PROPOSED TOWNSHIP DEVELOPMENT HARTENBOS ERF 3122

VISUAL SCOPING REPORT

Prepared for

Cape $\operatorname{\mathcal{E}\!^{}}$ nvironmental $\operatorname{\mathcal{A}\!^{}}$ ssessment $\operatorname{\mathcal{P}\!^{}}$ ractitioners (Pty) Ltd

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HARTENBOS ERF 3122

VISUAL IMPACT ASSESSMENT SCOPING REPORT

1 INTRODUCTION

This scoping report has been prepared at the request of Ms. Louise-Mari of Cape EAPrac on behalf of the ATKV.

The proposed residential and group housing development is located on top of a ridge to the west of Hartenbos and may, due to its scale, extent and location have a moderate visual impact on the natural and social environments.

With reference to the "Guideline for involving Visual and Aesthetic Specialists in EIA Processes" compiled for the Provincial Government of the Western Cape: Department of Environmental Affairs and Development Planning (Oberholzer, B and CSIR 2005), the low density of residential stands and the group housing that together make up approximately 50 percent of the land area, the development can be classified as a Category 3 type. This category is defined as 'low density residential development' having 1 to 2 storey structures including cluster development that has approximately 50% of the area as green open space.

The visual guideline document indicates that a full visual impact assessment is not necessary because of the area of open space of more than 50% of the erf area and that no buildings are taller than 2 storeys. However due to the request by the Department of Environmental Affairs and Development Planning a Visual Impact Assessment report will be provided for completeness.

The property is situated on the top of a remnant of the coastal terrace that has been formed by head-ward erosion from seaward and landward sides. Refer to **Figure 1: Locality Plan**. The site overlooks extensive areas seaward (to the east) and landward (to the north, west and south).

2 OBJECTIVES

The terms of reference to achieve this objective are to:

 Describe the visual character of the site and surrounding area by evaluating components such as topography and current land use activities. This will record the status quo of the visual environment;

- Identify elements of particular visual quality that could be affected by the proposed project;
- Describe the visual intrusion of the proposed project from identified critical areas and view fields in terms of any constraints the visual impact may have on the detailed planning of the site

3 THE VISIBILITY IN CONTEXT

The visibility of the development will to a certain extent influence the visual intrusion in views toward that site and its immediate/adjacent surroundings.

The site is situated on the top of a landform that is the remnant of the wave cut terrace between the beach and the Outeniqua Mountains. The proposed development has been placed on the gently sloping top of the terrace. The site is on the watershed of the drainage lines that flow west and eastward inland and seaward respectively. This provides the site with views of 360 degrees. Surface water drainage has cut shallow but relatively steep sided valleys into the terrace from all directions. Refer to **Figure 1: Locality Plan**. The site is surrounded by land that slopes away on all sides. This configuration of the landform limits the visibility of the proposed development, from nearby and more distant areas. However the elevated site position will present the development around the edges prominently in middle distance views toward the site.

The scale and density of the proposed development will also contribute to the visibility. However the amount of open space provided will decrease the extent to which the proposed development will contrast with the surrounding existing development and open space.

4 STUDY APPROACH

This report considers the visibility or views of the Site from within a study area of 500m to 2000m from the Site boundaries. The visibility of the developed Site will be determined by how it will "fit" into the existing landscape form, character and scenic quality.

4.1 Study Approach and Method

An overall impression of the setting was obtained during a site visit on 4th of August 2017 when critical viewpoints, the extent of the view shed (the areas from

where the project is visible), intervening landform or structures which blocked views of the site, and the character, scale and visual quality of the setting were identified.

Topographical and cadastral maps to record ridgelines, viewsheds and the scale of the landform variation.

The <u>visibility and visual intrusion</u> experienced by viewers surrounding the site will be described and assessed.

The <u>visual intrusion zones</u> are measured from the boundary of the proposed development. These are zone 0-0.5 km, zone 0,5-1 km and > 1 km.

The view shed determination using 1: 50,000 topo-cadastral maps. This view shed is contour based.

The **Visual Assessment** will cover the following key aspects:

Description of the visual landscape of the area with specific focus on topographical features that offer impact mitigation opportunities and constraints.

Description of key areas from which the proposed project will be seen (the view shed) as well as the viewing distance.

An assessment of the visual absorption capacity of the landscape (i.e. the capacity of the landscape to visually absorb structures and forms placed upon it). Particular attention must be paid to conservation, tourism, eco-tourism and associated activities, and potential impacts on sense of place.

The identification of potential impacts (positive and negative, including cumulative impacts if relevant) of the proposal on the visual landscape during construction and operation.

Recommendations on route alternatives, and additional alternatives should they be identified, to avoid negative impacts.

The identification of mitigation measures for enhancing benefits and avoiding, reducing or mitigating negative impacts and risks (to be implemented during design, construction and operation of the proposed project).

The formulation of a clear and simple system to monitor impacts, and their management, based on key indicators.

To aid in the integration of findings, this study must involve close collaboration with the Heritage, Social and Socio-Economic Impact Assessments.

5 ASSUMPTIONS

The following assumptions have been made:

- The installation of the roads and services will take approximately 9 months and there will be a site office and site laydown area and that the development will be phased
- The housing units will be 1-2 storeys with a pitched roof

5.1 Alternatives

At this stage there are no alternatives. The assessment will be based on the layout plan that was developed as an outcome of the constraints determination phase. The Site falls within the urban edge as indicated on the Sub-Regional Structure Plan for the town expansion.

5.2 Limitations

The purpose of this visual assessment study is to identify the visual intrusion and visual impact of the proposed development on the Site in relation to the existing and future landscape setting.

The local ridgelines provide limits to views of the proposed development from further away and these have been used to define the view sheds.

In terms of the Guideline for involving Visual and Aesthetic Specialists in EIA Processes, Oberholzer, B., & CSIR, the scale of development and the area of open space approximately 50% of the land area, the assessment is considered to be a Category 3 with a minimum to moderate visual impact expected. The proposed development is similar to existing surrounding development that is built on land forms flatter than 1 in 4. This places the study at a level 2 as described by the above Guideline.

This requires that the following is addressed in the final assessment:

- Identification of the visual issues raised in the scoping phase;
- Description of the receiving environment and proposed project;

- Establishment of view catchment areas and receptors;
- Description of alternatives and mitigation measures.

6 DESCRIPTION OF THE PROJECT

The Development Area comprises a portion of land approximately 60.5 ha in extent on the gently sloping plateau of the remnant of a portion of the wave cut terrace. The site is located west of the N2 National Road on the landform known as Hartenbos Heuwels. Refer to **Figure 1: Locality Plan**.

The land use will include single residential, group housing units, retirement housing units, a recreation and a community centre, a residential facility and frail care and a business centre. Refer to **Figure 2: Site Plan**

There will be one collector road that will be the extension of Geelhout Lane. This road will exit on the southern boundary and will link to existing suburban collector road.

A central open space incorporates an eastward drainage line. The open space is the retained natural vegetation on the plateau and steep slopes.

The onsite services that are visible, will include internal roads for access and electrical cables both overhead and underground.

The style and character of the development has yet to be finalised. The maximum height of the units will be 2 storeys.

7 POTENTIAL VISUAL IMPACT

7.1 Visibility

The proposed residential development on the site will be visible from the sector north to east. This view will be of the row of houses that will form a line on the horizon.

The development will be seen in its entirety from the higher ground in the area to the south-west along the Aalwyndal Road.

The development will not be seen from the sector east to south because the landform is lower than the site and there are existing houses that will block views.

The views from the west, agricultural land use, will be of the housing that will be on the western edge of the site.

The greatest visibility of the proposed residential development will be experienced from within the 1 km radial in the north-east sector and near the 1 km radial in the south-west sector.

The visibility of the proposed development is considered to be <u>moderate to high</u>, because of the location on top of a plateau.

7.2 Visual Impact

The visual density of the proposed development will only be experienced from the south-west sector and from higher ground. However this view is from 1km but never the less the rural view over the valley to the hill is picturesque and this scene will altered in views from this position. The visual intrusion is related to the visibility factor and distance.

The visual intrusion in views from the north-eastern sector is considered <u>moderate</u> within the 1000 m radial and <u>low</u> beyond. This is due to the landform that is falls away to the north.

The visual intrusion on the quality of view from the south-western section is considered to be moderate because the view is downward onto the site.

7.3 Visual Prominence

The proposed residential development will have a <u>high</u> visual prominence within the 500 m radial and <u>moderate</u> within the 1000 m radial from the north- eastern sector.

The visual prominence will be <u>high</u> in views towards the site from the west within the 1000 m radial.

7.4 Sense of Place

The sense of place is affected by the visual prominence of the proposed development in the setting.

The rural and natural ambience and character of that setting of the visual unit 1 will be changed by the high visual prominence of the residential area from views within the visual unit.

The change in the sense of place of the hill view is considered to be <u>high</u> for those areas that have a view of the plateau and its edge as these views will be converted from a natural to a built scene. The visual units that will be affected are 2, 3, 4 and 5 within the 1000 m radial. However, the area to the east is already built up and abuts the site. This urban image already detracts from the rural and natural image of the site.

7.5 Landform Change

The gently sloping to flat areas of the plateau will not require significant cuts into the landform for both roads and buildings. However for those roads and units on the steeper sloping areas at the head of the valleys that drain eastward some earthworks will be required that will require large cut and fill areas for roads and to give access to erven.

The exposure of the cut and fill sections will have limited visibility in views from the east.

This visibility of earthworks will endure, particularly during the construction phase and will include the trenching for underground services. This is rated as low-medium.

7.6 Development Phases

The three development phases are construction, operation and decommissioning. The <u>construction</u> phase will cause significant visual change to the site as a result of the necessary earthworks for roads and the trenching for water, sewerage and electrical services. The individual development of erven will also result in localised visual change due to the necessary landform change to accommodate the new structures. This development phase is rated as having a <u>low</u> visual.

The visual intrusion of dust during earthworks and the visual nuisance of construction vehicles up and down the access roads will be significant, but of short duration, 6 months to a year. This phase will become less significantly visually intrusive in that setting as the rehabilitation measures take full effect.

The <u>operation</u> phase is taken to be the completed development. The visual image of the development will be stable and new vegetation planted will soften the form of the residential units particularly those that form the horizon on the plateau edge.

The <u>decommissioning</u> phase of the whole development area is if the development is to be demolished. This will form part of another study at that time for any new or alternative development.

7.7 The Night Scene

The proposed development will add significantly to the area of light in that setting. While the view of the development on the edge of the plateau will result in a night horizon that is lit, the view obliquely down from the higher ground to the south-west and south-east will include two large lit areas linked by a row of lights along the road.

This relatively intense grouping of lights along the roads and from the houses will change the night scene of that area in views towards the site.

The lights of the proposed development will extend the illumination of Hartenbos Heuwels suburb to include the entire hill. This is rated as <u>moderate</u> given the existing and lit surrounding area. The view of this hill from the western and south western sector will change from dark to highly illuminated. This is rated as <u>high</u> because of the view across the proposed development. This will alter the night time sense of place from a rural ambience to an urban ambience.

This new condition is not significant in views of the site from the north eastern, eastern and south eastern sector. However it will have an effect on the night time ambience of views from the south west and western sector.

The visual impact of the night scene is considered to be <u>moderate</u> to <u>low</u> in visual units 2, 3 and 4 and moderate to high in visual unit 5.

7.8 Visual Issues

The following visual issues have been identified as important, because the manner in which these are designed or resolved, can improve or detract from the visual intrusion / visibility of the proposed development experienced by viewers looking towards the site. On the other hand the visual quality of the development experienced by the property owners and their visitors also need to be considered.

7.8.1 The Residential Site

- Based on the existing contours, cuts and fills into the sloping landform will be necessary to enable public and private road access to certain residential units and sites.
- The provision for effective storm water retention, attenuation and surface flow dissipation will be required to prevent erosion of the eastward flowing drainage ways that will receive water from the proposed development.

- The intensity and density of lighting used, will determine the degree of night time visibility of the site.
- The retention of the existing indigenous vegetation, particularly on steep slopes will assist in improving the visual fit of the development to the site.
- The buildings/houses on the plateau edge of the site should ideally not present more than one storey and a pitched roof as this will increase the visual intrusion of the buildings on the horizon.
- The houses on the edges need to be set back as far as possible to reduce the silhouette effect they may exert when viewed from outside the development.
 The site plan already has incorporated a 25m buffer zone from the edge of the property

8 REFERENCES

OBERHOLZER, B, and CSIR (2005). Guideline for involving visual and aesthetic specialists in EIA processes. Provincial Government of the Western Cape: Dept of Environmental Affairs and Development Planning

PHOTOGRAPHS



Photo 1: View of NE Entrance off Geelhout Avenue. Note intrusive powerlines



Photo 2: View north from Site



Photo 3: View north east from site towards the estuary



Photo 4: View east from the water reservoir



Photo 5: View west from the reservoir



Photo 6: View north from the reservoir



Photo 7: View west along internal road



Photo 8: View south towards Mossel Bay from an internal road



Photo 9: View down an eastern drainage line towards Hartenbos



Photo 10: View south along an existing internal road



Photo 11: View west towards site from Tolbos Road



Photo 12: View west towards site from Kinderbessie Road



Photo 13: View west towards site from Keurboomshout Road



Photo 14: View north east towards the site from the Kapkop road



Photo 15: View east towards the site from the Welbedag road



Photo 16: View southeast towards the site from the R328/Welbedag road intersection



Photo 17: View south east across the Transand Sand and Stone company towards the site from the R328 road



Photo 18: View southeast towards the site from the Hartenbos River mouth



Photo 19: View south towards the site from the R101



Photo 19: View south towards the site from the N2

FIGURES

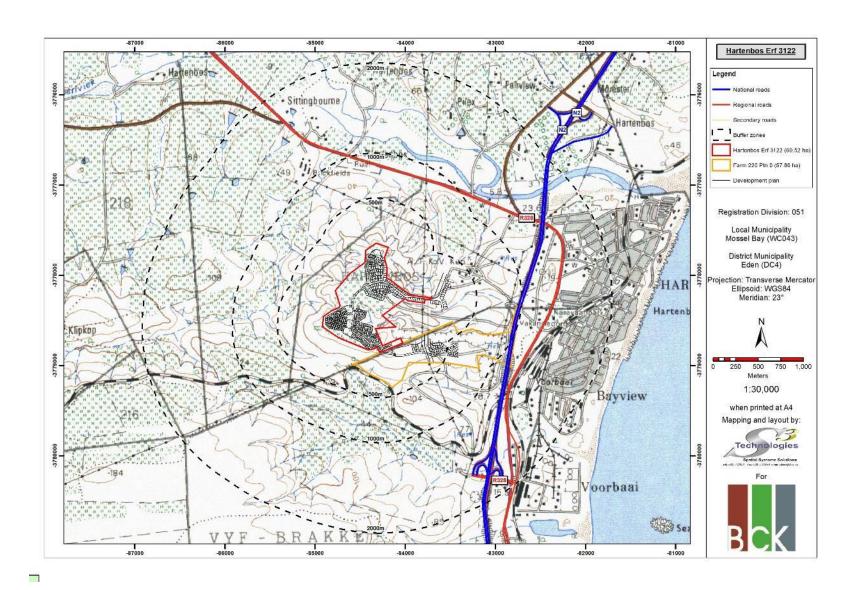


FIGURE 1 Locality Map

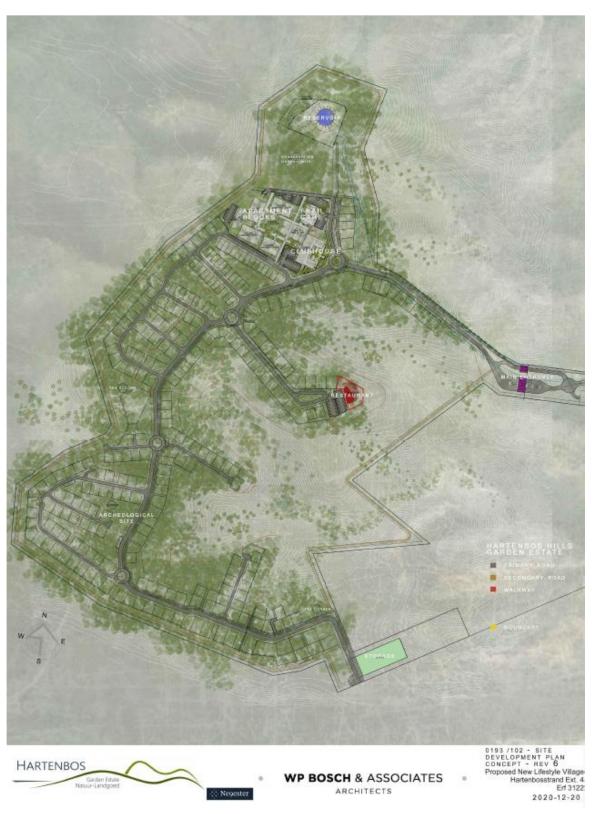


FIGURE 2 Site Map