

Belinda Pignone
Hanson
Environmental Planning and Compliance Coordinator

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23 October 2020

Reference: 0418291

Dear Belinda,

Subject: Sancrox Quarry Response to Submissions

Environmental Resources Management Australia Pty Ltd (ERM) provides this response to specific agency and community submissions made following the exhibition of the Sancrox Quarry Environmental Impact Statement (EIS). Responses are provided with respect to:

■ Soils and Water:

- NSW Environment Protection Authority (EPA) comments relating to soil properties and water balance;
- Port Macquarie Hastings Council (PMHC) relating to reticulated water supply;
- Department Planning, Industry and Environment (DPIE) relating to soil properties, water balance (consistent with EPA comments) and stormwater drainage;

■ Heritage:

- DPIE Biodiversity and Conservation Division (BCD) comments relating to further engagement with Registered Aboriginal Parties (RAPs), chance finds protocol, protection of a scar tree, and Aboriginal Cultural Heritage induction
- Heritage Council of NSW relating to location of a National Trust grave site relative to the quarry; and

■ Traffic


- Community comments relating to traffic movements, safety and road conditions of Rawdon Island Road and Sancrox Road.

Responses to these comments are provided in Table 1. Further responses on stormwater drainage will be provided with the more detailed surface and groundwater assessments currently under investigation and response preparation.



Table 1: Soils and Water, Heritage and Traffic Responses



Submission Reference No.	Submission	Response
Soils and Water		
EPA #24	<p>Soil Properties</p> <p>Revision of the need to extend the development and sediment basins into the very strong acidity Euroka Soil Landscape.</p> <p>Alternatively, provide a more detailed assessment of the potential impacts and mitigation measures addressing the potential risk to water quality.</p>	<p>The site is mapped as comprising three soil landscapes; Kundabung, Cooperabung and Euroka. The quarry extension is predominately across the Cooperabung soil landscape. The revised quarry plan provided with this RtS has straightened and moved the western quarry boundary eastward out of the Kundabung soil landscape and slightly reducing the impact on the Euroka soil landscape. The Euroka soil landscape is mapped across extensive areas from north of Kempsey to south of Wauchope and generally west of the Pacific Highway.</p> <p>The EIS at Section 9.3.2 provides a general description and limitations of the Euroka soil landscape including having very strong acidity. Atkinson (1999) confirms that the very strong acid soils are in the range pH 4.5-5.5 in the B and C subsoil horizons to a depth of approximately 100-120 cm depending on depth of the topsoil. The acidity limitation relates to agricultural use in which liming to increase pH to above 5.5 is recommended to improve agricultural productivity. Interrogation of the eSPADE data for NSW (OEH, 2012), provides a soil profile report at a location on Sancrox Road approximately 500 m south west of the revised quarry footprint. The soil profile report confirms the soils in this locality have A-horizon to a depth of 35 cm and B-horizon to 120 cm. The report confirms a field pH of the A horizon at pH 6.0 and subsoils at pH 5.0-5.5, a higher pH range than noted in the general description and limitations of the Euroka soil landscapes.</p> <p>The quarry void is not self-draining and runoff is collected in a sump which is pumped to the onsite dams for reuse for product moisture, dust control and rehabilitation works or eventual discharge offsite within pH criteria under an existing Environment Protection Licence (EPL). Runoff from surrounding disturbed areas including the office and processing areas drain to the onsite dams. This process will continue for the proposed quarry expansion.</p> <p>Overburden including topsoil will be separated and stockpiled for future reuse. The stockpiles will be stabilised and located within the disturbance footprint such that runoff will be directed to the onsite dams. The overburden stockpiles will constitute a minor portion of the total catchment areas for the onsite dams. Given the quarry is subject to water discharge limits under the EPL, and it is expected that these limits will remain for future quarry activity, management of pH in discharge water is through monitoring and pH adjustment as required.</p> <p>Given the strong acidity of the Euroka Soil Landscape, soil sampling will determine if required adjustment of pH using a determined lime application rate during stockpiling.</p> <p>Water quality testing of the most downstream onsite dam will determine compliance, and identify if pH modification (through use of products such as lime or hydrochloric acid) or total suspended solids modification (through the use of gypsum) is required prior to discharge.</p> <p>In summary management of highly acid soils will be through separation and placement in stabilised overburden stockpiles for future reuse and rehabilitation of the quarry. The stockpiles will be located within disturbed areas of the quarry which drain to the site's large capacity dams. Collected runoff is prioritised for onsite reuse and any discharges offsite are subject to EPL conditions including pH criteria. Therefore, the potential impacts will be managed through the implementation of appropriate mitigation and management which will be outlined in a Soil and Water Management Plan (SWMP).</p>

Submission Reference No.	Submission	Response
PMHC #1	The Environmental Impact Statement (EIS) has not adequately detailed the proposal development's reliance on reticulated water supply. Further details are required on intended usage.	As mentioned in Section 7.4.1 of the EIS, potable water will be required and will be source from council supply mains. This demand is for site amenity purposes as the quarry site water management system is predicted to provide sufficient supply to meet quarry demands as the quarry expands (refer EIS Section 7.4.3). Section 7.3.4 of the EIS provides an estimation of wastewater generation from site amenities at 1,250 litres per day. Given this constitutes the primary demand for potable water it is estimated with an allowance for other minor uses that the Project will require approximately 0.5 ML per year for potable water use onsite.
DPIE #24	Soil Properties Please respond to the EPA's concern over the proposal to undertake development activities within the very strongly acidic Euroka Soil Landscape.	Please refer to response to EPA #24 comment.
Heritage		
DPIE Biodiversity and Conservation Division (BCD) #7	Further attempts should be made to engage with Registered Aboriginal Parties.	<p>As outlined within the Aboriginal Cultural Heritage Report (ERM 2019), four groups registered an interest in being consulted for the project being:</p> <ul style="list-style-type: none"> ■ Birpai Traditional Owners; ■ Birpai Local Aboriginal Land Council (BLALC); ■ Yanggaay; and ■ Norm Archibald. <p>On 17 October 2017, each registered Aboriginal stakeholder group was provided an outline of the scope and a proposed survey methodology. No comments were received on the proposed methodology from any of the Aboriginal stakeholders.</p> <p>The Project area was surveyed by an ERM Heritage Consultant and Jason Holten (representing both Birpai Local Aboriginal Land Council and Birpai Traditional Owners Indigenous Corporation) on Wednesday 15 November and Thursday 16 November 2017.</p> <p>A draft copy of the ACHAR was provided to all four registered Aboriginal parties on 19 January 2018. A response was received on 14 March 2018 from the Birpai Local Aboriginal Land Council confirming that they were satisfied with the assessment, methodology and the protocols and do not wish to make any further comments.</p> <p>The remaining two RAPs, Yanggaay and Norm Archibald, registered an interest but did not respond to any other consultation. In response to BCD comments on the ACHAR, ERM have again attempted to contact both Yanggaay and Norm Archibald.</p> <p>On Monday 20th July ERM phoned Norm Archibald to discuss the Project and provide additional opportunities for input. Norm confirmed that he remembered the Project but he did not have any additional comments to make at this stage. ERM advised that they would be available to discuss further towards the end of the week in case anything came to mind. Norm made no efforts to contact ERM again and no further comments were received.</p> <p>During initial consultation, ERM tried to contact Yanggaay by phone, only to receive a notification that the number had been disconnected. No alternative contact numbers were provided during consultation. On 20th July 2020, ERM sent an email to the contact address provided by Yanggaay during initial consultation. The email advised that ERM had been trying to contact the group, and that we were seeking confirmation of receipt of the email. In addition to the email, ERM made efforts to search for a contact phone number via the internet, to</p>

Submission Reference No.	Submission	Response
		<p>no avail. No further correspondence has been received from Yanggaay.</p> <p>An updated consultation log and copies of the sent emails and text messages has been provided in Attachment A.</p>
BCD #8	The development footprint should be amended to preserve the scar tree.	<p>As confirmed within Figure 1 below, the potential scar tree has been avoided and is located to the west of the proposed extraction area. The location of the tree should be clearly marked on all construction/extraction plans. Consideration should also be given to further protecting the tree with temporary fencing during the final stages of the proposed works to ensure no accidental damage the site.</p> <p>Figure 1 – Location of potential scar tree</p> 
BCD #9	The ACH induction for workers should be presented by a representative of the Registered Aboriginal Parties (RAPs), or at a minimum, have a representative of the RAPs participate in the presentation and the context should be formulated by, or reviewed prior to finalisation, by the RAPs to ensure it is culturally appropriate.	<p>As outlined within Section 9.2.2 of the ACHAR (ERM 2019), Hanson provide a commitment that all employees and subcontractors will undergo environmental awareness training as part of the site induction to ensure they understand their obligations and responsibilities. This training will include basic Aboriginal heritage awareness across the following topics:</p> <ul style="list-style-type: none"> ■ legal responsibilities and statutory obligations for heritage under the National Parks and Wildlife Act 1974 and the Heritage Act 1977; ■ outline the location and type of archaeological sites within the Project Area and give instructions not to disturb these sites; ■ provide the detailed locations of all known Aboriginal objects within the Project Area to all relevant personnel; ■ outline the procedures for the discovery of previously unrecorded Aboriginal objects; and ■ provide training on how to identify stone artefacts and other Aboriginal heritage sites. <p>It is important to note that only information endorsed for sharing by the RAPs would be included within the induction package. A representative of the RAPs will also be invited to participate in the induction sessions for major contractors prior to works commencing.</p>

Submission Reference No.	Submission	Response
BCD #10	The proposed chance finds procedure should be amended to require authorisation from the Department of Planning, Industry and Environment of any proposed salvage of Aboriginal objects discovered during works associated with the project.	An updated unexpected (chance) finds procedure is provided in Attachment B and includes authorisation from Heritage NSW (noting that the management of Aboriginal Cultural Heritage was transferred from Department of Planning, Industry and Environment to Heritage NSW on 1 July 2020).
Heritage Council of NSW	The supporting EIS prepared for the Sancrox Quarry Expansion, by ERM dated October 2019 has been reviewed and does not discuss the location of the National Trust grave site in relation to the development.....Whilst it is acknowledged that a survey was undertaken, a lone grave, if that is what this National Trust reference relates to, may not be in good condition and physical evidence may have been removed. It would be appropriate for the DPIE to request the Proponent to clarify this outstanding question at the response to submissions stage.	<p>ERM have reviewed the National Heritage Trust Listing and confirm that the site is located over 3km to the southwest of the Sancrox Quarry.</p> <p>It's recorded as a single burial dated 3/5/1901. The site was surveyed in 1986 and is recorded as an imposing 2m white marble obelisk, erected in memory of Allen Johnston. The monument which faces east was reported to be in good condition with a cast iron surround set in sandstone. Two small surrounds of natural stone immediately north and south of the monument suggest that there may be other burials in the vicinity although no other monuments were recorded.</p> <p>The proposed quarry expansion will not impact on this record, and the heritage site is not required to be further assessed within the EIS or the RtS.</p>

Submission Reference No.	Submission	Response
Traffic		
Community	<p>A few community submissions raised that Rawdon Island Road is currently in poor shape and increased volume of heavy vehicles will further its deterioration.</p> <p>Some added that both Sancrox Road and Rawdon Island Road are unsuitable roads to cater for trucks and heavy traffic flow as these roads are designed for light rural traffic.</p> <p>Some also felt that is currently dangerous to walk, or ride a bike or a horse safely, as roads such as Sancrox Road and Rawdon Island Road are too narrow.</p>	<p>Trips to the west of the Quarry Access Road on Sancrox Road and Rawdon Island Road are not required due to the more suitable access options provided by the Sancrox and Oxley Highway interchanges and service roads. Hence, western movements on the Sancrox Road from the Quarry Access Road would be strictly limited to supplying markets within the Sancrox locality, considered to be less than 1% of the total annual trucks trips.</p> <p>To address safety concerns for pedestrians and cyclists, Figure 2 to Figure 5 illustrates upgrades to the road network undertaken by RMS in 2016 which allow for safe passage of pedestrians and cyclists along the Sancrox Road / Quarry Access roundabout</p> <p>Figure 2 – Photograph taken on Frogs Road looking North towards Quarry Access roundabout depicting pedestrian and cycle access</p>  <p>Figure 3 – Photograph taken on Quarry Access roundabout looking North along Quarry Access Road depicting pedestrian and cycle access</p> 

Submission Reference No.	Submission	Response
		<p>Figure 4 – Photograph taken on Quarry Access roundabout looking East along Sancrox Road depicting pedestrian and cycle access</p>  <p>Figure 5 – Photograph taken on Quarry Access roundabout look west along Sancrox Road depicted pedestrian and cycle access</p> 

Yours sincerely,



Amanda Antcliff
Principal Consultant



Murray Curtis
Partner

ATTACHMENT A UPDATED CONSULTATION LOG, JULY 2020

Table A1 – Updated Consultation Log, July 2020

Date	RAP/Contact Name	Contact Made By:	Form of Contact:	Evidence of Consultation	Details	Response/Follow up?
4 September 2017	-	-	Newspaper Advertisement	Yes	Port News	
30 August 2017	Birpai Local Aboriginal Land Council	ERM	Stage 1 Notification letter sent via email.	Yes	Letters were sent to the relevant government agencies to determine the relevant stakeholder groups for contact. Response requested by Friday 15 September 2017.	05/09/2017 - Response received via email to register an interest and confirming the proposed work is wholly located within the boundary of the Birpai Local Aboriginal Land Council. It was also suggested that Birpai Traditional Owners group would be interested.
30 August 2017	the Registrar	ERM	Stage 1 Notification letter sent via email and post.	Yes	Letters were sent to the relevant government agencies to determine the relevant stakeholder groups for contact. Response requested by Friday 15 September 2017.	6/09/2017 – Email response confirming that the project area described does not have Registered Aboriginal Owners pursuant to Division 3 of the Aboriginal Land Rights Act 1983 (ALRA).
30 August 2017	OEHL Port Macquarie	ERM	Stage 1 Notification letter sent via email and post.	Yes	Letters were sent to the relevant government agencies to determine the relevant stakeholder groups for contact. Response requested by Friday 15 September 2017.	17/09/2017 – Letter providing a list of potential interested parties.
30 August 2017	NTSCorp	ERM	Stage 1 Notification letter sent via email and post.	Yes	Letters were sent to the relevant government agencies to determine the relevant stakeholder groups for contact. Response requested by Friday 15 September 2017.	
30 August 2017	NNTT	ERM	Stage 1 Notification letter sent via email and post.	Yes	Letters were sent to the relevant government agencies to determine the relevant stakeholder groups for contact. Response requested by Friday 15 September 2017.	20/06/17 – Response email from NNTT which stated that there are no Native Title Determination Applications, Determinations of Native Title, or Indigenous Land Use Agreements over the identified area.
30 August 2017	Port Mac Hastings Council	ERM	Stage 1 Notification letter sent via email and post.	Yes	Letters were sent to the relevant government agencies to determine the relevant stakeholder groups for contact. Response requested by Friday 15 September 2017.	
30 August 2017	North Coast LLS	ERM	Stage 1 Notification letter sent via email and post.	Yes	Letters were sent to the relevant government agencies to determine the relevant stakeholder groups for contact. Response requested by Friday 15 September 2017.	
5 September 2017	Birpai Local Aboriginal Land Council	David Carroll	Email	Yes	David Carroll sent an email registering BLALC in the project and confirming that the proposed work is wholly located within the boundary of the Birpai Local Aboriginal Land Council. David also suggested contact with Birpai Traditional owners group.	5/09/2017 - ERM replied thanking David for his response and confirming that we will be in contact soon.
11 September 2017	Jason Holten Birpai Traditional Owners	Jason Holten	Phone	Consultation log	Jason Holten called KD ERM to register Birpai Traditional Owners as RAP for project. Received letter from NTS.	
4 October 2017	Salwater Tribal Council	ERM KD	Mail	Yes	Letter was sent to groups identified from Stage 1.1 letter to government agencies to determine the relevant stakeholder groups for contact, letter requested registration of interest to be consulted. Response requested by 13 October 2017.	
4 October 2017	Ghinni Ghinni Youth and Culture	ERM KD	Email & Mail	Yes	Letter was sent to groups identified from Stage 1.1 letter to government agencies to determine the relevant stakeholder groups for contact, letter requested registration of interest to be consulted. Response requested by 13 October 2017.	

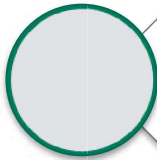
Date	RAP/Contact Name	Contact Made By:	Form of Contact:	Evidence of Consultation	Details	Response/Follow up?
	Aboriginal Corporation					
4 October 2017	Bindi Aboriginal Heritage & Cultural Centre Inc.	ERM KD	Mail	Yes	Letter was sent to groups identified from Stage 1.1 letter to government agencies to determine the relevant stakeholder groups for contact, letter requested registration of interest to be consulted. Response requested by 13 October 2017.	
4 October 2017	Jason Holten Birpai Traditional Owners	ERM KD	Email	Yes	Letter was sent to groups identified from Stage 1.1 letter to government agencies to determine the relevant stakeholder groups for contact, letter requested however letter sent to ensure that all groups have the same information.	
4 October 2017	Lakkari NTCCG Mick Leon	ERM KD	Email & mail	Yes	Letter was sent to groups identified from Stage 1.1 letter to government agencies to determine the relevant stakeholder groups for contact, letter requested registration of interest to be consulted. Response requested by 13 October 2017.	
4 October 2017	Birpai Local Aboriginal Land Council Steve Miles	E RM KD	Email & Mail	Yes	Letter was sent to groups identified from Stage 1.1 letter to government agencies to determine the relevant stakeholder groups for contact, letter requested registration of interest to be consulted. Response requested by 13 October 2017.	
4 October 2017	Norm Archibald	ERM KD	Email & Mail	Yes	Letter was sent to groups identified from Stage 1.1 letter to government agencies to determine the relevant stakeholder groups for contact, letter requested registration of interest to be consulted. Response requested by 13 October 2017.	
4 October 2017	Yangaay Danial Carriage	ERM KD	Mail	Yes	Letter was sent to groups identified from Stage 1.1 letter to government agencies to determine the relevant stakeholder groups for contact, letter requested registration of interest to be consulted. Response requested by 13 October 2017.	
13 October 2017	Yangaay Danial Carriage	Yangaay	email	Yes	Danial Carriage sent an email registering an interest in the project.	13/10/2017 ERM replied to confirm the registration and that ERM will be in contact with additional information..
17 October 2017	Jason Holten Birpai Traditional Owners	ERM KD	Email	Yes	Letter was sent to RAPs providing project information and invitation to fieldwork on 15 and 16 November. Requesting response by 13 November.	
17 October 2017	Birpai Local Aboriginal Land Council David Carroll	ERM KD	Email	Yes	Letter was sent to RAPs providing project information and invitation to fieldwork on 15 and 16 November. Requesting response by 13 November.	
17 October 2017	Yangaay Danial Carriage	ERM KD	Email	Yes	Letter was sent to RAPs providing project information and invitation to fieldwork on 15 and 16 November. Requesting response by 13 November.	
21 October 2017	Norm Archibald	Norm Archibald	Email	Yes	Norm Archibald sent an email registering an interest in the project. Norm apologised for delayed registration as there were issues with the mail.	27/10/2017 ERM replied to confirm the registration.
27 October 2017	Norm Archibald	ERM KD	Email	Yes	Email was sent to advise that ERM had included Norm Archibald as a Registered Aboriginal Party and extended invitation to fieldwork in form of below letter. Letter was sent to RAPs providing project information and invitation to fieldwork on 15 and 16 November. Requesting response by 13 November.	

Date	RAP/Contact Name	Contact Made By:	Form of Contact:	Evidence of Consultation	Details	Response/Follow up?
8 November 2017	Birpai Local Aboriginal Land Council cc. OEH	ERM	Email	Yes	Letter was sent to the LALC in accordance with the consultation guidelines advising them that the Registered Aboriginal Parties for the Sancroix Quarry Project are: Birpai Local Aboriginal Land Council; Birpai Traditional Owners; Yanggaay; and Norm Archibald.	
9 November 2017	Jason Holten Birpai Traditional Owners	ERM KD	Phone	Consult log	Call to advise that fieldwork still going ahead on 15 and 16 November. Jason Holten advised that he would be conducting the fieldwork on behalf of Birpai Traditional Owners and Birpai Local Aboriginal Land Council.	
9 November 2017	Birpai Local Aboriginal Land Council	ERM KD	Phone	Consult log	Call to advise that ERM had spoken to Jason Holten who had advised he would be conducting the fieldwork on behalf of Birpai Traditional Owners and Birpai Local Aboriginal Land Council. Requested insurance information be sent on Jason's behalf.	
9 November 2017	Yanggaay Danial Carriage	ERM KD	Phone	Consult log	Call to advise that fieldwork still going ahead on 15 and 16 November. Message that phone number was disconnected.	
19 January 2018	Jason Holten Birpai Traditional Owners	ERM KD	Email	Yes	Draft heritage assessment provided to all Registered Aboriginal Parties for their review and comment. Comments requested by COB Friday 16 February 2018.	
19 January 2018	Birpai Local Aboriginal Land Council David Carroll	ERM KD	Email	Yes	Draft heritage assessment provided to all Registered Aboriginal Parties for their review and comment. Comments requested by COB Friday 16 February 2018.	
19 January 2018	Yanggaay Danial Carriage	ERM KD	Email	Yes	Draft heritage assessment provided to all Registered Aboriginal Parties for their review and comment. Comments requested by COB Friday 16 February 2018.	
19 January 2018	Norm Archibald	ERM KD	Email	Yes	Draft heritage assessment provided to all Registered Aboriginal Parties for their review and comment. Comments requested by COB Friday 16 February 2018.	
14 March 2018	Birpai Local Aboriginal Land Council	LALC	Email	Yes	Response received on the draft report. The Birpai Local Aboriginal Land Council viewed the draft heritage assessment dated January 2018 and were satisfied with the assessment, methodology and the protocols and did not wish to make any further comments.	No further action required.
20 July 2020	Norm Archibald	ERM SM	Email	Yes	Call to Norm Archibald to ask if he had any comments on the draft report. Norm had no comments. SM advised that we would be available for follow up later in the week in case comments later came to mind.	SM sent a text message after the phone call with the appropriate contact information to provide any comments.
20 July 2020	Yanggaay Danial Carriage	ERM SM	Email	Yes	Email to Danial to follow up on consultation. Advised that we had previously made several attempts to contact with no response. Provided contact details and asked Danial to call or email to confirm receipt of the correspondence.	Find a current phone number for Danial.

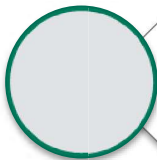
ATTACHMENT B UNEXPECTED FINDS PROTOCOL

UNEXPECTED FINDS PROTOCOL, July 2020

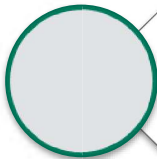
An unexpected (chance) finds procedure will be implemented for any locations subject to soil disturbance activities, including vegetation clearing. In the event that site workers identify any potential Aboriginal heritage sites, the unexpected finds procedure shall be implemented in compliance with s89 of *National Parks and Wildlife Act 1974*. The procedure is as follows:



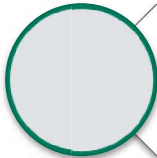
STOP WORK IMMEDIATELY. Any person that observes or uncovers potential Aboriginal heritage objects during the works must notify machinery operators immediately. All activities and/or works in the immediate area must cease (DO NOT collect samples to show someone).



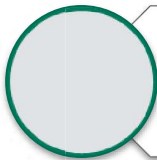
NOTIFY. Notify the site supervisor immediately. The site supervisor will contact, notify and consult with Registered Aboriginal Parties (RAPs), Heritage NSW and an appropriately qualified heritage professional (archaeologist).



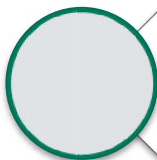
AVOID DISTURBANCE of the area at and adjacent to the cultural finds.



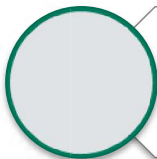
PROTECT THE SITE. Any sand/soils removed must be identified and set aside for assessment. The disturbed area needs to be cordoned off as an exclusion zone so that no further disturbance occurs (include an adequate buffer area).



ASSESS THE FIND. The RAPs and archaeologist will investigate the nature; extent and location of the find.



RECORD/SALVAGE THE FIND. The RAPs and archaeologist will, in consultation with the site supervisor, arrange recording of the objects and if required salvage. Note that any proposed salvage methodology must be approved in writing by Heritage NSW prior to undertaking any works on site.



RESUME WORK. Subject to the archaeologist's assessment, work may be able to recommence once the site is assessed and appropriately salvaged in accordance with any specific requirements from Heritage NSW. Alternatively, where possible, work methods or location may be altered to minimise further harm to the find, or objects associated with the find.

Note: In the event of the discovery of human skeletal material (or suspected human skeletal material) during Project activities, a separate protocol is provided in Section 9.2.1 of the ACHAR (ERM 2019). NSW Police and the Coroner will determine the nature of the suspected remains and advise on further actions.