



Sticks and Stones

CULTURAL RESOURCES MANAGEMENT



Survey Report

2021 Perpetual Resources Beharra Silica Project Area (M 70/1406) YSRC Heritage Survey

Aboriginal Heritage Site Avoidance Survey for a select area within the Perpetual Resources Beharra Silica Project (M 70/1406), Western Australia

Report prepared for Perpetual Resources, YSRC and the Yamatji people

01 December 2021

Daniel Puletama

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Spatial Data

Spatial data captured for any archaeological sites in this report has been obtained by using a hand held GPS unit using the GDA94 coordinate system.

Acknowledgements

SandS CRM acknowledges and thanks the following individuals who assisted in this project:

- James Hesford (Perpetual Resources)

Abbreviations

Abbreviation	Definition
AHA	Western Australian <i>Aboriginal Heritage Act 1972</i>
AHIS	Aboriginal Heritage Information System
DPLH	Department of Planning, Lands and Heritage
GPS	Global Positioning System
HISF	Heritage Information Submission Form
NTA	Commonwealth <i>Native Title Act 1993</i>
OHP/s	Other Heritage Place/s
SandS CRM	Sticks and Stones Cultural Resources Management Pty Ltd

Executive Summary

Sticks and Stones Cultural Resources Management (SandS CRM) has been engaged by the Yamatji Southern Regional Corporation to undertake an Aboriginal heritage survey of a selected area within the Perpetual Resources Beharra project area (M70/1406).

Specifically, the SandS CRM was engaged to:

- Undertake an Aboriginal heritage survey of supplied area within the Perpetual Resources Beharra project area; and
- Provide a report detailing the heritage survey.

Representatives from the Yamatji Southern Regional Corporation group participated in all aspects of the fieldwork.

Perpetual Resources Beharra project area lies wholly within the Arrowsmith region of Western Australia, generally being approximately 25 kilometres south of Dongara Township. The area subject to reporting can broadly be described as a single irregular block.

Western Australia's *Aboriginal Heritage Act 1972* (the 'AHA') is the foremost legislative mechanism for Aboriginal heritage in Western Australia. The Department of Planning, Lands and Heritage (DPLH) currently administer the AHA. Simply, in most instances compliance and adherence to the AHA and applicable land access agreements would meet heritage legislative requirements.

The natural environmental conditions have provided an area suitable for the formation and persistence of archaeological sites and places comprised of hard non-organic material (generally stone) and not suitable for the formation and persistence of soft organic archaeological sites and places due to erosion and decompositional environments.

The background research for the heritage survey consisted of searches of the DPLH Site Register, Records of the WA Museum and the corporate archives of SandS CRM.

A search of the DPLH AHIS did return specific results within the survey area, with two previous studies overlapping the southern portion of the study area. Additional searches of the Records of the Western Australian Museum did not return results for the survey area. A search of the corporate archives of SandS CRM returned a result for a drill line survey conducted over part of the area.

A search of the AHIS did return 'site' and 'other heritage place' and 'heritage surveys' in the surrounds. This indicates that surveys have occurred in the surrounding areas and, importantly, Aboriginal sites have the potential to exist within the current survey area.



No (0) isolated artefacts, archaeological sites or ethnographic were recorded at during the fieldwork.

The report makes the following findings:

- | | |
|------------------|---|
| Finding 1 | The spatial data provided with this report represents the area subject to heritage survey |
| Finding 2 | The heritage survey for the supplied project area is complete. |
| Finding 3 | No new heritage sites were recorded within the survey area. |

The report makes the following recommendations:

- | | |
|-------------------------|---|
| Recommendation 1 | There are no recorded heritage features in the survey area requiring action or management. |
| Recommendation 2 | A 'Site Discovery Procedure' is adopted for the project. |
| Recommendation 3 | The Southern Yamatji representatives recommend: <ol style="list-style-type: none">1. Perpetual Resources consult with the Southern Yamatji on the necessity of monitors in heritage management for the Project. |



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1 Introduction

1.1 Scope of Works

Sticks and Stones Cultural Resources Management (SandS CRM) has been engaged by the Yamatji Southern Regional Corporation to undertake an Aboriginal heritage survey of a selected area within the Perpetual Resources Beharra project area (M70/1406).

Specifically, the SandS CRM was engaged to:

- Undertake an Aboriginal heritage survey of supplied area within the Perpetual Resources Beharra project area; and
- Provide a report detailing the heritage survey.

Representatives from the Yamatji Southern Regional Corporation group participated in all aspects of the fieldwork.

1.2 Project Area

Perpetual Resources Beharra project area lies wholly within the Arrowsmith region of Western Australia, generally being approximately 25 kilometres south of Dongara township. The area subject to reporting can broadly be described as a single irregular block.

Survey Area Name	Size	Priority
M 70/1406 Beharra Project Area	19.4 km ²	1

Table 1: Survey area details

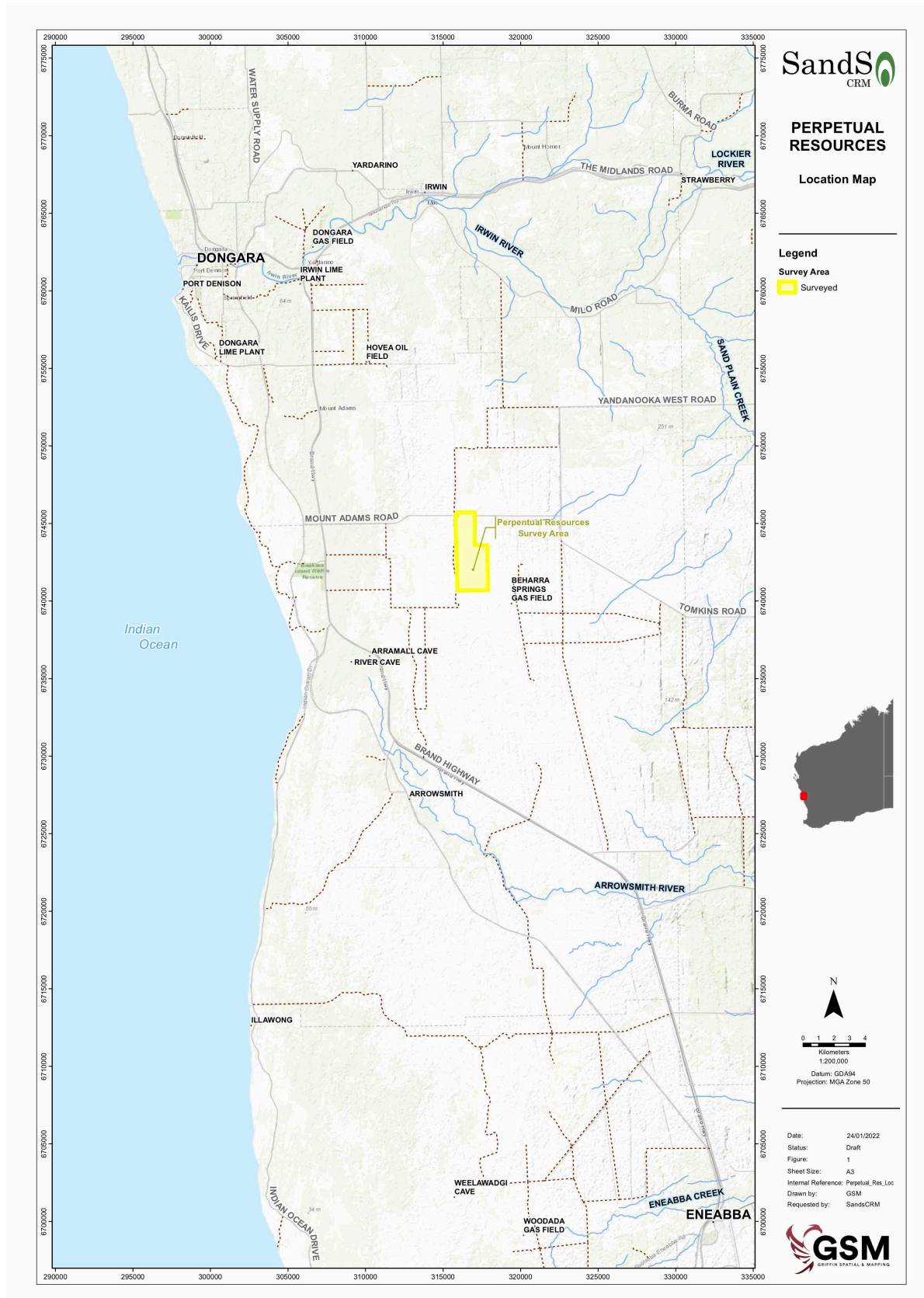


Figure 1: 2021 Perpetual Resources Beharra Project Survey Area Overview



Figure 2: 2021 Perpetual Resources Beharra Project Survey Area Detail

1.3 Participation

The fieldwork was conducted over a single trip and involved personal from the Yamatji Southern Regional Corporation, SandS CRM and a Perpetual Resources representative (the survey team). Survey team make up and trip details were as follows:

Perpetual Project Survey Participant Details		
Trip	1	
Fieldwork Dates	15 th November 2021 – 24 th November 2021	
Aboriginal Consultants (Yamatji Southern Regional Corporation)	Kevin Taylor	Michael Taylor
	Peter Taylor	Allan Taylor
	Kirk Taylor	Darren Ryan
SandS CRM Heritage Consultants	Daniel Puletama	Zack Sheppard
	Phil Czerwinski	
Perpetual Resources Representative	James Hesford	

Table 2: Field trip dates and participation details



Figure 3: The survey team

2 Relevant Legislation Considerations

Western Australia's *Aboriginal Heritage Act 1972* (the 'AHA') is the foremost legislative mechanism for Aboriginal heritage in Western Australia. The Department of Planning, Lands and Heritage (DPLH) currently administer the AHA.

All defined Aboriginal sites within Western Australia are protected under the AHA. An Aboriginal site is defined under Section 5 of the AHA as follows.

- (a) *any place of importance and significance where persons of Aboriginal descent have, or appear to have, left any object, natural or artificial, used for, or made or adapted for use for, any purpose connected with the traditional cultural life of the Aboriginal people, past or present;*
- (b) *any sacred, ritual or ceremonial site, which is of importance and special significance to persons of Aboriginal descent;*
- (c) *any place which, in the opinion of the Committee, is or was associated with the Aboriginal people and which is of historical, anthropological, archaeological or ethnographical interest and should be preserved because of its importance and significance to the cultural heritage of the State;*
- (d) *any place where objects to which this Act applies are traditionally stored, or to which, under the provisions of this Act, such objects have been taken or removed.*

It is an offence under Section 17 of the AHA to excavate, destroy, damage, conceal or in any way alter any Aboriginal site without prior consent from the Minister for Indigenous Affairs under Section 18 of the Act. Penalties apply for breaches of the AHA.

For the administration of Section 18 of the AHA, the ACMC makes recommendations to the Minister for Indigenous Affairs regarding any impacts to Aboriginal sites. The Minister for Indigenous Affairs must be informed by these recommendations prior to granting or not granting consent to use the land where that use will impact Aboriginal sites. Under Section 39(2&3) of the AHA the following criteria are employed by the ACMC in the evaluation of Aboriginal sites.

- (2) *In evaluating the importance of places and objects the Committee shall have regard to —*
 - (a) *any existing use or significance attributed under relevant Aboriginal custom;*
 - (b) *any former or reputed use or significance which may be attributed upon the basis of tradition, historical association, or Aboriginal sentiment;*
 - (c) *any potential anthropological, archaeological or ethnographical interest; and*



(d) aesthetic values

(3) Associated sacred beliefs, and ritual or ceremonial usage, in so far as such matters can be ascertained, shall be regarded as the primary considerations to be taken into account in the evaluation of any place or object for the purposes of this Act.

If consent to use land under Section 18 of the AHA is granted, the Minister for Indigenous Affairs may impose conditions for this use.

Public access to known and reported Aboriginal sites and places is managed through the Aboriginal Heritage Inquiry System (AHIS) maintained by the DPLH. Two pertinent designations for reported places are Aboriginal Sites (Registered Sites) and Other Heritage Places (OHPs). An Aboriginal site (Registered Site) on the AHIS is a place that fulfils Section 5 of the AHA, has been submitted to DPLH and has been assessed under section 39(2). Other Heritage Places can be 'Lodged' or 'Stored Data / Not a Site'. A place designated as 'Lodged' has been submitted to the DPLH but has not yet been assessed under section 39(2). 'Stored Data / Not a Site' is a place that has been submitted to the DPLH, assessed under section 39(2) and found not to fulfil requirements under Section 5. OHPs may not be afforded protection under the AHA. A 'Lodged' place may be protected, however the status is uncertain until an assessment under section 39(2) occurs. The precautionary principle governs that it is recommended 'Lodged' places are treated as if they meet Section 5 until confirmed otherwise.

Other relevant legislation includes the Commonwealth *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (ATSIHPA) and the *Native Title Act 1993*.

The ATSIHPA provides Commonwealth protection provisions for Aboriginal heritage sites. The ATSIHPA collaborates with relevant state legislation and is intended for use only when state measures have been ineffective. The Federal Minister has powers to make declarations to protect areas when state measures are considered to provide inadequate protection to areas and objects of significance. This is generally applied as a final option.

The Commonwealth *Native Title Act 1993* (NTA) acknowledges the traditional rights and interests of Indigenous people. Significantly, future act provisions allow for procedure rights to be afforded to appropriate persons including the right to be consulted, the right to negotiate and/or the same rights as other stakeholders.

It is worth noting that in addition to protections under the AHA and the ATSIHPA provisions for notification are required under the *West Australian Coroners Act 1996*, the AHA and the ATSIHPA regarding the discovery of human remains or suspected human remains.



2.1 Discussion

Simply, in most instances compliance and adherence to the AHA and applicable land access agreements would meet heritage legislative requirements.

3 Natural Environment Details and Considerations

The Perpetual Resources Beharra project area lies wholly within the Arrowsmith region of Western Australia, generally being approximately 25 kilometres south of Dongara (where Dongara is approximately 350 kilometres north of Perth).

3.1 Climate

The climate is described as generally Mediterranean climate of warm to hot, dry summers and mild, wet winters, significantly influenced by a band of high pressure known as the 'sub-tropical ridge'. The 'sub-tropical ridge' generally sits slightly to the north in winter allowing cold fronts to deliver water to the region before shifting south in the summer, blocking the movement of these cold fronts and allowing east or south easterly warm fronts across the region.

3.2 Geology

Geological mapping of the region characterise the area as dominated by aeolian dunes composed of calcareous and quartz sand, which are either mobile or fixed by vegetation.

3.3 Landforms

The region is described as a coastal dune system, including foredunes, beach ridge plains, parabolic dunes, deflation basins and flats.

3.4 Vegetation

The vegetation is generally a typical *Proteaceous spp.* scrub-heath with emergent *Banksia spp.* and *Actinostrobus spp.*

3.5 Discussion

The natural environmental conditions have provided an area suitable for the formation and persistence of archaeological sites and places comprised of hard non-organic material (generally stone) and not suitable for the formation and persistence of soft organic archaeological sites and places due to erosion and decompositional environments.



4 Aboriginal Heritage Survey – Method

4.1 Archaeological Survey Methods

The background research for the archaeological survey component consisted of searches of the DPLH Site Register, Records of the WA Museum and the corporate archives of SandS CRM.

Prior to the fieldwork component of the works, spatial data for the project area was uploaded into handheld Garmin GPSmap 62s Global Positioning System (GPS) units for orientation in the field. Field maps were printed to brief all survey participants. The SandS CRM archaeologist and YSRC representatives then undertook a pedestrian survey over the prescribed disturbance survey area. The pedestrian survey involved walking straight transects to cover the survey area. Transects lines were between 25 metres and 35 metres between participants depending on archaeological visibility and potential and covered a broad spectrum of land surfaces. Archaeological ground surface visibility at the time of survey was inconsistent and ranged from 60% to 100%. This survey strategy resulted in 100% coverage of the completed survey area. Information pertaining to archaeological conditions, including floral and fauna; raw material availability; and surface geology were recorded in field notebooks and accompanied by high-resolution digital photography. A wide ‘regional’ vehicular survey was undertaken over the prescribed non-disturbance areas.

Any archaeological site identified in the survey area would be flagged with pink and black tape at site boundary nodes. Photographs and detailed field notes would be recorded. The site grid components would be buffered by 5 metres post-survey to account for GPS error/accuracy, and converted into an ESRI shapefile as a polygon once fieldwork was completed.

The information recorded in the field notebooks may included, but would not be limited to:

- Site ID
- Site Type
- General intrasite feature types
- Specific metrics of intrasite feature components
- Persons whom the place is of importance and significance
- Place importance and significance
- Existing use or significance attributed under relevant Aboriginal Custom
- Any associated sacred beliefs, and ritual or ceremonial usage
- Former or reputed use or significance which may be attributed upon the basis of tradition, historical association or Aboriginal sentiment
- Potential anthropological, archaeological or ethnographic interest



- Aesthetic values
- Site Condition

It is understood these attributes are sufficient for recording standards to a 'Site Avoidance' level.

4.2 Archaeological Site Determination Principles

To determine whether a location could be determined to be an Aboriginal site, or whether the location simply contains Aboriginal artefacts or the potential to contain archaeological material, required a critical analysis of the archaeological record - it is too simple an approach to conclude that because there are artefacts at a location it must be an Aboriginal site.

One question that eludes researchers is what constitutes an archaeological site. Previous researchers have focused largely on artefact numbers for artefact scatters, and a subjective approach as to whether a rockshelter contains a liveable floor space.

In practice, the assessment of whether a location constitutes an Aboriginal site based on archaeological material (or the potential to contain archaeological material) is intrinsically a subjective process, where using artefact counts or the current state of a rockshelter may not necessarily be of paramount importance. Consequently, the current recording may use factors such as site spatial integrity and environmental association, along with artefact counts, as assessment criteria for Aboriginal sites.

Additional to this, s5(a) of the AHA defines a site as:

any place of importance and significance where persons of Aboriginal descent have, or appeared to have, left any object, natural or artificial, used for, or made or adapted for use for, any purpose connected with the traditional cultural life of the Aboriginal people, past or present.

In practice, the assessment of whether a location constitutes an Aboriginal site based on archaeological material (or the potential to contain archaeological material) is intrinsically a subjective process, where using artefact counts or the current state of a rockshelter may not necessarily be of paramount importance. Consequently, the current recording may use factors such as site spatial integrity and environmental association, along with artefact counts, as assessment criteria for Aboriginal sites. In other words:

The scientific definition of archaeological sites includes archaeological sites that may not be covered by heritage legislation (McGann 2001:11).

Accordingly, the following factors have been employed to assess a location as (or as not) a potential Aboriginal site.

4.2.1 Environment

Environmental change will affect archaeological sites, and can both destroy archaeological sites and create an impression of a site when one never existed. Archaeological materials can be re-deposited, and collect where drainage channels terminate.



For a location to be assessed as an Aboriginal site it must have a relatively intact environment that has not caused substantial post-depositional artefact movement and for artefacts to be congregated into artificial concentrations, to such a point where the artefacts cannot be determined to be associated with each other.

4.2.2 Purposeful Aboriginal Use of a Landscape

For a location to be an Aboriginal site it must show a purposeful use by Aboriginal people of the location in question. A loose congregation of stone artefacts on an eroded floodplain tells us little about Aboriginal lifeway's in the area, and may be a reflection of environmental taphonomic processes more than purposeful human action.

It is purposeful human action with the landscape that creates locations where a focus of cultural activity can be identified, and it is these locations that are determined to be Aboriginal sites in the context of the current survey. Such purposeful interaction may be due to an environmental feature (e.g. water source that allows for extended camping, food source for seasonal gathering, raised terrace to provide a dry camping location, outcrop of suitable rock for quarrying, etc.), or simply be of an ephemeral nature (i.e. a convenient location to stop and camp).

For a location to be assessed as an Aboriginal site it must show some spatial reasoning as to why it is located where it is in the landscape. If this cannot be ascertained, other factors are used to assess whether it is an Aboriginal site or not.

4.2.3 Research Potential

For an archaeological site to be classified as an Aboriginal site it must have a level of research potential where the location can provide information about Aboriginal land use above and beyond the site's constituent parts. It is not enough to simply state that, because there is archaeological material, it is an 'Aboriginal site' – the site must be able to contribute to the body of scientific knowledge through meaningful archaeological analysis.

4.2.4 DPLH Guidelines

The DPLH had previously released a set of guidelines identifying the types of features that an archaeological site must contain to be assessed as an 'Aboriginal Site' under Section 5 of the *Aboriginal Heritage Act 1972*. These guidelines were previously used to assist in the assessment of what archaeological material would, and would not, be assessed as an 'Aboriginal site'. The DPLH has recently withdrawn these guidelines and until such time as updated guidelines are provided, a combination of previous guidelines and recent experience is engaged for site determinations.

4.2.5 SandS CRM Site Definitions

Therefore, for the purpose of this survey and in keeping with the above site identification philosophies and legislative definitions, an 'Aboriginal site' is defined by SandS CRM as the following.

A location with sufficient archaeological material, with adequate spatial context and environmental integrity, where it can unequivocally be demonstrated that techniques of Aboriginal hunter-gatherer subsistence technologies occurred at the location, and that the location is of “importance and significance” to further the knowledge of Aboriginal lifeways through archaeological investigation.

4.2.6 Heritage Information Submission Form

The DPLH’s current Heritage Information Submission Form (HISF) provides information ‘prompts’. These prompts are in the form of nine questions, however there is little information regarding the weighting, qualitative thresholds or quantitative thresholds for each information prompt. The nine information prompts are:

- 1) To whom is the place of importance and significance?
- 2) Why is the place of importance and significance?
- 3) Connection of the objects with the traditional cultural life of Aboriginal people past and present.
- 4) Existing use or significance attributed under relevant Aboriginal custom.
- 5) Associated sacred beliefs and ritual or ceremonial use.
- 6) Former or reputed use or significance which may be attributed upon the basis of tradition, historical association or Aboriginal sentiment.
- 7) Potential anthropological, archaeological or ethnographic interest.
- 8) Aesthetic values.
- 9) Site condition

The information prompts provided within the HISF are complementary to the SandS CRM site definitions and provide for site assessments to acknowledge Aboriginal understandings outside of archaeological and anthropological spheres. Ideally sites would always contain contributions from all knowledge bases, however it must be recognised that sites will sometimes contain limited contributions from some knowledge bases and rely heavily on fewer knowledge bases.

4.3 Ethnographic Survey Methods

Consistent with the methodology and philosophy of ethnographic surveys, the main focus was on total landscapes, and cultural sites within these landscapes that may have significance to Traditional Owners, rather than on archaeological sites *per se*. The survey involved discussing the activities proposed by Perpetual Resources Beharra project area, consultation with the YSRC representatives regarding the Aboriginal heritage values of the area, and general discussion regarding stories, histories, song lines and the totemic landscape of the surrounding country side for context. With these considerations in mind, an ‘Aboriginal site’ based on ethnography is defined as the following.



A location with known cultural, historical, ceremonial and/or mythological “importance and significance” to the cultural interests of the relevant Aboriginal Traditional Owners.



5 Survey Results

5.1 Survey Results – Desktop research

The background research for the heritage survey consisted of searches of the DPLH Site Register, Records of the WA Museum and the corporate archives of SandS CRM.

A search of the DPLH AHIS did return specific results within the survey area, with two previous studies overlapping the southern portion of the study area. Additional searches of the Records of the Western Australian Museum did not return results for the survey area. A search of the corporate archives of SandS CRM returned a result for a drill line survey conducted over part of the area.

A search of the AHIS did return ‘site’ and ‘other heritage place’ and ‘heritage surveys’ in the surrounds. This indicates that surveys have occurred in the surrounding areas and, importantly, Aboriginal sites have the potential to exist within the current survey area.

Previous reports

2020 Hunter, Calautti and Serjeant

The March 2020 heritage works can be considered a precursor to the current works. The survey area consisted of drill lines and access tracks within the current works. The March 2020 survey did not record any heritage sites or features.

1999 O’Connor

The 1999 O’Connor works detailed the results of an ethnographic survey overlapping the southern portion of the current works. The ethnographic survey did not record any heritage sites.

1999 Harris

The 1999 Harris report is the complementary archaeological survey to the 1999 O’Connor ethnographic survey, again overlapping the southern portion of the current works. The archaeological survey did not record any heritage sites.





Figure 4: 2021 Perpetual Resources Beharra Project Survey Area Detail including previous survey

5.2 Survey Results – Isolated finds

No (0) isolated artefacts were recorded at during the fieldwork.

5.3 Survey Results – Sites

No (0) previously unrecorded archaeological or ethnographic heritage sites were recorded during the survey.

5.4 Survey Results – Discussion

The results of the field survey and the desktop research provide a complementary set of outcomes, rather than a single set of outcomes. To reconcile the sets of outcomes an explanation of heritage site formation and persistence is required.

In essence the field survey and desktop study demonstrated that when undisturbed environments persist, there is a potential for Aboriginal sites to persist. This is demonstrated in the desktop study through the persistence of subsurface burials in the wider region, noting that no burials have been recorded in the study area. Inversely, when environments are obscured to the point when accurate determinations about when; where; and how artefacts originate (archaeological context). The absence of results for surface scatters in the desktop research and the observed disturbed artefacts in the surrounds demonstrate this.

The desktop research established heritage sites may persist and the persistence of these sites was limited to subsurface sites. The field survey observed sites (culturally modified trees) in the surrounds (observed 1500 metres north of the survey area) and disturbed isolated artefacts on the ground surface in the 'plough zone' (observed 5000 metres east of the survey area).

It should be noted the 'plough zone' is the initial 300 mm – 600 mm of the initial ground surface subject to 'ploughing' or 'plough-like' activities. The works of the plough within this zone disrupt any archaeological material on the surface and interfere with the context of the artefacts, lessening the archaeology significance and diminishing the ability to characterise and interpret any artefacts. Beharra Springs Station historically encompasses the survey area, subjecting the survey area to plough and plough-like activities and diminishing the archaeological significance of any surface finds.

Heritage management strategies should be considered drawn from the following summary:

- The potential for sites to persist in the area is determined by post-depositional activity
- Areas subject to significant disturbance, such as intensive agriculture, have been shown to have negligible potential for the persistence of Aboriginal sites



- Areas below the disturbance (below the ‘plough zone’) have been shown to have meaningful potential for the persistence of Aboriginal sites.
- Features above the surface and thus above the disturbance, such as trees, should be considered to have significant potential for the persistence of Aboriginal sites.

The DPLH has provided a risk matrix to guide heritage management strategies. (Figure 5)

Previous Land Use	LAND ACTIVITIES – CATEGORIES 1-5					
		1. Negligible disturbance	2. Minimal disturbance	3. Moderate disturbance	4. Significant disturbance	5. Major disturbance
	Built Environment - e.g. urban environment, towns, metropolitan region.	Low	Low	Low	Low	Medium
	Significantly Altered Environment - e.g. cultivated and cleared land.	Low	Low	Low	Medium	High
	Moderately Altered Environment - e.g. partially cleared lands, re-vegetated landscape.	Low	Low	Medium	Medium	High
	Minimally Altered Environment - e.g. urban bush land, regrowth areas	Low	Medium	Medium	High	High
Unaltered Environment - e.g. protected areas or pristine environment.	Low	Medium	High	High	High	
Risk Assessment		Actions				
Low Risk (Review)		Review the landscape and proposed activity (see sections 2.4 - 2.8 - assessing the landscape and the activity). Refer to the AHIS.				
Medium Risk (Review /Exercise Caution)		Review the landscape and proposed activity (as above). The precautionary principle (see page 2) applies. Refer to the AHIS and contact the DAA. A range of actions may be recommended, including: no action, consultation with the relevant Aboriginal people, an Aboriginal heritage survey or modification of the proposed activity to avoid or minimise site impact.				
High Risk (Consult / Survey / Approvals)		Refer to the AHIS. Consult with the DAA and the relevant Aboriginal people. Dependent on consultation outcomes you may need to include: an Aboriginal heritage survey, modification of the proposed activity to avoid or minimise (see sections 2.24 - 2.28) impact to the site and/or other heritage management strategies. The land user may also need to apply for approval or consent (see section 2.26) to the activity.				
For major development projects refer to sections 2.10 - 2.12 for further advice.						

Figure 5: DPLH DDG Risk Matrix

The risk matrix dictates activities on the immediate ground surface and area within the ‘plough zone’ of the survey area would be considered of ‘Low Risk’ to contain unrecorded heritage sites. Correspondingly, the risk matrix dictates activities below the ‘plough zone’ should be considered ‘High Risk’ due to the ‘Minimally Altered Environment’, the works being ‘Significant Disturbance’, and the known subsurface sites in the region.

5.5 Survey Results – YSRC position

YSRC participants on the survey provided consistent messaging during the survey. Specifically, the participants recommended:

- Perpetual Resources consult with the Southern Yamatji on the necessity of monitors in heritage management for the Project.





Figure 6: The survey area

6 Summary, Findings and Recommendations

6.1 Summary

No (0) previously unrecorded Aboriginal archaeological sites were recorded during the survey.

The absence of newly recorded Aboriginal sites demonstrates that unsuitable conditions for the formation and persistence of surface archaeological sites or previously unrecorded ethnographic sites within the project area and surrounds. This is consistent with previous recordings in area. There is a reasonable potential for subsurface archaeological sites to persist due to the undisturbed nature of the soils below the 'plough zone' and the known cultural activities of YSRC ancestors below the 'plough zone' (such as burials).

6.2 Findings and Recommendations

The report makes the following findings:

- | | |
|------------------|---|
| Finding 1 | The spatial data provided with this report represents the area subject to heritage survey |
| Finding 2 | The heritage survey for the supplied project area is complete. |
| Finding 3 | No new heritage sites were recorded within the survey area. |

The report makes the following recommendations:

- | | |
|-------------------------|---|
| Recommendation 1 | There are no recorded heritage features in the survey area requiring action or management. |
| Recommendation 2 | A 'Site Discovery Procedure' is adopted for the project. |
| Recommendation 3 | The Southern Yamatji representatives recommend: <ol style="list-style-type: none">1. Perpetual Resources consult with the Southern Yamatji on the necessity of monitors in heritage management for the Project. |



7 References

Legislation

Commonwealth *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*

Commonwealth *Native Title Act 1993*

West Australian *Coroners Act 1996*

Western Australian *Aboriginal Heritage Act 1972*

Unpublished Reports

2020 Hunter, P, L. Calautti and M. Serjeant *Final report regarding the archaeological and ethnographic work area clearance heritage survey undertaken over Perpetual Resources Limited's Beharra Silica Sands project area* Report prepared for Perpetual Resources Limited

1999 O'Connor, R. *Report on a survey for Aboriginal ethnographic sites at the Beharra Springs 1999 3D seismic survey area* Unpublished report held by DPLH

1999 Harris, J. *Report of an archaeological study of proposed seismic programme, Beharra Springs* Unpublished report held by DPLH

