FINAL MOTIVATION REPORT: DEVELOPMENT APPLICATION FOR THE DEVELOPMENT OF LAND OUTSIDE THE TOWN PLANNING SCHEME AREA IN TERMS OF CHAPTER 4 OF THE KZN PLANNING AND DEVELOPMENT ACT (ACT 6 OF 2008): FOR THE PROPOSED RELOCATION OF THE SANI PASS PORT OF ENRTY LOCATED IN KWASANI LOCAL MUNICIPALITY

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### **EXECUTIVE SUMMARY**

The Department of Public Works has proposed that the Sani Pass Port of Entry be relocated from the existing site to the pre-identified site which is approximately eleven (11) kilometers from Himeville to allow improvement and expansion of the port of entry.

The application is prepared and submitted by Pravin Amar Development Planners, a registered professional town planning firm as authorized by the NDPW.

The property affected by the proposed development is formally described as Subdivision 1 of the Farm Good Hope Number 7168, Kwa-Zulu Natal.

The property is under the ownership of the Republic of South Africa. The existing building is currently unused and dilapidated.

In terms of the KwaZulu-Natal Planning and Development Act (Act No. 6 of 2008) an application has to be made to the authorizing municipality before land situated outside the town planning scheme may be developed for any particular purpose.

The general scope of the application is in line with Chapter 4 of the PDA, read in conjunction with Schedule 1 of the KZN PDA.

The purpose of this report is to apply and motivate for approval for the development of land situated outside the Town Planning Scheme to KwaSani Local Municipality.

The details of the proposed development application site as well the supporting documents are contained herein.

Prior to submission of this application for approval to the municipality, as required the draft planning development application was circulated for comment amongst the relative service departments and the details pertaining to the circulation of the draft are outlined below:

Date Draft PDA Report Circulated	Department Report Circulated to
12 March 2013	KwaSani Local Municipality
30 November 2014	Eskom
12 March 2013	Harry Gwala District Municipality
29 May 2014	Rural Development and Land Reform (Land Claims
	Commissioner)
06 August 2014	Department of Water and Sanitation
30 May 2014	Department of Transport

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### **General Document Information**

Project Name:	Final Planning and Development Application for the Proposed Relocation of the	
	Sani Pass Port of Entry Located in KwaSani Local Municipality.	
Project Code	051400T	
Controlling Company:	Pravin Amar Development Planners	
Prepared By:	Mr. Pravin Amar Singh	

### **Distribution**

Document Name:	Final Planning and Development Application in terms of Chapter 4 of the KZN
	Planning and Development Act (Act 6 of 2008): for the Development of Land
	Situated Outside the Town Planning Scheme
Version No.:	01/2014
Prepared for:	National Department of Public Works
Issue Date:	December 2014
Submitted to	KwaSani Local Municipality
Soft Copy submitted	Three (3)

### **1. BACKGROUND OF THE DEVELOPMENT APPLICATION**

The Department of Public Works intends relocating the existing Sani Pass Port of Entry and related housing to the approximate geographical co-ordinates of the proposed site which are as follows:

Point A: 29°26'8.99"E and 29°39'11.31"S Point B: 29°26'6.52"E and 29°39'5.41"S Point C: 29°26'1.21"E and 29°38'56.41"S Point D: 29°25'54.01"E and 29°38'52.32"S Point E: 29°25'58.02"E and 29°38'46.69"S Point F: 29°25'55.24"E and 29°38'45.74"S Point G: 29°25'48.70"E and 29°38'44.86"S Point H: 29°25'46.53"E and 29°38'48.92"S Point I: 29°25'47.03"E and 29°38'49.20"S

Please refer to Appendix 5.1 for the study area map indicating the coordinates.

The intention of the project is to issue site clearance for the Sani Pass Port of Entry through means of commissioning a feasibility investigation regarding the suitability of the pre-identified site.

A site has been identified is located within the jurisdiction of the Harry Gwala District municipality. Refer to Appendix 2 for the aerial photo of the site.

The Border Control Operation Coordinating Committee (BCOCC) currently operates a non-commercial port of entry (PoE) at Sani Pass, which acts as an entry point into Lesotho approximately 13.5km in the middle of the Maloti Drakensberg Park World Heritage Site. The existing port of entry is located within a world heritage site, managed by the KwaZulu Natal Ezemvelo Nature Conservation Board (EZKZN Wildlife).

The current site restricts expansion and improvement of the port of entry, whilst also failing to serve the growing demand in cross border traffic. Key to the expansion objective is the need to convert from a non-commercial to a commercial port of entry.

The BCOCC Design Guideline document will be consulted in detail during the planning and design stage to ensure its applicability.

Besides relocating the existing PoE, the other objective is the establishment of a tourism node (Phase 2) in Himeville

(Phase 3). The proposal includes rebuilding the existing border post at its then small scale at the new site, together with a small World Heritage Authority (Ezemvelo) tourism facility and field ranger accommodation.

The site clearance is undertaken to determine whether there are any constraints (as it relates to town planning, environmental, physical and other legal issues) preventing the proponent from relocating the Sani pass Port of Entry to the pre-identified site

Pravin Amar Development Planners (PADP), the registered professional planning firm, are appointed by the National Department of Public Works (NDPW) to facilitate the process of the site clearance and to undertake planning tasks for the project.

### 2. THE APPLICANT

The application is submitted by Pravin Amar Development Planners (PADP) on behalf of the National Department of National Public Works (NDPW) for the BCOCC. Please refer to Annexure 2 for the Power of Attorney.

The proposal entails application for the development of land situated outside the town planning scheme.

### 3. PURPOSE OF THE PROPOSAL

In terms of the KwaZulu-Natal Planning and Development Act (Act No. 6 of 2008) an application has to be made to the authorizing municipality before land situated outside the town planning scheme may be developed for any particular purpose. The general scope of the application is in line with Chapter 4 and Schedule 1 of the PDA.

This document serves to seek approval from the municipality for the development of Port of Entry. The details of the proposed development application site as well supporting documents are contained herein.

The report further analyses the relevant legislation and development policies within the municipal area to ensure that the proposed development does not contradict any current municipal plans or future development strategies.

Compliance to the relevant municipal land use management plans will further ensure that the proposed development will not have any negative impacts on the current land uses in the area.

### 4. STRUCTURE OF THE REPORT

The report is structured into the following sections:

- Section one provides a brief background of the application and the purpose of the report.
- Section two provides details of the applicant for the proposed development.
- Section three provides an outline of the purpose of the proposal.
- Section four provides an insight into the manner in which the report is structured.
- Section five provides details of the application site and provides the status quo for the development site.
- Section six provides the details of the proposed development and an outline of the applicable legislative framework.
- Section seven provides an assessment of the potential impacts.
- Section eight provides a brief outline of the building standards to be utilized for the proposed development.
- Section nine presents the motivation and support for the proposed development.
- Section ten concludes the report and provides recommendations.

### 5. DETAILS OF THE APPLICATION SITE: STATUS QUO

### 5.1. Setting and the Context

The application site (described as Subdivision 1 of the Farm Good Hope No. 7168) is situated in the province of KwaZulu-Natal within the jurisdictions of KwaSani Local municipality. This local municipality is one of five local municipalities forming Harry Gwala District Municipality. Refer to Annexure 4 for the Context Map and Annexure 5 for the Locality map.

KwaSani Municipality is the gateway to the remarkable Southern Drakensberg, which borders the Maloti Drakensberg Park World Heritage Site. The municipality is bordered by the Umkhomazi Wilderness Area to the West, Greater Kokstad to the South West, Eastern Cape to the South, Ingwe Local Municipality to the East and Impendle Local Municipality to the North.

It is noted that although the site falls within the jurisdiction of the Harry Gwala District Municipality in terms of the municipal demarcation system, the "buffer zone" and its tourism and recreation nodes fall within the KwaSani Municipality and are therefore administered by it as opposed to the district municipality.

The site is located approximately 11 km south east of the existing Port of Entry. Refer to Appendix 5 indicating the Lesotho PoE, the existing PoE and the proposed PoE.

### 5.2. Site Description

The site is formally described as Subdivision 1 of the Farm Good Hope No. 7168 and sometimes referred to as "Portion 1 of the Farm Good Hope No. 7168".

### 5.3. Ownership

The property is owned by the Republic of South Africa (RSA) with Title Deed Number T8505/1981. Refer to Annexure 6 for the Title Deed and Annexure 7 for the SG Diagram.

### 5.4. Site Size

The site measures 96.7306 hectares in extent. The development footprint is less than 2ha.

### 5.5. Current Zoning

The site is located outside of a municipal area and is not subject to a town planning scheme. However, the Maloti Drakensberg Park World Heritage Site (UDP) in which the site is located has its own zonation system (the Maloti Drakensberg Park World Heritage Site Zonation). In terms of this zonation plan (Refer to Annexure 8), the site falls within a "buffer" zone. The buffer zone as cited from the Maloti Drakensberg Park World Heritage Site, South Africa, Conceptual Development Plan (CDP) 2011, is an area outside of a protected area, where actions and agreements are taken to protect its integrity.

It is an area in which the protected area managers work collaboratively with neighbours and municipalities to try to ensure land uses that are compatible with the protected area.

It is recorded that although the site falls within the jurisdiction of the Harry Gwala District Municipality in terms of the municipal demarcation system, the "buffer Zone" falls within the KwaSani Municipality and is therefore administered by them as opposed to the District Municipality. Refer to Annexure 8 for the Zonation Map.

The other land use zones immediate to the site include the "Low Use Zone" and "Wilderness Primitive". The preferred and non-preferred activities of the buffer zone is indicated on the in the table below.

### Table 1: Buffer Zone Land Use Activities

	PREFERRED ACTIVITIES	NON-PREFERRED ACTIVITIES
	Amenity planting within non-invasive species	Agriculture Industry
	Extensive agriculture	Commercial afforestation
	Intensive agriculture	Large scale tourism development
	Nature and resources conservation	New Roads
BUFFER ZONE	Nature and culture based tourism	Subdivision of land
(Generally)	Subsistence agriculture	Large scale infrastructural projects
	Trails	Mines and Quarries
	Small scale tourism development	Industrial development
	Small scale agriculture	Intensive or semi intensive human settlement
	Trails	

It is self-evident that the proposed PoE will be compatible with the buffer zonation.

### 5.6. Land Use of the Site and Surroundings

The Sani Pass area generally hosts a range of sensitive ecological systems, wetlands, rivers and conservation areas due its location.

The pattern of land uses within the vicinity of the site is mainly the undeveloped stretches of land, resorts and wilderness conservation areas.

Preliminary observations indicate that there is no conflict in land use anticipated from the proposed development. The proposed development must, however, adhere to the provisions of the Maloti Drakensberg Park World Heritage Site Central Development Plan (CPD), the Integrated Management Plan (IMP) and Wilderness Area Management Plan (WMP) as well as other municipal development plan and guidelines.

The surrounding land uses include recreational areas, residential, and golf course. Please refer to Annexure 9 for the Land Use Map.

### 5.7. Access and Accessibility

The site is strategically located on the main road (P318) kwon as Sani Pass Road which interlinks the N3 via the R617 and the N2 via the R612. The Sani Pass Road is a primary corridor which provides access between South Africa and Lesotho. This primary corridor links Himeville to the top of the Sani Pass at the Lesotho border.

### 5.8. Topography and Physical Character of the Site

The KwaSani municipal area is described as moderately rolling topography with much of the area covered by mountainous topography. The District Management Area (DMA) moves from moderately rolling topography to steeply rising foothills.

This is no exception to the project site and the immediate surrounding properties. As with the majority of the adjacent land, the topography of the project site is generally steep in most parts, but the required flat land for the development can be easily attained.

### 5.9. Description of Available Bulk Infrastructure Services

### 5.9.1. Water and Sanitation

The provision of water and sanitation are the responsibility of the District Municipality within KwaSani Local Municipality. According to the KwaSani Municipal IDP, the area has abundant water supply, therefore water provision is not a constraint in the area. Currently the existing Port of Entry draws water from the Mkhomazana River.

With regard to sanitation, there is no formal wastewater management system that exists. The surrounding areas use septic tanks and pit-latrine system.

### 5.9.2. Electricity

The provision of the electricity is carried out by Eskom in the area. According to the Bulk Infrastructure Assessment undertaken for the site, it was identified that the electricity network for the site is not constrained and electrical capacity quantified to be 500kVA to supply the above development and will be available and granted upon a formal application to Eskom at design stage (BMK, 2014).

### 5.9.3. Storm Water

The Sani Pass Road is a newly constructed tarred road which has storm water management system. According to the Bulk Infrastructure Report, a fully reticulated network with lined/unlined open stormwater channels and pipe culverts is being used where absolutely necessary.

### 5.9.4. Access Roads

The Sani Pass Road is a newly constructed tarred road which gives direct access to the site. It was officially opened on the 31 October 2012 and just stops with the advantage at the border of the site. Accesses envisaged for the proposed development will require approval from the Department of Transport at design stage and these have to conform to the Department of Transport Road Access Design Standard Details.

### 5.9.5. Waste Disposal and Collection

There is no landfill site situated within the municipality and therefore currently waste is being transported out of the municipality to Pietermaritzburg.

The current Port Entry is in the process of renewing their waste removal contract with a private company. They currently conduct their own waste removal with their own vehicles. The waste is sent to the Himeville "dumping ground" – presumably an un-licensed and informal waste facility. It is envisaged that the waste disposal for the project will have to be dealt with by the maintenance and operations department of the border post facility (BMK, 2014).

### 5.9.6. Telecommunication

The existing Port of Entry has telephone lines as does the adjacent Sani Pass Hotel.

Please refer to Annexure 11 for Comments on existing bulk infrastructure services from technical departments and Annexure 19 for the Bulk Infrastructure Report.

### 5.10. Assessment of Existing Socio Economic Conditions

### 5.10.1. Demographics Profiles

The KwaSani Local Municipality consists of 4 wards. According to Statistics SA (2011) the local municipality has a total population of 12,898. The proposed development falls within Ward 1 and Ward 4.

The population dynamics for the municipality are outlined below:

### Table 2: KwaSani Population by Ward

Population by ward		
Ward	Number of people	
Ward 1	3,224	
Ward 2	4,009	
Ward 3	3,107	
Ward 4	2,558	
Total	12,898	

Geography			
	Male	6,688	
	Female	6,210	
	Total	12,898	
Ward 1	Male	1,538	
	Female	1,685	
	Total	3,224	
Ward 2	Male	2,059	
	Female	1,950	
	Total	4,009	
Ward 3	Male	1,634	

Geography		
	Female	1,473
	Total	3,107
Ward 4	Male	1,456
	Female	1,102
	Total	2,558
Total	Male	6,688
	Female	6,210
	Total	12,898

### Table 3: KwaSani Municipality Population Group Profiles

Population Group		
Ward Number	Race	Number of people
Ward 1	Black African	3,169
	Coloured	12
	Indian or Asian	2
	White	39
	Other	2
	Total	3,224
Ward 2	Black African	3,451
	Coloured	23
	Indian or Asian	5
	White	522
	Other	9
	Total	4,009
Ward 3	Black African	2,502
	Coloured	35
	Indian or Asian	19
	White	527
	Other	24
	Total	3,107
Ward 4	Black African	2,214
	Coloured	41
	Indian or Asian	25
	White	262
	Other	16
	Total	2,558
Total	Black African	11,336
	Coloured	110
	Indian or Asian	51
	White	1,350
	Other	51

Population Group		
Ward Number	Race	Number of people
	Total	12,898

#### Table 4: Source of Water at Household Level for KwaSani Municipality

Source of water (at household level)	
KwaSani Local Municipality	
Borehole	371
Spring	661
Rain water tank	48
Dam/pool/stagnant water	308
River/stream	342
Water vendor	23
Water tanker	254
Other	61
Total	3,673

#### Table 5: Statistics for refuse removal at household level: KwaSani Municipality

Refuse Disposal	
Method of waste removal	Number of people
Removed by local authority/private company at least once a week	1,586
Removed by local authority/private company less often	111
Communal refuse dump	140
Own refuse dump	1,682
No rubbish disposal	105
Other	50
Total	3,673

#### 5.10.2. Geotechnical Aspects

A Geotechnical Assessment of the study area was undertaken by Terratest (Pty) Ltd in October 2013. The investigation undertaken indicates that the site is suitable for the construction of the proposed Sani Pass Port of Entry and associated infrastructure subject to recommendations contained in the report.

Please refer to Annexure 15 for the Geotechnical Report.

### 5.10.3. Floodplain Assessment

A study on the 1:50 and 1:100 Floodline delineation was undertaken by Jeffares and Green Consulting Engineers in October 2013.

The floodlines presented in the study area indicate that the development is inundated by the 1:50 and 1:100 year design flood events. In addition, the existing road is inundated at and to the north-west of the transition of the road from gravel to tar.

The findings of the 1:50 and 1:100 year Floodline report are recorded as follows:

- Steep topography of the contributing catchment. Steep topography causes a catchment to have a higher runoff response during rainfall events. This is as a result typical characteristics of steep slopes that include; generally less dense vegetation, shallower soil layers and few depressions. These characteristics cause water to run off more rapidly resulting in increased flood peak discharge values.
- The characteristics of the Mkhomazana River that impart notably high Manning's and values. These include the dense vegetation on floodplains as well as the rocks, pools and vegetation in the Mkhomazana River. These factors decrease flood water flow velocities causing the water to spread out laterally onto floodplains adjacent to the Mkhomazana River.
- The close proximity of the development site to the Mkhomazana River and the flat terrain of the development site. The problem is that the Mkhomazana River is relatively incised and the southern bank is approximately 1.5 to 2m high. Once the southern bank of the river is breached, flood waters will spread across the flat terrain adjacent to the southern bank and inundate the development site. Due to the flatness of the terrain in the area of the proposed development, a small rise in floodwater elevations results in a large area being flooded".

Accordingly the recommendations for the Floodline Report are as follows:

That "the development engineers should consider measures that would mitigate the impact of floods on the development site or consider engineering interventions that would prevent floodwaters entering the crucial portions of the development. A possible solution would be a flood retention wall that would divert flood waters around the site. However, the feasibility of this approach may require more detailed hydraulic studies. If this required, J&G would gladly provide a quotation to undertake the additional hydraulic analysis".

Please refer to Annexure 16 for the 1:50 and 1:100 Floodline Reports.

#### 5.10.4. Geo-hydro Assessment

A Geohydrological Site Assessment of the study area was undertaken by Jeffares and Green Engineering and Environmental Consultants in October 2013.

The findings of the Geohydrological report are recorded as follows:

- "The site is underlain by silty sand with cobbles and boulders. The unsaturated zone permeability was calculated s 1.62m/d from a percolation test. The soils are underlain by a fractured sandstone aquifer with the geophysical survey indicating the potential presence of two geological features within the site boundary. These features may act as zones of preferential groundwater flow. Geographically, the region is classified by the DWA as a minor aquifer region and a moderately vulnerable region.
- The site is located within the Mkomazi Wilderness Area which is an environmentally sensitive area and part of a UNESCO World Heritage Site.
- Water sampling and analysis of the Mkhomazana River adjacent to the site was carried out. The surface water quality is suitable for human consumption, noting that operational limits were exceeded for total coliforms. No suitably representative samples of ground water were collected for chemical analysis during current assessment although the quality is expected to be good.
- A risk assessment was carried out to determine if the proposed development would impact the aquifer beneath the proposed site. The risk assessment reviewed the vulnerability and the strategic value of the aquifer in order to establish the level of risk of contamination from the proposed PoE development.
- Based on the risk assessment it can be concluded that the aquifer is at a low to moderate risk. The aquifer currently has a moderate strategic value and the implementation of future boreholes immediately down gradient of the site by other users should be restricted.
- Potential geohydrological impacts from the proposed PoE development could result from leakage of sewage and waste and accidental spills during construction and operation of the PoE. Any contamination is likely to percolate through the subsoils into groundwater and potentially flow into the Mkhomazana River. The Mkhomazana River, including the Sani Pass Golf Course abstraction point, is the only receptor in potential hydraulic connection with groundwater or surface water from the site".

Please refer to Annexure 17 for the Geohydrological Site Assessment Report.

### 5.10.5. Bulk Infrastructure Assessment

A Bulk Infrastructure Assessment of the study area was undertaken by BMK Engineering Consultants in June 2014.

The findings of the Assessment are as follows;

- The route traverses the P318 and is composed of asphalt road on the South African border which then joins gravel road on the Lesotho Border.
- > The P318 is managed by the Department of Transport and comprises of the following design specifications:
  - All-weather hardened surface road
  - Two-way road, thus one lane in each direction with road surface width of:
  - 7 *m* between km14 and km25 (lower section)
  - 6 *m* between km25 and km33 (upper section)
  - Safe traffic speed for a short-wheel-based truck or bus of:
  - 50 km per hour between km14 and km25 (lower section)
  - 30 km per hour between km25 and km33 (upper section)
- Stormwater control will be in the form of piped networks on the parking accesses and roadways which will discharge into the Umkomazana River.
- Erosion control measures shall include grassing, linings of concrete, stone-pitched weirs and gabions and reno mattresses. These measures will be placed in all areas where erosion is likely to occur and will also be positioned at intervals along steeper and longer slopes as deemed by Engineer in the implementation process.
- > Three alternatives were investigated with respect to the method of sanitation these include inter alia;
  - VIP Pit Latrines
  - Septic tank and Soak away
  - Waste Water treatment Plant (Activated Sludge Package Plant)
- A Waste Water treatment Plant (Activated Sludge Package Plant) was recommended from the alternatives assessed.

- The Umkomazana River passes alongside the development (about 10m east of the site). The option of extracting surface water can occur in a number of ways. Water will have to be pumped or piped to a new treatment works. All surface water require water treatment processes before being distributed to the user.
- The clean water will then be pumped or piped to a new overhead storage tank. The water will be gravity fed to the supply points. The overhead tank will allow for adequate pressures to the users and for firefighting purposes.
- Due to the fluctuating levels of the river between the summer and winter months, continuous pumping from the river to a treatment works may not be possible because of the low water levels in winter. A storage facility (tank or dam) will have to be positioned before the treatment works to cater for the low flows during winter.
- Infrastructure upgrade will be needed to allow for additional demand and water pressures required for the proposed development, however this will have to be agreed upon with the Sani Pass Hotel.
- > The existing infrastructure does not have sufficient capacity to cater for the new development.
- With due consideration to the topographical and existing servitudes, the following Levels of Service are proposed:
  - Roads are to be asphalt or block paved roadways, with road widths dependent on traffic conditions. All footpaths shall be combined concrete pathways with integral stormwater channels, with steps provided on steeper grades.
  - Fully reticulated network with lined/unlined open stormwater channels (dependent on envisaged flow velocities) and pipe culverts being used only where absolutely necessary.
  - Fully reticulated water-borne system discharging into an activated sludge package plant and reverse osmosis filtration system.
  - Water and emergency services for implementation by Project Team with input from Sisonke Municipality.
  - Refuse removal for implementation by DPW maintenance and operations with input from project team and Kwasani Municipality.
  - Fully reticulated electricity with the inclusion of a 500KVA Transformer

### 5.10.6. Vegetation Assessment

A detailed vegetation study was undertaken as part of the Phase 2 of the project Sani. Refer to Annexure 20 for the Phase 2 Vegetation Study.

The update of the Vegetation Impact Assessment Report of the Phase 1 Vegetation Study was commissioned in November 2014 to Elsa Pooley Indigenous Landscaping and Botanical Services. A site inspection was conducted to consider the impacts on the vegetation of the construction of the new Port of Entry.

When the site visit was conducted it was before the summer rainfalls. The vegetation was in a declining state and had been fire protected for some years. The floodplain area is a traditional regrowth forest area in the absence of fire or floods. It contains characteristic woody pioneer forest species. During the time of the site visit the herbaceous layer (groundcover) was not rich. Invasive Alien Species plants was present in the area but was not dominant compared to Indigenous species. All alien invasive species will need to be removed from the site area.

The North Facing Slope showed signs of historical disturbance particularly due to overgrazing when the mule trains worked from Good Hope trading store to Lesotho. This area is characterized by large eroded vegetated gaps, however this area contained grassland elements which are worth protecting if possible. Refer to Appendix 10.3 Assessment Report: Vegetation Impact.

#### 5.10.7. Aquatic Study

A detailed Baseline Biodiversity Assessment of the Aquatic Ecosystems of the Sani Pass region was undertaken in 2010.

An update of the Baseline Biodiversity Assessment was commissioned in November 2014 to GroundTruth Water, Wetland and Environmental Engineering. The outcomes of the assessment are outlined as follows:

- > The PoE is situated within the Maloti Drakensberg Park World Heritage Site and therefore has significant importance in terms of its conservation and biodiversity value.
- Subsequent to the 2010 aquatic biodiversity baseline study (GroundTruth, 2010), the Mkomazana River has been classified as a National Aquatic Ecosystem Priority Areas (NFEPA). NFEPA's are important in terms of conservation and sustainable use of South Africa's aquatic ecosystems, and include rivers, wetlands and estuaries. It is therefore important that the present ecological state of the Mkomazana River is maintained and where possible improvements made to the overall functioning and integrity of the system.
- > A number of issues have been identified at a desktop level whereby the proposed PoE will potentially affect aquatic ecosystems and associated biodiversity. The impacts are summarised as follows:

- Habitat loss and transformation The unnecessary loss and modification of the Mkhomazana River system can result from poorly designed and managed development procedures, such as:
  - Placement of buildings, parking areas, and associated infrastructure within aquatic habitats, buffers areas and floodlines;
  - Introduction of foreign materials to the aquatic ecosystems, such as, fuel, cement and other building materials during the construction and/or upgrade processes;
  - Compaction of soils from heavy vehicles;
  - Disturbance of riparian habitat from construction activities;
  - Complete loss of sections of wetland and/or riparian habitat; and
  - Infestation by invasive alien plants (IAPs).
- Altered hydrology Introduction of hardened, impervious surfaces (e.g. roads, parking areas, roofs, etc.), as well as poorly designed stormwater management systems, will increase stormwater runoff entering aquatic systems. This will result in change to the hydrological flow regime of the Mkhomazana River, notably the high flows. Altered flows in turn will negatively affect the ecological integrity and functioning of the instream and riparian habitats.
- Pollution and modified water quality Stormwater runoff may incorporate a wide variety of
  pollutants such as the plant nutrients (nitrogen and phosphorus), oxygen demanding organic
  compounds, toxic heavy metals, hydrocarbons and pesticides. These pollutants can adversely
  affect aquatic biota, water users and ecosystems downstream. Increase stormwater runoff would
  also exacerbate erosion within both the riparian and instream habitats. This could lead to further
  channel incision, bed scouring and bank collapse.
- Disturbance and loss of biodiversity The Sani Pass area is known to support important biota, some of which rely on specific aquatic habitats for their existence. In light of the proposed PoE, such species face the biggest threats resulting from habitat degradation, as discussed above. Important species that are associated with the Mkhomazana River include the Natal Cascade Frog Hadromophryne natalensis (habitat specialist swift-flowing, rocky streams), Plain Stream Frog Strongylopus wageri (Near Threatened), Maluti River Frog Amietia vertebralis (high-altitude endemic) and Maloti Minnow Pseudobarbus quathlambae (Endangered). However, the Maluti River Frog and Maloti Minnow would only be impacted by cumulative impacts. Cumulative impacts should be considered from the perspective that the PoE would improve accessibility into Lesotho, via the upgraded Sani Pass road. This may then lead to additional impacts such as increased development and associated pressures on aquatic habitats and biota located on the Lesotho side of the Sani Pass.

### 5.10.8. Heritage Impact Assessment

The Heritage Impact Report was commissioned in October 2013 by eThembeni Cultural Heritage.

A number of structures of heritage value were identified in the study area and these include; the caravanserai, warehouses/ storage sheds, managers' house and the compound and rondavel. However, the report did not provide maps locating these sites and it has been referred back to the consultants for review.

The Heritage Impact Report indicates a number of mitigation measures which should be complied with. From a physical observation it is unlikely that any of the existing structures have any significant value. This was confirmed by AMAFA in 2004 in correspondence received. A permit application in terms of the KZN Heritage Act (section 33(1) (a) for the demolition of structures older than 60 years, is being drafted by PADP for the buildings on site. Refer to Appendix 10.7 Review of Phase 1Heritage Impact Assessment Report of the Proposed Relocation of the Sani Pass Port of Entry.

### 6. THE PROPOSAL

The table below outlines the proposed development parameters for the current development.

No.	Description	Size
1.	BCOCC	
1.1.	Administration building	1 663m²
1.2.	Pedestrian, bus and tax control	513m <sup>2</sup>
1.3.	Guard house	30m²
1.4.	Ablution blocks	149m²
2.	EKZNW	
2.1.	Tourism node and auditorium	689m²
2.2.	Accommodation	330m²
3.	Shared Facilities	
3.1.	Water purification and waste handling	54m²
3.2.	Generator room	16m²
3.3.	Office facility and laboratory at sewer plant	20m <sup>2</sup>
	SUB-TOTAL	3440m <sup>2</sup>
4.	Carport parking (48 bays)	
5.	Shared engineering infrastructure	
5.1.	Roads	6440m²

#### Table 6: Development parameters for the current development

No.	Description	Size
5.2.	Parking areas	1269m²
5.3.	Water reticulation	589m²
5.4.	Storm water and drainage channels	260m <sup>2</sup> , 160m <sup>2</sup>
5.5.	Sewerage reticulation	240m <sup>2</sup>
5.6.	Water supply and purification system	503m <sup>2</sup>
5.7.	Sewerage purification plant	500m <sup>2</sup>
5.8.	Fencing	110m <sup>2</sup>
5.9.	Bulk electricity supply	1500m <sup>2</sup>
5.10	Electricity and standby power	399m²
	SUB-TOTAL	11 140m²
	GRAND TOTAL	16 130
	ESTIMATE TOTAL DEVELOPMENT FOOTPRINT	20 000m <sup>2</sup>

Some of the departments that will be located at the Port of Entry include but are not limited to the following:

- South African Revenue Services (SARS)
- South African Police Services (SAPS)
- Department of Home Affairs
- Border Control Operational Coordinating Committee (BCOCC)
- Department of Health

### 6.1. Compliance With The KwaSani Integrated Development Plan

Development Policy/Legislation	Description
KwaSani Integrated Development Plan (IDP)	In terms of the KZN Planning and Development Act, 2008 the emerging developments should be
	in line with the Municipal Development Strategies / Forward Planning. Consequently, the review of
	these development policies is critical.
	The KwaSani Municipal IDP identified challenges including lack of employment opportunities within
	the area, job creation, infrastructure development and shortage of income rental housing.
	The proposed relocation of the existing PoE, the establishment of a tourism node (Phase 2) and
	housing in Himeville (Phase 3) will address some of the challenges faced by the municipality such
	as job creation, infrastructure development and housing.
	It should be noted that the Sani Pass Port of Entry relocation project has been incorporated in the
	municipal IDP as one of the key projects anticipated over the next three (3) years.

Development Policy/Legislation	Description
	The proposed development is in line with the development objectives of the municipality since it
	will support the "Primary Corridor" identified by the Spatial Development Framework (SDF) and
	Provincial Spatial Economic Development Strategy (PSEDS).
	This will ensure that the municipality achieves its desired goal for the economic growth in the area.
	Moreover, channeling of economic development and future settlement along activity corridors and
	nodes that are linked or adjacent to main growth centers is also supported by the National Spatial
	Development Perspective (NSDP).

### 6.2. Compliance with the KwaSani Spatial Development Plan (SDP)

Development Policy/Legislation	Description
9.2. Compliance to KwaSani Spatial	The KwaSani Spatial Development Framework (SDF) is aimed at addressing spatial, environmental and
Development Framework (SDF)	economic issues confronting the KwaSani Municipality. The municipal SDF is the core component of the
	Integrated Development Plan (IDP). The Municipal Spatial Development Framework (SDF) is the main
	strategic tool intended to give direction of future spatial direction towards the achievement of the much
	desired developmental state. The KwaSani SDF draws on a number of points that refer to the proposed
	development and these are outlined as follows:
	• The SDF has outlined that Sani Pass is one of the major regional tourism attractions.
	• The western part of the municipality (Maloti Drakensberg Park World Heritage Site, Bushman's
	Nek and Sani Pass) could make a significant contribution toward the eco-tourism industry.
	• Sani Pass has been identified as one of the three nodes within the local municipality.

Development Policy/Legislation	Description
	• The Maloti Drakensberg Park World Heritage Site and Sani areas are the main tourist attractions
	offering a range of accommodation, events and attractions.
	• The municipality, in conjunction with the Maloti Drakensberg Park World Heritage Site
	management structures, should develop a model which could determine the socio-economic
	benefits of various developments in and adjacent to the area, in an attempt to balance and
	compare the net economic benefits of such developments. An example of such a balance is the
	determination of the net economic benefit of the upgrade of the Sani Pass.
	• The SDF reiterates that models such as the Sani Pass upgrade could be utilized for determining
	the feasibility of tourism and other developments and strike a comparison between the
	environmental impact and development value to determine the net socio-economic advantages
	of all developments in the area.
	Phasing of nodal roads such as Sani Pass requires careful planning
	Cross border trade should be strengthened.
	• P318-2 to Sani Pass of the P27-2 is identified as a primary movement corridor.
	• The P318-2 traversing through the Maloti Drakensberg Park World Heritage Site forming the
	Sani Pass is identified as a tourism route.
	• There is a strong tourism focused corridor via Underberg and Bulwer that links to Sani Pass.
	There are also a number of natural and environmental corridors crossing the boundary between
	Ingwe and KwaSani.
	The proposed development is in line with the development objectives of the municipality since it will
	support the "Primary Corridor" identified by the Spatial Development Framework (SDF) and Provincial

Development Policy/Legislation	Description
	Spatial Economic Development Strategy (PSEDS).

### 6.3. Compliance with the UKhahlamba Drakensberg Park Conceptual Development Plan, 2011 (CDP)

Development Policy/Legislation	Description
9.3. UKhahlamba Drakensberg Park	The purpose of the Concept Development Plan (CDP) for Maloti Drakensberg Park World Heritage Site is
Conceptual Development Plan, 2011 (CDP)	to provide a strategic operational framework for the development and maintenance of conservation
	management infrastructure and visitor facilities and activities within the Park while always considering the
	constraints of the receiving environment.
	The CDP highlights all development projects deemed necessary and the extent to which such projects will
	be implemented over the next five years will be dictated by available financial and other resources.
	The CDP also makes provision for the development application procedures for the developments proposed with the WHS.
	The requirements are summarized as follows:
	• Developments proposed within the World Heritage Site by management or hospitality staff must
	obtain internal approval through their Regional Operation Committee and then the Ezemvelo
	Development Facilitation Committee (DevCo). Any developments that require further approvals
	(such as environmental or planning authorisation) or waivers in policy will be advised of such by
	the DevCo.
	• Developments proposed for the World Heritage Site by external applicants must first obtain
	approval from the Park Management Committee, before proceeding to the Regional Operation
	Committee and then the DevCo for approval.

Development Policy/Legislation	Description
	• Any acceptable development proposals that require further approvals (such as environmental or
	planning authorization) or waivers in policy will be advised of such by the DevCo.
	• Developments already proposed within this CDP are not exempt from the above processes or
	legislation although the requirements of public participation may be significantly reduced.
	• In order for UDP WHS to operate appropriately, adequate facilities and infrastructure need to be
	developed and maintained both for management and eco-cultural tourism purposes.
	In addition, the CDP outlines general procedures for addressing facilities and infrastructure needs in the
	park.

### 6.4. Compliance With The UKhahlamba Drakensberg Park Draft Integrated Management Plan, 2011 (IMP)

Development Policy/Legislation	Description	
9.4. UKhahlamba Drakensberg Park Draft	The Integrated Management Plans are high-level, strategic documents that provide the direction for the	
Integrated Management Plan, 2011 (IMP)	development and operation of protected areas.	
	The purpose of the Integrated Management Plan is to:	
	Align the management of the Park with the Vision, Mission and strategic objectives of Ezemvelo.	
	• Provide the primary strategic tool for management of UDP WHS, informing the need for specific	
	programmes and operational procedures.	
	Build accountability into the management of the UDP WHS.	
	Provide for capacity building, future thinking and continuity of management.	
	Enable Ezemvelo to develop and manage the UDP WHS in such as way that its values and the purpose for which it was established are protected.	

Development Policy/Legislation	Description	
9.5. Special Case Area Plan for the The Special Case Area Plan for the Drakensberg (SCAP) report was produced b		
Drakensberg (SCAP)	Regional Planning Commission in 2001 to provide a balance between conservation requirements and development needs to ensure sustainable development within the Drakensberg area. It contains planning principles, regional zonation and recommendations. The UDP World Heritage Site is the core conservation area and an integral part of the plan.	

### 6.5. Compliance with the Special Case Area Plan for the Drakensberg (SCAP)

### 6.6. Compliance with Spatial Planning and Land Use Management Act (SPLUMA) – Act No. 16 Of 2013

DEVEL		NT PRINCIPLES	ALIGNMENT OF THE PROPOSAL TO THE PRINCIPLES	
		le of spatial justice, whereby— past spatial and other development imbalances must be redressed through improved access to and use of land; spatial development frameworks and policies at all spheres of government must address the inclusion of persons and areas that were previously excluded, with an emphasis on informal settlements, former homeland areas and areas characterized by widespread poverty and deprivation; spatial planning mechanisms, including land use schemes, must incorporate provisions that enable redress in access to land by	<ul> <li>ALIGNMENT OF THE PROPOSAL TO THE PRINCIPLES</li> <li>The proposed development application is not inconsistent with spatial planning principles alluded herein in that;</li> <li>It provides for a development that will redress issues relating to land by disadvantaged communities through the improved Port of Entry (PoE).</li> <li>The proposed development will benefit the local area greatly in terms of tourism and will in turn have a positive impact on the local economy.</li> <li>Given the location of the proposed development, the proposed development will ensure special consideration to</li> </ul>	
	iv.	disadvantaged communities and persons; land use management systems must include all areas of a	<ul> <li>protection of unique agricultural land and protected areas.</li> <li>Noted. The proposed land use in not inconsistent with existing land uses.</li> </ul>	

DEVELOP	IENT PRINCIPLES	ALIGNMENT OF THE PROPOSAL TO THE PRINCIPLES
v.	<ul> <li>municipality and specifically include provisions that are flexible and appropriate for the management of disadvantaged areas, informal settlements and former homeland areas;</li> <li>land development procedures must include provisions that accommodate access to secure tenure and the incremental upgrading of informal areas; and a Municipal Planning Tribunal</li> </ul>	- The proposed use will to an extent sustain communities in terms of job creation promoting the notion of community viability.
	considering an application before it, may not be impeded or restricted in the exercise of its discretion solely on the ground that the value of land or property is affected by the outcome of the application;	
,	ciple of spatial sustainability, whereby spatial planning and land use ment systems must—	
i.	promote land development that is within the fiscal, institutional and administrative means of the Republic;	
ii.	ensure that special consideration is given to the protection of prime and unique agricultural land;	
iii.	uphold consistency of land use measures in accordance with environmental management instruments;	
iv.	promote and stimulate the effective and equitable functioning of land markets;	
<i>V.</i>		
vi.	consider all current and future costs to all parties for the provision of infrastructure and social services in land developments;	

DE	VELOP	MENT PRINCIPLES	ALIGNMENT OF THE PROPOSAL TO THE PRINCIPLES
	vii.	promote land development in locations that are sustainable and limit urban sprawl; and	
	viii.	result in communities that are viable;	
c)	the prin	ciple of efficiency, whereby—	
	i.	land development optimizes the use of existing resources and infrastructure;	
	ii.	decision-making procedures are designed to minimize negative financial, social, economic or environmental impacts; and	
	iii.	development application procedures are efficient and streamlined and timeframes are adhered to by all parties;	
d)	land us livelihoo	ciple of spatial resilience, whereby flexibility in spatial plans, policies and se management systems are accommodated to ensure sustainable ods in communities most likely to suffer the impacts of economic and mental shocks; and	
e)	the prin	ciple of good administration, whereby—	
	I	spheres of government ensure an integrated approach to land use and land development that is guided by the spatial planning and land use management systems as embodied in this Act;	
	١	government departments must provide their sector inputs and comply with any other prescribed requirements during the preparation or amendment of spatial development frameworks;	
	iii. the	requirements of any law relating to land development and land use are	

DE	VEL	OPMENT PRINCIPLES	ALIGNMENT OF THE PROPOSAL TO THE PRINCIPLES
		met timeously;	
iv. the preparation and amendment of spatial plans, policies, land use schemes as well as procedures for development applications, include transparent processes of public participation that afford all parties the opportunity to provide inputs on matters affecting them; and			
	V.	policies, legislation and procedures must be clearly set in order to info and empower members of the public.	
DE	VEL	OPMENT NORMS AND STANDARDS OF THE SPATIAL	ALIGNMENT OF THE PROPOSAL TO THE NORMS AND
PL	ANN	IING LAND USE MANAGEMENT ACT (ACT 16 OF 2013)	STANDARDS
1.	The	e Minister must, after consultation with organs of state in the provincial and	The proposed development has considered the prescribed
	loc	al spheres of government, prescribe norms and standards for land use	development norms and standards as per the Act (SPLUMA) more
	та	nagement and land development that are consistent with this Act, the	especially to the promotion of spatial equity, desirable settlement
	Pro	motion of Administrative Justice Act, 2000 (Act No. 3 of 2000), and the	patterns, rural revitalization and sustainable development.
	Inte	ergovernmental Relations Framework Act.	
2.	The	e norms and standards must—	
	a)	reflect the national policy, national policy priorities and programmes relating	
		to land use management and land development;	
	b)	promote social inclusion, spatial equity, desirable settlement patterns, rural	
		revitalization, urban regeneration and sustainable development;	
	c)	ensure that land development and land use management processes,	
		including applications, procedures and timeframes are efficient and	
		effective;	
	d)	include—	

DEVELOPN	ENT PRINCIPLES	ALIGNMENT OF THE PROPOSAL TO THE PRINCIPLES
	a report on and an analysis of existing land use patterns;	
i	. a framework for desired land use patterns;	
ii	existing and future land use plans, programmes and projects	
	relative to key sectors of the economy; and	
i\	mechanisms for identifying strategically located vacant or under-	
	utilized land and for providing access to and the use of such land;	
e) stan	dardise the symbology of all maps and diagrams at an appropriate	
sca	le;	
f) diffe	rentiate between geographic areas, types of land use and development	
needs	; and	
g) prov	ide for the effective monitoring and evaluation of compliance with and	
enf	prcement of this Act.	

# 6.7. Analysis of Section 25 of the KZN Planning and Development Act (No.6 of 2008) relating to the development of land Outside the Area of Scheme

No.	Section 25	Aspect	Evaluation
1.	25 (d)	The potential impact of the proposal on the environment, socio-economic conditions and cultural heritage	This has been addressed under Section 7 of this report.
2.	25 (e)	The impact of the proposal on existing or proposed developments or land uses in the vicinity, or on existing developmental or mineral rights	The proposed development will not have impacts on surrounding uses and existing developments. The proposed development is located within an area that is mainly agricultural land, therefore the proposed use is not anticipated to negatively affect these

No.	Section 25	Aspect	Evaluation
			areas.
3.	25 (f)	The provision and standard of engineering services	This has been addressed in the Bulk Infrastructure Assessment Report. Please refer to Annexure 19 for this report.
4.	25 (g)	The impact of the proposal on the national, provincial and municipal road networks, public transport, municipal services, sewage, water and electricity supply, waste management and removal, policing and security	This has been addressed in Section 7.2.1. of this report.
5.	25 (h)	Access to public transport and health and educational facilities	The proposed relocation of the PoE is a public transport route and it will largely service the public. The proposed PoE will have the some civic facilities i.e. police station
6.	25 (i)	The historical effects of past racially discriminatory and segregatory legislation on land ownership, land development and access to engineering services and public facilities and the need to address the historical imbalances	Noted.
7.	25 (j)	The protection or preservation of cultural and natural resources, including agricultural resources, unique areas or features and biodiversity	Noted. Please refer to the Annexure 18 for the Heritage Impact Assessment Report which provides an assessment of this.
8.	25 (k)	The natural and physical qualities of the land	This is addressed in Section 5.8. of this report.
9.	25 (I)	The general principles for land development as stated in Section 3 of the Development Facilitation Act,1995 (Act No.67 of 1995), and other national norms and standards, frameworks and policies contemplated ins Section 146 (2) of the Constitution	The assessment has taken into account the provisions made in terms of the relevant legislation and development policies. This is addressed in Section 6.6 of this report.
10.	25 (m)	The provincial planning and development norms and standards	This is addressed under Section 6.6 of this report.
11.	25 (n)	The municipality's integrated development plan	This is addressed in Section 6.1. of this report.
12.	25 (o)	The municipality's scheme	It should be noted that the proposed development is located outside the Town Planning Scheme Area.
13	25 (p)	Any local practice or approach to land use management that is consistent with- (i) The laws of the Republic (ii) The provincial planning and development norms and standards	Consideration has been given to the norms and standards as it relates to development and planning. This development application is not inconsistent with development policies for the local municipality and

No.	Section 25	Aspect	Evaluation
		(iii) The municipality's integrated development plan The scheme	district municipality. The proposed development is very much supported in the local development policies.
14.	25 (q)	Any relevant other information	The Annexures are appended to this report as additional supporting information.

From the above assessment, it is self-evident that the proposed development therefore conforms to these principles in that it is located in an area that supports that spatial plans of the municipality. The proposed development will also have a major impact in terms of the economy and tourism of the region, therefore the proposed development should be supported.

### 7. ASSESSMENT OF POTENTIAL IMPACTS

### 7.1. Bulk Infrastructural Services

### 7.1.1. Water and Sanitation

Sewerage effluent can be treated on site to a standard permitting discharge into the Mkhomazana River.

### 7.1.2. Electricity

According to the letter from Eskom dated 13 December 2012, Eskom certifies that an efficient supply of electricity to within the normal connection distance of the property boundary. Substations are available in the vicinity of the site with a substation within close proximity to the Sani Pass Hotel and there are existing power lines for electricity.

### 7.1.3. Sewer

The site is located outside the municipal area; therefore, there is no formal wastewater management system. The surrounding areas use septic tanks and pit-latrine system. Sewerage effluent can be treated on site to a standard permitting discharge into the Mkhomazana River.

### 7.1.4. Waste Disposal and Collection

The KwaSani Municipality has confirmed that the municipality is only able to service the two areas i.e. Underberg and Himeville. However, the issue of refuse removal in the whole municipal area is being discussed but the matter is still at the developing stage.

### 7.1.5. Telecommunication

Telkom has confirmed that basic telecommunication services exist along the Sani Pass Road.

### 7.1.6. Access Roads, Parking and Circulation

The existing access on the project site from Sani Pass Road will be maintained. Adequate parking has been provided in the proposed layout of the proposed development. Therefore issues relating to parking have been addressed accordingly.

### 7.1.7. Socio-economic Impacts

The KwaSani Municipal IDP identifies different demographic challenges including high levels of illiteracy, a decreasing population and HIV/AIDS. It is stated that 60% of the population are in the economically active age group but many work outside due lack of employment opportunities within the municipality.

The majority of employment opportunities are only in the two small urban nodes namely Underberg and Himeville. Job creation is a challenge in the area.

In terms of infrastructure challenges, there is poor service delivery from the District Municipality for water and sanitation. Two urban nodes benefit from regular refuse removal but this service is not extended to rural areas. There is 5% backlog with electricity provision. The municipality is aiming at infrastructure development and fast tracking service delivery.

There is a lack of social infrastructure in general including schools, clinic, and hospitals. The need for medium income rental housing has been identified by the IDP.

From the environmental perspective, the municipality consists of range of sensitive ecological systems, wetlands, rivers and conservation areas and therefore a balance between development and conservation must be maintained.

### 7.1.8. Environmental Impacts

As with the majority of the adjacent land, the topography of the project site is generally steep in most parts, but the required flat land for the development can be easily attained.

The Gxalingenwa River runs south of the project site and joins Mkhomazana River that runs along the Sani Pass Road. Both the Gxalingenwa and Mkhomazana River are classified as perennial. According to the UDP Integrated Management Plan (2011) the Drakensberg Mountain including the park is a significant water catchment area for the southern African region. Recognizing the importance of this resource to the sustained livelihoods of people in the region, it is essential that park management practices do not threaten sustained natural flow regimes of good quality water with sedimentation.

The site is underlain by mudstone (also known as mud rock) and stormberg (Drakensburg) group basalt. The geotech report provides an assessment of the geology of the project site and the expected ground conditions. This report also provides a detailed assessment of the underlying geology in terms of the proposed development and provides recommendations thereof.

The KwaSani Municipality, in general is located in an extremely diverse and unique environment which encompasses vast open grasslands, highly productive arable farmlands, pristine rivers with their huge network of tributaries, numerous wetlands, lakes and dams as well as towering mountains and the foothills leading into such water bodies. The site is covered by dispersed vegetation and grass. The types of vegetation found in the site include the Southern Drakensburg Highland Grassland and Thukela Thornveld.

Furthermore, specialist studies have been undertaken to assess the geo-hydrological conditions, geotechnical conditions and the floodplain of the subject site.

In light of the above assessment of the environmental conditions, the development of the new Sani Pass Port of Entry has to take into consideration the existing character of the area and ensure the development does not result in any detrimental impacts to the area. Recommendations by specialist have been made and will be acted upon to ensure that the proposed development has minimal effects on the environment.

### 7.1.9. Cultural and Archeological Impacts

The site is located within an area that has rich cultural and heritage significance i.e. Maloti Drakensberg Park World Heritage Site. The San occupied mountain caves and rock shelters in the area during the past centuries. This neighbourhood has the largest and richest concentration of rock paintings in Africa, approximately 40 000 images at about 600 sites. Many of these sites are situated in the EKZN Wildlife Parks within the KwaSani Municipal area.

Various studies suggest that the cultural heritage of the park is more diverse and covers different periods. Accordingly, adherence to policies and legislative frameworks that provide for conservation and protection of such areas is critical.

A Heritage Impact Study was undertaken for the proposed development and the findings of the study can be summarized as follows:

### General Assessment of Study Area:

A number of structures of heritage value were identified in the study area and these include; the caravanserai, warehouses/ storage sheds, managers' house and the compound and rondavel. However, the report did not provide maps locating these sites and it has been referred back to the consultants for review.

The Heritage Impact Report indicates a number of mitigation measures which should be complied with. From a physical observation it is unlikely that any of the existing structures have any significant value.

Please refer to Annexure 18 for the Heritage Impact Assessment.

### 7.1.10. Potential Impact on Existing Developments and Land Uses

The Sani Pass area generally hosts a range of sensitive ecological systems, wetlands, rivers and conservation areas due its location (Refer to Environmental Base Map attached as Annexure 10).

The pattern of land uses within the vicinity of the site is mainly the undeveloped stretches of land, resorts and wilderness conservation areas.

Preliminary observations indicate that there is no conflict in land use anticipated from the proposed development. The proposed development must, however, adhere to the provisions of the Maloti Drakensberg Park World Heritage Site Central Development Plan (CPD), the Integrated Management Plan (IMP) and Wilderness Area Management Plan (WMP) as well as other municipal development plan and guidelines.

### 8. BUILDING STANDARDS

The construction of any buildings or facilities for the Port of Entry will comply with the National Building Regulations. A building plan indicating the proposed work/structure will be submitted and approved by the relevant Department within the municipality on approval of this application.

### 9. MOTIVATION AND SUPPORT OF THE APPLICATION

### 9.1. Development Need

The existing port of entry is located within a World Heritage Site (WHS). The WHS is managed by the KwaZulu-Natal Ezemvelo Nature Conservation Board (EZKZN Wildlife). The current site restricts expansion and improvement of the port of entry, whilst also failing to serve the growing demand in cross border traffic. Key to the expansion objective is the need to convert from a non-commercial to a commercial port of entry. Besides relocating the existing PoE, the other objective is the establishment of a tourism node (Phase 2) and housing in Himeville (Phase 3).

### 9.2. Desirability

There are number of added benefits that the proposed development will bring to KwaSani Local Municipality:

**Location and Accessibility** – The site manifests a positive quality in terms of the extent and location in relation to access and accessibility. In addition the site is located on the edge of the World Heritage Site. This will ensure minimal impact in terms of human activities on the World Heritage Site and natural environment as opposed to the existing PoE site.

The proposed location is considered to be desirable taking consideration the existing surrounding land uses such as Sani Pass Hotel and golf course.

**Sense of Place and Local Benefit** – The development of the Sani Pass PoE will no doubt provide sense of place to the area taking into account the surrounding land uses which will in turn impact positively on the PoE. The proposed PoE will not only benefit the local communities in terms of job opportunities but also the existing business including Sani Pass Hotel.

**Physical Characteristics of the site** – The topography of the site proves to be challenging but the extent of site which is 96 Ha is able to accommodate the 2Ha development footprint in some of the flatter areas particularly along the Sani Pass Road, close to the Mkhomazana River adjacent to the end of the San Pass Hotel golf course.

**Compliance with development policies** – In the assessment of the legislative compliance, it is self-evident that the proposed development is in compliance with the development policies of not only the local municipality but the district municipality.

### 9.3. Specialist Recommendations

### 9.3.1. Geo-hydro Assessment

Accordingly the following works are to be undertaken as recommendations and they include:

- The proposed sewerage purification and sanitation system and waste storage/ treatment facilities must be sited away from the Mkhomazana River in order to maximize the time for breakdown of potential microbial contamination before reaching the river.
- Surface water drainage should include a collector drain constructed on the northeast side of the site to prevent surface water runoff entering the Mkhomazana River.
- Ongoing routine sampling of the Mkhomazana River should be carried out to ensure any impacts on the resource are detected.
- Because ongoing protection measures against groundwater contamination from accidental spills are costly, prompt implementation of effective remedial actions is considered the only viable means of addressing the issue from a geohydrological perspective. Groundwater contamination and potential impacts to local users thus need to be included in disaster management plans".

### 9.3.2. Bulk Infrastructure Assessment

According to the undertaken Bulk Infrastructure Assessment, the following recommendations have been made:

#### 1.1. Road Access

• It should be noted that access envisaged for the project will require approvals from the Department of Transport at design stage and must conform to the Department of Transport Road Access Design Standard details.

• Any details other than the standards for the Department of Transport will require approval from the relevant authority at design stage.

### 1.2. Bulk Sewer

• Harry Gwala Municipality does not have upgrade plans for sanitation in the area within their 5 year IDP. Disposal of sanitation is recommended to be managed on site by an Activated Sludge Treatment Plant and Reverse Osmosis Filtration System.

#### 1.3. Bulk Water Supply

• The most feasible solution would be to incorporate the proposed scheme with scheme SO2 (Demand tributary of Umkomazaana River). The existing system is currently operational. An upgrade to the pumps, filter and possibly the tank will be able to cater for additional demand created by the new development.

#### 1.4. Refuse Removal

• Currently all dwellings and hotels in the vicinity of the border post manage their own waste disposal. It is envisaged that waste disposal for the project will have to be dealt with by the maintenance and operations department for the border post facility.

#### 1.5. Electricity

• The network is not constrained and electrical capacity quantified to be 500kVA to supply the proposed development is available and is granted upon a formal application to Eskom at design stage. A 500kVA transformer is however envisaged for the internal electrical reticulation.

#### 1.6. Stormwater

• Fully reticulated network with lined/unlined open stormwater channels (dependent on envisaged flow velocities) and pipe culverts being used only where absolutely necessary.

### 9.3.3. Geotechnical Assessment

The findings and recommendations of the geotechnical report are recorded as follows:

- The subsoils predominantly comprise of colluvial clayey silt or silty clay underlain by talus and dolerite boulders supported in a sandy clay or clayey sand matrix. The site classifies as H1 to H2 and a reinforced soil raft foundation is recommended.
- The site investigation has revealed that the geotechnical constraints are not onerous with regards to the proposed relocation of the Port of Entry.

- Other challenges lay in the increasingly steep terrain to the west of the study area where cut and fill platforms will be required.
- The choice of foundation type and the design of the foundations will need to be done by a competent engineer once the final structural layouts have been determined.
- The soils across the study area are considered to have a low to medium potential expansiveness resulting from medium clay fractions and medium plasticity indices. The geotechnical investigation findings thus indicate the site is suitable for the proposed infrastructure.

### 9.3.4. Vegetation Assessment

- On the floodplain, where it is to be covered in fill, no significant vegetation will be destroyed. The platform banks will need to be carefully shaped to allow for access to the picnic areas. The southern hillside also has no significant vegetation to protect.
- A vegetation rehabilitation plan needs to be drawn up to rehabilitate the area once construction is completed. This can be prepared when final plans are approved. The Sani Pass Road upgrade EMP has a detailed vegetation rehabilitation plan. It is important that all vegetation rehabilitation work use locally indigenous plants. To this end, some plant rescue work will be required ahead of construction.
- > A prerequisite for construction is that all Invasive Alien Plants will be removed from the area and surroundings and that follow-up control work will continue for at least 3 years after construction.

### 9.3.5. Geohydrological Assessment

- It is recommended that the proposed sewerage purification and sanitation system and waste storage / treatment facilities be sited away from the Umkomazana River in order to maximise the time for breakdown of potential microbial contamination before reaching the river.
- Surface water drainage should include a collector drain constructed on the northeastern side of site to prevent surface water runoff entering the Umkomazana River.
- Ongoing routine sampling of the Umkomazana River should be carried out to ensure any impacts on the resource are detected
- Because ongoing protection measures against groundwater contamination from accidental spills are costly, prompt implementation of effective remedial actions is considered the only viable means of addressing this issue from a geohydrological perspective. Groundwater contamination and potential impacts to local users thus need to be included in disaster management plans.

### 9.3.6. Baseline Biodiversity Assessment of Aquatic Ecosystems

In the case of the Sani Pass PoE development, the following options should be considered;

- Mitigating impacts of the development by rehabilitating aquatic habitat on-site (within the same system) so as to balance the loss of riparian and wetland habitat; and/or
- Where the impacts of the proposed development cannot be appropriately mitigated on-site, off-site rehabilitation and/or offsetting of the habitat loss may be required.

In the case of the Sani Pass PoE development, the following recommendations are made to avoid and/or mitigate impacts that may arise from the PoE development:

- Ensure, where possible, that the development footprint avoids all riparian and wetland habitat areas and associated buffers zones (as below).
- Undertake delineation of aquatic ecosystems with assessments of habitat integrity and functioning to verify the boundaries of wetland and riparian habitats (DWAF, 2005) and to determine the present ecological state of the systems (Kleynhans and Louw, 2008; Kotze et al., 2007; Macfarlane et al., 2007).
- Incorporate suitable buffer zones in terms of the development layout to preserve and protect ecosystem functioning. Generally, buffers are adopted to protect ecosystems from physical disturbance and to protect the water resource from other impacts such as pollution and contamination of aquatic ecosystems. Buffer zones of 20 m from the upper boundary of aquatic habitats are generally recommended to reduce impacts on aquatic ecosystems. However, larger buffers (approximately 50 m) may be necessary in the case where mitigation measures (as detailed in the points below) are not implemented.
- All riparian/wetland habitats and associated buffers within the development boundary need to be maintained and managed indefinitely. This is to ensure that potential impacts of the proposed development on aquatic ecosystems and biodiversity are mitigated.
- Erosion control methods should be implemented to minimise the loss and degradation of soils.
- Ensure that the stormwater management plan for the PoE development minimises flow-related impacts to the aquatic environment and associated buffers.
- Ensure that all sewage infrastructure are positioned to avoid damage from flooding. As a minimum these should be positioned beyond the 1:100 year floodline.
- Ensure minimal or no disturbance outside of the development footprint area during construction, and all
  material arising from the development must be prohibited from the aquatic habitats and associated buffer
  zones.
- Any excavations and/or construction activities within riparian habitat should be carried out preferably during the winter months (i.e. April to September). The active working area should be clearly demarcated and kept to a minimum to ensure that impacts to the aquatic ecosystems are minimised. All activities must be restricted to the demarcated working areas and completed in a timeous manner

- No hazardous chemicals used and/or spilled during the construction process must enter the riparian zones, wetlands or groundwater.
- Pollutants, potentially carried in surface water runoff, should be limited through the use of best management practises and designs (e.g. first-flush pollutant traps and filters, permeable paving in driveways and parking areas, etc.).

### 10. CONCLUSION AND RECOMMENDATIONS

It is submitted that this development is very much anticipated and supported by various district and municipal plans. It can be said that the proposed development will form a major regional tourism attraction which will have a positive economic impact not only within the local municipality but at a regional scale.

As alluded the KwaSani SDF (2013) the proposed development has been identified as one of the three nodal areas within the municipality and therefore the proposed development is ideally located in an area that has been "earmarked" for development that will have economic spin offs especially within the tourism sector within the area.

The proposed development is consistent with municipal and regional plans and guidelines and in the long run will have socio-economic advantages that will greatly benefit the local municipality. It has been proven in the above assessment that the proposed development is not inconsistent with the nature and place of the surrounding area; any of the statutory requirements; the environment or physical characteristics.

It is therefore concluded that the application for development of land outside the town planning scheme area is approved.