

REPORT OF AN ABORIGINAL HERITAGE SURVEY FOR THE YOGI MAGNETITE PROJECT IN THE SHIRE OF YALGOO, WESTERN AUSTRALIA

A report prepared for FI Joint Venture Pty Ltd

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Widi Mob WC1997/072 Native Title Claim group survey representatives:

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- Mr Jake Bykerk
- Ms Karli Martin

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*Note: This report, in terms of its assessment under section 5 of the Western Australian *Aboriginal Heritage Act 1972*, should be read in conjunction with the archaeological report by O'Reilly (2019).

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MAPPING

Datum Used: GDA 1994 MGA Zone 50. Handheld GPS Unit Garmin 64ST (+/- 10m)

GLOSSARY OF TERMS

The Proponent – FI Joint Venture Pty Ltd

The Consultant – Brad Goode & Associates Pty Ltd

ACMC – Aboriginal Cultural Material Committee

AHA – Western Australian Aboriginal Heritage Act 1972

AHIS – Aboriginal Heritage Inquiry System

BGA - Brad Goode & Associates Pty Ltd

BP – Before Present

CHMP – Cultural Heritage Management Plan

DPLH – Department of Planning, Lands and Heritage

EPA – Environmental Protection Authority

FIJV - FI Joint Venture Pty Ltd

HIS – Heritage Information Submission

JTSI – Department of Jobs, Tourism, Science and Innovation

Mtpa – Million Tonnes per Annum

EXECUTIVE SUMMARY

FI Joint Venture (the proponent) is proposing to develop the Yogi Magnetite Iron Ore Project and associated infrastructure located approximately 15km northeast of Yalgoo and 95km west of Mount Magnet in the Shire of Yalgoo, Western Australia.

Specifically, the Yogi Magnetite Iron Ore Project includes the construction of a 5 Mtpa magnetite iron ore mine, a processing plant and associated infrastructure proposed to be located on FIJV's mining tenements M59/740, M59/637, E59/2227-1, G59/53, P59/2133 and L59/156. The following proposed infrastructure is located within these tenements and comprises a total area of 699.35 hectares, referred to as the Survey Area:

- Crusher (9.40 ha)
- Ore Stockpile (13.50 ha)
- Administration (21.05 ha)
- Workshop (11.66 ha)
- Processing Plant (48.35 ha)
- Overburden Facility (53.45 ha)
- Mine pit (147.91 ha)
- Waste Rock Facility (214.08 ha)
- Dry Processing Waste Facility (160.44 ha)
- Fresh Water Pond (7.10 ha)
- Drainage Water Point (6.74 ha)
- Parking (5.67 ha)

Prior to proceeding the proponent wishes to determine if there are any sites or places of Aboriginal heritage significance, as defined by Section 5 of the Western Australian *Aboriginal Heritage Act 1972* (AHA), that will be affected by this proposed work in order to fulfil their obligations under the AHA.

As such Brad Goode & Associates Pty Ltd (the consultants) was commissioned by FI Joint Venture (FIJV) to conduct an archaeological and ethnographic Site Identification Aboriginal Heritage Survey for the proposed Yogi Magnetite Project infrastructure areas with the Widi Mob WC1997/072 Native Title Claim (NTC).

A search of the Department of Planning, Lands and Heritage (DPLH) Aboriginal Heritage Inquiry System (AHIS) conducted on the 23rd April 2019 for the survey areas revealed that there are **no** previously recorded ethnographic registered sites or other heritage places located within the survey area.

As a result of the ethnographic consultations held with four representatives from the Widi Mob WC1997/072 Native Title Claim group on the 29th and 30th of April 2019, **no new ethnographic sites** of significance, as defined by sections 5b, 5c, 39.2 & 39.3, of the AHA were identified within the Yogi Magnetite Project survey areas.

During the ethnographic survey the Widi NTC group representatives did advise that they were aware of a songline which ran north to south through the broader region in Widi country and connected to significant ceremonial law and meeting grounds at Peak Hill in Wadjari country. This songline was reported to follow a series of waterways which connected Peak Hill, Wilgie Mia, Walga Rock and Noongal in the north to Nullewa Lake, Koolanooka Springs, Three Springs, Lake Moore, Ninghan and Mongers Lake in the south before disappearing underground at the Yarra Yarra Lakes at Carnamah.

In relation to the survey area the Widi NTC group representatives advised that the songline may have possibly followed the waterways situated nearby, however they had no specific knowledge

of the path of the songline traversing the actual survey area under consideration. The section of the songline which was thought to pass through the vicinity of the survey area was reported by a senior Widi informant to have only been used intermittently by women and children as they made their way to Peak Hill to join other Yamatji groups, such as the Wanmulla and Badimia people. Whilst it was advised that women's sites could possibly be located along the songline, the Widi NTC group representatives had no specific knowledge of such places. It was further advised that the songline or travel path was marked by significant landscape features in the wider region, such as the Three Decker Hills (DPLH ID 21137), Wadgingarra Hill, Twin Peaks (DPLH ID 5669) and Yalgoo Creek (DPLH ID 20469).

During the ethnographic survey the Widi NTC group representatives also provided information on the cultural significance of waterways, advising that it was their belief that they, along with other significant landscape features such as the hills, were created by the water serpent spirit called the *Beemarra* as he travelled through the land. Permanent water sources, such as freshwater pools and rivers, were defined by the Widi NTC group representatives to be indicators that the Beemarra had travelled through the land and, as such, propitiatory rituals were required to be conducted at the waterways to acknowledge and respect the spirit of the Beemarra. In addition to these mythological beliefs, the waterways in the area were also defined by the Widi NTC group representatives to be significant as the Widi people followed and camped along them as they travelled and were an important resource for survival.

Due to the defined significant cultural heritage values associated with the waterways and high landmark features located along the reported songline in the vicinity of the survey area, the Widi NTC group representatives requested that they be preserved and managed throughout the proposed Yogi Magnetite Project to ensure that they are not adversely impacted upon, such as through being removed or permanently altered for mining. The Widi NTC group representatives advised that appropriate management actions to mitigate the impact of the proposed works on the cultural heritage values associated with waterways could include the possible relocation of infrastructure out of water catchment systems and, where this is not possible, stream training or the diversion of waterways to ensure the continuation of the flow of water. The Widi NTC group representatives requested that if such actions are proposed then further consultations be held with the Widi NTC group in order to minimise and mitigate the impact that such works could have upon the cultural heritage values associated with the waterways. In addition, they further requested that there be hydrological monitoring and restrictions on extractions from the water aquifer to avoid adverse cultural and environmental impacts upon the water system.

As a result of the ethnographic Aboriginal heritage survey the following recommendations are made in relation to the Western Australian *Aboriginal Heritage Act* (1972):

It is recommended that FI Joint Venture Pty Ltd can proceed with their plans for the Yogi Magnetite Project in the Shire of Yalgoo without risk of breaching section 17 of the AHA in relation to ethnographic Aboriginal heritage sites as defined by section 5 of the AHA.

It is further recommended that FI Joint Venture Pty Ltd gives due consideration to the Widi Mob WC1997/072 Native Title Claim group representatives' requests that:

- Waterways and significant landform features in the survey area be preserved and managed through the project to ensure that they are not adversely impacted upon; and
- If this is not possible then further consultations be held with the Widi Mob WC1997/072 Native Title Claim group to minimise and mitigate the impact that the project could have upon the cultural heritage values associated with such places.

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REPORT

Report of an Aboriginal Heritage Survey for the Yogi Magnetite Project in the Shire of Yalgoo, Western Australia

ISSUE

FI Joint Venture (the proponent) is proposing to develop the Yogi Magnetite Project and associated infrastructure areas northeast of Yalgoo, Western Australia.

The proponent wishes to determine if there are any sites or places of Aboriginal heritage significance, as defined by Section 5 of the Western Australian *Aboriginal Heritage Act 1972* (AHA), that will be affected by this proposed work in order to fulfil their obligations under the AHA.

REPORT OBJECTIVES

To report on archival research in order to determine if any previously recorded Aboriginal Heritage sites or places will be affected by the above project proposal.

To report on consultations held with representatives of the Widi Mob (Widi) WC1997/072 Native Title Claim (NTC) group in order to determine if any new Aboriginal Heritage sites or places will be affected by the above project proposal.

To report upon management recommendations should any sites or places of significance as defined by Section 5 of the AHA be identified to be located within the project area.

To report upon any recommendations and/or the significance of the sites or places should the proponent be required to make application under Section 18 of the AHA for consent to use the land that may contain an Aboriginal site.

BACKGROUND

On the 6th September 2018 Ms Shadi Sadegh (Acting Managing Director) contacted Brad Goode & Associates Pty Ltd (the consultants) in regards to a proposed magnetite iron ore project, located approximately 15km northeast of Yalgoo and 95km west of Mount Magnet in the Shire of Yalgoo.

Specifically, the Yogi Magnetite Iron Ore Project includes the construction of a 5 Mtpa magnetite iron ore mine, a processing plant and associated infrastructure proposed to be located on FIJV's mining tenements M59/740, M59/637, E59/2227-1, G59/53, P59/2133 and L59/156. The following proposed infrastructure is located within these tenements and comprises a total area of 699.35 hectares, referred to as the Survey Area:

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- Drainage Water Point (6.74 ha)
- Parking (5.67 ha)

Brad Goode & Associates Pty Ltd (BGA) were commissioned by the proponent to conduct an archaeological and ethnographic Site Identification Aboriginal Heritage Survey for the proposed Yogi Magnetite Project and associated infrastructure areas with the Widi NTC group, who are represented by MPS Law.

The ethnographic survey was conducted from the 29th April to the 30th of April 2019 by BGA anthropologists Ms Louise Huxtable and Mr Grant Preller with four representatives from the Widi NTC group, Mr Patrick Mullaley, Ms Karli Martin, Mr Jake Bykerk and Mr Djarran Martin.

The archaeological survey was conducted from the 26th April to the 1st of May 2019 by BGA archaeologists Mr Tom O'Reilly, Ms Sally McGann and Mr Stuart Johnston with the assistance of the four Widi NTC group representatives.

The results of these surveys are documented below.

LOCATION

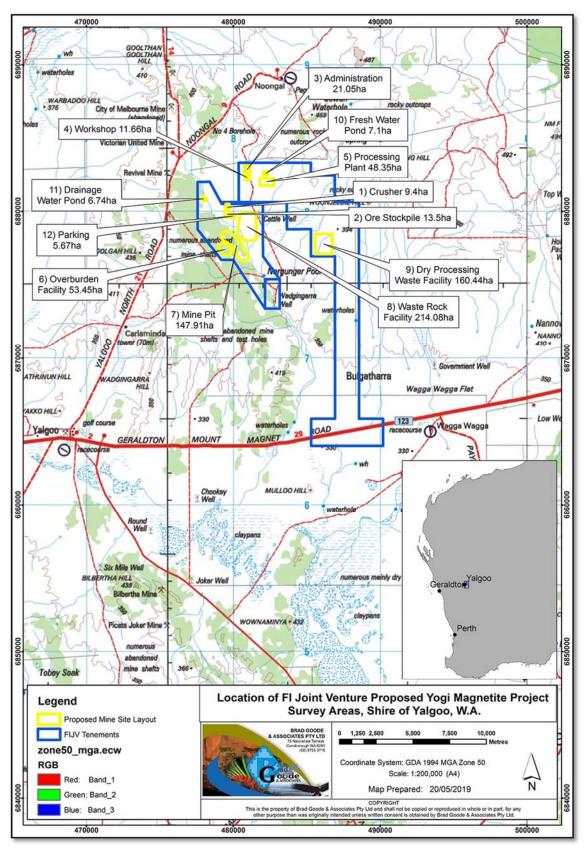


Figure 1: Location of the survey area.

ETHNOGRAPHIC & HISTORICAL BACKGROUND

TRADITIONAL YAMATJI CULTURE

The survey area is located within the traditional lands of the Widi people within the Mid-West Gascoyne in Western Australia. The Widi Mob WC1997/072 Native Title Claim boundary extends from Dalwallinu in the south, Dongara in the west, north of Mullewa and near Mt Gibson and Yalgoo in the east.

The survey areas encompasses country where Aboriginal people in contemporary times often refer to themselves as Yamatji or Yamadji, a generalised term meaning 'Aboriginal person' in the Wadjari language (Green et al. 1996: 24). Like 'Noongar' or 'Nyungar' has become a generalised term for the Aboriginal people of the South West, 'Yamatji' or 'Yamadji' has become an even more generic term for "people of mixed 'tribal' origin who may or may not be of Western Desert background" (Berndt 1979: 7). In 1979 Ronald Berndt described the Yamatji situation having "isolated aspects of traditional culture surviving" (ibid). Traditionally, within the Yamatji region Aboriginal groups comprised a cultural bloc unified by dialects of common languages and similar patterns of social organisation, as well as ritual, religious and mythological beliefs (ibid; Liberman 1978: 1). Traditional groupings and territorial boundaries in the Yamatji area have been examined by Daisy Bates (1938) and Norman Tindale (1974), however the work of both of these researches contain many inaccuracies due to a conceptual misunderstanding that Aboriginal groups were distinct political units with well-defined tribal boundaries demarcated by physiographic features. In reality, modern research indicates that in the Yamatji regions boundaries between different groups were mobile and flexible, with a resultant lack of exclusiveness between groups (Berndt 1979: 17-18). Boundaries were generally not specific and socio-linguistic dialect groups were associated with particular territories demarcated by zones rather than precise boundary markers (Berndt 1959: 33).

In 1974 Tindale defined traditional boundaries as based on socio-linguistic groupings, describing a "tribe" as, "a band of speech plus a widely recognised name" (Tindale 1974: 30). According to Tindale the *Wadjari*, their name deriving from the word *wadja* or *wadji* meaning "no", occupied a large area located,

North to the hills overlooking the head of the Lyons River, Teano Range, Mount Isabella, Waldburg Range; on [the] upper Gascoyne west of Three Rivers; at Erivilla and Milgun; south to Cheangwa and the Roderick and upper Sandford rivers (Tindale 1974: 257).

Tindale's 1974 map of tribal boundaries depicts the Wadjari's neighbouring groups to the east as the *Malgaru*, *Inggarda*, *Tedei*, *Malgana* and *Nokaan*; the *Widi* to the south; the *Barimaia*, *Ngaiawongga* and *Madoitja* to the east; and the *Ngarlawongga* and *Ninanu* to the north.

Tindale elaborated that the Wadjari western boundary in the Byro and Dalgety Downs area reflected an expansion of the Wadjari people from the Murchison valley, forcing the Kurudandi people of the Inggarda group further west (Tindale 1974: 258). As such Tindale concluded that the western boundary depicted on his map could have been placed some 65km further to the east to reflect the Wadjari lands prior to their expansion (ibid). According to Tindale's informants Mount Gould or *Jagarang* was reported to be the central place in Wadjari territory (ibid).

Whilst Tindale does not specifically mention the Mullewa Wadjari group, it is understood that the Mullewa area is included in the territory he credits as belonging to the Wadjari group, as depicted on his 1974 map of tribal boundaries.

Damien Marmion (1999) has more recently observed that,

Wajarri is the traditional language and name of the people from the area between the Wooramel and Gascoyne Rivers south to between the Murchison River and Geraldton-Mount Magnet Road; in the west it approached the coastal highway and in the east it extended to around Mileura Station (Marmion 1996: 2).

Today Wajarri people can be found across the Mid-West, Murchison and Gascoyne regions.

In 1886 the Western Australian Colonial Secretary, Lord Gifford, in his contribution to the first major Australian ethnological work, E.M. Curr's *The Australian Race*, described the *Widi* people as "Yamagee" (Curr 1886: 378). Gifford reported that Yamagee was a word meaning, "blackfellow or blackfellows generally in the language of the *Muliarra* people of the Upper Sandford region (ibid).

Tindale described the Widi as a distinct group who traditionally occupied the area,

From between Lakes Monger and Moore north to Yurin, Talleringa Peak, and Nalbarra; west to Mullewa and Morawa (Morowa); east to Paynes Find and Wogarno, south of Mount Magnet; at Yalgoo and upper Greenough River. They evidently visited Cheangwa in later times but it was north of their country (Tindale 1974: 260).

Tindale's 1974 map of tribal boundaries depicts the Widi's neighbouring groups as the *Amangu* in the west, the *Nokaan* in the north-west, the *Wadjari* and the *Barimaia* in the north, and the *Kelamia* in the east. Tindale (1974) also reported that,

At Lake Darlot, two tribes distances away, Widi (as Weedy) was given the description of 'too savage; no good' by A. Mason (1895 MS). Northern hordes around Pinegrove pushed southwest to Geraldton down the Irwin and Greenough Rivers in early contact times ... They practiced both circumcision and sub-incision (Tindale 1974: 260).

Tindale observed that the Widi's neighbouring Wadjari group may have had an advantage over,

[T]hose people ... on the coast and the Widi of the country southeast of Mullewa, because they placed great reliance on grass seed food whereas the other people lived on the hammered seeds of shrubs, did not use the process of wet milling of grass seed and thus ... often went hungry (Tindale 1974: 102).

Tindale's 1974 map of tribal boundaries was loosely based on Daisy Bates' descriptions from her work with the West Australian Aboriginal people in 1913. Bates defined different groups as 'nations' as based on their social, familial and geographical organisations, as well as whether they practiced ritual circumcision or subincision. Bates defined a group in the following way,

The term tribe is applied to an aggregate of local groups, occupying a definite area of country, distinguished by certain local names, applied from within or without the groups, or both, and with certain relationships existing between them, arising from intermarriages, community of language, totems and social laws (Bates 1985: 40).

The Wajarri and Widi lands fall into an area that Bates referred to as the Murchison Central Areas due to the similarity of class divisions, customs, laws and practices of the groups within the area (Bates 1985: 40). Bates states that the Central Areas Nation included, "the circumcised tribes of the Nor'West Coast, the tribes of the Upper Murchison and Gascoyne Rivers, and part of the Eastern Goldfields" (ibid). The western boundary of the Central Areas Nation was considered to be the approximate demarcation between circumcision practices (ibid: 61).

Bates (1985) describes the Wajarri, or *Wajjari wonga*, and the Widi, or *Wirdi wonga*, as one large socio-linguistic group, named after their tribal term for the word "no" (Bates 1985: 62). She elaborated that the Wajjari inhabited the areas,

On the Gascoyne and Murchison Rivers, and have been found as far north as Bangemall (Frederick River), as far west as the coast at Champion Bay in the Northampton district, and along the Railway Line from Mullewa, near Geraldton to and north and north-east of Nannine (Bates 1985: 62-63).

Bates (1985) reported that the Wajjari group moved into their neighbours' territories towards the coast and further south, particularly at the turn of the 20th century when they encroached westward to fill the vacuum left by groups dispersing or being forcibly removed from their traditional lands (Bates 1985: 58-59, 63). Bates also reported that the Wajjari encroached upon the traditional lands of the *Nanda*, *Nandadhurra* and *Nunnagurdi* in Northampton, as well as the *Ingarda*, *Warriwonga* and *Jiwarli* (ibid). The circumcised groups also practiced adoption and intermarriages with the uncircumcised groups to the west of them (ibid).

Groups further interacted with one another through travel along traditional paths and trade routes which zig-zagged across the country towards pools and camping places (Bates 1985: 63). The groups inhabiting the headwaters of the Fortescue, Ashburton, Gascoyne and Murchison districts, as well as the Upper Murchison, East Murchison and Goldfields were reported to have extensive highways running east and west or north-east and south-west from one sociolinguistic group's territory to another (ibid). These routes allowed trade between the Peak Hill and Upper Murchison groups with the Gascoyne groups and, through them, the uncircumcised groups of the North-West (ibid). Red ochre or *yaggara* was traded by the Ashburton coastal tribes for large pearlshell or *wirdi-wirdi* or *wira-wira* from the Thaduna and Lake Way groups and spears from the Upper Ashburton groups (ibid). This trade allowed friendly relationships to develop between different groups, allowing adoptions and intermarriages to occur, as well as widespread initiation practices. However, with the advent of Europeans and the restriction to traditional lands, these routes and paths were cut off from the Wajarri and Widi groups.

Through the writings of Bates it is evident that by the time any kind of ethnographic research had begun in the Yamatji territories, different Aboriginal groups' boundaries and domains had been disrupted and traditional land-owning patterns irrevocably changed. These changes, and the accompanying loss or variability of traditional knowledge, would have been much more pronounced by the time Tindale visited Widi country in 1939.

Each socio-linguist group, including the Wajarri Yamatji, Mullewa Wadjari and the Widi, consisted of a number of smaller groups. Each of these smaller groups were made up of around 12 to 30 people, consisting of related men, their wives and children and, at times, visiting relatives from other groups. These subgroups could be described as a family band, horde or local descent group (Green 1984: 9). Members of the local descent group exercised the greatest rights to resources although other groups would also have some rights of access and use gained through birth or marriage. Places of conception and birth held strong bonds and spiritual connections for individuals. Group members generally lived within their area except when travelling over larger distances and areas to visit other groups for meetings, ceremonies or trade. The names of these descent groups had totemic associations connecting to the land. Berndt (1979: 81) notes ritual affiliation was inherited through the father and adds that the work of Bates suggests local patrilineal descent groups whereby an individual inherited an affiliation to a conception (or birth) totem as well as its particular place and ritual,

Thus, a person belonged to the [...] local descent group of his (or her) father. Within the father's land division a person's conception (or birth) totem, a particular natural species, was mythically defined vis-à-vis a territorial centre which was, in turn, the focus of ritual (Berndt 1979: 81).

Berndt and Berndt (1999) elaborate on the significance of kin systems in Aboriginal societies,

In Aboriginal societies, most relationships are articulated in kin terms. All activities are carried out in the company of persons who are bounded to one another in

conventionally defined ways. They not only know what to expect from others, and how they will respond to certain situations, but are reasonably sure that participation and co-operation will be forthcoming if the occasion demands. Over and above the networks of obligations and responsibilities linking persons together in, more or less, a mutually satisfying systems, there is an atmosphere of familiarity and intimacy possible only in a group which disallows the concept of a stranger for anyone within its midst, and even well outside its own social limits (Berndt & Berndt 1999: 90).

For every local descent group there was a tract of land with which they most closely identified themselves with. This land was called their *Kalla* or fireplace, where they camped, hunted, gathered foods and had proprietary rights and custodial duties (Moore 1884: 4). The traditional Aboriginal notion of boundaries was much more fluid than the current rigid land boundaries that are imposed as part of the Native Title Process.

Aboriginal people throughout all of Australia have historically held two distinct and complementary forms of relationship to the land: esoteric (sacred, ritual, mythological and ceremonial) and economic (biographical, historical and habitation). Stanner (1965) clarifies their differences by using the terms 'estate', 'range' and 'domain'. Estate refers to the home ground or Dreaming place of a particular descent group whilst range refers to the tract of country over which a group travelled for hunting and foraging, and included their estate (Stanner 1965: 2). In short, a group's range provided economic boundaries whilst their estate offered a sense of place, belonging and spiritual meaning for both the individual and the group. A descent group's domain refers to the combination of both estate and range (ibid). The strength of attachment to a particular place would vary from person to person and/or family to family but the associations with the land were, and remain today, crucial elements of Aboriginal society.

An identifiable group's connection to specific country and land ownership was clearly demarcated and acknowledged through the manifestation of demonstrated religious rituals. These rituals were based upon mythological stores, often depicting the activities of mythological ancestors of the Dreaming as they traversed across the land (Peterson 1970: 201-202). As the mythological ancestors travelled they carved out 'runs', leaving clearly marked physical attributes of the landscape across the country. These Dreaming tracks were practical necessities for survival in the hot and dry climate of Yamatji lands in Western Australia. Therefore traditional paths or routes held significance as sacred creation from the Dreaming. As well as individual rights of use and economic benefit to particular tracts of land being transmitted and acquired through birth and marriage, the individual also acquired spiritual links and custodial obligations. These connections to the land also linked to the mythic figures of Aboriginal Dreaming (Silberbauer 1994: 124; Stanner 1965: 13). The Dreaming refers to a period of creation when mythical figures transformed the world and all within it, including the hills, lakes, rivers and animals, thereby defining spiritual, social, moral and territorial division for its inhabitants (Berndt & Berndt 1999: 137). Many myths are grounded in the landscape with different Dreaming figures transforming the land and infusing it with a living spirit, creating sacred sites that continue to link all Aboriginal generations with the Dreaming and the eternal spirit beings themselves (Machin 1996: 10; Berndt & Berndt 1999: 137). Belief in the Rainbow Serpent as a major creative Ancestral Being is widespread in Australia, including in the Mid-West Gascoyne region of Western Australia where the Yamatji people predominately referred to the Dreaming snake as the Beemarra (Radcliffe-Brown 1926: 19; Gifford & Harris 2011: 11).

EUROPEAN SETTLEMENT AND DISRUPTION

In terms of European contact, the history of the Yamatji people of the Mid-West Gascoyne began in the early 17th century, as in other coastal parts of Western Australia, when the Dutch United East India Company or the *Vereenige Oost-Indische Compagnie* (V.O.C.) ships involved in the spice trade with the Indonesian archipelago ventured too far eastwards while bound from the Cape of Good Hope to ports such as Batavia (now Jakarta) (Playford 1996: 9). En route to

the Dutch East Indies ships were often forced close to the coast by the prevailing south-westerly winds and, without realising their proximity to the rough coastline until too late, came to grief (Green 1984: 27-28). The first recorded contact with Western Australia occurred in 1616 by Dutchman Dirk Hartog after strong westerly winds blew his V.O.C. ship *Eendracht* off course and placed him upon the islands off the coast of Shark Bay (ibid: 28). Hartog's ship would almost certainly have been seen by the Yamatji people (likely the Nanda or their neighbours) but there is no record of any actual contact. Hartog left behind an inscribed pewter place which was recovered 81 years later by another Dutch navigator, Willem De Vlamingh, who was leading an exploration in 1697 to search for evidence of earlier shipwrecks (the *Batavia* in 1629, the Gilt Dragon in 1656 and the Ridderschap van Holland in 1694) (ibid: 29). De Vlamingh replaced Hartog's plate with one of his own before unsuccessfully trying to make contact with the local Aboriginal people in order to shed some light on the wrecked Dutch ships and lost seamen (ibid). Hartog's plate is the oldest known record of a landing by Europeans in Australia with his visit also having a major impact on world cartography in that the land hitherto thought of as Terra Australis Incognita (The Unknown South Land) was now tangible and became known as New Holland by the Dutch and Australia by the British (Playford 1996: 167-8; Battye 1985: 68, 77).

The first actual contact between the Yamatji people and Europeans, however, most likely occurred in 1629 after the wreck of the V.O.C ship the *Batavia* and subsequent mutiny of part of its crew in the Houtman Abrolhos Islands (Playford 1996: 20). The bloody mutiny took place after the ship's overall commander, Francisco Pelsaert, had sailed to Batavia in one of the ship's longboats to seek help after the *Batavia* crashed into the reef (ibid: 21). When he returned three months later Pelsaert discovered that the mutinied group had massacred 125 men, women and children (ibid). Pelsaert executed many of those who had taken part, excepting two younger men who were marooned on the mainland near a "small inlet", which was almost certainly either the mouth of the Hutt River or that of the Murchison further north (Drake-Brockman 1995: 92, 789-282). Bates (1966) later observed during her work in the Murchison and Gascoyne region that the local Aboriginal people were of distinct Dutch appearance writing, "There was no mistaking the flat heavy Dutch face, curly fair hair and solid stocky build" (Bates 1966: 107).

None of the Dutch visitors are thought, however, to have penetrated far inland. By one account at least four such ships were in the vicinity of what was later known as the Moore River mouth between 1656 and 1658, and crew members from one vessel, the *Emmeloort*, are said to have met some Indigenous inhabitants whilst venturing inland along the river for approximately 5km (anon. thesis 1955: 1). However a proposed Dutch colony along the south coast never eventuated and European contact with the Indigenous people of the Mid-Western interior region almost certainly did not commence until after British settlement.

British settlement at the Swan River began in 1829 when Captain Charles Fremantle landed with a party at the Swan River with the purpose of annexing the "whole of the western part of Australia in the name of Britain" (May 1997: 7). Upon arrival the Swan River region was explored and land was surveyed before being opened for settlers to purchase to farm (ibid: 12). However, the first contact with the Yamatji people was unlikely to have occurred until 1839 when Englishman Sir George Grey explored the north of Western Australia (Green 1984: 133). Following the discovery of the West Australian coast and British settlement in the Swan River, Geraldton, Albany, Busselton and Bunbury, European explorers turned their attention northward in the pursuit of gaining more pastoral properties. Grey had been exploring the north of Western Australia when, on his return to Perth, his whaleboats were wrecked in the heavy surf near the mouth of the Murchison River, forcing him and his men to make the rest of the 600km journey to Perth on foot through country previously unrecorded by Europeans (Bottrill 1991: 4). Grey's journals provide an insight into the early relationships between European explorers and the Indigenous Australian population with Green reporting that Grey's journal revealed the difficulty of the explorers "barely surviving on a small ration of food and water as they traversed a region that showed constant evidence that it supported a large Aboriginal population" (Green 1984: 133). Lieutenant Grey's journey from the Murchison to Perth showed some observations of traditional Aboriginal life and their ability to withstand and adapt to harsh environmental conditions, a process that took thousands of years. However, despite Grey's exploration party's reliance on Aboriginal knowledge and resources, his predominant concern was the suitability of pastoralism in Western Australia.

As far as the first British settlers in Western Australia were concerned, the then Governor John Hutt had reported to the Secretary of State in London, Lord Glenelg, in May 1839 that Aboriginal people had, "no fixed place of residence, no habitations but those which the weather temporarily necessitated them to erect..." (Battye 1985: 52). In such circumstances, which amounted to official support for the doctrine of *terra nullius* (unoccupied land), there was no likelihood of Aboriginal people being offered any form of compensation when European occupation of Yamatji lands began in the late 1840s and conflict inevitably followed.

Possibly the first British explorers to encounter the Widi people were the brothers Augustus and Francis Gregory during their explorations to the north and north-east of Perth in 1846-7 in which they crossed and named Lake Moore (Gregory & Gregory 2002: 5-6, 11; Battye 1985: 134). During this exploration the party came across an Aboriginal people who, "hastily decamped, leaving their spears and shields behind in the hurry of retreat" (ibid: 6).

Spanish Benedictine monks, led by Dom Joseph Serra and Dom Rosendo Salvado, had also begun their missionary work among Aboriginal people of the Victoria Plains at New Norcia in 1846 (Crake 1985: 26-27). The New Norcia Benedictine Mission was founded in 1849 by Bishop Salvado with the aim to "Christianise and civilise" the Aboriginal people of the Victoria Plains district (Haebich 1992: 6). It is possible that monks from New Norcia or their lay shepherds met Widi people whilst exploring the country to the north-east soon after, although they certainly would've when Salvado took up land in that area 20 years later (ibid). The Aboriginal population in the New Norcia mission was devastated by a series of measles epidemics during the 1860s and Salvado instead turned to providing "institutional care" for Aboriginal children from other parts of the region (ibid: 7). This care included domestic and farm work training and religious, numeracy and literacy education, before the young adults were encouraged to set up their own small farms on mission land, ensuring an enduring Aboriginal population at New Norcia (ibid).

As the Mid-West was further explored by European settlers the region became appealing to pastoral owners and gold miners. Early contact between European settlers and the Aboriginal Yamatji people often resulted in violent conflict. In 1880 the first attempt to drive cattle overland from the coast at Greenough, south of Geraldton, to the De Grey Station, east of Port Headland, took nineteen men led by the Clarkson brothers (Hammond n.d: 386). North of Meekatharra the party was attacked by Yamatji people, the Clarkson brothers both killed and the rest of the party turned back, abandoning 1, 573 cattle (ibid). A pastoral owner, Charlie Smith, brought the rights to the remaining cattle and a year later he used them to establish the first stations in the Upper Murchison and Gascovne districts (O'Connor & Veth 1984: 17). Whilst the Clarkson brothers did not fare well in their endeavour to drive cattle across the Meekatharra region their previous encounter with Aboriginal people south of Mullewa had led to the disclosure that there was gold in the region (Hammond n.d. 386). A member of that original party, Mr W. Pears, returned two years later in 1878 to locate gold with the aid of local Aboriginal people (ibid). Following this, a rich ore body was discovered in 1890 by three prospectors, Connelly, Bourke, and Douglas, leading to the proclamation of the Murchison Goldfield in 1891 (Pinnock 1959: 2-3).

In March 1869 a young surveyor, John Forrest, conducted an expedition from Perth in search of clues to the fate of the lost explorer Ludwig Leichhardt (Crowley 1981: 544). According to the *Australian Dictionary of Biography*,

From 15 April until 6 August he successfully led six men and 16 horses over 2000 miles much of it in uncharted wilderness around Lake Moore and Lake Barlee, and inland almost as far as the later site of Laverton. He found no trace of Leichhardt, and no good pastoral land (Crowley 1981: 544).

Forrest's interaction with local Aboriginal people was recorded by a long-time Dalwallinu farmer who reported that Forrest used extreme methods to obtain water in the area during his expedition, such as stuffing salt into the mouth of a local Aboriginal man so that when he became thirsty he would lead the party to water (Barnes cited in Gifford & Harris 2011: 15).

Conflict between the European invaders and local Aboriginal groups were not uncommon during this time. In what became the Paynes Find area, an incident took place in 1881 involving a pioneer pastoralist, A.J. Clinch and a shepherd. The two men were barricaded for two days in a hut near Mount Kenneth on the northern shores of Lake Moore before they managed to escape (Palmer 2010: 10). In the meantime Aboriginal people were said to have stolen 2, 000 sheep (ibid). Clinch's attempt to establish a permanent pastoral base at Mount Kenneth was described as "unsuccessful owing to the hostility of the Aborigines" (ibid).

In the Murchison regions the meeting of the two different cultures was reported to be, "peaceful, with Aboriginal people showing the white newcomers how to find water in the foreign landscape" and even helping to track lost sheep (Mitchell 2006: 10). Many pioneering settlers, such as Jock Sharpe from Wooleen Station or Francis Wittenoom who went on to establish Murgoo, Boolardy, Nookawarra, Mileura and Belele Stations, formed solid relationships with the Wajarri people based on mutual respect (ibid; Birman & Bolton 1990: 1). These settlers often employed the Yamatji people as station hands and cooks in the new homesteads. After catching an Aboriginal man stealing his stock, Wittenoom, "collared, weighted and chained" him and walked him 201km to the Bowes lock-up as required by law (ibid). Following this he wrote to the Resident Magistrate, Commissioner Fairbairn, stating that the punishment for Aboriginal people was unfairly harsh and requested that settlers be allowed to deal with Aboriginal people in, "their own way" (ibid).

With the foray of European settlers into the Wheatbelt region of Western Australia the different Yamatji groups saw their existence drastically altered. The introduction of new diseases that the European settlers brought with them was often fatal to a number of Aboriginal Australians (Berndt & Berndt 1999: 15). In addition to declining Indigenous populations, the introduction of stations and farms brought in foreign animals and fenced off lands, restricting Aboriginal access to traditional runs, hunting places and ceremonial sites. Despite help from local Aboriginal people in their British forefathers' explorations over unfamiliar grounds,

...the explorers and early settlers who followed them had moved in ... with that supreme confidence and sense of destiny with which the British were penetrating practically every other corner of the globe at the time ... Thus, convinced that they could make better use of the land, had a superior culture to boot, the Anglo-Australians simply assumed that its Aboriginal inhabitants would meekly stand aside as their ancestral homes were invaded (Webb & Webb 1983: 53).

Despite this sense of self-entitlement and righteousness, as well as the "culturally integrated acquisitive sense of private property", the farmers and pastoral owners were heavily reliant on local Aboriginal knowledge and it was reported that the Aboriginal people were quiet and peaceful on the provision that they were treated fairly (Webb & Webb 1983: 53, 54). However, the farmers expressed a lack of awareness of the highly developed belief systems surrounding the country belonging to the Aboriginal people and their intrusion justifiably occasionally resulted in bloodshed (ibid). Cattle and sheep spread over tribal lands, depleting and fouling the water and declining the numbers of native animals in the area (Marchant 1988: 14). Consequently the Yamatji groups either responded with violent conflicts, in which they

inevitably fared worse, were forced to create new pathways which subsequently brought them into contact with different lands, or remained on their fragmented traditional lands as workers (Bates 1985: 64; de la Rue 1979: 98; Fry et al. 1995: 20).

In 1920 the Geraldton local newspaper, the *Geraldton Express*, published the reminiscences of a white elderly man which gives some idea of the situation which the Yamatji found themselves in after the European invasion,

The natives were very wild, they were also numerous – to be counted in thousands – and they gave the new-comers a bad time ... The blacks resented the white man taking possession of their springs and water-courses – places around which their ancestors had hunted for generations – and following the murder of a white man by Aborigines or the killing of sheep, or bullocks, a party would be formed and a [expletive] hunt organised, with the result that the ringleaders in the neighbourhood where the crime was committed would be shot down – the saying being among some that 'the sooner the blackfellow and the dingo are exterminated the better for the white man' (Geraldton *Express* 10th September 1920).

This same man recalled a case where a settler was murdered and where two mounted policeman brought in,

...a string of natives - men and women - chained together by the necks. The natives were tried, convicted and sentenced to be hanged where they committed the murders. The executions duly took place - trees being used for gallows - and the bodies were left suspended for some days afterwards in order to bring home to the natives what they might expect if more murders were perpetrated. Altogether nine natives were hanged (Geraldton *Express* 10th September 1920).

A "hanging tree" at Mullewa remains part of Yamatji and European history, with reports that a number of Aboriginal people, mainly Wadjari people, were executed there, some without trial (Gifford & Harris 2011: 16). Others, including Widi people, were transported to Rottnest Island for offences including sheep stealing (ibid).

As in all other frontier areas in Australia, the killings and other atrocities on both sides in the Yamatji districts largely ceased as the country came to be more closely settled by Europeans. Wheat farmers moved into the Mid-West in the first decade of the 20th century and railway links with the south followed soon after (Crake 1985: 39). The other factor which brought a European population influx into the area was the discovery in the late 19th century of gold at Yalgoo, Pinyalling, Fields Find, Rothsay and Paynes Find (ibid: 29-28; Crowley 1962: 48). Whilst the population of the area has considerably reduced, gold mining still occurs, however, gold has largely been replaced by iron ore as the major object of mining activity in the region such as at Karara and Mount Gibson (Palmer 2010: 29).

The dislocation and dispossession of the Yamatji people was further magnified by the forced removal of Aboriginal children from their families into state and church missions. As well as establishing administrative structure and control over Aboriginal employment, movement, habitation and marriage, the Western Australian *Aborigines Act 1905* formulated official governmental powers to "remove and institutionalise 'mixed race' children" (Haebich 2000: 187). A number of restrictive regulations dictated familial relations of Aboriginal people in Western Australia, with Haebich stating that besides the Northern Territory, Western Australia's "system of removal and institutionalisation of Aboriginal children was the most separate from mainstream child welfare process and the most extreme in terms of powers to remove children" (ibid).

The resulting tribal disintegration due to this displacement of the Yamatji people from their traditional land led to fragmented family groups who tended to congregate on pastoral properties to follow an adapted life style. Those who survived these early years of disease, forced removal from their land and subsequent violent conflicts, often congregated about the pastoral lands, on missions and riverbanks, accepting meagre rations in return for labour (Clark 1992: ix). A situation developed in rural areas where pastoralists and Aboriginal people were dependent on each other for survival, the latter being both attracted to the stations for dependable food and water and encouraged to settle there (Heydon 1994: 207). In this way a pool of cheap labour was made available to pastoralists and the possibility of stock being slaughtered by wandering tribesmen avoided. The provision of rations by the stations was also attractive, as it made hunting and gathering redundant but subsequently repressed these traditional Aboriginal practices and migration patterns (Machin 1998: 15).

Yamatji pastoral workers in the Mid-West Gascoyne often settled on stations within their traditional lands in order to retain a connection with their country, albeit drastically altered (Ove Arup 1991: 8). This helped retain fragmented knowledge and contact with cultural sites that were then passed down onto future generations as the Aboriginal pastoral workers intermarried and often gave birth to their children on those stations (Clark 1992: ix). However, this was further complicated with the introduction of the Pastoral Award for Aborigines in 1968 whereby permanent residence and employment on stations became less secure and movement to central locations, such as the town of Carnarvon, Geraldton and Meekatharra, accelerated (ibid: 8). Whilst the Yamatji traditional way of life was irrevocably repressed, the continuation of culture and customary values of specific Aboriginal groups residing on pastoral stations led to a "gradual redefinition of traditional custodian in terms of boundaries" (Ove Arup 1991: 8). Additionally, the forced displacement of stolen Aboriginal children led to the recreation of Indigenous intercultural practices and further redefined traditional custodian lands. As such a redefined Yamatji culture persevered and traditional law functioned until the late 1940s. The breakdown of the law in the 1940s was similar to a process described by Professor Robert Tonkinson in respect of the Western Desert,

When the frontier spread, and graziers and miners ventured to the very edges of the desert, the isolation of the Aborigines came to an end, and their culture, already affected by introduced animals and items of material technology ... was threatened with further, irrevocable change (Tonkinson 1979 cited in Berndt 1979: 179).

ARCHIVAL RESEARCH

Archival research involved an examination of the Department of Planning, Lands and Heritage (DPLH) Aboriginal Sites and Places Register, a review of any relevant site and place files, and a review of any unpublished ethnographic reports that relate to the Yalgoo survey area in Western Australia.

SITES AND PLACES REGISTER SEARCH

The DPLH Aboriginal Sites and Places Register categorises places reported to be of importance and significance to Indigenous people into two separate categories.

The first category contains sites classified as 'Registered.' Registered sites have been assessed by the Aboriginal Cultural Materials Committee (ACMC) as meeting the definition of Section 5 of the AHA and are fully protected under the law. Disturbance to land that contains such sites requires a Section 18 application for ministerial consent should proponents wish to use the land that contain these sites.

'Other Heritage Places' is the second category of places contained upon the Aboriginal Sites and Places Register. These types of places include reported places 'Lodged' and awaiting ACMC assessment, and places where the information has been assessed but there is 'Insufficient information' to make a final determination under Section 5 of the AHA but there is enough information to warrant these places temporary protection in law. Disturbance to land that contains such places requires a Section 18 application for ministerial consent should proponents wish to use the land that contain these places.

Within the category of 'Other Heritage Places' the final category is 'Stored Data.' Such places have been assessed by the ACMC but fail to meet the definition of section 5 of the AHA. Places in this category are not sites under the AHA and are not protected in law. Proponents have no further legal requirements for such places should they wish to use the land unless further information is reported which would lead to such a place being reassessed as a site in terms of the definition of section 5 of the AHA.

In relation to this survey a search of the DPLH Aboriginal Heritage Inquiry System (AHIS) was conducted on the 23rd April 2019 for the Yogi Magnetite project survey area in the Shire of Yalgoo (see Appendix 1: DPLH Sites and Places Register Search).

The search revealed that there are **no** previously recorded DPLH registered ethnographic sites or other heritage places located within the Yogi Magnetite project survey area.

As such FIJV have **no further obligations** under the AHA in relation to any previously recorded DPLH registered ethnographic sites or other heritage places located within the Yogi Magnetite project survey area.

For further information of previously recorded DPLH Aboriginal Heritage Sites and Places adjacent to the survey areas within FIJV's tenements, please see the *Due Diligence Risk Assessment Advice for a Mine Proposal at Yalgoo and an Infrastructure Corridor between Yalgoo and Geraldton, Western Australia* (McGann 2019).

REVIEW OF RELEVANT SITE OR OTHER HERITAGE PLACE FILES

As there are no previously recorded DPLH registered ethnographic sites or other heritage places located within the Yogi Magnetite survey area, there are no DPLH site or place files to review.

REVIEW OF RELEVANT ETHNOGRAPHIC REPORTS

Table 1: Previous ethnographic Aboriginal heritage surveys conducted in the wider Yalgoo area.

Table 1: Previous ethnographic Aboriginal heritage surveys conducted in the wider Yalgoo area.			
DPLH ID	Aboriginal Heritage Surveys	Proximity to Yogi Survey Area	
17420	O'Connor, R. & Veth, P. 1984, Report of the Survey for Aboriginal Sites in the Vicinity of DRCS Repeaters, Meekatharra-Mount Magnet Area, prepared for Telecom Australia July 1984	One DRCS repeater located near Carlaminda Tower/Hill, approximately 1.2km east of Yalgoo North Road and 8km south-west of the Overburden Facility	
20858	O'Connor, R. 2003, Report on an ethnographic survey with the Mullewa Wadjari Group of proposed water supply improvements in Yalgoo, report prepared for the Dept. of Water, 2003.	The survey corridor runs for approximately 6km along the Yalgoo North Road, approximately 11km southwest of the proposed Overburden Facility location.	
20861	Parker, R. 2003, Archaeological and ethnographic site identification survey under the Aboriginal Heritage Act (1972) of Town Water Supply Improvement Project at Yalgoo, WA, report prepared for the Dept. of Water	The survey corridor runs for approximately 6km along the Yalgoo North Road, approximately 11km southwest of the proposed Overburden Facility location.	
21635	Muir, P. and Walker, D. 2001, Heritage Survey for Department Regional Development by Ngalia Heritage Research Council & Australian Interaction Consultants on Service Corridor Route (Proposed), October 2001.	Survey corridor runs to the south of the Geraldton Mount Magnet Road, intersecting with Tenement L59/156.	
106102	Hames Consultancy Group 2002, Interim report and application for consent to disturb sites for the infrastructure corridor from Geraldton to the North Eastern Goldfields under section 18 of the Aboriginal Heritage Act (1972), report prepared for ACMC, May 2002.	Survey corridor runs to the south of the Geraldton Mount Magnet Road, intersecting with Tenement L59/156.	
106388	Hames Consultancy Group 2002, Management report of Aboriginal Heritage issues affecting the infrastructure corridor from Geraldton to the North-Eastern Goldfields, report prepared for the Department of Minerals and Petroleum Resources, August 2002.	Survey corridor runs to the south of the Geraldton Mount Magnet Road, intersecting with Tenement L59/156.	
22483	Glendenning, W. 2006, Report of an Aboriginal Heritage Survey of a Proposed Exploration Drilling Project at Yalgoo, report prepared for Ferrowest Ltd, September 2006.	10km long x 200m wide N-S survey corridor situated within tenements E59/642, P59/1397 and P59/1508, approximately 14km east of Yalgoo. Located outside of current Yogi mine survey area but intersects with tenement M59/637-I.	
-	Glendenning, W. 2011, Report of an Aboriginal Heritage Survey of a Proposed Exploration Drilling Project at Yalgoo with the Wadjari Yamatji and Hodder Family, report prepared for Ferrowest Ltd, March 2011.	5 separate survey area located within tenements M59/637, E59/1097 and E59/1347 to the north and south of Geraldton Mount Magnet Road, approximately 20km east of Yalgoo. Intersects with tenement m59/637-I.	

OUTCOMES OF ARCHIVAL RESEARCH

In relation to this survey a search of the DPLH Aboriginal Heritage Inquiry System (AHIS) was conducted on the 23rd April 2019 for the Yogi Magnetite project survey area in the Shire of Yalgoo (see Appendix 1: DPLH Sites and Places Register Search). The search revealed that there are **no** previously recorded DPLH registered ethnographic sites or other heritage places located within the Yogi Magnetite project survey area.

As such FIJV have **no further obligations** under the AHA in relation to any previously recorded DPLH registered ethnographic sites or other heritage places located within the Yogi Magnetite project survey area.

IDENTIFICATION OF SPOKESPEOPLE

THE RIGHT TO SPEAK ON HERITAGE ISSUES

Various authors have discussed the contemporary problem of who in the Indigenous community has the authority to speak on heritage issues within an area. O'Connor et al. (1989: 51) suggests that when this question is posed to people in Indigenous Australia, answers are usually framed by such terms as 'the Traditional Owners', i.e., those people who are defined by place of birth, or descent. Myers (1986) presents a broader and more contemporary view of 'ownership' based upon descent and association,

An estate, commonly a sacred site, has a number of individuals who may identify with and control it. They constitute a group solely in relationship to this estate... Identification refers to a whole set of relationships a person can claim or assert between him/herself and a place. Because of this multiplicity of claims, land holding groups take essentially the form of bilateral, descending kindred. Membership as a recognised owner is widely extended and therefore groups are not a given (Myers 1986: 128).

Myers (1986) further clarifies the current perception of 'ownership' when he states,

....such rights exist only when they are accepted by others. The movement of the political process follows a graduated series of links or claims of increasing substantiality, from mere identification and residual interest in a place to actual control of its sacred association. The possession of such rights as recognised by others, called 'holding' (*kanyininpa*) a country, is the product of negotiation (Myers 1986: 128-129).

While the notion of descent is clearly an important criterion within Myers analysis, it must be seen in terms of the contemporary Nyungar situation. Nyungar tradition in the South West has been seriously eroded since colonisation as lines of descent have been broken and previously forbidden and mixed marriages have interconnected many Nyungar groups who would not have traditionally had a close association (Machin 1993: 20). Consequently, in contemporary times the criteria of historical 'association' may in some cases also be regarded as a 'right to speak' on heritage issues within an area. Machin (1995) elaborates,

Traditional subsistence no longer sufficed to support Aboriginals so they combined this with menial work on farms and over time new relationships to land developed. As a consequence, the more recent history associated with their involvement with European agriculture and labour patterns is often more relevant than the pre-contact mode of attachment to an old way of life and the roots of the identity as original owners of the land. Biographical associations are often tied to post-settlement labour patterns and identification. These can predominate. This is part of a dynamic process of ethnicity, identity and tradition (Machin 1995: 11).

O'Connor et al. (1989) identified several criteria for determining contemporary community spokespeople. A spokesperson must have a long-term association with an area, usually as a young person, and had extensive contact with a member or members of the 'pivotal generation of the culture transmitters'; those people whom, as children themselves, had contact with people who could pass on their traditional knowledge. A spokesperson must also demonstrate knowledge of the region's natural resources, its hunting, fishing and camping grounds, local water sources and flora and fauna. This is important because a person without this knowledge is unlikely to be seen by their fellow Nyungar people as truly being from that country, despite having been born or lived in that area. In some cases, people from outside a specific region have established themselves by political activism. They are accepted by their fellow Nyungars because they may have participated in mainstream pursuits, such as advanced education or legal and political careers, which have empowered them within the broader community. As such, these people are a valuable resource to the local Indigenous community. The people consulted in this survey fulfil at least one of these criteria.

NATIVE TITLE CLAIMS OVER THE SURVEY AREA

Currently lodged with the Register of Native Title Claims and the Schedule of Applications, held by the Commonwealth Native Title Tribunal, there is one registered Native Title application that overlays the project area. The Schedule of Applications includes registered applications, unregistered applications and applications still undergoing the registration test.

• Widi Mob WC1997/072 WAD6193/1998 (Registered)

<u>Applicants</u>: Gregory Denis Martin, Kathleen Eva Pinkerton, Shirley Anne McPherson, Justin Robert Martin and Edward James Mullaley.

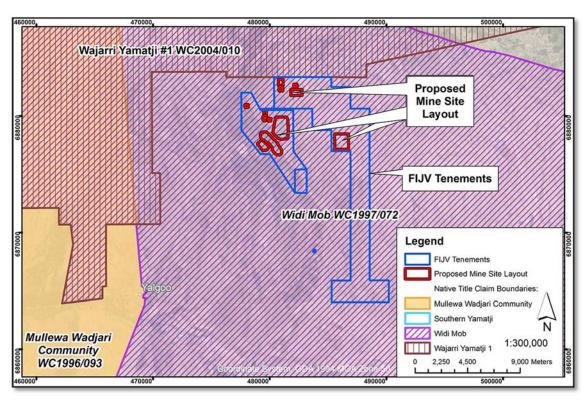


Figure 2: Native Title Claims over the FIJV Yogi Magnetite Project survey area.

SELECTION OF SPOKESPEOPLE FOR THIS SURVEY

As the representatives body under the *Native Title Act 1993* for the registered Widi Mob WC1997/072 Native Title Claim group, MPS Law were contacted in regards to selecting Widi representatives to be consulted with for this project. Subsequently, Mr Michael Pagsanjan (Principal) and Ms Tayla Inglis (Lawyer) from MPS Law provided BGA with the following list of nominated representatives from the Widi NTC group to be consulted with:

- Mr Kerin Martin
- Mr Djarran Martin
- Ms Karli Martin
- Mr Edward Mullaley Jnr

- Mr Edward Mullaley Snr
- Ms Linda Mackintosh
- Mr Jake Bykerk

However, due to unforeseen circumstances, Widi applicant and heritage coordinator Ms Kathleen Pinkerton advised BGA that Edward Mullaley Snr, Edward Mullaley Jnr and Linda Mackintosh were unable to attend the survey. As such Ms Pinkerton advised that Widi representative Mr Patrick Mullaley would instead be included in the survey.

On the morning of the archaeological survey it was further advised that Mr Kerin Martin would be unable to attend the survey. BGA contacted Ms Pinkerton in relation to this issue who authorised Widi representative Mr Bill Lewis to attend the survey instead. On the 28th of April Mr Lewis drove from Dongara to Yalgoo to participate in the survey, however due to personal issues he left the survey the following day.

As a result the following four Widi representatives attended the ethnographic survey on the 29th and 30th of April 2019:

Mr Patrick Mullaley was born to parents Mrs Myrtle Daphne Mullaley (nee Harris), from Morawa, and Mr Frank Thomas Mullaley, from Subiaco. Mr Mullaley's maternal grandparents are Mr Norman Cleaver Harris and Mrs Eva Harris (nee Phillips). Mr Mullaley's paternal grandmother is Mrs Kathleen Carter (nee McNamara). Mr Mullaley's apical ancestors are Ginny of Irwin, Tom Philips or Maluka, Amy Philips (nee Cameron) and Tom 'Ullamarra' Philips Jnr. Mr Mullaley shares a cultural association with to the Yalgoo survey area through his mother's familial connections and is a member of the Widi Mob WC1997/072 NTC group.

Ms Karli Martin was born in Perth to parents Mr Greg Martin, from Mount Magnet, and Mrs Cheryl Martin (nee Walley), from the Mogumber Mission. Ms Martin's paternal grandparents are Mrs Joan Margaret Martin (nee Lewis), from Morawa, and Mr Leonard 'Lennie' Martin, from Mount Magnet. Ms Martin's maternal grandparents are Mr Robert Walley and Mrs Theresa Walley, from Kellerberrin. Ms Martin's apical ancestors are Ginny of Irwin, Tom Philips or Maluka, Amy Cameron, Jane Philips, Norm Harris Senior and Tulbuk. Ms Martin shares a cultural association to the Yalgoo survey area through her father's familial connections and is a member of the Widi Mob WC1997/072 NTC group.

Mr Djarran Martin was born in Perth to parents Mr Greg Martin, from Mount Magnet, and Mrs Cheryl Martin (nee Walley), from the Mogumber Mission. Mr Martin's paternal grandparents are Mrs Joan Margaret Martin (nee Lewis), from Morawa, and Mr Leonard 'Lennie' Martin, from Mount Magnet. Mr Martin's maternal grandparents are Mr Robert Walley and Mrs Theresa Walley, from Kellerberrin. Mr Martin's apical ancestors are Ginny of Irwin, Tom Philips or Maluka, Amy Cameron, Jane Philips, Norm Harris Senior and Tulbuk. Mr Martin shares a cultural association to the Yalgoo survey area through his father's familial connections and is a member of the Widi Mob WC1997/072 NTC group.

Mr Jake Bykerk was born in Joondalup to parents Ms Renee Pinkerton, from Perth, and Mr Sacha Bykerk, from Holland. Mr Bykerk's maternal grandparents are Mrs Kathleen Pinkerton (nee Mullaley), from Morawa, and Mr Rodney Pinkerton, from Kalgoorlie. Mr Bykerk attended schooling in Perth. Mr Bykerk's apical ancestors are Ginny of Irwin, Tom Philips or Maluka, Amy Philips (nee Cameron) and Tom 'Ullamarra' Philips Jnr. Mr Bykerk shares a cultural association to the Yalgoo survey area through his maternal grandmother and is a member of the Widi Mob WC1997/071 NTC group.

COMMUNITY CONSULTATION

AIMS

- To establish contact with Indigenous people who retain traditional or current knowledge pertaining to the region.
- To determine if there are any sites or places of significance, as defined by Section 5 of the AHA, within the project area.
- To record any ethnographic information provided about identified sites or places.
- To generate consensual recommendations from the Indigenous community representatives in regards to any Section 18 requests and to record management strategies for identified ethnographic and archaeological sites.

METHOD

To arrange the survey the selected informants were contacted by phone and mail with an onsite meeting arranged. At the commencement of the meeting the informants were briefed as to the details of the project with the aid of the project plans and previously recorded Aboriginal heritage sites and places overlaid upon a large scale aerial photo map.

Ethnographic information was recorded in a notebook and photographs of the survey process were taken. GPS coordinates of any cultural features were recorded in the field and transferred to mapping software ArcView V10 where final maps were produced.

COMMUNITY CONSULTATION PROCESS

On Monday 28th April 2019 BGA consultants Ms Louise Huxtable and Mr Grant Preller (Anthropologists) met four representatives of the Widi NTC group, Mr Patrick Mullaley, Mr Djarran Martin, Ms Karli Martin and Mr Jake Bykerk at the FIJV project area, located approximately 30km north-east of Yalgoo. Mr Tom O'Reilly, Mr Stuart Johnston and Ms Sally McGann (Archaeologists) from BGA were also present having just completed an archaeological inspection. Ms Shadi Sadegh (Acting Managing Director) from FIJV, Mr Darren Lundberg (Managing Director) from Redna Global Pty Ltd and Mr Clint Hammond (General Manager) from the Department of JTSI were present to provide technical advice in regards to the project.



Figure 3: From left, Mr Mullaley, Mr O'Reilly, Mr Lundberg and Mr Hammond, discussing the proposed Yogi Magnetite Project in Yalgoo.

The ethnographic survey began with Mr Lundberg providing the group with an overview of the project, including a brief description of the various infrastructure areas.

Mr O'Reilly then provided a summary of the areas which had been archaeologically surveyed over the previous few days, explaining that no archaeological sites had been identified during the archaeological inspection (see O'Reilly 2019). Here Mr Mullaley stated that he was not surprised that the archaeologists had not found any artefact sites as there was little water in the survey area and, as such, the area was unsuitable for habitation.

Ms Huxtable then advised the group that the purpose of the ethnographic consultation was to discuss if the Widi NTC group representatives were aware of any sacred sites, such as places where mythologies, ceremonies or rituals occurred, or places where more mundane customary activities, such as camping or hunting, transpired.

Mr Patrick Mullaley responded that he knew of a songline that ran in a south-north direction across Widi country and connected to some ceremonial law grounds in Wadjari country. Mr Mullaley continued, explaining that the Widi Mob were known as the river people and were sometimes referred to as the *Willonew*, with 'willo' meaning 'river' and 'new' meaning 'people'. Mr Mullaley explained that the Irwin and Lockier River systems were important boundary markers and were culturally significant for the Widi people.

Ms Huxtable enquired into whether this songline ran through the survey area to which Mr Mullaley responded that the purpose of a songline was to provide directions to move through country, sometimes into or through other groups' traditional lands, with songlines being used regularly and others only every few years. He added that he was aware of Aboriginal people having used this Mullewa songline which he defined as "running through the general survey area" during his lifetime, and that it consolidated with several other songlines at Peak Hill. Mr Mullaley elaborated that Peak Hill was a significant meeting place where different Yamatji groups, including the Wadjari, Wanmulla and Badimia people, would congregate to carry out ceremonies and trade. Mr Mullaley added that his great-grandmother participated in these ceremonies and passed on knowledge about Peak Hill to her family.

Mr Mullaley advised that songlines, or travel pathways, usually followed fresh water systems and the songline through the area would likely follow the waterways and pools located to the north, south and east of the proposed Dry Processing Waste Facility. He stated that the travel time along this songline would have taken the "old people" (Widi and Wadjari ancestors) about three months to complete and, as the songline was associated with law, reiterated that it would have only been used by the Widi approximately every five years when they gathered at the law grounds at Peak Hill in Wadjari country.

Ms Huxtable enquired further into the path of the songline to which Mr Mullaley responded that the songline to Peak Hill was also connected to Wilgie Mia, Walga Rock, Noongal and possibly along the waterways in the nearby vicinity before continuing on in a south-westerly direction to Nullewa Lake, Koolanooka Springs, Three Springs and Carnamah. Mr Mullaley advised that the waterway, which the songline followed, disappeared underground at Yarra Yarra Lakes at Carnamah. Mr Mullaley added that this water system was also connected to Lake Moore, Ninghan and Mongers Lake.

On further questioning from Ms Huxtable Mr Mullaley advised that he was not aware of the exact location of the songline in relation to the survey area, however he thought that it did not pass through the actual survey area. Mr Mullaley further advised that the Three Decker Hills (DPLH Place ID 21137), located approximately 13.5km south-southwest of the proposed Overburden Facility location, served as an important marker on the songline, as did a freshwater well located near Wadgingarra Hill which was also defined to be a men's site. He also stated that places where archaeological material had previously been located in the vicinity were likely

camping places along this songline, such as the Yalgoo Creekline Scatters (DPLH Place ID 20469), as women and children travelled along waterways and drainage channels in the area along the songline. Mr Mullaley added that the Twin Peaks (DPLH Site ID 5669) were also connected to this songline.

Ms Huxtable enquired into women and children only utilising this travel path to which Mr Mullaley responded that the men would have travelled along a parallel route approximately 150km further to the west, with the two routes meeting up further north and south. Mr Mullaley advised that, as such, there could be women's sites in the area which he was restricted from knowing about. Mr Mullaley explained that he was not specifically familiar with the ethnographic stories or mythologies associated with the survey area and advised that Widi Elders Ike Simpson and Irene Curly would have more detailed knowledge about the survey area. As such Mr Mullaley requested that they be included in future surveys for the project.

Ms Huxtable later questioned Ms Martin about this gender-sensitive songline to which Ms Martin responded that she was unaware of any specific knowledge regarding this women-only songline, however advised that her Aunties, including several who lived in Yalgoo, had further knowledge. As such Ms Martin requested that elder women from Yalgoo be included in the consultation process.



Figure 4: Ms Louise Huxtable and Ms Karli Martin discussing the potential for women's sites in the vicinity of the survey area; view looking east.

The discussion then shifted to the significance of waterways, which was defined by the Widi NTC group representatives as being a core cultural value for the Widi Mob, with the group advising that they have a cultural obligation as traditional custodians to look after all waterways on their country. Mr Mullaley stated, "If we don't look after the waterways we could get punished by the spirits and die. We've got to look after them". He explained that the management of waterways in the survey area was important to ensure that they, and the cultural heritage values associated with them, were not impacted upon as a result of the project. Mr O'Reilly and Mr Lundberg clarified that there were no waterways present in the survey area.

Mr Mullaley advised that in addition to waterways, the Widi Mob were also concerned over the preservation of high landmark features which were defined to be culturally important as

"markers" used for orientation when travelling throughout the area. Mr Preller asked Mr Mullaley to clarify this concern, to which Mr Mullaley responded that in his view the management of the waterways and hills in the area were the main concerns which the Widi NTC group representatives had in regards to the proposed mine. Mr Mullaley advised that the tops of hills and ridges would have been traditionally and historically used by the Widi people as viewing points and that any body of water was associated with the water serpent creation spirit being called the Beemarra. In regards to the high areas, Mr Mullaley explained that if the peak of an important hill was impacted upon (such as being removed for mining), then the songline associated with the hill would be broken. If the waterway was broken, Mr Mullaley advised, then the associated songline would be broken and people would no longer be able to travel along the rivers and creeks. In regards to the significance of water Mr Mullaley explained that the quality and permanence of the water was an indication that the Beemarra had travelled through the landscape and created the waterways as he travelled. Widi people, Mr Mullaley advised, would then follow along the path or songline of the Beemarra, camping along the path where freshwater pools, springs and rivers were present. Ms Huxtable enquired into whether Mr Mullaley or any of the other Widi NTC group representatives knew of any specific mythologies regarding the Beemarra or any other spiritual beings in the survey area to which they responded no, however advised that it was their belief that the Beemarra would have created the major natural features in the region, such as the waterways and hills, as he travelled through the land. Mr Mullaley advised that a propitiatory ritual was required by visitors at waterways in order to acknowledge and show respect to the spirit of the Beemarra, whereby sand was thrown into the water and the visitor introducing him/herself. Mr Mullaley added that the waterways in the area also held significance as an important resource and habitat for animals in the area.



Figure 5: Widi NTC group representative Mr Patrick Mullaley performing a propitiatory ritual at a waterway located to the north of the Dry Processing Waste Facility survey area whilst Ms Sadegh and Mr Hammond look on; view looking south.

Here Ms Sadegh and Mr Lundberg advised that some appropriate measures in regards to the protection and management of any waterways that the project could possibly impact upon could include the possible redirection of waterways to ensure the continuation of water flow, stream training, the diversion of the waterway and/or relocation of infrastructure. Mr Mullaley responded that the main concern from the Widi NTC group was to ensure that the water and sheet flow were not adversely affected by the project infrastructure due to the cultural and

environmental significance of the water system. Mr Lundberg advised that there was some flexibility regarding the location of the project infrastructure with only the ore body unable to be relocated. Mr Mullaley enquired into the source of the main water supply for the mine to which Mr Lundberg responded that water for the mine would be artesian.

Further discussion continued on broader management considerations which Mr Mullaley advised should include the management of the water aquifer with water extractions being monitored to ensure that the mine site would not draw too much water. Mr Lundberg advised that there would be environmental regulations under the EPA which would have stipulations in regards to water use and management.

Mr Mullaley enquired into whether rehabilitation was planned to occur to which Mr Hammond responded that FIJV would have a legal obligation to rehabilitate the area at the end of the project life in accordance with the Mine Closure Plan.

Mr Preller then enquired about the life of the mine to which Ms Sadegh explained that at this stage it was based on 20-year life of mine and may include a pit of up to 250 metres deep. Ms Sadegh continued, explaining that the dewatering would be a 'closed system' and that a large proportion of the extracted water was proposed to be used for the slurry pipeline.

Mr Mullaley then enquired how the broader project infrastructure area were proposed to be connected together, noting that at this stage they had only inspected the main project infrastructure areas and that no access roads or any other ancillary infrastructure had been included in the survey. Mr Lundberg explained that the focus of the survey was to inspect the key infrastructure areas, and that pending the infrastructure areas being clear of Aboriginal heritage places, the ancillary infrastructure such as access roads would then be designed and surveyed. In relation to this Mr Mullaley advised that at this stage, the proposed location of all major infrastructure facilities was not likely to cause any issues to the cultural landscape.



Figure 6: From left, Mr Mullaley, Mr Johnston, Mr O'Reilly, Ms Huxtable and Mr Martin inspecting the survey area for the proposed Yogi Magnetite Survey Area; view looking north-west.

Mr Preller then enquired when the construction phase of the project was likely to commence to which Mr Lundberg explained that the project was still awaiting some significant approvals, including the EPA Approval which they estimated could be received in March 2020, after which construction would likely commence approximately two years after (in 2022).

Ms Huxtable enquired into whether the Widi NTC group representatives currently had any further questions or comments to make in regards to the survey area to which they responded no. This concluded the ethnographic survey for the day and the team returned to Yalgoo.

On the following day, the 30th of April 2019, the survey team further inspected and discussed survey area. No further issues were raised. Following this discussion, the anthropologists and Widi NTC group representatives discussed and consolidated the recommendations in regards to the project, including management requests. On the advice of Mr Mullaley, he signed the Letter of Advice (see Appendix 2) on behalf of the other members of the Widi Mob NTC group survey team.

This concluded the ethnographic survey.



Figure 7: The ethnographic and archaeological survey team on the completion of the survey at the proposed Yalgoo Magnetite Project.

COMMUNITY CONSULTATION OUTCOMES

As a result of the ethnographic consultations held with four representatives from the Widi Mob WC1997/072 Native Title Claim group on the 29th and 30th of April 2019, **no new ethnographic sites** of significance, as defined by sections 5b, 5c, 39.2 & 39.3, of the AHA were identified within the Yogi Magnetite Project survey areas.

During the ethnographic survey the Widi NTC group representatives did advise that they were aware of a songline which ran north to south through the broader region in Widi country and connected to significant ceremonial law and meeting grounds at Peak Hill in Wadjari country. This songline was reported to follow a series of waterways which connected Peak Hill, Wilgie Mia, Walga Rock and Noongal in the north to Nullewa Lake, Koolanooka Springs, Three

Springs, Lake Moore, Ninghan and Mongers Lake in the south before disappearing underground at the Yarra Yarra Lakes at Carnamah.

In relation to the survey area the Widi NTC group representatives advised that the songline may have possibly followed the waterways situated nearby, however they had no specific knowledge of the path of the songline traversing the actual survey area under consideration. The section of the songline which was thought to pass through the vicinity of the survey area was reported by a senior Widi informant to have only been used intermittently by women and children as they made their way to Peak Hill to join other Yamatji groups, such as the Wanmulla and Badimia people. Whilst it was advised that women's sites could possibly be located along the songline, the Widi NTC group representatives had no specific knowledge of such places. It was further advised that the songline or travel path was marked by significant landscape features in the wider region, such as the Three Decker Hills (DPLH ID 21137), Wadgingarra Hill, Twin Peaks (DPLH ID 5669) and Yalgoo Creek (DPLH ID 20469).

During the ethnographic survey the Widi NTC group representatives also provided information on the cultural significance of waterways, advising that it was their belief that they, along with other significant landscape features such as the hills, were created by the water serpent spirit called the *Beemarra* as he travelled through the land. Permanent water sources, such as freshwater pools and rivers, were defined by the Widi NTC group representatives to be indicators that the Beemarra had travelled through the land and, as such, propitiatory rituals were required to be conducted at the waterways to acknowledge and respect the spirit of the Beemarra. In addition to these mythological beliefs, the waterways in the area were also defined by the Widi NTC group representatives to be significant as the Widi people followed and camped along them as they travelled and were an important resource for survival.

Due to the defined significant cultural heritage values associated with the waterways and high landmark features located along the reported songline in the vicinity of the survey area, the Widi NTC group representatives requested that they be preserved and managed throughout the proposed Yogi Magnetite Project to ensure that they are not adversely impacted upon, such as through being removed or permanently altered for mining. The Widi NTC group representatives advised that appropriate management actions to mitigate the impact of the proposed works on the cultural heritage values associated with waterways could include the possible relocation of infrastructure out of water catchment systems and, where this is not possible, stream training or the diversion of waterways to ensure the continuation of the flow of water. The Widi NTC group representatives requested that if such actions are proposed then further consultations be held with the Widi NTC group in order to minimise and mitigate the impact that such works could have upon the cultural heritage values associated with the waterways. In addition, they further requested that there be hydrological monitoring and restrictions on extractions from the water aquifer to avoid adverse cultural and environmental impacts upon the water system.

RECOMMENDATIONS

As a result of the ethnographic Aboriginal heritage survey the following recommendations are made in relation to the Western Australian *Aboriginal Heritage Act* (1972):

It is recommended that FI Joint Venture Pty Ltd can proceed with their plans for the Yogi Magnetite Project in the Shire of Yalgoo without risk of breaching section 17 of the AHA in relation to ethnographic Aboriginal heritage sites as defined by section 5 of the AHA.

It is further recommended that FI Joint Venture Pty Ltd gives due consideration to the Widi Mob WC1997/072 Native Title Claim group representatives' requests that:

- Waterways and significant landform features in the survey area be preserved and managed through the project to ensure that they are not adversely impacted upon; and
- If this is not possible then further consultations be held with the Widi Mob WC1997/072 Native Title Claim group to minimise and mitigate the impact that the project could have upon the cultural heritage values associated with such places.

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REPORT ON AN ARCHAEOLOGICAL SURVEY OF THE YOGI MINE PROJECT AND ASSOCIATED INFRASTRUCTURE AREAS NORTHEAST OF YALGOO, WESTERN AUSTRALIA



A report prepared for FI Joint Venture Pty Ltd

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EXECUTIVE SUMMARY

In March 2019, FI Joint Venture Pty. Ltd. (FIJV) commissioned an archaeological survey of the proposed Yogi Mine Project and associated infrastructure areas northeast of Yalgoo, Western Australia. FIJV proposes to construct and operate the Yogi magnetite mine and associated infrastructure. They specifically requested that the Crusher, Ore Stockpile, Administration, Workshop, Processing Plant, Overburden Facility, Mine Pit, Waste Rock Facility, Dry Processing Waste Facility, Fresh Water Pond, Drainage Water Pond and Parking Project Areas be surveyed. In total, these areas cover 699.35 hectares.

While the Crusher, Administration, Workshop, Processing Plant, Dry Processing Waste Facility, Fresh Water Pond, Drainage Water Pond and Parking Project Areas are rectangular, the remainder are irregularly shaped. All project areas vary in size with the largest, Waste Rock Facility, covering 214.08 hectares and having maximum dimensions of 1.9km NS and 1.3km EW. The smallest project area, Parking, covers 5.67 hectares and has maximum dimensions of 0.23km NS and 0.25km EW.

The archaeological survey discussed in this report was undertaken to identify and record any Aboriginal archaeological sites that may be located within any of the Crusher, Ore Stockpile, Administration, Workshop, Processing Plant, Overburden Facility, Mine Pit, Waste Rock Facility, Dry Processing Waste Facility, Fresh Water Pond, Drainage Water Pond and Parking Project Areas (the survey areas) in order that FIJV can avoid disturbance to or impact upon them.

The archaeological survey of the survey areas included searches of the Aboriginal Heritage Inquiry System on the Department of Planning, Lands and Heritage (WA) website, to determine if any registered Aboriginal archaeological sites or 'other heritage places' that have an archaeological component, have been previously identified at positions that place them, or part of them, within any part(s) of the survey areas. In addition, searches were also made to determine if any previous archaeological surveys or investigations have been undertaken within any part(s) of the survey areas as well as in their vicinity and the wider region around them. Sources of environmental information were also utilised before a systematic archaeological survey of the survey areas was conducted.

As a result of research conducted by Brad Goode and Associates in April 2019 and a search of the Department of Planning, Lands and Heritage (WA) List of Registered Aboriginal Sites, it was established that no Aboriginal sites with an archaeological component have been registered at positions that place them or a part of them within any part of any of the survey areas. In addition, a search of the Department of Planning, Lands and Heritage (WA) List of Other Heritage Places also revealed that no Other Heritage Place which has an archaeological component have been identified at positions that place them or a part of them within any part of any of the survey areas.

The survey areas were surveyed for Aboriginal archaeological sites by walking a series of systematic transects across each of area with archaeologists and traditional owners spaced at not more than 30m intervals. Given the degree of surface visibility throughout and the intensity of coverage, it is considered that the archaeological survey was sufficient to locate any Aboriginal archaeological sites present on the surface.

As a result of the archaeological survey of the Crusher, Ore Stockpile, Administration, Workshop, Processing Plant, Overburden Facility, Mine Pit, Waste Rock Facility, Dry Processing Waste Facility, Fresh Water Pond, Drainage Water Pond and Parking Project Areas, **no** Aboriginal archaeological sites were identified.

It is there recommended that the results of the archaeological survey of the Crusher, Ore Stockpile, Administration, Workshop, Processing Plant, Overburden Facility, Mine Pit, Waste Rock Facility, Dry Processing Waste Facility, Fresh Water Pond, Drainage Water Pond and Parking Project Areas, as defined in this report, be accepted and taken into consideration when FI Joint Venture Pty. Ltd. seek approval to construct and operate the Yogi magnetite mine and associated infrastructure.

It is recommended that in the event of any artefactual material or skeletal material being discovered in the course of constructing and/or operating the Yogi magnetite mine and associated infrastructure, or whilst undertaking any other activities, work should stop while the Department of Planning, Lands and Heritage (WA) carry out an investigation of the site. In the case of skeletal material being uncovered, work must cease immediately and the Western Australian Police must be notified.

It is recommended that FI Joint Venture Pty. Ltd. personnel and contractors be advised of their obligations under section 15 of the *Aboriginal Heritage Act 1972*, to report the discovery of any Aboriginal cultural material which may be uncovered in the course of their work.

INTRODUCTION

An archaeological survey for Aboriginal archaeological sites was commissioned by FI Joint Venture Pty. Ltd. (FIJV) in March 2019. The primary aim of this survey was to examine the Crusher, Ore Stockpile, Administration, Workshop, Processing Plant, Overburden Facility, Mine Pit, Waste Rock Facility, Dry Processing Waste Facility, Fresh Water Pond, Drainage Water Pond and Parking Project Areas, all of which are located northeast of Yalgoo Western Australia, and to record and report any Aboriginal archaeological sites that may be located within them or that extend over them. The extent of any such site(s) will be determined and spatial data provided in order that FIJV can avoid disturbing them.

FIJV proposes to construct and operate the Yogi magnetite mine and associated infrastructure which includes the Crusher, Ore Stockpile, Administration, Workshop, Processing Plant, Overburden Facility, Mine Pit, Waste Rock Facility, Dry Processing Waste Facility, Fresh Water Pond, Drainage Water Pond and Parking Project Areas. In total, these areas cover 699.35 hectares and are referred to collectively in the following pages as the survey areas. These areas vary in size from 5.67ha to 214.08ha (Table 2) and with the exception of the Ore Stockpile, Overburden Facility, Mine Pit, and Waste Rock Facility Project Areas, are rectangular. Knowledge of the location and extent of any Aboriginal archaeological sites that exist within or extend over any of the survey areas will facilitate the making of management decisions that will ensure any such sites are not inadvertently impacted upon or disturbed by FIJV while they construct and operate the Yogi magnetite mine or any other activities. If any impact upon or disturbance to any Aboriginal archaeological site cannot be avoided it will be necessary for FIJV, as required under Section 18 of the Western Australian Aboriginal Heritage Act 1972, to seek the consent of the Minister for Aboriginal Affairs to proceed with activities that may disturb Aboriginal heritage sites.

Table 2: Survey areas and sizes.

Survey Area Name	Hectares	
Crusher	9.4	
Ore Stockpile	13.5	
Administration	21.05	
Workshop	11.66	
Processing Plant	48.35	
Overburden Facility	53.45	
Mine Pit	147.91	
Waste Rock Facility	214.08	
Dry Processing Waste Facility	160.44	
Fresh Water Pond	7.1	
Drainage Water Pond	6.74	
Parking	5.67	

As part of the archaeological survey of the survey areas, data was gathered from reports on previous archaeological surveys and investigations that have been undertaken in the past in areas that abut, coincide with or intersect a part or parts of these survey areas. Details of any previously recorded and/or registered Aboriginal archaeological sites and other heritage places previously identified within the survey areas or in their vicinity were obtained from the relevant files available from the Department of Planning, Lands and Heritage (WA) and, where possible, from unpublished reports. In addition to this, a review of maps, environmental information and academic research carried out within the wider region was also undertaken.

The fieldwork associated with the archaeological survey of the survey areas was conducted in April 2019 by archaeologists Mr Thomas O'Reilly, Ms Sally McGann and Mr Stuart Johnston. Mr Patrick Mullaley, Mr Jake Bykerk, Ms Karli Martin and Mr Djarran Martin, all representatives of the Widi NTC Group, assisted in the archaeological survey.

LOCATION OF SURVEY AREAS

The survey areas are centred in an area approximately 20km northeast of Yalgoo, Western Australia (Figure 8). They are all located east of the Yalgoo North Road and north of the Geraldton Mount Magnet Road. Established tracks traverse parts of some of the survey areas.

While the Crusher, Administration, Workshop, Processing Plant, Dry Processing Waste Facility, Fresh Water Pond, Drainage Water Pond and Parking Project Areas are rectangular, the remainder are generally irregularly shaped. All survey areas vary in size with the largest, Waste Rock Facility, covering 214.08 hectares and having maximum dimensions of 1.9km NS and 1.3km EW (Figure 9). Established tracks traverses the central and southeast parts of this survey area.

The smallest survey area, Parking, covers 5.67 hectares and has maximum dimensions of 0.23km NS and 0.25km EW (Figure 10). This survey area is located approximately 0.35km north of an established track. The Drainage Water Pond and Fresh Water Pond survey areas are only marginally bigger and cover 6.74ha and 7.1ha respectively. The Drainage Water Pond survey area has maximum dimensions of 0.26km NS and 0.26km EW (Figure 10). An existing track traverses the central part of this area from north to south while an established and well-used track is located 0.4km directly east of it at its closest point. The Fresh Water Pond survey area is located approximately 4.3km ENE of the Drainage Water Pond survey area and has maximum dimensions of 0.26km NS and 0.28km EW (Figure 11). This survey area is located approximately 0.89km south of an established track.

The Administration, Workshop and Processing Plant survey areas are located in close proximity to the Fresh Water Pond survey area and cover 21.05ha, 11.66ha and 48.35ha respectively. Together, these four survey areas comprise the most northerly group of survey areas (Figure 11). The Administration survey area has maximum dimensions of 0.52km NS and 0.4km EW, the Workshop survey area has maximum dimensions of 0.36km NS and 0.33km EW and the Processing Plant survey area has maximum dimensions of 0.5km NS and 0.97km EW. These survey areas are also located to the south of an established track.

The Crusher and Ore Stockpile survey areas are also relatively small and cover 9.4ha and 13.5ha respectively. They are located in close proximity to the parking survey area (Figure 10) and are at least 0.35km north of an established track. The Crusher survey area has maximum dimensions of 0.41km NS and 0.23km EW while the Ore Stockpile survey area has maximum dimensions of 0.49km NS and 0.33km EW.

The Overburden Facility and Mine Pit survey areas are located adjacent to each other and cover 53.45ha and 147.9ha respectively. The Overburden Facility survey area has maximum dimensions of 0.95km NW/SE and 0.6km SW/NE while the Mine Pit survey area has maximum dimensions of 2.51km NW/SE and 0.67km SW/NE. Established tracks traverse both of these areas while numerous cleared drill lines and old drill holes are also present within the Mine Pit survey area (Figure 12).

The most easterly survey area, Dry Processing Waste Facility, covers 160.44ha and has maximum dimensions of 1.35km NS and 1.19km EW (Figure 13). An existing track traverses the southern margin of this survey area.

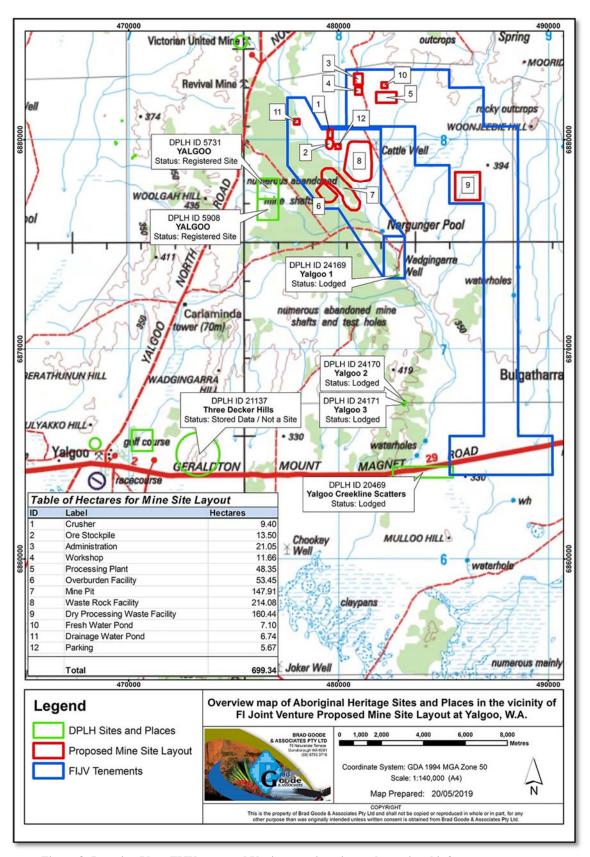


Figure 8: Location Plan: FIJV proposed Yogi magnetite mine and associated infrastructure areas.

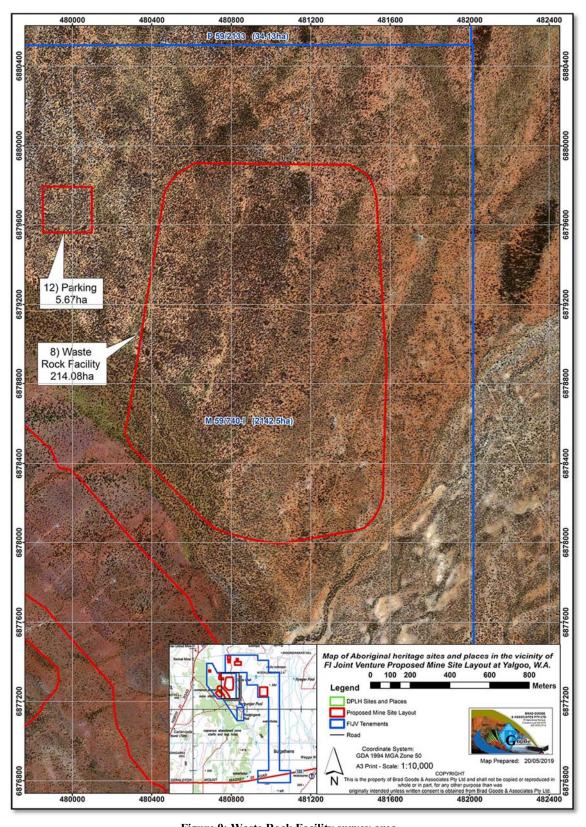


Figure 9: Waste Rock Facility survey area.

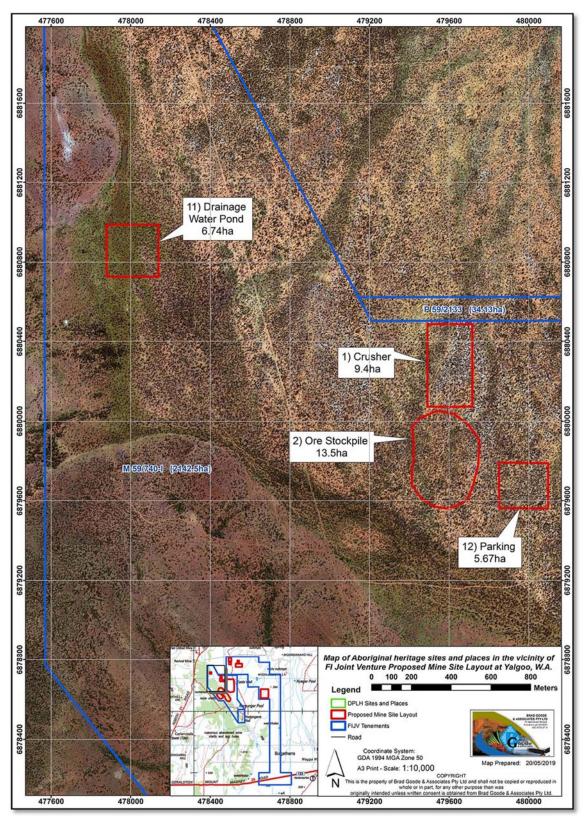


Figure 10: Parking, Drainage Water Pond, Crusher and Ore Stockpile survey areas.

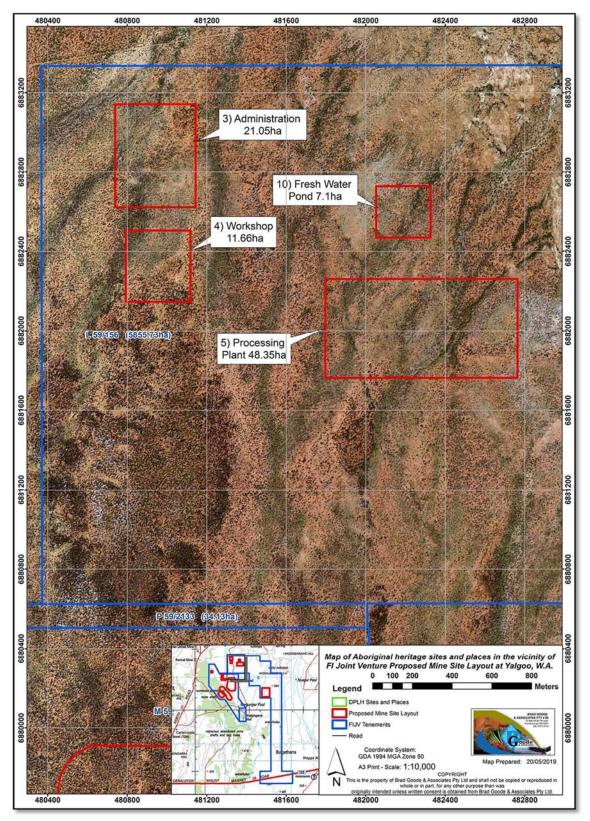


Figure 11: Fresh Water Pond, Administration, Workshop and Processing Plant survey areas.

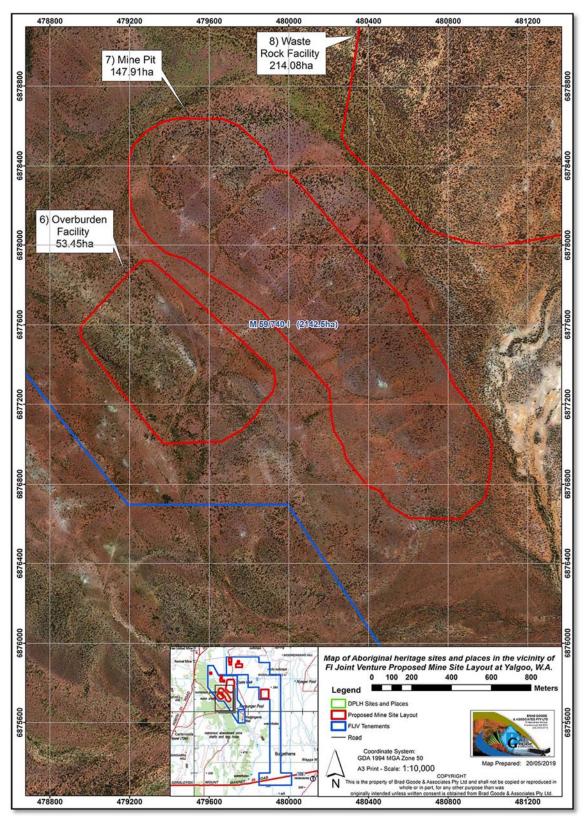


Figure 12: Overburden Facility and Mine Pit survey areas.

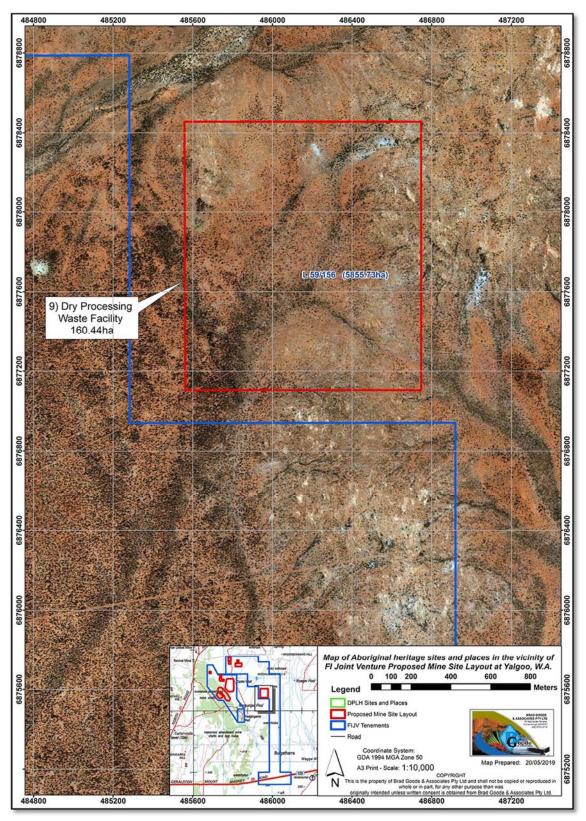


Figure 13: Dry Processing Waste Facility survey area.

ENVIRONMENTAL BACKGROUND

Climate

The survey areas and the region around them lie within a Semi-Desert Mediterranean climatic zone that averages approximately ten dry months per year (Beard 1976). Rainfall in this climatic zone is considered to be partially reliable during the winter months with the chance of additional summer rain from thunderstorms (Beard 1976). In general, the climate is characterised by mild winters and hot, dry summers (December – February).

The climatic recording station at Yalgoo has recorded weather conditions for 118 years. During the winter months (June-August) the average maximum temperature has been 19.1°C and the average minimum 6.9°C. In the summer (December-February) the equivalent temperatures have been 36.3°C maximum and 19.4°C minimum (Bureau of Meteorology, Australia 2019).

The survey areas are within a region that receives an average annual rainfall of approximately 258mm. Approximately 39% of the rain falls in the winter months and 20% in the summer, the rest being distributed between spring and autumn (Australian Bureau of Meteorology 2019).

Geology

In general, the survey areas are located within the central part of the Murchison Province of the Yilgarn Craton, a crustal unit that has been essentially stable for at least 2.4 billion years (Trendall 1990). According to Watkins (1990:32) the Murchison Province "contains six major crustal components: two greenstone sequences and four suites of granitoids". The geology of the areas in and around the survey areas has been mapped and described in the Yalgoo 1:250 000 map sheet and accompanying notes (Muhling and Lowe 1977). A more detailed account of the surface geology in and around the survey areas is given on the Yalgoo 1:100 000 geological map sheet (Ivanic *et al.* 2015).

The surface geology within the survey areas was variable. The southern margins of the Overburden Facility and Mine Pit survey areas are relatively flat while their remainders are elevated and undulating with some low but noticeable hills (Figure 14).



Figure 14: Low rocky hill on eastern side of the Overburden Facility survey area.

The flat southwest part of the Overburden Facility survey area has a surface geology of ironstone dominated gibber over red/orange colluvium comprised of sand and gravel. The remainder of this survey area is very rocky with some small, low and localised outcrops amongst extensive areas of lateritic dominated gibber in the western part (Figure 15) and ironstone dominated gibber in the eastern part. Red/orange sandy alluvium was present along the southeast margin of the Mine Pit survey area while its remainder was predominantly ironstone gibber in varying densities over red/orange colluvium comprised of sand and gravel. Small quantities of quartz were also present in some places.



Figure 15: Rocky gibber in the western part of the Overburden Facility survey area.

The Crusher, Ore Stockpile, Waste Rock Facility, Drainage Water Pond and Parking survey areas are flat and have a surface geology that can be characterised as exclusively red/orange sandy alluvium or sheetwash comprised of clay silt and sand (Figure 16).

The Administration, Workshop, Processing Plant and Fresh Water Pond survey areas are also flat and have a surface geology that is dominated red/orange sandy alluvium or sheetwash comprised of clay silt and sand. In addition, small patches of quartz gibber and granitic rubble are present along the southern half of the Administration survey area and throughout the Workshop survey area. Small subcrops of weathered granite were also identified along the southern half of the Administration survey area (Figure 17). Small outcrops of quartz are located in the eastern half of the Processing Plant survey area while numerous subcrops of weathered granite occur along the southern half of this area. A dense quartz gibber extends eastwards from the Administration survey area's eastern boundary. Small exposures of weathered granite and patches of quartz gibber and granitic rubble were also noted in the Fresh Water Pond survey area.

With the exception of a slight increase in elevation along its eastern margin, the Dry Processing Waste Facility survey area is generally flat. Its surface geology is variable and comprises numerous subcrops, low outcrops and exposed pavements of weathered granite along its southern, eastern and northern margins (Figure 18). There are also some very small outcrops of quartz amongst the granite. The remainder contains patches of mixed quartz gibber and granitic rubble over red/orange sandy alluvium, and large tracts of exclusively sandy alluvium.

Soils within the survey areas are generally shallow loams on hilly areas with rock outcrops, shallow red earthy sands and shallow red earths on the relatively flat ground, some of which also contain some ironstone (Beard 1976).

The only drainage features visible within any of the survey areas were two very narrow and shallow (<0.25m) ephemeral drainage lines in the southern part of the Mine Pit survey area.

In addition to the disturbances noted above, the survey areas discussed in this report have been utilised in the past by the pastoral industry. As a result, some modification of the landscape is likely to have occurred within the survey areas.



Figure 16: Surface geology typical of the Crusher, Ore Stockpile, Waste Rock Facility, Drainage Water Pond and Parking survey areas.



Figure 17: Subcrops of weathered granite in southern part of the Administration survey area.



Figure 18: Granite pavement in the eastern part of the Dry Processing Waste Facility survey area.

Vegetation

Beard (1976) notes the relationship between specific soil types and vegetation. The survey areas and the district around them lie within the Austin Botanical District of the Eremaean Botanical Province (Beard 1976).

Following Beard's (1976) division of the Austin Botanical District into vegetation systems, the vegetation within and about the survey areas belongs to the Yalgoo Sub-region. This sub-region typically had a catena of mixed *Acacia* scrub with scattered *A. aneura* on the plains, scrub of *A. ramulosa-A. acuminate* on hills, and scrub of *A. sclerosperma-A. eremaea* with *Atriplex* and *Maireana* on low lying flats (Beard 1976).

At the time of the archaeological survey described in this report, vegetation within and adjacent to the survey areas can be characterised as very open with mulga trees and shrubs (*Acacia aneura*) to 3m over *Eremophila* spp. and *Acacia* spp. shrubs to 1m (Figure 19). A general absence of any grasses or ground covers resulted in surface visibility being generally excellent and averaging between 90% and 95% throughout the survey areas (Figure 20). Numerous miniritchie trees (*Acacia grasbyi*) to 4m and some kurrajong trees (*Brachychiton gregorii*) to 3m were also noted in the Waste Rock facility survey area.



Figure 19: Vegetation typical of survey areas.



Figure 20: Example of excellent ground visibility in the survey areas.

PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

DEFINITIONS

The commonest Aboriginal archaeological materials found in Australia are discarded stone tools, or the debris from making such tools by knapping. These artefacts formed a small but durable part of the Aboriginal tool-kit. Often stone tools were used to manufacture other tools from organic materials that have not survived. Where numerous artefacts occur in context and in association, they constitute an artefact scatter and together comprise the scatter's artefact assemblage.

Artefact scatters generally represent campsites. Large scatters are places that were regularly occupied, sometimes for long periods and represent the accumulation of many overlapping smaller camps. Small scatters are the remains of sites that were briefly occupied, probably on several occasions. Very small scatters may be evidence of an overnight camp, meal-time camp or work area where specific activities were carried out.

Many stone arrangements have been interpreted as ceremonial sites, but this rarely can be established. Stone arrangements can consist of hundreds of stones arranged in elaborate lines or in mounds, or can be a single line or small cluster. Solitary placed or standing stones may have served as a sign; for example, as a warning to avoid a specific site or as an indicator of water. Some stone arrangements are the remains of hunting hides or the bases of huts.

A place where stone was obtained for making stone tools is a quarry. Generally, quarries contain knapping centres or core reduction areas where knapping was intensive. Quarries are found at occurrences of highly siliceous stone, such as chalcedony, chert, silcrete, quartz, *etc*. Finished artefacts are not common at quarries and the vast majority of material found at this type of site is waste, called debitage or debris, from making tools or preparing cores for transport off the quarry for later use.

Apart from concentrations of artefacts at campsites, there are also solitary artefacts that are distributed at a very low density across the landscape. They form a background scatter that probably represents evidence of dispersed hunting and gathering activities. In some instances, isolated finds are found beside watercourses in a long ribbon known as a 'creekline scatter'.

For the purposes of the survey discussed in this report, an archaeological "site" is defined as a place where "significant traces of human activity are identified" (Renfrew & Bahn 1991:42). In other words, where there is substantial *in situ* evidence of past Aboriginal occupation or activity. This is a scientific definition, not a legal definition.

The decision as to whether a place might or might not constitute a "site" under Section 5 of the W.A. Aboriginal Heritage Act 1972 is made by the Aboriginal Cultural Material Committee. Most types of Aboriginal sites are described in more detail in 'Notes on the recognition of Aboriginal Sites' published by the Western Australian Museum, Aboriginal Sites Department (1987). It is important to note that all sites, whether known or not, are protected under the W.A. Aboriginal Heritage Act 1972 and that it is an offence to disturb or conceal a site, or remove artefacts, without appropriate consent.

REGISTERED SITES AND OTHER HERITAGE PLACES

As a result of research conducted by Brad Goode and Associates (BGA) in April 2019 and a search of the Department of Planning, Lands and Heritage (DPLH) WA Aboriginal Sites Database, it was established that **no** registered Aboriginal sites with an archaeological component have been registered at positions that place them or part of them within any part of any of the survey areas. Furthermore, as a result of a search of the DPLH List of Other Heritage Places, it was established that **no** Other Heritage Places with an Aboriginal archaeological component has been identified at positions that place them or part of them within any part of any of the survey areas.

REVIEW OF RELEVANT ARCHAEOLOGICAL REPORTS

As a result of research conducted by BGA in April 2019 and a search of the DPLH Heritage Survey Database, one archaeological survey was identified that has been undertaken in the past in an area that overlaps a small part of the northern end of the Overburden Facility survey area as well as covering most of the Mine Pit and Drainage Water Pond survey areas. The report on this survey is reviewed here and its results presented.

Glendenning, W. 2011, Report of an Aboriginal Heritage Survey of a Proposed Exploration Drilling Project at Yalgoo with the Wadjari Yamatji and Hodder Family, Unpublished Report prepared for Ferrowest Ltd.

The archaeological survey described by Glendenning focused on five discrete exploration areas in the vicinity of Yalgoo. One of these exploration areas overlaps a small part of the northern end of the Overburden Facility survey area, and covers most of the Mine Pit and Drainage Water Pond survey areas. According to Glendenning (2011:4), "the survey team . . . walked the entire area of each project area to a distance of 200 metres from the base line down the centre of each area". No other relevant details are available from this report.

No Aboriginal archaeological sites were identified as a result of Glendenning's survey.

PREVIOUS ARCHAEOLOGICAL RESEARCH

Beyond the survey areas in general, archaeological research undertaken in the arid and semi-arid regions of Australia, documents amongst other things, the antiquity of human occupation in these regions. At present the earliest occupation dates for inland Western Australia are in the order of 35,000 years Before Present (BP) at Djadjiling Rockshelter northwest of Newman (Law et al. 2010), 32,000 BP at Juukan-1 near Tom Price (Slack et al. 2009) and 25,000 years Before Present (BP) at Newman Rockshelter in the Pilbara (Maynard 1980). In the Gibson Desert, occupation at Puntutjarpa has been dated c.10,000 BP (Gould 1977). In the wider region around the survey areas, occupation at Yalibirri Mindi Rockshelter in the Weld Range has been dated c. 29,000 BP (Winton et al. 2016) while occupation at Walga Rock, near Cue, has been dated c.10,000 BP (Bordes et al. 1983).

Although the arid and semi-arid regions of Australia were occupied during the terminal Pleistocene (Bowdler 1990; Hiscock 1988; Smith 1987, 1988; Veth 1989, 1993), the nature of occupation is still debated. Smith (1988) argues that the interior of Australia was widely settled by 12,000 BP as a result of the widespread availability of fresh water during an earlier lacustral phase. He proposes that before and during the last glacial maximum, when the environment deteriorated and water resources contracted, that desert lowlands were abandoned. With climatic amelioration (c.15,000-7,000 BP) Smith (1988) claims that these abandoned areas were reoccupied.

Veth (1993) presents a different colonisation model. He proposes that the sandy deserts of the Australian interior were not permanently occupied until the mid-Holocene (c.5,000 BP). That is, he sees sandy deserts as representing barriers to prehistoric occupation. It is proposed that by the mid-Holocene a shift towards the intensive exploitation of seeds, the development of hafted implements and the emergence of extended social networks combined to enable the colonisation and permanent occupation of the sandy deserts (Veth 1993:105).

Recent human adaptations in arid and semi-arid areas, which include the survey areas and their surrounds, are typified by settlement patterns involving 'rain chasing' behaviour and an opportunistic resource utilisation strategy for water. Ephemeral or semi-permanent water sources are exploited before falling back to more permanent and reliable water sources as the ephemeral supplies dry up (Gould 1980; Veth 1989). This has tended to produce a site

patterning with low density artefact scatters associated with ephemeral water sources and larger more complex sites associated with permanent or more reliable water sources.

The results of previous archaeological surveys and the research presented above, demonstrates the types of Aboriginal archaeological sites already known to exist in the wider region around the survey areas. In addition to this, these results, together with the environmental information already discussed, enables predictions to be made about probable site locations and the types of archaeological material and/or sites that could reasonably be expected to be found as a result of the archaeological survey of the survey areas. The types of archaeological sites or material that are most likely to be located within any of the survey areas would be various types of lithic artefacts either singularly or in scatters, and possibly small quarries at sources of stone suitable for the manufacture of artefacts.

SURVEY METHODS

The fieldwork associated with the archaeological survey of the survey areas was conducted in April 2019 by archaeologists Mr Thomas O'Reilly, Ms Sally McGann and Mr Stuart Johnston. Mr Patrick Mullaley, Mr Jake Bykerk, Ms Karli Martin and Mr Djarran Martin, all representatives of the Widi NTC Group, assisted in the archaeological survey. The methods utilised prior to and during the archaeological survey are outlined below.

Prior to undertaking the field component of the archaeological survey, a search of the DPLH List of Registered Aboriginal Sites and List of Other Heritage Places was made by BGA in April 2019, to determine if any Aboriginal archaeological sites, or sites with an archaeological component, or any other heritage place with an archaeological component, or parts of them are located within any part(s) of the survey areas. A review of reports detailing the results of previous archaeological surveys and investigations that overlapped or intersected with the survey areas, was also undertaken. Reports detailing the results of previous archaeological surveys and investigations carried out in the vicinity of the survey areas were also reviewed as was the results of archaeological research conducted in the wider region.

Geological and vegetation maps were also examined prior to the field survey to ascertain the physical geography and geomorphology of the land within the survey areas. Any areas of interest identified from these maps, or areas identified as having a high probability of containing Aboriginal archaeological sites would subsequently be targeted during the field survey.

The survey areas were surveyed for the presence of Aboriginal archaeological sites by walking a series of systematic transects across each of these areas. These transects had a general east-west alignment with archaeologists and traditional owners spaced at not more than 30m intervals.

In general, surface visibility throughout the survey areas was very good and averaged between 90% and 95%.

RESULTS

As a result of research undertaken at the Department of Planning, Lands and Heritage (WA) and a search of their Aboriginal Sites Database prior to the archaeological survey of the survey areas, it was established that **no** registered Aboriginal archaeological sites or sites with an archaeological component are registered at positions that place them within any of the survey areas. Furthermore, it was also established that **no** 'other heritage places' with an archaeological component are registered at positions that place them within any of the survey areas.

As a result of archaeological survey of the survey areas, **no** Aboriginal archaeological sites were identified.

CONCLUSIONS

DISCUSSION

An archaeological survey for Aboriginal archaeological sites within the Crusher, Ore Stockpile, Administration, Workshop, Processing Plant, Overburden Facility, Mine Pit, Waste Rock Facility, Dry Processing Waste Facility, Fresh Water Pond, Drainage Water Pond and Parking Project Areas, located northeast of Yalgoo, was undertaken for FI Joint Venture Pty. Ltd. in April 2019.

As a result of the archaeological survey described in this report, **no** Aboriginal archaeological sites were identified and it was established that **no** registered Aboriginal archaeological sites or sites with an archaeological component, or 'other heritage places' with an archaeological component, have been previously identified at positions that place them within any part of any of the survey areas.

Given the degree of surface visibility throughout and the intensity of coverage, it is considered that the archaeological survey of the Crusher, Ore Stockpile, Administration, Workshop, Processing Plant, Overburden Facility, Mine Pit, Waste Rock Facility, Dry Processing Waste Facility, Fresh Water Pond, Drainage Water Pond and Parking Project Areas was sufficient to locate any Aboriginal archaeological sites present on the surface. It should be noted that sites can be exposed and/or concealed as a result of both wind and water erosion. It is also possible that archaeological material lies below the surface and may be exposed as a result of environmental factors or work undertaken within the surveyed areas. FI Joint Venture Pty. Ltd. should be aware of this when constructing and operating the Yogi magnetite mine and associated infrastructure or undertaking any other activities.

RECOMMENDATIONS

On the basis of the above, **it is recommended** that the results of the archaeological survey of the proposed Crusher, Ore Stockpile, Administration, Workshop, Processing Plant, Overburden Facility, Mine Pit, Waste Rock Facility, Dry Processing Waste Facility, Fresh Water Pond, Drainage Water Pond and Parking Project Areas be accepted and taken into consideration when FI Joint Venture Pty. Ltd. seek approval to proceed with their proposal to construct and operate the Yogi magnetite mine and associated infrastructure.

In addition, it is recommended that in the event of any artefactual material or skeletal material being discovered in the course of constructing and operating the Yogi magnetite mine and associated infrastructure or whilst undertaking any other activities, work should stop while the Department of Planning, Lands and Heritage (WA) carry out an investigation of the site. In the case of skeletal material being uncovered, work must cease immediately and the Western Australian Police must be notified.

It is also recommended that FI Joint Venture Pty. Ltd. personnel and contractors be advised of their obligations under section 15 of the *Aboriginal Heritage Act 1972*, to report the discovery of any Aboriginal cultural material which may be uncovered in the course of their work.

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APPENDIX 1: DPLH SITES AND PLACES REGISTER SEARCH



List of Registered Aboriginal Sites

For further important information on using this information please see the Department of Planning, Lands and Heritage's Disclaimer statement at https://www.dolh.wa.gov.au/about-this-website

Search Criteria

No Registered Aboriginal Sites in Shapefile - MineSiteLayout_without_borefield

Disclaime

The Aboriginal Heritage Act 1972 preserves all Aboriginal sites in Western Australia whether or not they are registered. Aboriginal sites exist that are not recorded on the Register of Aboriginal Sites, and some registered sites may no longer exist.

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Coordinates (Easting/Northing metres) are based on the GDA 94 Datum. Accuracy is shown as a code in brackets following the coordinates.



List of Registered Aboriginal Sites

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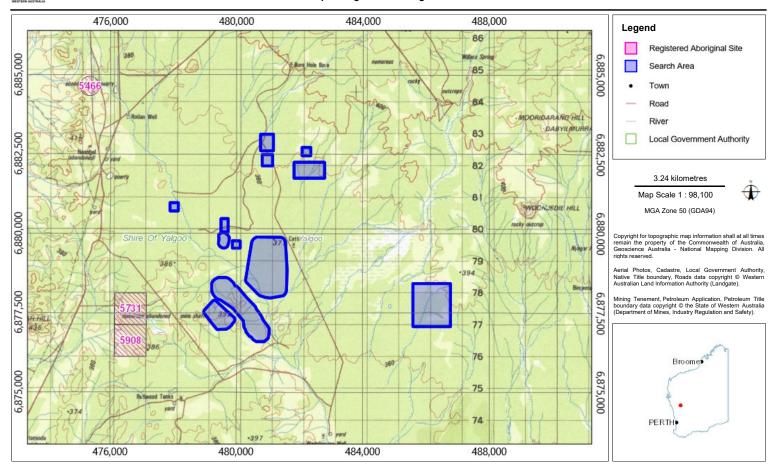
Report created: 23/04/2019 2:54:45 PM by: GIS_NET_USER

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Identifier: 391732

Map of Registered Aboriginal Sites





List of Other Heritage Places

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Search Criteria

No Other Heritage Places in Shapefile - MineSiteLayout_without_borefield

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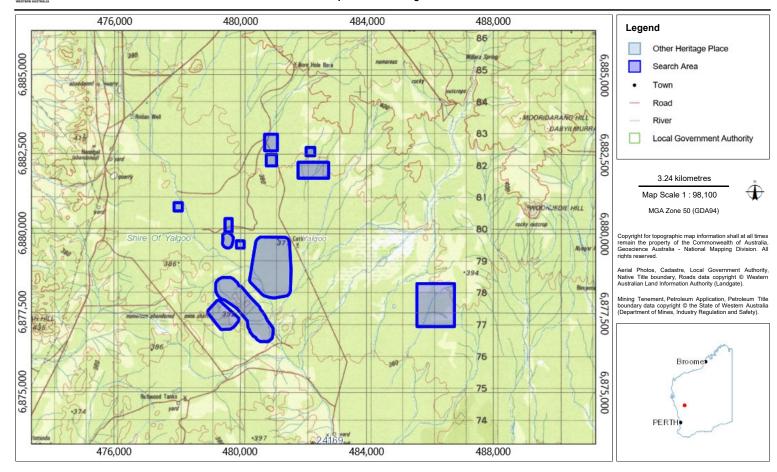
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Map of Other Heritage Places

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APPENDIX 2: LETTER OF ADVICE

Brad Goode & Asso Consulting Anthropologis Heritage Assessments		79 Naturaliste Terrac DUNSBOROUGH WA 628 (08) 9755 371 bradnlee@westnet.com.a ABN: 41 134 732 04
30 th April 2019		
proposed mine and as	ssociated infrastruction in the second secon	ted by FI Joint Venture Pty Ltd in regards to sture at Yalgoo in the Shire of Yalgoo. We would dations in relation to the Western Australia
not aware of a by the proposed As a result of advise that t	and offino aroby	
· During the Sur		itional Owner expressed their
Could impact		Tailings Dam in Survey Area 13
with the write		effect heatage values accorded
· As such the		Owners request that the
Tailings Dan		
alle to the	additional	
to the north	of the original	
· Subject to	the revision	location of the Tailing Dam,
the Traditiona		jest that further discussions
are undertak	1 1	e widi prior to this location
Deing final		proponent to ensure that
CONTRACTOR OF THE PARTY OF THE	npact igon	coltral values are properly
addressed:	m 011 - C 11	
· With regards		survey areas. the Troditional
not impacted u		ed inflortinature.
Wi	idi Mob WC1997/0	72 Native Title Claim Group
Patrick Mullaley	30.04.2019	y C
Kerin Martin	30.04.2019	4-4-
Djarran Martin	30.04.2019	

30.04.2019

30.04.2019

Karli Martin

Jake Bykerk

APPENDIX 3: MAP OF THE PROJECT AREA IN RELATION TO ABORIGINAL HERITAGE SITES

