# Heritage Impact Assessment

# Taung Skull World Heritage Site

# Visual Landscape Report

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### Vision for the Taung Skull World Heritage Site<sup>1</sup>

To ensure that the World Heritage and other multiple natural and cultural values of the Taung Skull World Heritage Site are understood, conserved, protected, respected and shared by all.

 $^{\rm 1}$  From; The Integrated Management Plan for the Taung Skull World Heritage Site 2010 - 2015.

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### **Terms, Concepts and Definitions**

Authenticity and Integrity

Authenticity and Integrity are aspects of related to the quality of heritage that may be protected within a World Heritage Site or other heritage site. Such heritage may date from a specific period of time relevant to the significance of the site. A site may not be intact, but it could still be authentic. A ruin with most of its fabric missing, for example, may be authentic because it has not been overlaid or distorted by subsequent layers. Memory and documentation can also be authentic (although not necessarily accurate), because it derives from the period under study or from someone who had direct experience of an event. For conservation purposes, neither authenticity nor integrity may be adversely affected.

Australopithecus africanus

The African Ape of Southern Africa, a new name given to the discovery by Dr Raymond Dart in 1924, as a result of the discovery of the Taung Child Skull Fossil at the subsequently named Dart Pinnacle, in Buxton Quarry.

**Paranthropus** 

A genus of extinct hominids that were bipedal and probably descended from the *Australopithecus* hominids 2.7 million years ago. Members of this genus are characterised by robust craniodental anatomy, including gorilla-like sagittal cranial crests, which suggest strong muscles of mastication, and broad, grinding herbivorous teeth. However, *Paranthropus* skulls lack the transverse cranial crests that are also present in modern gorillas.

**Outstanding Universal Value** 

Outstanding universal value means cultural and/or natural significance, which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity. As such, the permanent protection of this heritage is of the highest importance to the international community as a whole.

Tufa

Massive deposits formed over millions of years by the precipitation of calcium carbonate rich water flows. Water percolating through the dolomite of the Ghaap Plateau allows it to build up the chemicals necessary for the precipitation of tufa. This process is still happening, and the river provides a modern analogue of tufa formation. It is interesting to note that filamentous algae and mosses growing on the edge of pools are important in facilitating the precipitation process.

### **Acronyms**

DACERD Department of Agriculture, Conservation and Environment of the North

**West Province** 

FHSSA The Fossil Hominid-bearing Sites of South Africa

HIA Heritage Impact Assessment
HMP Heritage Management Plan

IKM International Knowledge Management

IMP Integrated Management Plan

LED Local Economic Development

NHRA National Heritage Resource Act

OUV Outstanding Universal Value

READ Rural, Environmental and Agricultural Development of the North West

Province

SAHRA South African Heritage Resource Agency

SDF Spatial Development Framework

TSWHS Taung Skull World Heritage Site

UNESCO United Nations Educational, Scientific and Cultural Organisation

VIA Visual Impact Assessment

WHL World Heritage List

WHS World Heritage Site

### 1. Introduction

The Taung Skull World Heritage Site (TSWHS) was inscribed on the World Heritage List (WHL) in 2005, under United Nations Educational, Scientific and Cultural Organisation (UNESCO) Cultural Criteria (iii) and (vi), as an extension to the serial nomination of the Fossil Hominid Sites of Sterkfontein, Swartkrans, Kromdraai and Environs. The serial nomination extension also included the Makapan Valley in Limpopo Province, under the extended World Heritage property named 'The Fossil Hominid-bearing Sites of South Africa' (FHSSA).

The Management Authority for the TSWHS is the Department of Rural, Environmental and Agricultural Development (READ) of the North West Province. As a World Heritage Site, the site's Outstanding Universal Value (OUV), Authenticity and Integrity must be protected and maintained when considering development on and around the site, and a carefully conducted Heritage Impact Assessment (HIA), in terms of the National Heritage Resources Act (No. 25 of 1999), will go a long way to ensure that this is the case. Landownership for the TSWHS falls under Batlhaping Da Ga Phuduhucwana Tribal Authority, currently under the leadership of the Paramount Chief Tsepo Mankuroane and local Chief Lekwene.

The FHSSA contain fossils that have enabled the identification of several specimens or early hominids, more particularly of *Paranthropus*, dating back between 4.5 and 2.5 million years, and show evidence of the domestication of fire 1.8 to 1 million years ago. Of prime importance to Taung is the fact that the TSWHS has locality status, meaning it is the first place in the world where a fossil of the species *Australopithecus africanus*, the African Ape of Southern Africa, was found and now known as the Taung Child. The site was occupied by Stone Age people for a fair portion of the past 100 000 or more years, with evidence from over a dozen significant archaeological and palaeontological sites. Some of these sites have yielded fossil human remains, as yet undescribed. Precambrian fossils entombed in the dolomitic country rock are a staggering 2.2 billion years old. Today the site is still used for traditional purposes where local *Sangomas* and *Rastafarians* make use of sacred sites, such as the healing waters of the Blue Pools and Ochre Cave. The site hosts living traditional culture, wide open vistas over an expansive landscape, the Thabasikwa River gorge with soaring Black Eagles and a lively troop of resident baboons. The site is also traversed daily by the local villagers from Tamasikwa on the Buffer Zone edge.

The leading management document for the TSWHS is the Integrated Management Plan (IMP) for 2010 – 2015. The IMP holds the Vision for the Taung Skull WHS being, 'To ensure that the World Heritage and other multiple natural and cultural values of the TSWHS are understood, conserved, protected, respected and shared by all.' Further work is required to strengthen the management and development of the TSWHS, as defined through the Vision. Further documentation supporting the IMP and effective management of the site, are the Conservation Management Plan 2004, as well as the Cultural Heritage Resources Survey 2003.

Various activities have been related to the discovery, research, management and development of the Taung Skull WHS over time, and Table 1 provides a timeline of key events leading up to the current time of compiling this Status Quo Report.

In a fast developing country like South Africa, with increasing pressures on land, the task of preserving heritage has become more important than ever – today we have tools to assess and mitigate impacts on heritage and these need to be applied wherever negative impacts may occur, as a result of current and possible future developments, operations and/or other changing circumstances. Therefore, the Department of Rural, Environmental and Agricultural Development of the North West Province (READ) appointed EcoAfrica Environmental Consultants (Gauteng) Pty Ltd, hereafter referred to as EcoAfrica, to conduct a Heritage Impact Assessment (HIA), including a Visual Impact Assessment (VIA) for the Taung Skull World Heritage Site, in the North West Province of South Africa.

Of critical importance in the management and development of the site is the protection of the visual landscape, intricately linked to the site's OUV. Activities and development within the defined Core Area and Buffer Zone should abide by all legal provisions and be well considered in terms of the requirements of the Integrated Management Plan (IMP) 2010 for the TSWHS. Guidelines for the construction, expansion and maintenance of buildings and other structures in and around the site are also required. Protection of the visual landscape implies consideration of changes in land use both within the Buffer Zone, as well as outside the Buffer Zone – what may be referred to as a transitional area. VIA thus forms an integral part of the HIA, in order that vistas of, and from, the TSWHS are well protected. Such visual linkages will also have to be well defined in the planning guidelines like the Spatial Development Framework (SDF) of the local municipality.

### 2. The Cultural Landscape

A cultural landscape<sup>2</sup> is a landscape designed, improved or at least affected by human activity, whether deliberately or not. In other words, a cultural landscape refers to tangible human modifications of a natural environment and the intangible meanings associated with that modified landscape, like memories, traditions and stories.

The Application for Inclusion on the World Heritage List describes the Taung Skull Fossil Site as a cultural landscape that encapsulates not only remains from proto-human Australopithecine times over three million years ago, but from various segments of the Earlier, Middle and Late Stone Ages to the present. Cultural landscapes typically tend to be layered, reflecting a range of activities over time and the connection of 'past, present and future are seamlessly connected' (O'Hare 1997:47). The TSWHS is no exception and provides rich layered tapestries of people, objects, events and times that provides a specific texture and weave to this cultural landscape.

Examination and appreciation of the different heritage layers and their interrelationships ultimately brings a deeper understanding and appreciation of the universal significance of the Taung Skull WHS. The palaeontology and archaeology of the site has tremendous value and also provide a profound context for the practice of local belief systems, rituals and traditions, by local Tswana and Xhosa villagers.

<sup>2</sup> A **cultural landscape**, as defined by the World Heritage Committee, is the 'cultural properties [that] represent the combined works of nature and of man.'

The TSWHS can be represented through a framework of various interconnected tangible and intangible heritage layers, as listed in Table 3 below, with a variety of interpretive themes related to each.

The current narrative related to the TSWHS, is the story of the Taung Child and the fossilised skull found here in 1924. The palaeontological and archaeological aspects of the site have been well documented and researched. There is however much more to explore in the TSWHS and many more discoveries to be made. The interesting and rich geology of the site provides a specific point of interest amongst all people interested in rocks and fossils, and these resources must be carefully guarded and protected. The link to the mining history of the town has been documented, yet requires more attention, and including focus on the intricate linkages to urban design, architecture and visual landscape. Further research relate to the site would ideally be done through creating local opportunities for local people to be trained and conduct research and documentation.

Tangible heritage like the pinnacles at the fossil discovery site, the caves and sites with old fossils, the natural setting and river, the rocks and buildings constructed, and many more, are all linked to a stories that provide meaning to the physical heritage symbol. Through understanding the story or narrative about the specific object, the site and/or object gathers further meaning for and value to the visitor. All the heritage layers have been well identified in the IMP 2010, and now require further research, management and development.

### 3. Physical Aspects of the Taung Skull WHS

### 4. Visual Aspects of the Taung Skull Cultural Landscape

### Critical View 1: Buxton Quarry and the TSWHS from New Town



Visual Quality	
Potential Threats	
Level of Protection	
Further Action	

### Critical View 2: Buxton Quarry and Thabasikwa River from the Old Powerhouse



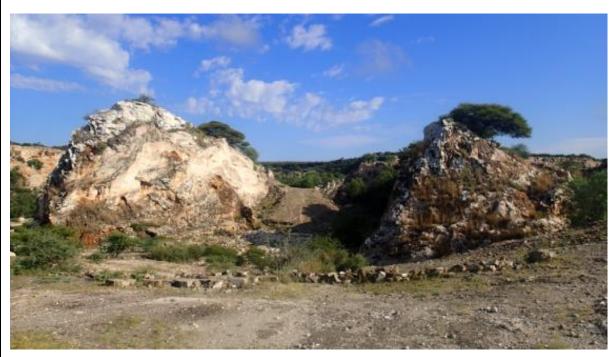
Visual Quality	
Potential Threats	
Level of Protection	
Further Action	

# Critical View 3: The 1<sup>st</sup> view of Dart's Pinnacle and Hrdlička's Pinnacle



Visual Quality	
Potential Threats	
Level of Protection	
Further Action	

Critical View 4: Taung Child Skull fossil discovery site at Dart's Pinnacle and Hrdlička's Pinnacle



Visual Quality	
Potential Threats	
Level of Protection	
Further Action	

### Critical View 5: Buxton, New Town and the Thabasikwa River towards the Harts River Valley



Visual Quality	
Potential Threats	
Level of Protection	
Further Action	

### Critical View 6: Thabasikwa River gorge (left) and Buxton Quarry (right)



Visual Quality	
Potential Threats	
Level of Protection	
Further Action	

# Critical View 7: Thabasikwa River and Buxton Quarry from edge of Buxton village

Visual Quality	
Potential Threats	
Level of Protection	
Further Action	

# Critical View 8: Wide open spaces across a rural landscape drop off the Ghaap Plateau, from Thomeng towards Buxton in the distance over the Buffer Zone



Visual Quality	
Potential Threats	
Level of Protection	
Further Action	

Critical View 9: Wide open spaces across a rural landscape over the Buffer Zone from Tamasikwa



Visual Quality	
Potential Threats	
Level of Protection	
Further Action	

### Critical View 10: Wide open spaces across the Buffer Zone from Mokassa towards Buxton



Visual Quality	
Potential Threats	
<b>Level of Protection</b>	
Further Action	

# 5. Recommendations

# References