ERF 21277, AALWYNDAL, MOSSEL BAY

VISUAL IMPACT ASSESSMENT

MAY 2024

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TABLE OF CONTENTS

1. INTRODUCTION

1.1. Background to the Report

FC Holm CC has been appointed to undertake a visual impact assessment for the proposed rezoning and development of a portion of Erf 21277, Aalwyndal, Mossel Bay (Portion A). The Proponent wishes to subdivide and develop a portion of Erf 21277 in response to the development potential of the area identified in the Aalwyndal Precinct Plan (2018).

A development comprising self storage/ workshop units is envisaged for Portion A of the property, following a rezoning application process to rezone the intended Portion A from Residential Zone I to Industrial Zone I (light industry). In response to the notification of intent to develop Erf 21277, Mossel Bay, Heritage Western Cape has requested that a visual impact assessment be undertaken to review the effect of potential visual impacts on the receiving environment.

1.2. Declaration of independence by the consultant

FC Holm CC is an independent consulting firm and other than fair remuneration for work performed to prepare this report have no business-, financial- or personal interest in the proposed developments. There are no other circumstances present that may compromise our objectivity and all material information, that could affect decision making, that has come to light during this study has been declared.

FC Holm CC is an established firm of professional architects and landscape architects based in the Southern Cape with more than 12 years' experience preparing visual impact assessments for various projects. We hold current professional registration with the SA Council for the Landscape Architecture Profession (SACLAP) and the SA Council for the Architecture Profession (SACAP).

1.3. Terms of Reference

The visual impact assessment is prepared in accordance with the Western Cape Government, Department of Environmental Affairs and Development Planning Guideline - Involving Visual and Aesthetics in an EIA Process (2005).

The following characteristics of the site and the proposed developments are listed as 'triggers,' in terms of the above guideline, that suggest visibility and aesthetics are likely to be key issues and may require specialist input:

The nature of the receiving environment:

- Areas with proclaimed heritage sites or scenic routes.
- Areas with important vistas or scenic corridors.
- Areas with visually prominent ridgelines or skylines.

The nature of the project:

- A change in land use from the prevailing use.
- A significant change to the fabric and character of the area.
- Possible visual intrusion in the landscape.

The site is situated partially within view of the N2 when approaching Mossel Bay from the west. The N2 has been identified as an important scenic route and view corridor all along the Garden Route, but visibility towards the site from the N2 is limited as will be discussed in subsequent parts of the visual impact assessment.

The site has previously been farmed and no areas of pristine, undisturbed vegetation remain. The portion of Erf 21277 that has been earmarked for development has been cleared in the past and put to pasture for farm animals.

In light of the above the type of environment can be described as "Areas or routes of low scenic, cultural, historical significance / disturbed".

The type of development falls within Category 4 development: e.g. medium density residential development, sports facilities, small-scale commercial facilities / office parks, one-stop petrol stations, light industry, medium-scale infrastructure. When the type of environment is correlated with the development Category 4, indication is that moderate visual impact can be expected.

The category of issues when moderate visual impact is expected includes:

- Potentially some effect on protected landscapes or scenic resources.
- Some change in visual character of the area.
- Introduces new development or adds to existing development in the area.

Table 1: Categorisation of issues to be addressed by the visual assessment

Type of environment	Type of development (see Box 3) Low to high intensity				
	Category 1 development	Category 2 development	Category 3 development	Category 4 development	Category 5 development
Protected/wild areas of international, national, or regional significance	Moderate visual impact expected	High visual impact expected	High visual impact expected	Very high visual impact expected	Very high visual impact expected
Areas or routes of high scenic, cultural, historical significance	Minimal visual impact expected	Moderate visual impact expected	High visual impact expected	High visual impact expected	Very high visual impact expected
Areas or routes of medium scenic, cultural or historical significance	Little or no visual impact expected	Minimal visual impact expected	Moderate visual impact expected	High visual impact expected	High visual impact expected
Areas or routes of low scenic, cultural, historical significance / disturbed	Little or no visual impact expected. Possible benefits	Little or no visual impact expected	Minimal visual impact expected	Moderate visual impact expected	High visual impact expected
Disturbed or degraded sites / run-down urban areas / wasteland	Little or no visual impact expected. Possible benefits	Little or no visual impact expected. Possible benefits	Little or no visual impact expected	Minimal visual impact expected	Moderate visual impact expected

The recommended level of visual input required is consistent with a level 3 visual assessment.

Approach	Type of issue (see Box 4)				
	Little or no visual impact expected	Minimal visual impact expected	Moderate visual impact expected	High visual impact expected	Very high visual impact expected
Level of visual input recommended	**Level 1** visual input	**Level 2** visual input	**Level 3** visual assessment	**Level 4** visual assessment	

Specific concepts that should be considered when providing visual inputs into the environmental authorisation process include the following (p.2, Oberholzer, B. 2005.):

- An awareness that 'visual' implies the full range of visual, aesthetic, cultural and spiritual aspects of the environment that contribute to the area's sense of place.
- The consideration of both the natural and the cultural landscape and their inter-relatedness.
- The identification of all scenic resources, protected areas and sites of special interest, together with their relative importance in the region.
- An understanding of the landscape processes, including geological, vegetation and settlement patterns, which give the landscape its particular character or scenic attributes.
- The need to include both quantitative criteria such as 'visibility' and qualitative criteria, such as aesthetic value or sense of place.
- The need to include visual input as an integral part of the project planning and design process, so that the findings and recommended mitigation measures can inform the final design.
- The need to determine the value of visual/aesthetic resources through public involvement.

The objectives of this report are as follows:

- Describe the proposed development.
- Describe the receiving environment.
- Establish the visual envelope and receptors, including view catchment area, view corridors and viewpoints.
- Establish the visual absorption capacity of the landscape influenced by topography, vegetation cover, urban developments, and settlement patterns.

- Determine the visibility of the proposed development and its relative compatibility or conflict with the receiving environment.
- Identify potential visual impacts.
- Provide mitigation measures.

1.4. Methodology

The following steps will be taken to complete the visual impact assessment:

- Describe the existing characteristics of the site and its environs by means of a review of existing information, site visits and photographic survey.
- Conduct desk top study to determine and describe scenic character and sense of place, visibility, visual exposure and visual sensitivity of the site by means of a mapping exercise and review of other existing information.
- Determine significant viewpoints and areas where views of the site and proposed developments will be possible.
- Assess the potential visual impacts of the proposed project on the receiving environment.
- Propose measures that will mitigate the potential visual impacts.

1.5. Assumptions and Limitations

This report was prepared during the planning stages of the project and assumes that the base information provided by others is correct.

A combination of 1:50 000 topo-cadastral maps, site photographs, open-source satellite imagery and GIS mapping techniques were used to prepare this report. The digital generation of viewsheds is based on topographical landform information and does not take into account screening effect of vegetation and buildings. Although every effort to maintain accuracy was undertaken, the use of satellite imagery and not measured survey information may not represent an exact visibility of the site or proposed developments.

The visual study was based on the development proposal provided by the proponent and does not review alternative design layouts.

2. THE AFFECTED ENVIRONMENT

2.1. Site Location and Description

The site on which the proposed development is planned is a portion of Erf 21277, Mossel Bay, located in the area known as Aalwyndal, situated to the west of Voorbaai. This area is characterized by smallholdings of approximately 7 Ha in size and is currently zoned Residential Zone I.

image: Google Earth https://earth.google.com

Figure 1: Site context.

image: Cape Farm Mapper https://gis.elsenburg.com/apps/cfm/

Figure 2: Development site

Erf 21277, Aalwyndal, Mossel Bay, is approximately 7.7 hectares in extent and is situated on Nagtegaal Street. The proponent intends to subdivide a portion of approximately 1.44 Ha (Portion A) in the southeastern corner of Erf 21277 and rezone the portion where new developments are proposed to Industrial Zone I.

In terms of the Mossel Bay Spatial Development Framework (2017) the property falls within the urban edge, within which development proposals will be considered. A further study, The Aalwyndal Precinct Plan, was completed in 2018 to guide future development in Aalwyndal. This area has been earmarked for intensified urban development that will include plans to enlarge the present Mossel Bay Airfield. Erf 21277, Mossel Bay, is situated within the area where noise levels are considered unsuitable for residential purposes and has been identified as suitable for commercial development, including services related to the Airfield such as storage.

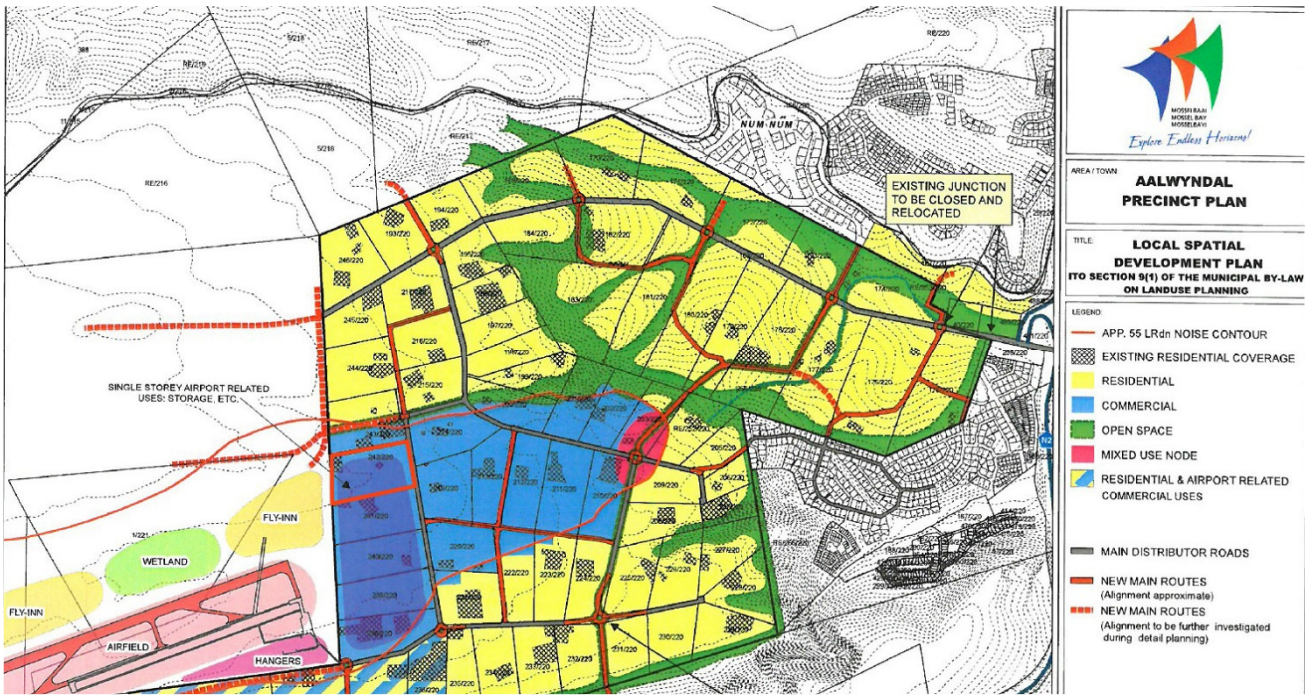

Figure 3: Excerpt from Aalwyndal Precinct Plan (2018).

2.2. Description of the Proposed Development

The Proponent wishes to develop a storage facility on a 1.442 ha portion of Erf 21277, Aalwyndal. A total of 456 storage units are proposed on the site, to be constructed in two phases, with associated office and ablution area. There will be six blocks of storage units when all phases are complete with a total coverage of 6910m². Five blocks of storage units situated along the Southern, Western and Northern boundaries of the site will be single storey while the central block will have two floors (ground + 1).

Entrance to the proposed development is located on Nagtegaal Street as indicated on the site plan (Appendix A). Parking bays (76 in total) have been positioned along the Eastern boundary bordering Nagtegaal Street and between blocks of storage units on the site. Parking bays to the Western portion of the site will be covered by shading structures.

See Appendix A for site layout of the proposed development.

3. VISUAL CONTEXT AND SPECIFIC CRITERIA FOR VISUAL IMPACT ASSESSMENT

This section describes the visual environment in which the development is situated and includes landscape type, landscape character and sense of place as determined by geology, landforms, vegetation cover, land use and settlement patterns. This provides a baseline context for assessment of the proposed development on the receiving environment.

The site lies west of Voorbaai in Mossel Bay in an area characterised by residential small holdings and small-scale farming.

The site is partially visible from the N2 that has been identified as a scenic route and is an important view corridor for tourists and holiday makers visiting the area. Tourism is one of the major economic drivers in the Garden Route.

3.1. Scenic Resources

3.1.1. Landform and Topography

The site lies at an elevated position on a small plateau surrounded by undulating coastal plains. A series of rivers and drainage lines bisect the coastal plains at various points, flowing towards the ocean. Mossel Bay is situated on a rocky outcrop that terminates at the Point and the area known as Kwanoqaba borders Aalwyndal to the south. There is a sharp drop in elevation to the south of the site at the edge of the plateau, through which the N2 decends towards Diaz beach and Voorbaai to the north. This results in limited visibility towards the site from the N2 as it descends towards Voorbaai and the town centre of Mossel Bay.

To the east of Aalwyndal and the site lies the Voorbaai precinct which is marked by light industrial development interspersed with residential areas. Voorbaai is situtated along a fairly narrow coastal section following the curve of the bay and bordered to the west by undulating hills rising to the plateau on which Aalwyndal is situated.

Elevation across the site varies from approximately 165 m at the south-eastern corner to approximately 170 m above M.S.L. at the north-western corner. Slopes are moderate across the site not exceeding 1:4 (<25%). Slopes >1:4 increase visual sensitivity due to the need for cut and fill areas needed to accommodate building platforms and roadways.

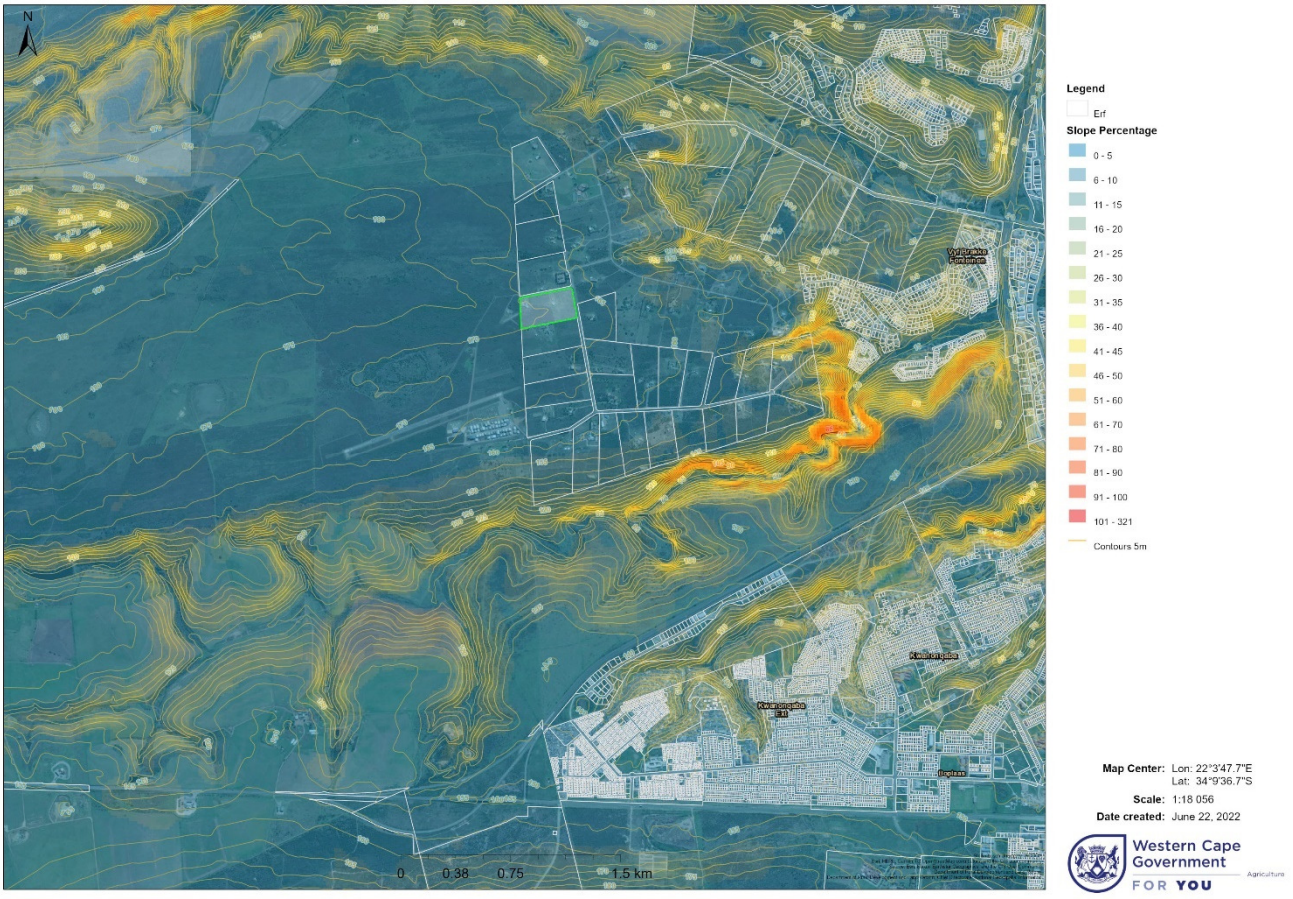

image: Cape Farm Mapper https://gis.elsenburg.com/apps/cfm/

Figure 4: Slope analysis of the area within which the site is situated.

Topography of the broader landscape comprises undulating hills and valleys. Hillsides are typically rounded with a series of convex slopes alternating with valleys along drainage lines.

Ridgelines along the hilltops to the north, south and west of the site limit the view catchment area to a localised extent of a few meters to approximately 4.5 kilometers.

3.1.2. Vegetation

For the purpose of the visual impact assessment the screening value only of the vegetation is considered.

The site is situated in an area mapped as North Langeberg Sandstone Fynbos according to the vegetation map of 2018. The property has been farmed in the past and no areas of pristine vegetation remain. The portion where new developments are proposed has previously been cleared and used for grazing.

Vegetation across the proposed development site consists of mostly low growing grasses with woody and herbaceous perennials <1m in height, interspersed with occasional small trees and shrubs up to approximately 2m height.

Figure 5: Vegetation looking across the site towards the west from Nagtegaal Street.

Figure 6: Close up of vegetation on site looking west.

Figure 7: View of vegetation on site looking north east.

Taller trees on site and surrounding the development site are sparse and limited to a few specimen trees planted in gardens surrounding farmhouses and tree avenues visible in the distance planted along boundaries and as wind breaks. No tall trees are present on the development site that could provide screening.

Figure 8: View of vegetation looking north towards neighbouring site Erf 21278.

Due to the low growing vegetation on site and lack of trees and tall bush clumps that could provide screening, the screening value of vegetation on site is rated as low.

Land Use and Settlement Patterns

Aalwyndal is an area of small holdings located between Voorbaai to the east and Mossel Bay Airfield bordering the precinct to the west. Access to the Mossel Bay Airfield passes the site along Nagtegaal Street.

Land use in the vicinity of the site is predominantly rural residential with some small-scale farming activities. Some guest houses, a wedding venue, holiday farms and a caravan camping facility are located in the precinct. A frail care centre and boutique hotel is situated on the corner of Aalwyn - and Klipheuwel Road.

Building density is low with mostly single- to double storey free-standing dwellings and farm buildings surrounded by open fields and pastures.

3.1.3. Landscape Character and Sense of Place

Landscape character embodies more than just the physical characteristics of the site and includes the history, land-use and other cultural factors that have distinguished the site over time.

These factors combine to establish sense of place, which can broadly be defined as the unique quality or character of a place, whether natural, rural or urban. It relates to the unique qualities, distinctiveness or strong identity of a particular place. Sense of place is that quality that imparts identity to a particular location, the extent to which a person can recognize or recall a place as being distinct from other places – as having a vivid, unique, or particular character of its own. Intense familiarity will create a sense of place, just as will special form (Lynch, 1996. p.132).

The current landscape typology of the Aalwyndal area is a combination of rural-, residential- and commercial/ light industrial activities associated with the Mossel Bay Airfield and a few other sites in the vicinity of the Airfield. Open farmlands and disturbed landscape predominate, interspersed with smaller patches of relatively undisturbed natural vegetation.

3.2. Visibility of the Proposed Development

Visibility of the project relates to the geographic area from which the project will theoretically be visible, or the view catchment area. This also relates to the number of receptors. Visibility criteria is defined as follows (Oberholzer, B. 2005):

High visibility	Visible from a large area (e.g. several square kilometres).
Moderate visibility	Visible from an intermediate area (e.g. several hectares).
Low visibility	Visible from a small area around the project site.

The view catchment area is determined primarily by topography and is typically defined by ridgelines that limit views to and from a site.

The zone of visual influence of a project may be smaller due to the potential screening effect of trees, existing developments and distance from proposed developments.

3.2.1. The View Catchment Area

The view catchment area refers to the theoretical outer-most extent from which the site and proposed developments can be seen.

Theoretically the area from which the site could be visible extends to the ridgelines surrounding the site as well as along the N2 view corridor approaching Mossel Bay from the west.

The undulating topography on which the site is situated has the effect of reducing the zone of visual influence to a smaller area.

3.2.2. Zone of Visual Influence

The zone of visual influence is an area subject to the direct visual influence of a particular project.

The proposed development site is situated in an elevated position relative to the surrounding landscape and the effect of the topography is to limit the zone of visual influence to an area of between 2 to approximately 5 km outward from the site.

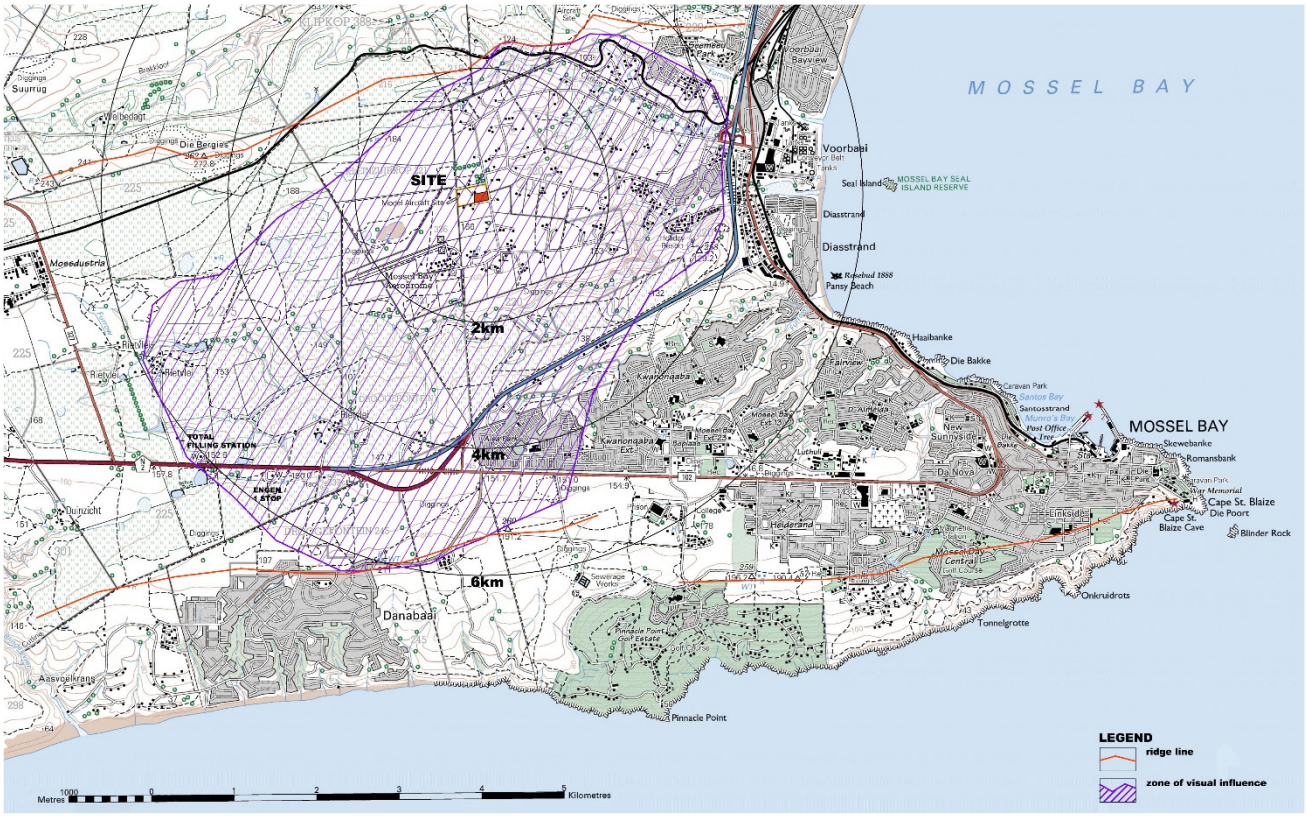

Figure 9: View catchment area and zone of visual influence for the development site (not to scale).

3.3. Visual Sensitivity of the area

Visual sensitivity of the site relates to the inherent visibility of the landscape, usually determined by a combination of topography, landform, vegetation cover and settlement pattern. This translates into visual sensitivity.

Summary of sensitivity criteria of topographical features:

High visual sensitivity	**Topography & Landform**: ridgelines; steep slopes
	Vegetation: no or minimal screening by vegetation < 1m in height.
	Landuse/ Heritage value: special features on site; no or minimal screening by existing development.
Moderate visual sensitivity	**Topography & Landform**: convex slopes; steep slopes.
	Vegetation: partial screening by vegetation.
	Landuse: partial screening by existing development.
Low visual sensitivity	**Topography & Landform:** valleys.
	Vegetation: tall trees; dense vegetation > 5m height.
	Landuse & Heritage value: no special site features; high degree of visual integration and screening by existing developments.

The following aspects were considered in terms of sensitivity rating for the site:

Areas of high visual sensitivity

- Topography and landforms –the site is situated at an elevated position in relation to surrounding topography, no valleys or outcrops are present in the vicinity of where new developments are proposed that could provide screening.
- Portions of the site where vegetation is <1m in height.

Areas of moderate visual sensitivity

- Topography and landforms – areas where slopes are moderate that are not located on ridgelines
- Areas where non-invasive vegetation provides partial screening.

Areas of low visual sensitivity

- Slopes < 1:4 that will require minimal grading and cut and fill operations that would cause visual scarring.
- Areas where non-invasive vegetation provides good screening >5m in height.

3.4. Visual Sensitivity of Receptors

The level of visual impact considered acceptable is dependent on the type of receptors.

High sensitivity	e.g. residential areas, nature reserves and scenic routes or trails;
Moderate sensitivity	e.g. sporting or recreational areas, or places of work;
Low sensitivity	e.g. industrial, mining or degraded areas.

The receptors in the area influenced by the proposed developments have been identified as follows:

Highly sensitive receptors:

- Residents and tourists in Aalwyndal and surrounding areas.
- The N2 scenic tourist route.

Moderately sensitive receptors:

- Places of work relating to farms, hotels and guesthouses and other businesses in Wilderness.

Low sensitivity:

- Light industrial developments associated with the Mossel Bay Airfield.

3.5. Visual Absorption Capacity of the Landscape

Visual absorption capacity (VAC) relates to the potential of the landscape to conceal the proposed project.

High VAC	e.g. effective screening by topography and vegetation.
Moderate VAC	e.g. partial screening by topography or vegetation.
Low VAC	e.g. little screening by topography or vegetation.

Visual absorption capacity is closely linked to the concept of compatibility with the surrounding landscape, but the emphasis is on the area's ability to visually absorb the development, not the proposed development's ability to fit into the surroundings.

In terms of topography the site is moderately exposed. Although Aalwyndal is situated on a plateau there are no prominent ridgelines present near the development site and partial screening is provided by existing developments and vegetation when viewed from a distance.

Visual absorption capacity of the surrounding landscape is rated as moderate to low due to partial screening from surrounding areas > 2km away to little screening by topography and vegetation from areas within a radius of < 2km from the site.

3.6. Visual Intrusion

Visual intrusion relates to the level of compatibility or congruence of the project with the particular qualities of the area, or its 'sense of place'. This is related to the idea of context and maintaining the integrity of the landscape or townscape.

High visual intrusion	Results in a noticeable change or is discordant with the surroundings.
Moderate visual intrusion	Partially fits into the surroundings, but clearly noticeable.

Low visual intrusion	Minimal change or blends in well with the surroundings.

The proposed development is of a nature and scale which is comparable to similar development in Aalwyndal and at the Mossel Bay Airfield. Building density will be much higher than the present situation on adjacent erven in Aalwyndal but will be limited to a smaller portion of Erf 21277 (1.44 Ha, Portion A). The type and size of buildings proposed for the new storage units can be compared to structures that would be expected in a farming / smallholding area such as sheds and buildings used to house horses and cattle.

Storage buildings of a similar nature are present at the Mossel Bay Airfield and on other properties in the Aalwyndal area in close proximity to Erf 21277.

Figure 10: Storage buildings at Mossel Bay Airfield.

Figure 11: Storage buildings and sheds in the vicinity of Erf 21277.

The proposed developments will result in a noticeable change in the surroundings and will be clearly visible but will not be discordant with current developments in the area.

Visual intrusion can be expected to be moderate.

3.7. Visual exposure

Visual exposure is based on the distance from the project to selected viewpoints. Exposure or visual impact tends to diminish exponentially with distance.

High exposure	Dominant or clearly noticeable.
Moderate exposure	Recognisable to the viewer.
Low exposure	Not particularly noticeable to the viewer.

Critical viewpoints were established based on visual corridors and views onto the site to establish visual exposure. Viewpoints were taken where visual effects would be expected to be higher and where most sensitive receptors would be expected to be exposed to views of the site and proposed new developments.

Figure 12: Viewpoints Key map

Viewshed maps were taken using key viewpoints identified in the field based on 5m contours to show visibility of the site from a distance based on topography.

3.7.1. Viewpoint 1

Viewpoint 1 is situated on the corner of Aalwyn Way and Klipheuwel Way at a distance of approximately 1 km from the site looking in a southwesterly direction. Coordinates for this point are 34°08′32,79″S and 22°04′5,454″E.

Figure 13: Viewpoint 1 Corner of Aalwyn- and Klipheuwel Way looking southwest towards the site.

Viewshed taken from this viewpoint indicates which portions of the site may be visible.

Figure 14: Viewshed of Viewpoint 1 showing portions of the site that would theoretically be visible based on topography only.

The viewshed taken from this position indicates that the site at ground level will not be visible from Viewpoint 1. In addition to low visibility indicated by the viewshed, views towards the site are well screened by existing developments and vegetation. New developments are not likely to be distinctly noticible to a viewer from this vantage point.

Visual exposure from Viewpoint 1 is expected to to be low.

3.7.2. Viewpoint 2

Viewpoint 2 is situated on Klipheuwel Road, at a distance of approximately 0.5 km from the site looking in a westerly direction. Coordinates for this point are 34°08′58,784″S and 22°04′17,464″E.

Figure 15: Viewpoint 2 looking west towards the site.

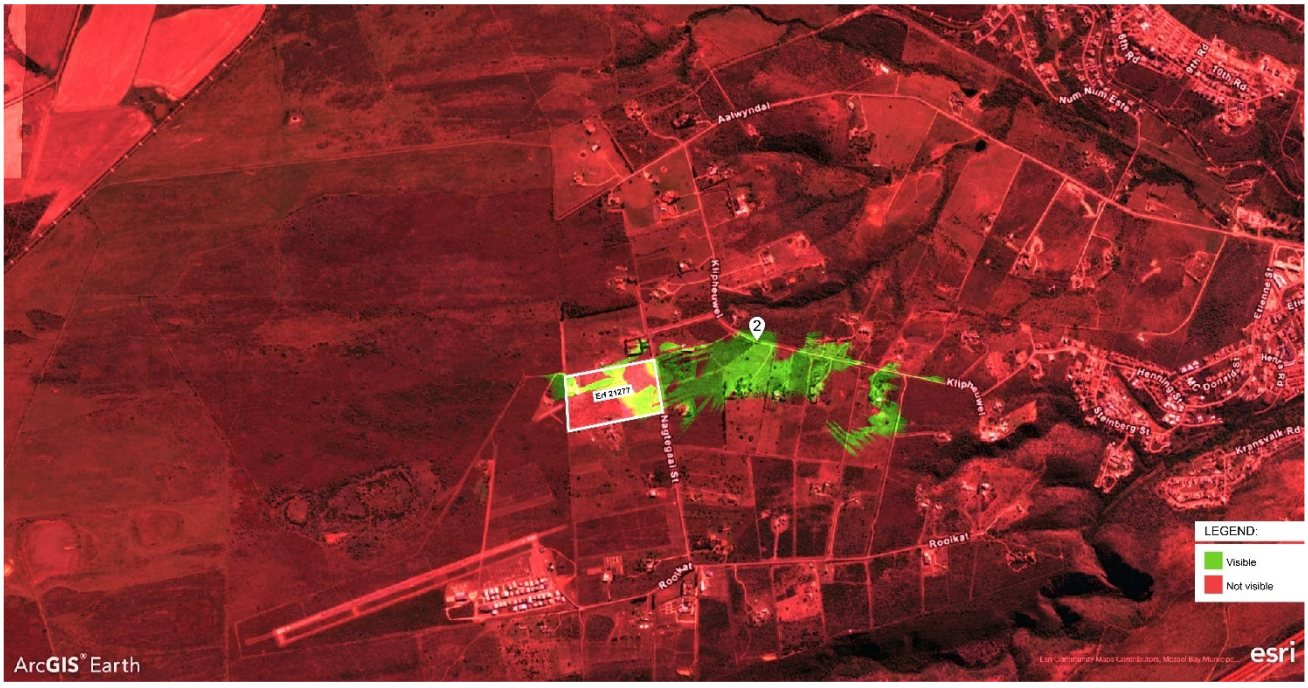

Figure 16: Viewpoint 2 viewshed.

From this viewpoint Portion A of Erf 21277 will be visible to receptors with partial screening provided by topography and vegetation. From this viewpoint the majority of taller shrubs providing screening are invasive species that may have to be removed in terms of CARA legislation, that could lead to reduced screening by vegetation over time.

Visual exposure from Viewpoint 2 is expected to to be moderate.

3.7.3. Viewpoint 3

Viewpoint 3 is situated on the corner of Rooikat- and Nagtegaal Street, at a distance of approximately 0.6 km from Erf 21277, Portion A, looking in a northerly direction towards the site. Coordinates for this point are 34°09′29,115″S and 22°04′6,811″E.

Figure 17: Viewpoint 3: Corner of Rooikat- and Nagtegaal Street, looking north towards the site. Partial screening is provided by vegetation.

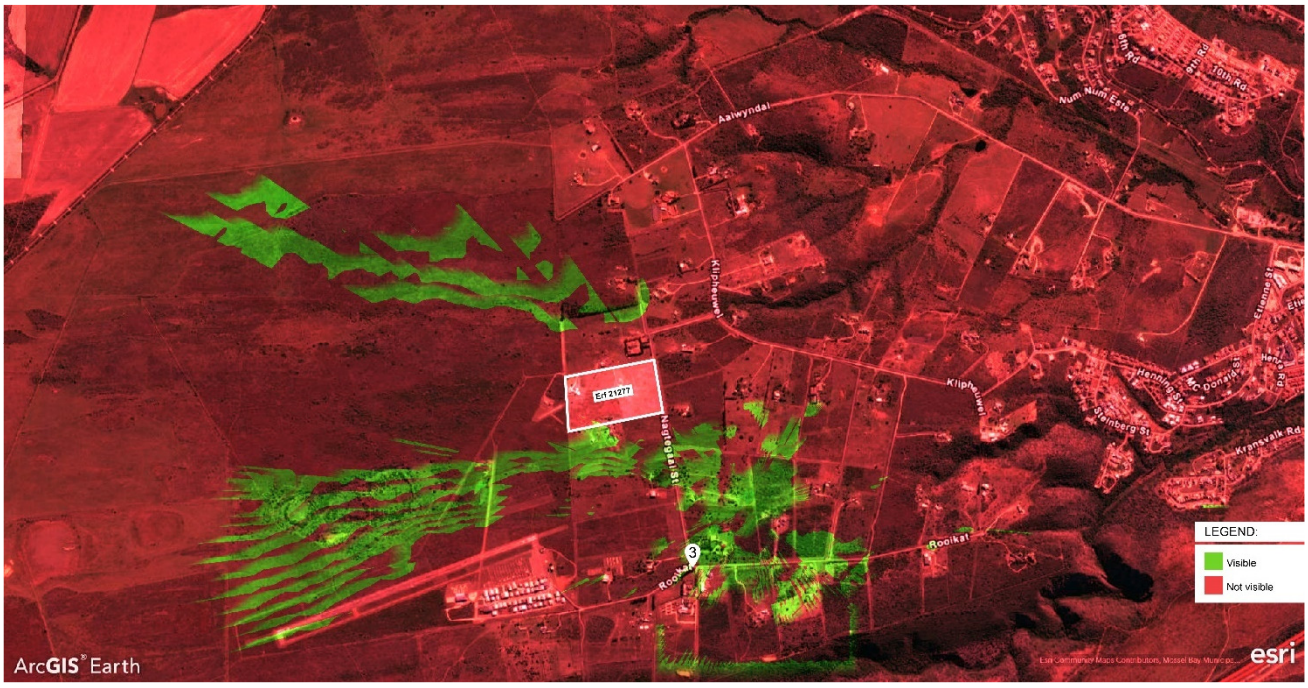

Figure 18: Viewpoint 3 viewshed.

Although the viewshed taken from this viewpoint indicate that the site at ground level will not be visible to receptors taking only topography into account, the view down Nagtegaal Street creates a view corridor from which new developments at a roof height of approximately 6900mm could be partially visible to receptors.

Partial screening would be provided by adjacent landuse with a number of similar shed-type buildings in the foreground.

Visual exposure from Viewpoint 3 is expected to to be moderate.

3.7.4. Viewpoint 4

Viewpoint 4 is situated on Flora Road leading to Danabaai, opposite the Mosselbaai Aftree & Leefstyloord, looking in a northerly direction towards the site. This viewpoint is at a slightly elevated position relative to Erf 21277, Portion A, situated at a distance of approximately 4 km from the site. Coordinates for this point are 34°11′19,801″S and 22°03′45,484″E.

Figure 19: Viewpoint 4 situated on Flora Road looking in a northerly direction towards the site.

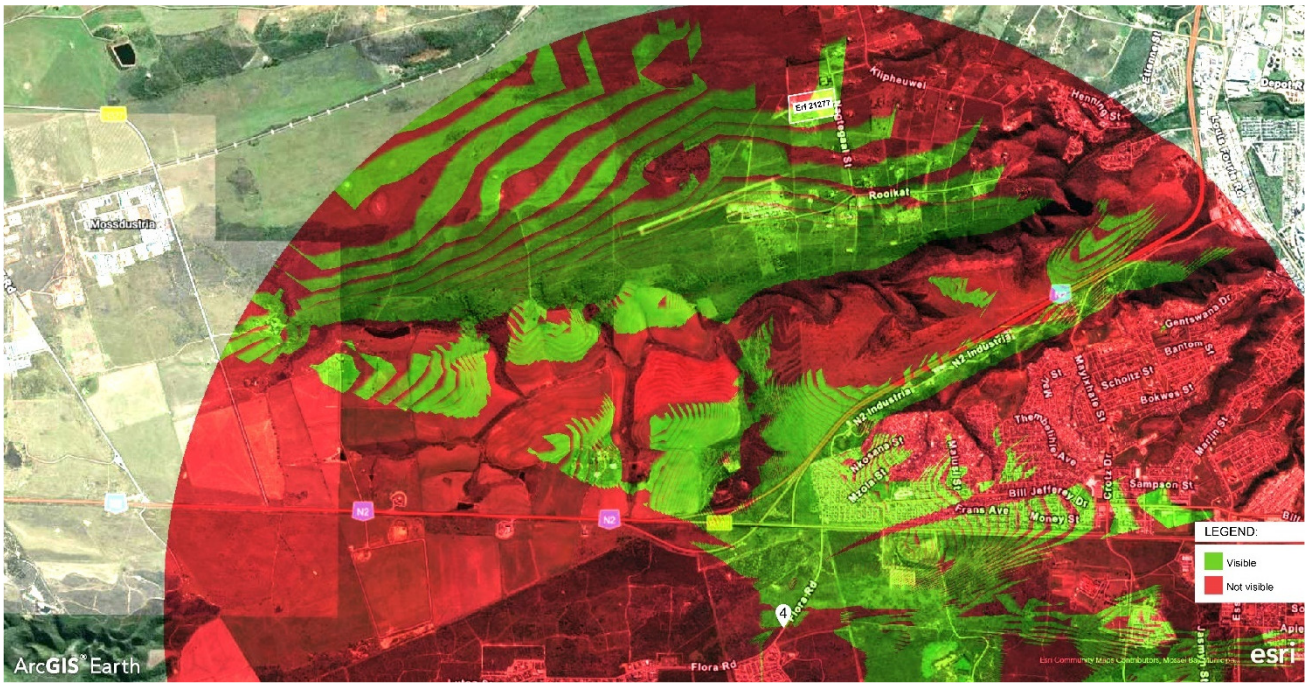

Figure 20: Viewpoint 4 Viewshed.

The viewshed taken from this point indicates that the site will be visible to receptors. From this viewpoint proposed new developments on Portion A could be partially noticeable to receptors with some screening provided by vegetation, however at this distance from the site new developments would tend to merge with existing land use in Aalwyndal where structures of similar type and scale are visible at the Mossel Bay Airfield and other erven near the site in the foreground.

Visual exposure from Viewpoint 4 is expected to to be low.

3.7.5. Viewpoint 5

Viewpoint 5 is situated on the N2 at the Total filling station, at a distance of approximately 4.6 km looking in a northeasterly direction towards the site. Coordinates for this point are 34°10′46,528″S and 22°01′46,111″E.

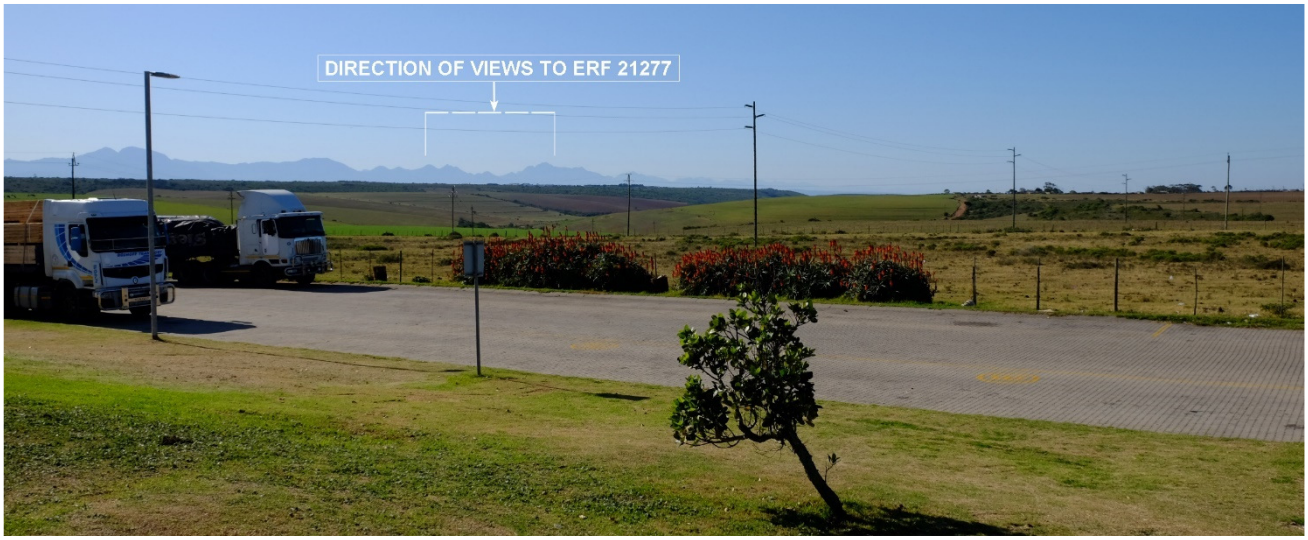

Figure 21: Viewpoint 5 on the N2 at Total filling station looking northeast towards the site.

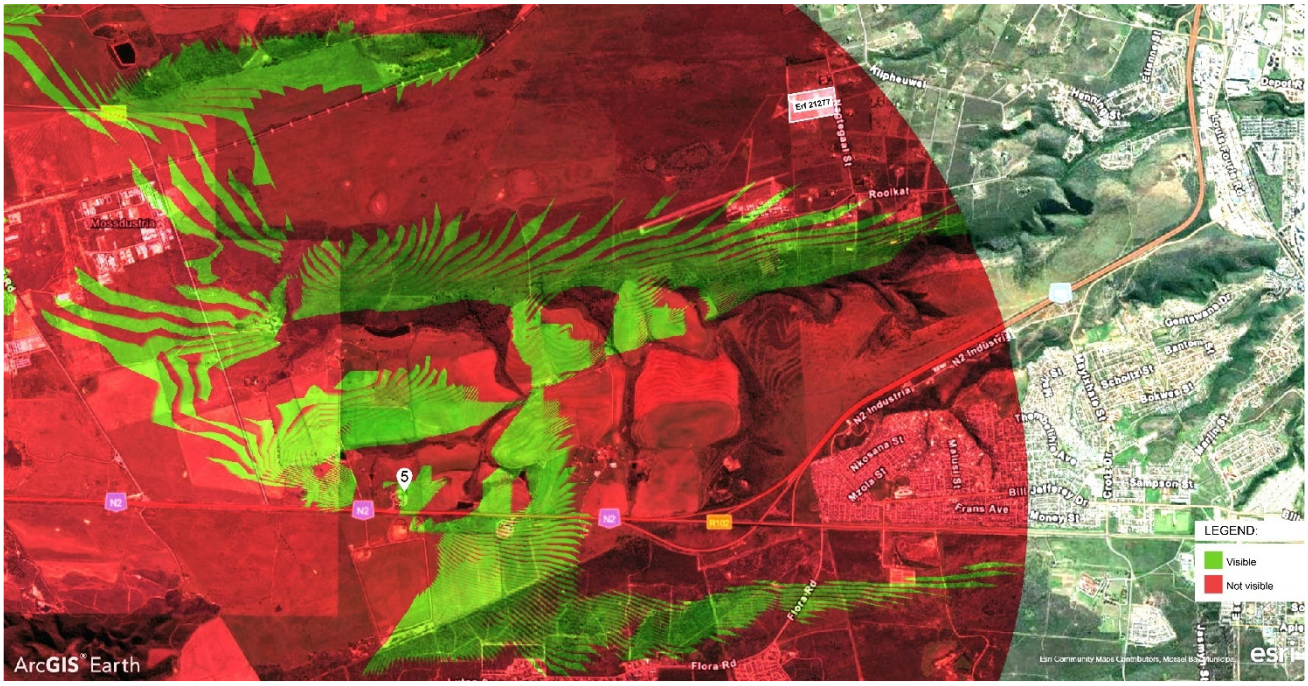

Figure 22: Viewpoint 5 Viewshed.

The viewshed taken from this point indicates that the site at ground level will not be visible to receptors. The distance from the viewer is such that even if new developments were to be partially visible from this viewpoint at roof height they would not be clearly distinguished by receptors and would tend to merge with the surrounding landscape and existing land use.

Visual exposure from Viewpoint 5 is expected to to be low.

3.7.6. Viewpoint 6

Viewpoint 5 is situated on the N2 just beyond the slipway leading to George looking in a northerly direction towards the site at a distance of approximately 2.5 km from Portion A of Erf 21277. The coordinates of this viewpoint are 34°10′23,911″S and 22°04′5,735″E.

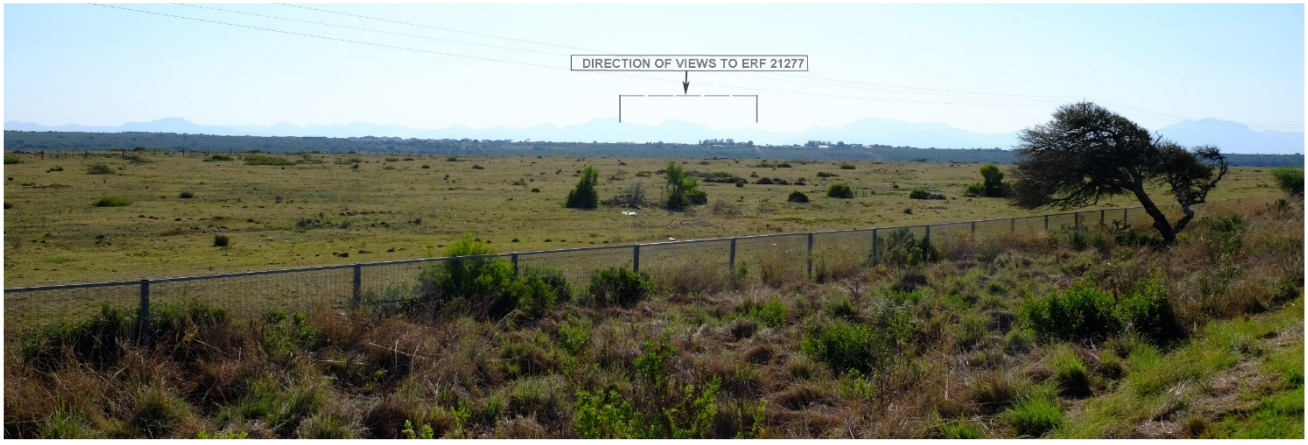

Figure 23: Viewpoint 6 on the N2 just past the slipway travelling northeast towards George.

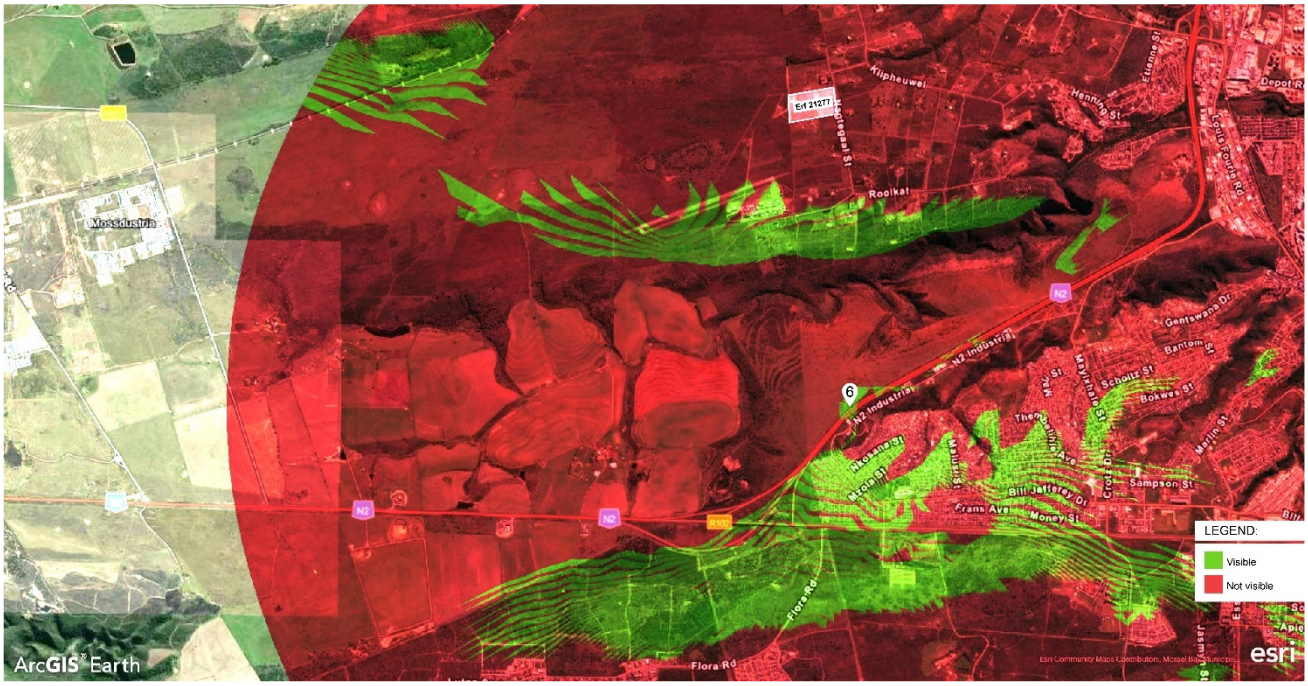

Figure 24: Viewpoint 5 Viewshed.

The viewshed taken from this point indicates that the site at ground level will not be visible to receptors. From this distance even if the proposed developments were to be partially visible at roof height new storage units would not be clearly distinguised by receptors and would tend to merge with the surrounding landscape and existing developments in Aalwyndal.

Visual exposure from Viewpoint 6 is expected to to be low.

4. VISUAL IMPACT ASSESSMENT

Potential visual impacts will be defined and assessed based on a synthesis of criteria as follows (Oberholzer, 2005.):

Criteria used for the assessments of impacts		
Nature of the impact	An appraisal of the visual effect the activity would have on the receiving environment. This description should include visual and scenic resources that are affected and the manner in which they are affected (both positive and negative effects).	
Extent	The spatial or geographic area of influence of the visual impact.	
	Site-related:	Extending only as far as the activity.
	Local:	Limited to the immediate surroundings.
	Regional:	Affecting a larger metropolitan or regional area.
	National:	Affecting large parts of the country.
	International:	Affecting areas across international boundaries.
Duration	The predicted lifespan of the visual impact.	
	Short term:	e.g., duration of the construction phase.
	Medium term:	e.g., duration for screening vegetation to mature.
	Long term:	e.g., lifespan of the project.
	Permanent:	Where time will not mitigate the visual impact.
Intensity	The magnitude of the impact on views, scenic or cultural resources.	
	Low:	Where visual and scenic resources are not affected.
	Medium:	Where visual and scenic resources are affected to a limited extent.
	High:	Where scenic and cultural resources are significantly affected.
Probability	The degree of possibility of the impact occurring.	
	Improbable:	Where the possibility of the impact occurring is very low.
	Probable:	Where there is a distinct possibility that the impact will occur.
	Highly probable:	Where it is most likely that the impact will occur
	Definite:	Where the impact will occur regardless of any prevention measures
Significance	The significance of impacts can be determined through a synthesis of the aspects produced in terms of their nature, duration, intensity, extent and probability, and be described as follows:	
	Low:	Where it will not have an influence on the decision.
	Medium:	Where it should have an influence on the decision unless it is mitigated.
	High:	Where it would influence the decision regardless of any possible mitigation.

Potential visual impacts were considered during the construction phase as well as the operational phase. The following potential visual impacts were assessed for the proposed developments as per the site development plan provided:

Construction phase

- Visibility of construction vehicles, temporary structures, scaffolding, site storage of materials during construction.

Operational phase

- Change in the visual character of the area from a peaceful, partly developed rural environment to a more densely developed rural site.

- Change in visual character of a scenic tourist route (N2).
- Visual intrusion of lighting at night.

4.1. Construction phase

4.1.1 Visibility of construction vehicles and activities

Key visual impacts	Visibility of construction vehicles, temporary structures, scaffolding, site storage of materials during construction.	
Extent	No mitigation	Local
	With mitigation	Local
Duration	No mitigation	Short-term
	With mitigation	Short-term
Intensity	No mitigation	Medium
	With mitigation	Medium to low
Probability	No mitigation	Probable
	With mitigation	Probable to low
Significance	No mitigation	Medium to low
	With mitigation	Low

During the construction phase the visual character of the site will change from a peaceful rural smallholding to a more lively construction site. These impacts will be of a temporary nature and can be mitigated to reduce significance. Due to the relatively small-scale nature of the proposed new development and the temporary nature of this impact the significance thereof is not highly rated.

Recommended mitigation measures are discussed in more detail in section 5. Effective mitigation measures to be implemented during the construction phase include:

- Screening site with appropriate site hoarding.
- Limit disturbance to the least possible area needed for construction.
- Rehabilitate and revegetate disturbed areas on site immediately following construction.

4.2. Operational phase

4.2.1 Change in visual character of the area

Key visual impacts	Change in the visual character of the area from a peaceful, partly developed rural setting to a more lively rural setting.	
Extent	No mitigation	Local
	With mitigation	Local
Duration	No mitigation	Long-term
	With mitigation	Long-term
Intensity	No mitigation	Medium
	With mitigation	Medium to low
Probability	No mitigation	Probable
	With mitigation	Probable
Significance	No mitigation	Medium
	With mitigation	Medium to low

If the proposed development were to go ahead the character of the site will change and it will affect the rural character of Aalwyndal. The changes proposed need not necessarily be negative and with the implementation of appropriate mitigation measures can contribute in a positive manner to the sense of place and landscape character of the area.

The nature of the proposed development is of a scale and type comparable with similar developments in the area, associated with the airfield, in Aalwyndal. Although the character of the area would change somewhat if the development were to go ahead the changes would not be at odds with the current sense of place and

forward planning for the Aalwyndal precinct. The design of buildings and site layout should endeavour to maintain the rural sense of place of Aalwyndal.

Mitigation measures are discussed in more detail in section 5. Mitigation measures would include:

- Design of buildings and landscape to complement the existing sense of place.
- Use of materials and finishes that will allow new developments to blend in with visual surroundings and reduce visual intrusion.
- Appropriate screening.

4.2.2 Change in visual character of scenic tourist route

The site is potentially visible from viewpoints along the N2. It is also situated in an area frequented by sensitive receptors and in close proximity to scenic coastal- and nature areas.

Key visual impacts	**Potential visual intrusion along a scenic view corridor frequented by tourists and holiday makers.**	
Extent	**No mitigation**	**Local**
	With mitigation	**Local**
Duration	**No mitigation**	**Long-term**
	With mitigation	**Long-term**
Intensity	**No mitigation**	**Medium**
	With mitigation	**Medium to low**
Probability	**No mitigation**	**Probable**
	With mitigation	**Probable to improbable**
Significance	**No mitigation**	**Medium to low**
	With mitigation	**Low**

Although the proposed developments could potentially be noticeable and cause visual intrusion along the scenic N2 route, the fact that the N2 passes Portion A of Erf 21277 at a distance of >2km with partial screening from existing development and vegetation will mean that the proposed new developments are unlikely to be clearly noticeable to highly sensitive receptors. The site is situated in a central position on a fairly flat plateau which means that views onto Erf 21277, Portion A, will be buffered by existing developments and other erven in the foreground in the Aalwyndal precinct.

Potential visual intrusion as a result of proposed new developments can be mitigated. Mitigation measures would include:

- Design of buildings and landscape to complement the existing sense of place.
- Use of materials and finishes that will allow new developments to blend in with the visual surroundings and reduce visual intrusion.
- Appropriate screening.

4.2.3 Visual intrusion of lighting at night

The proposed developments will increase lighting on the site at night and bring about changes from the rural night sky currently experienced in Aalwyndal.

Key visual impacts	**Visual intrusion of lighting at night.**	
Extent	**No mitigation**	**Local**
	With mitigation	**Local**
Duration	**No mitigation**	**Long-term**
	With mitigation	**Long-term**
Intensity	**No mitigation**	**Medium**
	With mitigation	**Medium to low**
Probability	**No mitigation**	**Highly probable**
	With mitigation	**Probable to impropable**
Significance	**No mitigation**	**Medium**
	With mitigation	**Medium to low**

Visual intrusion of lighting at night can be mitigated by effective design and management of exterior outdoor lighting. Mitigation measures will include:

- Minimize exterior lighting.
- Avoid light spillage with the use of appropriate lighting fixtures.
- Avoid spotlighting or floodlighting for security purposes and use alternative measures for security.

4.3. Mitigation measures

The proposed development will be noticeable to tourists and residents of Aalwyndal, particularly around Nagtegaal Street which is the main access route to the Mossel Bay Airfield. The proposed development could also potentially be partially visible to tourists and road users travelling on the N2 towards Mossel Bay. The visibility and potential visual impacts of the proposed developments need not necessarily be negative but could be positive through the implementation of mitigation measures that support and enhance the scenic resources of the area.

The type of mitigation measures that should be considered are centred around the following:

- Material selection must be considered as part of the design in order to ensure that proposed building structures are in harmony with the surrounding landscape as far as possible.
- Colours and finishes must be sensitive to the environment and must blend in with the existing landscape. Darker greens, greys and brown colours will tend to recede and blend in with the surroundings as opposed to lighter colours that will stand out and draw attention to new developments.
- Finishes must have non reflective qualities, mat finish paints must be used and large reflective glass expanses in office buildings must be avoided. Large window openings should be screened with appropriate roof overhangs to limit glare.
- Height and scale of buildings must be minimised where possible. Large buildings with increase bulk should be placed away from street edge and stepped down to reduce bulk in the most visible portions of the site bordering the street edge.
- Screening new developments from the street edge and towards neighbouring properties must be prioritised. Existing planted wind breaks and tree avenues in the Aalwyndal area set a precedent for landscape development and can be used to effectively screen new developments from surrounding areas.

Mitigation measures are divided into those that apply during the construction phase and those that apply to the operational phase.

4.3.1 Construction phase mitigation measures

- Locate site camp and temporary structures within an appropriate area that is not visible from the most prominent views and routes frequented by residents and tourists in Aalwyndal.
- Building works on site must be screened with site hoarding constructed to a minimum height of 1800mm comprising a double layer of 80% shade netting, securely fixed to three horizontal 114 x 38mm treated timber members top, middle and bottom fixed to 114 x 114mm treated timber posts or poles at 3m centres set securely into ground to a minimum depth of 700mm and including all necessary corner posts, stays, etc. The contractor is to maintain all hoardings and keep clean and finally remove and make good on completion of the contract.
- Disturbance area and hoarding must be limited to the smallest area possible needed for construction.
- Temporary site lighting if required must be kept to a minimum and not be flood lighting.
- The construction site must be kept clean and in a neat condition at all times during the construction period.
- Make good and rehabilitate all areas disturbed during the construction period within 3 months after completion of the building works.

4.3.2 Design and Operational Phase mitigation measures

- Use visually permeable fencing rather than boundary walls, to visually integrate new developments with the existing rural landscape.
- Use vegetated buffers along site boundaries to screen new developments from scenic views and routes. Vegetation must attain a height of at least 5 - 9 meters at maturity to provide adequate screening. Although the natural vegetation in the Aalwyndal area is not rich in tall growing tree species hardy drought resistant indigenous trees that can withstand coastal conditions can be closely planted to form tall hedges that will screen new developments. Non-invasive, evergreen, tall growing exotic trees that complement the existing landscape typology can also be considered.
- Maintain new tree and shrub planting until it is self-sufficient.
- Buildings and roadways must be positioned along contours to limit cut and fill operations wherever possible.
- Rehabilitate all cut and fill areas around new developments directly after construction to minimise visual intrusion.
- Reduce massing of built form by making use of setbacks from the boundary along the street and side boundaries. Setback area will provide space for vegetated buffers to reduce visual intrusion from prominent view corridors. Step building mass down towards roadway and side boundary so that the largest storage units are not located on the street and side boundary with the adjacent Erf 21276.
- Use finishes and colours on external building envelope that will merge with the surrounding landscape and recede from view from a distance.
- Reflective surfaces must be kept to a minimum and shaded with roof overhangs and / or screens to limit glare. Use mat finish paint on external surfaces.
- Lighting design must conform to the following:
    - Ensure lighting sources are top covered and directed only where needed ensuring that no light spillage occurs.
    - Ensure that no open light sources are visible from beyond the site.
    - Avoid flood lighting and spot lighting for security purposes.

5. CONCLUSION AND RECOMMENDATIONS

The proposed development is in line with the future planning for Aalwyndal in terms of the Mossel Bay Spatial Development Framework and Aalwyndal Precinct Plan adopted by the Mossel Bay Municipality. The construction of the Mossel Bay Airfield in recent years has brought about visual changes to the character of Aalwyndal and the type of development that it attracts. The proposed new development on Portion A of Erf 21277 is of a similar type and scale as other developments in the near vicinity associated with the airfield.

The visual framework presents a mix of developed and undeveloped properties with areas of natural vegetation interspersed with grazing fields and a mix of exotic and indigenous vegetation planted near dwellings and along fence lines. Although Aalwyndal has a sense of rural charm it does not present a distinctive scenic or cultural sense of place that must be protected and scenic, cultural and historical significance of the area is rated as low. The topography of the area furthermore serves to visually isolate Aalwyndal and partially screen views towards the proposed new developments planned for Erf 21277, Mossel Bay, from surrounding developments and scenic routes.

Residents and receptors related to the holiday and tourist industry are rated as highly sensitive and tourism is one of the major economic drivers of the Southern Cape. Although there is some tourist activity in Aalwyndal associated with the Mossel Bay Airfield and Guest Houses and farm accommodation offered, this is not one of the major areas of Mossel Bay associated with the tourist trade. New developments could be partially visible from the N2 view corridor, which has been identified as an important scenic tourist route, but this is at a distance of more than 2 km from the proposed development site at which new developments would not be clearly noticeable to receptors and potential visual impact would be low provided appropriate mitigation measures are put in place.

Although the visual absorption of the development site itself is low due to a lack of screening vegetation and relatively flat topography, the visual absorption capacity of the area is moderate to high due to the screening effect of existing structures and taller vegetation in the areas surrounding the development site.

Buildings will be constructed to the building lines, following rezoning of Erf 21277, Mossel Bay, on all four boundaries leaving limited space to plant screening vegetation between site boundaries and building structures. The proponent intends to make use of Clearvu fencing to provide perimeter security for the proposed new

development which will allow rows of trees to become established in the limited spaces along the Southern, Western and Northern boundaries.

Screening along the Eastern boundary bordering Nagtegaal Street must be prioritized as planting along this boundary will not be continuous due to parking bays and entrance to the building complex from Nagtegaal Street that will be located along this boundary. The proponent must keep paved surfaces along this boundary to a minimum and allow the maximum amount of space for planting areas that will still allow functionality of the entrance, parking bays and refuse area. Mature, evergreen trees in large container sizes (500 liters or larger) with a canopy height and spread of >3m should be evenly spaced along this boundary in planting areas as indicated on the site plan (Appendix A). Trees must be waterwise and well adapted to the harsh coastal conditions and wind to ensure the best possible chance for growth and development to provide maximum screening from Nagtegaal street in the long term. Trees must be watered and maintained for a minimum period of 12 months and until they are well established and showing clear signs of new growth.

Changes will be brought about to the existing visual environment of Aalwyndal should the proposed development go ahead, but such changes could be absorbed within the existing visual character of the area. Where potential visual impacts can be rated as moderate to high without mitigation, the significance of these impacts can be reduced to moderate to low if appropriate mitigation measures are put in place. In light of the above it is recommended that the proposed development be approved subject to the implementation of mitigation measures to soften the potential visual impacts to integrate the new developments with the existing character of Aalwyndal.

6. REFERENCES

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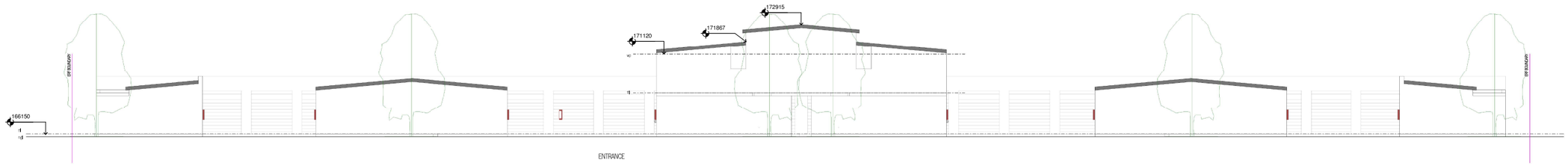
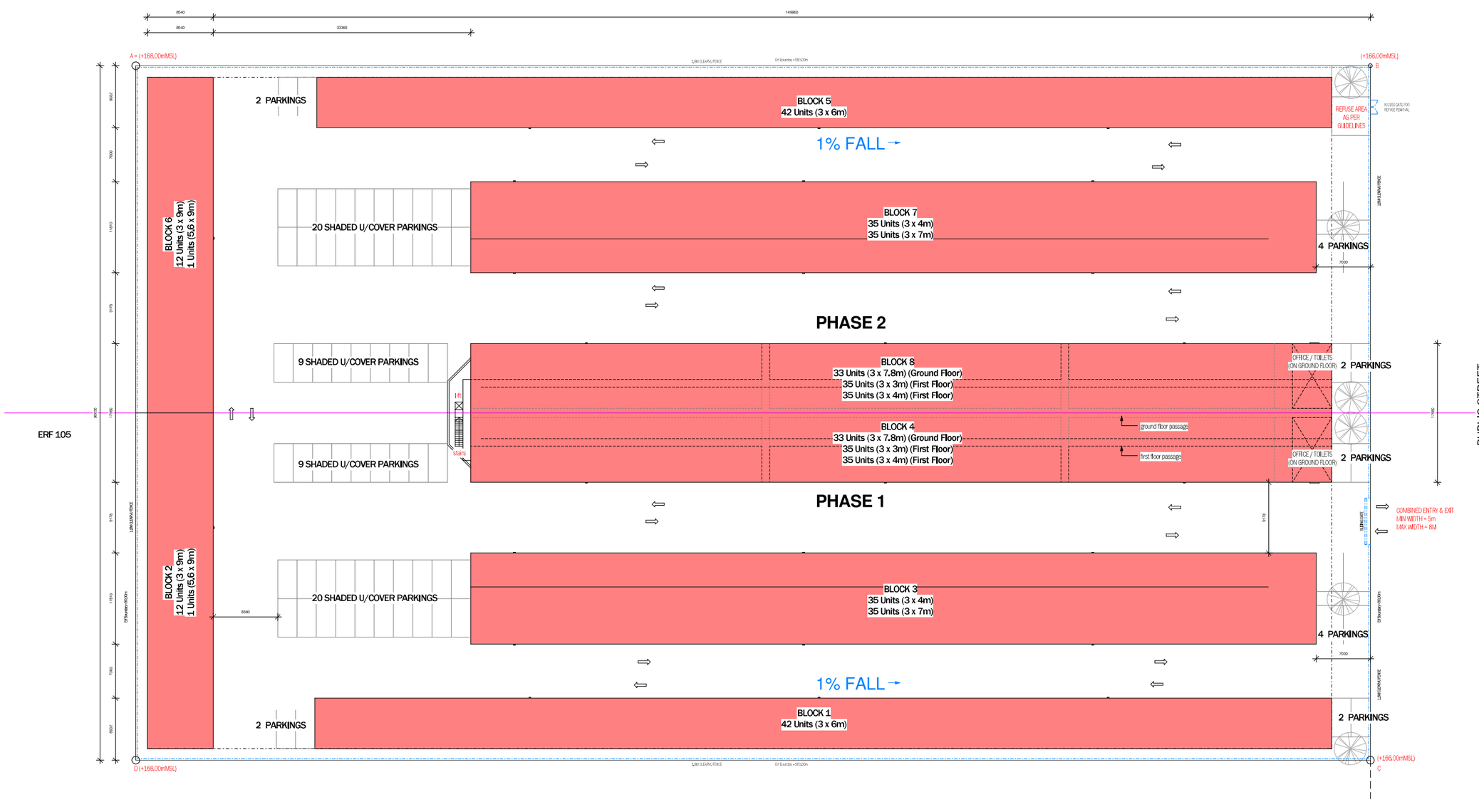
Lynch, K. 1996. *Good City Form*. MIT Press, London, England.

Oberholzer, B. 2005. *Guideline for involving visual & aesthetic specialists in EIA processes: Edition 1*. CSIR Report No ENV-S-C 2005 053 F. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.

Appendix A
Proposed Site Development Plan



2 FRONT ELEVATION
1 : 100



1 SITE PLAN
1 : 200

PUBLIC STREET

AREA SCHEDULE	
ERF 2521 Aalwyndal Mossel Bay ERF SIZE: 1440m²	
CONFIRED AREA	
New Storage units New office / toilets Total	860m² 70m² 867m²
Refuse area	22m²
TOTAL COVERAGE	681m² 47,29%

BLOCK	SIZE	QTY
PHASE 1		
BLOCK 1	3m x 6m	42
BLOCK 2	3m x 9m 5,6m x 9m	12 1
BLOCK 3	3m x 4m 3m x 7m	35 35
BLOCK 4	3m x 7,8m (GF) 3m x 3m (FF) 3m x 4m (FF)	33 35 35
TOTAL		218 4,35/m² 372,5m² (min)
OFFICE / TOILETS		38m²
PHASE 2		
BLOCK 1	3m x 6m	42
BLOCK 2	3m x 9m 5,6m x 9m	12 1
BLOCK 3	3m x 4m 3m x 7m	35 35
BLOCK 4	3m x 7,8m (GF) 3m x 3m (FF) 3m x 4m (FF)	33 35 35
TOTAL		218 4,35/m² 372,5m² (min)
OFFICE / TOILETS		38m²
TOTAL (Phase 1 & Phase 2) UNITS AREA		436 850,5m²

PARKING SCHEDULE
ERF 2521 Aalwyndal Mossel Bay ERF SIZE: 1440m²
GLA = 745m² (5 bays per 100m² GLA)
Parking required: 35
Parking provided: 36

S19
planning · design · engineering
SACPLAN 90276 · SACAP 20107 · ECSA 760109 · NHBRC 1887
IN COLLABORATION WITH
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client: AALWYNDAL STORAGE

project: Proposed new storage units on Erf PTN OF 21277, Aalwyndal, Mossel Bay

date: 21.01.2024 | sheet: A0-01

sheet: SITE PLAN

reference no: AD21277 / 2023 | FOR DISCUSSION