precipitous pass which shows wagon wheel cuts in the rock surface, is a Provincial Heritage Site.¹ The 18th century toll house still stands within the site on farm 1838. Documentary research as well as on site inspection of building fabric has confirmed the 18th

¹ This site is outside the study area however

century origins of the building. For further information see Section 6: Site Description and Historical Background

5.2. Site Location and Context

The site is located on the west facing slopes of the eastern rim of the Helderberg Valley. The Hottentots Holland range run from the south and sweep northwards along the eastern rim. The mountains form an amphitheatre² opening towards the west where there are panoramic views over the False Bay coast towards Cape Point and inland towards the Cape Flats and to the Cape Peninsula Mountain spine. The Helderberg Valley raises to a ridge on which is situated the Wedderwill Estate. To the north-west lies historic Vergelegen, the Lourens River Valley, and the hills of Somerset West. This includes domesticated landscapes of farm and smallholdings; with defining tree lines and cultivated fields. This eventually gives way to indigenous vegetation plantations and forest, as one moves up the mountain slopes.



Panoramic photograph from the Casa Maris eco-estate showing extensive views from the site across False Bay and the Helderberg foothills

² Van der Stok Casa Maris VIA September 2010, page 10.

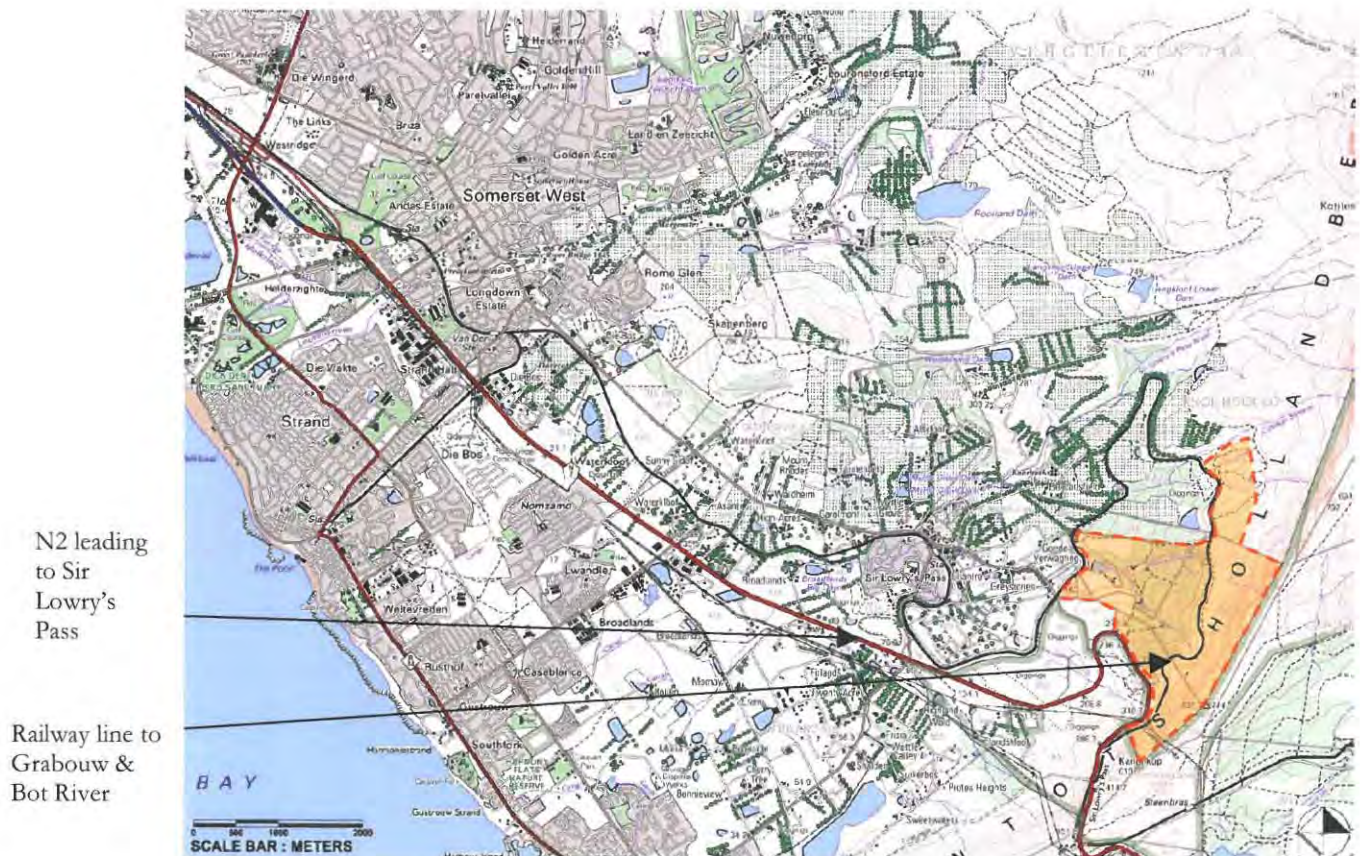


Fig 1. Site of the Casa Maris eco-estate in yellow showing Sir Lowry's Pass and the railway line: Image: A van der Stok and Planning Partners: 2010.

The site extends up the mountain slopes extending from High Riding and Sir Lowry's Pass Village. The N2 (Sir Lowry's Pass) which is a designated scenic drive. The site is bisected by the Cape Town Grabouw rail line within a railway reserve. The rail line is defined by a strong band of mature eucalyptus trees. The highest points on the site lie south east of the rail reserve.

The rail line dates from the turn of the century and the stone rail bridge which spans the stream is be considered a heritage resource in its own right. It is however on rail reserve and is not in the site study area. East of the railway line, the site becomes steeper and more prominent leading to a less domesticated and a barren, more wilderness area of boulders and low shrub.

The Casa Maris site consists of an extended series of slopes of increasing slopes of the Hottentots Holland extending from the lower slopes of the south western edge of the site to the high eastern mountain slopes; which define the eastern edge of the Peninsula and the Heldeberg. Within this extended landscape lies a vast amphitheatre of domestic landscapes from the Helderberg Mountains and the Schapenberg Hill, to the lower slopes of the Hottentots Holland. This landscape consists of a dense patchwork of fields, treed windbreaks, local and farm roads, farms and small settlements. (See below) The largest of the settlements close to the Casa Maris site is Sir Lowry's Pass Village and the informal settlements which surround it, particularly to the south.



Fig 2. Aerial Photograph showing amphitheatre of domestic landscape within the wider context of the Cape Peninsula, both defined by the Hottentots Holland Mountain range.

5.3. The Casa Maris Site

The site is well watered. A number of streams run down the mountain slopes, resulting in a series of small dams which add to its picturesque qualities. There are two moderate sized dams, one in the vicinity of the Toll House. (It is likely that the presence of water and the open fields around the tollhouse for outspans, dictated its position in relation to what is otherwise a steeply sloping environment). The nearby fields were cultivated or used for grazing at various times certainly by the 1830's and there appears to have been a watercourse developed for irrigation purposes.

In addition to the dams, there are farm roads some leading from the lower edges of the site and some from the N2. They lead on to dense vegetation.

The landscape itself consists of a convoluted topography with spurs and ridges, valleys and sloping hills, stony areas and dense vegetation extending up the slopes. There are parts that are highly visible and part that are hidden. The landscape analysis in the Visual Impact Assessment has attempted to analyse the topography in order to ensure that there is as rational an understanding of this landscape as possible.



Figs 3 & 4: Two views of the site the first towards Gordon's Bay and the second towards the Helderberg Mountains showing expansive panoramic views. This also suggests that the sites are highly visible from a variety of viewpoints in the Helderberg Valley.



Fig 5. Looking towards the homesteads before the 2009 fire showing alien clearance



Fig 6. Looking towards the two homesteads after the 2009 fire.



Fig 7. One of the two substantial dams on site. Water edges are currently overgrown with alien vegetation. 2009

In terms of the cultural landscape character of the site it may be considered as forming roughly three general areas, the lower domestic landscape which forms part of the farming and agricultural settlement patterns of the Helderberg Basin, the intermediate slopes consisting of high-visibility promontories, spurs and valley, either densely vegetated or rocky, and the south to south eastern remote zone consisting of the area beyond the railway line.

The site may be considered a cultural landscape at a variety of scales but chiefly for its role in the defining the character and edge of the Helderberg Basin and agricultural landscapes within it. At a larger scale the Hottentots Holland range define the edge of the Cape Peninsula and the Cape Metropolitan area.

6. HISTORICAL BACKGROUND

6.1. General Background

The Casa Maris site owes much of its historical significance to its position at the foot of the Hottentots Holland range in particular at the foot of the pass over the mountains. The area was the last outspan point before the ascent over the historic Gantouw Pass

The first pass was known as the Gantouw Pass and was named after the Khoi word for Route of the Eland, *T'kanaOuwe* or Elandspad. The route was initially used by game in search of fertile grazing east of the Hottentots Holland. Game paths were by the Khoi who travelled with large herds of sheep and cattle over the pass in search of better grazing. This route remained as was the Gantouw Pass until 1830 when it was superseded by a newer lower pass and renamed Sir Lowry's Pass after Sir Galbraith Lowry Cole, Cape Governor. The early pass therefore has links to the early pre-colonial history of the Cape as a known historic route.

The area around the proposed eco-estate slopes gently upwards from Sir Lowry's Pass Village through cultivated landscapes until ascending steep rocky slopes. The area is rich in plant species. Geological conditions favour fynbos diversity. Some of the richest areas of biodiversity are contained in the general area which includes Casa Maris. The suggested reason for such diversity in the area is its diversity of habitats resulting from supporting geological conditions and well as the streams which flow through the property

Vegetation types have been identified as a combination of Boland Granite Fynbos, Cape Winelands, Shale Fynbos and Kogelberg Sandstone Fynbos (see below)



Fig 8. The Casa Maris Estate outlined in blue showing different vegetation types and related geological conditions. These are Boland Fynbos Granite identified as FFg2, Cape Wynlands Shale Fynbos identified FFh5 and Kogelberg Sandstone Fynbos identified as FFs11: From McDonald 2010 and C Boucher 2010.

6. 2. Historic Environment

6.2.1 Background

The Somerset West area has its historical origins in the rich grazing lands used by the Gorinhauqua and Gorinchacqua groups who settled in the basin of the Lourens River on a seasonal basis. They travelled over the Hottentots Holland Mountains to the Overberg using the route known as the Gantouw Pass.

Dispossession of Khoi land and the closing of access to water sources as a result of land privatisation and expropriation; began in the late seventeenth and early eighteenth centuries with large land grants such as Verglegelen in 1700, Parel Vallei in 1699, and Zandberg granted in 1694. The closest farms to the Casa Maris site were De Fortuin (later Broadlands) and Knorhoek granted in 1711 and 1777 respectively. Parts of the Casa Maris site once formed part of the Knorhoek land. However even before that, travellers were making the arduous journey over the Gantouw Pass using indigenous knowledge of the area. The first recorded ascent of a colonial traveller over the Gantouw Pass was Hendrik Lacus, Dutch East Company Official in 1662. By 1704 the route and the pass were extensively used as the major access route to the Overberg.

The area contains a number of Provincial Heritage Sites. These include:

- The upper part of the Gantouw Pass declared 1958
- Knorhoek and mill declared 1987
- Railway Station, Sir Lowry's Pass Village declared 1986
- Sweet Saffraan Sir Lowry's Pass Village declared 1981

6.3. Sir Lowry's Pass Village

Sir Lowry's Pass Village is the closest hamlet to the proposed Casa Maris eco-estate. Prior to the building of the line it was used as an outspan for groups travelling over the Pass. Its importance as a focal point for travellers was re-inforced with the building of the first Post Office in 1846

The village was laid out in 1879 prior to the extension of the Kuils River Line to the foot of the Mountains at Sir Lowry's Pass in 1890. It has a number of late nineteenth century buildings and its rail station is a PHS (See below). Franssen describes the Village as "containing a few haphazardly placed turn of the century buildings, a post office, a hotel, a Wesleyan Chapel and a railway station. The Village was deeply affected by the Group Areas Act. In 1966 it was proclaimed a White Group Area but by 1975 a portion of the Village was deproclaimed for "coloured" ownership. Sir Lowry Village currently has poor socio-economic conditions, growing informal settlement, high unemployment and very high levels of poverty, having been described as the "area of deepest poverty in the Eastern District".³

6.4. The Development of the rail line over the Casa Maris Estate to Grabouw.

The railway line was extended from Sir Lowry's Pass Village in 1901-1902 and formally opened in 1902. The line was an engineering feat with the line descending steep and difficult terrain and across ravine and watercourses. Parts of the line and supporting infrastructure visible from Casa Maris show a dressed stone rail bridge spanning the stream supporting earthworks and defining bands of mature eucalyptus trees. These however are not on the Casa Maris Estate but form part of the theme of transport and travel which ties much of the history of the area together. The bridges and related bands of trees are considered for the purposes of this report part of a heritage route and supporting infrastructure.



Fig 9. The dressed stone rail bridge c 1901

6.5. The Gantouw Pass later replaced by Sir Lowry's Pass

³ Planning Partners: Casa Maris Eco-Estate: Application to amend the urban edge. Prepared for Moxba Property investments (Pty) Ltd April 2010 page 8

The historic lower Gantouw Pass traverses the Casa Maris Estate. The historic building generally known as the tollhouse or “Ou Tolhuis” can now be conclusively identified as the 18th century tollhouse linked to the Gantouw Pass. The upper and visible portion of the Pass, which is a PHS, is outside the Casa Maris Estate. However the route should be seen in its entirety as a significant heritage route.

The experience of ascending the Gantouw Pass has been extensively documented by early travellers. This is not surprising given the extreme conditions under which the early Pass was travelled.

Willem van Putten wrote in 1709 “ We halted below a high Mountain known as the Kloof (possibly in the vicinity of the tollhouse site) which was high, rocky devoid of trees covered with every variety of rock”.. “ and on account of its great height,⁴ difficult to scale”

After remaining at the foot of the mountain they resumed their journey along “some sort of track over loose flinty stones and pebbles but from then upwards the mountain has to be scrambled over in the best way possible –over large and small boulder using hands and feet”

Swedish traveller and botanist Anders Sparrman wrote in the 1770’s ““The next day...we got up at day-break, in order to take our journey over Hottentots Holland’s Mountain, in the cool of the morning. The way up it was very steep, stony, winding, and, in other respects, very inconvenient. Directly to the right of the road there was a perpendicular precipice, down which, it is said, that wagons and cattle together have sometimes the misfortune of falling headlong, and are dashed to pieces.”⁵

H Lichtenstein described the route as appearing as going perpendicularly straight to the top “ but for the latter part of the way it takes an oblique direction towards the rugged wall of the mountain”.

From the general readings of travellers reports it appears that they generally travelled from Cape Town towards Faure, stayed the night in one of the farms that were known for their hospitality including Meerust and Vergenoegd and travelled on to the foot of the mountain to the vicinity of the Tollhuis. They would make the ascent in stages with the wagons porters and slaves going first. The ascent took a full day and they left at first light.

The upper part of the Gantouw Pass is well recorded because of its visibility. In addition because of the precipitous nature of the landscape there were no choices to be made – there was a specific route which had to be followed. Grooves etched into the stone along the route still exist and are part of the PHS. They were caused by “remskoene” or the locking of the wheels to the wagons to prevent them falling away. This suggests that on the steeper slopes the wagons were effectively manhandled particularly on the route down to prevent them falling over the edge.

By 1821 by the time the Overberg interior and south western Cape had opened up to settlement, as many as 4500 wagons were using the tortuous route each year. Ross estimates that as many as 205 were damaged in the process.⁶

⁴ Putten as quoted in P Heap: The Story of Hottentots Holland, CP 1977 page 86.

⁵ Spaarmann as quoted <http://cyberafrica.wordpress.com/2009/09/28/history-of-gantouw-pass-elds-path/>

It became obvious that mobility and development were inhibited by the Gantouw Pass. In 1828 when Charles Michell was appointed as Surveyor General Civil Engineer and Surveyor of Works he decided to build an entirely new pass west of the old pass and south of the Kloof. Construction began in 1829 using convict labour. The Pass opened on 6 July 1830 was named after Sir Galbraith Lowry Cole, Cape Governor. Convicts and labourers were housed at the outspan and there is evidence to suggest that convicts were housed in the vicinity of the Toll House. Maintenance issues continued to affect the Pass and further improvements made. In 1950 the hairpin bend area was affected; and by 1959 the upper portion had been improved. In 1984 the road was widened and cantilevered viaducts were constructed to widen the passes in parts to four lanes.

6.5.1. *The position of the Gantouw Pass*

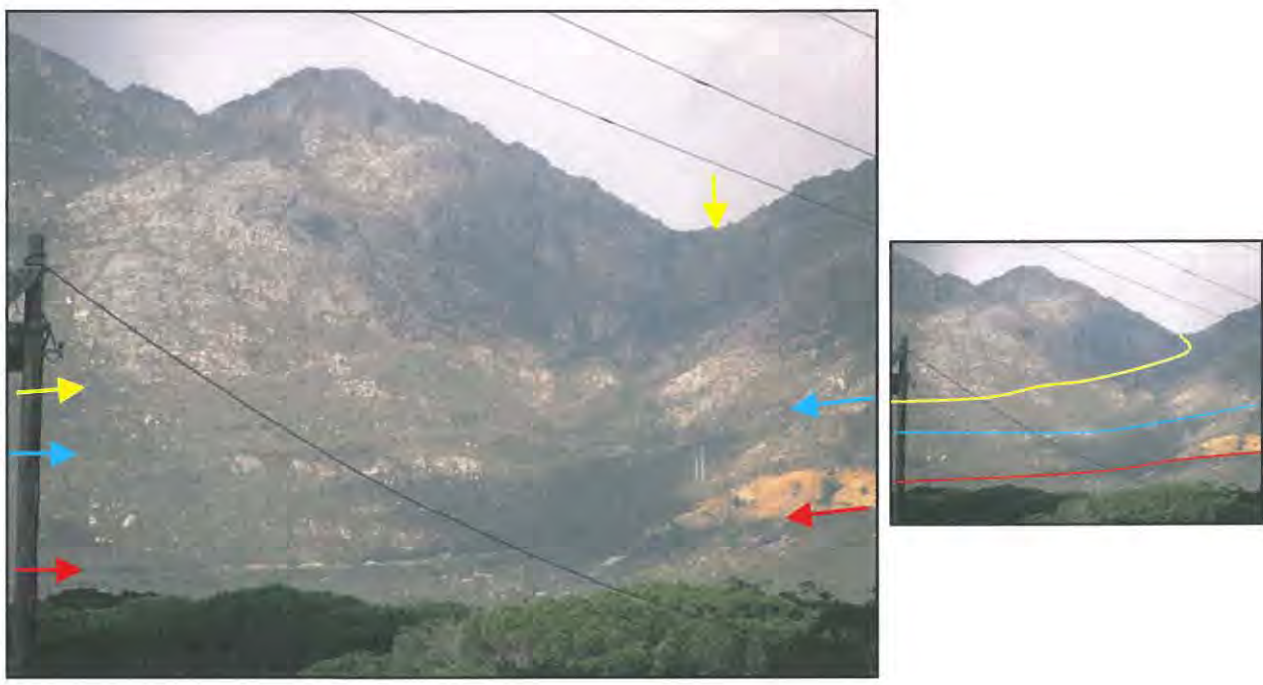
J Orton of the Archaeology Contract Office has extrapolated the relative route of the upper Gantouw Pass (Casa Maris Draft AIA 2009). What is less clear is the route followed by the lower section of the Gantouw Pass extending from the tollhouse to the upper route extending along the mountain face.

It would appear from Schuhmacher (1776) and Van Brandes (1786) that the route followed the existing route from the toll house south east towards the hill in which the bottling plant is to be situated. The navigation of this hill involved a series of tracks dependent on soil and weather conditions (Ross: *The Romance of the Cape Mountain*). *Passes*



*Figs 10 & 11. Upper Gantouw Pass:
Grooves made in the rock by wagons
wheels using "remskoene" Source ACO
2009.*

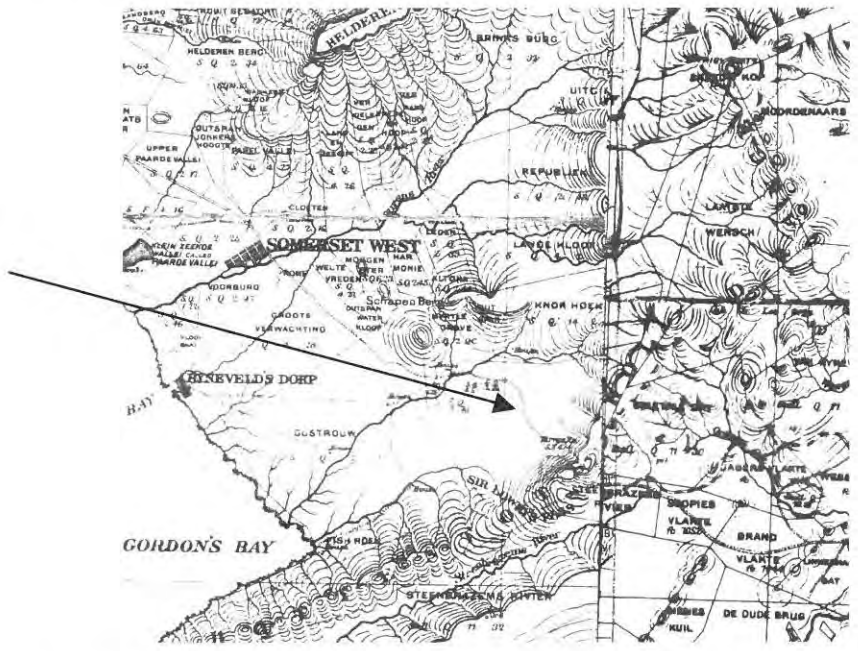
⁶ G Passes, David Philip Cape Town, 2002



Figs 12 & 13. Extrapolations by J Orton 2009 of the relative routes of the upper Gantouw Pass (in yellow) the rail line (in Blue) and the present Sir Lowry's Pass (in red).

The route is marked on the topo-cadastral compilation of 1901 and leads up the slopes in an almost perpendicular fashion as described in travellers reports

The route followed by the lower Gantouw Pass



Why is this not merely the 1830 Pass marked here? It does not pass the # # kloof!

Fig 14. Map of the South Western Districts: Sheets 1 to 13 Cape and Malmesbury: Trig Survey Mowbray.

6.6. The Toll House: Farm 839

6.6.1. Deeds summary

This farm which measured only 4 morgen was granted as a Stellenbosch freehold⁷ to the widow of PG Langenhoven in 1831. The presence of an established farm with watercourses and agricultural lands as well as the building known as the tollhouse, suggests that the land had been well utilised for some time prior to this grant. There may have been an earlier grant which lapsed but this could not be traced. A number of missing transfer follows, and by 1885, the whole site was transferred from C.A Friedrich to W W Ghislin and A J Ghislin.⁸ By 1892 the property was transferred to Cape merchant William Jardine. It remained in the Jardine family until 1958⁹ when the whole property was transferred to Jacob Petrus van Straaten. Of interest is a condition attached to the 1831 grant which required the building and site be used for the housing of convicts maintaining the new Sir Lowry's Pass. It stated:

"That such part of the land and buildings as that shall be designated by the Surveyor General shall be inhabited until further ordnance by a small group of convicts...which shall be employed in keeping Sir Lowry's Pass in repair said to extend S and SE to the Hottentots Holland Mountains"¹⁰. This suggests that the tollhouse and surrounds may have been used to convicts and workers also during the construction of the Pass as it is known that the Pass was built using local convict labour. This may have archaeological and historical implication and reinforces the need to examine the site around the tollhouse carefully from the archaeological perspective.

The diagram of 1831 shows the tollhouse referred to as a dwelling house. It shows the building surrounded by grazing land with a ravine to the north and the public road to the klook extending along the edge of the property in a north south direction.

In the original 1831 diagram attached to the Stellenbosch grant (not shown), the same dwelling is identified as "wooning van der Kloot" or road keeper. However in a later 1843 consolidation diagram, the house is referred to as "the old toll house". The 1844 diagram also shows two routes both shown in the earlier sketches of Schuhmacher and Van Brandes of two routes converging from the south and the west towards the tollhouse

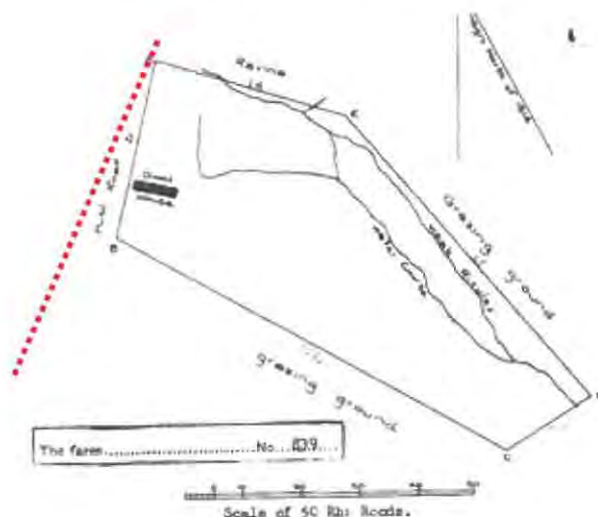


Fig 15. Diagram 179 of 1831 showing the "public road" and the current building on the site known as the Tollhouse

⁷ Stell FH vol 2 folio 33 1.12.1831, Deeds Office Cape Town

⁸ Transfer 71/7/7/1885 Deeds Office Cape Town

⁹ Transfer 12155/22/8/1958 Deeds Office Cape Town

¹⁰ Stell FH dd 1.12.1831

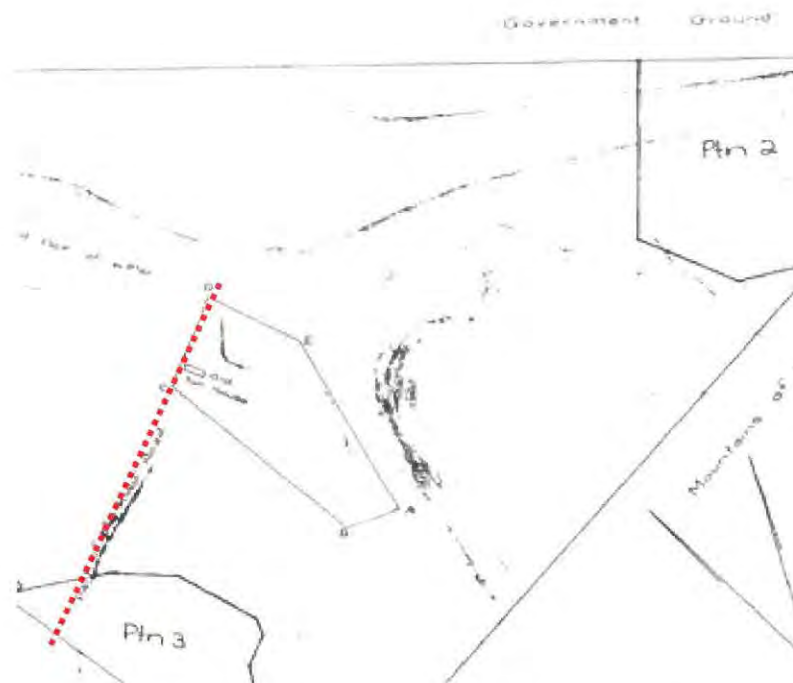


Fig 16. Diagram 387 of 1844 showing house identified as "Old Toll House and part of the Old Kloof Road extending towards the north-west.

6.6.2. The Toll House

A building of some antiquity exists on the farm 839. It consists of a low stone building with a pitched roof. The building has clearly been subject to changes including a pitched roof and the addition of a pergola. Additional windows have been inserted in places. There is a high steep and lean to sections to the west. There is an additional wing to the south of the building. Window surrounds have been changes and there is evidence that the structure may have been partially rebuilt after a fire.



Fig 17. The building known as the Toll House Farm 839.



*Fig 18. An early photograph (nd) of the Toll house: From P Heap
The Story of Hottentots Holland. This shows the building in a ruinous condition. It had a flat roof and the
parapet wall levels have been raised. The lean-to, the high stoep, steps, and the door apertures are substantially the
same although the stoep is now considerably deeper.*

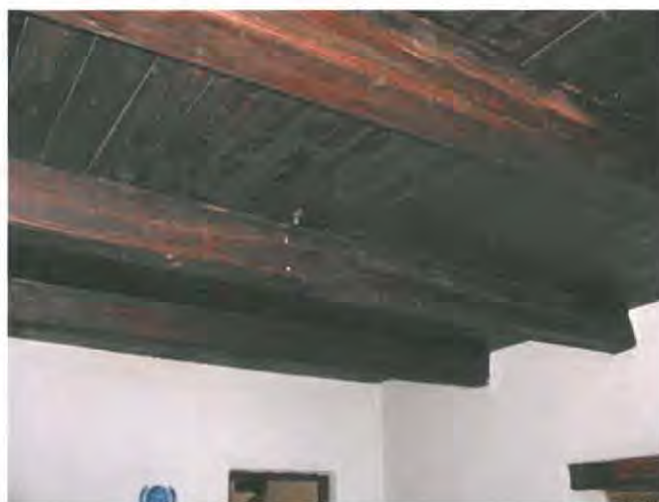


Fig 19. Toll house: Late eighteenth century interior beams.

There is a large camphor tree to the front of the structure similar to those at Vergelegen. The site is surrounded by fields which extend in a south westerly sloping direction.

There has been discussion regarding the provenance of the building and whether it is the tollhouse or not. J Orton states that the current location of the toll house remains unknown. In particular he writes:

“The road maker’s house soon became the toll house for the pass (Mossop 1927). The exact location of this toll house remains unknown but, from Mossop’s (1927) description of the pass¹¹ and an examination of a 1776 sketch by Johannes Schumacher it seems likely that it was somewhere in the vicinity of the south-western corner of the lowermost slopes of the proposed development site. The cottage in the centre of the site currently referred to informally as “Die

¹¹ See Appendix 2 for details.

Tolhuis”; must, therefore, relate to something else, perhaps a farm house. It also seems too deep in the valley to have functioned effectively as a toll house.”¹²

However from the site of the current building in relation to the diagrams, the age of the remnant fabric of the building (possibly late 18th century although altered), references to the house of the “kloat” in the diagrams (see above), the architectural similarity between the present building and those indicated in the early sketches, it is clear that the current building on the site is the old toll house. Moreover the building remains remarkably recognisable as that drawn by Van Brandes and Schuhmacher.

6.6.3. *The date of construction of the toll house*

Heap¹³ refers to the house of *cloeverkmaaker* who maintained the roads since 1740 and whose house was used as a toll. The earliest detailed sketch of the site in 1776 by J Schuhmacher, shows a building with a second structure behind it. This sketch shows two routes converging on the toll house and extending up the slopes towards the upper Gantouw Pass.

A second sketch a decade later 1786 by Van Brandes shows the toll house in a clearly recognisable architectural form. This shows a pitched roof structure with lean-to sections on either side of the front elevation. There are additional structures or a south wing. This suggests that the building is clearly the tollhouse and may date to 1740. This is likely but cannot be proved to be the same building as referred to by Heap. The building can however be dated with certainty to 1776 and the sketch of 1786 shows remarkable architectural similarities.

The Toll
House
1776

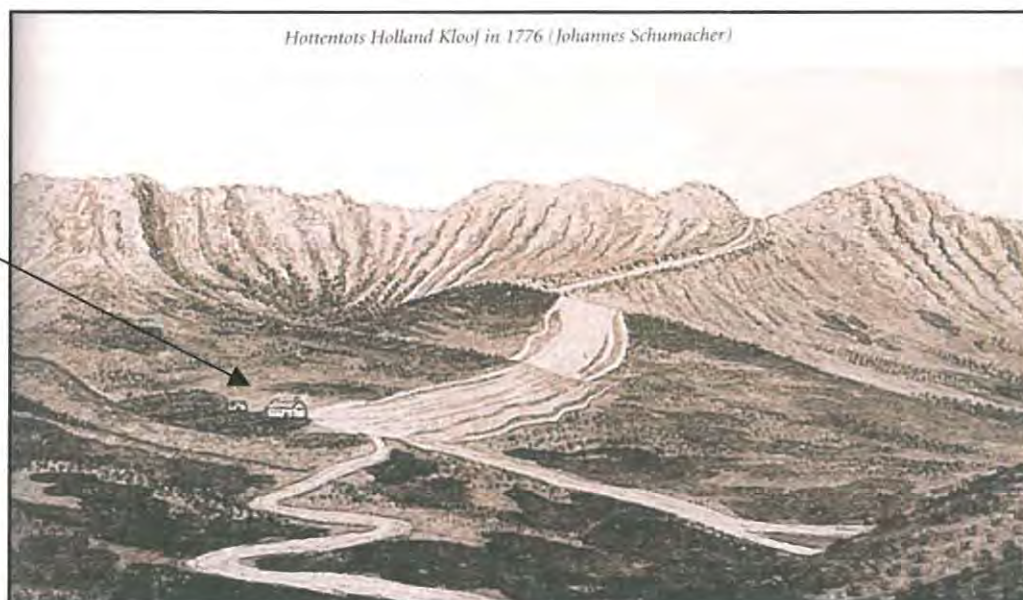


Fig 20. Sketch by Schumacher of the Gantouw Pass. The Tollhouse is likely to be the buildings in the kloof. The width of the route ascending the lower slopes however is the same as in the Van Brandes sketch (see below). This indicates that there were a number of choices as to how to ascend the lower slopes of the Gantouw Pass in the vicinity of the proposed bottling plant area. Two access points to the toll house from the west and south west are clearly visible. Note the wide swathe caused by wagons trying to negotiate to best advantage across the loose and periodically muddy terrain.

¹² J Orton ACO UCT AIA Gordon’s Bay Casa Maris July 2009 page 12.

¹³ P Heap, *The Story of Hottentots Holland*, Elandskloof Cape Province, page 86



Fig 21. View of the Tollhouse by Van Brandes c 1786 from the access road. The building is clearly recognisable as a pitch roof structure with lean to sections at the side. There also appears to be a smaller wing at the back. The pencil sketch on the left hand page shows a faint pencil sketch of the drawing and context, possibly a preliminary sketch. of the lower slopes. The drawing also shows the difficulty in identifying an exact route for the lower part of the Gantouw Pass. It appears to have been a fluid route changing in relation to soil and climate conditions (compare with the lower road alignment in Fig 20, ten years earlier)

6.7. Assumptions based on the Historical Evidence

6.7.1. On the basis of the above historical evidence the following can be assumed.

- a. A toll house existed on the site since at least 1740. The current structure is known to have existed on the site from between 1740 and 1776. It was by that stage a well developed outspan and toll
- b. There were two access route towards the Gantouw Pass converging on the toll house, from the west and the north respectively.
- c. The exact position of the lower Gantouw Pass changed but the access route from the current site to the proposed bottling plant is likely to have been the original route.
- d. There have been alteration to the toll house but the core building and building footprint remains intact
- e. The area around the tollhouse is considered of heritage significance because of its associations with the toll house but also as an outspan
- f. The toll house is part of a unique cultural route as a pass dating to pre-colonial times
- g. The site around the toll house is likely to have archaeological potential because of its long history of travellers, outspans, domestic settlement and later convict use.
- h. The rail line and supporting bridges as well as bands of mature eucalyptus trees also have historical/cultural significance as part of a theme of transport and the opening up of the area
- i. There are no formal graveyards in the area but in light of the link of the toll house and convict labour it is possible that unmarked graves exist in the area.

7. STATUTORY FRAMEWORK

7.1. National Environmental Management Act (NEMA) No 107: 1998

Melanie Attwell and ARCON Design undertake this study as part of an Environmental Impact Assessment in terms of NEMA. The study is submitted as one of a series of specialist studies intended to meet the specialist requirements of the legislation.

7.2. The National Heritage Resources Act (NHRA) No 25: 1999

7.2.1. Heritage Resources. This assessment, forms part of an Environmental Impact Assessment and has been called for in terms of Section 38(8) of the NHRA. The following work descriptions apply: Section 38(1) subsections:

(a) the construction of a road, wall, . . . pipeline, . . . or other similar form of rectilinear development or barrier exceeding 300m in length; and

(c) any development or other activity which will change the character of a site-

(i) exceeding 5000 sq. meters in extent

(d) the re-zoning of a site exceeding 10 000 sq m in extent.

7.2.2. HLA Report Requirements:

In terms of NHRA Section 38, the report must address:

- (a) The identification and mapping of all heritage resources in the area affected;
- (b) An assessment of the significance of such resources as set out in the NHRA;
- (c) An assessment of the impact of the development on such heritage resources;
- (d) An evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development;
- (e) The results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;
- (f) If heritage resources will be adversely affected by the proposed development, the consideration of alternatives; and
- (g) Plans for mitigation of any adverse effects during and after completion of the proposed development.

7.3. Archaeology and Burials

In terms of Section 35 of the NHRA, any archaeological remains discovered on the site may not be removed without the consent of the SA Heritage Resources Agency or HWC (depending on the nature of the finds). Archaeological remains include, in particular, [NHRA Definitions 2(ii)]:

Material remains resulting from human activity, which is in a state of disuse and are in or on land, which are (sic) older than 100 years, including artefacts, human and hominid remains and artificial features and structures.

For the Archaeological Assessment undertaken by the Archaeology Contract Office University of Cape Town (2009), refer to the summary of archaeological finds in Section 8 as well as **Annexure 7** of this document.

7.3.1. Archaeology Findings

The following archaeological findings were made:

- a. Prehistoric archaeology is very sparse
- b. Significant finds were the remains of the Gantouw Pass.
- c. Potential for significant archaeological remains to occur in two areas, around the cottage on the site and in the vicinity of the old toll house. These areas and the alignment of the Gantouw Pass need to be regarded as being of high significance until proven otherwise.

In terms of Section 36 of the NHRA, The South African Heritage Resources Agency (SAHRA) must “conserve and generally care for burial grounds and graves protected in terms of this Section and it may make such arrangements for their conservation as it sees fit”. Section 36(3b) ensures that “no person may destroy damage alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery”.

- d. No burial sites were identified

8. CRITICAL REVIEW OF EXISTING REPORTS AND POLICIES

8.1. Casa Maris Relevant Specialist Report

There have been a number of studies of the Casa Maris site which have relevance to the heritage impact assessment. These findings are summarised below

8.1.1. *Archaeological Impact Assessment for the proposed Casa Maris Development Gordon's Bay, Archaeology Contract Office, UCT Cape Town 2009.*

- a. Investigation limited by dense vegetation
- b. Prehistoric archaeology is very sparse and nothing significant was located.
- c. The only significant find was the remains of the Gantouw Pass. While clearly present above the upper railway line, it is either less obvious or non-existent below this point.
- d. There is potential for significant archaeological remains to occur in two areas, around the cottage on the site and in the vicinity of the old toll house. These areas and the alignment of the Gantouw Pass need to be regarded as being of high significance until proven otherwise.

8.1.2. *Visual Impact Assessment A van der Stok: Visual Impact Assessment of a Proposed Eco Estate on Casa Maris Sir Lowry's Pass Village Western Cape Province 2010*

- a. The site is a complex one with high visibility in places
- b. Topography is elevated
- c. Some visibility issues can be mitigated particularly on the lower slopes
- d. A “knit” of cultural landscape may be achieved by using traditional landscape pattern including treed windbreaks
- e. The costs to the visual environment have to be weighed up against the benefits of the positive visual outcomes which may be the result of implementing the project, but also the visual specialist has to keep in mind any other benefits to the community at large and test the visual impacts against these benefits, as far as is possible.
- f. The client's preferred alternative, (Alternative 4b,) is not the most favourable alternative in terms of either visual or botanical impacts.
- g. One of the chief aims of the client is to use the proposed development to generate significant social and economic benefits for the local community in Sir Lowry's Pass Village. The preferred alternative in terms of visual issues, (Alternative 3,) falls significantly short of achieving these aims.
- h. The final choice of alternative will have to be made by the relevant authorities based on their weighing of the visual costs against other factors, including the socio-economic benefits. The visual issues, while important, will therefore only form one of a matrix of assessments that will need to be taken into account.

8.1.3. *Botanical Study: Ecological Report No 163: Botanical Report on selected part of the Casa Maris Estate, Sir Lowry's Pass Village September 2010*

- a. Plant communities belonging to five vegetation types (Boland Granite Fynbos, Cape Winelands Shale Fynbos, Kogelberg Sandstone Fynbos, Swartland Granite Renosterveld and Swartland Shale Renosterveld) and three wetland types, of which all are recognised as being important within the context of the Fynbos Biome, are described here from the Casa Maris Estate, Sir Lowry's Pass.
- b. A long period of mismanagement, which has resulted in extensive areas that are densely infested with invasive alien trees, has led to the decimation of the vegetation, erosion and reduction of stream flow.
- c. Of the five different development alternatives were evaluated the botanically most acceptable did not provide sufficient income to meet the sociological aims of the development project.
- d. There is recognition of the plight of the Sir Lowry's Pass community
- e. There is recognition of the need to undertake expensive restoration work to restore the threatened vegetation on the Estate
- f. These are significant stimuli to accept a less than perfect botanical solution for the area.

8.2. Related Planning and Policy Frameworks

8.2.1. *The Scenic Drive Network Report*

Sir Lowry's Pass is identified as a primary scenic drive. Parts of the proposed development will be visible from Sir Lowry's Pass therefore the report has relevance. The site in question's primary significance is not entirely historical or heritage related, but its cultural landscape qualities, visual amenity, sense of place and defining characteristics. In addition it is at its upper and intermediate reaches, a partly open, remote and visually prominent scenic landscape.

Significant factors in the viewing of the site in terms of the criteria contained in the Scenic Drive report include the need to ensure that upward views towards the mountain, and downward views from Sir Lowry's Pass are not adversely affected by development. This includes controls over roofscape, boundary walls, excavations or any other intervention that disturb the upward views towards the mountain, downward views from higher ground, and other scenic resources.

8.2.2. *The Helderberg Urban Edge Study (2001)*

The current proposal falls outside the present urban edge as identified in 2001. The urban edge had two separate components –one for conventional urban edges areas and the other for smallholdings. The Casa Maris site falls outside both the conventional urban edge area and the smallholdings edge area. A number of urban edge policies have relevance to Casa Maris and are summarised in *Planning Partners: Casa Maris Eco-Estate: Application to amend the urban edge April 2010*. The following constraints affecting development and the urban edge have relevance from a cultural landscape and heritage perspective and are addressed in the VIA, and in landscaping planning and design proposals.

- No development on land with agricultural potential
- Smallholding boundary to be maintained
- Visually sensitive and steep slopes to be protected
- Cultural significance farms and buildings to be protected
- Protection of the 300m contour line

8.2.3. *The Draft Municipal Spatial Development Framework*

The MSDF designates all of Casa Maris as a Nature area and places Casa Maris outside the smallholding edge area. This cannot support any of the rehabilitation necessary for a nature area, and representations have been made to the City of Cape Town in this regard.

8.2.4. *The Provincial Spatial Development Framework.*

This Framework has been approved by the Government of the Western Cape Province as a statutory structure plan. It contains the following aims and principles which have relevance to the Casa Maris proposal.

- Sustainable development through “sense of place, and sense of history”, sense of nature and “sense of limits”.
- Bioregional planning using concepts including concepts “core”, “buffer”, “intensive”
- Redress of spatial apartheid legacy
- Improved socio-economic development
- Protection of bio-diversity

9. SCOPE OF WORK AND METHODOLOGY

9.1. Methodologies and Scope of Work

The RoD arising from the submission of the Notification of Intent to Develop required a full Heritage Impact Assessment to be undertaken with a special focus on cultural landscape and visual impact issues. The ‘RoD’ dated 28 March 2009 stated “ The Committee agreed to request and HIA and a VIA. It was noted that the non-compliance with existing planning policies was deemed to be problematic”. The ‘RoD’ is attached as Annexure 1.

As a result of this requirement, the heritage consultants have worked closely with the VIA consultant in order to ensure that issues around defining and analysing landscape character, visibility and cultural landscapes were fully explored.

Sections 1-12 comprises a full phase 1 HIA. It maps and evaluates heritage sites within the affected area and integrates, (where relevant), material and issues identified in the Archaeological Impact and Visual Impact Assessments, (both undertaken by separate consultants). It describes in Section 5 the cultural landscape context and character of the landscape. It contains a statement of cultural significance for the site which have guided decision affecting the impact assessment.

Sections 13-18 comprise a review of the development proposals in terms of the heritage related design informants and statement of cultural significance. It assesses the impact of the development on the site, identifies the nature character scope and duration of the impacts and suggests areas of mitigation where necessary.

The methodology used was based on compliance with Section 38(3) and 38(4) of the National Heritage Resources Act, as well as compliance with Regulations (Baumann and Winter) established by DEADP for the undertaken of heritage impact assessments within the context of an Environmental Impact Assessment.

9.2. Work Undertaken

- Site visits and landscape analysis in the company of the VIA specialist
- Research and analysis
- Application of above to the site
- Mapping and assessment of heritage resources and cultural landscapes
- Development of statement of cultural significance in accordance with agreed statutory criteria
- Review of proposals and advice to professional team

- Assessment of Impacts
- Recommendations for mitigation where appropriate
- Review of socio-economic benefits in relation to impacts of the proposal

The current report endeavours to ensure that the cultural/rural character of the place is addressed as far as possible, as well as the question of potential visual impact, in this study within the framework of the proposals.

The Visual Impact Assessment findings undertaken by A van der Stok forms part of a separate document and has informed this study. Consequently, this HIA responds to visual impact in terms of effect on heritage resources and “sense of character and place” of the cultural landscape.

10. DATING AND GRADING OF HERITAGE RESOURCES

10.1. Dating

Section 38(3) of the NHRA requires that heritage sites be identified mapped and assessed. Heritage resources should also be identified as whether they are affected by section 34 of the NHRA, namely whether they are older than 60 years.

As a result heritage sites were dated using historic diagram and aerial sketches which indicated that the single building on the site was about 250 years old. There are no other structures on the estate other than 2 recently constructed private dwelling houses east of the railway line.

The stone bridge supporting the railway line was dated to 1901 – the date of construction of the line. It is likely that the bands of mature eucalyptus trees which defined and shield the line date to slightly later and the trees are in the region of 80 years old.

The route know as the Gantouw Pass is dated to pre-colonial times and follows a path favoured by game over the mountains.

There were no other sites of above ground cultural significance which could be dated.

10.2. Grading

The grading of sites has been undertaken according to standard criteria of cultural significance.

Grading of sites is undertaken according to whether the sites are of National (Grade 1) Provincial (Grade 2) or local (Grade 3) heritage significance. Grade 3 sites are divided into those of outstanding local significance (Grade 3a), those of considerable local heritage significance (Grade 3b) and those of some local heritage significance (Grade 3c).

It was considered that the Old Tollhouse and surrounding precinct could be graded as Grade 2 in terms of its significance. This was on account of its association with the Gantouw Pass route, its context within an outspan valley setting, its scenic backdrop, its considerable age and level of architectural intactness, and presence of early authentic building fabric.

The railway bridge could be regarded as a Grade 3a structure on account of its links with the development of the railway route to the Overberg.

While there are no mechanisms to grade a cultural landscape, it was considered that the cultural landscape was of outstanding local cultural significance on account of its scenic and

historical qualities, the rich presence of bio-diversity, its historical role as a mobility route and its strong sense of place.

11. ESTABLISHING CULTURAL SIGNIFICANCE

The purpose of the establishment of cultural significance is to determine the degree and the type of value ascribed to the site, and as a result, to ensure that responses in development terms are appropriate and do not adversely impact on the cultural significance of the site.

In terms of the NHRA Definitions 2(vi), cultural significance means: “aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance”. Aesthetic significance includes spatial significance.

The criteria underpinning the assessment of cultural significance are set out in **Annexure 2** of this document.

The following contexts are referred to in the identification of the heritage significance of the site:

- *Architectural*: the site contains a structure, which is of high intrinsic architectural significance by reason its architectural vernacular interest
- *Historical*: The route of the Gantouw Pass insofar as it has been identified, the Tollhouse as authenticated as an 18th century structure are of outstanding significance
- *Aesthetic*: The site is of outstanding aesthetic and scenic significance, being a landscape situated on the eastern edge of the Helderberg Basin. Its lower slopes form part of the cultivated landscapes of the Helderberg Basin. The slopes then rise to high remote and dramatic landscapes to the south east.
- *Scientific*: The site has outstanding bio-diversity significance comprising a unique combination of vegetation types including Vegetation types have been identified as a combination of Boland Granite Fynbos, Cape Winelands, Shale Fynbos and Kogelberg Sandstone Fynbos. Some species are identified of national significance. Others are identified as Red Data Species. Details regarding the botanical context are contained in **Annexure 6** of this document.
- *Social*: The site is of considerable intrinsic social significance through the acknowledges rural qualities of the environment and the social significance of the mobility routes i.e. the historic Gantouw Pass, the current Sir Lowry’s Pass and the existing scenic rail route over the Hottentots Holland. The proposed use of the site for extensive private investment and upgrading of Sir Lowry’s Pass Village to improve education, social conditions, work opportunities and infrastructural development is a significant future factor in the life of the community. Details regarding the socio-economic context are contained in **Annexure 4** of this document.
- *Economic*: The land has low agricultural potential, is unused and overgrown with alien vegetation. Rights have, however, been granted for the bottling of spring water on the property. The developer intends to utilize these rights.
- *Archaeological*: The archaeological scan has revealed that the site has very little known archaeological significance. This may however change during site clearance. Details regarding the archaeological context are contained in **Annexure 7** of this document.

12. STATEMENT OF CULTURAL SIGNIFICANCE

The area known as the Casa Maris Eco- Estate has outstanding cultural significance in terms of the following:

Its dramatic Peninsula defining and Helderberg defining mountain edge
 Its landscape qualities ascending the Hottentots Holland Mountain slopes from domesticated and partially landscapes to rocky hills and spurs, to high remote area

Its strong spatial and historical link with the Gantouw Pass which runs through the site in an area generally identified as the route. Its known link as a route followed by the Gorinchaqua

The presence of the historic toll house which dates back to the 18th century and set in a shallow valley basin with open fields

Its link to the agricultural landscapes of the lower slopes of the Hottentots Holland Mountain range

Its link with the convict labour which built in Sir Lowry's Pass in 1829-1830

Its link with the many historical travellers who passed through the site including Lady Anne Barnard, William Burchell, and Anders Spaarmann

Its species-rich indigenous plant environment

13. HERITAGE RELATED DEVELOPMENT INFORMANTS

13.1. Introduction.

This report supports the principle of developing, to a limited extent, strategic portions of the site for residential purposes, while recognizing the importance of ensuring that such development remains sensitive – not only to the site's special character, including historic toll-house precinct and botanical resources – but also to its broader cultural landscape context in particular. This in-principle support is based on the following two key prospects:

- *Consideration of NHRA Section 38(3)(d)*, which requires that the impact of the development be evaluated relative to the sustainable social and economic benefits to be derived from the development. In this case, new development will ensure economic benefits to the depressed community of Sir Lowry's Pass Village that are possibly unprecedented in the sub-region, if not the entire Western Cape.
- *Environmental sustainability*. The proposed development, if responsibly implemented, will result in the balance of the area being established as a nature reserve with the purpose of protecting and consolidating its environmental and heritage assets into the future. It should be noted that the property owner has already spent large amounts of money¹⁴ reclaiming and re-establishing areas of fynbos from invasive alien vegetation on the estate. However, notwithstanding a legal obligation to control alien infestations on the estate, he is finding it increasingly difficult to continue the reclamation program without the property being put on an economically sustainable footing. The problem faced is the result of years of prior environmental neglect and mismanagement. The proposed development would ensure that sustainability. However, it should be noted that from a cultural landscape perspective the retention, at least in part, of certain mature trees and belts of trees is a necessary part of conserving sense of place as well as acting as a visual shield to the proposed development.

These prospects are addressed in more detail in **Sections 14 and 15** of this document.

In order to sensitively introduce new development into the area, it is important that the following priorities and development informants be carefully and thoughtfully considered:

13.2. Key Development Informant Priorities.

Priority 1: Impacts related to Density & Scale: Ensuring new development that has appropriate densities and a scale responding directly to the spatial and topographical characteristics of what is a rural landscape, the upper reaches of which are visible from parts of the N2, Sir Lowry's Pass and some portions of adjacent rural farmland;

Priority 2: Compatibility of landscape patterns: Ensuring new development and landscape patterns that are compatible with landscape patterns of adjoining properties, the purpose being

¹⁴ In the order of R20 million.

to create a landscaped continuum respecting these patterns, graduating to no development on the uncultivated and undeveloped remote upper slopes of the property.

Priority 3: Integration of Landscape & Architectural Patterns: Integrating landscaping and architectural patterns, with particular attention to scale, wall colouring, massing and articulation of roof canopies, choice and placement of trees and other vegetation, nature of road surfacing, placement of cut and fill (where at all acceptable), and nature and location of services.

Priority 4: Impacts on Significant Precincts & Outlooks: Introducing new development that strengthens and/or consolidates the character of existing signature precincts (e.g. the historic Toll-House precinct), signature man-made and natural alignments and gateway spaces. Such development must also be respectful of scenic outlooks from key locations beyond the site including Sir Lowry's Pass, the N2 and backdrops characterizing neighbouring historic farm werfs, and the neighbouring towns of Gordon's Bay, Somerset West and Strand.

Priority 5: Appropriately Informed New Architecture: Introducing architecture that is informed directly by the compartmentalized nature of adjoining cultivated landscapes, vegetation, landforms, micro-climatic conditions and natural colours, rather than being stylistically driven.

Priority 6: Impacts on Archaeological & Botanical Sites: Introducing development that avoids disruption to archaeological and botanically noteworthy sites.

These priorities fundamentally underpin the Development Informants for the property as set out in the remainder of this section, and as read in conjunction with **Section 13** and **Diagrams DI 01-03** in this report.

13.3. Key Spatial Informants.

Diagrams DI 01-03 identify key spatial informants directly relevant to Casa Maris. These are informed by the key priorities identified above. Development informants relating to proposed location, extents and densities are also informed by the visual impact assessment prepared in terms of the EIA, of which this report form a part.

13.3.1 **Diagram DI 01: Broad Scale Spatial Relationships**

Key

- i) *Property boundary:* defines the extent of the property in relation to the surrounding sub-regional landscape.
- ii) *Approximate area identified for development including landscaping:* identifies the area inside the property boundary within which development is proposed to take place. Note that this includes areas earmarked for both buildings and landscaped open space as defined in the re-zoning, architectural and landscape proposals & guidelines (**refer Annexures 4&5**).
- iii) *Landmark mountain ridge/signature backdrop defining a significant sub-regional landscape:* includes the landmark Helderberg and, in particular, Hottentots Holland Mountains which form an historic and spatially defining edge between False Bay and the Overstrand to the east.
- iv) *Secondary edge articulating a significant valley landscape:* locates the Skapenberg within the broader Hottentots Holland/Helderberg valley context. The Skapenberg (actually a substantial hill) obstructs views of the site from large portions of the Strand and Somerset West.

- v) *Portion of the N2 with scenic outlooks potentially affected by the proposed development:* relates specifically to the N2 over Sir Lowry's Pass, and its approach from the west. The portion of the N2 with outlooks most likely to be affected is from Sir Lowry's Pass, particularly when traveling downhill by car towards, and around the bend adjacent to the property in question.
- vi) *Portion of the N2 with outlooks unlikely to be affected by the proposed development:* identifies the remaining portions of the N2 within the sub-regional context, from which proposed development on the site would be substantially invisible.

13.3.2 Diagram DI 02: Landscape Character & Botanical Zones

The property can be divided into a number of zones of varying sensitivity. These include an agrarian landscape on the lower reaches of the property, and intermediate slope zone along the middle contours of the site, and an upper slope zone. The land comprising the agrarian landscape has a low visual profile given its shallow slopes and restricted views given a proliferation of tree belts and compartmentalized fields on adjacent properties. The intermediate slopes are more exposed. The upper slope zone has greatest visual exposure apart from in areas still populated by pine plantations. Visual exposure in non-plantation areas is exacerbated by low-lying natural vegetation.

In addition to the above, this diagram indicates a number of botanical zones of varying degrees of sensitivity as identified below:

Key

- i) *Botanical Zone 1:* defines the extent of the Boland Granite Fynbos zone, which is least sensitive to development due to intense alien infestation and fire. This zone would be most suitable for development from a botanical perspective.
- ii) *Botanical Zone 2:* defines the extent of Boland Granite Fynbos that has been severely burned, but is regenerating. Only low levels of development could be contemplated here from a botanical perspective.
- iii) *Botanical Zone 3:* defines the extent of the Cape Winelands Shale Fynbos zone, which is a no-go zone for development due to the rarity of this species, even though partly degraded.
- iv) *Botanical Zone 4:* Kogelberg Sandstone Fynbos. Critically endangered. A no-go zone for development.
- v) *Botanical Zone 5:* Boland Granite Fynbos acting as a transitional zone between granite fynbos and sandstone fynbos. Could support limited development.
- vi) *Domesticated agrarian landscape:* defines the approximate extent of the compartmentalized lower reaches of the site and adjacent landscape characterized by irregular rectilinear tree belts, paddocks and cultivated land.
- vii) *Intermediate slope landscape:* defines the approximate extent of the middle section of the site, characterized by degraded plantations and treed riverine kloofs. This area will be visible from key areas beyond the site including key parts of Sir Lowry's Pass.
- viii) *Remote upper landscape:* defines the approximate extent of the visually most exposed, and most elevated portion of the property, apart from some limited areas where pine plantations still survive. This area has highest visibility from beyond the site. It is also least impacted on by human activity.

13.3.3 Diagram DI 03: *Significant & Signature Elements and Places*

Key

- i) *Property boundary*: defines the extent of the property in relation to the surrounding sub-regional landscape.
- ii) *Railway alignment*: locates the railway line from Cape Town to Bot River, which crosses the site. This alignment is historic in terms of the NHRA, given that it is older than 60 years. (It is, in fact, older than 100 years).
- iii) *Gantouw Pass remnant: pre 1830*: locates the alignment of the historic precursor to Sir Lowry's Pass which began being used from before 1707. Evidence of this alignment survives in the form of grooves and ruts etched into the rocks by frictions from wagons negotiating the steep mountain slopes. This portion is a declared Provincial Heritage Site (former National Monument).
- iv) *Gantouw Pass: approximate road alignments to old tollhouse*: identifies the approximate positions of a series of connecting routes used between the surviving remnants of the old pass identified in iii) above, and the old tollhouse on the lower slopes within the property. Because of softer surfaces on the lower slopes, the terrain was more prone to heavy wear, unlike the rocky surfaces higher up on the mountain. There is no clear evidence to support a definitive alignment of the pass here, unlike on the upper slopes of the property. It appears as if large sides of the hillside were used in this area, with routes changing regularly so that the paths remained useable under heavy traffic.
- v) *Signature formal and domesticated planting patterns*: highlights the irregularly compartmentalized and rectilinear nature of planting patterns on immediately adjoining land. These include tree belts and avenues. On the intermediate sloped of the site, these patterns include concentrations of trees along kloofs and river courses.
- vi) *Historic structures, i.e. older than 60 years*: locates all structures on, or in the immediate sub-regional context of the site. These include the old toll house (the only significant architectural site on the property and structure older than 60 years), as well as the old stone railway bridge (off the site's western boundary) and the nearby Goede Verwachting farm werf. This latter werf dates back to 1793 and was used as an inn for travelers negotiating the old pass. Vegetation around this property would, however, screen it from the proposed development. The same applies to 19th century Ravenswood to the northwest, as well as the more distant historic werfs of Broadlands (1711) and Knorhoek (1777). The latter two sites are located to the west off the diagram.
- vii) *Road alignment older than 60 years (from 1830)*: identifies the road alignment over Sir Lowry's Pass, which, although now substantially widened and modernized, dates back to the opening of the pass in 1830. Portions of the western approach road may be earlier.
- viii) *Signature informal planting patterns*: Up to the area around the railway line: these comprise mostly clusters of pine plantation as typically found against mountainsides all around the Cape Peninsula, and now regarded as a signature component within the landscape of the Cape Winelands. On the higher more remote areas: mostly low-lying mountain fynbos.
- ix) *Historic development precinct, i.e. older than 60 years*: identifies significant historical development precincts either on, or in the immediate sub-regional context of the site.

These include the old toll house (the only such precinct on the site), and the nearby werfs of Goede Verwachting and Ravenswood.

- x) *Signature watercourse*: identifies the courses of the major streams within the local context of the property. All tree-lined and flow off the mountain. These features contribute to a landscape pattern distinctly different to the geometrical, compartmentalized patterns of the domesticated agrarian landscape that characterizes the lower reaches of the site and adjacent landholdings.
- xi) *Landmark mountain ridge/signature backdrop*: highlights the defining backdrop of the Hottentots Holland Mountain against which the property in question is located. Refer also to section 13.3.1iii) and **Diagram DI 01**.

13.4. Landscape Design

Contextually sensitive and thoroughly considered landscape design will be an important factor in determining the environmental success of this project, both within the body of the proposed development and around the outer edges of the property as a whole. Landscape proposals should therefore be carefully conceived to respond appropriately to the qualities of the three distinct landscape character zones identified in **Diagram DI 02**, *viz.*:

i) *The Domesticated Agrarian Landscape*: New landscaping in this zone should respond positively by carrying into the site the same irregular, compartmentalized, and mostly rectilinear patterns that characterize adjoining agrarian landscapes. This character is defined largely by linear clusters of trees located along the edges of paddocks, pastures and property boundaries, as well as along farm roads.

ii) *The Intermediate Slope Landscape*: Unlike the lower domesticated agrarian landscape zone, the area is characterized by more pronounced slopes containing some surviving plantation pockets and degraded, alien-infested vegetation through a number of tree-lined linear riverine systems pass. Sensitive landscaping within this zone is particularly important, given the visibility of the area from a number of key locations beyond the site: most specifically from Sir Lowry's Pass and other portions of the N2. Advantage should, wherever possible, therefore use the surviving plantation clusters and the patterns generated by the tree-lined streams and kloofs as both screening systems and pattern generators for new landscaping. For obvious reasons, the merging of architecture and landscaping therefore becomes increasingly important the more elevated the development becomes.

iii) *The Remote Upper Landscape*: This area is clearly most sensitive to new development given that it is the portion of the site least impacted on by human activity up to the present and, therefore, contains large surviving areas of Kogelberg Sandstone fynbos. The low-lying nature of this vegetation means that this area is also the most exposed on the site. It has little to no prospect of mitigation through, for e.g. tree planting, which would result in visually inappropriate contrasting patterns against the mountainside.

The landscape proposals for the site should reflect the following considerations:

13.4.1 *Layout & Overall Spatial Characteristics*

i) *Transition zones between new domesticated realms and existing wilderness landscapes*: Buffer zones comprising indigenous vegetation and incorporating natural rocks and other features should be left between buildings and around outer edges of each individual development site. Layered planting patterns using indigenous plant species characteristic of the natural habitats within the property are to be incorporated so as to 'flow through' new developments in a visually uninterrupted manner. The use of lawns and any flowering species from beyond the Immediate Context should be disallowed. The purpose should be for new developments and landscaping

features to be introduced onto the landscape as lightly and seamlessly as possible, particularly within the upper portions of the site.

ii) *Boundary walls/fences*: Security barriers should be contained to building envelopes e.g. window shutters and substantial doors. No freestanding walls other than of limited extent to screen domestic kitchen/drying yards should be encouraged. Yard walls, where permitted, should be of one single co-ordinated design matching building envelopes i.e. simple, unadorned stone or wood floated and rendered surfaces. Retaining walls, where unavoidable, should be likewise treated with indigenous planting encouraged along exposed faces. Subdivision and site perimeter barriers should not be permitted at all, with the possible exception of the Domesticated Agrarian Zone on the lowest levels of the site. In this area, low (max 900mm high) simple open mesh fences, unobtrusive rough timber laths and/or a combination of these; or other natural materials of a light, permeable nature drawn from the local vernacular could possibly be considered. Razor wire and electric fences are to be avoided at all costs.

iii) *Tree canopies*: The use of non-invasive exotic shade producing trees of similar stature, and with similar canopy characteristics to what are already encountered within the site and on adjoining properties, would be acceptable. The use of substantial indigenous shrub clusters against new walls, including retaining walls, would be encouraged, particularly on downhill-facing sides and along sides facing Sir Lowry's Pass.

iv) *Lighting and services*: Lighting should be limited to non-directional, hooded, low level and ground level illuminated footlights and fittings. External fittings generating reflected light only, should be acceptable. These should be attached, wherever possible, to buildings, rather than freestanding poles, which should be avoided at all costs. Where road lighting is required, if at all, this should preferably be in the form of LED light sources accommodated at road level. All services including electricity and telephone lines should be concealed below ground, both within and beyond the site boundaries, with the understanding that the laying of such services should not threaten or compromise the archaeological integrity of the property unless by prior arrangement with HWC.

v) *General security issues*: If at all necessary, foot patrols and unobtrusive building-mounted closed circuit TV surveillance should be considered. Security walls, security fences, gates and booms should be avoided apart from at the main entrances into the property, and along its outer perimeter.

vi) *Advertising signboards, nameplates* as well as any illuminated or backlit objects apart from normal domestic lighting, property identification and light fittings, should be avoided.

13.4.2 Integrated Landscape Plan

An integrated landscape plan is, therefore, a crucial component of the development proposals and should include the following:

- i) Proposed positions of building footprints;
- ii) Details and positions of planting patterns;
- iii) Nature and designs of walls, fences and other possible physical barriers;
- iv) Design and finishes of road surfaces and pathways; and
- v) Indications of changes to the existing ground levels including locations and approximate heights of principal cut and fill patterns.

13.5. Architectural Design

Guiding principles:

The architecture of the proposed developments should express appropriate and pragmatic responses to local climatic and topographical conditions, rather than being self-conscious, literal,

style-bound architectural re-interpretations. The following should be considered, more specifically:

i) *General response to physical context*: Producing development that merges with, rather than claims the Casa Maris landscape as classified in **Diagram DI 02**. By implication, subdivision patterns of a suburban nature, excessively scaled building envelopes, contextually inappropriate roof-shapes, inappropriate colours and finishes (e.g. white) strongly contrasting with the surrounding landscape would be discouraged;

ii) *Architectural expression*: Producing architecture that derives expression from appropriate responses to local micro-climate, topography and physical context, rather than simplistic stylistic borrowings from elsewhere, or literal style-driven applications uncritically applied (i.e. without sufficient thought to a specific context);

iii) *Roofscape*: Introducing development in which the cumulative visual impacts of its roofscape have been carefully considered, rather than assessed on an individual subdivision-specific basis. Of particular significance is the manner in which roofscapes are conceived in relation to surrounding planting – tree heights and positions in particular, and the manner in which roofs are perceived when looked down upon from above and from the sides, such as will be the case when viewed from parts of Sir Lowry's Pass. Where both upward and sideward views are critical issues, the use of hipped, rather than sheer gable ends should be considered.

iv) *Overall shape and massing*: Producing units based on simple, rectilinear floor plans with roof spans preferably not exceeding 6m with an overall roof height (ground floor to top of roof ridge) of 6m in the case of single storey plus attic configurations, and 5m in the case of single storey configurations. Where garages are acceptable as basement additions due to sufficient site gradients, floor to ceiling heights should preferably not exceed 2,4m.

v) *Orientation and response to natural contours*: Buildings should be arranged with their simple rectilinear floor plans running parallel with, rather than at right angles to natural contours. Exposed retaining walls should preferably not exceed 1,2m in height. Projecting floor and verandah platforms, as well as houses supported on stilts are to be avoided at all costs.

vi) *External wall finishes*: Simple external wall and floor surfaces deriving their adornment from the natural and honest use of materials including local stone (as opposed to factory-sawn and/or processed reconstituted stone imported into the area from elsewhere), wood floated plaster and limewash surfaces reflecting muted and natural earth tones, rather than glaring white (see ii above). Face brick is to be avoided at all costs;

vii) *Wall openings*: Architectural expression reflecting relatively small wall openings punctured into relatively large exposed wall surfaces would be encouraged to avoid excessive reflection and night time light emission. Large glazed areas, where introduced, should be recessed into the façade and/or placed behind pergolas or other traditional shading structures.

viii) *External joinery*: The use of solid, slatted or louvered shutters, sapling pergolas and/or trellises where necessary, e.g. for privacy and to augment natural screening by trees, would be encouraged.

14. ASSESSMENT OF DEVELOPMENT PROPOSAL ALTERNATIVES

This report assesses four development alternatives as prepared by Planning Partners for Moxba Property Investments (PTY) Ltd. This excludes consideration of a 'no-go' or 'no-development' option for the simple reason that the properties concerned *do* have development rights in terms of their existing agricultural zonings. For this reason, the no-development option has been replaced by Alternative 1. This alternative examines development of the property in terms of its agricultural zoning rights and, therefore, requires no rezoning or subdivision

approvals. The other three options, i.e. Alternatives 2-4, are for residential development incorporating a water bottling plant for which rights already exist.

14.1. Development Alternative 1 (The 'Existing Rights' Option: **DIAGRAM 01**)

This alternative involves the individual and 'as of right' development of the 9 separate properties comprising Casa Maris. In terms of the Agricultural Zone 2 zoning for each of these erven, this would permit a main house, a manager's house and staff housing along with other infrastructure needed in pursuit of the relevant agricultural activities. Such structures would include roads, barns, stables, kennels and processing installations. This means that the owner could exercise entrenched rights to construct at least 32 dwellings distributed over 381 ha (**Diagram 1**). In other words, the 'no-development' option is simply unrealistic, as the properties can be developed to some extent anyway, as of right. It is consequently more realistic to refer to this alternative as maintaining the status quo.

Planning Partners *et al* makes the point that should rezoning for larger scale residential development be refused by the authorities, it is only a matter of time before the individual land units are sold off for ad-hoc development, opening the way for consent applications for guest-house facilities, wine tasting centres, stables, dog kennels and farms stalls in addition to the dwelling units permitted as of right.

It should be noted that rights for a water bottling plant on one of the properties also exist, and are likely to be exercised over and above the other development referred to above. In fact, this case applies to all of the other alternatives (Alternatives 2, 3 & 4B) considered in this report.

14.1.1 *Positive factors:*

- i) This option would result in the least development on the property.
- ii) Visual impacts would be limited by the amount of development permitted in terms of the Zoning Scheme.
- iii) Would not trigger concerns regarding development beyond an established urban edge, as the properties would retain their agricultural zonings.

14.1.2. *Negative factors:*

- i) Development would be uncontrolled and of an ad-hoc nature.
- ii) The degree to which control could be exercised over the location and architectural expression would be uncertain, notwithstanding NHRA Clause 38(1)(c) where confusion already exists as to when this clause would trigger the requirement for an HIA. Evidence of this already exists in the location and extent of the two existing and visually prominent residences constructed on the northwest end of the property. Because of questionable control over the location of future development, the tendency will be to locate new residences in those areas with the greatest view opportunities and, therefore, in the most visually exposed portions of each site, as has been the case in the recent past.
- iii) Proper co-ordinated rehabilitation and environmental management of the estate, which has suffered degradation due to wild fires and unchecked propagation of invasive alien vegetation over a number of years, is likely to be denied.
- iv) Substantial planned socio-economic benefits linked to economically more viable alternatives to develop the property for broader residential purposes (refer Alternatives 2-4) would not materialize. This would amount to a significant potential loss for the Sir Lowry's Pass Village community, which stands to benefit substantially from such development, as discussed more fully in **Section 15.3.1** of this report.
- v) Heritage benefits associated with the restoration and historic interpretation of the toll house and related historic context would not be assured.

14.2. Development Alternative 2 (The 'Conventional Development' Option: **DIAGRAM 02**)

This alternative comprises the following:

- 409 residential units on erven of between 900sq m and 1500 sq m on
- 59 ha (15,6%) of the estate;
- Water bottling plant (constructed as of right) on a further 1,5 ha (0,4%) of the property;
- 305 ha open space (Zone 2) for use as a nature conservancy (80% of the estate); and
- 15,8 ha (Special Zone) for roads (4% of the estate).

Units would be located on the mid to upper slopes to maximize view potential. The water bottling plant would be developed and the Toll House Precinct rehabilitated and conserved as a tourism facility.

14.2.1 *Positive factors:*

- i) This option would release an unprecedented amount of money specifically aimed at the upliftment of the Sir Lowry's Pass Village community, which suffers from high levels of poverty. More particulars regarding the nature of the socio-economic empowerment opportunities directly related to the development of Casa Maris are provided in **Section 15.3.1** of this document.
- ii) New houses and roads would replace current dense areas of invasive alien vegetation.
- iii) Built up areas would become considerably less susceptible to wild fires.

14.2.2. *Negative factors:*

- i) Development according to this proposal would result in unacceptably high levels of visual impact due, largely, to the proposed development densities, resulting in development of an unavoidable suburban character, even with mitigation, including contextually appropriate landscaping.
- ii) The proposed development densities would be very difficult, if not impossible, to mitigate and would result in particularly high visual impacts from scenic outlooks from Schapenberg, Wedderwil Ridge, the N2 and Sir Lowry's Pass in particular.
- iii) Notwithstanding the large proposed nature conservancy, proposed unit densities would promote increased water runoff over hard surfaces and light pollution.
- iv) Would lead to substantial losses in existing fynbos. Shale Renosterveld and Swartland Granite Renosterveld on the property would be totally lost, together with large portions of Boland Granite Fynbos. (Botanical Report, September 2010).
- v) Proposed linkage corridors would be too narrow to be effective. (Botanical Report, September 2010).
- vi) Would impact upon the landscape qualities of a dramatic mountain backdrop.
- vii) Would fall outside the established Urban Edge and within a landscape context ranging from domesticated agrarian in character on the lower slopes, to natural, substantially undisturbed wilderness on the upper slopes. Given the nature of layout and density, this proposal is likely to be highly controversial.

14.3. Development Alternative 3 (The 'Cluster Alternative' Option: **DIAGRAM 03**)

This alternative comprises the following:

- 2 existing units plus 200 residential units in clusters and on individual erven. General development density: 15-20 units/ha. More specifically:
- Residential Zone 1: 74 dwellings on 12 ha (3,2%);
- Residential Zone 2: 128 group housing units on 8 ha (32%);
- Business Zone 2: 5 units on 5 ha (0,4%);

- Agriculture Zone 2 with bottling plant on 1,5 ha (0,4%);
- Open Space 2/Private Open Space Nature Area (343,8 ha (90%); and
- 15,8 ha (Special Zone) for roads (4% of the estate).

This proposed new development footprint is the product of carefully considered landscape analysis (refer **Annexure 10**) and recognizes areas of ecological sensitivity, incorporating ecological corridors extending from the mountain through the site interspersed with pockets of development. The proposals are specifically designed to vary in accordance with the natural transformations that occur across the site, i.e. much in accordance with the landscape hierarchies and zones illustrated in **Diagram DI 02**. For example, highest unit densities and building heights are reserved for the lower portions of the site where the view shed is smallest and visual absorption capacity greatest. The intention is to continue the irregular rectilinear tree lines reflecting the domesticated agrarian nature of adjoining landscapes across the lower portions of the property. A less formal approach is taken along the intermediate slopes in response to the more organic nature of the topography with its kloofs and river courses.

The proposed development would include the following:

i) A 'gateway village' near the entrance to the site drawing on the linear patterns of many of the older Western Cape towns as precedent. Units in the village would be mixed use, incorporating upper level living space above ground floor studio/commercial units flanking a central tree-lined street.

ii) Three clusters of dwellings on the lower slopes at a density of 15-20 units/ha

iii) Houses on the mid-slopes referred to as 'partly sunken' houses, in order to present lower visual profiles on what are more exposed slopes. Some would be tucked into the riverine kloofs to reduce visual impact.

iv) A few houses on the upper slopes above the railway line would be designed to merge with the mountainside, incorporating stone-clad walls following its contours, and roofs planted over with vegetation within a rehabilitated fynbos context. These houses would be of an expensive and highly controlled type, excavated into the mountain slopes. They are intended to be virtually invisible within their visually exposed landscape contexts.

v) Rehabilitation and conservation, for tourism purposes, of the old toll house and Toll House Precinct.

vi) Identification and interpretation of the historic wagon route crossing the site and forming part of the historic Gantouw Pass, which would be made a feature of the development; and

vii) Construction and operation of the water bottling plant as per the other alternatives.

14.3.1 *Positive factors:*

- i) Would result in a significant reduction in visual impact compared to Alternative 2.
- ii) Would reflect a far more sympathetic response to the existing topography and natural environment than Alternative 2, with 90% of the area devoted to becoming a nature conservation area. Note that this alternative has been identified in the specialist botanical study as the best performing with regard to the conservation of the estates botanical heritage, i.e. coming in ahead of even Alternative 1 (the 'Existing Rights' Option).
- iii) Given the lower development densities compared to Alternative 2, the incorporation of proposed development into the estate's biophysical realm is regarded by specialist consultants as feasible. Also, water runoff and light pollution issues are considered far more manageable.
- iv) Proposes new landscaping and planting patterns that reflect, more successfully than any of the other alternatives, a continuum with existing landscape patterns on properties abutting the estate.
- v) Recognizes and celebrates specific heritage features on the site including the old toll-house and the historic alignment of the old Gantouw Pass.

14.3.2 Negative factors:

- i) Visual impact from the proposed residential development on the remote upper slopes of the property are likely to be controversial and would require very careful, and detailed mitigation in order to be successful, if at all.
- ii) Would lead to substantial losses in existing fynbos. Shale Renosterveld and Swartland Granite Renosterveld areas would be totally lost, together with large portions of Boland Granite Fynbos. (Botanical Report, September 2010).
- iii) Would involve greater up-front capital outlay for the developer, as the costs of the proposed cluster buildings would have to be borne by him. Also, such cluster units are not expected to generate the same prices as detached units, which would be the preference of the wealthy individuals capable of paying the high prices required ensuring the financial feasibility of the development.
- iv) This would therefore result in less money being available for the social upliftment program of Sir Lowry's Pass Village already referred to. Market response from this alternative is, therefore, expected to be limited (Planning Partners *et al*, 2010).
- v) Falls outside the established Urban Edge and therefore likely to be controversial, though less so than Alternative 2.

14.4. Development Alternative 4B (The 'Eco Corridor Alternative' Option: **DIAGRAM 04**): Developers Preferred Option.

This alternative is a modified version of former Alternative 4, which proposed larger development footprints and closer spacing between dwelling units. This modified alternative is therefore considered environmentally preferable, and comprises the following:

- 200 residential units plus existing 2 units on erven of 750 sq m each (the same number of units as Alternative 3) comprising:
 - Residential Zone 1: 202 dwellings on 15,5 ha (4%);
 - Business Zone 2: guest house, clubhouse and restaurant 0,5 ha (0,1%);
 - Agriculture Zone 2 with bottling plant on 1,5 ha (0,4%);
 - Open Space 2/Private Open Space Nature Area (350 ha (92%); and
 - 13,5 ha (Special Zone) for roads.

Although this alternative comprises the same number of residential units as Alternative 3, the units would be spread further apart in precincts to accommodate large fynbos ecological corridors extending from the upper slopes of the property to its lower portions. Unlike Alternative 3, there would be no cluster units.

The proposed development would include the following:

- i) Dwellings surrounded by private open space/nature areas and erven spaced apart by 25-30m to ensure that housing patterns are broken up. 2,5m building setbacks applicable to each erf would result in spacing between individual houses of at least 30m.
- ii) Uniform, rectilinear geometrical tree belts, in order to further subdivide the residential development patterns in response to the rectilinear landscape geometries characterizing properties abutting the estate along its lower slopes. These belts would serve the added purpose of helping to obscure views of residential units and, therefore, mitigate visual impacts affecting surrounding areas.
- iii) 750 sq m (25x30m) erven, each with a developable area of 250sq m, and with the remainder devoted to indigenous vegetation. House positions would be selected so that they overlook, but remain separate from, the ecological corridors. All erven would be set well back from riverine systems and eco buffer areas.

iv) Graded development, with higher densities on the lower portions of the site. Development would become progressively less dense and more dispersed towards the estate's remote upper slopes.

v) Various proposed residential types in which the larger houses would be located on the lower slopes, where they would be less prominent in the landscape. On the upper slopes, houses would follow the contours, have low-slung roofs and be designed to be recessive in nature. Development on the upper slopes would include a dispersed string of residential development above the railway line as in Alternative 3, i.e. along the lower edge of the remote upper landscape of the property. Unlike Alternative 3 however, residential units would not be dug into the mountainside to the extent proposed in this alternative. Units would, however, be partially cut into the slopes with surrounding rehabilitated vegetation allowed to grow up to, in between and over (planted) flat roofs with other roofs following the slopes and multi-levels hugging the terrain.

vi) Landscaping which would be implemented in phases, along with incremental clearing, structural planting and fynbos rehabilitation. Rehabilitated and consolidated fynbos would include Sandstone Fynbos on the higher slopes, pockets of Granite Fynbos on the mid slopes and Shale Fynbos over the remainder of the site. Fynbos would be included within the proposed ecological corridors. The southern ecological corridor is designed to link with the adjoining land to the south, administered by Cape Nature conservation authority.

vii) Various buildings on the lower part of the site near the entrance to house maintenance and storage facilities for residents.

viii) A small sewerage plant located in the same area as the storage facilities referred to above.

ix) Refurbishment and conservation of the Old Toll House and Toll House Precinct for use as the estate admin office, resident's centre and guest house with tourist accommodation.

x) Construction and operation of the water bottling plant as per the other alternatives. In this alternative, the plant building has been shifted slightly to accommodate the estimated path of the approach trail to the historic Gantouw Pass. This alignment is intended to become a feature of the development.

xi) Access via a new road connected to the N2 that would bypass Sir Lowry's Pass Village and, therefore, would not contribute to the current traffic congestion along the present access road.

14.4.1 *Positive factors:*

- i) Would result in a significant reduction in visual impact compared to Alternative 2.
- ii) Would reflect a far more sympathetic response to the existing topography and natural environment than Alternative 2, although not quite as low-profile a response as in Alternative 3 with regard to the residential units on the upper slopes, in particular.
- iii) Would not include any 3 storey structures or cluster units as in Alternative 3.
- iv) Recognizes and celebrates specific heritage features on the site including the old toll-house and the historic alignment of the old Gantouw Pass.
- v) Would result in large-scale eradication of alien vegetation, while also reducing the spread of their seed into adjacent veld. According to the specialist botanical report (Boucher, p60), consolidation and protection of indigenous fynbos heritage species on the estate is regarded in a very positive light, i.e. as a contribution to the national conservation effort, given the recognized biophysical significance of the species found on the site.
- vi) The removal of invasive alien vegetation and additional runoff from hard surfaces would improve water flow volumes. This would be especially beneficial to the stream biota in the dry months.
- vi) Would release a substantial amount of money for the upliftment of the Sir Lowry's Pass Village community, in that 50% of the profits from each unit sale would be channelled to a trust fund for the social upliftment of the village. The amounts so generated would be considerable – and quite possibly unprecedented within the Western Cape Province,

if not further afield. Detailed particulars of the upliftment program are given in **Section 15.3.1** of this document.

14.4.2 *Negative factors:*

- i) Visual impact from the proposed residential development on the remote upper slopes of the property in particular, is likely to be controversial and will require very careful, and detailed mitigation in order to be successful, if at all, i.e. notwithstanding the acknowledged measures to merge these buildings with their context.
- ii) No development is proposed within the riverine kloofs as in Alternative 3 (which would appear not to be fundamentally problematic from a botanical/ecological perspective (refer Boucher: Table: Table 5). Instead, development is proposed on the more exposed mid-level shoulders of the estate.
- iii) Potential fire control problems with widely spread even and indigenous vegetation extending through and over dwellings. This would apply particularly with regard to thatched roof typologies.
- iv) Vegetation such as the threatened *Agathosma hispida* Rocky Outcrop Swartland granite Renosterveld would be totally lost, while large parts of the *Leucadendron tinctum-Dicerotheramnus rhinocerotis* Shale Renosterveld and the Boland Granite Fynbos would be destroyed.
- v) Falls outside the established Urban Edge and therefore likely to be controversial, albeit less so than Alternative 2.

14.5 General Observations

Although the 'Existing Rights' Option (Development Alternative 1) would involve substantially less development than Alternatives 2-4, and despite the fact that the other alternatives would involve development beyond the established Urban Edge, the substantial social upliftment opportunities offered by the latter Alternatives cannot be ignored. Neither can the opportunities for rehabilitating and managing the estates fynbos heritage, even if this were to involve the initial displacement of certain fynbos species in order to accommodate the proposed residential component. In this scenario, it would be assumed that displacement of fynbos species would involve a carefully controlled transplanting program informed by the findings in the specialist botanical report.

It is for this main reason that further consideration is given to Alternatives 3 and 4. Alternative 2 is screened out from further consideration by virtue of its high number of units, development density and layout which would result in impacts considered to be very difficult, if not impossible to mitigate.

15. ASSESSMENT OF IMPACTS ON HERITAGE RESOURCES

This section assesses, in more detail, heritage impacts relating to Alternatives 3 and 4 only, given that impacts relating to Alternative 1 (The 'Existing Rights' Option) are already sufficiently well defined, and given that Alternative 2 (The 'Conventional Development' Option) has been screened out because its associated impacts have, at an early stage, been considered very difficult, if not impossible, to mitigate.

15.1 Development Proposals informing this Assessment

2ad Space Architecture & Interiors	<i>Casa Maris, Sir Lowry's Pass Eco Estate.</i> Development Alternative 2, October 2008.
Botha Architectural Designs (Nelia Botha)	<i>Casa Maris Eco Estate Architectural Design Controls,</i> 20 September 2010.

Botha Architectural Designs (Nelvia Botha)	<i>Sample Architectural Design Proposals based on the Architectural Design Controls: Examples A1&2; B1; B3; C1-3; C1a; C2a; C3a; D1&2; E1&2; E1a; E2a; E3a; & E4a.</i>
Comrie Wilkinson Architects and Urban Designers (Henry Comrie)	<i>Casa Maris Urban Design Proposals. Development Alternative 3, 29 October 2009.</i>
Planning Partners	<i>Draft Landscape Architectural Input into ELA and Masterplanning, 20 September 2010.</i>
Planning Partners	Development Plan 4B, Scale: 1:4000., Dwg No 4286 00, September 2010.

15.2 Structure and Approach to this Assessment

This assessment is structured to comply with Section 38 of the NHRA as underpinned by the Heritage Statement and Design Informants in **Sections 12 & 13** of this report. Impacts are measured in terms of the eight Key Development Priorities established in **Section 13.2** of this document. It is also informed by relevant specialist reports including the Draft Visual Impact Assessment by Albert van der Stok; a Draft Archaeological Impact Assessment by the UCT Archaeological Contracts Office (ACO); and Draft Botanical Report by Dr Charles Boucher.

In the absence of detailed criteria for assessing heritage impacts (i.e. apart from the broad assessment criteria in Section 38 (3) of the NHRA), this assessment employs criteria consistent with the standard requirements for Environmental Impact Assessments as endorsed by DEADP. This addresses:

- Nature of Impact
- Measurement & Duration of Impacts
- Significance of Impacts (unmitigated)
- Mitigation and
- Confidence of Assessment.

Assessments are arranged in tabular form for brevity (**Tables A-D**). General observations, conclusions and recommendations generated by the assessment **Tables A-D** are discussed below, i.e. in **Section 15.2: Table 10** of this document.

A full description of the assessment criteria upon which assessment **Tables A-D** are based, is contained in **Annexure 3** of this report.

15.2 Table 1: Performance of Development Alternatives 1 to 4B in terms of the Key Development Informant Priorities (Section 13.2) and Tables A-D (attached).

Key Development Informant Priority	Performance of Development Alternatives
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<p><i>Priority 1: Impacts related to Density & Scale:</i> Ensuring new development that has appropriate densities and a scale responding directly to the spatial and topographical characteristics of what is a rural landscape, the upper reaches of which are visible from parts of the N2, Sir Lowry's Pass and some portions of adjacent rural farmland.</p>	<p>Alternative 1: Status quo retained. Densities controlled in terms of agricultural zoning. Scale and contextual response of new development more difficult to predict and control.</p> <p><i>Observation:</i> Could result in intrusive, ad-hoc development, albeit limited in extent.</p> <p><i>Performance:</i> Undetermined, but could feasibly result in future <i>Poor to Moderate</i> performance.</p>
<p><i>Priority 1: Impacts related to Density & Scale:</i> Ensuring new development that has appropriate densities and a scale responding directly to the spatial and topographical characteristics of what is a rural landscape, the upper reaches of which are visible from parts of the N2, Sir Lowry's Pass and some portions of adjacent rural farmland.</p>	<p>Alternative 2: Proposed densities and therefore, visual impacts, are considered excessive within the rural landscape context, even with mitigation landscaping and architectural controls.</p> <p><i>Observation:</i> Screened out from further consideration due to unacceptably high visual impacts.</p>
<p><i>Priority 1: Impacts related to Density & Scale:</i> Ensuring new development that has appropriate densities and a scale responding directly to the spatial and topographical characteristics of what is a rural landscape, the upper reaches of which are visible from parts of the N2, Sir Lowry's Pass and some portions of adjacent rural farmland.</p>	<p>Alternative 3: Development on upper remote slopes questioned. Visual impacts not fully tested with regard to the broader context.</p> <p>Development on lower slopes of 3 storey cluster units questioned. Visual impacts not fully tested with regard to the broader context.</p> <p><i>Observation:</i> Contextually sensitive conceptual approach taken. Impacts may possibly be mitigated to acceptable levels. This would still have to be convincingly established, particularly with regard to development on the upper levels of the estate.</p> <p><i>Performance:</i> Provisionally <i>Poor to Moderate</i> in the absence of further testing.</p> <p>Alternative 4B: Development on upper remote slopes questioned, notwithstanding proposed low densities and carefully prepared architectural controls and landscaping proposals.</p> <p>Testing of visual impacts reveal cause for concern even with mitigation. This relates not only to development on the upper remote slopes of the estate, but also on the semi-exposed intermediate slopes. Would have higher cumulative impacts than Alternative 3 in this respect.</p> <p><i>Observation:</i> Unlikely that visual impacts from development on the upper remote areas of the site can be mitigated to acceptable levels, given its exposed and substantially pristine surrounding landscapes.</p> <p><i>Performance:</i> Provisionally <i>Poor to Moderate</i> in the absence of</p>

	further testing.
<p><i>Priority 2: Compatibility of landscape patterns:</i> Ensuring new development and landscape patterns that are compatible with landscape patterns of adjoining properties, the purpose being to create a landscaped continuum graduating to no development on the uncultivated and undeveloped remote upper slopes of the property.</p>	<p>Alternative 1: Status quo retained. Landscape patterns would continue to evolve in an ad-hoc manner.</p> <p><i>Observation:</i> Could result in intrusive, ad-hoc development, even if conforming with zoning requirements, e.g. development patterns related to involving tunnel farming, shadecloth covered fields, kennels and over-scaled structures.</p> <p><i>Performance:</i> Undetermined, but could feasibly result in future <i>Poor to Moderate</i> performance.</p>
<p><i>Priority 2: Compatibility of landscape patterns:</i> Ensuring new development and landscape patterns that are compatible with landscape patterns of adjoining properties, the purpose being to create a landscaped continuum graduating to no development on the uncultivated and undeveloped remote upper slopes of the property.</p>	<p>Alternative 2: Proposed densities and, therefore visual impact, is considered excessive.</p> <p><i>Observation:</i> Screened out from further consideration due to unacceptably high impacts based on other factors.</p>
	<p>Alternative 3: Landscape patterns associated with this alternative are the product of careful analysis. The result is a development pattern that forms a continuum with the surrounding landscape. Development within the remote upper zone of the estate still raises concerns, however.</p> <p><i>Observation:</i> Measures up to the requirements of this performance priority more successfully than all other development alternatives with the possible exception of Alternative 1. However, impacts from development within the upper remote zone requires further testing to establish, convincingly, whether mitigated impacts can be kept within acceptable levels.</p> <p><i>Performance:</i> Currently <i>Good</i> apart from within the upper remote zone where performance is provisionally rated <i>Poor to Moderate</i> subject to further testing.</p>

	<p>Alternative 4B: Notwithstanding carefully prepared architectural mitigation, proposed built forms on the intermediate shoulders and across the upper remote slopes are still questioned with regard to location, distribution and visual profile.</p> <p><i>Observation:</i> Impacts from development within the intermediate slopes and upper remote zone require further testing to establish, convincingly, whether mitigated impacts can be kept within acceptable levels.</p> <p><i>Performance:</i> Currently <i>Moderate</i> apart from within the upper remote zone where performance is provisionally rated <i>Poor to moderate</i> subject to further testing.</p>
<p><i>Priority 3: Integration of Landscape & Architectural Patterns within the Site:</i> Integrating landscaping and architectural patterns, with particular attention to scale, wall colouring, massing and articulation of roof canopies, choice and placement of trees and other vegetation, nature of road surfacing, placement of cut and fill (where at all acceptable), and nature and location of services.</p>	<p>Alternative 1: Status quo retained. Landscape patterns would continue to evolve in an ad-hoc manner.</p> <p><i>Observation:</i> Could result in intrusive, ad-hoc and unintegrated development that would, nonetheless, be compliant with the property's agricultural zoning.</p> <p><i>Performance:</i> Undetermined, but could feasibly result in future <i>Poor to Moderate</i> performance.</p> <p>Alternative 2: Proposed densities and, therefore, visual impact, is considered excessive regardless of the level of integration of landscape patterns.</p> <p><i>Observation:</i> Screened out from further consideration due to unacceptably high impacts based on other factors.</p>

<p><i>Priority 3: Integration of Landscape & Architectural Patterns within the Site.</i> Integrating landscaping and architectural patterns, with particular attention to scale, wall colouring, massing and articulation of roof canopies, choice and placement of trees and other vegetation, nature of road surfacing, placement of cut and fill (where at all acceptable), and nature and location of services.</p>	<p>Alternative 3: Integration of landscape and architectural patterns within the site are carefully co-ordinated. Integration of development patterns within the remote upper zone of the site is insufficiently tested, although conceptually carefully considered.</p> <p><i>Observation:</i> Effectiveness of mitigation difficult to establish conclusively along upper portions of the site based on current information.</p> <p><i>Performance:</i> Good apart from within the upper remote zone where performance is provisionally rated <i>Poor to Moderate</i> subject to further testing.</p>
<p><i>Priority 4: Impacts on Significant Precincts & Outlooks:</i> Introducing new development that strengthens and/or consolidates the character of existing signature precincts (e.g. the historic Toll-House precinct), signature man-made and natural alignments and gateway spaces. Such development must also be respectful of scenic outlooks from key locations beyond the site including Sir Lowry's Pass, the N2 and backdrops characterizing neighbouring historic farm werfs, and the neighbouring towns of</p>	<p>Alternative 1: Status quo retained. Development would continue to evolve in an ad-hoc manner.</p> <p><i>Observation:</i> Compliancy in terms of the current agricultural zoning holds potential risks for visual impacts on surrounding landscapes and key outlooks from beyond the site, with potential for ad-hoc, inappropriate development occurring on strategic significant locations affecting outlooks and backdrops beyond the site.</p> <p><i>Performance:</i> Undetermined, but could feasibly result in future <i>Poor to Moderate</i> performance.</p> <p>Alternative 2: Proposed densities and, therefore, visual impact, is considered excessive, thereby negatively impacting on spatial relationships both within and beyond the site.</p> <p><i>Observation:</i> Screened out from further consideration due to unacceptably high impacts.</p>

<p>Gordon's Bay, Somerset West and Strand.</p> <p><i>Priority 4: Impacts on Significant Precincts & Outlooks:</i> Introducing new development that strengthens and/or consolidates the character of existing signature precincts (e.g. the historic Toll-House precinct), signature man-made and natural alignments and gateway spaces. Such development must also be respectful of scenic outlooks from key locations beyond the site including Sir Lowry's Pass, the N2 and backdrops characterizing neighbouring historic farm werfs, and the neighbouring towns of Gordon's Bay, Somerset West and Strand.</p>	<p>Alternative 3: Impacts are low from significant viewpoints within the local context of the site. Areas of concern, based on current information and VIA analysis, include key stretches of scenic routes and certain high points within the sub-regional context.</p> <p><i>Observation:</i> Effectiveness of mitigation difficult to establish based on current information.</p> <p><i>Performance:</i> Generally <i>Good</i> apart from along certain stretches of the N2, Sir Lowry's Pass, and from Schapenberg and Wedderwil Ridge in particular, where performance is rated <i>Poor to Moderate</i>, subject to further testing.</p>
<p><i>Priority 5: Appropriately Informed New Architecture:</i> Introducing architecture that is informed directly by the compartmentalized nature of adjoining cultivated landscapes, vegetation, landforms, micro-climatic conditions and natural colours, rather than being stylistically driven.</p>	<p>Alternative 4B: Impacts are similar to Alternative 3, i.e. low from within the local context, but problematic from key areas beyond the property. Would appear to require more mitigation than Alternative 3.</p> <p><i>Observation:</i> Effectiveness of mitigation difficult to establish based on current information. This applies particularly to views from above the site looking down onto the proposed development, e.g. Sir Lowry's Pass.</p> <p><i>Performance:</i> Generally <i>Good</i> apart from along certain stretches of the N2, Sir Lowry's Pass, and from Schapenberg and Wedderwil Ridge in particular, where performance is rated <i>Poor to Moderate</i> subject to further testing.</p> <p>Alternative 1: Status quo retained. Development would continue to evolve in an ad-hoc manner.</p> <p><i>Observation:</i> Nature of future development including architecture undetermined.</p> <p><i>Performance:</i> Undetermined</p> <p>Alternative 2: Nature of proposed architecture undetermined.</p> <p><i>Observation:</i> Screened out from further consideration due to other factors. Architectural design therefore remains undeveloped.</p>

<p><i>Priority 5: Appropriately Informed New Architecture:</i> Introducing architecture that is informed directly by the compartmentalized nature of adjoining cultivated landscapes, vegetation, landforms, micro-climatic conditions and natural colours, rather than being stylistically driven.</p>	<p>Alternative 3: Architectural proposals are conceptually in accordance with the development informants, even if not fully developed.</p> <p><i>Observation:</i> Architectural approach well conceived and integrated with the proposed landscaping. Would rely on effective implementation of architectural and landscaping design controls for which no details currently exist.</p> <p><i>Performance:</i> Provisionally <i>Good</i> subject to more detailed design development.</p>
	<p>Alternative 4B: Architectural proposals are in accordance with the development informants.</p> <p><i>Observation:</i> Architectural approach well conceived and integrated with the proposed landscaping. Will rely on effective implementation of the architectural and landscaping design controls.</p> <p><i>Performance:</i> Provisionally <i>Good</i> subject to finalization of the proposed architectural and landscaping design controls.</p>
<p><i>Priority 6: Impacts on Archaeological & Botanical Sites:</i> Introducing development that avoids disruption to archaeological and botanically noteworthy sites.</p>	<p>Alternative 1: Status quo retained. Development would continue to evolve in an ad-hoc manner. Impact on archaeological potential difficult to determine in this scenario, given considerably less stringent checks and controls than would be the case with Alternatives 2 to 4B. Potential impact on botanical significance generally within acceptable levels.</p> <p><i>Observation:</i> Potential impact on botanical significance is surprisingly greater than for Alternative 3, albeit still within acceptable levels.</p> <p><i>Performance:</i> Archaeology: probably <i>Moderate</i>. <i>Performance:</i> Botanical resources: <i>Moderate to Good</i></p>
	<p>Alternative 2: Impact on archaeological potential is provisionally determined as low. Impact on botanical resources is significant</p> <p><i>Observation:</i> Screened out from further consideration due to other factors.</p>

<p><i>Priority 6: Impacts on Archaeological & Botanical Sites:</i> Introducing development that avoids disruption to archaeological and botanically noteworthy sites.</p>	<p>Alternative 3: Impact on archaeological potential is provisionally determined as low. Impact on botanical resources can be kept within acceptable limits with mitigation.</p> <p><i>Observation:</i> Potential impact with mitigation, on botanical significance is the lowest of all alternatives, including Alternative 1.</p> <p><i>Performance:</i> Good with regard to Archaeological resources. <i>Performance:</i> Moderate to Good with regard to the estate's botanical resources.</p>
	<p>Alternative 4B: Impact on archaeological potential is provisionally determined as low. Impact on botanical resources is significant.</p> <p><i>Observation:</i> Potential impact on botanical resources is significantly greater than with Alternative 3, even with mitigation.</p> <p><i>Performance:</i> Good with regard to Archaeological resources. <i>Performance:</i> Low to Moderate with regard to the estate's botanical resources.</p>

15.2.1 General Summary

i) Alternative 3 (the 'Cluster Alternative') performs best in terms of these development informant priorities with the exception of Alternative 1, the performance of which can only be speculated upon. Alternative 3 still draws concerns, however, relating to proposed development along the upper remote slopes of the estate, and the proposed 3 storey cluster units on the lower levels. This alternative would require further testing to establish more conclusively, the effectiveness of proposed mitigation.

ii) Alternative 4 (the 'Eco Corridor Alternative') does not perform as well as Alternative 3, but is the developer's preferred alternative for viability reasons. Like Alternative 3, this alternative draws concerns relating to proposed development along the upper remote slopes of the estate. Other concerns relate to the distribution of development across the semi-exposed, intermediate shoulders of the estate, rather than locating at least a portion of the development within its riverine kloofs as proposed in Alternative 3, even if involving construction on slopes exceeding 1:4. This alternative therefore requires more mitigation than Alternative 3. The viability of the project is a significant factor that cannot be ignored however, given that it is directly linked to a social empowerment initiative that holds significant benefits for the community of Sir Lowry's Pass Village (**refer Section 15.3.1**).

iii) Alternative 1 (the 'Existing Rights' Option) would not necessarily perform well in terms of these development informant priorities, given uncertainties relating to future ad-hoc development, less rigorous spatial controls imposed by the zoning scheme and uncertainties regarding the triggering of heritage impact assessments according to the Heritage Resources Act.

iv) Alternative 2 (the 'Conventional Development' Option) is the worst performer in terms of these development informant priorities and has been screened out from further consideration.

v) None of the alternatives, with the arguable exception of Alternative 1, meet overall minimum (*moderate*) performance requirements at this stage. At the same time, it would be unreasonable to dismiss these alternatives while there are realistic possibilities for mitigating impacts to acceptable levels. Such mitigation does, however, require further design development and testing with regard to both Alternatives 3 and 4B as elaborated on in **Tables A-D** and **Table 1**

15.3 Other Factors to be Considered

15.3.1 *Socio-Economic Implications*

The socio-economic implications of the proposed development are pivotal in assessing its impact on the region. In fact, the socio-economic argument is a factor that colours this entire HIA report. It is also a requirement of the National Heritage Resources Act [Section 38(3)(d)] that socio-economic benefits derived from activities impacting upon a receiving environment must be considered¹⁵.

The development of portions of the estate are directly linked to a socio-economic empowerment initiative that will directly benefit the century old settlement of Sir Lowry's Pass Village, which is struggling for economic survival. This initiative is based on a formalized agreement between the village community and fellow residents of the area (the owner of the estate, Mr Henk Maris, is a local resident, as are the members of the Casa Maris Development Committee). The owner is also anxious that the partnership be extended to include a joint venture between the estate and conservation authorities for the benefit of the local and regional bio-sphere.

A Social Impact Assessment prepared by Urban Issues Consulting (**refer Annexure 4**) provides a strong argument for the proposed development, the social upliftment components of which are based on a four-part initiative, viz: i) educational opportunities for children; ii) preferential full-time employment for adult residents from the village; iii) improved health care, safety and security; and iv) improved transport infrastructure. The investment would be one of the largest made in the Helderberg area. Direct investment capital as well as secondary economic impact capital that would be generated by the approval of the project, would amount to well over R1 billion.

- i) Key factors emerging from the socio-economic report include the following:
- a. 53% of adults in the village are unemployed;
 - b. Sir Lowry's Pass Village falls within the 'red zone', i.e. within the pocket of deepest historical and generational poverty within the Helderberg Basin (University of Stellenbosch: Unit for Religion & Development Research);
 - c. Sir Lowry's Pass Village, being a community bordering a nature reserve, will increasingly face pressure for informal development sprawl over next 5 years unless an economic plan is developed to end poverty;
 - d. The levels of living index for Sir Lowry's Pass Village is poor, and on a par with Lavender Hill (Cape Metro Annual Report, 1997). This makes it one of the communities of deepest poverty, reflecting vast discrepancies with privileged communities in Somerset West, Strand and Gordon's Bay.

¹⁵ This requirement states that '...an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development...' must be undertaken.

It is therefore clear that substantial socio-economic needs exist within the village, and that an injection of capital into the community, if properly managed, would be of considerable benefit for poverty relief. Contextually appropriate development of the Casa Maris estate is seen as a means of achieving this, and a number of other goals: most specifically the ecological rehabilitation of the Casa Maris estate towards which the owner has already spent R20 million. Large portions of the site remain heavily degraded however, due to invasive alien infestation, illegal dumping and years of environmental mismanagement.

It is, therefore, the owner/developer's plan to link the proposals for Casa Maris to an initiative that would provide a new economic hub for the area based on an integrated settlement and economic development model, with Sir Lowry's Pass Village as the economic centre. This would have the benefit of overturning the current economically non-active and extremely low income generating capacity of the village. The agreement with the village is expected to generate a minimum of R100 million for the upliftment of its community, an amount which is very substantial, if not unprecedented for conservation/community upliftment initiatives.

- ii) Key benefits emerging from this report include the following:
- a. The creation of a minimum 285 jobs for residents of Sir Lowry's Pass Village (i.e. for residences, guest lodge, bottling plant, maintenance of the nature reserve, security and long-term maintenance and construction).
 - b. The creation of a trust (the Casa Maris Trust), which will receive 50% of the net profits generated by the eco-estate, 50% from the sales of water from the bottling plant, and 20% of the monthly homeowner's levy. This would amount to a total of R100 million from the once-off sales of plots, a further approximate R100 000 monthly from the monthly levies and R45 000 monthly from the sales of bottled water. 1,5% of the proceeds from each property re-sale will also accrue to the trust. The trust would be jointly managed by representatives of the Village and Casa Maris, with independent auditing to ensure transparency.
 - c. The possibility of establishing a learning centre on the property that seeks to promote environmental and heritage conservation of the Sir Lowry's Pass Village and surrounding area. This cannot be confirmed, however, until approval for the project has been granted.
 - d. The release by the Casa Maris Trust, of funds for furthering education, skills transfer, business opportunities, village living conditions, tourism and crime prevention, sports and recreation.

The proposal presented by the developer/owner is therefore intended to produce a world-class triple bottom-line outcome: Good for Business; Good for the Environment; and Good for the Community.

iii) Implications in terms of this assessment:

Although Development Alternative 3 has been identified as best performing in terms of the Development Informant Priorities (refer Table 1 and Assessment Tables A-D) this alternative is expected to incur a substantial financial loss (refer to the Socio-Economic Impact Assessment: Section F, p50 – identified there as Plan 4). This alternative is therefore regarded as economically unfeasible and would result in no socio-economic benefits for the community of Sir Lowry's Pass Village. Alternatives 1 and 2 (identified respectively as Plan 2 and Plan 3 in the Socio-Economic Impact Assessment) are expected to be break-even ventures and would therefore also not result in socio-economic benefits for the community of Sir Lowry's Pass Village. The abovementioned key benefits linked to this proposal are therefore derived from Alternative 4B, (identified as Plan 1 in the Socio-Economic Impact Assessment). It is for this reason that Alternative 4B is the developer's preferred option.

If one accepts the socio-economic argument, one has to then consider development Alternative 4B (or a possible further mitigated variation thereof) as a serious development

option, even if not as good a performer in terms of meeting the key Development Performance Priorities forming the basic yardstick of this study.

15.3.2 *Urban Edge Implications*

Heritage Western Cape has noted with concern, ('RoD' dated 28 April 2009) the lack of compliance with planning policies. This would include the urban edge. The Casa Maris estate falls outside the urban edge, and is surrounded by rural agricultural landscapes on the lower slopes, and virtually pristine natural areas on the upper slopes. This urban edge is, however, under increasing pressure due to urban sprawl generated by informal settlement in the vicinity of Sir Lowry's Pass Village and is expected to increase, according to research conducted by the University of Stellenbosch (Unit for Religion & Development Research: 1997).

Planning Partners, in a report motivating for an amendment to the urban edge (April 2010) argues that if an appropriately limited and managed development with clear socio-economic benefits for local impoverished communities is halted by an urban edge, then the underlying worthy objectives of the PSDF and Urban Edge Policy would be undermined. The report goes on to argue that a more realistic approach that harnesses a development initiative such as the Casa Maris project and balances this with the interests of the people, environment and economy, should be seriously considered.

It proposes, therefore, that the urban edge be amended to accommodate 'islands' around the proposed development portions on the Casa Maris estate, much in the same way as similar islands have been created in the Constantia/Tokai Valley. A copy of the Draft Application for Rezoning and Removal of Restrictions Report is contained in **Annexure 5** of this document.

- i) Key points motivating an amendment to the urban edge include the following:
- a. The social development imperative which is a key factor of the proposal, balances conservation of the natural environment with a social empowerment initiative aimed at advancing an underprivileged community's ability to sustain itself. It argues that the seeds of such sustainability lie in the biophysical and heritage realms, with leverage provided by the proposed eco-estate. Consequently, the project should be seen as a mechanism for much needed social development and should not be stifled by a fixed line.
 - b. By creating community partnerships such as proposed, a developmental culture emerges in which grassroots communities are able to see that authorities are not blindly using the environmental and heritage arguments as a tool to entrench class privilege, but rather sees environmental and heritage resources as a platform for promoting socio-economic sustainability. The underlying rationale is, therefore that projects such as Casa Maris promote the idea that regional well-being is not based on blind preservationist attitudes but, rather, on responsible use of the biophysical and heritage environments as platforms for sustainable spatial and socio-economic development.
 - c. Where the opportunity to create a sustainable livelihood clashes with the urban edge, as is the case of Sir Lowry's Pass Village, the wellbeing of communities to create a sustainable living should prevail over an artificial line.
 - d. The challenge of how to responsibly integrate sustainable development, environmental conservation and economic growth into a partnership that unlocks the door to community upliftment, requires new approaches. It is argued that the Casa Maris proposals provides such a model.
 - e. While the urban edge is intended to prohibit further outward expansion of urban settlements that entrench the current spatial apartheid pattern resulting in urban sprawl, the Casa Maris project is planned as an eco-sensitive interface between the urban realm and the mountain. It is argued that the estate represents a logical place for planned expansion, yet does not entrench spatial apartheid patterns nor urban sprawl. On the contrary, it is argued that a planned, low-density interface delivering socio-economic benefits to a disadvantaged

community is the opposite to apartheid, and would help to redress the imbalances of apartheid.

- f. Although the site falls outside the urban edge, more detailed environmental studies show that the site has areas that are suitable for development. It is further argued that the proximity to the Strand-Somerset West urban area, suitability of the lower basin and mid slopes for development, together with the restraining influence of the mountains, mean that this area will inevitably be developed in the future with pressure from unco-ordinated urban sprawl already being felt. It concludes that it would therefore be better to adapt the urban edge to provide for managed and co-ordinated development, before the opportunity for a sensitive interface with its associated socio-economic benefits, is lost.

iii) Implications in terms of this assessment:

The arguments offered above challenge the delineation of urban edges as single-dimensional, arguing that such lines do not necessarily achieve their underlying purpose, particularly given the vast social discrepancies between rich and poor, and increasing development pressure on limited land resources within our country.

While there is merit in some of these arguments and others challenging the inflexibility of urban edge designations and reactionary preservationist attitudes, it is equally important to ensure that both biophysical and spatial heritage resources are responsibly conserved, especially where losses would be irreversible, such as scenic quality. It is for this reason that both new and existing boundaries be dealt with as visually 'soft edges,' and that new development on the estate include a matrix of tree belts and other planting patterns contiguous with landscape patterns beyond the property, even if development densities were visibly to exceed those on adjoining land. It is for this reason that the graduated, irregular geometries characterizing the response of Alternative 3 perform better, in terms of the Key Design Informant Priorities in this report, than the more uniform, rectilinear patterns of Alternative 4B.

Another critical issue to address with regard to development beyond the urban edge is that of precedent. Development should be permitted to proceed only once all mechanisms for its appropriate implementation, screening and monitoring are fully in place, as there is clearly potential for a double-edged outcome, i.e. either development that would become a model for future private/community empowerment partnerships using the responsible rehabilitation and conservation of biophysical and spatial heritage as a platform, or else development that would constitute disastrous, irreversible impacts on the landscape, providing precedent for even more disastrous intrusions thereafter.

15.3.3 *Cultural Landscape Implications*

The cultural landscape of the Helderberg Valley is of at least outstanding local significance in terms of its scenic and historic significance, in particular. The Casa Maris estate occupies a strategic position within this valley, situated against the landmark Hottentots Holland Mountains and along the historic route into the interior. (Refer to **Diagrams DI 01** and **DI 03**).

- i) Key factors to be considered include the following:
 - a. Views from significant viewpoints looking towards the property are limited by the nature of the topography despite occupying what would appear to be a prominent position from most surrounding areas. This applies, for example, to scenic outlooks from the N2 including Sir Lowry's Pass (although the limited outlooks from these routes, where unobstructed, are potentially significant).
 - b. Views of the proposed development from historic nearby farmsteads such as Goede Verwachting (formerly an inn along the same old Gantouw wagon route, but outside the property), Broadlands (another former inn along this historic route), and Ravenswood, are obscured by tree belts and tree clusters. This means that backdrops from these farmsteads

would not be affected by the proposed development on the Casa Maris estate. Other potentially significant backdrops, such as from Gordon's Bay main beach, the Strand beach and the De Beers Precinct at Heartland, Somerset West are all either obscured by the Schapenberg (a large hill located in the centre of the Helderberg Valley), intervening buildings, or mitigated by distance.

- c. Nonetheless, views of the site from above, such as when viewed from Sir Lowry's Pass, are regarded as particularly sensitive given that this pass becomes a strategic scenic threshold into the Cape Peninsula when approached from beyond the Hottentots Holland Mountains. Other scenic views that would be affected are elevated outlooks to the southeast from the Schapenberg itself, as well as from the adjacent Wedderwil Ridge.

ii) Implications in terms of this assessment:

It is particularly important, in this instance, to draw a distinction between impacts on the discrete heritage elements and precincts located on the estate, and impacts on the broader cultural landscape. Section 15.2 read in conjunction with assessment tables A-D supports the conclusion that all measurable alternatives perform positively with regard to impacts on discrete resources located within the property including the old toll house, Toll House Precinct and remnants of the historic Gantouw Pass. Concerns however arise with regard to certain impacts on the broader cultural landscape embodied in the various development alternatives. Of these development alternatives, and excluding Alternative 1 (the 'Existing Rights' option) Alternative 3 draws least reservations while Alternative 4B is the developer's preferred alternative based on socio-economic and commercial grounds. Although Alternative 3 draws least concerns, it nonetheless does not meet minimum performance levels in term of the Development Informant Priorities of this study. Neither does Alternative 4B. Indeed, the findings of this study indicate that both alternatives require further testing and, most likely, further mitigation in order to achieve acceptable performance levels. Most contentious of these impacts are those relating to proposed development within the upper remote zone of the estate, i.e. in the vicinity of the railway line.

Of course, cultural landscapes do not necessarily derive their significance on the basis of scenic quality alone. Historic communities such as Sir Lowry's Pass Village, their activities and consequent impact on the geography are also important parts of the complex layering that defines a cultural landscape. (It is for this reason that economic sustainability is recognized by the National Heritage Resources Act as an important factor in assessing heritage impacts). It can, therefore be argued that sustainability of a cultural landscape has as much to do with the sustainability of its historic communities as it has to do with the sustainability of its scenic qualities.

15.3.4 Botanical Implications

One of the qualifying aspects of cultural significance, as defined in the National Heritage Resources Act is scientific significance. As scientific significance includes biophysical significance, it therefore follows that botanical resources are heritage resources, and therefore have to be taken into account in this study.

The specialist botanical study informing this assessment (**refer Annexure 6**) prioritises the four development alternatives for the estate in the following order (most to least preferred from a botanical point of view) (Boucher: September 2010):

- Alternative 3 – The 'Cluster Option' Development Alternative (score: 118)
- Alternative 1 – The 'Existing Rights Option' Development Alternative (score: 125) (referred to in the botanical report as the 'No Go' Development Alternative);
- Alternative 4B – The 'Modified Eco-Corridor Option' Development Alternative (score: 154) (referred to in the botanical report as 'Alternative 5'); and
- Alternative 2 – The 'Conventional Option' Development Alternative (score: 186).

i) Key factors emerging from the socio-economic report include the following:

- a. The estate has been exposed to a long history of disturbance and mismanagement which has resulted in extensive areas that are densely infested with alien trees. Considerable negative influence on the botanical composition of the estate occurs particularly in the foothills, through different utilization patterns, and high lying areas which have suffered intensely from dense invasion by exotic species. This has led to the decimation of the (indigenous) vegetation, erosion, and reduction of stream flow on the property.
- b. The vegetation types identified on the Estate include communities belonging to nationally threatened ecosystems and thus require extra protection. Protection of these types on this Estate would constitute a contribution to the national conservation effort.
- c. Water regimes in the streams, which contribute to the flow in the Sir Lowry's Pass River, would benefit significantly from the control and elimination of the dense eucalypt infestations, amongst others, on the Estate.
- d. Red Data Book species will benefit directly from alien vegetation removal and species directed management systems.
- e. More threatened species will in all probability be found once latent seed and hidden plants (especially bulbous plants) are exposed following essential removal of invasive species.
- f. Erosion control through the property requires urgent attention both existing and particularly during alien clearing operations.

ii) Implications in terms of this assessment:

Despite being heavily degraded, the Casa Maris estate therefore has high botanical significance, containing areas of red date plant species including endangered species of national significance. The developer/owner's concern for the conservation of the site is, therefore, not without substance. After having bought the various farms now comprising the estate, he has so far spent approximately R20 million of his own money to rehabilitate significant portions of the property. He intends to use a substantial portion of the funds generated by the proposed residential development to pay for rehabilitating 90% of the property as a nature conservancy.

The rehabilitation and conservation of this highly significant biome must, together with the empowerment initiative for the Sir Lowry's Pass Village community, therefore be considered a key motivating factor supporting the development of portions of the property, at least in principle.

15.3.5 *Archaeological Implications*

An archaeological impact assessment of the estate, prepared by the Archaeological Contracts Office, UCT (refer **Annexure 7**), has found no significant archaeological material apart from remnants of the old Gantouw Pass on the uppermost portions of the site, i.e. above the railway line. Remains of the old pass below the railway line were found to be either less obvious, or non-existent. No protected ruins were located. Although the site was found to be covered in dense vegetation, these conclusions were not deemed to have been compromised.

i) Key factors to be considered include the following:

Potential for significant remains were identified within two other areas, i.e. around the old toll house and within the historic Toll House Precinct. Both of these areas, as well as the alignment of the old Gantouw Pass have been identified as of high significance until proven otherwise.

ii) Implications in terms of this assessment:

The report recommends the following:

- A further limited archaeological survey once vegetation has been cleared from the site. It cautions that no earthworks of any sort are to be conducted in the sensitive areas prior to this survey which should have three aims:
 - o to record any remaining sections of the old Pass that might still be visible;
 - o attempt to locate the remains of the toll house;
 - o and check for graves near the cottage;
- Archaeological monitoring of any excavations within about 100m of the house should occur to check for historical material.
- Consideration should be given to creating an open belt along the alignment of the Gantouw Pass in recognition of its place in both the pre- and post-colonial history of South Africa.

Historical research in this HIA has confirmed that the structure referred to as the 'old cottage' in the archaeology report is indeed the old toll house. Consequently, the recommendations relating to the location of the remains of the toll house are no longer applicable, although the possibility of locating the remains of other structures in the vicinity cannot be discounted. There is also a reasonable possibility of finding unmarked graves near the old toll house given the length of time that the site was settled. It is also not uncommon to find graves in the vicinity of historic outspans, particularly where these occur on a major historic route.

Given the above, and the fact that there is neither major new construction work proposed for the historic Toll House Precinct, nor near known remnants of the old Gantouw Pass, archaeology is not expected to be a significant factor in the proposed development on the estate.

15.3.6 Public Participation Implications

The development proposals for the estate have been the subject of two public engagement processes: the first undertaken in February 2009 at the developer's own initiative to determine local (Sir Lowry's Pass Village) community perceptions towards its own developmental challenges, and the second initiated in March 2009 in terms of the statutory requirements of the EIA, of which this HIA forms a part.

i) *The Sir Lowry's Pass Village Perception Survey* : This community perception survey (CPS) included in the Socio-Economic Impact Assessment (refer **Annexure 4**) was undertaken to establish the developmental needs of the local community with a view to the empowerment partnership linked to the development of portions of the estate. This survey involved interviews with every single household in the village, passing only over those households that refused to participate. This survey received an approximate 93% response, which is clearly significant. An underlying perception revealed in this survey, was that the community of Sir Lowry's Pass was being excluded from the economic benefits resulting from the expanding upmarket housing estates in neighbouring areas. The survey also confirmed high poverty, high unemployment and low education levels.

Key Issues arising from the CPS:

- a. Basic needs identified by respondents, in order of priority: 1 Housing; 2 Jobs; 3 Crime prevention; 4. Social; 5 Education; 6 Health facilities; 7 Spiritual; and 8 Food store.
- b. Most disturbing issues in the village, in order of priority: 1 Drug abuse; 2 Crime; 3 Housing; 4 Lack of jobs; 5 Health facilities; 6 Education; 7 Social; 8 Food and 9 Spiritual. Issues 1 to 4 attracted by far the greatest amount of concern.
- c. The topmost negative experiences experienced by community members in order of priority; related to 1 Lack of education opportunities; 2 Hunger; 3 Insufficient grants; 4 Assault and

- theft; 5 Insufficient people receiving state grants and pensions; and 6 Insufficient accessibility to healthcare.
- d. Youth expectations, in order of priority: 1 Skills development; 2 Education; 3 Social; 4 Jobs; and 5 Health.
- e. Crime is a major concern for the majority of residents.
- f. Base on the above, specific needs are identified relating to education, housing, road safety and job creation.

ii) *Public Engagement as part of the ELA Process* (refer **Annexure 8**): The public engagement process has so far included an initial public participation process (commenced on 31 March 2009); the distribution of a Draft Scoping Report for public review (27 August to 19 October 2009); and the distribution of a Final Scoping Report for public review (12 November 2009 to 19 October 2009). The distribution of the Draft EIA Report (EIR) is currently open for public review (28 September 2010 to 10 November 2010). At each successive stage, an updated record of public feedback from the preceding stage was included. An Issues Trail from the Draft EIA Report is included in Annexure 8.

- i) Key Issues arising from the Draft EIR include the following:
 - a. Opposition from environmental bodies to the proposals then proposed (for 400 units as per Alternative 2) has been vociferous. The underlying feeling from these quarters is that ecological loss cannot be bought by social gain, in other words, that the proposals would result in a net loss to the ecology despite embodying conservation priorities.
 - b. A general sentiment from these same quarters that the project is fatally flawed in terms of current planning policy. The issue of the proposals being well beyond the urban edge was repeatedly referred to.
 - c. Allegations that the social empowerment initiative amounted to bribery of the local community by the developer.
 - d. Visual impact, particularly at night.
 - e. Legitimacy of community leaders with regard to the proposed empowerment partnership agreement, and representivity of community perceptions as reflected in the CPS were questioned.
 - f. Strong local support from at least some quarters of the community for the proposals.

ii) Implications in terms of this assessment:

The public engagement process has so far been extensive, attracting responses from across the social spectrum, no doubt spurred by the social empowerment component linked to the development proposals. Most support for the development has, so far come from Sir Lowry's Pass Village, with some notable exceptions including at least one prominent neighbouring landowner. Not surprisingly, the project is therefore seen as highly controversial – at least in response to the initial development proposals i.e. now referred to as Alternative 2 (the 'Conventional Development Option' proposing 400 residential units).

It is reminded that in this study Alternative 2 has been screened out from further consideration given its unacceptably high impacts on the cultural landscape. IAP response to Alternative 3 (the 'Cluster Option') and Alternative 4B (the 'Eco-Corridor Option') have yet to be received.

15.3.7 *Design Control Implications*

Development and landscaping on the estate will be subject to strict architectural and landscape design controls, draft copies of which are included in **Annexure 9** of this study. The intention underlying these documents will be of restriction ('control') rather than guidance ('guideline'). The details as to how this principle would be enforced have yet to be specified, including the internal approval process and composition of the design review committee. This would clearly have to be established to the satisfaction of DEADP, presumably with support

from HWC as a significant commenting party in terms of Section 38(8) of the National Heritage Resources Act.

The draft landscape design document is currently aimed at informing the EIA and masterplanning for the development, It is therefore not a landscape design control document per se. However, its guidelines do provide some restrictions, as well as important insights into the manner in which landscaping controls would be imposed, both on the developer and individual property owners. The draft architectural design document on the other hand, is aimed directly and exclusively at controlling architectural development.

i) Key factors addressed these design control documents.

- a. The draft landscape report identifies a sector by sector staged strategy for controlling alien infestations and rehabilitating fynbos. It recognizes the historical importance of certain non-invasive alien species within historical precincts such as those around the old toll house. Fire management areas around proposed residential footprints are identified. Other key landscaping issues addressed include control of cut and fill (inclusive of roads); external lighting; stormwater engineering and detention; and water management. It establishes a set of underlying landscape principles and practices to which new landscaping will be expected to adhere, together with a landscape masterplan that uses surrounding landscape patterns as formal precedent for mitigating impacts. It includes a set of draft guidelines relating to landscape character, a set of restrictions relating to domestic garden and gardening activities, and a list of recommended and forbidden plant species.
- b. The draft architectural design controls are underpinned by a series of general environmental design principles that are context, rather than style-driven. For this reason, the document proposed a variety of architectural designs, each responding to a specific context, and demonstrating the application of the various controls. Vegetation is encouraged to grow in between and over certain connecting elements in order to better merge with surrounding landscapes. The controls adopt Green Building requirements that would encourage proposals to aim towards Green Star ratings for final approvals. The controls also make provision for the establishment of an Architectural Design Review Committee

ii) Implications in terms of this assessment:

The purpose is to provide an integrated landscape and architectural design control document for informing all new construction interventions and planting on the Casa Maris estate. The landscaping component of the control document is arguably more important than the architectural controls, in that they provide the broad-scale matrix for the development, thereby determining the degree of 'fit' within the wider landscape context. The architectural controls are nonetheless very important, particularly relating to the manner in which they control roofscapes, overall height, scale and building massing.

The landscape and architectural controls have not yet been integrated to form one coordinated document, with the result that there is insufficient cross referencing between macro landscaping principles, and the architectural proposals at a site-specific scale. Therefore, although the architectural control document does illustrate planting, there is insufficient guidance as to how this should be prepared and managed from a broader landscaping perspective, nor to what extent proposed planting at site level would have on, say, fire management on a macro (landscape) scale. Landscape architectural interests should, therefore be strongly represented on the proposed Casa Maris Architectural Review Committee, for example.

The architectural control document in particular, is well set out, systematic in its approach and considered to be substantially in accordance with the Key Design Informant Priorities forming the basis of this HIA. Certain detail concerns do require further attention e.g. representation of solar panels on roofs and the cumulative impacts of these on roofscapes,

Robust mechanisms for the implementation and enforcement of both landscape and architectural controls have yet to be elaborated on.

16. CONCLUSIONS

16.1 Meeting HWC's requirements informed by the NID

In terms of the Notice of Intent to Develop (NID) application of 20 March 2010, it was recommended that:

- a full HIA to be undertaken to examine impact on heritage resources and the scenic cultural landscape;
- the relevant heritage specialist work closely with the VIA specialist in assessing impacts; and that
- the work include a Phase 1 heritage study with design indicators (development informants) and a Phase 2 heritage impact assessment responding to the requirements set out in Section 38(3) of the NHRA.

These recommendations were endorsed by HWC, which recommended as follows:

"The Committee agreed to request an HIA and VIA. It was noted that the non-compliance with existing planning policies was deemed to be problematic".

The authors submit that HWC requirements have been met as set out above, in that:

- this document does constitute a full HIA examining impacts on heritage resources and the scenic cultural landscape;
- the work has involved close liaison with a VIA specialist in assessing impacts;
- the work does include a Phase 1 and Phase 2 assessment responding to the requirements set out in Section 38 of the NHRA.

16.2 Overall Conclusions

- i. This report finds that the cultural landscape forming the context of this study, is of outstanding local significance for the following main reasons:
 - a. Its dramatic Peninsula-defining and Helderberg-defining mountain edge;
 - b. Its location close to the spectacular scenic threshold (Sir Lowry's Pass) to the Cape Peninsula;
 - c. Its landscape qualities ascending the Hottentots Holland Mountain slopes from domesticated and partially landscapes to rocky hills and spurs, to high remote area;
 - d. Its strong spatial and historical link with the Gantouw Pass, which runs through the site in an area generally identified as the route;
 - e. Its known link as a route followed by the Gorinchaqua;
 - f. The presence of the historic toll house related to the Gantouw Pass, dating back to the 18th century and set in a shallow valley basin with open fields;
 - g. Its link to the scenic agricultural landscapes of the lower slopes of the Hottentots Holland Mountain range; and
 - h. Its link with Sir Lowry's Pass and the convict labour which built in Sir Lowry's Pass in 1829-1830.

For these reasons, change at Casa Maris needs to be very carefully considered. Change is, of course, inevitable, whether it comes in the form of invasive alien infestations or as a more direct result of human activity, including development. It bears repeating that regulatory frameworks applicable to the estate do all permit change. It is, therefore, sobering that exercising development options 'as of right' in terms of the zoning scheme

can also result in dramatic and negative changes within the landscape (see for example, Point ii below). Management of change, and the degree of predictability that can be expected in implementing change management therefore become critical factors. Another critical factor, is that the dynamics of change characterizing a cultural landscape include social change. The spatial legacy of apartheid in our country is one manifestation of this. Another is the growing social divide between poverty and privilege. It is for this reason that development initiatives within significant cultural landscapes such as the Helderberg Valley must be seriously considered, if properly managed, if reflecting a reasonable degree of predictability and, particularly, if able to help to redress our prevailing social inequities. It is with this in mind that the authors of this report are willing to support the principle of medium-scale development on Casa Maris.

- ii. Alternative 1 (the 'Existing Rights Option') does not assure conservation of the estate's spatial heritage resources, nor does it provide assurance that there would be no intrusive development against the upper slopes of the mountainside in future. Such development is, indeed permitted in terms of the site's current zoning as long as this were limited to the number of units permitted in terms of the site's agricultural zoning. This could result in highly significant impacts against the mountainside, particularly at night.
- iii. Alternative 1 does not assure conservation of the estate's biophysical resources, including its botanical heritage. This is underpinned by t
- iv.
- v. The findings of the botanical report, which regards Alternative 3 (the 'Cluster Development Option') with mitigation, as the preferred alternative over Alternative 1.
- vi.
- vii. Alternative 2 (the 'Conventional Development Option') is seen as a non-starter due to excessive densities and, therefore visual impacts. It was, therefore screened out from further consideration at an early stage. This alternative has also attracted vociferous opposition from Interested and Affected Parties.
- viii.
- ix. Alternative 3 has been identified as the preferred option from a heritage perspective although it requires further mitigation in order to bring impacts within acceptable levels. This alternative has, however, been identified as least viable of all alternatives by a significant margin and is projected to run at a significant loss. The social empowerment initiative with the Sir Lowry's Pass Village community would, therefore, not be workable. The authors agree with the view that this would be unfortunate.
- x.
- xi. Alternative 4B (the 'Eco-Corridor Option') has been identified as a lesser alternative to Alternative 3 due, largely, to its contextually less responsive development pattern and greater visual exposure. It therefore also requires further mitigation to bring impacts within acceptable levels. This alternative is, however, the developer's preferred alternative. It is considered financially viable and would offer significant benefits for both community empowerment and conservation.
- xii.
- xiii. This means that none of the alternatives perform particularly well, including the 'Existing Rights' ('No-Go') Option. Alternative 2 performs worst. The other two alternatives, i.e. 3 and 4B, will require further mitigation in order to bring impacts within acceptable levels. These alternatives also require more information for mitigation to be established with a greater degree of confidence. Most notably, successful mitigation may require the removal of the proposed dwellings on the upper remote zone of the property, unless further investigation and modelling (particularly views from above such as from Sir Lowry's Pass) should reveal otherwise.
- xiv.
- xv. If one accepts the socio-economic argument, i.e. on the basis of the developer's empowerment partnership initiative, then one has to ask if development Alternative 4B should not be considered. In this regard, it is worth mentioning the Arabella Phase 2

Development case, in which justices Louw and Bozalek stated, in a joint judgement handed down on 1 October 2009, that while social and economic benefits must be considered, it is not enough for the developer to say that environmental impacts would be offset by unrelated social benefits, as this would amount to 'buying' environmental approval. In other words, for the development proposals to be acceptable, these must reflect a net environmental benefit, notwithstanding the socio-economic benefits involved. If one applies this to Alternative 4B (and Alternative 3B, for that matter), it becomes evident that this alternative would require further mitigation to meet the performance criteria of this assessment.

- xvi.
- xvii. While the development proposals are clearly at variance with local planning policy, including urban edge policy, it is important to recognize the underlying principles governing such policy. The current means of defining urban edges is, indeed, simplistic and inflexible and do not necessarily achieve their underlying purpose. However, it is equally important to ensure that both biophysical and spatial heritage resources are responsibly conserved, especially where losses would be irreversible, such as scenic quality. The conceptual approach underlying Alternative 3, for example, recognizes that the urban edge policy does have limitations and sets out to develop an urban design and landscape strategy for accommodating the developer's initiatives, while at the same time being environmentally responsible, and without subverting the underlying principles of the Urban Edge policy. The authors feel that even though Alternative 3 may not be viable, there is still much merit in this alternative as a conceptual model for analysing landscape in order to mitigate impacts related to Alternative 4B.
- xviii.
- xix. Another critical issue to address with regard to development beyond the urban edge is that of precedent. Development should be permitted to proceed only once all mechanisms for its appropriate implementation, screening and monitoring are fully in place, as there is clearly potential for a double-edged outcome, i.e. either i) development that would become a model for future private/community empowerment partnerships using the responsible rehabilitation and conservation of biophysical and spatial heritage as a platform, or else ii) development that would constitute disastrous, irreversible impacts on the landscape, providing precedent for even more disastrous intrusions thereafter. The authors obviously ascribe to the first scenario.
- xx.
- xxi. The report finds that there is a single heritage structure on the site of outstanding significance, i.e. the toll house and surrounding fields, historically used for agriculture and outspans. It is considered that this resource is a grade 2, or Provincial Heritage Site (PHS). This site is linked to a mobility route of outstanding significance, i.e. the Gantouw Pass.
- xxii.
- xxiii. On the strength of the Archaeology impact Assessment, and the fact that there is neither major new construction work proposed for the historic Toll House Precinct, nor near known remnants of the old Gantouw Pass, archaeology is not expected to be a significant factor in the proposed development on the estate.
- xxiv.
- xxv. It is clear that significant effort has gone into the preparation of the design guidelines for Casa Maris, although the landscape and architectural controls have yet to be integrated to form one co-ordinated document. Certain refinements have provisionally recommended and this document is regarded as work in progress, albeit having reached an advanced stage. The architectural control document is well set out, systematic in its approach and considered to be substantially in accordance with the Key Design Informant Priorities forming the basis of this HIA.

17. RECOMMENDATIONS

The report recommends the following:

17.1 That the Committee notes that the site known as Casa Maris Eco-Estate and its context is a cultural landscape of outstanding local significance. This significance is based on the following:

- i. Its dramatic Peninsula-defining and Helderberg-defining mountain edge;
- ii. Its location close to the spectacular scenic threshold (Sir Lowry's Pass) to the Cape Peninsula;
- iii. Its landscape qualities ascending the Hottentots Holland Mountain slopes from domesticated and partially landscapes to rocky hills and spurs, to high remote area;
- iv. Its strong spatial and historical link with the Gantouw Pass, which runs through the site in an area generally identified as the route;
- v. Its known link as a route followed by the Gorinchaqua;
- vi. The presence of the historic toll house related to the Gantouw Pass, dating back to the 18th century and set in a shallow valley basin with open fields;
- vii. Its link to the scenic agricultural landscapes of the lower slopes of the Hottentots Holland Mountain range; and its link with Sir Lowry's Pass as a scenic route and gateway to the Peninsula

17.2. This report Recommends that the Committee:

- i. Accepts, in principle, that development in excess as what can occur "as of right" on the Casa Maris estate may occur on site. This is dependent on mitigation as addressed in this report, and the implementation and realisation of the economic benefits proposed by the developer.
- ii. Notes that the proposed socio-economic benefits attached to the proposal are substantial and likely to involve the improvement of life-quality for members of the impoverished Sir Lowry's Village Community
- iii. Notes that the proposed environmental benefits as a result of alien clearing attached to the proposal are substantial and will contribute to the improved environmental and bio-diversity quality of the area
- iv. Notes that the toll house and its immediate context including ancient camphor tree and other old exotics is regarded in this study as being of Provincial Heritage Significance (the remnants of the Gamtouw Pass on the upper reaches of the property are already a declared Provincial Heritage Site).
- v. Accepts that while the site is currently outside the urban edge and not in accordance with other planning frameworks, this need not necessarily be seen as problematic, provided that the underlying purposes for which the urban edge policy was implemented, are not subverted. A submission has been made to the City of Cape Town to amend the urban edge and is currently under review.

17.3. That in terms of the proposed four alternatives the following recommendations be made:

- i. Alternatives 1 and 2 are not recommended for the reasons identified in Section 16 (ii-v).
- ii. Alternative 4b (the developer's preferred option) be considered for implementation subject to substantial mitigation as identified in this report. In order for this alternative to be acceptable the proposal should reflect a net environmental and heritage benefit, notwithstanding the socio-economic benefits involved. If one applies this to Alternative 4B (and Alternative 3B, for that matter), it becomes evident that this alternative would require further mitigation to meet the performance criteria of this assessment.
- iii. That the scope and methodology of this report be endorsed;
- iv. That **Assessment Tables A-D** attached to this report, and underpinning this study be endorsed; and
- v. That the Conclusions reached in Section 16 of this report be endorsed.

Melanie Attwell and Graham Jacobs
September 2010

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- Planning Partners *Casa Maris Eco-Estate: Application to Amend the Urban Edge*. Prepared for Moxba Property Investments. April 2010.
- Ross, G. *The Romance of the Cape Mountain Passes*, David Philip Publishing. Cape Town. 2002.
- Van der Stok, Albert *Draft Visual Impact Assessment of a Proposed Eco Estate on Casa Maris, Sir Lowry's Pass Village, Western Cape Province*, September 2010.

18.1. Deeds and Map Research

- Deeds Office, Cape Town
- Surveyor General's Office, Cape Town
- Trigonometrical Survey Office, Mowbray

TABLE A

Read with the HIA Report Section 13: Design Informants, HIA Figures 3&4; Architectural Design Guidelines (Nelia Botha Architects), Landscape Guidelines (Planning Pnrs) & VIA (Albert vd Stok)

ACTIVITY: IMPACTS GENERATED BY NEW DEVELOPMENT: DESCRIPTION	MEASURE-MENT & DURATION OF IMPACTS	SIGNIFICANCE (UNMITIGATED) OF IMPACTS ON HERITAGE RESOURCES: (INCL BROADER CULTURAL LANDSCAPE CONTEXT)	REFERENCES	SIGNIFICANCE (MITIGATED) OF IMPACTS ON HERITAGE RESOURCES WITH MITIGATION RECOMMENDATIONS	CONFI-DENCE
<p>1. RE: DEVELOPMENT PRIORITY 1: IMPACTS RELATING TO DENSITY & SCALE</p> <p>1.1 ALTERNATIVE 1:</p> <p>Nature: <i>Not determinable</i>, in terms of this HIA</p> <p>1.2 ALTERNATIVE 2:</p> <p>Nature: <i>Negative</i>,</p> <p>1.3 ALTERNATIVE 3:</p> <p>1.3.1 <i>Subdivision density and number of new development units.</i> Nature: <i>Negative</i></p> <p>1.3.2 Scale & distribution of new development & landscaping in relation to:</p> <p>i) The broader Sub-Regional landscape context Nature: <i>Negative</i></p> <p>ii) The Toll House Precinct Nature: <i>Neutral</i></p> <p>iii) The historic Gantouw Pass alignment Nature: <i>Neutral</i></p> <p>iv) Historic farmsteads in the local context beyond the site incl. Goede Verwachting, Broadlands, Knorhoek & Ravensburg Nature: <i>Neutral</i></p> <p>1.3.3 <i>Scale of new development units in overall relation to their immediate spatial context</i> Nature: <i>Neutral-Negative</i></p>	<p><i>Not determinable</i></p> <p><i>Sub-regional High Negative Permanent</i></p> <p><i>Sub-regional Med-High Negative Permanent</i></p> <p><i>Sub-regional Low-Med Negative Permanent</i></p> <p><i>Local Low Negative Permanent</i></p> <p><i>Local Low Negative Permanent</i></p> <p><i>Local No-Low Negative Permanent</i></p> <p><i>Local Low-Med Negative Permanent</i></p>	<p><i>Not determinable</i> but could possibly result in moderate to high significant impacts, depending on the nature of future ad-hoc development</p> <p>High –Very High significant impact Screened out from further consideration</p> <p>High significant visual impact, given the current low-density rural context beyond the urban edge.</p> <p>Moderate significant impact, given the careful attention to adopting landscape patterns for the development that form a continuum with adjacent established landscape patterns. The location of dwelling units in kloofs, to reduce visual profiles where possible, is considered positive even if involving construction on slopes steeper than 1:5.</p> <p>Low significant impact, given that the precinct would not be impinged upon by the rest of the development, thereby retaining its spatial integrity.</p> <p>No-Low significant impact, given that the known parts of the alignment remain remote from the development with the remainder of the alignment would be commemorated as part of a conjecturally re-instated route.</p> <p>No-Low significant impact, given that the werfs of these farms are shielded from the site by their own trees, other intervening planting patterns and the general topography.</p> <p>Moderate-High significant impact, given the undeveloped and currently exposed nature of much of the development area, even though units have been scaled carefully to ensure that the most substantial development, i.e. 3 storey cluster units, are located on low ground with proposed recessive (excavated) units along the upper portions of the site.</p>	<p>HIA Diag 01</p> <p>HIA Diag 02 HIA 14.5</p> <p>HIA Diag D1 03 HIA 13.4; 13.5i)</p> <p>HIA Diag D1 02 & 03 HIA 13.4i), ii), iii) CW DF pp5-11</p> <p>HIA Diag D1 03</p> <p>HIA Diag D1 03</p> <p>HIA Diag D1 03</p> <p>HIA Diag D1 02 HIA 13.5i)-vii) CW DF pp12-41</p>	<p><i>Not determinable</i></p> <p>High significant impact notwithstanding mitigation Screened out from further consideration</p> <p>Moderate-High significant impact with mitigation even once landscaping has matured. <i>Mitigation:</i> Removal of residential units on upper slopes would reduce impacts, even while recognizing that these units are 'dug in' to the mountainside. Apply mitigation as proposed in the draft development framework underpinning this alternative.</p> <p>Low-Moderate significant impact with mitigation & once landscaping has matured. <i>Mitigation:</i> Removal of residential units on upper slopes would reduce impacts, even while recognizing that these units are 'dug in' to the mountainside. Apply mitigation as proposed in the draft development framework underpinning this alternative.</p> <p>Low significant impact. <i>Mitigation:</i> no significant mitigation required provided that the landscaping proposals are properly implemented.</p> <p>No-Low significant impact. <i>Mitigation:</i> no significant mitigation required</p> <p>No-Low significant impact. <i>Mitigation:</i> no significant mitigation required provided that the landscaping proposals are properly implemented.</p> <p>Low-Moderate significant impact with mitigation, even once landscaping has matured. <i>Mitigation:</i> Reconsider 3-storey units even though located on lower, less visible portions of the site. The abovementioned rating pre-supposes implementation of landscaping that responds appropriately to adjacent established landscape patterns beyond the site; appropriately scaled and configured architectural massing with particular attention to roofscape. It is noted that such landscaping & built form does form part of this alternative as supported by its underlying draft development framework.</p>	<p><i>High</i></p> <p><i>High</i></p> <p><i>Med</i></p> <p><i>Med-High</i></p> <p><i>High</i></p> <p><i>Med-High</i></p> <p><i>Medium</i></p> <p><i>Med-High</i></p>

<p>1.4 ALTERNATIVE 4B</p>					
<p>1.4.1 Subdivision density and number of new development units. Nature: Negative</p>	<p>Sub-regional Med-High Negative Permanent</p>	<p>High significant visual impact, given the current low-density rural context beyond the urban edge.</p>	<p>HIA Diag D1 03 HIA 13.4; 13.5i)</p>	<p>Moderate-High significant impact with mitigation, even once landscaping has matured. <i>Mitigation:</i> Removal of residential units on upper slopes would be encouraged, as this would reduce impacts significantly. The above impact rating assumes implementation of landscaping that responds appropriately to adjacent established landscape patterns beyond the site; appropriately scaled and configured architectural massing with particular attention to roofscape. It is noted that such landscaping and built form is addressed as part of this alternative, although not considered as responsive to context as Alternative 3.</p>	<p>High</p>
<p>1.4.2 Scale & distribution of new development & landscaping in relation to:</p>					
<p>i) The Sub-Regional landscape context Nature: Negative</p>	<p>Sub-Regional Med Negative Permanent</p>	<p>Moderate-High significant impact. Distribution of units less responsive than Alternative 3 to established landscape settlement patterns and topography, including larger numbers of units spread across exposed shoulders rather than within kloof troughs. Although the intention is to avoid construction on slopes exceeding 1:5 as per DEADP's guideline is recognized, the result is greater development exposure.</p>	<p>HIA Diag D1 02 & 03 HIA 13.4i), ii), iii)</p>	<p>Moderate significant impact with mitigation, including adjustment of layout adjusted using Alternative 3 as reference. <i>Mitigation:</i> Consider placing more units in kloofs, even if on slopes exceeding 1:5. Such relocations should not negatively affect catchment areas. Consider modifying tree planting to create less formal rectilinear patterns as in Alternative 3. This will help to improve continuity with landscape patterns across adjoining property boundaries. The above impact rating pre-supposes appropriately scaled and configured architectural massing, with particular attention to roofscape. It is noted that such landscaping & built form does form part of this alternative, although currently not considered as responsive to context as applied in Alternative 3.</p>	<p>Medium</p>
<p>ii) The Toll House Precinct Nature: Neutral-Negative</p>	<p>Local Low Negative Permanent</p>	<p>Low significant impact, given that the precinct would not be impinged upon by the rest of the development, thereby retaining its spatial integrity.</p>	<p>HIA Diag D1 03</p>	<p>Low significant impact. <i>Mitigation:</i> no significant mitigation required provided that the landscaping proposals are properly implemented.</p>	<p>High</p>
<p>iii) The historic Gantouw Pass alignment Nature: Neutral</p>	<p>Local Low Negative Permanent</p>	<p>No-Low significant impact, given that the known parts of the alignment remain remote from the development with the remainder of the alignment would be commemorated as part of a conjecturally re-instated route.</p>	<p>HIA Diag D1 03</p>	<p>No-Low significant impact. <i>Mitigation:</i> no significant mitigation required</p>	<p>Med-High</p>
<p>iv) Historic farmsteads in the local context beyond the site incl. Goede Verwachting, Broadlands, Knorhoek & Ravensburg Nature: Neutral</p>	<p>Local No-Low Negative Permanent</p>	<p>No-Low significant impact, given that the werfs of these farms are shielded from the site by their own trees, other intervening planting patterns and the general topography.</p>	<p>HIA Diag D1 03</p>	<p>No-Low significant impact. <i>Mitigation:</i> no significant mitigation required provided that the landscaping proposals are properly implemented.</p>	<p>Medium</p>
<p>1.4.3 Scale of new development units in relation to their immediate spatial context Nature: Neutral-Negative</p>	<p>Local Low-Med Negative Permanent</p>	<p>Moderate-High significant impact, given the undeveloped and currently exposed nature of much of the development area, particularly on the upper slopes, and even though units have been scaled carefully.</p>	<p>HIA Diag D1 02 HIA 13.5i)-viii)</p>	<p>Moderate significant impact with mitigation, once landscaping has matured <i>Mitigation:</i> Co-ordinate scale of development and landscaping so as to maximize screening. Massing of roofscapes a particularly significant factor in this respect. Such landscaping & built form does form part of this alternative, although not considered as responsive as Alternative 3.</p>	<p>Med-High</p>

TABLE B

Read with the HIA Report Section 13: Design Informants, HIA Figures 3&4; Architectural Design Guidelines (Nelja Botha Architects), Landscape Guidelines (Planning Pnrs) & VIA (Albert vd Stok)

ACTIVITY: IMPACTS GENERATED BY NEW DEVELOPMENT: DESCRIPTION	MEASURE-MENT & DURATION OF IMPACTS	SIGNIFICANCE (UNMITIGATED) OF IMPACTS ON HERITAGE RESOURCES: (INCL BROADER CULTURAL LANDSCAPE CONTEXT)	REFERENCES	SIGNIFICANCE (MITIGATED) OF IMPACTS ON HERITAGE RESOURCES WITH MITIGATION RECOMMENDATIONS	CONFI-DENCE
<p>2. RE: DEVELOPMENT PRIORITY 2: COMPATIBILITY OF LANDSCAPE PATTERNS</p> <p>2.1 ALTERNATIVE 1:</p> <p>Introduction of new planting patterns Nature: <i>Not determinable</i>, in terms of this HIA</p> <p>2.2 ALTERNATIVE 2:</p> <p>Introduction of new planting patterns Nature: <i>Neutral-Positive</i>.</p> <p>2.3 ALTERNATIVE 3:</p> <p>2.3.1 Introduction of new planting patterns with particular attention to tree belts and clusters. Nature: <i>Positive</i></p> <p>2.3.2 Introduction of new built forms with regard to scale, configuration & distribution.</p> <p>i) The broader Sub-Regional landscape context Nature: <i>Neutral-Negative</i></p> <p>ii) The Toll House Precinct Nature: <i>Neutral</i></p> <p>iii) The historic Gantouw Pass alignment Nature: <i>Neutral</i></p>	<p><i>Not determinable</i></p> <p><i>Sub-regional Positive Permanent</i></p> <p><i>Sub-regional Positive Permanent</i></p> <p><i>Sub-regional Med-Negative Permanent</i></p> <p><i>Local Low Negative Permanent</i></p> <p><i>Local Low Negative Permanent</i></p>	<p><i>Not determinable</i>. Ad-hoc development in accordance with the zoning scheme could, however, result in development patterns at variance with the broader context.</p> <p>No-Low significant impact but this alternative nonetheless screened out from further consideration due to other factors.</p> <p>No (negative) significant impact. New planting patterns compatible with adjoining properties creating a landscaped continuum in the sub-regional and broader context. Considered to be a positive intervention, given the present degraded nature of much of the lower part of the property</p> <p>Low-Moderate significant impact on lower levels of the property, given the careful attention in preparing contextually compatible built forms co-ordinated with new planting patterns.</p> <p>Provisionally Moderate-High significant impact on the higher levels of the site, i.e. in the vicinity of the railway line. However, requires further investigation based on additional graphic analyses (group montages etc) before a more accurate assessment can be made for this area.</p> <p>Low-Moderate significant impact, given that the precinct would not be significantly impacted upon by the rest of the development, thereby retaining its spatial integrity.</p> <p>Low significant impact. Will not impinge on this alignment, as commemorated as part of a conjecturally re-instated route.</p>	<p>HIA 14.5</p> <p>HIA Diag 02 & D1 03 HIA 13.4</p> <p>HIA Diag 03 & D1 03 HIA 13.4i) & iii) CW DF pp5-11</p> <p>HIA Diag 03 & D1 03 HIA 13.4i) & iv) CW DF pp12-15; 23-41</p> <p>HIA Diag 03 & D1 03 HIA 13.4i) & iv) CW DF pp12-15; 23-41</p> <p>HIA Diag 03 & D1 03 HIA 13.4i) ii), iii), iv) & vi)</p> <p>HIA Diag D1 03</p>	<p><i>Not determinable</i></p> <p>No-Low significant impact but this alternative nonetheless screened out from further consideration due to other factors.</p> <p>No-Low significant impact with mitigation. <i>Mitigation:</i> The preparation of an Environment Conservation Management Plan ensuring the sustainability of the tree belts and clusters in accordance with the approved Site Development/Landscape Plan and the specialist botanical report.</p> <p>Low-Moderate significant impact with mitigation. <i>Mitigation:</i> The preparation and competent administration of approved, integrated, illustrated landscape and architectural design controls based on the draft development framework so far completed, in order to ensure that the proposals are properly implemented according to this framework's guiding principles.</p> <p>Difficult to establish with reasonable confidence the overall effectiveness of mitigating development in the upper remote zone of the site at this stage – and whether it would be possible to sufficiently reduce impacts in this area to moderate or lower levels even when units have been dug into the slopes. Until otherwise established, impacts must be assumed to remain of Moderate-High significance even if likely to be lower than for Alternative 4B as examined overleaf.</p> <p>Low significant impact. <i>Mitigation:</i> no significant mitigation required provided that the landscaping/architectural proposals are properly implemented as emphasized above.</p> <p>No-Low significant impact. <i>Mitigation:</i> no significant mitigation required</p>	<p><i>High</i></p> <p><i>High</i></p> <p><i>Med-High</i></p> <p><i>Med</i></p> <p><i>Low-Med</i></p> <p><i>Med</i></p> <p><i>Med-High</i></p>

<p>2.4 ALTERNATIVE 4B</p> <p>2.4.1 Introduction of new planting patterns with particular attention to tree belts and clusters. Nature: <i>Neutral-Negative</i></p> <p>2.4.2 Introduction of new built forms with regard to scale, configuration & distribution.</p> <p>i) The broader Sub-Regional landscape context Nature: <i>Neutral-negative</i></p> <p>ii) The Toll House Precinct Nature: <i>Neutral</i></p> <p>iii) The historic Gantouw Pass alignment Nature: <i>Neutral</i></p>	<p><i>Local Positive- Low Neg Permanent</i></p> <p><i>Sub-regional Low-Negative Permanent</i></p> <p><i>Local Low Negative Permanent</i></p> <p><i>Local Low Negative Permanent</i></p>	<p>Moderate significant impact. New planting patterns are generally compatible with adjoining properties. However, new rectilinear tree belt grids on lower – mid portions are over-stated in relation to surrounding less regular planting patterns. However, considered overall to have positive qualities given the present degraded nature of much of the lower slopes of the property.</p> <p>Moderate significant impact on lower levels of the property, given the careful attention to preparing contextually compatible built forms co-ordinated with the proposed planting patterns – albeit not as conceptually recessive as in Alternative 3.</p> <p>Moderate-High significant impact on the higher levels of the site, i.e. across the intermediate shoulders and higher in the vicinity of the railway line. Requires further investigation based on additional graphic information (group montages etc) before a more accurate assessment can be made for this area.</p> <p>Low-Moderate significant impact, given that the precinct would not be significantly impinged upon by the rest of the development, thereby retaining its spatial integrity.</p> <p>Low significant impact, Will not impinge on this alignment as commemorated, i.e. as part of a conjecturally re-instated route across the mid-lower slopes of the site.</p>	<p>HIA Diag 03 & D1 03 HIA 13.4i) & iii) PP LC 7</p> <p>HIA Diag 03 & D1 03 HIA 13.4i) & iv) PP LC 7 & pp6,11</p> <p>HIA Diag 03 & D1 03 HIA 13.4i) ii), iii), iv) & vi)</p> <p>HIA Diag D1 03</p>	<p>No-Low significant impact with mitigation. <i>Mitigation:</i> Modification of the tree belt patterns on the lower slopes to make them more compatible with the irregular rectilinear and other geometries of adjoining landscapes. The landscape patterns prepared as part of Alternative 3 can be used as a reference. Also; the preparation of an Environment Conservation Management Plan ensuring the sustainability of the tree belts and clusters in accordance with the approved Site Development/Landscape Plan</p> <p>No-Low significant impact with mitigation. <i>Mitigation:</i> The preparation and competent administration of integrated, illustrated landscape and architectural design controls in order to ensure that the proposals are properly implemented. Such design controls do form part of this alternative.</p> <p>Difficult to establish the effectiveness of mitigating development in the upper remote zone of the site without further visual evidence, – also whether it would be possible to reduce impacts in this area to moderate levels, if at all. Consider placing more units in kloofs, even if on slopes exceeding 1:5. Such relocations should not negatively affect catchment areas. Unless it can be otherwise established, impacts must be assumed to remain of Moderate-High significance.</p> <p>Low significant impact. <i>Mitigation:</i> no significant mitigation required provided that the landscaping/architectural proposals are properly implemented as emphasized above.</p> <p>No-Low significant impact. <i>Mitigation:</i> no significant mitigation required.</p>	<p><i>Med-High</i></p> <p><i>Med</i></p> <p><i>Low-Med</i></p> <p><i>Med-High</i></p> <p><i>Med-High</i></p>
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TABLE C

Read with the HIA Report Section 13: Design Informants, HIA Figures 3&4; Architectural Design Guidelines (Nelja Botha Architects), Landscape Guidelines (Planning Pnrs) & VIA (Albert vd Stok)

ACTIVITY: IMPACTS GENERATED BY NEW DEVELOPMENT: DESCRIPTION	MEASURE-MENT & DURATION OF IMPACTS	SIGNIFICANCE (UNMITIGATED) OF IMPACTS ON HERITAGE RESOURCES: (INCL BROADER CULTURAL LANDSCAPE CONTEXT)	REFERENCES	SIGNIFICANCE (MITIGATED) OF IMPACTS ON HERITAGE RESOURCES WITH MITIGATION RECOMMENDATIONS	CONFI-DENCE
<p>3. RE: DEVELOPMENT PRIORITY 3: INTEGRATION OF LANDSCAPE & ARCHITECTURAL PATTERNS WITHIN THE SITE</p> <p>3.1 ALTERNATIVE 1: Introduction of landscape & new architectural patterns: integration. Nature: <i>Not determinable</i>, in terms of this HIA</p> <p>3.2 ALTERNATIVE 2: Introduction of landscape & new architectural patterns: integration. Nature: <i>Negative</i></p> <p>3.3 ALTERNATIVE 3: Introduction of landscape & new architectural patterns: integration. Lower levels: Nature: <i>Positive</i> Upper levels: Nature: <i>Negative</i></p> <p>3.4 ALTERNATIVE 4B 3.4.1 Integration of landscape & new architectural patterns Nature: <i>Neutral-Negative</i> Lower levels: Nature: <i>Neutral-negative</i> Upper levels: Nature: <i>Negative</i></p> <p>4. RE: DEVELOPMENT PRIORITY 4: IMPACTS ON SIGNIFICANT PRECINCTS & OUTLOOKS</p> <p>4.1 ALTERNATIVE 1: Impacts from new development on significant precincts & outlooks Nature: <i>Neutral</i> in terms of this HIA</p>	<p><i>Sub-regional Not established Long Term</i></p> <p><i>Sub-regional Med-High Negative Permanent</i></p> <p><i>Sub-regional Positive Permanent</i></p> <p><i>Sub-regional Med-High Negative Permanent</i></p> <p><i>Sub-regional Low Negative Permanent</i></p> <p><i>Sub-regional Med-High Negative Permanent</i></p> <p><i>Sub-regional Low Negative Long Term</i></p>	<p><i>Not determinable,</i></p> <p>High significant impact by virtue of proposed development density (i.e. high number of units within the designated development area). Screened out from further consideration based on this and other factors</p> <p>Low significant impact at site development plan level for lower portions of the site.</p> <p>Provisionally Moderate-High significant impact on the higher levels of the site, i.e. in the vicinity of the railway line. This area requires further investigation based on additional graphic analyses (group montages etc) before a more accurate assessment can be made for this sensitive area. Proposals reflect interventions based on careful studies for integrating development and landscape</p> <p>Low-Moderate significant impact. on the higher levels of the site, i.e. in the vicinity of the railway line. Main negative issues relate to spatial relationships between rectilinear tree belts and dwelling units on low to lower-mid portions of the property.</p> <p>Provisionally Moderate-High significant impact on the higher levels of the site, i.e. in the vicinity of the railway line, particularly as seen from above (Sir Lowry's Pass and from similar elevated viewpoints (e.g. Schapenberg and Wedderwil Ridge). This area requires further investigation based on additional graphic analyses (group montages etc) before a more accurate assessment can be made for this sensitive area.</p> <p>Low significant impact</p>	<p>HIA Diag 01 & D1 03 HIA 14.5</p> <p>HIA Diag 02 & D1 03 HIA 13.4, 14.5</p> <p>HIA Diag 03 & D1 03 HIA 13.4ii) CW DF pp12-41</p> <p>HIA Diag 03 & D1 03 HIA 13.4ii) CW DF pp12-41 NB AC PP LC</p> <p>HIA Diag 01 & D1 03 HIA 14.5</p>	<p><i>Not determinable</i>, in terms of this HIA</p> <p>High significant impact notwithstanding mitigation Therefore screened out from further consideration</p> <p>Low significant impact with mitigation <i>Mitigation:</i> The preparation of integrated, illustrated landscape and architectural design controls as basis for informing development on the property, and subject to endorsement by HWC.</p> <p>Difficult to establish with reasonable confidence the overall effectiveness of mitigating development in the upper remote zone of the site at this stage – and whether it would be possible to sufficiently reduce impacts in this area to moderate or lower levels even when units have been dug into the slopes. Until otherwise established, impacts must be assumed to remain of Moderate-High significance even if likely to be lower than for Alternative 4B as examined overleaf.</p> <p>No-Low significant impact with mitigation: <i>Mitigation:</i> Consider more tree infill and less open space around housing units as per Alternative 3. This would also help to reduce cumulative impacts while resulting in greater compatibility with the irregular planting pattern geometries on adjoining properties.</p> <p>Difficult to establish with reasonable confidence the overall effectiveness of mitigating development in the upper remote zone of the site at this stage – and whether it would be possible to sufficiently reduce impacts in this area to moderate or lower levels even when units have been dug into the slopes. Until otherwise established, impacts must be assumed to remain of Moderate-High significance even if likely to be lower than for Alternative 4B as examined overleaf.</p> <p>Low significant impact. <i>Mitigation:</i> No mitigation recommended in terms of this process</p>	<p><i>High</i></p> <p><i>High</i></p> <p><i>Med-High</i></p> <p><i>Low-Med</i></p> <p><i>High</i></p> <p><i>Low-Med</i></p> <p><i>High</i></p>

Assessment of Site Development Alternative 3: Casa Maris Farm Knorhoek 830 (Ptns 8&9); Farm 838 (Rem); and Farms 839, 843, 862, 1052, 1100 & 1369, Stellenbosch Div. at Sir Lowry's Pass Village

<p>4.2 ALTERNATIVE 2: Impacts from new development on significant precincts & outlooks Nature: <i>Neutral</i> in terms of this HIA</p>	<p><i>Sub-regional High Negative Permanent</i></p>	<p>High-Very High significant impact relating to development density and large number of units. Screened out from further consideration</p>	<p>HIA Diag 02 & D1 03 HIA 13.4, 14.5</p>	<p>High significant impact notwithstanding mitigation Therefore screened out from further consideration</p>	<p><i>High</i></p>
<p>4.3 ALTERNATIVE 3: Impacts from new development on significant precincts & outlooks</p>					
<p>4.3.1 The Toll House Precinct Nature: <i>Neutral</i></p>	<p><i>Local Low Negative Permanent</i></p>	<p>Low-Moderate significant impact, given that the precinct would not be significantly impinged upon by the rest of the development, thereby retaining its spatial integrity.</p>	<p>HIA Diag D1 03</p>	<p>Low significant impact. <i>Mitigation:</i> no significant mitigation required provided that the landscaping proposals are properly implemented.</p>	<p><i>Med-High</i></p>
<p>4.3.2 The historic Gantouw Pass alignment Nature: <i>Neutral</i></p>	<p><i>Local Low Negative Permanent</i></p>	<p>Low significant impact, Will not impinge on this alignment as commemorated as part of a conjecturally re-instated route.</p>	<p>HIA Diag D1 03</p>	<p>No-Low significant impact. <i>Mitigation:</i> no significant mitigation required</p>	<p><i>Med-High</i></p>
<p>4.3.3 Historic farmsteads in the local context beyond the site incl. Goede Verwachting, Broadlands, Knorhoek & Ravensburg Nature: <i>Neutral</i></p>	<p><i>Local No-Low Negative Permanent</i></p>	<p>No-Low significant impact, given that the werfs of these farms are shielded from the site by their own trees, other intervening planting patterns and the general topography.</p>	<p>HIA Diag D1 03</p>	<p>No-Low significant impact. <i>Mitigation:</i> no significant mitigation required provided that the landscaping proposals are properly implemented.</p>	<p><i>Medium</i></p>
<p>4.3.4 From the N2 in general & Sir Lowry's Pass in particular.</p>	<p><i>Sub-regional Med-Negative Permanent</i></p>	<p>Moderate-High significant impact although these impacts occur from limited points along the N2, due to substantial treed edges and level changes along the N2 approach to Sir Lowry's Pass, and due to the curve of the mountain along the pass itself. Impacts would, otherwise have been rated higher.</p>	<p>HIA Diag D1 03 HIA 13.5(i), iii), v), vi) ADC 2.4, 2.6, 3.1</p>	<p>Difficult to establish the overall effectiveness of mitigation without the digital modelling undertaken for Alternative 4B, although it appears likely to result in lower visual impacts than for Alternative 4B. For this reason, it is not possible to establish with reasonable confidence at this stage whether impacts could be reduced to moderate or lower levels, even if probable. <i>Mitigation:</i> Consider placing more units in kloofs, even if on slopes exceed 1:5. Such relocations should not negatively affect catchment areas. Also employ other measures as stipulated in the Architectural & Landscape controls for Alternative 4B (especially relating to massing & configuration of roofs, fragmentation of built bulk, use of muted tones for wall finishes etc. Unless it can be otherwise established, impacts must be assumed to remain of Moderate-High significance, although likely to be less than for Alternative 4B as examined below.</p>	<p><i>Low-Med</i></p>
<p>4.4 ALTERNATIVE 4B: Impacts on significant precincts & outlooks</p>					
<p>4.4.1 The Toll House Precinct Nature: <i>Neutral</i></p>	<p><i>Local Low Negative Permanent</i></p>	<p>Low-Moderate significant impact, given that the precinct would not be significantly impinged upon by the rest of the development, thereby retaining its spatial integrity.</p>	<p>HIA Diag D1 03</p>	<p>Low significant impact. <i>Mitigation:</i> no significant mitigation required provided that the landscaping proposals are properly implemented.</p>	<p><i>Med-High</i></p>
<p>4.4.2 The historic Gantouw Pass alignment Nature: <i>Neutral</i></p>	<p><i>Local Low Negative Permanent</i></p>	<p>Low significant impact, Will not impinge on this alignment as commemorated as part of a conjecturally re-instated route.</p>	<p>HIA Diag D1 03</p>	<p>No-Low significant impact. <i>Mitigation:</i> no significant mitigation required</p>	<p><i>Medium</i></p>
<p>4.4.3 Historic farmsteads in the local context beyond the site incl. Goede Verwachting, Broadlands, Knorhoek & Ravensburg Nature: <i>Neutral</i></p>	<p><i>Local No-Low Negative Permanent</i></p>	<p>No-Low significant impact, given that the werfs of these farms are shielded from the site by their own trees, other intervening planting patterns and the general topography.</p>	<p>HIA Diag D1 03</p>	<p>No-Low significant impact. <i>Mitigation:</i> no significant mitigation required provided that the landscaping proposals are properly implemented.</p>	<p><i>Medium</i></p>
<p>4.4.4 From the N2 in general & Sir Lowry's Pass in particular.</p>	<p><i>Sub-regional Med-High Negative Permanent</i></p>	<p>High significant impact by virtue of greater exposure of units when compared to Alternative 3 - although impacts occur from certain points along the N2 only. Cause for considerable concern without mitigation.</p>	<p>HIA Diag D1 03 HIA 13.5(i), iii), v), vi) ADC 2.4, 2.6, 3.1</p>	<p>Moderate-High significant impact with mitigation, even once landscaping has matured. <i>Mitigation:</i> Removal of residential units on upper slopes would be encouraged, as this would reduce impacts significantly. Also consider placing more units in riverine kloofs, even if on slopes exceed 1:5. Such relocations should not negatively affect catchment areas. The above impact rating assumes implementation of landscaping that responds appropriately to adjacent established landscape patterns beyond the site; appropriately scaled and configured architectural massing with particular attention to roofscape. It is noted that such landscaping and built form is addressed as part of this alternative, although not considered as responsive to context as Alternative 3.</p>	<p><i>Medium-High</i></p>

TABLE D

Read with the HIA Report Section 13: Design Informants, HIA Figures 3&4; Architectural Design Guidelines (Nelja Botha Architects), Landscape Guidelines (Planning Pnrs) & VIA (Albert vd Stok)

ACTIVITY: IMPACTS GENERATED BY NEW DEVELOPMENT: DESCRIPTION	MEASURE-MENT & DURATION OF IMPACTS	SIGNIFICANCE (UNMITIGATED) OF IMPACTS ON HERITAGE RESOURCES: (INCL BROADER CULTURAL LANDSCAPE CONTEXT)	REFERENCES	SIGNIFICANCE (MITIGATED) OF IMPACTS ON HERITAGE RESOURCES WITH MITIGATION RECOMMENDATIONS	CONFI-DENCE
<p>5. RE: DEVELOPMENT PRIORITY 5: APPROPRIATELY INFORMED NEW ARCHITECTURE</p> <p>5.1 ALTERNATIVE 1: Architectural impact as informed by landscape, geography & climatic context (rather than style). Nature: <i>Undetermined</i> in terms of this HIA</p> <p>5.2 ALTERNATIVE 2: Architectural impact as informed by landscape, geography & climatic context (rather than style). Nature: <i>Undetermined</i></p> <p>5.3 ALTERNATIVE 3: 5.3.1 Architectural impact as informed by landscape, geography & climatic context (rather than style). Nature: <i>Neutral-Positive</i></p> <p>5.4 ALTERNATIVE 4B 5.4.1 Architectural impact as informed by landscape, geography & climatic context (rather than style). Nature: <i>Neutral-Positive</i></p>	<p><i>Undetermined</i></p> <p><i>Undetermined</i></p> <p><i>Local Positive Permanent</i></p> <p><i>Local Positive Permanent</i></p>	<p><i>Significance undetermined.</i> Would be established as development unfolds in terms of existing rights.</p> <p><i>Significance undetermined.</i> (Screened out due to other factors. (Architectural design therefore not developed).</p> <p>Low significant impact to the conceptual stage to which the proposals have been developed. Substantially in accordance with the HIA development informants.</p> <p>Low significant impact based on the proposed architectural design controls for this alternative. Substantially in accordance with the HIA development informants.</p>	<p>HIA 13.2</p> <p>HIA 13.2</p> <p>HIA Diag 03 & D1 03 HIA 13.5 CW DF pp17-41</p> <p>HIA Diag 04 & D1 04 HIA 13.5, 15.3 NB AC pp4-11</p>	<p><i>Significance undetermined.</i></p> <p><i>Significance undetermined.</i></p> <p>No-Low significant impact <i>Mitigation:</i> No mitigation necessary at the scale of architectural design development reached. More detailed architectural controls would, however, be required.</p> <p>No-Low significant impact <i>Mitigation:</i> No mitigation necessary with regard to architectural approach. Review of architectural controls document addressed in Section 15.3 of the HIA document.</p>	<p>-</p> <p>-</p> <p><i>Med-High</i></p> <p><i>High</i></p>
<p>6. RE: DEVELOPMENT PRIORITY 6: IMPACTS ON BOTANICAL & ARCHAEOLOGICAL SITES.</p> <p>6.1 ALTERNATIVE 1: Impacts on botanical sites. (Archaeological impact undetermined at this stage). Nature (Botanical): <i>Negative</i></p> <p>6.2 ALTERNATIVE 2: Impacts on botanical & archaeological sites. <i>Neutral-Positive</i></p> <p>6.2.1 Nature (Botanical)</p>	<p><i>Regional & National Low-Med Negative Permanent</i></p> <p><i>Regional & National Med-High Negative Permanent</i></p>	<p>Low-Moderate significant impact with regard to botanical impacts. (Archeological impacts are only possible to determine as development unfolds as existing rights are exercised).</p> <p>High-Very High significant impact in terms of the specialist botanical report. This alternative has been screened out due to this and other (negative) factors.</p>	<p>HIA Diag 01 & D1 03 CB BR Table 3</p> <p>HIA Diag 01 & D1 03 CB BR Table 4</p>	<p>Low-Moderate in terms of the specialist botanical report.</p> <p>Moderate-Very High significant impact in terms of the specialist botanical report.</p>	<p><i>Low</i></p> <p><i>Not stated. (Assumed to be Medium or higher).</i></p>

Assessment of Site Development Alternative 3: Casa Maris Farm Knorhoek 830 (Ptns 8&9); Farm 838 (Rem); and Farms 839, 843, 862, 1052, 1100 & 1369, Stellenbosch Div. at Sir Lowry's Pass Village

6.2.2 Nature (Archaeological)	<i>Regional Low Negative Permanent</i>	<i>Low significant impact</i> with regard to archaeological impacts at this stage of investigation. Will, however, require further investigation in the vicinity of the Toll House.	HIA Diag 01 & D1 03 ACO AIA, pp10, 20, 21	<i>Low significant impact</i>	<i>Med-High</i>
6.3 ALTERNATIVE 3: Impacts on botanical & archaeological sites.					
6.3.1 Botanical sites Nature: <i>Negative</i>	<i>Regional-National Med-High Negative Permanent</i>	<i>Moderate-High significant impact significant impact</i> , in terms of the specialist botanical report.	HIA Diag 01 & D1 03 CB BR Table 5	<i>Low-Moderate significant impact significant impact</i> , in terms of the specialist botanical report.	<i>Not stated. (Assumed to be Medium or higher).</i>
6.3.2 Archaeological sites Nature: <i>Neutral</i>	<i>Regional Low Negative Permanent</i>	<i>Low significant impact</i> , New buildings will not impinge on tangible remnants of the old Gantouw Pass alignment.	HIA Diag 01 & D1 03 ACO AIA, pp10, 20, 21	<i>Low significant impact</i> Further investigations required in the vicinity of the Toll House re: possible graves and old rubbish dumps.	<i>Medium-High</i>
6.4 ALTERNATIVE 4B: Impacts on botanical & archaeological sites.					
6.4.1 Botanical sites Nature: <i>Negative</i>	<i>Regional-National Med-High Negative Permanent</i>	<i>Moderate-High significant impact</i> , in terms of the specialist botanical report.	HIA Diag 01 & D1 03 CB BR Table 6	<i>Moderate-High significant impact significant impact</i> , in terms of the specialist botanical report.	<i>Not stated. (Assumed to be Medium or higher).</i>
6.4.2 Archaeological sites Nature: <i>Neutral</i>	<i>Regional Low Negative Permanent</i>	<i>Low significant impact</i> , New buildings will not impinge on tangible remnants of the old Gantouw Pass alignment.	HIA Diag 01 & D1 03 ACO AIA, pp10, 20, 21	<i>Low significant impact</i> Further investigations required in the vicinity of the Toll House re: possible graves and old rubbish dumps.	<i>Medium-High</i>