

# DRAFT BASIC ASSESSMENT REPORT: MOBILE SEASONAL TENTED CAMPS IN THE KRUGER NATIONAL PARK

**19 April 2022**

**Submitted to:**

Mr Herman Alberts  
Email: HAlberts@environment.gov.za  
and  
Mr Muhammad Essop  
Email: MEssop@environment.gov.za



**Submitted by:**

Kevan Zunckel  
ZUNCKEL ECOLOGICAL + ENVIRONMENTAL SERVICES  
7 Annthia Road, HILTON, 3245  
E-mail: kevanzunckel@gmail.com  
Tel: (033) 343 1739  
Cell: 082 929 4270

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**Client:**

Ms Lysta Stander  
South African Experiences (Pty)Ltd for BidCo

**Submitted to:**

Herman Alberts and Muhammad Essop

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# DRAFT BASIC ASSESSMENT REPORT: MOBILE SEASONAL TENTED CAMPS IN THE KRUGER NATIONAL PARK.

## 1 INTRODUCTION

---

This report serves to accompany the application for Environmental Authorisation submitted on behalf of South African Experiences (Pty) Ltd. (on behalf of BidCo) for the establishment and operation of two seasonal mobile tented camps in the vicinity of the Tshokwane Picnic Site and the Satara Rest Camp in the Kruger National Park respectively.

As a parastatal entity, the South African National Parks (SANParks) have the ability to generate income which is used to support their operations and enhance their ability to manage the country's National Parks effectively. In June 2019 SANParks published a Request for Proposals (RfP) for the establishment and operation of mobile seasonal tented camps in the Kruger National Park (KNP). As SANParks has a long history of providing and managing concession opportunities in the Park, these opportunities, amongst others, were included in the Park Management Plan for 2018 – 2028. The compilation of this plan was subjected to rigorous stakeholder consultation and therefore the stakeholder engagement process for the tented camps needs to be seen within that context.

South African Experiences (Pty) Ltd (for BidCo) were the successful bidders and as such took on the responsibility of obtaining all the necessary permits and authorisations that may be required for this initiative, over and above meeting the requirements stipulated by SANParks in the RfP and which has been included in the Public Private Partnership (PPP) Agreement (see Annex A).

SANParks support for this process and the proposed activities is evident in the "Landowners Consent" letter dated 8 October 2020 and which is included in Annex A.

In general the potential environmental impacts of the proposed development are all avoidable or mitigatable to levels of insignificance while the proposed activities have the capacity to generate income for SANParks to support the organisations ability to effectively manage the KNP and to generate socio-economic benefits through direct and indirect job creation opportunities during both the construction and operational phases of these activities. It will thus be shown by the environmental impact assessment captured in this report, that the proposed development will have a net socio-economic benefit with negligible impact on the natural environment.

## 2 ASSESSMENT DETAILS

---

### 2.1 THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

The Environmental Assessment Practitioner (EAP) responsible for facilitating the environmental authorisation application process and for compiling the basic assessment report and related environmental management plan report is Mr. Kevan Zunckel of Zunckel Ecological + Environmental Service (ZEES). Mr Zunckel has 35 years of experience as an ecologist and environmental scientist with an MSc Environmental Science from the University of Cape Town and is affiliated to the South African Chapter of the International Association of Impact Assessments (IAIASa – Membership

number: 2396). He is also registered with the Environmental Assessment Practitioners Association of South Africa (EAPASA) (reg. No. 2020/1483) and is an accredited with the Education, Training and Development Practices Sector Education and Training Authority (ETDP SETA) as an assessor of applications for registration with EAPASA. His contact details are as follows and his full CV is included with this report as Annex B:

Postal address: 7 Annthia Road, Hilton, 3245  
 Telephone: (033) 343 1739  
 Cell: 082 929 4270  
 Fax: 086 517 5582  
 Email: kevanzunckel@gmail.com

A signed Declaration of Interest has been included with this report as Annex B.

## 2.2 SPECIALIST STUDIES

The National Web-based Environmental Screening Tool indicates that a number of specialist studies may be relevant to this assessment. The Screening Report for the Tshokwane and Satara sites are captured in Annex C. After carrying out site surveys and consulting with relevant SANParks officials, it became evident that these were not necessary. The reasons for this are primarily related to the limited spatial and temporal scale of the proposed activities, the features of the receiving environment, the high level of compatibility and the low level of potential negative impacts post mitigation. The specialist studies suggested by the Screening Tool and this assessment's response are captured in Table 1.

**Table 1: Assessment response to recommended specialist studies**

| SUGGESTED SPECIALIST STUDY                 | ASSESSMENT RESPONSE   |
|--|---|
| Agricultural impact assessment             | Not applicable in a protected area.   |
| Landscape/Visual Impact Assessment         | Sites have been selected so that the camps will not be seen from any existing tourism infrastructure and so that a sense of 'wilderness' will be maintained in the camps, i.e. guests will not see any sign of tourists and/or management movement and/or infrastructure from the camps and vice versa.   |
| Heritage Impact Assessment                 | No heritage sites are recorded in the area on SAHRIS and SANParks Cultural Heritage officials concur, although there is a site of heritage significance in close proximity to the preferred site near Satara. It is also acknowledged that heritage artefacts occur throughout the KNP and therefore, the EMPr includes the requirement of applying the "Chance Find Procedure" and field guides and selected operational staff will attend heritage sensitisation and interpretation training to aid in the identification of unrecorded sites and to enhance visitor experiences. |
| Palaeontology Impact Assessment            | SAHRIS indicates that the sites are in an area of 'no palaeontological significance'.   |
| Terrestrial Biodiversity Impact Assessment | The EAP has extensive ecological expertise and was able to cover this aspect in the site surveys and assessment of potential impacts. Given the limited temporal and spatial extent of the activities it is also not considered significant enough to warrant a specialist terrestrial biodiversity impact assessment.  |
| Aquatic Biodiversity Impact Assessment     | As above and in addition the SANParks Manage of Water Resources in the KNP, Dr Riddell, has stated that he does not foresee any particular risk for the riverine system that would not be covered under the general   |

| SUGGESTED SPECIALIST STUDY | ASSESSMENT RESPONSE  |
|----------------------------|--|
|                            | EIA processes given the fact that the camps will be operated in the dry season.  |
| Traffic Impact Assessment  | The placement of these concessions in the central part of the Kruger National Park is a strategic decision by SANParks based on the 'space' that is available for further tourism operations. A 'Park and Ride' system will be applied whereby guests to the camps will enter through any of the KNP entrance gates and self-drive to the 'Park and Ride' facility at the Tshokwane Picnic Site or Satara Rest Camp, from where they will be picked up by the camp's game drive vehicles and transferred to the camps. It is therefore envisaged that the additional traffic generated by these two camps is at a scale that does not warrant an independent traffic impact assessment. Note that these camps are included in the latest Park Management Plan which was subjected to stakeholder and role-player review and which was approved by the Acting Minister for Environmental Affairs in April 2018. |
| Socio-Economic Assessment  | Due to the distance of more than 30km from the camps to the nearest neighbouring communities, it is envisaged that there will be no negative socio-economic impacts. However, there is potential for the camps to have a small positive socio-economic impact through the generation of direct and indirect work opportunities. These have been included in the assessment with recommendations for their enhancement.   |
| Plant Species Assessment   | A SANParks botanist based in Skukuza (Guin Zimatis) has indicated that the critically endangered <i>Adenium swazicum</i> (Impala Lily) may occur on the sites and that they flower from October to January. Due to the dry season operation of the camps it is likely that any specimens of this threatened plant species that may occur on the sites, will not be flowering at the time, but using the local knowledge of the Regional and Section Rangers and the flexibility inherent in the camp layout will make it possible to avoid these. Note that annual camp establishment will be preceded by a site inspection by all relevant SANParks officials as well as an independent Environmental Compliance Officer (ECO). Note also that site surveys have revealed that this species is not present on either of the two sites and their alternatives.   |
| Animal Species Assessment  | As with the terrestrial biodiversity assessment, the EAP has the expertise to assess the sites from the perspective of animal species. Also the limited temporal and spatial scale of the activity as well as its flexibility will ensure that potential impacts on animal species are easily avoided.   |

### 3 DESCRIPTION OF PROPOSED ACTIVITIES

#### 3.1 LOCALITY OF ACTIVITIES

The preferred sites for the seasonal mobile tented camps (as described in Section 3.2) are located within the central region of the KNP, with one being 10km to the north-north west of the Tshokwane Picnic Site, and the other just over 10km to the north east of the Satara Rest Camp as illustrated in Figure 1 below. In the absence of specific names for the camps they are referred to as the Tshokwane Ripape and Satara Mananga Camp Sites respectively. They are shown together with the localities of alternative sites (see Section 9 for a discussion on alternatives).

Other details related to the localities of these sites are captured in Table 2 below and more detail as to the localities and the surrounding features of the sites are provided in Figure 2 for Tshokwane and Figure 3 for Satara.

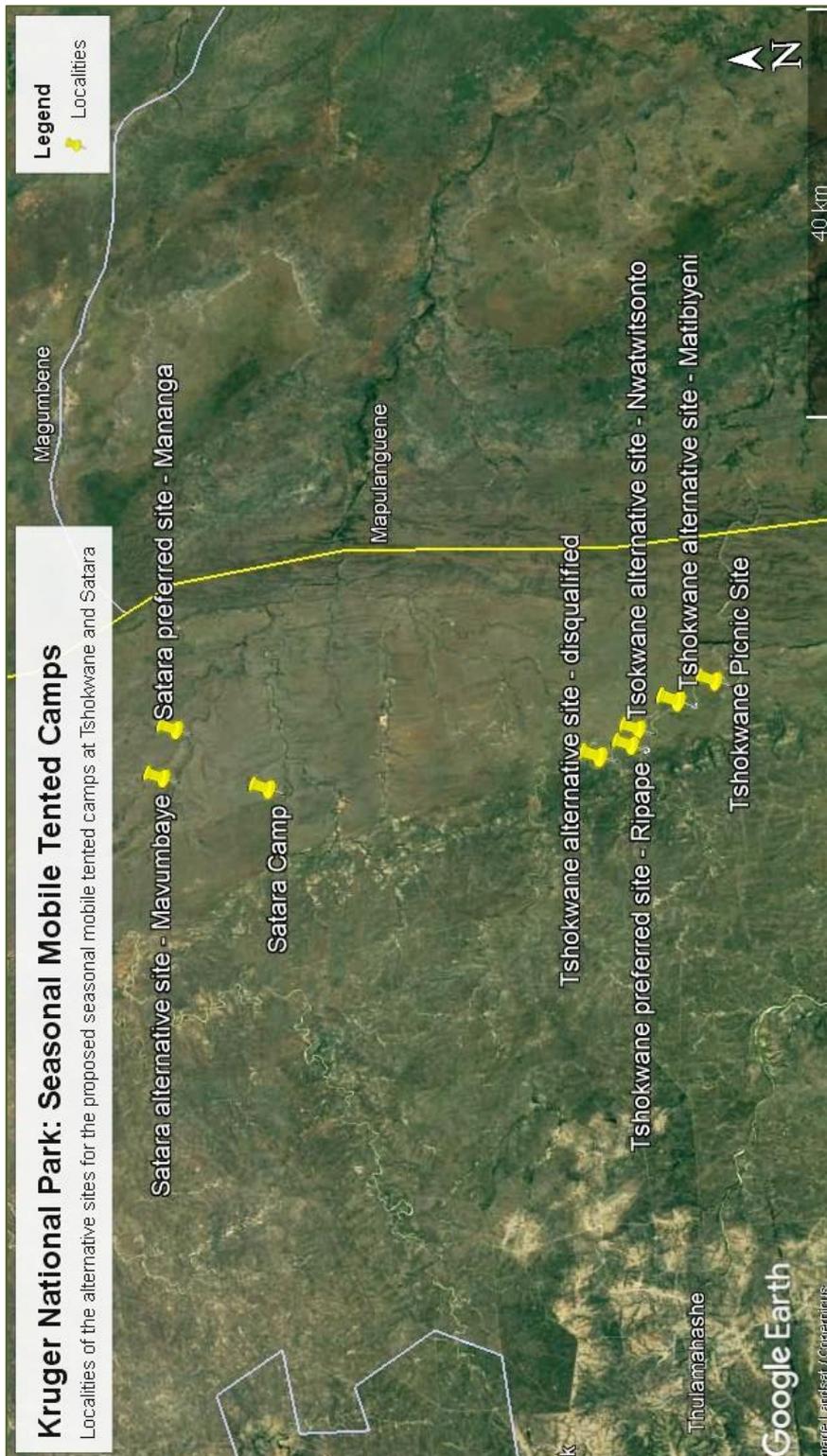


Figure 1: A Google Earth image showing the localities of the preferred and alternative sites for the seasonal mobile tented camps. Note that the north-south yellow line on the image is the border with Mozambique.

**Table 2: Locality specification for the Tshokwane and Satara preferred and alternative sites.**

| LOCALITY SPECS        | TSHOKWANE RIPAPE - PERFERRED SITE         | SATARA MANANGA - PREFERRED SITE    |
|-----------------------|---|------------------------------------|
| District Municipality | Ehlanzeni                                 | Ehlanzeni                          |
| Local Municipality    | Bushbuckridge                             | Bushbuckridge                      |
| SG Code               | TOKU00000000033500000                     | TOKU00000000014800000              |
| Farm Name             | DIJON - KU                                | REITSPRUIT -JU                     |
| Coordinates: latitude | 24°42'40.28"S                             | 24°18'58.76"S                      |
| longitude             | 31°48'4.26"E                              | 31°50'22.51"E                      |
| LOCALITY SPECS        | TSHOKWANE Nwaswitsonto - ALTERNATIVE SITE | SATARA MAVUMBYE - ALTERNATIVE SITE |
| District Municipality | Ehlanzeni                                 | Ehlanzeni                          |
| Local Municipality    | Bushbuckridge                             | Bushbuckridge                      |
| SG Code               | TOKU00000000033500000                     | TOKU00000000014800000              |
| Farm Name             | DIJON - KU                                | REITSPRUIT -JU                     |
| Coordinates: latitude | 24°43'4.80"S                              | 24°18'7.91"S                       |
| longitude             | 31°48'58.62"E                             | 31°47'36.47"E                      |

Note that for this assessment four sites were assessed for the Tshokwane camp and two sites were assessed for the Satara camp. Those assessed for the Tshokwane camp are labelled from north to south in Figure 2 as Tshokwane – disqualified, Tshokwane - Ripape, Tshokwane - Nwaswitsonto and Thokwane - Matibiyeni; while the two assessed for the Satara camp are labelled from west to east as Satara - Mavumbye and Satara - Mananga. More information on this is provided in the discussion in Section 3.2 below and in the discussion on alternatives in Section 9. The localities of the preferred and alternative sites for the Tshokwane camp are illustrated in Figure 4, while those for Satara are illustrated in Figure 5.

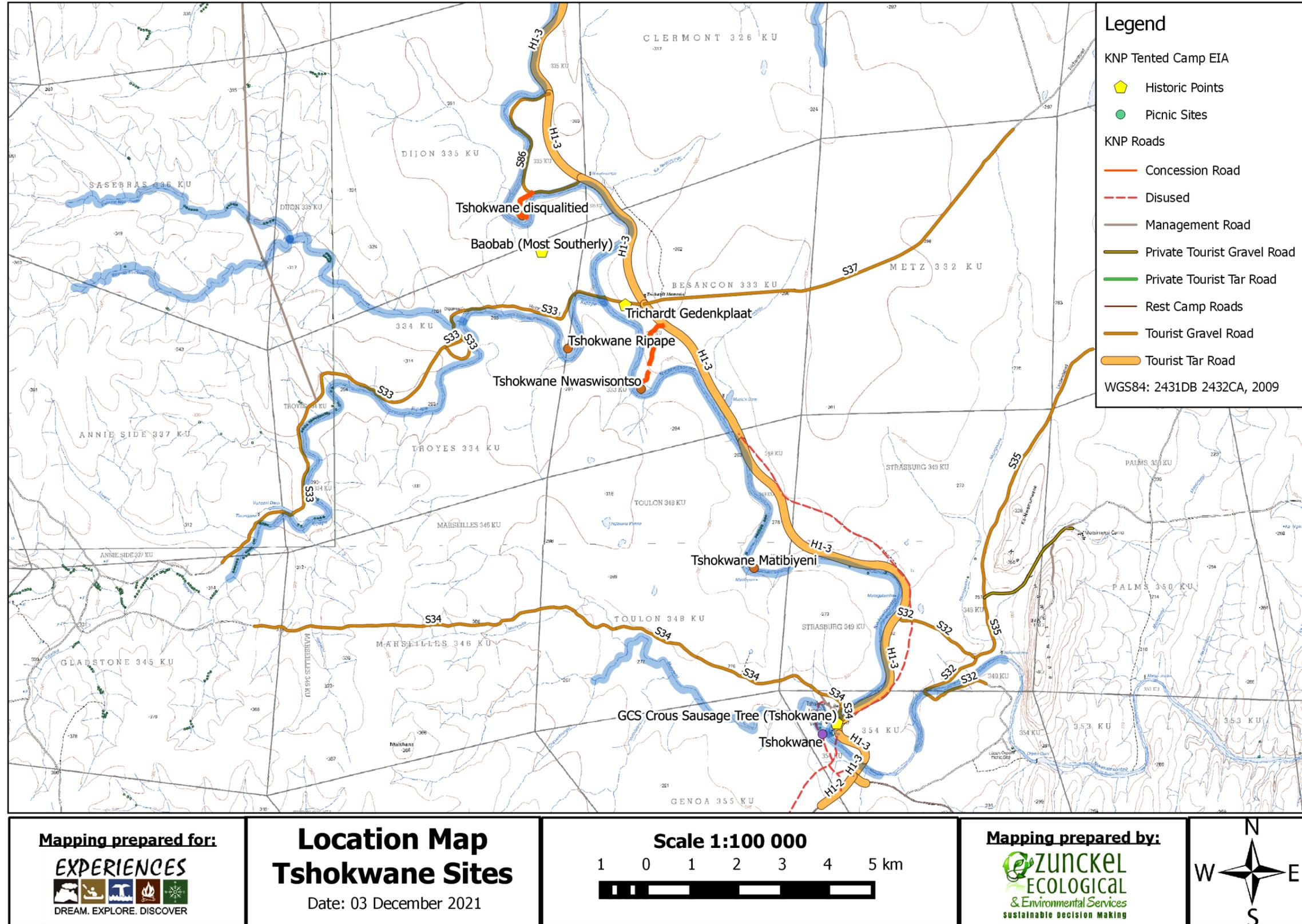


Figure 2: The localities of the preferred and alternative camp sites north of Tshokwane

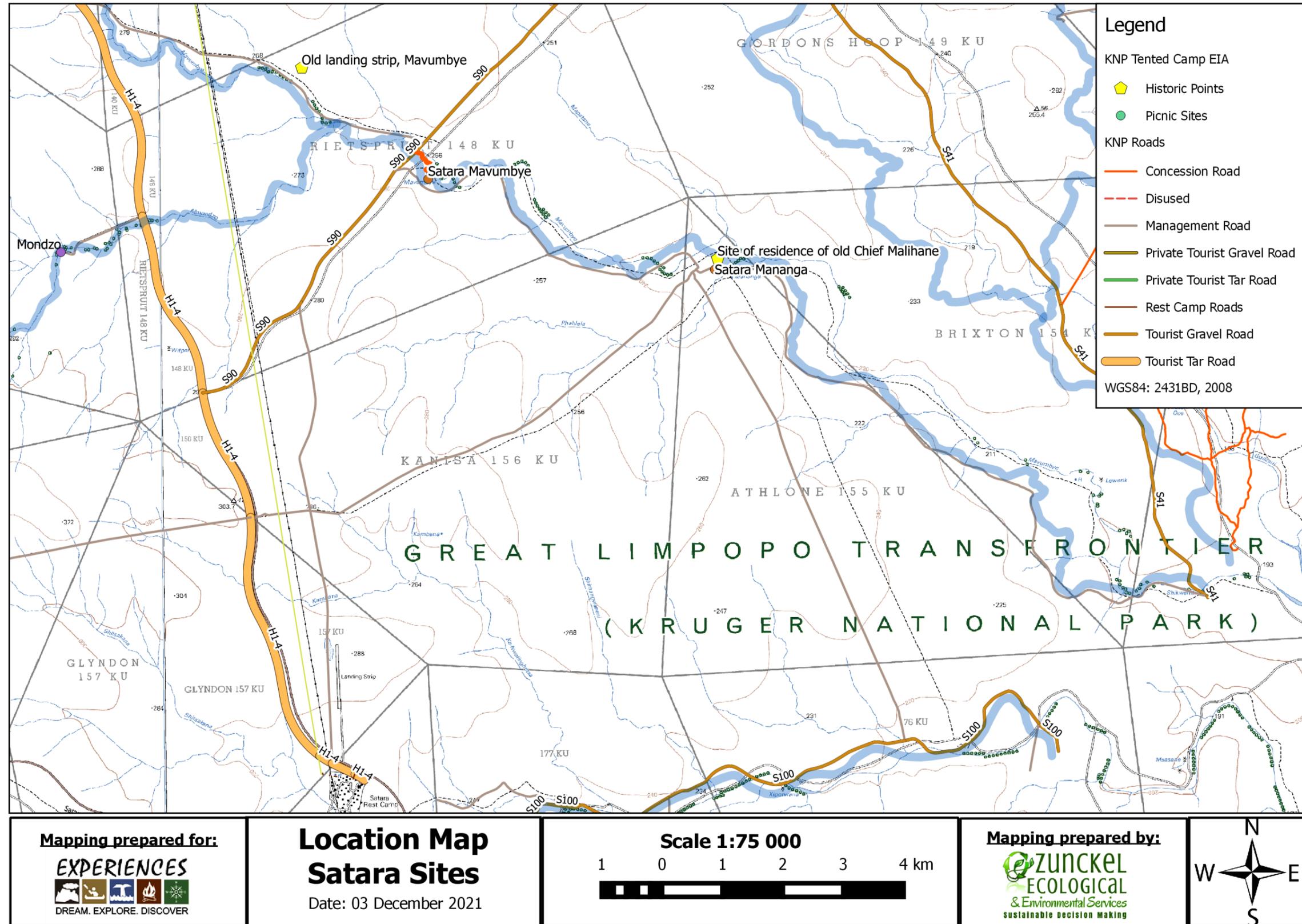


Figure 3: The localities of the preferred and alternative camp sites north of Satara



Figure 4: The localities of the concession areas of the preferred and alternative sites for the Tshokwane Camp.

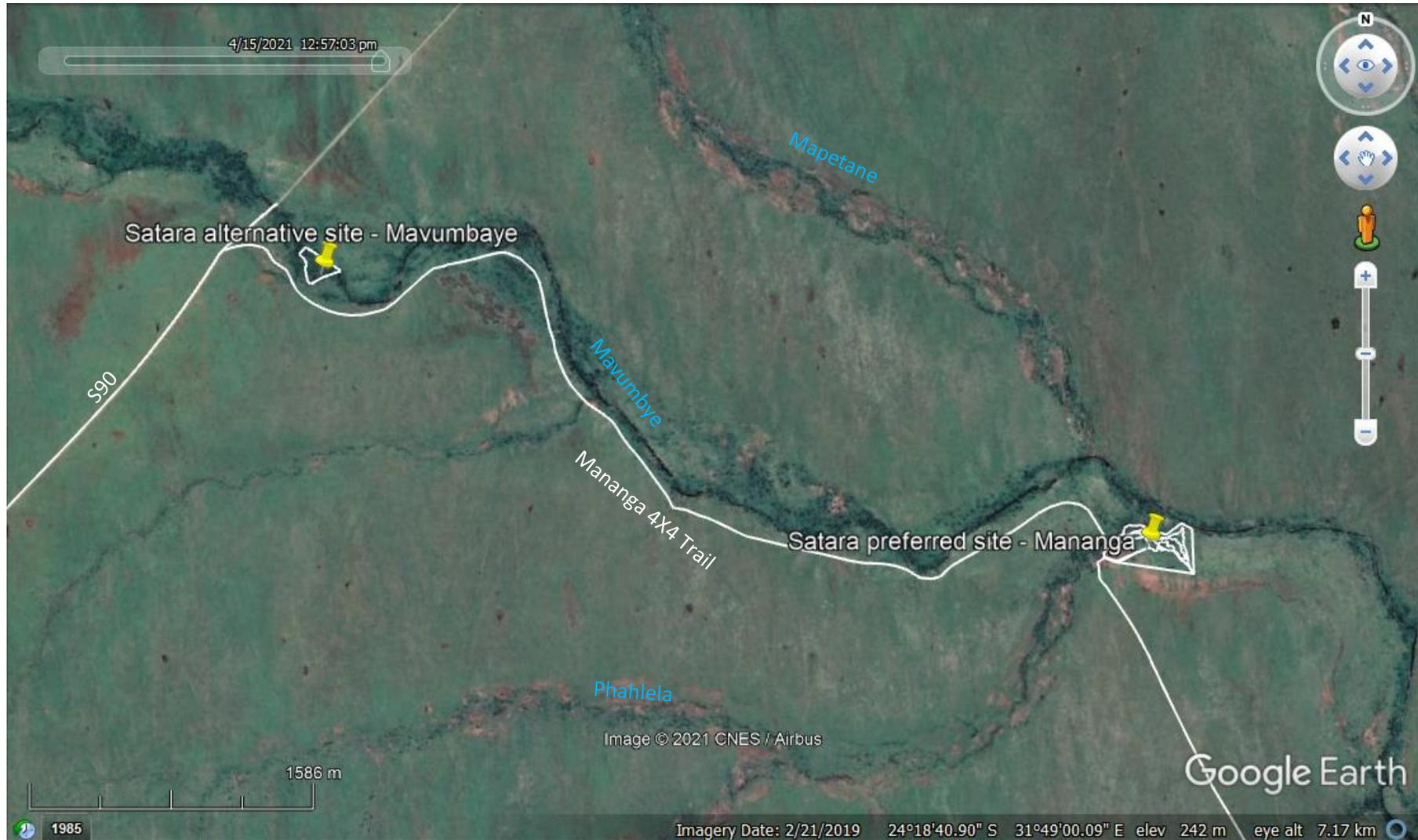


Figure 5: The localities of the concession areas of the preferred and alternative sites for the Satara Camp.

### 3.2 GENERAL DESCRIPTION

The proposal is for two seasonal mobile tented camps to be established and operated for the five months of the dry season, May to September, at a site approximately 10km to the north-west of the Tshokwane Picnic Site and approximately 10km to the north-east of the Satara Rest Camp, respectively. An alternative site was assessed at Satara and three alternative sites were assessed at Tshokwane, all in relatively close proximity to the preferred sites. While the assessment of alternatives served the environmental assessment process as discussed in Section 9, the existence of an alternative site for each camp is in case the preferred sites are rendered unusable due to factors such as fire, flood and elephant damage. These localities have been discussed in Section 3.1 above and are illustrated in Figure 1 to Figure 5. Application is therefore for the use of both the preferred and alternative sites.

The camps will be established in March and April to be operated from the beginning of May until the end of September each year, and will then be dismantled in October. All of the camp infrastructure will be removed from the sites at the end of each operating season and will be brought in again for re-establishment the following April. Each camp will consist of 30 two-bed guest tents, a communal lounge/dining Bedouin tent, a kitchen tent and storage area using containers, tents to accommodate 20 – 25 staff, a staff lounge/dining tent, parking and access for 1 x 14-Seater Minivan and Trailer for staff transport and laundry, gas and supply delivery/collection; 4 x Open Safari Vehicles for Game Drives and Guest Transfers, and a light utility vehicle for the removal of both solid and liquid waste. The layout of these components within the concession areas is illustrated in Figure 6 to Figure 9 and their dimensions are provided in Table 3 below.

It is important to note that two of the sites have existing access roads and these have therefore not been included in the component dimensions and coordinates. However, these specifications have been included for the other two sites where access roads will need to be constructed.

**Table 3: Camp component dimensions and coordinates**

| FEATURES   | DIMENSIONS           |                        | COORDINATES   |               |
|--|----------------------|------------------------|---------------|---------------|
|  | Perimeter/length (m) | Area (m <sup>2</sup> ) | Latitude      | Longitude     |
| <b>TSHOKWANE RIPAPE – PREFERRED SITE</b>           |                      |                        |               |               |
| Concession   | 1229                 | 92,737 (9.27ha)        | 24°42'40.25"S | 31°48'4.26"E  |
| Junior staff accommodation                         | 100                  | 600                    | 24°42'36.99"S | 31°48'4.84"E  |
| Senior staff accommodation                         | 100                  | 600                    | 24°42'35.58"S | 31°48'2.75"E  |
| Vehicle parking and bulk storage                   | 100                  | 600                    | 24°42'36.28"S | 31°48'3.84"E  |
| Back-of-house                                      | 160                  | 800                    | 24°42'39.94"S | 31°48'0.33"E  |
| Communal area                                      | 100                  | 600                    | 24°42'41.09"S | 31°47'59.66"E |
| Guest tent envelope 1                              | 660                  | 9,700                  | 24°42'36.63"S | 31°47'57.68"E |
| Guest tent envelope 2                              | 870                  | 9,200                  | 24°42'45.62"S | 31°48'4.57"E  |
| TOTAL AREA – components within the concession area |                      | 22,100 (2.21 ha)       |               |               |
| <b>TSHOKWANE NWSWITSONTO – ALTERNATIVE SITE</b>    |                      |                        |               |               |
| Concession   | 1356                 | 100,000                | 24°43'4.47"S  | 31°48'59.01"E |
| Access road - start                                | 1760                 | 3,620                  | 24°42'22.90"S | 31°49'19.79"E |
| Mid-point  |                      |                        | 24°42'44.68"S | 31°49'10.10"E |
| End-point  |                      |                        | 24°43'7.27"S  | 31°48'59.40"E |
| Junior staff accommodation                         | 120                  | 900                    | 24°43'9.95"S  | 31°48'59.89"E |
| Senior staff                                       | 80                   | 800                    | 24°43'11.04"S | 31°48'58.85"E |

| FEATURES   | DIMENSIONS           |                        | COORDINATES   |               |
|--|----------------------|------------------------|---------------|---------------|
|  | Perimeter/length (m) | Area (m <sup>2</sup> ) | Latitude      | Longitude     |
| accommodation  |                      |                        |               |               |
| Vehicle parking and bulk storage                               | 120                  | 900                    | 24°43'9.88"S  | 31°49'0.88"E  |
| Back-of-house  | 120                  | 900                    | 24°43'7.13"S  | 31°48'57.43"E |
| Communal area  | 100                  | 600,                   | 24°43'7.31"S  | 31°48'56.66"E |
| Guest tent envelope  | 750                  | 18,000                 | 24°43'1.24"S  | 31°48'56.87"E |
| TOTAL AREA - components within the concession area             |                      | 23,860 (2.39 ha)       |               |               |
| <b>SATARA MANANGA – PREFERRED SITE</b>                         |                      |                        |               |               |
| Concession   | 1,430                | 100,588                | 24°18'58.79"S | 31°50'22.49"E |
| Staff accommodation, bulk storage and vehicle parking envelope | 357                  | 4,362                  | 24°18'57.11"S | 31°50'18.41"E |
| Back-of-house  | 80                   | 400                    | 24°18'57.04"S | 31°50'21.50"E |
| Communal area  | 110                  | 680                    | 24°18'56.55"S | 31°50'22.67"E |
| Guest tent envelope 1  | 386                  | 7,942                  | 24°18'57.45"S | 31°50'26.87"E |
| Guest tent envelope 2  | 464                  | 9,470                  | 24°18'59.67"S | 31°50'27.86"E |
| TOTAL AREA - components within the concession area             |                      | 28,296 (2.83ha)        |               |               |
| Re-routing of Mananga 4x4 route                                | 4,775                | 9,550                  |               |               |
| SAT D  |                      |                        | 24°18'58.19"S | 31°49'1.71"E  |
| SAT C  |                      |                        | 24°19'42.51"S | 31°49'28.04"E |
| NWA Track B  |                      |                        | 24°19'54.30"S | 31°51'13.02"E |
| NWA Track A  |                      |                        | 24°20'6.46"S  | 31°50'51.03"E |
| <b>SATARA MAVUMBYE – ALTERNATIVE SITE</b>                      |                      |                        |               |               |
| Concession   | 671                  | 21,773 (2.17ha)        | 24°18'7.77"S  | 31°47'36.45"E |
| Access road - start  | 608                  | 1,216                  | 24°17'55.05"S | 31°47'30.01"E |
| Mid-point  |                      |                        | 24°17'57.88"S | 31°47'39.57"E |
| End-point  |                      |                        | 24°18'4.62"S  | 31°47'36.65"E |
| Junior staff accommodation                                     | 120                  | 900                    | 24°18'4.88"S  | 31°47'34.09"E |
| Senior staff accommodation                                     | 80                   | 800                    | 24°18'5.53"S  | 31°47'33.40"E |
| Vehicle parking and bulk storage                               | 140                  | 1,200                  | 24°18'5.45"S  | 31°47'34.95"E |
| Back-of-house  |                      |                        |               |               |
| Communal area  | 100                  | 600                    | 24°18'6.79"S  | 31°47'34.50"E |
| Guest tent envelope  | 622                  | 7,307                  | 24°18'8.15"S  | 31°47'37.02"E |
| TOTAL AREA - components within the concession area             |                      | 12,023 (1.2ha)         |               |               |

From the above it can be seen that three of the concession areas, i.e. the two Tshokwane sites and the Satara Mananga site, have concession areas of 10ha with the total footprint of the camp components covering from 22% to 28% of the concession areas. The Satara Mavumbye site is much smaller with a concession area of 2.17ha and a camp footprint of 60%. While this appears to be proportionately larger, its absolute coverage is approximately 50% smaller due to the significantly smaller concession area.



Figure 6: The detailed layout of the Tshokwane Ripape camp on the preferred site. To be viewed in conjunction with Figure 4.



**Figure 7:** The detailed layout of the Tshokwane Nwaswitsonto camp on the alternative site. To be viewed in conjunction with Figure 4.



Figure 8: The detailed layout of the Satara – Mananga Camp preferred site illustrating the position of the camp components within the concession boundary. To be viewed in conjunction with Figure 5



**Figure 9:** The detailed layout of the Satara – Mavumbye Camp alternative site illustrating the position of the camp components within the concession boundary. To be viewed in conjunction with Figure 5

Clearing of vegetation to accommodate the camp infrastructure will be limited as far as possible and the disturbed areas will re-vegetate during the rainy season while the site is not being used from October to April each year. Where camp elements have caused excessive die-back and compaction, these areas will be scarified and reseeded with a mix of locally indigenous grass seeds once all camp elements have been broken down and removed.

The camps will be re-established with the same layout each season, unless specific circumstances call for the need for minor adjustments. Each site will be inspected by the relevant Section Ranger, the SANParks official responsible for Environmental Management in the KNP and an independent Environmental Compliance Officer prior to establishment, to ensure that the layout does not impact on any biophysical feature and/or dynamic that may have become apparent during the rainy season; e.g. a pair of breeding owls in a tree. Any adjustments that might be required will be minimised to that which is absolutely necessary and will be preceded by an application for a Part I amendment to the authorisation, if necessary and assuming that authorisation to this application is granted in the first instance.

### 3.2.1 Establishment of the Camps

The preparation crews, numbering 30 for each camp site, will arrive at the camp sites at the end of February in order to begin the establishment process. They will be accompanied by certified armed guards as required by the PPP agreement and will immediately erect the perimeter fences according to the standards specified in the PPP agreement. Thereafter they will establish the staff villages and bulk storage areas from which they will do their work and be accommodated for the approximately six weeks that it will take to establish the camps. All the equipment for the camps will be transported to site on an eight ton truck with either one being dedicated to a site, or rotating between the sites.

As already stated and prior to any work being carried out on site, a site inspection will be carried out by the relevant Section Ranger, the SANParks official responsible for Environmental Management in the KNP and an independent Environmental Compliance Officer (ECO). Only once it has been confirmed that there are no issues that may prevent the camps from being established according to the approved layout, will the establishment process be permitted to begin. Any necessary minor deviations within the approved development envelopes will be noted by the officials and the ECO, while major deviations will be subjected to formal applications for amendments to the authorisation.

Following finalisation of the layout, all structures will be positioned accordingly. Staff and guest accommodation tents will be placed on timber decking that will be raised above the ground on cement blocks, thus minimising site disturbance and facilitating the positioning of waste water management infrastructure. Included in the layout will be the positioning of walkways which will be used for the servicing of staff and guests tents and will double as access for the establishment teams. These will be 'established' simply through use by the establishment team and service staff in the establishment and set up processes. Any additional clearing of these access paths will take place just before the start of the season and will be minimised as far as possible.

The electricity and water reticulation infrastructure will make use of the access pathways as far as possible and will be buried in narrow trenches that are deep enough to ensure that elephant are not

attracted to the water pipes. It must be noted that this reticulation will be minimised as far as possible with tents being operationally independent and/or in clusters serviced by concentrated supply infrastructure. It is possible that some of this infrastructure will fall outside of the areas accommodating tents and pathways, for example where it is necessary to place a solar panel in the sunshine while the tent is in the shade, and narrow shallow trenches will be used for this purpose.

Two weeks prior to the opening of the camp for the season, the service staff will arrive to prepare for guest arrival.

### 3.2.1.1 Access to the Camps

Access to the tented camps will be via a Park-and-Ride system where guests will park in designated area at the Tshokwane Picnic Site and the Satara Rest Camp respectively. The localities of these areas are illustrated in Figure 10 and Figure 11. From there they will be transported to the camps in the operator's game drive vehicles. Guests will access the KNP via any of the entrance gates or the Skukuza Airport. The possibility of guests flying into the Satara airstrip will be investigated as an option, but this has no bearing on this application and assessment.



**Figure 10:** The locality of the area designated for the Park and Ride facility within the Satara Rest Camp (see red polygon in the north eastern corner of the camp).

#### 3.2.1.1.1 Tshokwane Camp Sites

Access to the Tshokwane Ripape preferred site is via an existing management track off the S33 and to the Tshokwane Nwaswitsonto alternative site is via the H1-3, i.e. the Satara – Tshokwane main road, for 12.3km to the north from the Park and Ride facility, to where a twin-track access road will be developed as illustrated in Figure 7 and in compliance with the SANParks Road Classification. This access road will be positioned on the crest of the spur jutting into the curve of the Nwaswitsonto River on which the camp site is located. Just before the access road enters the concession area from the east, it crosses perpendicular to a small depression 100m above a seasonal wetland. The reasons for the existence of this depression are not clear but it may have been caused by flood

events in the past. The wetland at its south eastern extremity will be as a result of drainage from the immediate surrounds as well as push back from the main channel of the Nwaswitsonto River when it floods. This feature, in relation to the concession area and the access road, can be seen in Figure 12.



Figure 11: The locality of the area designated for the Park and Ride facility adjacent to the Tshokwane Picnic Site



Figure 12: The small depression and seasonal wetland to the east of the Tshokwane Camp concession area.

### 3.2.1.1.2 Satara Camp Sites

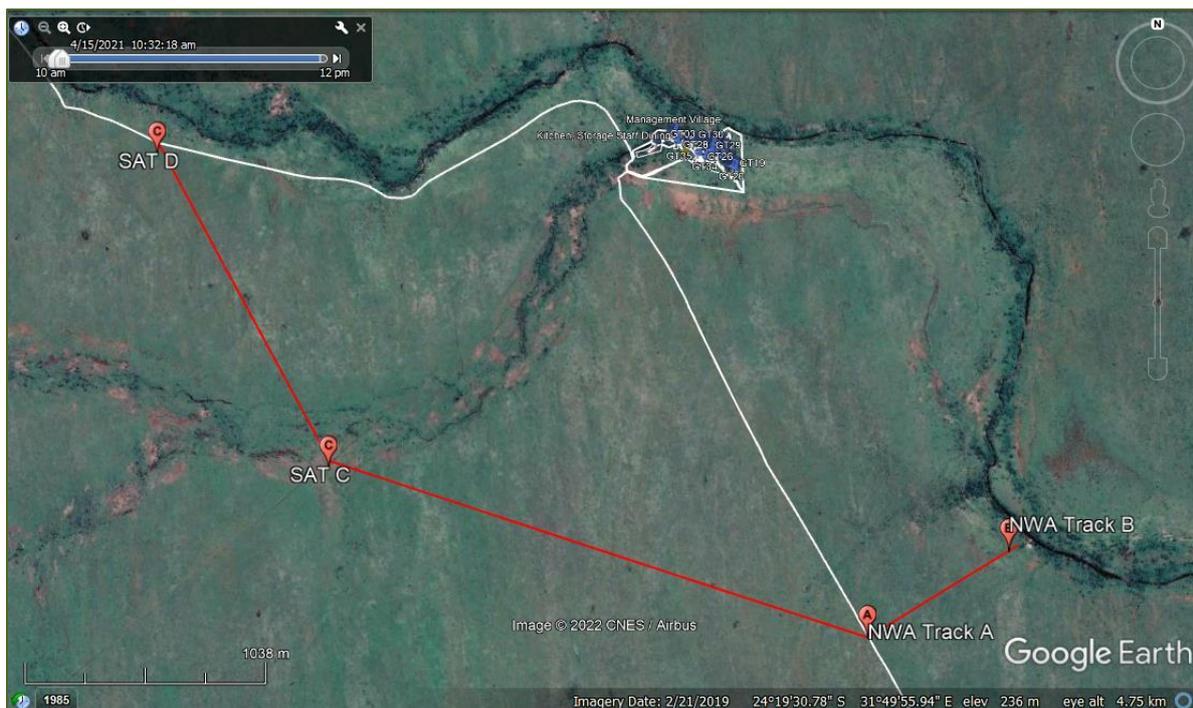
Access to the Satara Mananga preferred site is via existing roads and tracks and there are two options; (a) via the H1-4 for just on 7km to the north where the S90 turns off to the north east. Just before this road crosses the Mavumbye River, there is a turn off to the east on the Mananga 4X4 route. The site is reached after just less than 7km along this track, and (b) also via the H1-4 but heading south for just less than 2km and then turn east on the S100 for approximately 11km where the Mananga 4X4 track turns off in a northerly direction and the site is accessed after 8.5km. These existing roads and tracks are visible in Figure 3.

Access to the Satara Mavumbye alternative site is via the H1-4 for just on 7km to the north where the S90 turns off to the north east. After 5.5km the S90 crosses the Mavumbye perennial watercourse and another 100m after this crossing is the point at which the access track will be taken off. The track will then meander for approximately 600m in an easterly and then southerly direction to the guest arrival point in front of a large Apple Leaf tree (*Philenoptera violacea*). It traverses soils that are suitable to accommodate a twin-track road and will be developed in compliance with the SANParks Road Classification, i.e. simply by driving the track until it is established. The positioning of this access road can be seen in Figure 13.



**Figure 13:** The position of the access track that will need to be constructed for access to the Satara Mavumbye alternative site.

An additional aspect pertaining to access is the need for a portion of the Mananga 4x4 trail to be repositioned relative to its current locality past the Satara Mananga site. The positioning of this re-routing has been determined by the Section Ranger and the method of construction will be the same as required for the access route to the Mavumbye site, i.e. simply driven on until the track is visible. The position of this re-routing is illustrated in Figure 14. Coordinates for this realignment are provided in Table 3.



**Figure 14:** The re-routing of the Mananga 4x4 trail (red) relative to the position of the Satara Mananga camp site and the existing trail alignment (white).

### 3.2.1.2 Bulk Infrastructure

Details pertaining to the bulk infrastructure required for the establishment, operating and dismantling of the camps are listed and described below. The descriptions are based on the details provided in the PPP Agreement in Annex A. Direct extractions from this document are indented from the left margin.

#### 3.2.1.2.1 Potable Water

For Tshokwane and Satara, based on the expected water requirements, the existing boreholes close to the site won't be sufficient to supply water to the camp. As outlined in the information memorandum, carting water to the site will have too much impact on the environment so BidCo will drill a new borehole to provide water to the facility. BidCo will ensure that the quality and yield of the borehole complies with the national water standards. BidCo will apply for the relevant water-use licences and pay for the water use in accordance with the specified rates at the time. The operator will ensure they have water on site at all times for a 48-hour period.

Post borehole, water to be stored in 2x 10000- or 4 x 5000-litre tanks pumped up to a height of 2m. This would allow for storage at any time of 20 000 litres with a solar pump activated during day light hours keep it filled. The gravity-fed system of distributing water throughout the camp would allow for gas geysers per tent and into the kitchen. Solar would be an option for the Kruger sites.

The estimated water usage for Tshokwane and Satara will be approximately 75 litres per person per day. The total usage from all sources inside Kruger National Park will be limited to the park's water policy.

BidCo acknowledges the critical need to conserve water. Water use will be monitored and controlled with guests being advised of any limitations in consumption. Shower heads and taps will be fitted with flow restrictors and automatic shut-off where necessary. A standard operating procedure with regard to water system maintenance will be developed to ensure zero wastage via proper maintenance of the water system at all times. Use will be recorded.

BidCo undertakes to implement water conservation measures in the design and implementation of its operations;

BidCo undertakes to:

- Monitor the use of water;
- Educate staff via onsite notices on the use of water;
- Set water usage targets (monitored weekly/monthly) and manage these targets;
- Aim to avoid accidental loss through effective maintenance, installing quality storage and reticulation systems and implementing leak detection systems.

BidCo acknowledge that KNP will require for bulk water meters to be installed where the KNP does have sufficient bulk water and BidCo to pay for the water use in accordance with the rate as included in the latest approved tariff document. If the KNP does not have sufficient bulk water, BidCo will seek the supply of bulk potable water from the nearest borehole, or install a new water abstraction point (subject to approval of KNP and registration with relevant authorities) and ensure that the quality and yield of the borehole complies with the national water standards.

Water quality tests for both Tshokwane and Satara were carried out by Mr CRH Clanahan (PrEng MPhil) (see Annex E), who concluded the following:

The water from the two boreholes - one each at Satara and Tshokwane – is clean and free of bacteria, with the Tshokwane water being marginal as potable water because of slightly high total dissolved solid count and potential taste problems. Both sources are safe for cooking, washing and other non-consumptive uses.

It is advised that regular testing be scheduled, prior to the start of each camp season and during the occupancy, to check on quality.

It is also advised that the systems for water transfer and storage incorporate facilities for mild chlorination of stored water.

Potential borehole sites at the Tshokwane camps were identified using the local knowledge of the owner of Rhino Walking Safaris, Mr Louis Straus, and the Section Ranger, Mr Rob Thompson; and in both cases these sites are within the camp layout areas as depicted in Figure 6 and Figure 7. Raw water for the Satara Mavumbye site will be drawn from an existing pipeline, and for the Mananga site, an old borehole close to the concession area will be reactivated.

#### 3.2.1.2.2 Waste Water

The PPP Agreement specifies that BidCo are to “provide suitable waste disposal solutions of a mobile nature for the Mobile Tented Safari Facilities, ensuring that no waste is disposed of at the Project Sites, with exception of grey water, subject to requirements specified by SANParks”, and the following is in response to this requirement:

Showers Water: to be gravity-fed into each tent through a gas or rocket geyser. The grey water would be channelled into soak-aways positioned around the camp or at the very least captured in 50 litre buckets / bladders at the shower point either underneath or at the rear of the showers. This grey water would then be emptied and stored in 2500 litre bowzers ready to be disposed of at designated points and in line with the environmental officer requirements. Guests will be supplied with bio-degradable amenities which are softer on the environment.

Kitchen wastewater: A double sink washing basin will be plumbed into 200 litre storage containers. The waste is filtered through layers of cheesecloth to catch oil, fats and food waste before disposal. The cheesecloth filtration material will be recycled every day. As with the disposal of black water, the drums are to then be transported to and disposed of in the designated area prescribed by SANParks. The disposal will occur on a schedule roughly ever second day, but as frequently as necessary.

Waste water management will be in full compliance with the South African water quality standards and guidelines as listed in the National Water Act (1998). Water waste would not be recycled or reintroduced into the environment and will be filtered to remove FOG (fats, oils and grease), plumbed into sealed containers, and disposed of in an evaporation dam or similar as allocated by SANParks.

Toilet waste: Guests have chemical flush camping toilets for each individual tent. The toilets are serviced by trained Chiefs Tented Camp Staff daily. The liquid waste is stored in sealed plastic sanitation drums. These containers will be disposed of at the porter potty disposal site at Skukuza or Satara (whichever has capacity). Toilets are cleaned, serviced and decanted over a secondary catchment tray.

In addition to the above the following has been extracted from the bid document:

- BidCo confirms that monthly wastewater monitoring will be undertaken and these reports made available to SANParks;
- BidCo undertakes to manage liquid waste in accordance with national and local legislation requirements;
- BidCo undertakes to design management techniques to be both economically viable and environmentally sustainable;
- BidCo confirms that fuels, solvents, other wastes will be stored in vessels equipped with secondary containment structures, removed from the Project Site, and disposed of in compliance with national, local and SANParks requirements.
- BidCo undertakes to implement waste procedures that optimise the principles of liquid waste reduction and liquid waste reuse and ensures that the end product does not pollute the environment;

- BidCo undertakes to maintain the grease taps for:
  - Pot and Rinse Sinks attached to Dish Washers;
  - Fixtures or drains through which significant amount of fats, oils or grease may be introduced;
  - Soup Kettles or similar devices;
  - All sinks that are used to clean any dishes, pots, pans or cooking utensils.
  - BidCo undertakes to implement processes and procedures which stipulates the following:
    - Kitchen staff should inspect and clean grease traps and interceptors at daily and maintain a log sheet of each trap inspection detailing condition of the trap and any maintenance activity;
    - that grease traps are cleaned daily; and
    - that waste recovered from the grease traps be disposed of at an authorised facility.

#### 3.2.1.2.3 *Solid Waste*

Solid waste would be stored in lidded bins in the service areas with separate bins for general/food waste and recycling. All solid waste would be collected and stored in heavy duty bags, specifically sorted into recyclable and non-recyclable bags (as per KNP's waste management system). Waste bags would be stored in a sealed trailer and be transported at least weekly, or as needed, to the closest designated disposal site as agreed upon by SANParks. As far as possible, we will aim to make use of mostly recyclable products.

In addition to the above the following has been extracted from the PPP Agreement:

- The BidCo business model will adopt a policy of minimising the generation of solid waste material wherever possible. Waste management will adopt the approach of reduce, reuse and recycle and will comply with the KNP and GRNP waste management policy.
- BidCo acknowledges that landfills are not permitted in any Project Sites.
- BidCo acknowledges that solid waste will be separated onsite and transported to an approved landfill site, either at a respective approved camp waste disposal site or outside the relevant Park to approved re-cycling depots. Final disposal arrangements will be agreed with the successful bidder prior to set-up of the Mobile Tented Safari Facilities on an annual basis.
- BidCo undertakes to manage all waste that is generated in such a way that direct and indirect impacts are kept to a minimum.
- BidCo undertakes to achieve Solid Waste Management Best Practices which implies the following:
  - Manage solid waste from source to disposal (use of green bags for recycle waste and black bags for non-recycle waste, in accordance with Park's Waste management system);
  - Strive to eliminate non-recyclable or hazardous packaging or containers at the procurement phase;
  - BidCo undertakes to include the following policies in the waste management:
    - Green Procurement Policy: This policy defines the procedures that BidCo will implement to ensure that all produce, containers and packaging comes from suppliers that underwrite environmental principles, and that waste be recyclable as far as possible;

- Hazardous Waste Policy: The Hazardous Waste Policy defines procedures that the Operator will implement to manage any hazardous waste, to ensure that it is firstly minimised, but also that it is stored and discarded in a safe and legal way.
- BidCo commits to follow the following guidelines to minimise the effect of the solid waste on the environment:
  - Minimise solid waste production at all sources, by striving for the minimisation of all waste.
  - Maximise the recycling of solid waste. Glass, tin, paper and cardboard must be sorted onsite for recycling, while actual recycling will take place off site at the approved camp waste disposal site or approved disposal site outside the relevant Park.
  - All waste must be removed to the respective approved camp waste disposal site and incinerator, or approved disposal site outside the relevant Park, for disposal and recycling. The dumping and disposal of waste other than at an approved waste site is strictly prohibited and failure to comply may result in termination. Final disposal arrangements will be agreed with the successful bidder prior to set-up of the Mobile Tented Safari Facilities on an annual basis.
  - Waste storage and sorting areas must be properly set-up and maintained. Waste storage areas must remain clean and secure from problem animals.
  - Waste storage areas must remain visually hidden from guests.
  - Packaging and containers given to visitors must be environmentally friendly, biodegradable and recyclable.
  - The distribution of plastic bags and polystyrene to visitors is strictly prohibited and only brown paper bags are allowed to be given for the purpose of carrying items purchased.
  - In terms of packaging, BidCo undertakes to not use the following in outside seating and eating areas as this pollutes the park:
    - Sachets (for sugar, tomato sauce, salt and pepper, etc.);
    - Paper serviettes;
    - Butter tubs/pads
    - Plastic straws
    - Plastic cutlery
  - BidCo undertakes to continuously strive towards eliminating plastic water bottles and single-use plastics in its operations.
  - BidCo will ensure that the all areas are kept free of litter by promoting an ethic amongst guests and staff alike and soliciting the co-operation of all staff to pick up litter wherever they find it.

#### 3.2.1.2.4 Electricity

For camp establishment, the primary source of electricity will be low decibel diesel generators when needed.

During the operation of the Mobile Tented Safari Facilities the primary energy source is anticipated to be solar with battery storage and inverters to supply 220vac, and a low decibel generator (sound attenuated) as back-up and for the charging of battery operated equipment such as torches and radios. Solar arrays will be located subject to further site assessment to minimise any visual impact whilst maximizing exposure to sunlight. Reticulation will be planned accordingly to points of use.

Alternatively, each tent will be equipped with its own solar power pack which includes a small solar panel and an integrated unit with inverter and battery which accommodates UPS ports for charging small electronic equipment and to power a number of LED lights.

According to the PPP Agreement, diesel generators are to be used as back-up on site, not as the primary energy source and:

- Will be low decibel generators;
- Diesel tanks will be installed in bund walls to prevent diesel spillages; and
- A diesel spillage SOP will be developed in line with SANParks' requirements and standards.

BidCo confirms that it will provide an electrical certificate of compliance for all electrical works once the Mobile Tented Safari Facilities have been set-up for the period of operation.

BidCo undertakes:

- To measure energy use and continuously aim to implement measures to reduce energy usage until optimal levels are reached;
- Monitor the use of energy;
- Educate staff via training and onsite notices on the use of energy;
- Set energy usage targets (monitored weekly/monthly) and manage these targets.

### 3.2.2 Operation of the Camps

#### 3.2.2.1 Staff Numbers, Accommodation and Movements

The 20 operational staff will arrive at the sites two weeks prior to the beginning of the season in order to ensure that the camps are ready for guests. The senior staff will be accommodated in four 3 x 3m dome tents with ensuite ablution facilities located as per the layouts in Figure 6 and Figure 9. This area will include a 10 x 5m gazebo as a communal lounge and dining area. Junior staff will be accommodated in the 30 x 30m area designated for this in six to eight 3 x 3m dome tents, communal ablution facilities and a communal lounge and dining gazebo.

All operational staff will be accommodated on site for the duration of the season and the two weeks prior to and afterwards. Staff will work on a two week rotational shift arrangement and will be transported to and from the Paul Kruger and/or Orpen Gates.

#### 3.2.2.2 Risk Management

As part of the BidCo submission, a preliminary risk assessment and response plans was provided for the operation of the camps, including the required equipment (e.g. fire-fighting) to be kept onsite to manage natural and/or accidental incidents and/or disasters. Each potential risk was subjected to an assessment of the likelihood that it would occur and the potential severity of such an occurrence scored from a 1 to a 5 for likelihood with a 1 being "improbable" and a 5 being "highly probable"; and for potential severity with a 1 being "negligible" and a 5 being "catastrophic"; with scores of 2 – 4 denoting measures between the extremes. The outcome of this assessment and plan is captured in Table 4 below. Note that this assessment process has reviewed and amended the plan to make it more comprehensive.

**Table 4: Risk assessment and response plan**

| RISK           | POTENTIAL IMPACT  | POTENTIAL CAUSE  | LIKELIHOOD | SEVERITY | RESPONSE   | EQUIPMENT REQUIRED   |
|----------------|---|--|------------|----------|--|--|
| Fire           | Damage to camp and all property.<br>Guest and staff injuries.<br>Animals could be affected. | Negligent staff in the kitchen.<br>Equipment failure.<br>Guest negligence (smoking, etc).    | 4          | 4        | Have fire-fighting equipment on site. All staff trained to deal with this sort of situation. Evacuation plans visible on site and all staff and guests briefed on the routes and assembly point. Fire breaks to be in place around each camp site before operations begin.   | Fire extinguishers of sufficient size and number, as well as beaters and reliable radio communications.  |
| Flooding       | Damage to camp and property.<br>Guest and staff injuries.<br>Animals could be affected.     | An above average late rainfall event within the catchment of the Nwaswitsant so watercourse. | 1          | 4        | Always be aware of weather conditions and reports. Have vehicles available on site when poor weather predicted. Avoid using the dry river bed for the central guest facility at these times and guest tents close to the edge need to be moved or vacated.   | Existing vehicles. Radio for emergency calls.  |
| Animal attacks | Guests/staff injured or killed  | Ineffective fencing and/or negligent guest and/or staff.                                     | 3          | 4        | Three stand electrified fence designed to keep large animals out of camp and positioned around the perimeter of the site. The perimeter to be frequently (at least daily) patrolled and the fence to be maintained. Rangers to be well trained, alert and shifts should be reasonable. All staff and guests to be reminded of the do's and don'ts at camp, to avoid incidents. Guest movements | At least two staff trained in first aid and well equipped with complete first aid kits. Radio for emergency calls. Guest tents to be equipped with whistles and/or aerosol sirens. |

| RISK            | POTENTIAL IMPACT  | POTENTIAL CAUSE  | LIKELIHOOD | SEVERITY | RESPONSE  | EQUIPMENT REQUIRED  |
|-----------------|---|--|------------|----------|---|---|
|                 |   |  |            |          | before sunrise and after sunset to be accompanied by a porter equipped with a powerful torch and trained in the management of potential incidents.  |   |
| Animal damage   | Damage to camp and all property. Guest/staff injuries.        | As above.  | 3          | 3        | As above.   | As above.   |
| Poisonous bites | Guest or staff can suffer severely or even die                | Guests /staff don't close up tents properly at night. They don't put on insect repellent while camping and are generally not mindful of the risks. | 3          | 4        | Guests and staff to be made aware of the risks associated with snakes, scorpions, spiders and mosquitos, and advised to apply insect repellent at critical times and be aware of their surroundings at all times. | Integrity of all tents and storage facilities maintained at all times.<br>At least two staff trained in first aid and well equipped with complete first aid kits.<br>Insect repellent to be provided to all guests and staff and insect repellent equipment to be installed and maintained in all communal areas. |
| Strong wind     | Damage to camp components, especially tents and some content. | Natural causes.  | 2          | 2        | Ensure all camp components are secured against the possibility of high winds and monitor weather forecasts.   | Storm straps.   |

### 3.2.3 Dismantling of the Camps

The dismantling of the camps will occur in reverse to their establishment with all the softs, decor and furniture being stripped from the tents and communal areas. All cables and pipes will be removed, trenches will be filled and re-vegetated. Thereafter the tents will be dismantled together with their decks and everything will be removed from site. Finally the electric fences will be deactivated and removed together with the solar power, water pumping and storage infrastructure.

Once the sites are cleared they will be inspected by the appointed ECO as well as the relevant SANParks officials. If and when all is found to be in order, the sites will be signed over to SANParks until the following season.

### 3.3 LISTED ACTIVITIES

The establishment and operation of the two seasonal mobile tented camps triggers a number of listed activities in the EIA Regulations (GNR 327 Listing Notice 1, 7 April 2017 and GNR 324 Listing Notice 3, 7 April 2017); made under section 24(5) of the National Environmental Management Act (Act 107 of 1998) (NEMA), as amended) as detailed in Table 5 below.

**Table 5: The listed activities relevant to this application.**

| Activity No(s): | The relevant Basic Assessment Activity/ies as set out in <u>Listing Notice 1</u> of the EIA Regulations, 2014 as amended.   | The portion of the proposed project to which the applicable listed activity relates.  |
|-----------------|---|---|
| 27              | The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for: (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan. | Accumulatively the layout on the sites will exceed this threshold and allows for minimal clearing of some vegetation for the placement of the camp components. Included in this accumulative area is the development of access tracks and pathways.   |
| Activity No(s): | Provide the relevant Basic Assessment Activity/ies as set out in <u>Listing Notice 3</u> of the EIA Regulations, 2014 as amended.   | Describe the portion of the proposed project to which the applicable listed activity relates.   |
| 6               | The development of resorts, lodges, hotels, tourism or hospitality facilities that sleep more than 15 people in a protected area identified in terms of the NEMPAA.   | Each of the two tented camps will accommodate up to 60 people and will include a maximum of 30 staff also accommodated on site.   |
| 12              | The clearance of an area of 300 square metres or more of indigenous vegetation on land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning.   | The accumulative coverage of all the tents, i.e. guest, communal, kitchen and staff; plus walkways and access roads will exceed this threshold. Although the camps are seasonal and temporary, this activity is still relevant due to the disturbance that will be caused on an annual basis.         |
| 14              | The development of infrastructure or structures with a physical footprint of 10 square metres or more; where such development occurs within 32 metres of a watercourse, measured from the edge of a watercourse (depending on the site layout) in a protected area identified in terms of NEMPAA.             | All the sites are within close proximity of water courses and it is likely that the guest facilities will be positioned so as to capitalise on this. Also the access track to the Tshokwane Nwaswitsonto alternative site crosses a depression that may be considered a water course (see Figure 12). |

### 3.4 PROJECT SECTOR

The sector within which the project falls is “Services - hospitality” and “Transformation of land – indigenous vegetation” is also relevant.

## 4 ACTIVITY CONTEXT AND ENVIRONMENTAL FACTORS

### 4.1 ACTIVITY COMPATIBILITY

In order to assess the compatibility of what is being proposed in this application and report, it is necessary to consult the spatial data behind the KNP Park Management Plan 2018 – 2028, and

specifically that which speaks to zonation. Figure 15 and Figure 16 were derived from the spatial data provided by SANParks and shows the localities of all the sites relative to the KNP zonation.

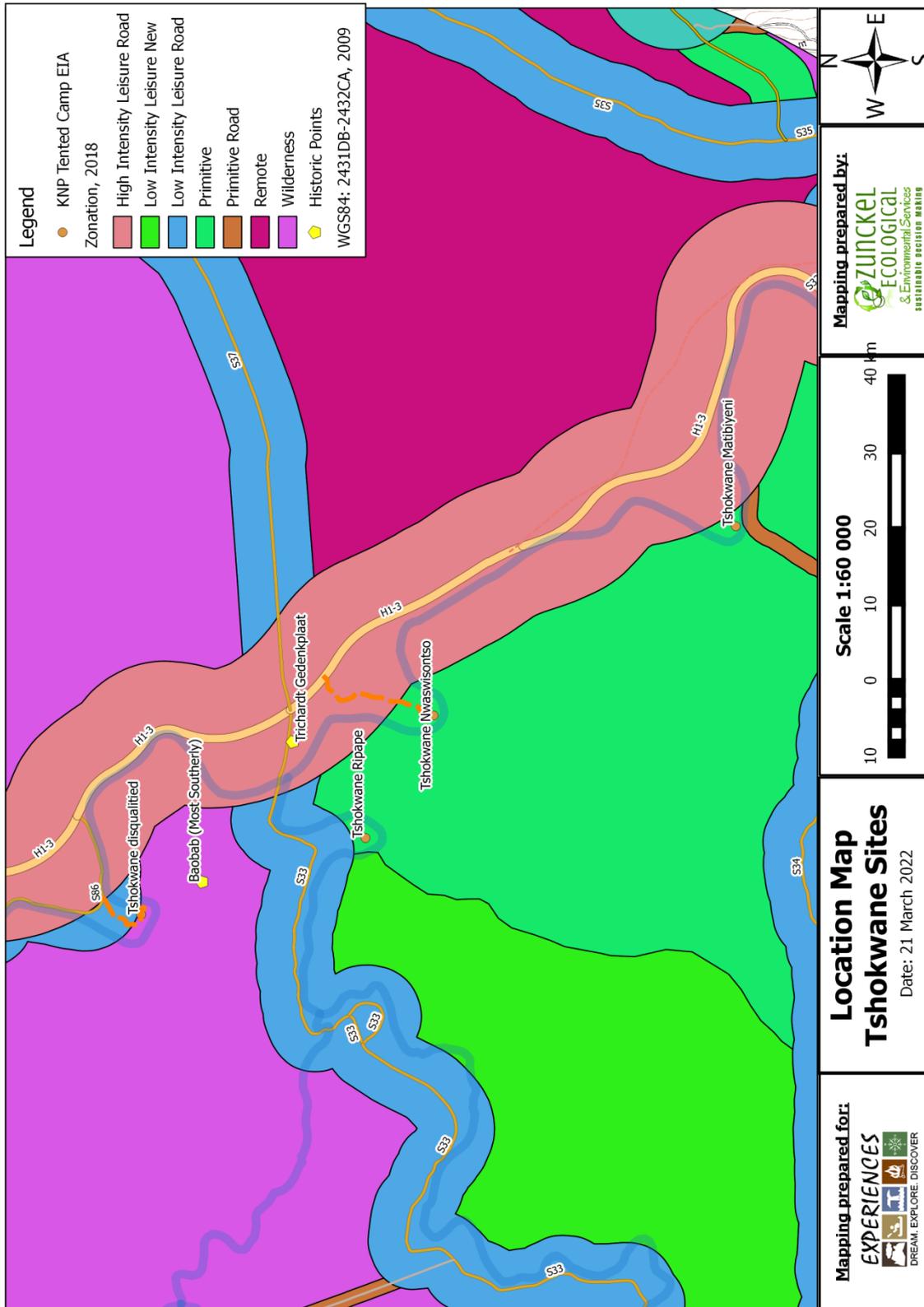


Figure 15: Zonation relevant to the preferred Tshokwane Camp Site.

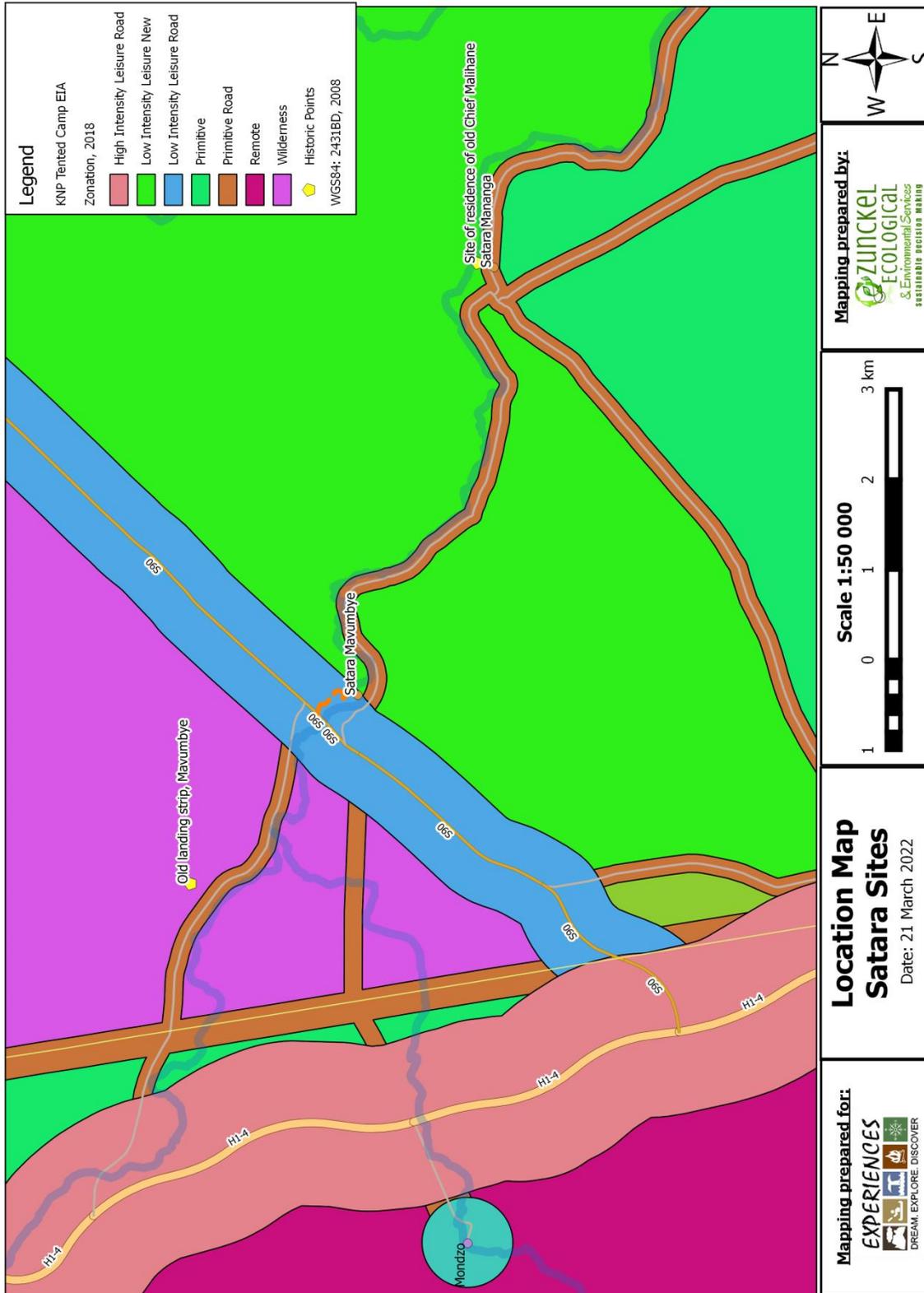


Figure 16: Zonation relevant to the preferred site near the Satara Rest Camp.

From the above it can be seen that the zones relevant to this assessment of compatibility are Wilderness, Primitive, Low Intensity Leisure, Low Intensity Leisure Road and High Intensity Leisure Road. Information/text related to these zones, i.e. their objectives, activities and facilities, has been

extracted from the KNP PMP 2018 – 2028, inserted below and discussed in relation to the proposed activities to provide an indication of compatibility.

#### 4.1.1 Wilderness

##### 4.1.1.1 Objective

The objective of this conservation orientated zone is to protect areas of the park that are un-impacted by human developments to provide an experience aimed at intangible attributes such as solitude, remoteness, wildness, and serenity (wilderness qualities). As such, they are areas where the sights and sounds of human activities are infrequent or that have high scenic or natural qualities allowing for an experience of isolation. The main accent of management is biodiversity conservation and the conservation of the wildness for the appreciation by future generations. The park also has extensive scope to provide a true wilderness experience as defined in the NEM: PAA.

To allow for management actions, to secure biodiversity assets and to make these wilderness areas more accessible to suitable tourism products, the existing roads bisecting the large Wilderness blocks will be maintained. The resulting Wilderness clusters will be governed by cluster guidelines as defined in the Conservation Development Framework (CDF).

##### 4.1.1.2 Visitor activities and experience

*Activities:* Access is through guided non-mechanised means and is controlled in terms of number, frequency and size of groups. Activities include non-mechanised activities such as hiking or birding. Visitors need to be self-reliant as no infrastructure, either temporary or permanent, is allowed in the zone, as the nature of the experience is heavily dependent on the quality of the Wilderness zone. The duration of any overnight accommodation is strictly limited, based on the “pack-in pack-out” basis, with no permanent alterations to the site (such as bush clearing).

*Interaction with other users:* There should be zero interaction between different groups, including any sound or sight. The number of groups within the area will be determined by the ability to ensure that there is no interaction between groups.

##### 4.1.1.3 Facilities

*Type and size:* No facilities are allowed. Should overnight facilities be required to serve this zone, these should be placed in suitable adjoining zones.

*Sophistication of facilities:* “Pack-in pack-out” activities only, with visitors making use of self-carried tents.

*Audible equipment and communication structures:* None within the zone and the impact of such structures in surrounding zones must be considered for new installations.

*Access and roads:* No roads and mechanised access are allowed within the designated Wilderness blocks. Access to the Wilderness cluster is through existing roads, zoned Primitive, bordering the Wilderness blocks. Access is controlled and for a limited number of vehicles. This is to allow for operational activities or for guided access to a specific location from which visitors walk into the block. Low volume access 4x4 routes could be accommodated in or through the Wilderness clusters using the Primitive Road zone. Heavy machinery such as trucks or large numbers of vehicles is only

allowed under exceptional circumstances for operation purposes. No infrastructure may be erected along the access routes.

## 4.1.2 Primitive

### 4.1.2.1 Objective

The main objective of this conservation-orientated zone is to provide a relative sense of solitude and relaxation in an environment that maybe exposed to some sights and sounds of human activities. Although it is a place of quietness and naturalness, there will be more interaction between users than in the Remote zones. The zone is easy to access through mechanised means on access-controlled roads. The quality of the experience is less dependent on the quality of the natural environment with the provision of small, low impact accommodation with some activities.

Key management objectives of this zone are biodiversity restoration within the context of heritage, resource and recreational use. Development is limited and reflects and respects the natural environment.

### 4.1.2.2 Visitor activities and experience

*Activities:* Provides for a range of recreation activities such as self-drive game viewing, birding and guided hiking and mountain biking which can be undertaken in designated areas and along designated routes.

*Interaction with other users:* Interaction between groups of users is low.

### 4.1.2.3 Facilities

*Type and size:* Small, basic self –catering accommodation or concessions with limited numbers (<80 beds) that is well distributed to avoid contact between users. 4x4 Routes and guided hiking trails. No day visitor facilities are allowed in the camps within this zone and tourist facilities such as bird hides, whilst allowed, should rather be in the LIL or HIL zones for more general use.

*Sophistication of facilities:* Basic camp facilities or low impact camps that provide a good level of comfort whilst still providing a sense of wildness and solitude.

*Audible equipment and communication structures:* Allowed, but should be managed to retain a relative level of solitude.

*Access and roads:* Roads zoned as Primitive need to adhere to the regulations of the zones they traverse. Access controlled tourist roads and management access are allowed within the Primitive Zone. Access to the zone is through existing roads, with the option of new roads (though only after the appropriate workflow has been followed). Access is for a low number of vehicles at a time to allow for operational activities or for guided and self-drive activities. Low volume access 4x4 routes could be accommodated. Heavy machinery such as trucks or large numbers of vehicles is only allowed in designated areas and along designated routes for seasonal mobile tented camps or operation purposes. Limited infrastructure may be erected along the access routes for alight-from-vehicle points or heritage sites.

### 4.1.3 Low Intensity Leisure

#### 4.1.3.1 Objective

The objective of this tourist-orientated zone is to provide infrastructure for day and overnight visitors in a natural environment. These zones are well patronised areas that provide accessible, safe, natural areas with a range of accommodation and recreational or leisure activities. Group interaction and socialisation are an integral part of the experience, which depends more on the quality of the facilities provided than on a completely natural environment. Impacts on the surrounding areas are restricted through intensive landscaping and vegetation management. Limited, sympathetic development is permitted in these areas, linked specifically to tourism, recreation and management of the park.

While large game viewing areas may be zoned LIL as placeholders to allow for flexibility in siting new camp developments, in reality, development footprints should be localised, with some areas having more of a primitive zone “feel”.

#### 4.1.3.2 Visitor activities and experience

*Activities:* Self-drive motorised game viewing, guided game drives, picnicking, walking / hiking, cycling.

*Interaction with other users:* Moderate to high.

#### 4.1.3.3 Facilities

*Type and size:* A range of small to medium self-catering (including camping) and catered accommodation options (<360 beds). Camps have a peaceful feel without large commercial facilities such as shops and restaurants. Additional facilities could include swimming pools. Trails for 4x4 vehicles can also be provided. Small or seasonal (facilities are only open as required or during peak season) commercial facilities, such as kiosks or tea gardens as well as tented concession camps could be provided. However, these should still fall within the general ambience of the zone. Larger commercial facilities and larger concession restaurant operators (e.g. Cattle Barons, Mug-and-Bean), should rather be placed in the High Intensity Leisure (HIL) zone.

*Sophistication of facilities:* Mostly comfortable self-contained self-catering accommodation units with bathroom facilities. Luxury catered options may also be accommodated. Low impact campsites mostly include ablution and kitchen facilities but with limited additional facilities. Tourist facilities should not include permanent commercial facilities such as shops, convenience stores or restaurants.

*Audible equipment and communication structures:* Cell phone coverage in vicinity of camps. Code of use for cell phones and radios required to retain relative level of solitude.

*Access and roads:* Motorised self-drive sedan car access (traditional game viewing) on designated gravel roads. Large busses are restricted to high volume roads designed to accommodate them. These roads are dictated as such.

#### 4.1.4 High Intensity Leisure

##### 4.1.4.1 Objective

The main objective of this tourist orientated zone is the concentration and containment of commercial, tourism, managerial and operational park activities in a restricted and designated area, which is robust enough to tolerate development, and where these diverse activities can piggyback off multi-use infrastructure (roads, plumbing, power), thus reducing their overall footprint. This zone allows for higher density tourism development with modern commercialised amenities and a concentration of visitor facilities. The quality of the visitor experience is heavily dependent on the quality of the facilities which enable the visitor to experience the environment with a minimum of effort.

The focus of management is to ensure high quality visitor facilities and experience whilst ensuring that the activities have a minimal impact on the surrounding natural environment. As impacts and particularly cumulative impacts are higher, where possible the HIL zone should be placed on the periphery of the park, and in areas that have low sensitivity values, and are robust enough to tolerate development. Staff not directly associated with tourism facilities should be accommodated outside of the park if possible. All new industrial type facilities such as laundries, abattoirs, maintenance depots and workshops, should ideally be located close to the park boundary or, if possible, outside of the park.

In all cases, HIL zones should reflect the ethos and character of the park.

##### 4.1.4.2 Visitor activities and experience

*Activities:* Traditional game viewing routes with more sophisticated infrastructure, such as large picnic and day visitor sites and activities associated with amenities such as dining in larger or concessional restaurants.

*Interaction with other users:* High

##### 4.1.4.3 Facilities

*Type and size:* High-density camps (>400 beds) providing a range of tourist accommodation with diverse modern amenities. Restaurants, shops, education / information centres, view sights, ablution facilities, parking areas. Day visitor sites are provided outside of rest camps where possible. Day visitor sites or picnic sites may provide catered facilities and kiosks. Where it may be necessary to provide high-density recreational sites with a wide range of intensive activities, an attempt should be made to concentrate these sites close to the access points of the park. Staff villages and administrative centres should be restricted to core staff. Non-essential staff housing, administration and industrial infrastructure should be positioned outside of or close to the periphery of the park where possible.

*Sophistication of facilities:* Moderate to high-density facilities. Self-catering and catered. Camps often have diverse modern facilities such as shops and restaurants, which may be concessional.

*Audible equipment and communication structures:* Cell phone coverage in vicinity of camps. Code of use for cell phones and radios required to retain relative level of solitude.

*Access and roads:* The zone is highly motorised, including busses and delivery vehicles on designated routes that are tarred. Care must be taken to distinguish between roads that serve as high access delivery routes to camps, link roads between camps, and game viewing roads, to minimise conflict between users.

#### 4.1.5 Compatibility Assessment

By overlaying the locality and extent of the preferred sites, and in consideration of all the information provided and discussed in 3.2 on the above descriptions, it is possible to provide an indication of compatibility (green) and/or otherwise (red). The outcome of this process is captured in Table 6. From this it can be seen that there are no aspects of incompatibility associated with the sites selected as preferred and alternative sites, with the exception of the most northerly option for Tshokwane which is bisected by a portion of Wilderness zone, and is therefore incompatible.

**Table 6: Assessment of site compatibility in relation to KNP zonation.**

| ZONES AND ZONE ASPECTS            | CAMP SITES    |        |              |            |          |         |
|-----------------------------------|---------------|--------|--------------|------------|----------|---------|
|                                   | TSHOKWANE     |        |              |            | SATARA   |         |
|                                   | Alternative 1 | Ripape | Nwaswitsonto | Matibiyeni | Mavumbye | Mananga |
| <b>WILDERNESS</b>                 |               |        |              |            |          |         |
| Objective                         | Red           |        |              |            |          |         |
| Visitor activities and experience | Red           |        |              |            |          |         |
| Facilities                        | Red           |        |              |            |          |         |
| <b>PRIMITIVE</b>                  |               |        |              |            |          |         |
| Objective                         |               | Green  | Green        | Green      |          | Green   |
| Visitor activities and experience |               | Green  | Green        | Green      |          | Green   |
| Facilities                        |               | Green  | Green        | Green      |          | Green   |
| <b>LOW INTENSITY LEISURE</b>      |               |        |              |            |          |         |
| Objective                         | Green         |        |              |            | Green    |         |
| Visitor activities and experience | Green         |        |              |            | Green    |         |
| Facilities                        | Green         |        |              |            | Green    |         |
| <b>HIGH INTENSITY LEISURE</b>     |               |        |              |            |          |         |
| Objective                         |               |        | Green        | Green      |          |         |
| Visitor activities and experience |               |        | Green        | Green      |          |         |
| Facilities                        |               |        | Green        | Green      |          |         |

#### 4.2 SITE DESCRIPTIONS

The information provided for the descriptions of the biophysical and cultural heritage features of the two proposed sites has been captured in Table 7 below. This information was gathered from relevant literature as referenced, analysis of spatial information, consultations with relevant SANParks officials and direct observations made during field surveys.

Three field surveys were carried out with one on the 26<sup>th</sup> and 27<sup>th</sup> of August 2020 (at the end of the dry season), another on the 15<sup>th</sup> and 16<sup>th</sup> of October 2020 (after the onset of the wet season) and another on 30 November and 1 December 2021. These surveys entailed intensive walkovers on each site with relevant biophysical features being noted, photographed and spatially referenced.

Each survey was accompanied by relevant SANParks officials who also provided important insights based on their local knowledge. Particular reference is made here to the Regional Ranger, Mr Steven Whitfield, and the three Sections Rangers, Mr Rob Thomson, Mr Robert Bryden and Mr Wilson Siwela. Tshokwane Alternative 1 and Matibiyeni have been excluded from this description.

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**Table 7: A summary of the biophysical and cultural heritage features of the proposed sites**

| CHARACTERISTIC   | TSHOKWANE   |  | SATARA  |   |
|--|---|--|---|---|
|  | RIPAPE  | NWASWITSONTO   | MAVUMBYE  | MANANGA   |
| Gradient (source: Google Earth)  | Across the 344m north-south axis the gradient varies from 277m to 275m with a 4m drop off into the Ripape water course over the last 30m. This gives an average slope of between 1.5 to -3.7. The west-east axis cuts across this peninsula and therefore has a 1% gradient for the first 30m out of the Ripape, followed by a gentle 0.1% for the bulk of the axis, with a steeper drop of 15% into the Ripape again.  | Across the 600m north-south axis the gradient varies between 1% and -1.2% and across the west-east axis of 237m the gradient varies between 2% to -1.5% with short steep slopes dropping off into the Nwaswitsontso River in the west. | Across the 250m north-south axis the gradient is -0.9% and across the 153m west-east axis the gradient is 1% for the first 75m and then -1% for the next 75m. The site is flat with short steep slopes dropping off into the Mavumbye River.  | The 200m north-south axis has a very gentle gradient of 0.1% from the Phahlela water course to the southern edge of the concession area; while the west-east axis undulates very slightly from a low of 229m to a high of 231 across 500m with the gradient varying from 1.7% to -2.2%. |
| Location in the landscape (source: Google Earth and field observations)          | Flood plain adjacent non-perennial watercourse.   |  | Flood plain adjacent perennial water course.  | Flood plain adjacent non-perennial watercourse.   |
| Geology and soils (source: KNP PMP 2018 -2028)                                   | Karoo Supergroup shale and sandstone with sheets and dykes of dolerite; soils rich in Na and prone to erosion   |  | Letaba Formation basalts; black, brown or red clayey soils, vertisols in low-lying areas.   |   |
| Surface water/hydrology (source: Nel et al, 2011) (see Figure 17 and Figure 18). | The non-perennial Ripape and Nwaswitsontso Rivers are located in the far north of the Inkomati Water Management Area and the proposed site is on the banks of this watercourse in the sub-quadernary catchment 598. Together with sub-quadernaries 592 and 663 they are recognised as an 'Upstream Management Area' due to sub-quadernary catchments 594, 616 and 660 being recognised as 'River FEPA & associated sub-quadernary catchment'. There are no NFEPA wetlands within these sub-quadernary catchments. |  | The perennial Mavumbye River and its non-perennial tributary, the Phahlela, are located in the extreme far north of the Inkomati Water Management Area and the proposed sites are on the banks of these watercourses. The entire catchment of this system, and the watercourses themselves, have no NFEPA status, although there is a wetland cluster in the southern portion of the catchment which is a substantial distance from the proposed sites. |   |
|  | Consultation with Dr Eddie Riddell, Manager: Water Resources in the KNP, indicate that the nature of the proposed activities appear to be compatible with these systems and that any potential impacts will be satisfactorily addressed through the EIA process, particularly   |  |   |   |

| CHARACTERISTIC  | TSHOKWANE   |              | SATARA  |         |
|---|---|--------------|---|---------|
|   | RIPAPE  | NWASWITSONTO | MAVUMBYE  | MANANGA |
|   | considering that they are temporarily located and active in the dry season.   |              |   |         |
| Aquatic biodiversity  | Figure 17 (left) shows the wide sandy river bed of the non-perennial Nwaswitsontso River showing that this system may only carry aquatic biodiversity features after significant precipitation events that occur from time to time in the wet season. Note that the Ripape is a tributary of the Nwaswitsontso and has the same characteristics.  |              | Figure 17 (right) shows the narrow perennial water course of the Mavumbye River which will carry aquatic biodiversity features throughout the year, although it has not been identified as a FEPA by Nel et al (2011). Note that the Phahlela is a non-perennial tributary of the Mavumbye and is therefore less sensitive to any potential impacts on the aquatic biodiversity.  |         |
| Vegetation cover (source: KNP PMP 2018 – 2028) (see Figure 19).   | SVI4 Delagoa Lowveld:<br>Dense tree or tall shrub layer dominated by <i>Senegalia welwitschii</i> (Delagoa Thorn).  |              | SVI5 Tshokwane-Hlane Basalt Lowveld:<br>Open tree savanna, often dominated by <i>Sclerocarya birrea</i> (Marula) and <i>Senegalia nigrescens</i> (Knobthorn), moderately dense shrub layer and dense herbaceous layer.  |         |
| Plant biodiversity<br>Conservation status:<br>LC - least concern<br>NP – not protected<br>P – protected<br>CR – critically endangered<br>Plant species identified on site are listed below with their common names and conservation status: | <i>Combretum microphyllum</i> (Flame Creeper) - LC<br><i>Diospyros mespiliformis</i> (Jackalberry) – NP<br><i>Euclea divinorum</i> (Magic Guarri) - LC<br><i>Ficus craterostoma</i> (Strangler Fig) – LC<br><i>Grewia flavescens</i> (Raisinbush) - LC<br><i>Gymnosporia heterophylla</i> (Common Spike Thorn) - LC<br><i>Kigelia africana</i> (Sausage Tree) – LC<br><i>Panicum maximum</i> (White Buffalo Grass) - LC<br><i>Philenoptera violacea</i> (Apple Leaf) - P<br><i>Spirostachys Africana</i> (Tamboti) - LC<br><i>Trichilia emetic</i> (Mahogany) - LC<br><i>Vachellia robusta</i> (Broadpod Robust Thorn) - LC   |              | Plant species identified on site are listed below with their common names and conservation status:<br><i>Capparis tomentosa</i> (Woolly Caper Bush) - LC<br><i>Combretum mossambicense</i> (Knobbly Creeper) - LC<br><i>Croton megalobotrys</i> (Fever Berry) - LC<br><i>Diospyros mespiliformis</i> (Jackalberry) – NP<br><i>Ficus sycomorus L. subsp. sycomorus</i> (Sycamore Fig) - LC<br><i>Euclea divinorum</i> (Magic Guarri) – LC<br><i>Gymnosporia heterophylla</i> (Common Spike Thorn) - LC<br><i>Kigelia africana</i> (Sausage Tree) – LC<br><i>Panicum maximum</i> (White Buffalo Grass) - LC<br><i>Philenoptera violacea</i> (Apple Leaf) - P<br><i>Spirostachys Africana</i> (Tamboti) - LC<br><i>Trichilia emetic</i> (Mahogany) - LC<br><i>Vachellia robusta</i> (Broadpod Robust Thorn) - LC |         |
|   | Note that <i>Adenium swazicum</i> (Impala Lily) – CR, which was predicted to possibly occur on both sites (pers comm Guin Zimbatis), was not observed on any of the sites, and the Regional and Section Rangers confirmed its absence from the sites according to their local knowledge.  |              |   |         |
| Animal biodiversity   | All four sites represent very small areas of much widely occurring habitat types and thus the animal biodiversity that occurs throughout these habitat types will occur on these sites as well, with the majority of the animals being transient. The latter is clearly evident by the number of game paths present on each site (see Figure 21). However, as an indication of the relatively small portion of habitat that will be unavailable to animals during the dry season operation of these camps, the proportional extent of the Ripape, Nwaswitsontso, Mavumbye and Phahlela watercourses that will be taken up by the camps is a very small percentage with the remaining majority of the areas still be |              |   |         |

| CHARACTERISTIC   | TSHOKWANE   |  | SATARA   |  |
|--|---|--|--|--|
|  | RIPAPE  | NWASWITSONTO   | MAVUMBYE   | MANANGA  |
|  | available for animal access and movement.   |  |  |  |
| Land Use Character of Surrounding Area as per the discussion in Section 4.1. | The site is within a Pristine zone that extends to the east and south, with the existing access track to the north in a Low Intensity Leisure zone which also occurs to the west of the site. | The site is within and surrounded by a Primitive zone with the new access track located to the north east in a High Intensity Leisure zone.  | This site is located within a Light Intensity Leisure Road Zone and is immediately adjacent to a Light Intensity Leisure New zone as discussed in Section 4.1.   | This site is located within a Primitive zone and immediately adjacent to a Low Intensity Leisure zone to the north across the Mavumbye River.  |
| Ecological Functionality   | The ecological functionality of all the sites is high with current impacts being limited to gravel tourism roads and old water provision infrastructure adjacent to the Satara sites.         |  |  |  |
| Cultural/Historical Features   | No cultural heritage features are present on this site.   | The southernmost Baobab Tree ( <i>Adansonia digitate</i> ) is located approximately 2km to the north of the Ripape site and the Trichardt Memorial Plaque is located approximately 1.3km to the north east (see Figure 2). | No cultural heritage features are present on this site. The old Mavumbye Landing Strip is located approximately 3km to the west north west and the Site of Residence of Chief Malihane is approximately 5km to the east south east (see Figure 3). | Stone artefacts are evident on this site (see Figure 20) and the locality of the site of the Residence of Chief Malihane is 60m to the north of the concession boundary across the Phahlela water course (see Figure 3). |



**Figure 17:** The non-perennial river bed of the Nwaswitsontso on the left and the perennial water course of the Mavumbye on the right (© Kevan Zunckel).

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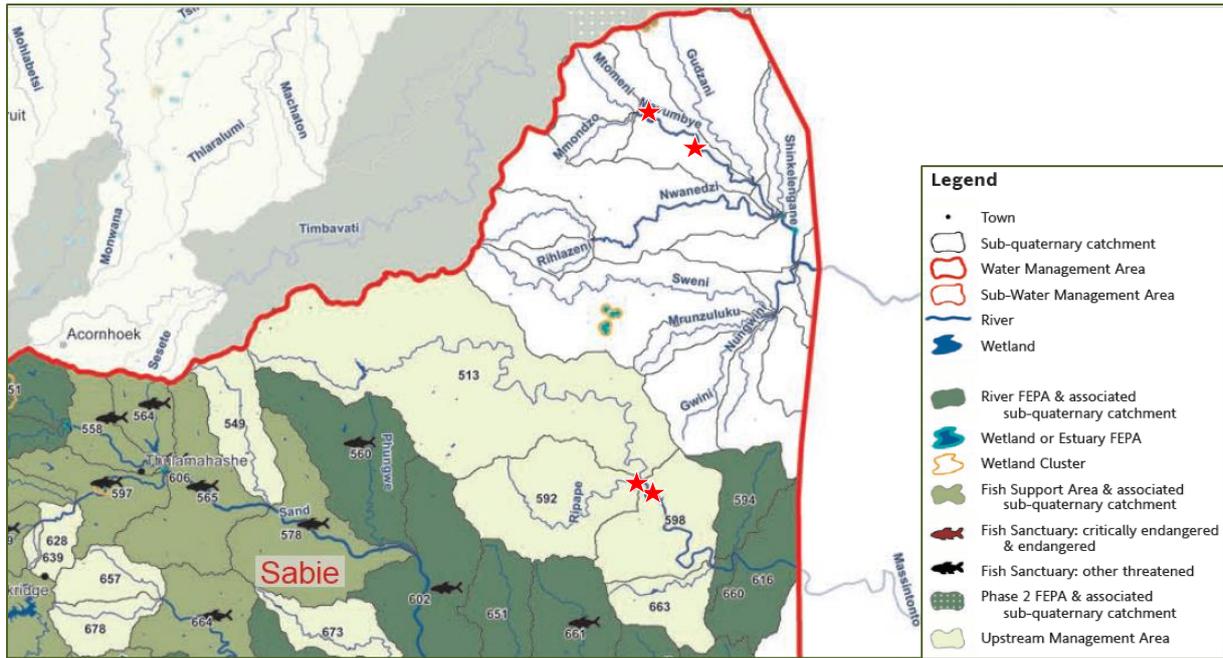


Figure 18: An extraction from the Inkomati Water Management Area illustrating the NFEPA status related to the proposed sites (source: Nel et al, 2011).

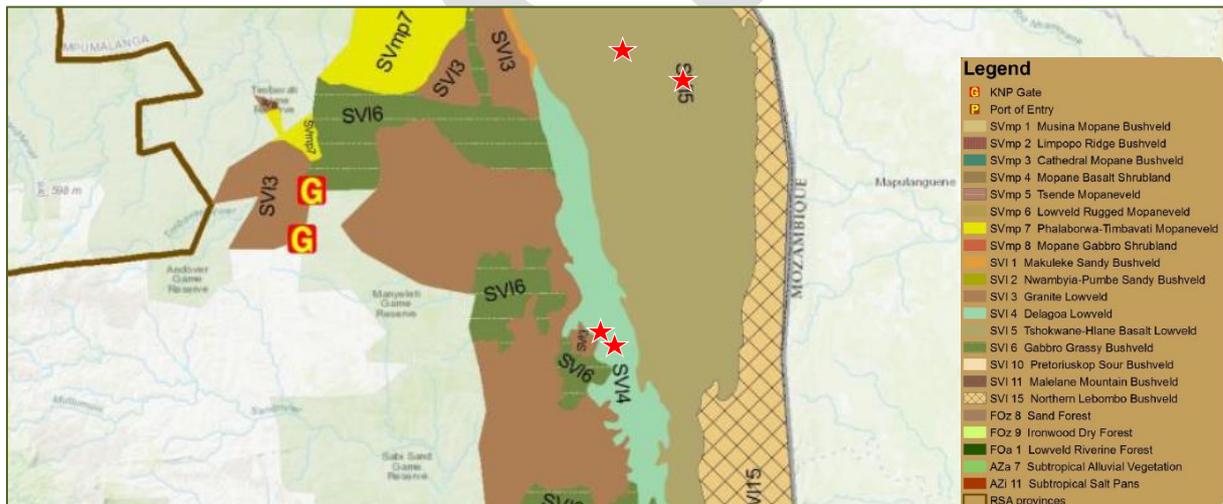


Figure 19: The locality of the proposed sites within the broad vegetation types in the Kruger National Park (source: KNP PMP 2018 – 2028).



Figure 20: Evidence of stone artefacts found at the Satara Mananga site (© Kevan Zunckel).



**Figure 21: Evidence of the movement of animals through the proposed sites with the Tshokwane Nwasitsonto site on the left and the Satara Mavumbye site on the right (© Kevan Zunckel).**

## 5 LEGAL AND POLICY FRAMEWORK

SANParks is bound by a number of statutes with relevance to environmental management of [National] Parks, including (without limitation) the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) (NEMPAA); the National Water Act 36 of 1998 (NWA); the Water Services Act, 108 of 1997; the National Environmental Management Act, 107 of 1998 (NEMA); the National Environmental Management: Air Quality Act (NEM:AQA); the Hazardous Substances Act, 15 of 1973; and the National Heritage Resources Act, 25 of 1999 (NHRA).

In addition to these are the internal policies of SANParks as these relate to the development and operation of commercial ventures in the KNP. While an over-arching Environmental Management System is still to be developed for the KNP the Selati Accommodation PPP Agreement (SANParks, 2016b) includes clear guidelines in Schedule 8 of the document entitled “Environmental Specifications for the Operation of Selati Precinct Facility within the Protected Areas”. These guidelines have been developed from the basis of documents such as the KNP Management Plan and internal multi-disciplinary workshops and are available on the SANParks website ([www.sanparks.org](http://www.sanparks.org)).

A comprehensive view of policy and legislation relevant to this proposed development is provided in Table 8, together with an indication of how the proposed development is compliant and responsive to these.

**Table 8: A list of relevant legislation and policy**

| Title of legislation, policy or guideline                                    | Purpose of the legislation and applicability to the project  | Administering authority                   | Proposed activity compliance/response   |
|--|--|---|---|
| Constitution of Republic of South Africa (108 of 1996):                      | <p>This is the fundamental law of South Africa, setting out the Bill of Rights as well as the relationship of various government structures to each other.</p> <p>“Everyone has the right –</p> <p>(a) to an environmental that is not harmful to health or well-being; and</p> <p>(b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that –</p> <p>a. prevent pollution;</p> <p>b. promote conservation; and</p> <p>c. secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.</p>                                     | National Government                       | <p>The proposed activity has been conceptualised, designed and planned in respect of meeting these constitutional requirements in that all recommended mitigation actions will be implemented and frequently monitored ensuring that any pollution risks are avoided and addressed and that conservation is promoted. Both establishment/breakdown and operational phases will happen within the limits of sustainability both in terms of the natural and social environments.</p> |
| Conservation of Agricultural Resources (Act 43 of 1983):                     | <p>The purpose of the Conservation of Agricultural Resources Act No. 43 of 1983 (CARA) is to provide for control over the utilisation of the natural agricultural resources of the Republic in order to promote the conservation of the soil, the water sources and the vegetation and the combating of weeds and invader plants.</p>  | National Department of Agriculture (DAFF) | <p>Mitigation measures are in place to ensure that no impacts on soil and water occur during the establishment/breakdown and operational phases of the proposed development, and the need to address potential weed infestations is also noted in the EMPr.</p>   |
| National Environmental Management: Protected Areas Act (Act No. 57 of 2003): | <p>The Act provides for the protection and conservation of ecologically viable areas representative of South Africa’s biological diversity and its natural landscapes and seascapes; for the establishment of a national register of all national, provincial and local protected areas; for the management of those areas in accordance with national norms and standards; for intergovernmental co-operation and public consultation in matters concerning protected areas, and for matters in connection therewith. The proposed development falls within the Kruger National Park, a Protected Area in terms of this Act, and will therefore be subject to the provisions of this Act.</p> | Department of Environmental Affairs       | <p>The opening paragraphs of this section speak specifically to the policy framework of SANParks within which this development is nested and controlled. SANParks have taken responsibility for ensuring that the development fits within the legal and policy framework for the KNP and have provided written evidence of such as discussed in Section 1 and included in Annex A.</p>  |

| Title of legislation, policy or guideline                                       | Purpose of the legislation and applicability to the project   | Administering authority                           | Proposed activity compliance/response  |
|---|---|---|--|
|   | Specifically including the following: <ul style="list-style-type: none"> <li>Regulations for the proper administration of special nature reserves, national parks and world heritage sites, published under Government Notice R1061, In Government Gazette 28181, dated 28 October 2005.</li> <li>Norms and standards for the management of protected areas, published under Government Notice R382, In Government Gazette 399878, dated 31 March 2016.</li> </ul>  |   |  |
| National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004): | The objects of the National Environmental Management: Biodiversity Act 10 of 2004 (NEMBA) are to provide for the management and conservation of biological diversity within South Africa and of the components of such biological diversity; to give effect to ratified international agreements that are binding on South Africa; and to ensure the protection of the ecosystem as a whole, including species that are not targeted for exploitation.  | Department of Environmental Affairs               | It is acknowledged that both proposed sites are on green field sites within a National Park and that it is therefore absolutely critical that the proposed activities are compatible and that all negative impacts are avoided and at least mitigated, while the positives are enhanced to the fullest extent. |
| National Biodiversity Strategy and Action Plan                                  | The National Spatial Biodiversity Assessment (NSBA) classifies areas as worthy of protection based on their biophysical characteristics, which are ranked according to priority levels. The proposed development sites are located in areas zoned as Primitive, Low Intensity Leisure and High Intensity Leisure as per the draft Park Management Plan for 2018 – 2028.   | Department of Environmental Affairs and SANBI     | The locality and nature of the proposed activities are within and compatible with the zonation as per the draft Park Management Plan for 2018 – 2028, which ensures that the requirements of the NSBA are not compromised.   |
| National Forests Act, 1998 (Act no 84 of 1998):                                 | The purposes of the National Forests Act No. 84 of 1998 (NFA) are, inter alia, to promote the sustainable management and development of forests for the benefit of all and to enact special measures for the protection of certain forests and trees. The minister may declare any tree, group of trees, woodland or species to be protected trees, groups of trees and species (Section 12) or a particular forest to be a “natural forest” (Section 7). Specified activities in respect of these areas or trees are prohibited by the NFA. Protected trees require permits to move, or damage them. | Department of Agriculture, Forestry and Fisheries | Minimal clearing of small shrubs and some saplings will be required and where this will impact on protected species, specifically the <i>Philenoptera violacea</i> (Apple Leaf), permits for this will be obtained.  |
| National  | The National Heritage Resources Act legislates the  | South African                                     | No cultural heritage features were observed on three of the four sites   |

| Title of legislation, policy or guideline                      | Purpose of the legislation and applicability to the project  | Administering authority                        | Proposed activity compliance/response  |
|--|--|--|--|
| Heritage Resources Act 25 of 1999                              | necessity for cultural and heritage impact assessment in areas earmarked for development, which exceed 0.5 hectares (ha) and where linear developments exceed 300 metres in length. In this regard, the proposed development site will not be subject to engagement with the South African Heritage Resources Agency (SAHRA). Potential impact on cultural heritage, paleontological or archaeological resources through excavation activities or disturbance, whilst unlikely, will need to be monitored. | Heritage Resources Agency (SAHRA)              | and the historical features that are in proximity will not be impacted on by the proposed activities. A chance find policy will be implemented on all sites, but specifically on the Satara Mananga site where stone artefacts were found.   |
| The National Water Act, (Act No. 36 of 1998)                   | The purpose of the National Water Act 36 of 1998 (NWA) is to ensure that the nation's water resources are protected, used, developed, managed and controlled in ways that ensure that the integrity of water resources are protected.  | Department of Water and Sanitation through the | A Water Use Licence will be applied for at the Tshokwane sites where boreholes will be drilled to supply the camps. The KNP General Authorisation will cover water use at the Satara sites.  |
| National Environmental Management Waste Act 59 of 2008         | The National Environmental Management: Waste Act (NEMWA) was primarily enacted to reform the law regulating waste management in order to protect health and the environment by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development.   | Department of Environmental Affairs            | Waste generation volumes are insignificant but will be completely absorbed into the Satara bulk infrastructure as far as waste water is concerned. Solid waste will be subjected to the RRR policy with separation taking place on site and removal to the Satara solid waste management facility. |
| Occupational Health and Safety Act, 1993 (Act No. 85 of 1993): | The purpose of this Act is to provide for the health and safety of persons at work and for the health and safety of persons in connection with the use of plant and machinery; the protection of persons other than persons at work against hazards to health and safety arising out of or in connection with, the activities of persons at work. The proposed development will therefore be subject to this Act during the construction and operational phases of the project.                            | National Department of Labour                  | The EMPr speaks to these aspects for the establishment/breakdown and operational phases and BidCo (Pty) Ltd. have provided commitments to meeting these requirements as per the PPP Agreement contained in Annex A.  |
| DEA Integrated Environmental Management Information Series     | IEM is a key instrument of NEMA and provides the overarching framework for the integration of environmental assessment and management principles into environmental decision-making. The aim of the information series is to provide general information on techniques, tools and processes for environmental assessment and Management.   | Department of Environmental Affairs            | These guidelines have been applied in the assessment of the proposed activity and its potential impacts on the natural, social and economic environment.   |

## 6 STAKEHOLDER AND ROLEPLAYER PARTICIPATION

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### 6.1 PUBLIC PARTICIPATION

Public involvement in this impact assessment process was facilitated through the following actions:

- A notice of intention to apply for environmental authorisation was published as follows:
  - On the SANParks website and in selected social media platform managed by the SANParks media liaison personnel on 23 September 2020;
  - In the Lowvelder on 24 September 2020; and
  - In the Hoedspruit Herald on 25 September 2020.
  
- Laminated A3 notices were posted at the following localities:
  - Phabeni Entrance Gate reception – adjacent to reception entrance;
  - Paul Kruger Gate reception – adjacent to reception entrance;
  - Skukuza Rest Camp reception notice board;
  - Skukuza Rest Camp shop notice board;
  - Satara Rest Camp – reception notice board;
  - Orpen Gate Rest Camp - reception notice board;
  - Orpen Gate – at the entrance to the reception office;
  - SANParks Head Office reception; and
  - SANParks Head Office central reservations.

Evidence of the above is provided in Annex G in Figure 22 to Figure 24. The contact database for the Interested and Affected Parties (I&APs) and authorities is included as Annex H and evidence of distribution of the draft documents for review and comment is provided in Annex J.

In addition to the above the General Manager of the N’wanetsi Concession in the Kruger National Park was informed directly as this concession area is in relatively close proximity to the Satara site of this initiative, i.e. just more than 10km to the east.

Public responding to these notices were registered as I&APs in a contacts database (see Annex H) and were sent a copy of the Background Information Document (see Annex I).

### 6.2 AUTHORITY PARTICIPATION

The process of soliciting comments on draft documents from relevant authorities ran in parallel to the I&AP engagement process. Soft or Hard copies of draft and final documents, together with a digital copy on a Compact Disc, were emailed or couriered to the following:

- The Director: Integrated Environmental Authorisations, National Dept of Environmental Affairs, for attention Mr Herman Alberts and Muhammad Essop;
- The Director Protected Areas Planning Legislation Compliance and Monitoring, National Dept of Environmental Affairs, for attention Mr Thivhulawi Nethononda;
- SANParks - Skukuza Environmental Management, for attention Ms Shane Gertze;
- Environmental Impact Management (Ehlanzeni District), Mpumalanga Department of Agriculture, Rural Development, Land & Environmental Affairs (DARDLEA), for attention Ms Robyn Luyt;

- Water Resources Utilisation, Inkomati Usuthu Catchment Management Agency (IUCMA), for attention Mr Sampie Shabangu;
- Mpumalanga Parks and Tourism Authority, for attention Khumbelo Malele;
- Ehlanzeni District Municipality, for attention Thapelo Shabngu;
- Bushbuckridge Local Municipality, for attention Leavi Mokoena;
- City of Mbombela Local Municipality, for attention Mr Dumisani Mabuza; and
- The Mahlambandlophu Traditional Authority Forum, for attention Mr Moses Mathembule.

## 7 NEED AND DESIRABILITY

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In September 1998, the Department of Environmental Affairs and Tourism articulated the need for SANParks to prepare for a lesser dependence on state funding, which would increasingly be aimed at funding the essential conservation requirements. This formed the basis of the Commercialisation Strategy adopted by SANParks in 2000 with its foundation in economic theory, which defines the State's responsibility as one of performing a regulatory function and intervening in the market-place only where there is market failure. The objective was to reduce the dependence on state funding and improve existing operational efficiencies.

Following the implementation of the Commercialisation Strategy 2000, there have been significant developments in SANParks' approach to PPP initiatives. SANParks accordingly developed the Strategic Plan for Commercialisation 2006 to accommodate and benefit from:

- i. The experience and specialist skills acquired;
- ii. The lessons learnt from implementation and management of PPPs;
- iii. Legislative requirements; and
- iv. The extended scope of projects identified to enable SANParks to improve its infrastructure towards 2010 and beyond, generate revenues, promote B-BBEE and create employment.

The objective of the strategy is to ensure that SANParks has the fundamentals, including capacity, in place for managing existing, and for entering into new PPPs successfully. In addition, SANParks has a responsibility towards creating tourism infrastructure on a longer term as compared to a tourism organisation run by a private company. Such infrastructure will enable South Africa to compete with global tourism destinations like Brazil and Thailand for example. Commercialisation through PPPs provides SANParks the opportunity to achieve this goal.

As part of its Strategic Plan for Commercialisation 2013 - 2018, SANParks identified the tourism PPP opportunity for seasonal Mobile Tented Safari Facilities in the Kruger National Park. It is intended that by SANParks entering into the PPP with a Private Party, SANParks may be able to generate additional revenue through PPP fees paid to SANParks by the Private Party, while enabling SANParks to focus on its core activity of conservation. In keeping with SANParks' objectives, particular attention will be paid to the implementation of Broad-Based Black Economic Empowerment ("B-BBEE"), particularly those from local communities adjacent to the Parks. In this regard, SANParks will require that Interested Parties confirm their willingness to promote B-BBEE by entering into an agreement with a local community trust partner. In addition, the Private Party will have to respect existing SANParks regulations regarding protection of the environment. It is intended that the

project will be developed by the Private Party in compliance with strict environmental standards maintained by SANParks.

From an environmental management perspective SANParks has set very clear and stringent operating protocols for the Private Party. These are captured in detail in the Request for Proposals and the PPP agreement, also addressing the extent to which adherence to these requirements will be monitored. The applicant has indicated their commitment to meet and exceed these requirements as stated in their proposal.

The development and operation of the Seasonal Mobile Tented Safari Facilities product ties in with the SANParks Commercialisation Strategy whereby the Private Sector will perform functions that are not the core business of SANParks being (but not limited to) full service luxury mobile tented accommodation.

Over the term of the product, income to SANParks from this operation is estimated at an average of R2.8 million annually, which equates to approximately 11% of total annual PPP income.

In addition to the income, the Seasonal Mobile Tented Safari Facilities product diversifies the SANParks product offering, offering guests a unique accommodation experience in the bush at sites that will only be open to guests staying at the camps.

The SANParks Commercialisation Strategy has resulted in the following socio-economic benefits:

- Increased employment - 2009 additional direct jobs excluding construction;
- 79% of employees recruited from communities adjacent to the Parks;
- Local SMME spend of R75 million per annum; and
- Multiplier economic effects to benefit local communities.

The Seasonal Mobile Tented Safari Facilities product will further contribute towards the above, with jobs sourced from local communities and an anticipated annual spend with local SMMEs. Unfortunately at this time it is not possible to quantify these benefits but the opportunity further allows for 10% equity by a local community trust.

In the absence of this development going ahead, SANParks will lose out on the opportunity to:

- generate revenue towards conservation and socio-economic development;
- further diversify its tourism products to attract new markets and enhance the tourism experience of its existing market; and
- use this PPP to further contribute towards local community upliftment.

Based on the above and the overall outcome of this environmental impact assessment, it can be seen that the proposed development is needed from a social and an economic perspective, and is desirable in terms of these perspectives as well.

It must be noted as well that these two seasonal mobile tented camps will provide guests with an enhanced wilderness experience, even though this will not meet the true definition of 'wilderness'. Given that there is a dire need to reconnect humanity with nature, any initiative that achieves this may be seen as desirable.

## 8 AUTHORISATION TIME FRAMES

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### 8.1 VALIDITY PERIOD

The PPP Agreement between BidCo and SANParks is valid for nine years from the date of its signing.

### 8.2 ACTIVITY SCHEDULE

As described in Section 3 the proposed activity is of a seasonal nature being operated from the beginning of May to the end of September each year with approximately one month either side of this operational period used for the setting up and the dismantling of all operational components. Given that all components will be brought in to the site at the beginning of each season and then removed again at the end of the season, it is deemed to be unnecessary to unpack the activity schedule more than that which has been provided here and in Section 3.

### 8.3 COMPLIANCE MONITORING

Prior to establishment each of the sites will be assessed by the relevant Section Rangers who will confirm if they will be able to accommodate the coming seasons activities, i.e. that no event has occurred during the wet season to modify the sites in any way that would prevent the camps from being established. If such a situation occurs, the alternative sites will be assessed to confirm suitability. Assuming suitability, the Section Rangers will also report any specific aspects that may need to be avoided by the camp layout. In the absence of the latter, the camp will then be established according to the layout details reflected in Figure 6 to Figure 9.

BidCo will appoint an independent Environmental Control Officer (ECO) who will compile an environmental compliance check list and will monitor camp establishment and breakdown on a weekly basis to ensure full compliance with the mitigation measures listed in this report, the Environmental Management Plan report and the conditions of establishment included in the Environmental Authorisation, should this be granted. The ECO will monitor the operational phase on a monthly basis and provide audit reports to the Environmental Management officer at Skukuza and the Concessions Management unit of SANParks in Pretoria.

In addition to the independent compliance auditing, SANParks will be free to visit the camp sites during setup, breakdown and operational phases in order to carry out their own compliance audits, if deemed necessary by the organisation. These may be carried out by the relevant Section Rangers, the Regional Ranger, the Environmental Management office at Skukuza and/or the Concession Management unit from Pretoria. Ideally compliance monitoring should be undertaken by the ECO in the company of the SANParks officials and camp management.

BidCo will ensure that all of their staff are well trained in all aspects of the environmental management requirements for camp setup, breakdown and operation and that specific members of staff are delegated the responsibility of monitoring and reporting on aspects specific to their areas of responsibility. For example, a member of the kitchen staff may be responsible for monitoring the condition of the grease traps and the management of solid waste, while a porter may be responsible for monitoring water usage and the integrity of any water reticulation for leaks and possible elephant damage. Detailed and accurate records of all environmental management aspects will need to be kept by the delegated members of staff and reported to a senior member who may then

act as the camps environmental management officer. The latter will be well trained in the environmental management requirements and specifications and will be held accountable for their attainment.

The following is an extract from the PPP Agreement:

- BidCo agrees to cooperate with SANParks in compiling a monitoring checklist that encompasses all environmental conditions. The checklist will be used for environmental compliance auditing purposes of the Mobile Tented Safari Facilities. In addition to the environmental compliance audits, the Environmental Manager and relevant Section Ranger will conduct site inspections from time to time.
- BidCo agrees that SANParks will monitor, evaluate and score the operations (based on the line items in the checklist) and that a score of less than 85% for three (3) consecutive audits would imply material breach of the PPP Agreement.

## 9 CONSIDERATION OF ALTERNATIVES

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### 9.1 ALTERNATIVE SITES

The Localities of all the sites that were assessed as part of this process are illustrated in Figure 1 to Figure 5. According to the PPP Agreement, the concessionaire will establish and operate the Tshokwane and Satara camps on the sites most suited to the activity, but two alternative sites will remain available in case any emerging biophysical dynamics prevent the use of any of the preferred sites. Such dynamics could be the altering of the water course through a heavy flood event during the wet season, the decimation of large tree canopy cover through excessive elephant damage, unseasonal fire, or the like.

Immediately after the first site visits on the 26<sup>th</sup> and 27<sup>th</sup> of August 2020, a working session was facilitated by the EAP with the applicant and the Regional Ranger, using the “Site Selection and Assessment Methodology” developed by the SANParks Business Development Unit. As a result of one of the Tshokwane alternatives being ruled out due to it being partly within a Wilderness Zone, additional alternative sites were identified by the Section Ranger. These were again assessed on 30 November 2021 and subjected to review through the “Site Selection and Assessment Methodology”. The scores allocated are reflected in Table 9 with the recommendation that the Tshokwane Ripape and the Satara Mananga site are the preferred sites and that the Tshokwane Nwaswitsonto and Satara Mavumbye will remain as alternatives should either one of the preferred sites be unusable in a given season.

### 9.2 ALTERNATIVE USES FOR THE SITES

No alternative uses were considered for these sites.

Table 9: The outcome of the assessment of the alternative sites.

| <b>KRUGER NATIONAL PARK</b>                                 |  |                           |        |                           |        |                           |        |                           |  |                           |        |                           |        |
|---|--|---------------------------|--------|---------------------------|--------|---------------------------|--------|---------------------------|--|---------------------------|--------|---------------------------|--------|
| <b>ASSESSMENT OF TSHOKWANE AND SATARA SITE ALTERNATIVES</b> |  |                           |        |                           |        |                           |        |                           |  |                           |        |                           |        |
| Mobile Tented Safari Facilities - PPP Opportunity           |  |                           |        |                           |        |                           |        |                           |  |                           |        |                           |        |
| Date  | 8/27/2020  |                           |        |                           |        |                           |        |                           | 30/11/2021   |                           |        |                           |        |
| Assessment done by  | Steven Whitfield, Keith Stannard, Lysta Stander, Allan Johnston, Kevan Zunckel |                           |        |                           |        |                           |        |                           | Shane Gertze, Lysta Staner, Allan Johnston, Karen Zunckel, Kevan Zunckel |                           |        |                           |        |
| Criteria  | Name   | Satara - Mavumbye         |        |                           |        | Tshokwane - Nwaswitsontso |        |                           |  | Tshokwane - Ripape        |        | Tshokwane - Matibenyi     |        |
|   |  | Alternative 1             |        | Alternative 2             |        | Alternative 1             |        | Alternative 2             |  | Alternative 1             |        | Alternative 1             |        |
|   | GPS  | -24.302619°<br>31.793611° |        | -24.314969°<br>31.839019° |        | -24.719206°<br>31.817033° |        | -24.684519°<br>31.791453° |  | -24.719206°<br>31.817033° |        | -24.719206°<br>31.817033° |        |
|   | Weight   | Score                     | Rating | Score                     | Rating | Score                     | Rating | Score                     | Rating   | Score                     | Rating | Score                     | Rating |
| <b>1. General</b>   |  |                           |        |                           |        |                           |        |                           |  |                           |        |                           |        |
| Surface Water   | 5  | 3                         | 15     | 1                         | 5      | 1                         | 5      | 1                         | 5  | 1                         | 5      | 1                         | 5      |
| Visual Aspects  | 5  | 2                         | 10     | 1                         | 5      | 2                         | 10     | 1                         | 5  | 1                         | 5      | 2                         | 10     |
| Noise   | 5  | 2                         | 10     | 1                         | 5      | 2                         | 10     | 2                         | 10   | 1                         | 5      | 3                         | 15     |
| Water availability  | 5  | 1                         | 5      | 1                         | 5      | 1                         | 5      | 1                         | 5  | 1                         | 5      | 1                         | 5      |
| Provision of Water to the site                              | 4  | 0                         | 0      | 0                         | 0      | 0                         | 0      | 0                         | 0  | 0                         | 0      | 0                         | 0      |
| Proximity to facilities                                     | 5  | 1                         | 5      | 1                         | 5      | 1                         | 5      | 1                         | 5  | 1                         | 5      | 4                         | 20     |
| Proximity from access roads                                 | 4  | 1                         | 4      | 1                         | 4      | 1                         | 5      | 1                         | 5  | 1                         | 5      | 1                         | 5      |
| Access to the site  | 4  | 1                         | 4      | 3                         | 12     | 3                         | 15     | 1                         | 5  | 1                         | 5      | 4                         | 20     |
| Existing access to the site                                 | 5  | 2                         | 10     | 1                         | 5      | 3                         | 15     | 1                         | 5  | 1                         | 5      | 4                         | 20     |
| Zoning Plan   | 5  | 1                         | 5      | 1                         | 5      | 1                         | 5      | 1                         | 5  | 1                         | 5      | 1                         | 5      |
| Total Rating  |  |                           | 68     |                           | 51     |                           | 75     |                           | 50   |                           | 45     |                           | 105    |
| <b>2. Tourism Criteria</b>                                  |  |                           |        |                           |        |                           |        |                           |  |                           |        |                           |        |
| Sense of place  | 5  | 2                         | 10     | 1                         | 5      | 2                         | 10     | 1                         | 5  | 2                         | 10     | 4                         | 20     |
| Shade – Winter  | 4  | 1                         | 4      | 1                         | 4      | 1                         | 5      | 1                         | 5  | 1                         | 5      | 3                         | 15     |

DRAFT BASIC ASSESSMENT REPORT: Mobile Seasonal Tented Camps in the Kruger National Park

|  |   |   |     |   |     |   |  |   |     |   |     |   |     |
|--|---|---|-----|---|-----|---|--|---|-----|---|-----|---|-----|
| Strong winds                           | 2   | 1 | 2   | 1 | 2   | 1 | 5  | 1 | 5   | 1 | 5   | 2 | 10  |
| Cooling breeze                         | 3   | 2 | 6   | 1 | 3   | 2 | 10   | 2 | 10  | 2 | 10  | 2 | 10  |
| Lighting susceptibility                | 4   | 1 | 4   | 1 | 4   | 1 | 5  | 1 | 5   | 1 | 5   | 1 | 5   |
| External night lights                  | 5   | 2 | 10  | 1 | 5   | 2 | 10   | 1 | 5   | 1 | 5   | 2 | 10  |
| Walking ability from site              | 5   | 1 | 5   | 1 | 5   | 2 | 10   | 2 | 10  | 1 | 5   | 2 | 10  |
| Bad odour                              | 3   | 1 | 3   | 1 | 3   | 1 | 5  | 1 | 5   | 1 | 5   | 1 | 5   |
| Seasonal Accessibility                 | 3   | 1 | 3   | 2 | 6   | 3 | 15   | 2 | 10  | 1 | 5   | 3 | 15  |
| <b>Total Rating</b>                    |   |   | 47  |   | 37  |   | 75   |   | 60  |   | 55  |   | 100 |
| <b>3. Bio-physical criteria</b>        |   |   |     |   |     |   |  |   |     |   |     |   |     |
| Geology                                | 3   | 1 | 3   | 1 | 3   | 1 | 3  | 1 | 3   | 1 | 3   | 1 | 3   |
| Soils                                  | 3   | 4 | 12  | 2 | 6   | 4 | 12   | 4 | 12  | 4 | 12  | 4 | 12  |
| Hydrology                              | 3   | 0 | 0   | 0 | 0   | 0 | 0  | 0 | 0   | 0 | 0   | 0 | 0   |
| Vegetation                             | 4   | 3 | 12  | 2 | 8   | 2 | 8  | 2 | 8   | 2 | 6   | 2 | 6   |
| Topography                             | 4   | 1 | 4   | 1 | 4   | 1 | 4  | 1 | 4   | 1 | 3   | 1 | 3   |
| Animal utilization                     | 4   | 4 | 16  | 4 | 16  | 4 | 16   | 4 | 16  | 4 | 12  | 4 | 12  |
| Rare species                           | 4   | 1 | 4   | 1 | 4   | 1 | 4  | 1 | 4   | 1 | 3   | 1 | 3   |
| Heritage                               | 5   | 2 | 10  | 3 | 15  | 2 | 10   | 2 | 10  | 2 | 6   | 2 | 6   |
| Compatibility with existing activities | 4   | 1 | 4   | 1 | 4   | 2 | 8  | 1 | 4   | 1 | 3   | 1 | 3   |
| <b>Total Rating</b>                    |   |   | 65  |   | 60  |   | 65   |   | 61  |   | 48  |   | 48  |
| <b>Sum of Total Ratings</b>            |   |   | 180 |   | 148 |   | 215  |   | 171 |   | 148 |   | 253 |
| Comments                               | Alternative site 1 is preferred over site 2 primarily due to the access to the site and the limitations and costs associated with obtaining access to site 2. |   |     |   |     |   | The order of preference is 1 - Ripape, 2 - Nwaswitsontso 2, 3 - Nwaswitsontso 1, & 4 - Matibiyeni. However, Nwaswitsontso 1 was disqualified due to half of it's locality bisecting the wilderness zone. |   |     |   |     |   |     |

### 9.3 ALTERNATIVE TECHNOLOGIES

A significant amount of time was spent with the applicant in the assessment of alternative technologies that would enhance the sustainability of the establishment, breakdown and operational phases of the activities. In addition to the applicant committing to the environmental management standards as stipulated by SANParks in the PPP Agreement, technologies were carefully selected to ensure that the environmental footprint of the camps could be minimised as far as possible. The outcome of this assessment process is reflected in the detail provided in Section 3.2.

## 10 ANALYSIS OF POTENTIAL IMPACTS

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### 10.1 ASSESSMENT METHOD

This section provides a discussion on the potential impacts of the preferred alternative and the no-go option, and an indication of their significance through superimposing all phases of the proposed development (see Section 3) on the environmental aspects of the receiving environment (see Section 4.2), i.e. the socio-economic, biophysical and cultural heritage. In addition to this is an indication of the extent to which these impacts may be avoided or mitigated.

It is noted that environmental impact assessment processes call for the assessment of all the phases of a proposed development, i.e. planning, pre-construction, construction, operation and decommissioning. In the case of this proposed development it is only the establishment/breakdown and operational phases that are considered relevant for this assessment. The fact that the proposed activities have been considered in the KNP PMP 2018 – 2028, which was subjected to intensive public consultation and that the nature of the activities are specifically designed to be mobile, implies that the first two phases do not require assessment. To reiterate, the SANParks processes that have led to this proposal and application have in themselves been subjected to public participation and open tender processes which have all been concluded.

The detailed analysis of potential impacts was guided by the scoring allocations as listed in Table 10 and explained in detail in Annex F. Impacts that retain a post-mitigation score higher than 40, i.e. those colour coded from yellow to red, would be recognised as potential fatal flaws that could render the proposed development environmentally unsustainable, and/or which may require further detailed specialist studies.

Potential impacts have been considered according to the establishment/breakdown and operational phases of the proposed activities as described in Section 3.2 and for the proposed activities and the no-go option. As the activities are mobile and seasonal, they will be 'decommissioned' at the end of each season. The assessment of decommissioning has thus been included in the assessment of the establishment/breakdown phase.

The outcome of this process is captured in Table 11, Table 12 and Table 13 below. Note that the tables were originally configured to address negative impacts but have been adapted to include positive impacts as well. Where these have been listed, the scoring for 'mitigation efficiency' has been applied conversely in order to cater for the positive effect of the enhancement recommendation. The colour code is also adapted here where only green is used to retain the

denoting of a positive impact. In the assessment of the no-go option no mitigating measures have been included as these will not be applicable if nothing is done. The potential impact scores therefore remain the same before and after mitigation.

The tables have been completed by the EAP on the basis of their understanding of both the development proposal and the receiving environment. This understanding has been generated through the interrogation of relevant documents and reports (mostly referenced in this report), site surveys described in Section 4.2, and consultations with Dr Eddie Riddell – KNP Manager of Water Resources and Mrs Guinevere Zambatis - Curator Skukuza Biological Reference Collection (recently retired); and consideration of comments received from registered I&APs and relevant authorities.

**Table 10: Impact assessment score allocation guide.**

| PRE-MITIGATION     |                                     |             |                    |                       |                                       | POST-MITIGATION            |                                     |
|--------------------|-------------------------------------|-------------|--------------------|-----------------------|---------------------------------------|----------------------------|-------------------------------------|
| Extent             | Duration                            | Intensity   | Probability        | Weighting factor (WF) | Significance rating (SR) <sup>1</sup> | Mitigation efficiency (ME) | Mitigated aspects (MA) <sup>2</sup> |
| Site<br>1          | Short term<br>(0-3 years)<br>1      | Low<br>1    | Unlikely<br>1      | Low<br>1              | Low<br>0-19                           | High<br>0.2                | Low<br>0-19                         |
| Local<br>2         | Short to medium<br>(3-5 years)<br>2 |             | Possible<br>2      | Medium low<br>2       | Medium low<br>20-39                   | Medium High<br>0.4         | Medium low<br>20-39                 |
| Regional<br>3      | Medium term (5-10 years)<br>3       | Medium<br>3 | Likely<br>3        | Medium<br>3           | Medium<br>40-59                       | Medium<br>0.6              | Medium<br>40-59                     |
| National<br>4      | Long term (10-30 years)<br>4        |             | Highly Likely<br>4 | Medium High<br>4      | Medium High<br>60-79                  | Medium low<br>0.8          | Medium High<br>60-79                |
| International<br>5 | Permanent (>30 years)<br>5          | High<br>5   | Definite<br>5      | High<br>5             | High<br>80-100                        | Low<br>1.0                 | High<br>80-100                      |

<sup>1</sup> Significance Rating (without mitigation) = SUM (Extent, Duration, Intensity, Probability) \* Weighting Factor

<sup>2</sup> Significance Rating (with mitigation) = Significance Rating (without mitigation) \* Mitigation Efficiency

## 10.2 FINDINGS AND RECOMMENDATIONS IN TERMS OF POTENTIAL IMPACTS

### 10.2.1 Establishment and Breakdown Phases

**Table 11: Assessment of potential impact during the establishment and breakdown phases of the activity.**

| POTENTIAL IMPACTS AND RECOMMENDED MITIGATION MEASURES  |  | EXTENT | DURATION | INTENSITY | PROBABILITY | WEIGHTING FACTOR | SIGNIFICANCE RATING | MITIGATION EFFICIENCY | ENHANCEMENT POTENTIAL | MITIGATED ASPECTS |
|--|--|--------|----------|-----------|-------------|------------------|---------------------|-----------------------|-----------------------|-------------------|
| IMPACT   | MITIGATION / ENHANCEMENT   |        |          |           |             |                  |                     |                       |                       |                   |
| SOCIO-ECONOMIC   |  |        |          |           |             |                  |                     |                       |                       |                   |
| Increased number of employment opportunities.  | Ensure opportunities are made available to adjacent communities and where skills are not present, that relevant capacity building is carried out.  | 2      | 1        | 1         | 5           | 5                | 45                  |                       | H: 1                  | 45                |
| Increased number of business opportunities.  | As above plus ensure BEE obligations are fulfilled.  | 2      | 1        | 1         | 5           | 5                | 45                  |                       | H: 1                  | 45                |
| Staff are exposed to the principles of sustainability and may carry these with them for implementation in their own homes and businesses.  | Implement a continuous programme of environmental awareness and responsibility training.   | 2      | 3        | 3         | 5           | 5                | 65                  |                       | H: 1                  | 65                |
| Staff are exposed to a wilderness experience that has the potential to enhance their connection with nature and to cause them to change their behaviour in terms of living more sustainably on the planet. | Make every effort to ensure that the staff experience is wilderness based and that they have a full knowledge of all the sustainability technologies applied in the establishment, breakdown and operation of the camps. | 2      | 3        | 3         | 5           | 5                | 65                  |                       | H: 1                  | 65                |
| BIOPHYSICAL  |  |        |          |           |             |                  |                     |                       |                       |                   |
| The presence of human activity at these sites could potentially discourage poachers or provide additional eyes and ears on the ground to enhance counter-poaching activities.                              | Ensure that staff are made aware of the threat of poaching and the roll that they can play in assisting the Section Ranger with reporting any suspicious activities in proximity to the sites.                           | 2      | 3        | 3         | 5           | 5                | 65                  |                       | H: 1.0                | 65                |

| POTENTIAL IMPACTS AND RECOMMENDED MITIGATION MEASURES   |   | EXTENT | DURATION | INTENSITY | PROBABILITY | WEIGHTING FACTOR | SIGNIFICANCE RATING | MITIGATION EFFICIENCY | ENHANCEMENT POTENTIAL | MITIGATED ASPECTS |
|---|---|--------|----------|-----------|-------------|------------------|---------------------|-----------------------|-----------------------|-------------------|
| IMPACT  | MITIGATION / ENHANCEMENT  |        |          |           |             |                  |                     |                       |                       |                   |
| Clearing of vegetation cover leading to the loss of plant species and animal habitat.   | Limit clearing to the immediate development footprint and ensure no encroachment on adjacent natural areas. Also retain all trees and shrubs and plan and develop to integrate these into the development footprint. Where clearing of small shrub and over-hanging vegetation is required the former must be replanted in an area that will not be disturbed and the material from the latter must be used as screening between tents. The nursery at Skukuza must also be notified and given the opportunity for accessing such material. Where access tracks and paths are created, these must avoid the need for any clearing and only disturb the grass layer. | 1      | 3        | 1         | 5           | 1                | 10                  | H:<br>0.2             |                       | 2                 |
| Disturbance of the vegetation cover may allow a foothold for invasive alien plant species.  | Limit disturbance of vegetation cover as discussed above and ensure that any invasive alien plants that emerge in the concession area are removed by hand pulling before the establishment of the camps. The Section Rangers may assist with the identification of the IAPs with their annual pre-season site inspections.  | 1      | 3        | 1         | 2           | 3                | 21                  | H:<br>0.2             |                       | 4.2               |
| Noise and vehicle and human movements on site impacting on the ability of fauna to access areas immediately adjacent to the development sites.  | Train all personnel in the need to be aware of all fauna species and the need to keep the level of noise and disturbance to an absolute minimum and ensure that these requirements are met at all times.  | 2      | 1        | 2         | 5           | 2                | 20                  | MH<br>:<br>0.4        |                       | 8                 |
| Dust generated from heavy vehicles coating adjacent vegetation and decreasing its palatability for grazing and browsing fauna, particularly as breakdown will happen at the end of the dry season.    | Monitor the extent of dust generation and vegetation coating and apply dust suppression measures as required.   | 2      | 1        | 2         | 3           | 2                | 16                  | MH<br>:<br>0.4        |                       | 6.4               |
| Loss of ground cover will expose the surface to erosion and runoff of sediments, particularly considering that camp breakdown is timed for the end of the dry season and the onset of the wet season. | Harvest brush from the dominant shrub species in the area and stack the brush on the exposed surfaces parallel to the contour. Note that this action can only take place under the strict guidance of the Section Ranger and the ECO.   | 1      | 1        | 2         | 3           | 3                | 21                  | MH<br>:<br>0.4        |                       | 8.4               |

| POTENTIAL IMPACTS AND RECOMMENDED MITIGATION MEASURES   |  | EXTENT | DURATION | INTENSITY | PROBABILITY | WEIGHTING FACTOR | SIGNIFICANCE RATING | MITIGATION EFFICIENCY | ENHANCEMENT POTENTIAL | MITIGATED ASPECTS |
|---|--|--------|----------|-----------|-------------|------------------|---------------------|-----------------------|-----------------------|-------------------|
| IMPACT  | MITIGATION / ENHANCEMENT   |        |          |           |             |                  |                     |                       |                       |                   |
| Pollution of the site and surrounding area through the increase in solid waste generated on site.   | Compile and implement a strict solid waste management plan which applies the “reduce, reuse and recycle” policy linked to the waste management policy of the KNP. Ensure that all solid waste is washed, compacted, securely stored and frequently removed off site to the solid waste management facility at Skukuza or Satara or outside the KNP.  | 2      | 1        | 3         | 5           | 3                | 33                  | H:<br>0.2             |                       | 6.6               |
| Pollution of the site and surrounding area through the spillage and/or leaking of liquid waste and/or dangerous substances such as diesel, petrol, paraffin and /or cooking oils. | No vehicles to be services and/or repaired on site and to be in good working order with a full service history. All vehicles to be monitored for leaks and drip trays to be placed under all vehicles parked on site. Spills and drips are to be addressed immediately with contaminated soil being removed and disposed of outside the KNP at a registered facility. Fuels and oils are to be stored in controlled, monitored and locked facilities in the relevant storage areas and are to be issued under strict control with registers maintained. The bulk storage of fuels and oils to be in bunded facilities. Chemical toilets to be provided for staff and resultant liquid waste to be collected, stored and then transported to the waste water treatment facility at Skukuza or Satara. | 1      | 1        | 3         | 3           | 3                | 24                  | MH<br>: 0.4           |                       | 9.6               |
| The illegal harvesting of animals and/or plants in and around the sites.  | All staff to be made fully aware of the fact that no harvesting of animals and/or plants on, adjacent to the sites or anywhere in the KNP is allowed and will not be tolerated and that perpetrators will be immediately dismissed. The Section Ranger should be alerted to the incident/s in order to implement the KNP crime management procedures. Staff movements are to be restricted to the immediate camp footprints of the sites and no access beyond these will be allowed. No wood is to be harvested for the purposes of making fires and fuel for cooking and heating must be provided by gas or fuel efficient technology such as rocket stoves or geysers. Wood fuel is to be brought in from outside the KNP and preferably from a source that utilises invasive alien species.       | 2      | 1        | 5         | 2           | 5                | 50                  | MH<br>: 0.2           |                       | 10                |

| POTENTIAL IMPACTS AND RECOMMENDED MITIGATION MEASURES   |  | EXTENT | DURATION | INTENSITY | PROBABILITY | WEIGHTING FACTOR | SIGNIFICANCE RATING | MITIGATION EFFICIENCY | ENHANCEMENT POTENTIAL | MITIGATED ASPECTS |
|---|--|--------|----------|-----------|-------------|------------------|---------------------|-----------------------|-----------------------|-------------------|
| IMPACT  | MITIGATION / ENHANCEMENT   |        |          |           |             |                  |                     |                       |                       |                   |
| VISUAL / AESTHETIC  |  |        |          |           |             |                  |                     |                       |                       |                   |
| The movement of heavy vehicles on the tourist roads on route to the sites will detract from the experience of other visitors to the KNP.  | Time the transportation of camp equipment outside of peak game drive times and ensure that drivers are well aware of and adhere to the rules of the roads in the KNP.<br>Plan and implement the transportation of camp equipment in such a way that it takes place over as short a period of time as possible achieving the balance between the size and number of vehicles required for this purpose. | 2      | 1        | 2         | 5           | 2                | 20                  | M:<br>0.6             |                       | 12                |
| The activities of camp establishment and breakdown may be visible from adjacent tourism roads, including the staff village and vehicles, i.e. the S86 for the Tshokwane site and the S90 and the Mananga Adventure Route for the Satara site. | Ensure that activities on site are strictly limited to the camp footprint and that the footprint is laid out to ensure that all components will be screened from the tourist roads.  | 2      | 1        | 1         | 2           | 3                | 18                  | M:<br>0.6             |                       | 10.8              |

| POTENTIAL IMPACTS AND RECOMMENDED MITIGATION MEASURES   |  | EXTENT | DURATION | INTENSITY | PROBABILITY | WEIGHTING FACTOR | SIGNIFICANCE RATING | MITIGATION EFFICIENCY | ENHANCEMENT POTENTIAL | MITIGATED ASPECTS |
|---|--|--------|----------|-----------|-------------|------------------|---------------------|-----------------------|-----------------------|-------------------|
| IMPACT  | MITIGATION / ENHANCEMENT   |        |          |           |             |                  |                     |                       |                       |                   |
| CULTURAL HERITAGE   |  |        |          |           |             |                  |                     |                       |                       |                   |
| Any cultural heritage features missed during this assessment process may be revealed during these phases of the activity and be removed by staff. | <p>All staff are to be made fully aware of the possibility of finding cultural heritage features such as pot shards, stone tools, arrow heads, etc.; and that these are not to be removed.</p> <p>In the event of any cultural heritage features being located, a Chance Find Procedure must be immediately initiated which includes the following:</p> <ul style="list-style-type: none"> <li>• all work in and around the affected area to cease and the area to be clearly demarcated with no further access permitted;</li> <li>• immediately engage an independent archaeologist to assess the situation and to provide advice as to how it should be addressed;</li> <li>• proposed actions will depend on the significance of the find but include:                             <ul style="list-style-type: none"> <li>○ application for a permit from SAHRA to remove the features;</li> <li>○ the undertaking of a heritage impact assessment and implementation of its recommendations.</li> </ul> </li> <li>• work on the affected area may only proceed once the above have been implemented.</li> </ul> | 1      | 1        | 5         | 1           | 3                | 24                  | H:<br>0.2             |                       | 4.8               |

10.2.2 Operational Phase

**Table 12: Assessment of potential impact during the operational phase of the activity.**

| POTENTIAL IMPACTS AND RECOMMENDED MITIGATION MEASURES   |   | EXTENT | DURATION | INTENSITY | PROBABILITY | WEIGHTING FACTOR | SIGNIFICANCE RATING | MITIGATION EFFICIENCY | ENHANCEMENT POTENTIAL | MITIGATED ASPECTS |
|---|---|--------|----------|-----------|-------------|------------------|---------------------|-----------------------|-----------------------|-------------------|
| IMPACT  | MITIGATION / ENHANCEMENT  |        |          |           |             |                  |                     |                       |                       |                   |
| SOCIO-ECONOMIC  |   |        |          |           |             |                  |                     |                       |                       |                   |
| Increased number of employment opportunities.   | Ensure opportunities are made available to adjacent communities and where skills are not present, that relevant capacity building is carried out.   | 2      | 1        | 1         | 5           | 5                | 45                  |                       | H: 1                  | 45                |
| Increased number of business opportunities.   | As above plus ensure BEE obligations are fulfilled.   | 2      | 1        | 1         | 5           | 5                | 45                  |                       | H: 1                  | 45                |
| Staff and guests are exposed to the principles of sustainability and may carry these with them for implementation in their own homes and businesses.  | Implement a continuous programme of environmental awareness and responsibility training.  | 4      | 3        | 2         | 3           | 5                | 60                  |                       | H: 1                  | 60                |
| Staff and guests are exposed to a wilderness experience that has the potential to enhance their connection with nature and to cause them to change their behaviour in terms of living more sustainably on the planet. | Make every effort to ensure that the guest experience is wilderness based and that they have a full knowledge of all the sustainability technologies applied in the operation of the camps.               | 4      | 3        | 3         | 3           | 5                | 65                  |                       | H: 1                  | 65                |
| BIOPHYSICAL   |   |        |          |           |             |                  |                     |                       |                       |                   |
| The presence of human activity at these sites could potentially discourage poachers or provide additional eyes and ears on the ground to enhance counter-poaching activities.   | Ensure that staff and guests are made aware of the threat of poaching and the roll that they can play in assisting the Section Ranger with reporting any suspicious activities in proximity to the sites. | 2      | 3        | 4         | 4           | 5                | 65                  |                       | H: 1.0                | 65                |
| The loss of access to the camp area by animals due to it being fenced off to protect staff and guests from the risk of encountering dangerous game.   | Position the fence as close to the camp layout as possible to ensure that the area excluded from animal access is as small as possible.   | 1      | 3        | 1         | 5           | 1                | 10                  | M: 0.6                |                       | 6                 |

| POTENTIAL IMPACTS AND RECOMMENDED MITIGATION MEASURES   |   | EXTENT | DURATION | INTENSITY | PROBABILITY | WEIGHTING FACTOR | SIGNIFICANCE RATING | MITIGATION EFFICIENCY | ENHANCEMENT POTENTIAL | MITIGATED ASPECTS |
|---|---|--------|----------|-----------|-------------|------------------|---------------------|-----------------------|-----------------------|-------------------|
| IMPACT  | MITIGATION / ENHANCEMENT  |        |          |           |             |                  |                     |                       |                       |                   |
| Noise and vehicle and human movements on site impacting on the ability of fauna to access areas immediately adjacent to the sites.  | Train all staff in the need to be aware of all fauna species and the need to keep the level of noise and disturbance to an absolute minimum and ensure that these requirements are met at all times.<br>No music to be played in the staff village and back of house.<br>Provide guests with a thorough briefing on arrival as to the need to behave appropriately, to keep their voices down and to respect the wilderness setting and other guests.<br>Any entertainment provided for the guests to be in line with the cultural and wilderness context of the camp and must be 'un-plugged'. | 2      | 1        | 3         | 5           | 3                | 33                  | MH : 0.4              |                       | 13.2              |
| Dust generated from service and safari vehicles coating adjacent vegetation and decreasing its palatability for grazing and browsing fauna, particularly as operation is during the dry season. | Monitor the extent of dust generation and vegetation coating and apply dust suppression measures as required.   | 2      | 1        | 3         | 4           | 3                | 30                  | MH : 0.4              |                       | 12                |
| Loss of ground cover will expose surfaces to erosion and runoff of sediments, despite the fact that camp operation is timed for the dry season.   | Ensure that all tracks and paths are positioned in the landscape and are managed in a way that will ensure that any runoff generated by unlikely precipitation events will be contained and that erosion risk is limited.<br>Monitor the situation closely during any precipitation events to check for potential run-off and install barriers to remedy these immediately.   | 1      | 1        | 2         | 1           | 3                | 15                  | MH : 0.4              |                       | 6                 |
| Pollution of the site and surrounding area through the increase in solid waste generated on site.   | Compile and implement a strict solid waste management plan which applies the "reduce, reuse and recycle" policy linked to the solid waste management policy of the KNP.<br>Ensure that all solid waste is washed, compacted, securely stored and frequently removed off site to the solid waste management facility at Skukuza, Satara or outside of the KNP.   | 2      | 3        | 3         | 5           | 5                | 65                  | H: 0.2                |                       | 13                |

| POTENTIAL IMPACTS AND RECOMMENDED MITIGATION MEASURES   |  | EXTENT | DURATION | INTENSITY | PROBABILITY | WEIGHTING FACTOR | SIGNIFICANCE RATING | MITIGATION EFFICIENCY | ENHANCEMENT POTENTIAL | MITIGATED ASPECTS |
|---|--|--------|----------|-----------|-------------|------------------|---------------------|-----------------------|-----------------------|-------------------|
| IMPACT  | MITIGATION / ENHANCEMENT   |        |          |           |             |                  |                     |                       |                       |                   |
| Pollution of the site and surrounding area through the spillage and/or leaking of liquid waste and/or dangerous substances such as diesel, petrol, paraffin and /or cooking oils. | <p>No vehicles to be services and/or repaired on site and to be in good working order with a full service history.</p> <p>All vehicles to be monitored for leaks and drip trays to be placed under all vehicles parked on site.</p> <p>Spills and drips are to be addressed immediately with contaminated soil being removed and disposed of outside the KNP at a registered facility.</p> <p>Fuels and oils are to be stored in controlled, monitored and locked facilities in the relevant storage areas and are to be issued under strict control with registers maintained.</p> <p>The bulk storage of fuels and oils to be in bunded facilities.</p> <p>Grease traps to be installed in the kitchens, to be well maintained and regularly emptied and cleaned with captured grease being securely stored and frequently removed for deposit at a registered waste management facility outside the KNP.</p> <p>Black and grey water management facilities to be provided for both staff and guests that ensure that this waste water is captured and contained, regularly removed either directly or to a temporary holding and treatment facility, and then removed off site to the Satara waste water management facility.</p> | 2      | 3        | 3         | 3           | 5                | 55                  | MH : 0.2              |                       | 11                |

| POTENTIAL IMPACTS AND RECOMMENDED MITIGATION MEASURES   |   | EXTENT | DURATION | INTENSITY | PROBABILITY | WEIGHTING FACTOR | SIGNIFICANCE RATING | MITIGATION EFFICIENCY | ENHANCEMENT POTENTIAL | MITIGATED ASPECTS |
|---|---|--------|----------|-----------|-------------|------------------|---------------------|-----------------------|-----------------------|-------------------|
| IMPACT  | MITIGATION / ENHANCEMENT  |        |          |           |             |                  |                     |                       |                       |                   |
| The illegal harvesting of animals and/or plants in and around the sites.  | All staff and guests to be made fully aware of the fact that no harvesting of animals and/or plants on, adjacent to the sites or anywhere in the KNP is allowed and will not be tolerated and that perpetrators will be immediately dismissed (staff) or expelled at cost (guest). In both instances the Section Ranger will be alerted in order to implement the KNP crime management procedures.<br>Staff and guest movements are to be restricted to the immediate camp footprints of the sites and no access beyond these will be allowed, unless on a guided trail.<br>No wood is to be harvested for the purposes of making fires and fuel for cooking and heating must be provided by gas or fuel efficient technology such as rocket stoves or geysers where the fuel is brought in from outside the KNP and preferably from a source that utilises invasive alien species. Where possible solar power technology must be used.<br>Camp fires are to be fuelled using wood from invasive alien plants obtained outside the KNP. | 2      | 1        | 5         | 2           | 5                | 50                  | MH : 0.2              |                       | 10                |
| VISUAL / AESTHETIC  |   |        |          |           |             |                  |                     |                       |                       |                   |
| The movement of delivery and service vehicles on the tourist roads on route to the sites will detract from the experience of other visitors to the KNP.                                     | Time the movement of delivery and service vehicles outside of peak game drive times and ensure that drivers are well aware of and adhere to the rules of the roads in the KNP.  | 2      | 3        | 1         | 5           | 2                | 22                  | M: 0.6                |                       | 13.2              |
| The activities of and the camps themselves may be visible from adjacent tourism roads, i.e. the S86 for the Tshokwane site and the S90 and the Mananga Adventure Route for the Satara site. | Ensure that activities on site are strictly limited to the camp footprint and that the footprint is laid out to ensure that all components will be screened from the tourist roads.<br>Ensure that all camp components are located so as to be screened from adjacent roads and/or install natural screening where components may be visible.<br>Ensure that all lighting is subdued, shaded and positioned as low as possible and no flood lighting is to be used.<br>Realign the Mananga 4x4 route as per Figure 14.  | 2      | 3        | 3         | 3           | 4                | 44                  | MH : 0.4              |                       | 17.6              |

| CULTURAL HERITAGE   |   |   |   |   |   |   |    |           |     |
|---|---|---|---|---|---|---|----|-----------|-----|
| <p>Any cultural heritage features missed during this assessment process may be revealed during the operational phase of the activity and may be removed by staff and/or guests.</p> | <p>All staff and guests are to be made fully aware of the possibility of finding cultural heritage features such as pot shards, stone tools, arrow heads, etc.; and that these are not to be removed.</p> <p>In the event of any cultural heritage features being located, a Chance Find Procedure must be immediately initiated which includes the following:</p> <ul style="list-style-type: none"> <li>• access to the affected area to cease and the area to be clearly demarcated with no further access permitted;</li> <li>• immediately engage an independent archaeologist to assess the situation and to provide advice as to how it should be addressed;</li> <li>• proposed actions will depend on the significance of the find but include:                             <ul style="list-style-type: none"> <li>○ application for a permit from SAHRA to remove the features;</li> <li>○ the undertaking of a heritage impact assessment and implementation of its recommendations.</li> </ul> </li> <li>• access to the affected area may only be allowed once the above have been implemented.</li> </ul> | 1 | 1 | 5 | 1 | 3 | 24 | H:<br>0.2 | 4.8 |

10.3 ASSESSMENT OF THE NO-GO OPTION

Table 13: Assessment of the No-Go Option

| POTENTIAL IMPACTS AND RECOMMENDED MITIGATION MEASURES   |                          | EXTENT | DURATION | INTENSITY | PROBABILITY | WEIGHTING FACTOR | SIGNIFICANCE RATING | MITIGATION EFFICIENCY | ENHANCEMENT POTENTIAL | MITIGATED ASPECTS |
|---|--------------------------|--------|----------|-----------|-------------|------------------|---------------------|-----------------------|-----------------------|-------------------|
| IMPACT  | MITIGATION / ENHANCEMENT |        |          |           |             |                  |                     |                       |                       |                   |
| SOCIO-ECONOMIC  |                          |        |          |           |             |                  |                     |                       |                       |                   |
| Opportunity costs associated with the loss of jobs and business opportunities for adjacent communities.   | n/a                      | 2      | 3        | 1         | 5           | 3                | 33                  |                       |                       |                   |
| Lost opportunities for demonstrating sustainability techniques and technology and exposure of staff and guests to a wilderness experience and reconnecting with nature. | n/a                      | 3      | 3        | 2         | 5           | 3                | 39                  |                       |                       |                   |
| BIOPHYSICAL   |                          |        |          |           |             |                  |                     |                       |                       |                   |
| The opportunity of having more eyes and ears on the ground to assist with combating poaching will be lost.  |                          | 2      | 5        | 2         | 5           | 4                | 56                  |                       |                       |                   |
| None of the negative impacts listed in Table 11 and Table 12 will manifest.   |                          | 2      | 3        | 1         | 5           | 2                | 22                  |                       |                       |                   |
| VISUAL / AESTHETIC  |                          |        |          |           |             |                  |                     |                       |                       |                   |
| As above.   |                          | 2      | 3        | 1         | 5           | 1                | 11                  |                       |                       |                   |
| CULTURAL HERITAGE   |                          |        |          |           |             |                  |                     |                       |                       |                   |
| As above.   |                          | 1      | 3        | 1         | 2           | 1                | 7                   |                       |                       |                   |

## 10.4 CUMULATIVE IMPACTS

As these proposed activities have been pro-actively planned according to the KNP PMP 2018 – 2028 it must be acknowledged that their nine year life span fits within the time frames of the PMP and therefore, there the threat or risk of cumulative impacts has been taken into consideration. In the same vein it is clear from the PMP that SANParks has recognised the risk allowing the past trend in infrastructure developments to continue, and have, by virtue of the nature of these opportunities, taken a conscious decision to turn the development trend around and introduce developments and activities that are far more in keeping and compatible with the management objectives of the KNP. It can thus be stated that within this context, it is highly unlikely that any negative cumulative impacts will occur.

## 11 ENVIRONMENTAL IMPACT STATEMENT

### 11.1 SUMMARY OF KEY FINDINGS

A summary of the impact assessment findings is presented in Table 14 below.

**Table 14: Summary of impact assessment findings.**

| IMPACT CATEGORY  | SIGNIFICANCE RATING |           |           |          |    |   |
|--|---------------------|-----------|-----------|----------|----|---|
|  | Positive            | L         | ML        | M        | MH | H |
| <b>ESTABLISHMENT/BREAKDOWN PHASE</b>                     |                     |           |           |          |    |   |
| NUMBER OF IMPACTS PRE-MITIGATION PER SIGNIFICANCE SCORE  |                     |           |           |          |    |   |
| Socio-economic   | 4                   |           |           |          |    |   |
| Biophysical  | 1                   | 2         | 7         | 1        |    |   |
| Visual/Aesthetic   |                     |           | 2         |          |    |   |
| Cultural Heritage  |                     |           | 1         |          |    |   |
| <b>TOTAL</b>   | <b>5</b>            | <b>2</b>  | <b>10</b> | <b>1</b> |    |   |
| NUMBER OF IMPACTS POST-MITIGATION PER SIGNIFICANCE SCORE |                     |           |           |          |    |   |
| Socio-economic   | 4                   |           |           |          |    |   |
| Biophysical  | 1                   | 9         |           |          |    |   |
| Visual/Aesthetic   |                     | 2         |           |          |    |   |
| Cultural Heritage  |                     | 1         |           |          |    |   |
| <b>TOTAL</b>   | <b>5</b>            | <b>12</b> |           |          |    |   |
| <b>OPERATIONAL PHASE</b>                                 |                     |           |           |          |    |   |
| NUMBER OF IMPACTS PRE-MITIGATION PER SIGNIFICANCE SCORE  |                     |           |           |          |    |   |
| Socio-economic   | 4                   |           |           |          |    |   |
| Biophysical  | 1                   | 2         | 2         | 3        |    |   |
| Visual/Aesthetic   |                     |           | 1         | 1        |    |   |
| Cultural Heritage  |                     |           | 1         |          |    |   |
| <b>TOTAL</b>   | <b>5</b>            | <b>2</b>  | <b>4</b>  | <b>4</b> |    |   |
| NUMBER OF IMPACTS POST-MITIGATION PER SIGNIFICANCE SCORE |                     |           |           |          |    |   |
| Socio-economic   | 4                   |           |           |          |    |   |
| Biophysical  | 1                   | 7         |           |          |    |   |
| Visual/Aesthetic   |                     | 2         |           |          |    |   |
| Cultural Heritage  |                     | 1         |           |          |    |   |
| <b>TOTAL</b>   | <b>5</b>            | <b>10</b> |           |          |    |   |

From the above it can be seen that there are five positive impacts in both the first and the second phases of these activities, and from Table 11 and Table 12 it can be seen that these are all rated as being of medium to medium-high significance.

None of the negative impacts identified for the first phase go beyond a rating of medium significance, with the majority being rated as medium-low pre-mitigation. With a high mitigation success rating, the significance of all the potential impacts all come down to a low significance rating. The same is true for the second and operational phase of the activities.

## 11.2 SENSITIVITY MAPS

The sensitive features relative to each of the two preferred and two alternative sites are the water courses which are clearly visible on the Google Earth images provides to illustrate the layout details of each site in Figure 6 to Figure 9. While each site includes protected tree species, none of these will be impacted by the establishment, break down and operation of the activities as the site layout process positioned the camp components so as to avoid them, although in many instances, components will be positioned to capitalise on their presence. As such they are important features which will be protected.

## 12 ASSUMPTIONS AND LIMITATIONS

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The Basic Assessment Report has been prepared on the strengths of the information available, from site visits and that provided by the applicant and other relevant sources at the time of the assessment. Comments and inputs from I&APs were carefully considered. Topographical, vegetation and NFEPA maps were consulted. The assumptions made and constraints that were prevalent did not obviously have any restrictive or negative implications on the study.

In undertaking this investigation and compiling the Basic Assessment Report, the following has been assumed:

- The information provided by the client is accurate;
- The scope of this investigation is limited to assessing the environmental impacts associated with the construction and operation of the proposed Kruger Shalati upmarket tourism accommodation; and
- Should the project be authorised, the applicant will implement any layout changes, recommendations and mitigation measures outlined in the BA and conditions of environmental authorisation into the detailed design and construction contract specifications of the proposed project.

There is a high level of confidence in the accuracy of the information provided, sourced and gathered and that the resultant assessment has produced recommendations that are appropriate and that will ensure the sustainability of the proposed development.

## 13 RECOMMENDATIONS AND CONDITIONS OF AUTHORISATION

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It is recommended that the proposed Mobile Seasonal Tented Camps for the Tshokwane and Satara areas, as described in Section 3.2 and its listed activities as presented in Section 3.3, be granted environmental authorisation. The mitigation measures listed in Sections 10.3 and 10.4 should be included as conditions of authorisation and must be strictly adhered to within the context of the

compliance monitoring recommendations in Section 8.3, in addition to the requirements of the EMPr.

## 14 CONCLUSION

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In conclusion it can be stated that the proposed Mobile Seasonal Tented Camps in the KNP will have no significant negative impacts on and adjacent to their development/operational footprints. They will also serve to enhance the ability of the KNP to contribute positively to neighbouring communities through job creation and the provision of employment opportunities. The increased revenue base generated from the PPP Agreement will enhance the capacity of SANParks to fulfil its mandate for the conservation of the biodiversity of the KNP.

## 15 REFERENCES

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- Nel, J.L., Driver, A., Strydom, W.F., Maherry, A., Petersen, C., Hill, L., Roux, D.J., Nienaber, S., van Deventer, H., Swartz, E. and Smith-Adao, L.B. (2011). ATLAS of FRESHWATER ECOSYSTEM PRIORITY AREAS in South Africa: Maps to support sustainable development of water resources. Report to the Water Research Commission. WRC Report No. TT 500/11, August 2011.
- Riddell, E., current Manager: Water Resources at Skukuza. Pers. Comm. Via email correspondence dated 29 August 2020.
- South African National Parks (SANParks), (2018). Kruger National Park, Park Management Plan, for the period 2018 – 2028. Management Plan compiled in terms of Sections 39 and 41 of the National Environmental Management: Protected Areas Act No. 57 of 2003 (NEM: PAA), and subject to public review and comment by 9 March 2018. SANParks, Muckleneuk, Pretoria, South Africa.
- Zimbatis, G., previous curator of the Skukuza Biological Reference Collection, Kruger National Park. Pers. Comm., confirmation of the potential presence of threatened plants at the proposed camp sites via email correspondence from Ms Tracy-Lee Petersen, previous Strategic Conservation Planner and Environmental Manager at Skukuza, Kruger National Park and dated 31 August 2020.

## ANNEX A: SANPARKS CORRESPONDENCE IN SUPPORT OF PROPOSED ACTIVITIES

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Land Owners letter of consent

PPP Agreement

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ANNEX B: FULL CURRICULUM VITEA OF KEVAN ZUNCKEL:  
ENVIRONMENTAL ASSESSMENT PRACTITIONER

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## ANNEX C: SIGNED DECLARATIONS OF INTEREST

### APPENDIX 10

#### DECLARATION OF THE EAP

I, Kevin Zunckel, declare that –

- I act as the independent environmental assessment practitioner in this application;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I will take into account, to the extent possible, the matters listed in Regulation 13 of the Regulations when preparing the application and any report relating to the application;
- I undertake to disclose to the applicant and the Competent Authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the Competent Authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the Competent Authority, unless access to that information is protected by law, in which case it will be indicated that such information exists and will be provided to the Competent Authority;
- I will perform all obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I am aware of what constitutes an offence in terms of Regulation 48 and that a person convicted of an offence in terms of Regulation 48(1) is liable to the penalties as contemplated in Section 49B of the Act.

Disclosure of Vested Interest (delete whichever is not applicable)

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Regulations;



\_\_\_\_\_  
Signature of the environmental assessment practitioner

Zunckel Ecological + Environmental Services

\_\_\_\_\_  
Name of company:

14 April 2022

\_\_\_\_\_  
Date

## ANNEX D: SCREENING REPORTS GENERATED BY THE DFFE SCREENING TOOL

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## ANNEX E: GROUND WATER QUALITY TEST REPORT

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## ANNEX F: SUMMARY OF QUANTIFIERS AND QUALIFIERS USED FOR ASSESSMENT PURPOSES

| CATEGORY  | RATING      | EXPLANATION   |
|---|-------------|---|
| Sensitivity of Aspect / Magnitude or intensity of impact: | Low         | The aspect has very little value in terms of its ecological importance e.g. a highly disturbed area is rated as low); |
|   | Medium      | The aspect has certain qualities which make it ecologically valuable); or   |
|   | High        | The aspect is near pristine and has numerous qualities which make it extremely ecologically valuable).                |
| Duration (time scale):                                    | Short-term  | Impact restricted to construction and early operation (0-5 years);  |
|   | Medium-term | Impact will cease on closure of the site (6-30 years);  |
|   | Long-term   | Impacts will exist beyond the life of the site (>30 years); or  |
|   | Permanent   | Impacts will have permanent potential.  |
| Geographic Spatial Scale:                                 | Site        | The impact will be limited to within the site boundaries;   |
|   | Local       | The impact will affect surrounding areas;   |
|   | Regional    | The impact will affect areas far beyond the site boundary but limited to the Province of KwaZulu-Natal; or            |
|   | National    | The impact will affect areas far beyond the site boundary within the South Africa.                                    |
| Significance rating pre / post-mitigation:                | Low         | The impact will have a minimal effect on the environment;   |
|   | Medium      | The impact will result in a measurable deterioration in the environment; or   |
|   | High        | The impact will cause a significant deterioration in the environment.   |
| Degree of certainty:                                      |             | Definite (>90%);  |
|   |             | Probable (>70%);  |
|   |             | Possible (40%); or  |
|   |             | Unsure (<40%).  |
| Mitigation:   |             | No mitigation necessary;  |
|   | Full        | Full mitigation/reversal of the impact is possible;   |
|   | Partial     | Only partial mitigation/reversal of the impact is possible; or  |
|   | None        | No mitigation or reversal of the impact is possible.  |

## ANNEX G: EVIDENCE OF PUBLIC NOTICE PLACEMENT AND PUBLICATION



Figure 22: Site notices placed at, from the top and left, Orpen Gate, Satara, Skukuza Shop, Skukuza Reception, Phabeni Gate, SANParks H/O Reception and Bookings

Friday September 25, 2020 Education | Hoedspruit Herald

Megan van Rieën in gr 5 spog met haar weertaan.

Tatvica Mering wys hoe jouweef haar weertaan is.

Lee Laka in gr. 5 se weertaan wys jouweef die windrigting aan.

Mirié Steffen wys haar weertaan met sy klein kulkans.

### Laerskool Mariepskop bou weertinstrumente

Bj Laerskool Mariepskop word Akademie met ontseleasie en pret saangepak. Daarom word teke ontskep in visuele voorreke soos weertinstrumente. "Die belangrik om die konsepte van weer en klimaat by die leerders vas te lê saansien dit lewenslange kennis en vaardigheite is. Dit is byvoorbeeld belangrik om te weet hoe 'n weerwater werk en om te weet wat water rigting die wind waak."

Mirié Kitchan se weertaan.

Leonora Kruger het 'n windokus gemaak.

R1000 REWARD

**HOEDSPRUIT  
AUTOMOTIVE  
ENGINEERING**

2000 RING LIFT  
OVER HALLS  
THIS  
100 RING LIFT  
**177 MOORE STREET  
015 763 0154**

↑

We are offering a reward of R 1000 for the recovery of the signpost belonging to Hoedspruit Automotive Engineering and for any information leading to the perpetrators of the theft.

The signpost was stolen around the 31st of September 2020, from General Property near the entrance of Fouries Dunes, just off the R400.

## NOTICE

### APPLICATION FOR ENVIRONMENTAL AUTHORISATION

Bafsa (Pty) Ltd is applying in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), and the Environmental Impact Assessment Regulations, 2014, to the Chief Directorate of Integrated Environmental Authorisations of the National Department of Environment, Forestry and Fisheries (NDEFF) for environmental authorisation of the Basic Assessment (BA) to develop and operate two seasonal tented camps in the Sabi Game and Sabi Game Reserve in the Kruger National Park, a common grazing range area, a motor fuel storage area and tented staff accommodation. Infrastructure will be established and removed in a seasonal basis at the camps and operate over the winter period (May, June, July, August and September).

This development opportunity was put forward by Bafsa (Pty) Ltd through a public tender process and will be expected to meet the environmental requirements, standards and guidelines put forward by them and DEFF as this process. Submissions required, submission to a wide of visual, water management, pest control, visual impacts and monitoring.

Any other aspects identified through the environmental assessment process will be included in an Environmental Management Plan to which Bafsa (Pty) Ltd will be expected to adhere to and will be monitored accordingly.

The two sites are in the Kruger National Park and within the Bushbuckridge Local Municipality and the Bushbuckridge Municipality (BCHM) which is in the Mpumalanga Province.

In order to participate in the Basic Assessment process you are invited to register as an Interested and Affected Party by contacting the Environmental Assessment Practitioner to get the details provided below and before 20 November 2020. Please submit your name, contact information and interest in the above mentioned project to:

**Kevan Dundee of Dundee Ecological – Environmental Services**  
 Address: 7 Amrita Road, Pietermaritzburg, 6001  
 Tel: 033-2411 229  
 Fax: 033-217 8460  
 Cell: 082 329 4179  
 Email: kevandundee@gmail.com

You are not permitted to pass this information on to any other party that you may be contacted by and/or have an interest in the assessment process.

### Stanford Lake College

Independent, co-educational boarding school

Growing an adventurous spirit in all that we do

100% Matric Pass Rate, 22 years and counting

World Class teaching and learning

Producing future-smart, leaders of tomorrow

[www.slc.co.za](http://www.slc.co.za)

M. J. du Toit, Limpopo  
info@slc.co.za

Figure 23: Noticed published in the Hoedspruit Herald on 25 September 2020.

**CLASSIFIED - LOWVELDER**

**TELEPHONY EQUIPMENT 24, 2020**

**NOTICE**  
In terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), and the Environmental Impact Assessment Regulations, 2014, the Chief Directorate, Integrated Environmental Authorisations of the National Department of Environment, Forestry and Fisheries (DFFE) is applying for environmental authorisation at the Basic Assessment level, to develop and operate two seasonal tented camps in the Thabakweng and Solana areas respectively. Each camp will include 50 tented tents, a communal dining lounge tent, a kitchen tent, storage area and tented staff accommodation. All infrastructure will be established and removed on a seasonal basis as the camp will operate over the winter period (May, June, July, August and September).

**PERSONAL DETAILS**  
1. Name: Bhebeke, M.  
2. Address: 123 Main Street, Johannesburg, 2001.  
3. Contact: 011-123-4567.  
4. Email: m.bhebeke@example.com

**PERSONAL DETAILS**  
1. Name: Dlamini, S.  
2. Address: 456 Oak Avenue, Durban, 4001.  
3. Contact: 031-234-5678.  
4. Email: s.dlamini@example.com

**PERSONAL DETAILS**  
1. Name: Mkhomo, T.  
2. Address: 789 Pine Road, Cape Town, 7800.  
3. Contact: 021-345-6789.  
4. Email: t.mkhomo@example.com

**PERSONAL DETAILS**  
1. Name: Nkomo, P.  
2. Address: 101 Birch Lane, Harare, 1000.  
3. Contact: 09-123-4567.  
4. Email: p.nkomo@example.com

**PERSONAL DETAILS**  
1. Name: Radebe, J.  
2. Address: 202 Elm Street, Pretoria, 0001.  
3. Contact: 012-345-6789.  
4. Email: j.radebe@example.com

**PERSONAL DETAILS**  
1. Name: Sibiya, Z.  
2. Address: 303 Cedar Drive, Pietermaritzburg, 3200.  
3. Contact: 033-456-7890.  
4. Email: z.sibiya@example.com

**PERSONAL DETAILS**  
1. Name: Tshabalala, M.  
2. Address: 404 Maple Way, Bloemfontein, 9300.  
3. Contact: 051-567-8901.  
4. Email: m.tshabalala@example.com

**PERSONAL DETAILS**  
1. Name: Venter, A.  
2. Address: 505 Willow Court, Port Elizabeth, 6001.  
3. Contact: 041-678-9012.  
4. Email: a.venter@example.com

**PERSONAL DETAILS**  
1. Name: Zulu, K.  
2. Address: 606 Birchwood Place, Durban, 4001.  
3. Contact: 031-789-0123.  
4. Email: k.zulu@example.com

**NOTICE: APPLICATION FOR ENVIRONMENTAL AUTHORIZATION**

BidCo (Pty) Ltd. is applying in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), and the Environmental Impact Assessment Regulations, 2014, to the Chief Directorate, Integrated Environmental Authorisations of the National Department of Environment, Forestry and Fisheries (DFFE) for environmental authorisation at the Basic Assessment level, to develop and operate two seasonal tented camps in the Thabakweng and Solana areas respectively. Each camp will include 50 tented tents, a communal dining lounge tent, a kitchen tent, storage area and tented staff accommodation. All infrastructure will be established and removed on a seasonal basis as the camp will operate over the winter period (May, June, July, August and September).

This development opportunity was put forward by SANParks through a public tender process and will be expected to meet the environmental requirements, standards and guidelines put forward by them and DFFE as this relates to all authorisations required, adherence to a code of conduct, waste management, pest control, visual impacts and monitoring. Any other aspects identified through this environmental assessment process will be included in an Environmental Management Plan to which BidCo (Pty) Ltd. will be expected to adhere to and will be monitored accordingly.

The two sites are in the Kruger National Park and within the Bushbuckridge Local Municipality and the Ehlanzeni District Municipality (EDM) which is in the Mpumalanga Province.

In order to participate in the Basic Assessment process you are invited to register as an Interested and Affected Party by contacting the Environmental Assessment Practitioner as per the details provided below and before 20 November 2020. Please submit your name, contact information and interest in the above mentioned project to:

**Kwena Zandack of Zandack Ecological + Environmental Services**  
Address: 7 Avenida Road, Hillside, 3240  
Tel: 033-344-1709  
Fax: 033-317-5982  
Cell: 082-929-4370  
Email: kwenzan@zandack.com

You are welcome to pass this information on to any other parties you feel may be affected by and/or have an interest in this assessment process.

**ZUNDEL ECOLOGICAL + ENVIRONMENTAL SERVICES**

**Lowvelder** Your trusted news source *In the community - for the community*

Figure 24: Notice published in the Lowvelder on 24 September 2020.

## ANNEX H: CONTACT DATABASE FOR STAKEHOLDER AND ROLEPLAYER PARTICIPATION

| FIRST NAME                                 | SURNAME    | AFFILIATION   | PHONE                       | EMAIL   | BID | DBARv1 | DBARv2 |
|--|------------|---|-----------------------------|---|-----|--------|--------|
| REGISTERED INTERESTED AND AFFECTED PARTIES |            |   |                             |   |     |        |        |
| Toni                                       | Stockdale  |   | 079 148 6242                | <a href="mailto:toni.purplebutterfly@telkomsa.net">toni.purplebutterfly@telkomsa.net</a>  | ✓   |        |        |
| Robert                                     | Boesch     |   | +264812095797               | <a href="mailto:rob_bo@iway.na">rob_bo@iway.na</a>  | ✓   |        |        |
| Fred                                       | de Groot   |   | 0833732712                  | <a href="mailto:freddeg911@gmail.com">freddeg911@gmail.com</a>  | ✓   |        |        |
| Pierre                                     | Naudé      |   | 083 778 4635                | <a href="mailto:pierrenaudé75@gmail.com">pierrenaudé75@gmail.com</a>  | ✓   |        |        |
| Grant                                      | Oliver     | Singita Lebombo   |                             |   |     |        |        |
| Reece                                      | Alberts    | North West University   | 084 507 3323 / 018 299 4267 | <a href="mailto:reece.alberts@nwu.ac.za">reece.alberts@nwu.ac.za</a> / <a href="mailto:albertsreece@gmail.com">albertsreece@gmail.com</a> | ✓   |        |        |
| Francois                                   | Retief     | North West University   | 083 639 2293                | <a href="mailto:francois.retief@nwu.ac.za">francois.retief@nwu.ac.za</a>  | ✓   |        |        |
| Jade                                       | De Keijzer | UCT Environmental and Geo Science   | 0716756656                  | <a href="mailto:DKJJAD001@myuct.ac.za">DKJJAD001@myuct.ac.za</a>  | ✓   |        |        |
| Moses                                      | Mathebule  | Mahlamandlophu T/A Forum Secretary  | 0606242043                  | <a href="mailto:mathebulemoses71@gmail.com">mathebulemoses71@gmail.com</a>  | ✓   |        |        |
| STAKEHOLDERS                               |            |   |                             |   |     |        |        |
| Herman                                     | Alberts    | National Dept. of Environmental Affairs: Integrated Environmental Authorisations      | (012) 399 9371              | <a href="mailto:HALberts@environment.gov.za">HALberts@environment.gov.za</a>  | ✓   |        |        |
| Muhammad                                   | Essop      | National Dept. of Environmental Affairs: Integrated Environmental Authorisations      | (012) 399 9406              | <a href="mailto:MEssop@environment.gov.za">MEssop@environment.gov.za</a>  | ✓   |        |        |
| Thivhulawi                                 | Nethononda | National Dept. of Environmental Affairs   |                             | <a href="mailto:Tnethononda@environment.gov.za">Tnethononda@environment.gov.za</a>  | ✓   |        |        |
| Shané                                      | Gertz      | SANParks - Skukuza Environmental Management   | 079 623 8731                | <a href="mailto:Shane.Gertze@sanparks.org">Shane.Gertze@sanparks.org</a>  | ✓   |        |        |
| Thabo                                      | Kgomommu   | SANParks - Manager Cultural Heritage  | 012 426 5358                | <a href="mailto:Thabo.Kgomommu@sanparks.org">Thabo.Kgomommu@sanparks.org</a>  | ✓   |        |        |
| Thanyani                                   | Madzhuta   | SANParks - Skukuza Cultural Heritage  |                             | <a href="mailto:thanyani.madzhuta@sanparks.org">thanyani.madzhuta@sanparks.org</a>  | ✓   |        |        |
| Solly                                      | Themba     | SANParks - Skukuza Community Facilitator  | 082 908 2685                | <a href="mailto:solly.themba@sanparks.org">solly.themba@sanparks.org</a>  | ✓   |        |        |
| Jeremiah                                   | Machavi    | SANParks - Skukuza Community Engagement   | 0822154456                  | <a href="mailto:Jeremiah.Machavi@sanparks.org">Jeremiah.Machavi@sanparks.org</a>  | ✓   |        |        |
| Philip                                     | Hine       | South African Heritage Resources Agency   |                             | <a href="mailto:phine@sahra.org.za">phine@sahra.org.za</a>  | ✓   |        |        |
| Khumbelo                                   | Malele     | Mpumalanga Tourism and Parks Agency   |                             | <a href="mailto:khumbelomalele@gmail.com">khumbelomalele@gmail.com</a>  | ✓   |        |        |
| Thapelo                                    | Shabangu   | Ehlanzeni District Municipality   | 0137598554/07987            | <a href="mailto:stshabangu@ehlanzeni.gov.za">stshabangu@ehlanzeni.gov.za</a>  |     |        |        |
| Leavi                                      | Mokoena    | Bushbuckridge Local Municipality, Information Centre, Along R40                       | 0729019014/08379 84703      | <a href="mailto:mokoenaevy8@gmail.com">mokoenaevy8@gmail.com</a>  | ✓   |        |        |
| Charity                                    | Nxumalo    | Road, Bushbuckridge   | 013 004 0453                | <a href="mailto:tcharitynxumalo@gmail.com">tcharitynxumalo@gmail.com</a>  | ✓   |        |        |
| Sampie                                     | Shabangu   | Inkomati Usuthu CMA   | 0629079061                  | <a href="mailto:shabangus@iucma.co.za">shabangus@iucma.co.za</a>  | ✓   |        |        |
| Robyn                                      | Luyt       | Mpumalanga Department of Agriculture, Rural Development, Land & Environmental Affairs | 072 157 0587                | <a href="mailto:rluyt@mpg.gov.za">rluyt@mpg.gov.za</a>  | ✓   |        |        |

## ANNEX I: BACKGROUND INFORMATION DOCUMENT

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## ANNEX J: EVIDENCE OF DISTRIBUTION OF DBAR AND EMPR

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ANNEX K: COPIES OF NATIONAL AND PROVINCIAL  
AUTHORITY COMMENTS

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## ANNEX L: COMMENT AND RESPONSE MATIRX

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