# APPENDIX 24

## SOCIO-ECONOMIC IMPACT ASSESSMENT REPORT

NOVEMBER 2024

MULTI-PURPOSE
BUSINESS SOLUTIONS

# Draft Socio-Economic Impact Assessment for the proposed Cape Winelands Airport, Fisantekraal

**Draft Consultative Report**

***prepared by***
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# Executive Summary

Cape Winelands Airport Limited acquired the 150-ha Fisantekraal Airfield in November 2020 and proposes the redevelopment thereof that comprises the current Cape Winelands Airport (CWA) and various adjacent land portions to represent a total size of 220 ha. The CWA currently serves as a general flying airfield and offers flight training in the Cape Town area, aircraft maintenance, private charter flights, hangarage for private plane owners, and the sale of aviation fuel. The vision is to establish CWA as the Western Cape's dedicated General Aviation (GA) hub and the preferred airport for discerning business and leisure passengers. The project is a "semi-greenfield" development on property that includes four concrete runways built during WW2, of which only two will be rehabilitated for future commercial use by the airport (Cape Winelands Airport Limited, 2021b).

Dr Jonathan Bloom of Multi-Purpose Business Solutions was commissioned as an independent consultant to prepare a Socio-Economic Baseline Assessment of the proposed development.

## Fit with spatial planning

In keeping with the *Guidelines for Economic and Social and Specialist input into EIA Processes* (CSIR, 2005 and Department of Environmental Affairs and Development Planning, 2007), the project should fit with planning frameworks and is desirable from a societal cost-benefit perspective. It is clear from both national and provincial policy, strategies and programmes, that the proposed development does not infringe the current spatial planning of the City of Cape Town and enhances the strategic objectives of the planning context at the national, provincial and local levels.

The Cape Winelands Airport is a large private investment that would contribute to economic growth and job creation during the construction and operational phases. The proposed WCA development clearly focuses on transport and commercial uses that will contribute to employment and new business opportunities for the CMA. The roll-out of the project offers an opportunity for skills development and will contribute to transport infrastructure. The City of Cape Town's IDP and SDF specifically support the CWA development, and the Northern District Plan includes amending the urban development edge to include the CWA. However, the amendment of the urban development edge does not cover the proposed landside development, which will require motivation to deviate from the MSDF.

## Identification of impacts

The question that needs to be addressed in the context of perceptions and concerns raised by I&APs is whether the proposed CWA development is desirable from a societal cost-benefit perspective? Several issues of a social nature are raised and discussed in this report. It was determined that there will be both positive and negative socio-economic consequences if the project is to proceed and the need thus exists to determine whether mitigation of the negative impacts could be implemented, and to what extent the developer would be willing to introduce the recommended mitigation measures. **Note that a 4-year construction period was assumed for the first phase of the Preferred Alternative 3**.

### *Development Alternatives*

1) The **No-Go Alternative 1** – development of the current airport within its current rights (i.e. maximum runway of 1 454 m and 6 000 $m^2$ GLA)
2) The Initial Preferred Alternative (**Runway Alternative 2**) - a commercial and aviation hub (350 000 $m^2$ GLA) with a 3 500 m main runway at orientation 01-19 and initial retention of cross runway 14-32 in Phase 1
3) The New Preferred Alternative (**Runway Alternative 3**) - a commercial and aviation hub (350 000 $m^2$ GLA) with a 3 500 m main runway at orientation 01-19 (no cross runway)

### *Impact Ratings*

The following table summarises the residual impacts of the three alternatives:

| Nature of the Impact | Rating after mitigation (Residual impact) | | | |
|---|---|---|---|---|
| | Alternative 1 | Alternative 2 | Preferred Alternative 3 | Cumulative (Alternatives 2, 3) |
| **Construction** | | | | |
| Traffic flows along access roads | (scored as Low negative in Transport Impact Assessment) | | | |
| Nuisance factors (dust and noise) | Very Low | Low | Low | Medium (-) |
| Influx of jobseekers | Very Low | Low | Low | Medium (-) |
| Construction workers – local communities | Very Low | Low | Low | Medium (-) |
| Increase in local crime | Very Low | Low | Low | Medium (-) |
| Economic income and employment opportunities | L (+) | High (+) | High (+) | High (+) |
| **Operations** | | | | |
| Provision of transport infrastructure | Low (+) | High (+) | High (+) | High (+) |
| Traffic flows along access roads | (scored as Low negative in Transport Impact Assessment) | | | |
| Sense of place | Very Low (-) | Medium (-) | Medium (-) | High (-) |
| Increase in local crime | Very Low (-) | Low (-) | Low (-) | Medium (-) |
| Risk of informal settlements | Very Low (-) | Low (-) | Low (-) | Medium (-) |
| Nearby farming and business operations | Very Low (-) | Low (-) | Low (-) | Medium (-) |
| Surrounding property values – residential | Very Low (-) | Low (-) | Low (-) | Medium (-) |
| Surrounding property values – commercial/industrial | Very Low (+) | Low (+) | Low (+) | Medium (+) |
| Bulk infrastructure requirements | Very Low (-) | Low (-) | Low (-) | Medium (-) |
| New business development | Very Low (+) | High (+) | High (+) | High (+) |
| New employment opportunities | Very Low (+) | High (+) | High (+) | High (+) |
| Revenue accruing to public authorities | Very Low (+) | High (+) | High (+) | High (+) |

**Cumulative impacts** refer to any other developments as well as existing activities within the immediate area that could compound any positive or negative impacts associated with the proposed development. This usually refers to similar developments, such as the proposed upgrades at CTIA, which is too far away to have a cumulative impact, except for the provision of transport infrastructure. However, several other nearby developments are in the planning or construction stages, such as Graanendal, Greenville Garden City, Buh-Rein Estate and Darwin Road, that could have a cumulative impact.

The potential **negative impacts** would be compounded if additional developments were introduced in the immediate and surrounding areas. These impacts would typically relate to sense of place, traffic, infrastructure requirements, crime and nuisance factors. Similarly, other developments in the Fisantekraal area could compound employment and economic income **benefits**.

### *Recommendations*

Many potential impacts could be mitigated by introducing the measures proposed by various specialists; these must be considered and implemented by the developer. Monitoring and evaluating socio-economic impacts and continuously assessing the outcomes would further inform the social and economic fabric and the impact on surrounding land users. The following mitigation measures related to the **socio-economic context** are proposed and should be consolidated into an Implementation Plan as part of the Construction Environmental Management Plan (CEMP) and/or Operational Environmental Management Plan (OEMP).

| Pre-construction (CEMP) |
|---|
| **Procurement Strategy** that includes the following and applies to the project:<br>(a) Initiate the activity during the first phase of the development;<br>(b) The strategy is the responsibility of the contractor(s) collectively under the guidance of the Municipality;<br>(c) Focus on opportunities for local labour in the surrounding areas and businesses as a priority. Contractors are required to indicate the geographical location of sub-contractors (businesses) and local labour; and<br>(d) Local contractors invited to tender for work in the context of the terms and conditions included in RFP documentation, which would include skills development, on-site training, gender equality, etc. |
| **Pre-construction & Construction (CEMP)** |
| **Communication Protocols** that address directly and indirectly affected residents and surrounding landowners, with specific reference to activities, timelines and intended impacts related to the construction phase and all related activities associated with the implementation of the project (i.e. during the operational phase).<br>• **Objectives**<br>- To orientate, generate awareness and gain positive attitudes among stakeholders as far as possible; and<br>- To engage and inform stakeholders of progress regarding all phases of construction.<br>• **Target audience**<br>- Property owners and users of the land portions directly surrounding the proposed activity; and<br>- Other stakeholders and property owners that may be affected.<br>• **Major types of messages**<br>- Inform directly affected residents on the periphery of the development site and others that would frequent the area;<br>- The commencement date for construction activities related to the project;<br>- Duration and extent of the construction activities and details of individual construction activities;<br>- Progress updates, including any delays in a construction-related activity; and<br>- Introduce appropriate signage to warn persons frequenting the area and those residing adjacent to the development area. |

| Construction phase | |
|---|---|
| Nuisance factors (dust and noise) | Dust and noise emissions during the construction period should be minimised through a Construction Environmental Management Plan (CEMP). |
| Influx of job seekers, impact on local communities | Contractors need to employ people from the immediate area whenever possible. |
| Increase in local crime | Co-operation between the Developer and contractors is essential to ensure that the area around the proposed development remains secured during construction. On-site security measures, such as perimeter fencing, controlled access and security guards and patrols will minimise the risk. |
| **Operational phase** | |
| Sense of place, residential property values | Implement recommendations by relevant specialists to mitigate negative impacts related to visual, traffic, noise, air pollution. |
| Local crime | Co-operation between Developers and contractors and on-site security measures. |
| Informal settlements | Formal housing could address the area's housing needs, eliminating the need for informal structures. Private landowners should ensure that unauthorised land settlements are dealt with by the authorities. |
| Nearby farming and business operations | Refer to mitigating measures relevant specialists proposed (in particular agro-ecosystem, noise and air pollution). |

# Impact statement

The most significant socio-economic benefit from the proposed CWA project is the anticipated contribution to the aviation industry in the Western Cape. In terms of **economic benefits**, an estimated R8,9 billion in capital investment could generate R23,1 billion in new business sales, which could add R8,8 billion (net of the import leakage) to the GGP of the Western Cape economy during construction. During an initial 20-year operational period, which includes a substantial component of maintenance expenditure, an estimated R36,1 billion in nominal terms could generate R76,1 billion in new business sales.

The project could sustain about 32 433 (direct, indirect, and induced) **employment opportunities** during construction, including ongoing capital expenditure upgrades over 20 years. This could increase household incomes by R3,8 billion over 22 years. During the initial 20 years of operations, the project could sustain about 102 732 direct, indirect, and induced employment opportunities, adding R17,7 billion in household income.

Several potential **negative impacts** were identified, including traffic flows, sense of place, nuisance factors, local crime, influx of job seekers, informal settlements and construction workers that could impact local communities. However, if the site is properly managed and the mitigation measures indicated by the various specialists are implemented, the significance of these impacts will be low to moderate.

**We assess that the proposed development's social benefits outweigh the potential costs, but this must be considered in an operation that adheres to local and national operational guidelines.**

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# 1 BACKGROUND

## 1.1 Introduction

Cape Winelands Airport Limited acquired the 150-ha Fisantekraal Airfield in November 2020 and proposed a redevelopment that comprises the current Cape Winelands Airport (CWA) site and various adjacent land portions to represent a total development size of approximately 885 ha. The CWA currently serves as a general flying airfield and offers flight training in the Cape Town area, aircraft maintenance, private charter flights, hangarage for private plane owners, and the sale of aviation fuel. Due to the proposed expansion of the CWA, Cape Town will become a 'Multi-Airport City'. The airport will support the aviation sector by providing scheduled airline operations, General Aviation (GA) services, an alternate airport for fuel planning, a reliever airport, and a logistics hub.

Dr Jonathan Bloom of Multi-Purpose Business Solutions was commissioned as an independent consultant to prepare a Socio-Economic Impact Assessment of the proposed development. Dr Bloom (PhD, Corporate Finance) is the principal member of Multi-Purpose Business Solutions and was a professor of real estate at Stellenbosch University until 2013. He has conducted more than 100 socio-economic impact and other assessments as an independent consultant for real estate and other South and Southern Africa developments. Jonathan has research skills in designing and implementing research projects from a qualitative and quantitative perspective. He majored in statistics and business economics, and his background in statistical modelling of economic aspects related to assignments and cost-benefit assessments has been used to assist clients with evaluating socio-economic impacts associated with projects. Refer to **Annexures C and D** for a declaration of independence and his *curriculum vitae*.

## 1.2 Terms of Reference

The Socio-Economic Impact Assessment includes the following:

1. Description and understanding of the nature and scope of the proposed project, location, layout, etc.;
2. An overview of the economic development patterns in the City of Cape Town Metropolitan Area;
3. A socio-demographic and -economic profile of the population (and communities) residing within specified concentric zones from the site;
4. Place the envisaged project in the context of spatial planning regulations and other guideline documents and assess the fit from an economic perspective;
5. Identify possible social and economic impacts / consequences / implications associated with the proposed development;
6. Ascertain the overall monetary benefits, i.e. Gross Value Added (GVA) and job creation potential on the Western Cape Province economy during the construction and operational phases; and
7. Proposals for a framework for monitoring and evaluation of the socio-economic impacts.

## 1.3 Approach & Methodology

Our approach for assessing the socio-economic impacts of the proposed development is presented in **Figure 1**. The illustration shows that evaluating a project's financial feasibility and long-term viability is an essential point of departure, as long-term positive economic impacts can only flow from a financially sustainable or viable project. It must also fit and demonstrate compatibility with economic and integrated planning for the area, which also covers spatial planning. These hurdles are a critical aspect of economic desirability, which ensures that the proposed development complements economic planning as reflected in spatial development planning and the local economic development plans and strategies for the area.

In keeping with the *Guideline for Involving Economic Assessment Specialists in EIA Processes* (CSIR, 2005) and the *Guideline for Involving Social Assessment Specialists in EIA Processes* (Department of Environmental Affairs and Development Planning, 2007), the project should fit with planning frameworks and be desirable from a societal

cost-benefit perspective (concerning the assessment of social impacts). The *Need and Desirability Guidelines* (Republic of South Africa, 2014) also apply to the economic and social justification for the development proposed in the particular location. In addition, adherence to Appendix 6 of the NEMA Regulations and alignment with existing guidelines are essential (**Annexure B**).

Given the nature of the proposed activities and the importance of the project for direct investment in the Cape Town Metropolitan Area (CMA), monitoring and evaluation throughout construction and operations are essential. Both the envisaged positive and potential negative impacts need to be monitored through an inclusive and credible process, with a broad framework outlined in this report.

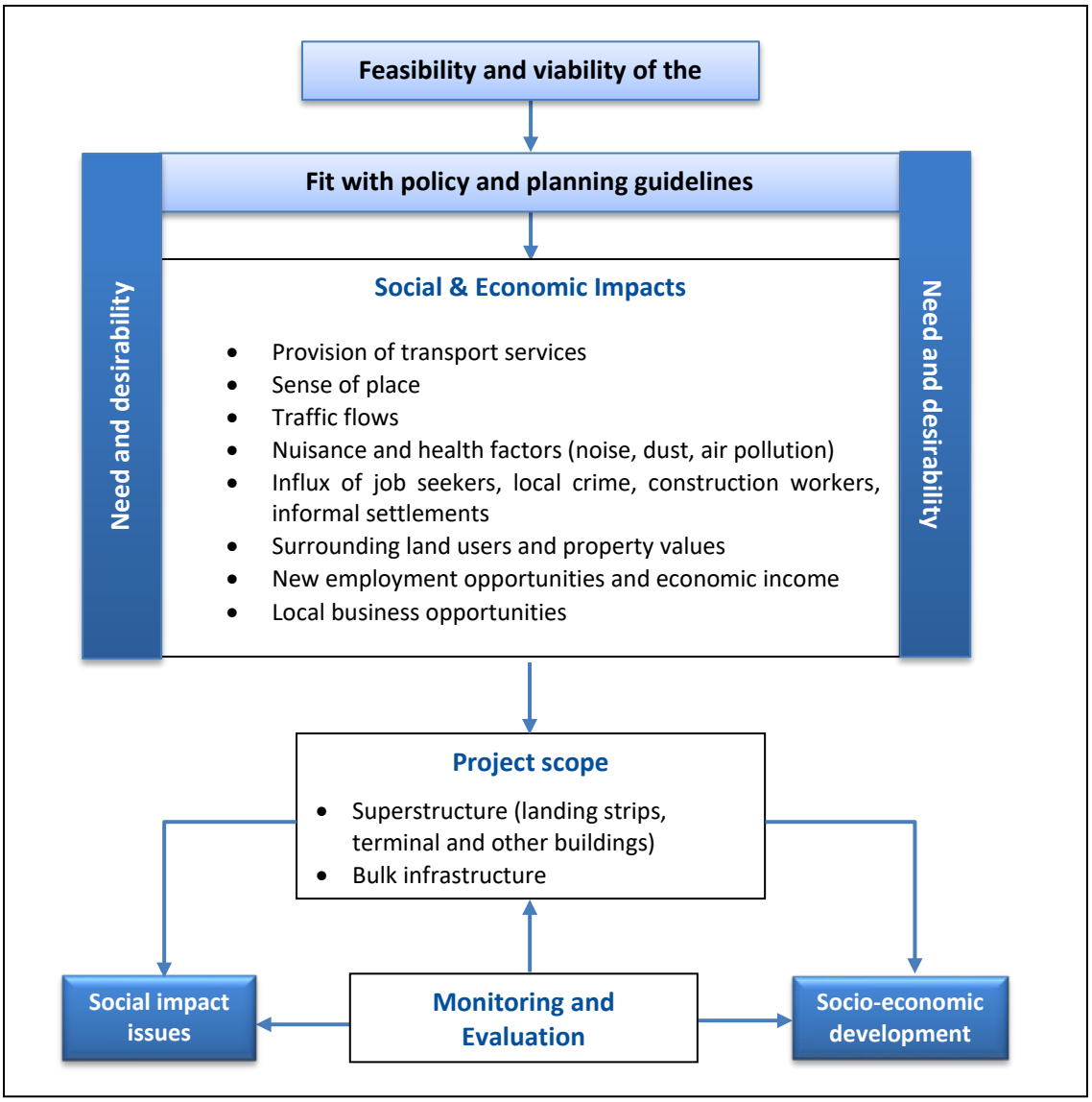



**Figure 1: Methodology used for specialist socio-economic input for the EIA process**
**Source**: Multi-Purpose Business Solutions

### 1.3.1 Data gathering and analysis

The analysis of primary inputs usually includes information collected from interviews with key stakeholders and/or representatives of stakeholder groups that are affected directly or indirectly by the proposed development. Secondary sources (including reports and publications) are consulted to inform the independent socio-economic assessment and complement the primary research. Our approach to addressing comments from stakeholder groups

and Interest and Affected Parties (I&APs) is to include relevant inputs from the environmental process conducted by the Environmental Assessment Practitioner (EAP) and assess the inputs from a socio-economic perspective. Where applicable, I&APs will be identified for further consultation to obtain additional information for inclusion in the report. These parties may include, but are not limited to, the local authority, landowners, surrounding landowners, local business associations (where applicable), e community leaders and representatives, interest groups, etc.

The study area for the socio-economic impact assessment is defined as concentric zones that include all sub-places (communities) within 10 km and 20 km from the development site. Refer to the socio-demographic and -economic analysis in **Section 4** for a detailed description of the communities likely to be affected by the development.

### 1.3.2 Impact assessment

The proposed project would have both qualitative and quantitative impacts (benefits and costs) on the socio-economic fabric of the area. We have considered the core project's quantitative economic impact, i.e., positive and negative consequences, and analysed the socio-economic impact. Where applicable, a qualitative assessment of both benefits and costs is provided from a social perspective. The different impacts are assessed using the impact assessment criteria indicated in Annexure A. Per NEMA EIA Regulations (2014, as amended), the potential impacts of the Preferred Alternative are assessed and compared with the No-Go Alternative:

1) The **No-Go Alternative 1** – development of the current airport within its current rights (i.e. maximum runway of 1 454 m and 6 000 $m^2$ GLA)
2) The Initial Preferred Alternative (**Runway Alternative 2**) - a commercial and aviation hub (350 000 $m^2$ GLA) with a 3 500 m main runway at orientation 01-19 and initial retention of cross runway 14-32 in Phase 1
3) The New Preferred Alternative (**Runway Alternative 3**) - a commercial and aviation hub (350 000 $m^2$ GLA) with a 3 500 m main runway at orientation 01-19 (no cross runway)

Estimating the economic impact of a project or development can be a constructive process for understanding the potential benefits. However, it should be noted that estimating these benefits is more helpful in understanding the likely order of intensity related to impacts rather than specific amounts. An economic impact assessment traces spending through an economy and measures the cumulative effects of that spending over time. Defining the area of influence is an important first step in the process. The focus of the economic impact is local, regional or national. The nature of the proposal determines the impact region, which can be the entire country, province, individual, or combination of municipalities. An economic impact assessment would estimate the economic consequences of the development on the metro and provincial economy.

An Economic Impact Analysis (EcIA) assesses the direct and indirect contributions of construction spend and operational revenues (spend) on the economy by applying multipliers. Benefit-Cost and Economic Impact Analyses are not directly comparable, but are complementary in providing a micro-level appraisal and macro-economic assessment of the impact related to the development.

Once the direct investment is determined, the indirect/induced impacts are estimated. The multiplier effect is the relationship between one form of economic activity and the total additional activity it generates. An Economic Impact Analysis is thus based on the multiplier concept, which estimates how much additional economic activity will result from an investment of R1 in the economy. It is termed as such because the total impacts are larger than an investment's initial, direct impact during construction or operations. For example, an aggregate economic multiplier of 2,50 would mean that for each Rand spent on the operation of the airport, R2,50 is generated. Subtracting the original R1,00 of operational spending (direct impact) leaves R1,50 of additional spending on items and services, referred to as the indirect/induced impact.

For this study, a Social Accounting Matrix (SAM) is used to assess and estimate the indirect/induced impacts of the project on the local/regional economy. A SAM represents the flows of all economic transactions within an economy (regional or national), and the total direct contribution to and indirect impact on, the economy in terms of value added to Gross Geographic Product (GGP).

## 1.4 Assumptions

The following assumptions were used for calculations related to employment and economic income during construction:

- The structure and composition of the Western Cape economy will remain unchanged. This is necessary to enable the use of multiplier analyses.
- No significant political or other administrative changes will take place on a national or provincial level.
- An initial construction period of 4 years and additional construction during operations were used to assess employment during construction.
- Only total labour demand is considered; no race, gender or skill level is considered; and
- An assumed import leakage[1] of 20% for construction.

## 1.5 Limitations

Several limitations were identified during the study:

- Due to the reclassification of employment categories in the 2011 Census, no comparative assessment is possible with the 2001 Census.
- Comparing the population figures for the 2001 and 2011 Census is impossible as different categories were considered for various demographic items in the 2011 Census.
- The data provided in reports prepared by Statistics SA and the data extracted from a detailed assessment of enumeration areas[2] and sub-places do not correspond or are missing.
- Although the 2022 Census high-level results have been released, many issues have arisen which doubt the credibility and validity of the 2022 Census. The large undercount of 30%, way above any acceptable norm, does not provide any confidence in the results and much criticism has been levelled at the methodology and other matters. We used the outdated 2011 Census, in the absence of any credible information to provide some demographic and socio-economic context, but this is not plausible.
- Given the lack of detailed information on the potential revenue of the proposed development, it is impossible to quantify the potential contribution toward the local economy once all the envisaged components are complete and operating.

[1] Leakage refers to capital or income that exits an economy or system rather than remaining within it.
[2] An enumeration area (EA) is the geographic area surveyed by one census representative and is composed of one or more adjacent blocks.

# 2 PROJECT DESCRIPTION

## 2.1 Project location and site description

The Cape Winelands Airport (CWA), formerly Fisantekraal Airfield, is an ex-South African Air Force airfield built circa 1943 outside Fisantekraal in the Durbanville area. The Airfield is located on various portions of Farms 724, 474 and 942 in the City of Cape Town Metropolitan Area (Subcouncil 7, Ward 105). The site has been included in the Urban Development Edge in the 2023 Municipal Spatial Development Framework. It is approximately 2 km northeast of Fisantekraal, 8 km north of Kraaifontein and 6 km north of the N1. It takes direct access off Lichtenburg Road (R312), which links with the R304 to the east and the R302 (Klipheuwel Road) to the west. It is located between the three major regional growth centres of Cape Town, Stellenbosch and Drakenstein, and along north-south and east-west road networks that provide opportunities for transport-related developments.

The CWA currently serves as a general flying airfield that is mainly used for flight training in the Cape Town area, but also offers aircraft maintenance, private charter flights, hangarage for private plane owners, and the sale of aviation fuel (stored in a 28 000 L containerised tank). There are currently four concrete runways of 90 m wide in varying lengths (700 m to 1 500 m), designated 01/19, 05/23, 14/32 and 03/21 (**Figure 2**). Runway 05-23 is mainly used during strong winds from the south and in normal operation conditions, whereas Runway 14-32 is mostly used during high winds from the east/west to minimise crosswinds (Cape Winelands Airport Limited, 2021a). Runways 01/19 and 03/21 have not been used recently.

There are currently 20 permanent structures of varying heights with a combined floor area of approximately 6 000 $m^2$ and numerous metal shipping containers used for storage (Townsend, 2020). The permanent buildings accommodate a flight school, helicopter school, private hangars, storage areas, fuel bays, offices, and other airport-related activities. Four old structures were built during the War as part of the airport's defences; three are derelict, and one is no longer roofed; the fourth was adapted for staff housing many years ago. The landing strips are poorly maintained and must be cleared regularly from moss and/or shrubs growing through the cracks. Port Jackson shrubs and trees cover most of the site between and surrounding the landing strips.

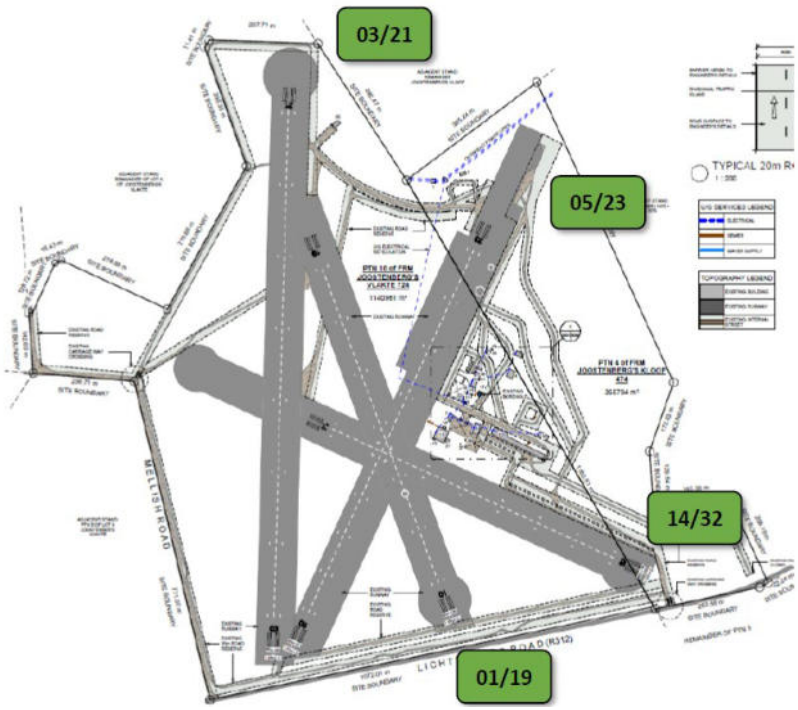



**Figure 2: Site map of the current Cape Winelands Airport**
**Source:** Cape Winelands Airport Limited (2021a)

## 2.2 Zoning rights

In November 2020, the Airfield was acquired by Cape Winelands Airport Limited and adjacent land parcels were secured to take the scope of the current development to approximately 885 ha (**Figure 3)**. In March 2021, an application to rezone the 150-ha site from Agricultural with its existing lawful non-conforming use as an airport to Transport Zoning 1: Transport Use (TR1) with a permanent consent use for "airport" subject to a Site Development Plan and a condition limiting the gross leasable area to the existing 6 000 m², was approved. The area highlighted in pink (approx. 263 ha) will be rezoned from Agriculture 1 to Transport 1, while the area in green will remain Agriculture 1 (approx. 471 ha). H & A Planning (2024) indicated that the Primary Uses under TR1 include transport use, multiple parking garage, utility service, shop, restaurant, service trade, office, warehouse, rooftop base telecommunication station, minor freestanding base telecommunication station, minor rooftop base telecommunication station and container site. In addition, consent use may also be applied for business premises, flats, place of assembly, place of entertainment, hotel, conference facility, service station, airport, helicopter landing pad and industry, among others. However, such consent uses should not detract from transport use as the dominant use.

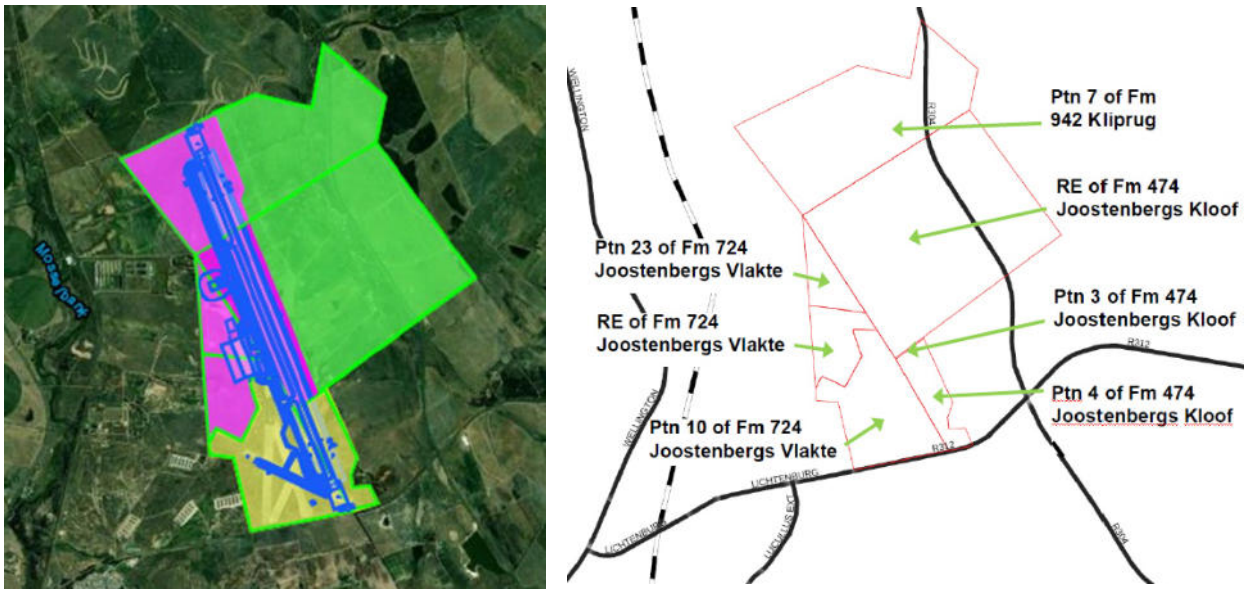



**Figure 3: Zoning requirements for the proposed CWA. Yellow represents the current CWA footprint, pink requires rezoning, whereas the green area will remain Agriculture 1**

**Source:** Cape Winelands Airport Limited (2023), H & A Planning, 2024

## 2.3 Project Alternatives

The assessment will consider three development alternatives:

1) The **No-Go Alternative 1** – development of the current airport within its current rights (i.e. maximum runway of 1 454 m and 6 000 m$^2$ GLA)
2) The Initial Preferred Alternative (**Runway Alternative 2**) - a commercial and aviation hub (350 000 m$^2$ GLA) with a 3 500 m main runway at orientation 01-19 and initial retention of cross runway 14-32 in Phase 1
3) The New Preferred Alternative (**Runway Alternative 3**) - a commercial and aviation hub (350 000 m$^2$ GLA) with a 3 500 m main runway at orientation 01-19 (excluding the cross runway)

The Runway Alternatives Report (Cape Winelands Aero, 2023) concluded that the **No-Go (Alternative 1)** does not allow CWA to meet its strategic and business objectives, nor the opportunity to offer a tremendous value proposition to the region, stakeholders, customers and nearby communities. Alternative 1 was thus not considered to be viable. CWA has a runway system consisting of four crossing non-instrument runways, with lengths ranging from 1 050 to 1 454 m. The length of the current runways would limit the airport's operations to Code A and B

aircraft, as 3 500 m for the main runway is required to accommodate up to Code F aircraft. However, it does meet the 700 m runway requirement for Code 1A non-instrument operations and enables light aircraft operations during certain wind conditions. The CWA can thus resurface the current runways to allow for increased operations of Code A and Code B aircraft, but it will not be able to balance the terminal and landside capacities with the anticipated growth on the airside. Code A and B operators will also require CWA to develop hangars, FBO facilities, a terminal building, parking, roads, bulk services, etc., to facilitate these operations end-to-end. Scheduled operations will also require apron parking stands. CWA's Land Use Planning Application indicates that "the development shall be limited to a maximum of 6 000 $m^2$ Gross Leasable Area (GLA). However, the 6 000 $m^2$ GLA is fully utilised, leaving no capacity for further development. CWA can thus not develop the associated infrastructure and facilities within the current development rights.

For **Runway Alternative 2**, the Airport development would occur in two phases: Phase 1 would involve the construction of a new 3 500-m primary runway at orientation 01-19 (with a 280 m runway strip width) and would initially retain cross runway 14-32 as a secondary runway (**Figure 4**). As the airport develops, the secondary cross runway will be closed and absorbed into the greater development as part of Phase 2.

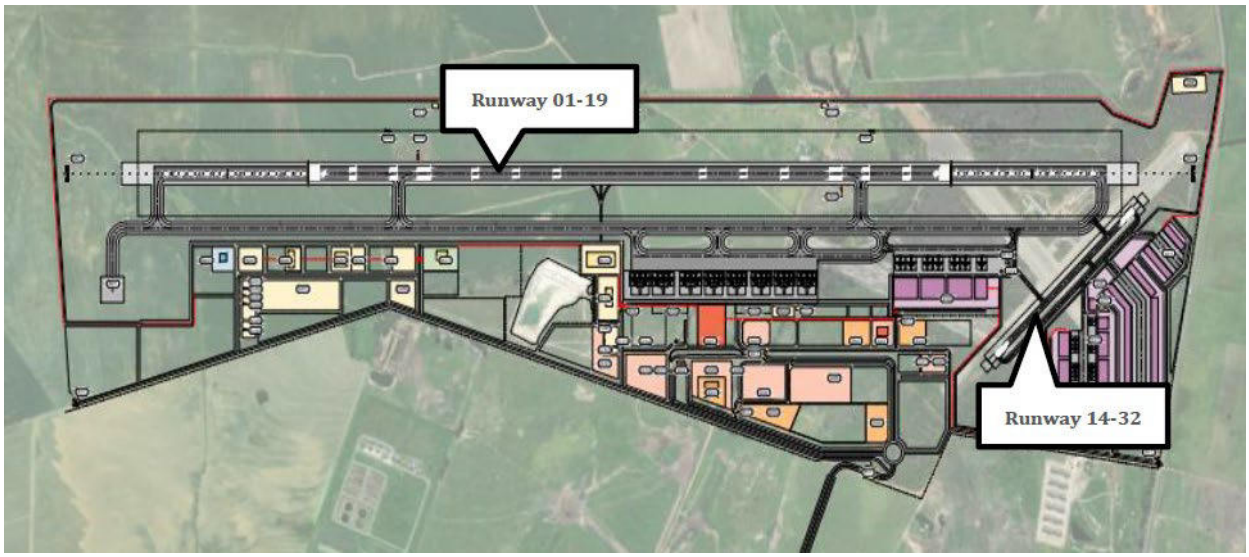



**Figure 4: Phase 1 of Alternative 2, indicating the main runway 01-19 and the cross runway 14-32.**
**Source: Cape Winelands Airport, 2023a**

Further studies after the Scoping phase informed the **Preferred Alternative 3**, excluding the existing cross runway 14-32 as a secondary runway. Airport development will still be undertaken in two phases. Phase 1 will focus on developing the fundamental infrastructure of the airport, as well as the infrastructure and facilities required for diversion operations. This will include site clearing, bulk earthworks and the installation of stormwater management infrastructure, terminals, aircraft stands, and essential airport operational facilities (Zutari, 2024). Phase 2 will be focused on increasing the capacity and functionality of the Services Precinct, the Airport Terminal Precinct and the General Aviation Precinct.

## 2.4 Proposed development (Preferred Alternative 3)

The proposed project entails the development of the existing airfield and adjacent plots of land into a commercial and aviation hub, supporting domestic, regional and international flight operations with a particular focus on non-aeronautical revenue streams (Cape Winelands Airport Limited, 2022).

The proposed development is based on three strategic pillars:

1. **General Aviation (GA) & Charter Operations:** Given its location and facilities, CWA is well-positioned to become the region's *de facto* hub for GA. There is room for growth in the current flight school operations, and the airport

can attract private aircraft owners by developing cost-effective, professional facilities for aircraft parking, maintenance and fuelling, and hospitality.

2. **Scheduled Commercial Traffic:** CWA will position itself as a secondary airport in Cape Town that offers connectivity for specific market segments and a faster processing time than the Cape Town International Airport (CTIA). CWA is also well-positioned to serve as a diversion airport for domestic airlines.
3. **Commercial Development:** Multimodal connectivity and synergistic landside activities can turn the airport into an economic node and growth catalyst for the region. Based on its location, the airport can become a destination in and of itself. Non-aeronautical activities related directly to flight operations (such as advertising, retail, food & beverage) contribute to the all-around attractiveness of the airport. Transportation-related developments and commercial (or even light-industrial) property development can create significant value and diversification of income. Opportunities include a Training Academy, Hotels, Clubhouse (public restaurant), Garage and Cargo facilities.

The project is unique in a few critical ways:

1. It is a "brownfield" development that entails redeveloping an existing property with four concrete runways built during WW2. Runway 01/19 will be rehabilitated for future commercial use; the others will be decommissioned and broken up, and the material potentially used for the main runway.
2. It is a private airport development, whereas most international airport developments in South African and Southern Africa are government-funded.
3. The ultimate goal is to develop the airfield into a fully commercial airport. Most historic international airports progressed naturally and organically from humble beginnings. With the final stage in mind, the CWA development can be planned most efficiently and practically.

After rigorous engagement with industry and specialists, a scope for the project - driven by the business plan and informed by technical runway limitations and considerations - was compiled to facilitate safe operations for aircraft up to code F (Cape Winelands Airport Limited, 2022). Some of these considerations include:

- **Runway length/width requirements** to accommodate aircraft up to code F.
- **Prevailing wind direction:** Aircraft take-off against the wind to get airborne (SE/SW in summer, NW in winter).
- **Integration into existing airspace:** CWA falls within the airspace currently used by CTIA. The main runway at CWA is desired to be parallel to the CTIA runway (magnetic bearing of 01/19) so that flight paths arriving at or departing from the Cape Town area do not interfere.
- **Topography** - Runway systems require large portions of relatively flat land due to slope constraints that runways must comply with.
- **Obstacles** - Runway systems require flat land without obstacles (e.g. water masses, quarries or hills) that pose a danger to aircraft.
- **Land availability**.

### 2.4.1 Airside Precinct Development

In Phase 1, the airport will consist of one runway, at an orientation of 01-19, 3,5 km long and constructed to serve up to Code 4F instrument operations (**Figure 6**). This runway will be shared by all operators, including scheduled commercial and general aviation (PHS Consulting, 2024b). To improve efficiency for general aviation operations, intersection take-off points will be introduced on the runway. The airside runway development in Phase 1 will also include airside systems such as CAT III Instrument Landing System (ILS), Precision Approach Path Indicator, Glidepath Antennas, Meteorological Systems, Airfield Ground Lighting (AGL) and Remote Digital Control Tower Systems. Additional developments proposed as part of Phases 1 and 2 of the Airside Precinct (**Figures 5 and 6**) include Aircraft Parking Aprons; passenger terminal apron; general aviation and FBO aprons; isolation pad; cargo apron (Phase 2); and MRO apron (Phase 2).

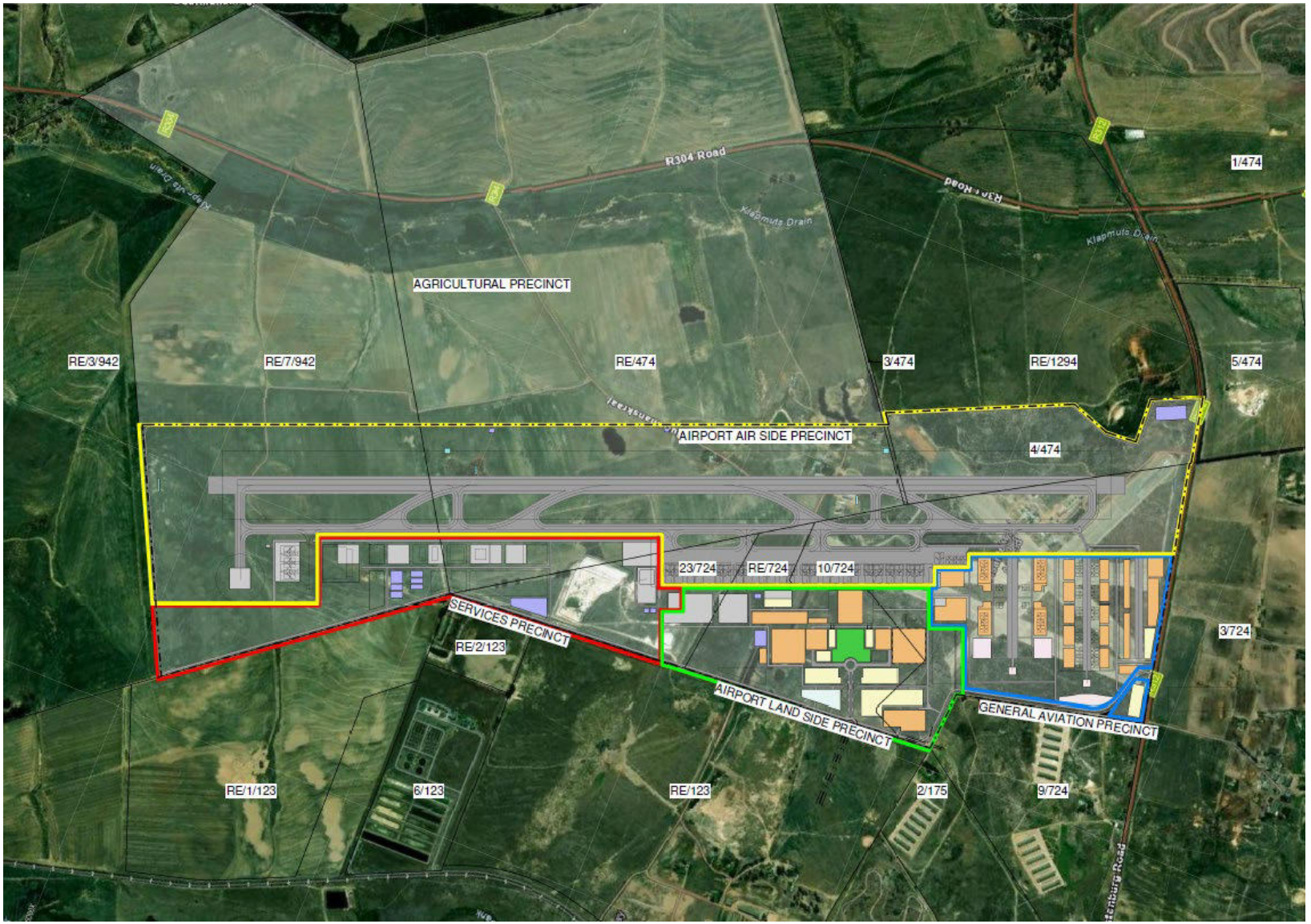



**Figure 5: The proposed Site Development Plan for the Cape Winelands Airport, Phase 1**
**Source:** Cape Winelands Airport Limited, 2024

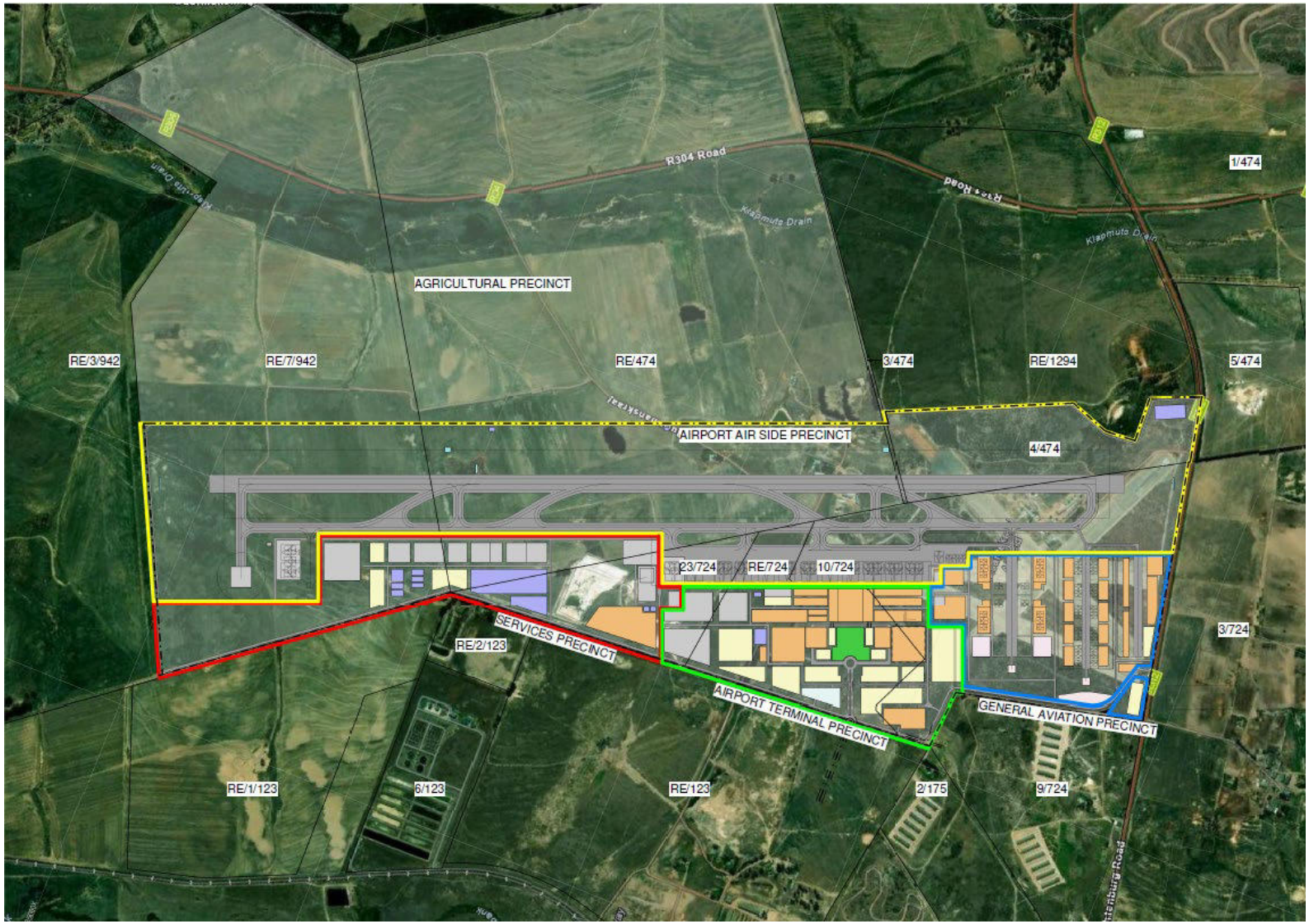



**Figure 6: The proposed Site Development Plan for the Cape Winelands Airport, Phase 2**
**Source:** Cape Winelands Airport Limited, 2024

Aircraft parking stands range from ICAO Code B up to ICAO Code F stands. As part of the Development, 11 MARS stands (21 code C equivalent stands) are foreseen. Some of these will be contact MARS stands, equipped with passenger boarding bridges (PBBs), and able to accommodate up to Code F aircraft. The other stands will be remote stands to which passengers are bussed or can walk. In addition, 1 Code E cargo aircraft parking stand and 2 Code E MRO aircraft parking stands have been included.

Airside service roads will be constructed to provide access to airport assets for vehicles such as buses, ground service equipment and maintenance vehicles. An airport security fence will be erected in line with aviation security standards. The bulk electricity supply will terminate within the CWA site at a connection point comprising an Eskom local substation (final overhead pole, overhead drop-out line-fuses, medium voltage 3-core cable connection to metering substation fitted with dual outgoing feeder connections) housed in a fenced or secure enclosure.

### 2.4.2 Landside Precinct Development

The following developments are proposed as part of Phase 1 & Phase 2 of the Land Side Precinct:

- **Passenger Terminal Building** (Phase 1): The PTB (Passenger Terminal Building) serves as the nexus of the airport's operations, connecting airside and landside areas, facilitating passenger and baggage movements, while adhering to rigorous national and international regulations. It has been designed in accordance with the latest ICAO Annexes and the IATA Airport Development Reference Manual (12$^{th}$ edition, May 2022), ensuring compliance with aviation standards. The location and approximate size of the PTB have been predetermined in the airport master plan. The PTB will be a double-level building with a handling capacity of 5,2 MPPA, and the terminal has been designed to process both domestic and international passengers.

  Facilities will be designed specifically for the intended user groups and will be compliant with the relevant standards and recommended practices. These facilities will include specialised equipment and areas to facilitate check-in and bag-drop, security screening, and, in the case of international traffic, customs and emigration/immigration.

- The **VIP processing facility** will have direct access to the airside. Government officials, VIPs and CIPs (Commercial Important Persons) will be processed through the facility.

- Included in the Development for Phases 1 & 2 are **commercial developments** with approximately 350 000 m² of lettable area. The terminal precinct encompasses a terminal plaza with landmark hotels, and an aviation museum. Included in the aeronautical hub functions are hangars, aviation clubs, an aviation training centre, workshops, light manufacturing, logistics, warehousing, and food processing.

- **Additional developments:** Petrol Service Station; Hotel; Access, egress and an internal vehicular road system; Drop and go facilities which will allow passengers to drop passengers off close to the passenger terminal building; Car rental facilities; Vehicular parking (multi-storey parking, at-grade parking); Pedestrian walkways; Substations; Billboards (indoor and outdoor, static and electronic); Droneport and vertiports; Gardens; Public transport facilities (Phase 2); Carpark/VTOL (Phase 2).

### 2.4.3 General Aviation Precinct

Phases 1 & 2 of the General Aviation Precinct will include Fixed Base Operators Hangars, General Aviation Hangars, a Clubhouse Area, Final Approach & Take-Off Infrastructure, a AVGAS Station, Substation, and Remote Digital Control Tower.

The general aviation area for Phases 1 & 2, including business aviation, is located on the southern part of the airport site. The FBO (Fixed Base Operators) facilities are located along a dedicated taxi lane that provides direct access to/from the main runway via the parallel taxiway. A GA (General Aviation) kerbside refuelling station for AV-gas will be developed at the furthest southern corner of the GA site. A GA clubhouse with airside views will be developed, with adjacent grass parking areas for visiting GA aircraft. The helicopter operations will be from dedicated FATOs (Final Approach and Take-off areas).

### 2.4.4 Services Precinct

The key airport support facilities are the aircraft rescue and firefighting (ARFF) services, airport maintenance, ground support equipment (GSE) maintenance and staging, cargo, aircraft maintenance, repair and overhaul (MRO), aircraft fuel facilities and an airport operations centre. Also included is provision for solar PV, wind energy and a biodigester. Most of these facilities are located on the western side of the airport. All facilities are accessible from the secondary landside road system, accessed from the western entrance road into the airport site. The following developments are proposed as part of Phase 1 & Phase 2 of the Services Precinct:

- The **fuel facilities** (Phase 1) consist of a bulk fuel depot, a general aviation kerbside refuelling station and a commercial/retail service station. An underground fuel line from the bulk fuel depot to the aprons is also provided for in Phase 2.
- **Aircraft Rescue and Fire Fighting** (Phase 1) - The airport will be equipped to provide a level of protection corresponding with Category 9 to meet the ICAO standards. The location of the rescue and firefighting station has been positioned close to the middle of the runway and complies with the ICAO requirements, considering the response times of two minutes and not exceeding three minutes to any point of the operational runway and any other part of the movement area.
- **Cargo Facility** (Phase 1) - The cargo facility is planned for the handling of general and specialized cargo in a dedicated facility on the airside. The cargo facility is expected to handle both belly cargo (on passenger aircraft) and full freighter aircraft and is, therefore, located close to the passenger terminal building. Initially, full freighter aircraft can make use of the main apron, as aircraft stand demand is limited during off-peak hours. A single dedicated freighter aircraft stand will be provided when passenger peak traffic starts to spread out.
- The **airport maintenance facilities** (Phase 1) are planned in the services precinct, with access on both airside and landside.
- **GSE staging areas** (Phase 1) are included close to the main apron. Two areas have been reserved for GSE parking adjacent to the main apron.
- The proposed **MRO facility** (Phase 1), including an apron and taxiway, is located to the North of the airport site. This includes one widebody aircraft parking position and associated hangar. Moreover, additional space for several additional aircraft is available on the site.
- **Catering Building** (Phase 2) - located in the northern area of the airport, with direct airside access and landside access via the northern service entrance to the airport.
- **Solar PV, Biodigester and wind energy** (Phase 1 & Phase 2) - provision for solar PV and a biodigester as renewable energy sources is included, with wind energy (roof based and land based) considered as an alternative.
- **Airport Operations Centre** (Phase 1) - A dedicated Airport Operations Centre will provide space for several key airport support services such as airport offices, remote/digital air traffic control facilities, police services, clinic, airport staff facilities and emergency facilities, among other functions. Housed in this facility will also be a central facility for all government department officiating at the airport. It is envisaged that this Operations Centre is a multi-storey building with 5 floors with access to both landside and airside on the ground floor.
- **Air Traffic Control Centre** (Phase 1) - The upper levels of the Airport Operations Centre will also contain an entire floor dedicated to the remote air traffic control centre.

Additional developments proposed as part of Phase 1 & Phase 2 of the Services Precinct development: Potable Water Reservoir; Groundwater Treatment Infrastructure; Potable Water Pump Station; Non-potable Water Storage; Solid Waste Storage; WWTW; Substation; Cargo Apron (Phase 2).

## 2.5 Surrounding land uses

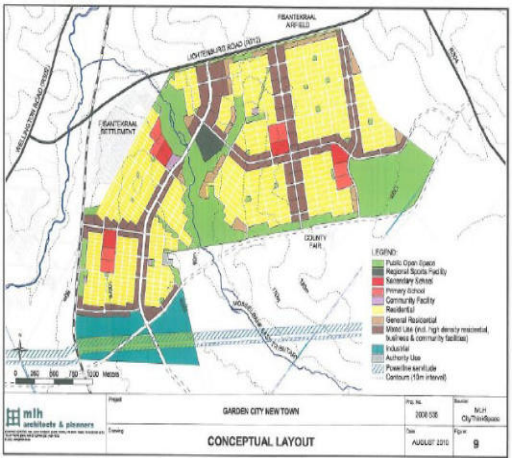
The site is bordered by the R312, with several agricultural activities towards the east and north (**Figure 7**). Peta's Place Equestrian Centre is located directly north of the CWA, whereas facilities linked to the Country Fair Laying Farms are directly west of the CWA. Further west and northwest are Dirt & Dust, Braam's Voerkrale and the

Fisantekraal Wastewater Treatment Works. Southwest of the site is the Fisantekraal residential area, which includes the new Garden City development. There are also pockets of land northwest of the site previously used for sand mining. The following overview offers brief descriptions of some surrounding land uses.


**Figure 7: Land uses close to the Cape Winelands Airport**
**Source:** Google Maps (2023)

The **Fisantekraal** settlement, southwest of the CWA site, had 12 369 residents per the 2011 Census, dominated by Black African (51,5%) and Coloured (46,9%) residents. It is home to primary and secondary schools, sports grounds, and several small businesses. The mainly low-income community battles with high unemployment and a growing informal settlement, with little prospect for work close to home. No more recent demographic data from the 2022 Census is available, and due to the serious limitations of the Census data, it is not considered credible as an indication of the population in the Fisantekraal area and surrounding area.

The housing need in the area is partially addressed by the adjacent **Greenville Garden City,** a 767-ha town launched in March 2016 as a private/public partnership between the City, the Provincial Government and Garden Cities, a non-profit residential developer. The mixed-use development includes 16 000 high-density residential units, and business and community facilities. By October 2022, a total of 2 072 new BNG houses were occupied, and another 100 were earmarked for take-up in early 2023. Construction of the houses is staged to accommodate demand by first-time homeowners receiving Government grants to buy their own homes (https://gardencities.co.za/greenville/). In 2022, the Fisantekraal Centre for Development was opened as a skills training facility that helps unemployed people find jobs in various sectors.




H & A Planning, 2024

**Peta's Place Equestrian Centre** places a lot of emphasis on the horse and their health, from weighing horses and their food to professionals monitoring their physical and mental health. All horses live in camps with grazing, either in mixed or single-gender herds. The surrounding farmland is used as paths where wildlife can be seen on scenic horseback rides.

**Braams Voerkrale** is one of the largest feedlots in the Western Cape, with about 4 000 cattle. It is the largest covered cattle farm in South Africa, with 80% of the cattle fed on concrete floors. The cattle are auctioned/sold off to various abattoirs in the Western Cape.

**Dirt and Dust** is an off-road racetrack mainly for motorcycles, but it also facilitates 4x4 vehicles, quad bikes, and related vehicles. They offer rentals for using the dirt track and motorcycles and hold weekly races and/or tournaments.

Southeast of Dirt & Dust is **Goedgeleven,** a venue for weddings and other events that offers scenic farmland and a natural setting. A chapel is available for smaller weddings, while its reception hall can accommodate larger events, offering water and garden features, specialised catering and suite accommodation.

Other communities along the flight path proposed for CWA aircraft include the following:

**Klipheuwel** is a small rural village located 15 km north of Durbanville and 8 km north of the CWA site. In 2011, a population of 2 294 was registered, represented by 54% Black African and 38,6% Coloured residents.

**Mikpunt** is a smallholding community located about 6 km north of the WCA site, between the Mosselbank and Klapmuts Rivers, and home to the Klipheuwel public primary school.

**Joostenberg Vlakte** is home to several smallholdings, bordered by the N1 on the south, Canary Road on the west, and Lucullus Road cutting north-south through the middle. The area is well-known for equestrian activities, but several other small goods and services businesses are operated from the smallholdings. The area north and east of the smallholdings is home to various farms that mainly produce fresh vegetables. However, in recent years, the full agricultural potential of the area has not been realised as farmers have to deal with trespassing, stock theft, break-ins and burglaries at premises, equipment theft and vandalism, the growing need for crop irrigation and the unreliable provision of electricity, among others. The ongoing uncertainty about future development in the area has discouraged landowners from investing in agricultural activities.

**Buh-Rein Estate**, directly south of the Darwin Road project site, is a lifestyle estate launched in 2010, and is estimated to be home to almost 12 000 new residents by 2022. Amenities include a family restaurant, clubhouse, swimming pool, open-air gym, 10 km jogging trail and a multi-functional sports field. Phase 2 retirement village offers 418 independent living and 43 assisted living apartments.

Although part of the City of Cape Town Metropolitan Municipality, **Kraaifontein** is still considered a town with its own central business district. It comprises several residential areas, i.e. Windsor Park, Scottsville, Peerless Park, Eikendal, Scottsdene, Bloekombos, Wallacedene, Belmont Park, Bonny Brook, and Uitzicht. The aircraft's flight path will pass over the eastern parts of Kraaifontein.

The approved **Lucullus Gardens** mixed-used development on a number of the Joostenberg Vlakte smallholdings includes residential, business, retail, institutional (college, hospital, school, community facilities), industrial and life science (research) components, totalling 418 880 $m^2$ GLA and 2 525 residential units of 80 $m^2$ each.

The 118-ha **Darwin Road** project was proposed on the corner of Darwin Road and Mostert Street, Kraaifontein. The proposal included various residential opportunities integrated with primary and secondary schools, early childhood development centres, clinics, places of worship, and civic and business nodes. On 15 July 2019, developers were granted Environmental Authorisation for 142 group housing units, comprising 106 duplex residential units, 36 larger duplex semi-detached residential units, and 284 on-site parking bays.

## 2.6 Other ongoing or proposed developments in the area

The Northern District has experienced significant development applications in recent years, with multiple developments approved or in the planning phase (**Figure 8**).

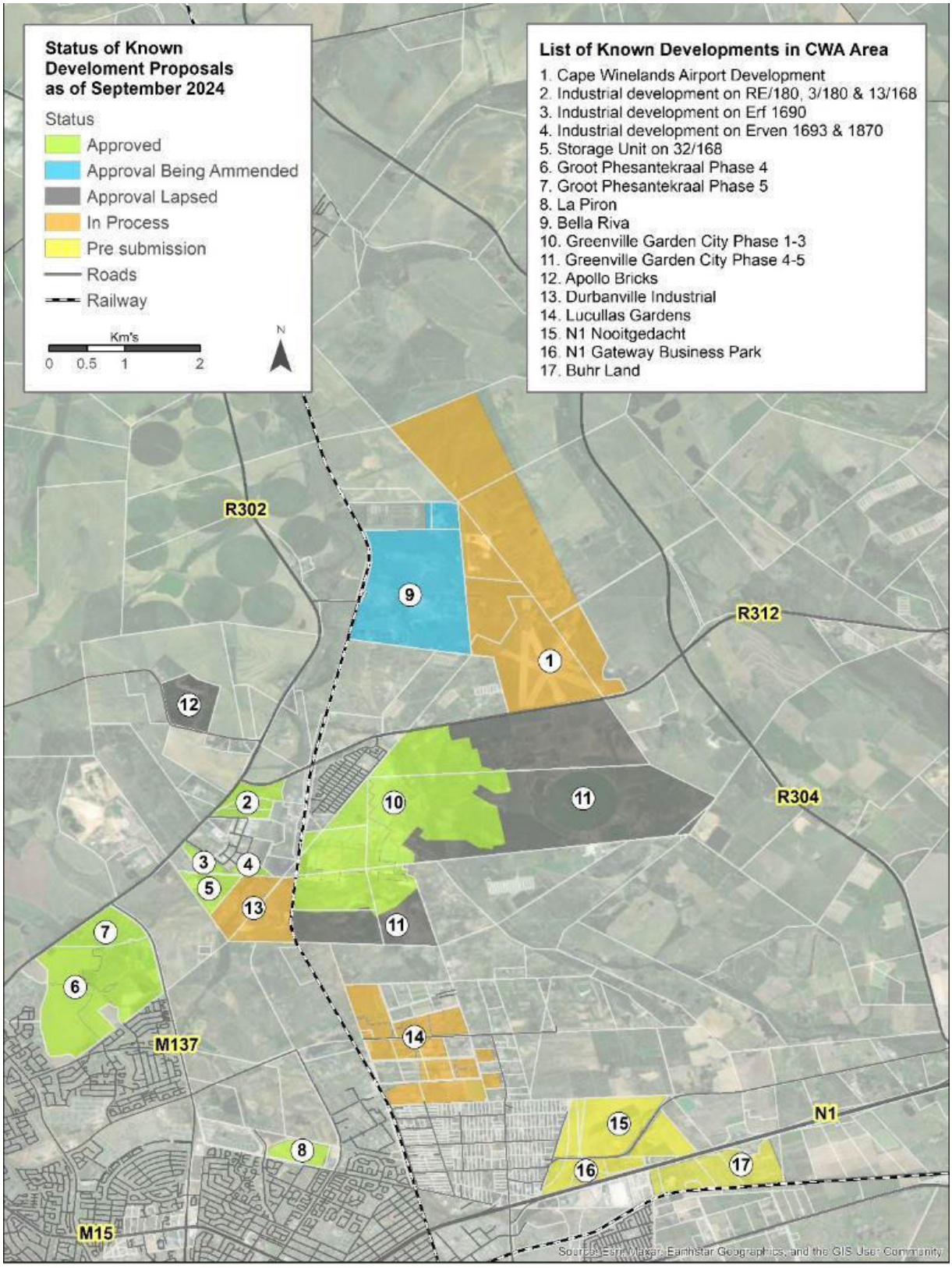



**Figure 8: Other developments near the CWA site.**
**Source**: H & A Planning, 2024

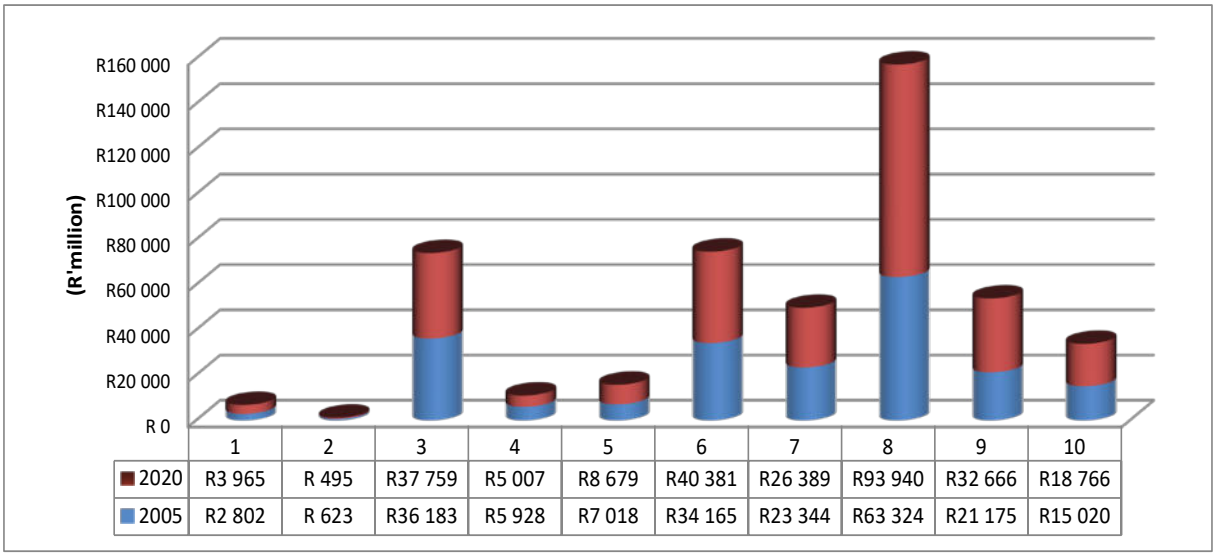
- Industrial and general business development on **Portion 13 of Farm 168 was approved in 2019, and on Remainder Farm 180 and Portion 3 of Farm 180** were approved in 2022. The latest proposal for the three erven includes a 135 867 m² GLA glass factory.
- Industrial development with a total GLA of 42,567 m² on **Erf 1690** has been approved.
- A 19 016 m² GLA industrial development on **Erven 1693 and 1870** is apparently in progress, while a Storage Facility with 6 100 units was proposed for **Portion 32 of Farm 168**.
- The **Groot Phesantekraal Phase 4** development was approved in 2019 and consists of three subphases (Phase 4.1, 4.2 and 4.3) that includes townhouses, retail, offices, medical, retirement village, school, higher education institute and student apartments (total GLA of 25 000 $m^2$).
- **Groot Phesantekraal Phase 5** includes a bulk trade centre, townhouses, arms dealership, office, nursery, shopping centre, fast food outlet and vehicle fitment centre (total GLA of 32 358 $m^2$).
- **La Piron** development on Portion 41 of Farm 725, designated for residential use, including single residential units and group housing.
- An Environmental Authorisation (EA) for the **Bella Riva Lifestyle & Golf Estate** was issued in January 2014, followed by a timeframe amendment that extended the EA until 10 April 2026. The initial EA authorised a mixed residential and lifestyle golf estate development that included an 18-hole golf course, 1000 subsidised housing, 2 069 dwelling units, Golf Estate Clubhouse and amenities, sports facilities and a sports academy, retail convenience centre, mixed-use lifestyle facility comprising an 80-room hotel with conference facilities, a gym and spa, a reconstructive clinic, schools (2 000 pupils) and crèches (500 children), public transport interchange and station near the Fisantekraal settlement and other relevant infrastructure.
- **Greenville Garden City** is a multi-phase mixed development that includes residential, business and community facilities. Phase 1-3 have been approved and construction has commenced. Phase 4 and 5 will involve completing the construction of the Lucullus Road southern extension and the east-west link road connecting to the Darwin Road extension.
- The **Apollo Bricks** development on Portion 42 of Cape Farm 168 was approved for rezoning and subdivision in 2019, which entailed the development of an industrial park with a total GLA of 120 000 m².
- The **Durbanville Industrial** development application is in process (total GLA of 207 198 m²).
- Approval for the **Lucullus Gardens** mixed-use development has been granted, but is subject to appeal. The project will include residential, business, retail, institutional, life sciences, and industrial uses (total GLA of 418 880 m²).
- The **N1 Nooitgedacht** development application is in process. The land is designated for warehousing on Portion 373 and the Remainder Portion 4 of Farm 728 (total GLA 321 543 m²).
- The **N1 Gateway Business Park** development is pending an amended EA and appeal. The land is designated as an industrial park, including warehousing and distribution, covering Portions 29, 30, 32, 374, 375, and 377 of Farm 728 (total GLA 144 526 m²).
- The **Buhr Land** development application is in process for industrial development on Portions 27, 327, and 407 of Farm 728, with a total area of 49 hectares.

# 3 OVERVIEW OF THE CAPE TOWN AND WESTERN CAPE PROVINCE ECONOMIES

## 3.1 Overview

The CMA economy contributed approximately 72,00% to the economy of the Western Cape Province in 2020. In terms of absolute numbers, the CMA economy generated R268 048 million in GVA at constant prices[3], relative to R372 308 million recorded for the Western Cape Province. The GVA contribution of the CMA economy to the Western Cape Province decreased from 72,98% in 2005 to 72,00% in 2020. The CMA economy grew off a solid base by 1,65% per annum from 2005 to 2020, or 27,89% over the 15 years despite the impact of the COVID-19 pandemic.

**Figure 9** indicates the sector contributions to the GVA of the CMA economy for 2005 and 2020. The largest sector of the CMA economy was Finance, Insurance, Real Estate and Business Services sector, followed by Wholesale and Retail and Manufacturing. Combined, these three sectors contributed almost 64,20% of the total GVA generated by the CMA economy in 2020, an increase of 0,65% from 2005. The Finance, Insurance, Real Estate and Business Service sector has remained the largest contributor to the CMA GVA over the 15 years of the analysis. The Manufacturing sector's contribution decreased from 17,26% in 2005 to 14,09% in 2020, whereas Finance, Insurance, Real Estate and Business Services increased their contribution to GVA from 30,21% in 2005 to 35,05% in 2020.




| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| 2020 | R3 965 | R 495 | R37 759 | R5 007 | R8 679 | R40 381 | R26 389 | R93 940 | R32 666 | R18 766 |
| 2005 | R2 802 | R 623 | R36 183 | R5 928 | R7 018 | R34 165 | R23 344 | R63 324 | R21 175 | R15 020 |

**Figure 9: An illustration of the GVA contributions per sector for the CMA economy in 2005 and 2020**

**Legend:**

| | | | |
|---|---|---|---|
| 1 | Agriculture, hunting, forestry and fishing | 6 | Wholesale and retail |
| 2 | Mining and quarrying | 7 | Transport, storage and communication |
| 3 | Manufacturing | 8 | Finance, insurance, real estate and business services |
| 4 | Electricity, gas and water supply | 9 | Community, social and personal services |
| 5 | Construction | 10 | Government Services |

**Source**: Adapted from data provided by Quantec Research, 2021

[3] GVA and Gross Geographic Product (GGP) or Gross Regional Product (GRP) are very similarly related concepts. GVA excludes taxation and subsidies, whereas GDP includes the items. GVA is analysed using current prices

To understand whether sectors are contracting or growing, it is useful to consider the overall and annual growth rates and to compare those to the Western Cape Province within which the CMA economy functions. **Figure 10** indicates the annual compounded growth rates per economic sector for the CMA and Western Cape Province from 2005 to 2020.

The Western Cape Province and Cape Town economies grew in nominal terms by 1,75% and 1,65% per annum, respectively, from 2005 to 2020 (refer to Total data in **Figure 10**). The Agriculture, Hunting, Forestry and Fishing, and Community, Social and Personal Services sectors in the CMA economy achieved higher growth rates than the province from 2005 to 2020.

The Agriculture, Hunting, Forestry and Fishing, Finance, Insurance, Real Estate and Business Services, and General Government sectors demonstrated the highest annual growth rates for the CMA from 2005 to 2020. Although the Manufacturing sector grew only by 0,28% per annum between 2005 and 2020, its contribution to GVA declined by 18,41% from 2005 to 2020.

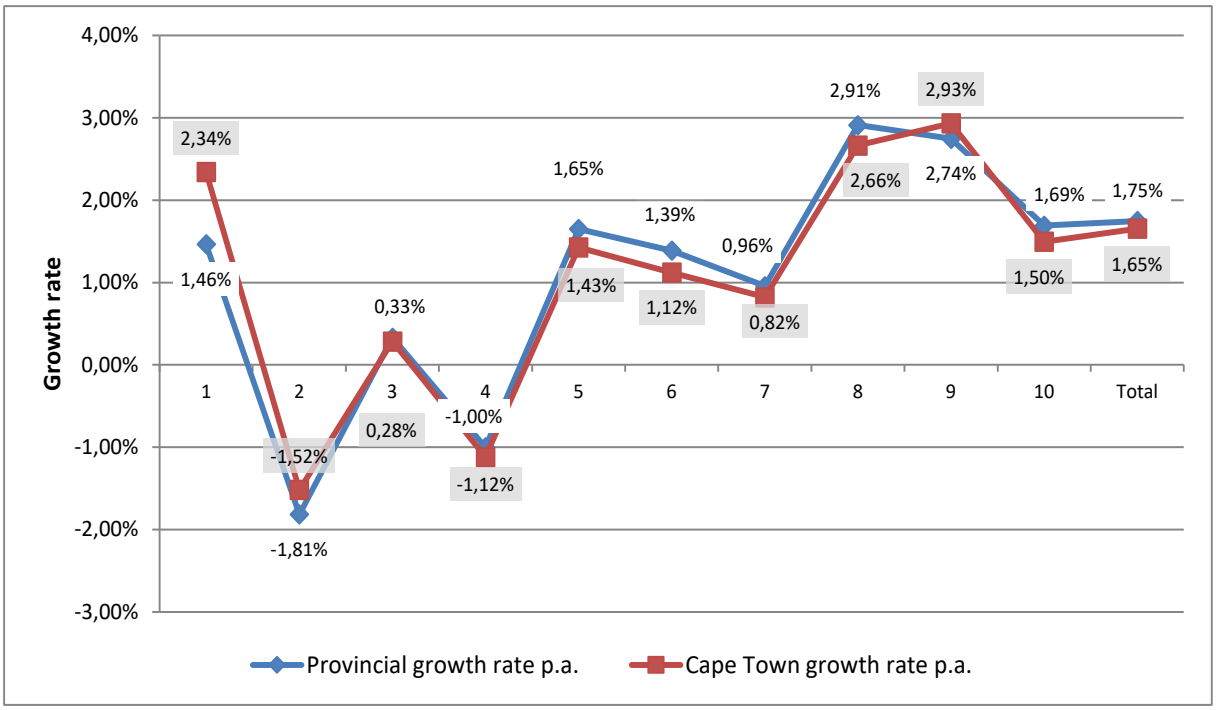



**Figure 10: An illustration of the annual nominal growth rates per economic sector for Cape Town and the Western Cape Province from 2005 to 2020**

**Legend:**

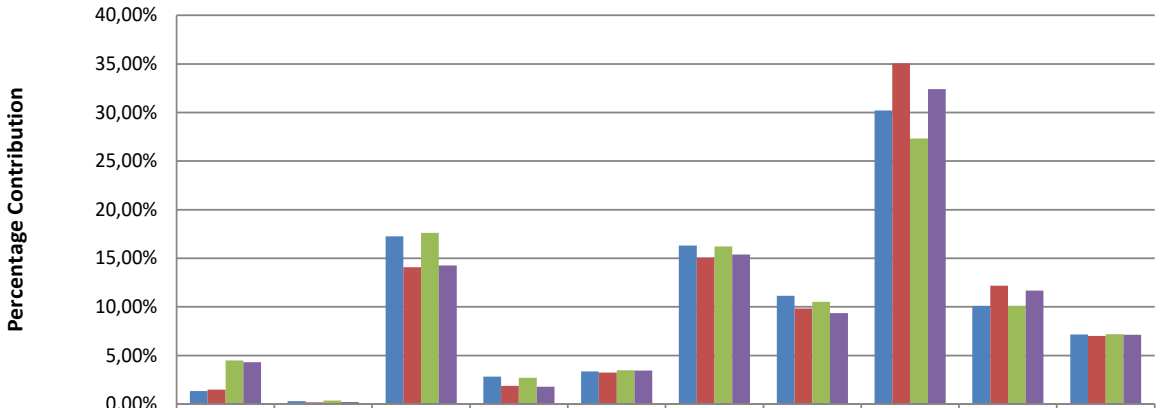
| | | | |
|---|---|---|---|
| 1 | Agriculture, hunting, forestry and fishing | 6 | Wholesale and retail |
| 2 | Mining and quarrying | 7 | Transport, storage and communication |
| 3 | Manufacturing | 8 | Finance, insurance, real estate and business services |
| 4 | Electricity, gas and water supply | 9 | Community, social and personal services |
| 5 | Construction | 10 | Government Services |

**Source**: Adapted from data provided by Quantec Research, 2021 and own calculations

## 3.2 Sector analysis of GVA contributions

**Figure 11** indicates the contribution of each economic sector to the GVA of the CMA and the Western Cape Province economy for 2005 and 2020. An assessment of the larger sectors suggests that the contribution of several of the sectors (such as Wholesale and Retail and Transport, Storage and Communication) declined slightly in the CMA economy from 2005 to 2020 in favour of Finance, Insurance, Real Estate and Business Services, which increased its

contribution to GVA of the CMA economy by 16.02% over the period, and Community, Social and Personal Services, which increased its contribution by 20.69%. The Manufacturing sector showed a decline in its contribution to GVA, i.e. 17,26% (2005) compared to 14,09% (2020). The contribution of the sectors to GVA in the CMA and the Western Cape Province remained more or less in the same proportions whether the sector contribution increased or declined. This is to be expected since the CMA contributes 72% to the GVA of the Western Cape Province.




| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Local 2005 | 1,34% | 0,30% | 17,26% | 2,83% | 3,35% | 16,30% | 11,14% | 30,21% | 10,10% | 7,17% |
| Local 2020 | 1,48% | 0,18% | 14,09% | 1,87% | 3,24% | 15,06% | 9,84% | 35,05% | 12,19% | 7,00% |
| Province 2005 | 4,49% | 0,37% | 17,61% | 2,70% | 3,49% | 16,23% | 10,51% | 27,32% | 10,09% | 7,20% |
| Province 2020 | 4,31% | 0,21% | 14,27% | 1,79% | 3,44% | 15,40% | 9,35% | 32,41% | 11,68% | 7,14% |

**Figure 11: Sector contributions to GVA for the CMA and Western Cape Provincial economies in 2005 and 2020**

**Legend:**

| | | | |
|---|---|---|---|
| 1 | Agriculture, hunting, forestry and fishing | 6 | Wholesale and retail |
| 2 | Mining and quarrying | 7 | Transport, storage and communication |
| 3 | Manufacturing | 8 | Finance, insurance, real estate and business services |
| 4 | Electricity, gas and water supply | 9 | Community, social and personal services |
| 5 | Construction | 10 | Government Services |

**Source**: Adapted from data provided by Quantec Research, 2021 and own calculations

A synopsis of the data presented in **Figure 11** suggests that three sectors increased their contribution to GVA of the CMA economy, while seven sectors indicated a declining contribution. The trend emerging across the Province is similar with only two sectors increasing their GVA contribution to the Province economy, i.e. Finance, insurance, real estate and business services and Community, social and personal services. The concern with this trend is the reduced employment levels within the more labour-intensive sectors of the economy. A greater focus on sectors with a service orientation has emerged over the 15 years of the analysis, which are invariably low employment creators compared to construction and manufacturing.

The assessment of GVA sector contributions to the CMA together with the annual and period growth rates for 2005 and 2020 are indicated in **Table 1**. Among the 10 classified sectors, eight sectors indicated an annual increase in economic activity with the minor economic sectors of Mining and Quarrying and Electricity, Gas and Water Supply indicating a year-on-year decline from 2005 to 2020. The declining trend in the Manufacturing sector's contribution to GVA (14,09% in 2020 versus 17,26% in 2005) is concerning due to the labour-intensive nature of the industries that generally form part of this sector. The analysis also demonstrates that the Manufacturing sector is declining in favour of increases in Finance, Insurance, Real Estate and Business Services and Community, Social and Personal Services, which alludes to a greater focus on service orientation.

**Table 1: An assessment of sector contributions to GVA in 2005 and 2020 and annual growth rates for the CMA economy**

| Economic sector (R'million) | Gross Value Added | | | | Growth for | Annual | Direction |
|---|---|---|---|---|---|---|---|
| | 2005 | % of total | 2020 | % of total | Period | growth | of growth |
| Agriculture, hunting, forestry and fishing | 2 802 | 1,34% | 3 965 | 1,48% | 41,50% | 2,34% | ↑ |
| Mining and Quarrying | 623 | 0,30% | 495 | 0,18% | -20,49% | -1,52% | ↓ |
| Manufacturing | 36 183 | 17,26% | 37 759 | 14,09% | 4,36% | 0,28% | ↑ |
| Electricity, gas and water supply | 5 928 | 2,83% | 5 007 | 1,87% | -15,53% | -1,12% | ↓ |
| Construction | 7 018 | 3,35% | 8 679 | 3,24% | 23,66% | 1,43% | ↑ |
| Wholesale and retail | 34 165 | 16,30% | 40 381 | 15,06% | 18,19% | 1,12% | ↑ |
| Transport, storage and communication | 23 344 | 11,14% | 26 389 | 9,84% | 13,05% | 0,82% | ↑ |
| Finance, insurance, real estate and business services | 63 324 | 30,21% | 93 940 | 35,05% | 48,35% | 2,66% | ↑ |
| General government | 21 175 | 10,10% | 32 666 | 12,19% | 54,27% | 2,93% | ↑ |
| Community, social and personal services | 15 020 | 7,17% | 18 766 | 7,00% | 24,94% | 1,50% | ↑ |
| Total | 209 582 | 100,00% | 268 048 | 100,00% | 27,90% | 1,65% | ↑ |

**Source**: Adapted from data provided by Quantec Research, 2021 and own calculations

The **primary sector** of the CMA economy includes Agriculture, Hunting, Forestry and Fishing activity and Mining and Quarrying. The primary sector contributed 1,66% to the GVA of the CMA economy in 2020, slightly up from 1,64% in 2005. Agriculture is the largest contributor to the GVA of the primary sector, with a sector contribution of 81,81% in 2005 and an increase of 88,89% in 2020.

The **secondary sector** of the CMA economy includes Manufacturing, Construction and Electricity, Gas and Water Supply. The secondary sector contributed 23,44% to the GVA of the CMA economy in 2005, while the contribution to GVA decreased to 19,99% in 2020. The contribution of the Manufacturing sector to the secondary sector GVA decreased from 73,64% in 2005 to 73,39% in 2020.

The **tertiary sector** of the CMA economy includes Trade, Repairs and Hospitality, Financial Institutions, Real Estate and Business Services; Community, Social and Personal Services; and Government Services. The tertiary sector contributed 74,92% to the GVA of the CMA economy in 2005; this increased to 79,14% in 2020. Government Services are included as part of the tertiary sector for the analysis. The analysis suggests that the contribution of Government Services to the GVA of the tertiary sector increased from 13,48% in 2005 to 15,39% in 2020.

## 3.3 General employment trends

A comparison of total employment indicates that the CMA contributed 62,58% to the total employment of the Western Cape Province in 2020. Overall employment increased by 33,01% in the CMA economy from 2001 to 2020.

The primary, secondary and tertiary sectors contributed 2,73%, 16,81% and 80,46%, respectively, to total employment in the CMA economy in 2020. In comparison, the Western Cape Province enjoyed total employment contributions of 10,08%, 15,54% and 74,39% from the primary, secondary and tertiary sectors, respectively.

The strong growth in the tertiary sector was offset by negative and low growth in employment in the primary and secondary sectors, respectively, of the CMA economy. Strong employment growth was recorded in the tertiary sector, with an increase of 44,93% from 2001 to 2020, or an annual compounded growth of 1,97% annually. The Western Cape Province experienced similar trends, with a decline of 27,55% recorded for the primary sector, and increases of 5,56% and 52,90% for the secondary and tertiary sectors, respectively.

In terms of employment growth by sector in the CMA and specified periods pre-2008, 2008 - 2011 and post-2011, it is clear that the tertiary sector shed the fewest jobs with a decline of 0,39% from 2008 to 2011 (**Figure 12**). The secondary sector and primary sector of the economy shed jobs with declines of 16,21% and 9,01%, respectively, over the period 2008 to 2011. Post-2011, all three sectors clawed back all or some of the lost employment in the previous period, achieving an increase in employment of 13,89%, and 8,95% over the period 2012 to 2020 for the primary and tertiary sector, respectively. However, the secondary sector had not recovered all the employment lost

during the recessionary period by 2020, which is a concern as stated previously, with specific reference to the labour-intensive industries.

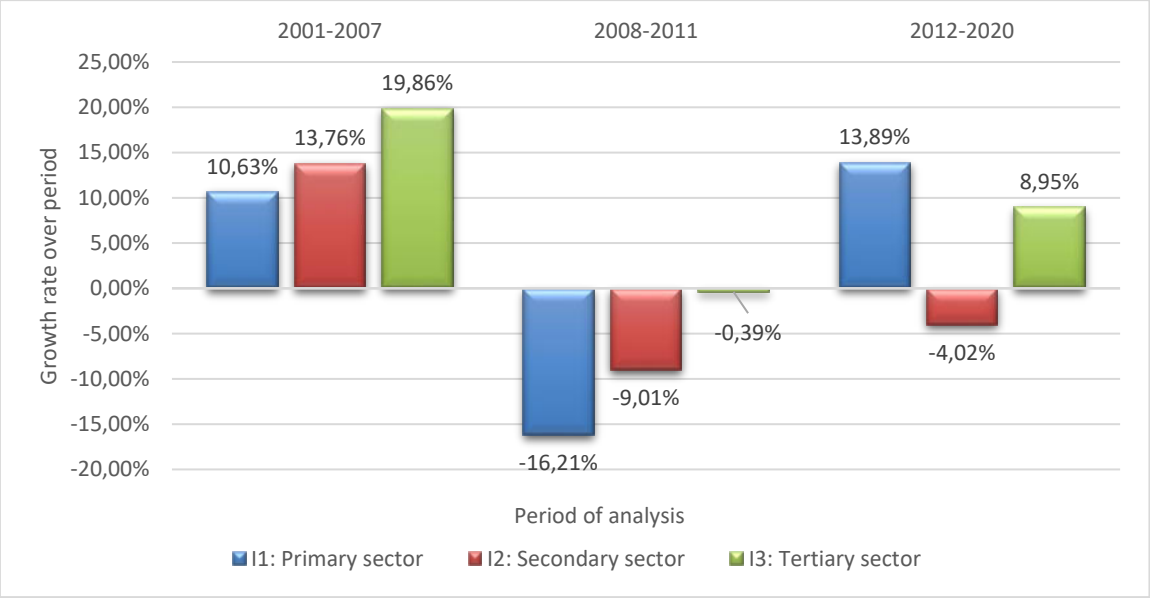



**Figure 12: An illustration of the employment growth in the CMA for three specified periods (pre-recession, recession and post-recession) from 2001 to 2020**

**Source**: Quantec, 2021 and own calculations

In conclusion, the CWA development will specifically benefit the secondary and tertiary sectors of the Western Cape economy. However, all economic activities associated with the development during construction and operations impact the primary, secondary and tertiary sectors of the economy with a requirement for raw materials (e.g. sand, stone), construction activity (e.g. bricks, cement, etc.) and business services (e.g. professional services).

# 4 SOCIO-ECONOMIC AND DEMOGRAPHIC PROFILE OF THE POPULATION WITHIN THE STUDY AREA

## 4.1 Aligning the study area and available statistics

The approach adopted for the preparation of the socio-economic and demographic profile of communities surrounding the site of the Cape Winelands Airport entailed the specification of concentric circles representing areas within 10 km and 20 km from the centre of the site designated for the project. This approach was used due to the need to ascertain the relative proximity of communities to the development site to understand the geographical impact of the location on residents and economic activity in the study area. The choice of radii for 10 km and 20 km is based on our observations of population distribution, economic activities and likely sources of procurement in the areas surrounding the site of the Cape Winelands Airport. We believe that this approach will offer a more realistic socio-demographic and economic profile of the population most likely to be affected by the development of industries in the area.

**Figure 13** accurately indicates the different concentric zones as applied to the municipal area with an exact indication of the proposed location for the development. To include the larger population of the study area, the assessment covers the 59 sub-places (SP) primary within the Cape Metro, and within 10 km of the site. A total of 288 sub-places are within 20 km of the site, including those within the 10 km radius and sub-places in the Stellenbosch and Drakenstein Municipal areas. Where applicable, the analysis considers several socio-demographic characteristics of the population as determined by Statistics South Africa. The statistics for the different zones are based on the identified sub-places as defined by Statistics South Africa in the 2011 Population Census Survey.

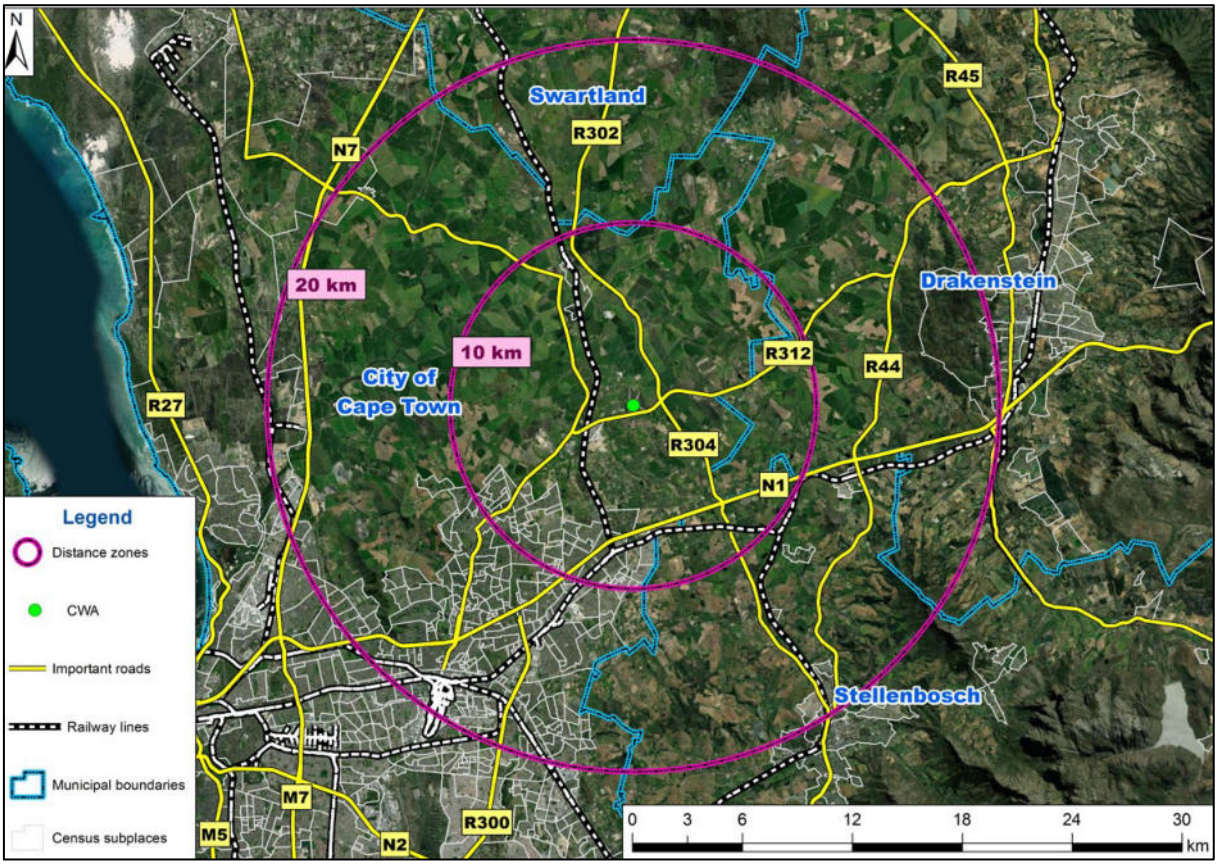



**Figure 13: Different concentric zones using the site of CWA a central point**
**Source: Prepared from GIS data (Statistics South Africa), 2023**

## 4.2 Socio-demographic profile of the study area population

The following socio-demographic profile of the study area is based on data from the 2011 National Population Census Survey (Statistics South Africa, 2013). A summarised socio-demographic profile is presented in **Table 2** for the 2011 census year.

An analysis based on the specified concentric zones suggests that 31,22% of the population residing within 20 km of the proposed site, live within 10 km of the site. An assessment based on the population groups suggests that 36,22% of the population that reside within 20 km of the site are White, 30,86% are Coloured and 30,02% are Black African. Within the 10 km zone, 41,73% of the total population are Black African, 28,45% are Coloured and 27,71% are White residents.

It is also noteworthy that the age group under 15 years represents the largest group within both 10 km and 20 km from the site. The age group above 65 years is the smallest for both zones, which confirms that few retirees are residing in this area.

**Table 2: A socio-demographic profile of the study area based on the 2011 Census Survey**

| | | Cape Town: Northern District, Drakenstein, Stellenbosch | | | |
|---|---|---|---|---|---|
| | | **Within 10 km** | | **Within 20 km** | |
| **Population:** | Black African | 72 594 | 41,73% | 167 283 | 30,02% |
| | Coloured | 49 485 | 28,45% | 171 988 | 30,86% |
| | Asian | 860 | 0,49% | 5 304 | 0,95% |
| | White | 48 198 | 27,71% | 201 835 | 36,22% |
| | Other | 2 825 | 1,62% | 10 884 | 1,95% |
| | **Total** | **173 963** | **100,00%** | **557 294** | **100,00%** |
| **Gender:** | Male | 86 390 | 49,66% | 272 384 | 48,88% |
| | Female | 87 573 | 50,34% | 284 910 | 51,12% |
| | **Total** | **173 963** | **100,00%** | **557 294** | **100,00%** |
| **Age classification:** | 0 - 14 | 44 266 | 25,45% | 123 811 | 22,22% |
| | 15 - 24 | 30 388 | 17,47% | 93 654 | 16,81% |
| | 25 - 34 | 37 775 | 21,71% | 112 276 | 20,15% |
| | 35 - 44 | 27 393 | 15,75% | 85 195 | 15,29% |
| | 45 - 54 | 16 486 | 9,48% | 62 962 | 11,30% |
| | 55 - 64 | 9 738 | 5,60% | 41 403 | 7,43% |
| | 65 - 120 | 7 917 | 4,55% | 37 993 | 6,82% |
| | **Total** | **173 963** | **100,00%** | **557 294** | **100,00%** |

**Source**: Adapted from Statistics South Africa (2013)

## 4.3 Analysis of the study area population

The combined population of the Northern and Tygerberg Districts was 851 516 in 2001 and 1 018 554 in 2011, representing an average annual growth of 1,96% (Statistics South Africa, 2003; 2013). **Table 3** indicates the population distribution of residents within 10 km and 20 km of the site relative to the Northern District, Drakenstein and Stellenbosch population for 2011. The findings suggest that 8,75% of the population live within 10 km of the proposed development site and 74,24% live within 20 km. An analysis of the breakdown per population group

suggests that Black African and Coloured residents living within 10 km of the site comprise 22,08% and 6,02% of the total Northern District, Drakenstein and Stellenbosch population, respectively.

**Table 3: Breakdown of the population by population group for the study area (within 10 and 20 km) as a percentage of the Northern District, Drakenstein and Stellenbosch populations in 2011**

| | Black African | Coloured | Asian | White | Total |
|---|---|---|---|---|---|
| **Within 10 km** | 36 434 | 14 199 | 108 | 756 | 52 151 |
| **Within 20 km** | 120 972 | 149 357 | 2 982 | 163 018 | 442 279 |
| **Northern District, Drakenstein, Stellenbosch population** | **165 006** | **235 927** | **3 613** | **183 871** | **595 777** |
| **Percentage within 10 km** | 22,08% | 6,02% | 2,99% | 0,41% | 8,75% |
| **Percentage within 20 km** | 73,31% | 63,31% | 82,54% | 88,66% | 74,24% |

**Source**: Adapted from Statistics South Africa (2013)
*A category referring to Other is excluded
Note: Paarl/Wellington, Stellenbosch Town and Northern District

A discussion of key socio-demographic profile characteristics (population, education and age levels) is provided in the following sections, based on data from the 2011 South African Census (Statistics South Africa, 2013).

## 4.4 Analysis of education levels

An analysis of education levels in the study area for 2011 is provided in **Table 4**. The results indicate that 3,28% of persons living within 10 km of the site had no schooling (including those under the school age), whereas 2,55% of the population within 20 km of the site had no schooling in 2011. The assessment further suggests that 79,21% of persons living within 20 km of the site received Grade 1 to Grade 12 schooling, whereas 20,79% obtained Matric with a higher diploma or degree qualification.

**Table 4: An analysis of education levels for the population per specified zone in 2011**

| Education category | Within 10 km | Within 20 km |
|---|---|---|
| No schooling | 5 060 | 12 492 |
| Some primary | 32 334 | 83 420 |
| Completed primary | 7 751 | 19 838 |
| Some secondary | 51 627 | 142 788 |
| Grade 12/Std 10 | 37 209 | 129 397 |
| Higher | 20 133 | 101 832 |
| **Total** | **154 114** | **489 767** |

**Notes**: N/A are excluded together with unspecified
**Source**: Statistics South Africa (2013)

## 4.5 Analysis of age levels

An analysis of the age levels among the population within 10 km and 20 km indicates the population that could be considered economically active, i.e. persons between the ages of 14 and 65. The illustration provided in **Figure 14** indicates that 25,45% and 22,22% of the population within 10 km and 20 km of the development site are below 15 years of age, respectively. Our analysis also suggests that 70,00% of the population within 10 km of the site are in the working-age category between 14 and 65 years of age, while the working group within 20 km of the site

represents 70,96% of the total population. The assessment indicates that every 2,33 persons who would normally be considered economically active (i.e. between 14 and 65 years of age) could support another person that is not economically active within 10 km of the site. The latter is comparable to the dependency ratio of 2,44 for the population residing within 20 km of the site.

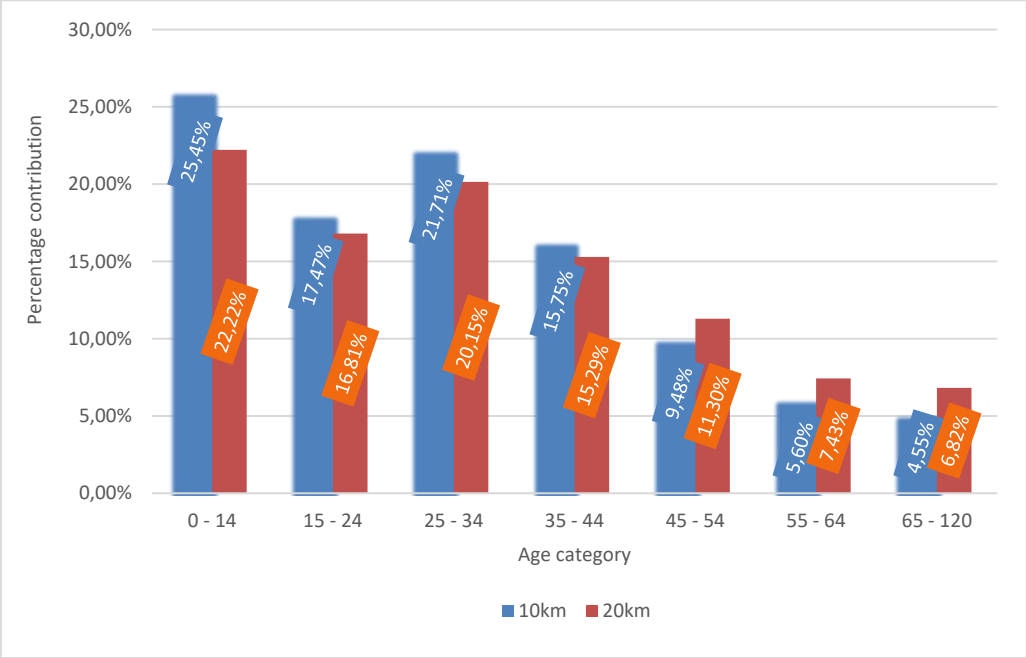



**Figure 14: An assessment of percentage contributions to age levels per identified zone for 2011**
**Source**: Compiled from data provided by Statistics South Africa (2013)

A more detailed assessment of the population presented in **Table 5** suggests that the Black African population group younger than 15 years represents 11,80% of the total population living within 10 km of the site proposed for development. Coloured and White residents under 15 years of age represent 8,03% and 5,18% of the total population within 10 km. An analysis of dependency factors suggests that among the White population residing within 10 km of the site, 2,48 persons that have the potential to be economically active could support another person not considered to be in an age category that represents an economically active person, i.e. younger than 15 years and older than 64 years of age. The dependency figures for the Coloured and Black African residents are 2,09 and 2,38, respectively.

**Table 5: An assessment of age levels among residents in the zones in 2011 by population group**

| Age category | 0 - 14 | 15 – 24 | 25 – 34 | 35 - 44 | 45 - 54 | 55 - 64 | 65 - 120 | Total |
|---|---|---|---|---|---|---|---|---|
| **Within 10 km** | | | | | | | | |
| Black African | 20 522 | 15 778 | 18 930 | 10 362 | 4 371 | 1 690 | 942 | **72 595** |
| Coloured | 13 974 | 8 520 | 8 280 | 7 460 | 5 866 | 3 334 | 2 052 | **49 486** |
| Indian/Asian | 183 | 162 | 193 | 152 | 89 | 48 | 32 | **859** |
| White | 9 009 | 5 330 | 9 442 | 9 008 | 6 007 | 4 569 | 4 833 | **48 198** |
| Other | 578 | 597 | 930 | 411 | 154 | 97 | 59 | **2 826** |
| **Grand Total** | **44 266** | **30 387** | **37 775** | **27 393** | **16 487** | **9 738** | **7 918** | **173 964** |

| Age category | 0 - 14 | 15 – 24 | 25 – 34 | 35 - 44 | 45 - 54 | 55 - 64 | 65 - 120 | Total |
|---|---|---|---|---|---|---|---|---|
| **Within 20 km** | | | | | | | | |
| Black African | 43 907 | 34 863 | 46496 | 23 787 | 10 518 | 4 516 | 3 195 | **167 282** |
| Coloured | 43 959 | 30 214 | 29 102 | 25 777 | 21 842 | 12 839 | 8 256 | **171 989** |
| Indian/Asian | 1 059 | 953 | 1 144 | 924 | 666 | 354 | 204 | **5 304** |
| White | 32 465 | 25 684 | 32 424 | 33 124 | 29 029 | 23 200 | 25 910 | **201 836** |
| Other | 2 420 | 1 941 | 3 110 | 1 583 | 906 | 494 | 429 | **10 883** |
| **Grand Total** | **123 810** | **93 655** | **112 276** | **85 195** | **62 961** | **41 403** | **37 994** | **557 294** |

**Note**: A category referring to other is excluded
**Source**: Statistics South Africa (2013)

## 4.6 Analysis of household income levels

**Table 6** provides the income ranges for households as defined by the specified radii from the centre of the site proposed for development. Note that not all the respondents disclosed their income. Of those that did disclose their income, 15,43% of the households residing within 10 km of the proposed development had no income, and 42,30% earned less than R76 801 per annum (excluding households with no income). Within 20 km of the development, 13,47% of the households did not have an income, 33,54% of the households had an annual income of less than R76 801, whereas 8,52% of households declared an income of more than R614 400 per annum.

**Table 6: Distribution of annual household income for each specified zone in 2011**

| Income category | Within 10 km | | Within 20 km | |
|---|---|---|---|---|
| No income | 7 762 | 15,43% | 23 357 | 13,47% |
| R1 - R4 800 | 1 492 | 2,97% | 3 307 | 1,91% |
| R4 801 - R 9 600 | 2 076 | 4,13% | 4 662 | 2,69% |
| R9 601 - R 19 200 | 4 794 | 9,53% | 11 831 | 6,82% |
| R19 201 – R 38 400 | 7 180 | 14,27% | 19 385 | 11,18% |
| R38 401 – R 76 800 | 5 742 | 11,41% | 18 959 | 10,94% |
| R76 801 – R153 600 | 5855 | 11,64% | 22 883 | 13,20% |
| R153 601 - R307 200 | 6 622 | 13,16% | 28 368 | 16,36% |
| R307 201 - R614 400 | 5 957 | 11,84% | 25 858 | 14,91% |
| R614 401 - R1 228 800 | 2 252 | 4,48% | 11 144 | 6,43% |
| R1 228 801 - R2 457 600 | 358 | 0,71% | 2 399 | 1,38% |
| R2 457 601 and more | 223 | 0,44% | 1 220 | 0,70% |
| **Grand Total** | **50 313** | **100,00%** | **173 373** | **100,00%** |

**Note**: Excluded is a category of unspecified
**Source**: Adapted from Statistics South Africa (2013)

## 4.7 Employment and skills level analysis

A perspective of employment for the different zones within the Northern District, Drakenstein and Stellenbosch is provided in **Table 7** with specific reference to the number of employed, unemployed and not-economically active persons per population group.

**Table 7: An assessment of employment by population group for 2011 based on specified radii from the site proposed for development**

| Category of employment | Black African | Coloured | Indian/ Asian | White | Other | Grand Total |
|---|---|---|---|---|---|---|
| **Within 10 km:** | | | | | | |
| Employed | 23 555 | 18 991 | 394 | 25 405 | 1 465 | **69 810** |
| Unemployed | 11 542 | 3 655 | 33 | 1 110 | 237 | **16 577** |
| Not economically active | 16 033 | 10 814 | 216 | 7 841 | 488 | **35 392** |
| **Total** | **51 130** | **33 460** | **643** | **34 356** | **2 190** | **121 779** |
| ***Dependency ratio per population group*** | ***0,85*** | ***1,31*** | ***1,58*** | ***2,84*** | ***2,02*** | ***1,34*** |
| **Within 20 km** | | | | | | |
| Employed | 57 027 | 68 214 | 2461 | 103 108 | 4 927 | **235 737** |
| Unemployed | 24 689 | 10 815 | 157 | 4 319 | 913 | **40 893** |
| Not economically active | 38 464 | 40 744 | 1423 | 36 033 | 2 194 | **118 858** |
| **Total** | **120 180** | **119 773** | **4041** | **143 460** | **8 034** | **395 488** |
| ***Dependency ratio per population group*** | ***0,90*** | ***1,32*** | ***1,56*** | ***2,56*** | ***1,59*** | ***1,48*** |

**Note:** Not applicable excluded. Not economically active includes Discouraged work-seeker, Other not economically active, and Age less than 15 years

**Source**: Statistics South Africa (2013)

**Table 7** indicates that 57,33% of the total population residing within 10 km of the site is employed, while 59,61% within 20 km are employed. The proportion of employed for the White, Coloured and Black African groups within 20 km is 71,87%, 56,95% and 47,45% of the total population group, respectively.

An assessment of the dependency ratios for the zones is based on the premise that for each person who is employed, a factor of people is unemployed or economically inactive. The findings of the research for each of the zones suggest a dependency ratio of 1,34 and 1,48 for the total population within 10 km and 20 km, respectively. This implies that every employed resident has to support less than one unemployed or economically inactive person residing within 20 km. The ratio for the White and Black African population groups within 10 km of the site is 2,56 and 0,90, respectively.

## 4.8 Formal and informal sector employment

A further assessment of employment levels is provided by economic sector and by population group for the population residing within 10 km and 20 km from the designated site. The findings presented in **Table 8** indicate the percentage employed per population group for the specified zones, with 29,28% of employed people within 20 km residing within 10 km of the site.

**Table 8: Classification of employment per economic sector, industry and population group in 2011 for 10 km and 20 km from the sites proposed for the development**

| Sector | Within 10 km | Percentage Within 10 km | Within 20 km | Percentage within 20 km |
|---|---|---|---|---|
| **Formal sector employment** | | | | |
| Black African | 17 123 | 24,74% | 42 857 | 18,13% |
| Coloured | 15 386 | 22,23% | 58 087 | 24,57% |
| Indian or Asian | 334 | 0,48% | 2 158 | 0,91% |
| White | 22 231 | 32,12% | 92 045 | 38,94% |
| Other | 1 020 | 1,47% | 3 648 | 1,54% |

| Sector | Within 10 km | Percentage Within 10 km | Within 20 km | Percentage within 20 km |
|---|---|---|---|---|
| **Informal sector employment** | | | | |
| Black African | 3 340 | 4,83% | 7 005 | 2,96% |
| Coloured | 1 969 | 2,84% | 5 014 | 2,12% |
| Indian or Asian | 27 | 0,04% | 150 | 0,06% |
| White | 1 715 | 2,48% | 6 949 | 2,94% |
| Other | 221 | 0,32% | 656 | 0,28% |
| **Private households** | | | | |
| Black African | 2 444 | 3,53% | 6 112 | 2,59% |
| Coloured | 1 522 | 2,20% | 4 986 | 2,11% |
| Indian or Asian | 32 | 0,05% | 138 | 0,06% |
| White | 1 683 | 2,43% | 6 019 | 2,55% |
| Other | 173 | 0,25% | 568 | 0,24% |
| **Total** | **69 220** | **100,00%** | **236 392** | **100,00%** |

**Note**: Excluded from the figures above are categories for Do not know, Unspecified, Not applicable
**Source**: Adapted from Statistics South Africa (2013)

The findings applicable to the zone within 20 km of the site suggest that the formal sector employs 84,10% of the economically active population, followed by the informal sector with 8,36%. Our assessment also suggests that 81,04% of the employed people within 10 km of the site are working in the formal sector, whereas 10,51% within 10 km of the site are working in the informal sector.

# 5 FEASIBILITY OF THE PROJECT AND FIT WITH SPATIAL PLANNING

## 5.1 Need and desirability

The Department of Environmental Affairs (2014) issued a Guideline on Need and Desirability with a list of questions that should be addressed when considering a proposed development. The concept of "need and desirability" relates to, amongst others, the nature, scale and location of the proposed development and the wise use of land. Essentially, "need" primarily refers to time and "desirability" to place (i.e., is this the right time and the right place for the type of land use/activity being proposed?). The "need and desirability" requires the consideration of the strategic context of the development proposal along with the broader societal needs and the public interest. While the financial viability considerations of the private developer might indicate if a development is "do-able", the "need and desirability" will be determined by considering the broader community's needs and interests as reflected in an IDP, SDF and EMF for the area. Although job creation and economic growth are important, the specific needs of the broader community should be considered together with the opportunity costs and distributional consequences to determine whether the development will be socially, economically and environmentally sustainable.

The Cape Winelands Airport is located approximately 10,5 km northeast of Durbanville and 25 km northeast of Cape Town International Airport (CTIA). The Morningside Airfield, Ysterplaat Airforce Base and Stellenbosch Flying Club are all located within 30 km of the CWA (Cape Winelands Airport Limited, 2021b). The airport is located between the three major regional growth centres of Cape Town, Stellenbosch and Drakenstein and along north-south and east-west road networks, and can thus effectively serve businesses and the tourism industry in the Western Cape (**Figure 15).** This provides opportunities for transport-related development supported by other transport services (public transport, rental cars, etc.) and complementary commercial services. The airport will also serve as a multimodal transport hub given its strategic location near the Saldanha-linked Mellish Station (Rail) and only a few kilometres from the N1 highway, enabling efficient sea-rail-road-air linkages (Cape Winelands Airport Limited, 2022).

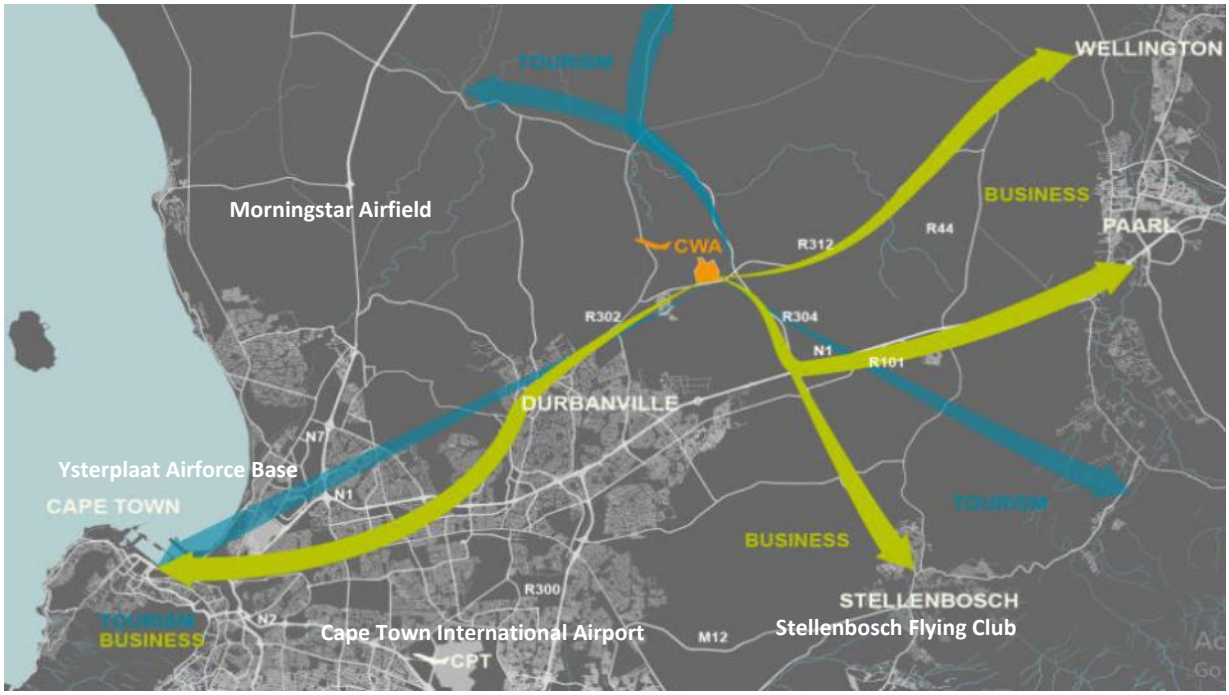



**Figure 15: Location of the proposed Cape Winelands Airport relative to other local airfields.**
**Source:** Cape Winelands Airport Limited (2021a)

The aviation industry accounted for about 1,9% of all greenhouse gas emissions (https://ourworldindata.org/co2-emissions-from-aviation). It was estimated that aviation emissions can account for about 22% of global carbon emissions by 2050 (https://www.nature.com/articles/s44168-022-00001-w). Furthermore, aviation emissions drive about 7,2% of global warming due to high-altitude atmospheric effects. Although global emissions from aviation have tripled over the past 50 years, air travel volumes increased 75-fold since 1960. The much slower growth in emissions implies significant improvements in aviation efficiency, linked to improvements in the design and technology of aircraft, larger aircraft sizes (more passengers per flight), and an increase in how 'full' passenger flights are (also referred to as the 'passenger load factor').

The aviation sector is broad and complex, with multiple unique, heterogeneous sub-sectors within it, which each face unique constraints and inefficiencies. Cape Winelands Airport Limited (2022) indicates that the CWA will fulfil numerous key roles within the aviation sector, addressing these constraints and efficiencies and significantly improving the socio-economic landscape within the region by performing and/or facilitating the following functions:

- **Scheduled Airline Services** for domestic and international passenger and cargo operations;
- **General Aviation** for domestic and international, unscheduled and private operations;
- **Alternate Airport** for fuel planning purposes and environmental savings;
- **Reliever Airport**, adding redundancy and diversion capability for aircraft in the region;
- **Logistics Hub** catalysing multi-modal commercial activity in the region and stimulating economic growth; and
- **Commercial Property Developments** stimulated and enabled by the above.

H & A Planning (2024) raised several points for consideration related to the "**Appropriateness of Timing**". This included the contribution to economic growth and maintaining a competitive advantage by having a diversified aviation infrastructure to cater to multiple aviation needs while alleviating capacity constraints at major hubs. The report concluded that the proposed development of CWA is more time-efficient and cost-effective than building a new airport. The development would contribution to infrastructure development, with existing roads, power, water, and telecommunication infrastructure that can be augmented to also benefit the surrounding area. Having multiple airports enhances resilience during natural disasters or emergencies, ensuring business continuity and supporting regional disaster recovery. CWA as a diversion airport thus simultaneously mitigates risk and potential economic losses. Furthermore, CWA's master plan fulfils all the requirements to function as a destination alternate aerodrome for all aircraft flying to CPT18. With increasing air travel demand, especially during peak periods, a secondary reliever airport must alleviate congestion at Cape Town International Airport (CTIA) and support future growth."

H & A Planning (2024) also considered the **Desirability (placing)** of the proposed development. CWA's location relative to significant growth areas like Paarl, Stellenbosch, and the Winelands, enables it to be close enough to be convenient, but far enough to avoid urban constraints or have an undue negative impact on large residential communities. The airport is easily accessible from major roads (N1) and is near railway, which could set it up to receive land cargo from other ports. With the completion of the northern loop of the R300, regional accessibility will be further enhanced. By distributing passenger traffic across two airports, road congestion around the airports would be reduced, making it easier for passengers to reach their flights on time instead of funnelling all passengers via the N2/R300 highways. The site is not close to a nature reserve or within any heritage or cultural landscape area. Finally, it falls outside a built-up area, the existing controlled airspace of Cape Town International Airport, and the Koeberg Nuclear Protection Zone.

## 5.2 Project viability and sustainability

The project is a "brownfield" development of a site that includes four concrete runways built during WW2, of which only one will be rehabilitated for future commercial use by the airport. CWA will generate revenue from both aeronautical and non-aeronautical activities (Cape Winelands Airport Limited, 2021b). The aeronautical income includes Landing fees, Aircraft parking fees, Passenger fees, Terminal charges, Cargo uplift charges and Aviation fuel

sales. The non-aeronautical revenue includes Commercial property rental (hangars, office, facilities, warehousing etc.), Retail Concessions, Advertising, Car parking & car rental, Air shows and events.

To become and remain financially sustainable over the long term, the CWA should generate more returns than the cost of debt used as part of the financing structure. In this manner, the ability to service debt, meet short and long-term obligations and ensure the assets are efficaciously utilised to generate sustained revenue form the basis for the micro-sustainability of the CWA. The CWA will access markets and position itself as an alternate airport for CTIA and as a hub for General Aviation. The ability to diversify into a market space within the CMA and the surrounding districts that is generally untapped, offers the basis for a sustained market as well as a derived benefit for the CITA and enhanced synergies between the two airports. It is envisaged that the CMA economy and the region would benefit from such an investment, where the CWA aims to serve people and provide airlines with an opportunity to transport cargo. Passengers will benefit from a shorter travel distance and experience cost savings.

Research by the CWA Developers indicates the following:

- The Traffic Forecast Study (NACO, 2023) indicates that the CWA would generate sufficient passenger volumes to enhance its financial feasibility and long-term sustainability, achieving 5 million annual passengers (of which 40% will be international) by 2050. With the CWA envisaged to attract 50% of all new passengers, it demonstrates significant pent-up market demand for an international service into and from Cape Town, which can be met with the nature and scope of the proposed infrastructure.
- The availability of an alternate airport implies that international airlines would require less reserve fuel, resulting in weight saving and extra cargo capacity.
- Given a need for a new alternate destination airport closer to the CTIA, combined with the fuel savings, an opportunity exists to address some of the current challenges at CTIA.
- The initial feasibility studies prepared by CWA and the Concept of Operations (CONOPS) suggest that the proposed CWA airport would integrate seamlessly into the current air transport and airspace network.
- Based on the projected volumes, public resources in the form of customs, immigration and other government officials would be justified.

The **Cape Winelands Alternate Aerodrome Study** (MAI, 2024) concluded that only two South African airports currently provide a suitable destination alternate aerodrome for CPT, i.e. only Durban and OR Tambo Airport can handle all aircraft types flying to CPT. However, the high elevation of OR Tambo Airport means that certain types of aircraft cannot take off with their maximum take-off weight. "The CWA master plan fulfils all the requirements to function as a destination alternate aerodrome for all aircraft types flying to CPT. Considering the significant fuel saving for airlines from planning CWA as the destination alternate aerodrome for CPT, CWA could be the preferred destination alternate for CPT in the future."

An independent **Airspace and Capacity Study** (Straten CSL, 2024) concluded that "the CWA will be able to operate independently of CTIA, i.e. there will be no impact to operations from/to CTIA. The future development plans for CWA are also not expected to be an issue as the runway re-alignment will enhance airspace use and further cement the independent operations between the two airports. The GA community raised valid concerns, as will always be the case where more Controlled Airspace is required. However, there are opportunities for improving airspace access, including rationalising existing airspace to reduce airspace infringements and allow for better use of VFR corridors. No immediate solution is available to the GA community, as this will require further consultation. Further explanation is contained within this report that provides some guidance on future outcomes. CWA has commenced with an Airport Task Force that includes many stakeholders. It is recommended (if not already done) that smaller work groups are formed to deal with specific concerns that will help determine the airspace design requirements."

## 5.3 Compatibility with spatial planning from an economic perspective

The individual benefits of a project overstate the true benefits if the project diminishes benefits elsewhere in the area. The economic desirability is therefore essential to determine whether the proposed development compliments economic planning as reflected in spatial development planning. It is not sufficient that the development results in some positive spin-offs if it is not compatible with planning guidance designed to maximize

the overall economic potential of an area. SDFs are central to economic development planning and to guide overall development in a direction that local and provincial authorities see as desirable. Notwithstanding, the basic purpose of an SDF is to outline the spatial implications of Integrated Development Plans (IDPs). To provide some context, the provincial, regional and metro SDFs (together with related frameworks, interpretation reports and discussion documents) and Local Economic Development (LED) plans and strategies (together with other documents that offer guidance) are considered as a premise for this part of the assessment.

### 5.3.1 National Development Plan 2030 (NDP 2012)

The National Development Plan (NDP, National Planning Commission, 2012) set out six interlinked priorities (National Planning Commission, 2012):

- Uniting all South Africans around a common programme to achieve prosperity and equity;
- Promoting active citizenry to strengthen development, democracy and accountability;
- Bringing about faster economic growth, higher investment and greater labour absorption;
- Focusing on key capabilities of people and the state;
- Building a capable and developmental state; and
- Encouraging strong leadership throughout society to work together to solve problems.

While the achievement of the objectives of the National Development Plan requires progress on a broad front, one of the fundamental factors is raising employment through faster economic growth. A sustainable increase in employment will require a faster-growing economy and the removal of structural impediments, such as poor-quality education or spatial settlement patterns that exclude the majority. These are essential to achieve higher rates of investment and competitiveness and to expand production and exports. However, business, labour, communities and government will need to work together to achieve faster economic growth.

In summary, the NDP proposes to enhance human capital, productive capacity and infrastructure to raise exports, which will increase resources for investment and reduce reliance on capital inflows. Higher investment, supported by better public infrastructure and skills, will enable the economy to grow faster and become more productive. Rising employment and productivity will lead to rising incomes and living standards and less inequality. Shifting the economy towards more investment and lower consumption is thus necessary for long-term economic prosperity. In addition, more efficient and competitive infrastructure is required to facilitate economic activity that is conducive to growth and job creation.

The NDP identified nine main challenges facing the country and approaches to tackle these. The NDP's key objectives are eliminating income poverty and reducing inequality by 2030. In terms of Urban and Rural Transformation, the NDP's human settlement targets include more people living closer to their places of work, better quality public transport and more jobs in proximity to townships. To achieve these targets, it advocates strong measures to prevent further development of housing in marginal places, increased urban densities to support public transport, incentivising economic activity in and adjacent to townships, and engaging the private sector in the Gap housing market.

### 5.3.2 National Spatial Development Framework (NSDF) 2050

The National Spatial Development Framework (NSDF) provides the vision and directives for a resilient, sustainable and inclusive spatial pattern through a consolidated and well-connected system of international, national and regional development nodes and corridors, within a highly productive network of rural regions, where development nodes, rural regions and hard infrastructure are embedded within the limitations and interdependencies of national ecological infrastructure and natural resources" (p. 106).

The NSDF envisions the National Transport System as "A well-functioning and well-managed national transport and connectivity infrastructure network that ensures and enables (1) the safe and efficient movement and transport of people, (2) the rapid and reliable flow of information and communication, (3) the efficient transport of goods, (4)

the provision of services, and (5) the ability to participate and interact in the global economy. Given the high costs associated with the construction, upgrading and maintenance of such networks, which include airports, harbours, border posts, logistic hubs, electricity, fibre networks, broadband, natural gas pipelines, and road and rail networks, and the need to recover such costs through use, a country has to carefully plan where these networks are to be built/installed."

### 5.3.3 Western Cape Provincial Spatial Development Framework (WCPSDF) 2014

The Western Cape Provincial Spatial Development Framework (2014) refers to the importance of a coherent framework for the Province's urban and rural areas that gives spatial expression to the National and Provincial development agendas, among others. Its guiding principles include the following:

- **Spatial justice**: Past spatial and other development imbalances should be redressed through improved land access to and use by disadvantaged communities.
- **Sustainability and resilience**: Land development should be spatially compact, resource-frugal, compatible with cultural and scenic landscapes, and should not involve the conversion of high-potential agricultural land or compromise ecosystems.
- **Spatial efficiency**: Efficiency relates to the form of settlements and use of resources - compaction as opposed to sprawl; mixed-use, as opposed to mono-functional land, uses; residential areas close to work opportunities as opposed to dormitory settlement, and prioritisation of public transport over private car use.

In terms hereof, the logical underpinning of the spatial strategy of the WCPSDF covers the following (p. 34):

- Capitalise and build on the Western Cape's comparative strengths (e.g. gateway status, knowledge economy, lifestyle offering) and leverage the sustainable use of its unique spatial assets;
- Consolidate existing and emerging regional economic nodes as they offer the best prospects to generate jobs and stimulate innovation;
- Connect urban and rural markets and consumers, fragmented settlements and critical biodiversity areas (i.e. freight logistics, public transport, broadband, priority climate change ecological corridors, etc.); and
- Cluster economic infrastructure and facilities along public transport routes (to maximise the coverage of these public investments) and respond to unique regional identities within the Western Cape.

The Province's economic prospects clearly lie in the urban space economy (i.e. the metropolitan area), with public infrastructure investment forecasted to be the leading driver of growth. Several of the key concepts related to the space-economy policies refer to the following (as adapted) (p. 76):

- Reinforce the Cape Metro region as the Province's economic engine;
- Use new bulk economic infrastructure investment in the Cape Metro functional region to leverage private sector and community investments (i.e. energy, water, transport and freight logistics, ICT);
- Build 'land assembly' capacity in the urban space-economies and apply new land policy instruments (e.g. land banking, land value capture, etc.);
- Incentivise mixed land use and economic diversification in urban land markets;
- Regenerate and revitalise existing economic nodes in the urban space-economy (i.e. CBDs, etc.);
- Prioritise public transport investment and higher-order facilities in district centres; and
- Prioritise rollout of the 'greener' economy.

### 5.3.4 City of Cape Town Inclusive Economic Growth Strategy (2021)

The City of Cape Town Inclusive Economic Growth Strategy (IEGS) (City of Cape Town, 2021) recognises that "inclusive economic growth can contribute to the alleviation of existing poverty and inequality as well as the

improvement of livelihoods for current and future generations of Capetonians." The average economic growth rate in the five years preceding 2019 was 1,5%, down from 2,6% in the five years preceding 2013. The Cape Town economy was significantly impacted by two global trends, i.e. climate change linked to extreme weather events, and technological change that creates both threats and opportunities in the job market.

While this Strategy is intended to guide City operations and decision-making for 5 years, the context is firmly embedded around economic recovery after COVID-19. Implementation of this Strategy is thus a three-phase recovery approach that prioritises service provision, business support, labour market support and investment stimulation:

Phase 1: Stabilisation – A 12-month programme of initiatives which will be emphasised due to their ability to respond to and halt the immediate economic downturn.

Phase 2: Adaption – A further 12-month phase will emphasise a programme of initiatives that can transition us to a re-purposed and relevant economy with increased competitiveness in the post-Covid economic landscape.

Phase 3: Rebuilding/Recovery – A long-term programme of initiatives that consolidate and build on the previous phases and seek to leverage competitive advantages for sustainable growth within the changed economic context

Specific references to airports and air transport include the following:

- There has been added focus on air travel, with over 750 000 inbound seats added to the Cape Town International Airport network through the City's partnership with the Cape Town Air Access Programme. The added demand drives airport expansion as a transport hub and a larger, more sophisticated business precinct (p. 18).
- The economic impact of congestion is also felt in relation to the transport of freight, perishable goods or other "time-sensitive" products by road-based freight vehicles. The current crisis manifests particularly on the road network for commuters, as Cape Town's otherwise comprehensive rail network is increasingly unsafe, unreliable and subject to sabotage: more than 40 train carriages have been burnt in arson attacks between 2017 and 2019 (p. 30).
- Expand and implement the City's SEZ offering to allow targeted areas identified for strategic growth to foster improved prospects for inclusive economic growth, including around key strategic assets such as the airport (p. 44).
- The Cape Town International Airport (CTIA), with over 10 million in passenger traffic per annum, is the second busiest airport in South Africa, winning the Best Airport in Africa by Skytrax in 2020 and retaining its rating as the 23rd best airport in the world (Skytrax, 2020). CTIA was also named Africa's Leading Airport by World Airport Awards (World Airport Awards, 2020) (p. 67).
- The City will pursue several activities to identify new transport solutions, including supporting ACSA in the development process to realign the CTIA runway to allow for increased traffic and larger planes.

### 5.3.5 City of Cape Town Integrated Development Plan (2022-2027)

The IDP for the City of Cape Town (2023a) confirms the vision to be "a City of Hope for all – a prosperous, inclusive and healthy city where people can see their hopes of a better future for themselves, their children and their community become a reality". To achieve this vision, several focus areas are outlined in the IDP, with the following that specifically relate to economic growth and transport:

**ECONOMIC GROWTH:** The guiding priority for everything the City does is to support faster economic growth that enables people to lift themselves out of poverty. Economic growth is needed to rekindle our hope for a more prosperous future.

**TRANSPORT**: Efficient and sustainable public transport and quality road networks are key enablers to businesses, workers and job seekers. A city that is better connected will be more productive and create more economic opportunities. The City will work to make it safer and cheaper for all people to travel, increasing their freedom to

enjoy all that the city has to offer. The city must be built on the right foundations to succeed in becoming a City of Hope and be a prosperous, sustainable, and inclusive city in the long term.

### 5.3.6 City of Cape Town Municipal Spatial Development Framework (2023)

Fundamental to the City's Municipal Spatial Development Framework (MSDF) is to ensure spatial transformation via dense and transit-oriented growth and development anchored by an efficient transport system. The 2018 MSDF emphasised a progressive spatial transformation agenda and an inward growth focus for "an inclusive, integrated and vibrant Cape Town that substantially countered the inter-generational legacies of apartheid and provided the foundation for sustainable, inclusive spatial and economic growth" (City of Cape Town, 2018). The 2022-2027 IDP sets out the vision to create a City of Hope – "a demonstration of what is possible in South Africa if we work together – and living proof that South African cities can be places where people's life steadily improve, and poverty is overcome". This implies a commitment to address spatial injustice, inequality and avoids creating new structural imbalances; working in partnership with the private and public sector in achieving spatial transformation by building a more inclusive, integrated, vibrant and healthy city; and proactively responds to social, economic, climate and resource shocks and stresses.

The inward growth focus of the 2022-2027 MSDF (City of Cape Town, 2023b) directly supports the City's resilience and sustainability efforts, and is a response to built environment stresses, such as urban sprawl. These stresses typically place the greatest burden on the poorest members of Cape Town society who commute the longest distances between home and work locations, pay the greatest percentage of household income towards fares, and spend the most time getting to and from places of work.

The 2022-2027 MSDF identified three main spatial strategies:

- **Spatial strategy 1**: Plan for economic growth and improve access to economic opportunities;
- **Spatial strategy 2**: Manage urban growth, and create a balance between urban development, food security and environmental protection; and
- **Spatial strategy 3**: Building an inclusive, integrated, vibrant and healthy city.

Specific reference is made to the Cape Town International Airport (p. 41), "one of Cape Town's primary freight and logistical links to global commercial markets. Retention and expansion of airport infrastructure and intensification of associated land uses support the regional economy and job creation. Its continued role in aviation and related land uses surrounding the airport should be encouraged and actively supported. Migration of general aviation activity from CTIA to Cape Winelands Airfield should be supported to promote better operational efficiencies for aviation. Other Civil Aviation Authority accredited landing strips, flying schools, as well as farms and other recreational landing areas, will continue to play a smaller role, even in the regional context."

The following policies specifically refer to the CWA and CTIA:

- **Policy 5.1:** Land use decision-making should consider leveraging large-scale economic investments in airport precincts and supporting transport infrastructure with employment-generating land uses.
- **Policy 5.2:** Support land use intensification at CTIA and the CWA to enhance Cape Town's aviation-enabled competitive advantage. Maintain a network of airfields used for civil aviation purposes, such as Morningstar.
- **Policy 5.3:** Decision-making on land development proposals in areas subject to cross-municipal-boundary urban development pressure, to ensure relevant consideration to longer-term implications of urban growth (i.e. increased peripheral land demand for urban development and bulk infrastructure investment).
- **Policy 5.4:** Decision-making on land development proposals to consider operational and economic cost benefits to the city as a service provider, the affordability of services to future occupants and practicalities of regional service provision (like disaster risk management, firefighting, ambulance and emergency services). This implies the consideration of the impact of potential development on the coherency and consolidated nature of spatial assets that underpin the regional economy (i.e. areas of agricultural significance; terrestrial and coastal natural resources; cultural and scenic landscapes; surface and groundwater sources; minerals and construction materials; and air quality).

- **Policy 5.5**: Support and prioritise the reconfiguration of inter- and intra-regional freight and logistics networks to reduce externalities and the costs of doing business. Support the regional development potential of CTIA and Cape Town.

H & A Planning (2024) indicated that "Policy 16 deals with directing urban growth away from risk areas and activities. This would include current and proposed noise contours for development proposals and must be part of the EIA processes. Consultations are mandatory for all urban development proposals between 55dBA – 80dBA noise contours (current and proposed). Runways must be within the framework of restrictions in terms of SANS 10103: 2008 as well as any applicable height restrictions. The future duelling of the Cape Town International Airport (CTIA) single re-aligned runway must balance economic benefits with noise impact on existing and potential informal or formal residential development, as well as on a range of social infrastructure like clinics, schools, elder care facilities and halls. It would be reasonable to assume that similar considerations would apply to the Cape Winelands Airport. Likewise, Policy 16 also spells out that other incompatible land development will not be supported if closely located to an airport or airfield with any existing or potential future aviation rights. The implementation intent of Policy 16 is to support the CTIA in continuing to provide the national and international aviation function to a limit determined by its manageable impact on surrounding land uses (noise impacts). Linked to this policy statement is the support of complementary and appropriate land development at the Cape Winelands Airport that will contribute to the efficiency of CTIA in terms of general aviation and related uses.

### 5.3.7 Northern District Plan (2023)

A District Plan is a framework of policies and plans that will guide the physical development of a district (in the same way that the City's SDF will guide the development of the City). The District Plan (City of Cape Town, 2023c), along with the City's SDF and local plans, are used by the City to apply spatial concepts and structuring elements to the District. The CWA falls within Sub-district 3 (Lucullus Road/Maroela Road Corridor) and covers the areas east of the Malmesbury rail line, south of the R312 and south of the N1 freeway. What is of particular importance, is that the areas to the west and south of the CWA have been earmarked for residential development, i.e. Bella Riva and Garden Cities (numbers 5 and 6 in **Figure 16**).

Key interventions / actions are proposed in the Northern District Plan to facilitate the achievement of the spatial objectives through the spatial vision, the role of the district and the spatial concept. The following specifically relate to the Fisantekraal area (p. 28):

1. Protect Mikpunt, Philadelphia and Klipheuwel from expansion.
7. Link Fisantekraal to the south with urban footprint via mixed-use development (employment-generating focus), dependant on bulk services and adequate accessibility. However, it should also protect the Joostenbergvlakte smallholdings/residential estates from change in land use for the duration of the district plan.
10. Protect agricultural land from urban expansion.
11. Amend the urban development edge to include Cape Winelands Airport and round off the edge to the north of the R312 (Lichtenburg Road).

The CWA is specifically supported and encouraged in the district-wide Development Guidelines (p. 60) under Airports and other freight hubs:

1. Encourage and support the development of the airport to address market needs in the area.
2. Encourage the development of inter-dependent associated economic activities, maximising economic opportunity within and in immediate proximity to the airport property, as appropriate.

H & A Planning (2024) noted that the existing airport site with its Transportation Zone (TR1) zoning and consent for an airport is located within the CoCT's urban edge. However, the proposed extension spans two MSDF Spatial Transformation Areas, namely the Incremental Growth Area (inside the Urban Development Edge [UDE]) and the Discouraged Growth Area (outside the UDE). The landside development is west of the runway, mainly within the Incremental Growth Area, while the airside (runway safety area) is mostly outside the UDE.

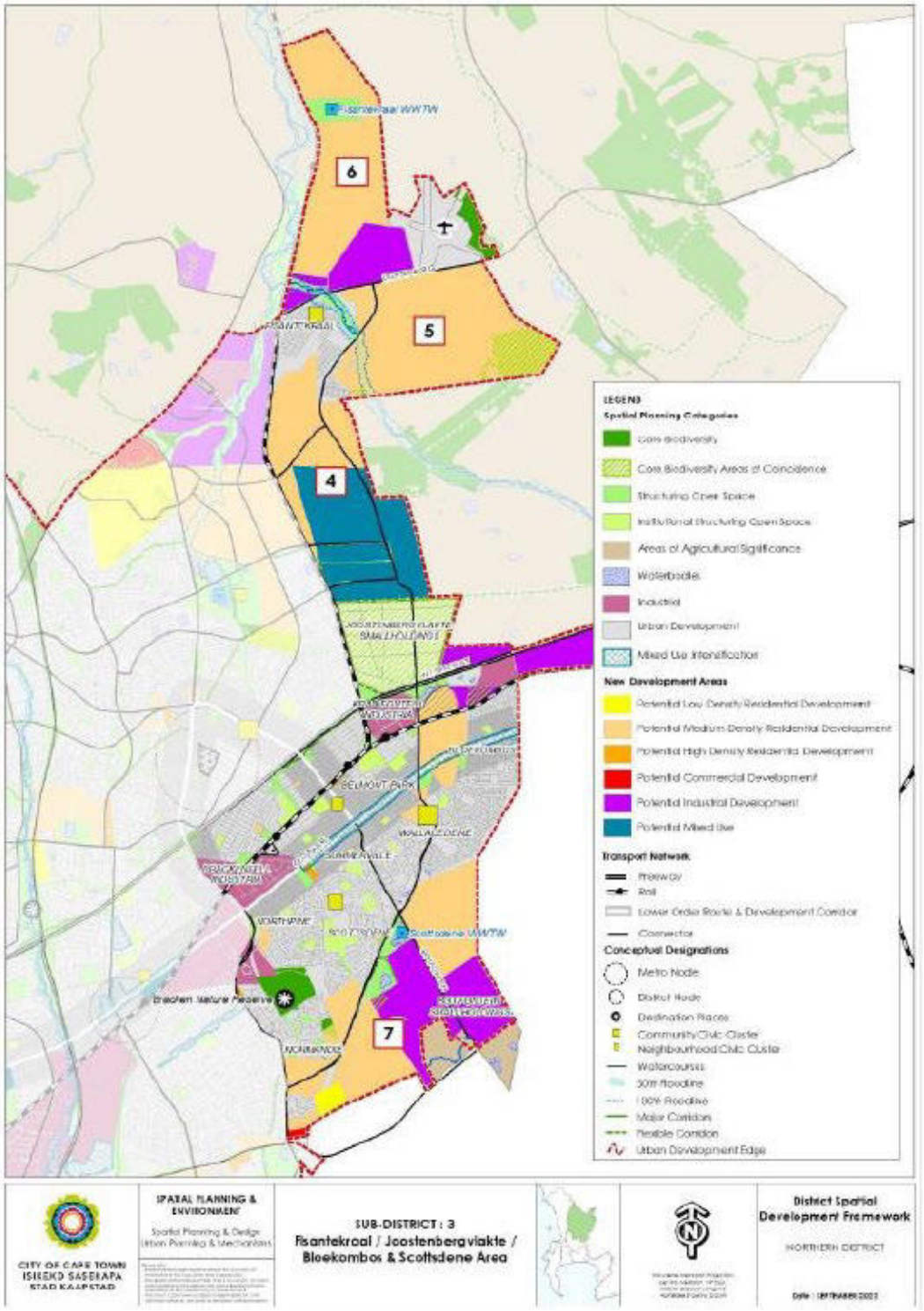



**Figure 16: Northern District Plan for Sub-district 3.**
**Source**: Northern District Plan Vol 2, City of Cape Town, 2023c

The Sub-district 3 Development Guidelines (p. 92) identified new development areas. The following were stated for the Cape Winelands Airport (PA 474-4 & PA 724-10) and Farm portions to the west (PA 724-9 & CA 175-2):

1. "The airfield, located directly north of the R312 operates under private ownership. Any extension to the existing operations, or application for amendment of approvals (existing) need to follow due process, as may be prescribed. With regard to the portions identified on the Biodiversity Map and SDF Plan areas of high

biodiversity value, detailed ground-truthing needs to establish the extent and conservation value of those portions.

2. To round off the urban development edge in the area to the north of the R312, CA 175/2 & 724/9 are included inside the urban development edge, and may be considered for industrial development, together with CA 175/1, to increase employment for the Fisantekraal community. Access onto the R312 needs to be resolved by applicants prior to development of proposals, which should include pedestrian movement across the R312.
3. Note that for any development proposals located within the noise contour zones around the airfield, the relevant authority should be consulted with regards to the applicable noise regulations and the type of development (i.e. residential or non-residential) that could be permitted to ensure that appropriate mitigation measures are put in place, where necessary. The AOLS (Airport Obstacle Limitation Services) limit building heights of developments located in proximity to the airport flight paths. These developments are subject to comment from the South African Civil Aviation Authority."

## 5.4 Conclusions

The Cape Winelands Airport is a large private investment that would contribute toward economic growth and job creation in the CMA and particular the Northen District during both the construction and operational phases. The proposed WCA development has a clear focus on transport and commercial uses related to aviation that will contribute to employment and new business opportunities for the CMA. The roll-out of the project offers an opportunity for skills development in the aviation space and will contribute directly and indirectly to the aviation landscape and infrastructure. The City of Cape Town's IDP and SDF support the CWA development, and the Northern District Plan includes a large part of the property extent earmarked for the CWA within the urban development edge. H & A Planning (2024) concluded that the proposed CWA development "directly supports the vision and development concept of the **Greater Cape Metro Regional Spatial Implementation Framework (GCM RSIF) 2019 Policies,** by enhancing regional transport infrastructure and logistics networks, lowering the costs of doing business and improving the efficiency of logistics operations in the region. It will drive economic growth by attracting investment, improving air access, supporting exports, and positioning the region as an innovation hub. The expansion will also spatially provide easier access to economic opportunities, ultimately creating a more inclusive and dynamic economy for the GCM as contemplated in the **Western Cape Growth for Jobs Strategy 2023 and Priority Focus Areas (PFA)**."

The Cape Winelands Airport development subscribes to the NDP principles by offering commercial opportunities close to the Northern District of the City of Cape Town. The proposed Cape Winelands Airport development will contribute toward private sector investment, reinforce the Cape Metro economy and create additional employment (in particular in the transport and construction sectors) that will further strengthen growth in the local economy. The project addresses spatial efficiency to some extent, i.e. mixed-use as opposed to mono-functional land uses. The provision of additional airport services will significantly contribute to the tourism sector in the Western Cape as it will increase connectivity and visitors to the region.

The development will ensure a substantial direct investment in the City of Cape Town and represent a significant indirect investment. During the construction and operational phases, direct jobs will be created to benefit the surrounding areas' communities. It will also directly support the transport sector by providing additional airport services. It will contribute to creating and attracting investment that will facilitate economic growth and employment opportunities while also addressing the need for improved aviation services in the City.

# 6 PERCEPTIONS AND CONCERNS OF KEY STAKEHOLDER GROUPS

## 6.1 Introduction

The perceptions and concerns of stakeholder groups form an important contribution to the EIA process, especially from a social and economic perspective. Primary face-to-face or telephonic interviews with representatives of stakeholder groups are essential input to understanding the parties' perceptions and potential positive and negative aspects of the proposed project. Comments of a **socio-economic nature** received from Interested and Affected Parties (I&APs) in response to the EAP's public participation process are summarised below (verbatim as far as possible) and, where appropriate, included in the assessment of the respective impacts. Please refer to the Comments and Response Report (PHS Consulting, 2024a) for the comments and the EAPs' responses.

## 6.2 Local Government

The City of Cape Town Spatial Planning and Environmental Directorate, Environmental Management Department, raised the following concerns related to the Socio-Economic Assessment (the paragraph numbers as referenced in the response by the I&AP):

1.10.4 The DSR is silent about other semi-/publicly known industrial and commercial developments in various stages of EIA and land use approvals; such as around Lucullus Gardens, Durbanville Industrial Area, to mention a few.

1.18 The UPD Department supports the proposal for a detailed economic/market study to determine the need and desirability of both airports within the regional context of the Western Cape including a consideration of George Airport together with CTIA. This was previously raised by the UPD Department and not adequately addressed in the specialist studies.

3.6 The impact on noise, traffic congestion, and potential loss of securing open-market buyers must be considered.

4.6.1 As noted in the report, an informal settlement, on land designated for agricultural use, is 4.5 km north-west of the proposed expansion. As the majority of the land surrounding the CWA is currently zoned as agricultural or unused, the development and expanded operation of the CWA logically adds to the risk of expanded informality in the area, including within Discouraged Growth Areas and Environmentally Sensitive areas. This aspect of the development adds both an element of risk and financial costs to the City; these risks and costs are not properly evaluated in the Socio-economic Scoping Report.

## 6.3 Local residents and community groups

### Alison Muller: Adjacent landowner

- **Decrease in land use for agriculture**: Airport spillover effects make surrounding land hard surfaces, prohibiting or greatly reducing the amount of water that soaks into the ground.
- **Decrease in average farming income**: Although the local economy may benefit, the loss of agricultural land will decrease the income from agricultural activities.
- **Traffic**: The R312, R304, and R302 are already high-volume traffic roads, and construction vehicles will affect traffic flows.
- **Light pollution** affects how plants grow and reproduce; it disrupts their seasonal rhythms, ability to sense and react to natural light, and fragile relationship with pollinators.
- **Water pollution:** Fuel and oil emissions that seep into aquifers can contaminate nearby boreholes and affect the water that feeds animals and crops.
- **Air pollution:** Airports and aviation generate air pollution as the combustion of aviation fuel produces nitrogen oxides (NOx), carbon monoxide (CO), sulphur oxides (SOx), hydrocarbons and particulates.

- **Noise pollution:** Aeroplanes will be at a level close to the ground, near residential homes and animal sheds.
- **Devaluation of agricultural farms:** Agricultural properties will lose value as planes land and take off so close to residential buildings and farm activities.

### Barbara Gale: Joostenbergvlakte Resident

- I am concerned about the local environment, conservation of the rural/agricultural nature of the area and concern for the degradation of local roads.
- I am opposed to upgrading and widening Lucullus Road to access the N1, as it would destroy the **rural character** of Joostenbergvlakte.
- The **environmental impacts** on surrounding wetlands, water courses, and terrestrial/agricultural land must be properly assessed, and the preservation of unique systems must be ensured. Conservation of the Critical Biodiversity Area on the eastern boundary is essential.
- Potential negative impacts on the Joostenbergvlakte **cultural landscape** to the south should be assessed and mitigated.
- Potential **environmental impacts** (such as biophysical, socio-economic, noise and traffic) must include the whole of Joostenbergvlakte, south of Fisantekraal to the N1, East to the R304 and West to the Malmesbury railway line.

### Fred Berrange: Durbanville Resident

- Drop in **residential property prices** due to the noise and industrial pollution from the expanded airport.
- The airspace will **compromise recreational aviation**, making a simple flight from Morningstar to FASH problematic. If you are ADSB equipped, you can fly through the CTR, but pilots need a flight plan.
- There are farms surrounding the area, and families with horses and other animals will suffer severely from **noise and industrial fallout**.

### Jenni Davies: Local Resident

I believe the proposed airport will have far-reaching negative consequences on the very essence of the area and the socio-economic, food production, tourism, and health of communities.

- While the development could bring potential job opportunities and economic growth to the CMA, economic **growth is generally NOT achieved within the airport's immediate vicinity.** Furthermore, **temporary construction workers** would find themselves without work but don't move away, further increasing the severe impoverishment of this area.
- **Noise:** Aircraft noise has a negative effect on sleep disturbance, stress, and other health outcomes.
- **Air Pollution:** Airports and aviation increase air pollution due to aircraft, ground vehicles, and other airport-related activities. This will impact the health of residents in and around Durbanville, Fisantekraal, Greenville, etc., but also add to the burden on local public health services, such as clinics and hospitals. Current research indicates that those within a 10 km radius of an airport are at increased risk of hospital admissions for respiratory conditions and heart disease, as well as increased incidence of asthma, mainly due to the increased $CO_2$ levels. Children are particularly affected and, given that the area within 10 km of the airfield is home to a young, growing population.
- **Property Values in the surrounding areas are usually negatively impacted** by airport developments. Homes within the "limited use area" around an airport have lower average prices and are seen as less desirable (they don't sell as fast).
- **Social Impacts:** School-age children are significantly impacted by noise, which causes frequent interruptions of classroom communication and school performance problems, impaired ability to read and memorise, and decreased motivation to learn.

- **Road infrastructure:** Durbanville has an immense problem with increasing expansion not being integrated into existing or planned road and town planning infrastructure. The airport aims to accommodate 5.2 million passengers p.a., which will add a significant number of people travelling to the airport. All these vehicles will add noise and emissions to the air, congest what are essentially single-lane farm roads, and lead to traffic jams.
- **Safety**: There is increasing gang violence, theft, muggings, drug issues, and hijackings in the Fisantekraal area. Those travelling to and from the airport will require protection, particularly on dark, narrow, single-lane country roads.
- **Tourism:** This region is a highly popular tourist destination for international visitors. The construction of an airport and its accompanying flight paths, fuel dumping, air pollution, and the trash that inevitably accompanies airports will impact tourism, resulting in less job security in this area and around the Winelands.
- **Destruction of an important rural and farming region** may affect food production and the local agricultural economy. Surrounding farming activities include grapes, wheat, mushrooms, chicken, beef and dairy cattle, equestrian centres, smallholdings, and subsistence farmers with goats, pigs, and chickens that may be affected by the noise and pollution. As the area's rural nature is phased out, the farms will eventually be forced to close, reducing food security and jobs.

### Romano Plescia: Durbanville Resident

My concerns are rooted in this development's significant environmental and health impacts. The increase in air and road traffic, coupled with the airport's strategic location, raises serious questions about air quality deterioration, noise pollution, and the overall well-being of Durbanville's residents and environment. The expansion of Cape Winelands Airport could have substantial environmental and health impacts on Durbanville and its surrounding areas. The evidence from various studies underscores the need to prioritise the health and well-being of our community.

- **Impact on Air Quality:** The expansion is expected to increase air traffic, significantly increasing air pollution. Studies have shown a direct correlation between airport proximity and elevated levels of pollutants like CO, $CO_2$, and $NO_x$, which can have long-term health impacts on our community.
- **Impacts of Noise Pollution:** Increased aircraft and road traffic will amplify noise pollution. Studies have linked noise pollution to a range of health issues, including cardiovascular diseases and cognitive disorders.
- **Airport Location and Prevailing Winds:** The location of Cape Winelands Airport, with runways directed towards Durbanville and influenced by prevailing SE winds in summer and NW winds in winter, will likely direct pollution toward our suburban area. This geographical positioning exacerbates the potential impact of air and noise pollution on Durbanville, putting our community at an increased risk.
- **Impact on Schools:** The proximity of schools to the airport raises additional concerns. Studies have shown that air pollution from airports infiltrates nearby schools, impacting children's health and academic performance. Moreover, the increased traffic poses significant safety risks for students commuting to and from these schools.

### Lizel Visagie: Durbanville Resident

While I understand the potential economic benefits associated with such a development, I believe there are significant concerns that warrant careful consideration:

- **Environmental Impact**: The Winelands boast a unique ecosystem, and the proposed airport could adversely affect our environment. Increased noise and air pollution and disruption to local wildlife could irreversibly harm the delicate balance that makes our region special.
- **Cultural and Aesthetic Value:** The Winelands Urban Area is an economic hub, bit also a cultural and aesthetic treasure. The airport's construction could compromise the scenic beauty that attracts residents and visitors alike, impacting the overall charm of our community.
- **Impact on Agriculture:** The potential displacement of valuable agricultural land may have far-reaching consequences on our community's livelihoods.

- **Quality of Life and Well-Being:** The proposed airport raises concerns about increased noise levels, traffic congestion, and potential decreases in property values. These factors could diminish residents' overall quality of life in the affected areas.
- **Alternatives and Community Engagement:** Before proceeding with such a transformative project, I urge you to consider alternative locations with fewer detrimental effects on our community. Additionally, involving residents in the decision-making process is crucial, ensuring that their voices are heard, and concerns addressed.

### Leon Roos: Local Resident (Mikpunt)

- **Impact on rural living**: Rural areas are cherished for their peaceful surroundings, tight-knit communities, and lack of industrial intrusion. The expected surge in traffic will result in congestion, longer commute times, and heightened risks for residents, especially if the existing rural infrastructure is ill-equipped to handle such changes.
- **Socio-economic impact on Mikpunt and Klipheuwel**: Mikpunt and Klipheuwel, situated near the proposed airport, will likely witness substantial changes in their social and economic dynamics. The anticipated surge in traffic and demand for services has the potential to strain local resources, significantly affecting residents' daily lives. Schools, healthcare facilities, and other amenities may experience increased pressure, necessitating a comprehensive evaluation with proposed solutions to mitigate adverse effects.
- Increased vehicular movement may lead to road degradation, congestion, and safety concerns. The strain on rural roads and inadequate infrastructure for heightened traffic need explicit attention. The current oversight in addressing the specific impact on Mikpunt and Klipheuwel, particularly concerning traffic, road infrastructure, and economic considerations, raises questions about the comprehensiveness of the socio-economic report. A more inclusive analysis is imperative for a holistic understanding of the proposed airport's socio-economic impact on existing communities and their associated infrastructures.
- **Economic impact on residents**: An inclusive socio-economic report should scrutinise potential disruptions to local businesses, farms, and livelihoods. Moreover, the report should address the economic burden on residents, including potential increases in living costs, taxes, and other financial obligations resulting from the proposed airport.
- **Economic impact on existing businesses**: The CWA development has potential economic ramifications for existing businesses, especially in areas like Mikpunt and Klipheuwel. Local resources, including schools and healthcare facilities, may experience strain, impacting the operations of established businesses. A thorough socioeconomic analysis should delve into the existing economic activities, assessing potential disruptions to local businesses and farms. Transparent community engagement processes must be outlined, ensuring the concerns of these existing businesses are integral to the decision-making process.
- **Potential rise in crime and impact on security:** The rural areas under consideration presently enjoy relatively low crime rates. This equilibrium can be disrupted by introducing an airport and the associated influx of people, vehicles, and activities. Increased population density and economic activities linked to the airport can attract criminal elements seeking to exploit the new opportunities. A robust plan for crime prevention and security enhancement should be integral to airport development. This includes measures to prevent criminal activities within the airport premises and strategies to secure the surrounding rural areas effectively. Adequate lighting, surveillance systems, and community involvement need explicit attention.
- **Community engagement and consultation**: Community engagement and consultation processes are pivotal, demanding transparency and inclusivity. The reports should outline robust measures taken to involve residents of Mikpunt and Klipheuwel in the decision-making process. Ensuring that their concerns, needs, and perspectives are heard and integrated into the decision-making process is essential.

### Danielle Cronje: Mosselbank River Conservation Team

The mission of the Mosselbank River Conservation Team (MRCT) is to protect wetlands and promote environmental education. We believe that by working together, we can make a difference in preserving the natural beauty of Mosselbank River and its surrounding wetlands. As we understand and acknowledge the numerous economic benefits the airport expansion, we are equally concerned about the negative consequences of the development:

- **Community Engagement**: We are concerned that the expansion is widely publicised, but the applicant should engage fairly and concisely with all residents, businesses and non-profits in the area.
- **Noise Pollution**: Increased noise can adversely affect residents' well-being, leading to sleep disturbances and other health issues.
- **Air Pollution**: The community is surrounded by a few industrial areas, with pollution levels that may sometimes be “Unhealthy for sensitive groups”. With increased air traffic, these pollution levels will certainly increase as aircraft emissions, and can contribute to air pollution, potentially causing respiratory problems and other health issues.
- **CWA Valley-Bottom Wetlands**: Efforts should be placed on conserving remnants of wetlands and biodiversity and not offsetting to benefit developers.
- **Biohazards and the local conservation areas**: The Eastern Tributary of the Mosselbank River is an identified core conservation area located approximately 2.3 km from the Airport. Considering that international flights are considered, biohazards are a big concern for our local conservation areas in terms of pathogenic microorganisms and the intentional or unintentional release of biohazards, such as invasive species.
- **Safety and Security:** The Greenville and Fisantekraal Communities are suffering from the lack of police resources, with only a satellite police station and one police van monitoring the entire area. The applicant will be able to privatise their security and protect their assets, but what about the potential criminal elements stemming from the development and impacting the community’s safety? Furthermore, taxi strikes occur regularly and become very violent by keeping residents hostage in their own community. The need for additional public transport will have to be well thought out as the taxi associations will fight for their territories, ultimately impacting residents.
- **Current Road infrastructure:** The road leading to the airport, Lichtenburg Road, cannot carry the increased traffic expected from an airport. Most of Fisantekraal residents walk on that road, but there are no sidewalks, traffic signals, pedestrian crossings or lights. Stray cattle and dogs are also frequent. This also applies to access from Klipheuwel Road, which has seen multiple accidents as the road has no streetlights for traffic signals.
- **Community engagement**: We request that proper community meetings and engagements be held with the Fisantekraal and Greenville communities, who will receive the brunt of this development's negative impacts.

### Deon Barnard: Durbanville Resident

Durbanville is already under severe strain, with overloaded trucks taking shortcuts through neighbourhoods. The town's expansion has made local roads and infrastructure bursting at the seams. Durbanville is supposedly a rural quiet community that pays maximum property taxes to keep the town as such. We do not want an airport with aircraft taking off / landing over our town 24/7.

### Mr SS and Mrs MD de Wit: Hercules Pillar Farm (straddling the R304)

We strongly reject this proposal to build such a huge airport in the heart of extensive agricultural farming. Most farms around the airport have **heritage values** and have been farmed actively for generations. The construction of roads to accommodate the massive increase in traffic will disrupt agricultural land. The **traffic** on the R304 road has already increased so much, and farmers need to move around to get to other parts of their farms. Apart from the deafening **noise** humans will have to endure, farm animals will also suffer. The project will also **disturb the biodiversity** of the area, which is under serious threat due to insensitive infrastructural development and over-exploitation of wildflowers.

### Jozef van Wyk: Mikpunt Resident

We recently sold our suburban property to settle in Mikpunt to live in a more rural area with peace and quiet. The airport directly in line with Mikpunt will definitely impact this. Our property value will also decrease if the noise and pollution levels increase.

### Jolene Van Wyk: Mikpunt Resident

My greatest concern is the **pollutants and noise** caused by an airport. We live in Mikpunt, which is directly in line with the airport, and on any larger scale, this airport will harm those of us who grow vegetables organically.

### MC Pienaar: Mikpunt Resident

The community of Mikpunt, a small town next to Klipheuwel, is totally against the airport. We moved to a rural area, and now you want to bring air pollution, noise and crime to us. Our roads are not built for heavy traffic, and we struggle as they are. There are many health risks to living next to an airport, and there is absolutely nothing good about this for our community. The impact on wildlife will also not be positive at all.

### Anthony Zenger: Local property owner

I am a property owner near the proposed airport, and I object to this new establishment. My reasons include noise, traffic and health, along with potential crime issues.

### Madelein de Bruin: Local Resident

I object to rezoning rural land to industrial on this scale as it will disturb a vast area and affect many farming, rural and winelands businesses. Socio-economic and environmental health impacts need to be thoroughly investigated, and reports be transparent and presented in layman terms.

- The Winelands is a huge **tourist destination** that will be negatively affected by removing the peace, quiet, nature, and tranquillity that are the area's drawcard and heritage.
- Our council does not have the **infrastructure budget** to upgrade the roads, get sewerage and grey water systems in place, nor can supply us with more water, so how does this same council suddenly have enough money to upgrade supply in the same area for an industrial area development of this scale?
- **Noise pollution** will disturb the peace and rural country setting. The existing airport traffic from the small airport strip is already causing issues in Mikpunt/Klipheuwel as low-flying aircraft result in **stock losses**.
- There are several **health concerns**, with air pollution in farming areas producing food and wine. It's common knowledge that excess carbon monoxide increases heart health and respiratory health issues, noise disturbs sleep and increases stress for humans and livestock. People who have moved out of the city for health reasons, such as cleaner air and less noise pollution, will now be negatively affected.
- **Increased crime** in an area with inadequate police and security services could very well turn the beautiful Cape Winelands into the next hijacking hotspot, as tourists are a target. Fisantekraal is a huge informal settlement and will grow even more, thus increasing crime in nearby areas such as Durbanville, Kraaifontein, etc.

### Arno Rossouw: Local Resident

- **Air pollution** – This development would add a huge amount of air pollution from aeroplane engines, support and operational vehicles, and vehicles transporting personnel and passengers. If the railway systems were still up and running, that might have helped with the vehicle count.
- **Noise pollution** – Residents in Durbanville, Kraaifontein, Stellenbosch, Uitzicht and Brackenfell did not buy in these areas for it to sound as if they are in Kempton Park. This will also have a huge impact on **property values**.
- **Traffic** – The Airport will turn an already difficult situation into a total traffic disaster. The R304 towards Stellenbosch, and especially the interchange with the N1, is already a permanent mess, with similar problems are experienced on the R302 and R312.

### Henk Lourens: Durbanville Heritage Society

We are not entirely in agreement with the content of the **Heritage Impact Report**. The document does not recognize that the proposed development falls within a cultural landscape, nor does it identify potentially affected heritage resources in reasonably close proximity to the site. The pressure of development on the surrounding landscape is of great concern, specifically areas of greater heritage significance.

### Johan Van Tonder: Stellenberg NG Kerk

We support the project, mainly based on the positive contributions to improve and develop the external road infrastructure north of Durbanville, improve incoming and outgoing passenger and cargo freight infrastructure, spur on tourism and economic development and growth in Durbanville and the greater City of Cape Town, the West

Coast and the Cape Winelands, and provide more job opportunities in the Northern District of the City of Cape Town and adjacent areas.

### Joostenbergvlakte Community Forum Registrations

This development will directly affect the Joostenbergvlakte community in terms of Traffic, Socio-Economic Circumstances, Environmental issues, Air Quality, Noise nuisance, quality of life, and animals.

### Joseph Shaw: Pinehurst Ratepayers & Residents Association

- **Noise** – identify noise levels from airport, air traffic and road traffic, and benchmark against the City of Cape Town's Environmental Health, specialised services, Noise Control Office's relevant By-laws, Regulations, and policies in respect of noise disturbances.
- **Road traffic** –identify types and sources of traffic and forecast volumes and required upgrades
- **Flight paths** – identification and approval of flight paths
- **Pollution** – light pollution contributing to visual impact, management of and mitigation measures for pollutants
- **Disaster management** – what plans are in place, are existing resources adequate to meet the demand?
- **Upgrades to Cape Town International Airport (CTIA) / Alternatives**: Impact of CTIA upgrade, external demand, economic benefit analysis, alternative land use, impact on surrounding agricultural land values,
- **Immediate benefit to local community**: forecasted economic benefit analysis to determine who will benefit from the CWA, impact on service delivery and infrastructure provision by CoCT
- **Water resource management**: Impact on and protection of local freshwater resources
- **Heritage**: heritage significance of the current airport and surrounding farms

## 6.4 Surrounding businesses and developments

### Karla Burger: ELCO Property Development (on behalf of Bella Riva)

The approved Bella Riva development is immediately west of the proposed development (Portion 2 and Remainder of Farm 123). As of 2023, it has been included in the Urban Edge as per the revised City of Cape Town Municipal Spatial Development Framework and Northern District Plan.

- The proposed Wineland Airport draft report does not reference any **noise impacts** on the approved Bella Riva development. This is of utmost concern as there are limitations to residential uses in relation to certain noise contour zones. The proposed Winelands Airport must consider Bella Riva's status as an approved housing development and thoroughly assess the impact of **noise levels**. It's imperative to prioritise achieving zero noise impact within Bella Riva's boundaries to uphold its appeal as a housing development, which will safeguard the City's greater plans of residential expansion along the North-South railway line.
- Other aspects that will need to be addressed are the **scale, position and alignment** of the runway, the existence and placement of the proposed bioreactor and the positioning and alignment of access along Lucullus Avenue.
- Bella Riva will bring significant **infrastructure** to the area, including an electrical substation, water pipelines, a bridge, and road infrastructure. The bridge and east-west road traversing Bella Riva are vital for the Airport's accessibility. We must emphasise that these infrastructure costs can only be justified if we are assured there will be no additional burdens on our land.

### Renier Smith: Garden Cities NPC (RF)

Garden Cities believe that any decision that confirms land use rights for the Fisantekraal airfield has the potential to impact extremely negatively on the approved land use rights granted for Greenville Garden City. The location of this airport is unsuitable in its present location and would strongly believe that other alternative locations should be considered as a more suitable and less invasive solution to the existing landscape, existing in-hand approvals and

surrounding land-uses. We are extremely concerned regarding the proposed CWA and the resultant impacts it will have on Greenville Garden City, and the layout that the relevant authorities have endorsed as part of the 10-year authorization process.

Various potential impacts are raised related to (among others) Airport Access, traffic congestion and infrastructure constraints: Electricity Supply, Water Supply, Sewage Management and Treatment, Security and social issues, Noise Pollution, Air Quality and Emissions, CWA Valley-Bottom Wetlands and Ecology, Garden Cities Conservation Areas, Livestock farming. Those of a socio-economic nature are summarised below:

- **Road infrastructure**: important to also consider the safety of current and future residents of Greenville Garden City and surrounds.
- **Biodigesters** produce odorous gases, noise, potential runoff of polluted water
- Safety concerns related to **bulk fuel storage**.
- **Increased water demand** for construction and operational needs may strain local water resources, impacting both human and ecological requirements. Most of the surrounding farms rely on borehole water, but no plans for aquifer recharge or the sustainability of surrounding boreholes are presented.
- Fisantekraal **WWTW** is already under immense stress due to the growing population in Fisantekraal and Greenville, and Bella Riva's construction must also be considered.
- Fisantekraal is already a high-crime area with very limited policing resources, and the **increase in local crime** is a concern. Taxi violence, strikes and protests are prevalent in the area, and may affect major roads to the airport.
- Construction activities and ongoing air traffic will contribute to **elevated noise levels**, disrupting the peace and tranquillity of the Greenville community. Increased noise can adversely affect residents' well-being, leading to sleep disturbances and other health issues.
- Increased noise levels will negatively impact **property values and house sales** as residents would not want to invest in areas with high noise and traffic areas.
- Garden Cities has active tenants on its landholdings which actively **farm with livestock** and particularly cattle. We are concerned about noise disturbance, animal behaviour and productivity, dust and air quality, traffic and access issues, water resources, biosecurity risks, visual and aesthetics, visual disturbances.
- The **noise cones** are of huge concern and impacts vast extents of our landholdings in terms of land already forming part of the Greenville approval with existing rights in place, as well as future landholding. Further threats such as noise pollution and height restrictions in a similar way curtail the original development and anticipated land uses even further, rendering vast tracks of previously approved land sterile.
- The realization of the CWA would also pose substantial impacts on the provision of **bulk infrastructure** and more so the bulk infrastructure which was planned and gradually rolled out to cater for Greenville and its mixed land use approach, the bulk potentially being taken up by the bulk requirements suggested by the CWA development.
- Decreasing of **land values** in existing developments and areas with newly created flights paths and loss of tranquillity of the area.

### Stephen Levetan (ENSafrica): County Fair, a division of Astral Operations Ltd

County Fair operates the Fisantekop Complex, which consists of four laying farms, namely Quarryside, Wheatlands, Fisantekop and Vergelee. Current operations account for some 38% of our client's total laying stock in the Western Cape. County Fair has a permanent workforce of 79 people working or servicing the four farms, drawn from Fisantekraal. We submit that the proposed project immediately adjacent to the Fisantekop laying complex, is incompatible with each other. That said, our client does recognise the potential need for a second commercial airport to service Cape Town and is willing to engage with the applicant to see whether the project can be accommodated adjacent to its operations or to explore alternative solutions that satisfy both parties.

- An **outbreak of disease** among the laying chickens presents a great risk to commercial poultry farming. The laying stock is extremely susceptible to disease and infection, and isolated and remote areas were chosen to

develop the laying operations to minimise the risk of diseases. One of such sites was the farm adjacent to the site proposed for the project.

- The **risk of infection** is also a threat to our client's workforce and to the public at large. Certain diseases, such as *Salmonella*, can be transmitted from poultry products to humans, causing severe illness and possible death.
- The farm complies with a stringent **bio-security plan** to isolate its stock from disease. The two key elements of the bio-security plan are the distance between the farms and any source of infection, and human-entry procedures. County Fair strives to maintain a 1000 m buffer zone around its chicken houses, which would not be possible for the proposed landside layout.
- **Light and noise pollution** will have a seriously detrimental impact on our client's laying stock.
- In regard to the proposed **access roads**, it will not be possible to accommodate County Fair operations and the Lucullus Road extension and effectively, the laying farms would need to be expropriated and the cost of such

**Pierre Briel - Briel & Associates (Pty) Ltd, on behalf of Corobrik (Pty) Ltd**

A closure application for the remainder of Joostenberg Vlakte (now Portion 23), No. 724, and the Remainder of Joostenbergs Kloof 474, located in the Magisterial District of Cape Town, Western Cape Province, under DMRE reference WC30/5/1/2/2/311MR, has been submitted. The closure plan will provide for the rehabilitation of the open clay quarry, in accordance with the provisions stipulated for the cessation of mining activities. The closure plan will be structured to align with the anticipated development of the Cape Winelands Airport and the engineering design specifications provided by the property developer.

**Shaun Taylor – Mainstream Renewable Power South Africa**

Mainstream Renewable Power is investigating a potential wind farm, Durbanville Wind Farm, approximately 3 km to the west of the current Winelands Airport. They need to understand the current plans for CWA and any possible restriction zones that can be anticipated as they investigate the feasibility of the proposed Durbanville Wind Farm project.

## 6.5 Aviation associations/clubs

**Sean Bradshaw: Airports Company South Africa**

ACSA supports the relocation of light general aviation to CWA but not high-performance General Aviation, such as fixed-wing, jet-engine aircraft. GA, which includes private, charter, mercy, and training movements at CTIA, comprises an average of 30% of all air traffic movements at the airport. Smaller aircraft (ICAO code A—B) comprise more than 35% of all GA movements. It is necessary to differentiate between light GA and high-performance GA (business aviation jets and air charters), and between the different types of General Aviation, such as Training Schools, Crop Spraying, Fire Fighting, Business Aviation or Air Charters. ACSA supports the development of CWA to support and grow light General Aviation. However, we do not support the development of CWA into an airport which processes scheduled commercial domestic and international traffic for the following reasons:

- We believe that the two airports will **compete** for the same scheduled commercial domestic and international traffic and will therefore not be financially sustainable. The City of Cape Town collectively processes significantly lower scheduled commercial passenger volumes (10 million passengers) as compared to major cities like Johannesburg (22 million pax), which can sustain a main airport and a secondary airport.
- CTIA and ACSA are still recovering from the devastating effects of COVID and its debt burden grew during the COVID-19 pandemic. Due to the higher debt levels, lower passenger volumes and planned investment programmes, the airport must focus on sustained passenger and air traffic growth to remain sustainable. Any **dilution of traffic into CTIA will be a major risk** to these planned investment programmes and to continued investment at CTIA.
- The **airspace conflict and restrictions** will create inefficiencies in the airspace and movements into Cape Town International Airport. Given the proximity between the two aerodromes, CWA will impact the airspace and procedures into CTIA. This will reduce CTIA's capacity and efficiency. It could also result in a higher noise footprint at CTIA, inefficient flight paths, and increased fuel burn for airlines flying into CT IA.

- The **CTIA investment programme** includes the planned construction of a new international terminal, a new domestic arrivals terminal and additional Airbridges and a second new runway. These programmes will commence in a phased approach from 2025 to 2027 and inject significant additional capacity into CTIA in the short term.
- ACSA operates as a **cluster of airports**, and CTIA provides management services and general support to the other local airports. The sustainability of airports like George, Kimberley, and Upington is dependent on the sustainability of ACSA and Cape Town International Airport.
- Increased connectivity at a single airport enhances route development. Increased connectivity and offering passengers convenience and connections at a single airport will support the continued growth of CTIA. Most international airlines operating at CTIA have interline agreements with domestic carriers to connect international passengers to regional and local destinations.

### Louis Stanford: Chairman, South African Hang-gliding and Paragliding Association (SAHPA)

SAHPA is the national sporting body approved by the Civil Aviation Authority to oversee the sports of paragliding and hang-gliding (and powered versions) in South Africa. It represents the interests of approximately 780 member pilots, and a variable temporary membership of up to 1000 foreign pilots. There are 85 instructors in South Africa, most based in the Western Cape or the Garden Route District. Our members are expressing concerns about the proposed expansion of Cape Winelands Airport, most importantly about the hang-gliding site at Rondebossie and launch sites and flight corridors within 50 km (i.e. Paarl, Du Toits Kloof, etc.). Rondebossie hill is unique in that it is the only remaining hang-gliding site in the Cape Town area suitable for training and has been used by the Cape Albatross Hang Gliding Club (CAHGC) since 1995.

### Stuart Burgess & Derek Lord: Stellenbosch Flying Club

The Stellenbosch Flying Club (SFC) is the sole managing entity for all operations at Stellenbosch Airfield (FASH). SFC deems it imperative that we participate directly and comprehensively in all airspace design consultations and workshops associated with the Cape Winelands Airport project. Our primary objective is safeguarding our operational interests and ensuring the design aligns with our flight school's unique requirements and commercial viability. It is imperative that SFC has a direct and influential role in shaping the airspace design to mitigate any adverse impact on our operations.

### Timothy Irvine: Morningstar Flying Club

The Morningstar Flyers Association NPC represents over 500 members who use and operate from the Morningstar Airfield. Our concerns relate primarily to the potential changes to airspaces and the impact it may have on our free and safe use of the airspaces. Of particular note, and without limiting the scope of our interest, is the detail associated with the creation of adequate and usable VFR corridors allowing appropriate freedom of passage.

## 6.6 Other respondents

### Dean Thompson

- The development may accelerate the development in the area, potentially **spoiling the scenic landscape** and encroaching on limited open space that should be geared towards restoring and sustaining biodiversity.
- Large developments such as an airport may lead to indiscriminate **water usage** by those using the facility.
- Research shows airport **noise pollution** contributes to decreased residential **property values**.
- **Noise and air pollution** may compromise the **physical and mental health** of people living near the airport. The planned extension of the R300 highway into Durbanville will only exacerbate the compounding effects of air pollution.
- The existing Cape Town international airport can suffice, and **transport infrastructure** should be expanded to cater to those in outlying areas, specifically modern rail transport and updated public bus services and routes.

### Larry Eichstadt: Resource Management Services

- The direct **conflict with neighbouring landowners**, County Fair and Garden Cities is a potentially fatal flaw for the project.
- The envisaged project will require significant **infrastructure changes** in the area. Future changes in the area are assumed as given, without any alternatives provided if the assumptions are incorrect. Service Provision across the board cannot be based on future planning assumptions without considering alternatives.

### Shamim Hargovan & Naiefa Rashied

- This airport is close to Durbanville and its proposed construction ignores the additional **air and noise pollution** that is affecting the environment.
- The Cape Town International Airport is adequate and practical to serve the needs of tourists and visitors to the province.
- The CWA will only **increase traffic and pollution** by private jets landing and further polluting the air around Durbanville and surrounding residential and industrial areas.

### Patrick Bond: Concerned Party

- The Environmental Impact Assessment should include Scope 3 **emissions** by airlines anticipated to use CWA.
- A rudimentary costing of the greenhouse gas emissions associated with a new airport will, at R57 000/ton, most likely result in the conclusion that the facility is uneconomic and will burden all South Africans with an unacceptably high level of carbon debt to other countries (especially in Africa) and to future generations.

## 6.7 Questions of a socio-economic nature raised during Public Meeting, 8 May 2024

(PHS Consulting, 2024c)

- How will the CWA ensure that the local communities near the development have access to and opportunities for jobs at the CWA during the construction and operational phase?
- Unskilled work/laborer opportunities?
- Procurement process enquiry? How does it work? Where can the local community get involved?
- Traffic & Roads concerns? Congestion etc.
- Taxi issue? MyCiti & private airport transport vs taxis?
- Existing businesses like security companies & cleaning services, how will CWA ensure they get access to opportunities?
- Employment opportunities should only be available to South African citizens. How will CWA ensure that SA citizens have access to opportunities?
- Who are the community leaders? How do we identify them? Suggesting CWA are misleading residents in terms of job opportunities. Crime concern, small police station in Fisantekraal. Safety concerns with roads and children. Concerns about wetland and botanical loss and feasibility of offset arrangements. Critique against media representation of development.
- Jobs and promises: What is the future for the community?
- Noise Contours? Bella Riva requires noise cones prior to commencement with Bella Riva development

# 7 ASSESSMENT OF IMPACTS

## 7.1 Introduction

Various qualitative and quantitative impacts are attributed to a proposed development, applicable to either the construction or operational phases, or both. The following potential impacts were identified for the proposed CWA expansion:

**Potential positive socio-economic impacts**:

- Provision of transport infrastructure (operations)
- Creating new employment opportunities (construction and operations)
- Economic income (construction and operations)
- Creating new business opportunities (operations)
- Revenue accruing to local authorities (operations)

**Potential negative socio-economic impacts:**

- Vehicular traffic flows (construction and operations)
- Nuisance factors, such as dust and noise (construction)
- Influx of job seekers (construction)
- Construction workers in local communities (construction)
- Local crime (construction and operations)
- Risk of informal settlements (operations)
- Sense of place (operations)
- Nearby farming and business operations (operations)
- Surrounding land values (operations)
- Bulk infrastructure requirements (operations)

Per NEMA EIA Regulations (2014, as amended), the potential impacts of the two Runway Alternatives are assessed relative to the No-Go Alternative using the impact assessment criteria indicated in **Annexure A**:

1) The **No-Go Alternative 1** – development of the current airport within its current rights, i.e. four runways up to 1 454 m and 6 000 $m^2$ GLA.
2) The Initial Preferred Alternative (**Runway Alternative 2**) - a commercial and aviation hub (350 000 $m^2$ GLA) with a 3 500 m main runway at orientation 01-19 and initial retention of cross runway 14-32 in Phase 1
3) The New Preferred Alternative (**Runway Alternative 3**) - a commercial and aviation hub (350 000 $m^2$ GLA) with a 3 500 m main runway at orientation 01-19

Where applicable, appropriate **mitigation measures** are proposed to reduce the significance of the specific impacts. **Residual impacts** refer to the significance after the implementation of mitigation measures. **Cumulative impacts** refer to any other developments as well as existing activities within the immediate area that could compound any positive or negative impacts associated with the proposed development. This usually refers to similar developments, such as the proposed upgrades at CTIA, which is too far away to have a cumulative impact, except for the provision of transport infrastructure. However, several other nearby developments are in the planning or construction stages, such as Graanendal, Greenville Garden City, Buh-Rein Estate and Darwin Road, that could have a cumulative impact (refer to **Section 2.6** for descriptions).

## 7.2 Construction Phase

The negative qualitative impacts during construction mostly relate to large construction vehicles on access roads, noise and dust, an influx of job seekers, crime, and 'incoming' construction workers that may impact local communities. Potential positive impacts include temporary employment opportunities and a contribution towards the local economy, with specific reference to the construction, retail, and services sectors and industries. Note that the impacts are based on an initial construction period of 4 years for Phase 1, although there will be additional construction in Phase 2 (no clear timeframes).

### 7.2.1 Vehicular traffic due to construction activities

**Nature of impact**

The movement of large construction vehicles will affect traffic flows and residents along the access routes.

**Scope and consequence of impact**

Large construction vehicles will impact the road infrastructure and traffic flows along the access routes during construction. The site will be accessed via the R312 and either the R302 (Klipheuwel Road) from Durbanville or the R304 via the N1. The Transport Impact Assessment (ITS, 2024) determined that most relevant intersections operate at an acceptable Level of Service (LOS) during peak hours. However, several intersections, including Klipheuwel Road/Lichtenburg Road, Lichtenburg Road/Boys Biers Drive, and Klipheuwel Road/Arum Lily Street, experience significant delays (LOS F) during peak periods.

The Transport Impact Assessment indicated that, if all earthworks for the CWA construction will be sourced from existing quarries mostly located west of the site, approximately 875 000 m³ of earthworks will be required for construction (worst-case scenario). With a truck capacity of 15 m³, this equates to approximately 58 167 truckloads. However, most earthworks will be done on site to balance cut and fill areas. The quarries can be accessed either via the existing surfaced road network or the gravel road network. Due to the poor condition of the gravel roads and the heavy loads expected, it is recommended that trucks use the surfaced road network.

Upgrades are recommended for Klipheuwel Road/Lichtenburg Road, including the installation of a traffic signal and additional turn lanes, which are expected to improve the LOS to B. Planned future developments and access management plans (AMPs) for Lichtenburg Road (MR213) and Klipheuwel Road (MR188) include changes to intersection configurations and realignments, which are expected to reduce demand at some constrained intersections. However, these upgrades are recommended as part of the Background Traffic Conditions scenario, i.e., background developments will mitigate these intersections.

According to information from the Bella Riva transport consultants (Sturgeon Consulting in Innovative Transport Solutions, 2024), a 5-year horizon is considered for Phase 1, and a 10 to 15-year horizon for Phases 2 and 3. However, it is likely that Phases 2 and 3 will only be realised in the 15-year horizon. Conditions directly related to the proposed CWA expansion include:

- Minor Roads 6/8 and 59 in the east-west direction will be closed. The East-West link road will be constructed from Klipheuwel Road up to the first access point for Bella Riva Phase 1 (5-year horizon).
- Minor Road 6/8 (north-south), also known as Mellish Road, will be used as access from Lichtenburg Road (R312) until signalisation is warranted/required. This will require the proposed Lucullus Road northern extension, which will only be constructed as part of Bella Riva Phase 2 and 3 (10 to 15-year horizon).


**Source**: Innovative Transport Solutions, 2024

Comments from I&APs mainly refer to increased traffic during operations (PHS Consulting, 2024a), but large earthmoving vehicles will impact traffic flows and the road infrastructure already during construction. I&AP Leon Roos highlighted the need to address the specific impact on Mikpunt and Klipheuwel, particularly concerning traffic, road infrastructure, and economic considerations.

**Development Alternatives**
Runway Alternatives 2 and 3 would require more construction activities (and thus more construction vehicles) for the extended runway and landside development than the No-Go Alternative. Runway Alternative 2 would retain the cross runway in Phase 1, adding minor additional construction activity.

**Cumulative Impact**
Ongoing and approved developments in the area will increase the number of construction vehicles along the access routes, in particular Bella Riva.

**Mitigation measures**
The Transport Impact Assessment indicated that planned future developments and access management plans (AMPs) for Lichtenburg Road (MR213) and Klipheuwel Road (MR188) include changes to intersection configurations and realignments, which are expected to reduce demand at some constrained intersections. Upgrades are recommended as part of the Background Traffic Conditions scenario, and the background developments will mitigate these intersections. Once a contractor has been appointed, a detailed construction management plan must be developed for the CWA, ensuring that deliveries are scheduled outside peak hours to prevent congestion during peak periods.

**Impact Rating**
The Transport Impact Assessment concluded that the impact would be low negative compared to other future developments in the area, which could contribute to a medium negative cumulative impact.

### 7.2.2 Nuisance factors (dust and noise)

**Nature of impact**
Construction activities will create dust and noise at the development site that could affect nearby receptors.

**Scope and consequence of impact**
During the introduction of bulk services and the construction of top structures, large earth-moving equipment and concrete mixers will generate noise and dust. Although this will be limited to the construction site, the prevailing winds would carry dust and noise towards the surrounding properties and thus affect the residents, their living conditions, and the ecological environment. The receptors likely to be affected are the residents of Fisantekraal to the southwest and landowners/users towards the west, north and east. Given the size of the development and the phased approach, it is likely that dust (and noise to a lesser extent) will be a nuisance to surrounding landowners beyond the initial 4-year construction. The **Noise Impact Assessment** (DDA Environmental Engineers, 2024b) concluded that the noise levels during construction at the closest community receptors are not expected to exceed the SANS guidelines for urban residential areas.

The **Air Quality Impact Assessment** (DDA Environmental Engineers, 2024a) indicated that the main air pollutants during construction would be dust generated during the land clearing, site preparations and levelling, bulk earthworks, such as cut and fill operations to the east of the existing runways, material loading and hauling, travelling on unpaved roads and wind erosion from exposed areas. The dust is expected to settle to the ground near the sources and can cause a nuisance to nearby receptors. The effects of dust include visual soiling of clean surfaces, such as cars, windowsills and household washing. The airborne dust can also affect visibility in the immediate vicinity, which may affect potential aircraft operations during construction. The sensitivity in the immediate vicinity is considered low, since the closest community (Fisantekraal) is more than 1 000 m away.

The **Agricultural Agro-Ecosystem Assessment** (Agri Informatics, 2024) highlighted that some parts of the proposed development envelope intersect with very sandy soils at the surface layer. This could result in wind erosion (and dust) during construction if not effectively controlled.

### Development Alternatives
Runway Alternatives 2 and 3 would require significantly more construction activities (and thus create more dust and noise) than the No-Go Alternative 1. Runway Alternative 2 would add to the construction activities, but should have a similar impact than Alternative 3.

### Cumulative Impact
Additional construction activities in the immediate area (particularly Garden City and Bella Riva) will compound the nuisance factors if they coincide or overlap with construction at the CWA site.

### Mitigation measures
Dust and noise emissions during the construction period should be minimised by implementing a Construction Environmental Management Plan (CEMP) for the development that would include measures and trigger mechanisms to mitigate any potential impacts to nearby receptors. The **Air Quality Impact Assessment** (DDA Environmental Engineers, 2024a) recommended dust suppression measures to reduce any possible impacts, i.e.,

- Apply wet suppression on the main site roads.
- Implement a speed limit of 30 km/hour on unpaved roads on site.
- Give preference to routes away from the western site boundary.
- Reduce the frequency of disturbance of stockpiles.

The **Agricultural Agro-Ecosystem Assessment** indicated that soil erosion by wind during construction should be mitigated by minimising bare soil surfaces without adequate protection, either by applying a mulch cover or wetting the surface or similar action. Suitable run-off and soil erosion control measures and infrastructure should be designed and implemented to limit and restrict the loss or degradation of soil.

The **Noise Impact Assessment** indicated that no specific noise mitigation measures are necessary for construction other than ensuring that the equipment is in good working order and properly maintained, as well as providing training to the personnel to adhere to operational procedures that reduce the occurrence and magnitude of individual noisy events. General measures considered essential include limiting night-time construction activities and avoiding night-time construction activities (earthworks) on the property west of the airport boundary, which is closer to the Fisantekraal residential area.

### Impact Rating
The Noise Impact Assessment concluded that the significance of the unmitigated impact is anticipated to be *VERY LOW*. For a short duration, when the working face is closest to the Fisantekraal community towards the site's western boundary, this impact may be *LOW*. With mitigation measures, the noise impact during construction is anticipated to be insignificant. The Air Quality Impact Assessment (DDA Environmental Engineers, 2024a) concluded that the expected impact of the vehicle and equipment exhaust emissions is considered to be insignificant. The total dust deposition beyond a 200 m zone from the site is expected to be well below the DEA guideline of 600 mg/m$^2$/day for residential areas, resulting in an insignificant impact after mitigation.

Based on these reports, the residual impact related to nuisance factors will be very low negative for Alternative 1, and low negative for Alternatives 2 and 3. Nearby developments could contribute to a medium negative cumulative impact for Alternatives 2 and 3.

## 7.2.3 Influx of job seekers

### Nature of impact
An influx of job seekers will lead to competition with local residents for employment opportunities.

### Scope and consequence of impact
As discussed in **Section 7.2.6**, the Preferred Alternative 3 would require about 6 582 workers with low, medium or highly specialised skills during construction and ongoing capital expenditure requirements over 20 years. Local people skilled in earth-moving and construction activities can be employed during the construction phase, with

additional opportunities associated with security, transport and related services. The Fisantekraal community struggles with high unemployment, with several low-income communities relatively close to the proposed CWA site. It is likely that most jobseekers would be from the Fisantekraal area, but may also originate from Klipheuwel and Kraaifontein. The socio-demographic analysis (**Section 4**) indicates that 42,67% of the working-age population residing within 10 km of the site were unemployed in 2011.

Several I&APs raised concerns about temporary construction workers who would find themselves without work after the construction phase (PHS Consulting, 2024a). While the influx of people seeking employment does not have a social impact, such a movement can result in social impacts, such as the disruption of local community networks and the cohesive social fabric within communities, increased crime levels and insufficient social services. Construction work on the proposed project is limited to a specified period, and non-local construction labourers may find themselves stranded in the area after the construction phase, resulting in more competition for employment. This could increase the demand for housing and social services over the long term.

**Development Alternatives**
Alternatives 2 and 3 would require more construction activities (and thus more employees) than the No-Go Alternative 1. Runway Alternative 2 would retain the cross runway in Phase 1, but this is unlikely to affect the influx of job seekers.

**Cumulative Impact**
Given the high unemployment levels in the nearby communities, construction projects in the area will attract job seekers. More casual workers will be attracted to the area if multiple developments' construction phases overlap.

**Mitigation measures**
Given the nature and scope of the development, contractors with an established workforce will be appointed to the project. Contractors must commit to employing people from the Northern District (specifically Fisantekraal and Klipheuwel). Combined with very strict security rules, this will discourage casual labourers looking for employment.

**Impact Rating**
The residual impact will be very low negative for Alternative 1, and low negative for Alternatives 2 and 3. Nearby developments could contribute to a medium negative cumulative impact for Alternatives 2 and 3.

### 7.2.4 Impact of construction workers on local communities

**Nature of impact**
Incoming construction workers can disrupt family structures and social networks in local communities.

**Scope and consequence of impact**
Contractors working on large development projects usually have permanently employed construction workers who move from site to site. Depending on the location, these workers may be away from their families for extended periods and visit the local community for leisure and social activities. This could lead to an increase in alcohol and drug abuse or sexual interactions that could lead to an increase in prostitution, unwanted pregnancies and sexually transmitted diseases (STDs), including HIV. All these may impact local families and their social structures but can also damage the construction workers' family structure at home.

**Development Alternatives**
Alternatives 2 and 3 would require more construction workers than the No-Go Alternative 1. Runway Alternative 2 would retain the cross runway in Phase 1, but this would add little significance.

**Cumulative Impact**
If the construction phase of the CWA expansion overlaps with other developments, a large number of construction workers may interact with the local communities.

**Mitigation measures**
Local labour and enterprises, defined as residents and businesses in the Northern District (specifically Fisantekraal,

Mikpunt and Klipheuwel), should be employed whenever possible. Construction workers from outside the area should return home over weekends or regularly to maintain strong family and social bonds. If required to stay near the construction site, there should be rules for social conduct, and an STD awareness or protection programme for the construction workers should be implemented.

**Impact Rating**

The residual impact will be very low negative for Alternative 1, and low negative for Alternatives 2 and 3. Nearby developments could contribute to a medium negative cumulative impact for Alternatives 2 and 3.

### 7.2.5 Increase in local crime

**Nature of impact**

The presence of construction activities and workers may increase criminal activities in the surrounding area.

**Scope and consequence of impact**

There is a general perception that local crime increases in areas where construction activities occur. This may include on-site petty theft, theft of building material, on-selling of security information, or burglary and theft at nearby properties. The presence of construction workers and vehicles generally increases the risk of criminals entering the construction site undetected, which may result in increased criminal activities in the area during construction. Although I&APs mainly raised concern about increased crime during operations (PHS Consulting, 2024a), criminals will also seek out new construction sites on their doorstep.

Fisantekraal is the closest urban settlement to the proposed development site. It lies within the adjacent Kraaifontein police precinct – a relatively high-crime precinct. According to the SAPS Crime Statistics (SAPS, 2024), contact crimes against other persons (murder, sexual offences, attempted murder, common assault, common robbery and robbery with aggravated circumstances) dominated in the Kraaifontein area in April - June 2024, accounting for 49,61% of all community-reported cases (**Figure 17**). There was also a high incidence of drug-related crime (567 cases) and various types of burglary and theft (a total of 494 cases).

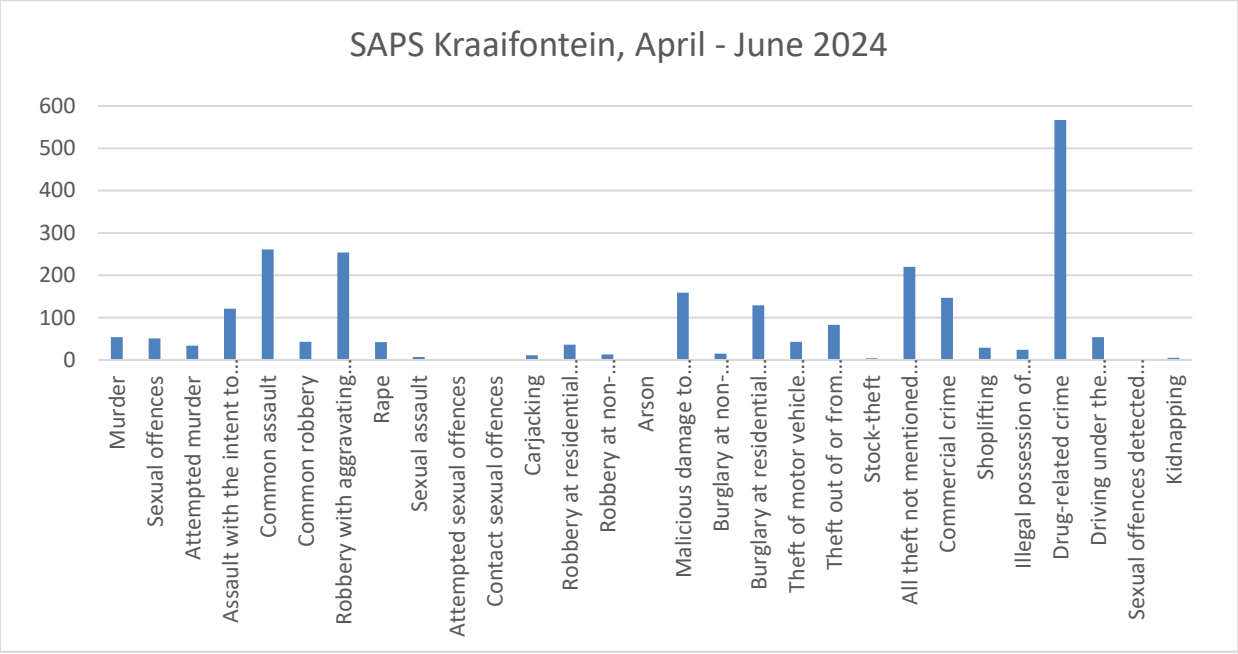



**Figure 17: Crime statistics recorded at SAPS Kraaifontein, April-June 2024.**
**Source**: SAPS, 2024

### Development Alternatives

Runway Alternatives 2 and 3 would require more construction activities than the No-Go Alternative 1, potentially attracting more criminals.

### Cumulative Impact

Given the high unemployment rate in the Fisantekraal area, construction activities are likely to attract criminals in search of easy targets. Each additional development project will contribute to the risk of criminal activities, but effective security measures should confine these problems to site-specific events with less cumulative impact.

### Mitigation measures

Co-operation between the Developer and contractors is essential to ensure that the area around the proposed development remains secured during construction. On-site security measures, such as perimeter fencing, controlled access, security guards and patrols, will minimise the risk.

### Impact Rating

The residual impact on local crime will be very low negative for Alternative 1, and low negative for Alternatives 2 and 3. Nearby developments could contribute to a medium negative cumulative impact for Alternatives 2 and 3.

## 7.2.6 Economic income and employment during construction

### Nature of impact

The CMA and Western Cape economies will benefit from the procurement of goods and services and the spending of wages and salaries, as well as temporary employment for people with different types and levels of skill.

### Scope and consequence of impact

A high-level estimate of the socio-economic impacts during construction requires an analysis based on a Social Accounting Matrix (SAM) applicable to the Western Cape. The SAM could also apply to the CMA, which is responsible for more than 70% of the Gross Value Added in the Western Cape. I&APs commented that the local communities and businesses often don't benefit directly from developments (PHS Consulting, 2024a). Local residents also emphasised the importance of sourcing labour for the project from Fisantekraal and Klipfontein to maximise the benefit to local residents (PHS Consulting, 2024c). Based on this narrative, it is possible to estimate the impact of the expenditure on the CMA economy during the construction phase. This impact is represented by an income and output multiplier, an indication of temporary job opportunities, and the impact on household incomes of those workers directly or indirectly involved in the construction phase. The impacts are direct, indirect and induced, with the latter representing spending of salaries and wages in the local economy.

Note that employment creation does not necessarily imply NEW jobs but sustainable employment for employees of contracted service providers not operating at full capacity. If the company doesn't have spare capacity, additional workers may be appointed, in which case NEW jobs will be created during the construction phase. Thereafter, the employment opportunities will taper away. Highly skilled and skilled jobs will likely be reserved for persons from outside the area if no persons with the requisite skills reside in the Northern District. It is also imperative that the recruitment process should promote gender equality by employing women wherever possible.

The initial construction is envisaged to take 4 years (Phase 1), with most of the capital expenditure occurring in the first two years (Year -1 and Year 0). Phase 2 will entail further upgrades scheduled periodically over the next 20 years. **Table 9** estimates the economic impact of the envisaged direct spending in the first two years of construction, focusing on Output[4], Gross Geographic Product (GGP)[5], jobs, and nominal household income.

[4] Output is the quantity of goods or services produced within a specific time period.
[5] Gross Geographic Product is the total monetary or market value of all the finished goods and services produced within a region's borders in a specific time period.

**Table 9: Direct, indirect and induced impact of construction spending related to GGP, output, household income and jobs in the first two years of construction**

| Economic measure | Direct | Indirect | Induced | Total |
|---|---|---|---|---|
| Production (output, R' billion) | R6,1 | R7,8 | R3,6 | **R17,4** |
| Gross Geographic product (GGP, R' billion) | R1,4 | R2,8 | R1,4 | **R5,6** |
| Jobs (number) | 4 751 | 15 441 | 4 195 | **25 107** |
| Household income (R' billion) | R0,8 | R1,3 | R2,7 | **R4,7** |

**Source**: Multi-Purpose Business Solutions SAM model

The information provided in **Table 9** indicates the following for the initial two years of construction:

- An estimated R6,4 billion in capital investment could generate R17,4 billion in **new business sales**, referred to as the production (or output) that creates demand for business activity during construction.
- The increase in production output could add R5,6 billion (net of the import leakage) to the **GGP** of the CMA.
- The project could sustain about 25 107 (direct, indirect and induced) **employment opportunities** (refer to net jobs movement below).
- **Household income** from job opportunities could increase by R4,7 billion.

Using a similar approach, impact of capital expenditure on the CMA economy during construction can be estimated over the long term (22 years). This impact is represented by an income and output multiplier, an indication of temporary job opportunities that will taper away after the construction period, and the impact on household incomes of those workers directly or indirectly involved in the construction phase. The impacts are direct, indirect and induced, with the latter representing the spending of salaries and wages in the local economy.

**Figure 18** illustrates the annual impacts for the individual items used to assess the impact, with the initial construction envisaged to peak in the initial construction years.

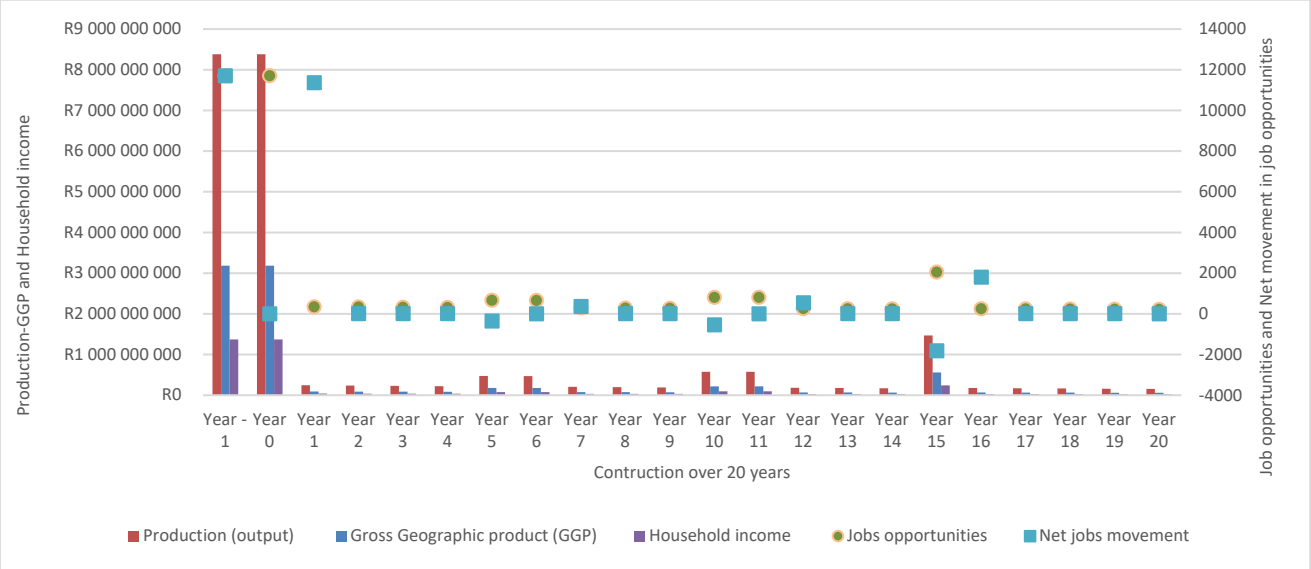



**Figure 18: Impact of annual capital expenditure over initial 2 years of construction and 20 years thereafter**

To give effect to the long-term impact of capital expenditure, the analysis presented above is extended to include a further 20 years of capital expenditure in nominal terms. **Table 10** indicates the total impact economic impact of the envisaged direct capital spending associated with the construction of the CWA, focusing on Output (production), Gross Geographic Product (GGP), the net movement in jobs and household income over 22 years.

**Table 10: Impact of capital expenditure over 22 years**

| Economic measure | Total | Average (p.a.) | Maximum (Year -1) | Minimum (Year 20) |
|---|---|---|---|---|
| Production (output, R' billion) | **R23.2** | R1.1 | R8.4 | R0.2 |
| Gross Geographic product (GGP, R' billion) | **R8.8** | R0,4 | R3.2 | R0,059 |
| Jobs (number) | **32 433** | 1 474 | 11 707 | 217 |
| Household income (R' billion) | **R3.8** | R172.8 | R1.4 | R0.025 |
| Net jobs movement (number) | **11 420** | | | |

**Source**: Multi-Purpose Business Solutions SAM model

The information provided in **Table 10** indicates the following for the construction period of 22 years:

- The estimated capital investment could generate R23,2 billion in **new business sales**, the production (or output) that creates demand for business activity during construction with an average expenditure of R1,1 billion per annum. The highest output impact of R8,4 billion is achieved in Year -1 and the minimum in Year 20.
- The increase in production output could add R8,8 billion (net of the import leakage) to the **GGP** of the CMA in nominal terms. The average GGP contribution is R400 million annually, with the highest impact of R3,2 billion in Year -1 and the lowest of R59 million in Year 20.
- The **household incomes** from the workers could result in an additional spending of R3,8 billion, which translates to an average of R173 million per annum.

The net movement in jobs during the 22 years of ongoing construction is intended to address the issue of over-estimating opportunities resulting from capital expenditure. The premise is to establish the baseline from the first capital expenditure and adjust the number for each successive year. This approach initially results in a net movement of 11 420 (direct, indirect and induced) employment opportunities during construction, including ongoing capital expenditure requirements. These job opportunities reflect the net movement commencing with a base figure of 11 707 in Year -1. It is envisaged that a total of 32 433 direct, indirect and induced jobs would arise from the capital expenditure on a nominal basis over 22 years, including the initial construction period of two years and ongoing capital expenditure for a further 20 years.

The difference between job opportunities and net movement in jobs, as illustrated above, implies the need to add or reduce the number of workers required in any year depending on the estimate of capital expenditure, i.e. there is a causal relationship between capital spending and delivery of infrastructure and superstructure.

### Development Alternatives

Runway Alternatives 2 and 3 would require significantly more capital input and thus generate more economic income and employment opportunities than the No-Go Alternative 1. Runway Alternative 2 would retain the cross runway in Phase 1, potentially adding slightly more capital costs to the construction activities.

### Cumulative Impact

Similar projects in the CMA would act synergistically to create more demand for supplies and services, which, due to the multiplier effect, would act as a catalyst for further economic growth and employment.

### Mitigation measures

No mitigation applies as it represents a positive impact. However, businesses and workers must register on the CWA website and participate in the CoCT procurement strategy, community forums, skills development, and learning initiatives. It is also imperative that the recruitment process promote gender equality, with women employed wherever possible.

### Impact Rating

The impact will be low positive for Alternative 1, and high positive for Alternatives 2 and 3. Nearby developments could contribute to a high positive cumulative impact for Alternatives 2 and 3.

## 7.3 Operational Phase

The most significant concerns for the operational phase relate to the sense of place, traffic, noise, and air pollution, the risk of crime and informal settlements, and the impact on surrounding communities, business operations, and land values. On the positive side, the proposed development will address a growing need for transport facilities and amenities, sustain additional employment opportunities, and contribute to economic income. Although the current development rights for CWA allow up to 301 daily Air Traffic Movements (ATMs), the landside capacity would be inadequate to support such a high number. This report thus assumed a significantly lower number of ATMs for Alternative 1 than for Alternatives 2 and 3 (the latter estimated at 208 at full capacity).

### 7.3.1 Provision of transport infrastructure

**Nature of impact**
The proposed development will address a growing demand for transport infrastructure in the CMA.

**Scope and consequence of impact**
CTIA is the primary airport for the City of Cape Town and Western Province, with scheduled commercial air traffic – both international and domestic – as its main focus, at the expense of GA operators (flying schools, aircraft maintenance, fixed-based operators, charter companies, etc.). From a technical aviation perspective, mixing large with small aircraft reduces airspace capacity because of the turbulence created by the large jets. The proposed upgrading at the CTIA will include refurbishing the domestic arrival terminal, expanding the international terminal, and realigning the runway to increase landings and departures and accommodate the new generation of large aircraft such as the Boeing 747-800 and A380.

H & A Planning (2024) indicated that the proposed CWA development will address the need for a secondary airport and diversion capability. “CWA as an alternate airport instead of Port Elizabeth or OR Tambo Airports for flights inbound to CTIA17 will result in cost savings due to the shorter diversion distance, which results in less fuel weight being allocated to the reserve. With increasing air travel demand, a secondary reliever airport is necessary to alleviate congestion at Cape Town International Airport (CTIA) and support future growth. The development will alleviate hangar shortages and relocate general aviation from CTIA, reducing congestion in airspace and on runways. Both CWA and CTIA are vital for unlocking economic development and ensuring the aviation industry's sustainability, aligning with best practices observed in thriving global cities. Having two international airports will also create healthy price competition and service offerings between the airport operators as opposed to being exposed to a monopolistic situation as is the case with Cape Town’s port.”

The intention is that the CWA will serve as a “*reliever*” airport for the CTIA in a complementary role within South Africa’s network of airports and airfields. It is envisaged that the bulk of General Aviation at CTIA would relocate to CWA. Most air traffic movements will be light aircraft on an unscheduled basis (e.g. flight training, charter and recreational flying); the remaining activity will comprise scheduled commercial operations (Cape Winelands Airport Limited, 2022). The airport would also serve as a significant multimodal transport hub given its strategic location alongside the Saldanha and CT Port-linked Mellish Station (Rail), and only a few kilometres from the N1 highway, enabling efficient sea-rail-road-air linkages.

Although many I&APs expressed support for a second airport in the Western Cape, others believe that the CTIA has sufficient capacity to meet current and future demand (PHS Consulting, 2024a). A few respondents expressed concern that it may compromise recreational aviation in the area, particularly those at the Morningstar and Stellenbosch Airfields. ACSA highlighted the need for a more detailed economic/market study to determine if both airports will be financially sustainable in a relatively small market. CTIA and CWA will compete for the same market, which in normal market conditions should eventually result in lower prices and possibly additional demand, which could sustain two airports in the wider region. However, due to the limited market (geographical position and socio-economic factors), the sustainability of both airports could be threatened with adverse implications for the entire industry and region. Some I&APs believe that the additional operational cost of operating two airports, less efficiently if demand is low, and the cost of additional government support resources (if the airport acquires international status) should also be considered.

**Development Alternatives**
Runway Alternatives 2 and 3 can accommodate larger aircraft and more passengers than the No-Go Alternative 1.

**Cumulative impact**
Similar projects (in particular, the proposed improvements at CTIA) would create more supply in the transport sector and demand for associated supplies and services in the CMA.

**Mitigation measures**
No mitigation applies as it represents a positive impact.

**Impact rating**
Our assessment suggests that impact will be low positive for Alternative 1, and high positive for Alternatives 2 and 3. A high cumulative impact for Alternatives 2 and 3 is expected given the CTIA improvements.

### 7.3.2 Increased vehicular traffic

**Nature of impact**
The transport, commercial and service activities will increase vehicular movement along the access routes.

**Scope and consequence of impact**
Several I&APs expressed serious concern about the impact of the proposed CWA development on the area's traffic flows and the road infrastructure's ability to manage the traffic flows (PHS Consulting, 2024a). According to respondents, Durbanville is experiencing serious problems with increasing expansion and overloaded trucks taking shortcuts through neighbourhoods. Increased vehicular movement may lead to road degradation, congestion, and safety concerns for current and future residents of Fisantekraal and Greenville Garden City. Many Fisantekraal residents walk along the Lichtenburg and Klipheuwel Roads, but there are no sidewalks, traffic signals, pedestrian crossings or lights. The proposed development will add a significant number of people travelling to the airport. The construction of roads to accommodate the massive increase in traffic will disrupt agricultural land. The traffic on the R304 road has already increased significantly, forcing farmers to find alternative routes to other parts of their farms. The R304 towards Stellenbosch, and especially the interchange with the N1, pose daily challenges with vehicles that cannot get onto the R304 from the N1 in both directions. Similar problems are experienced on the R302 and R312. The expected surge in traffic will result in congestion, longer commute times, and heightened risks for residents, especially if the existing rural infrastructure is ill-equipped to handle such changes.

The Transport Impact Assessment (ITS, 2024) indicates that the CWA development will be divided into four Planning Activity Levels (PAL) based on projected airline traffic forecasts. The site is planned to be operational by 2029 (PAL 1A) with full build-out (PAL 4) projected around the year 2050. The environmental impact assessment (EIA) splits the PAL into two phases: Phase 1 (PAL 1A and 1B) and Phase 2 (PAL 2 to 4). Forecasts for Phase 1 indicate 1,7 million annual passengers by 2029 (PAL 1A) and 2,5 million by 2032 (PAL 1B). Forecasts for Phase 2 indicate airline traffic forecasts reaching 5,2 million annual passengers in the 2050 planning horizon (PAL 4).

The TIA estimated that over 8 000 background development trips will be added by 2032 to the road network during the PM peak hour due to planned developments in the area. This increase in traffic will trigger the need for road upgrades, especially along the Klipheuwel and Lichtenburg Roads. With the proposed upgrades, capacity constraints are expected at some priority-controlled intersections, but alternative routes via signalised intersections will help alleviate traffic congestion. The proposed Access Phasing is highlighted in **Figure 19**:

1. Mellish Road will be the initial connection from Lichtenburg
2. The East-West link to Klipheuwel Road when Bella Riva constructs this. CWA to engage with the Bella Riva landowner/developer to establish if it is feasible to build the Lucullus Road extension and/or the East-West Class 3 road. The East-West Class 3 at this stage is the most likely to come first.
3. The ultimate link will be via the northern extension of Lucullus Road once approved. The alignment and road reserve requirements of Lucullus Road bordering the west edge of the CWA site must be confirmed.

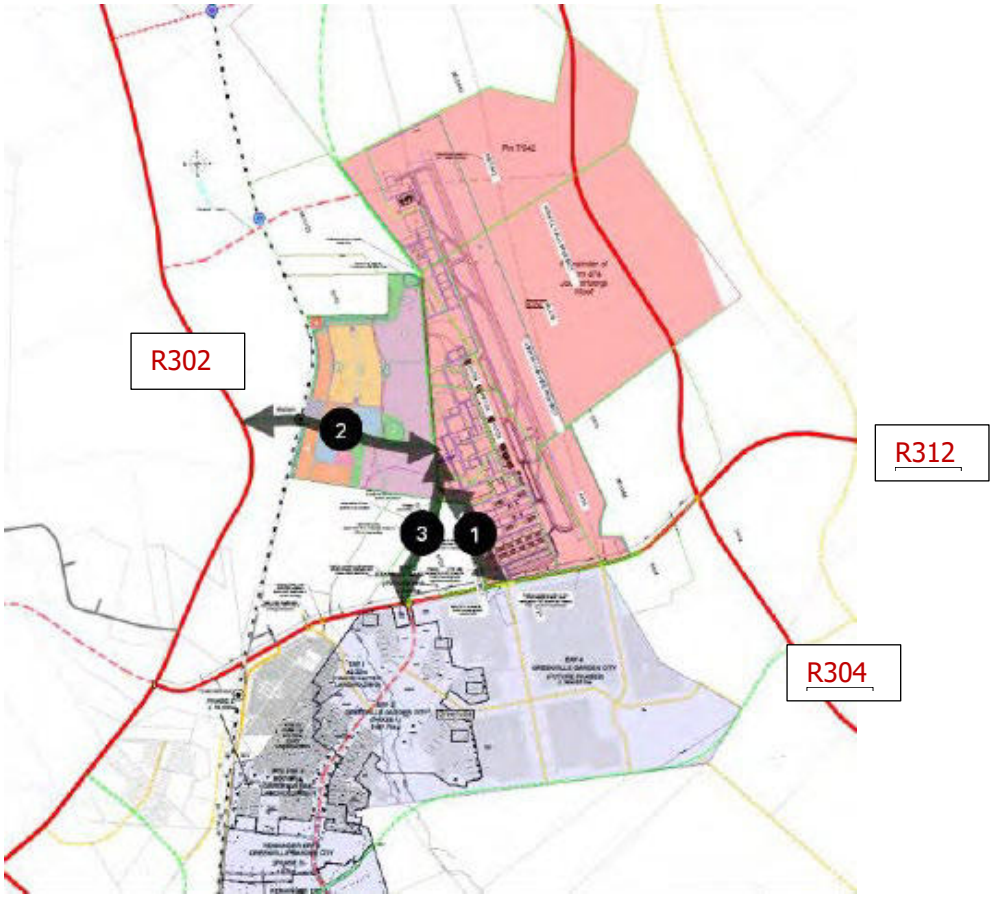



**Figure 19: Site access opportunities via 1, Melish Road / Lichtenberg Road (R312); 2, Lucullus Road extension; and 3, Melish Road / Klipheuwel Road (R302)**

**Source**: ITS, 2024

The estimated daily trips are 13 205 for 2032 and 24 172 trips for 2050. The peak-hour trip estimates for the respective horizon years are as follows:

- **2032 Horizon:**
  - Weekday AM peak hour: 601 total (467 in / 134 out)
  - Weekday PM peak hour: 1 199 total (659 in / 540 out)

- **2050 Horizon:**
  - Weekday AM peak hour: 1 314 total (1 004 in / 310 out)
  - Weekday PM peak hour: 2 228 total (1 151 in / 1 077 out)

The 2032 Total Traffic Conditions assessed the impact of Phase 1 (PAL 1B) with the realigned Mellish Road access and the East-West link from Bella Riva as a secondary access. As with the 2032 Background Traffic Conditions, capacity constraints are expected to continue at the priority-controlled intersections along Klipheuwel and Lichtenburg Roads. However, alternative routes via signalised intersections on Klipheuwel Road/Darwin Road and Lichtenburg Road/Dulah Omar Street will help alleviate congestion. The Klipheuwel Road/Olifantsrivier Avenue intersection is also expected to reach capacity during the PM peak hour. This traffic can be redistributed to the Klipheuwel Road/Okavango Road intersection, which has sufficient capacity. The City's EMME model was updated to evaluate the impact of Phase 2 (PAL 4) of the CWA for the 2050 scenario. This update included the total extent of the future developments in the area and assessed the R300 northern extension along with several new road links, including the Darwin Road and Lucullus Road extensions and the East-West links. The results indicated that the future road network will be sufficient to accommodate future developments, including Phase 2 (PAL 4) of the CWA.

### Development Alternatives

Runway Alternatives 2 and 3 would attract significantly more traffic than Alternative 1.

**Cumulative Impact**
Further development and densification along the Darwin corridor are already underway and will generate significant additional traffic on the access routes.

**Mitigation measures**
A number of recommendations are made in the Transport Impact Assessment to address potential problems related to the background and CWA-associated traffic flows. Future developments will require several upgrades to be implemented as more than 8 000 peak-hour trips will be added to the road network. The construction of the R300 northern extension, along with new road links such as the Darwin Road extension and extensions of Lucullus Road and the East-West links should be fast-tracked.

**Impact Rating**
The Transport Impact Assessment concluded that the impact of the CWA will be **low negative** for Phase 1; an updated TIA would be required for the future phases.

### 7.3.3 Sense of place

**Nature of impact**
The proposed development will impact the sense of place for surrounding land users.

**Scope and consequence of impact**
Sense of place generally refers to how people perceive places, whether they are streets, communities, cities or regions. This may influence their well-being, how they describe and interact with a place, what value they place on something, etc. A sustainable community resembles a living system in which human, natural and economic elements are interdependent and draw strength from each other (Roseland, 1998). Community members generally recognise and support people's sense of well-being, which includes a sense of belonging, a sense of place, a sense of self-worth, a sense of safety and a sense of connection with nature.

The proposed WCA development will constitute a transport hub, including retail and service-related commercial activities. The site is currently used as an airfield, but to a limited extent and only for small aircraft. A larger operation will affect neighbouring land users who may enjoy a more rural character, with their sense of place negatively affected by the visual impact (buildings instead of open veld), aircraft noise, air pollution and increased traffic along the access routes. Road users along the access routes will be affected by increased traffic, but the most significant impact would be aircraft noise along the flight path.

Several I&APs expressed concerns about the impact of the proposed development on the sense of place as it will "destroy the rural character of the immediate area (PHS Consulting, 2024a). It will also impact all communities along the flight path - from Joostenbergvlakte to Klipheuwel and Mikpunt. Rural areas are cherished for their peaceful surroundings, tight-knit communities, and lack of industrial intrusion. The Winelands Urban Area is an economic hub, but also a cultural and aesthetic treasure that attracts local and international tourists. Construction activities will contribute to elevated noise levels, disrupting the peace and tranquillity of the local communities. Respondents also expressed concern that the development may accelerate development in the area, potentially spoiling the scenic landscape and encroaching on limited open space that should be geared towards restoring and sustaining biodiversity".

Several new residential developments are in the planning stages or have been approved for the Northern District (**Figure 20**). The receptors likely to be affected are mainly the residents of Klipheuwel, Mikpunt, Fisantekraal, Bella Riva, Greenville Garden City, Lucullus Gardens, Darwin Road, Buh-Rein Estate and Joostenbergvlakte. The approved **Bella Riva Lifestyle & Country Estate** is a mixed residential and lifestyle golf estate development that includes an 18-hole golf course, housing units, sports facilities and schools. **Greenville Garden City** is a 767-ha private/public partnership between the City, the Provincial Government and Garden Cities to construct 16 000 homes across the economic spectrum, including bonded houses. Further south is **Buh-Rein Estate**, which aims to accommodate 12 000 residents, a family restaurant, clubhouse and sports facilities. The Phase 2 retirement village offers 418 independent and 43 assisted living apartments. The **Darwin Road** housing received Environmental Authorisation for 142 group housing units, comprising 106 duplex residential units and 36 larger duplex semi-detached residential

units. Adjacent is **Lucullus Gardens,** a mixed-used development that includes 2 387 residential units (80 $m^2$ each), business, retail, institutional facilities, industrial and life science components.

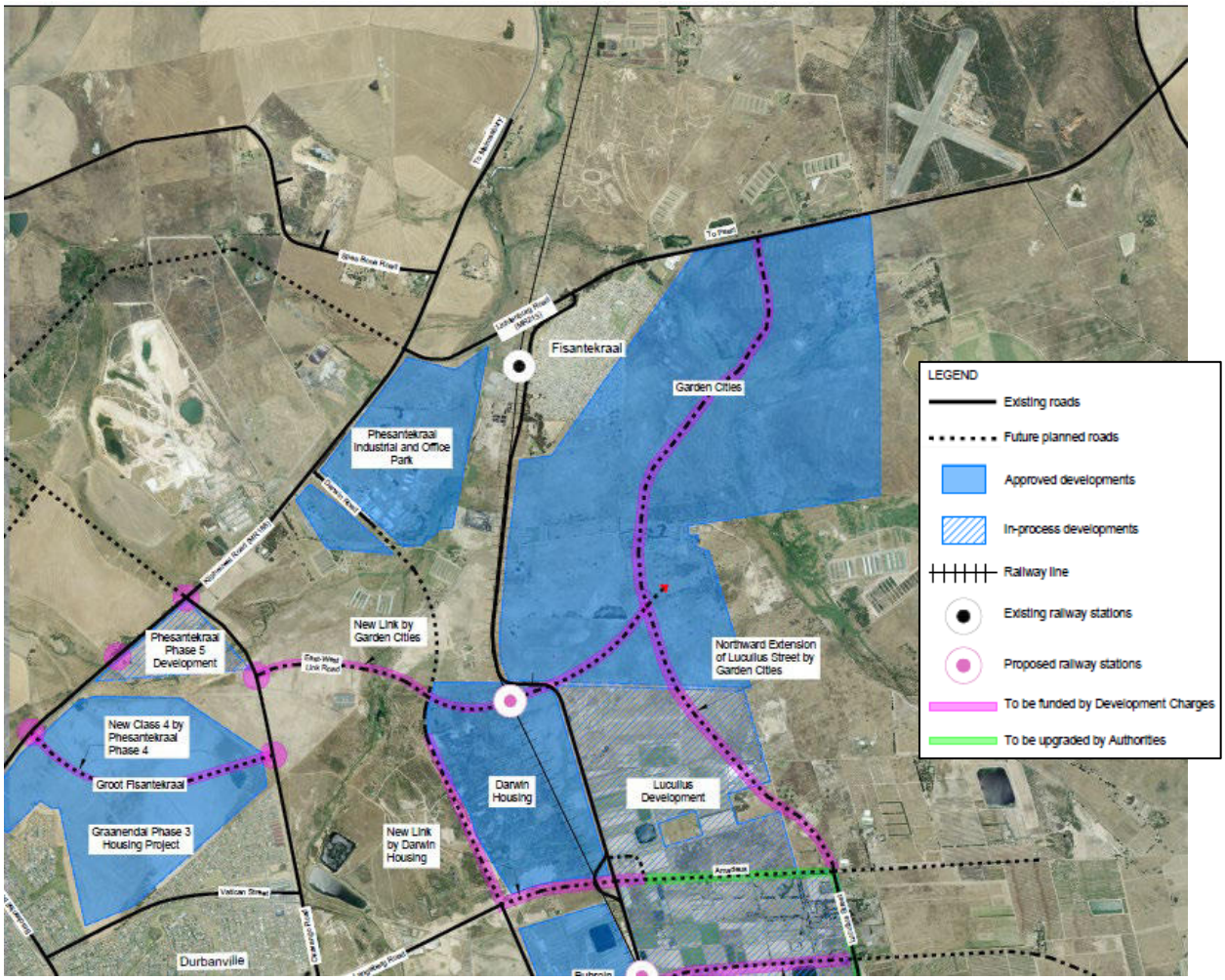



**Figure 20: Residential areas near the proposed WCA development**
**Source**: Innovation Transport Solutions (2021)

The **Visual Impact Assessment** (Filia Visual, 2024) determined that the proposed CWA would potentially affect protected landscapes or scenic resources, and result in some change in the area's visual character. The residual visual impacts (after successfully implementing mitigation measures) related to the visibility of light sources at night would be low-medium negative, depending on the landscape character area. The visibility of new buildings, structures, and service infrastructure will be low negative, with scope for a positive enhancement. The residual impact effect on scenic routes and cultural landscapes will be low negative, with scope for positive enhancement. The Assessment concluded that the anticipated visual impact of the proposed CWA Phase 2 development should be **moderate overall,** with one or two instances of low significance.

A **Heritage Statement** (Townsend, 2020) noted that the airfield is an interesting relic of wartime need and the need for coastline defence. The four structures on the site are derelict, unused, and have no special significance or meaning, whereas the landing strips have functional significance only. The **Draft Heritage Impact Assessment** (Aikman Associates, 2024) concluded that agricultural activity has irrevocably transformed the properties acquired for the proposed CWA development over the last 300 years. From an archaeological perspective, it can be concluded that although isolated MSA and LSA stone tools may be exposed below the topsoil during site preparation, the significance is likely low. None of the farmsteads in the study area appears to be of aesthetic, historical or architectural significance, although they contain structures older than 60 years. There will be no significant threat to archaeological heritage resources, and the two farmsteads to be lost are not considered conservation-worthy.

Aircraft are known to generate significant noise, but they also cause air pollution due to the release of chemicals that may cause health problems. Several I&APs expressed concerns about the impact of the proposed development on the health and well-being of residents (PHS Consulting, 2024a):

- **"Noise** from passing aircraft could significantly impact receptors close to the airport, as well as those along the aircraft's flight path. Increased aircraft activity and road traffic would amplify noise pollution.
- Airports and aviation increase **air pollution** due to aircraft, ground vehicles, and other airport-related activities, which could impact the health of nearby residents and add to the burden on local public health services.
- **Fuel and oil emissions** that seep into aquifers can contaminate nearby boreholes and affect the water that feeds animals and crops.
- Concern about **biodigesters** that produce odorous gases, noise, and potential runoff of polluted water."

The impact of noise on the sense of place has yet to be researched in South Africa, but international research suggests that from a social impact perspective, it is possible to relate the level of noise as defined by decibels (dB(A)).

Bell (2001) identified different acceptable noise levels (i.e. without undue complaint) for different locations, as well as threshold levels when harmful effects start to occur. The average noise levels in different locations are indicated on the right, with 45-55 dB(A) daytime and 35 – 45 dB(A) nighttime noise associated with residential areas. Bell (2001) identified 55 dB(A) as an important threshold for acceptable noise levels; anything higher than this would have a negative impact on sensitive receptors.

| Location | Day dBA | Night dBA |
|---|---|---|
| Rural residential | 35-40 | 25-35 |
| Suburban residential | 40-50 | 30-40 |
| Urban residential | 45-55 | 35-45 |
| Commercial | 55-65 | 45-55 |
| Industrial | 60-70 | 50-60 |

Source: Bell, 2001

If the noise levels increase by more than 5 dB(A) above the acceptable level, sporadic complaints from surrounding communities may be expected. A 10 dB(A) increase may result in widespread complaints, whereas 15 dB(A) above acceptable levels may result in threats of action. Noise levels above 45 dB(A) may impact people's sleeping patterns, whereas noise levels higher than 75 dB(A) may cause hearing loss.

| Objectives | Noise levels at which harmful effects begin to occur, dB(A) |
|---|---|
| Prevention of hearing loss | 75-85 |
| Prevention of extra-auditory physiological effects | 65-75 |
| Prevention of speech interference | 50-60 |
| Prevention of interruption of sleep | 45-50 |
| Satisfying subjective preferences | 45-50 |

**Source**: Bell, 2001

The **Noise Impact Assessment** (DDA Environmental Engineers, 2024b) indicates the day-night noise contours ($L_{Rdn}$) from the new runway 01/19 operating at maximum capacity (**Figure 21**). The impact zones will extend beyond the development area boundaries, primarily towards the north and the south, but also towards the west and east. The 55 dB(A) impact zone would reach 4 km north from the airport's northern site boundary in a north-north-westerly direction, to just outside the eastern boundary of the Klipheuwel residential area. This contour will be situated over mainly agricultural land north and east of the airport. Towards the west, the 55 dB(A) contour will extend approximately 300 m into the Bella Riva residential development, measured from its easternmost point.

The 55 dB(A) noise contour will reach 3.3 km south of the airport, overlapping the Greenville Garden City area (covering approximately 1.02 $km^2$). There is a small area of 0.11 $km^2$ within the Greenville Garden City area and immediately south of the runway, where the noise levels will be between 60 dB(A) and 63 dB(A). Given the categories identified by Bell (2001), the latter could prevent extra-auditory physiological effects in humans.

The **Air Quality Impact Assessment** (DDA Environmental Engineers, 2024a) indicated that airport operations are expected to impact the local air quality around the runway, the taxiways and the airport apron areas. Jet engines

emit various pollutants, including nitrogen oxides (NOx), sulphur oxides (SOx), carbon monoxide (CO), volatile organic compounds (VOCs) and particulate matter (PM). Ground support, such as ground power units, air conditioning units, and vehicles used for airport operations, can also emit the same air pollutants, contributing to local air pollution, especially during take-off and landing. Increasing vehicular traffic on the main access roads to the airport can result in increased vehicle emissions that may contribute to local air pollution.

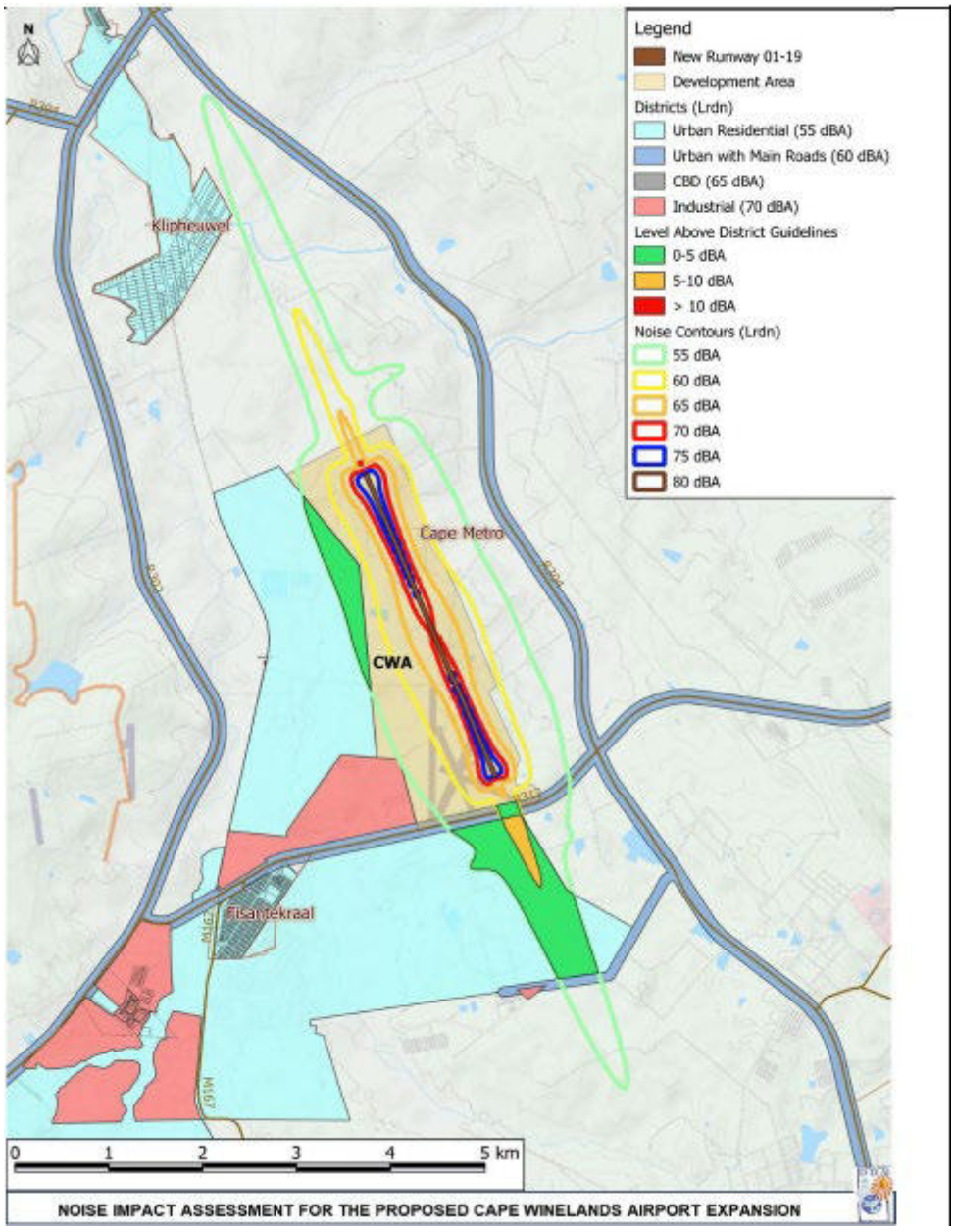



**Figure 21: Day-Night Noise Rating Level ($L_{Rdn}$) for Scenario 3 relative to SANS 10103 District Guidelines**
**Source:** DDA Environmental Engineers (2024b)

## Development Alternatives

Runway Alternatives 2 and 3 would impact the sense of place more than the No-Go Alternative given the larger landside buildings and operations. The **Visual Impact Assessment** (Filia Visual, 2024) rated the visual impact significance for the No-Go Alternative as neutral (no significance), and a generally **low to moderate negative** impact for Alternatives 2 and 3 after mitigation.

The **Noise Impact Assessment** (DDA Environmental Engineers, 2024b) assessed three scenarios:

- Scenario 1: Existing operations at full capacity (No-Go Alternative 1)
- Scenario 2: New runway in [first] operational year (Alternative 3)
- Scenario 3: New runway at full capacity (Alternative 3)

Note, the No-Go Alternative 1 is based on full operation within current rights, i.e. with a license for up to 301 daily Air Traffic Movements (ATM). The Noise Impact Assessment indicates the following for areas within the different $L_{Rdn}$ contours:

| | Area within $L_{Rdn}$ Noise Contour dB(A) | | | | | | Significance rating before/after mitigation |
|---|---|---|---|---|---|---|---|
| | **55-60** | **60-65** | **65-70** | **70-75** | **75-80** | **>80** | |
| Scenario 1 | 2.47 | 0.77 | 0.25 | 0.02 | 0.00 | 0.00 | High Negative / Moderate Negative |
| Scenario 2 | 1.44 | 0.51 | 0.15 | 0.03 | 0.00 | 0.00 | Low Negative / not specified |
| Scenario 3 | 10.30 | 3.81 | 1.60 | 0.63 | 0.23 | 0.00 | High Negative / Moderate Negative |

The **Air Quality Impact Assessment** estimated the potential impacts for the same three scenarios mentioned above. The modelling results for the existing situation under full capacity (Scenario 1), the ground-level concentrations of all pollutants are expected to exceed their respective guidelines outside the CWA airport site boundaries, but the impact is mostly limited to the airport site, with two small areas extending towards the west and south of the site. The overall impact rating for Scenario 1 was found to be of very low significance.

For Scenario 2 with the introduction of the new runway, the air quality impact zones during the operational year will be reduced in size compared to Scenario 1 and will follow a more north-westerly and south-easterly direction. The air pollution concentrations due to the airport operations at the Fisantekraal community, but also at the new developments west and south of the airport, are expected to be very low and well within the air quality standards. The overall air quality impact for Scenario 2 is of very low significance.

The air quality impact zones for the new runway at full capacity (Scenario 3) will extend beyond the airport site boundaries in a north-westerly and south-easterly direction. The air pollutant levels will be within their respective air quality standards, except for the highest maximum 1-hr $NO_2$ concentrations within small areas north and south of the runway, but within specified legislation. The air pollutant levels at the identified community receptors, including at Fisantekraal and Klipheuwel were found to be well within the standards, with the overall air quality impact considered to be of low significance.

### Cumulative Impact

Together with the proposed expansion at CTIA, more aircraft will pass over the Northern District residential areas, impacting their sense of place.

### Mitigation measures

Management actions and mitigation measures highlighted in the Visual Impact Assessment should be implemented to successfully mitigate the visual impacts. However, some impacts, such as certain lighting installations, present very little opportunity for mitigation, and they will remain moderate in significance. Implementing mitigation measures related to noise and air pollution will reduce the potential negative impact on nearby residents. The Noise Impact Assessment recommends various actions that could minimise the noise impacts, such as encouraging airport-compatible land-use planning, noise reduction technologies and strategies, and the introduction of 'passive' mitigation measures.

The **Air Quality Impact Assessment** recommended various mitigation measures for Scenario 3 in consultation with the various stakeholders. In line with the noise impact recommendations, the airport-compatible land-use planning immediately south of the new runway would be recommended. As such, the identified potential mitigation measures are:

- Encourage airport-compatible land-use planning
- Implement measures to decrease the queuing lines

- Limit the length of the course of taxiing
- Shutting down as many engines as possible when idling and taxiing
- Reduce reverse thrust use during landing
- Utilise aircraft-serving equipment with “cleaner” technology
- Investigate the provision of electricity at terminal gates

**Impact Rating**
The Visual Impact Assessment concluded that the proposed CWA development (Alternative 3) would have a moderate negative visual impact after mitigation for lights and a low negative for site-specific visual impacts and scenic routes and cultural landscapes. The Air Quality Impact Assessment found that the overall impact with mitigation for Scenario 3 would be expected to be slightly lower than the unmitigated one, but the overall significance rating would not change. The Assessment also recommended that a continuous air quality monitoring station is established at the northern CWA site boundary to monitor $SO_2$, $NO_x$, $PM_{10}$ and benzene, with biannual reporting to the authorities.

Together with other specialist reports, we believe that the residual impact on the sense of place will be very low negative for Alternative 1 and medium negative for Alternatives 2 and 3. Together with the Greenville Garden City and Bella Riva developments, the CWA expansion would contribute to a high negative cumulative impact on the sense of place.

### 7.3.4 Increase in local crime

**Nature of impact**
The presence of transport and commercial activities may contribute to an increase in local crime.

**Scope and consequence of impact**
Several I&APs expressed concern about a potential rise in crime and the impact on security due to the proposed CWA expansion (PHS Consulting, 2024a). “The rural areas under consideration enjoy relatively low crime rates, but this equilibrium can be disrupted by introducing an airport and the associated influx of people, vehicles and activities. Increased population density and economic activities linked to the airport can attract criminal elements seeking to exploit the new opportunities. There is increasing gang violence, theft, muggings, drug issues, and hijackings in the Fisantekraal area, which may pose a threat to those travelling to and from the airport, including passengers and staff. The Greenville and Fisantekraal Communities are suffering from a lack of police resources, with only a satellite police station and one police van monitoring the entire area. Increased crime in an area with inadequate police and security services could very well turn the beautiful Cape Winelands into the next hijacking hotspot, targeting tourists.”

The transport hub and associated activities could attract criminals searching for soft targets. As highlighted in **Section 7.2.5**, the SAPS Crime Statistics reported that contact crimes against other persons (murder, sexual offences, attempted murder, common assault, common robbery and robbery with aggravated circumstances) dominated in the Kraaifontein area in April - June 2024, accounting for 49,61% of all community-reported cases. There was also a high incidence of drug-related crime (567 cases) and various types of burglary and theft (a total of 494 cases). An interesting statistic is the relatively high number of malicious property damage cases, with 159 reported this quarter.

**Development Alternatives**
Runway Alternatives 2 and 3 could have a higher impact than the No-Go Alternative 1 as more and larger aircraft will use the airport. However, the area's security problems may continue or be influenced by activities unrelated to the proposed development.

**Cumulative Impact**
Other industrial or residential developments nearby could have a cumulative impact in attracting criminals in search of easy targets.

**Mitigation measures**
Co-operation between the Developer and contractors is essential to ensure the area around the proposed development remains secured. On-site security measures, such as perimeter fencing, controlled access, security guards, and patrols will minimise the risk.

**Impact Rating**
The residual impact will be very low negative for Alternative 1, and low negative for Alternatives 2 and 3. The site is far from the CTIA, but nearby developments (particularly Greenville Garden City and Bella Riva) could contribute to a medium negative cumulative impact for Alternatives 2 and 3.

### 7.3.5 Risk of informal settlements

**Nature of impact**
Large developments may attract jobseekers who settle on nearby vacant land in anticipation of employment.

**Scope and consequence of impact**
In many cities around the world, informal settlements are typically positioned on the urban periphery, underused spaces or land unsuitable for formal structures, such as slopes or wetlands. Informal settlements around the City of Cape Town have grown significantly since 2000, with an estimated 150 000 households in 2019 scattered across hundreds of informal residential areas in Cape Town (Cinnamon and Noth, 2023), including around CTIA (**Figure 22**). To allow for the proposed expansions at the CTIA, three informal communities on its periphery - Freedom Farm, Malawi Camp, and Blikkiesdorp - have been earmarked for relocating to formal housing settlements.

The informal settlements on the perimeter of the CTIA have raised concerns about a similar scenario unfolding at the proposed CWA. These concerns are fuelled by two existing informal settlements near the CWA site, i.e. Fisantekraal (southeast) and Mikpunt (northwest of the site). The City's Spatial Planning and Environment Directorate commented, "An informal settlement on land designated for agricultural use is 4,5 km northwest of the proposed expansion. As most of the land surrounding the CWA is currently zoned as agricultural or vacant, the development and expanded operation of the CWA logically adds to the risk of expanded informality in the area, including within Discouraged Growth Areas and Environmentally Sensitive Areas. This aspect of the development adds both an element of risk and financial costs to the City."

H & A Planning (2024) also alluded to the potential of the CWA development to promote or act as a catalyst to create a more integrated settlement in terms of its nature, scale and location. The area directly west of the existing airport is designated for "industrial" use in the Northern District Plan, stretching up to the railway line north of Lichtenburg Road. The spatial planning intention is to create work opportunities in this area to prevent the larger Greenville and other residential areas from becoming embedded as mono-use dormitory towns. In contrast to residential development, commercial and industrial nodes only develop where the cumulative agglomeration advantages and symbiotic business interdependencies make it possible. Without a massive catalyst, the existing Fisantekraal Industrial area and the large extent between it and the airport are unlikely to be developed as a thriving industrial employment node over the next 20 years. A more probable scenario is that it will become another informal settlement. The proposed airport development can potentially put the Fisantekraal Industrial Area literally and figuratively on the map.

**Preparations underway for upgrades at Cape Town International Airport**
July 22, 2023

Despite resistance from informal housing occupants in the surrounding areas, preparations are underway for refurbishments at Cape Town International Airport, including developing the land on the eastern and western sides of Symphony Way, including the Symphony Way Urban Park. As part of this development, the CoCT has reportedly committed to relocating three informal communities – Freedom Farm, Malawi Camp and Blikkiesdorp – to formal housing, in alignment with the City's human settlements directorate's vision.

'The relocation of these informal settlements is also essential for the future development of the airport because the current informal settlements are currently on land required for the construction of the new realigned runway and a future second runway at Cape Town International Airport,' Acsa said. The City's Acting Mayco Member for Human Settlements, James Vos, said that this project has faced challenges due to criminal activity and unlawful occupation, prompting the City and Acsa to work together to address these issues. Thea Govindsamy from Acsa reportedly confirmed that a total of 3 200 state-subsidised Breaking New Ground (BNG) units are planned for construction on the Symphony Way Development Corridor.
**Source**: https://www.capetownetc.com/news/preparations-underway-for-upgrades-at-cape-town-international-airport/

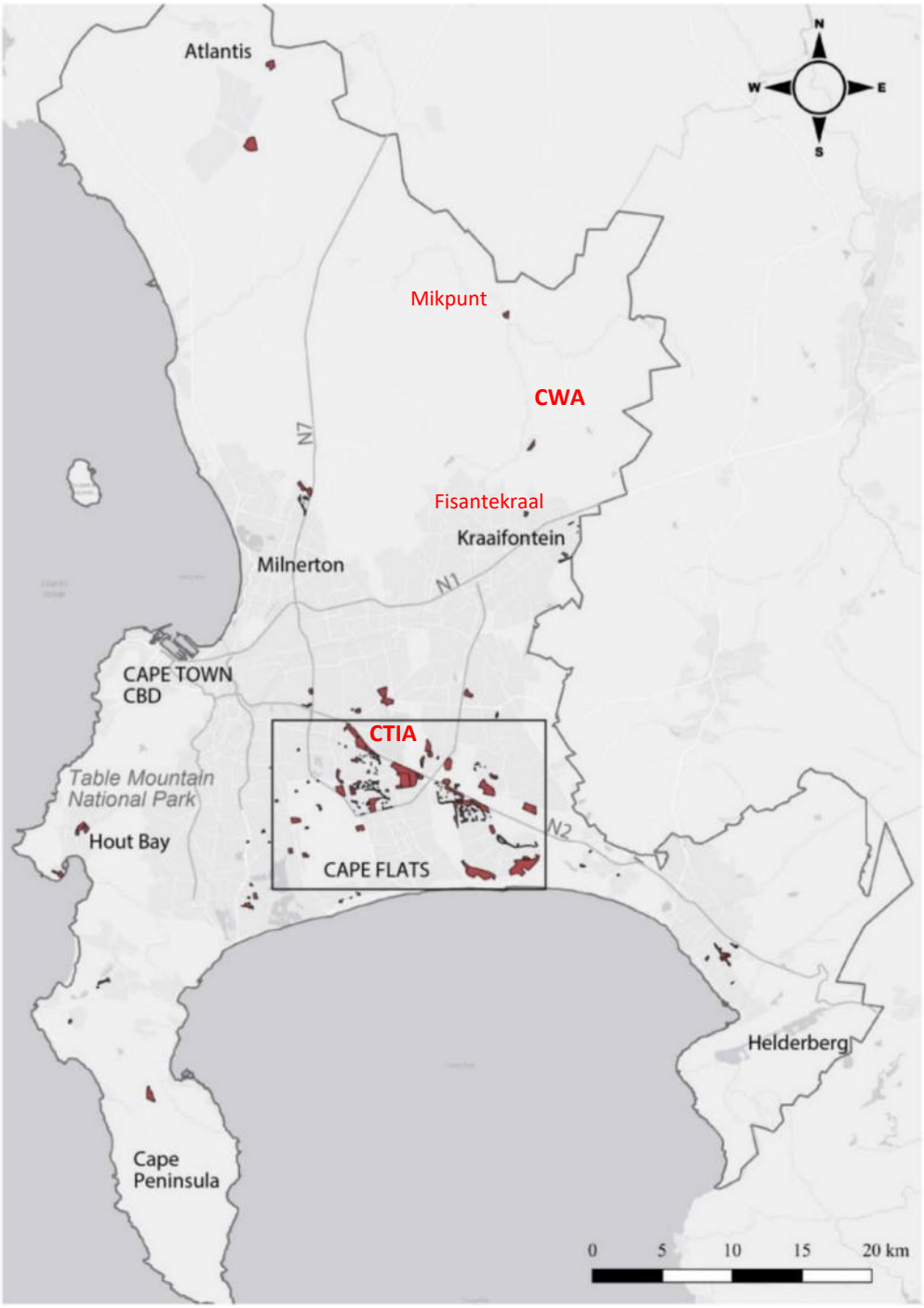



**Figure 22: Informal settlements in the City of Cape Town**
**Source**: Cinnamon and Noth (2023)

**Minister Simmers remains dedicated to the Airport Precinct Informal Settlement project**
06 Jul 2023

Tertuis Simmers, Western Cape Minister of Infrastructure, remains dedicated to ensuring that dignified housing opportunities are provided to the intended beneficiaries from the communities of the airport precinct informal settlement. Comprising of nine communities, the airport precinct informal settlement is divided into the following areas: the main site (Kanana, Barcelona, Europe, Vukuzenzele and Lusaka), airport infills (Lusaka Infills, Gxagxa and New Rest), Tsunami and Thabo Mbeki. Within this project, the Western Cape Department of Infrastructure intends to build 7 800 houses. Minister Simmers' department has allocated a budget of R3,2 billion to undertake land rehabilitation, bulk services, internal services and top structures during the various phases of the project. Additionally, the airport precinct main site is on a historic landfill site that requires rehabilitation through land remediation.

Due to the high population density in these areas, the department has identified Greenfield land parcels for transitional relocations of residents, i.e. Welmoed Estate (Penhill), Ithemba Farms, Airport Precinct (Airport Infills – Luyolo and Tambo Square), Kosovo (Farm 694 and Weltevreden Wedge) and Forest Village. Relocation to the Greenfield sites necessitates active participation and consent from all stakeholders. However, the relocation process has encountered challenges, leading to project delays.

The department has prioritised relocating 800 beneficiaries from the southern corridor areas (greater Airport Precinct) to Forest Village to facilitate the development of the southern corridor. This commitment includes relocating 75 vulnerable beneficiaries, including the elderly and those with disabilities. Currently, the department has successfully relocated 799 out of the 800 beneficiaries. Progress depends on the relocation of the 3,000 qualifying beneficiaries to create space for land rehabilitation, which will help unlock the development of the airport precinct.
**Source**: https://www.gov.za/news/media-statements/mec-tertuis-simmers-airport-precinct-informal-settlement-housing-project-06

### Development Alternatives
The scale of operations for Alternatives 2 and 3 will be significantly larger than No-Go Alternative 1. However, as indicated above, multiple factors determine the risk, including potential employment and available land.

### Cumulative Impact
Other industrial or residential developments in the area could have a cumulative impact in attracting jobseekers that erect informal structures due to a lack of nearby housing.

### Mitigation measures
Informal settlements usually arise on vacant land, whether in private or public ownership, in areas close to potential employment and transport, often as an extension of existing formal settlements. The CWA site is surrounded by private agricultural land with limited commercial activity in the area. It is not possible with any certainty to predict the origin or growth of existing or informal settlements, often influenced by multiple socio-economic factors. Formal housing could address the area's housing needs, eliminating the need for informal structures. Private landowners should ensure that unauthorised land settlements are dealt with by the authorities.

### Impact Rating
The residual impact will be very low negative for Alternative 1, and low negative for Alternatives 2 and 3. Nearby developments (particularly Greenville Garden City and Bella Riva) could contribute to a medium negative cumulative impact for Alternatives 2 and 3.

### 7.3.6 Impact on nearby farming and business operations

**Nature of impact**
A large airport may impact current and future farming and business operations in the area.

**Scope and consequence of impact**
The CWA site is in a rural area surrounded by several farms, businesses, and mixed-use developments that may be negatively affected by noise and air pollution. I&APs identified several aspects related to farming and business operations that could be affected by the CWA development (PHS Consulting, 2024a):

- "Decrease in land use for agriculture
- Food production affected by noise and air pollution
- Decrease in farming income due to livestock loss or reduced production
- Tourism activities in Winelands
- Economic impact on residents due to increases in living costs, taxes, and other financial obligations
- Economic impact on existing businesses due to potential disruptions
- Reduced interest in residential developments (e.g. Bella Riva and Greenville)
- Direct conflict with approved land use rights granted to other developments (e.g. Bella Riva and Greenville)
- Biosafety risks, including infections spreading to or from County Fair
- Specific impact on Mikpunt and Klipheuwel, particularly concerning traffic, road infrastructure, and economic considerations"

The **Agricultural Agro-Ecosystem Assessment** (Agri Informatics, 2024) stated that, "while the dry summers and non-availability of irrigation water limits the agricultural potential of the study area to produce perennial crops, the adequate winter rainfall results in a high potential for winter cereal production in combination with a livestock component. However, the soil properties of Ptn 23/724 (clay deposits) and Rem 724 (deep sand with low water retention capacity) reduce the potential of these farm portions to medium-low. The loss of cultivated fields amounts to 168 ha, of which only ±60% (100 ha) are being cultivated per year due to the crop rotation system followed. At an average wheat yield of 4.0 t/ha, that loss of productive land relates to a reduction of 400 tons in production or ±0.03% of the wheat production of the Western Cape. The potential loss of 400 tons of wheat is equal to 0.01% of the national wheat consumption, 0.02% of the national wheat production and 0.03% of the Western Cape's wheat production. While this loss of production is not negligible, its impact on food security is. While difficult to quantify at this stage, it can be expected that the new Cape Winelands Airport can support food security by its contribution to access to food, through its role in food distribution logistics as well as job creation that will lead to wider food affordability."

Several Aviation associations expressed concern about the proposed expansion of CWA as it will impact their operations. ACSA supports the relocation of light general aviation to CWA, but not high-performance General Aviation, such as fixed-wing, jet-engine aircraft. The Stellenbosch Flying Club stated that their primary objective is safeguarding their operational interests and ensuring the design aligns with their flight school's unique requirements and commercial viability. The Morningstar Flying Club's concerns relate primarily to the potential changes to airspaces and the impact they may have on their free and safe use. The South African Hang-gliding and Paragliding Association (SAHPA) expressed concerns about the hang-gliding site at Rondebossie, and launch sites and flight corridors within 50 km.

In its response to the Scoping Report, the City's Spatial Planning and Environmental Directorate indicated that "the UPD Department supports the proposal for a detailed economic/market study to determine the need and desirability of both airports within the regional context of the Western Cape including a consideration of George Airport together with CTIA." This matter is aligned with the envisaged aviation-related demand, which includes airport users, such as travellers, the airline industry and various auxiliary service requirements. It is our understanding that the industrial and commercial development earmarked for CWA is aviation-related and not conventional commercial space such as shopping centres, offices, etc. No direct comparison exists and the dedicated nature of commercial aviation should not result in any displacement from current businesses operating

in the area. Furthermore, the feasibility study prepared by CWA accounts for growth in the aviation market and unmet demand over the long term.

**Development Alternatives**
Runway Alternatives 2 and 3 would have a significantly higher impact than the No-Go Alternative 1 as more and larger aircraft will use the airport.

**Cumulative Impact**
Other industrial developments in the immediate area could compound any negative impacts on surrounding land users.

**Mitigation measures**
Implementing mitigation measures related to noise and air pollution will reduce the potential negative impact on nearby farming and business operations. The Agricultural Agro-Ecosystem Assessment indicated that further loss of productive farmland should be prevented by clear demarcation of the development envelope during construction, and no vehicle or other activity should be allowed outside of the demarcated area. Suitable run-off and soil erosion control measures and infrastructure should be designed and implemented to limit and restrict the loss or degradation of soil.

**Impact Rating**
The residual impact will be very low negative for Alternative 1, and low negative for Alternatives 2 and 3. Nearby developments could contribute to a medium negative cumulative impact for Alternatives 2 and 3.

### 7.3.7 Impact on surrounding property values

**Nature of impact**
A new development may affect the current and future perceived value of properties in the surrounding area.

**Scope and consequence of impact**
The value of a property is driven by various factors, among others, supply and demand, interest rates, the contraction or expansion of the local economy, population growth rates and changes in disposable income to debt ratios. In addition, relative property values are based on the abundance of sites the market values or avoid. As these underlying characteristics and resulting relative advantages change, so do the relative prices, as these advantages are capitalised into land values. The future land value in the area also depends on spatial planning policies and the bulk supply of land permitted for various uses.

There are no published studies quantifying the impact of noise on the values of property near airports in South Africa, but there are several international studies that reported the impact on residential house prices. McMillen (2004) estimated the noise discount for properties around Chicago's O'Hare airport using the annual energy mean sound level ($L_{dn}$), the most common measure of noise for North American airports. The $L_{dn}$ statistic measures average sound levels over a year, including a 10 dB penalty for nighttime. The FAA and HUD define areas exposed to $L_{dn}$ levels of 65 or over as incompatible with residential housing. McMillen reported a 9.2% discount on homes selling in severe noise areas where $L_{dn}$ levels are 65 or above. Salvi (2003) applied a hedonic regression specified as a spatial error component model for single-family housing data in the Zurich airport area. He found that airport noise decreases housing values by up to 4% for noise levels of 55 dB and under and up to 27% for noise levels of about 68 dB (Jud and Winkler, 2006).

Valdes (2008) suggested several benchmarks for understanding the movement in property prices for different house price categories that can be used to assess the potential noise impact of the CWA. The application of the ratio is assumed to be a level of noise that would be acceptable to a suburban residential property owner (p. 24):

- **Low-priced suburbs**: A 1-dBA increase in airport noise exposure decreased property value by 0,7%
- **Moderately-priced suburbs**: A 1-dBA increase in airport noise exposure decreased property value by 1,12%
- **High-priced suburbs**: A 1-dBA increase in airport noise exposure decreased property value by 1,35%

The impact of aircraft noise pollution on residential property valuations for suburbs near airports has been the subject of research for several years. Various terms have been used to describe this effect, such as diminution of value due to detrimental conditions (Mense & Kholodilin, 2014). Several published studies virtually come to the same conclusion that homes under or near the flight corridors of national or international airports experience some diminution in property values. The impact of flight noise levels on property values depends on various factors such as the flight path, the location of residents on either side of the flight path, the flight level of the aircraft, etc. The nature of the airport and the type of aircraft able to land there also play a role. The studies of aircraft noise impacts have focused on large airports that cater for international and domestic air traffic, i.e. large and smaller aircraft. In addition, some studies also considered the impact of airport development on values before announcing the development or after the airport's expansion and post-announcement.

Nelson (2004) conducted a meta-analysis of airport noise and property values. The study consists of 33 estimates of noise discounts for 23 airports in Canada and the US, combining the findings of various prior studies. His results indicate that the noise discount is between 0,50 and 0,60 per decibel (dB). Properties would sell at about 10–12% less if located at 75 dB instead of 55 dB. The distance from an airport and the aircraft's height are associated with the impact of aircraft noise. Mense and Kholodilin (2014) examined these factors and reported that where the flight altitude is below 1 000 meters, the decline in the property price is between 11,8% and 12,8%, as compared to an average of 8,3% for flight altitudes above 1 000 meters.

However, the fact that a property is located near a noise source is not automatic evidence of a loss in market value (Bell, 2001, p. 7). Bell suggests that in studying the “most likely impact” of airport noise on real estate values, it should be recognized that there are outlying extremes. Like many detrimental conditions, there is a segment of the market that appears to be almost immune to the effects, while at the opposite extreme, there is often a segment that will not purchase a property at any cost if impacted by a detrimental condition. For example, it is stated that a portion of the population seems more or less imperturbable. If located close to an airport or under a flight path, these people are still not seriously disturbed. Nevertheless, noise is a significant issue for most people, and a segment of the population will live under a major flight corridor if enticed through a discount on the price. However, a slight majority of the market will not purchase a property close to a major airport *at any discount.* Similarly, a significant portion of the market will neither purchase a property close to a motorway nor a few miles from a major airport.

The announcement of an airport project has the advantage of measuring the change in housing prices *ex-ante* instead of *ex-post*. This is important because neighbourhood and locational attributes often change substantially after an airport expansion becomes operational. Although noise level measurement is possible *ex-post*, the net effect is difficult to determine years later. Jud and Winkler (2006) examined the effect of the announcement on housing values of building an air cargo hub in the Greensboro/High Point/Winston-Salem metropolitan area. The study differs from other airport noise studies by focusing on the change in pre- versus post-announcement housing prices, before the actual construction and operation of the proposed airport hub (p. 9). The study results indicate that even after controlling for housing, neighbourhood and locational characteristics, there is a 9,2% decrease in housing prices for properties located within 2,5 miles of the Greensboro Airport. A 5,7% decrease occurs for properties in the next 1,5-mile band surrounding the airport.

Case studies could assist in understanding practical outcomes for similar types of airports:

> Given that **Cairns Airport** (Queensland, Australia) is a small local airport that neither caters to domestic jet airlines nor international airlines, the noise levels and the amount of air traffic would seem to be minimal, yet they were sufficient to cause community concern (Bishop and Laing, 2020, p. 2). This study provides evidence consistent with prior research that airport noise can negatively impact the values of residential properties. The findings highlight that the impact is evident for properties in zones within the flight paths of the particular airport. This study implies that when the expansion of any airport or residential developments is being considered, the result is likely to have an impact leading to the diminution of the residential property values directly under the flight paths (p. 9).

> **Eros Airport** is Windhoek’s second-most prominent airport after the Hosea Kutako International Airport (Iipinge, 2020). It is situated in the southern part of Windhoek, west of the main B1 Rehoboth Road, about 500 m from the Safari Hotel. Eros Airport is about 4 km from Windhoek's Central Business District (CBD)

and Namibia's busiest airport regarding local flights. The airport sometimes accommodates a few flights between Cape Town and Windhoek, and it is Namibia's tourism gateway. The same airport handles over 75 592 passengers and 20 167 aircraft movement annually, from business, private and booked traffic, accommodating superior performance jet aircraft to Cessna aircraft, regularly used aircraft for charter and fly-in safaris in Namibia.

The research found that no relationship between property values and proximity to the airport exists in the absence of external factors, arguing that the agents have not yet come across any cases where properties have lost value owing to their proximity to the airport in the studied residential locations and therefore a discount due to noise is required owing to the aircraft operations. The values of residential properties around the Eros Airport are not significantly influenced by aircraft noise, since residents in studied suburbs are not yet concerned about it was the outcome of the study. Conversely, there is a view that the relationship between property values and proximity to the airport is an unsuitable environment owing to aircraft noise/noise pollution and therefore would sell their properties. Similar residential properties have different values in areas close to the airport, such as Academia, Olympia and Pionierspark, compared to others, which are far from Eros Airport, where prices are higher. Academia homeowners (who happen to be closest to the airport) frequently sell their properties more often than those in Olympia and Pionierspark, which is a distance away from the Eros Airport, albeit property values were lower in Academia compared to Olympia and Pionierspark.

For the CWA development, property owners in nearby neighbourhoods may be negatively affected due to a change in the sense of place. However, land adjacent to the airport site may be in demand for commercial and/or industrial developments, thus increasing the perceived value of the properties. The properties adjacent to the CWA are predominantly zoned Agricultural, but there are a few exceptions, such as the approved Bella Riva mixed-used development directly east of the airport and other land uses. The Northern District is considered a growth and development node for the CoCT, attracting interest from developers for megaprojects. In general, properties inside the urban edge may experience demand for infill development, often increasing the perceived value of undeveloped properties. Properties outside the urban edge could also experience an increase in perceived value over time, which is often realised when the urban edge is adjusted to include said properties. However, landowners that bought properties bordering on a green belt may be concerned about the sense of place, visual impact (interrupted views), peace and tranquillity (increased traffic, noise and dust), privacy and security.

Several I&APs expressed concern about the impact of the CWA expansion on residential prices in the immediate area and along the flight path (PHS Consulting, 2024a). The factors that impact the sense of place, i.e. noise, pollution, traffic and sense of place, would also negatively impact the perceived value of residential homes, farms and business premises. New homeowners may prefer to buy property outside the noise cone, and current property owners may find it difficult to sell or rent their property – or would have to do so at reduced prices. Agricultural properties will lose value as planes land and take off so close to residential buildings and farm activities. The impact on residential and business property values is a particular concern to the developers of Bella Riva and Greenville Garden City, as it will impact future residential sales. Renier Smith (Garden Cities, in PHS Consulting, 2024a) expressed concern that the CWA development may threaten Greenville's planned industrial area and that future phases may have to consider industrial land as the only potential and viable land use. Various land parcels acquired by CWA (to accommodate the extended runway) have been earmarked for future industrial uses. This creates a substantial supply in an area where existing industrial areas (such as the Fisantekraal Industrial Park) have shown little to no development interest. He expressed concerns and reservations about the viability and suitability of the extensive industrial land created as a direct result of the proposed airport as it may result in the stagnation of any residential opportunities in the area.

### Development Alternatives

Alternatives 2 and 3 will have a significantly larger scale of operations than No-Go Alternative 1, with a higher risk of impacting surrounding property values.

### Cumulative Impact

Other developments in the immediate area could compound any negative impacts on surrounding land users (e.g. sense of place and traffic flows). On the other hand, several large-scale developments in the area could increase

the perceived value of undeveloped properties within the urban edge, particularly those that could form part of a future airport precinct.

**Mitigation measures**
Implementing mitigation measures related to the sense of place will reduce the potential negative impact on residential property prices.

**Impact Rating**
The impact is unavoidable but can be partially managed if visual, noise and traffic concerns are effectively mitigated. For residential properties, the residual impact will be very low negative for Alternative 1, and low negative for Alternatives 2 and 3. For commercial and industrial properties (including agricultural properties with the potential to be rezoned), the impact would be very low positive for Alternative 1, and low positive for Alternatives 2 and 3. Other industrial developments in the area could contribute to a medium negative cumulative impact for residential properties along the flight path, or medium positive for non-residential properties within the airport precinct.

### 7.3.8 Bulk infrastructure requirements

**Nature of impact**
Bulk infrastructure services are to be supplied by the Developer, but require sufficient local capacity.

**Scope and consequence of impact**
Several I&APs expressed concern about the bulk infrastructure requirements for the CWA expansion as the envisaged project will require significant infrastructure changes in the area (PHS Consulting, 2024a). “The increased water demand for construction and operational needs may strain local water resources, impacting human and ecological requirements. Most of the surrounding farms rely on borehole water, but no plans for aquifer recharge or the sustainability of surrounding boreholes have been presented. This would substantially impact the provision of bulk infrastructure planned and gradually rolled out to cater for Greenville and its mixed land use approach if the CWA development potentially takes up the available capacity.”

The following summarises the main bulk infrastructure requirements; refer to the relevant specialist reports for further information:

***Electricity***
The site has a 66 kVa Eskom supply, but renewable energy alternatives are being considered for the CWA expansion (Sands, 2024). A comprehensive power plan is being developed to ensure that the site and facilities will be self-sustaining regarding renewable energy sources and resources, including a biodigester plant, wind energy and photovoltaic systems.

***Water Supply & Reticulation***
The site borders the City’s urban edge and water services provision is limited, with the closest existing accessible services about 3 km east of the CWA site. The site falls into the Spes Bona Reservoir supply zone, with a 400-mm main trunk supply pipe in the R312 Lichtenburg Road. The City of Cape Town indicated sufficient capacity in the Spes Bona reservoir to supply the CWA development, but the network infrastructure in the area is limited (Zutari, 2024). The existing network pipe diameters are restricted and should the CWA development connect to the network with the calculated demand, the flow velocities in the network will exceed acceptable levels. The CoCT indicated that the CWA development would only be able to obtain 25% (5.65l/s of the calculated demand of 22.5l/s) of its requested peak instantaneous demand capacity (Qp) from the municipal system. (This would only be 8% of the current calculated demand of 69 l/s). Additional measures would need to be implemented to account for the shortfall.

The CoCT also proposes a 1 700 mm trunk main to supply the new Muldersvlei Reservoir (Zutari, 2024); this will be installed on R312 Lichtenburg Road and pass alongside the CWA Development. The CoCT planning team advised that this line could supply CWA and that the Bulk Water Branch should be engaged to determine whether such a connection was feasible. Due to the current constraints in the municipal system, alternative potable water sources will have to be considered for the short to medium-term CWA development. In addition, consideration should be

given to non-potable systems to reduce the demand for potable water. The strategy for water supply to CWA is one of a phased approach. It entails using groundwater as a supply source in the short term until municipal infrastructure can either supplement the groundwater supply or, in the case of the Muldersvlei line, be the sole supply source.

***Sewer Reticulation & Treatment***

The site is located on the urban edge, where sewage services provision is limited and existing municipal services are located a considerable distance from the site. The site is not provided with municipal connections for foul sewer drainage, and the existing buildings at the airfield are serviced through septic tanks (Zutari, 2024). However, the site falls into a catchment area serviced by the Fisantekraal WWTW, close to the site. The areas in Fisantekraal drain to a series of pump stations where the sewage is pumped to the Fisantekraal WWTW in the north or Kraaifontein WWTW in the south. There are proposed developments nearby where municipal sewer lines are proposed, including the Greenville development to the south and the Bella Riva development to the east. These developments include proposals to expand the municipal sewage network, which were considered possible opportunities to tie into the municipal network. However, these developments are still in the planning stage, and there is no confirmation that either development will have sewage infrastructure constructed in the short term.

Due to the limited network coverage, conveyance infrastructure must be implemented outside the site boundary to convey the sewage to the municipal wastewater treatment works (Zutari, 2024). Considering this requirement, two options are contemplated: i.e. constructing an on-site packaged Sewage Treatment Plant to treat sewage on-site or constructing a pump station and associated rising main to pump sewage to the Fisantekraal WWTW. To enhance the system's reliability and resilience, an emergency overflow pond is proposed, which shall provide a mitigation against spillage should there be a problem with the pump station.

***Stormwater Drainage***

The existing stormwater drainage services on the site are limited and mainly consist of open drains and limited pipework to drain areas around the existing airfield into the existing water courses (Zutari, 2024). A large portion of the site is a greenfield development from a stormwater perspective, and there are no formal municipal infrastructure services at the site from a stormwater perspective. A detailed Stormwater Management Plan is required to obtain final approval for the development. The Stormwater Management Plan will identify measures to comply with the Council's Management of Urban Stormwater Impacts Policy (C58/05/09); propose methods (structural controls) for removing, reducing, or retarding runoff flows, and preventing targeted stormwater runoff constituents, pollutants and contaminants from reaching receiving waters; and propose operation and maintenance procedures.

## Development Alternatives

Runway Alternatives 2 and 3 would have significantly higher bulk service requirements than Alternative 1.

**Cumulative Impact**

Other developments near the CWA will increase the local demand for bulk services.

## Mitigation measures

No mitigation is applicable as the Developer pays to introduce the various bulk services.

## Impact Rating

The engineering reports indicate that potable water, sewage and electricity services are available in the area, and that there is sufficient capacity to accommodate the proposed CWA development if the Developer provides the necessary infrastructure and network connections. The residual impact will be very low negative for Alternative 1, and low negative for Alternatives 2 and 3. The site is far from the CTIA, but nearby developments (particularly Greenville Garden City and Bella Riva) could contribute to a medium negative cumulative impact.

### 7.3.9 Local business opportunities

**Nature of impact**
A new development will create opportunities for small businesses in the goods and services sectors.

**Scope and consequence of impact**
A total of 350 000 $m^2$ of GLA includes Hangarage, Light manufacturing & Industrial, Logistics & Warehousing, Food Processing, Educational & Commercial Office Space, Retail, Events & Conferencing, Hotel & Guesthouse Accommodation, Bulk Aviation Fuel Farm and Public Filling Station. This would allow several independent businesses to conduct their activity on-site and opportunities for other businesses to support a range of supply and support services. It is anticipated that operators based at CWA would partner with various regional tourist attractions to provide attractive packages, growing the Cape's status as the ultimate tourist destination.

The airport is located between the three major regional growth centres of Cape Town, Stellenbosch and Paarl and along north-south and east-west road networks, which provide numerous opportunities for transport-related businesses like public transport, car hire, fuelling, and parking will attract commercial passenger traffic at the airport. Commercial developments such as retail, food & beverage, and offices can support business traffic by providing complementary and convenient services. The combination of transport linkages and commercial activity can galvanise demand for light-industrial facilities such as logistics, warehousing and even air freight (Cape Winelands Airport Limited, 2021a).

**Development Alternatives**
Runway Alternatives 2 and 3 would have a significantly higher impact than the No-Go Alternative 1, with a significantly higher demand for goods and services.

**Cumulative Impact**
The CTIA expansion may act synergistically to create more demand for airport-related supplies and services and stimulate further economic growth in the CMA. However, it is more likely that existing and new businesses closer to CWA will have a cumulative impact in creating new opportunities in the goods and services industries within the Northern District.

**Mitigation measures**
No mitigation applies as it represents a positive impact.

**Impact Rating**
The impact will be very low positive for Alternative 1, and high positive for Alternatives 2 and 3. Nearby developments could contribute to a high positive cumulative impact for Alternatives 2 and 3.

### 7.3.10 Economic income and employment during operations

**Nature of impact**
Procuring goods and services, creating new employment opportunities, and spending wages and salaries during operations will benefit the CMA and Western Cape economies.

**Scope and consequence of impact**
A high-level estimate of the socio-economic impacts during operations also requires an analysis based on a SAM for the Western Cape, which could also apply to the CMA. **Table 11** estimates the economic impact of the envisaged direct operational spending associated with the CWA, focusing on Output, Gross Geographic Product (GGP), jobs and household income. Note that employment creation does not necessarily imply NEW jobs, but rather sustainable employment for employees of contracted services providers not operating at full capacity. For example, it could represent a new contract for a service provider with spare capacity. If the company doesn't have spare capacity, additional workers may be appointed, in which case NEW jobs will be created during operations.

**Table 11: Direct, indirect and induced economic, household and jobs impact of operational spending over 20 years**

| Economic measure (R' billion) | Direct | Indirect | Induced | Total |
|---|---|---|---|---|
| Production (output, R' billion) | R36,1 | R17,1 | R22,8 | **R76,1** |
| Gross Geographic product (GGP, R' billion) | R19,0 | R5,7 | R9,5 | **R34,2** |
| Jobs (number) | 57 073 | 17 122 | 28 537 | **102 732** |
| Household income (R' billion) | R11,4 | R2,7 | R3,6 | **R17,7** |

**Source**: Multi-Purpose Business Solutions SAM model

Note that the figures represent the total economic and employment impacts in nominal terms for the first 20 years of operations:

- The operational phase, which includes a substantial component of maintenance expenditure, estimated at R36,1 billion in nominal terms, could generate R76,1 billion in **new business sales**, referred to as the production (or output) that creates demand for business activity.
- The increase in production output could add R34,2 billion (net of the import leakage) to the **GGP** of the CMA.
- Based on the operational expenditure, the CWA could sustain about 102 732 direct, indirect and induced **employment opportunities** over 20 years of operations.
- Due to the job opportunities created, household incomes from **job opportunities** could increase by R17,7 billion during 20 years of operations.

Based on the narrative above, it is possible to estimate the impact of the operational expenditure on the CMA economy during the first 20 years of operations on an annual basis. This impact is represented by an income and output multiplier, an indication of job opportunities, and the impact on household incomes of those workers directly or indirectly involved in the operations. The impacts are direct, indirect and induced, with the latter representing the spending of salaries and wages in the local economy.

The net movement in jobs over the first 20 operational years is intended to address the issue of over-estimating opportunities resulting from operational expenditure. The premise is to establish the baseline from the first expenditure and adjust the job movement for each successive year. This approach results in a net movement of 9 155 sustainable employment opportunities (direct, indirect and induced) during the first 20 years of operations. These job opportunities reflect the net movement commencing with a base figure of 1 712 in Year 1.

**Figure 23** illustrates the annual impacts for the individual items used to assess the economic impact over the first 20 years of operations. The difference between annual job opportunities and net movement in jobs, as illustrated above, implies the change in employment in any year depending on the change in revenue, i.e. there is a causal relationship between revenue generated and the change in operations to achieve high levels of revenue, which means additional employment opportunities.

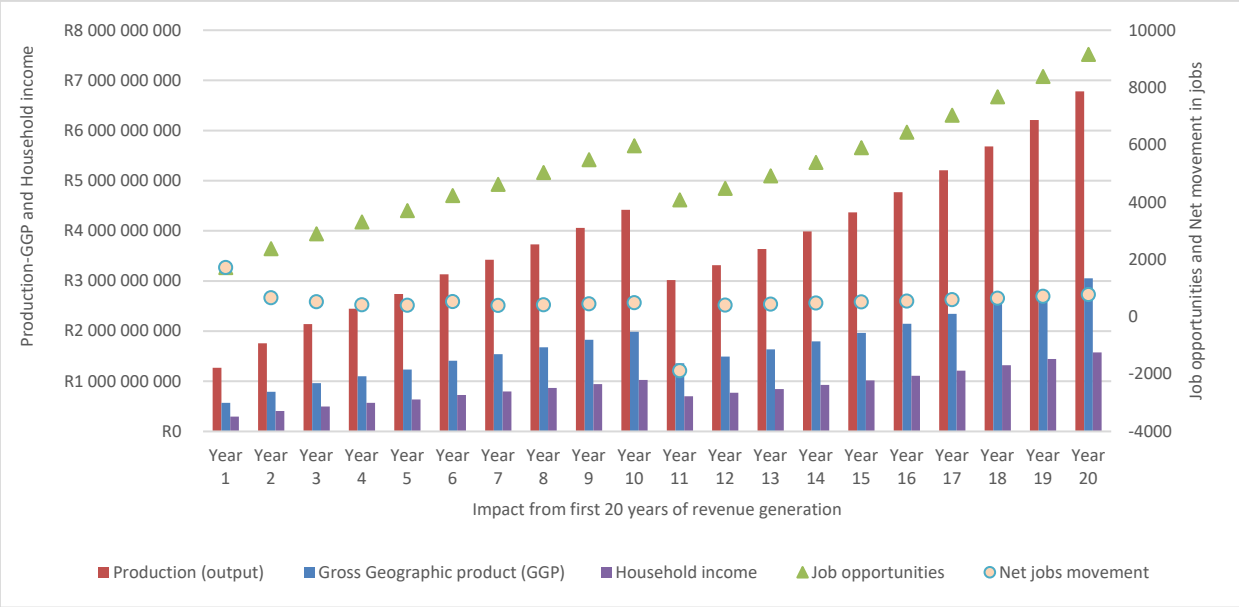



**Figure 23: Impact of Operational expenditure on an annual basis over 20 years**

### Development Alternatives

Runway Alternatives 2 and 3 would have a significantly higher impact than the No-Go Alternative 1, resulting in more employment and economic activity.

### Cumulative Impact

Other development projects in the CMA could act synergistically to create more demand for supplies and services and thus catalyse further economic growth in the area.

### Mitigation measures

No mitigation applies as it represents a positive impact. However, the Developer should insist that the contractors demonstrate the use of local labour as far as possible. It is also imperative that the recruitment process should promote gender equality with women employed wherever possible.

### Impact Rating

The impact will be very low positive for Alternative 1, and high positive for Alternatives 2 and 3. Nearby developments could contribute to a high positive cumulative impact for Alternatives 2 and 3.

## 7.3.11 Revenue accruing to local authorities

### Nature of impact

Monetary benefits accrue to the CMA through property rates and other utility charges such as water and electricity.

### Scope and consequence of impact

The CWA will contribute to the fiscus during construction and ongoing operations as various taxes and levies will become payable or accrue to the national government and the City of Cape Town. The fiscus will benefit from individual and company taxes, individual taxes and levies, VAT and import duties. The City of Cape Town will benefit from Development Changes (DCs) based on the envisaged construction expenditure, property rates, and services (utilities). Several assumptions are applied to determine the fiscal and monetary contributions:

- The period covered is 2025 to 2046, of which the first 4 years are earmarked for construction and 20 years as the operational period;
- Statutory rates and levies are applied as they relate to UIF, SDL, Company Tax, Import duties and VAT;

- Import duties are levied on aeronautical ground lighting (AGL) CAT II, GSE: tug, loaders, steps, pax busses, etc., GSE: fire tenders and equipment and baggage equipment;
- Marginal rates for PAYE (41% for skilled, 25% for semi-skilled and 18% for unskilled labour);
- Development charges are calculated per the DCs levied by or agreed to with the CoCT;
- Municipal property rates are estimated at 1,2% of the capital expenditure applicable to initial construction, and based on the 2023/24 property tariffs of the City of Cape Town for 350 000 $m^2$ of commercial space to be developed over 20 years;
- Municipal services are assumed to be 1% of revenue;
- A discount rate of 10% is applied to determine the fiscal and monetary benefit in current terms (2023); this rate is used in the public sector and essentially equates to prevailing borrowing rates.

**Table 12** indicates the fiscal and monetary impacts. In current terms, the CWA expansion could contribute R3,9 billion to central government coffers over 22 years, while the City of Cape Town could obtain R2,1 billion from rates and services based on the applied assumptions.

**Table 12: Fiscal and monetary funds accruing to the two spheres of government in current terms**

| | R' million |
|---|---|
| **National Government** | R3 896.9 |
| PAYE (Construction) | R575 397.1 |
| Unemployment Insurance Fund (UIF) | R25.7 |
| SDL | R25.7 |
| VAT (net) | R1 534.4 |
| Company Tax | R1 355.9 |
| Import duties | R31.1 |
| PAYE operations | R316.0 |
| Unemployment Insurance Fund (UIF) | R21.8 |
| Skills Development Levy (SDL) | R10.9 |
| **City of Cape Town** | **R2 055.9** |
| Municipal rates | R969.6 |
| Municipal taxes | R1 051.2 |
| Development charges | R35.1 |

### Development Alternatives

Given their larger development footprints, Runway Alternatives 2 and 3 would attract higher rates and taxes than No-Go Alternative 1.

### Cumulative Impact

Other development projects would further enhance the rate base of the City of Cape Town.

### Mitigation measures

No mitigation applies as it represents a positive impact.

### Impact Rating

The impact will be very low positive for Alternative 1, and high positive for Alternatives 2 and 3. Nearby developments could contribute to a high positive cumulative impact for Alternatives 2 and 3.

# 8 SOCIAL INVESTMENT AND MONITORING INITIATIVES

## 8.1 Social investment and community engagement

Social investment initiatives have become a standard inclusion in the submission of development proposals to relevant government departments at the local, provincial, and national levels. Developers are required and expected to indicate to what extent the development project would contribute to the welfare of surrounding communities through social investment initiatives.

A need exists to align communities' development priorities with the project developers' social investment objectives. Multi-Purpose Business Solutions has prepared a framework to provide developers with a sense of direction when assessing what initiatives could be considered as part of a social investment programme. **Figure 24** illustrates a matrix consisting of four quadrants based on the nature of the intended investment and the "capital" introduced by the developer as part of the social investment.

| | Abstract capital | Physical capital |
|---|---|---|
| Active Investment | • Grants<br>• Bursaries<br>• In-house training<br>• Education<br>• Development of small, medium and micro businesses<br>• Youth training initiatives<br>• Environmental initiatives (nursery and training initiatives)<br>• Enterprise development opportunities | • Upgrading of community health facilities (e.g. clinics)<br>• Upgrading and maintenance of sports fields<br>• Construction of new skills development/training facilities<br>• Provision or upgrading of infrastructure (with advantage for the community)<br>• Development or conversion of existing buildings to multi-purpose centres<br>• Community gardening project and farming projects |
| Passive Investment | • Establishment of community trust funds for environment and development<br>• Provision of guarantees<br>• Advancing preferential terms | • Build facility and transfer ownership to a community trust for application to the community<br>• Maintenance of community facility |

**Figure 24: An illustrative matrix of social investment options for developers**

**Source:** Multi-purpose Business Solutions ©

**Notes:**

**Active and Passive investment of abstract capital.** These investments refer specifically to time and funds invested in initiatives such as bursaries and in-house training. Passive investment refers specifically to the allocation of funds to a community trust or some other vehicle that assumes responsibility for the disbursement of the funds to community third parties and projects.

**Active and passive investment in physical capital.** Active participation implies direct investment in the needs of communities by the provision of new or upgrading of existing community facilities such as health care centres, schools and recreation and sports facilities. Passive investment in this context refers specifically to the establishment of a facility for the community, which is then transferred to a trust or other type of entity (vehicle) with the sole purpose of administrating and maintaining the facility on behalf of the community.

It should be noted that the term "social investment" in this context has a broad meaning. In this framework, a distinction is made between (1) physical and abstract capital reflecting the difference between actual funds invested in assets and "in-kind" investment in people, and (2) active and passive investment reflecting the degree of the developer's actual involvement in the community either directly or through a third party, which could be an entity or other vehicle.

A developer could select any one or combination of social investment initiatives illustrated in **Figure 24**. We suggest that a clear indication is provided in the application of the nature and scope of the social investment and whether or not a passive or active investment approach will be followed. Our assessment suggests that the type of investment that should be considered by the Developer based on an agreement with various stakeholders must achieve the highest impact

## 8.2 Monitoring framework

An essential component of determining the success of a project from a socio-economic perspective entails monitoring, reviewing and evaluating processes to assess the adherence to socio-economic obligations. Continuous and periodic monitoring and evaluation are required to ensure the achievement of milestones and the overall success of achieving the socio-economic objectives envisaged for the Project. The following activities are geared towards achieving acceptable and ongoing monitoring standards:

1. Regular field visits to the project and stakeholders benefiting from the project
2. A review after the first six months after implementation to assess the overall progress and achievement of the objectives and milestones related to the specified targets of employment, skills development, small business development and capacity building.

In order to monitor the performance related to the achievement of the socio-economic development obligations, the contractor should record and report progress with agreed socio-economic obligations. Typical reporting information should include:

- Actual total expenditure on Total Procurement;
- Actual total expenditure on Procurement of Materials;
- Actual total expenditure on Sub-contracting;
- Actual total employment categorised according to standard Occupational Categories; and
- Actual total payroll.

The successful implementation and development of the proposed project will ultimately be assessed on the contribution the project makes during construction and operations to the social development and economic goals of employment creation, skills development and training, small business development and capacity building in the area. The following Key Performance Areas (KPAs) are outcomes based on the scope of social engagement activities:

- Procurement from, or sub-contracting to local enterprises;
- Procurement from, or sub-contracting to enterprises from outside the local area;
- Procurement of local materials/resources;
- Procurement of materials from outside the CMA;
- Recruitment process that promotes gender equality

# 9 SUMMARY OF IMPACTS & RECOMMENDATIONS

## 9.1 Summary of impacts

The question that needs to be addressed in the context of perceptions and concerns raised by I&APs is whether the proposed CWA development is desirable from a societal cost-benefit perspective? Several positive and negative socio-economic consequences are raised and discussed in this report.

To provide a perspective of the net societal benefits and costs associated with the various alternatives for the proposed project, the socio-economic impacts associated with the proposed development and their respective significance before and after the implementation of mitigation measures (i.e. the residual impact) are indicated overleaf, followed by a discussion of the different impacts.

The following table summarises the residual impacts of the three alternatives:

1) The **No-Go Alternative 1** – development of the current airport within its current rights (i.e. maximum runway of 1 454 m and 6 000 m$^2$ GLA)
2) The Initial Preferred Alternative (**Runway Alternative 2**) - a commercial and aviation hub (350 000 m$^2$ GLA) with a 3 500 m main runway at orientation 01-19 and initial retention of cross runway 14-32 in Phase 1
3) The New Preferred Alternative (**Runway Alternative 3**) - a commercial and aviation hub (350 000 m$^2$ GLA) with a 3 500 m main runway at orientation 01-19 (no cross runway)

| Nature of the Impact | Rating after mitigation (Residual impact) | | | |
|---|---|---|---|---|
| | Alternative 1 | Alternative 2 | Preferred Alternative 3 | Cumulative (Alternatives 2, 3) |
| **Construction** | | | | |
| Traffic flows along access roads | (scored as Low negative in Transport Impact Assessment) | | | |
| Nuisance factors (dust and noise) | Very Low | Low | Low | Medium (-) |
| Influx of jobseekers | Very Low | Low | Low | Medium (-) |
| Construction workers – local communities | Very Low | Low | Low | Medium (-) |
| Increase in local crime | Very Low | Low | Low | Medium (-) |
| Economic income and employment opportunities | L (+) | High (+) | High (+) | High (+) |
| **Operations** | | | | |
| Provision of transport infrastructure | Low (+) | High (+) | High (+) | High (+) |
| Traffic flows along access roads | (scored as Low negative in Transport Impact Assessment) | | | |
| Sense of place | Very Low (-) | Medium (-) | Medium (-) | High (-) |
| Increase in local crime | Very Low (-) | Low (-) | Low (-) | Medium (-) |
| Risk of informal settlements | Very Low (-) | Low (-) | Low (-) | Medium (-) |
| Nearby farming and business operations | Very Low (-) | Low (-) | Low (-) | Medium (-) |
| Surrounding property values – residential | Very Low (-) | Low (-) | Low (-) | Medium (-) |
| Surrounding property values – commercial/industrial | Very Low (+) | Low (+) | Low (+) | Medium (+) |
| Bulk infrastructure requirements | Very Low (-) | Low (-) | Low (-) | Medium (-) |
| New business development | Very Low (+) | High (+) | High (+) | High (+) |
| New employment opportunities | Very Low (+) | High (+) | High (+) | High (+) |
| Revenue accruing to public authorities | Very Low (+) | High (+) | High (+) | High (+) |

| PROJECT ALTERNATIVE | NATURE OF IMPACT | BEFORE MITIGATION | | | | | | | | AFTER MITIGATION | | | | | | | | PROPOSED MITIGATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Extent | Magnitude | Duration | Probability | Confidnece | Significance | Status | Cumulative | Extent | Magnitude | Duration | Probability | Confidnece | Significance | Status | Cumulative | |
| **CONSTRUCTION PHASE** | | | | | | | | | | | | | | | | | | |
| **Nuisance factors (dust and noise)** | | | | | | | | | | | | | | | | | | |
| Alternative 1 | Construction activities create dust and noise at the development site that would affect nearby receptors | SS | L | S | D | C | VL | - | L | SS | VL | S | D | C | VL | - | L | Dust and noise emissions during the construction period should be minimised by means of a Construction Environmental Management Plan. Noise could also be reduced with mufflers and silencers on large trucks, as well as restricting activities to working hours. |
| Alternative 2 | | SS | H | S | D | C | L | - | M | SS | M | S | D | C | L | - | M | |
| Alternative 3 | | SS | H | S | D | C | L | - | M | SS | M | S | D | C | L | - | M | |
| **Influx of job seekers** | | | | | | | | | | | | | | | | | | |
| Alternative 1 | An influx of job-seekers may lead to competition with local residents for employment opportunities | L | L | S | D | C | VL | - | L | L | VL | S | D | C | VL | - | L | Contractors need to employ people from the immediate area whenever possible. |
| Alternative 2 | | L | H | S | D | C | L | - | M | L | M | S | D | C | L | - | M | |
| Alternative 3 | | L | H | S | D | C | L | - | M | L | M | S | D | C | L | - | M | |
| **Impact of construction workers on local communities** | | | | | | | | | | | | | | | | | | |
| Alternative 1 | Incoming construction workers can disrupt family structures and social networks in local communities | L | L | S | D | C | VL | - | L | L | VL | S | D | C | VL | - | L | Local labour and local enterprises should be used, and construction workers from outside the area should return home regularly. |
| Alternative 2 | | L | H | S | D | C | L | - | M | L | M | S | D | C | L | - | M | |
| Alternative 3 | | L | H | S | D | C | L | - | M | L | M | S | D | C | L | - | M | |
| **Local crime** | | | | | | | | | | | | | | | | | | |
| Alternative 1 | The presence of construction activities and workers may increase criminal activities in the surrounding area | L | L | S | D | C | VL | - | L | L | VL | S | D | C | VL | - | L | Co-operation between the Developer and contractors is essential to ensure that the area around the proposed development remains secured during construction. On-site security measures will minimise the risk. |
| Alternative 2 | | L | H | S | D | C | L | - | M | L | M | S | D | C | L | - | M | |
| Alternative 3 | | L | H | S | D | C | L | - | M | L | M | S | D | C | L | - | M | |
| **Contribution towards local economic income and temporary employment opportunities** | | | | | | | | | | | | | | | | | | |
| Alternative 1 | The CMA and Western Cape economies will benefit from procurement and temporary employment opportunities | R | L | S | D | C | L | + | M | | | | | | | | | No mitigation applies as it represents a positive impact. However, the Developer should be cognisant of the importance of using local labour as far as possible. |
| Alternative 2 | | R | H | M | D | C | H | + | H | | | | | | | | | |
| Alternative 3 | | R | H | M | D | C | H | + | H | | | | | | | | | |

| PROJECT ALTERNATIVE | NATURE OF IMPACT | BEFORE MITIGATION | | | | | | | | AFTER MITIGATION | | | | | | | | PROPOSED MITIGATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Extent | Magnitude | Duration | Probability | Confidnece | Significance | Status | Cumulative | Extent | Magnitude | Duration | Probability | Confidnece | Significance | Status | Cumulative | |
| **OEPRATIONAL PHASE** | | | | | | | | | | | | | | | | | | |
| **Transport infrastructure** | | | | | | | | | | | | | | | | | | |
| Alternative 1 | The proposed development will address a growing demand for transport infrastructure in the CMA. | R | L | L | D | C | L | + | L | | | | | | | | | No mitigation applies as it represents a positive impact. |
| Alternative 2 | | R | H | L | D | C | H | + | H | | | | | | | | | |
| Alternative 3 | | R | H | L | D | C | H | + | H | | | | | | | | | |
| **Sense of Place** | | | | | | | | | | | | | | | | | | |
| Alternative 1 | The proposed development will affect the sense of place for the surrounding land users | L | L | L | D | C | L | - | M | L | VL | L | D | C | VL | - | L | Refer to Visual Impact Assessment for mitigating measures. |
| Alternative 2 | | L | H | L | D | C | H | - | H | L | M | L | D | C | M | - | H | |
| Alternative 3 | | L | H | L | D | C | H | - | H | L | M | L | D | C | M | - | H | |
| **Local crime** | | | | | | | | | | | | | | | | | | |
| Alternative 1 | The presence of transport and commercial activities may contribute to an increase in local crime | L | VL | L | Pr | S | VL | - | L | L | VL | L | Pr | S | VL | - | L | Co-operation between the Developer and contractors and on-site security measures will minimise the risk. |
| Alternative 2 | | L | M | L | Pr | S | M | - | H | L | L | L | Pr | S | L | - | M | |
| Alternative 3 | | L | M | L | Pr | S | M | - | H | L | L | L | Pr | S | L | - | M | |
| **Risk of informal settlements** | | | | | | | | | | | | | | | | | | |
| Alternative 1 | Large developments with employment prospects may attract job-seekers that settle on nearby vacant land. | L | VL | L | Pr | S | VL | - | L | L | VL | L | Pr | S | VL | - | L | Formal housing, such as those offered by Greenville Garden City, could address the need for housing in the area, thus eliminate the need for informal structures. |
| Alternative 2 | | L | M | L | Pr | S | M | - | H | L | L | L | Pr | S | L | - | M | |
| Alternative 3 | | L | M | L | Pr | S | M | - | H | L | L | L | Pr | S | L | - | M | |
| **Impact on nearby farming and business operations** | | | | | | | | | | | | | | | | | | |
| Alternative 1 | A large airport may impact current and future farming and business operations. | L | VL | L | Pr | S | VL | - | L | L | VL | L | Pr | S | VL | - | L | Implementing mitigation measures will reduce the potential negative impact on nearby farming and business operations. Also refer to Agricultural Agro-Ecosystem Assessment for mitigating measures. |
| Alternative 2 | | L | M | L | Pr | S | M | - | H | L | L | L | Pr | S | L | - | M | |
| Alternative 3 | | L | M | L | Pr | S | M | - | H | L | L | L | Pr | S | L | - | M | |
| **Surrounding property values - residential** | | | | | | | | | | | | | | | | | | |
| Alternative 1 | A new development may affect the current and future perceived value of properties in the surrounding area | L | VL | L | Pr | S | VL | - | L | L | VL | L | Pr | S | VL | - | L | Implementing recommendations made by various specialists will minimise negative impacts for surrounding landowners. |
| Alternative 2 | | L | M | L | Pr | S | M | - | H | L | L | L | Pr | S | L | - | M | |
| Alternative 3 | | L | M | L | Pr | S | M | - | H | L | L | L | Pr | S | L | - | M | |
| **Surrounding property values - commercial/residential/agricultural** | | | | | | | | | | | | | | | | | | |
| Alternative 1 | A new development may affect the current and future perceived value of properties in the surrounding area | L | VL | L | Pr | S | VL | + | L | | | | | | | | | No mitigation applies as it represents a positive impact. |
| Alternative 2 | | L | L | L | Pr | S | L | + | M | | | | | | | | | |
| Alternative 3 | | L | L | L | Pr | S | L | + | M | | | | | | | | | |

| PROJECT ALTERNATIVE | NATURE OF IMPACT | BEFORE MITIGATION | | | | | | | | AFTER MITIGATION | | | | | | | | PROPOSED MITIGATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Extent | Magnitude | Duration | Probability | Confidnece | Significance | Status | Cumulative | Extent | Magnitude | Duration | Probability | Confidnece | Significance | Status | Cumulative | |
| **OEPRATIONAL PHASE** | | | | | | | | | | | | | | | | | | |
| **Bulk infrastructure requirements** | | | | | | | | | | | | | | | | | | |
| Alternative 1 | Bulk infrastructure services to be supplied by developer require local capacity. | L | L | L | D | C | **L** | - | **L** | L | VL | L | D | C | **VL** | - | **L** | The engineering reports indicate that potable water, sewage and electricity services are available with sufficient capacity if the Developer provides the infrastructure and network connections. |
| Alternative 2 | | L | H | L | D | C | **H** | - | **H** | L | L | L | D | C | **L** | - | **M** | |
| Alternative 3 | | L | H | L | D | C | **H** | - | **H** | L | L | L | D | C | **L** | - | **M** | |
| **Local business development** | | | | | | | | | | | | | | | | | | |
| Alternative 1 | A new development will create opportunities for small businesses in the goods and services sectors | R | VL | L | D | C | **VL** | + | **L** | | | | | | | | | No mitigation applies as it represents a positive impact. |
| Alternative 2 | | R | H | L | D | C | **H** | + | **H** | | | | | | | | | |
| Alternative 3 | | R | H | L | D | C | **H** | + | **H** | | | | | | | | | |
| **New employment opportunities** | | | | | | | | | | | | | | | | | | |
| Alternative 1 | The project will create new employment opportunities for people with different types and levels of skills | R | VL | L | D | C | **VL** | + | **L** | | | | | | | | | No mitigation applies as it represents a positive impact. |
| Alternative 2 | | R | H | L | D | C | **H** | + | **H** | | | | | | | | | |
| Alternative 3 | | R | H | L | D | C | **H** | + | **H** | | | | | | | | | |
| **Revenue accruing to public authorities** | | | | | | | | | | | | | | | | | | |
| Alternative 1 | Monetary benefits accrue to the CMA through property rates and other utility charges such as water and electricity. | R | VL | L | D | C | **VL** | + | **L** | | | | | | | | | No mitigation applies as it represents a positive impact. |
| Alternative 2 | | R | H | L | D | C | **H** | + | **H** | | | | | | | | | |
| Alternative 3 | | R | H | L | D | C | **H** | + | **H** | | | | | | | | | |

### *Potential positive impacts – Preferred Runway Alternative 3*

1. **Provision of transport infrastructure:** The proposed CWA will serve as a "reliever" airport for the CTIA in a complementary role within South Africa's network of airports and airfields. It would alleviate congestion at CTIA and make land available for future expansions at the CTIA. It would also increase the available hangarage facilities in the market and unlock the Western Cape GA market, which is currently severely constrained.
2. **Employment opportunities:** The findings of the employment analysis indicate that the project could sustain about 32 433 (direct, indirect and induced) employment opportunities during construction, including ongoing capital expenditure requirements over 22 years of initial and ongoing construction. As a result of the job opportunities created through the proposed interventions, household incomes from job opportunities could increase by R3,8 billion over the total 22 years of initial and ongoing construction.

   During the initial 20 years of operations, the project could sustain about 102 732 direct, indirect and induced employment opportunities, adding R17,7 billion in household income.
3. **Economic income:** The initial capital investment of an estimated R8,9 billion could generate R23,2 billion in new business sales during construction, referred to as the production (or output) that creates demand for business activity over the construction period. The increase in production output could add R8,8 billion (net of the import leakage) to the GGP of the CMA during construction. During an initial 20-year operational period, which includes a substantial component of maintenance expenditure, an estimated at R36,1 billion in nominal terms could generate R76,1 billion in new business sales.
4. **New business development:** The preferred Alternative 2 development plan earmarks 350 000 $m^2$ of GLA for commercial and general business. This will provide numerous opportunities for transport-related businesses like public transport, car hire, fuelling, and parking will attract commercial passenger traffic at the airport. Commercial developments such as retail, food & beverage, and even offices can support business traffic by providing complementary and convenient services.
5. **Revenue accruing to the local authorities:** The development of the CWA could contribute R3,9 billion to central government coffers over 22 years in current terms, while the City of Cape Town could obtain R2,.1 billion from rates and services based on the applied assumptions in current terms.
6. **Surrounding property values:** Properties adjacent to the site may be in demand for commercial and/or industrial developments, thus increasing the perceived value of those properties.

### *Potential negative impacts – Preferred Runway Alternative 3*

1. **Impact on traffic flows:** A significant increase in traffic along the access routes can be expected during construction and operations, which will negatively impact surrounding land users in particular. A number of road upgrades have been recommended by the Traffic Impact Assessment; many of these are directed at background traffic related to other developments in the area.
2. **The influx of job seekers:** An influx of job seekers (mainly from the Northern District) during construction will lead to competition among local (Fisantekraal) residents for employment opportunities. Workers stranded in the area after the construction phase could also increase the demand for housing and social services over the longer term.
3. **Dust and noise (construction)**: Site preparation and the introduction of services will create dust and noise that would affect nearby receptors, in particular the residents of Fisantekraal to the southwest.
4. **Construction workers** may seek the local community for leisure and social activities. This could lead to social ills impacting local families and their social structures.
5. **Increase in crime levels**: On-site activities could attract criminals, but this could be mitigated with effective security measures and access control. Crime could include on-site petty theft, theft of building material, on-selling of security information, or burglary and theft at nearby properties.
6. **Sense of place (operations)**: A large airport will affect neighbouring land users who may enjoy a more rural character, with their sense of place negatively affected by the potential visual impact, aircraft noise, air pollution and increased traffic along the access routes.

7. **Nearby farming and business operations**: Noise and air pollution may negatively impact nearby farming operations and businesses in the area.
8. **Surrounding property values:** Property owners in nearby neighbourhoods may be negatively affected due to a change in the sense of place, mainly those along the flight pathway.
9. **Bulk infrastructure requirements** relate to the provision of bulk infrastructure for sewerage, water and electrical supply, solid waste disposal and stormwater management. The developer is responsible for the provision of these services, but the local municipality requires sufficient capacity to meet the additional demand. The engineering reports indicate that the required services are available in the area, and that there is sufficient capacity to accommodate the proposed CWA development if the Developer provides the necessary infrastructure and network connections.

### *Alternatives*

**No-Go Alternative 1 (development within current rights):** As indicated in the summary table above, the same impacts would apply as for the preferred Alternative 3, but with much lower significance given the much-reduced construction and operation.

**Runway Alternative 2 (development with initial cross runway):** The nature and significance of the impacts would be comparable to that of the preferred Alternative 3. The construction costs are likely to be slightly higher to repair and then decommission the cross runway, but this would be small in comparison to the total capex.

### *Cumulative impacts*

**Cumulative impacts** refer to any other developments as well as existing activities within the immediate area that could compound any positive or negative impacts associated with the proposed development. This usually refers to similar developments, such as the proposed upgrades at CTIA, which is too far away to have a cumulative impact, except for the provision of transport infrastructure. However, several other nearby developments are in the planning or construction stages, such as Graanendal, Greenville Garden City, Buh-Rein Estate and Darwin Road, that could have a cumulative impact. The potential **negative impacts** would be compounded if additional developments were introduced in the immediate and surrounding areas. These impacts would typically relate to sense of place, traffic, infrastructure requirements, crime and nuisance factors. Similarly, other developments in the Fisantekraal area could compound employment and economic income **benefits**.

## 9.2 Recommendations

Many potential impacts could be mitigated by introducing the measures proposed by various specialists; these must be considered and implemented by the developer. Monitoring and evaluating socio-economic impacts and continuously assessing the outcomes would further inform the social and economic fabric and the impact on surrounding land users. The following mitigation measures related to the **socio-economic context** are proposed and should be consolidated into an Implementation Plan as part of the Construction Environmental Management Plan (CEMP) and/or Operational Environmental Management Plan (OEMP).

| **Pre-construction (CEMP)** |
|---|
| **Procurement Strategy** that includes the following and applies to the project:<br>(e) Initiate the activity during the first phase of the development;<br>(f) The strategy is the responsibility of the contractor(s) collectively under the guidance of the Municipality;<br>(g) Focus on opportunities for local labour in the surrounding areas and businesses as a priority. Contractors are required to indicate the geographical location of sub-contractors (businesses) and local labour; and<br>(h) Local contractors invited to tender for work in the context of the terms and conditions included in RFP documentation, which would include skills development, on-site training, gender equality, etc. |

| Pre-construction & Construction (CEMP) | |
|---|---|
| **Communication Protocols** that address directly and indirectly affected residents and surrounding landowners, with specific reference to activities, timelines and intended impacts related to the construction phase and all related activities associated with the implementation of the project (i.e. during the operational phase).<br>• **Objectives**<br>- To orientate, generate awareness and gain positive attitudes among stakeholders as far as possible; and<br>- To engage and inform stakeholders of progress regarding all phases of construction.<br>• **Target audience**<br>- Property owners and users of the land portions directly surrounding the proposed activity; and<br>- Other stakeholders and property owners that may be affected.<br>• **Major types of messages**<br>- Inform directly affected residents on the periphery of the development site and others that would frequent the area;<br>- The commencement date for construction activities related to the project;<br>- Duration and extent of the construction activities and details of individual construction activities;<br>- Progress updates, including any delays in a construction-related activity; and<br>- Introduce appropriate signage to warn persons frequenting the area and those residing adjacent to the development area. | |
| **Construction phase** | |
| Nuisance factors (dust and noise) | Dust and noise emissions during the construction period should be minimised through a Construction Environmental Management Plan (CEMP). |
| Influx of job seekers, impact on local communities | Contractors need to employ people from the immediate area whenever possible. |
| Increase in local crime | Co-operation between the Developer and contractors is essential to ensure that the area around the proposed development remains secured during construction. On-site security measures, such as perimeter fencing, controlled access and security guards and patrols will minimise the risk. |
| **Operational phase** | |
| Sense of place, residential property values | Implement recommendations by relevant specialists to mitigate negative impacts related to visual, traffic, noise, air pollution. |
| Local crime | Co-operation between Developers and contractors and on-site security measures. |
| Informal settlements | Formal housing could address the area's housing needs, eliminating the need for informal structures. Private landowners should ensure that unauthorised land settlements are dealt with by the authorities. |
| Nearby farming and business operations | Refer to mitigating measures relevant specialists proposed (in particular agro-ecosystem, noise and air pollution). |

## Impact statement

The most significant socio-economic benefit from the proposed CWA project is the anticipated contribution to the aviation industry in the Western Cape. In terms of **economic benefits**, an estimated R8,9 billion in capital investment could generate R23,1 billion in new business sales, which could add R8,8 billion (net of the import leakage) to the GGP of the Western Cape economy during construction. During an initial 20-year operational period, which includes

a substantial component of maintenance expenditure, an estimated R36,1 billion in nominal terms could generate R76,1 billion in new business sales.

The project could sustain about 32 433 (direct, indirect, and induced) **employment opportunities** during construction, including ongoing capital expenditure upgrades over 20 years. This could increase household incomes by R3,8 billion over 22 years. During the initial 20 years of operations, the project could sustain about 102 732 direct, indirect, and induced employment opportunities, adding R17,7 billion in household income.

Several potential **negative impacts** were identified, including traffic flows, sense of place, nuisance factors, local crime, influx of job seekers, informal settlements and construction workers that could impact local communities. However, if the site is properly managed and the mitigation measures indicated by the various specialists are implemented, the significance of these impacts will be low to moderate.

**We assess that the proposed development's social benefits outweigh the potential costs, but this must be considered in an operation that adheres to local and national operational guidelines.**

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# 11 ANNEXURE A: CRITERIA FOR SPECIALIST ASSESSMENT OF IMPACTS

These criteria are drawn from the EIA Regulations published by the Department of Environmental Affairs and Tourism (April 1998) in terms of the Environment Conservation Act, 1989 (Act No. 73 of 1989) and include:

- Nature of the impact: This is an appraisal of the type of effect the construction, operation, and maintenance of a development would have on the affected environment. This description should include what is to be affected and how.
- Extent of the impact: The specialist should describe whether the impact will be local (extending only as far as the development site area) or limited to the site and its immediate surroundings; or will have an impact on the region; or will have an impact on a national scale or across international borders.
- Duration of the impact: The specialist should indicate whether the lifespan of the impact would be short term (0-5 years), medium term (5-15 years), long term (16-30 years) or permanent.
- Intensity: The specialist should establish whether the impact is destructive or benign and should be qualified as low, medium, or high. The specialist study must attempt to quantify the intensity of the impacts and outline the rationale used.
- Probability of occurrence: The specialist should describe the probability of the impact actually occurring and should be described as improbable (low likelihood), probable (distinct possibility), highly probable (most likely) or definite (impact will occur regardless of any prevention measures).

The impacts should also be assessed in terms of the following aspects:

- Legal requirements: The specialist should identify and list the relevant South African legislation and permit requirements pertaining to the development proposals. He / she should provide reference to the procedures required to obtain permits and describe whether the development proposals contravene the applicable legislation.
- Status of the impact: The specialist should determine whether the impacts are negative, positive, or neutral ("cost –benefit" analysis). The impacts are to be assessed in terms of their effect on the project and the environment. For example, an impact that is positive for the proposed development may be negative for the environment. It is important that this distinction is made in the analysis.
- Cumulative impact: Consideration must be given to the extent of any cumulative impact that may occur due to the proposed development. Such impacts must be evaluated with an assessment of similar developments already in the environment. Such impacts will be either positive or negative, and will be graded as being of negligible, low, medium, or high impact.
- Degree of confidence in predictions: The specialist should state what degree of confidence (low, medium, or high) exists in the predictions based on the available information and level of knowledge and expertise.

Based on a synthesis of the information contained in the above-described procedure, the specialist is required to assess the potential impacts in terms of the following significance criteria:

- No significance: the impacts do not influence the proposed development and/or environment in any way.
- Low significance: the impacts will have a minor influence on the proposed development and/or environment. These impacts require some attention to modification of the project design where possible, or alternative mitigation.
- Moderate significance: the impacts will have a moderate influence on the proposed development and/or environment. The impact can be ameliorated by a modification in the project design or implementation of effective mitigation measures.
- High significance: the impacts will have the "No-Go" implication on the development or portions of the development regardless of any mitigation measures that could be implemented. This level of significance must be well motivated.

The EIA process is based on assessment of future impacts and consequences, therefor there is still possibility of uncertainties and unknown areas even though the scientific basis of the specialist studies is sound. Where unknowns and uncertainties exist, it should be indicated, and a conservative approach should be followed when assessing and determining the level of significance.

**Criteria for evaluation of impacts**

| CRITERIA | CATEGORY | DESCRIPTION |
|---|---|---|
| **EXTENT or Spatial influence of impact** | **Regional (R)** | Beyond 5 km of the proposed development |
| | **Local (L)** | Within 5 km of the proposed development |
| | **Site-specific (SS)** | On site or within 100 m of the site boundary. |
| **MAGNITUDE of NEGATIVE IMPACT (at the indicated spatial scale)** | **High (H)** | Bio-physical and/ or social functions and/ or processes are *severely* altered. |
| | **Medium (M)** | Bio-physical and/ or social functions and/ or processes are *notably* altered. |
| | **Low (L)** | Bio-physical and/ or social functions and/ or processes are *slightly* altered. |
| | **Very Low (VL)** | Bio-physical and/ or social functions and/ or processes are *negligibly* altered |
| | **Zero (Z)** | Bio-physical and/ or social functions and/ or processes remain *unaltered.* |
| **MAGNITUDE of POSITIVE IMPACT (at the indicated spatial scale)** | **High (H)** | Bio-physical and/ or social functions and/ or processes are *vastly* enhanced. |
| | **Medium (M)** | Bio-physical and/ or social functions and/ or processes are *notably* enhanced. |
| | **Low (L)** | Bio-physical and/ or social functions and/ or processes are *slightly* enhanced. |
| | **Very Low (VL)** | Bio-physical and/ or social functions and/ or processes are *negligibly* enhanced. |
| | **Zero (Z)** | Bio-physical and/ or social functions and/ or processes remain *unaltered.* |
| **DURATION of impact** | **Short Term (S)** | 0-5 years (after construction). |
| | **Medium Term (M)** | 5-15 years (after construction). |
| | **Long Term (L)** | More than 15 years (after construction). |
| **PROBABILITY of occurrence** | **Definite (D)** | >95% chance of the potential impact occurring. |
| | **Probable (Pr)** | 20% - 95% chance of the potential impact occurring |
| | **Possible (Po)** | 5% - 20% chance of the potential impact occurring |
| | **Improbable (Im)** | <5% chance of the potential impact occurring. |
| **CONFIDENCE level** | **Certain (C)** | More than adequate amount of information and understanding of the bio-physical and/ or social functions and/ or processes that may potentially influence the impact. |
| | **Sure (S)** | Reasonable amount of information and understanding of the biophysical and/ or social functions and/ or processes that may potentially influence the impact. |
| | **Unsure (U)** | Limited amount of information and understanding of the bio-physical and/ or social function |

**Definition of significance ratings**

| SIGNIFICANCE RATINGS | LEVEL OF CRITERIA REQUIRED |
|---|---|
| **High (H)** | - High intensity with a regional extent and long-term duration<br>- High intensity with either a regional extent and medium-term duration or a local extent and long-term duration<br>- Medium intensity with a regional extent and long-term duration. |
| **Medium (M)** | - High intensity with a local extent and medium-term duration<br>- High intensity with a regional extent and short-term duration or a site-specific extent and long-term duration<br>- High intensity with either a local extent and short-term duration or a site-specific extent and medium-term duration<br>- Medium intensity with any combination of extent and duration except site specific and short term or regional and long term<br>- Low intensity with a regional extent and long-term duration. |
| **Low (L)** | - High intensity with a site-specific extent and short-term duration<br>- Medium intensity with a site-specific extent and short-term duration<br>- Low intensity with any combination of extent and duration except site specific and short term<br>- Very low intensity with a regional extent and long-term duration. |
| **Very low (VL)** | - Low intensity with a site-specific extent and short-term duration<br>- Very low intensity with any combination of extent and duration except regional and long term. |
| **Neutral (N)** | Zero intensity with any combination of extent and duration |

# 12 ANNEXURE B: APPENDIX 6 CHECKLIST

**Compliance with Appendix 6 of the National Environmental Management Act (NEMA) Environmental Impact Assessment (EIA) Regulations, 2014**

| Requirements of Appendix 6 of the 2014 EIA Regulations | Included in the report in: |
|---|---|
| (1) A specialist report prepared in terms of these Regulations must contain-(a) details of-<br>(i) the specialist who prepared the report; and<br>(ii) the expertise of that specialist to compile a specialist report including a *curriculum vitae*; | Section 1.1, Annexure D |
| (b) a declaration that the specialist is independent in a form as may be specified by the competent authority; | Annexure C |
| (c) an indication of the scope of, and the purpose for which the report was prepared; | Section 1 |
| (cA) an indication of the quality and age of base data used for the specialist report; | Section 1.5 |
| (cB) a description of existing impacts on the site, cumulative impacts of the proposed development and levels of acceptable change; | Section 2 |
| (d) the duration, date and season of the site investigation and the relevance of the season to the outcome of the assessment; | 19 Feb 2022 |
| (e) a description of the methodology adopted in preparing the report or carrying out the specialised process inclusive of equipment and modelling used; | Section 1.3 |
| (f) details of an assessment of the specific identified sensitivity of the site related to the proposed activity or activities and its associated structures and infrastructure, inclusive of a site plan identifying site alternatives; | Section 2 |
| (g) an identification of any areas to be avoided, including buffers; | Not applicable |
| (h) a map superimposing the activity including the associated structures and infrastructure on the environmental sensitivities of the site including areas to be avoided, including buffers; | Section 2 |
| (i) a description of any assumptions made and any uncertainties or gaps in knowledge; | Section 1.4 & 1.5 |
| (j) a description of the findings and potential implications of such findings on the impact of the proposed activity or activities; | Section 7 |
| (k) any mitigation measures for inclusion in the EMPr; | Section 7 |
| (l) any conditions for inclusion in the environmental authorisation; | Section 9 |
| (m) any monitoring requirements for inclusion in the EMPr or environmental authorisation; | Sections 8 & 9 |
| n) a reasoned opinion-<br>(i) whether the proposed activity or portions thereof should be authorised; and<br>(iA) regarding the acceptability of the proposed activity or activities; and<br>(ii) if the opinion is that the proposed activity, activities or portions thereof should be authorised, any avoidance, management and mitigation measures that should be included in the EMPr, and where applicable, the closure plan; | Section 9 |
| (o) a description of any consultation process that was undertaken during the course of preparing the specialist report; | Section 1.3 |
| (p) a summary and copies of any comments received during any consultation process and where applicable all responses thereto; and | Section 6<br>Responses to comments provided as part of the EIA process; included in Comments and Response table prepared by EAP |
| (q) any other information requested by the competent authority. | Not applicable |
| (2) Where a government notice gazetted by the Minister provides for any proposal or minimum information requirement to be applied to a specialist reports, the requirements as indicated in such notice will apply. | Report prepared in accordance with Economic and Social Specialist input Guidelines issued by Department of Environmental Affairs and Development Planning. |

# 13 ANNEXURE C: DECLARATION OF INDEPENDENCE

forestry, fisheries & the environment
Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

Private Bag X447, Pretoria, 0001, Environment House, 473 Steve Biko Road, Pretoria, 0002 Tel: +27 12 399 9000, Fax: +27 86 625 1042

## SPECIALIST DECLARATION FORM – AUGUST 2023

Specialist Declaration form for assessments undertaken for application for authorisation in terms of the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment (EIA) Regulations, 2014, as amended (the Regulations)

### REPORT TITLE

**Socio-Economic Impact Assessment for the proposed Cape Winelands Airport, Fisantekraal**

**Kindly note the following:**

1. This form must always be used for assessment that are in support of applications that must be subjected to Basic Assessment or Scoping & Environmental Impact Reporting, where this Department is the Competent Authority.
2. This form is current as of August 2023. It is the responsibility of the Applicant / Environmental Assessment Practitioner (EAP) to ascertain whether subsequent versions of the form have been published or produced by the Competent Authority. The latest available Departmental templates are available at https://www.dffe.gov.za/documents/forms.
3. An electronic copy of the signed declaration form must be appended to all Draft and Final Reports submitted to the department for consideration.
4. The specialist must be aware of and comply with '*the Procedures for the assessment and minimum criteria for reporting on identified environmental themes in terms of sections 24(5)(a) and (h) and 44 of the act, when applying for environmental authorisation - GN 320/2020)'*, where applicable.

### 1. SPECIALIST INFORMATION

| | |
|---|---|
| Title of Specialist Assessment | Socio-Economic Baseline Report |
| Specialist Company Name | Multi-Purpose Business Solutions CC |
| Specialist Name | Dr Jonathan Zorah Bloom |
| Specialist Identity Number | 6706265061081 |
| Specialist Qualifications: | BCom, HonsBCom, MCom, PhD |
| Professional affiliation/registration: | Not applicable |
| Physical address: | 1479 Milano Place, Val de Vie Estate, Paarl |
| Postal address: | 1479 Val de Vie Estate, Paarl, 7646 |
| Telephone | 021-8800774 |
| Cell phone | 083 299 8523 |
| E-mail | jzbloom@mweb.co.za |

## 2. DECLARATION BY THE SPECIALIST

I, **Jonathan Zorah Bloom**, declare that –

- I act as the independent specialist in this application;
- I am aware of the procedures and requirements for the assessment and minimum criteria for reporting on identified environmental themes in terms of sections 24(5)(a) and (h) and 44 of the National Environmental Management Act (NEMA), 1998, as amended, when applying for environmental authorisation which were promulgated in Government Notice No. 320 of 20 March 2020 (i.e. "the Protocols") and in Government Notice No. 1150 of 30 October 2020.
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing –
    - any decision to be taken with respect to the application by the competent authority; and;
    - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- All the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of Regulation 48 and is punishable in terms of section 24F of the NEMA Act.

**Signature of the Specialist**

Multi-Purpose Business Solutions cc

**Name of Company**

**Date**

# 14 ANNEXURE D: ABBREVIATED CURRICULUM VITAE OF SPECIALIST

## DR. JONATHAN ZORAH BLOOM

**ID NUMBER:** 670626 5061 081

**CURRENT STATUS:** Managing Member, Multi-Purpose Business Solutions cc

**NATIONALITY:** South African Citizen

**DATE OF BIRTH:** 26 June 1967

**LINGUISTIC ABILITIES:** Proficient in English and Afrikaans

**ADDRESS (Office):** 1479 Milano Place, Val de Vie Estate, Paarl, 7646
Telephone: +27-21-880 0774
Mobile: +27-83-299 8523
E-mail: jbloom@mpbs.co.za

### EDUCATION AND QUALIFICATIONS

1985: Matriculation at Paarl Boys' High School, Paarl
1989: BComm, Stellenbosch University
1990: HonsBComm (*cum laude*), Stellenbosch University
1992: MComm (*cum laude*), Stellenbosch University
2001: PhD (Corporate Finance), Stellenbosch University

### EMPLOYMENT HISTORY

**1995 to present**: Managing Member of Multi-Purpose Business Solutions, a niche business advisory and economic development consulting firm with a specific focus on the public and government sector.

**1 January 2008 to 31 July 2013**: Part-time Professor of Corporate Finance, specialising in Real Estate Investment and Financing, Stellenbosch University.

**2003 to April 2019**: Director of Blue Cube Systems (Pty) Ltd and Blue Cube Intellectual Property Company (Pty) Ltd, private sector companies in the ICT industry.

**1 July 2001 to 31 December 2007**: Professor of Corporate Financial Management, specialising in Real Estate Investment and Financing, Stellenbosch University, with a special interest in business development.

**1 July 2000 to 30 June 2001**: Executive Manager of Chartered Alliance (Pty) Ltd, with assigned responsibility for the Business Services Unit within the Lateral Corporate Finance division of Chartered Alliance.

**1 July 1999 to 30 June 2000:** Executive Director of Crusader Systems (Pty) Ltd, charged with establishing a presence for the Business Solutions Group in the financial services industry.

**1 January 1991 to 30 June 1999**: Lecturer in the Department of Business Management, Stellenbosch University.

### RESEARCH AWARDS

- Y-rating from the National Research Foundation (NRF) (2003).
- Rector's award for Excellence in Research (2003), Stellenbosch University.

## BUSINESS AND ADVISORY EXPERTISE

- Public transport (IPTN) business development and implementation
- Project Management
- Public-Private-Partnership facilitation and procurement
- Commercialisation Initiatives
- Real Estate Development Services
- Financial Appraisals and Feasibility Studies
- Social and Economic Impact Assessments
- Customer Surveys
- Local Economic Development Planning with project development focus

## SELECTION OF PROJECT INVOLVEMENTS RELATED TO SOCIO-ECONOMIC IMPACT ANALYSES

- Socio-Economic Impact Assessment for the Klipfontein Solar Farm in the West Coast District for Resource Management Services.
- Socio-Economic Impact Assessment for the proposed Service Station on Erf 7379, Pacaltsdorp, George, for Tshani Consulting.
- Socio-Economic Impact Assessment for the proposed 150 MW LPG Fueled Power Generating Facility, Saldanha Bay, for Legacy Environmental Management Consulting.
- Socio-Economic Impact Assessment for the proposed 100 MW LPG Fueled Power Generating Facility, Saldanha Bay, for Legacy Environmental Management Consulting.
- Socio-Economic Impact Assessment for the proposed 1000 MW Liquified Natural Gas (LNG) to Power Plant; LNG Storage and Regassification Facility, Overhead Electricity Transmission Line, and Associated Infrastructure across various Farm Portions, Saldanha, Western Cape, for Legacy Environmental Management Consulting.
- Socio-Economic Impact Assessment for the proposed Sterrekus Solar Energy Facility & Overhead Power Lines, Blaauwberg, for Legacy Environmental Management Consulting.
- Socio-Economic Impact Assessment for the proposed Mixed Township Development on Portion 1, 8 and 21 of Grootfontein Farm No. 394IR in the City of Tshwane, for GKM Environmental.
- Socio-Economic Impact Assessment for the proposed Carletonville Solar Photovoltaic Plant on Farm 105 Twyfelvlakte, Merafong City, Gauteng, for Legacy Environmental Management Consulting.
- Socio-economic Impact Assessment for the proposed Carpe Diem Solar Photovoltaic Plant on Farms Varkenslaagte 119/5 and Doornfontein 118/27, Merafong City, for Legacy Environmental Management Consulting.
- Socio-Economic Baseline Report for the proposed 50 MW Eland Solar PV Plant and associated Overhead Line, eMakhazeni Municipality, for Legacy Environmental Management Consulting.
- Socio-Economic Impact Assessment for the proposed Cape Winelands Airport, Fisantekraal, for Capital Expenditure Projects (Pty) Ltd.
- Socio-economic Impact Assessment for the proposed Gydo Renewable Energy Project, Witzenberg Municipality, for SPV Renfields.
- Input for Liveable Urban Waterway (LUW) projects, including Property Analysis, Resident Perception Analysis and Socio-economic Analysis of proposed interventions, for Lukhozi Consulting Engineers: Grootboschkloof River Corridor, Keysers River Corridor, Sand and Langevlei Canal Confluence, Spaanschemat & Prinskasteel River Confluence, Westlake River (and Wetland), and Vygekraal River
- Macassar stage gate review: Supplementary analysis in support of feasibility study for the introduction of inundation measures, for Lukhozi Consulting Engineers.
- Socio-economic and Benefit-Cost Analysis for proposed Eerste River Flood Alleviation Project in Macassar; Supplementary Report: Comparative analysis of Scenario 2a and 2a(i), for Lukhozi Consulting Engineers.
- Property Analysis for proposed Eerste River Flood Alleviation Project in Macassar, for Lukhozi Consulting Engineers.
- Property Analysis for the Lourens River Flood Alleviation Phase 2 Project, for Lukhozi Consulting Engineers.

- Socio-economic and –demographic analysis and housing need assessment: Prepared as an input for the development of Erven 7444 and 5321, Macassar, for Lukhozi Consulting Engineers.
- Socio-economic and –demographic analysis and housing need assessment: Prepared as an input for the development of Erf 5113, Gordon's Bay, for Lukhozi Consulting Engineers.
- Socio-economic and –demographic analysis and housing need assessment: Prepared as an input for the Strandfontein Development Framework, for Lukhozi Consulting Engineers.Socio-Economic Impact Assessment for the proposed Klipheuwel Organic Waste Beneficiation and Biogas Facility on Farm Corona RE/480, Paarl, for Resource Management Services.
- Socio-Economic Impact Assessment for the proposed Ebenezer Multi-Purpose Centre and Sports Fields, on a Portion of Farm 727/22, Warburgh Road, Joostenbergvlakte, for Legacy Environmental Management Consulting.
- Socio-economic Impact Assessment for the proposed Cape Winelands Airport, Fisantekraal, for Capital Expenditure Projects (Pty) Ltd.
- Socio-economic Impact Assessment for the proposed Bellpark Mixed-use development, Bellville, for Legacy Environmental Management Consulting.
- Socio-economic Impact Assessment for the proposed Gydo Renewable Energy Project, Witzenberg Municipality, for SPV Renfields.
- Economic Scoping Assessment for the proposed Wesco Waste Management Facility (WMF) on the Farm Brakkefontein 32, Cape Town, for SLR Consulting (South Africa) (Pty) Ltd.
- Socio-economic Impact Assessment for the proposed Western Cape Wind Energy Facility, located in the Overberg REDZ, Western Cape Province, for Terramanzi Group.
- Socio-Economic Impact Assessment for the Klipfontein Solar Farm in the West Coast District for Resource Management Services.
- Socio-Economic Impact Assessment for the Stellenbosch Bridge development in Klapmuts, Stellenbosch, for Stellenbosch Bridge Properties (Pty) Ltd.
- Socio-Economic Impact Assessment for the proposed Lucullus Gardens Development, Joostenbergvlakte for Urban Land Joostenbergvlak (Pty) Ltd.
- Socio-economic Impact Statement for the additional housing on the Uitgezocht development in Paarl. Terramanzi Group commissioned the project.
- Benefit-Cost Value Assessment and socio-economic implications associated with the Picardi Residential Development, Paarl, for Arun Projects (Pty) Ltd.
- Socio-Economic Impact Assessment for the Darwin Road housing development, Joostenbergvlakte, for Lukhozi Consulting Engineers.
- Socio-Economic Impact Assessment for the Longlands Manor development in Vlottenburg, Stellenbosch for Legacy Environmental Consulting.
- Socio-Economic Impact Assessment for the proposed expansion of the Afro Fishing facility in the Port of Mossel Bay for Afro Fishing (Pty) Ltd.
- Financial viability, cost-benefit and market analysis for a proposed Mediclinic in the George Area. The assignment adopted a strategic approach to packaging a project that had transport-related issues, location considerations and required spatial alignment (2018-2019).
- Economic impact assessment and financial modelling for the development of Waterfront in the Port of Mossel Bay for Transnet National Ports Authority (TNPA)
- Socio-Economic Impact Assessment for Substantive Amendment Application for the Levendal Development in Southern Paarl for Val de Vie Investments (Pty) Ltd.
- Socio-Economic Impact Assessment for the River Farm development in Paarl for Val de Vie Developments (Pty) Ltd.
- Socio-Economic Impact Statement for the proposed Paarl Valleij Estate in Northern Paarl for Paarl Valleij Developments (Pty) Ltd.
- Socio-Economic Impact Assessment for the proposed Gourits Abalone Farm, in association with PHS Consulting.
- Socio-economic Impact Assessment for the proposed Vlottenburg Village development on Vredenheim Farm, Stellenbosch, in association with Withers Environmental Consultants.
- Economic and financial analysis, strategy formulation input for the preparation of an Urban Development Strategy for Stellenbosch Municipal area. The assignment entailed the development of a value surplus or deficit model to assess the

impact of development decisions on the socio-economic fabric of the Stellenbosch economy, communities and the Municipality from an infrastructure and operational income and expense perspective. Rode and Associates commissioned the assignment.

- The development and application of a value assessment model for the Klapmuts Special Development Area (SDA) (Stellenbosch Municipality) to assess the investment, economic and funds flow impact for a development scenario. Assignment also included a property valuation analysis and the preparation of a community investment structure supported by a SPV. Beal Africa commissioned the assignment.
- Financial Economic analysis and preparation of an Investment Decision-making Platform as an input for the George Settlement Restructuring Strategy. RoyalHaskoning DHV commissioned the assignment.
- Socio-economic impact assessment for the development of a proposed Tungsten Mining Project in Piketberg in terms of the NEMA regulations and Mineral Petroleum and Resources Act.
- Socio-Economic Impact Assessment for the Mamre Wind Energy Facility in the City of Cape Town Metropolitan Area for Mulilo Mamre Wind Energy (Pty) Ltd.
- Social and Labour Plan for the application of a Mining Right for a proposed Tungsten Project in Piketberg in terms of the Mineral Petroleum and Resources Act.
- Economic impact assessment of the construction phase for the redevelopment of the Somerset Precinct in the Cape Town area for Department of Public Works, Western Cape in association with Rode and Associates.
- Socio-economic impact assessment for the development of two mariculture sites off the coast of the Eastern Cape for the Department of Environmental Affairs and Development Planning in association with Cape Environmental Practitioners, George.
- Economic Impact Assessment and Social Impact Assessment for the Parklands development in Saldanha Bay on the West Coast for Parklands Township Developers (Pty) Ltd.
- Socio-Economic Impact Assessment for development on a portion of the farm Constantia Uitsig and expansion of the tourism and hospitality facilities on the Farm.
- Socio-Economic Impact Assessment for the development of a residential estate in Melkbosstrand, Cape Town, for Nuplan Africa.
- Economic Impact Assessment and Social Impact Assessment with a social development focus for the Bella Riva development in the Durbanville region of the Cape Town Metropolitan Area of the Western Cape.
- Socio-Economic Impact Assessment for the development of two Wind Energy Facilities (Goereesoe and Kluitjieskraal) near Swellendam for Inca Energy (Pty) Ltd.
- Socio-Economic Impact Assessment for the proposed development of the Clover Wind and Solar Energy facility near Darling, Swartland Municipal area.
- Socio-Economic Impact Assessment for the proposed development of the Storm Photovoltaic Plant, Saldanha Bay, for Midnight Storm Investments 184 (Pty) Ltd.
- Socio-Economic Impact Assessment for the proposed development of Organic Recycling Processing Facility on Portion 2 of the Farm Olyphantsfontein No. 935, Malmesbury, for Soil and More Reliance.
- Socio-Economic Impact Assessment for the proposed development of the Dysselsdorp RE-Power PV Plant, near Oudtshoorn, Western Cape, for Dysselsdorp RE-Power (Pty) Ltd.
- Socio-Economic Baseline Assessment for the proposed Schaap Kraal Philippi Horticultural Area (PHA), Cape Town, for MSP Developments (Pty) Ltd.
- Social Impact Assessment with a social development focus for the Bosbokkamp Residential development in Stilbaai, Western Cape for Asla Devco (Pty) Ltd.
- Economic Impact Assessment and Social Impact Assessment for an upmarket residential estate in Paarl for Rhebokskloof Properties (Pty) Ltd.
- Socio-Economic Assessment for the proposed development of a sports facility for the Paarl Boys' High School. The School commissioned the assignment.
- Socio-economic Impact Assessment for the proposed Hoek van de Berg Marine and Coastal Reserve, Overstrand, for Saddle Path Properties 79 (Pty) Ltd.
- Socio-Economic Impact Assessment for the establishment of a Regional landfill site in the Worcester area, Western Cape Province, for Jan Palm Consulting Engineers.

- Socio-Economic Impact Assessment for a mixed-use development on the Vredenheim Farm in Stellenbosch for Withers Environmental Consultants (ongoing).
- Socio-Economic Impact Assessment for the establishment of an Organic Recycling Facility on Farm Corona No. 480, Paarl, Western Cape, for Resource Management Services.
- Socio-Economic Impact Assessment for the establishment of the Frankendale Industrial Park north of Cape Town for Kohler Bricks (Pty) Ltd.
- Socio-Economic Impact Assessment for the development of a mixed-use development around the Brandwag Dam in Worcester, Western Cape for Tresso Trading 915 (Pty) Ltd (ongoing).
- Economic impact assessment for the development of a Sun International Resort on Retosa Island, Singapore. The assignment was commissioned jointly by International Real Estate Appraisals and Sun International South Africa.
- Economic impact assessment for the development of a themed attraction in the Ezulwini Valley, Swaziland, for KPMG (SA).
- Socio-economic impact analysis of hotel developments on the local and regional communities in the Helderberg Basin, Western Cape, for Quaypower Properties Plc, United Kingdom.
- Socio-economic impact assessment for the development of an Africa Theme Park and Resort in Gauteng for Stewart Scott International in association with KPMG (SA).
- Economic impact assessment for the development of the Salama Waterfront in Dar es Salaam, Tanzania, for Atos-KPMG and International Real Estate Appraisals.
- Economic Impact Assessment and Social Impact Assessment for the establishment of Waverenskroon Country Estate in Tulbagh for L'eritage Nouveau Development Company (Pty) Ltd.
- Economic Impact Assessment and Social Impact Assessment for the establishment of Dalskroon Retirement Village in Tulbagh for Midnight Masquerade 267 (Pty) Ltd.
- Economic Impact Assessment for the establishment of residential development at Doringbaai for Doringbaai Hoogtes Eiendomsbelegging (Edms) Bpk.
- Economic Impact Statement for the establishment of an Apartment Complex at Hawston near Hermanus in the Overstrand region of the Western Cape for Portland Eiendoms Ontwikkeling (Edms) Bpk.
- Economic Impact Assessment and Social Impact Assessment for the establishment of the Salmonsvlei-Wes Residential estate in Paarl for Keynote Trading and Investments 50 (Pty) Ltd.
- Economic Impact Assessment and Social Impact Assessment for the development of the proposed Middelberg Eco- and Country Estate in Stanford, Overstrand for the Wright Approach Consultancy of Hermanus.
- Economic Impact Assessment and Social Impact Assessment for the development of the Compagnes Drift Residential Estate in Botrivier, Theewaterskloof, for the Wright Approach Consultancy.
- Economic Impact Assessment and Social Impact Assessment for the development of a hotel and apartment complex at Gansbaai (Danger Point) in the Overstrand region of the Western Cape for Great White Limited, a UK-based development firm.
- Economic Impact Assessment and Social Impact Assessment for the multi-million Rand Destiny Africa development in George, Southern Cape, for Kuriakos Design & Management Consultancy.
- Economic Impact Assessment and Social Impact Assessment for the Groenfontein mixed-use Development in Klapmuts, Stellenbosch, for Frantius Property Investments (Pty) Ltd.
- An economic impact assessment with a social development focus for a mix of components comprising agriculture estate units, a lodge with conference facility, a farm stall, wine cellar and restaurant known as the Stellenbosch Wine and Country Estate in the Stellenbosch area. Stellenbosch Wine and Country (Pty) Ltd commissioned the study.
- Economic impact assessment for residential development, boutique lodge and retail village in the Sundays River area of the Eastern Cape for Premier Residential Development (Pty) Ltd.
- Economic impact assessment for the Statue of Freedom multi-purpose development in Nelson Mandela Bay Metropolitan Municipality for the Nelson Mandela Metropolitan Municipality in association with Atos-KPMG.
- Socio-Economic Impact Assessment for a lifestyle resort in the Somerset East area of the Eastern Cape Midlands for the Blue Crane Development Agency.
- Socio-Economic Impact Assessment for the development of a golf estate and hotel (primary application) at Stellenbosch for Paradyskloof Golf Estates (Pty) Ltd. The assignment entails the evaluation of a primary application and two alternatives, one being agriculture (vineyards and olive orchards).

- Socio-Economic Impact Assessment for the development of a golf links and residential estate at L'Agulhas for Prop Access (Pty) Ltd (a Gauteng-based empowerment group).
- Socio-Economic Impact Assessment for a commercial shopping centre development in Hout Bay, Western Cape, for the Alliance Property Group.
- Economic Impact Assessment and Social Impact Assessment with a social development focus for a Shopping centre development in the Gordon's Bay region of the Cape Town Metropolitan Area of the Western Cape.
- Socio-Economic Impact Assessment for the development of residential development in Vleesbaai, on the Southern Cape Coast, for Amanzi Moya Developments (Pty) Ltd.