Appendix G.6

VISUAL SCOPING REPORT

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Sasol South Africa (Pty) Ltd

THE PROPOSED SECUNDA GAS TO POWER FACILITY

Visual Impact Baseline Assessment

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OCTOBER 2026

CONFIDENTIAL

Sasol South Africa (Pty) Ltd

THE PROPOSED SECUNDA GAS TO POWER FACILITY

Visual Impact Baseline Assessment

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Sasol South Africa (Pty) Ltd

THE PROPOSED SECUNDA GAS TO POWER FACILITY

Visual Impact Baseline Assessment

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1 INTRODUCTION

Sasol South Africa (Pty) Ltd (Sasol) operates an integrated petrochemical and energy production complex within Secunda, Mpumalanga Province. The Secunda Operations comprise one of the largest coal-to-liquids and petrochemical production facilities globally and play a significant role in South Africa's energy and industrial sectors.

Sasol has proposed a Gas-to-Power (GtP) Project in Secunda, which forms part of Sasol's strategic energy transition initiatives aimed at enhancing energy security, improving operational efficiency, and supporting the transition towards lower-carbon energy solutions. The proposed project entails the generation of electricity using liquefied natural gas (LNG) as the primary fuel source, with methane-rich gas being considered as a potential backup feedstock. The primary objective of the Secunda GtP Project is to generate electricity for supply to the national grid, thereby contributing towards meeting South Africa's growing energy demand and improving grid stability.

The proposed site for the GtP Project is located within the Sasol Secunda Operations facility in Secunda (Figure 1-1). The proposed development footprint covers approximately 50,000 m² and is situated within the primary operational area of the existing facility. The proposed project requires Environmental Authorisation (EA) through the undertaking of a Scoping and Environmental Impact Assessment (EIA) process in terms of the applicable environmental legislation. As part of the EIA process, a specialist Visual Impact Assessment (VIA) is required to assess the potential visual impacts associated with the proposed development.

This baseline assessment and site sensitivity verification report (SSVR) has therefore been undertaken in support of the specialist VIA and serves to characterise the existing ambient landscape visual quality within the study area prior to the proposed development. The baseline assessment considers the prevalent landscape characteristics and derives the perceived visual resource value, as well as identifies potentially impact visual receptor groups and identifies expected visual impacts associated with the project, which will be further evaluated during the impact assessment phase.

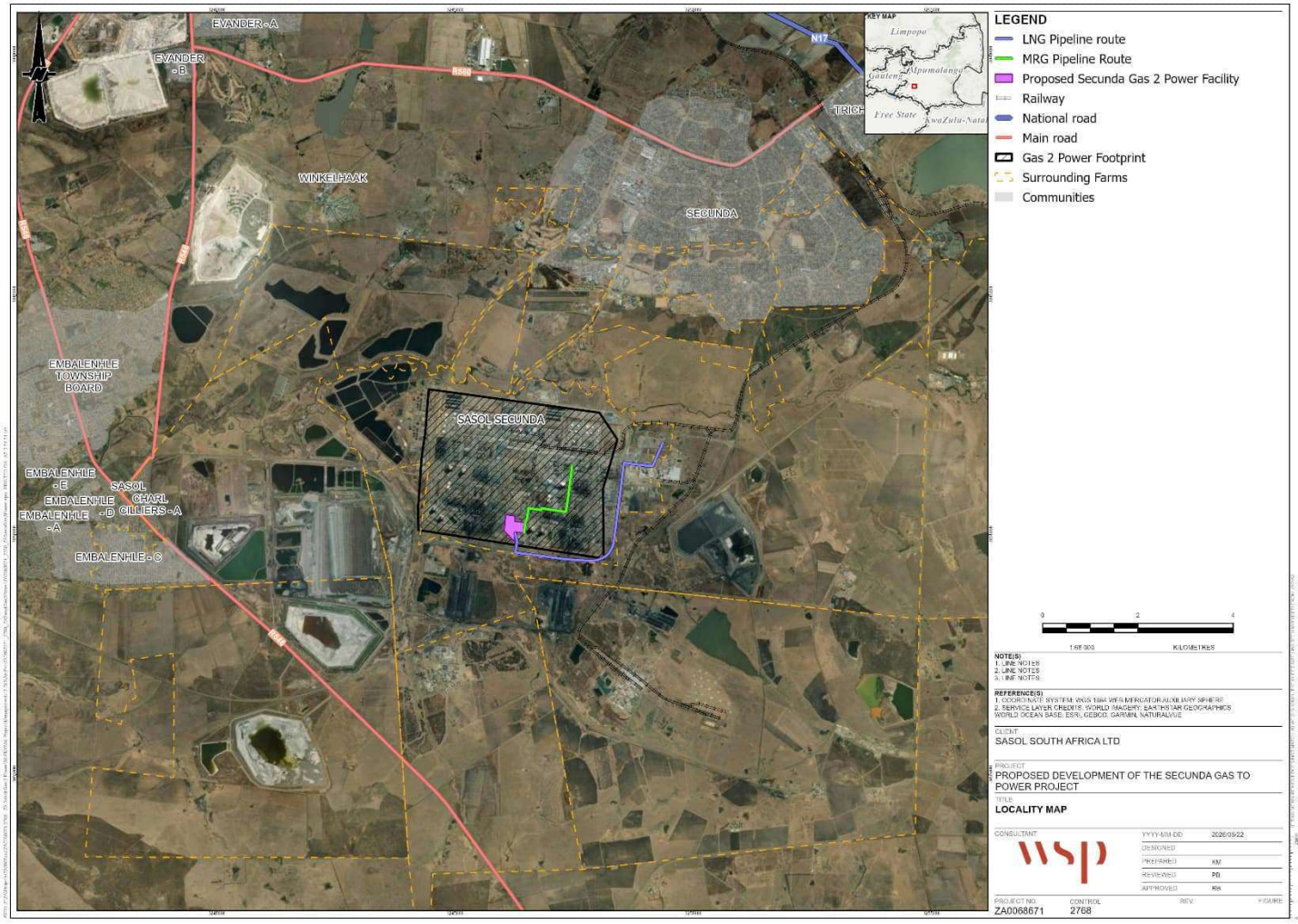

Figure 1-1 - Location of the proposed Sasol Gas 2 Power project

2 METHODOLOGY

The VIA specialist study will be conducted using the following methodology:

Baseline phase (this report):

- Describing the landscape character or visual baseline based on:
  - A review of available site photographs, aerial imagery and topographical maps, focusing on the both natural- and human-made elements
- Determining the visual resource value of the landscape based on:
  - The topographical character of the study area and potential occurrence of landform features of interest
  - The presence of water bodies within the study area
  - The general nature and level of disturbance of existing vegetation cover within the study area
  - The nature and level of anthropogenic disturbances and transformation
- Determining the visual absorption capacity of the receiving visual landscape
- Determining the resultant visual resource value of the study area
- Identifying visual receptor groups that may be impacted by the project
- Identifying potential visual impacts during the construction, operation and decommissioning phases

Impact assessment phase:

- Verifying visual impacts associated with the construction, operation and decommissioning phases respectively, based on the detailed project description and layout
- Determining the magnitude/severity of potential impacts within the existing visual context by considering the proposed project in terms of:
  - Visibility
  - Visual intrusion
  - Visual exposure
- Evaluating the expected receptor sensitivity to the proposed project
- Assessing the impact significance by relating the visual resource value and severity of the visual impacts to:
  - Impact extent
  - Impact duration
  - Probability/likelihood of occurrence
  - Reversibility, i.e. the degree to which the impact:
    - can be reversed
    - may cause irreplaceable loss of resources, and
    - can be avoided, managed or mitigated
- Assessing the potential cumulative impact of the project, as a function of existing and possible future similar land use activities within the defined study area

- Based on the outcomes of the impact assessment, defining management/mitigation measures to reduce the potential negative visual impacts of the project, were feasible

3 LEGAL AND POLICY FRAMEWORK

3.1 LEGISLATIVE REQUIREMENTS

For the purposes of conducting the VIA, guidance will be taken from the Provincial Government of the Western Cape, Department of Environmental Affairs and Development Planning (DEA&DP) *Guideline for Involving Visual and Aesthetic Specialists in the EIA Process* (Oberholzer, 2005). These are the only VIA guidelines that have been issued in South Africa.

Further, in accordance with the Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes, which were promulgated in Government Notice No. 320 of 20 March 2020 and in Government Notice No. 1150 of 30 October 2020 (i.e. "the Protocols"), and Appendix 6 of the EIA Regulations. The protocols used are the "*Site Sensitivity Verification Requirements where a specialist Assessment is required but no Specific Assessment Protocol has been Prescribed*".

Additional guidance will also be taken from relevant mining industry standards described in Section 3.2 below, as well as criteria and principles widely applied in the field of visual assessment, listed in the methodology described in Section 2.

3.2 INTERNATIONAL STANDARDS

3.2.1 INTERNATIONAL FINANCE PERFORMANCE STANDARDS

The International Finance Corporation (IFC), a member of the World Bank Group, published Performance Standards on Environmental and Social Sustainability in 2012 (IFC, 2012).While the IFC Performance Standards do not provide a specific, standalone methodology for conducting a VIA, the IFC Performance Standards provide a global benchmark for managing environmental and social risks, including visual impacts if they are a material risk.

- Performance Standard 1: Assessment and management of environmental and social risks and impacts:
  - This Performance Standard requires an integrated ESIA that identifies all significant risks and impacts, including visual and aesthetic changes.
  - The VIA should be part of the baseline studies and impact analysis, covering:
    - Landscape character and scenic quality
    - Viewshed analysis (extent of visibility)
    - Visual receptors (communities, sensitive viewpoints)
  - The VIA should apply the mitigation hierarchy:
    - Avoid visual intrusion through site selection and design.
    - Minimize impacts via screening, colour blending, and layout adjustments.
    - Restore through progressive rehabilitation and post-closure landform design.
    - Offset residual impacts if necessary.

- The Performance Standard requires stakeholder engagement using visual simulations or photomontages to disclose potential changes and gather feedback.
- The VIA should consider the potential cumulative visual effects of the project in combination with other existing or planned developments in the project's area of influence.

- Performance Standard 6: Biodiversity conservation and sustainable management of living natural resources:
  - Recognizes ecosystem services, including cultural and aesthetic values.
  - The VIA should consider:
    - Impacts on natural habitats and scenic landscapes.
    - Integration of visual mitigation with biodiversity conservation measures.

For projects in sensitive or critical habitats, visual impacts must be assessed alongside ecological impacts, ensuring no net loss of biodiversity and maintaining landscape integrity.

3.2.2 INTERNATIONAL COUNCIL ON MINING AND METALS

The International Council on Mining and Metals (ICMM) does not provide a dedicated guideline for conducting a VIA. Instead, visual impacts are addressed within ICMM's broader sustainability framework, which emphasizes environmental performance, biodiversity conservation, and community engagement. VIA is therefore integrated into the ESIA processes rather than treated as a standalone requirement.

The following ICMM 10 Sustainable Development Principles will also be considered during the VIA process:

- Principle 6: Environmental Performance: Requires continual improvement in environmental management, including minimizing the visual footprint of mining operations
- Principle 7: Biodiversity and Land Use Planning: Encourages integrated land use planning and conservation of biodiversity, which includes maintaining natural landscape character and reducing visual fragmentation

4 ASSUMPTIONS AND LIMITATIONS

The following qualification is relevant to the field of VIA and the findings of this study:

- The proposed project layout and description of individual project components was not available at the time of this report compilation, and the findings of this VIA baseline is therefore considered preliminary and subject to potential verification during impact assessment
- The specific nature and appearance of individual equipment, plant and buildings is not expected to materially influence the findings of the VIA baseline assessment, as the proposed project will take place within an existing industrial visual context
- Determining the value, quality and significance of a visual resource or the significance of the visual impact that any activity may have on it, in absolute terms, is not achievable. The value of a visual resource is partly determined by the viewer and is influenced by that person's socio-economic, cultural, and individual background, and is even subject to fluctuating and intangible factors, such as emotional mood and appreciation of "sense of place"

- This situation is compounded by the fact that the conditions under which the visual resource is viewed can change dramatically due to natural phenomena, such as weather conditions and seasonal change. Visual impact cannot therefore be measured simply and reliably, as is for instance the case with water, noise, or air pollution
- It is therefore not possible to conduct a VIA without relying to some extent on the expert opinion of a qualified consultant, which is inherently subjective. The subjective opinion of the visual consultant is however unlikely to materially influence the findings and recommendations of this study, as a wide body of scientific knowledge exists in the industry of VIA, on which findings are based

4.1 DELINEATION OF THE VISUAL STUDY AREA

The study area for the VIA comprises the spatial extent of the project footprint and related activities, as well as an associated buffer area. A visual impact will be caused by all visible infrastructural components that form part of the project, as well as all areas where the physical appearance of the landscape will be altered by earthworks and construction activities. The areas from which these proposed landscape alterations are expected to be visible are therefore defined as the study area, which was defined as a 10 km radius around the physical footprint of the proposed GtP Project footprint.

- For the purposes of this VIA, the term ‘project site’ or ‘site’ refers to proposed GtP Project footprint
- The term “study area” refers to the area that will potentially be visually affected by the project and represents the 10 km radius buffer around the total project site. Visual receptors occurring within the study area will also be considered during the impact assessment process

5 DESCRIPTION OF THE BASELINE ENVIRONMENT

5.1 GENERAL LANDSCAPE CHARACTERISTICS

5.1.1 TOPOGRAPHY

The topography of the study area is representative of much of the general region and is characterised by rolling plains and low hills typical of much of the Mpumalanga Highveld. Most landforms are not visually significant when viewed over longer distances, and views are often dominated by manmade elements where these are present (Figure 5-1), especially within the study area itself which contains numerous expansive ash and discard dumps.

The proposed site for the GtP Project itself is small and relatively flat, with no significant distinguishing topographical features, aside from the relatively narrow, shallow drainage channel that transects the western half of the site.

Figure 5-1 - Most landforms are not visually significant and are often dominated by manmade elements when viewed over longer distances

5.1.2 SURFACE WATER AND DRAINAGE FEATURES

The untransformed parts of the study area are traversed by numerous narrow, winding watercourses and contains many wetland areas, as well as pans and farm dams of various sizes (Figure 5-2). These features are usually not visually prominent in the landscape and are often obstructed by the topography, vegetation, or infrastructure. By contrast, the many expansive artificial dams and evaporation ponds associated with the Sasol Secunda industrial complex are visually dominant in short- and medium-range views.

The GtP Project site itself is largely built-up, although a highly transformed and canalised watercourse crosses from north to south section along the western site boundary. This stream is bordered by a road embankment to the west and passes underneath this embankment via a concrete culvert to join up with a larger west-to-east running stream located south of the site (Figure 5-3).

Figure 5-2 – The untransformed parts of the study area contain many narrow watercourses, wetland and pans

Figure 5-3 – A highly transformed watercourse crosses the site from north to south and exits underneath an embankment through a concrete culvert

5.1.3 VEGETATION CHARACTERISTICS

The study area is in the Mpumalanga Highveld, which is typified by a patchwork of highly fragmented grasslands interspersed between expansive areas of agricultural cropland and grazing, as well as extensive coal mining, industrial infrastructure, and urban development.

Locally, the vegetation cover has been completely replaced by the highly industrialised Sasol Secunda complex to the north of the site, as well as the associated ash disposal and coal mining operations located west, east and to a lesser extent south of the site. Blocks of disturbed riparian and grassland vegetation are also located immediately south, as well as further east and west of the site, with stands and isolated clumps of eucalyptus and other alien trees in a few locations.

The GtP Project site itself is largely devoid of vegetation, with most of the site utilised for various equipment and material storage and handling purposes and as such is covered by gravel or hardstand. Additionally, the associated project pipeline route to the northeast passes through the industrial complex. However, a small section along the western site boundary consists of a highly disturbed mix of riparian vegetation, kikuyu and other introduced grasses, and small clumps of alien trees and invasive vines and shrubs (Figure 5-4).

Figure 5-4 - Most of the site is gravel covered material storage and handling areas, while highly disturbed riparian vegetation occurs along the western site boundary

5.1.4 LAND COVER AND LAND USE

As mentioned, the primary land uses in the study area are agriculture, which includes dryland and irrigated cropping as well as grazing, as well as power generation and transmission, petrochemical industries, coal mining, and urban development. Other land uses in the area also include a casino and various hospitality venues, airfield, sports facilities and public recreation areas.

The site is located along the southern edge of the Sasol Secunda industrial complex (Figure 5-5) with associated coal mining operations directly south and east. The area immediately south of the site is a fragmented mixture of coal mining activities and remnant infrastructure and ruins, pipelines, powerlines and roads interspersed between disturbed riparian and grassland areas.

Figure 5-5 - The site is located along the southern edge of Sasol Secunda

5.1.5 SEASONAL AND ATMOSPHERIC CONDITIONS

A further aspect of the visual baseline that needs to be considered is that of weather-related/atmospheric conditions and seasonal variations. Prevailing atmospheric conditions can greatly influence how a landscape is perceived by viewers, as well as the range over which views are possible.

The study area is located in a summer rainfall region, while winters are cold and mostly dry. Mist is common particularly during winter, greatly reducing visibility when it is present. Airborne pollution occurs frequently in the region, and high humidity or smoke from fires often result in hazy atmospheric conditions. Fires can also significantly impact visual conditions, causing vast and highly visible smoke columns which greatly reduce visibility in short-range views.

In addition, seasonal changes greatly change the appearance of most landscapes, with the regional vegetation cover typically alternating from vast expanses of various hues of green during the rainy season, to more subdued browns and tans during the winter (Figure 5-6). Croplands also change in

appearance, from bare earth at the start of the spring planting season to visually uniform fields of corn during summer. These gradually brown and yellow during autumn before harvesting, following which the fields are again characterised by exposed earth and bare stalks, or blackened burnt areas.

Figure 5-6 - Regional vegetation cover typically alternates from vast expanses of green during the rainy season, to more subdued browns and tans during the winter

5.2 VISUAL RESOURCE VALUE OF THE STUDY

5.2.1 VISUAL RESOURCE VALUE CRITERIA

Visual resource value refers to the visual quality of elements of an environment, as well as the way in which combinations of elements in an environment appeal to our senses. Studies in perceptual psychology have shown an affinity for landscapes with a higher visual complexity, rather than homogeneous ones (Young, 2004). Furthermore, based on research of human visual preference (Crawford, 1994), landscape quality increases when:

- Prominent topographical features and rugged horizon lines exist
- Water bodies such as streams or dams are present
- Untransformed indigenous vegetation cover dominates, and
- Limited presence of human activity, or land uses that are not visually intrusive or dominant prevail

Further to these factors, Table 5-1 indicates criteria used for visual resource assessment. The assessment combines visual quality attributes (views, sense of place and aesthetic appeal) with landscape character and gives the landscape a very high, high, moderate, or low visual resource value.

A review of the national web-based environmental impact assessment screening tool indicates that the site is not considered sensitive regarding the visual resource. Nonetheless, it recommends that a visual impact assessment be conducted as part of the environmental assessment process.

Table 5-1 - Visual resource value criteria

Visual Resource Value (sensitivity)	Criteria
Very high (4)	▪ Pristine or near-pristine natural landscape with no or very limited human intervention visible ▪ Natural landscapes characterised by highly scenic or attractive features that are unique to the area or region ▪ Areas that exhibit a strong positive character with valued features that combine to elicit a distinct experience of visual unity, richness, and harmony ▪ Cultural heritage sites, architectural features, or built-up sites comprised completely or mostly consisting of elements of high historical or social value, and that are unique or otherwise characterised by high visual appeal ▪ These landscapes are likely of particular importance to conserve, and are particularly sensitive to change
High (3)	▪ Predominantly natural landscapes that nevertheless have some human interventions visible ▪ Natural landscapes characterised by scenic or attractive natural features, characteristic of the region in which it is located ▪ Areas comprised of visual elements that mostly combine to create a sense of visual unity, richness, and harmony, with minor or isolated incongruent aspects of features ▪ Cultural heritage sites, architectural features, or built-up sites largely characterised by features of high historical or social value, and that mostly have high visual appeal ▪ These are landscapes may contain specific features or elements of conservation importance, and which may be sensitive to change
Moderate (2)	▪ Partially transformed or disturbed landscape in which human interventions are visible but do not dominate views ▪ Natural landscapes but with noticeable presence of incongruous elements or degradation of some features ▪ Areas that exhibit some positive visual appeal but that are not unique and are found elsewhere, or that include some disharmonious elements resulting in a more mixed character ▪ Cultural heritage sites, architectural features, or built-up sites characterised by individual elements that have some socio-cultural or historic interest but not considered visually unique ▪ These landscapes are less important to conserve but may still include certain areas or features worthy of conservation, and have some capacity to absorb visual change
Low (1)	▪ Extensively transformed or disturbed landscape ▪ Human intervention is of visually intrusive nature and dominates available views ▪ Scenic appeal of landscape greatly compromised, and visual cohesion of individual elements is mostly non-existent ▪ Built-up sites in which unappealing elements have visual prominence, or that consist of widely disparate or incongruous land uses and activities ▪ Areas generally negative in character with few, if any, valued features. Scope for positive enhancement frequently occurs

5.2.2 VISUAL RESOURCE VALUE EVALUATION

A summary of the visual resource value of the study area *vis-á-vis* the tabulated factors is discussed below:

- The natural topography of the study area is typical in visual character to that of the greater region, however the site (which is relatively small) as well as immediate surroundings is relatively flat. Many prominent landforms do exist within the study area; however, these are artificial i.e. coal and ash dumps and are of limited to no resource value. The site topography visual resource value is therefore rated as low (1)
- The drainage channel along the western site boundary is more disturbed than those found elsewhere in the study area, although locally still forms a focal element and can be reasoned to be of at least some interest in short-range views. This aspect of the landscape is therefore considered to be of moderate (2) visual resource value
- Given that most of the site vegetation cover has been completely removed and the remaining area is characterised by significant degradation, the visual resource value of the site's vegetation cover is rated as moderate (2)
- The site itself and majority of surroundings have been extensively transformed by heavy industrial and mining activity, and the land use visual resource value is therefore rated as low (1)

The visual resource value assessment of the site within the context of the study area, in terms of the above criteria scores, is summarised in Table 5-2:

Table 5-2 - Visual resource value determination

Visual baseline attribute	Topography	Water bodies	Vegetation	Land uses
Visual resource value score	1	2	2	1
Total				**6 (low)**

Where:

- 4 – 6 = low
- 7 – 9 = moderate
- 10 – 13 = high
- 14-16 = very high

Based on the above score ranges, the overall visual resource value and sensitivity of the site, within the context of the surrounding study area, is rated as low. As a consequence, from a visual impact perspective there are no areas that are deemed to be "no-go" zones in terms of the proposed development.

5.3 VISUAL ABSORPTION CAPACITY

5.3.1 VISUAL ABSORPTION CAPACITY CRITERIA

Visual absorption capacity (VAC) can be defined as an "estimation of the capacity of the landscape to absorb development without creating a significant change in visual character or producing a reduction in scenic quality" (Oberholzer, 2008). The ability of a landscape to absorb development or additional human intervention is primarily determined by the nature and occurrence of vegetation cover, topographical character, and human structures.

A further major factor is the degree of visual contrast between the proposed new project and the existing elements in the landscape. If, for example, a visually prominent industrial development already exists in an area, the capacity of that section of landscape to visually "absorb" additional

industrial structures is higher than that of a similar section of landscape that is still in its natural state. VAC is therefore primarily a function of the existing land use and cover, in combination with the topographical ruggedness of the study area and immediate surroundings.

Based on the extensive degree of landscape transformation of the site and most of the study area, and prevalence of vertical manmade elements, the VAC of the site is rated as high.

5.3.2 VISUAL ABSORPTION CAPACITY WEIGHTING FACTOR

To account for the fact that visual impacts are expected to be more intrusive in landscapes with a lower VAC than in those with a higher VAC (regardless of the visual quality of the landscape), a weighting factor will be incorporated into the impact magnitude determination during impact assessment, as indicated in Table 5-3. A higher weighting factor is applied to areas with a low VAC to account for the increased visual impact, and *vice versa*.

Table 5-3 - VAC weighting factor table

Visual resource value of receiving landscape	Low VAC	Medium VAC	High VAC
High/very high resource value	High (1.2)	High (1.2)	Moderate (1.0)
Medium resource value	High (1.2)	Moderate (1.0)	Low (0.8)
Low visual resource value	Moderate (1.0)	Low (0.8)	Low (0.8)

The visual resource value of the study area has been determined to be low (refer to Section 5.2.2), while the VAC of the study area has been rated as low (see above). Hence, a low (0.8) weighting factor in terms of VAC will be applied during the impact assessment.

6 VISUAL RECEPTORS

6.1 RECEPTOR GROUPS

Visual impact is primarily concerned with human interest. Potential viewers or visual receptors therefore constitute people that might see and be affected by the proposed GtP Project development. Receptor sensitivity refers to the degree to which an activity is expected to impact receptors, and depends on:

- the various groups of people (visual receptor groups) that occur within the project study area
- how many people will see and be impacted by the project
- how frequently they are expected to be exposed to the project
- their perceptions regarding the aesthetics of the existing visual context

Visual receptors of the proposed project can be broadly categorised into two main groups, namely:

- people who live or work in the area, and who will be continuously or frequently exposed to the project components (resident receptors)

- people who travel through the area and are only temporarily exposed to the project components (transient receptors)

Receptors in the study area potentially include the following groups:

- employees of the Sasol Secunda and associated mining operations (resident receptors)
- residents of the various farmsteads and smallholdings within the study area, and workers at these establishments (resident receptors)
- people living or working at or visiting the hospitality and commercial destinations that occur in the study area (resident and transient receptors)
- residents of and visitors to Sasolburg and other townships in the study area (resident and transient receptors)

The degree to which these receptors will be impacted by the project will be dependent on the level of visibility of the project components within the project study area, which is further assessed in the impact assessment.

6.2 RECEPTOR SENSITIVITY

The visual receptor sensitivity and incidence can be classified as high, moderate, or low, as indicated in Table 6-1.

Table 6-1 - Visual receptor sensitivity criteria

Number of people that will see the project (incidence factor)	
Large	Towns and cities, along major national roads (e.g. thousands of people)
Moderate	Villages, typically less than 1 000 people
Small	Less than 100 people (e.g. a few households)
Receptor perceived landscape value (sensitivity factor)	
High	People attach a high value to aesthetics, such as in or around a game reserve or conservation area, and the project is perceived to impact significantly on this value of the landscape.
Moderate	People attach a moderate value to aesthetics, such as smaller towns, where natural character is still plentiful and in close range of residency.
Low	People attach a low value to aesthetics, when compared to employment opportunities, for instance. Environments have already been transformed, such as cities and towns.

The following ratings have been applied to the identified visual receptor groups:

- Resident receptors: Resident receptors comprise many people (incidence factor) living and/or working in the study area. We advance that considering the high existing levels of development associated with the industrialised and urbanised setting, most people in this receptor group will probably attach a low value (vulnerability factor) to the visual appearance of the project site
- Transient receptors: People travelling through the study area will include residents, workers, regional tourists, and people on route to towns in the area, or destinations elsewhere. Given the proximity of numerous towns, it is likely that at least a moderate number of people (incidence factor) could see the site in passing. It can be assumed that different people within this receptor group will have widely divergent views on visual value, but given the highly industrialised nature

of the study area will again attach a low degree of value to the proposed project site (vulnerability factor)

Based on the above, many people (incidence factor) are expected to be visually affected by the project, but that the perceived landscape value (vulnerability factor) is expected to be low.

6.3 RECEPTOR SENSITIVITY WEIGHTING FACTOR

A weighting factor that accounts for receptor sensitivity is applied when determining the magnitude of a visual impact (Table 6-2), based on the number of people that are likely to be exposed to a visual impact (incidence factor) and their expected perception of the value of the visual landscape and project impact (vulnerability factor).

Table 6-2 - Receptor sensitivity criteria weighting factor

Receptor vulnerability factor	Receptor incidence factor		
	Large	**Moderate**	**Small**
High	High (1.2)	High (1.2)	Moderate (1.0)
Moderate	High (1.2)	Moderate (1.0)	Low (0.8)
Low	Moderate (1.0)	Low (0.8)	Low (0.8)

Based on the receptor sensitivity assessment and the above criteria, a moderate weighting factor (1.0) in terms of this aspect will be applied during the impact magnitude determination as part of the impact assessment.

7 IMPACT IDENTIFICATION

The following potential visual impacts that may occur during the construction, operational and decommissioning/closure phases of the project were identified, which will be further evaluated during the impact assessment phase. The expected visual impacts of the construction and decommissioning phases were grouped and will be assessed together, as they will largely be the same, albeit with the latter essentially occurring in reverse:

7.1.1 CONSTRUCTION AND DECOMMISSIONING PHASE IMPACTS

- Presence of visually intrusive construction/decommissioning related activities and equipment in the landscape
- Airborne dust due to construction/decommissioning activities and resultant dust settling onto surrounding landscape

7.1.2 OPERATIONAL PHASE IMPACTS

- Nominal reduction in visual resource value due presence of additional visually intrusive industrial project infrastructure in the landscape
- Minor additional light pollution at night due to safety and security lighting

7.1.3 CLOSURE PHASE IMPACTS

- Positive impact, as the site will presumably be rehabilitated to the pre-project, visual baseline condition, thereby effectively reversing the operational and decommissioning phase impacts

Present indications, based on the outcomes of this baseline assessment and SSVR, are that the respective construction/decommissioning and operational phase impacts will have a relatively low magnitude, given the comparatively limited additional development in relation to the surrounding industrial land use context and overall low visual resource value. By contrast, the overall impact significance can be expected to be low to possibly medium, owing to the following factors:

- The extent (or visibility) of the impact will be at a local level
- The impact duration will be long-term, i.e. for the duration of the project
- The probability of the impact occurring will be high
- The degree to which the impact could realistically be managed or mitigated will be relatively limited due to operational and practical considerations

These observations will be verified during the impact assessment stage.

8 CONCLUSION

8.1 VISUAL BASELINE

In summary:

- The study area is in the Mpumalanga Highveld, which is typified by a patchwork of highly fragmented grasslands interspersed between expansive areas of agricultural cropland and grazing, as well as extensive coal mining, industrial and power generation infrastructure, and urban development
- The Sasol GtP Project site is located along the southern edge of the Sasol Secunda industrial complex with associated coal mining operations located directly to the south and east
- The overall visual resource value and sensitivity of the site, within the context of the surrounding study area, is rated as low
- The visual absorption capacity of the site is rated as high
- Many visual receptors are expected to be visually affected by the project, but that the vulnerability factor is expected to be low

8.2 IMPACT ASSESSMENT PLAN OF STUDY

The determination and assessment of impacts will be based on the following criteria:

- Nature of the impact
- Significance of the impact
- Consequence of the impact
- Extent of the impact
- Duration of the impact
- Probability of the impact
- Degree to which the impact:
  - can be reversed

- may cause irreplaceable loss of resources and
- can be avoided, managed or mitigated

Following international best practice, additional criteria have been included to determine the significant effects. These include the consideration of the following:

- Magnitude: to what extent environmental resources are going to be affected
- Sensitivity of the visual resource (rated as high, medium and low) by considering the importance of the receiving environment (international, national, regional, district and local), rarity of the receiving environment, benefits or services provided by the environmental resources and perception of the resource or receptor) and
- Severity of the impact, measured by the importance of the consequences of change (high, medium, low, negligible) by considering inter alia magnitude, duration, intensity, likelihood, frequency and reversibility of the change

The impact assessment phase will also be conducted at a desktop level, as adequate site information is currently available from fieldwork recently completed by other specialists. The visibility and extent of the visual impact and magnitude will be determined by conducting a GIS-based viewshed analysis mapping, to identify all areas from which the project infrastructure may potentially be visible.

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