

Socio- Economic Impact Assessment of

**Proposed Jacobuskraal Service Station,  
At R27 and R315 Intersection**

June 2022

Prepared by





# **Socio- Economic Impact Assessment Report: Proposed Jacobuskraal Service Station, at R27 and R315 Intersection**

## **Proposed Development**

Approximately ± 9.8ha of Portion 7 of Farm Jacobuskraal No 554 and 10,369ha in extent will be rezoned from being agricultural land to operate a service station, tourism market and business premise at the R27 and R315 intersection, ±6km east of Yzerfontein.

The proposed service station precinct (±2.1ha) includes service station islands, a forecourt, a convenience store, a restaurant and wash bays. Two more precincts provide for tourism facilities: one provides for the container market with stalls and covered areas with seating (±0.6ha), whilst the other precinct provides for a business premise (±2.2ha) being home to retail outlets selling tyres and batteries, holiday and fishing gear and related retail.

The by-passing traffic on the R27 and accessing Yzerfontein via the R315 will frequent the proposed Jacobuskraal Service Station and business premise. The service station and business premise should create as many as 58 jobs during construction and 222 jobs during operations.

Leap Sustainable Development was appointed by Mr Werner Ackerman, representative of JetVest 1157 (Pty) Ltd, owner of Remainder Portion 7 of Farm Jacobuskraal No 554, Malmesbury Division) to compile a socio-economic impact assessment for the proposed Service Station and business premises at the R27 & R315 intersection. Enviro EAP Environmental Consultants was appointed by JetVest 1157 (Pty) Ltd to undertake an Environmental Impact Assessment.

## **Impacts addressing community needs**

Of note are the following impacts of the proposed service station and business premise development being supportive road infrastructure facilities:

- Contribute to slow growing economy as economic opportunities unlocked by road infrastructure are taken up;
- enhance mobility and road safety as it offers motorist an opportunity to rest and to slow down more likely at the intersection;
- Promote entrepreneurship and small businesses.

- Generate jobs at relative close proximity and enhance related skills development;
- Create a gateway to coast and to the rural hinterland and recreate sense of place at intersection.
- Keep the sense of place of Yzerfontein as holiday settlement in-tact whilst establishing much needed zoned land outside of the settlement.

These impacts cause changes to the social and economic status of the receiving community. Key insights from interviews and needs expressed in Swartland IDP, 2017 – 2022, confirmed the social and economic status of the broader Swartland community. The table below presents the social and economic needs that the proposed service station and business premise development is likely to address.

<b>Social and economic status and needs</b>	<b>Significant Impacts of the proposed service station and business premise development</b>
Economic growth is slow.	Diversification of Local Economy and Increased Local Sales as economic opportunity created by Road infrastructure is utilized.
Unemployment is high and keeps rising.	Jobs generated contribute to the lowering of the rising unemployment rate. Jobs at the intersection are closer to workforce living in Darling than jobs in Yzerfontein. Jobs are more diverse compared to mainly domestic jobs offered in Yzerfontein.
Financial Sustainability of service delivery vs strong dependency on grants.	Jobs generated will decrease household dependency on grants and enable indigent households not being able to pay for municipal services to do so. Promote entrepreneurship and small businesses.
Quality of the living environment including municipal services, social spaces – some vibrant and some peaceful - and recreational facilities.	Contribute to the safety of the intersection as motorists are likely to slow down. Create a vibrant social space. Keep Yzerfontein’s sense of place as holiday and west coast seaside settlement as business opportunities are developed removed from settlement itself.
Housing and ownership including backyarders whom	Indirectly, as jobs generated will decrease household dependency on grants and enable households to move out of back yard structures.

constitute a substantive segment of the housing waiting list.	
Cultural and heritage resources need protection to keep tourism growing: Lime kilns and fynbos (Renoster - and Strandveld).	Indirectly, could contribute to create awareness. Create a gateway to coast and to rural hinterland at intersection and enhance sense of place.
Affordable opportunities to access Further Education and skills development that result in employment.	Proposed skills fund for working age people and resultant improved skills enlarge and deepen region's skills pool:
Rehabilitation support / family relief/ homeless centre–Supporting the working age population staying at home caring for family members.	No impact on these community needs
Decreased maternal and child health amongst women and children:	Indirectly as households' income improves.
Safety and social well-being as the number of street kids and - people increases.	Indirectly as households' income improve.

The alternative to establish the service station and business premise has the most benefits for the receiving community and, consequently, the lowest overall costs compared to conservation or farming or the No Go alternatives. The No Go alternative withholds social and economic opportunities and resultant benefits from the receiving community. Creating employment and promoting entrepreneurship should contribute to improve slow economic growth.

Management measures proposed to mitigate these consequences includes

- Develop urban guidelines to direct sense of place of gateway created by proposed development.
- Establish a fund and develop the necessary principles and framework to govern such a fund to benefit people of working age where to all businesses operating on the Jacobuskraal premise and any other willing contributors should contribute
-

## Receiving Community

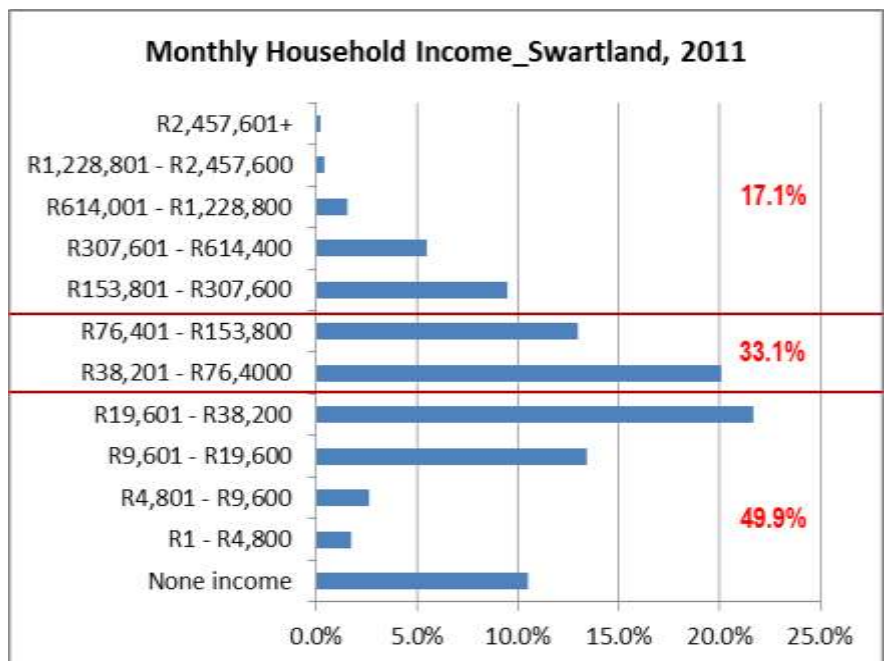
In 2020, the Swartland population of 147 225 people represented 39 929 households with an average household size of 3.5 people. Yzerfontein and Darling have 1 839 and 1 682 residents respectively totaling 3 521 people and represents 2.4% of the Swartland population.

Since the 2016 Community Survey, the average annual growth rate of the Swartland population is calculated as 3.3%. The population is fairly equally distributed in terms of gender with 50.4% females and 49.6% males. Of note are the **28.5% female-headed households**, whilst 39.2% of households have partners who are married or live as married partners. Thus, **60% of households are single parents** in one way or another (never married, widowed, separated or divorced). The population of the Swartland is relatively young as the Youth (0-14) represents 25%, the **working-age population (15 – 64) represents 69.1%** and the Elderly (65+) 5.9% of the total population.

According to StatsSA, 2011 half (49.8% or 14 603) of the households within the municipal area earned less than R3 500 per month and as indigent households, qualify for subsidized housing and free civil and electrical services provision.

More than half (52%) of the working-age (15 -64) Swartland population are employed, 39% are

not economically active while 8% are unemployed and 2% are discouraged work-seekers.



In 2011 the unemployment rate was 8.9% (StatsSA and 10.4% in 2017) whilst the youth unemployment rate was 17.9%. The proposed service station and business premise should increase of employment creation in the Tertiary Sector (retail) which should greatly benefit the 15.2% skilled and 34.6% semi-skilled

workers whilst the low-skilled workers will benefit to a lesser extent. Training and development could enhance the benefits for the low-skilled workers.

The Swartland Municipal area has the second largest economy in the WCD, with a GDP of R7.4 Billion in 2016 with Malmesbury comprising the economic hub. More than three quarters (77.5%) of the contribution to Swartland's economy comes from the five main sectors that are manufacturing (R1 689.0 million or 22.9 per cent), wholesale and retail, catering and accommodation (R1 289.2 million or 17.5 per cent) and agriculture, forestry and fishing (R1 173.4 million or 15.9 per cent in 2016). Government services are the fourth biggest contributor (R851.0 million or 11.5 per cent) whilst finance, insurance, real estate and business services (R704.7 million or 9.6 per cent) follows as fifth biggest contributor.

In Swartland, basic services are accessed by most of Swartland's residents (26 068 or 91%) who reside in formal dwellings:

- Water (piped water inside the dwelling): 80.6%.
- Energy / Electricity for lighting: 97.8%
- Sanitation: Flush toilet connect to sewerage: 77.3%
- Weekly refuse removal: 76.1%
- Housing (formal dwelling): 90.9%

Whilst **43.6%** and **8.6%** of **households** respectively **own** and **pay off** their homes, **28% of households rent** their homes.

Swartland has a Gini coefficient of 0.725, presenting a severe income gap and income inequality within the Swartland community. Though the education level in Swartland is relatively low with it recording the highest Matric Pass Rate in the West Coast District the drop-out rate is the highest confirming the semi-skilled state of the population and high youth unemployment rate of the Swartland Community.

## **Approach and Limitations**

This socio-economic assessment was limited, as the development alternatives assessed is the preferred alternative (and being limited in location and design) and the no-go alternative as the only alternatives. Other limitations are the calculation of the number of jobs created is limited to direct jobs benefitting the immediate community, whilst the contributions (or interviews) are not representative but indicative.

## Policy and Planning Context

An analysis of the compatibility of the proposed development with the relevant sector policies and development plans concluded that the proposed development is compatible with the significant National and Provincial plans and policies such as the PSDF and NDP (2012).

Being located at the intersection of the R27 and R315 and not having a major impact on the natural and agricultural (conservation) environment, it promotes sustainable use of infrastructure resources to establish supportive road infrastructure facilities and hence complies with the NDP, OneCape and the Western Cape Infrastructure Framework to give effect to the PSDF. The proposed service station and business premise development enhances the ultimate aim of the PSDF to establish well **performing, livable and sustainable** settlements and **regions** as it enhances the performance of the region (maximizing the opportunities infrastructure provides and accumulating revenue from outside the region) and contribute to livable rural environment. Due to the proposed development complying with different policies, it will positively impact the economic capabilities of Swartland by increasing employment and skills development opportunities and by attracting a variety of economic activities and investment.

## Summary of Impacts during the Construction and Operational Phase

The impacts during the Construction and Operational Phases are categorized as cumulative, direct, indirect or residual of nature and a short outline of the identified impacts follows below.

- **Cumulative Impacts**
- The cumulative impacts associated with the proposed service station and business premise development is largely of a visual and economic nature.
- The impact on the surroundings is a changed **sense of place** that is positive as a vibrant supportive transition environment is created. Despite the presence of other (electricity pylons, wind turbines etc.) and similar (West Coast Padstal) infrastructure, the lack of absorption capacity caused the added impact of the proposed development to be cumulative and to be described as direct, additive and permanent.

- Urban design and landscaping guidelines have to balance provision of business opportunities to protect the rural regional landscape and cultural, heritage and natural resources and indirectly the growth of tourism and particularly local tourism. Urban design management and landscaping plans have to be implemented and maintained.
- The proposed development keep the Keep Yzerfontein's sense of place as holiday and west coast seaside settlement as business opportunities develop removed from settlement itself. Yet the proposed development is limited to the intersection precinct and corridor as defined by the Swartland SDF, 2019 - 2022
- The associated impact on the **economy of Yzerfontein, Darling and Swartland as a region** is of medium significance and positive.
- Business and purchases from passing-by motorist, now stopping at the intersection, will bring revenue from other municipal areas and provinces into the Swartland region. Accessing the target market beyond the inhabitants of the Swartland will substantially add to driving growth.
- The tourism market will afford many entrepreneurs and small business an opportunity to be operated on a well exposed site.
- The business opportunities taken up and being operated, ensure work for the unemployed in Darling and ensure Yzerfontein can keep to be mainly a residential settlement.
- Given the growth of holiday settlements such as Yzerfontein, driven in-tact infrastructure in the Swartland and its proximity to Cape Town, the cumulative impacts are described as direct and additive.
- **Direct and Indirect Impacts**

Identified impacts are categorized As Direct, Indirect and Residual.

**Direct impacts** occur as a direct result of an action at the same time **and** location as the action. **Indirect impacts** are reasonably foreseeable **and** occur as a result of an action, but occur later or are removed from the action location. **Residual Impacts** are secondary results to the main purpose of the project and

impacts on the surroundings and community. These impacts will remain even after the implementation of mitigation measures.

Overall, the construction and operational phase brings about some direct and positive impacts, direct and negative impacts and indirect positive and negative impacts.

#### Direct and Positive Impacts during the Construction and Operational

*Table 1: A summary of direct and positive impacts, Construction Phase*

	Impact (s) & Environment	Experienced as	Population Unit	Construction		Operational	
				Rating	Mitigated	Rating	Mitigated
A	Employment opportunities increase, Econ.	Working age people find employment temporarily and permanently	Individual, family and community	Low positive	Low positive	High positive	High positive
B	Increased Income, Social & Economic	Working age persons find employment and contribute to household income.	Family	Low Positive	No Mitigation	High Positive	No Mitigation
C	Increased skills levels of working age population and youth in particular, Econ.	Skills base extend People find employment temporarily and permanently as their employability improve	Individual and family	Low Positive	Low Positive	Medium Positive	High Positive
D	Growth of local economy and Increased Sales and GGP, Econ.	Increased sales and income and spending	Community	Low Positive	No Mitigation	Medium Positive	No Mitigation

*Table 2: A summary of direct and positive impacts, Operational Phase*

	Impact (s) & Environment	Experienced as	Population Unit	Rating	Mitigated
E	Broadened municipal tax base, Economic	Well maintained rural environment	Family and community	Medium positive	No mitigation
F	Increased SMME participation, Economic	Increased and sustainable economic participation by individual small business owners	Community	Medium positive	Medium positive
G	Change in sense of place, Social	A permanent change of the rural landscape resulting in a vibrant supportive transition environment. (on the doorstep of the IDZ)	Family	Medium Positive	High Positive

Direct and Negative Impacts during the Construction and Operational Phase are tabulated below:

Table 3: A summary of direct and negative impacts, Construction Phase

	Impact (s) & Environment	Experienced as	Population Unit	Construction		Operational	
				Rating	Mitigated	Rating	Mitigated
E	Increased Use of Social Amenities & Service, Social & Economic	Diminishing social amenity and services capacity (Construction), Additional pressure on bulk services provided	Community, family and Individual	Low negative	Low Negative (Neutral)	Low negative	Low negative
F	Increased motorized and non-motorized traffic levels, Economic	Non-motorized and slow moving motorized traffic levels increase. Decreased road safety	Individual & Community	Low negative	Low negative	Low negative	No Mitigation

Table 4: A summary of direct and negative impacts, Construction (C) or Operational (O) Phase

	Impact (s) & Environmental	Experienced as	C/O	Population Unit	Rating	Mitigated
G	Increased noise & dust levels, Social (Health)	Living conditions may turn harsh with increased dust and noise	C	Individuals & Family	Low negative	Low Negative (Neutral)
H	Change in sense of place, Social	Living environment change	C	Family	Low negative	Low negative
J	Loss of Agricultural Potential and Land, Economic	Decline in food security	O	Community	Low Negative	No mitigation
K	Oil and fuel leaks and Spills, Environmental	Environmental degradation	O	Community	Low negative	No mitigation

Indirect Impacts during the Construction and Operational Phase are tabulated below:

Table 5: A summary of indirect impacts, Construction Phase

	Impact (s) & Environment	Experienced as	Population Unit	Rating	Mitigated
J	Community stability & homogeneousness, Social	Influx of people (employed and unemployed) permanently or semi-permanently to work or in anticipation to access employment	Individual, Family & Community	Low Negative	No Mitigation
K	Crime and Offences, Social	Prevalence of criminal incidence experienced	Individuals, Family & Community	Low Negative	Low Negative

Table 6: A summary of indirect impacts, Operational Phase

	Impact (s) & Environment	Experienced as	Population Unit	Rating	Mitigated
L	Increased levels of education and skills, Social & Economic	Influx of skilled people to work encourage youth to obtain an education; Enhance personal choices in world of work as people gain qualifications and experience Discourage school drop-outs.	Individual and Family	Medium Positive	High Positive

Residual Impacts during the Construction and Operational Phase are tabulated below:

Table 7: A summary of residual impacts, Construction Phase

	<b>Impact (s) &amp; Environment</b>	<b>Experienced as</b>	<b>Population Unit</b>	<b>Rating</b>	<b>Mitigated</b>
L	Youth's self-esteem develop, Social	Young people find employment temporarily and permanently	Individual, family and community	Low Positive	Medium Positive
M	Self-esteem and image of youth and change, Social	Young people find employment temporarily and permanently	Individual, family and community	Medium Positive	No mitigation

Table 8: A summary of residual impacts, Operational Phase

	<b>Impact (s) &amp; Environment</b>	<b>Experienced as</b>	<b>Population Unit</b>	<b>Rating</b>	<b>Mitigated</b>
N	Employment equity of vulnerable groups, Social	Women and Youth find employment temporarily and permanently and family structure may change.	Community and Individuals	Medium positive	Medium positive (Perceived High positive)

### Concluding Recommendation

The benefits of the proposed service station and business premise development are significant whilst the costs are limited. Having a diversified and the second largest economy within the West Coast yet experiencing slow economic growth the Swartland does not escape poverty as:

- a Gini coefficient of 0.578 in 2017, presenting a severe income gap and income inequality within the Swartland community. However, the NDP sets a target of 0.6 to be achieved in 2030, which represents a more severe income gap than that of the Swartland.
- The low skills levels of the workforce (50.1% low-skilled, 34.6% semi-skilled and 15.2% skilled) and a matric drop-out rate of 20.2 in 2017 confirms the semi-skilled educational level and high youth unemployment rate of the Swartland Community.

The benefits resultant from the impacts:

- Contributes to slow growing economy as economic opportunities unlocked by road infrastructure are taken up;
- enhances mobility and road safety as it offers motorist an opportunity to rest and to slow down more likely at the intersection;
- Promotes entrepreneurship and small businesses.

- Generates jobs at relative close proximity and enhance related skills development;
- Creates a gateway to coast and to the rural hinterland and recreate sense of place at intersection.
- Keep the sense of place of Yzerfontein as holiday settlement in-tact whilst establishing much needed zoned land outside of the settlement.

Consequently the following two mitigation measures proposed should be adhere to

- Develop urban guidelines to direct sense of place of gateway created by proposed development.
- Establish a fund and develop the necessary principles and framework to govern such a fund to benefit people of working age where to all businesses operating on the Jacobuskraal premise and any other willing contributors should contribute

The benefits confirm the need and desirability of the proposed development. The development is recommended from a socio-economic perspective.

# Socio- Economic Impact Assessment Report: Proposed Jacobuskraal Service Station, at R27 and R315 Intersection

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# environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA


## DETAILS OF SPECIALIST AND DECLARATION OF INTEREST

File Reference Number:  
NEAS Reference

(For official use only)
DEAT/EIA/

Application for authorization in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2010

### PROJECT TITLE

**Proposed Jacobuskraal Service Station, at R27 and R315 Intersection**

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The specialist appointed in terms of the Regulations\_

I, Anelia**Coetzee**, declare that

I act as the independent specialist in this application

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 71 and is punishable in terms



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Signature of the specialist:

**Leap Sustainable Development cc (BEE Level Four Contributor)**

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Name of company (if applicable):

Date: **11 April 2022**

## Socio-Economic Impact Assessment Report:

### Proposed Jacobuskraal Service Station, at R27 and R315 Intersection

#### Section 1: Project Overview & Assessment Scope

##### 1.1 Introduction

Leap Sustainable Development was appointed by Mr Werner Ackerman, representative of JetVest 1157 (Pty) Ltd, owner of Remainder Portion 7 of Farm Jacobuskraal No 554, Malmesbury Division) to compile a socio-economic impact assessment for the proposed Service Station and business premises at the R27 & R315 intersection. Enviro EAP Environmental Consultants was appointed by JetVest 1157 (Pty) Ltd to undertake an Environmental Impact Assessment.

A socio-economic impact assessment is required given the scope of the development of



Figure 1: Locality of Remainder of Portion 7 of Farm Jacobuskraal no 554, Malmesbury Division

##### 1.2 Description of Proposed Preferred Development Alternative

The proposed Jacobuskraal Service Station is ideally located at the point where a main freight route and connector road intersects: the R27 abutting Portion 7 of Farm Jacobuskraal No 554 on its eastern boundary and the R315 road its southern boundary. Portion 7 of Farm Jacobuskraal No 554 is located along the R27 and connects the Industrial Development Zone between Saldanha Bay and Vredenburg with Cape Town. Portion 7 of Farm Jacobuskraal No 554 is 10,369ha in extent and is Agricultural land (Agricultural Zone 1) owned by JetVest 1157 (Pty) Ltd as per T16523/2021. Approximately  $\pm$  9.8ha will be rezoned and the remainder of the farm will stay agriculture. The site is vacant.

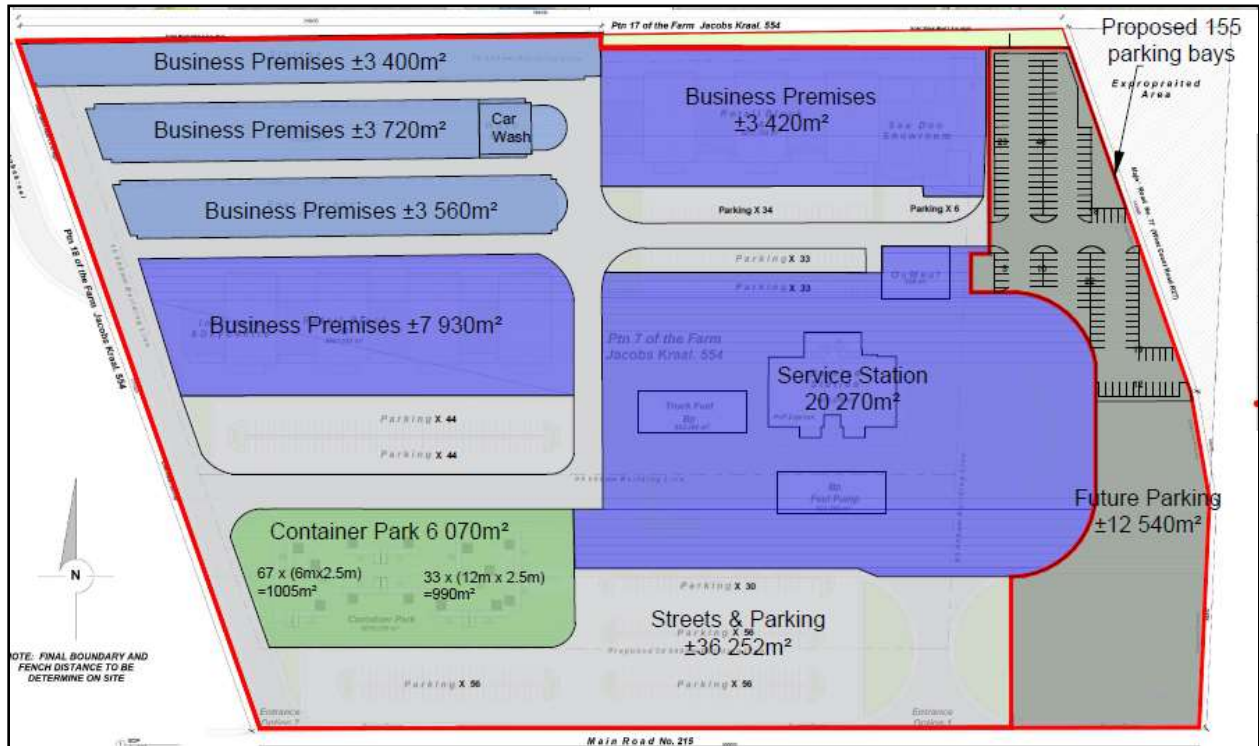


Figure 1: Proposed Jacobuskraal Service Station Development

The proposed service station precinct (±2.1ha) includes the service station islands, forecourt, convenience store, a restaurant and Wash bays. Two more precincts provide for tourism facilities: one provides for the container market with stalls and covered areas with seating (±0.6ha), whilst the other precinct provides for business premises (±2.2ha) such as tyre shops, holiday and fishing gear and related retail.

To establish the proposed development land use changes will include:

- i. Rezoning a portion  $\pm 4.3$ ha from Agricultural Zone 3 to Business Zone 3 to operate a service station including a washing bay as primary rights  $\pm 2.1$ ha, and
- ii. Obtaining Consent Use, of  $\pm 2.2$ ha on business zone 3 in order to operate a shop and business premises.
- iii. Obtaining Consent Use, of  $\pm 0.6$ ha on Agriculture Zone 3 in order to operate a tourist facility
- iv. Rezoning a portion of  $\pm 3.6$ ha from Agriculture Zone 1 or 3 to Transport Zone 2 to accommodate streets and parking.

### **1.3 Purpose of the Assessment**

The purpose of this report is to complete a Socio-Economic Impact Assessment analyses (predicting, evaluating and reflecting) that also considers the intended and unintended consequences on the human environment of planned interventions (policies, programmes, plans and projects). As well as, any social change processes invoked by those interventions so as to bring about a more sustainable and equitable biophysical and human environment (Vanclay, 2002).

At a broad level, the impacts on the overall welfare of a community should be investigated considering the efficiency, equity and sustainability of the project as well as the trade-offs (or 'opportunity cost') the various alternatives will yield.

### **1.4 Approach**

The approach to the study is directed by the requirements for Environmental Impact Assessments and the Guidelines for Social Impact Assessments (SIA) and Economic Impact Assessments commissioned by DEA&DP i.e.:

- Review of project information and preliminary social statement as part of other reports, which included
  - Collection and synthesis of baseline socio-economic data on the area;
  - Identification of project results and key social variables and the impact of the project results on the receiving society and economy, as per Guidelines for Social Impacts;
- Verification of some results, social variables and impacts through communication with the developer, specialists and key project team members, as per bibliography;
- Ascertain significance of impacts through a round of interviews and correspondence with a limited number of community members, specialists and key project team members.
- Rate the confirmed impacts as per recommended scale (Addendum A) informed by the results of the interviews with various parties as outlined above.
- Recommending management measures to mitigate the impacts of the proposed development.
- Conclusion of Social Impact Assessment (SIA) and recommendations

## 1.5 Assumptions & Limitations

The following social risks and level thereof, are inherent to the proposed development.

Table 9: *Inherent Risk Overview Matrix\_ Jacobuskraal Service Station*

Risks	Extend	Duration	Intensity	Probability	Confidence:	Element	Proposed Service station
Inequality	Local	Perm	Low	Unl	Indir, Unl	Employment Opportunities to operate a business from premise.	benefits low, middle and high-income groups overall; May not be accessible to locals (lower income groups) to operate a business.
Social Fabric	Local	Perm	Low	Like	Indir, Like	Scale (extent), Construction phase Labour force	May indirectly contribute to change of social fabric of community.
Livelihoods	Local	Perm	Med	Like	Dir, Like	Income generation opportunity (ies)	Does not take away; may create?
Vulnerable communities	Local	Perm	Low	Unl	Indir, Unlik	Vulnerable community members (and absence of concentration of): women, elderly, children, dependents;	Does not directly impact
Critical resources	Local	Perm	Low	Lik	Dir, Like	Water, energy and clean air:	Reuse water, overall operates according to national and international standards and, thus limited impact.
Economic vulnerability	Local	Perm	Low	Unl	Dir, Like	Population size, remoteness, merchandise export concentration, share of agriculture in GDP homelessness (natural disasters) instability of agricultural production, instability of exports of goods and services, share of population living below coastal zone (EVI) and (Human Asset Index): - Health (<5 & maternal mortality rate, stunting) and	No change Remote but highly accessible More readily available and accessible  No direct impact None (no disasters)  Stable, no direct impact  Stable and improved stability  No impact  Indirectly, improved per capita

						- Education (gross secondary school enrolment & gender parity, adult literacy)	income improve health Indirectly, improved per capita income improve health
Sustainability	Local	Perm	Low	Unl	Dir, Like	Balance between social, economic and natural; Able to meet present needs without negatively impacting on future	Contributes to economic development and meeting present needs, whilst managing future impacts
Extend: Local or Regional, Duration: Short, Medium and Long term and Perm – Permanent, Intensity: Low, Med – Medium and High. Probability: Likely, Perhaps, Unl – Unlikely, Confidence: Con – Confidence, Directly or Indirectly							

The above matrix aids to avoid risk and being cautious. The impacts considered, and those likely to have an impact are local, permanent and low in intensity and whilst the balance is unlikely to have an effect. Where the impacts are likely, mitigation measures should be applied. The application of such measures mitigates the risk to become very low and limited to Yzerfontein (7km directly from the proposed site) and Darling (13km).

The following assumptions, gaps in current knowledge and limitations shaped the impact assessment:

#### Assumptions

This socio-economic impact assumes that:

- a) as convenience (accessibility to obtain needed fuel and ablution facilities) is the driver to operate a service station limiting the land uses required.
- b) the event of a complete demolition phase is unlikely and has not been assessed.

#### Gaps in current knowledge areas

- a. Transport and business uses can include a variety of activities which could have some environmental impacts related to contamination or risks as these facilities handle and trade produce that can cause pollution. However the entire spectrum of precautionary measures and management protocols of such facilities are subject to international legislation and monitoring and resultant environmental impacts is unlikely. The entire spectrum of environmental impacts is not known as yet and will be confirmed during the environmental assessment.
- b. The mechanisms going to be used to enhance skills development benefitting the working age population, is not established as yet.
- c. Implementation date and period is estimated, as there are several licenses and authorizations to be obtained, and the implementation period most likely may be drawn out.

#### Limitations

- a) Assessment of alternatives is limited in location and design as the location was determined by:
  - Existing infrastructure providing access to opportunities to capitalize on the existing motorists passing by. The establishment of complementary zonings that integrate land uses and generate employment opportunities should formalize such opportunities.

- The lack of alternatives provided in the SDF limits the likely site alternatives. Hence the alternatives assessed in the Socio- Economic Impact Assessment are limited to the proposed site and the no-go alternative as the only alternative.
- b) Calculation of the number of jobs created is limited.  
The number of jobs created was based on information obtained from similar projects to establish service stations. No other job generation benchmarks were considered and only direct jobs were calculated.
- c) Interviews not representative but indicative.  
Impacts were assessed through specialist studies and interviews with a number of people, yet not a representative sample (i.e. interested and affected parties, key officials, some community members and businessmen). These interviews assisted to amplify the issues at hand and provide an overall indication of community concerns.

## **1.6 Specialist details**

The author of this report is an independent specialist with 10 years' experience in the field of rural development, 7 years in community education, 10 years in project management and coordination, 16 years in town and regional planning (Reg. no: A/1369/2010) and 14 years in socio-economic research.

## **1.7 Declaration of Independence**

This is to confirm that Anelia Coetzee, responsible for conducting the study and preparing the Socio-Economic Impact Assessment Report, is independent and has no vested or financial interests in the proposed development being either approved or rejected.

## **1.8 Report Outline**

The report is divided into four sections, namely:

- Section 1: Project Overview & Assessment Scope
- Section 2: Socio-Economic Overview of Study Area and Applicable Legal Context
- Section 3: Assessment of Impacts: Construction and Operation Phases
- Section 4: Management guidelines to address the socio-economic impact.

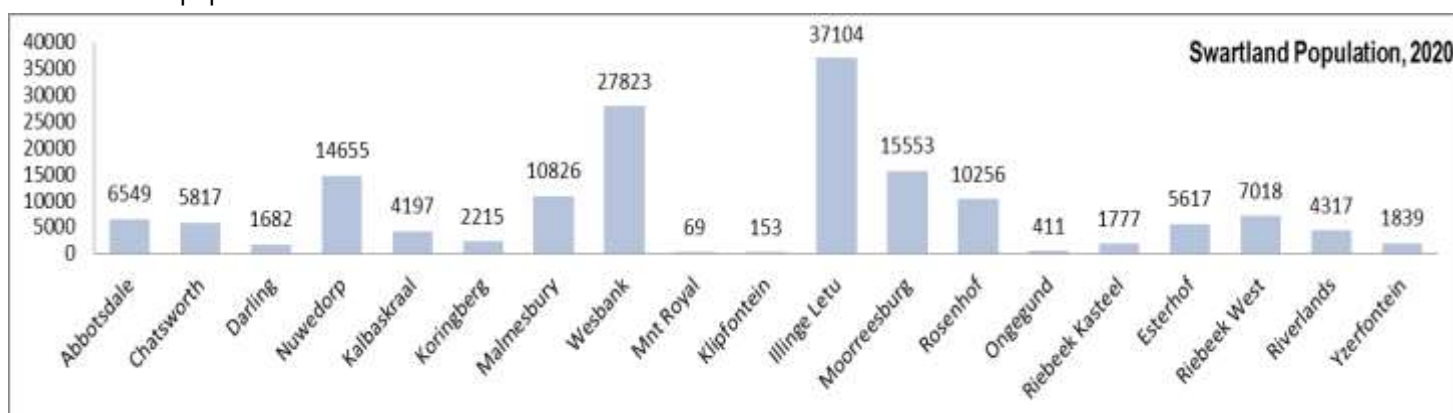
## Section 2: Socio- Economic Overview of Study Area and Applicable Legal Context

This section provides an overview of the baseline socio-economic conditions of the receiving environment and the policy context.

### 2.1 Socio-Economic overview of Malmesbury and Swartland

#### Demographics

In 2020, the Swartland population of 147 225 people represented 39 929 households with an average household size of 3.5 people. Malmesbury, including Mount Royal and Klipfontein, has 11 048 residents, Wesbank has 27 823 and IlingsLethu has 37104 residents totaling 75 975 people and 51% of the Swartland population.



Graph 1: Swartland Population, 2020

Three-quarters of the total population live in urban areas, while slightly more than a quarter resides in rural areas. The community profile of Swartland households living in the municipal area according to StatsSA 2011 and the 2016 Community Survey, is tabulated below.

Table 10: Swartland Population and Households 2011 (Source: StatsSA, 2011)

		2011	2016
<b>Population</b>	Total Population	113 782	133 762
	Population Growth Rate	4.56%	3.29%
	15-64 years of age	78 610 (69.1%)	
<b>Households</b>	Number of Households	29 324	39 929
	Average Household Size	3.9	
	Female-Headed Households	8 384 (29%)	
	Housing Owned / Paying off	15 337 (52%)	
	Formal Dwellings	26 068 (91%)	

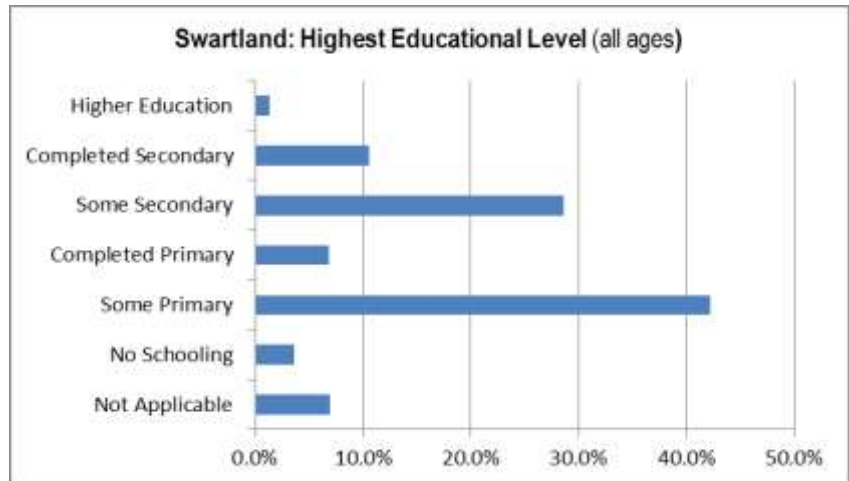
Since the 2016 Community Survey, the average annual growth rate of the Swartland population is calculated as 3.3%. The population is fairly equally distributed in terms of gender with 50.4% females and 49.6% males. Of note are the 28.5% female-headed households, whilst 39.2% of

households have partners who are married or live as married partners. Thus, 60% of households are single parents in one way or another (never married, widowed, separated or divorced). The population of the

Swartland is relatively young as the Youth (0-14) represents 25%, the working-age population (15 – 64) represents 69.1% and the Elderly (65+) 5.9% of the total population.

Education

According to the Western Cape Education Department, 2018, learner enrolment in Swartland has increased consistently between 2012 and 2017, with increases ranging between 228 and 550 additional learners per year for this period. Although there was a decline in the Grade 12 drop-out rate from 27.3 in 2013 to 20.1 in 2015, it increased again in 2016, before dropping down to 20.2 in 2017.



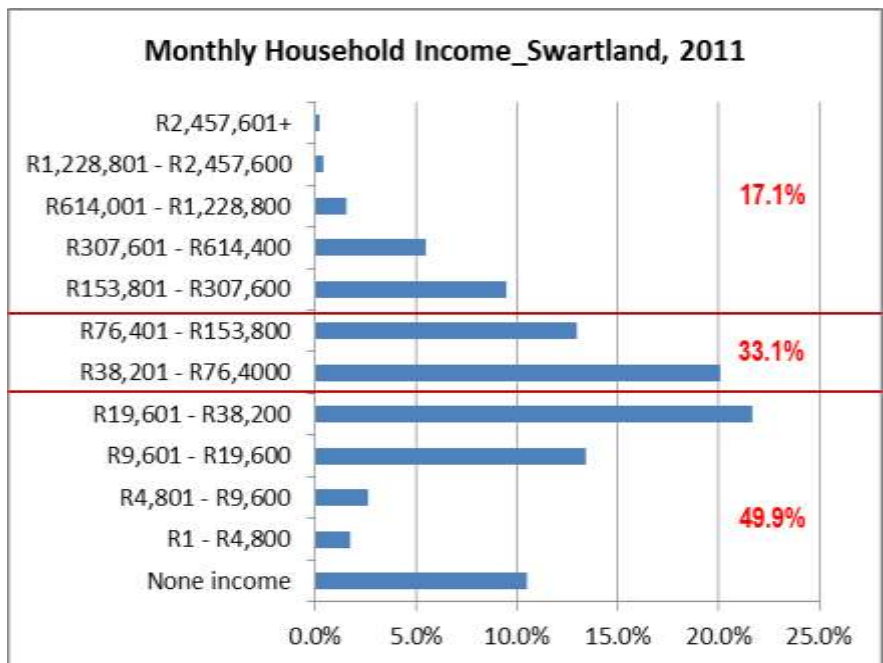
Graph 2: Highest level of Education Achieved, Swartland

Although the matric pass rate has, with the exception of 2015, increased between 2012 and 2016, a significant decline in the pass rate in 2017 was experienced, bringing the matric pass rate down to the lowest pass rate over the entire period. Although comparatively low when compared with the rest of the West Coast District, the drop-out rate, as well as the recent decline in the matric pass rate, is cause for concern. The learner-teacher ratio is 40.4.

The resultant skills levels according to Quantec Research, 2018 are 50.1% of the workforce are low-skilled, 34.6% of the workforce are semi-skilled and 15.2% of the workforce are skilled.

Economy

According to StatsSA, 2011 half (49.8% or 14 603) of the households within the municipal area earned less than R3 500 per month and as indigent households, qualify for subsidized housing and free civil and electrical services provision.

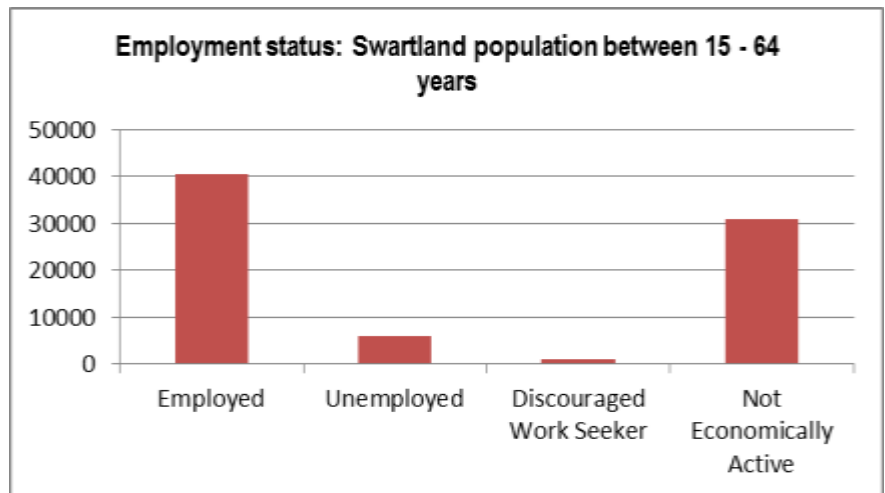


Graph 3: Monthly Household Income, Swartland (StatsSA 2011)

The dependency ratio is 44.5% meaning that for every dependent non-working aged person there are two working-age persons. However, adding the number of people that are unemployed, discouraged work seekers and those not actively

involved in the economy, the dependency ratio changes to 93% meaning that for every person actively involved in the economy there is a person that is not involved.

More than half (52%) of the working-age (15 -64) Swartland population are employed, 39% are not economically active while 8% are unemployed and 2% are discouraged work-seekers. In 2017 the unemployment rate was 8.9% (StatsSA) and the youth unemployment rate was 17.9% in 2011.



Graph 4: Swartland Employment Status of Working Age Population (StatsSA 2011)

### The Labour Market

Table 11: Labour market summary

With a population of 113 762 in 2011, and the working-age population (15 -64) representing 69.1% of the population, a third of the population is of non-working age: Youth (0-14) (25%) and the Elderly (65+) (5.9%). Of the working-age population of 37 979 persons, 15.6% are not in unemployment and 3% are discouraged work-seekers totalling 7 125 persons whilst eighty one percent (81% or 30 854 persons) of the working-age population are not economically active. The nearly 41 000 persons of working age that are employed are mainly employed in the formal sector.

Working Age Population	78 610
Employed	40 651
Unemployed	5 928
Discouraged Work Seeker	1 197
Not Economically Active	30 854
Unemployment Rate	8.9%
Youth Unemployment Rate	17.9%

Over the last decade, the unemployment rate<sup>1</sup> has been rising steadily. Unemployment in the Swartland municipal area was 8.9% in 2011 and rose steadily to an estimated 10.4 per cent in 2017. Swartland's unemployment rate in 2017 is just slightly lower than that of the District's 11.1 per cent as well as that of the Province's 18.2 per cent.

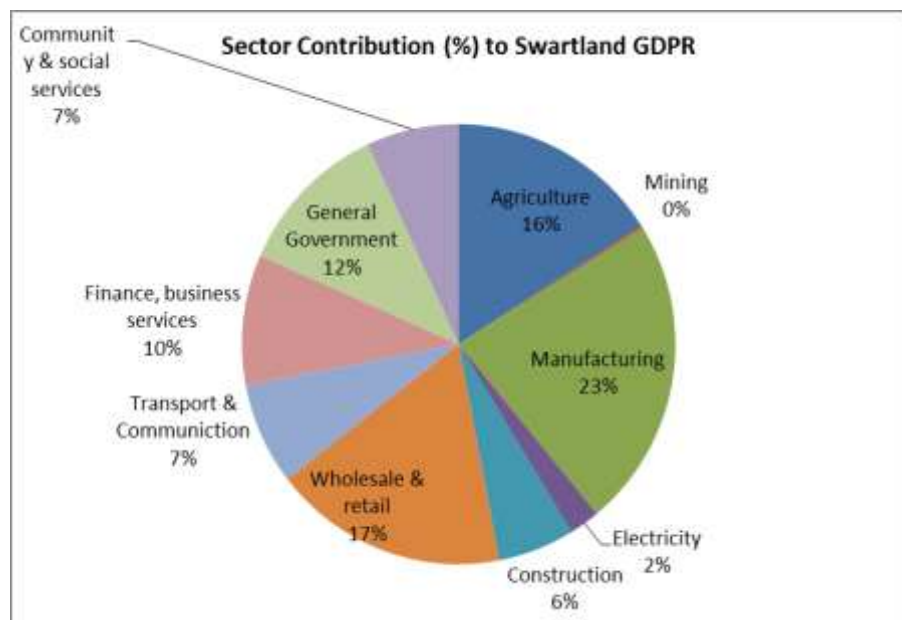
Table 12: Unemployment rate 2007 – 2017, Quantec Research, 2018

Area	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Swartland	4.7	6.1	7.3	8.5	8.9	8.0	8.6	9.3	8.5	9.5	10.4
West Coast District	4.7	6.5	7.9	9.3	9.7	9.6	9.2	10.0	0.0	10.1	11.1
Western Cape	13.3	12.9	14.2	15.5	15.7	15.8	15.7	16.1	16.2	17.4	18.1

<sup>1</sup> Narrow definition: Percentage of people that is able/ willing to work, but unable to find employment. In turn, broad definition refers to people that are able to work, but not actively seeking employment. Broad definition is more difficult to accurately measure/calculate.

Due to the large contribution to employment from the agriculture, forestry and fishing sector, the majority of formally employed workers in the Swartland municipal area are low-skilled (50.1 per cent). Only the agriculture, forestry and fishing sector in the Swartland area reported an average decrease in the number of jobs (-4 621) between 2006 and 2016. There were some job losses reported in the agriculture, forestry and fishing sector in 2014, 2016 and 2017 (estimate) due to the severe drought. This is a cause for concern considering the considerable contribution of this sector to the Swartland economy as well as its great significance to employment. Agri-tourism has increased and in 2018 there were 330 agri-tourism facilities and activities such as olive and wine tasting, quad biking and wedding venues. The sector which reported the largest increase in jobs between 2006 and 2016 was the wholesale, retail and trade (2 658), general government (1 855) and financial and business services (1 231). The decrease in employment opportunities in agriculture, forestry and fishing most likely will cause discomfort for the 50.1% of the workforce that are low-skilled and the 34.6% of the workforce that are semi-skilled. The growth in the tertiary economic sector such as wholesale, retail and trade and as financial and business services will most likely favour the 15.2% of the population that are skilled (Quantec Research, 2018).

The Swartland Municipal area has the second largest economy in the WCD, with a GDP of R7.4 Billion in 2016 with Malmesbury comprising the economic hub. More than three quarters (77.5%) of the contribution to Swartland's economy comes from the five main sectors that are manufacturing (R1 689.0 million or 22.9 per cent), wholesale and retail, catering and accommodation (R1 289.2 million or 17.5 per cent)



Graph 5: Economic Sector Contributions to the Swartland GDP, 2016

and agriculture, forestry and fishing (R1 173.4 million or 15.9 per cent in 2016). Government services are the fourth biggest contributor (R851.0 million or 11.5 per cent) whilst finance, insurance, real estate and business services (R704.7 million or 9.6 per cent) follows as fifth biggest contributor.

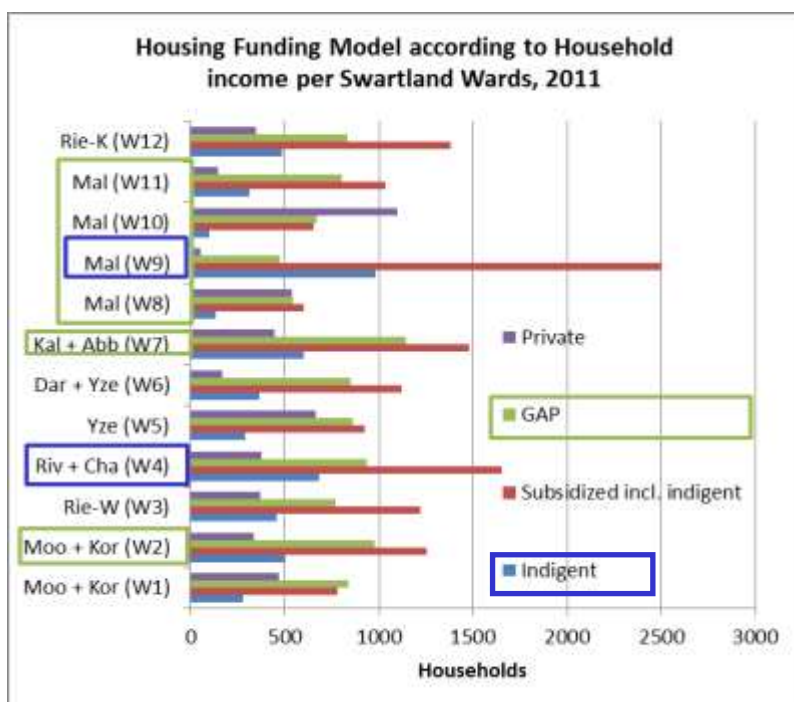
The economic growth rate is contributed to by agriculture forestry and fishing and in manufacturing whilst the tertiary sector experienced a slower growth. These trends are not driven from within the municipal area or the region but by the national economy.

The 10-year trend, between 2006 and 2016, shows that the construction as well as general government sectors registered the highest average growth rate (4.6 per cent) in Swartland during this period, followed by the wholesale and retail trade, catering and accommodation (3.8 per cent), finance, insurance, real estate and business services and community, social and personal services (both at 3.1 per cent). It is encouraging that some of the top economic sectors (wholesale and retail trade, catering and accommodation, agriculture, forestry and fishing and finance, insurance, real estate and business services) registered growth in excess of 3 per cent over this period. Growth of the agriculture sector shrunk into negative territory in 2015 and 2016 due to the severe drought but the estimated growth rate for 2017 is a healthy 6.8 per cent.

### Housing Typologies

Educational levels impact on household income which in turn determines house typologies and government funding models. Hence Ilinge lethu (W9) and Chatsworth (W4) have the highest need for Subsidized housing while Moorreesburg (W2), Abbotsdale (W7), Kalbaskraal (W7) and Malmesbury (W8-11) have the highest need for GAP housing.

Although there are no informal settlements, overcrowding and informal structures are present in Swartland settlements. The towns with the highest number of households living in informal backyard structures are Malmesbury and in particular Wards 9 and 11 (IlingeLethu and Saamstaan) followed by Abbotsdale and Kalbaskraal (Ward 7). Informal backyard dwellers constitute more than a third (33%) of the waiting list in these settlements.



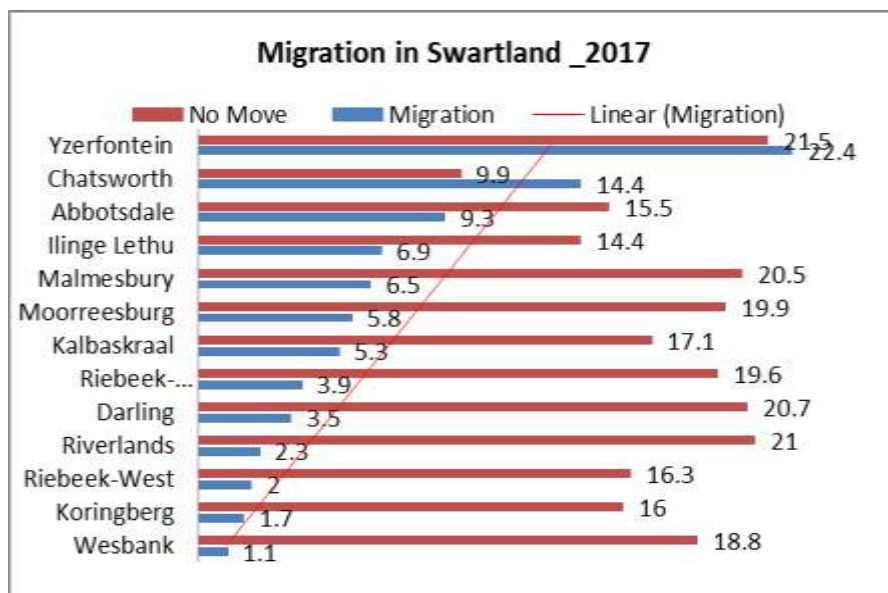
Graph 6: Housing topologies required per Swartland Wards, 2011

There are also informal precincts in Pola Park in Malmesbury and formalizing the informal structures has been prioritized.

### Migration

Development trends in the region and at neighbouring municipalities cause migration. On average 18.8% of Swartland households have not moved for a period of 5 years and more.

Yzerfontein, Darling, Riverlands and Malmesbury are the settlements with the most (20% and more) households that did not move in the last five years. Contrary, Yzerfontein and Chatsworth are the exceptions as more households (22.4%) and (14.4%) moved into these settlements than those staying there for 5 years and more.



Graph 7: Migration in Swartland, 2017 (Municipal Census Survey, 2016)

There are three areas in the Swartland that practice intensive agriculture: Darling, Riebeek Valley and along the Berg River (Broodkraal). These areas are more labour intensive than extensive agriculture e.g. growing grain. The need for either on or off farm housing is inferred in the population growth rate trends in Riebeek Valley, Nuwedorp in Darling and Koringberg. The need for housing for farmworkers is illustrated by the migration of farmworkers into Riebeek Kasteel and Abbotsdale as per the graph above.

Surrounding municipalities i.e. Cape Metropole, Drakenstein and Saldanha Bay have high migration rates which may result in Swartland absorbing some of those households. Malmesbury in particular is a place of transit (North to South) and an alternative to settling in Cape Town.

Access to basic services (Quantec, 2014)

Most households have access to basic services: water (97.4%), energy (97.0%), sanitation (90.1%), refuse removal (80.1%). Of note is that access to basic services has declined from 2011 to 2013.

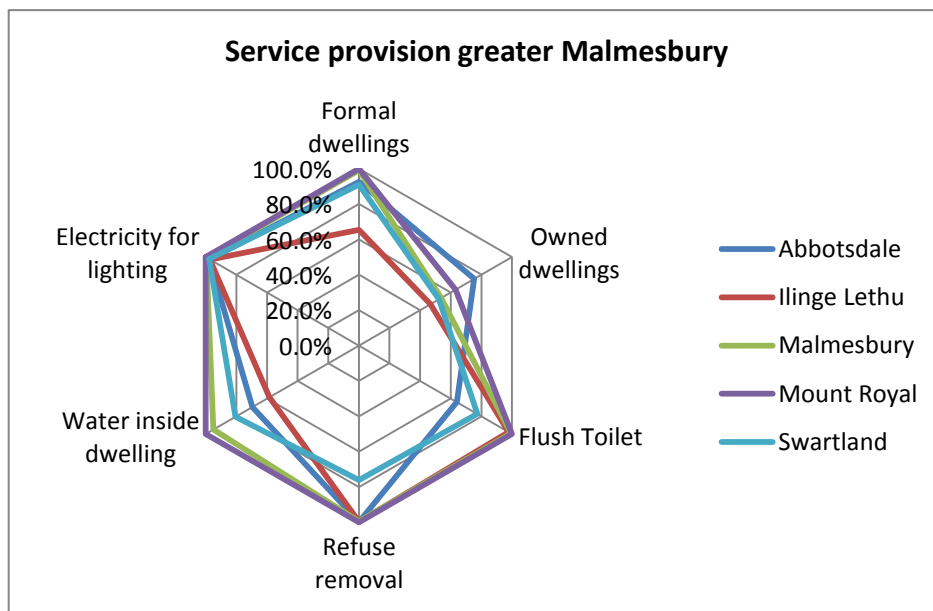
Table 13: Access of Swartland Households to basic services vs West Coast Households

Community 2016	Survey	Swartland Households	Swartland % of Households	Swartland Consumer Bills	Swartland Indigent Consumer Bills	Ratio Consumers vs Indigent	West Coast District Households	West Coast District % Households
Total Number of Households		39 130	100%	39 130	8 183	No data	129 862	100%
Formal main dwelling		37 024	94.6%	37 024	No data	No data	111 389	85.8%
Water (piped inside dwelling / within 200m)		36 316	92.8%	21 600	8 357	28%	125 336	96.5%
Electricity (primary source of lighting)		37 660	98.2%	17 614	7 296	29%	120 155	92.5%
Sanitation (flush / chemical toilet)		38 501	98.4%	20 272	7 291	26%	122 205	94.1%
Refuse removal (at least weekly)		32 675	83.5%	19 711	8 183	29%	108 311	83.4%

In Swartland basic services is accessed by most households:

- Water (piped water inside the dwelling): 80.6%.
- Energy / Electricity for lighting: 97.8%
- Sanitation: Flush toilet connect to sewerage: 77.3%
- Weekly refuse removal: 76.1%
- Housing (formal dwelling): 90.9%

Whilst forty four percent (43.6%) households own and nearly nine percent (8.6%) households pay off their homes, 28% of households rent their homes.



Graph 8: Services Provision Malmesbury and precincts, 2011

### Health & Health Facilities

Swartland has a total of 13 primary health care facilities of which 4 are clinics and 9 an additional mobile clinics, one (1) community day center and 1 district Hospital. There are 15 ART clinics serving 2 337 (2017/18) patients and 18 TB clinics serving 842 TB patients in 2017/18 compared to 915 in 2016/17. In contrast to the rising numbers of HIV/AIDS cases, Swartland experienced a decline in tuberculosis (TB) cases.

Child Health or the health of new born up to children under 5 years of age has declined in Swartland: as from 2016/2017 to 2017/18:

- The immunization rate declined from 73.2 to 68.4.
- The number of malnourished children under five years from 2.3 to 3.0 per 100 000.
- Neonatal mortality rate (NMR measures the number of deaths within the first 28 days of age per 1000 live births) 0.8 to 12 per 1 000 live births.
- Low birth weight indicator (babies born weighing less than 2.5kg) deteriorated.
- 33 deliveries by women under 18 years,
- A delivery rate of 9.1 by women younger than 18 years, delivery rate improved from 18.2% to 13.3%; unlike broader West Coast rate that deteriorated from 8.7% to 16.6%.
- 23 pregnancies terminated and 340 pregnancies per 100 000 terminated.

Maternal mortality (deaths per 100 000 live births) deteriorate as:

- From zero to 1.2 deaths per 100 000 live births.
- Thirteen percent (13.3%) of women under 18 fall pregnant.
- Termination of pregnancy rate declined from 0.2% to 0.0%.

### Safety and security

Drug related crimes and residential burglaries are the most prevalent in Swartland and are trending upwards since the late 2000s. The actual number of reported cases in 2018 are 2 621 and 789.

### Settlement Needs (per Ward)

According to the IDP, 2019/2020 and prioritizing the top five needs in each ward, resulted in the following settlement making related needs:

Housing in Moorreesburg (W2), Riebeek West (W3), Chatsworth & Riverlands (W4), Darling (W6) totaling 2064 fully subsidized opportunities in 2020 on the waiting list and being earmarked to provide for GAP housing, Kalbaskraal & Abbotsdale (W7), Saamstaan (W11) and Riebeek Kasteel (W12), including housing for backyard dwellers in Saamstaan. In Darling a total of 148 or 6% of the waiting list is back yard dwellers.

Recreational facilities: in all wards in need of housing with the exception of Saamstaan (W11) and Riebeek Kasteel (W12).

Educational facilities in all wards: Schools, upgrading of schools and crèches in all wards with the exception of Moorreesburg (W2) and Saamstaan (W11): High schools in both Darling (W6) and Riebeek Kasteel (W12).

Multipurpose centers in Riebeek West (W3), Riverlands and Chatsworth (W4) and Kalbaskraal (W7). A rehabilitation center in Malmesbury (W8).

Of note is an Old Age Homes in Koringberg (W1), Riebeek West (W3) and Malmesbury (W8) of which the former two settlements are settlements to where farmworkers migrate to. Most likely these farm workers are retired.

### Poverty

Living condition (standard of living) are measured by means of indicators including GDP per capita, income inequality and human development (HDI) to show the current reality of households residing in the Swartland municipal area based on most recent data including Global Insight and Quantec.

Economic theory suggests that when an economy prospers its households are expected to enjoy an improved standard of living. The deteriorating financial health of households and individuals, specifically between 2011 and 2015, has resulted in an increase in the poverty levels, according to Statistics South Africa (Poverty Trends in South Africa report, 2017). Rising unemployment levels, low commodity prices, higher consumer prices, and lower investment levels, household dependency on credit and grants, and policy uncertainty are key contributors to economic decline in South Africa.

According to poverty trends, categories of people vulnerable to poverty remained to be African females, children 17 years and younger, people from rural areas, and those with no education. Inflation-adjusted poverty lines show that the food poverty line increased from R219 in 2006 to R531 per person per month in 2017. The lower-bound poverty line has increased from R370 in 2006 to R758 per person per month in 2017 while the upper-bound poverty line has increased from R575 in 2006 to R1 138 per person per month in 2017.

An increase in real GDP per capita, i.e. GDP per person, is experienced only if the real economic growth rate exceeds the population growth rate. Even though real GDP per capita reflects changes in the overall well-being of the population, not everyone within an economy will earn the same amount of money as estimated by the real GDP per capita indicator. At R64 954 in 2017, Swartland municipal area's real GDP per capita was marginally below that of the West Coast District's figure of R65 711 as well as below that of the Western Cape's R87 110.

The National Development Plan set a target of reducing income inequality in South Africa from a Gini coefficient<sup>2</sup> of 0.7 in 2010 to 0.6 by 2030 whilst in the Swartland, it measured 0.578 in 2017. It is anticipated that it may increase beyond the target.

The Human Development Index (HDI)<sup>3</sup> is used to benchmark the relative level of socio-economic development in countries. Indicators used to measure human development including education, housing, access to basic services and health indicators. Per capita income is the average income per person of the population per year; per capita income does not represent individual income within the population. The life expectancy and infant mortality rates are other important criteria for measuring development. There has been a general increase in the HDI of Swartland Municipality, the West Coast District as well as for the Western Cape between since 2008. However, Swartland's HDI has fallen back slightly to 0.684 in 2017. Naturally, per capita income as per definition did mimic the HDI trend.

#### Sense of place

- a) The Swartland municipal area has 13 settlements having each a role, an economic base and locational advantages. Malmesbury and Abbotsdale are being viewed as the breadbasket of the Western Cape, and the once ago church town and settlement are now performing the role of the regional and administrative center. Its locational advantage is that it is next to the N7 transport route and railway line and in close proximity to Cape Town. Towns with regional roles and locational advantages have the highest potential for future growth and to sustain such growth. Towns such as Malmesbury including Abbotsdale has a very high potential score and are prioritized for future settlement development and in particular subsidized housing. However towns such as Darling and Yzerfontein have more limited growth potential yet can highly benefit from regional developments Such as the Industrial Development Zone in Saldanha.

The key initial insights of the social status of the receiving community are that:

Similar to other rural municipalities, Swartland also experiences common challenges such as a lack of skills, skew patterns of wealth distribution, relatively high levels of unemployment yet still relatively low levels of crime. Despite the relatively positive economic growth it is quite evident that not all sectors of society share in the benefit resulting from this. In fact it seems that the gap between rich and poor is actually widening as poverty stays prevalent. The challenge stays to create employment and to increase

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<sup>2</sup>Gini index < 0.2 represents perfect income equality, 0.2–0.3 relative equality, 0.3–0.4 adequate equality, 0.4–0.5 big income gap, and above 0.5 represents severe income gap.

<sup>3</sup>Human Development Index is a statistic composite index of life expectancy, education, and per capita income indicators. A value above 0.800 is very high, between 0.700 and 0.799 high, 0.550 to 0.699 as medium and below 0.550 as low.

the participation of emerging entrepreneurs in the mainstream economy and to bring the first and second economy closer together.

The key initial insights of the social status of the receiving community are that:

- Unemployment is high and keeps rising. This is the case for the receiving community of Darling where there is real need to find employment or operate a business and besides the limited employment opportunities offered in Darling, those who want to work have to travel to Malmesbury or Yzerfontein.
- Economic growth is slow. In the case of Yzerfontein, business development opportunities are limited to a holiday settlement to keep the character of Yzerfontein intact whilst business development in Darling is limited for similar reasons and with limited business and industrial zoned land available given the location of the settlement.
- Financial Sustainability is a challenge as there is a strong dependency on grants, as is the case in Darling.
- Housing and ownership is a need and desire to provide housing to backyarders who constitute the biggest segment of the housing waiting list and in Darling constitutes 6% or 148 units.
- Quality of the living environment including municipal services: Residents want to protect the safety and security of rural villages and the order and maintained status of their environment but at the same time they would like to be afforded opportunities to improve their living standard.
- Cultural and heritage resources need protection to keep tourism growing. The character of the Swartland between Yzerfontein and Darling includes fynbos (Renosterbos and Strandveld fynbos) along the coast and views across the rolling wheat fields onto Table Mountain. Both Yzerfontein and Darling are two smaller rural settlements with defined character and residents would like to keep the character of both settlements in place.
- Safety and social well-being of kids are a concern as the number of Street kids has increased.
- Decreased maternal and child health amongst women and children: Health care should become a focus of future community facilities and institutions.
- Affordable opportunities to access Further Education and Skills Development that result in employment are a challenge. Work shadowing and – replacement programmes offered by the college and university will enable the desired educational and skills development.
- Rehabilitation support / family relief as there is a large percentage of the working age population that is at home and is not economically active. However, working age population at home play a vital role in caring for family members that are unable to do so themselves.

Overall there is a strong sense that a vibrant living environment is required for the social well-being of the community and for the growth of the economy. The balance between conservation, cultural and heritage resources and development can go a long way to address a vibrant living environment that will provide shelter, security and safety whilst enhancing the economy to grow.

## 2.2 Policy and Planning Context

An analysis of the compatibility of the proposed development with the relevant sector policies and development plans concluded that the proposed development is compatible with the following National and Provincial plans and policies:

- Western Cape Provincial Spatial Development Framework (PSDF), March 2014 revised 2019
- Swartland Spatial Development Framework ;
- Swartland IDP
- Swartland Human Settlement Plan;
- National Development Plan (NDP) of 2012
- One Cape 2040
- Western Cape Infrastructure Framework (2013)

Not only does the proposed development represent an infrastructure related development with amenities and employment opportunities, it facilitates road safety and reduces risk for motorists and freight transporters.

### 2.2.1 National and Western Cape Policies and Directives

The proposed development supports the following plans and frameworks that give effect to the PSDF:

*Table 14: Plans and frameworks supporting and giving effect to by the PSDF*

<b>National Development Plan (NDP) of 2012</b>	<b>Proposed development</b>
<ul style="list-style-type: none"> <li>- strives to eliminate poverty and reduce inequality by creating jobs and livelihoods,</li> <li>- transform urban spaces,</li> <li>- expand infrastructure, provide capable public services, etc.</li> </ul>	Supports the NDP initiative by creating a service station in a suitable location maximizing efficient use of infrastructure, creating jobs and opportunities to create jobs.
<b>One Cape 2040</b>	<b>Propose development</b>
<p>Intends</p> <ul style="list-style-type: none"> <li>• An enabling spatial framework</li> <li>• Integrated neighbourhoods</li> <li>• Healthy and caring living areas</li> <li>• Settlements that addresses resource scarcity and quality living through design.</li> <li>• Integrated services planning &amp; provision</li> <li>• Mostly low-carbon resource use. Limited toxic use.</li> <li>• Healthy, accessible, liveable, multi-opportunity communities.</li> <li>• Social value capture</li> <li>• High level of local connectivity and global market fluency</li> <li>• High innovation opportunity.</li> </ul>	<p>Support One Cape vision as it:</p> <ul style="list-style-type: none"> <li>• Gives effect to the Swartland SDF without limiting future uses whilst enhancing sustainability.</li> <li>• Integrates complementary land uses to infrastructure development.</li> <li>• Increases intensification of use in appropriate locations aligned with resources and space economy.</li> <li>• Provides affordable services as proposed development will be partially service self-sufficient. Thus spatially aligned infrastructure planning, prioritisation and investment.</li> <li>• Creates variety of employment and income opportunities in close proximity to settlements.</li> <li>• Generates local economic opportunities whilst attracting international investors.</li> <li>• Proactively manages economic assets (community resources).</li> </ul>
<b>Western Cape Infrastructure Framework(2013)</b>	<b>Proposed development</b>

<p>Prioritises</p> <ul style="list-style-type: none"> <li>• Invest in public transport and non-motorised transport (NMT) infrastructure, particularly in larger urban centres</li> <li>• Continue to provide basic services to achieve national targets</li> <li>• Diversify the housing programme</li> <li>• Integrate settlement development, prioritising public service facilities in previously neglected areas</li> <li>• Improve energy efficiency in buildings through design standards</li> <li>• Distribute health and education facilities equitably</li> </ul>	<p>Complies as it</p> <ul style="list-style-type: none"> <li>• Enhances public transport as an infrastructure support development.</li> <li>• Is highly likely to apply design standards to introduce improved energy and water efficiency in buildings.</li> <li>• Contributes to service facilities in rural areas.</li> </ul>
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The proposed service station being located in the rural hinterland, will be located at the intersection of the R27 and R315. The location of the service station promotes sustainable use of infrastructure resources and support national and provincial plans and frameworks to give effect to the PSDF.

Table 15: Compliance of proposed service station with PSDF

<b>A. Western Cape SDF (2014) principles</b>	<b>Proposed development</b>
<p><b>Policy R1: Protect Biodiversity and Ecosystem services:</b></p> <ul style="list-style-type: none"> <li>• divert urban growth pressures away from critical biodiversity areas</li> </ul>	<p><i>Proposed development footprint is outside the urban edge of any of the Swartland settlements Yzerfontein and Darling. Should there be any Critical Biodiversity Areas, mitigation measures will protect biodiversity and ecosystem services.</i></p>
<p><b>Policy R2: Safeguard inland and coastal water resources, and manage the sustainable use of water:</b></p> <ul style="list-style-type: none"> <li>• Given current water deficits, practice 'water wise' planning and design approach</li> <li>• Protect and rehabilitate river systems and high yielding groundwater recharge areas, particularly in areas of intensive land use</li> </ul>	<p><i>Likely that grey water will be reused, water wise landscaping will be implemented and water for firefighting will be obtained from a ground source.</i></p>
<p><b>Policy R3: Safeguard the Western Cape's Agricultural and Mineral resources, and manage their sustainable use:</b></p> <ul style="list-style-type: none"> <li>○ Reconcile ecosystem requirements with conflicting land development pressures.</li> </ul>	<p><i>The soil potential is very low and the loss of agricultural land is limited to non-arable land.</i></p>
<p><b>Policy R4: Recycle and recover waste, deliver clean sources of energy to urban consumers, shift from private to public transport, and adapt to mitigate against climate change:</b></p> <ul style="list-style-type: none"> <li>○ Provide low income areas with access to electricity and systematically upgrade informal settlements</li> <li>○ Avoid developing new residential areas in proximity of agricultural crop spraying</li> <li>○ Pursue energy diversification and energy efficiency and delink economic growth from energy use</li> <li>○ Support emergent Independent Power Producers</li> </ul>	<p><i>Operational guidelines of proposed development include guidelines and requirements for recycling and recovering of waste.</i></p> <p><i>The soil suitability is very low and the loss of agricultural land is limited to non-arable land that was mined.</i></p>

<ul style="list-style-type: none"> <li>○ Address climate change mitigation measures in Municipal SDFs</li> <li>○ Encourage and support renewable energy generation at scale</li> <li>○ Protect agricultural land that holds long term food security value from urban encroachment.</li> </ul>	
<ul style="list-style-type: none"> <li>● <b>Policy R5: Safeguard cultural and scenic assets:</b></li> <li>○ Include townscape and landscape making considerations into municipal SDF's, land use management systems and infrastructure development programmes</li> <li>○ Protect heritage and scenic assets from inappropriate development and land use change</li> <li>○ The delineation of urban edges to safeguard scenery and natural and cultural landscapes</li> <li>○ Priority focus areas proposed for conservation or protection include: Rural landscapes of scenic and cultural significance situated on major urban edges, undeveloped coastal landscapes under major development pressure, landscapes under pressure for large scale infrastructural developments and Vulnerable historic mountain passes and 'poorts'</li> </ul>	<p><i>The proposed service station is not located within a focus area proposed for conservation or protection. The proposed service station is in the rural area outside the urban edge footprint and will be supportive infrastructure to long distance travellers. Being along the R27, the design interface of the proposed development should express the essence of a contemporary West Coast. .</i></p>
<p><b>Policy E1: Use regional infrastructure investment to leverage economic growth:</b></p> <ul style="list-style-type: none"> <li>● Develop the renewable energy sector</li> <li>● Reduce reliance of transport on liquid fuels</li> <li>● Invest in public transport and non-motorised transport (NMT) infrastructure</li> <li>● Promote denser settlement patterns, reduce the need for travel and create walkable neighbourhoods</li> <li>● Designing human settlements to accommodate infrastructural smart grids</li> </ul>	<p><i>– Enhance and intensify use of pedestrian and cycle routes.</i></p> <p><i>–Job opportunities are provided within walking distance.</i></p>
<p><b>Policy E2: Diversify and strengthen the rural economy</b></p> <ul style="list-style-type: none"> <li>● Where there is a combination of land suitable for agriculture and raw water available in proximity to settlements, this strategic Provincial asset should be safeguarded for agricultural purposes.</li> <li>● Commonages should be safeguarded for their original purpose, and municipal SDFs should give consideration to the establishment of new commonages.</li> </ul>	<p><i>Though neither suitable land nor raw water is available, the proposed service station will diversify and strengthen the rural economy as it supports the local economies of Darling and Yzerfontein.</i></p>
<p><b>Policy E3: Revitalise and strengthen urban space-economies as the engine of growth:</b></p> <ul style="list-style-type: none"> <li>○ Renewable energy (low job creation potential) – on farms subject to consistency with biodiversity, heritage, scenic and agricultural requirements</li> <li>○ Incentives should be put in place to attract economic activities close to dormitory residential areas.</li> </ul>	<p><i>Intensification of use such as the proposed service station in appropriate locations,</i></p> <ul style="list-style-type: none"> <li><i>- is aligned with resources and space economy;</i></li> <li><i>- should attract economic activities close to dormitory residential areas.</i></li> </ul>
<p><b>Policy S1: Protect, manage and enhance the sense</b></p>	

<p><b>of place, cultural and scenic landscape:</b></p> <ul style="list-style-type: none"> <li>• Prevent settlement encroachment into viable agricultural areas, scenic landscapes and biodiversity areas</li> <li>• Promote smart growth ensuring efficient use of land and infrastructure, containing urban sprawl and prioritising infill</li> <li>• Enhance an economically, socially and spatially meaningful settlement hierarchy while preserving structural hierarchy of towns, villages, hamlets and farmsteads in relation to historical settlement patterns</li> <li>• Use heritage resources, such as the adaptive use of historic buildings, to enhance the character of an area, stimulate urban regeneration, encourage investment and create tourism opportunities.</li> </ul>	<p><i>Though the service station is representing visible supportive infrastructure within a rural area, the proposed service station development does promote smart growth as it:</i></p> <ul style="list-style-type: none"> <li>- <i>is located on marginal agricultural land of which the minable resource (sand) has been depleted.</i></li> <li>- <i>Promote intensification of use (densification) along the R315 and R27 intersection providing access to the IDZ efficiently using land and infrastructure and containing urban sprawl</i></li> <li>- <i>preserves historical structural hierarchy of settlements and historical settlement patterns</i></li> </ul>
<p><b>Policy S2: Improve provincial, Inter and Intra-regional accessibility:</b></p> <ul style="list-style-type: none"> <li>• Develop human settlement patterns that are compact and accessible so that they can all access the opportunities of urban environments</li> <li>• Built environment projects should focus on compacting and connecting urban development and clustering public facilities along these connections</li> <li>• Improve intermodal integration and regional linkages of all public transport based services.</li> <li>• Strengthen functional linkages between settlements and larger towns. Promote the upgrading of existing rail infrastructure.</li> <li>• Built environment investment programmes to focus on compacting and connecting urban development.</li> </ul>	<p><i>The proposed service station</i></p> <ul style="list-style-type: none"> <li>- <i>is highly accessible to all the surrounding settlements and to the region.</i></li> <li>- <i>improves regional linkages of all public transport based services.</i></li> <li>- <i>strengthens functional linkages between settlements such as Yzerfontein and Darling and larger towns such as Saldanha, Vredenburg and Langebaan. - - focuses on connecting urban development.</i></li> </ul>
<p><b>Policy S3: Promote compact, industrial and integrated settlements:</b></p> <ul style="list-style-type: none"> <li>• Secure a more sustainable future settlement plan by means of higher densities and compact settlements save people time and money,</li> <li>• Promote functional integration and industrial as a key component of achieving improved levels of settlement liveability and counter apartheid spatial patterns and decentralization through densification and infill development</li> <li>• Locate and package integrated land development packages, infrastructure and services as critical inputs to business establishment and expansion in places that capture efficiencies associated with agglomeration</li> <li>• Continue to deliver public investment to meet basic needs in all settlements</li> <li>• Promote functional integration and mixed use as a key component of achieving improved levels of</li> </ul>	<p><i>The proposed service station</i></p> <ul style="list-style-type: none"> <li>- <i>represents more intensified uses located next to the arterial route saving people time and money</i></li> <li>- <i>provides economic opportunities next to isolated rural settlements.</i></li> <li>- <i>integrates land development, infrastructure and services as it capture the proximity of Darling and Yzerfontein.</i></li> <li>- <i>is supportive of the promotion of industrial intensification and proximity as a key component of achieving improved levels of settlement liveability and counter apartheid spatial patterns and decentralization by means of intensification.</i></li> <li>- <i>represents a well located integrated land development and business expansion that capture efficiencies associated with agglomeration such as infrastructure and services.</i></li> <li>- <i>promotes functional integration (between settlements and larger towns) as a key component of improved levels</i></li> </ul>

<p>settlement livability.</p> <ul style="list-style-type: none"> <li>• Target existing economic nodes as levers for the regeneration and revitalization of settlements.</li> </ul>	<p><i>of settlement liveability.</i></p> <ul style="list-style-type: none"> <li>- <i>leverage the regeneration and revitalisation of surrounding settlement such as Darling and Yzerfontein.</i></li> </ul>
<ul style="list-style-type: none"> <li>• <b>Policy S4: Balance and coordinate the delivery of facilities and social services:</b></li> <li>• Balance sustainable service delivery and equitable access to education and health services</li> <li>• Apply the principles of space utilization efficiency, multi-functionality and clustering to all facility provision projects</li> <li>• Ensure that developments take place in a holistic, integrated and sustainable manner, equitable and accessible distribution of social services and facilities is required</li> <li>• Promote flexibility through the prioritization of mobile services in areas of need and limited access.</li> <li>• Coordinate and cluster public facilities, services and government offices to increase convenience, accessibility and efficiency regarding operations, maintenance and security as well as optimal use of land.</li> </ul>	<p><i>The proposed service station</i></p> <ul style="list-style-type: none"> <li>—<i>act as an accessible supportive facility for the public, and</i></li> <li>- <i>enable mobile social amenities to offer a service from the premise, bringing social services and amenities in close proximity and within walking distance of the surrounding rural community.</i></li> </ul>
<p><b>Policy S5: Promote sustainable, integrated and inclusive housing in formal and informal markets:</b></p> <ul style="list-style-type: none"> <li>• Investment in housing ensures optimal and sustainable use of all resources, including financial, land, social and infrastructure components</li> <li>• Provide a wide choice of housing typologies and tenure options, based on economic, fiscal, and social affordability.</li> <li>• Incremental housing development to be pursued, with phased service provision to accelerate housing provision</li> <li>• Provide households with the residential environments, mobility and access to opportunities that support productive activities</li> <li>• Achieve a wider range of housing opportunities and options</li> <li>• Prioritize investment in community facilities, public infrastructure and public space.</li> <li>• Increase densities of settlements and dwelling units in new housing projects.</li> <li>• Target housing delivery projects within Integration Zones and Social Housing Restructuring Zones.</li> </ul>	<p><i>Could afford entrepreneurs the opportunity to establish businesses or trade within the convenient stores (commercial) area or to deliver services to maintain the facility.</i></p>

### 2.2.1 Swartland Spatial Development Framework

The proposed service station development is located in rural Swartland at the intersection of the R27 and R315 halfway between Darling and Yzerfontein.

The site itself is proposed on Portion 7 of Farm Jacobuskraal No 554, Malmesbury.

The principles of the Swartland Spatial Development Framework are supported by the proposed service station (See Figure 1 and Table 1):

Table 16: Compliance of proposed service station development with Swartland SDF

A. Saldanha Bay SDF (2012) principles	Compliance by proposed service station development
Adhere to six bioregional planning categories of which “surface infrastructure and buildings: other buildings and infrastructure” is one category.	Falls within the category earmarked “Surface infrastructure and buildings”
<b>Appropriate Walking Distance:</b> Walking distance should be the prime measure of accessibility in an urban settlement.	Is not located within an urban settlement but can be accessed with non-motorized transport or public transport.
<b>Functional Integration:</b> If at least 50% of all the functions residents require are within walking distance this reduces the need and time required to travel.	Contributes to the target of at least 50% of amenities are within walking distance.
<b>Socio-economic Integration and Interface:</b> If the complete socio-economic cross-section of residents is within walking distance of each other the first four SPLUMA principles will be achieved. Create pleasant interfaces	Proposed development is limited to the intersection node and as a public amenity enables socio-economic integration.
<b>Socio-economic Gradient:</b> Urban areas should be set out so that they attract investment.	Is attracting investment to surrounding settlements in support of the service station.
<b>Intensification of Nodes and Corridors:</b> Strategic intensification of activities along higher order routes will promote stronger business thresholds, greater employment and more efficient transport and infrastructure provision.	Represent a strategic intensification of activities along a R315 (higher order route) in support of the IDZ and thus enhancing business capacity and scope, employment as well as efficient transport infrastructure.
<b>Nodes and Intersections:</b> Higher order facilities and more intense activities should be clustered in nodes and intersections as these have higher levels of accessibility and therefore make activities and facilities more viable.	Is located at higher levels of accessibility at the R27 and R315.
<b>Urban Edge:</b> restrains outward lateral growth thereby limiting urban sprawl and helps protect important environmental resources such as Critical Biodiversity Areas and agricultural land.	Brings about intensification and densification along major routes and at an intersection. Indirectly protects environmental resources being located at the intersection on disturbed land.
<b>Off-grid Infrastructure:</b> Off grid infrastructure should be promoted so as to reduce the demands on the municipality’s finances, infrastructure and natural resources, and particularly in out of town locations.	Intends to make use of off-grid infrastructure.
<b>Spatial Management of River Corridors:</b> Development along river corridors should be set	Not applicable

back from ecological corridor boundaries and face onto it so as to promote safety and surveillance and enable these corridors to have multiple uses.	
<b>Complete Streets Approach to Transport Planning and Street Cross-section Options:</b> Roads and streets should be planned so that their spatial, economic and social benefits, in addition to their transport benefits, are maximized.	Maximizes the spatial, economic and social benefits of the intersection.
<b>Service / frontage roads as an important device for economic development along mobility routes:</b> Roads and streets should be planned so that their spatial, economic and social benefits, in addition to their transport benefits, are maximized	Collectors provide access to proposed service station development. Formalizes opportunities for local and integrated economic development.
<b>Mining Rehabilitation:</b> Mining rehabilitation plans should form part of land use management and be guided by SDF.	Will be located on a rehabilitated mine site and is ideal for alternative use of low potential agricultural soil.
<b>Wind and Solar Farm Siting Principles:</b> Should not detract from tourism assets/ scenic landscapes nor negatively impact on environmental resources.	Not applicable.
<b>Guidelines for the Management of Development on Mountains, Hills and Ridges:</b> should not detract from tourism assets such as scenic landscapes nor negatively impact on environmental resources.	Not applicable

Ultimately the SDF aims to establish well **performing** settlements and regions within Livable Environments and Sustainable Settlements **Qualities**. **The proposed service station development enhances the aim to establish a well performing region and livable environment.**

### Section 3: Assessment Impacts

The chapter provides a description of impacts assessed according to standard assessment measures (Addendum A). Impacts are classified firstly according to the environment (as per built environment) they impact upon, the formality of the impact, the unit of people or receptors involved (individual, family or community) and having a direct, indirect, residual or cumulative result.

Table 17: Impact classification Matrix

Environment	Level Formality	Population unit	Directness
Built	Life/ Relations (Informal)	Individual	Direct
Environment (Natural)	Institutional/ Social (Formal)	Family	Indirect
Social		Community	Residual
Economic			Cumulative

**Direct impacts** occur as a direct result of an action at the same time **and** location as the action. **Indirect impacts** are reasonably foreseeable **and** occur as a result of an action, but occur later in time or are removed from the action location.

**Residual impacts** are the result(s) of a project or action, secondary to the main purpose of the project that is nonetheless impacting on the surroundings and the community (<https://bizfluent.com>, September 2017). Residual Impacts are defined as those impacts that remain following the implementation of mitigation measures (Seagrave Road Environmental Statement Addendum Vol1)

**Cumulative Impacts** are the impact which results from the action when added to other past, present, and reasonably foreseeable future actions which include proposed project activities, other similar activities and unregulated background pressures and trends. The analysis of a project's incremental impacts combined with the effects of other projects can often give a more accurate understanding of the likely results of the project's presence than just considering its impacts in isolation (Business Biodiversity and Offsets Programme (BBOP) 2012). The combined effect of individual impacts occurs when a receptor is affected by more than one impact during any phase of development (Seagrave Road Environmental Statement Addendum Vol1)

The assessment of impacts will be reflected according to the following ratings as per standard assessment measures.

Table 18: Impact rating scale

Rating	Score -	Score +
Low	0 to – 40	0 to 40
Medium	- 41 to – 80	- 41 to 80
High	- 81 to – 120	- 81 to 120
Very High	> - 120	> 120

### 3.1 Construction Phase:

The construction of civil and electrical infrastructure such as road and bulk services will first take place and followed by the construction of the structures and buildings. The construction phase will include the following broad activities:

Table 19: Activities and skills required: Construction Phase

Activity	Skills required
1. Prepare site	Fencing, surveying, grading and construction
2. Excavate, install services, built internal roads	Excavation, trenching, sleeve and cable laying, concrete work, road building.
3. Construction	Casting Foundations, building walls, installing window, pitch trusses, fix roof, installing services
4. Finishing off structures	Fronting services for commercial/ domestic use, installing ceilings, hanging doors.
5. Connect services	Connect electricity, water and sewerage

The site preparation will include surveying erven and road, erecting a fence, grading road, and erecting a site office. The bulks services and road will first be installed and build followed by digging trenches for the foundations of the structures, casting foundations, building walls, installing windows, pitching trusses and fixing roofs onto the trusses and paving operational areas. The structures will be finished off by installing the internal services, internal finishes and signage. On completion of the structure, services will be switch on.

Capital Expenditure is estimated as ±R15million (service station) and ±R10 million (business premises and tourism facility). The implementation time frame is estimated as two (2) years.

The impacts identified, are assessed and mitigation measures are suggested in the section below.

#### 3.1.1 Direct and Positive Impacts during the Construction Phase

##### a) Employment opportunities increase

**Experienced as:** Working-age people find employment temporarily and permanently

With an estimated capital expenditure of ±R15 million for the service station and ±R10 million for the business premise, and whilst the skills pool of the receiving community includes 50.1% persons being low-skilled, 34.6% persons being semi-skilled and 15.2% persons being skilled, the number of jobs the construction phase generates, was calculated as:

For the service station: 35 jobs for a period of one year. Of these who does construction work, 40% (or 14 persons) are low-skilled, 40% (or 14persons) are semi-skilled and 20% (or 7 persons) are skilled.

For the business premises: 23 jobs for a period of one year. Of these who does construction work, 52% (or 14 persons) are low-skilled, 32% (or 7 persons) are semi-skilled and 17% (or 4 persons) are skilled.

The value of employment for the service station is R1.99 million (spend over 1 year) of which R 800 000 will be spend on the Fore Court, R400 000 on services and R 800 000 on the remaining facilities. The value of employment for the business premises will be R2.712million (spend over 1 consecutive year).

Given the unemployment rate of 8.9% (2011) and 10.4% (2017), and the youth unemployment being 17.9% (2011), eighty percent (80%) of the construction jobs should be reserved for locals. Thus, the project will result in an increase of 51 people employed during the Construction Phase, which is a secondary economic sector. Of those employed, 21 would be unskilled, 17 would be semi-skilled and 9 would be skilled.

The construction contractor to be appointed should from the Western Cape. Employees will be recruited within Swartland, with the majority being locals. Granting most of the unskilled and semi-skilled jobs to locals will limit the competition with “outsiders” and contribute to decrease the unemployment rate. The employment of locals would have a consistently positive impact on the economic and material wellbeing of the local community as the expected value of employment benefitting locals is ±R1.59 million and R2.17 million respectively.

On the contrary, the employment of contract workers or outside job seekers is likely to prohibit the money flowing back into the community. In addition, conflict between locals and outsiders may be experienced given the unemployment rate (10.4%) in Swartland.

The intensity of the impact on the local population will be measured according to the following scale:

<b>Local Level</b>	<b>Rating</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>
Number of jobs (35 + 23)	As a % of working age population (78 610)	0-78 (<1%)	79 – 786 (<10%)	>786+ (>10%)

The percentage employed working age population per annum change from 51.71% to 51.76% and rates low given an increase of less than 1% during the construction of the proposed service station development whilst the unemployment rate is 8.9% (in 2011). Of the total number of unemployed (5 928) and discouraged work seekers (1 197), less than one percent (0.1%) are likely to find employment for a year. However, the community views creating jobs as highly significant as unemployment in the municipal area is high.

The no go alternative has no impact on the population of Swartland and its immediate surroundings.

The employment of working age people affects the economic environment, as the relationships between people at an individual, family and community level are directly affected.

<b>Environment</b>	<b>Level Formality</b>	<b>Population unit</b>	<b>Directness</b>
Economic	Life/ Relations (Informal)	Individual, family and community	Direct

A summary of the impact follows in the table below.

*Table 20: Assessment of impact on employment opportunities: Construction Phase*

<b>Impact</b>	<b>Changes to the economic and material wellbeing of the community as some locals find employment with the</b>
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	<b>construction contractor.</b>			
<b>Nature of Impact</b>	<p><i>Service station: 35 Jobs are generated and 28 jobs earmarked for locals will be created. Of those jobs, 13 are unskilled, 13 semi-skilled and 7 skilled jobs.</i></p> <p><i>Business premises; 23 Jobs are generated and 18 jobs earmarked for locals will be created. Of those jobs, 11 are un-skilled, 6 semi-skilled and 3 skilled jobs.</i></p>			
<b>ALTERNATIVES</b>	<b>Preferred Local</b>		<b>No Go</b>	
<b>Extent of impact (A)</b>	Local	4	No impact	0
<b>Duration of Impact (B)</b>	Short term	1	No impact	0
<b>Probability of occurrence (C )</b>	Likely	2	No impact	0
<b>Intensity of Impact(D)</b>	High positive	3	No impact	0
<b>Degree of confidence (E)</b>	Likely	2	No impact	0
<b>Level of significance (AxBxD+E)xC</b>	Low Positive	28	No impact	0
<p>Mitigation measures:</p> <ul style="list-style-type: none"> <li>Contractors should be required to employ 80% locals of whom 80% is HDIs and are suitably qualified or skilled. Should there be a lack of suitably qualified people, skills transfer should be prioritized whilst construction is taking place.</li> <li>The municipality, local community and community organizations should be informed of the project and potential job opportunities by the developer.</li> <li>A database of locals including small businesses owned and run by HDIs that qualify as service providers (construction companies, catering companies, waste collection companies, site cleaning companies etc.) should be compiled by the contractor prior to the commencement of the project. These businesses should be invited to render services where required;</li> </ul>				
<b>Level of significance after Mitigation</b>	Degree of confidence: Certain- 3	of 30	No mitigation	
<b>Related results</b>	Influx of contract workers due to lack of skills and job seekers due to jobs created.			

The increase in the number of jobs is positive, and the significance of the impact is rated low positive at a local level before and after mitigation. The No-go alternative has no impact.

## b) Increased Income

**Experienced as:** Working age persons find employment and contribute to household increases

The average household income overall is low as 48.4% of the population earns R42 000 (maximum R3 500 per month) and less, whilst 31.9% earns between R 42 000 and R 153 800 (maximum R12 800 per month) and 19.8% earn more than R12 800 per month:

Annual household income below R42 000	48.4%
Annual household income between R42 001 and R144 000	31.9%
Annual household income above R144 000	19.8%

An amount of ±R1.59 million and R2.17 of the total wage bill of ±R1.99million and be R2.712millionshould benefit the local community of Darling and Yzerfontein (to a limited extend) over a period of two years during the construction phase.

The increased income affects the economic and social environment, as the relationships between family members directly.

Environment	Level Formality	Population unit	Directness
Economic and Social	Life/ Relations (Informal)	Family	Indirect

The No-Go alternative will have no impact. A summary of the impact follows in the table below.

Table 21: Assessment of Impact on income: Construction Phase

Impact	Some households will experience an increase in income			
<b>Nature of Impact</b>	The households of the unskilled and semi-skilled locals, who are employed as a result of the proposed development, will benefit. There will be a stable and likely increased income during the construction period of two years.			
<b>ALTERNATIVES</b>	<b>Preferred Local</b>		<b>No Go</b>	
<b>Extent of impact (A)</b>	Local	4	No impact	0
<b>Duration of Impact (B)</b>	Short Term	1	No impact	0
<b>Probability of occurrence (C )</b>	Probable	2	No impact	0
<b>Intensity of Impact(D)</b>	Moderate, positive	2	No impact	0
<b>Degree of confidence (E)</b>	Certain	3	No impact	0
<b>Level of significance (AxBxD+E)xC</b>	Low, positive	22	No impact	0
Mitigation measures: None				
<b>Level of significance after Mitigation</b>	None		No mitigation	
<b>Related results</b>	Those employed will be able to find work on contract sites of similar developments within the West Coast District and Western Cape.			

The construction of the proposed service station development will impact positively on the income of households employed locally and regionally. The No Go alternative will have no impact.

### c) Skills development of working age population

**Experienced as:** Skills base extended

To install the bulk and internal services and build the structures, 80% of those employed should be from the local population.

Though education and skills levels in Swartland and its immediate surroundings are low (50.1% unskilled, 34.6% semi-skilled and 15.2% skilled, Quantec Research, 2018), and as the drop-out rate from school in Swartland is comparatively low when compared with the rest of the West Coast District, the receiving community may not have all the skills required for construction. Of the 35 service station construction jobs,

the skills levels required are: 40% (or 14 persons) low-skilled, 40% (or 14 persons) semi-skilled and 20% (or 7 persons) skilled. Of the 23 business premises construction jobs, the skills levels required are: 52% (or 14 persons) low-skilled, 32% (or 7 persons) semi-skilled and 17% (or 4 persons) skilled. The construction skills required to build the service station and business premise include but are not limited to: casting foundations, bricklaying, roofing, guttering, plumbing, electrification and painting, securing construction materials, scaffolding, transportation and logistics and construction management.

The duration of the construction phase would be two years and capacity building and skills development will be by working with people that are better skilled (job shadowing). Those employed will benefit and the community will benefit in the short term and long term. As people get skilled their income will increase and their economic and material well-being will improve. Obtaining skills will enable community members to find work at future construction projects or to do maintenance within the settlement, the municipality and the region. The creation of the opportunity to work and to develop skills will cause more jobseekers to settle in Darling and Yzerfontein as immediate surrounding communities. The influx of jobseekers may cause societal tension and instability particularly if the unemployment rates stay high and locals do not find work.

Skills development amongst working age persons affects the economic environment, as the relationships between people at an individual level are directly affected.

Environment	Level Formality	Population unit	Directness
Economic	Life/ Relations (Informal)	Individual	Direct

A summary of the impact follows in the table below.

Table 22: Assessment of Impact on skills and educational qualification levels: Construction Phase

Impact	<b>Changes in economic and material well-being as the skills base amongst the local population expand and deepen.</b>			
<b>Nature of Impact</b>	More people gain skills in the field of construction as they are employed and those employed in the construction field broaden and deepen their skills. Those with newly acquired skills may leave the area as new projects in surrounding areas come into being or as outsiders may be employed to do the job. Job seekers joining the community may directly and indirectly cause safety, security and community stability to deteriorate.			
<b>ALTERNATIVES</b>	<b>Preferred Local</b>		<b>No Go</b>	
<b>Extent of impact (A)</b>	Local	4	No impact	0
<b>Duration of Impact (B)</b>	Short term	1	No impact	0
<b>Probability of occurrence (C )</b>	Probable	2	No impact	0
<b>Intensity of Impact(D)</b>	Moderately positive	2	No impact	0
<b>Degree of confidence (E)</b>	Likely	2	No impact	0
<b>Level of significance (AxBxD+E)xC</b>	Low, positive	20	No impact	0
Mitigation measures: <ul style="list-style-type: none"> <li>Reserve 80% of jobs for local labour.</li> <li>Require contractors to put mechanisms in place to enable locals to access jobs offered by the proposed service station and business premise development.</li> <li>Require the contractor to enhance on the job skills transfer:</li> </ul>				

Should skilled persons from outside the community be employed, the developer should consider implementing a training and skills development programme to enhance the opportunities for local historically disadvantaged individuals in the construction industry. Measures should be put in place to ensure successful training and development i.e. structured job shadowing and learnerships. Where likely, such a programme should be offered in liaison with an accredited Further Education and Training College like the West Coast College or Cape Peninsula University of Technology;			
<b>Level of significance after Mitigation</b>	Probability: Highly Probable: 3	30	
<b>Related results</b>	Skills drain in the municipal area as people find work elsewhere. Others are afforded the opportunity to develop their skills instead of locals.		

The impact of the skills increase is low positive, and stay low positive after mitigation. Creating skills development opportunities for locals, irrespective of its significance, is viewed positively given the challenge of unemployment in the municipal area and in the province. Moreover, skills are a long term investment.

#### **d) Improved local Economy and Increased Sales and GDP**

**Experienced as:** Increase in income

The improvement of the economy will be measured by the change in Gross Domestic Product (GDP) of Swartland, applying the 2016 GDP of R7.4 billion and that of the Western Cape province at R 424.38 billion (2016).

The contribution of the proposed service station and business premise development made to the Swartland Municipal GDP is R15 million over a period of one year and R10 million in the consecutive year. Not all purchases representing the expenditure will be done locally and thus local GDP contribution, based on the 2016 GDP, is calculated as a percentage of the total contribution. The local contribution is less than 1% to the Swartland GDP and sales.

During the construction phase, the general project purchases i.e. most building materials, fuel and domestic purchases, such as groceries, liquor and restaurant services will be purchased locally. This will cause the sales volumes (direct and indirect) to increase. Some of the building materials will be purchased regionally.

Intensity of the change in GDP will be rated according to the following scale:

Low <1%, Medium 1 -3% and High >3%

The GDP contribution affects the economy and the community directly.

<b>Environment</b>	<b>Level Formality</b>	<b>Population unit</b>	<b>Directness</b>
Economic	Economy	Community	Direct

A summary of the impact follows in the table below.

*Table 23: Assessment of Impact on GDP: Construction Phase*

<b>Impact</b>	<b>Changes in the economic and material well-being</b>
<b>Nature of Impact</b>	Direct and indirect sales volumes will increase which will lead to

	an increase of the GDP of the local and district economy.			
<b>ALTERNATIVES</b>	<b>Preferred</b>		<b>No Go</b>	
<b>Extent of impact (A)</b>	Local	4	No impact	0
<b>Duration of Impact (B)</b>	Short term	1	No impact	0
<b>Probability of occurrence (C )</b>	High probable	3	No impact	0
<b>Intensity of Impact(D)</b>	Medium, positive	2	No impact	0
<b>Degree of confidence (E)</b>	Likely	2	No impact	0
<b>Level of significance (AxBxD+E)xC</b>	Low Positive	30	No impact	0
Mitigation measures: None				
<b>Level of significance after Mitigation</b>	No Mitigation		No mitigation	
<b>Related results</b>	None			

The improvement of the economy, measured by the change in Gross Domestic Product (GDP) of the Swartland reflects as low measured against the 2016 GDP.

The No Go alternative has a low impact.

### 3.1.2 Direct and Negative Impacts during the Construction Phase

#### e) Increased use of Social Amenities and Services

**Experienced as:** Diminishing social amenity and services capacity

Health amenities, i.e. the local clinic, local doctors and regional ambulances will be utilized should a construction-related accident happens. It is anticipated that any serious emergencies will be routed to Malmesbury and Cape Town alternatively. However the likelihood of emergencies on site occurring is unlikely as national safety standards will have to be adhered to.

The temporary stay of non-local construction team will add negligible pressure on the demand for basic services i.e. water, sewerage and electricity and removing refuse.

The use of social amenities and services affects the social and the economic environment, as the relationships at community level are directly affected.

Environment	Level Formality	Population unit	Directness
Social and Economic	Life/ Relations (Informal)	Community	Direct

A summary of the impact follows in the table below.

Table 24: Assessment of Impact on services and amenities: Construction Phase

Impact	Changes in the living environment	
<b>Nature of Impact</b>	Demand for services may increase slightly and emergency capacity may be required to cope with any construction accidents.	
<b>ALTERNATIVES</b>	<b>Preferred</b>	<b>No Go</b>

<b>Extent of impact (A)</b>	Local	4	No impact	0
<b>Duration of Impact (B)</b>	Short term	1	No impact	0
<b>Probability of occurrence (C )</b>	Probable	2	No impact	0
<b>Intensity of Impact(D)</b>	Low negative	-1	No impact	0
<b>Degree of confidence (E)</b>	Low	1	No impact	0
<b>Level of significance (AxBxD+E)xC</b>	Low, negative	-6	No impact	0
Mitigation measures:				
<ul style="list-style-type: none"> <li>To adhere to international construction, health and safety standards and precaution measures.</li> </ul>				
<b>Level of significance after Mitigation</b>	Low probability: 1	- 3	No mitigation	
<b>Related results</b>				

The impact of the temporary construction team on amenities and municipal services is unlikely, yet in the event it happens it would be experienced as slightly negative. After mitigation the probability of the impact becomes less and the level of significance decreases causing the impact to be nearly neutralized. The No Go alternative will have no impact.

#### **f) Increased traffic levels**

**Experienced as:** Non-motorized and slow moving motorized traffic levels may increase.

Sturgeon Consulting Pty Ltd traffic engineers were appointed to undertake a Transport Impact Assessment (TIA) for a proposed service station and business development node. The TIA concluded that since the anticipated new traffic levels will not increase drastically from current traffic flow, the current infrastructure and future infrastructure will be able to accommodate anticipated traffic.

During the construction phase, construction vehicles (graders, TLB's and cement trucks etc.) would be used. These vehicles would stay onsite and their impact on the road into Yzerfontein and on the R27, will be minimal as most of these vehicles will be transported to the site. Vehicles transporting goods, materials and equipment would make use mainly of the R27 and R315 roads.

Construction signs informing drivers of the project that are static non-illuminated boards informing drivers of activity ahead of them will become part of the landscape.

The increase in traffic/ decreased safety, affects the social environment and the relationship amongst the community indirectly.

<b>Environment</b>	<b>Level Formality</b>	<b>Population unit</b>	<b>Directness</b>
Social	Life/ Relations (Informal)	Community	Indirect

As slow moving delivery vehicles (trucks with loads) and employees on foot (pedestrians) could impact on road safety, road signs, erected to address the impact of the slow moving vehicles and that of pedestrians on foot, will neutralize this impact.

A summary of the impact follows in the table below.

Table 25: Assessment of Impact on Traffic: Construction Phase

<b>Impact</b>	<b><i>The increase in heavy and slow traffic may cause changes in the living environment i.e. safety.</i></b>			
<b>Nature of Impact</b>	Slow moving and heavy traffic will increase. The road infrastructure is capable of accommodating the additional traffic cause by construction vehicles. Road signals will have to be upgraded to inform motorist of the project implementation and to decrease conflicting situations and road safety.			
<b>Related impacts</b>	Increased economic opportunity.			
<b>ALTERNATIVES</b>	<b>Preferred</b>		<b>No Go</b>	
<b>Extent of impact (A)</b>	Local	4	No impact	0
<b>Duration of Impact (B)</b>	Short term	1	No impact	0
<b>Probability of occurrence (C )</b>	Probable	2	No impact	0
<b>Intensity of Impact(D)</b>	Medium, negative	-2	No impact	0
<b>Degree of confidence (E)</b>	Likely	2	No impact	0
<b>Level of significance (AxBxD+E)xC</b>	Low, negative	-12	No impact	0
Mitigation measures: <ul style="list-style-type: none"> <li>• Upgrade road signs to address the movement conflict.</li> <li>• Road signs for protecting pedestrians crossing and accessing the road should be displayed.</li> <li>• Provide transport to decrease pedestrian traffic.</li> <li>• Restrict heavy vehicles to specific hours.</li> <li>• Erect road signs signaling times when heavy vehicles will make use of the road.</li> <li>• Adhere to national traffic safety standards and precaution measures.</li> </ul>				
<b>Level of significance after Mitigation</b>	Intensity: Low -1	-4		
<b>Related results</b>	Increase in pedestrian traffic as more people walk to work.			

The intensity of the impact caused by the increase of traffic is low but negative. Mitigation measures will assist the decrease in the negative experience to become very low in significance.

The No Go alternative will have no impact.

### **g) Increased noise and dust levels**

**Experienced as:** Living conditions may turn harsh with increased dust and noise.

Noise and dust will be generated during the establishment of the construction site, but only for a limited period of time. Excavation activities for building infrastructure foundations, trenches for cabling and piping may affect the noise and dust levels. After preparation and during the building period noise will be generated by activities such as concrete mixing, construction and transport vehicles to and from the site along gravel roads, building, concrete vibration and steel work, and the installation of services. On-site vehicle movement, delivery of materials and equipment and additional traffic will also create noise. These impacts will be of a local nature (immediate surroundings of service station and business premise development) and for a limited period of time. However the sparsely inhabited surroundings of the service station and business premises development are removed far enough to make the impact negligible.

The presence of dust affects the social environment, as individual family members are indirectly affected.

Environment	Level Formality	Population unit	Directness
Social (Health)	Life/ Relations (Informal)	Individuals and families	Direct

A summary of the impact follows in the table below

Table 26: Assessment of Impact on air and audio quality: Construction Phase

Impact	<b>Changes in the health and social well-being of the local population as noise and dust levels may increase.</b>			
<b>Nature of Impact</b>	<p>Dust and noise may impact on the health of employees and inhabitants in close proximity of the service station and business premise development and it is unlikely that it would cause or contribute directly to respiratory or indirectly psychological illnesses. .</p> <p>Increases in the dust and noise levels will occur during the entire construction period for short intervals. However, the location of the proposed service station development is removed sufficiently from the town environment and located in a sparsely inhabited area not to cause such an impact. In addition dust and noise suppression can be applied as mitigation measure to maintain the standard of health for employees on site.</p>			
<b>ALTERNATIVES</b>	<b>Preferred</b>		<b>No Go</b>	
<b>Extent of impact (A)</b>	Local	4	No impact	0
<b>Duration of Impact (B)</b>	Short intervals over 15 years	1	No impact	0
<b>Probability of occurrence (C )</b>	Probable	2	No impact	0
<b>Intensity of Impact(D)</b>	Low, negative	-1	No impact	0
<b>Degree of confidence (E)</b>	Likely	2	No impact	0
<b>Level of significance (AxBxD+E)xC</b>	Low, negative	-4	No impact	0
<p>Mitigation measures:</p> <ul style="list-style-type: none"> <li>• Dust creation must be controlled as per construction management and control code.</li> <li>• Noise creation should be controlled as per construction management and control code.</li> <li>• Appoint an Environmental Control Officer to supervise construction and building.</li> <li>• Adhere to the Environmental Management Plan (EMPr) for the Construction Phase.</li> <li>• All workers and management must undergo an induction course.</li> <li>• Implementation of dust suppression measures;</li> <li>• Access must be on recognized routes.</li> <li>• Litter and littering must be strictly controlled.</li> <li>• All construction waste and building rubble must be removed off site.</li> </ul>				
<b>Level of significance after Mitigation</b>	Probability: Improbable: 1	-2		
<b>Related results</b>				

The impact of dust and noise is low negative as it occurs over short intervals and is removed from neighborhoods in close proximity. Mitigation will neutralize the impact as the likelihood of the impact to occur, becomes less.

The No Go alternative has no impact.

#### **h) Change in sense of place**

**Experienced as:** Living environment change

The contextual environment in which development will occur has been and will be affected by the construction of road infrastructure and the present tourism facilities.

The proposed development will represent a change in land use and form and thus the status quo. The sense of place and visual landscape are altered during the construction phase as a result of the construction activities and infrastructure and structures of the proposed development being introduced onto a limited development node amidst the dominantly vacant landscape. These activities include generation of artificial lighting and glare at night and construction signs that are static non-illuminated boards that will inform drivers of the project. Construction signs having a negligible potential for actively distracting a driver will become part of the landscape. The receptors in the fore- and middle ground of the view shed from the view corridors such as the R27 and the R315 are temporarily impacted upon by the proposed development during the construction phase.

The absorption of the intensity of the visual impact by the existing and proposed road infrastructure development and the present tourism facilities will be limited. Given the high visual exposure; low to medium visual absorption capacity; low to medium compatibility; and high visibility will continuously cause the construction phase to be highly visible. The sense of place along the R27 and R315 will change within acceptable levels (moderately high impact) as expected from a service station and business premise amidst fallow fields and Fynbos causing definite change to the visual environment.

The proposed development has no impact on heritage resources and the presence of archaeological resources is unlikely.

The change in the living environmental affects the social environment, as the relationships between family members are indirectly affected.

<b>Environment</b>	<b>Level Formality</b>	<b>Population unit</b>	<b>Directness</b>
Social	Life/ Relations (Informal)	Family	Indirect

A summary of the impact follows in the table below.

*Table 27: Assessment of Impact on appearance & experience of environment: Construction Phase*

<b>Impact</b>	<b>Changes in the quality of the rural environment</b>
<b>Nature of Impact</b>	<i>The visual environment of the area will change as the construction of infrastructure of the proposed development impact on sensitive receptors in the foreground and middle ground of the view channels.</i>

	<i>Likely the generation of artificial lighting and glare at night and the presence of static non-illuminated construction signs during the construction phase contribute to the changed sense of place.</i>			
<b>ALTERNATIVES: Preferred</b>	<b>Sense of place (Local)</b>		<b>No Go</b>	
<b>Extent of impact (A)</b>	<i>Local</i>	4	<i>No impact</i>	0
<b>Duration of Impact (B)</b>	<i>Temporary</i>	1	<i>No impact</i>	0
<b>Probability of occurrence (C)</b>	<i>Highly Probable</i>	3	<i>No impact</i>	0
<b>Intensity of Impact(D)</b>	<i>Medium, negative</i>	-2	<i>No impact</i>	0
<b>Degree of confidence (E)</b>	<i>Certain</i>	3	<i>No impact</i>	0
<b>Level of significance (AxBxD+E)xC</b>	<i>Low, Negative</i>	-15		
<p><i>Mitigation measures during the construction phase</i></p> <ul style="list-style-type: none"> <li>- <i>Keep disturbed areas to a minimum;</i></li> <li>- <i>Buildings and similar structures must be in keeping with regional planning policy documents, especially the principles of critical regionalism, namely sense of place, sense of history, sense of nature, sense of craft and sense of limits.</i></li> <li>- <i>Utilize existing roads and tracks to the maximum extent possible.</i></li> <li>- <i>Provide pedestrian walkways where desire lines are identified.</i></li> <li>- <i>Outdoor lighting must be strictly controlled so as to prevent light pollution.</i></li> <li>- <i>All lighting must be installed at downward angles.</i></li> <li>- <i>Sources of light must as far as possible be shielded by physical barriers such as trees and buildings or structures.</i></li> <li>- <i>Use only minimum wattage light fixtures.</i></li> <li>- <i>Visual management and maintenance: site tidiness should be maintained at all times including during construction.</i></li> <li>- <i>Notify the motorists about the development once implementation is started. It is important that warning/informative signs (billboards) be erected at the site. These should indicate the operation hours and when works are likely to be started and completed. The signs should be positioned in a way to be easily viewed by the public and mostly motorists.</i></li> </ul>				
<b>Level of significance after Mitigation</b>	<i>Intensity: low, negative: -1</i>	-3		
<b>Related result</b>				

The visual and aesthetic sensitivity of the area is moderate to high and the anticipated impact on scenic resources is moderately high. The construction phase of the development has a visual impact that is regional (rural) yet limited to local extent, moderate in intensity, definite in probability, and of moderate significance on the landscape. The visual impact during construction is rated as low negative before and after mitigation.

### **i) Oil and fuel leaks and Spills**

**Experienced as:** Environmental degradation

Oil/grease spills may be prevalent, though not common at the site during construction. Petroleum products contain detrimental elements to the environment since they contain traces of heavy metals such as; mercury, lead and sulfur among others. Therefore, it is wise to control and observe the little that could occur especially during maintenance of

the involved machinery. The unlikely impact of oil/ grease spills will not be assessed as the environmental management plan will deal with the prohibition of such leaks and spills.

### 3.1.3 Indirect Impacts during the Construction Phase

#### j) Community stability and homogeneousness

**Experienced as:** Influx of people (employed and unemployed) permanently or semi-permanently to work or in anticipation to access employment

The unskilled and semi-skilled workforce is located in Darling whilst the skilled work force may be located in Yzerfontein. The creation of jobs may cause an influx of unemployed people semi-permanently in anticipation to access employment which may affect community stability. As unemployed and most likely unskilled people settle in the community and affect the social environment, the relationship between these individuals and families in the community and community members are indirectly affected.

The presence of employed skilled and semi-skilled outsiders will also increase the population for at least a two year period. However they will introduce different job options to the local community and impart skills on the job.

Environment	Level Formality	Population unit	Directness
Social	Life/ Relations (Informal)	Individual, family & community	Indirect

A summary of the impact follows in the table below.

Table 28: Assessment of Impact on community stability and homogeneity: Construction Phase

Impact effect	Increase in the local population and presence of unemployed outsiders in the community as they are looking for work.			
<b>Nature of Impact</b>	The construction phase may create the impression that there are jobs and will cause the unemployed to migrate to Darling where the workforce is located in search of work. This influx can last for the two year construction period or can even be semi -permanent. Should these job seekers not find work the unemployment rate will increase. The presence of skilled and semi-skilled outsiders will: a) increase the population for at least a one year period. b) introduce different job options to the local community.			
<b>ALTERNATIVES</b>	<b>Preferred</b>	<b>No Go</b>		
<b>Extent of impact (A)</b>	Local	4	No impact	0
<b>Duration of Impact (B)</b>	Medium term	2	No impact	0
<b>Probability of occurrence (C )</b>	Probable	2	No impact	0
<b>Intensity of Impact(D)</b>	Medium negative	-2	No impact	0
<b>Degree of confidence (E)</b>	Certain	3	No impact	0
<b>Level of significance (AxBxD+E)xC</b>	Low, negative	-26	No impact	0
Mitigation measures:				

<ul style="list-style-type: none"> <li>• Ensure that contractors employ at least 80% locals of whom 80% were previously disadvantaged across all skills categories (unskilled, semi-skilled and skilled).</li> <li>• If not suitably qualified, make an effort to transfer skills on the job. Provide opportunities to learn on the job and be taught by someone who has the skills.</li> <li>• Involve schools and colleges to visit construction site to inspire youngsters to join the construction industry.</li> </ul> <p>Establish a Monitoring Committee for the construction phase in collaboration with representatives of the local community. The Monitoring Committee has to ensure that the proposed service station development is implemented and that any problems that arise, is addressed.</p>				
<b>Level of significance after Mitigation</b>	No mitigation		No mitigation	
<b>Related results</b>	The burden on social services may increase. Crime may increase.			

The influx of unemployed persons will impact negatively on the social stability and the presence of the unemployed is perceived as negative by the community of Darling and the surrounding. No mitigation is proposed, as the influx of unemployed persons is an indirect result of the proposed service station and business premise development. The influx of skilled and semi- skilled people (employed by contractors) and more likely into Yzerfontein, has a low positive impact locally as locals who do not have the skills be afforded the opportunity to acquire these skills. With mitigation, the presence of contractor employees can be enhanced to introduce different job options to the local community and to impart skills to locals.

### k) Crime and Offences

**Experienced as:** Prevalence of criminal incidence experienced

The inhabitants of Swartland perceive that common crimes including drug trafficking and use, related sexual offences, theft and drunken driving, most likely will increase during the construction period of the proposed service station development.

The prevalence of criminal incidences affects the social environment and individuals, families and the community indirectly.

Environment	Level Formality	Population unit	Directness
Social	Life/ Relations (Informal)	Individual, family and community	Indirect

A summary of the impact follows in the table below.

Table 29: Assessment of Impact on safety and security: Construction Phase

<b>Impact</b>	<b>Short term safety and security of the local community decrease.</b>			
<b>Nature of Impact</b>	Whilst the material well-being of those employed improves, access to money may cause the employed to commit offences. Similarly, the presence of contractors creates the opportunity for criminals to commit crime.			
<b>ALTERNATIVES</b>	<b>Preferred</b>	<b>No Go</b>		
<b>Extent of impact (A)</b>	Local	4	No impact	0
<b>Duration of Impact (B)</b>	Medium term	1	No impact	0

<b>Probability of occurrence (C )</b>	Probable	2	No impact	0
<b>Intensity of Impact(D)</b>	Medium, negative	-2	No impact	0
<b>Degree of confidence (E)</b>	Likely	2	No impact	0
<b>Level of significance (AxBxD+E)xC</b>	Low, negative	-28	No impact	0
Proposed Mitigation measures: - Contractors / developers offer family financial management coaching.				
<b>Level of significance after Mitigation</b>	Intensity: low, negative: -1	-12		
<b>Related results</b>				

The construction of the proposed service station development may lead to increased offences and crime but after mitigation, the already low impacts most likely will become even less.

### 3.1.4 Residual Impacts during the Construction Phase

#### l) Youth self-esteem develop

**Experienced as:** Young people find employment temporarily and permanently

The population of the Swartland municipal is relatively young as the Youth (0-14) represents 25% of the total population. In 2017, the unemployment rate was 10.4% (8.9% in 2011) totaling 7 125 people out of 37 959 of the Working Age Population that are currently not in employment whilst 40 651 persons of working age are employed mainly in the formal sector. The unemployment rate amongst the youth, aged 15-35 and constituting 40 044 (35%) of the population, was 17.9%. The number of youth being unemployed, equals the total number of unemployed.

Given the high youth unemployment rate of 17.9% in relation to the unemployment rate of 8.9% there is a need that young people be employed as part of the local component that have to constitute such a project. As the young people may not have the skills, they have little to aspire to and employment is limited to entrance level jobs should they get employed.

The employment of youth affects the social environment, as the relationships between people at an individual level and at a family and community level are indirectly affected.

<b>Environment</b>	<b>Level Formality</b>	<b>Population unit</b>	<b>Directness</b>
Social	Life/ Relations (Informal)	Individual, family and community	Indirect

Job reservation for youth is a mitigation measure to improve the social wellbeing of the community. The impact of the mitigation measure was considered when employing youth was assessed as part of the impacts during the Construction Phase. The opportunity afforded to youth to work was assessed as positive. A subsequent impact is that families may start to hold youth in a position of higher esteem than previously. As the perception (view) about youth changes positively, **family and community life** will be touched and change positively in the long term breaking the cycle of hopelessness of youth in the local and regional community.

Job reservation could be manipulated by the local authority as it is highly likely that the developer will approach the municipality to access the labour market. The likelihood of the local authority promoting the appointment of members of a specific political party is unlikely. Any preferential treatment is unlikely to occur and should not impact the number of jobs created or increased household income. The impact of job reservation will therefore not be rated.

The rating applied to assess the impact on youths' self-esteem will be project specific.

A summary of the impact follows in the table below.

Table 30: Assessment of impact on social wellbeing of youth: Construction Phase

<b>Impact</b>	<b>Young people's social well-being improves, as they find employment.</b>			
<b>Nature of Impact</b>	Young people may lack skills and employment experience and are therefore not afforded an opportunity to be employed by the project. Should young people be employed it may assist to break the cycle of hopelessness. The self- image of the youth improves as well as the way the community views them. It is anticipated that 17 and 14 young people respectively will be employed annually over the two year construction period.			
<b>ALTERNATIVES</b>	<b>Preferred</b>		<b>No Go</b>	
<b>Extent of impact (A)</b>	Local	4	No impact	0
<b>Duration of Impact (B)</b>	Medium term	2	No impact	0
<b>Probability of occurrence (C )</b>	Probable	2	No impact	0
<b>Intensity of Impact(D)</b>	Medium positive	2	No impact	0
<b>Degree of confidence (E)</b>	Medium	2	No impact	0
<b>Level of significance (AxBxD+E)xC</b>	Low, positive	36	No impact	0
Mitigation measures:				
<ul style="list-style-type: none"> <li>Reserve 60% jobs for youth: Of the 35 direct jobs, and the 28 jobs reserved for locals, 17 jobs should be earmarked to be taken up by people 35 years of age and younger. And of the 23 direct jobs, and the 18 jobs reserved for locals, 14 jobs should be earmarked to be taken up by people 35 years of age and younger.</li> <li>Require contractor to facilitate mechanisms to enable youth to access employment.</li> <li>Pay youth market related prices for the job.</li> <li>Require contractor to facilitate that youth gain equal access to training and education opportunities.</li> </ul>				
<b>Level of significance after Mitigation</b>	Highly probable: 3	54		
<b>Related results</b>	Families develop hope			

The opportunity afforded to youth is low positive. Although the significance of the impact is medium after mitigation, the change in social wellbeing of youth will change the social wellbeing of the family. Therefore the impact is viewed as significantly positively as it may assist in breaking the local cycle of hopelessness.

### 3.1.5 Summary of impacts during the Construction Phase

Overall, the construction phase brings about some direct and positive impacts, direct and negative impacts and indirect positive and negative impacts.

Direct and Positive Impacts during the Construction Phase are tabulated below:

*Table 31: A summary of direct and positive impacts, Construction Phase*

	<b>Impact (s)</b>	<b>Environment</b>	<b>Experienced as</b>	<b>Population Unit</b>	<b>Rating</b>	<b>Mitigated</b>
A	Employment opportunities increase	Economic	Working age people find employment temporarily and permanently	Individual, family and community	Low positive	Low positive
B	Increased Income	Economic and Social	Working age persons find employment and contribute to household income.	Family	Low Positive	No Mitigation
C	Skills development of working age population	Economic	Skills base extend	Individual	Low Positive	Low Positive
D	Improved local Economy and Increased Sales and GDP	Economic	Increased sales and income	Community	Low Positive	No Mitigation

Direct and Negative Impacts during the Construction Phase are tabulated below:

*Table 32: A summary of direct and negative impacts, Construction Phase*

	<b>Impact (s)</b>	<b>Environment</b>	<b>Experienced as</b>	<b>Population Unit</b>	<b>Rating</b>	<b>Mitigated</b>
E	Increased Use of Social Amenities & Service	Social & Economic	Diminishing social amenity and services capacity	Community	Low negative	Low Negative (Neutral)
F	Increased traffic levels	Social	Non-motorized and slow moving motorized traffic levels increase.	Community	Low negative	Low negative
G	Increased noise & dust levels	Social (Health)	Living conditions may turn harsh with increased dust and noise	Individuals & Family	Low negative	Low Negative (Neutral)

H	Change in sense of place	Social	Living environment change	Family	Low negative	Low negative
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Indirect Impacts during the Construction Phase are tabulated below:

Table 33: A summary of indirect impacts, Construction Phase

	<b>Impact (s)</b>	<b>Environment</b>	<b>Experienced as</b>	<b>Population Unit</b>	<b>Rating</b>	<b>Mitigated</b>
J	Community stability & homogeneity	Social	Influx of people (employed and unemployed) permanently or semi-permanently to work or in anticipation to access employment	Individual, Family & Community	Low Negative	No Mitigation
K	Crime and Offences	Social	Prevalence of criminal incidence experienced	Individuals, Family & Community	Low Negative	Low Negative

Residual Impacts during the Construction Phase are tabulated below:

Table 34: A summary of residual impacts, Construction Phase

	<b>Impact (s)</b>	<b>Environment</b>	<b>Experienced as</b>	<b>Population Unit</b>	<b>Rating</b>	<b>Mitigated</b>
L	Youth's self-esteem develop	Social	Young people find employment temporarily and permanently	Individual, family and community	Low Positive	Medium Positive

## 3.2 Operational Phase

The following impacts during the operational phase are identified and evaluated:

### 3.2.1 Direct Positive Impacts

#### a) Increased Employment Opportunities

**Experienced as:** Working age people find employment temporarily and permanently

During the operational phase, the service station and business premise development has to be managed, maintained, and kept clean and rejuvenated from time to time. Municipal service connections will be taken up. Several direct jobs will be created for example but not limited general workers (cleaners), technicians, sales person, business managers and logistic controllers, drivers. The unskilled and semi-skilled labour force is located in Darling and the skilled labour force most likely in Yzerfontein.

The service station: The expected value of the employment for the first ten (10) years is ±R90.5 million (5% average increase per annum) of which approximately R81.4 million rand will benefit previously disadvantaged individuals.

The proposed service station development could create 45 -60 direct jobs (15 – 20 staff per 8hour shift x 3 shifts) on completion of the development. Ninety percent (90%) of those jobs should be reserved for locals. Thus, the project could result in an increase of 60 people (including management) employed in the primary, secondary and tertiary economic sector. Of those employed, 9 (15%) would be unskilled, 45(60%) would be semi-skilled and 6(10%) would be skilled.

Of the population in Swartland that are of working age, 7.5% or 5 928 persons are unemployed, 1.5% or 1 197 are discouraged work seekers and 39.2% or 30 854 persons not economically active totaling 37 979 people and 33.4% of the total population. The proposed development could contribute to decrease by 60 persons (7 125 – 7 065) unemployment rate by 0.1%.

A breakdown of the jobs generated during the construction of the proposed subsidized development follows below:

<b>No of jobs:</b>	<b>Duration of contract</b>	<b>Skills levels Required</b>	<b>Value of employment opportunities/ jobs/ annum</b>	<b>Involvement of locals</b>
60	Permanent	9 unskilled 45 semi-skilled 6 skilled	±R378 000 (@±R42 000/a) ±R6 480 000 (@±R144 000) ±R1 800 000 (@±R300 000)	High, though locals may lack some skills required

The employment of locals would have a consistent positive impact on the economic and material well-being of the local community as the expected value of employment annually is ±R8.658 million. Of this amount R6.93 million should benefit the local community annually.

The business premise: The expected value of the employment for the first ten (10) years is ±R363 million (5% average increase per annum) of which approximately ±R327 million rand will benefit previously disadvantaged individuals.

The proposed business premise development could create approximately 162 jobs on completion of the development. Ninety percent (90%) of those jobs should be reserved for locals. Thus, the project could result in an increase of approximately 162 people of working age (including management) employed in the primary, secondary and tertiary economic sector. Of those employed, 30 (15%) would be unskilled, 150 (75%) would be semi-skilled and 20(10%) would be skilled.

Of the population in Swartland that are of working age, 7.5% or 5 928 persons are unemployed, 1.5% or 1 197 are discouraged work seekers and 39.2% or 30 854 persons not economically active totaling 37 979 people and 33.4% of the total population. The proposed development could contribute to decrease the unemployment rate by 0.2.8%.

A breakdown of the jobs generated during the construction of the proposed subsidized development follows below:

<b>No of jobs:</b>	<b>Duration of contract</b>	<b>Skills levels Required</b>	<b>Value of employment opportunities/ jobs/ annum</b>	<b>Involvement of locals</b>
162	Permanent	25 unskilled 120 semi-skilled 17 skilled	±R1 0500 000 (@±R42 000) ±R17 280 000 (@±R144 000) ±R5 100 000 (@±R300 000)	High, though locals may lack some skills required

The employment of locals would have a consistent positive impact on the economic and material well-being of the local community as the expected value of employment annually is ±R29.5 million. Of this amount R26.5 million should benefit the local community annually.

Locals should be recruited within the Swartland region. Granting most of the unskilled and semi-skilled jobs to locals will limit the competition with “outsiders”. As it is anticipated that the proposed service station and business premise development may employ contract workers or outside job seekers may cause conflict between locals and outsiders. Such practices will cause the earnings not flowing back into the community but being diluted and being spent most likely outside the region.

The no go alternative will result in no influx of people and has no impact on the population of Swartland and its immediate surroundings.

The employment of working age people affects the economic environment at an individual, family and community level directly.

<b>Environment</b>	<b>Level Formality</b>	<b>Population unit</b>	<b>Directness</b>
Economics	Life/ Relations	Individual, family and community	Direct

A summary of the impact follows in the Table below.

Table 35: Assessment of impact of job opportunities: Operational Phase

<b>Impact</b>	<b>Changes to the economic and material well-being of the local community</b>			
<b>Nature of Impact</b>	Several jobs (formal and informal) could be created benefitting locals. The formal jobs will be general and sector specific jobs.			
<b>ALTERNATIVES</b>	<b>Preferred Local</b>		<b>No Go</b>	
<b>Extent of impact (A)</b>	Local	4	No impact	0

<b>Duration of Impact (B)</b>	Long term	3	No impact	0
<b>Probability of occurrence (C)</b>	Highly Probable	3	No impact	0
<b>Intensity of Impact(D)</b>	High, positive	3	No impact	0
<b>Degree of confidence (E)</b>	Moderate	2	No impact	0
<b>Level of significance (AxBxD+E)xC</b>	High, positive	114	No impact	0
Mitigation measures: Opportunities for entrepreneurs are provided.				
<b>Level of significance after Mitigation</b>	Confidence: Certain: 3	117		
<b>Related results</b>	Unemployment levels stay high at local municipal level given the number of jobs created			

The community perceives job creation as highly positive and the number of jobs created by the operation of the service station and associated service is highly positive. The No Go alternative generates no opportunities.

#### b) Increased Income

**Experienced as:** Income of families increases as working age people are employed

The 2011 average household income overall is low as 49.8% or 14 603 of the households earns R38 200 (maximum R3 200 per month) and less, whilst 33.1% or 9 706 households earns between R38 201 and R 153 800 (maximum R12 800 per month) and 17.1% or 5 014 households earn more than R12 800 per month. These figures correlate with the individual skills levels of 50.1% un-skilled, 34.6% semi-skilled, and 15.2% skilled.

Taking up economic opportunities unlocked by road infrastructure should contribute to salaries and sales. The expected value of the employment for the first ten (10) years for the service station is ±R90.5 million (5% average increase per annum) of which approximately R81.4 million rand will benefit previously disadvantaged individuals mainly in Darling and for the business premise is ±R295 million (5% average increase per annum) of which approximately ±R265 million rand will benefit previously disadvantaged individuals mainly in Darling. Household members getting employed or getting employed in a better paying job may now have an income or additional income. Overall household income increases.

Increased income of working age people affects the economic environment and the family relationship directly.

<b>Environment</b>	<b>Level Formality</b>	<b>Population unit</b>	<b>Directness</b>
Economic	Life/ Relations	Family	Direct

The No Go alternative will have no impact.

Table 36: Assessment of impact on income: Operational Phase

<b>Impact</b>	<b>Some households experience an increase in household income</b>
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<b>Nature of Impact</b>	Member(s) of some households will find employment. As more members per household are employed and members are appointed in better paying jobs, the per capita income of Swartland and of families will increase.			
<b>ALTERNATIVES</b>	<b>Preferred Local</b>		<b>No Go</b>	
<b>Extent of impact (A)</b>	Local	4	No impact	0
<b>Duration of Impact (B)</b>	Long term	3	No impact	0
<b>Probability of occurrence (C )</b>	Highly Probable	3	No impact	0
<b>Intensity of Impact(D)</b>	High	3	No impact	0
<b>Degree of confidence (E)</b>	Medium	2	No impact	0
<b>Level of significance (AxBxD+E)xC</b>	Medium, positive	114	No impact	0
Mitigation measures:				
<ul style="list-style-type: none"> <li>Developer, municipality and business owners to liaise with existing or future projects to enhance employment opportunities for locals.</li> </ul>				
<b>Level of significance after mitigation</b>	Degree of confidence: Stay as is.	-	No impact	
<b>Related results</b>	Members of households may start businesses and generate own income.			

The operation of the proposed service station and business premise development will impact positively on the income of some local households as some member(s) of these households find employment, find better paying employment and others create self-employment. The significance of the impact is moderate.

The No Go alternative will have no impact.

### c) Increased skills levels of working age population and youth in particular

**Experienced as:** People find employment temporarily and permanently as their employability improve

Should capacity building and skills development training programmes be attended and completed, these programmes will benefit the community of Darling mostly in the short and long term. As working age people in Darling get trained their skills level and income will increase and their economic and material well-being will improve. Not only training will build capacity but work experience will also contribute to skills levels.

Obtaining skills will enable community members to find work within the municipality area and the region. The creation of the employment opportunities and to attend training and skills development and to get work may cause more jobseekers to settle in Darling and in the Swartland. This may cause societal tension and instability particularly if the unemployment rates stay high and locals do not find work.

Skills development amongst working age people and youth affects the economic environment and the relationships between individuals and families directly.

<b>Environment</b>	<b>Level Formality</b>	<b>Population unit</b>	<b>Directness</b>
Economic	Life/ Relations (Informal)	Individual and families	Direct

A summary of the impact follows in the Table below.

Table 37: Assessment of impact of skills development and capacity building: Operational Phase

<b>Impact</b>	<b><i>The skills base amongst the local population expands and deepens.</i></b>			
<b>Nature of Impact</b>	Educational qualification, knowledge and skills levels and skills capacity (work experience) will increase. Those with newly acquired qualification and knowledge and skills may leave the area as new projects in surrounding areas come into being or as outsiders may be employed to do the job or as they find work elsewhere. Job seekers joining the community may directly and indirectly cause safety, security and community stability to deteriorate.			
<b>ALTERNATIVES</b>	<b>Preferred Local</b>		<b>No Go</b>	
<b>Extent of impact (A)</b>	Local	4	No impact	0
<b>Duration of Impact (B)</b>	Long term	3	No impact	0
<b>Probability of occurrence (C )</b>	Probable	2	No impact	0
<b>Intensity of Impact(D)</b>	Highly positive	3	No impact	0
<b>Degree of confidence (E)</b>	Likely	2	No impact	0
<b>Level of significance (AxBxD+E)xC</b>	Moderate, positive	76	No impact	0
<p>Mitigation measures:</p> <ul style="list-style-type: none"> <li>Reserve 90% of jobs for locals.</li> <li>Facilitate mechanisms to enable locals to access training opportunities offered by the service station development.</li> <li>Require formal and informal skills transfer:</li> </ul> <p>Should skilled persons from outside the community be employed, industry and business owners should consider implementing a training and skills development programme to enhance the opportunities for local historically disadvantaged individuals in their specific industry. Measures should be put in place to ensure successful training and development i.e. structured job shadowing and learnerships. Such a programme should be offered in liaison with an accredited Further Education and Training College like the West Coast College or University of Technology or the Proposed university.</p> <ul style="list-style-type: none"> <li>Establish and or contribute to skills development and obtaining qualifications by establishing a fund to benefit people of working age. The necessary principles and framework to govern such a fund should be established and all businesses on the Jacobuskraal premise should contribute to the fund.</li> </ul>				
<b>Level of significance after Mitigation</b>	Probability: Highly Probable: 3	114		
<b>Related results</b>	Changes in economic and material well-being are experienced. Skills drain in the Municipality as people find work elsewhere. Others are afforded the opportunity to develop their skills instead of locals.			

The impact of the skills increase is moderately positive, and change to highly positive after mitigation. Creating skills development opportunities for locals, irrespective of its significance, is viewed as significantly positive given the challenge of unemployment in the municipality and in the province. Moreover skills are a long term investment.

The No Go alternative will have no impact.

**d) Growth of local economy and Increased Sales and GGP**

**Experienced as:** Increase in sales, income and spending

When in operation, the proposed service station development and business premises should increase the local GGP of Swartland and cause the sales volumes (direct and indirect) to increase locally.

Business and purchases from passing-by motorist, now stopping at the intersection, will bring revenue from other municipal areas and provinces into the Swartland region. Accessing the target market beyond the inhabitants of the Swartland and accumulating revenue from outside the region will substantially add to driving growth. The tourism market will afford many entrepreneurs and small business an opportunity to be operated on a well exposed site.

The business opportunities created by the road infrastructure being taken up and being operated, ensure work for the unemployed in Darling and ensure Yzerfontein can keep to be mainly a residential settlement. The expected value of the employment for the first ten (10) years for the service station is ±R90.5 million of which the locals will benefit R81.4 million rand and R9 million per annum. The expected value of employment for the first (10) years for the business premise is ±R295 million of which the locals will benefit ±R265 million rand and R29.5 million per annum benefitting also previously disadvantaged individuals. The local GGP most likely will increase by less than 1% as operational and household purchase purchases will be made in Darling, Yzerfontein and Malmesbury by those operating their businesses and by those employed. Only the local, not the regional, GGP was assessed

The GGP change intensity will be rated as per the following scale: Low<1%, Medium 1 -3% and High >3%

The increased GGP affects the economy and the community directly.

Environment	Level Formality	Population unit	Directness
Economic	Life/ Relations (Informal)	Community	Direct

A summary of the impact follows in the Table below.

*Table 38: Assessment of Impact of GDP: Operational Phase*

Impact	Economic growth and material well-being			
<b>Nature of Impact</b>	Local GDP will increase. Direct and indirect sales volumes/ spending by employees and vendors will increase which will lead to an increase of the GDP of the local and district economy.			
<b>ALTERNATIVES</b>	<b>Preferred</b>		<b>No Go</b>	
<b>Extent of impact (A)</b>	Local	4	No impact	0
<b>Duration of Impact (B)</b>	Long term	3	No impact	0
<b>Probability of occurrence (C )</b>	High probable	3	No impact	0
<b>Intensity of Impact(D)</b>	Moderate, positive	2	No impact	0

<b>Degree of confidence (E)</b>	Likely	2	No impact	0
<b>Level of significance (AxBxD+E) x C</b>	Medium	78	No impact	0
Mitigation measures: <ul style="list-style-type: none"> <li>• Business should be directed to purchase locally and to make use of local service providers.</li> <li>• Small business should be supported (i.e. skills training, assistance and guidance to set up small businesses) and joint ventures with previous disadvantaged persons should be promoted.</li> <li>• The promotion of joint ventures between small business (owned by previous disadvantaged persons) and more established business should be encouraged.</li> </ul>				
<b>Level of significance after Mitigation</b>	No Mitigation		No mitigation	
<b>Related results</b>	None			

The improvement of the economy, measured by the change in Gross Domestic Product (GGP) of the Swartland reflects as low against the 2016 GDP.

The No Go alternative has a low impact.

#### e) Broadened municipal tax basis

**Experienced as:** Well-maintained rural environment

The proposed service station should broaden the Swartland tax basis as it will contribute to thereto. It will also contribute to the local economy enabling inhabitants to contribute to the tax basis. The proposed development of economic opportunities unlocked by road infrastructure should contribute indirectly to livable environments as the municipality will have the financial capacity to keep settlement precincts intact.

The broadened municipal tax basis is a social impact affecting the economic environment of individuals, families and the community directly.

Environment	Level Formality	Population unit	Directness
Economic	Institutional/ Social (formal)	Family and community	Direct

A summary of the impact follows in the Table below.

Table 39: Assessment of impact of broadened municipal tax base: Operational Phase

Impact	Broadened municipal tax basis			
<b>Nature of Impact</b>	The proposed service station contributes to and broadens the rates and taxes base. The taxes enable a well maintained rural and living environment.			
<b>ALTERNATIVES</b>	<b>Local</b>	<b>No Go</b>		
<b>Extent of impact (A)</b>	Local	4	No impact	0
<b>Duration of Impact (B)</b>	Permanent	4	No impact	0
<b>Probability of occurrence (C)</b>	Probable	2	No impact	0
<b>Intensity of Impact(D)</b>	Medium, positive	2	No impact	0
<b>Degree of confidence (E)</b>	Moderate	2	No impact	0
<b>Level of significance (AxBxD+E)xC</b>	Medium, positive	68	No impact	0

Mitigation measures:				
<ul style="list-style-type: none"> <li>• None</li> </ul>				
<b>Level of significance after mitigation</b>	No mitigation		No mitigation	
<b>Related results</b>				

The municipal tax contribution of the proposed service station development is rated moderately positive and there is no mitigation measures proposed.

The No Go alternative has no impact.

### m) Increased SMME participation

**Experienced as:** Increased and sustainable economic participation by individual small business owners

An area of just more than half a hectare will be used to establish a tourism container market that will unlock business opportunities for local entrepreneurs and small businesses. Being well located and easily and highly accessible, visitors will frequent the market. .

Driven by unemployment, there is a need to encourage and support small businesses and formalized businesses should assist to build (mentor) small businesses and industries. This will result in an increase in the number of sustainable businesses and industries and solidifying the local economy in Swartland benefitting the community in the long term.

The change in increased SMME participation affects the economic environment and the relationship amongst individual, families and community members indirectly.

Environment	Level Formality	Population unit	Directness
Economic	Institutional/ Social (formal)	Community	Direct

A summary of the impact follows in the Table below.

*Table 40: Assessment of impact of enhancing small businesses: Operational Phase*

Impact	Increased and sustainable economic participation by individual SMME owners and an increase in number of small businesses			
<b>Nature of Impact</b>	Small businesses operated by locals increase and become sustainable given the location of the tourism container market at the service station unlocking business opportunities.			
<b>ALTERNATIVES</b>	<b>Preferred Local</b>		<b>No Go</b>	
<b>Extent of impact (A)</b>	Local	4	No impact	0
<b>Duration of Impact (B)</b>	Long term	3	No impact	0
<b>Probability of occurrence (C )</b>	Probable	2	No impact	0
<b>Intensity of Impact(D)</b>	High, positive	3	No impact	0
<b>Degree of confidence (E)</b>	Medium	2	No impact	0
<b>Level of significance</b>	Medium, positive	52	No impact	0

<b>(AxBxD+E)xC</b>				
Mitigation measures: <ul style="list-style-type: none"> <li>• The promotion of joint ventures between small business (owned by previous disadvantaged persons) and more established businesses.</li> <li>• Implement formal small business training and mentoring programmes.</li> <li>• Establish a mechanism to enable investment into small businesses</li> </ul>				
<b>Level of significance after Mitigation</b>	Medium; (Highly probable: 3)	78	No mitigation	

The impact of more small businesses is of medium significance before mitigation and change to high significance after mitigation. The impact will significantly affect individual families.

The No Go alternative has no impact.

### g) Change in sense of place

**Experienced as:** a permanent change of the rural landscape resulting in a vibrant supportive transition environment at the R315 and R27 intersection.

Despite the presence of other (electricity pylons, wind turbines etc.) and similar (West Coast Padstal) infrastructure and future intersection upgrade that aid the absorption capacity of the site, the intersection lacks of absorption capacity.

The proposed development will represent a change in land use and form and thus the status quo. The development infrastructure and structures included the service station, tourism container market and business premises, parking and road surfaces being introduced onto a limited development node amidst the dominantly vacant landscape. Lighting at night and signs that are static non-illuminated boards that will inform drivers of the facility are part of what contribute to the change of the rural landscape. Service station signs include primary signs attracting and directing passing vehicles and secondary signs aimed at 'internal advertising' by providing more detail information on products and services once visitors have arrived at the filling station or roadside service area. The driver distraction potential of an advertisement depends very much on the nature of the display. Static non-illuminated boards and static have a negligible potential for actively distracting a driver. The proposed development creates a vibrant social space and a supportive transition environment.

Given the high visual exposure; low to medium visual absorption capacity; low to medium compatibility the development will be highly visible. Hence the sense of place along the R27 and R315 will change within acceptable levels (moderately high impact) and the receptors in the fore- and middle ground of the view shed from the view corridors such as the R27 and the R315 are permanently impacted upon by the proposed development. The application of design guidelines can mitigate the impact on the fore- and middle ground receptors. The proposed development creates a gateway to coast and to rural hinterland and recreate sense of place at intersection. At the same time it keeps the sense of place of Yzerfontein as west coast sea-side and holiday settlement in-tact whilst establishing much needed business zoned land removed from settlement. Yet the proposed development is limited to the intersection precinct and corridor as defined by the Swartland SDF, 2019 - 2022

The proposed development has no impact on heritage resources and the presence of archaeological resources is unlikely.

The change in the living environmental affects the social environment, as the relationships between family members are indirectly affected.

Environment	Level Formality	Population unit	Directness
Social	Life/ Relations (Informal)	Family	Indirect

The change in the living environmental affects the social environment, as the relationships between family members are indirectly affected.

Environment	Level Formality	Population unit	Directness
Social	Life/ Relations (Informal)	Family	Indirect

A summary of the impact follows in the Table below. The impact on the receptors was equated to be regional whilst sense of place was equated to the local area.

Table 41: Assessment of impact of visible changes to the local scenery: Operational Phase

Impact	<b>Changes in the quality of the living environment</b>			
<b>Nature of Impact</b>	<i>The visual environment of the area will change as the development and infrastructure impact on sensitive receptors in the foreground and middle ground of the view channels. The contrast between the natural environment and visible static advertising signs and lighting should remind drivers of activity ahead and cause drivers to slow down. The service station then full-fill the role of a vibrant supportive transition environment.</i>			
<b>ALTERNATIVES</b>	<b>Preferred Local &amp; Regional</b>	<b>No Go</b>		
<b>Extent of impact (A)</b>	<i>Local</i>	4	<i>No impact</i>	0
<b>Duration of Impact (B)</b>	<i>Permanent</i>	4	<i>No impact</i>	0
<b>Probability of occurrence (C )</b>	<i>Probable</i>	2	<i>No impact</i>	0
<b>Intensity of Impact(D)</b>	<i>Medium, Positive</i>	2	<i>No impact</i>	0
<b>Degree of confidence (E)</b>	<i>Certain</i>	3	<i>No impact</i>	0
<b>Level of significance (AxBxD+E)xC</b>	<i>Medium, positive</i>	68		
<i>Mitigation measures during the lifetime of the proposed development include the architectural and landscaping guidelines to be implemented and maintained.</i>				
Develop urban guidelines to recreate the sense of place of the gateway to the coast and rural hinterland established by proposed development.				
<b>Level of significance after Mitigation</b>	<i>Intensity: High: 3</i>	102	No mitigation	
<b>Related results</b>				

The visual and aesthetic sensitivity of the area is moderate to high and the anticipated impact on scenic resources is moderately high. The development's visual impact has regional extent though localized, permanent duration, moderate intensity, definite probability, and moderate significance on the landscape.

Hence Urban design and landscaping guidelines have to balance provision of business opportunities to protect the rural regional landscape and cultural, heritage and natural resources and indirectly the growth of tourism and particularly local tourism. Urban design management and landscaping plans have to be implemented and maintained.

The No Go alternative has no impact.

### 3.2.2 Direct impacts that are negative

#### **h) Bulk Services Capacity**

**Experienced as:** Additional pressure on bulk services provided.

The proposed service station, together with other uses, on Portion 7 of Farm Jacobuskraal No. 554, will require 136.7Kl of water per day. Permission needs to be obtained by the Swartland Municipality from the West Coast District Municipality for a water connection to the existing water line next to the R315 route.

Stormwater will be directed along the natural ground slope that falls south west towards the R315. The storm water system will consist of the following:

- The storm water from the wash bay and filling station area will be treated separately from the parking area storm water. The wash bay and filling station platform storm water will flow into a sand and grease trap system.
- Storm water from the buildings and the parking areas will be discharged into the R315 storm water system.
- It is also recommended that rain water harvesting be implemented by supplying rain water tanks at all roof downpipes. This water can be used for gardening and flush toilets.

The construction of a waste water package plant system is recommended. The individual components of the Sewerage system are as follows:

- Fat and grease traps to be provided at all kitchens and wash bays.
- A Waste water treatment plant with a minimum capacity of 110 Kl/day. Effluent that complies with the General DWA Limits will be discharged into the water course crossing the R315 south of the proposed development. A pipeline can be constructed through the site neighbouring the Farm Stall site to the nearest natural stream.

The proposed development will be required to contribute to infrastructure for basic service provision i.e. water and refuse removal. Whilst the proposed development will be mainly self-sufficient it will take up bulk services provision i.e. reservoir and landfill services capacity.

The No Go alternative will have no impact.

The increased use and supply of services affects the economic and social environment and the community directly.

Environment	Level Formality	Population unit	Directness
Economic (and Social)	Institutional (Formal)	Individual, family and community	Indirect

A summary of the impact follows in the Table below.

Table 42: Assessment of impact of demand for & provision of services & amenities: Operational Phase

Impact	Decreased bulk service capacity			
Nature of Impact	The proposed development requires some reservoir and landfill capacity.			
ALTERNATIVES	Preferred		No Go	
Extent of impact (A)	Local	4	Local	0
Duration of Impact (B)	Long term	3	Long term	0
Probability of occurrence (C)	Highly Probable	3	Likely	0
Intensity of Impact(D)	Low, negative	-1	High negative	0
Degree of confidence (E)	Likely	2	Uncertain	0
Level of significance (AxBxD+E)xC	Low, negative	-30	No impact	0
Mitigation measures:				
<ul style="list-style-type: none"> <li>Water for firefighting has to be provided for.</li> </ul>				
Level of significance after Mitigation			No consideration	No rating
Related results	None.			

The impact of the proposed service station on the provision of services rates low negative. The No Go alternative has no impact.

### i) Increased motorized and non-motorized traffic levels

**Experienced as:** Decreased road safety

The R27 was built to connect two major economic hubs i.e. Cape Town and the IDZ. The proposed service station is ideally located at the intersection of the R315 and the R27 given the traffic volumes (total two-way) on the surrounding road network:

- The total peak hour traffic volumes observed through the intersection was 481 vph and 570 vph during the AM and PM peak hours, respectively.
- It is clear from the traffic counts that the R27 carries most of the traffic ( $\pm 70\%$ ).
- The R315 carries low volumes of traffic west of the R27, approximately 190 vph (two-way) during the AM peak hour and approximately 220 vph during the PM peak hour. The AADT on the R27 is approximately 6 300 vpd (two-way) and on the R315 approximately 3 300 vpd (two-way). The intersection is operating at good levels of service (LOS) with minimal delays measure against the Sidra norms.

According to the TIA, the service station will have a limited impact on the road network and specifically on the operations at the R27 intersection. Very few new trips are expected to be generated by the service station which will have an insignificant impact on the surrounding road network. The only new trips likely to be generated by the site will be from the retail and tourism component as the service station provides a service to the travelling public and the trip generation for the filling station will depend primarily on the traffic volumes along the R27 and R315 (pass by trips).

Access to the filling station and convenience shop is proposed via Access 1 (Interim) only off the R315, approximately 190m west of the R27 intersection and opposite the existing West Coast Farm Stall access.

Sturgeon Consulting Pty Ltd traffic engineers compiled a traffic impact assessment in 2022. TIA concluded that since the anticipated new traffic levels will not increase drastically from current traffic flow, the current infrastructure and future infrastructure will be able to accommodate anticipated traffic. There is sufficient parking provided on the site for motorists.

Service station signs include **primary signs** attracting and directing passing vehicles and **secondary signs** aimed at 'internal advertising' by providing more detail information on products and services once visitors have arrived at the filling station or roadside service area. The primary signage of the service station and service station, being static and static non-illuminated has a negligible potential for actively distracting a driver. From a road safety point of view roadside signs provide a welcome mental and visual stimulation on longer routes. Road signs, adverts or billboards refocus the mind and advises drivers of the services, i.e. petrol station or rest stop, available in their area. This helps make driving safer and more convenient. In addition to the primary signs the TIA recommends that that street lighting be provided at the access to the service station which will make the intersection much safer for pedestrians and vehicles during night-time.

According to the TIA, it is not anticipated that any pedestrian / public transport facilities will be required near the proposed development due to:

- Low pedestrian and traffic volumes in the area due to the location of the site within the wider area;
- The majority of the workers at the service station / filling station and other land uses will be from the local community and will be transported to and from the development by the owner;

As the infrastructure capacity accommodates the current and future traffic and the proposed service station and service station does not generate additional motorized and non-motorized traffic, both the social and economic environment and the relationship amongst community members are negligibly affected indirectly.

Environment	Level Formality	Population unit	Directness
Social & Economic	Life/ Relations	Individual and community	Direct

A summary of the impact follows in the table below.

*Table 43: Assessment of impact of Traffic: Operational Phase*

<b>Impact</b>	<b><i>Increased traffic cause road to be less safe.</i></b>
<b>Nature of Impact</b>	As the increase in traffic is minimal and the road infrastructure able to handle the increased traffic and the location of the facility it is unlikely that road safety will decrease.

ALTERNATIVES	Preferred		No Go	
Extent of impact (A)	Local	4	No impact	0
Duration of Impact (B)	Long term	3	No impact	0
Probability of occurrence (C )	Probable	1	No impact	0
Intensity of Impact(D)	Low, negative	-1	No impact	0
Degree of confidence (E)	Likely	3	No impact	0
Level of significance (AxBxD+E)xC	Low, negative	-9		
Mitigation measures recommended				
<ul style="list-style-type: none"> <li>○ <b>Primary signs boards</b> to be static non-illuminated and static boards. Animated or electronic boards with changing lighting patterns are not acceptable within the view of a driver.</li> <li>○ The Access 1 (Interim) access along the R315, opposite the existing farm stall approximately 190m west of the existing R27 intersection.</li> <li>○ Access 1 (Interim) has one lane in and two lanes out with an auxiliary/passing lane widening the road to the south.</li> <li>○ The new service road is re-aligned over Portion 7 of Farm 554 and the existing road is closed on R315. The Access 2 is located approximately 100m north of the R315. Once the future R27/R315 Interchange comes online, Access 1 (Interim) (including the existing farm stall access) will be closed.</li> <li>○ A westbound right turn lane be constructed at the R315/New Servitude Road intersection once the Access 1 (Interim) is closed.</li> <li>○ All the detailed design of the above-mentioned road infrastructure be approved by the relevant Road Authority before construction commences.</li> <li>○</li> </ul>				
<b>Level of significance after Mitigation</b>	No mitigation		No mitigation	No rating
<b>Related results</b>	Increased economic opportunities as existing traffic and increased pedestrian traffic use the facility. The road infrastructure will unlock business opportunities.			

The TIA concludes that the proposed service station and service station and being accommodated by the adjacent transport network, will have an insignificant traffic impact on the road network provided that the recommendations in the report are implemented. The impact of the proposed service station and service station is thus very low negative and negligible.

The No Go alternative has no impact as the infrastructure is already in place.

#### j) Loss of Agricultural Potential and land

**Experienced as:** Decline in food security

The soil potential is low and given the rain fall, arability of the land is limited, hence the land being earmarked for conservation agriculture.

The loss of agricultural land affects the economic environment and the relationship amongst community members indirectly.

Environment	Level Formality	Population unit	Directness
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Economic	Life/ Relations	Community	Indirect
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A summary of the impact follows in the Table below.

Table 44: Assessment of impact of the loss of agricultural land: Operational Phase

<b>Impact</b>	The agricultural potential of the land is irreversibly lost when the proposed service station proceed. However the soil potential and rain fall are both low, hence the land has very limited arability.			
<b>Nature of Impact</b>	Small but decreased wine and wheat production Decreased food security			
<b>ALTERNATIVES</b>	<b>Preferred Local</b>		<b>No Go</b>	
<b>Extent of impact (A)</b>	Local	4	No impact	0
<b>Duration of Impact (B)</b>	Long term	3	No impact	0
<b>Probability of occurrence (C )</b>	Highly Probable	3	No impact	0
<b>Intensity of Impact(D)</b>	Moderate, negative	-1	No impact	0
<b>Degree of confidence (E)</b>	Moderate	3	No impact	0
<b>Level of significance (AxBxD+E)xC</b>	Low Negative	-27	No impact	0
Mitigation measures: None				
<b>Level of significance after Mitigation</b>	No mitigation		No mitigation	
<b>Related results</b>				

The loss of agricultural land is of low significance. No mitigation measures are proposed. The loss of agricultural land result into land contributing little to the economy being transformed to be optimally used and contributing to the economy. The no go alternative has no impact.

### k) Oil and fuel leaks and Spills

**Experienced as:** Environmental degradation

Among the most significant environmental issues from retail petroleum sites is the accidental release of stored or handled fuels due to leaks from storage tanks, piping systems, and fittings under fuel dispensers. Releases may also result from surface spills and overfills during delivery and fueling. Tank and piping system failures may result from aging (e.g. corrosion of steel components) or from structural stress due to improper installation. The impacts from such releases depends on numerous factors including the amount of materials released, local geologic conditions, and proximity to environmental receptors such as subsurface utilities or building structures (in which organic vapor may accumulate) or water resources (e.g. groundwater wells or surface water reservoirs used for portable water purposes).

The spillage of oil and leaking of fuel affects the environmental and economic environment and the community members indirectly.

<b>Environment</b>	<b>Level Formality</b>	<b>Population unit</b>	<b>Directness</b>
Environmental	Living Conditions	Community	Direct

A summary of the impact follows in the Table below.

Table 45: Assessment of impact of oil spills and fuel leakages: Operational Phase

<b>Impact</b>	Oil and fuel leaks and Spills			
<b>Nature of Impact</b>	Environmental degradation			
<b>ALTERNATIVES</b>	<b>Preferred Local</b>		<b>No Go</b>	
<b>Extent of impact (A)</b>	Local	4	No impact	0
<b>Duration of Impact (B)</b>	Long term	3	No impact	0
<b>Probability of occurrence (C )</b>	Highly Probable	3	No impact	0
<b>Intensity of Impact(D)</b>	Moderate, negative	-1	No impact	0
<b>Degree of confidence (E)</b>	Moderate	3	No impact	0
<b>Level of significance (AxBxD+E)xC</b>	Low Negative	-27	No impact	0
Mitigation measures:				
<ul style="list-style-type: none"> <li>• Oil Spills <ul style="list-style-type: none"> <li>○ Fit hoses with quick-acting leak-proof cock or with an approved nozzle</li> <li>○ Train and supervise employee to ensure minimal spillage of fuel.</li> </ul> </li> <li>• Leakages <ul style="list-style-type: none"> <li>○ Use of approved fuel tanks and monitor fuel quantities to detect leakages.</li> <li>○ To prevent any leaks from getting into the environment, the tanks should be properly treated. A layer of clay should be used to encase the tanks during installation.</li> </ul> </li> <li>• Waste and storm water <ul style="list-style-type: none"> <li>○ Construct proper drainage system</li> <li>○ Treatment of water through oil interceptors prior to discharge into the environment</li> </ul> </li> </ul>				
<b>Level of significance after Mitigation</b>	No mitigation		No mitigation	
<b>Related results</b>				

The impact of oil and fuel leaks and spills low negative significance as the likelihood of them occurring is low. Mitigation measures are proposed. The no go alternative has no impact.

### 3.2.3 Indirect Impacts

#### I) Increased levels of education

##### Experienced as:

- Influx of skilled people to work encouraging youth to obtain an education
- Enhanced personal choices in the world of work as people gain qualifications and experience

More inhabitants of Swartland will improve their educational qualifications as:

- Those who find employment will gain skills and work experience and will inspire young people to further their studies. As youngsters will take the opportunity to further their studies and it is likely that the matric drop-out rate decreases and the pass rate increases.
- Influx of skilled persons working at the proposed development will encourage youth to obtain an education.

The improvement of educational qualifications will enhance personal choices, particularly in the world of work.

Increased levels of education affect the economic environment and individuals and families directly.

Environment	Level Formality	Population unit	Directness
Social	Life/ Relations	Individual and family	Direct
Economic			Indirect

A summary of the impact follows in the Table below.

Table 46: Assessment of impact of access to education and skills development: Operational Phase

Impact	Improved levels of education.			
<b>Nature of Impact</b>	Changes in the material well-being of generations to come as they are afforded the opportunity to improve their skills. Enhance personal choices in the world of work. Encourage youth not to drop-out of school.			
<b>ALTERNATIVES</b>	<b>Preferred Local</b>	<b>No Go</b>		
<b>Extent of impact (A)</b>	Local	4	No impact	0
<b>Duration of Impact (B)</b>	Long term	3	No impact	0
<b>Probability of occurrence (C )</b>	Highly Probable	3	No impact	0
<b>Intensity of Impact(D)</b>	Moderate, positive	2	No impact	0
<b>Degree of confidence (E)</b>	Moderate	2	No impact	0
<b>Level of significance (AxBxD+E)xC</b>	Moderately, positive	78	No impact	0
Mitigation measures:				
<ul style="list-style-type: none"> <li>• Develop personal development plans for employees. <ul style="list-style-type: none"> <li>• Establishing a fund to benefit people of working age where to all businesses on the Jacobuskraal premise and any other willing contributors in the corridor should contribute and develop the necessary principles and framework to govern such a fund</li> </ul> </li> <li>•</li> </ul>				
<b>Level of significance after Mitigation</b>	Intensity: High, positive 3	114	No mitigation	
<b>Related results</b>				

After mitigation, the impact changes to highly positive as educational qualifications will be advanced. As young people get the opportunity to improve their education, self-development opportunities and income will increase and their economic and material well-being will improve.

The No Go alternative has no impact.

### 3.2.4 Residual Impacts

**o) Self-esteem and image of youth and change**

**Experienced as:** Young people find employment temporarily and permanently

The improved self-esteem of the youth (amongst themselves and within the community) generated during the construction phase should be continued to be strengthened through enhancing their employability in the operational phase. Several jobs will be generated during the operational phase and is evaluated over a 10 year period (long term).

The self-esteem of the youth affects the social environment and the relationship with families and community members indirectly.

Environment	Level Formality	Population unit	Directness
Social	Life/ Relations (Informal)	Individual, family and community	Indirect

A summary of the impact follows in the Table below.

*Table 47: Assessment of impact of improved health and social well-being of youth: Operational Phase*

Impact	Youth social well-being improved.			
<b>Nature of Impact</b>	Youth's improved self-esteem stays intact as they continue to find work within the new precinct.			
<b>ALTERNATIVES</b>	<b>Preferred Local</b>		<b>No Go</b>	
<b>Extent of impact (A)</b>	Local	4	No impact	0
<b>Duration of Impact (B)</b>	Long term	3	No impact	0
<b>Probability of occurrence (C )</b>	Probable	2	No impact	0
<b>Intensity of Impact(D)</b>	Medium, positive	2	No impact	0
<b>Degree of confidence (E)</b>	Likely	2	No impact	0
<b>Level of significance (AxBxD+E)xC</b>	Medium, positive	52	No impact	0
Mitigation measures: None				
<b>Level of significance after Mitigation</b>	No mitigation			
<b>Related results</b>	Decreased teenage addictions and pregnancies. Decreased alcohol abuse			

The improved self-esteem of youth will change their social well-being and in turn change the social well-being of the family. Therefore the impact is viewed as highly positive as it assists to break the local cycle of hopelessness.

The No Go alternative has no impact.

**p) Employment equity of vulnerable groups:**

**Experienced as:** Youth and Women find employment temporarily and permanently

Affording youth and women the opportunity to join the workforce, will improve the social well-being of these vulnerable groups. Given the high youth unemployment rate of 17.9% in relation to the unemployment rate of 8.9% (in 2011) and 10.4% (in 2017), it is likely that fewer young people will get employed. As the young people may not have many skills, they have little to aspire to and employment is limited to entrance level

jobs should they get employed. Of the jobs generated per annum, 60% jobs should be earmarked to be taken up by people younger than 35 years of age and half of these jobs are earmarked to be taken up by women.

Jobs at the intersection are closer to workforce living in Darling than jobs in Yzerfontein.

Jobs are more diverse compared to mainly domestic jobs offered in Yzerfontein

The employment of vulnerable groups affects the social environment and the relationship amongst community members indirectly.

Environment	Level Formality	Population unit	Directness
Social	Institutional/ Social	Community and Individual	Indirect

A summary of the impact follows in the Table below.

Table 48: Assessment of impact of employment of vulnerable groups: All Phases

Impact	<b>Youth and women's social well-being improves, as they find employment.</b>			
<b>Nature of Impact</b>	Young people may lack the skills required and women and young people may be viewed as not suitable for the work opportunities available and may be excluded from the labour component to be employed. The employment of youth and women should improve their self- image as well as the way the community views them. Should young people be employed it may assist to break the cycle of hopelessness. The employment opportunities will enable the families of those employed to benefit from their employment.			
<b>ALTERNATIVES</b>	<b>Preferred</b>	<b>No Go</b>		
<b>Extent of impact (A)</b>	Local	4	Status Quo remains	0
<b>Duration of Impact (B)</b>	Long term	3	No impact	0
<b>Probability of occurrence (C )</b>	Probable	2	No impact	0
<b>Intensity of Impact(D)</b>	Medium positive	2	No impact	0
<b>Degree of confidence (E)</b>	Medium	2	No impact	0
<b>Level of significance (AxBxD+E)xC</b>	Medium, positive	52	Status Quo remains	0
Mitigation measures:				
<ul style="list-style-type: none"> <li>• Municipality facilitates that youth and women gain equal access to training and education opportunities: Skills development and improvement of educational qualifications should be a project component and youth and women should gain equal access to training and education opportunities.</li> <li>• Reserve 60% of jobs for youth and of those jobs reserve 50% for women.</li> <li>• Municipality to facilitate access to employment for youth and women.</li> <li>• Pay youth and women market related prices for the job.</li> </ul>				
<b>Level of significance after Mitigation</b>	Highly probable: 3	78	Status Quo Remain	
<b>Related results</b>	As youth and women's find employment, the family structure change. Vulnerable groups earning an income, should be able to provide for themselves or contribute to the household's income. Their contribution either enables them to leave the family or to contribute to family member(s) taking care of other vulnerable persons in the family that cannot work or to employ someone to assist them caring for the family.			

The opportunity afforded to youth and women is positive. Although the significance of the impact is medium, the change in social wellbeing of youth and women will change the social well-being of their families. After mitigation the significance of the impact changes to high. Therefore the impact is viewed as significantly positive, as it may assist in breaking the cycle of hopelessness within poorer communities.

The No Go alternative has no impact.

### 3.2.5. Summary of Impacts during the Operational Phase

Overall, the operational phase brings about some direct and positive impacts, direct and negative impacts and indirect positive and negative impacts.

Direct and Positive Impacts during the Operational Phase are tabulated below:

*Table 49: A summary of direct and positive impacts, Operational Phase*

	Impact (s)	Environment	Experienced as	Population Unit	Rating	Mitigated
A	Increased Employment opportunities	Economic	Working age people find employment temporarily and permanently	Individual, family and community	High positive	High positive
B	Increased Income	Economic	Income of families increases as working age people are employed	Family	High Positive	No Mitigation
C	Increased skills levels of working age population and youth in particular	Economic	People find employment temporarily and permanently as their employability improve	Individual and family	Medium Positive	High Positive
D	Growth of local economy and Increased Sales and GGP	Economic	Increased sales, income and spending	Community	Medium Positive	No Mitigation
E	Broadened municipal tax base	Economic	Well maintained rural environment	Family and community	Medium positive	No mitigation
F	Increased SMME participation	Economic	Increased and sustainable economic participation by individual small	Community	Medium positive	Medium positive

			business owners			
G	Change in sense of place	Social	A permanent change of the rural landscape resulting in a vibrant supportive transition environment. (on the doorstep of the IDZ)	Family	Medium Positive	High Positive

Direct and Negative Impacts during the Operational Phase are tabulated below:

*Table 50: A summary of direct and negative impacts, Operational Phase*

	Impact (s)	Environment	Experienced as	Population Unit	Rating	Mitigated
H	Bulk Services Capacity	Economic (and Social)	Additional pressure on bulk services provided	Individual, family and community	Low negative	Low negative
I	Increased motorized and non-motorized traffic levels	Economic	Decreased road safety	Individual & Community	Low negative	No Mitigation
J	Loss of Agricultural Potential and Land	Economic	Decline in food security	Community	Low Negative	No mitigation
K	Oil and fuel leaks and Spills	Environmental	Environmental degradation	Community	Low negative	No mitigation

Indirect Impacts during the Operational Phase are tabulated below:

*Table 51: A summary of indirect impacts, Operational Phase*

	Impact (s)	Environment	Experienced as	Population Unit	Rating	Mitigated
L	Increased levels of education and skills	Social, Economic	Influx of skilled people to work encourage youth to obtain an education; Enhance personal choices in world of work as people gain qualifications and experience Discourage school drop-outs.	Individual and Family	Medium Positive	High Positive

Residual Impacts during the Operational Phase are tabulated below:

Table 52: A summary of residual impacts, Operational Phase

	Impact (s)	Environment	Experienced as	Population Unit	Rating	Mitigated
M	Self-esteem and image of youth and change	Social	Young people find employment temporarily and permanently	Individual, family and community	Medium Positive	No mitigation
N	Employment equity of vulnerable groups	Social	Women and Youth find employment temporarily and permanently and family structure may change.	Community and Individuals	Medium positive	Medium positive (Perceived High positive)

### 3.3 Cumulative Impacts

The cumulative impact associated with the proposed service station development is largely of a visual nature.

The associated impact on the **sense of place** of the surroundings is different yet positive as the changed sense of place creates a vibrant supportive transition environment. Despite the presence of other (electricity pylons, wind turbines etc.) and similar (West Coast Padstal) infrastructure cause the cumulative impact to be described as direct, additive and permanent.

Urban design and landscaping guidelines have to balance provision of business opportunities to protect the rural regional landscape and cultural, heritage and natural resources and indirectly the growth of tourism and particularly local tourism. Urban design management and landscaping plans have to be implemented and maintained to keep up the rural transition environment.

The associated impact on the **economy of Swartland and the region** is of medium significance and positive. The cumulative impacts are described as direct and additive. Economic growth will be countered by increased informality as those looking for work will settle informally creating a negative experience secondary to the growth in the economy. The consequential informality could gradually change should employment be created and per capita income increases. Accessing the market beyond the inhabitants of the Swartland will substantially add to driving growth given the infrastructure of the Swartland and its proximity to Cape Town.

### **3.4 No Go Alternative**

Should this alternative be selected, the development of the proposed service station and service station would not proceed. This alternative would allow the site to lay fallow and economic growth opportunities will be lost.

The No-Go Alternative will result in:

- Losing employment opportunities generated during construction and operational phases.
- Diverting economic opportunities, as small businesses will not be enhanced.

Given the slow economic growth in Swartland this alternative would represent a negative social cost, particularly, for the local community.

## Section 4: Management guidelines to address socio-economic impacts

In order to ensure that the disadvantages are managed to maximize positive impacts, specific management strategies and mechanisms need to become part of the proposed development. These strategies and mechanisms need to be implemented through development conditions and are outlined below. It needs to be noted that some of these management guidelines are already practice as they are required by legislation applicable to the proposed development and to the practice of the implementation agent:

### 4.1 Mitigation Measures applicable to the Construction Phase:

The mitigation measures are applicable to employment opportunities, skills and educational qualifications.

*Table 53: Mitigation measures (Construction Phase)*

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#### Mitigation measures regarding **employment** opportunities

- Contractors should be required to employ 80% locals of whom 80% is HDIs and are suitably qualified or skilled; should there be a lack of suitably qualified people, skills transfer should be prioritized whilst construction is taking place.
- The municipality, local community and local community organizations should be informed of the project and potential job opportunities by the developer;
- A database of locals including small businesses owned and run by HDIs that qualify as service providers (construction companies, catering companies, waste collection companies, site cleaning companies etc.) should be compiled by the contractor prior to the commencement of the project. These firms should be invited to render services where required;
- Establish a Monitoring Committee for the construction phase in collaboration with representatives of the local community. The Monitoring Committee has to ensure that the proposed service station development is implemented and that any problems that arise, is addressed.

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#### Mitigation measures regarding **skills and educational** qualification levels

- Reserve 80% of jobs for local labour.
- Require contractors to put mechanisms in place to enable locals to access jobs offered by the proposed service station development.
- Require the contractor to enhance on the job skills transfer: Provide opportunities to learn on the job and be taught by someone who has the skills.
- Should skilled persons from outside the community be employed, the developer should consider implementing a training and skills development programme to enhance the opportunities for local historically disadvantaged individuals in the construction industry. Measures should be put in place to ensure successful training and development i.e. structured job shadowing and learnerships. Where likely, such a programme should be offered in liaison with an accredited Further Education and Training College like the West Coast College or Cape Peninsula University of Technology;
- Involve schools and colleges to visit construction site to inspire youngsters to join the construction industry.

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#### Mitigation measures regarding **use of services and amenities**

- To adhere to international construction, health and safety standards and precaution measures.

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#### Mitigation measures regarding **Traffic**

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- 
- Upgrade road signs to address the movement conflict.
  - Road signs for protecting pedestrians crossing and accessing the road should be displayed.
  - Provide transport to decrease pedestrian traffic.
  - Restrict heavy vehicles to specific hours.
  - Erect road signs signaling times when heavy vehicles will make use of the road.
  - Adhere to national traffic safety standards and precaution measures.
- 

Mitigation measures regarding **air and audio quality**

- Dust creation must be controlled as per construction management and control code.
  - Noise creation should be controlled as per construction management and control code.
  - Appoint an Environmental Control Officer to supervise construction and building.
  - Adhere to the Environmental Management Plan (EMPr) for the Construction Phase.
  - All workers and management must undergo an induction course.
  - Implementation dust suppression measures;
  - Access must be on recognized routes.
  - Litter and littering must be strictly controlled.
  - All construction waste and building rubble must be removed off site.
- 

Mitigation measures regarding **appearance & experience of living environment**

- *Keep disturbed areas to a minimum;*
  - *Buildings and similar structures must be in keeping with regional planning policy documents, especially the principles of critical regionalism, namely sense of place, sense of history, sense of nature, sense of craft and sense of limits.*
  - *Utilize existing roads and tracks to the maximum extent possible.*
  - *Provide pedestrian walkways where desire lines are identified.*
  - *Outdoor lighting must be strictly controlled so as to prevent light pollution.*
  - *All lighting must be installed at downward angles.*
  - *Sources of light must be shielded as far as possible by physical barriers such as trees and buildings or structures.*
  - *Use only minimum wattage light fixtures.*
  - *Visual management and maintenance: site tidiness should be maintained at all times including during construction.*
  - *Notify the motorists about the development once implementation is started. It is important that warning/informative signs (billboards) be erected at the site. These should indicate the operation hours and when works are likely to be started and completed. The signs should be positioned in a way to be easily viewed by the public and mostly motorists.*
- 

Proposed Mitigation measures regarding oil and fuel leaks and spills:

- As per EMPr.
- 

Proposed Mitigation measures regarding **community stability and homogeneity and safety and security**

- Contractors / developers offer family financial management coaching.
- 

Mitigation measures on **social wellbeing of youth**

- Reserve 60% jobs for youth: Of the 35 direct jobs, and the 28 jobs reserved for locals, 17 jobs should be earmarked to be taken up by people 35 years of age and younger.
  - Require contractor to facilitate mechanisms to enable youth to access employment.
  - Pay youth market related prices for the job.
  - Require contractor to facilitate that youth gain equal access to training and education opportunities.
-

## 4.2 Mitigation measures applicable to the Operational Phase

Table 54: Mitigation measures (Operational Phase)

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### Mitigation measures regarding **employment opportunities**

- Opportunities for entrepreneurs are provided.

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### Mitigation measures regarding **income generation**

- Developer, municipality and business owners to liaise with existing or future projects to enhance employment opportunities for locals.

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### Mitigation measures regarding **skills development, training and capacity building**

- Reserve 90% of jobs for locals.
- Facilitate mechanisms to enable locals to access training opportunities offered by the proposed service station and service station development.
- Require formal and informal skills transfer.
- Should skilled persons from outside the community be employed, industry and business owners should consider implementing a training and skills development programme to enhance the opportunities for local historically disadvantaged individuals in their specific industry. Measures should be put in place to ensure successful training and development i.e. structured job shadowing and learnerships. Such a programme should be offered in liaison with an accredited Further Education and Training College like the West Coast College or University of Technology or the Proposed University.
- Establish and or contribute to skills development and obtaining qualifications by establishing a fund to benefit people of working age. The necessary principles and framework to govern such a fund should be established and all businesses on the Jacobuskraal premise should contribute to such a fund.

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### Mitigation measures regarding **Sales**

- Business should be directed to purchase locally and to make use of local service providers.
- Small business should be supported (i.e. skills training, assistance and guidance to set up small businesses) and joint ventures with previous disadvantaged persons should be promoted.
- The promotion of joint ventures between small business (owned by previous disadvantaged persons) and more established business should be encouraged.

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### Mitigation measures regarding Enhancing small businesses/increased SMME participation

- The promotion of joint ventures between small business (owned by previous disadvantaged persons) and more established businesses.
- Implement formal small business training and mentoring programmes.
- Provide urban space to conduct business (business erven and industrial opportunities).
- Establish a mechanism to enable investment into small businesses

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*Mitigation measures during the lifetime of the proposed development include the architectural and landscaping guidelines to be implemented and maintained.*

Develop urban guidelines to recreate the sense of place of the gateway to the coast and rural hinterland established by proposed development.

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### Mitigation measures regarding the demand for and **provision of services:**

- Water for firefighting has to be provided.

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### Mitigation measures regarding NMT and motorized road infrastructure:

- **Primary signs boards** to be static non-illuminated and static boards. Animated or electronic boards with

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changing lighting patterns are not acceptable within the view of a driver.

- The Access 1 (Interim) access along the R315, opposite the existing farm stall approximately 190m west of the existing R27 intersection.
- Access 1 (Interim) has one lane in and two lanes out with an auxiliary/passing lane widening the road to the south.
- The new service road is re-aligned over Portion 7 of Farm 554 and the existing road is closed on R315. The Access 2 is located approximately 100m north of the R315. Once the future R27/R315 Interchange comes online, Access 1 (Interim) (including the existing farm stall access) will be closed.
- A westbound right turn lane be constructed at the R315/New Servitude Road intersection once the Access 1 (Interim) is closed.
- All the detailed design of the above-mentioned road infrastructure be approved by the relevant Road Authority before construction commences.

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#### Mitigation measures regarding **oil leaks and spills**

- Oil Spills
  - Fit hoses with quick-acting leak-proof cock or with an approved nozzle
  - Train and supervise employee to ensure minimal spillage of fuel.
- Leakages
  - Use of approved fuel tanks and monitor fuel quantities to detect leakages.
  - To prevent any leaks from getting into the environment, the tanks should be properly treated. A layer of clay should be used to encase the tanks during installation.
- Waste and storm water
  - Construct proper drainage system
  - Treatment of water through oil interceptors prior to discharge into the environment

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#### Mitigation measures regarding accessing education and skills development:

- Develop personal development plans for employees.

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#### Mitigation measures regarding employment of vulnerable groups

- Municipality facilitates that youth and women gain equal access to training and education opportunities: Skills development and improvement of educational qualifications should be a project component and youth and women should gain equal access to training and education opportunities.
  - Reserve 60% of jobs for youth and of those jobs reserve 50% for women.
  - Municipality to facilitate access to employment for youth and women.
  - Pay youth and women market related prices for the job.
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### 4.3 Conclusion

The above management guidelines have been presented in terms of the specific social constraints that might result due to the proposed service station and business premise development. These guidelines aim to change the social constraints of the proposed development into benefits in favour of the inhabitants of Swartland.

To implement the strategies and mechanisms, the administration thereof should be in partnership with Swartland Municipality.

The benefits of the proposed service station and business premise development are significant whilst the costs are limited. Having a diversified and the second largest economy within the West Coast that experiences slow economic growth the Swartland does not escape poverty and challenges such as:

- a Gini coefficient of 0.578 in 2017, presenting a severe income gap and income inequality within the Swartland community. The NDP sets a target of 0.6 to be achieved in 2030, which represents a more severe income gap than that of the Swartland.
- The low skills levels of the workforce (50.1% low-skilled, 34.6% semi-skilled and 15.2% skilled) and a matric drop-out rate of 20.2 in 2017 confirms the semi-skilled educational level and high youth unemployment rate of the Swartland Community.

The significance of the service station and business premise lies in the benefit of the jobs and related skills development likely to be generated and confirms the need and desirability of the proposed development. The development is recommended from a socio-economic perspective.



## Addendum A

### Assessment Measures

The assessment departs from a factual description of the nature of the impact. This description is followed by an appraisal including a description of the effect the activity has on the environment. The description should include what is being affected and how it is affected. Assessment Measures are then applied to refine the results.

#### Extent (A)

This assessment measures the geographical scale of the impact

<b>Extent of the Impact</b>		
<b>Rating</b>	<b>Definition of rating</b>	<i>Score</i>
<b>Local</b>	Extending only as far as the activity, Will be limited to the site and its immediate surroundings	4
<b>Regional</b>	Will have an impact on the region	3
<b>National</b>	Will have an impact on a national scale	2
<b>International</b>	Will have an impact across international borders	1

Usually the scores are in ascending order from 1 to 4 (local to international) but given the levels of poverty and remoteness the scores for this project has been changed to a descending order of 4 to 1 (local to international).

#### Duration (B)

This assessment measure indicates the lifetime of the impact.

<b><i>Duration of the Impact</i></b>		
<b><i>Rating</i></b>	<b><i>Definition of rating</i></b>	<b><i>Score</i></b>
<b><i>Short term</i></b>	<b><i>0-5 years</i></b>	<b><i>1</i></b>
<b><i>Medium term</i></b>	<b><i>e.g. 5-15 years</i></b>	<b><i>2</i></b>
<b><i>Long term</i></b>	<b>The impact will cease after the operational life of the activity, either because of natural process or by human intervention</b>	<b><i>3</i></b>
<b><i>Permanent</i></b>	<b>Where mitigation either by natural process or by human intervention will not occur in such a way or in such a time span that the impact can be considered transient</b>	<b><i>4</i></b>

The duration of some of the impacts during construction is considered mainly short term, whilst the duration of the impacts during the operational phase is considered long term.

#### Intensity (C)

Here it should be established whether the impact is destructive or benign and should be indicated as:

<b>Intensity of the Impact</b>		
<b>Rating</b>	<b>Definition of rating</b>	<b>Score</b>
<b>Low</b>	The impact affects the environment in such a way that natural, cultural and social functions and processes are not affected	<b>1(±)</b>
<b>Medium</b>	The affected environment is altered but natural, cultural and social functions and processes continue albeit in a modified way; and	<b>2(±)</b>
<b>High</b>	Natural, cultural or social functions or processes are altered to the extent that it will temporarily or permanently cease.	<b>3(±)</b>

The intensity of some of the impacts of the proposed project varies. In the case of the proposed project the criteria was customize and refined to their particular study (e.g. a positive impact of “high” significance is when the project could reduce local employment by 5% or more).

### Probability (D)

This should describe the likelihood of the impact actually occurring indicated as:

<b>Probability of the Impact</b>		
<b>Rating</b>	<b>Definition of rating</b>	<b>Score</b>
<b>Improbable</b>	The possibility of the impact to materialize is very low either because of design or historic experience;	<b>1</b>
<b>Probable</b>	There is a distinct possibility that the impact will occur	<b>2</b>
<b>Highly probable</b>	It is most likely that the impact will occur	<b>3</b>
<b>Definite</b>	The impact will occur regardless of any prevention measures	<b>4</b>

### Significance

The significance of impacts can be determined through a synthesis of the aspects produced in terms of their nature, duration, intensity, extent and probability and be described as:

<b>Significance of the Impact: (F)= (A*B*D+E)*C</b>			
<b>Rating</b>	<b>Definition of rating</b>	<b>Score</b>	
<b>Low</b>		<b>0 to – 40</b>	<b>0 to 40</b>
<b>Medium</b>		<b>- 41 to - 80</b>	<b>41 to 80</b>
<b>High</b>		<b>- 81 to - 120</b>	<b>81 to 120</b>
<b>Very High</b>		<b>&gt; - 120</b>	<b>&gt; 120</b>

The above significance bands have been determined through calculating a maximum potential score of 156(e.g. positive or negative) applying the above criteria. This was then subdivided into broad bands as indicated above to provide a comparative assessment of all impacts in relation to the maximum possible significance score. The overall status of the impact (after mitigation) for the preferred alternative are also assessed applying the above criteria.

The above rating scales will be applied to assess the impacts during the construction, operational and demolition phase.

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