

SOCIAL IMPACT ASSESSMENT REPORT

THE PROPOSED SKYWALK PROJECT- GOD'S WINDOW

Prepared for:

Mpumalanga Tourism and Parks Agency (in collaboration with the IDC)
Private Bag Gateway
x11338
1200



Submitted to:

Department of Environmental Affairs
Fedsure Building
315 Pretorius Street
Pretoria

Prepared by:

Strategic Environmental Focus (Pty) Ltd
CSIR Campus
Building 4, 2nd Floor
Meiring Naude Street
Brummeria, Pretoria
Tel. No.: +27 12 349 1307
Fax No.: +27 12 349 1229
Website: www.sefsa.co.za
E-mail: sef@sefsa.co.za



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EXECUTIVE SUMMARY

Introduction

Strategic Environmental Focus (Pty) Ltd (SEF) has been appointed by the Industrial Development Corporation (Pty) Ltd to undertake an environmental application process for the proposed Skywalk at God's Window, Hazyview, Mpumalanga Province. This Social Impact Assessment (SIA) forms part of the fulfilment of the Environmental Impact Assessment (EIA) Process guided by the National Environmental Management Act (No. 107 of 1998) (NEMA), as amended. This is necessary to understand the potential effects that are likely to emanate from the proposed project on various sectors of the community.

The Mpumalanga Tourism and Parks Association (MTPA) have proposed a glass bottomed, cantilevered Skywalk to be built at the God's Window site. This is in order to enhance the tourist experience at the site, and to attract a growing number of tourists to the region. The idea of the Skywalk is premised on the existing Skywalk at the Grand Canyon in the United States of America.

A feasibility study has been completed on the project by AECOM, which indicated that the project is technically feasible and there is a market for such a tourist component in the Blyde River Canyon area.

The MTPA wants to diversify their tourism products due to the tourism facilities in the Panorama, Blyde River Canyon being run down (Mr Buthelezi, Senior Manager: Tourism Product Development at the MPTA, interview 25.07.13). The Panorama route attractions are "popular enough to market themselves" but the MTPA aims to increase the number of tourists, and God's Window is the main icon in the area. In the Mpumalanga Tourism Growth Strategy (2008) a portfolio of fifteen (15) concepts were developed to enhance the tourism in the area. These concepts were subsequently showcased in an investor conference which was held in 2011. However, there was a lack of interest as feasibility studies had not been conducted on the concept projects. The MTPA then presented this to the Industrial Development Corporation (IDC), who has provided funding for the Environmental Impact Assessment (EIA) currently underway.

METHODOLOGY

The methodology proposed for the SIA was that of a qualitative approach, by way of in-depth interviews of key stakeholders within the local community. These interviews allowed for the in-depth understanding of concerns raised. Furthermore the interaction with various individuals and groups allowed for a snowball sampling method to be effectively used.

An anonymous self-administered questionnaire was also used in order to gather data, which provided useful information, however, very few of the questionnaires were actually completed.

CONCLUSIONS AND RECOMMENDATIONS

The proposed Skywalk concept was supported by all stakeholders interviewed during the engagement process. Concerns were, however, raised with regard to the current lack of management of the God's Window and Panorama Route attractions and it was feared that this will continue, thereby inhibiting the potential success of the Skywalk and its ability to attract tourists. The need for a general upgrading of the road infrastructure in the area has been identified to facilitate the transport of tourists to the various attractions. Finally, it is recommended that the MTPA act with a greater level of urgency in ensuring that they restore and maintain the tourist areas and associated activities within Mpumalanga Province.

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Glossary of Terms

Applicant	Any person who applies for an authorisation to undertake an activity or to cause such activity to be undertaken as contemplated in Section 22(1) of the Environment Conservation Act, 1989 (Act No. 73 of 1989).
Cultural heritage resources	All non-physical and physical human-made occurrences, as well as natural occurrences that are associated with human activity. These include all sites, structures and artefacts of importance, either individually or in groups, in the history, architecture and archaeology of human (cultural) development.
Environment	All physical, chemical and biological factors and conditions that influence an object and / or organism.
Environmental Impact Assessment	The assessment of the effects of a development on the environment.
Environmental Management Plan	A legally binding working document, which stipulates environmental and socio-economic mitigation measures that must be implemented by several responsible parties throughout the duration of the proposed project.
Study area	Refers to the entire study area encompassing the total area as indicated on the study area map.
Social impact	Something that is experienced or felt by humans. It can be positive or negative. Social impacts can be experienced in a physical or perceptual sense.
Social change process	A discreet, observable and describable process which changes the characteristics of a society, taking place regardless of the societal context (that is, independent of specific groups, religions etc.) These processes may, in certain circumstances and depending on the context, lead to the experience of social impacts.
Social Impact Assessment	The processes of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by these interventions. Its primary purpose is to bring about a more sustainable and equitable biophysical and human environment.
Stakeholders	People who are affected by or have an interest in the establishment of the proposed development.

List of Abbreviations

MTPA	African Exploration and Mining Finance Corporation
BBSEEC	Broad Based Socio-Economic Empowerment Charter
DEA	Department of Environmental Affairs
DEAT	Department of Environmental Affairs and Tourism
DM	District Municipality
EAP	Environmental Assessment Practitioner
EAP	Economically Active Population
ECA	Environment Conservation Act (Act 73 of 1989)
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
ha	Hectare
HDSA	Historically Disadvantaged South Africans
HDI	Historically Disadvantaged Individuals
HRDP	Human Resource Development Programme
IAIA	International Association for Impact Assessment
IDP	Integrated Development Plan
IWULA	Integrated Water Use License Application
LED	Local Economic Development
LM	Local Municipality
MoU	Memorandum of Understanding
MQA	Mining Qualifications Authority
MRA	Mining Right Application
NEMA	National Environmental Management Act (Act No. 107 of 1998)
NEM:AQA	National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004)
NEM:WA	National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)
NGO	Non Government Organisation
NWA	National Water Act, 1998 (Act No. 36 of 1998)
OHS	Occupational Health and Act (Act 85 of 1993)
PPP	Public Participation Process
SAPD	South African Police Department
SEF	Strategic Environmental Focus (Pty) Ltd
SIA	Social Impact Assessment
SLP	Social and Labour Plan
SMME	Small, Micro and Medium Enterprises
tpm	Ton per month

1 INTRODUCTION

Strategic Environmental Focus (Pty) Ltd (SEF) has been appointed by the Industrial Development Corporation (Pty) Ltd (IDC) to undertake an environmental application process for the proposed Skywalk at God's Window, Hazyview, Mpumalanga Province. This Social Impact Assessment (SIA) forms part of the fulfilment of the Environmental Impact Assessment (EIA) Process guided by the National Environmental Management Act (No. 107 of 1998) (NEMA), as amended. This is necessary to understand the potential effects that are likely to emanate from the proposed project on various sectors of the community.

The Blyde River Canyon is the world's third largest canyon, and the largest vegetated canyon. As a result of its scenic beauty, the canyon, and the various viewing points and natural features associated with the canyon are major tourist destinations. This is both in terms of domestic and international tourism.

The Mpumalanga Tourism and Parks Association (MTPA) have decided to investigate the construction of a glass bottomed, cantilevered Skywalk at the God's Window site. This is in order to enhance the tourist experience at the site, and to attract a growing number of tourists to the region. The idea of the Skywalk is premised on the existing Skywalk at the Grand Canyon in the United States of America (**Error! Reference source not found.**).

A feasibility study has been completed for the project by AECOM, which indicated that the



Source: www.grandcanyon-nationalpark.org
<http://www.hualapaitourism.com>

Figure 1-1: Grand Canyon Skywalk

project is technically feasible and there is a market for such a tourist component in the Blyde River Canyon area.

The MTPA and the IDC have been working together on this project for some time. The MTPA initially devised a strategy to increase the tourism potential in the Mpumalanga area, with a focus on the Blyde River Canyon. As a result, a portfolio of tourism packages and developments were created. However, a lack of information regarding the feasibility of these projects meant that there was little buy-in from investors. As a result, the IDC became involved and have since provided the funding for the feasibility study and the EIA phase of the project.

In terms of tourism, the only profit that tourism attractions in the area are generating comes from the entry fee that is being paid by tourists to the various sites. The aim of the project is to increase the amount of money that is spent in the area, and, according to Marais, there are only two ways of doing this. These are overnight stays and the increased consumption of food. Therefore, it is vital to get people to remain longer in the area, stay overnight and thus support the local restaurants and businesses.

The concept of the Skywalk ties in with the idea of experiential travel which, according to L Sheard (interview 11.07.13), is a new and growing focus of international travel. Furthermore, J Sheard (interview 24.07.13) indicated that tourism is a dynamic industry and that it therefore needs to be constantly renewed. For J Sheard this is particularly true of the God's Window and Panorama areas, which have stagnated for at least the past decade. It is important to have a synergy with the town of Graskop so that the initiatives at the God's Window site do not detract from the town of Graskop.

1.1 Project background and motivation

The proposed Skywalk is a cantilevered glass bottomed walkway that will protrude from an elevated view point at the God's Window site. This will provide a 360° panoramic view of the canyon and the surrounding area. The Skywalk will create the feeling of being suspended or hovering in the air. This will be achieved through the use of large glass panels on the floor and sides of the walkway. The Skywalk itself will be constructed using metal for strength and rigidity, and glass for transparency. As a result, the experience that will be created is one that is truly breath-taking, and unique. Two of the best examples of the Skywalk concept are found in Austria and the United States of America, both of which have seen countless visitors passing through each year. The planned restaurant and shop area will provide visitors with food and refreshments during their visit. There will be a curio shop that will sell memorabilia of

the area as well as arts and crafts from the local community. The marketing of the attraction will be focussed on holiday makers visiting the province as a “must-see” visiting point.

The Skywalk will be established and run as a separate entity that serve the needs of tourist with benefits flowing back to the community in which it is based, through the land reform agreement that has been established. The community will benefit from employment opportunities, rental income and profit share through equity investment.

According to the feasibility study which has been completed on the proposed development, the Mpumalanga Province has been losing market share to the other Provinces. One of the major reasons was found to be lack of product. Even though Mpumalanga has a wealth of natural, cultural and historic attractions that have been well documented, inadequate facilities and services available at these attractions have been identified as a major reason for the lack of growth. The Skywalk Project has been earmarked by MTPA as one of the priority projects to put te Mpumalanga Province back on the map (Scott, 2010:5).



Figure 1-1: Skywalk Concept

1.2 Project location and land use

The proposed skywalk project- God's Window will be located on Farms De Houtbosch 503 KT and Portion 2 of Farm Lisbon 531 KT within the Thaba Chweu Local Municipality (LM), in the Ehlanzeni District Municipality near Graskop and Pilgrim's Towns. God's Window is located on the rim of the Mpumalanga Escarpment, Mpumalanga. God's Window is located on the Panorama Route in the Blyde River Canyon in Mpumalanga Province. The site is situated approximately 95km north of Nelspruit which is the largest town in the region. The project site lies 5km north of Graskop, which together with Sabie and Hazyview, forms a triangle of key towns along the tourist route. The study site is located to the east of Johannesburg (400km)

and Pretoria (360km), near to Kruger National Park. The N4 motorway links both cities to Mpumalanga (Figure 1-2).

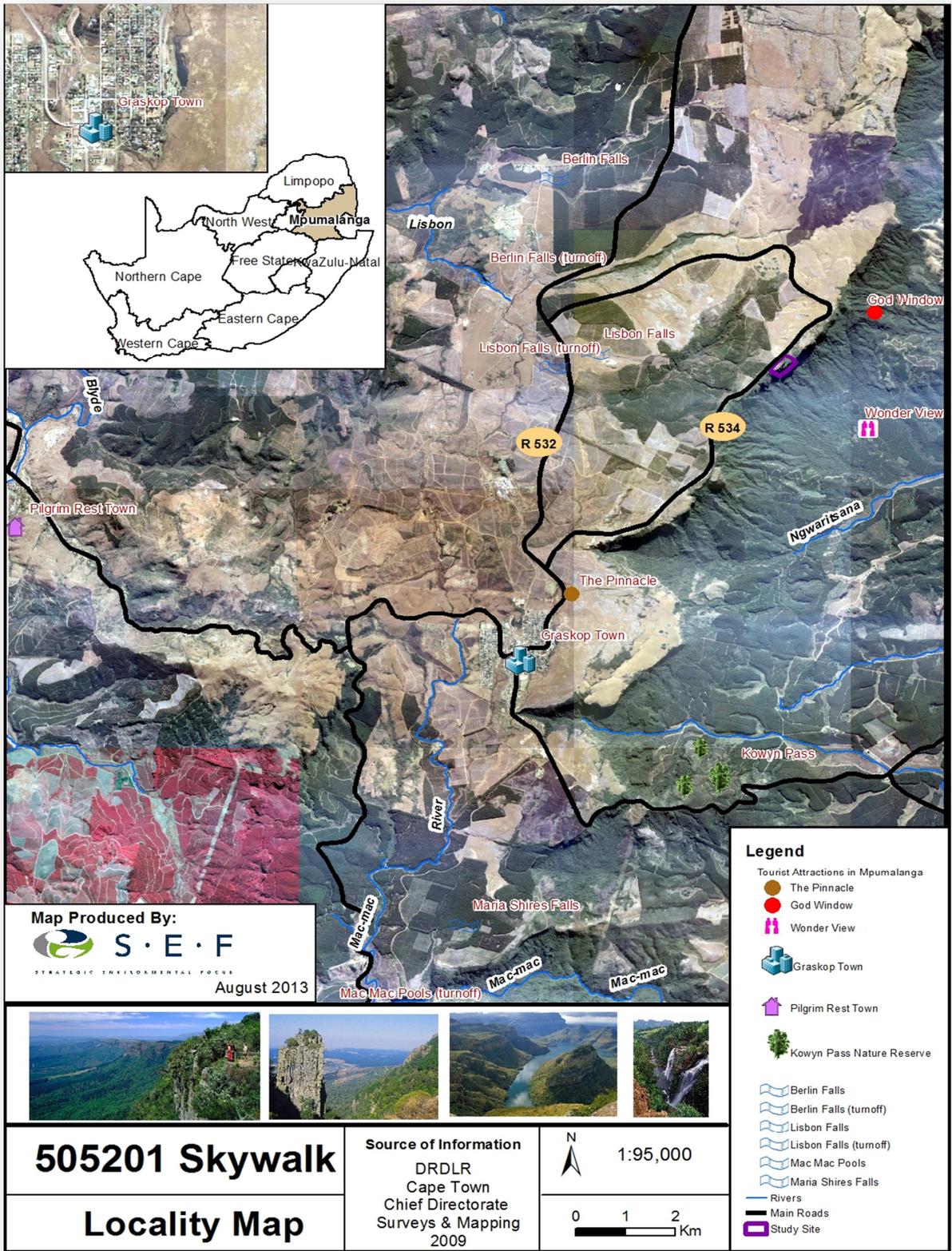


Figure 1-2: Skywalk Locality Map

The site itself does not have clearly defined boundaries, however, it is estimated that the main area of the God's Window site (car park, ablution facility and area up to the rim) to be around 25 000 m² (2.5 ha) in size. The site currently entails a car parking area, visitor's entrance and retail area for local craftspeople that currently trade from stalls at God's Window (Figure 1-3).



Figure 1-3: Site layout

2 SCOPE OF WORK

2.1 Study objective

As communities continue to grow, local officials and community members are constantly challenged by the need to balance fiscal, social, economic, and environmental goals. One aspect of this challenge is deciding how much and what types of new development the community can accommodate without compromising the day-to-day quality of life for local residents. SIA is designed to assist in making decisions that promote long-term sustainability, including economic prosperity, a healthy community, and social well-being.

Assessing social impacts requires both quantitative and qualitative measurements of the impact of a proposed development. For example, a proposed development may increase employment in the community and create demand for more affordable housing; both effects are easily quantifiable. Also of importance, however, are the perceptions of community members about whether the proposed development is consistent with a commitment to preserving the character of the community. Assessing community perceptions about development requires the use of methods capable of revealing often complex and unpredictable community values.

The aim of this SIA is to investigate and describe the social environment surrounding the proposed development, to assess the anticipated social impacts of the proposed project and to identify appropriate mitigation measures to mitigate adverse impacts and enhance positive impacts.

The SIA is meant to assist the decision-making authorities in their decision-making on whether the development will be socially, environmentally and economically sustainable.

The objectives of this SIA are to:

- Define and describe the receiving environment (footprint, local and regional) from an social perspective, and identify, analyse and in detail assess the opportunities and constraints arising from or potentially limiting the proposed project ;
- Investigate the potential social benefits of the proposed project in order to ensure maximum benefit to the local community and associated structures;
- Assess the development impact of the proposed project on the economy of the local area (from a social point of view), which will form an important component for establishing the overall feasibility of the project; and
- Identify relevant legislation, standards and policies.

2.2 Legislative and regulatory review

SEF has been appointed as independent Environmental Assessment Practitioner (EAP) by MTPA to assist in the application process of an Environmental Authorisation, in terms of the Environmental Impact Assessment (EIA) Regulations promulgated in terms of Chapter 5 of the National Environmental Management Act (NEMA), 1998 (Act No. 107 of 1998). This SIA forms part of the EIA process for the proposed Skywalk.

The EIA Regulations, promulgated under the NEMA, focus primarily on creating a framework for co-operative environmental governance by establishing principles for decision-making on matters affecting the environment, institutions that will promote co-operative governance and procedures for co-ordinating environmental functions exercised by State Departments and to provide for matters connected therewith.

In terms of the EIA Regulations of 2010 and activities listed in GN No. R544 and R 546 (requiring a Basic Assessment (BA) process) and GN No. R 545 (requiring a S&EIR process), the following listed activities are deemed by the Environmental Assessment Practitioner (EAP) to be applicable to the proposed Skywalk Project- God's Window based on the information provided by the client.

It must be noted that activities requiring only a BA process are triggered by the proposed development. The mentioned listed activities are deemed to include activities that could potentially have a detrimental impact on the social and biophysical state of an area and as such, are required to undergo a BA process.

GN No & Activity Number		Description of each listed activity
GN No: 544, 18 June 2010	9	The construction of facilities or infrastructure exceeding 1000 metres in length for the bulk transportation of water, sewage or storm water - (i) with an internal diameter of 0,36 metres or more; or (ii) with a peak throughput of 120 litres per second or more, excluding where: a) such facilities or infrastructure are for bulk transportation of water, sewage or storm water or storm water drainage inside a road reserve; or b) where such construction will occur within urban areas but further than 32 metres from a watercourse, measured from the edge of the watercourse.
	11	The construction of: (i) canals; (ii) channels; (iii) bridges; (iv) dams; (v) weirs; (vi) bulk storm water outlet structures; (vii) marinas; (viii) jetties exceeding 50 square metres in size; (ix) slipways exceeding 50 square metres in size; (x) buildings exceeding 50 square metres in size; or (xi) infrastructure or structures covering 50 square metres or more where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback
	18	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock or more than 5 cubic metres from: (i) a watercourse; (ii) the sea; (iii) the seashore; (iv) the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater but excluding where such infilling, depositing, dredging, excavation, removal or moving; a) is for maintenance purposes undertaken in accordance with a management plan agreed to by the relevant environmental authority; or b) occurs behind the development setback line.
	37	The expansion of facilities or infrastructure for the bulk transportation of water, sewage or storm water where – a) the facility or infrastructure is expanded by more than 1000 meters in length; or b) where the throughput capacity of the facility or infrastructure will be increased by 10% or more- excluding where such expansion: a) relates to transportation of water, sewage or storm water within a road reserve; or b) where such expansion will occur within urban areas but further than 32 meters from a watercourse, measured from the edge of the watercourse.
	40	The expansion of (i) jetties by more than 50 square metres; (ii) slipways by more than 50 square metres; or (iii) buildings by more than 50 square metres (iv) infrastructure by more than 50 square metres within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, but excluding where such expansion will occur behind the development setback line.

GN No: 546, 18 June 2010	12	<p>The clearance of an area of 300 square metres or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation.</p> <p>a) Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;</p> <p>b) Within critical biodiversity areas identified in bioregional plans;</p> <p>c) Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuary, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas.</p>
	16	<p>(a) In Eastern Cape, Free State, KwaZulu-Natal, Limpopo, Mpumalanga and Northern Cape:</p> <p>i. In an estuary;</p> <p>ii. Outside urban areas, in:</p> <p>(aa) A protected area identified in terms of NEMPAA, excluding conservancies;</p> <p>(bb) National Protected Area Expansion Strategy Focus areas;</p> <p>(cc) World Heritage Sites;</p> <p>(dd) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;</p> <p>(ee) Sites or areas identified in terms of an International Convention;</p> <p>(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</p> <p>(gg) Core areas in biosphere reserves;</p> <p>(hh) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve;</p> <p>(ii) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined.</p> <p>iii. In urban areas:</p> <p>(aa) Areas zoned for use as public open space;</p> <p>(bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, zoned for a conservation purpose; or</p> <p>(c) Areas seawards of the development setback line.</p>

Below is a brief description of the legislative and regulatory requirements that were taken into consideration while compiling this report.

Constitutional Provision

The Constitution deals with the environment in Section 24 and proclaims the right of everyone—

- (a) To an environment that is not harmful to their health or well-being; and
- (b) To have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that—
 - (i) Prevent pollution and ecological degradation;
 - (ii) Promote conservation; and

- (iii) Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

Sustainable development

Section 24 of the Constitution explicitly states that justifiable “economic and social development” must be recognised and promoted. Economic and social development is essential to the well-being of human beings. In a June 2007 judgement, the Constitutional Court has recognised that socio-economic rights that are set out in the Constitution are indeed vital to the enjoyment of other human rights guaranteed in the Constitution. But development cannot subsist upon a deteriorating environmental base. Unlimited development is detrimental to the environment and the destruction of the environment is detrimental to development. Promotion of development requires the protection of the environment. Yet the environment cannot be protected if development does not pay attention to the costs of environmental destruction. The environment and development are thus inexorably linked. And as has been observed—

“[E]nvironmental stresses and patterns of economic development are linked one to another. Thus agricultural policies may lie at the root of land, water, and forest degradation. Energy policies are associated with the global greenhouse effect, with acidification, and with deforestation for fuelwood in many developing nations. These stresses all threaten economic development. Thus economics and ecology must be completely integrated in decision making and lawmaking processes not just to protect the environment, but also to protect and promote development. Economy is not just about the production of wealth, and ecology is not just about the protection of nature; they are both equally relevant for improving the lot of humankind” (Brundtland Report, 2007).

The concept of sustainable development

It was the report of the World Commission on Environment and Development (the Brundtland Report) which “coined” the term “sustainable development” (Sands, 2003). The Brundtland Report defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. It described sustainable development as—

“[i]n essence...a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development; and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations”.

This report argued for a merger of environmental and economic considerations in decision-making and urged the proposition that “the goals of economic and social development must be defined in terms of sustainability”. It called for a new approach to development - “a type of development that integrates production with resource conservation and enhancement, and that links both to the provision for all of an adequate livelihood base and equitable access to resources.” The concept of sustainable development, according to the report, “provides a framework for the integration of environment[al] policies and development strategies”.

The 1992 Rio Conference made the concept of sustainable development a central feature of its Declaration. The Rio Declaration developed general principles on sustainable development and provided a framework for the development of the law of sustainable development. In this sense, the Rio Declaration provides a benchmark for measuring future developments and a basis for defining sustainable development.

At the heart of the Rio Declaration are Principles 3 and 4. Principle 3 provides that “[t]he right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.” Principle 4 provides that “[i]n order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it”. The idea that development and environmental protection must be reconciled is central to the concept of sustainable development. At the core of this Principle is the principle of integration of environmental protection and socio-economic development.

Sustainable development does not require the cessation of socio-economic development but seeks to regulate the manner in which it takes place. It recognises that socio-economic development invariably brings risk of environmental damage as it puts pressure on environmental resources. It envisages that decision-makers, guided by the concept of sustainable development, will ensure that socio-economic developments remain firmly attached to their ecological roots and that these roots are protected and nurtured so that they may support future socio-economic developments.

National Environmental Management Act (NEMA) (Act No. 107 of 1998)

NEMA embraces the concept of sustainable development. Sustainable development is defined to mean “the integration of social, economic and environmental factors into planning, implementation and decision-making for the benefit of present and future generations”. This broad definition of sustainable development incorporates two of the internationally recognised elements of the concept of sustainable development, namely, the principle of integration of

environmental protection and socio-economic development, and the principle of inter-generational and intra-generational equity.

One of the key principles of NEMA requires people and their needs to be placed at the forefront of environmental management – batho pele. It requires all developments to be socially, economically and environmentally sustainable. It requires that the social, economic and environmental impact of a proposed development be “considered, assessed and evaluated” and that any decision made “must be appropriate in the light of such consideration and assessment”. This is underscored by the requirement that decisions must take into account the interests, needs and values of all interested and affected persons. NEMA therefore requires the integration of environmental protection and economic and social development. It requires that the interests of the environment be balanced with socio-economic interests.

In terms of the EIA Regulations promulgated in terms of Chapter 5 of NEMA, an EIA is required for the proposed project. The EIA Regulations of 2010 (GNR No R. 543, R. 544, R. 545 and R. 546) requires that a list of “listed activities” be assessed. Please refer to the Scoping Report / EIA Report for more information.

National Water Act, 1998 (Act No. 36 of 1998) (NWA)

The NWA stipulates that activities which have the potential to impact on a water resource require that a water use licence (WUL) be issued by the Department of Water Affairs (DWA).

Due to water resources identified on site (i.e. non perennial rivers), and the close proximity of the Blyde River, the proposed development may trigger the following water uses listed in Section 21 of the NWA:

- a) Abstraction of water;
- c) impeding or diverting the flow of water in a watercourse;
- g) disposing of waste in a manner which may detrimentally impact on a water resource; and
- i) altering the bed, banks, course or characteristics of a watercourse.

Accordingly, the proposed project may thus require a Water Use Licence (WUL), which is administered by the Department of Water Affairs (DWA).

National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (NEM:WA)

In terms of Section 44 of the NEM:WA, the application and decision-making process regarding the licensing of waste management activities must be in line with the decision-making process in NEMA. The interpretation and application of the NEM:WA must be guided by the principles set out in Section 2 of NEMA. The proposed project is likely to trigger listed activities under NEM:WA as follows:

GN No & Activity Number		Activity Description	
GN No. 718 of 3 July 2009	B5	The treatment of hazardous waste using any form of treatment regardless of the size or capacity of such a facility to treat such waste	Sewage will be treated onsite. The system to be used for this purpose is the Lilliput system.
	B7	The treatment of effluent, wastewater or sewage with an annual throughput capacity of 15 000 cubic metres or more	The construction of a waste water treatment package plant (WWTP) on site.
	B11	The construction of facilities for activities listed in Category B of this schedule (not in isolation to associated activity)	The construction of infrastructure/facilities in respect of the WWTP.

Other Legal Requirements

In addition to the above, the following key legislation and guidelines are also relevant to the process:

- Environment Conservation Act (ECA) (Act 73 of 1989);
- Environment Conservation Amendment Act (Act 50 of 2003);
- National Building Regulations and Standards Act No. 103 of 1997;
- National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004);
- National Heritage Resources Act, 1999 (Act No. 25 of 1999);
- National Water Act (Act 36 of 1998 as amended);
- National Environmental Management: Air Quality Act (Act 39 of 2004);
- Nature Conservation Ordinance 12 of 1983;
- Occupational Health and Safety (OHS) Act (Act 85 of 1993);
- Department of Environment and Tourism (DEAT¹) Guideline 3: General Guideline to the EIA Regulations (2006);
- DEAT Guideline 4: Public Participation (2009); and
- DEAT Guideline 5: Assessment of Alternatives and Impacts (2009).

Guideline Documents

Mpumalanga Tourism Growth Strategy

¹ Now the Department of Environmental Affairs (DEA)

The MTPA have compiled a Tourism Growth Strategy, which aims to elaborate a framework to guide tourism initiatives and development in the province. The key outcomes of the strategy include the following:

- an integrated tourism marketing plan,
- a tourism product development plan,
- a tourism human resource plan,
- proposal for an appropriate institutional framework, and
- an action plan for implementation.

The Growth Strategy attempts to plan a bright future for tourism in the province, building on the natural resource capital that exists in the province. The type of projects that are to be pursued include large scale and noteworthy projects, such as the Skywalk. The factors that will determine the character of Mpumalanga's tourism are:

- type of tourism (product experience) to be developed
- the quality of development
- the scale and design of development
- the rate of growth to be pursued
- the extent to which tourism development is dispersed throughout the Province.

The MTPA aim to ensure a broader offering for tourists, which exploits the natural beauty of the province. The Mpumalanga Tourism Growth Strategy states that:

“Mpumalanga is endowed with a wealth of attractive tourism resources, (KNP, Blyde Canyon, Bulembu Mountains, Wetlands) which serve as ‘honey pots’ and provide the base for investment in complementary attractions and experiences. The specialness and authenticity of these attractions are not negotiable and must be protected at all costs” (2007:78).

The MTPA also aim to ensure that they capture a larger segment of the market, through a variety of offerings, including those aimed at business people, high-end holiday makers and thrill seekers (2007).

2.3 Terms of reference of the Social Impact Assessment

This SIA is meant to assist the decision-making authorities to decide whether the development will be socially, environmentally and economically sustainable.

The analysis includes a baseline study describing the social characteristics of the affected population, as well as the cultural and socio-political dynamics in the broader project area. In

addition, the assessment identifies relevant social aspects and predicts the anticipated impacts associated with the proposed project. The assessment of positive and negative social impacts includes the identification of viable mitigation measures and project related benefits.

2.4 Assumptions and limitations

It is essential that the SIA are based on current and accurate project information. Similarly, the geographic extent of the SIA is influenced by project design and overall planning processes. The SIA report is based on current information received while compiling the SIA and the report therefore takes into consideration project information relating to planning and design, implementation and infrastructure placement available to SEF during the compilation of this report.

The following assumptions are therefore made:

- The construction impacts are provided for the length of the construction period;
- The impacts during the operational phase provide an indication of the impact during steady state operations;
- The project life is accepted to be long-term; and
- It is assumed that local employment will be a priority for all operations.

Additional limitations of this report are that SEF was not able to contact the local municipalities of Graskop and Lydenberg and thus were not able to present their views on the proposed project. However, as part of the EIA process, they will be contacted during the public participation component and will thus have the opportunity to submit their views and/or comments. Furthermore, of 150 surveys which were distributed, only 12 were completed and returned. This was an ancillary data collection method, and therefore does not detract from the overall research presented.

The information contained in this report has been compiled with the utmost care and accuracy within the parameters specified in this document. Any decision based on the contents of this report is, however, the sole responsibility of the decision maker.

3 METHODOLOGY

3.1 Introduction to Social Impact Assessment

A SIA examines how a proposed development will change the lives of current and future residents of a community.

Quantitative measurement of such factors is an important component of the SIA. At the same time, the perceptions of community members of how a proposed project will affect their lives are a critical part of the assessment and should contribute to any decision to move ahead with a project.

One of the most important steps in the process is in fact to gain an understanding of community values and concerns. The social impacts of a proposed development on a community may actually begin the day the project is proposed. Changes in social structure and interactions among community members may occur once the new development is proposed to the community. Community members start organising themselves, they start interacting in ways that are different to the norm.

In addition, real, measurable and often significant effects on the human environment can begin to take place as soon as there are changes in social or economic conditions. From the time of the earliest announcement of a pending policy change or development project, attitudes toward the project are formed, interest groups and other coalitions prepare strategies, speculators may lock up potentially important properties, and politicians can manoeuvre for position. These factors were taken into consideration with this specific study.

The International Association for Impact Assessment (IAIA, 2003) states that SIA includes the processes of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by these interventions. Its primary purpose is to bring about a more sustainable and equitable biophysical and human environment. The Inter-organisational Committee on Principles and Guidelines for Social Impact Assessment (2003:231) defines SIA in terms of *“efforts to assess, appraise or estimate, in advance, the social consequences that are likely to follow from proposed actions”*.

On the other hand, social change processes are set in motion by project activities or policies. Change has a way of creating other changes. Social change processes can lead to several other, second-order social change processes. Depending on the characteristics of the local social setting and mitigation processes that are put in place, social change processes can lead to social impacts (Vanclay, 2002:192). Social change processes relevant to the project will be discussed before the potential impacts will be investigated and mitigation measures proposed.

SIA introduces knowledge about the social implications of an activity, into the planning, decision-making and management process associated with the activity. A social impact is something that is experienced or felt and it can be positive or negative. In social sciences, one can distinguish between two types of social impacts:

Subjective social impacts

Impacts that occur “in the imaginations” or emotions of people, such as negative public attitudes, psychological stress or reduced quality of life. This kind of impact is much more difficult to identify and describe, as one cannot readily quantify perceptions or emotions.

Objective social impacts

Impacts that can be quantified and verified by independent observers, such as changes in population size or composition, in employment patterns, in standards of living or in health and safety. This can typically be quantified.

The study made use of comments obtained as part of the public consultation process as stipulated by NEMA to assess potential social impacts.

Research conducted for the purposes of the report was mainly of a qualitative nature. The qualitative approach is concerned with understanding social life and the meaning that people attach to everyday life (Fouché and Delport, 2002:79). Using a qualitative approach, social scientists are able to address issues such as human perception and behaviour, regardless of how realistic it may be.

In contrast, the quantitative approach aims to measure the social world objectively, to test hypothesis and to predict and control human behaviour (Hoyle, Harris and Judd, 2002:394).

The assessment of economic impacts typically relies more heavily on quantitative data, however, qualitative data has been used in Section 6 – Baseline Description of the Social Environment, which relies mainly on statistical data.

3.2 Approach and methodology

3.2.1 Social Impact Assessments

Social Impact Assessments ensure that the social impacts or consequences of a particular development are thoroughly analysed, monitored and ultimately managed (IAIA, 2003). Social Impact Assessment is a methodology used by SIA practitioners to assess the social impacts

of planned interventions or events, and to develop strategies for the on-going monitoring and management of those impacts (IAIA, 2003).

Social impacts do not occur in a vacuum, they occur within the context of human behaviour, which is often unpredictable. In the South African society one will encounter a variety of cultures, traditions, political and religious beliefs. These social, cultural, political, economic and historic contexts are influenced by various perceptions. Perceptions are formed based on preconceived ideas, rather on all possible information. It is thus necessary to understand and manage these perceptions, which is where the SIA is an important tool.

3.2.2 Baseline conditions

In order to determine the social impacts of the proposed new development, the report aims to provide a brief status quo, pertaining to the demographic and economic variables of the study area as well as the service delivery in each of the associated tourism areas.

When conceptualising the social environment being impacted upon, the anticipated social and environmental impacts are generally broad and not limited to one specific area or town. Therefore, the baseline study includes an analysis of the socio-economic aspects in the broader community. This is particularly important in tourism projects such as this, as the tour routes are interlinked and activity in one area will have an impact on adjacent areas.

Due to the high profile nature of this project, and the ways in which it could potentially affect the community, it was important to engage with the various stakeholders in a comprehensive manner. It was thus decided that a qualitative approach to data collection would be used, which focuses on in-depth data and considers individual interpretations of events, feelings and lived experiences (Greenstein, 2004). This method of data collection includes document analysis and interviews. In-depth interviews and focus group meetings were the most widely used and provided the most useful information regarding the views of the various community groups.

3.2.3 Sample

SEF engaged in purposive sampling, aimed at specifically selecting people to participate in the research on the basis of particular criteria – namely their knowledge of the area and their activity in the tourism sector. However a snowball sampling method - i.e. referral of participants by participants - was also used in order to ensure that relevant parties were contacted (Greenstein, 2003). SEF completed thirteen in-depth, semi-structured interviews as a primary data collection tool. In addition to this, SEF attended two focus group/ community group meetings. This was used to engage with individuals who represent the various

community interests, and thus aimed to be as representative of the views of the community as possible. According to Flyvbjerg (2000: 64), qualitative methods, such as the “active interview [are the] ‘primary methods’ for social science. According to Weiss (1995: 9) interviews are important as they allow for “developing [of] detailed descriptions ... integrating multiple perspectives... [and] describing process”. These interviews provided insights into the numerous aspects and issues raised, both positive and negative of the proposed development.

Key stakeholder groups, who will be affected by the development, were identified. These groups included the Graskop Business and Tourism Forum (GBTF), the Graskop Conservation Society as well as the Local Tourism Organisations (LTO) for Graskop, Sabie, Hazyview, and White River. Furthermore the Mpumalanga Tourism and Parks Agency (MTPA) and the Kruger Lowveld Regional Tourism Organisation (KLERTO) were interviewed.

Since the LTOs are representative groups, one contact person from each group was interviewed, and presented the views of the group. These interviews were all similar in format and question content; the respondents were provided the opportunity to direct the discussions. This was important as each respondent was allowed the opportunity to voice the concerns and issues that were most important to them and the group that they represented. In this way the interviewer did not lead the respondents to reach any conclusions or dwell on any particular issues. The interviews were conducted at a place and time convenient for the respondent.

In terms of the ethics appraisal for the proposed project, SEF approached all aspects of the project with the appropriate amount of care and respect. As highlighted by Wassenaar (2006: 67), “autonomy and respect for the dignity of persons” is vital. Participants that were interviewed were not required to provide any information against their will and were informed of the nature of the interview and so participated willingly, thereby ensuring informed consent (Laher & Israel, 2006). SEF was always honest, fair and respectful towards all who participated and at no point did SEF attempt to deceive those interviewed (principles derived from Laher & Israel, 2006).

3.3 Assessment phases

For the purpose of assessing impacts during the SIA, the project will be divided into two phases from which impacting activities can be identified, namely:

Construction Phase

- All the construction related activities on site, until the contractor leaves the site.

Operational Phase

- All activities, including the operation and maintenance of the proposed development.

The activities arising from each of these phases will be included in the impact assessment tables. This is to identify activities that require certain environmental management actions to mitigate the impacts arising from them.

The assessment of the impacts will be conducted according to a synthesis of criteria required by the integrated environmental management procedure.

3.4 Assessment criteria

3.4.1 Assessment weighting

Each aspect within an impact description was assigned a series of quantitative criteria. Such criteria are likely to differ during the different stages of the project's life cycle. In order to establish a defined base upon which it becomes feasible to make an informed decision, it was necessary to weigh and rank all the criteria.

Simply, such a weighting factor is indicative of the importance of the impact in terms of the potential effect that it could have on the surrounding environment. An explanation of the impact assessment criteria follows.

3.4.2 Extent / Scale

The physical and spatial scale of the impact is classified as:

Description	Explanation	Value
None	No noticeable impact is expected.	0
Site	The impacted area extends only as far as the activity, such as footprint occurring within the total site area.	1
Local	The impact could affect the whole, or a significant portion of the site.	2
Regional	The impact could affect the area around the site including neighbouring farms, transport routes and adjoining towns.	3
National	The impact could have an effect that expands throughout the country (South Africa).	4
International	The impact has international ramifications that go beyond the boundaries of South Africa	5

3.4.3 Magnitude

The Magnitude of the impact is considered by examining whether the impact is destructive or benign, whether it destroys the impacted social environment, alters its functioning, or slightly alters it. These are rated as:

Description	Explanation	Value
Minor	The impact is not expected to have a noticeable effect on the social environment.	1
Low (L)	The impact alters the affected social environment in such a way that the natural processes or functions are not affected.	2
Moderate	The affected social environment is altered, but functions and processes continue, albeit in a modified way.	3
High (H)	Function or process of the affected social environment is disturbed to the extent where the function or process temporarily or permanently ceases.	4
Very high / don't know	The impact is expected to have a severe effect on the social environment and is seen as a fatal flaw for the process.	5

This will be a relative evaluation within the context of all the activities and the other impacts within the framework of the project.

3.4.4 Duration

The lifetime of the impact, which is measured in relation to the lifetime of the proposed development, is indicated as:

Description	Explanation	Value
Immediate	The impact will either disappear with mitigation or will be mitigated through a natural process in a period shorter than any of the development phases.	1
Short term	The impact will be relevant through to the end of the construction phase.	2
Medium-term	The impact will last up to the end of the phases, where after it will be entirely negated.	3
Long-term	The impact will continue or last for the entire operational lifetime of the development, but will be mitigated by direct human action or by natural processes thereafter.	4
Permanent	This is the only class of impact that will be non-transitory. Mitigation either by man or natural process will not occur in such a way or in such a time span that the impact can be considered transient	5

3.4.5 Probability

This describes the likelihood of the impacts actually occurring. The impact may occur for any length of time during the lifecycle of the activity, and not at any given time. The classes are rated as follows:

Description	Explanation	Value
None	No impacts are expected to occur.	0
Improbable	The possibility of the impact occurring is none, due either to the circumstances, design or experience. The chance of this impact occurring is thus zero (0%).	1
Low probability	The possibility of the impact occurring is very low, either due to the circumstances, design or experience. The chances of this impact occurring is defined as 25%.	2
Medium probability	There is a possibility that the impact will occur to the extent that provisions must therefore be made. The chances of this impact occurring is defined as 50%.	3
Highly probable	It is most likely that the impacts will occur at some stage of the Development. Plans must be drawn up before carrying out the activity. The chances of this impact occurring is defined as 75%.	4
Definite / don't know	The impact will take place regardless of any prevention plans, and only mitigation actions or contingency plans to contain the effect can be relied upon. The chance of this impact occurring is defined as 100%.	5

3.4.6 Mitigation

The impacts that are generated by the development can be minimised if measures are put in place to reduce them. These measures are mitigation measures to ensure that the development takes into consideration the social environment and the impacts that are predicted so that development can co-exist with the social environment as a basis for planning.

Determination of significance

Without mitigation

Significance is determined through a synthesis of impact characteristics as described in the above paragraphs. It provides an indication of the importance of the impact in terms of both tangible and intangible characteristics. The significance of the impact "without mitigation" is the prime determinant of the nature and degree of mitigation required. Where the impact is positive, significance is noted as "positive" (indicated as +). Significance is rated on the following scale:

Description	Explanation
Low (L)	The impact is not substantial and does not require any mitigation.
Low to medium (LM)	The impact is of little importance, but may require limited mitigation.
Medium (M)	The impact is of importance and is therefore considered to have an impact. Mitigation is required to reduce the negative impacts to acceptable levels.
Medium to high (MH)	The impact is of great importance. Mitigation of the impact is essential.
High (H)	The impact is of major importance, and should mitigation not be applied, it is considered to be a fatal flaw in the project proposal. This could render the entire development option or entire project proposal unacceptable.
International	The impact has international ramifications that go beyond the boundaries of South Africa

Determination of significance

With mitigation

Determination of significance refers to the foreseeable significance of the impact after the successful implementation of the necessary mitigation measures. Significance with mitigation is rated on the following scale:

Description	Explanation
Low (L)	The impact will be mitigated to the point where it is of limited importance.
Low to medium (LM)	The impact is of importance, however, through the implementation of the correct mitigation measures such potential impacts can be reduced to acceptable levels.
Medium (M)	Notwithstanding the successful implementation of the mitigation measures, to reduce the negative impacts to acceptable levels, the negative impact will remain of significance. However, taken within the overall context of the project, the persistent impact does not constitute a fatal flaw.
Medium to high (MH)	The impact is of major importance but through the implementation of the correct mitigation measures, the negative impacts will be reduced to acceptable levels.
High (H)	The impact is of major importance. Mitigation of the impact is not possible on a cost-effective basis. The impact continues to be of major importance, and, taken within the overall context of the project, is considered to be a fatal flaw in the project proposal. This could render the entire development option or entire project proposal unacceptable.
Low (L)	The impact will be mitigated to the point where it is of limited importance.

3.4.7 Assessment of significance

Each aspect within an impact description was assigned a series of quantitative values. Such criteria are likely to differ during the different stages of the project's life cycle.

The allocation of a rating is a result of the efficiency and effectiveness, as identified through professional experience and empirical evidence of how effectively the proposed mitigation measures will reduce the significance of the impact.

Thus, the lower the assigned value, the greater the effectiveness of proposed mitigation measures and subsequently, the lower the significance of impacts with mitigation.

The efficiency of the mitigation measure determines the eventual significance of the impact. The level of impact is therefore seen holistically with all considerations taken into account.

Table 3-1: Description of assessment parameters for socio-economic impacts

Scale	Duration	Magnitude /Intensity	Probability	Significance Rating	Mitigation Efficiency	Significance following mitigation
Site	Immediate	Low	Improbable	Low	High	Low
Local	Short term		Low probability	Low to medium	Medium High	Low to medium
Regional	Medium term	Medium	Medium probability	Medium	Medium	Medium
National	Long term		Highly probable	Medium to high	Low to medium	Medium High
International	Permanent	High	Definite	High	Low	High

3.5 Integration of Specialist's Input

In order to maintain consistency in the impact assessment, all potential impacts to the community will be listed in the table below. The assessment parameters used in the table will be applied to all impacts and a brief descriptive review of the impacts and their significance will then be provided. The various issues raised have been assessed in a qualitative manner, and each issue is dealt with below. However in order to assess the severity of each of the issues that has been raised, a ranking scale has been used. It is important in the SIA to be able to assess the various scores that are reached in quantitative manner, in order to determine the level of impact that each issue has.

Table 3-2: Example of Impact Table

Nature		Impact status	N / P	
Impact source(s)				
Affected stakeholders				
Magnitude	Magnitude			
	Duration			
	Scale			
	Probability			
Significance Before Mitigation				
Significance Potential				
Proposed mitigation measures				
	Significance After Mitigation		Impact status	N / P
	Mitigation efficiency			
	Magnitude	Magnitude		
Duration				
Scale				
Probability				
Significance Potential				

5 PROJECT ACTIVITIES AND INFRASTRUCTURE

5.1 Project activities and phases

The Skywalk at God's Window is envisaged to be a cantilevered glass walkway, extending some 12 metres from the Canyon's edge, offering 360° panoramic views with a 700 metre vertical drop below, as well as a main building which will house a cafeteria and gift shop. However, in the future, there could be potential to supplement this attraction with the addition of a 'Skylift' and/or an observation tower. The Skylift concept would involve a vertical drop by a hoisting system into a series of suspended walkways in the forest below.

The key features of the Gods Window site plan are as follows:

- Upgrading of existing view points and pathways, with the addition of an elevated lookout tower in the "rain forest";
- Signage and demarcation of paths and viewpoints;
- Upgrade and formalisation of the craft market;
- Upgrade and development of the parking facilities; increasing the number of parking bays for cars as well as the inclusion of a bus terminal;
- Proposed skywalk complex; including a restaurant area that can be used as a conference, wedding venue, ablutions, the skywalk, and a heritage museum, including the geological and social history of the area;
- The Skylift;
- Paved Pedestrian Boulevard linking the main access to view points, tuck shop and outdoor environmental display;
- Outdoor environmental education display, detailing fauna and flora of the area;
- Kiosk/ Tuck-shop and paved walkway with tables and chairs;
- Adventure centre across the road from the main access point into Gods Window. This facility could be placed anywhere in the close proximity of the view points and offers visitors a number of low impact adventure activities like: horse riding, mountain biking, abseiling etc.

Figure 5-1 depicts an improved car parking and service area, new visitor centre and enhanced retail area for local craftspeople that currently trade from stalls at God's Window. The Skywalk project represents the core component of the development at God's Window.



Figure 5-1: Google Image of God's Window Site



Figure 5-2: Road access to Gods Window

The main access to the proposed Skywalk is along the R534 which forms a loop road with the R532 from Graskop (**Error! Reference source not found.**). No major human settlements exist in the immediate area and thus this is not a primary road access. Notwithstanding the regulatory restrictions from the Department of Roads and Transport (DRT), access on the R534 could be controlled by two entry gates on the Northern and Southern junctions of the R534 with the R532. This would result in controlled access to the whole area along the escarpment; this would also eliminate the need for individual entry gates at each view point and the cost thereof.

5.2 Project alternatives

To give effect to the principles of NEMA and Integrated Environmental Management (IEM), an EIA should assess a number of reasonable and feasible alternatives that may achieve the same end result as that of the preferred project alternative. The following alternatives have been identified during the scoping phase of the project and were further investigated as part of this EIA:

Alternative 1: Site/ Location Alternatives:

No site alternatives for the proposed project are being considered. The proposed site is the only site identified as feasible for the establishment of the proposed skywalk, due to the following:

- The views from God's Window are extremely impressive, with a dramatic drop to the base of the canyon and to the lowveld below;
- On a clear day, it is possible to see over Kruger National Park and to Mozambique beyond;
- Due to the altitude, the climate at God's Window is markedly different to that at the lowveld; and
- The area between the existing carpark and the rim is considered as a 'disturbed area' due to prior environmental degradation.

Alternative 2: Layout/ Design Alternatives:

The Skywalk will form part of a larger redevelopment of God's Window, including an enhancement of the existing walkways, viewpoints and car park. The redevelopment of the wider site would significantly enhance the existing observation areas and guest services and create a new visitor building containing Food and Beverages and possibly a cultural element.

Other alternative layout/design plans will evolve from the findings of specialist studies that will be undertaken to inform the EIR phase. However, in the future, there could be potential to

supplement this attraction with the addition of a 'Skylift' and/or an observation tower (not part of this EIA process). The Skylift concept would involve a vertical drop by a hoisting system into a series of suspended walkways in the forest below. Design and layout alternatives will be proposed based on the environmental sensitivities identified on site.

Alternative 3: Technology Alternatives:

The proposed project is considering two waste management systems and will be investigated/assessed during the EIR phase of the proposed project. These include the following alternatives:

- **Flushing toilet with conservancy tank**

This system consists of a standard flushing toilet that drains into a storage or conservancy tank on the property. A vacuum tanker regularly conveys the excrement to a central sewage treatment works for purification before the treated effluent is discharged into a watercourse. The appropriate volume of the conservancy tank should be calculated on the basis of the planned emptying cycle and the estimated quantity of wastes generated. Tank volumes are sometimes prescribed by the service provider.

- **Lilliput Sewage Treatment System**

Raw sewage is pre-digested in a septic tank, or with the 'full kit' plant, in Lilliput tanks, by anaerobic bacteria converting most of the complex organic matter into simple but toxic chemicals. At times of surge flow, excess effluent is returned to the septic tank to ensure complete treatment. The final stage of treatment is disinfection, which ensures that any pathogens are removed.

The technologies that will be considered will have implications varying from cost to effectiveness.

Alternative 4: No Development Alternative:

The 'no-go' alternative would be applicable if the proposed development is not approved by the DEA. This would imply that the status quo of the site will remain. Should the proposed development not be implemented, the area will not be affected by any construction-related or operational phase impacts. Therefore, the present state of the biophysical, social and economic environment will remain, unaffected. Under these circumstances there would be no changes to the environment at the proposed site. As discussed above, the proposed site is

located on the edge of Blyde River Canyon, one of the most visually impressive canyons in the world, the attraction will therefore benefit from the high volumes of visitors (both residents and tourists) visiting the Panorama Route throughout the year. The glass-bottomed Skywalk concept is unique to the regional market, with just one other project of its type globally (Grand Canyon Skywalk). This proposed project therefore has very high positive impacts to benefit the country as a whole.

6 BASELINE DESCRIPTION OF THE SOCIAL ENVIRONMENT

The Graskop area, in which the Skywalk falls, is part of the Thaba Chweu Local Municipality (LM). Graskop serves primarily as a tourist destination, and the town services as a stop-off before tourists visit the Blyde River Canyon and its' associated tourist sites. The town is part of a number of small towns in the area which form a major tourism offering in the Mpumalanga Region. These associated towns include Pilgrims Rest, Sabie, Hazyview, Nelspruit, White River, and to a lesser degree Lydenberg. These towns are largely visited en-route to the Kruger National Park. **Error! Reference source not found.** indicates the location of these towns, in relation to Graskop, as well as indicating a number of tourism offerings in the area.

The town of Graskop itself largely provides food and curio offerings to the tourists, as well as accommodation facilities. The boundaries of this municipality extends cover the entire Blyde River Canyon.

According to the Integrated Development Plan (IDP) for the Thaba Chweu LM, the proximity of the municipality to "wildlife, nature and heritage sites - nature and game reserves with big five and special interest nature" means that this is a development priority for them (Thaba Chweu LM IDP, 2012/13:26) They further state that "Tourism activities are concentrated around the beautiful areas of Pilgrim's Rest, Blyde River Canyon, Sabie and Graskop" (Thaba Chweu LM IDP, 2012/13:27). The figures below provide a representation of the various demographic indicators and information for the Thaba Chweu LM, in which the town of Graskop falls.

The Thaba Chweu LM has a total population of 98, 387 people, with a total of 69.9% of this population being classified as economically active (Stats SA, 2013). However, of this population 35,972 are employed and 2,213 persons are classified as discouraged work-seekers while the total unemployment rate is estimated at 20.5% (Stats SA, 2013). Furthermore, the youth unemployment rate is higher than this. Of those aged between 15 – 35 years, 16 624 are employed and 1 500 are discouraged work-seekers, with a total

unemployment rate of 27,1% (Stats SA, 2013). This demographic bulge of unemployed individuals is a very poor statistic and worrying for the economic prospects of the region.

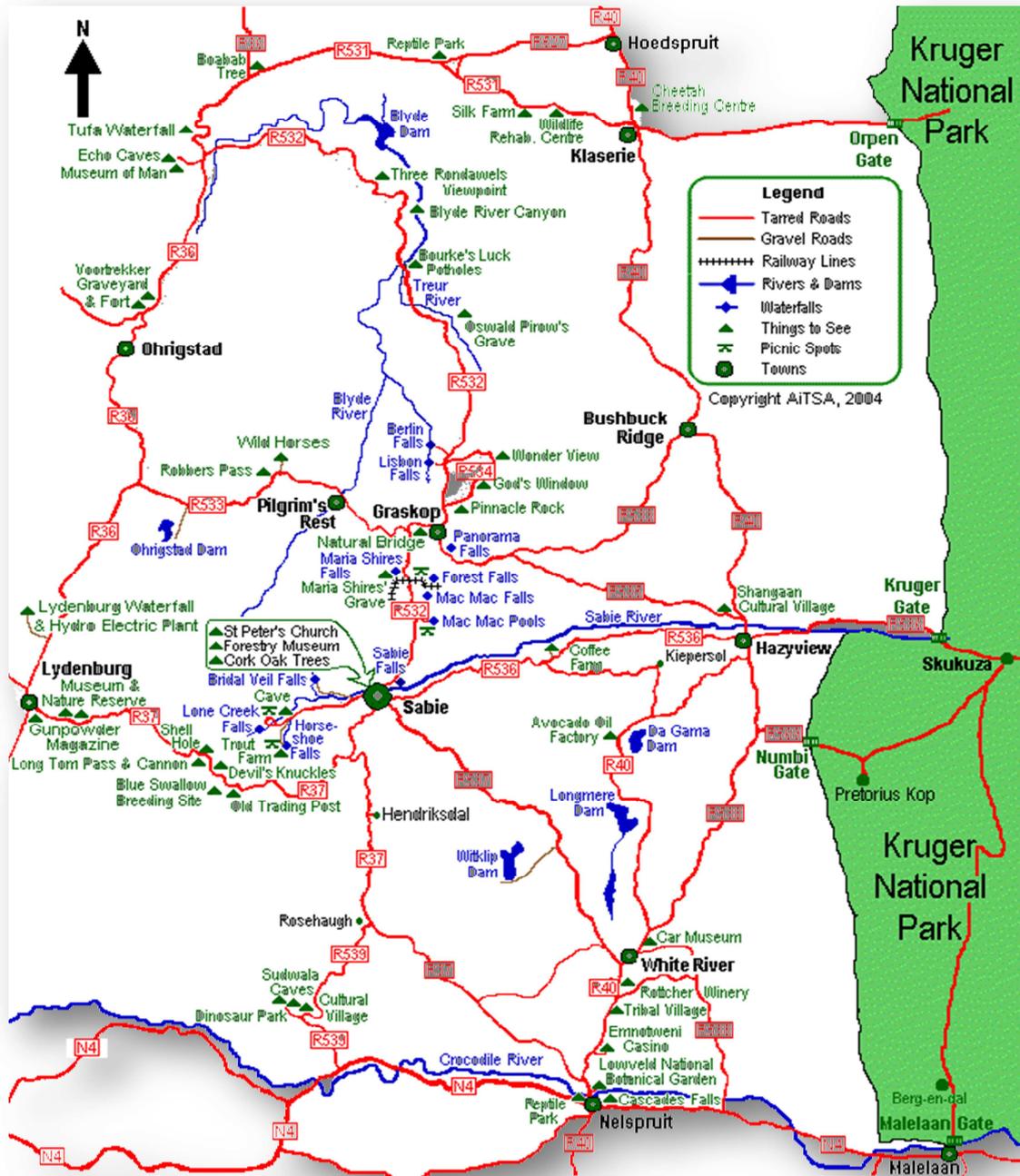


Figure 6-1: Map of Graskop and associated tourism towns

The population of the Thaba Chweu LM is largely Black African, followed by White and Coloured groups (Figure 6-1, Stats SA, 2013).

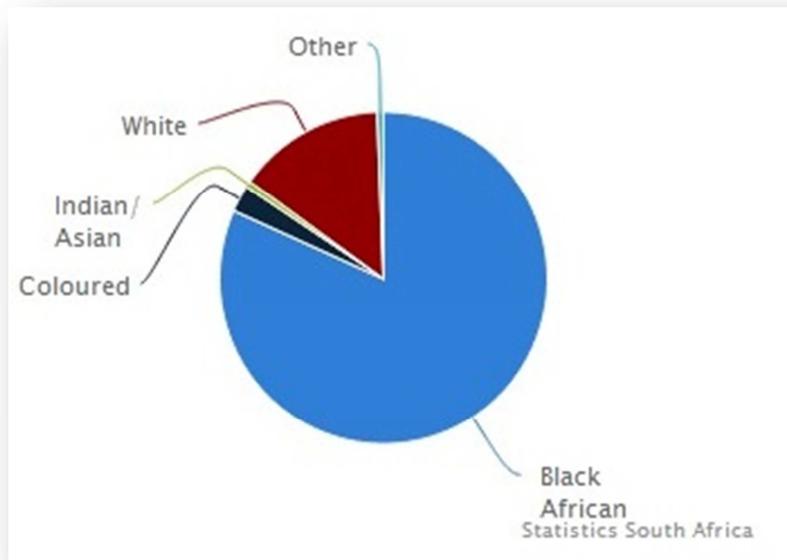


Figure 6-1: Population Groups for Thaba Chweu Municipality

The language most predominantly being spoken is Sepedi, followed by Siswati and Afrikaans (Figure 6-2, Stats SA, 2013). It is evident from the above table that a large percentage of the Thaba Chweu LM population are dependent on the support of the employed population, who represent 36.6% of the population (Figure 6-3).

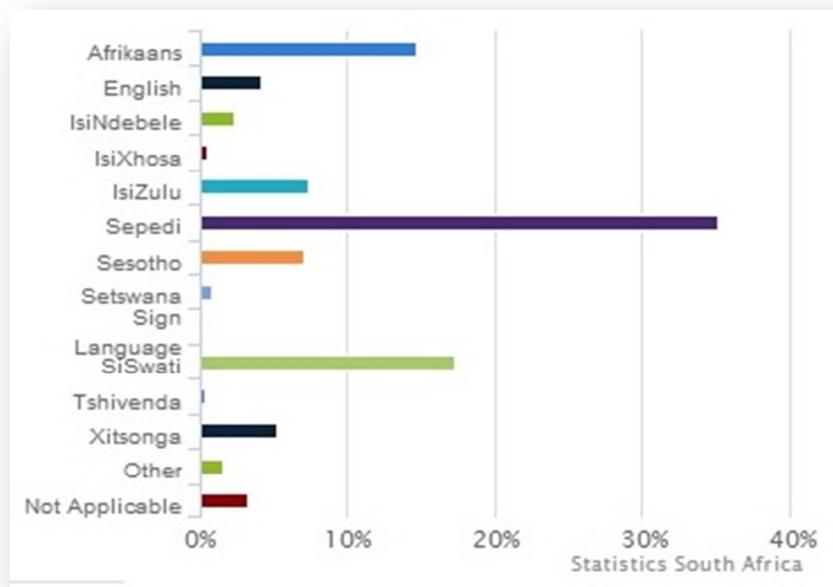


Figure 6-2: Language Prevalence for Thaba Chweu Municipality

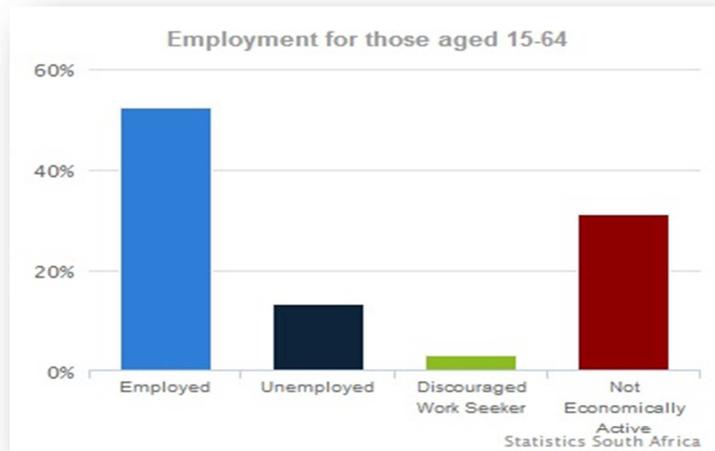


Figure 6-3: Employment statistics for the Thaba Chweu Municipality

It is evident from Figure 6-4 that there is a large youthful population in the Thaba Chweu LM. When combined with an understanding of the education statistics for the municipality, it is evident why there is such a large unemployed population within Thaba Chweu LM. Approximately 45 - 50% of the population are under the age of 34 (Figure 6-4, Stats SA, 2013). With the unemployment and education levels where they are, this indicates that there will be a large strain on the state going forward to provide for these individuals.

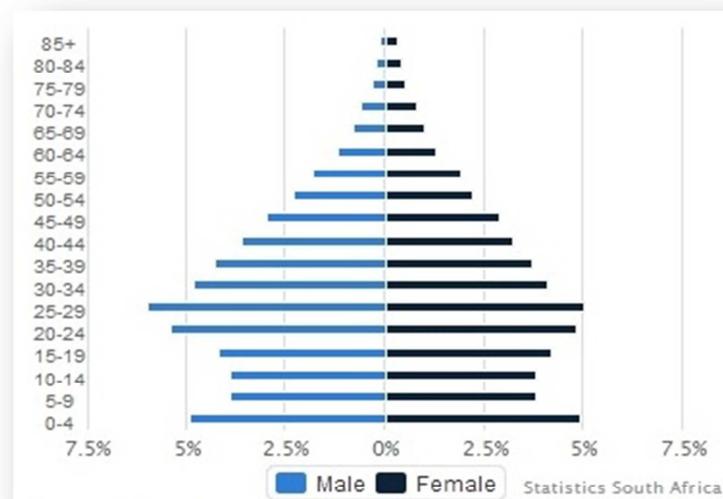


Figure 6-4: Sex and Age Distribution for the Thaba Chweu Municipality

According to Stats SA (2013), less than 20% of the Thaba Chweu LM population have completed high school (Figure 6-5), with a tiny number of the population having a post-matric qualification. However, the majority of the Thaba Chweu LM population (just below 40%) have only completed 'Some Primary' education. This statistic probably feeds into the unemployment figures listed above, and is an indication of one of the contributing factors to the low unemployment in the area.

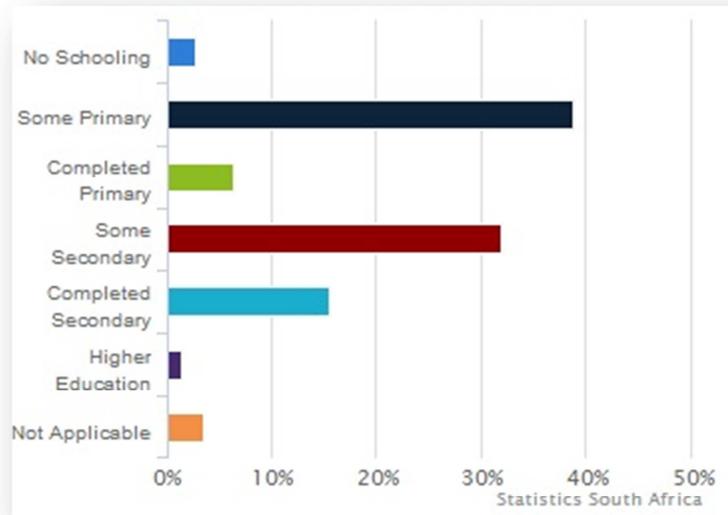


Figure 6-5: Education levels for the Thaba Chewu Municipality

The Living Standard Measure (LSM) of the Thaba Chewu LM is, on average, likely to be LSM 6 and below. The LSM categorises the population into 10 LSM groups, 10 (highest) to 1 (lowest) (SAARF, 2013). The “SAARF LSM ...cuts across race and other outmoded techniques of categorising people, and instead groups people according to their living standards using criteria such as degree of urbanisation and ownership of cars and major appliances” (SAARF, 2013: N.P.). This number is based on Figure 6-6 which indicates that just over half of the municipality’s citizens own a refrigerator and stove, while computer ownership is very low, as is the penetration of satellite television. This speaks to the levels of disposable income in the communities. This would then influence the ability to purchase consumer goods and services, which would in turn, drive economic growth in the region.

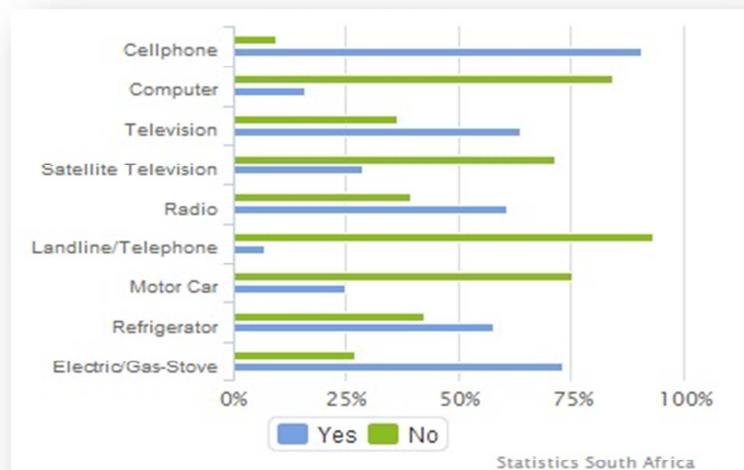


Figure 6-6: Household possessions for the Thaba Chewu Municipality

7 ASSESSMENT OF SOCIAL IMPACTS

7.1 Waged labour / Employment creation and decrease in unemployment

Phase at which impact is relevant	Prior to construction Construction Operation
Description of the impact	

Waged labour can be defined by an impact that changes the number of available jobs in an area. Development directly influences changes in employment and income opportunities in communities. Such changes may be more or less temporary (e.g., construction projects, or seasonal employment) or may constitute a permanent change in the employment and income profile of the community should the development project bring long-term job opportunities for community residents.

In order to ensure that this impact leads to maximum benefit, it is important to ensure that employment opportunities created will lead to employment of local residents, especially in areas where settlement agreements has been reached. Emerging employment opportunities should be targeted at local residents as well as people from the surrounding areas. This will ensure a reduced dependency on temporary employment in addition to enhancing the living standards of local people.

Recruitment of labour should be guided by recruitment policies which should promote the employment of local labour by the project as well as by any appointed contractors. A local employment procedure and recruitment process should be developed in consultation with local authorities and representatives. A transparent process of employment must be followed to limit opportunities for conflict situations.

Employment opportunities should be communicated in a fair and transparent manner, while at the same time being sensitive not to create any undue expectations for employment. In the event of there being an excess of local unemployed persons whom are willing and able to be employed, it is suggested that certain selection criteria be used, such as employing one person per household, or requiring proof of residence in the area for a period of at least two years. This will ensure that as many households as possible benefit from the employment opportunities. Other criteria could, for example include, the level of skills, previous experience, and the applicant's employment record.

In order to ensure that the resultant positive impact develop into a long term boost to the economy, it is suggested that, where possible, the IDC advise and assist, in liaison with the local ward committees, farmers associations, local business and tourism operators, etc. to establish and grow SMMEs. The support of local business and the use of their products and services should be promoted as far as possible.

Affirmative procurement is an ideal mechanism for the economic empowerment of HDSAs. Therefore, IDC and the MTPA should procure locally and assist potential HDSA suppliers, through mentoring, to become part of the project's supply chain. Through the proposed Skywalk, MTPA has the ability to create an enabling environment for the empowerment of HDSAs within the surrounding areas. It is therefore suggested that MTPA formulate a Procurement Policy, to provide HDSAs and surrounding communities with a preferred supplier status in all 3 levels of procurement, namely: capital goods, consumables and services.

MTPA can provide preferred supplier status to local HDSAs through implementation of the following measures:

- Identifying products which could be supplied by local suppliers; and
- Identifying prospective procurement suppliers from employees / surrounding communities, by means of a Local Economic Development (LED) Forum.

MTPA should also require in its tender process the following from suppliers:

- The promotion of SMMEs, especially within the direct environment of the Skywalk;
- The creation of new jobs; and
- The upliftment of communities through corporate social responsibility projects.

MTPA should aim to procure from local service providers in the area. Various procurement outsourcing services could benefit the wider community such as:

- Food – catering;
- Construction – building material and building;
- Transportation;
- Accommodation for workers;
- General maintenance of grounds, plumbing, electricity;
- Laundry for security, maintenance personnel, etc.;
- Recycling;
- Security services; and
- Facility management and maintenance.

It is proposed that MTPA's recruitment policy require its core contractors to recruit and employ, where possible, local job seekers from the immediate communities. A further

measure to ensure the employment of local persons is to require that project contracts between MTPA and the specialist contractor for the construction of the Skywalk and associated infrastructure stipulate the use of local labour for unskilled and semi-skilled jobs.

Significance of the impact

Nature	Waged labour, employment creation and decrease in unemployment	Impact status	P	
Impact source(s)	Availability of job opportunities for local residents			
Affected stakeholders	Labour (existing and potential)			
Magnitude	Magnitude	Minor	2	
	Duration	Medium	3	
	Scale	Regional	3	
	Probability	Low	2	
Significance Before Mitigation				
Significance Potential		Low	L	
Proposed mitigation measures	<ul style="list-style-type: none"> Unskilled and unemployed labour should be sourced from the surrounding local communities as far as possible; Skills development opportunities should be granted to community members and local job seekers, where needed; Project contracts between MTPA and the specialist contractor should stipulate the use of local labour for unskilled and semi-skilled positions and tasks; Ensure that local businesses, especially those of HDI, women and of SMMEs get allocated the maximum appropriate share of project related business opportunities; and Ensure that the Labour Relations Amendment Act, 2002 (Act No. 12 of 2002) as well as the necessary policies and procedures are taken into consideration to ensure the correct procurement procedures. 			
	Significance After Mitigation		Impact status	P
	Mitigation efficiency		Medium	M
	Magnitude	Magnitude	Moderate	6
		Duration	Medium	3
		Scale	Regional	3
Probability		Medium	3	
Significance Potential		Medium	M	

7.2 Loss of business sales due to temporary closure of curio stalls

Phase at which impact is relevant	Construction
Description of the impact	

It is anticipated that access to the site will be denied to tourists while the Skywalk is being constructed due to safety reasons. In this event, curio stall operators will be negatively affected since there will be no tourists travelling to the area, therefore removing their customer base.

Since the construction period may extend well over a year, the livelihoods of these stall operators will be dramatically impacted on. Therefore, intensive consultation with the licensed curio stall operators should take place well in advance of the construction phase. It will be important to inform the operators of exactly how long the construction phase will be and to provide them with opportunities to sell their curios at alternative tourism sites within the area. MTPA should facilitate this transition and provide the operators with the necessary resources to move their curio stores.

Once the construction phase has been finalised, these curio store operators should be provided with first preference to sell their goods at the Skywalk. Once again, the necessary resources should be provided to them to relocate their stores. In order to address any cumulative negative impact on them during the transition phase, it is advised that training and mentoring be provided to them in terms of business skills, financial accounting, marketing, etc. to enhance their ability to adapt to the changing circumstances.

Significance of the impact			
Nature	Temporary loss of livelihood to curio store operators	Impact status	N
Impact source(s)	Construction phase – closure of God’s Window tourism site		
Affected stakeholders	Curio stall operators		
Magnitude	Magnitude	High	4
	Duration	Short	2
	Scale	Site	2
	Probability	Definite	5
Significance Before Mitigation			
Significance Potential		Medium/High	MH
Proposed mitigation measures	<ul style="list-style-type: none"> Skills development opportunities, training and mentorship should be granted to curio stall operators, where needed; and Curio stall operators should be provided with the necessary resources to temporarily move their stalls to an alternative site, which should be provided by the MTPA. 		
	Significance After Mitigation		
Mitigation efficiency		Medium	M
Magnitude	Magnitude	Low	2
	Duration	Short	2
	Scale	Site	2
	Probability	Medium	3
Significance Potential		Low	L

7.3 Functioning of government agencies

Institutional and legal processes are those processes that affect the efficiency and effectiveness of various organisations that are responsible for the supply of the goods and

services on which people depend. These organisations include government agencies, non-government organisations and the commercial sector.

These impacts refer to the capacity of the authorities and other institutions to cope with the workload generated by the proposed Skywalk.

Phase at which impact is relevant	Construction Operation
Description of the impact	

Integration of tourism with the community and local government structures should be addressed at two levels. The local authority should recognise tourism as an important, often strategic, development and ensure that land-use planning and zoning makes provision for the demarcation of current tourism areas and possible future expansion. Tourism is often viewed as important economic driver, however, greater interaction with the DM and LM is required to ensure that potential for negative impacts on infrastructure such as roads, and service delivery such as water supply are reduced.

It is therefore crucial to ensure that the LM and DM has the capacity to address infrastructure and service delivery requirements in light of the addition of the Skywalk. LTOs have already lamented the fact that the current road infrastructure are poor, and before construction can commence, these roads will have to be upgrade to prevent any further damaged from construction vehicles.

It is therefore important that various local government departments be involved in decision-making processes and stakeholder buy-in support, such as the:

- Local and District Municipalities / LED Offices;
- Department of Economic Development, Environment and Tourism
- Department of Roads, Transport and Public Works; etc.

It is, however, recognised that the responsibility of developing local infrastructure development and job creation initiatives does not exclusively lie with the LM and that MTPA should also contribute towards the social and economic upliftment of the area.

Therefore, MTPA must attempt to:

- Assists in implementing LED projects and/or programmes identified in the IDPs, in partnership with local government, business and affected communities;
- Undertake and support identified sustainable development initiatives in surrounding and affected communities;

- Provide HDSA's who possess the required technical ability with a preferred supplier status in all three levels of procurement.

Significance of the impact

Nature	Infrastructure needs,	Impact status	N	
Impact source(s)	Construction of Skywalk infrastructure			
Affected stakeholders	Tourists, residents, local authorities			
Magnitude	<i>Magnitude</i>	Moderate	3	
	<i>Duration</i>	Medium	3	
	<i>Scale</i>	Regional	3	
	<i>Probability</i>	Highly	4	
Significance Before Mitigation				
Significance Potential		Medium/High	MH	
Proposed mitigation measures	<ul style="list-style-type: none"> • Assist the LM with the diversification of the local economy; • Emphasise the use of local service providers and SMMEs and focus on the development of LED programmes; and • Institute a joint municipal coordinating and implementing committee to support the municipality's local economic and social develop needs and requirements, where feasible. 			
	Significance After Mitigation		Impact status	P
	Mitigation efficiency		High	H
	Magnitude	<i>Magnitude</i>	Moderate	3
<i>Duration</i>		Long	4	
<i>Scale</i>		Regional	3	
<i>Probability</i>		Medium	3	
Significance Potential		Medium	M	

7.4 Capacity building and skills transfer

Phase at which impact is relevant	Construction Operation
Description of the impact	

Capacity building refers to the conscious increasing of knowledge, networking capability and the skills base amongst local people. It is predicted that the proposed project will add, to a small degree, capacity building in the community, as opportunities do exist to develop the skills of local residents. This type of skills development should, however, encompass more skills than merely the technical skills and should include life skills training and mentorship. In terms of training, it is suggested that all employees be trained in the function of their job and that this training incorporate health, safety, security and environmental aspects. The development and support of SMMEs in the local communities should also be encouraged as far as possible.

According to the Thaba Chweu LM IDP, “53.9% of the adult population has had access to secondary schooling or above. This bodes well for creating jobs in the tourism industry where much of the job creation potential is reliant on a semi-skilled population which could be employed as tour guides, front office staff such as receptionists and back office staff such as accountants, chefs and filing clerks and in support industries such as bus driving. Less skilled people, 20.7% of the population [have] not been to school could be employed as gardeners, cleaners or could be encouraged to establish their own enterprises as service providers in these fields”.

There is thus a shared vision between the various LTOs, the GBTF and the Thaba Chweu LM regarding the potential for job creation.

Significance of the impact

Nature	Skills transfer to local employees and capacitating of communities	Impact status	P	
Impact source(s)	Construction and operational activities			
Affected stakeholders	Local residents and businesses, local authorities,			
Magnitude	<i>Magnitude</i>	Minor	1	
	<i>Duration</i>	Short	2	
	<i>Scale</i>	Regional	3	
	<i>Probability</i>	Medium	2	
Significance Before Mitigation				
Significance Potential		Low	L	
Proposed mitigation measures	<ul style="list-style-type: none"> Recruit and train local residents to supply unskilled labour during the construction of the Skywalk; Stakeholders should be mutually accountable for increased opportunities regarding skills and competency development (general education and technical training); Training should be concentrated on skills that can be readily transferred to other employment opportunities in the local area to avoid persons with trained skills leaving the area for work elsewhere; and Ensure that the employment and training of HDSA and women. 			
	Significance After Mitigation		Impact status	P
	Mitigation efficiency		High	H
	Magnitude	<i>Magnitude</i>	Moderate	3
<i>Duration</i>		Long	4	
<i>Scale</i>		Regional	3	
<i>Probability</i>		High	4	
Significance Potential		High	H	

7.5 Physical quality of the living environment (actual and perceived)

Phase at which impact is relevant	Construction Operation
Description of the impact	

The impacts related to the quality of the living environment refer to how appropriate, from a social point of view, the study area is to live in. Social impacts experienced in the physical environment relate to exposure to dust, noise, risk, odour, vibration, artificial light etc.

Although the assessment of environmental risks and concerns fall outside the scope of this SIA, it is important to understand these issues as it pertains to the social environment.

Water – The objective of the United Nations Millennium Development Goals on water is a 50% reduction in the number of people without sustainable access to safe drinking water, by 2015. The developer should, as far as possible, explore opportunities to minimise water usage, maximise water reuse and recycling and reduce the impact their operations will have on the freshwater resources in the regions where they operate.

Dust – During the construction phase, it is suggested that dust production be controlled by the regular watering of roads and work areas.

Waste – During the construction phase, the illegal dumping of waste must be avoided at all cost. During the operational phase, it is suggested that the developer continually seek opportunities to minimise the generation and disposal of waste products through recycling, waste minimisation programmes and improvement of operational practices and processes.

Noise – in terms of noise impact, the National Noise Regulations define an increase of 7dB as disturbing. It is therefore advised that noise levels be kept within 7dB of the baseline data. Noise reduction is essential and contractors must endeavour to limit unnecessary noise, especially loud talking, shouting, whistling, radios, sirens, hooters of vehicle revving. Neighbouring landowners adjacent to the development should be notified 24 hours prior to any planned activities that will be unusually noisy.

Roads and traffic– it is anticipated that the construction of the Skywalk and associated infrastructure will lead to an increase in traffic in and around the site. Heavy moving vehicles may have a detrimental impact on the road surface and it is suggested that the road infrastructure be upgraded before the construction phase commences.

Significance of the impact

Nature	Quality of the physical environment (actual and perceived)	Impact status	N	
Impact source(s)	Noise, dust, water and nuisance impacts			
Affected stakeholders	Local residents, construction workers, local authorities			
Magnitude	<i>Magnitude</i>	High	4	
	<i>Duration</i>	Long term	4	
	<i>Scale</i>	Regional	3	
	<i>Probability</i>	High	4	
Significance Before Mitigation				
Significance Potential			M	
Proposed mitigation measures	<ul style="list-style-type: none"> Existing community forums must serve as liaison between the affected stakeholders and MTPA and can discuss traffic, dust, noise and construction related concerns with them; Prevent dust blowing off transported materials by washing vehicles, wheels and covering loads; Prepare a dust management plan in liaison with air quality and soil specialist; Prepare a noise reduction plan to cover all significant impacts at source and implement noise reduction and screening to limit exposure. The maximum acceptable night time noise levels should not be exceeded; Upgrade the roads feeding to the Skywalk site; Traffic calming measures should be put in place to minimise traffic noise; Adequate monitoring of the biophysical impacts should occur in order to address any unnecessary inconveniences to stakeholders; Recommendations made in the EMPr should be adhered to. 			
	Significance After Mitigation		Impact status	N
	Mitigation efficiency		Low	L
	Magnitude	<i>Magnitude</i>	Moderate	6
		<i>Duration</i>	Long term	4
		<i>Scale</i>	Regional	3
		<i>Probability</i>	Medium	3
	Significance Potential		Medium	M

7.6 Aesthetic quality of the living environment and sense of place

Phase at which impact is relevant	Construction
	Operation
Description of the impact	

The visual impact of a project is influenced by the terrain, relief of surrounding areas as well as by the population density, transport routes or other development nodes, which will all impact on its visual absorption capacity. It is possible that a project could impact on the "Sense of Place", that quality that makes the place unique or distinct with a character of its own. Visual quality or aesthetic appeal might also be affected if the degree of visual diversity or complexity, discernible textures or patterns or striking features and the landscape character are impacted.

In determining the quality of the visual resource, a Visual Impact Assessment (VIA) has been undertaken. The VIA has identified direct, indirect and cumulative impacts associated with the project.

Direct Impacts include impacts during the construction phase, such as the change in views experienced by visual receptors, of vegetation clearance, construction activities including construction camps, material lay-down yards, stockpiles, cranes, scaffolding, delivery vehicles and general construction operations. Direct Impacts during the operational phase includes views experienced by visual receptors, of the skywalk structure, new building and associated upgraded infrastructure and the ultimate enhancement of the visitor's viewing experience.

Cumulative impacts include the depletion of natural visual resources by changing the natural landscape character through development. Indirect impacts include the setting of a precedent of developing an area located in a visually sensitive setting of international significance (i.e. on the escarpment of the world's largest green canyon).

Visual receptors that would experience views of the proposed development include the following:

- Tourists visiting the God's Window viewpoint;
- Forestry workers (residents) living and working at the foot of the escarpment;
- Residents on the outskirts of Graskop;
- Recreational users utilising the plantation roads and hiking routes in the area; and
- Motorist traveling along the R533 road between Graskop and Bushbuckridge, as well as along the R534 that runs past the study site. Both these provincial roads form part of the scenic Panorama Route.

According to the VIA, vegetation within and around the study site is extremely dense which will shelter development to an extent. Tourists, however, would be directly exposed to the impacts and are also classified as the most sensitive of all receptors. Observers develop a sense of place through knowledge and experience of a particular area. The uniqueness of the landscape, simplicity and visual character of God's Window is already widely known. Many tourists (especially South Africans) therefore have a preconceived perception of the character of God's Window. Like other attractions along the Panorama route, the existing infrastructure is low-key, yet sensitive and doesn't impose itself on the natural environment. The fact that you are able to quickly pull over and admire the view (often alone or with 2 or 3 other groups) gives God's Window a unique and therefore strong sense of place (identity). It was therefore established by the VIA that the impact of the proposed project on tourists would be much higher in comparison with the impact on other visual receptors.

On the other hand, in the long term, the proposed project will also enhance the Tourist's viewing experience. Tourists will be able to experience the feeling of weightlessness when walking over 12 meter glass walkway – offering spectacular views in all directions. Better facilities (cafeteria and ablution facilities) will also make the visit more convenient and

pleasant. The visual impact of the improved facilities and the visual experience it will offer the tourist will be high in a positive sense.

Significance of the impact

Nature	Degradation of physical environment	Impact status	N	
Impact source(s)	Project infrastructure during construction			
Affected stakeholders	Visual receptors and tourists			
Magnitude	<i>Magnitude</i>	High	4	
	<i>Duration</i>	Medium	3	
	<i>Scale</i>	Local	2	
	<i>Probability</i>	High	4	
Significance Before Mitigation				
Significance Potential			M	
Proposed mitigation measures	<ul style="list-style-type: none"> Utilise the existing screening capacity of the site and improve it by enclosing the construction site and stockyards with a dark green or khaki brown shade cloth of at least 20% density and at least 3 metres high, as an additional screen; Retain the existing vegetation cover of the site through selective clearing, where practical; Remove rubble and other construction rubbish off site as soon as possible or place it in containers in order to keep the construction site free from additional unsightly elements; Keep the construction sites and camps neat, clean and organised in order to portray a tidy appearance; Restrict the new building to one storey; Where possible the proposed Skywalk structure must be orientated in such a way that it is not visible from other viewpoints at God's Window; Treat all steelwork with a matt paint to limit reflection; Be sensitive towards the use of glass or materials with a high reflectivity to avoid glare from the shiny surfaces and to avoid visual discomfort for viewers during the day; and Repair damage and do not allow the facility to fall into disrepair. 			
	Significance After Mitigation		Impact status	N
	Mitigation efficiency		Low	L
	Magnitude	<i>Magnitude</i>	Low	4
		<i>Duration</i>	Long	4
		<i>Scale</i>	Local	2
		<i>Probability</i>	High	4
	Significance Potential		Medium	M

7.7 Personal safety and hazard exposure / crime and violence

Phase at which impact is relevant	Construction
	Operation
Description of the impact	

The potential impact can be two-fold, i.e. personal safety and risk exposure due to the project infrastructure itself, or due to the influx of strangers entering the local communities or farms.

The safety of workers and property owners and other residents within close proximity to the study area may be impacted on during the construction and operational phase. These impacts are related to the movement of vehicles transporting goods and materials on the roads leading to the site (e.g. heavy machinery, heavy vehicles, and earthmoving equipment), in addition to the transport of construction personnel. The transportation of materials will also

impact on the safety of road users. It is therefore crucial that transportation contractors are closely monitored to ensure that they keep to designated routes and that they obey the traffic laws and speed limits. Vehicles should be clearly visible and drive with their headlights on at all times to increase visibility.

A more direct threat is the potential of fires occurring due to the presence of construction workers and construction related activities on site. This could pose a threat to livestock, plantations, crops, residents and houses in the area. To this effect, a Fire/Emergency Management Plan should be developed and implemented in association with local firefighting organisations. It is important that this management plan and associated communication channels are developed as soon as possible. It would be important to regularly review the functionality and efficiency of such a plan in conjunction with the local emergency teams, management and neighbouring landowners.

In order to assist with local monitoring of strangers entering the area, all construction vehicles should be clearly marked in order to allow local residents to identify the origin of the vehicle. Workers should not be allowed to loiter around in the area and should remain inside the site boundaries at all times. Transportation vehicles should collect and drop-off workers within the boundaries of the site. All workers should also wear identification badges and should be able to present this upon request.

Significance of the impact				
Nature	Construction related activities and influx of newcomers	Impact status	N	
Impact source(s)	Fear of crime and construction related hazards including traffic			
Affected stakeholders	Local residents, labourers, local authorities			
Magnitude	Magnitude	Low	2	
	Duration	Medium	3	
	Scale	Local	2	
	Probability	Medium	3	
Significance Before Mitigation				
Significance Potential		Medium	M	
Proposed mitigation measures	<ul style="list-style-type: none"> Strict security measures should be put in place. Security personnel should be on site on a permanent basis; The construction area should be fenced to avoid unauthorised entry by humans or animals onto the site; The contractor should communicate the construction schedule and vehicle movements to the neighbouring property owners in advance; Workers must not be allowed to leave the designated construction areas without permission; A Health and Safety Plan should be implemented and it must be ensured that all managers are trained in First Aid and other relevant safety courses; Implement safety measures to limit fire hazards and implement fire breaks if possible; Operational safety risks should be addressed as part of the OHS Act; and Appropriate firefighting equipment should be on site and construction workers should be appropriately trained for firefighting. 			
	Significance After Mitigation		Impact status	N
	Mitigation efficiency		Medium	M
	Magnitude	Magnitude	Low	2
		Duration	Short	2
		Scale	Site	1
		Probability	Low	2
	Significance Potential		Low	L

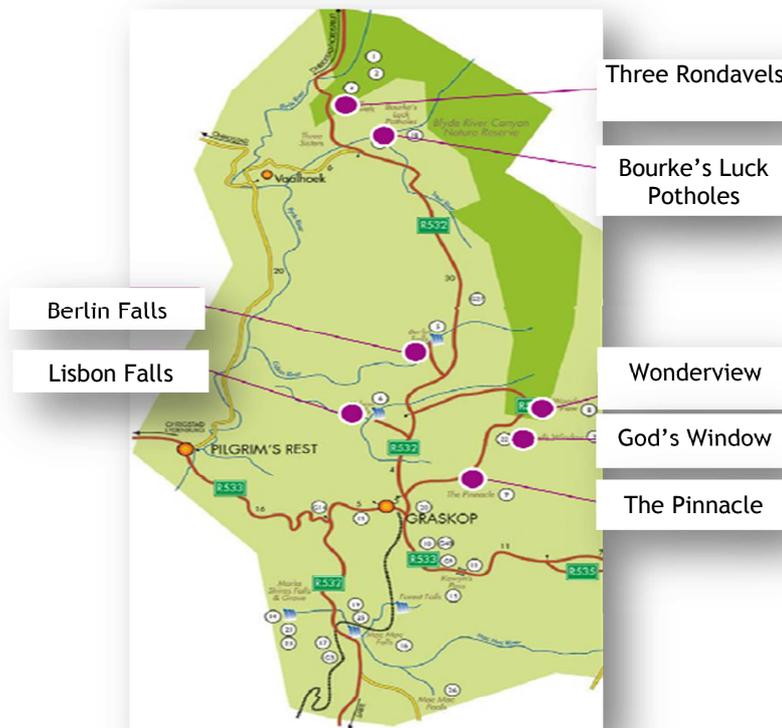
7.8 Lack of Maintenance

Phase at which impact is relevant	Construction Operation
Description of the impact	

The Graskop Business and Tourism Forum (GBTf) had a total of 41 members in the period of 2012 – 2013, which was their first year of operation, and they currently have 21 member companies. The GBTf indicated that the God's Window site has been neglected and that this has affected the quality of the tourist experience at the various sites, including God's Window. God's Window is an attraction that, according to some members of the GBTf, by virtue of its name, has a large appeal to the public, and thus should be a world class tourist destination. The MTPA have recently begun to charge an entry fee to the various sites along the Panorama route, which previously had been free of charge. The fee structure has been in place since December 2009 according to security guards employed at the God's Window site, when the fee was just R5 for all vehicle classes (interview 10.07.13). However, since 1 July

2013 this structure has been altered with cars paying R10, Taxi's pay R30, and Busses pay R50. This fee is regardless of the number of occupants in the vehicle.

The majority of interviewed respondents was concerned over the current state of affairs at the God's Window site, and the Panorama route (Figure 7-1) in general. The panorama route includes the various destinations and tourist sites, such as Bourke's Luck Potholes, The Pinnacle, the Three Rondavels and the Berlin Falls, among others.



Source: Google images

Figure 7-1: Panorama Route

According to the GBTF, there is concern regarding the safety of some of the railings at the viewpoints. As is evident from Figure 7-2, the railings are not of the highest standard.



Figure 7-2: Railings at a viewing platform at God's window

During the site visit it was found that there was a general lack of maintenance at the site, with paving stones missing from the paths and poor quality signs, as is evident from **Error! Reference source not found.** Furthermore, according to L Sheard (interview 11.07.13), there have been some security related incidents at God's Window, and thus the security at the site should be improved.



Figure 7-3: Various examples of lack of maintenance at the God's Window site

The concern raised by the various LTOs was that, although they support the idea of the Skywalk, and would welcome the 3boost that it would provide to tourism in the area, they are not certain that it will be properly managed. The lack of coordination between the various

municipalities whose responsibility it is to maintain the road network at, and surrounding, the God's Window and Panorama tourist sites, has meant that tourists and tour companies are now less eager to visit. Thus the GBTF have raised the issue that the budget for road maintenance should be increased, if necessary, and that the roads must always be of world class quality, in order to ensure that tourists are not unwilling or unable to come to the area (GBTF Focus Group, 2013).

L Sheard indicated that it is important to act soon as the declining state of the infrastructure is deterring tourists. L Sheard indicates that to ensure that the area is clean and safe there are two easy measures to implement and achieve, and that these will also assist in creating jobs in the area. These two measures will improve the tourist experience in the area, and contribute to increased revenue.

The lack of maintenance is an issue which was raised by each of the LTOs interviewed. This included the Sabie (J Sheard), Hazyview (Harvie), Graskop (McNelly), White River (Davies), and the Regional Tourism Organisation (RTO) Kruger/Lowveld (L Sheard). It was echoed by Phiri, a vendor at the God's Window site. The consensus on this issue highlights the importance of it, and the urgency with which it should be addressed.

Error! Reference source not found. below highlights the various maintenance issues that are evident at the God's Window site. These include missing paving stones, litter, old signage that is unclear and has been altered. These are aspects that are all easy to upgrade, without a major investment of either time or money. However they will make a vast improvement in the quality of the viewing site.

Significance of the impact

Nature	Improving of maintenance at God's Window facility	Impact status	N/A
Impact source(s)	<ul style="list-style-type: none"> Increase quality of experience at God's Window Decrease in current safety risk 		
Affected stakeholders	God's window visitors, tourists, employees		
Magnitude	<i>Status quo</i>		
Significance Before Mitigation			
Significance Potential			N/A
Proposed mitigation measures	<ul style="list-style-type: none"> The MTPA should ensure that the management of the God's Window site is improved in the interim, and throughout the construction phase of the proposed project. This includes the provision of water to the bathrooms and an increased security presence on-site. Thereafter, stringent management criteria must be stipulated in the contract to be awarded to the company who will ultimately run the Skywalk itself. In this manner, the required maintenance will cease to be the direct responsibility of the MTPA, who will be responsible for ensuring that the contractor appointed maintains the site. 		
	Significance After Mitigation		
Mitigation efficiency		Impact status	P
Magnitude	<i>Magnitude</i>	Medium	M
	<i>Duration</i>	High	4
	<i>Scale</i>	Long term	4
	<i>Probability</i>	Regional	3
		High	4
Significance Potential		Medium	M

In terms of the above rating, the mitigation measures of implementing maintenance measures and ensuring that they are effective is only effective as long as it is a continuous process. The MTPA must therefore ensure that this mitigation measure is continuous and occurs on an on-going basis.

7.9 Infrastructure for Curio Stores

Phase at which impact is relevant	Construction
	Operation
Description of the impact	

According to Phiri (interview 10.07.13), who has been working at God's Window since 1993 selling her tourist goods and curios, there is a need to upgrade the existing infrastructure, which has been neglected. There are roof tiles missing and the structures are not particularly sturdy. On the day of the site visit, there was a strong wind and the hut structures, beneath which the vendors stood, were visibly shaking.

According to Phiri, the ideal solution would be to have individual stores which could be locked up. This would mean that the vendors would unpack their items onto shelves only the first time and not be required to pack and unpack each day, which leads to breakages of the goods. This would also prevent the vendors from placing their goods in the road of the

parking area (as seen in **Error! Reference source not found.**), which the GBTF indicate is not allowed. This too causes damage to the goods as they are blown away and can be damaged by vehicles.

The shopping area is not well maintained in terms of the exterior look of the building and so is a very unattractive element of the God's Window tourist site. This is evident in **Error! Reference source not found.** which shows the view as one parks or drives out to exit the viewing site. Furthermore, due to the lack of maintenance and the resulting damage that can occur to the goods which are stored on site, as well as the need to protect the goods being sold, the vendors use large plastic sheets to protect their goods. During the day, when not in use, these are stored in a visible location, which again detracts from the beauty of the area (**Error! Reference source not found.**).

Phiri has indicated that the vendors who are on site lack the permission to mend and maintain the structures themselves, and yet the huts are also not maintained by the MTPA. This is obviously problematic and somewhat of an eyesore at such an important tourist destination.

According to Bosman (interview 25.07.13), of the GBTF, twelve permits have been issued to the vendors to sell at the God's Window site, as each building houses two vendors. This is supposed to be regulated by the MTPA, however Bosman does not believe this occurs as regularly as is necessary. As a result the vendors are now selling in areas outside of those designated, namely the buildings. This has led to vendors placing their goods in the road, as is evident in **Error! Reference source not found.**, and to spread out and sell their goods near to the bathrooms and further along the island in the parking lot.



Missing roof tiles at God's Window shopping area.



The poor storage area, and unsightly plastic



View of the shopping area from the back of the parking



The goods set out in the parking lot



Gloria Phiri in front of her stand

Figure 7-4: Infrastructure for curio stores

Bosman indicated that 15 years ago the site was opened up for vendors, who had to apply for permits. Bosman has been active in attempting to ensure that the goods that are sold are produced locally, however he indicated that this is unfortunately not the case. A large portion of the goods come from other African countries, and some may even bear the dubious label of 'Made in China'. There is also not a variety of goods being sold on site. Harvie (interview

24.07.13) suggested that the vendors on site should be provided with a uniform and that a greater effort should be made to ensure that the goods that are sold are in fact locally made. This will assist with the growth of the local economy.

Significance of the impact

Nature	Enhanced Infrastructure for curio sellers on site	Impact status	N/A	
Impact source(s)	A lack of maintenance of curio infrastructure on site			
Affected stakeholders	God's window visitors, MTPA, Curio Sellers			
Magnitude	<i>Status quo</i>			
Significance Before Mitigation				
Significance Potential			N/A	
Proposed mitigation measures	<ul style="list-style-type: none"> The MTPA should ensure that the hut structures are stable and repaired until such time as the construction of the proposed Skywalk. Thereafter, a substantial upgrade of the facilities should be planned. The MTPA should play a more active role in monitoring the permits given to vendors, and to ensure that these are used by the correct people. There should be a greater focus on monitoring the vendors in order to ensure that they adhere to the rules established regarding the areas in which they may, and may not, display and sell their goods. This will assist in ensuring that the site is always presentable and appears to be well managed and maintained for tourists. 			
	Significance After Mitigation		Impact status	P
Mitigation efficiency			Medium	M
Magnitude	Magnitude	Moderate	3	
	Duration	Medium	3	
	Scale	Local	2	
	Probability	High	4	
Significance Potential			Medium	M

Again, once the maintenance has occurred, and the facilities are brought up to a decent standard, it is important that maintenance continues to occur.

7.10 Water and ablutions

Phase at which impact is relevant	Construction
	Operation
Description of the impact	

There is no water supply at the God's Window site, which results in the ablution facilities not working effectively. According to God's Window security personnel, the tourists who visit the God's Window site complain about the lack of water. This is a concern of great importance and should be rectified before the God's Window Skywalk project is implemented.

The LTOs and GBTF again raised the issue of the state of the ablution facilities at the fact that they are often not working, not clean and lack water. J Sheard (interview 24.07.13) also indicated that the ablution facilities are dirty and that this needs to change urgently. He

believes that once people see God's Window in its current state, they will be unlikely to return or to recommend it.

The money that is now being collected at the entrance to God's Window was supposed to be used to pay for water to be brought to the site, however, this is not occurring. It is crucial that water is always available on site in order to ensure that the God's Window Skywalk project will be a success.

One anonymous respondent stated that when recommending God's Window he would state that "*the bathrooms are disgusting*". This is a very poor reflection on the MTPA and the God's Window area which should be rectified. The Komatieland foresters also indicated that they encounter human waste in the forest opposite the God's Window site, as the ablution facilities are not used. This is obviously problematic for the forestry teams, and in terms of the environment (Forrester at Komatieland, 2013, interview 10.07.13).

Significance of the impact				
Nature	Improved water and ablutions	Impact status	N/A	
Impact source(s)	A poor quality of ablution facilities			
Affected stakeholders	God's window visitors, MTPA, Curio Sellers, MTPA employees on site			
Magnitude	<i>Status quo</i>			
Significance Before Mitigation				
Significance Potential			N/A	
Proposed mitigation measures	<ul style="list-style-type: none"> Ensure that entrance fees are used to add value to the site. Therefore a permanent solution to the problem of a lack of water and the subsequent effect that this will have on the standard of the ablution facilities must be sought. This should happen before the proposed Skywalk comes into effect, and tourists should not be faced with a poor quality ablution facility which leads to poor publicity about the site. The current situation of sewerage being found in the forestry area is unhygienic and a solution should be found urgently. 			
	Significance After Mitigation		Impact status	P
Mitigation efficiency			High	H
Magnitude	<i>Magnitude</i>		High	5
	<i>Duration</i>		Long term	4
	<i>Scale</i>		Site	2
	<i>Probability</i>		High	4
Significance Potential			Medium/High	MH

Once a constant and assured supply of water is provided to the site, it is vital that MTPA staff ensure that the ablution facilities are clean and in working order. The MTPA must ensure that any repairs are timeously done, and that vagrants do not use the facilities as accommodation overnight.

7.11 The Panorama Route and Associated Activities

Phase at which impact is relevant	Construction
	Operation
Description of the impact	

As indicated above, there are various aspects of the Panorama Route (**Error! Reference source not found.**) which are either not functioning correctly, or are being avoided by tourists due to a lack of maintenance, lack of security, or lack of facilities. The road to Berlin Falls, is just one example.

The Graskop Conservation Society has been working to clear the path of a hiking trail which is not being utilised as it has not been maintained. This trail runs through an area called “Fairy Land” to the north of the town of Graskop. The current restoration of the hiking trail is being undertaken on an entirely voluntary basis, and the funds which will be required are being raised by the Graskop Conservation Society itself.

In an article in the Hazyview Herald on 19 July 2013, Lourens examined the various issues with the tourist attractions in the area. Basschau, discussing God's Window, Blyde River Canyon and Bourke's Luck Potholes in the article, stated that “for more than two months, some of these destination have had no running water, and just getting my tourists to the attractions is already proving to be very difficult as the roads are riddled with potholes” (in Lourens, 2013). Speaking specifically about God's Window, Basschau indicated that there is a lack of security at the site and that this is a danger for the MTPA employees there as well as tourists. Furthermore, Maile, a registered tour guide for Thompsons Touring Hilton Roads stated that the God's Window site was the most neglected on the Panorama Route (in Lourens, 2013). Basschau further confirmed that certain hiking trails have not been open for over a year due to renovations, although there has not been any restoration activity at these sites. Carr and Lucas (interview 25.07.13) highlighted that they had turned away in excess of 100 people who had wanted to go on a particular hike. This is a result of the hike being closed due to lack of maintenance and therefore being unsafe and incomplete.

A further example provided by the GBTF is a tuck shop which used to sell basic foodstuffs and beverages to the tourists on the Panorama Route, but which is now closed. This would be the only place outside one of the main towns such as Graskop or Pilgrims Rest where one would be able to purchase food or beverages. However, this tuck shop is no longer functional, and thus represents a missed opportunity to generate increased income from tourism in the area. Nkambule, the spokesperson of the MTPA stated that “the standard of the kiosk and

some facilities was ... not satisfactory, hence in this financial year a budget has been set aside to prioritise the critical upgrades which include ablution facilities” (in Lourens, 2013).

Hough indicated that for the project to be a success, the MTPA should be negotiating simultaneously for an increase in the budget allocation for roads maintenance. Finally, Carr stated that the town of Graskop itself is untidy and needs to be maintained and cared for, should they wish to attract more tourists to stay in the area. However, this is not occurring as the municipality lack the political will or finances to maintain the town.

Significance of the impact

Nature	The general degradation of the panorama route and its affiliated activities and towns re on site	Impact status	N/A
Impact source(s)	Status quo		
Affected stakeholders	God's window visitors, curio sellers, tour operators, accommodation service providers, restaurants and other businesses, MTPA and Thaba Chweu Municipality		
Magnitude	Status quo		
Significance Before Mitigation			
Significance Potential			N/A
Proposed mitigation measures	<ul style="list-style-type: none"> In order to ensure that the Panorama Route remains a relevant and attractive inclusion on the programmes of tour operators, it is imperative that the entire area receives attention from the MTPA and the local municipalities. The roads and access points to the various attractions must be maintained so that tourists are safe on the roads and able to easily access the various attractions. Furthermore the ancillary tourist attractions, such as the hikes in the areas, should be secure and well managed. The upkeep and repair of paths, bridges and steps is an important manner in which to ensure that tourists remain in the area for a longer time period. It is also important for the municipalities to ensure that the towns that are en-route to the Panorama are neat and attractive. This too will encourage tourists to spend longer in these destinations. Should the proposed Skywalk proceed, the town of Graskop will receive an increased number of tourists, and it is important that it is an orderly and clean town. 		
	Significance After Mitigation		Impact status
Mitigation efficiency			MH
Magnitude	Magnitude	Moderate	3
	Duration	Long term	4
	Scale	Regional	3
	Probability	Highly	4
Significance Potential		Medium/High	MH

There is a need to ensure that all stakeholders work together in order to provide a decent and 'tourist friendly' area. This will encourage positive feedback on the area and promote increased levels of tourism. Furthermore this is vital to support the world class facility that the Skywalk project represents.

7.12 Tourism Survey and tourism focus

Phase at which impact is relevant	Construction Operation
Description of the impact	

The entrance to the God's Window site is not particularly impressive. There is no official notice board indicating the entrance fee (Figure 7-5). According to L Sheard, the tourists that stay at her lodge and visit God's Window are disappointed by the standard of facilities on offer. L Sheard indicates that there are over 250 000 people who use the Panorama Route each year, but suspects that this may be even higher as not all vehicles are recorded.



Figure 7-5: Entrance and guard house at God's Window

The GBTF indicated that there are approximately 700 people who visit God's Window each day and that this can reach a peak of 1000. As a result there is not enough parking at the site to cater for this number of visitors, particularly during the peak season.

L Sheard suggested that the entire Panorama Route be sold on one ticket and that it be made available online. This would reduce the necessity for buying individual tickets with cash at each viewpoint. The ease of payment and access would increase the simplicity with which tourists would be able to approach the Panorama route.

In terms of the findings of the tourism survey, of the 12 responses received, 4 were international tourists while the rest were South African, all visiting from outside Mpumalanga. Furthermore, only 2 respondents indicated that they would not recommend God's Window to friends and family. Of the other respondents 5 indicated that they would recommend the site as the view and natural beauty were rare and worthwhile for people to see. One respondent

stated that they would recommend the site itself, however, they would inform whoever they recommended about the terrible state of the ablution facilities.

Most respondents rated God's Window as 'Excellent' or 'Good' tourist attraction. Respondents consistently stated that the view was excellent, however, the rating of the ablution facilities did not score well, with most respondents selecting 'Very Poor or Average'. The maintenance of the site and information available on site ranked lower than the view but scored better than the ablution facilities. This indicates that it is the view itself that draws people, to the area, and that, from the tourists perspective, the ablution facilities are not of a decent standard and that there is room for improvement in terms of the maintenance and information at the site.

Table 7-1 highlights the popularity of the God's Window site, and the importance of the area in terms of tourist activities. This obviously has knock-on effects for economic growth and social development. It's therefore vital to nurture the area, harness its potential and make sure that it meets the level of expectation in all areas.

Table 7-1: Visitor numbers, God's Window 2012

MONTH	January	February	March	April	May	June
	God's Window					
VISITORS	11,796	8,618	10,519	16,384	8,366	4,508
VEHICLES	3,270	1,955	1,914	3,373	1,705	2,483
BUS	104	103	111	138	98	19
COMBIES	206	142	187	263	206	36
July	August	September	October	November	December	TOTAL
	God's Window					
11,882	12,310	9,954	13,985	10,267	18,391	60,191
3,533	3,506	2,748	2,444	2,048	4,422	14,700
88	209	123	129	141	103	573
231	30	216	171	169	337	1,040

Significance of the impact

Nature	A lack of world class tourism facilities	Impact status	N/A
Impact source(s)	Status quo		
Affected stakeholders	God's window visitors, curio sellers, unemployed		
Magnitude	Status quo		
Significance Before Mitigation			
Significance Potential			N/A
Proposed mitigation measures	<ul style="list-style-type: none"> In order to ensure that the proposed Skywalk is of World Class Standard, the MTPA should consider providing a uniform to the personnel who work at the entrance to the God's Window site, as well as to the vendors, and to people employed to provide information regarding the site. This would assist tourists in identifying the correct people to ask for certain information. The idea of a single, multi-entry ticket would also streamline the tourism process and provide a more efficient edge to the Panorama route. 		
	Significance After Mitigation		
Mitigation efficiency		Medium	M
Magnitude	<i>Magnitude</i>	Moderate	3
	<i>Duration</i>	Long	4
	<i>Scale</i>	Site	2
	<i>Probability</i>	Highly	4
Significance Potential		Low/Medium	LM

7.13 Concern regarding the environment

Phase at which impact is relevant	Construction Operation
Description of the impact	

Harvie (interview 24.07.13) indicated that there is a need to provide more information at the God's Window Site, so that people understand what they are looking at. He provided the example of the Victoria Falls which has an impressive panel display of all the information regarding the Falls, how they were formed, where the water flows to and from, as well as information regarding the volume of water that passes over the falls. This type of information, according to Harvie, allows what would be a shorter visit to this natural wonder, to be extended into full day's experience. Therefore, he believes that there should be the opportunity to interact with a tour guide on site, and thus for information to be shared with the tourists.

L Sheard and Eekhout (interview 26.07.13) both indicated that the attraction at God's Window is the environment and the natural beauty of the area. This is, therefore, an important element to retain in the design of the Skywalk and the associated infrastructure. It should be sustainable and themed around the idea of sustainable development and sustainable, eco-tourism. The GBTF concurred with the above statement and do not think that the artist's impression of the Skywalk is appropriate for a natural environment, and should be rethought along those lines.

Carr (interview 25.07.13) also indicated that, due to the pristine nature of the area, it is important to carefully consider the positioning of the restaurant. Carr is concerned that the restaurant will compromise the natural experience and thus detract from the existing God's Window view. This is evident in Figure 7-6, which highlights the undisturbed area between the parking and entrance, and God's Window itself.



Figure 7-6: View towards the parking area at God's Window

Significance of the impact

Nature	The increased development footprint at the God's Window site	Impact status	N
Impact source(s)	Construction and development (restaurant, parking, etc)		
Affected stakeholders	MTPA, GBTF		
Magnitude	<i>Magnitude</i>	Moderate	3
	<i>Duration</i>	Long term	4
	<i>Scale</i>	Site	2
	<i>Probability</i>	Highly	4
Significance Before Mitigation			
Significance Potential		Medium	M
Proposed mitigation measures	<ul style="list-style-type: none"> The recommendations and mitigation measures proposed in the relevant Environmental Impact Assessment Report and associated Specialist Studies should be consulted in order to gauge the level of concern that the proposed Skywalk should elicit in terms of environmental impacts. The EIA should, however, make an assessment based on an increased number of people visiting the site and the additional burden of a restaurant and additional parking facilities. 		
	Significance After Mitigation		
Mitigation efficiency			P
Magnitude	<i>Magnitude</i>	Moderate	3
	<i>Duration</i>	Short term	2
	<i>Scale</i>	Site	2
	<i>Probability</i>	Medium	3
Significance Potential		Low/Medium	LM

It is important to approach the development with the environment in mind, in order to ensure that as little damage to the environment occurs as possible. It is important to carry this through from the construction into the operation phase.

7.14 Land Reform

Phase at which impact is relevant	Construction
	Operation
Description of the impact	

Marais (interview 25.07.13) deals with regional land claims at the MTPA. She highlights how the entire Blyde River Canyon Nature Reserve has been claimed by various communities. There are four claimant communities, 3 of which are run under a tribal authority. Three of these communities are on the eastern side of the Nature Reserve, while the fourth is on the west, in the Bushbuck Ridge area. Marais indicated that the Bushbuck Ridge area is characterised by high unemployment, a low level of literacy, a large population size and are dependent on natural resources for their survival. According to Marais, there are between 500 000 and 750 000 people in the Bushbuck Ridge area². This has led the National Department of Tourism (NDT) to focus on this area in order to attempt to improve the socio-economic situation in the area. By comparison, Marais said that the Graskop area has a population of

² Statistics SA, Census 2011 data indicates the number of persons living within the Bushbuckridge LM as 541 249 persons, the town of Bushbuckridge has a population of 2 110 persons.

approximately 75 000 people³. Please refer to the footnotes for data from Statistics SA, Census 2011 which states the true number of persons per area.

The claimant group, Pilgrims Rest Development Trust, has claimed the area from the Mac Mac Falls to the Forever Resort in Blyde River. The Moletele Community Property Association (CPA) has claimed from the Blyde River Forever Resort to the Swadini Forever Resort. The Sethlare CPA and the Mahubahuba CPA have each claimed a portion of land below the escarpment (Marais, 2013).

In 2006, the Department of Land Affairs (DLA) and the Department of Environment, Agriculture and Tourism (DEAT, now called the DEA) signed a Memorandum of Understanding (MoU) which stated that Land Restitution in protected areas would occur in title only. Thus, the claimant communities would receive the title deed to the land, however, be prohibited from settling on the land, and would form part of a Co-Management Committee overseeing the management and use of the land in terms of all applicable Protected Areas Legislation.

An arrangement has been agreed to, whereby the profits that are generated by the Blyde River Nature Reserve are split between the 4 communities, based on the percentage of land that each contribute to the Nature Reserve. This is done annually once the results have been audited. The claimant communities are then bound to use a certain percentage of the funds attained for socially responsible development and investment.

Furthermore, job opportunities in the nature reserve are split on a 60:40 basis. Therefore 60% of the available jobs will go to members of the claimant communities, while the remaining 40% will be shared among non-claimant border communities.

Finally, should the proposed Skywalk project be approved and developed, Buthelezi indicated that the management of the facility will be outsourced to an external company. The fees that this company pays in order to utilise, run and manage the facility will also be paid to the various community claimants.

³ Statistics SA, Census 2011 data indicates the number of persons living within the Thaba Chweu LM as 98 387 persons, the town of Graskop has a population of 3 995 persons.

Significance of the impact				
Nature	Land reform	Impact status	P	
Impact source(s)	Development of tribal land			
Affected stakeholders	MTPA, Claimant Communities			
Magnitude	Magnitude	Moderate	3	
	Duration	Medium term	4	
	Scale	Site	2	
	Probability	Medium	3	
Significance Before Mitigation				
Significance Potential		Low/Medium	LM	
Proposed mitigation measures	<ul style="list-style-type: none"> Ensure that development takes place as per the applicable Protected Areas Legislation; Continuous consultation with the claimant communities are required to ensure that they benefit as much as possible from the proposed development; Consideration should be given to the claimant communities' cultural preferences when designing the Skywalk 			
	Significance After Mitigation		Impact status	P
	Mitigation efficiency			
	Magnitude	Magnitude	High	4
Duration		Long term	2	
Scale		Site	2	
Probability		Highly	4	
Significance Potential		Medium/High	MH	

The land claims process has been managed and the boundaries of the agreement do not impact on the proposed Skywalk project. The proposed Skywalk will simply allow for a greater contribution of funds to be allocated to the claimant communities and ultimately their development.

7.15 Comprehensive offering

Phase at which impact is relevant	Construction Operation
Description of the impact	

In order to ensure that the God's Window Skywalk is a successful project, it is vital to ensure that it is part of a comprehensive offering, and does not become the proverbial white elephant, i.e. a structure at huge cost that fails to stimulate tourism in the area.

Certain existing elements of the Panorama Route are not being visited by the tour operators due to the poor condition of the roads which lead to the various attractions. This is true of the Berlin Falls, and Hough, whose lodge is on the same road, has indicated that this is obviously negative for tourism. Hough stated that in the space of a month, 2 people had been killed in vehicle accidents on a short stretch of road that led from the town of Graskop to the Berlin Falls, and God's Window. This was due to a very large pothole which spanned the length of one of the lanes.

If the road structure leading to God's Window is not maintained at an excellent standard befitting a project of the nature of the Skywalk, then this will severely compromise the overall tourism potential of the site.

Similarly, the town of Pilgrim's Rest has been under severe strain as a result of mismanagement and a lack of certainty for the current tenants. As a result, this too has been removed from the tour operators' schedules. One of the anonymous respondents on the tourism survey stated emphatically that the state of affairs in Pilgrim's Rest is horrible, while another stated that "*Pilgrims Rest is a disgrace to tourism*".

L Sheard indicates that it would be worthwhile to have the opportunity for tourists to go on self-guided tours, as they have internationally. The operators could provide headphones with information in different languages as well as trained guides to accompany groups of people. L Sheard stated that there is a field guide training school in Hoedspruit and Nel (interview 24.07.13) indicated that he would be building a culinary school at his premises. These types of initiatives would provide job creation opportunities at the Skywalk, beyond those initially envisaged. Harvie further indicated that it would be meaningful for tourists to leave the area having received educational information about the natural wonder. This kind of tourism is currently undertaken in Cape Town (namely the Hop-on Hop-off City Bus Tour in Cape Town, South Africa) and has proven to be very popular amongst tourists (Figure 7-7). This type of tourism is also prevalent in European cities.



Source: <http://www.toursinsouthafrica.com/offer/2131>

Figure 7-7: Hop on Hop-off Bus Tour

Carr from the GBTF proposed that the original window that is part of the naming of the area should be incorporated into a display at the Skywalk that highlights the history of the area and the reason for it acquiring its name. Therefore the broader narrative around the Skywalk should be told and people should be informed about the history of the area.

Using the Grand Canyon Skywalk as a case study, God's Window Skywalk can also gather some useful ideas in terms of how they have harnessed the surrounding beauty of the environment and linked up their offerings with other offerings in the area (Figure 7-8).

LEGACY GOLD PACKAGE

\$70.95 per person, plus tax, \$8 impact fee & \$4 fuel surcharge

Skywalk ticket to walk on the glass bridge over the Grand Canyon

Meal at viewpoint of your choice

\$5 voucher towards any \$25 gift shop purchase

Hualapai Visitation Certificate

Photo opportunities with Hualapai Members

Hop-on-Hop-off shuttle to all viewpoints

Eagle Point
 Native American Village: walking tour of authentic Native American dwellings depicting multiple tribes
 Amphitheater: live Native American performances from multiple tribes demonstrated continuously all day
 Creations by Native Hands: featuring handmade, authentic Native American jewelry and crafts

Guano Point
 "Highpoint Hike": offering breathtaking panoramic canyon views of the Grand Canyon and Colorado River.
 Visit the remnants of a historic tram that stretched 8,800 feet across the canyon to a guano mine discovered in the 1930's.
 Hualapai Market: interact with Tribal members offering Native American and crafts.

Hualapai Ranch
 Enjoy western hospitality, cowboy entertainment, wagon rides and more.
 Learn how to rope, quick draw and tomahawk toss the cowboy way.

Source: <http://www.hualapaitourism.com>

Figure 7-8: Grand Canyon Tourism Package

Tourist discount packages can be provided for the Panorama Route as a whole which can include accommodation, hop-on hop-off bus tours of all the viewing points on the route, cultural experience and photo opportunity with traditionally clothed community members (include the claimant communities here), hikes or environmental educational tours, craft making (make your own beaded jewellery), etc. The food and beverage/restaurant facilities should try to add to the God Window theme and include the local history of the area (i.e. mining in Pilgrim's Rest, traditional village). The package can also include a "voucher" for the curio stalls and for the restaurants ensuring that, through the purchase of a ticket, money is guaranteed to be spent at these attractions. The food and beverage stalls could also employ local women to cook traditional meals, treats, drinks, etc to be sold to tourists.

Significance of the impact

Nature	Lack of world class packaged tourism offering	Impact status	N/A
Impact source(s)	Status quo		
Affected stakeholders	MTPA, Tourists, curio sellers, the unemployed, tour operators and the Thaba Chweu Municipality		
Magnitude	<i>Status quo</i>		
Significance Before Mitigation			
Significance Potential			N/A
Proposed mitigation measures	<ul style="list-style-type: none"> The Skywalk should form the centre of a comprehensive tourism package. This should allow the tourists to enjoy the excitement of the Skywalk, but also to learn more about the area, the environment and conservation efforts in the nature reserve. In this way, tourists will go away with a more detailed understanding of the area. The use of tour guides should be prioritised as this will lead to job creation, which is much needed in the area. 		
	Significance After Mitigation		
Mitigation efficiency		Medium	M
Magnitude	<i>Magnitude</i>	Moderate	3
	<i>Duration</i>	Long term	4
	<i>Scale</i>	Regional	3
	<i>Probability</i>	Medium	3
Significance Potential		Medium	M

8 CONCLUSIONS AND RECOMMENDATIONS

All of those interviewed were in favour of the proposed Skywalk project going ahead. As Nel stated, “*Any development is good*” and the more tourism offerings are available, the greater the number of people who will come to an area. The construction of the Skywalk at God’s Window will not detract from other offerings, but simply enhance what is there. Nel intends on building a hotel at his premises and this will both provide tourists to visit the Skywalk, as well as benefit from those who visit the attraction.

J Sheard stated that the sooner the Skywalk is developed to its full potential, the better. This is due to the decrepit and aging infrastructure discussed above. The only concern is the management of the Skywalk and the way in which this will affect the facility. The current lack of maintenance and active management at the God’s Window site, as well as other sites along the panorama route, lead to the representatives of the various LTOs being doubtful of the ability of the project to succeed. However, all the LTO respondents would like to see the project come to fruition and for it to become a major tourism draw card in the province. A unique offering such as the Skywalk is seen to have the ability to revive the tourism industry and provide the opportunity for many spinoff benefits, most importantly job creation in the area.

The Skywalk represents a unique opportunity to stimulate support behind a project which will bring about many positives to the area, and which is already seen as favourable by the

surrounding communities. There is an opportunity for the private and public sectors to work together to create a unique and world-renowned tourism offering.

Therefore, the proposed Skywalk at God's Window is seen to be a positive by all those interviewed. The representatives of the various LTOs in the area, as well as the KLRTA and the GBTF believed that this project would be a boon for tourism in the area. However, there are concerns regarding the management of the project, and the effect that potential mismanagement would have on the Skywalk itself and the Panorama Route more broadly.

Furthermore, there is a major concern regarding the infrastructure in the area and the way in which the steadily declining state of roads infrastructure in the area is adversely affecting tourism, and the willingness of tour operators to visit certain areas and tourist sites. It is thus vital that the MTPA work with local and district municipalities to ensure that correct maintenance and upgrades of the existing road network is completed.

Another broad theme which emerged was the need for a more comprehensive tourist offering, where tourists are able to be guided through the area with trained personnel. There should also be an availability of educational information, so that tourists are able to leave the God's Window area with a greater understanding of what they have been looking at. Therefore information regarding the formation of God's Window, the naming of the site and the history of the area should all be included in the project, to ensure that a holistic tourism experience is achieved. The history of the claimant communities can also be included in this presentation and some of its members can be featured to provide tourists with an understanding of local people as well.

The project has the ability to create a large number of jobs, which will benefit the claimant communities in the land reform claim on the Blyde River Nature Reserve.

These claimant communities are obligated to spend a percentage of their earning on social investment projects within their communities which will hopefully lead to an improving socio-economic status of these communities. Furthermore, according to the 60:40 split, jobs will also be shared with other communities in the area.

Finally, there are some concerns regarding the environmentally sensitive nature of the area and the effect that the proposed Skywalk and associated facilities will have on the environment. This will, however, be carefully examined by the environmental specialists reports.

Further to this, the following guidelines and mitigation measures are briefly listed below:

- Labour should, as far as possible, be sourced locally during the construction and operation of the project;
- It is strongly recommended that local materials are used for construction and that enterprise development assist local suppliers in meeting the demand created by the Skywalk;
- Extensive consultation with the affected landowners (claimant communities) should take place throughout the process;

These recommendations are listed as part of the mitigation measures of each impact identified, and should therefore be read in conjunction with Section 7 of this report.

Should all the mitigation measures, as highlighted in this report be employed, it is recommended that the project may proceed.

9 REFERENCES

Crawford, D. 1994. Using remotely sensed data in landscape visual quality assessment. *Landscape and Urban Planning*. 30: 71-81.

Graskop Website. Regional Map. http://www.graskop.co.za/trips/regional_map.htm
Accessed 27 August 2013

Flyvbjerg, B. (2001). *Making Social Science Matter: Why Social Inquiry Fails and How It Can Succeed Again?* Cambridge University Press

Greenstein, R. (2003). *Introduction to Quantitative Methods*.

International Association for Impact assessment. 2003. *Social Impact Assessment: International Principles*. Special Publication Series no.2. IAIA; Fargo.

Laher, S., Israel, N. (2006). *Ethical Code of Professional Conduct: Research design workbook*. RDA 11A . Department of Psychology. The University of the Witwatersrand.

Lourens, C. (2013). Scenic Wonders are now unsafe for tourist viewing. *Hazyview Herald*. July 19, 2013.

Lynch, K. (1992). *Good City Form*. The MIT Press, London. p131

Mpumalanga Parks and Tourism (2012). *Tourism Figures for Graskop*.

Mpumalaga Tourism Growth Strategy (2007).

Newtown Landscape Architects CC, 2006.

Scott, C. (2010). *Feasibility Study for the development of a Skywalk complex and Skylift at God's Window*.

South African Audience Research Foundation (SAARF) <http://saarf.co.za/LSM/lms.asp>
Accessed 28 August 2013

Thaba Chweu Local Municipality Integrated Development Plan (2012/13).
<http://cgta.mpg.gov.za/IDP/Ehlanzeni2012-13/ThabaChweu2012-13.pdf>
Accessed 29 August 2013

Wassenaar, D. (2006). *Ethical Issues in Social Science Research*. In *Research in Practice: applied methods for social sciences*. Terrblanche, M., Durrheim, K. And Painter, D. (Eds.). UCT Press.

<http://citysightseeing-blog.co.za/2009/07/21/big-issue-vendors-celebrate-madiba%E2%80%99s-big-birthday-on-city-sightseeing-cape-town%E2%80%99s-big-red-bus/>
(Date Accesses: 4 Septmeber 2013)

List of attendees at the Graskop Conservation Association Meeting

Merle Whyte	25 July 2013
Joggie Prinsloo	25 July 2013
Chris Boshoff	25 July 2013
Esme Kopke	25 July 2013
Dr Ian Whyte	25 July 2013
Dr J. Ligthelm	25 July 2013
Babsie McNelly	25 July 2013
Martin Eekhout	25 July 2013
Gerda van den Bos	25 July 2013

Distribution of Questionnaires

Harries Pancakes	24 July 2013
Silverspoon Restaurant	24 July 2013

List of Interviews

Name	Organisation	Position	Date of Interview
Lisa Sheard	Kruger Lowveld Tourism (RTO)		11 July 2013
Yoliswa Dlamini	Komatieland Forestry	Forester	10 July 2013
Felicity	Komatieland Forestry	Forester	10 July 2013
Lizzy and Laurence	God's Window	Entrance personnel	10 July 2013
Gloria Phiri	God's Window	Curio Seller	10 July 2013
Chris Harvie	Hazyview LTO		24 July 2013
Dr R.G. Nel	Krugers Gold Restaurant	Owner	24 July 2013
James Sheard	Sabie Chamber of Business and Tourism		24 July 2013
Grant Bosman	GBTF		25 July 2013
Warren Southey	Silverspoon Restaurant (GBTF)		25 July 2013
Joseph Lucas	Valley View Backpackers (GBTF)		25 July 2013
Melinda Carr	Valley View Backpackers (GBTF)		25 July 2013
Brendan Traill	Log Cabins (GBTF)		25 July 2013
Gerda van den Bos	GPS News	Journalist	25 July 2013
Babsie McNelly	Graskop Business and Tourism Association	Chairman of the Graskop Business and Tourism Association	25 July 2013
Busisiwe Buthelezi	Mpumalanga Tourism and Parks Association	Tourism Product Development	25 July 2013
Marinda Marais	Mpumalanga Tourism and Parks Association		25 July 2013
John Davies	Travel Planner – SA. White River Local Tourism Organisation		25 July 2013
Wendell Hough	Thaba Tsweni Lodge	Vice-chair of the Graskop Business and Tourism Association	26 July 2013

Note: Attempts were made to contact both the Graskop and Lydenberg Municipalities, in order to discuss the project. However all attempts were unsuccessful.