



## **APPENDIX M      ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT**



**HILLS OF GOLD WIND FARM  
SSD-9679**

**Aboriginal Cultural Heritage Assessment**

Prepared for ARUP  
on behalf of Wind Energy Partners Pty Ltd

Upper Hunter, Liverpool Plains & Tamworth Regional Local Government Areas

October 2020

Ref. 1849

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## Document Information

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## Executive Summary

Wind Energy Partners Pty Ltd ('Wind Energy Partners') is proposing to construct and operate a wind farm south of Nundle, a historic gold-mining town in the Tamworth Regional Local Government Area. Nundle is located approximately 50 kilometres south east of Tamworth. The proposal is known as the Hills of Gold Wind Farm.

The Hills of Gold Wind Farm is a State Significant Development and subject to approval under the *Environmental Planning and Assessment Act 1979*. Secretary's Environmental Assessment Requirements (SEARs) for the proposal were issued by the Department of Planning, Industry and Environment (DPIE) on 22 November 2019 (with supplementary SEARs on 18 February 2020) and included requirements for the assessment of Aboriginal cultural heritage as part of the Environmental Impact Statement.

Kelleher Nightingale Consulting Pty Ltd was engaged by Arup on behalf of Wind Energy Partners to prepare an Aboriginal cultural heritage assessment report (CHAR) for the project. The CHAR has been prepared in accordance with the SEARs, Heritage NSW [formerly Office of Environment and Heritage (OEH)] *Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales*, *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* and *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW*.

Aboriginal archaeological assessment identified seven Aboriginal archaeological sites comprising Aboriginal objects and one potential archaeological deposit (PAD) within the study area. The sites comprised four artefact scatters and three isolated finds and the PAD comprised a landform considered likely to contain subsurface archaeological deposit. Archaeological significance of the identified Aboriginal archaeological sites was defined by the information exhibited by each site. Sites displayed a mixture of low and moderate significance and the identified PAD was considered to display moderate potential.

The methodology undertaken in this impact assessment assumes that the entirety of the study area will be impacted by the project. A detailed infrastructure layout will be developed following the completion of further environmental and technical investigations and placement of some specific infrastructure elements (e.g. individual transmission towers along the overhead power line route) would be determined at the detailed design stage; however a corridor-wide impact assessment presents the most comprehensive option for determining appropriate management and mitigation of Aboriginal heritage impacts. Wind Energy Partners has in iterations of the design process taken Aboriginal heritage into consideration by avoiding areas of moderately significant finds. This has included redesigning the proposed impact area at turbines 54-56 to avoid impacting identified site Hills of Gold AFT 1 on the main ridgeline. The redesign of this section of the proposal has avoided impacting on this moderately significant site. Early identification of Aboriginal heritage sites and areas of archaeological potential allows for more informed management of impacts and potential avoidance of sites and PAD by the detailed design.

A mitigation program comprising archaeological salvage, undertaken prior to construction, would be required where portions of at least moderately significant Aboriginal archaeological sites would be impacted by the proposal. If impact is unavoidable at other sites/PADs, mitigative salvage excavation would be required for one archaeological site and one PAD: Hills of Gold AFT 3 and Peel River/Woodley Creek PAD. Surface artefact collection is recommended for low significance Aboriginal archaeological sites where surface artefacts were identified during the assessment: Hills of Gold AFT 2, Hills of Gold AFT 4, Hills of Gold IF 1, Hills of Gold IF 2 and Hills of Gold IF 3. No impact is proposed for Hills of Gold AFT 1.

The salvaged information will increase our understanding, strengthen our interpretations and improve ongoing and future management of Aboriginal heritage in the surrounding area. The spatial extent, presence of archaeological deposits and activities related to Aboriginal occupation at archaeological sites in the locality are not yet fully understood due to limited archaeological investigations. In this light, the project offers an opportunity to advance the interpretation and management of Aboriginal heritage of the surrounding area by contributing to the baseline of information available to future heritage assessments.

Aboriginal stakeholders have previously expressed that all archaeological sites hold cultural value and significance, regardless of disturbance or low artefact densities, and the loss of intrinsic Aboriginal cultural value of impacted sites cannot be offset. However, information recovered from mitigation activities is equally as valuable to the contemporary Aboriginal community as it is to archaeologists as it expresses the overall cultural story of the area and has cultural and social value independent of its scientific significance. Both surface collection and salvage excavation should be undertaken with the involvement of Aboriginal stakeholders to enhance the archaeological interpretation with cultural knowledge, stories and values. Combining cultural and scientific values in this manner is a positive outcome for Aboriginal heritage.

Project approval is required from DPIE before impacting the Aboriginal objects/sites/PAD identified within the proposed impact area. Impact to Aboriginal objects/sites/PADs may only be undertaken in accordance with conditions of project approval.



## Contents

<b>EXECUTIVE SUMMARY .....</b>	<b>II</b>
<b>CONTENTS.....</b>	<b>III</b>
<b>FIGURES .....</b>	<b>IV</b>
<b>TABLES .....</b>	<b>IV</b>
<b>1 INTRODUCTION.....</b>	<b>1</b>
1.1 PROPONENT AND CONSULTANTS.....	1
1.2 LOCATION AND SCOPE OF ACTIVITY .....	1
1.3 PROJECT REQUIREMENTS.....	2
<b>2 LANDSCAPE CONTEXT .....</b>	<b>2</b>
<b>3 ETHNOHISTORIC CONTEXT .....</b>	<b>7</b>
<b>4 ARCHAEOLOGICAL CONTEXT.....</b>	<b>10</b>
4.1 DATABASE SEARCH (AHIMS).....	10
4.2 OTHER HERITAGE REGISTERS AND DATABASES.....	10
4.3 AHIMS RESULTS AND PREVIOUSLY RECORDED SITES .....	12
4.4 PREVIOUS ABORIGINAL ARCHAEOLOGICAL INVESTIGATIONS .....	13
<b>5 ABORIGINAL ARCHAEOLOGICAL SURVEY .....</b>	<b>15</b>
5.1 DESKTOP REVIEW.....	15
5.2 REGIONAL CHARACTER AND SITE PREDICTIONS .....	15
5.3 SAMPLING STRATEGY AND FIELD METHODS .....	16
5.4 SURVEY COVERAGE .....	16
5.5 SURVEY RESULTS.....	22
5.5.1 Hills of Gold AFT 1.....	22
5.5.2 Hills of Gold AFT 2.....	23
5.5.3 Hills of Gold AFT 3.....	24
5.5.4 Hills of Gold AFT 4.....	25
5.5.5 Hills of Gold IF 1 .....	26
5.5.6 Hills of Gold IF 2 .....	27
5.5.7 Hills of Gold IF 3 .....	28
5.5.8 Peel River/Woodleys Creek PAD.....	29
<b>6 ABORIGINAL COMMUNITY CONSULTATION.....</b>	<b>30</b>
6.1 COMMUNITY CONSULTATION PROCESS.....	30
6.2 REGISTRATION OF INTEREST .....	30
6.3 CONSULTATION REGARDING THE LAND AND PROPOSED ACTIVITY .....	31
6.4 STAKEHOLDER RESPONSES TO THE PROPOSED ASSESSMENT METHODOLOGY FOR THE CULTURAL HERITAGE ASSESSMENT REPORT.....	31
6.5 REVIEW OF DRAFT CHAR .....	32
6.6 ABORIGINAL CULTURAL VALUES .....	33
<b>7 SUMMARY AND ANALYSIS OF BACKGROUND INFORMATION.....</b>	<b>34</b>
7.1 IDENTIFIED ABORIGINAL HERITAGE WITHIN THE STUDY AREA.....	35
<b>8 CULTURAL HERITAGE VALUES AND STATEMENT OF SIGNIFICANCE .....</b>	<b>36</b>
8.1 SIGNIFICANCE ASSESSMENT CRITERIA .....	36
8.2 STATEMENTS OF SIGNIFICANCE.....	38
<b>9 THE PROPOSED ACTIVITY AND IMPACT ASSESSMENT .....</b>	<b>40</b>
<b>10 MITIGATING HARM.....</b>	<b>44</b>
<b>11 MANAGEMENT OUTCOMES .....</b>	<b>45</b>
11.1 MITIGATION THROUGH THE COLLECTION OF SURFACE ARTEFACTS .....	45

11.2	MITIGATION THROUGH ARCHAEOLOGICAL SALVAGE EXCAVATION .....	45
<b>12</b>	<b>MANAGEMENT PROCEDURES .....</b>	<b>46</b>
12.1	MANAGEMENT POLICY FOR ABORIGINAL HERITAGE.....	46
12.2	PROCEDURES FOR HANDLING HUMAN REMAINS.....	47
12.3	PROCEDURES FOR HANDLING UNEXPECTED ABORIGINAL OBJECTS.....	47
12.4	PROCEDURE FOR PROPOSED CHANGES TO APPROVED PROJECTS.....	47
12.4.1	<i>Changes in heritage impact .....</i>	<i>48</i>
12.5	PROCESS FOR CONTINUED CONSULTATION WITH ABORIGINAL STAKEHOLDERS .....	48
	<b>REFERENCES .....</b>	<b>49</b>
<b>APPENDIX A</b>	<b>AHIMS EXTENSIVE SEARCH .....</b>	<b>51</b>
<b>APPENDIX B</b>	<b>ADVERTISEMENT FOR REGISTRATION OF INTEREST .....</b>	<b>53</b>
<b>APPENDIX C</b>	<b>ABORIGINAL COMMUNITY COMMENTS ON DRAFT CHAR.....</b>	<b>54</b>
<b>APPENDIX D</b>	<b>CONSULTATION LOG .....</b>	<b>57</b>
<b>APPENDIX E</b>	<b>MINOR TRANSPORT INFRASTRUCTURE ADJUSTMENTS.....</b>	<b>66</b>

## Figures

Figure 1.	Location of the study area.....	3
Figure 2.	Detail and components of the study area .....	1
Figure 3.	Geology of the study area .....	5
Figure 4.	Topography of the study area .....	6
Figure 5.	AHIMS extensive search results map .....	11
Figure 6.	Survey results - Identified Aboriginal heritage within the study area .....	21
Figure 7.	Extract from draft EIS showing impact avoidance measures at Hills of Gold AFT 1 .....	41
Figure 8.	Proposed impact area and Aboriginal heritage.....	43

## Tables

Table 1.	SEARs for Aboriginal heritage.....	2
Table 2.	Geological formations shown on Figure3 .....	2
Table 3.	Site features and site context from AHIMS database search .....	10
Table 4.	Sample artefacts from Hills of Gold AFT 1 .....	22
Table 5.	Artefacts from Hills of Gold AFT 2 .....	23
Table 6.	Artefact from Hills of Gold AFT 3 .....	24
Table 7.	Artefacts from Hills of Gold AFT 4 .....	25
Table 8.	Artefact from Hills of Gold IF 1 .....	26
Table 9.	Artefact from Hills of Gold IF 2 .....	27
Table 10.	Artefact from Hills of Gold IF 3 .....	28
Table 11.	Registered Aboriginal Stakeholders .....	30
Table 12.	Identified Aboriginal archaeological sites within the study area.....	35
Table 13.	Assessed significance of Aboriginal archaeological sites/PAD within the study area.....	39
Table 14.	Proposed impact to Aboriginal archaeological sites/PAD within the study area .....	42
Table 15.	Mitigation measures for identified Aboriginal sites/PAD .....	44
Table 16.	Aboriginal sites requiring mitigation (collection) .....	45
Table 17.	Aboriginal sites requiring mitigation (salvage excavation) .....	45

# 1 Introduction

## 1.1 Proponent and consultants

Wind Energy Partners Pty Ltd ('Wind Energy Partners') is proposing to construct and operate a wind farm south of Nundle, a historic gold-mining town in the Tamworth Regional Local Government Area (LGA). Nundle is located approximately 50 kilometres south east of Tamworth. The proposal is known as the Hills of Gold Wind Farm.

The Hills of Gold Wind Farm is State Significant Development (SSD) and subject to approval under the *Environmental Planning and Assessment Act 1979* (EP&A Act). Secretary's Environmental Assessment Requirements (SEARs) for the proposal were issued by the Department of Planning, Industry and Environment (DPIE) on 22 November 2019 (with supplementary SEARs on 18 February 2020) and included requirements for the assessment of Aboriginal cultural heritage as part of the Environmental Impact Statement (EIS).

Kelleher Nightingale Consulting Pty Ltd (KNC) was engaged by Arup on behalf of Wind Energy Partners to prepare an Aboriginal cultural heritage assessment report (CHAR) for the project. The CHAR has been prepared in accordance with the SEARs, Heritage NSW [formerly Office of Environment and Heritage (OEH)] *Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales* (OEH 2010a), *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (OEH 2010b) and *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011).

## 1.2 Location and scope of activity

The Hills of Gold Wind Farm is located across a prominent ridgeline that forms the boundary between the Tamworth Regional LGA and the adjacent Upper Hunter LGA, and extends west into the Liverpool Plains LGA. The general locality includes the town of Nundle, the town of Hanging Rock, Ben Halls Gap State Forest, Nundle State Forest, Ben Halls Gap National Park, agricultural farmland and industry.

The project is expected to have a power output of up to 420MW depending on the final design and subject to project approvals and in consultation with the community. The project will provide regional jobs and economic benefits for communities in and around Nundle, Hanging Rock and Crawney while producing enough electricity for approximately 185,000 typical homes on an average day. It is currently proposed that the wind farm would include development of the following infrastructure:

- Up to 70 wind turbines, mounted on tubular steel towers, with hardstand construction areas. It is currently proposed that each turbine will have a maximum tip height of 230m above ground level;
- Construction compound and temporary construction infrastructure, including concrete batching facilities;
- Electrical connections between wind turbines and the substations (likely to be underground, subject to constructability);
- Internal access tracks and upgrades to existing access roads, where required.
- A substation, control room and an operations and maintenance facility;
- Up to approximately 23km of high voltage, overhead power line with an estimated 60m wide easement, connecting the wind farm site to the TransGrid Liddell to Tamworth transmission line; and
- Connection infrastructure including a switching station and battery storage.

The concept design for the project indicates the extent of the development within the investigation area, with the final location of specific infrastructure elements to be selected during detailed design.

The 'study area' for the CHAR is shown in Figures 1 and 2 and comprises the following elements:

- Wind Farm development corridor including proposed turbine locations WP1-WP70 and ancillary infrastructure (substation, operations and maintenance (O&M) facility)
- Proposed overhead power line route with 60m easement (30m either side), switching station and existing access tracks to transmission line
- Proposed access upgrades at Morrisons Gap Road, Head of Peel Road, Transverse Track, and Barry Road from Nundle to Hanging Rock - Devil's Elbow, and intersection adjustments at:
  - Lindsays Gap Road/Nundle Road
  - Happy Valley Road/Jenkins Street
  - Jenkins Street/Oakenville Street
  - Happy Valley Road/Barry Road
  - Oakenville Street/Barry Road
  - Lindsays Gap Road crossing of Goonoo Goonoo Creek

Additional locations requiring minor transport infrastructure adjustments were also assessed for the project (Appendix E).

### 1.3 Project requirements

This CHAR addresses the Aboriginal heritage requirements identified in the project SEARs. The objectives of the CHAR combine Aboriginal community consultation with an archaeological investigation in accordance with:

- Secretary's environmental assessment requirements;
- *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (OEH 2010a);
- *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011), and;
- *Aboriginal cultural heritage consultation requirements for proponents 2010* (OEH 2010b).

Aboriginal cultural heritage assessment for the project was designed to meet the SEARs. This included:

- Assessment of impacts to Aboriginal heritage (both cultural and archaeological significance);
- Consultation with Aboriginal communities to assess impacts and develop mitigation measures.

Specific requirements of the SEARs are outlined in the table below.

**Table 1. SEARs for Aboriginal heritage**

Secretary's Environmental Assessment Requirements	Where addressed in this document
<b>Heritage</b> – the EIS must:	
<ul style="list-style-type: none"> <li>• assess the impact to Aboriginal cultural heritage impact under the <i>Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW</i> (OEH, 2011) and the <i>Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW</i> (DECCW, 2010);</li> </ul>	Section 9
<ul style="list-style-type: none"> <li>• provide evidence of consultation with Aboriginal communities in determining and assessing impacts, developing options and selecting options and mitigation measures (including the final proposed measures), having regard to the <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents</i> (DECCW, 2010).</li> </ul>	Sections 6, 9, 10 & 11 Appendices B, C & D



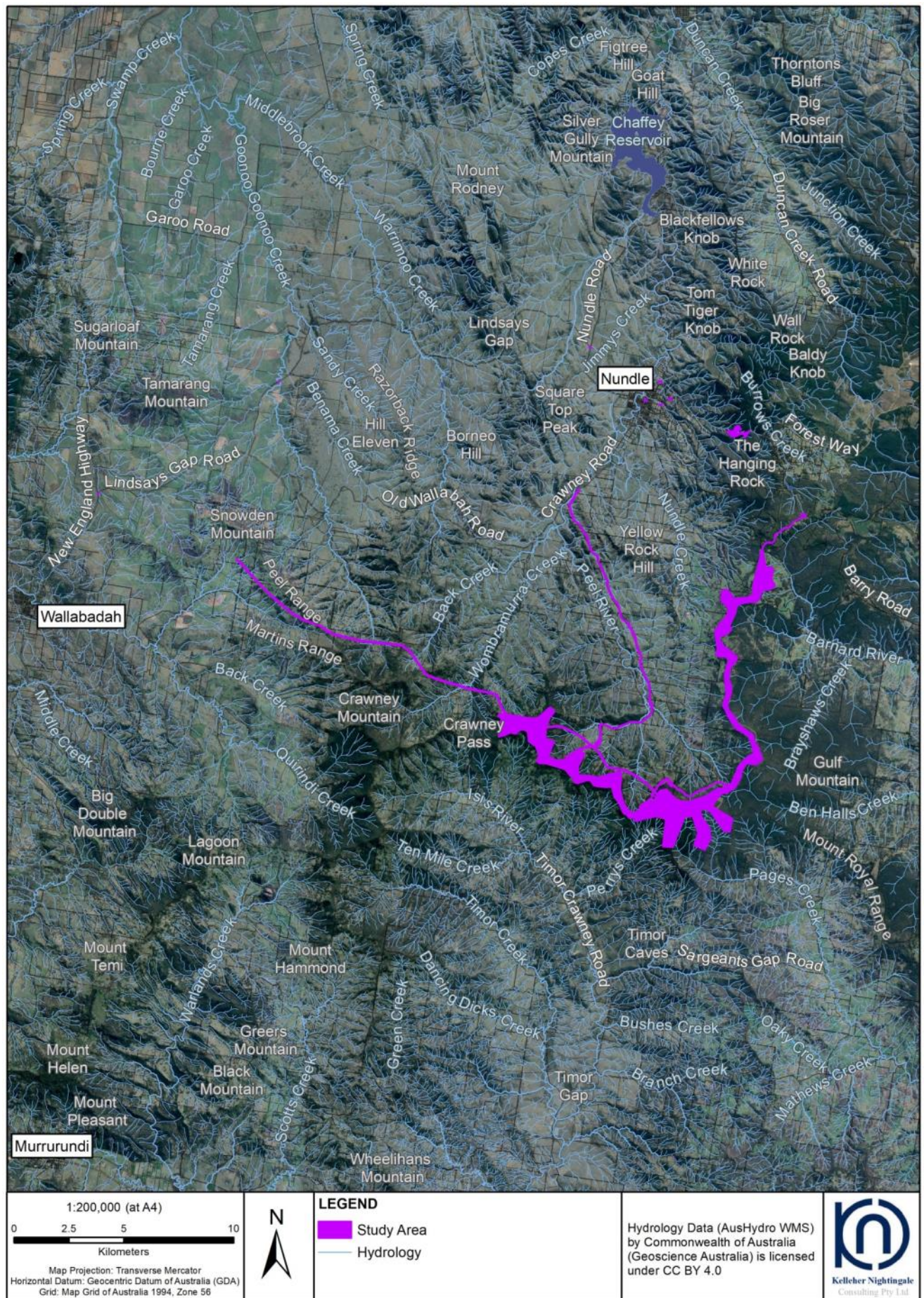


Figure 1-1. Location of the study area



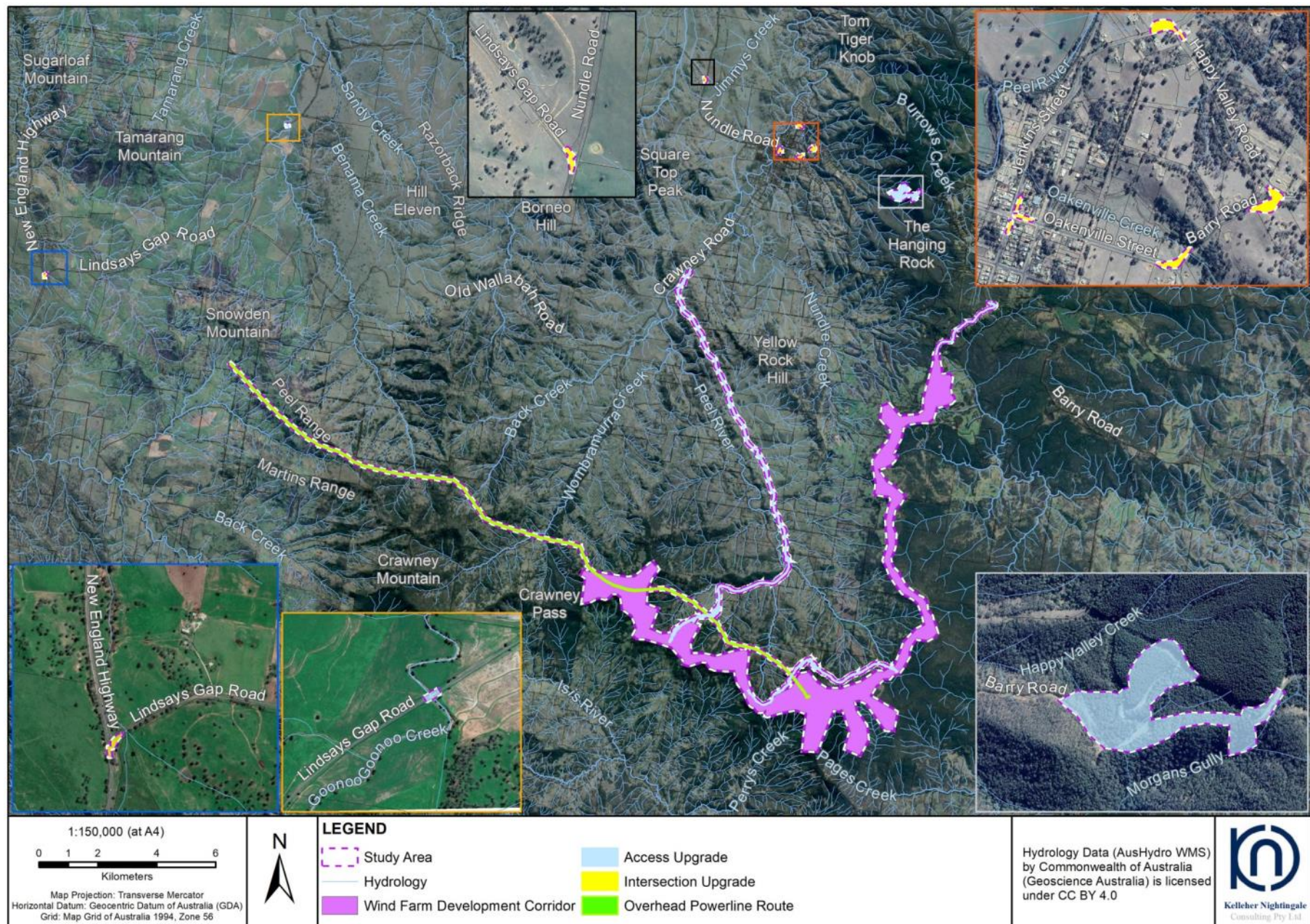


Figure 1-2. Detail and components of the study area



## 2 Landscape Context

The study area is located at the boundary between a number of NSW's bioregions: the Nandewar bioregion, the Hunter bioregion, the North Coast bioregion and the New England Tablelands bioregion (NSW National Parks and Wildlife Service (NPWS) 2003). The dominant system for the majority of the study area is the Nandewar bioregion, which encompasses Inverell and Tamworth and the smaller towns of Quirindi, Bingara, Barraba, Manilla and Bendemeer (NPWS 2003:145) across the western slopes and ramp of the Great Dividing Range. Geomorphically, the western slopes can be seen as a dissected ramp that links the uplifted highlands with the western plains. The ridgeline occupied by the study area forms the northern boundary of the Hunter region and is the watershed between the Hunter – Central/Coastal Rivers catchments and those of the Murray-Darling Basin.

Underlying regional geology is complex (Table 2) (Offenberg 1971, Gilligan et al 1987). The majority of the study area is located atop the Liverpool Range Beds (Tv) (Figure 3), a suite of Tertiary volcanics forming a series of mountain ranges and volcanic plateaux through the Great Dividing Range. Component materials include basalt, dolerite, polymictic conglomerate, quartzose and ferruginous sandstone, mudstone, shale and bole. These Tertiary basalt flows lie on older river gravels and sands or on lake sediments. As the basalt erodes, the sands are exposed and have been mined for the sapphires, diamonds, gold and tin ore that they contain (NPWS 2003:157). The proposed overhead power line route crosses a heavily faulted region of older Devonian- Carboniferous and early Devonian geologies, including those of the Parry Group (DCp; mudstone, minor lithic and feldspathic sandstone, conglomerate, oolitic and crenoidal limestone, andesitic sills) and the Tamworth Group (Det; cherty argillite, sandstone, conglomerate, limestone, tuff, keratophyre, basalt and dolerite).

**Table 2. Geological formations shown on Figure3**

Symbol	Name	Composition
Cem	Merlewood Formation	Coarse lithic sandstone, polymictic conglomerate, siltstone, felsic and intermediate pyroclastics, minor limestone and magnetite sandstone, andesite sills/flows
Clt	Temi and Currabubula Formations	Polymictic boulder to pebble conglomerate, diamictite, lithic sandstone, siltstone, varves, carbonaceous mudstone, felsic pyroclastics
DCp	Parry Group	Mudstone, minor lithic and feldspathic sandstone, conglomerate, oolitic and crinoidal limestone, with andesitic sills near the top
DCs	Sandon Association	Sandstone, schist, phyllite, slate, chert, jasper, basalt and amphibolite
Det	Tamworth Group	Cherty argillite, sandstone, conglomerate, limestone, tuff, keratophyte, basalt and dolerite
Pne	Mount Ephraim Granite	Trondhjemite, granodiorite
Ps	Unnamed fault zone complex	Serpentinite and serpentinised ultramafics, with included blocks of blueschist, eclogite, amphibolite, nephrite and country rock
Pem	Manning Group	Diamictite, conglomerate, sandstone, mudstone, felsic and intermediate volcanics and limestone
Pzw	Woolomin Association	Chert, jasper, slate, phyllite, basalt, minor sandstone
Pnd	Duncans Creek Trondhjemite	Trondhjemite
Pnz	Unnamed, Nundle Plutonic Suite	Unnamed porphyries and granitoids
Ta	Unnamed Tertiary	Trachyte and rhyolite plugs, sills and flows
Tv	Liverpool Range Beds	Basalt, dolerite, polymictic conglomerate, quartzose and ferruginous sandstone, mudstone and bole
Tb	Unnamed Tertiary	Basalt, dolerite and teschenite intrusives
Qa	Quaternary Alluvium	Alluvial mud, sand, silt and gravel deposits

The wind farm development corridor occupies the crest of a prominent ridgeline that forms an approximate cirque or U-shape around the head of the Peel River valley (Figure 4). The valley head is approximately seven kilometres across and is intruded from its western edge by two ridge spurs running east from Crawney Pass. The crest varies from narrow to wide and is adjoined by moderate to steep northern slopes dropping down to the river valley below. The study area occupies the edge of the New England Tablelands – to the east are the rugged, elevated plateaux and mountain ridges of the Great Dividing Range while to the north and west is the lower-lying, undulating plains country. The study area overlooks rolling hill country to the south and the river valley to the north, and to the immediate north and south are steep, partially cleared slopes used for grazing and some agriculture. The proposed overhead power line route runs across the top of the dissected ridge system extending north east from Crawney Mountain then runs west and north along the southern slopes of the main ridgeline of the Peel Range towards Snowden Mountain.

The headwaters of the Peel River drain the northern ridge slopes, while the southern side of the ridge is drained by Ben Halls Creek, Perrys Creek and Pages Creek, which all drain to separate river catchments. Smaller watercourses in the Peel River valley include Wardens Brook, Dirt Hole Gully, Talbotts Creek, Paynes Gully, Webbs Gully and Woodleys Creek. On the more elevated Tertiary ridge landforms, aquifers occur in porous regolith, fractured basalt, and in basal and intercalated sediments, where groundwater discharges as springs and seepages. The proposed overhead power line route also intersects (from west to east) the upper drainage catchments of Wiles Gully and Basin Creek (Mooki River catchment) and Goonoo Goonoo Creek, Back Creek and Wombramurra Creek (Peel River catchment). Closer to Nundle, Devil's Elbow and the proposed intersection upgrades are in the vicinity of Happy Valley Creek, Morgans Gully and Oakenville Creek, all tributaries of the Peel River.

Soils are of varying depth. Soils of the Barrington Tops soil landscape occur on the rolling low hills on Tertiary basalts, with Daisy Patch soils on residual crests and Myrtle Scrub soils on steeper sideslopes (OEH 2018). Barrington Tops soils comprise well-drained Melanic/Haplic Red Ferrosols (Krasnozems) on weathered substrates, Brown Ferrosols (minimal Chocolate Soils) on resistant substrates mainly on crests and upper slopes and shallow, well-drained stony Inceptic Brown or Red-Orthic Tenosols (Lithosols, occasional Laterites). Daisy Patch soils comprise moderately deep, well-drained stony Melacic Red Dermosols (Red Earths) on resistant substrates on crests, moderately deep, well-drained Melacic Red Ferrosols (Krasnozems) on weathered substrates and deep, well-drained Red Kurosols (Red Podzolic Soils) on areas with structural decline. Myrtle Scrub soils comprise stony shallow, well-drained Brown Dermosols, Inceptic Chernic Tenosols and Inceptic Red-Orthic Tenosols (Lithosols) developed on resistant substrates on crests and upper slopes.

Moderately to very deep, well-drained Red Ferrosols (Krasnozems) and Brown Ferrosols (Chocolate Soils) occur on weathered substrates and deep, poorly drained Sodic Yellow Dermosols (Yellow Earths) occur on basal (sub-basaltic) sediments. The occurrence of the deeper and more structured soil types depends on landform and underlying geology – stable, level areas are more conducive to their development and retention due to reduced gradient and subsequent soil movement. Sheet, rill and gully erosion is common in areas disturbed by livestock or farming operations. Soil sampling of level, elevated areas adjacent to the ridge crest in the Ben Halls Gap State Forest has demonstrated red clay loam Krasnozems with A horizons of up to 40cm and occasional basalt floaters on the surface.

To the northwest, the proposed overhead power line route crosses a series of rolling hills and ridgelines associated with the north-running spurs of the Liverpool Range off Crawney Mountain, and the north-west striking Peel Fault. Soil sampling of this area demonstrates predominantly texture contrast soils, with Brown Dermosols (Brown Podzolics) of clay loams above B horizon clays recorded on the hillslopes above Back Creek near Wombramurra and shallow (A horizon >10cm) Brown Chromosols on steeper slopes. Brown Kandosols and Lithosols occur on lithic sandstone substrates with frequent cobbles and coarse fragments of parent material. Highly erodible Sodosols (Solodic soils) are present along drainage gullies, with a high sand content on alluvial plains and alluvial cobble/pebble bedloads along drainage lines. Self-mulching Brown Vertosols occur on the westerly-draining flats between Snowden Mountain and Tamarang Mountain further to the north west.

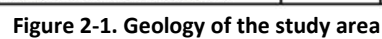
The soil types around the study area have variable capacity to conserve Aboriginal objects in situ. Soils on the flatter crest landforms are typically more disturbed by land use practices, as these areas have been the focus for agriculture and contemporary occupation. On steeper gradient slopes, soil movement is common and subsurface deposit is unlikely to be preserved in situ, particularly in rocky areas where poorly developed Lithosols occur. The steep valley side slopes are also affected by colluvial movement and soil transfer accelerated by European vegetation clearance and increased water runoff. Down in the alluvial river valley, potential for subsurface deposit depends strongly on the nature and extent of flooding along the river and its tributaries, with elevated landforms such as terraces and crests considered to display better archaeological potential. The valley has also been more intensively settled than the surrounding ridge system and is more affected by European land use disturbance including agriculture, various drainage modifications, some industry and infrastructure such as roads. Archaeological potential and integrity will depend on the extent of disturbance.

Both remnant and regrowth vegetation is present across the study area, and original old growth forest occurs in Ben Halls Gap National Park to the east (NPWS 2002:2). Prior to clearing, original vegetation would have been characterised by grassy open forests and woodlands on the ridge slopes and through the valley, with eucalypt forest on the basalt highlands to the east and creekline shrubland and rainforest in gullies. Within the Crawney Pass National Park to the west, the most common canopy species include rough-barked apple (*Angophora floribunda*), silvertop stringybark (*Eucalyptus laevopinea*), ribbon gum (*E. viminalis*), forest oak (*Allocasuarina torulosa*) and Bendemeer white gum (*E. elliptica*). The most common understorey species include native geranium (*Geranium solanderi*), large tussock grass (*Poa labillardierei*), bidgee-widgee (*Acaena novae-zelandiae*), kidney weed (*Dichondra repens*), tree violet (*Melicytus dentatus*) and sweet pittosporum (*Pittosporum undulatum*) in sheltered areas (NPWS 2017). Ben Halls Gap National Park includes tall, high nutrient old growth eucalypt forest featuring mountain gum (*E. dalrympleana*), messmate (*E. obliqua*), snowgums (*E. pauciflora*) and rare sphagnum moss mounds (NPWS 2002). The study area is located at the overlap of many eastern and western bird and fauna distributions, with the surroundings offering a variety of habitats and environments that would have encouraged a diverse flora and fauna population.



The study area and its surroundings have been extensively cleared of native vegetation and used for grazing, agriculture and forestry. Some of the flatter areas along the crest have been ripped for feed crops and evidence of stick-raking is widespread. Tracks and fencelines have caused localised disturbances to the ground surface, and drainage works and dam construction have affected some of the drainage lines. The original hydrological systems of the landscape have also been affected by vegetation clearance following European settlement. Portions of the study area (particularly the proposed overhead power line route) intersect more heavily vegetated areas which have not been subject to the same level of land use disturbance, generally due to steep to precipitous slope gradients and rough terrain. Areas around Ben Halls Gap National Park, Crawney Pass National Park, Hanging Rock State Forest and the steep upper slopes of the Peel Range north west of Crawney Mountain are more heavily vegetated. Down in the valley, land use disturbance is more widespread due to European settlement and agricultural practices.







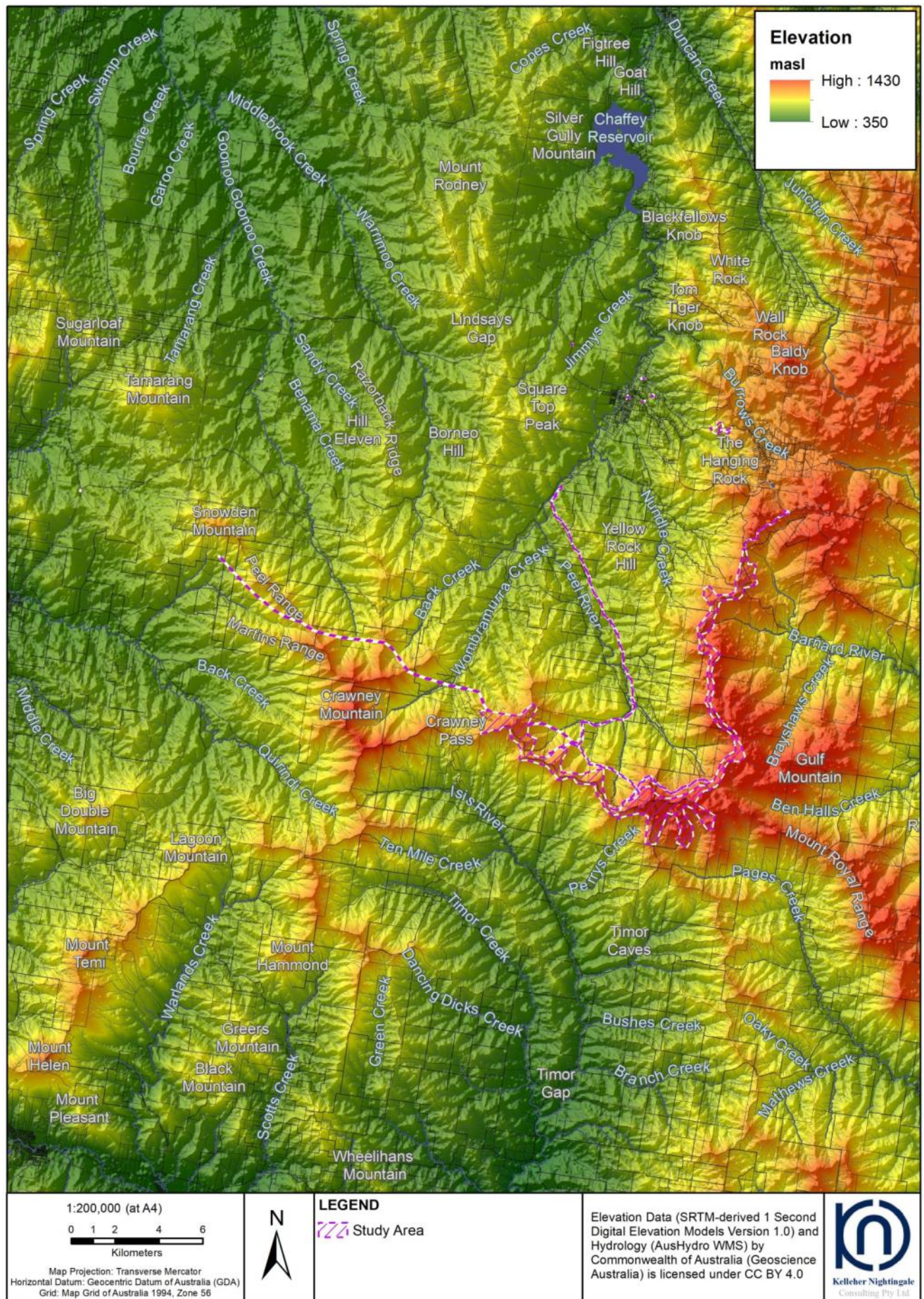


Figure 2-2. Topography of the study area



### 3 Ethnohistoric context

Historic accounts of the Indigenous inhabitants of the region provide an insight into Aboriginal life at the time of initial European exploration and settlement. The study area lies within a landscape which was important to, and frequently used by, past Aboriginal peoples. Aboriginal people living in the region at the time of first European contact were distinguished by various language groups. The study area in the vicinity of a 'boundary' between the suggested extent of two chief language groups: Kamilaroi/Gamilaroi/Gamilaraay to the north and west inland of the Great Dividing Range, and the smaller Geawegal/Kayawaykal to the south into the Upper Hunter. Tindale (1974) describes the Kamilaroi range as "Walgett, N.S.W., to Nindigully, Qld.; near Talwood and Garah; at Moree, Mungindi, Mogil Mogil, Narrabri, Pilliga, Gunnedah, Bingara, Tamworth, Quirindi, Bundella, Barraba, Gwabegar, and Come-by-Chance; on headwaters of the Hunter River" and the Geawegal as "Northern tributaries of the Hunter River to Murrurundi; at Muswellbrook, Aberdeen, Scone, and Mount Royal Range", and notes that the two languages are closely related.

Within these broad language groups were various dialects spoken across territorial ranges. People appear to have been organised into economic units of small residential groups or 'bands' who had an association with certain areas of land and spoke the same dialect of language. Most European attempts at mapping the fluid and intangible boundaries of these language groups place the study area near the point where these language groups meet, likely associated with the natural topographical boundary evident in the landscape along the Liverpool Ranges and the watershed between the Hunter – Central/Coastal Rivers catchments and those of the Murray-Darling Basin.

The passes in the landscape were likely used to facilitate travel between these communities, particularly those at Crawney Pass and Ben Halls Gap which likely functioned as pathways in the landscape (Morris in NPWS 2002) and used regularly and repeatedly for travel. At Crawney Pass, "it is likely that scattered sources of water and the traversable topography of the park made the area a useful trading route before and after European settlement" across the Liverpool Range (NPWS 2017:9-10) while at Ben Halls Gap "there is known to have been movement from the Nowendoc area into the Hunter Valley and it is probable that Ben Halls Gap was used as a travel route as it is a relatively low point and permanent water is available" (Taylor in NPWS 2002:17). Traditional knowledge also holds the area as being significant and associated with travel routes. These passes were later used as early travel routes for European exploration and settlement. In 1825 the surveyor and explorer, Henry Dangar, was dispatched by John Oxley, Surveyor General of NSW, to inspect the Liverpool Plains. Dangar traversed Crawney Pass and recommended the district for settlement. Major Thomas Mitchell's excursion to the Liverpool Plains led him over Crawney Pass in 1831. Dangar later crossed the Liverpool Range again through Ben Halls Gap in 1831.

Between 1848 and 1852 Crawney Pass was part of the main movement corridor linking Maitland and Nundle, but was regarded as "exceptionally steep" and "perilous at the best of times and impassable at worst" (Telfer 1980). Other routes across the Liverpool Range were equally difficult, with the Hanging Rock Pass being shorter but steeper, the Peel line from Nowendoc to Newcastle considered 'daunting' and the Nundle-Currabubula-Quirindi-Murrurundi route, while it avoided the steepest topography, was long. Ben Halls Gap was also frequently used, and by the 1850s the area was part of the Barry Station lease and used for summer grazing. The Gap also hosted a stock droving route between the Hunter and Barnard catchments, as well as being used for transit by settlers heading to the gold fields at Uralla and to the Northern Tablelands (NPWS 2002:18).

The northern edge of the Upper Hunter region has been variously associated with the Geawegal and Kamilaroi but also the Wonarua (Wanarruwa) and Gringai (Guringay) peoples in the literature (c.f. Brayshaw 1986, Wafer 2014, Dunn 2015, Moore 1981 and Miller 1887). Despite differences in words used, customs and material culture, Aboriginal people from the principal language groups of the region would have interacted amongst themselves and also between languages for ceremonies, intermarriage, dispute resolution, trade and access to certain resources:

*... while there were strong attachments to particular tracts of country, group formation was very fluid both in the range of inclusion producing functional groupings of various sizes and in people's capacity to associate with kin across a range of local groupings. Together with this there were networks of inter group association in relation to trade, ceremony, marriage and fighting that created a web of intense cultural linkages across areas and across dialect and even language groups. In addition to this the area [...] is in the zone of border country with considerable interaction between major tribes. (Riebe 2018)*

The Kamilaroi around the Nundle district also had close links and strong trading, ceremonial and resource sharing relationships with the Darkinung and the Anaiwan people of the New England Tableland. While the core country of the Anaiwan extended from Guyra and Ben Lomond south to Uralla and the Moonbis, they also shared country with the Kamilaroi in the Nundle area (Kitchener 2006 in Boileau 2007:7).

The study area is located in a zone of strong association across group boundaries being located near the various passes described above as well as the Ardglenn crossing at Nowlands Gap, with early European recordings from properties around Scone describing the cultural links across the landscape:

*In 1828 Peter McIntyre at Segenhoe said the local Aborigines had a “constant communication with the wild blacks” on the Dividing Range towards Liverpool Plains, with Francis Little at Invermein reporting the same connections over the mountains... The movement of Aboriginal people around the Hunter and their connections through the mountains to the adjacent regions of Mudgee and Liverpool Plains reveals the great and continuing mobility of the people across the region... (Dunn 2015:261-262)*

In his account of the early decades of European intrusion into the Hunter Valley, historian Mark Dunn refers to the complex network of pathways utilized by Aboriginal people, many of which were unknown to the European colonists, underscoring the deep understanding Aboriginal people had moving through country:

*Aboriginal groups could come and go, slipping into European society for work, blankets or food and then leaving again to return to their country. Europeans could only guess where they went, who they were in contact with or even how many were living around them. Once settled on their estates, Europeans also largely kept within the boundaries and moved via the paths and tracks that had been marked out and surveyed. Aboriginal people also moved via paths and tracks well-known to them, but these criss-crossed the Valley in all directions, with their course and purpose embedded in a wider knowledge of country set down over thousands of years of occupation (Dunn 2015: 262)*

These pathways link together nodes in the landscape that are related to resource-rich areas, mythological movement patterns, and places of ceremonial and spiritual importance. Pathways extend through the country of neighbouring groups, connecting people and places together in a complex network of economic, social and ceremonial links.

The early records for the Upper Hunter are sparse in their detail of Aboriginal people and their economic and social activities. However, it is clear that the region was rich in wildlife including kangaroos, wallabies, emus, possums, bandicoots and wild turkeys. In the wetlands that existed in much greater abundance prior to the impact of introduced stock, a rich range of water birds were recorded and the rivers carried abundant fish. There are very few records relating to the plant foods that were used in the Upper Hunter area, those that are mentioned being Zamia nuts, native cherries and Kurrajong seeds. Other plant foods, such as grass seeds and fern roots, yams and giant lilies, whose use is recorded nearer the coast, are likely to have also been utilized in the Upper Hunter area (Brayshaw 1986: 74-79; ERM 2004: 29-30). There are references to winter kangaroo hunts occurring in the Upper Hunter and to the fruit of the Kurrajong tree ripening from July to October. There are also indications that the Aboriginal people of the inland may have visited the coast during the summer months when marine foods were plentiful and that the coastal peoples travelled inland to join in the winter kangaroo hunts (Brayshaw 1986: 81-82).

For the Kamilaroi to the north and west, the inland river systems would have provided a rich economic resource. The swamps, wetlands and anabranch channels related to the river systems were an abundant source of various foods. Aquatic resources including fish, eels, crustaceans and shellfish were utilised with fresh-water mussel shells commonly found in middens along the river systems (McBryde 1968). Hunting of small animals including possums, gliders, bandicoots and wallabies would have contributed to the protein component of the diet of local people. These were hunted in a number of ways, including smoking out the animal by lighting a fire in the base of a hollow tree, burning large tracts of land and gathering the stranded animals, and cutting toe-holds in trees. Along the rivers and creeks, traps, snares and decoys were used. Firing of the landscape may also have ensured the fruiting of certain plant species and allowed for new vegetation growth, which encouraged kangaroos and other grazing animals to the area.

The use of numerous plant resources has also been documented, both for food and for medicinal purposes. The following resources have all been recorded as used by local Aboriginal groups: Kurrajong seeds, growing tips and berries, honey, roots, acacia gum, bulrush, pulp, nuts (quandong), grass seeds, Gubiyaay (a type of lily), *Capparis lasiantha* (a native orange or pomegranate), various species of native mistletoe, *Owenia acidula* (Emu apple / sour plum), yams, water yams, wild potato, melon and various fruits and berries. Wild honey was also exploited. *Cymbidium canaliculatum* (Black Orchid) was used for its medicinal properties to cure stomach ailments (O’Rourke 1997; Thompson 1993; Balme 1985; OzArk 2010). McBryde (1968) also notes that nineteenth century European observers often commented on the use of grass seeds for food for those communities situated on the western slopes of the Great Dividing Range. Flat grinding stones have been recovered during archaeological investigations in the region, likely used for the preparation of seed food, to grind it into flour.

Thomas Mitchell’s recordings of his excursion into the Liverpool Plains describe various items of material culture used by Aboriginal people in the region. These include hunting implements such as throwing sticks, boomerangs and spears with varying points including barbed, tapered and even trident-like forms. Coolamon (bark containers) were used for gathering food including fruits, berries, tubers and vegetables and for collecting and transporting water. Bark was also used for shields and canoes. Kangaroo and possum skins were treated and sewn into cloaks. Cloaks were important items as they offered an opportunity for artistic expression laden with social meaning and were practical for warmth and protection from the elements. Traditional cloaks of the Kamilaroi were often decorated with designs which may have reflected totems or levels of rank and kinship within the group (Sonter and White 2012).

Historical accounts of Kamilaroi cloaks describe the manufacturing process and the designs added to the finished product (McPherson 1860, Parker 1896; in Sonter and White 2012):

*When a sufficient number of skins have been collected they are sewn together by the women, whose needles are wooden skewers, and their thread the sinews of some animal, or the fibres of some plant, and thus are formed the skin cloaks [...] in cold or wet weather the skin cloak answers all requirements.*

*Their opossum rugs used to have designs scratched on the skin sides and also painted patterns, some say tribal marks, others just to look pretty and distinguish their own.*

Woven and thatched baskets were used as carry bags and for food preparation. Hafted stone hatchets/axes were used to chop wood, remove bark from trees and carve toeholds in trunks for climbing. Woven nets and traps were used for catching birds and small game, while both stone weirs and wooden fish traps have been recorded on the Barwon and Gwydir Rivers further to the north west and were likely used throughout the region (Mitchell 1839, Balme 1986). Mitchell also described the use of nets for fish and water birds.

In her survey of the material culture of the Aboriginal people of the Upper Hunter, Brayshaw refers to the manufacture of items ranging from huts through tools such as axes, scrapers, boomerangs, and spears to items of clothing such as belts and fur headbands. These items were produced from resources including stone, wood, possum fur, shell, resin and bark. As summarized by Brayshaw, *"The ethnohistorical literature shows the Aborigines to have manufactured a range of artefacts from a variety of raw materials, supplementing articles of their own manufacture by exchange with those from other resources zones"* (Brayshaw 1986:67-68). In an 1877 letter to the Maitland newspaper a settler commented, *"I am now living in the Upper Hunter, and the axes here are of a heavy black stone, which takes an edge so sharp that you could cut your fingers with one that I have seen.... very effective work could be done with them"* (Brayshaw 1986:66).

The decline in the population of Aboriginal people in the region resulted from the impact of European intrusion on multiple fronts: through direct violence, through the rapid decline of traditional resources as a result of European land management practices, and through the impact of alcohol and introduced diseases, particularly smallpox (Wood 1972: 157-158). Disease spread rapidly among Aboriginal people even ahead of the European incursion. Between 1830 and 1832 a smallpox pandemic devastated the indigenous population of New South Wales. When Major Mitchell's group crossed the Murrurundi Pass from the Upper Hunter to the Liverpool Plains, they encountered Aboriginal people already affected by smallpox. Mitchell's diary entry for 5 December 1831 reads:

*We reached at length a watercourse called 'Currungai' and encamped upon its bank, beside the natives from Dart Brook, who had crossed the range before us, apparently to join some of their tribe who lay at this place extremely ill, being affected with a virulent kind of small pox. We found the helpless creatures, stretched on their backs beside the water, under the shade of the wattle or mimosa trees to avoid the intense heat of the sun.*

Squatters with their sheep and cattle rapidly followed in the wake of the early explorers, taking over the prime river flats, forcing Aboriginal people from their camp sites near watercourses and depriving them of their best hunting grounds (Boileau 2007). The impact of European intrusion and the associated violence, resource depletion and forced movement meant that as early as 1831 Mitchell commented that, *"...the natives had almost all disappeared from the valley of the Hunter; and those who still linger near their ancient haunts, are sometimes met with, about such large establishments as Segenhoe [east of Scone]..."* (Mitchell 1839).

The region remains important to local Aboriginal people, who have maintained their traditional ties to the area through the sharing of knowledge and lore down generations, despite the devastating effects of European arrival and a complex and often painful history since white settlement. Aboriginal culture and cultural heritage is dynamic and continues to evolve in contemporary times. While the ethnohistorical and historical record may be limited in some areas, there is no denying the strong contemporary cultural associations that Aboriginal people and groups hold for the landscape. It is the aim of the consultation process to illuminate the way in which Aboriginal people relate to the area today, based on their own traditional affiliations, identities and cultural histories. The consultation process to date has identified a number of people who have indicated their interest in the local area, demonstrating the tangible link that members of the contemporary Aboriginal community retain to the land. Aboriginal cultural heritage values identified during the consultation process enrich our understanding of the area.

## 4 Archaeological Context

### 4.1 Database search (AHIMS)

The Aboriginal Heritage Information Management System (AHIMS) is a database operated by Heritage NSW, regulated under section 90Q of the *National Parks and Wildlife Act 1974*. AHIMS contains information and records related to registered Aboriginal archaeological sites (Aboriginal objects, as defined under the Act) and declared Aboriginal places (as defined under the Act) in NSW. An AHIMS search was undertaken to identify registered (known) Aboriginal sites or declared Aboriginal places within or adjacent to the study area. The search results are attached as Appendix A.

The AHIMS Web Service database search was conducted within the following coordinates (GDA, Zone 56):

Eastings: 295350 - 332385  
 Northings: 6494360 - 6523125  
 Buffer: 0m (search coordinates included a buffer around the study area)

The AHIMS search results showed:

<b>7</b>	<b>Aboriginal sites are recorded in or near the above location</b>
<b>0</b>	<b>Aboriginal places have been declared in or near the above location</b>

The distribution of recorded Aboriginal sites within these coordinates is shown on Figure 5. The frequencies of site types (site context/features) within the AHIMS database search area are listed in Table 3. Additional AHIMS searches undertaken for the minor transport infrastructure adjustment areas are attached in Appendix E. No previously recorded sites were located in the vicinity of these locations.

**Table 3. Site features and site context from AHIMS database search**

Site Context	Site Feature	Number	% Frequency
Open	Artefact	2	28.5
	Artefact; Stone Quarry	1	14.3
	Grinding Groove	2	28.5
	Modified Tree (Carved or Scarred)	1	14.3
Closed	Art (Pigment or Engraved)	1	14.3
<b>Total</b>		<b>7</b>	<b>100</b>

As well as determining if there are any registered (known) sites within a given area, an AHIMS search also helps to characterise local archaeology by illustrating the distribution of sites within the local landscape. Results from the AHIMS database search divide archaeological sites into two contexts: open, meaning existing in an open landscape context, and closed, meaning associated with a rock shelter. Both site contexts have been recorded within the AHIMS search area.

### 4.2 Other heritage registers and databases

A search was undertaken of the following statutory and non-statutory heritage registers for Aboriginal heritage items:

- Tamworth Regional Local Environmental Plan 2010
- Upper Hunter Local Environmental Plan 2013
- Liverpool Plains Local Environmental Plan 2011
- State Heritage Register
- State Heritage Inventory
- Section 170 Heritage and Conservation Registers
- National Heritage List
- Commonwealth Heritage List
- Australian Heritage Database
- Australian Heritage Places Inventory
- Register of the National Estate – (Non-statutory archive).

No Aboriginal heritage sites or items of Aboriginal heritage were identified on these registers within the study area.



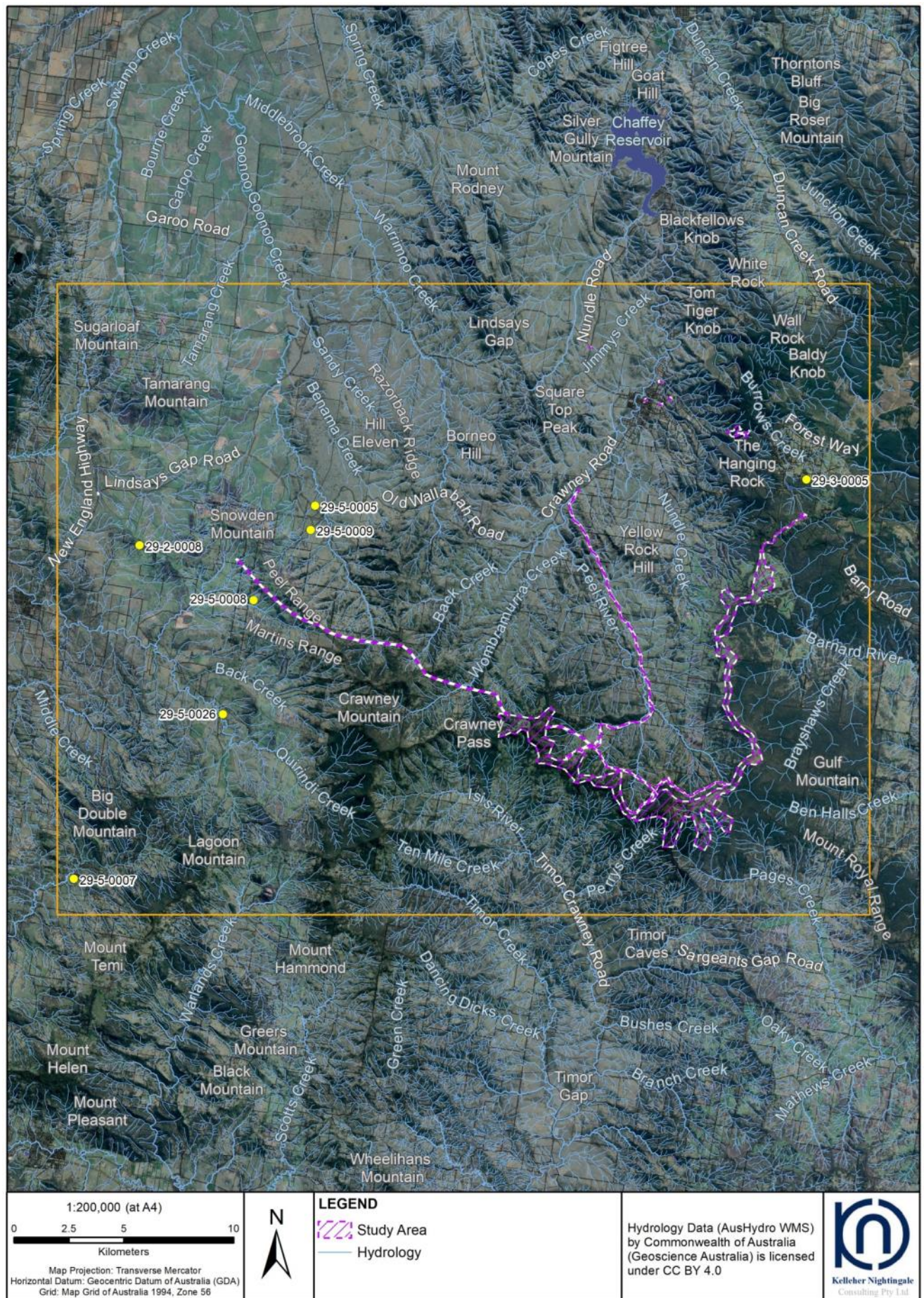


Figure 4-1. AHIMS extensive search results map



### 4.3 AHIMS results and previously recorded sites

The AHIMS search results list seven previously recorded Aboriginal sites within the AHIMS search area. Site descriptions and location information are provided below. None of the known sites are in close proximity to the current study area.

#### *Hanging Rock (AHIMS 29-3-0005)*

The site is a closed context rock shelter site, listed as a shelter with art. The site card states the art is comprised of human figures in a dry pigment paint. The registered site coordinate is approximately one kilometre east of the Barry Road near the Sheeba Dams. The site is approximately 1.5 kilometres north of the northern extent of proposed works on Morrisons Gap Road, and 3.5 kilometres south east of the proposed access works at Devils Elbow.

#### *Quirindi (AHIMS 29-5-0005)*

The site is an open context grinding groove site. The site card describes at least 12 grooves located on sandstone. The grooves measured approximately one foot in length and were two inches wide. The registered site coordinate places the site immediately north of the Old Wallabadah-Nundle Road on a low order tributary of Goonoo Goonoo Creek. Location details on the site card indicate the site is actually located west of Quirindi, on the 'Waverton' property west of Bonny Rig Road (35 kilometres west of the current study area). The site card describes the grooves being located approximately ½ mile from Warrah Creek in sandstone hill country (the Warrah Ranges). The site is not located in proximity to the current study area.

#### *Basin Creek (AHIMS 29-5-0008)*

The site is an open context site with registered features of 'stone quarry' and 'artefact'. Examination of the site card indicates the site is actually an ochre quarry. No stone quarrying or artefacts were described. The recording is based on an interview with the landowner of Wallabadah Station in 1960 who stated that Aboriginal people used ochre from deposits along Basin Creek east of Wallabadah for personal adornment and as trade goods. The site was registered by the Quirindi District Historical Society. The registered site coordinate is to the east of the end of Basin Creek Road, on a ridge spur above the northern bank of Basin Creek, approximately 800m south of the proposed overhead power line route.

#### *Snowden Mountain; Ranger's Valley (AHIMS 29-5-0009)*

The site is an open context site featuring axe grinding grooves. The site card describes a report of an 'axe-grindery' in the eastern hills at the head of Rangers Valley where Aboriginal people would sharpen their axes. The registered site coordinate is near the Rangers Valley property, approximately 950 metres south of the Old Wallabadah-Nundle Road, and is located on a lower slope above a drainage line rather than in the eastern hills at the head of the valley. The registered site location is approximately 4 kilometres north of the proposed overhead power line route and not in proximity to the current study area.

#### *Rosebys Road (AHIMS 29-5-0026)*

The site is an open context site featuring a scarred tree. The tree was an Apple Box (*Eucalyptus bridgesiana*) located on the bank of Wallabadah Creek within the Clydesdale property. The scar measured 50cm x 30cm. The registered site coordinate is located east of Rosebys Road and south of Wallabadah Creek Road. The site is approximately 7.1 kilometres south of the western end of the proposed overhead power line route and is not in proximity to the current study area.

#### *Rocksley (AHIMS 29-2-0008)*

The site is an open context artefact site. The site card described 'various implements' including an axe head, 10-12 'skinning pieces' of local stone, a pointed stone and an oval stone. One of the 'skinning pieces' was made of non-local green olivine material and was described as 'razor sharp'. The registered coordinate places the site on the upper slope of a north westerly running spur, approximately 3 kilometres south east of the New England Highway/Lindsays Gap Road intersection. Location details on the site card indicate that the site is actually located some 6.2 kilometres to the north-east, at the junction of Wiles Gully and Jacob and Joseph Creek. The site is located near the Springbank property along Seven Creek Road, west of the New England Highway. The site was registered by the Quirindi District Historical Society. The site is not located in proximity to the current study area.

#### *Chilcott's Creek (AHIMS 29-5-0007)*

The site is an open context artefact site featuring a 'half-finished axe-head, grinder and scrapers' located on the property of a Mr. W Porter at Chilcott's Creek east of Willow Tree. The 'tomahawk' (axe/hatchet) was described as a most uncommon and very fine specimen. The site was recorded by the Quirindi District Historical Society based on a report in the local paper from 1916 describing the site. The recording noted that Aboriginal people were not known to have been in the area over the preceding 50 years and therefore 'the axe had evidently lain there for that period'. The site card also quotes the recorder as stating that the "tribe which frequented the hills was known as the Mundi tribe". The site is not located in proximity to the current study area.

#### 4.4 Previous Aboriginal archaeological investigations

Few systematic archaeological investigations have been undertaken in the local area, and none previously within the wider study area. Previous assessments have generally been undertaken as a result of development or infrastructure projects around Nundle and the Chaffey Dam. The findings of previous studies are discussed in the following section.

##### **Nundle Sawmill and Preservation Plant (Haglund 1985)**

Laila Haglund undertook an archaeological survey and assessment in 1985 for a proposed sawmill and timber pole preservation plant on Nundle Creek Road, immediately south east of Nundle township. The assessment area was located on the western side of a small ridgeline forming the watershed between Splitters Creek to the east and Nundle Creek to the west. Review of background information included an assessment of environmental and archaeological context.

The underlying geology of the region was recognised as being complex, with numerous raw materials suitable for stone tool making available from various sources. Areas of rock outcrop (mostly as small, separate blocks) were noted on the upper slopes and crest of the assessment area, and it was considered that these sloped areas would not have been suitable for Aboriginal campsites, with areas of flat, relatively level ground considered to be more sensitive. Soils in the assessment area were found to be variably affected by erosion, with widespread surface exposures on the lower slopes where vegetation had been cleared. Little gullying erosion was evident despite several minor drainage lines cutting through the slopes. Archaeologically, Haglund considered open camp sites (artefact scatters) and scarred trees the most likely site types to occur.

Field survey of the property did not identify any Aboriginal heritage items or archaeological constraints to the proposed development. Archaeological potential was considered to be low. A number of trees with scars were noted on the property, but none of these were considered to be Aboriginal in origin. It was considered that the assessment area was generally unsuitable for camping, particularly given the presence of more attractive landforms along Nundle Creek to the south and west. Such elevated, flat landforms in proximity to water sources were considered more likely to have been used.

##### **Nundle-Woolomin Optic Fibre Cable (Ruig 1996)**

An archaeological assessment and field survey was undertaken for an underground optic fibre cable route between Nundle and Woolomin (Ruig 1996). The route primarily ran along the roadside and paddock fencelines, running north from Nundle and west of the Chaffey Dam to the Woolomin Exchange. Landscape review indicated the undulating valley floor had been affected by extensive land clearing and pastoral activities. Minor drainage lines were common, and raw materials suitable for artefact manufacture were available from outcropping bedrock at higher elevations and as cobbles in the bedload of the Peel River. Archaeological context indicated that the most likely type of sites to be encountered along the route were low density artefact scatters or isolated artefacts in association with watercourses, where disturbance levels were low.

The entirety of the route was traversed by pedestrian survey and one Aboriginal archaeological site was identified. Nundle/Woolomin 1 (AHIMS 29-3-0018) comprised an isolated artefact recorded in a cleared, recently ploughed paddock on the eastern side of Canns Creek. The artefact was an axe blank of fine-grained igneous material, partially flaked and shaped into an axe form. Despite good visibility, no other artefactual material was identified in the vicinity and archaeological potential was considered to be low. The site was considered to display low archaeological significance and it was recommended that the cable route be shifted to avoid the recorded artefact location, with the potential for the Nungaroo Local Aboriginal Land Council to seek a collection permit for the site.

##### **Chaffey Dam Expansion (Resource Planning Pty Ltd 1990 & Navin Officer Heritage Consultants 2008)**

In 1990, Resource Planning Pty Ltd undertook an archaeological survey of the foreshore of the Chaffey Dam on the Peel River, approximately 8.5 kilometres downstream of Nundle. The survey aimed to inform the environmental assessment process for the proposed expansion of the dam capacity. The overall assessment area comprised approximately 650 hectares of foreshore which would be inundated at the flood level of the proposed expansion. Reporting included a detailed assessment of the Peel River valley's geomorphology, a review of background archaeological information and a field survey.

Assessment of geomorphology focused on the relationship between valley alluvium and the underlying bedrock, especially at the alluvial/colluvial junction points along tributary streams of the valley floor, and the influence of this on the availability of permanent fresh water sources. The complexity of the local geology was emphasised, particularly the wide range of raw materials suitable for stone tool making. An additional geomorphic feature of the Peel valley that was considered archaeologically relevant was the bedload of the main river valley (Resource Planning 1990:4), which had significant sand and gravel deposits associated with meander beds. This cobble bedload appeared absent along the western bank tributary watercourses. Cobbles and stream gravels from the eastern tributaries and the main river bed were expected to provide raw material sources for both flaked- and ground-stone tools. These watercourses drain both

the Tertiary volcanics of the Liverpool Range Beds and the older Sandon Association and Woolomin Beds underlying the Walcha Plateau, providing a diversity of raw material.

The review of archaeological background information summarised several previous investigations within the wider region and their findings. Previously recorded sites included a stone arrangement on a granite outcrop near Dungowan, a ceremonial site at Collingwood, a small rockshelter with hand stencils at Hanging Rock and isolated artefact sites along the Cockburn River near Kootingal. Six previous archaeological surveys from the Tamworth district were reviewed. These included a survey for the Tamworth-Gunnedah electricity transmission line, which identified five scarred trees in poor condition along the route, a survey at Moore Creek Dam (no sites identified) and Attunga (one isolated artefact identified). Additional work included that of Haglund's 1985 survey of the proposed sawmill site and a 1986 survey of proposed gravel extraction sites on the Peel and Cockburn Rivers which identified two isolated artefacts. The Moore Creek area north of Tamworth was considered to be the largest and most complex archaeological area then known in the district, comprising rockshelters with occupation deposit, open campsites, burials, ceremonial grounds, scarred and carved trees, rock art and a large stone quarry. As originally described by McBryde (1974), most site types occurred on ridge crests rather than the valley floor. A similarly complex archaeological group was also recorded at Moonbi, five kilometres east of Moore Creek.

Based on the findings of previous investigations, it was considered that open campsites would be the most likely site type to occur on the Peel valley floors, variably disturbed by European land use practices. Scarred/carved trees were considered possible but unlikely due to widespread clearance of old-growth vegetation since European settlement. Ceremonial sites and stone arrangements were considered more likely to occur on the ridge crests and upper valley sides. Field survey was subsequently undertaken of the areas considered most likely to display archaeological potential: drainage lines of 2<sup>nd</sup>-4<sup>th</sup> order with alluvial/colluvial valley fills and low angle footslopes, and low gradient spurs extending east from the main valley sides towards the river. Additional areas along the foreshore were also inspected. A total of four Aboriginal sites were identified; two isolated artefacts and two low density artefact scatters. Artefact raw materials comprised chalcedony, jasper, quartz, metamorphic rocks and cherty argillite (a type of indurated mudstone). Reduction types comprised flakes and two cores, one of black chalcedony with 0% cortex and four scars, and one of fine-grained metamorphic with 30% waterworn pebble cortex. Three of the four sites were identified on stony colluvial/alluvial valley fill substrates adjacent to 3<sup>rd</sup> order tributaries, while the fourth was on a low angle bedrock spur next to the present dam. Overall it was considered that similar landforms elsewhere in the Peel Valley could be considered to display moderate potential for low density artefact sites.

Further assessment of the Chaffey Dam was undertaken in 2008 by Navin Officer Heritage Consultants for a proposed safety upgrade. Three options were assessed. Additional field survey identified 12 previously unrecorded Aboriginal sites, comprising five artefact scatters and seven isolated finds, and four areas of Potential Archaeological Deposit (PAD). The artefact sites displayed the use of a wide range of raw materials including rhyolitic tuff, quartz, brown and grey/cream banded tuff, chert, quartzite and other volcanics. Artefacts were primarily flakes, broken flakes and flaked pieces, with one core and a possible grindstone. Sites were mostly low density scatters with fewer than five artefacts, with one site (CDAS5) containing 13 artefacts. Sites were identified in a range of landform contexts including hill slopes, basal slopes above the Peel River flats, alluvial terraces and drainage gullies. The majority of the sites had been disturbed to some degree by erosion, road and track construction and gold mining activities. The four PAD areas were located on the alluvial terrace landforms bordering Canns Creek, Hydes Creek and the Peel River, with one PAD located on the basal slopes above the original river route prior to dam construction. Further archaeological work including additional survey, and a subsurface test excavation of the four PADs and four of the sites was recommended depending on selection of a preferred option for the upgrade (two of the options had no impact on Aboriginal heritage).

## 5 Aboriginal Archaeological Survey

An Aboriginal archaeological survey was undertaken by KNC of the study area to inform the project EIS. The assessment comprised an archaeological survey in addition to a desktop review of previous archaeological investigations and the environmental context.

### 5.1 Desktop review

The desktop review included a search of the Aboriginal Heritage Information Management System (AHIMS) and other heritage registers and lists. A review of the AHIMS search results and associated AHIMS site cards identified seven Aboriginal archaeological sites within the wider search area but none in the immediate vicinity of the current proposal. No Aboriginal heritage items or places were listed on other heritage registers and lists within or in the vicinity of the study area.

### 5.2 Regional character and site predictions

Review of background archaeological information indicates that large parts of the region have not been subject to previous archaeological investigation and the number of recorded sites in the area is low, more likely as a reflection of previous survey effort and not as a result of Aboriginal land use patterns. Where sites have been recorded, a diversity of site types is evident, ranging from grinding grooves on suitable sandstone country to the west, rock shelter sites in the elevated ranges and plateaux to the east, and open context artefact sites on the river valley slopes and flats to the north. The range of site types and successful identification of archaeology indicates that material traces of Aboriginal landscape use do survive in the region across a range of landforms, and are variably affected by disturbance factors including erosion/colluviation, flooding and European land use practices. Elevated landforms in association with water sources have consistently been identified as displaying higher potential for Aboriginal camp sites, while ceremonial sites and stone arrangements tend to occur on more isolated ridgelines and in the upper valleys. Isolated artefacts resulting from accidental loss or deliberate discard while moving through the landscape may occur anywhere.

A review of the environmental context of the study area determined that the soil types around the study area have variable capacity to conserve Aboriginal objects in situ. Soils on the flatter crest landforms are typically more disturbed by land use practices, as these areas have been the focus for agriculture. On steeper gradient slopes, soil movement is common and subsurface deposit is unlikely to be preserved in situ, particularly in rocky areas where poorly developed Lithosols occur. The valley side slopes are also affected by colluvial movement and soil transfer accelerated by European vegetation clearance and increased water runoff. Down in the alluvial river valley, potential for subsurface deposit depends strongly on the nature and extent of flooding along the river and its tributaries, with elevated landforms such as terraces considered to display better archaeological potential. The valley has also been more intensively settled than the surrounding ridge system and is more affected by European land use disturbance including agriculture, various drainage modifications and infrastructure such as roads. Archaeological potential and integrity will depend on the extent of disturbance.

Review of ethnographic and historical context strongly indicates the study area occupies somewhat of a transitional zone between different language groups, matching the topographical boundary presented by the main ridgeline and the division of the hydrological catchments. The passes through the Liverpool Ranges such as Crawney Pass and Ben Halls Gap have repeatedly been identified as key transit corridors facilitating the movement of people between the Upper Hunter and the inland plains, as well as up into the New England Tablelands. Given the environmental and topographical context of the study area, and its position along a cultural boundary landscape, it is likely Aboriginal land use in the immediate area was transitory in nature, with behaviours (and consequently an archaeological signature) more indicative of a movement corridor rather than sustained habitation.

Based on information from previous archaeological investigations, landscape context and regional character, site predictions for the study area include the following:

- Archaeological sites are likely to consist of culturally modified trees, artefact scatters, and isolated finds. Ceremonial sites and stone arrangements may also occur on the ridge tops.
- A wide range of raw materials may be expected given the complex underlying regional geology, including tuff, chert, quartz, chalcedony, fine grained volcanics, quartzite and igneous materials.
- Old growth trees may be present in the study area and have the potential to display scars of Aboriginal origin.
- The identification of surface artefacts is likely to be affected by differential visibility of the ground surface, but successful assessment of areas of potential archaeological deposit can be made based on landform and other environmental factors such as disturbance and distance to water.

### 5.3 Sampling strategy and field methods

The aim of the archaeological survey was to conduct a comprehensive field inspection of the study area and to record any Aboriginal archaeological sites or areas with potential to contain Aboriginal objects. The survey included the wind farm development corridor and turbine locations, ancillary infrastructure (substation and O&M facility), existing access tracks, the proposed overhead power line route, proposed access upgrades at Morrisons Gap Road, Head of Peel Road, Transverse Track, and Barry Road from Nundle to Hanging Rock - Devil's Elbow, and intersection adjustments around Nundle and on Lindsays Gap Road. An assessment was also undertaken of additional locations requiring minor transport infrastructure adjustments between the study area and Newcastle.

The study area was inspected on separate occasions by KNC Archaeologist/Director Dr Matthew Kelleher, Senior Archaeologist Mark Rawson, Archaeologists Tristram Miller and Laura Patterson, a representative from Wanaruah Local Aboriginal Land Council and Nungaroo Local Aboriginal Land Council (David Horton) and the Gomeri People Native Title Claimant group (Rose Nean). Based on the archaeological background and landform context of the study area, the survey closely inspected any areas of surface exposure for artefacts, evidence of intact soils and subsurface archaeological potential and any mature trees for evidence of Aboriginal bark removal.

The survey team were equipped with high resolution aerial photography and topographic maps showing the study area and components of the project. A non-differential GPS receiver was used for spatial recordings. All GPS recordings were made using the Geocentric Datum of Australia (GDA) coordinate system (GDA 94, Zone 56). The study area was divided into three survey units to facilitate logistics. Survey Unit 1 comprised the wind farm development corridor across the main ridge and the proposed turbine locations and ancillary infrastructure including existing access tracks. Survey Unit 2 comprised the proposed access upgrades and intersection adjustments, mostly located within the river valley, primarily along Head of Peel Road, Devils Elbow, Morrisons Gap Road and around Nundle township. Survey Unit 3 comprised the proposed overhead power line route running to the north west across the Peel Range. Detailed notes on the condition of each survey unit were compiled by the survey team including an assessment of surface visibility, vegetation coverage, modern disturbance and current land use. Given the extremely steep topography and rough terrain, 4WD vehicles were used to access the study area, with inspection then proceeding on foot.

### 5.4 Survey coverage

Survey unit 1 comprised the wind farm development corridor, individual turbine locations and ancillary infrastructure including the proposed O&M facility, substation and battery storage system area. The wind farm development corridor runs around the cirque ridgeline and onto adjacent upper slopes around the head of the Peel Valley. Landforms within the survey unit included crests, knolls, spurs, saddles, drainage depressions/gullies and steep slopes as well as sheer cliffclines. Ground surface visibility varied significantly and was primarily tied to the extent of existing disturbance from clearing and agriculture, as well as drainage modifications around several small dams.

Exposures were identified in vehicle and pedestrian tracks, along fencelines, in areas of stock disturbance/trampling (cattle and horses), around built structures such as sheds, huts and stockyards, around wombat burrows, areas of erosion on the steeper slopes, and rut scars from feral pigs. Visibility on exposures varied from 30-50% and was limited by vegetation, a background of naturally occurring and abundant large volcanic cobbles and fractured rock, and in some areas by snow cover.



**Plate 1.** View to north, WP66. Crest landform. Morrisons Gap is at base of slope, a natural saddle in the ridge.



**Plate 2.** View to west around ridgeline at head of Peel valley, vicinity of WP51

Most of the wind farm development corridor is located across the plateaus of the ridgetop, between steeply sloping and undulating landforms separating crest or knoll elements. The plateau areas were often the proposed turbine locations areas and were carefully inspected on foot for any Aboriginal objects or areas of subsurface archaeological potential.



All had low visibility of the ground surface. Volcanic bedrock outcrop was common along with cobbles and fractured gravels visible across the ground surface. Surface rocks were inspected for the possibility of alignments or cairns, or quarrying.



**Plate 3. View to north, WP42 showing slope up to crest and abundant surface rock.**



**Plate 4. View to east. Turbine WP40 proposed for steep slopes at left. Ben Halls Gap in mid distance.**



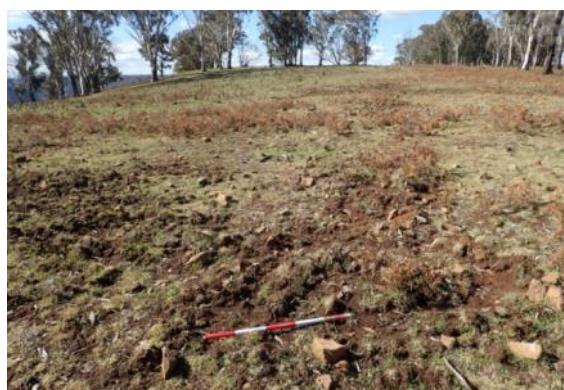
**Plate 5. View to east, WP30. Crest of small rise. Zero visibility due to bracken fern. Ground uneven from tree clearing, and abundant surface rocks under ferns.**



**Plate 6. View to north, vicinity of WP2. Relief drops sharply off crest, down precipitous slopes**



**Plate 7. View to west. WP6 proposed for crest of steep hill in far distance.**



**Plate 8. View to east. Visibility up to 20% on feral pig ruts. Abundant large surface rocks. Former clearing and stick raked.**

Where soils were visible (in section or in exposure) these primarily comprised soft dark brown to red loams with abundant cobbles. Evidence of colluvial movement and erosion of soils on the slopes was widespread along tracks. All exposures were closely inspected for Aboriginal objects. Larger and potentially old-growth trees (mostly eucalypts) were closely inspected for scars or evidence of cultural modification however almost the entirety of this section of the study area has been cleared. Dense pasture grass was present across most of the area along with beds of bracken fern. The areas that have been reclaimed by the bracken fern usually showed evidence of former stick-raking as did large portions of the flatter areas of the crest. Evidence of ripping/ploughing was also noted along with tree and brush clearing using heavy machinery to increase available pasture for cattle. Archaeological potential (outside of the identified site areas) was assessed as low, due to gradient and unsuitable landforms. The flatter, gentler landforms have generally been the focus for contemporary landuse including stick-raking etc. and exhibit higher disturbance, reducing their archaeological potential. Aboriginal use of this landscape as a transit corridor is also unlikely to have left archaeological traces due to the transient nature of activities.



Survey unit 2 included the proposed access upgrades and intersection adjustments, primarily along Head of Peel Road, Morrisons Gap Road and around Nundle township. The intersection and road upgrades around Nundle and at Lindsays Gap Road are all located in and along existing road corridors. These areas were found to be highly disturbed and no Aboriginal objects, archaeological sites or areas of Aboriginal archaeological potential were identified.

The proposed upgrades/access realignment at Devil's Elbow is located across steep to sheer terrain disturbed by tracks and pine plantations. This area was inspected for potential rockshelter sites on the sideslopes but none were identified. One surface site was identified in this area but the potential for subsurface archaeological potential around Devil's Elbow is low to nil due to unsuitable landform.



**Plate 9.** View to north west, Devils Elbow showing steep gullies and slopes along existing road



**Plate 10.** View to east. Steep slopes in Nundle State Forest planted with pines. Disturbed.

The section of Morrisons Gap Road south of Barry Road requiring upgrade is also located across undulating terrain and primarily follows the existing road corridor. Archaeological potential of this area is low due to disturbance and landform context, and no Aboriginal objects or archaeological sites were identified.



**Plate 11.** View to south-west, northern end of Head of Peel Road. Road bisects small rise in distance. Peel River at right.



**Plate 12.** View to west from Head of Peel Road. Crest of rise showing undulating hills. Looks to Peel River



**Plate 13.** View to north-west. Typical soil profile in road cutting.



**Plate 14.** View to south. Elevated creek bank. Tributary of Wardens Brook at right. Peel River in distance.

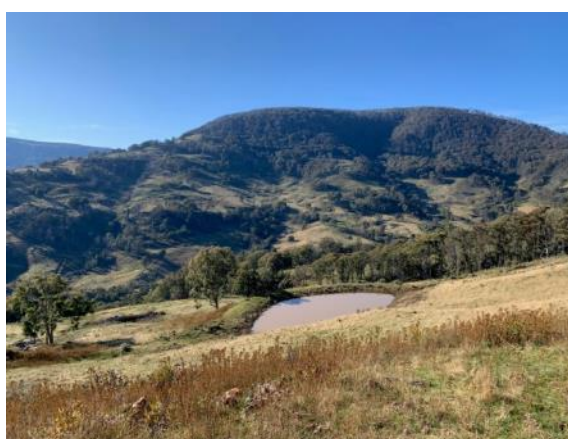
The Head of Peel Road upgrade corridor was inspected on foot. Particular attention was paid to landforms that the archaeological background review suggested were considered sensitive in the region, namely gentle gradient elevated landforms in close proximity to water sources. Landform pattern traversed in this section of survey unit 2 comprised the rolling hills of the Peel River Valley. The survey focused on landforms bisected by the road with potential for Aboriginal campsites, particularly elevated areas above creeks, saddles, and sections proposed for road widening. The road runs in a roughly south-easterly direction through a number of natural passes between hills. The road crosses numerous westerly flowing minor tributaries of the Peel River, which lies to the west of the road, and creek crossings were closely inspected for stone artefact scatters. Old growth trees near the road were also inspected for cultural modification.

Survey began at the northern end, where Head of Peel Road leaves Crawney Road. Here the road is above the Peel River and bisects steep slopes. After 800 metres the road deviates south, through a series of natural passes and saddles between hills, until it joins the floodplain and then crosses the river again at the southern end. The survey route then deviated west, along Kirks Road and then Woodleys Road, which follows Woodleys Creek, a major tributary of the Peel River. The route deviates again to the south, from Woodleys Creek, up a winding and very steep 4WD farm track, to the proposed overhead power line route on Head of the Peel ridge. Exposures were present along the roadside and in adjacent tracks, as well as along the creek banks and gully margins of the various drainage lines. Other areas of disturbance and exposure included fencing and various agricultural infrastructure including cattle/stock yards, sheds and vehicle tracks. Some areas of sheet erosion were also evident on slopes. Generally, surface visibility was low due to pasture grass cover. Apart from the locations of identified sites/PADs, survey unit 2 did not display any locations of Aboriginal archaeological potential, due to a combination of unfavourable landform (steeper gradient slopes, floodplain) and existing disturbance.

Survey unit 3 comprised the proposed overhead power line route running north west from the wind farm development corridor towards Lindsays Gap Road, along the southern slopes and spurs of the Peel Range. In general the corridor traversed numerous extremely steep spurs and gullies with very occasional flatter benches, knolls, saddles, ridgelines, mountain tops etc. that had low potential due to their inaccessibility. The vast majority of the corridor was very steep slopes with no archaeological potential.

Soil erosion and movement was common, with remaining deposit thin and rocky, suffering ongoing surface erosion due to stock movement and runoff. The broader bench landforms offered a better gradient but retained only thin, rocky soils. Flatter areas or those with a gentler gradient on the range were infrequent. These were closely inspected for intact/remnant soils suitable for curating archaeological deposit or Aboriginal objects/sites but none were identified. At lower elevations, landforms close to water sources were inspected for potential sites but none were identified, with the low-lying creek floodplains regularly affected by flooding and unlikely to retain any intact subsurface deposit.

Large portions of the proposed overhead power line route have been subject to previous vegetation clearance and similar land use practices as were identified across the wind farm development corridor. Larger trees were checked for cultural modification or scars but none were identified. No stone arrangements or cairn type sites were evident. One isolated artefact was recorded on a saddle landform but no other Aboriginal objects or areas of archaeological potential were identified due to thin soils and unsuitable steep landforms.



**Plate 15.** View to south-east from spur on northern ridge slopes, eastern part of route, showing steep mountainous terrain with limited archaeological potential on the slopes.



**Plate 16.** View to east from floodplain on Wombramurra Creek, central part of route, showing low lying flood affected topography with limited archaeological potential.





**Plate 17.** View to south-east from ridgeline/spur on northern side of main ridgeline, central part of route, showing thin rocky deposit in foreground, heavily eroded with low archaeological potential. Steep spur gully terrain in background.



**Plate 18.** View to south-west from southern ridge slopes, near western end of route, showing broad bench landforms with low archaeological potential due to thin rocky deposits and limited accessibility.



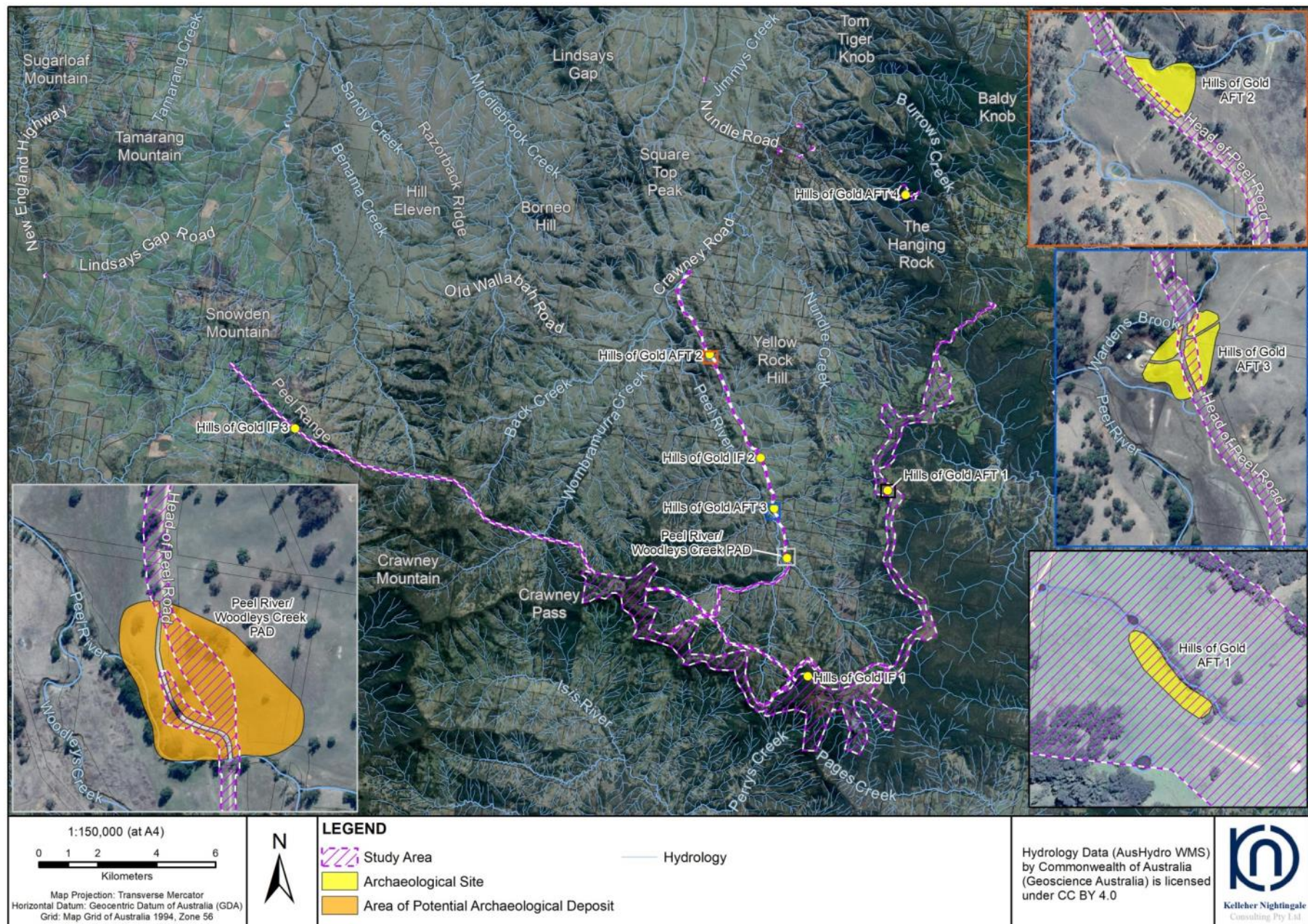


Figure 5-1. Survey results - Identified Aboriginal heritage within the study area



## 5.5 Survey results

The archaeological survey resulted in the identification of seven Aboriginal archaeological sites and one area of Potential Archaeological Deposit (PAD) (Figure 6).

### 5.5.1 Hills of Gold AFT 1

**Site Name:** Hills of Gold AFT 1  
**Coordinates:** 325838E 6506274N  
**Site Type:** Artefact Scatter

Hills of Gold AFT 1 was an open artefact scatter located in Lot 2 DP 1171688 on the southern bank of a spring-fed creekline in the eastern part of the wind farm development corridor, between turbine locations WP55 and WP56. The creek is a tributary to Wardens Brook, which joins the Peel River approximately 3.8 kilometres to the west in the valley. Surrounding landform is a gently sloping to flat section of the ridge crest. To the east is a small elevated knoll (the highest part of the crest) and to the west are steep slopes dropping down to the Peel River valley. The ridge continues to the north and south. The area offers good views to the west towards Crawney Mountain and across the valley.

Two artefacts were found on soil exposed in front of a wombat burrow near the creek bank. This stream is on a section of the main ridge crest which is wide and relatively level. There has been some previous disturbance from tree clearing and cattle grazing, with some remnant trees lining the creek. Visibility on the exposure was high, c.70% on reddish brown soil. Other flakes and flake fragments of fine grained grey volcanic, red chert and quartz were identified in exposures along the edge of the bank. The site area extends along the creek to the east, west and south, and is associated with the slightly more elevated ground bordering the water source.

**Table 4. Sample artefacts from Hills of Gold AFT 1**

Artefact type	Raw material	Length mm	Width mm	Thickness mm	Comments
Flake	Silcrete	31	32	9	Yellow brown, dull, plain platform, feather termination, zero cortex.
Distal Fragment	Siliceous tuff/indurated mudstone (IM)	24	25	11	Brown, dull, hinge termination.



**Plate 19. Dorsal surface of artefacts**



**Plate 20. View to west. Findspot at wombat burrow. Creek at right.**



**Plate 21. View to east of artefact findspot and site area**



**Plate 22. Intact red clay loam Krasnozem soils in exposure**

### 5.5.2 Hills of Gold AFT 2

**Site Name:** Hills of Gold AFT 2  
**Coordinates:** 319787E 6510888N  
**Site Type:** Artefact Scatter

Hills of Gold AFT 2 comprised an open artefact scatter site located near Head of Peel Road, approximately 3.3 kilometres south of the Crawney Road intersection. Three artefacts were identified in a partially disturbed context along the roadside near a creek crossing. The creek is an unnamed westerly-running tributary of the Peel River which runs through a pass in the spurline separating the road and river to its confluence approximately 950m to the west.

The artefacts were on the eastern side of the road, just off the road carriageway, and 30-40 metres south of where the road crosses the creek. At this point there is a confluence of this creek with another minor drainage line from the north. Two artefacts were found 5 metres apart, and another 8 metres to the west. The site landform is a creek bank, within a moderately sloped gully. To the north and south of the creek gully are two natural passes between hills. Artefacts were exposed on the southern side of the creek, on a 25m x 3m graded mound, next to an area of gully and sheet erosion. Between the mound and road is a shallow gutter. Visibility on exposure was up to 70%, limited by a background of local rocks and grass tufts. Immediately north of the creek is a tear drop shaped dam, and on the road at a cattle grid is a gate of large logs.

There is considered low potential for more artefacts to occur in sub-surface deposit due to the extent of existing disturbance.

**Table 5. Artefacts from Hills of Gold AFT 2**

Artefact type	Raw material	Length mm	Width mm	Thickness mm	Comments
Flake	Chert	34	49	11	Brown with thin veins, glossy, plain platform, feather termination
Flake	Chert	37	25	8	Pale brown, ridged platform, use edge fracture
Flake	Chert	28	28	12	Reddish brown, marbled, cortical platform, <30% cortex



**Plate 23.** View to north. Head of Peel Road at left. Creek in middle distance, natural pass between hills in distance. Artefacts were found on this grader mound exposure.



**Plate 24.** View to south showing exposure where artefacts were identified.



**Plate 25.** Ventral surface of artefacts



**Plate 26.** Dorsal surface of artefacts

### 5.5.3 Hills of Gold AFT 3

**Site Name:** Hills of Gold AFT 3  
**Coordinates:** 321976E 6505658N  
**Site Type:** Isolated Artefact

Hills of Gold AFT 3 was an artefact scatter site located where Head of Peel Road crosses Wardens Brook, a tributary of the Peel River. The confluence of these two watercourses is approximately 170 metres to the west of the artefact findspot. This location is 9.2 kilometres south of the Crawney Road intersection.

Site landform is lower hillslope to elevated creek banks, on the southern side of the creek. Wardens Brook is 35 metres north of the findspot. One artefact was on the eastern side of the road, 8 metres from the edge, where the road has cut the natural slope and is sheet eroded. Visibility on exposure was 50%, limited by low grass tufts, weeds, local rocks, and cattle hoof prints. Adjacent is a top dressed farm track, and across the road to the west are cattle yards.

**Table 6. Artefact from Hills of Gold AFT 3**

Artefact type	Raw material	Length mm	Width mm	Thickness mm	Comments
Distal Fragment	Petrified Wood	12	24	5	Pale grey, banded, feather termination, dorsal negative scars, distal edge fracture

While slopes above the findspot to the south east are steep, there is moderate archaeological potential along the adjacent elevated southern creek banks, to the east and west, although there has been previous clearing and cattle activity, due to the site's position in the landscape above a larger tributary of the Peel River. The site extends on both sides of the road.



**Plate 27. View to north. Head of Peel Road at left. Elevated ground on southern banks of Wardens Brook.**



**Plate 28. View to west at findspot. Peel River is in the distance at foot of hills.**



**Plate 29. Ventral surface of artefact**



**Plate 30. Dorsal surface of artefact**



#### 5.5.4 Hills of Gold AFT 4

**Site Name:** Hills of Gold AFT 4  
**Coordinates:** 326445E 6516299N  
**Site Type:** Artefact Scatter

Hills of Gold AFT 4 was an artefact scatter site located south of Barry Road at Devils Elbow, north west of Hanging Rock. The site is located within the footprint of the access upgrade corridor. Site landform comprised the crest of a ridge spur, which runs steeply down from east to west, above Morgans Gully. An exposure was found along a 3-5 metre wide fire trail or former logging track which runs down the sloping landform crest. A wider 10 x 5 m area of exposure was found at the junction of the main track with another track, on a benched area at the base of a steep slope. Slopes drop to the north into the headwater gully of a 1st order tributary of Happy Valley Creek, c.30 metres away, and to the south down almost precipitous slopes to Morgans Gully.

Visibility on exposure was up to 50%, limited by leaf litter and a background of abundant local rock fragments. Soils were reddish and stony. Vegetation is medium growth forest which has had bushfire and possible logging. There has been disturbance from formation of the track, which has been graded in sections. Archaeological potential for associated intact subsurface deposit was considered low, due to the vehicle track disturbance, and shallow soils with abundant rock content. Bedrock outcrops and large cobbles were also noted downslope to the west.

**Table 7. Artefacts from Hills of Gold AFT 4**

Artefact type	Raw material	Length mm	Width mm	Thickness mm	Comments
Retouched Proximal Fragment	Igneous	38	25	8	Grey black. Focal platform. Old distal break. Edge fracture left and right margins possibly from use.
Utilised Flake	Chert	32	75	5	Grey. W>L. Patinated. Plain platform. Feather termination . Distal use edge scars off dorsal.



**Plate 31.** View to east. Artefacts were found at the junction of two vehicle tracks, on a bench at the base of a steep spur slope. Looking back up route of Option Blue.



**Plate 32.** View to north. Artefacts were found on this benched area on spur crest. Below is a steep sided gully to a 1st order tributary of Happy Valley Creek.



**Plate 33.** Artefacts identified at the site

### 5.5.5 Hills of Gold IF 1

**Site Name:** Hills of Gold IF 1  
**Coordinates:** 323124E 6499969N  
**Site Type:** Isolated Artefact

Hills of Gold IF 1 was an isolated artefact identified in on a small knoll in Lot 83 DP 755349, on a northerly projecting spur off the main Head of Peel ridgeline in the central part of the wind farm development corridor. The eastern end of the proposed overhead power line route is located approximately 160m to the south. The artefact is approximately 30m east of turbine location WP22. Visibility on exposure was low, c.10 -20%, with only small patches of brown loam seen between abundant cobbles of igneous rock with pale yellow brown patina. Cobbles were up to 30cm in size. There was more visibility, up to 50%, on an adjacent 4 metre wide vehicle track along a stock fence. The area has been previously cleared.

The artefact was found 8 metres east of the stock fence. West of the fence is thick eucalypt forest. Elevation is between 1365-1370 metres above sea level. Relief is very steep in the vicinity, with slopes dropping sharply just north of the findspot, into the Peel River valley. Nearest watercourses are c.500 metres to the west and east, both headwater tributaries of the Peel River, and possibly spring fed. The river is 2.5 kilometres to the north east.

Potential for subsurface archaeological deposit in this location is considered low due to the steepness of the terrain, soil erosion, abundance of surface rocks, and previous tree clearing and stick raking disturbance.

**Table 8. Artefact from Hills of Gold IF 1**

Artefact type	Raw material	Length mm	Width mm	Thickness mm	Comments
Core/Tool	Metamorphic	39	80	45	Pale greenish grey, banded, 2 platforms, unifacial rotated, 8 negative scars, largest scar 17 x 32mm.



**Plate 34.** View to north. Location of isolated find on rocky knoll. North side of main ridge. From here slopes drop steeply down into the Peel River valley.



**Plate 35.** View to west. Inspection of vehicle track along stock fence. Site of proposed wind turbine WP22.



**Plate 36.** Core – negative scars off one platform



**Plate 37.** Core – negative scars off rotated platform

### 5.5.6 Hills of Gold IF 2

**Site Name:** Hills of Gold IF 2  
**Coordinates:** 321527E 6507371N  
**Site Type:** Isolated Artefact

Hills of Gold IF 2 was an isolated find located next to a cutting on Head of Peel Road, where the road crosses a minor tributary of the Peel River. The site is approximately 7 kilometres south of Crawney Road intersection. Two fragments of a broken flake were found on a sheet erosion exposure. The artefact was less than 5 metres from the road, on the eastern side (Lot 91 DP755335).

Site landform is a low rise, which has been previously cleared for cattle grazing, and bisected by the road. Recent two wheel vehicle tracks run down the slope to the creek next to the findspot. There is good exposure here of a pale grey brown upper soil unit over yellow subsoil. Visibility on exposure was high, >70%. The location overlooks the confluence of two tributary creeks, 90 metres to the west. Peel River is 650 metres to the west.

**Table 9. Artefact from Hills of Gold IF 2**

Artefact type	Raw material	Length mm	Width mm	Thickness mm	Comments
Split flake (Left)	Chert/IM	34	24	7	Brown, old longitudinal break, scarred platform, also recent medial break (in 2 fragments)

Potential for intact sub-surface deposit was considered low due to previous disturbance from clearing, soil erosion, vehicle movements, and probable cattle trampling.



**Plate 38. View to south. Findspot in distance (arrow), on orange erosion scour, behind the two white posts at creek crossing.**



**Plate 39. View to east of findspot, where Head of Peel Road crosses creek.**



**Plate 40. View to south of findspot. Good visibility on exposure of grey A unit over yellow orange subsoil.**



**Plate 41. Dorsal surface of artefact**



### 5.5.7 Hills of Gold IF 3

**Site Name:** Hills of Gold IF 3  
**Coordinates:** 305715E 6508377N  
**Site Type:** Isolated Artefact

Hills of Gold IF 3 was an isolated artefact located in the western part of the study area along the proposed overhead power line route, in Lot 2 DP 226603. The artefact was located approximately 45 metres south east of a proposed tower location, on the south western slopes of the Peel Range spur leading to Snowden Mountain. Site landform was a saddle leading to a small spur knoll to the south west. The knoll overlooks the headwater drainage gullies down to Basin Creek to the west.

The artefact was identified in a patchy exposure along a cattle track. Visibility on exposure was around 50%, limited by grass tufts and a background of fractured rocks and cobbles. The area was cleared and displayed thin, rocky soils with evidence of disturbance from stock movement and erosion. Archaeological potential for subsurface deposit within the proposed overhead power line route corridor was low.

**Table 10. Artefact from Hills of Gold IF 3**

Artefact type	Raw material	Length mm	Width mm	Thickness mm	Comments
Proximal fragment	Chert	23	15	5	Black, plain platform, 4 negative scars evident on dorsal surface, zero cortex



**Plate 42.** View to north-east of findspot from saddle on southern ridge slopes, western part of route, showing rocky, thin soils



**Plate 43.** View to southwest showing saddle landform and spur knoll in background.



**Plate 44.** Dorsal surface of artefact



**Plate 45.** Ventral surface of artefact

### 5.5.8 Peel River/Woodleys Creek PAD

**PAD Name:** Peel River/Woodleys Creek PAD  
**Coordinates:** 322418E 6503975N  
**Site Type:** Potential Archaeological Deposit

Peel River/Woodleys Creek PAD was located on an elevated hill crest landform near the Head of Peel Road crossing of the Peel River. The PAD is located across Lots 8 and 9 DP 1120827. The PAD did not have any apparent surface archaeology (zero visibility) but based on landform and the extent of visible disturbance was considered likely to contain subsurface archaeological deposit.

The crest containing the PAD is elevated above the floodplain of the river and overlooks the confluence of the river and Woodleys Creek. The river curves around the base of the hill to the south and east with this area being low-lying and flood prone. The PAD landform is elevated above flooding. Ground surface visibility on the hillcrest was zero due to pasture grass. Small areas of exposure were present in areas of grass die-off and along the roadside. These were closely inspected but no Aboriginal objects were identified. Large cobbles were present on the surface. The area has previously been subject to clearing with occasional large trees remaining but subsurface disturbance appeared otherwise low.

Archaeological potential for subsurface deposit within the PAD area is considered to be moderate due to low levels of apparent disturbance, favourable landform, aspect and environmental position close to the river but outside the flood zone, and above a key drainage confluence.



Plate 46. View to south east of raised PAD area at left, road dropping down to Peel River crossing



Plate 47. View north to Peel River crossing showing elevated PAD landform beyond



Plate 48. View to south west. Hill crest landform PAD at left, overlooking Peel River and floodplain at right

## 6 Aboriginal Community Consultation

### 6.1 Community consultation process

The aim of consultation is to integrate cultural and archaeological knowledge and ensure registered Aboriginal stakeholders have information to make decisions on Aboriginal cultural heritage. For the preparation of this CHAR and to inform the EIS and meet the requirements of the SEARs for the Hills of Gold Wind Farm project, consultation with Aboriginal people has been undertaken in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (OEH 2010b) and the requirements of Clause 60 of the *National Parks and Wildlife Regulation 2019*. A full consultation log is included as Appendix D to this report.

The formal consultation process has included:

- Notification of Aboriginal persons, including register of native title determinations search and government agency notification letters;
- advertising for registered stakeholders in local print media *Northern Daily Leader* (Appendix B);
- notification of closing date for registration (04/05/2020);
- record of registration of interest (DPIE (now Heritage NSW) and LALC notified 05/05/2020);
- provision of project information (20/04/2020 and 05/05/2020);
- provision of assessment methodology for review (28 day review period ending on 02/06/2020);
- invitation to advise on Aboriginal cultural value of the study area;
- provision of draft CHAR for review (28 day review period ending on 19/10/2020); and
- ongoing consultation with the local Aboriginal community including regular project updates and continuing to register stakeholders on the project.

### 6.2 Registration of interest

Aboriginal people who hold knowledge relevant to determining the cultural heritage significance of Aboriginal objects and Aboriginal places in the study area were invited to register an interest in a process of community consultation. Investigations for the current project have included consultation with Aboriginal community individuals and groups as listed in Table 11.

**Table 11. Registered Aboriginal Stakeholders**

Group/Individual	Contact person
Nungaroo Local Aboriginal Land Council	CEO
Wanaruah Local Aboriginal Land Council	Rosslyn Thomson
Gomerai People (Native Title Claimant)	NTSCORP Contact: Maeve Parker
A1 Indigenous Services	Carolyn Hickey
AGA Service (AGA Culture Services)	Ashley, Gregory and Adam Sampson
Aliera French Trading	Aliera French
AT Gomilaroi Cultural Consultancy	Aaron Talbott
Cacatua General Services (Cacatua Culture Consultants)	George Sampson
Culturally Aware	Tracey Skene
Didge Ngunawal Clan	Paul Boyd & Lilly Carroll
Galamaay Cultural Consultants	Robert Slater
Garry Binge	Garry Binge
Ian Worley	Ian Worley
Kamilaroi Yankuntjatjara Working Group	Phil Khan
Kevin Smith	Kevin Smith
Malcom Talbot	Malcom Talbot
Muragadi Heritage Indigenous Corporation	Jesse Johnson



Group/Individual	Contact person
Murra Bidgee Mullangari Aboriginal Corporation	Darleen Johnson
Nunawanna Aboriginal Corporation	Colin Ahoy
Paul Frazer	Paul Frazer
Richard Slater	Richard Slater
Tocomwall	Scott Franks
Ungooroo Aboriginal Corporation	Allen Paget
Warragil Cultural Services	Aaron Slater
Wurrumay Pty Ltd	Vicky & Kerry Slater
Yinarr Cultural Services	Kathie Steward Kinchela

*\*One further stakeholder has registered interest in the project but has chosen to withhold their details in accordance with Section 4.1.5 of the Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*

### 6.3 Consultation regarding the land and proposed activity

Following on from Stage 1 of the consultation process undertaken by KNC (stakeholder identification and registration), project-specific consultation was undertaken. Information regarding the wind farm development and study area location was provided to registered Aboriginal stakeholder groups in a letter dated 20/04/2020. Information included an outline of the proposal, location of the study area and an invitation to consult during the assessment.

Stakeholders were provided with the proposed assessment methodology for the Cultural Heritage Assessment Report on 05/05/2020, and invited to review and provide feedback (review period of 28 days, closing on 02/06/2020). An invitation was extended for Aboriginal cultural knowledge holders and stakeholders to provide comments on the proposed cultural heritage assessment methodology, including any protocols regarding the gathering of information and any matters such as issues/areas of cultural significance that might affect, inform or refine the assessment methodology.

It was identified that the study area was located along the boundary between the Wanaruah and Nungaroo Local Aboriginal Land Councils, and also fell within the Gomeroi People Native Title Claim area. These groups were invited to send representatives to attend field survey.

All stakeholders were provided with a copy of the draft CHAR report for review and comment. In particular, feedback regarding the Aboriginal cultural values and significance of the study area was sought, as well as input on the proposed management and mitigation measures for identified archaeological sites.

### 6.4 Stakeholder responses to the proposed assessment methodology for the Cultural Heritage Assessment Report

Formal responses to the proposed assessment methodology were received from A1 Indigenous Services (A1), AT Gomilaroi Cultural Consultancy (ATGCC), Culturally Aware, Didge Ngunawal Clan (DNC), Garry Binge, Galamaay Cultural Consultants (Galamaay), Gomeroi People Native Title Claimant (Gomeroi People NTC), Kamilaroi-Yankuntjatjara Working Group (KYWG), Murra Bidgee Mullangari Aboriginal Corporation (MBMAC), Muragadi Heritage Indigenous Corporation (MHIC), Warragil Cultural Services (Warragil) and Wurrumay Pty Ltd (Wurrumay).

A1 stated they had read and reviewed the document and supported the proposed assessment methodology (email dated 18/05/2020).

ATGCC noted the importance of integrating a cultural assessment of proposed impact locations, and suggested the addition of a cultural values footprint for the whole of the project area. ATGCC also noted the cultural importance of ecological and fauna studies from an Aboriginal cultural perspective (email dated 25/05/2020).

Culturally Aware requested clarification on the extent to which the project crossed into the Wonnarua area of the Upper Hunter and was provided with a project map. Further discussion confirmed their organisation's interest for the portion on the Wonnarua side. Culturally Aware stated they supported the methodology and had no issues with the proposed approach (emails dated 6-18/05/2020).

DNC stated they were happy to go ahead with the proposed approach (email dated 05/05/2020).

Garry Binge confirmed his strong ties to the area, noting his personal and family history in the area including his grandparents, and also noted a connection to the Gomeroi People NTC (phone call 13/05/2020).

Galamaay stated they supported the proposed assessment methodology for the project (email dated 07/05/2020).

NTSCorp confirmed registration arrangements for the Gomeroi People NTC group and requested copies of the methodology be sent on to the identified stakeholders. All were provided with the methodology (email 06/05/2020 and phone call 07/05/2020).

KYWG confirmed their interest in the project area and provided additional cultural information on the Kamilaroi connections of the area (see Section 6.6, email dated 21/05/2020). KYWG also suggested some archaeological excavation might be required.

MBMAC stated they had read and reviewed the proposed assessment methodology, and endorsed the assessment recommendations made (email dated 11/05/2020).

MHIC stated their agreement with the recommendations of the project methodology (email dated 12/05/2020).

Warragil stated their acceptance and agreement with the proposed assessment methodology (email dated 02/06/2020).

Wurrumay stated they had read and reviewed the proposed assessment methodology and agreed with it (email dated 02/06/2020).

## 6.5 Review of draft CHAR

The draft CHAR was provided to registered Aboriginal stakeholders for review and comment. All registered Aboriginal stakeholders were provided with a 28 day period for review, closing on 19/10/2020. Formal comments received from stakeholders during this period are attached in full in Appendix C and summarised below. Responses to the draft CHAR were received from Ian Worley, MBMAC, ATGCC and KYWG.

Ian Worley contacted KNC to discuss a potential axe grinding groove site near the study area (email dated 22/09/2020). Ian indicated the potential site was located on the DAG Sheep Station, a property managed by John Krsulja at Crawney Road. Ian expressed that the site may be significant and should be considered as the proposed development “will impact the entire feel of the area”. Ian provided KNC with contact details for John Krsulja.

KNC contacted John to discuss the potential site and to confirm its location (phone calls 07/10/2020 and 08/10/2020). John confirmed it is located on the DAG Sheep Station property at Wombramurra and provided several photographs. The location is approximately 750 metres east of Crawney Road and the DAG complex. It is not in proximity to the current study area. John also noted that the general area was considered significant as it was a ‘meeting area’ for three different Aboriginal groups who had their traditional boundaries in this region.

MBMAC acknowledged receipt of the draft CHAR and stated they had read and reviewed the information. MBMAC stated they endorsed the recommendations for Aboriginal heritage (email dated 29/09/2020).

ATGCC affirmed their representative’s strong cultural ties to the area through ancestral ceremony and trade. ATGCC provided cultural knowledge stating that the areas generally functioned as pathways and were not occupied on a permanent basis, with people from the region moving towards the coast or further west during the winter months to avoid the harsh weather. ATGCC agreed with the requirement for further archaeological investigation of the identified archaeological sites, particularly given the assumed totality of impact. ATGCC suggested more field investigations including testing and salvaging of the sites, as well as a cultural values assessment (email dated 14/10/2020).

KYWG stated they had read and reviewed the report and agreed with the findings and recommendations (email dated 14/10/2020). KYWG reiterated that the area was highly significant to Aboriginal people and agreed with the proposed surface artefact collection and salvage excavations for the identified sites. KYWG also expressed their approval for the report as a whole, noting that it was a large area, and the quality of the recordings. KYWG recommended stakeholder involvement in all aspects of potential fieldwork including assisting with the surface artefact collection and salvage excavation program. KYWG also indicated their preference for recovered artefacts to be subject to detailed recording and then transferred to the care of the LALC.

## 6.6 Aboriginal cultural values

It has been identified during the consultation process that the wider local area has cultural heritage value to the local Aboriginal community. Some of the Aboriginal cultural heritage values expressed by stakeholders include:

- strong association with the land
- responsibility to look after the land, including the heritage sites, plants and animals, creeks, rivers and the land itself
- scarred trees
- artefact sites and landscape features
- creek lines, especially permanent water sources and springs and larger landscape features such as the Peel River, their tributaries and their floodplains
- indigenous plants and animals
- sacred or spiritual sites in the landscape which may not have material, archaeological features associated with them
- general concern for burials, as their locations are not always known and they can be found anywhere.

Aboriginal archaeological sites within the study form part of a wider Aboriginal heritage landscape across the edge of the Upper Hunter and Liverpool Ranges. No specific cultural values have been identified by Aboriginal stakeholders for the archaeological sites but this wider landscape holds high levels of significance.

ATGCC indicated that the study area was used primarily as a transit zone with numerous pathways and was occupied on a semi-permanent basis, with people from the region moving towards the coast or further west during the winter months to avoid the harsh weather (email dated 14/10/2020).

KYWG noted the area was associated with the Kamilaroi-Gamilaraay people of the Nundle and Tamworth area and into the Upper Hunter valley, being a highly cultural sensitive area connected to trading tools, food, cultural exchange and also ceremonies. Gamilaraay place names are common in the local area (e.g. Barraba “a place of many yellow jacket or box trees” and Manilla “winding river”) and help strengthen the ongoing cultural connection to place experienced by members of the contemporary Kamilaroi community (email dated 21/05/2020).

Nunawanna Aboriginal Corporation noted that their representative had a strong connection to the area and had lived in the region for many years, with particular connection to the land and waterways (letter/email dated 20/04/2020).

Warragil Cultural Services noted the connection to the Gamilaraay/Kamilaroi/Gomeroi tribe of people and stated a cultural knowledge and ancestral connection to the Nundle, Tamworth, Caroonna and surrounding area (letter dated 23/04/2020).

Wurrumay advised they had cultural knowledge and a spiritual and family connection to the area stretching back to the 1820s (email dated 04/05/2020).

Yinarr Cultural Services advised that the general area was considered highly significant, particularly associated with travelling through the landscape, as well as contemporary cultural and family connections, stories and art. Yinarr emphasised the importance of continuing to “recognize and maintain a deep respect for our ancestral belief system, traditional lore and customs, our responsibilities and obligations are to discover, preserve, protect and conserve our culture and heritage for our future generations” (email/letter dated 13/05/2020).

Many stakeholder organisations noted they had members and staff who were connected to the Native Title Claim and were Traditional Owners of the area, and had family connections to the Nundle area.



## 7 Summary and Analysis of Background Information

Analysis of the background information presented in sections 2, 3, 4, 5 and 6 allows an assessment of the cultural heritage values within the study area to be made. Combining data from historical/ethnographic sources, Aboriginal community consultation, landscape evaluation, background archaeological context and a comprehensive field survey provides an insight into how the landscape around the study area was used and what sort of events took place in the past. This section draws together a variety of information to bring further understanding to the cultural landscape of the study area.

The surrounding region is known to have been important to and extensively used by past Aboriginal people. Aboriginal people's use of the Upper Hunter and adjoining Liverpool Plains is well-documented in historic accounts, as are a range of subsistence activities, practices and. Historic accounts demonstrate the importance of the Liverpool Ranges and the area around the study area as a key travel corridor for movement between Wanaruah and Kamilaroi country, stretching across the major catchments and landscapes to the north, south and east towards the New England Tableland and the coast. Traditional knowledge held by the contemporary Aboriginal community supports these accounts, with the area identified as being located across the transitional 'boundary' between groups and therefore a key travel corridor. The arrival and settlement of Europeans in the region caused major social and economic upheaval for the Aboriginal people of the Upper Hunter and Liverpool Ranges/Plains; however, members of the contemporary Aboriginal community continue to experience connection with the area through cultural and family associations.

The local area contains a number of resources which would have been important to local Aboriginal groups. Varied environmental settings including creeks, alluvial plains and terraces, rolling foothills and elevated ridgelines were all accessible and useful for Aboriginal land use activities. A wide variety of plant and animal resources would have been available to Aboriginal people to collect and use as they moved around the various parts of the landscape, with fresh water sourced from waterways such as the Peel River and its larger tributaries as well as natural springs on the ridge. The creek systems may also have acted as travel routes once people descended into the catchment, with easier movement along their margins than in the rugged ranges in between. Raw materials suitable for stone tool-making would also have been readily available along the creek systems, having been transported in gravel and cobble form down from the eroding ranges. Outcrops and overhangs provided rockshelters suitable for occupation and art making, while exposed platforms allowed for axe-grinding in the vicinity of potholes or the numerous freshwater streams and creeks dissecting the landscape. Quarrying of basalt and other volcanics has also been recorded in the region where these geologies are exposed at the surface.

Where sites have been recorded both around and within the study area, a diversity of site types is evident, ranging from grinding grooves on suitable sandstone country to the west, rock shelter sites in the elevated ranges and plateaux to the east, and open context artefact sites on the river valley slopes and flats to the north. The range of site types and successful identification of archaeology indicates that material traces of Aboriginal landscape use do survive in the region across a range of landforms, but are variably affected by disturbance factors including erosion/colluviation, flooding and European land use practices. Elevated landforms in association with water sources have consistently been identified as displaying higher potential for Aboriginal camp sites. More regular and repeated visitation is likely to have taken place near major water sources in the region which acted as focal points for subsistence and social activities. Isolated artefacts resulting from accidental loss or deliberate discard while moving through the landscape may occur anywhere.

Field survey confirmed the prior landscape assessment of the study area. Despite the limitations to surface visibility it was still possible to assess the archaeological potential based on landform, vegetation and disturbance. Soils on the flatter crest landforms of the main ridgeline were found to have been more disturbed by land use practices, as these areas have been the focus for agriculture. On steeper gradient slopes, subsurface deposit is unlikely, particularly in rocky areas where poorly developed Lithosols occur. The valley side slopes are also affected by colluvial movement and soil transfer accelerated by European vegetation clearance, logging, establishment of pine plantations and increased water runoff. Down in the alluvial river valley, potential for subsurface deposit depends strongly on the nature and extent of flooding along the river and its tributaries, with elevated landforms bordering the flood zone considered to display better archaeological potential. The valley has also been more intensively settled than the surrounding ridge system and is more affected by European land use disturbance including agriculture, various drainage modifications and infrastructure such as roads.

The identification of numerous sites along the Head of Peel Road section of the study area is partially the result of increased exposure and archaeological visibility resulting from disturbance, but also likely reflects Aboriginal landscape use. Camping and economic activities would have been more frequent down in the valley along the river, while the higher ground and elevated ridgelines and passes would have functioned as travel corridors with only transient use. The passes through the Liverpool Ranges such as Crawney Pass and Ben Halls Gap have repeatedly been identified as key transit corridors facilitating the movement of people between the Upper Hunter and the inland plains, as well as up into the New England Tablelands. Given the environmental and topographical context of the study area, and its position within a cultural 'boundary' landscape, it is therefore likely Aboriginal land use in this area was transitory in nature, with behaviours (and consequently an archaeological signature) more indicative of a movement corridor rather than

sustained or repeated habitation. The steep topography and inaccessibility of large portions of the study area would have discouraged casual visitation, and the steep slopes would be unsuitable for campsites, as well as being unlikely to preserve any archaeological material in situ. The more favourable landscape context at Hills of Gold AFT 1 likely resulted in its use as one of the few ridgetop campsites. The area would have been attractive to past Aboriginal people due to the presence of both level ground and a permanent water source, both of which are relatively rare on the elevated ridgetop system. Elsewhere, isolated objects and low density scatters on the steeper gradient landforms indicate transient use of the more marginal ridgetop landscape circling the valleys.

Few excavations have been reported for the region and the available archaeological data for the study area locale is scarce and often dated. Further work in the area should focus on characterising the 'archaeological signature' of the area in light of the existing cultural and historical understanding of transit through the ridge system into the Peel River valley.

## 7.1 Identified Aboriginal heritage within the study area

Review of background information, Aboriginal community consultation, and archaeological assessment has resulted in the identification of seven Aboriginal archaeological sites and one potential archaeological deposit within the study area. These locations are listed in Table 12 and shown on Figures 6-7.

**Table 12. Identified Aboriginal archaeological sites within the study area**

Site Name	Landscape Context	Site Feature
Hills of Gold AFT 1	Main ridgeline – elevated flat in proximity to spring-fed creek	Artefact
Hills of Gold AFT 2	Peel River valley – creek bank on minor drainage line	Artefact
Hills of Gold AFT 3	Peel River valley – lower hillslope to elevated creek bank on Wardens Brook	Artefact
Hills of Gold AFT 4	Devils Elbow – small bench on ridge crest surrounded by steep slopes	Artefact
Hills of Gold IF 1	Main ridgeline – small knoll on steep slopes	Artefact
Hills of Gold IF 2	Peel River valley – low rise near minor drainage line	Artefact
Hills of Gold IF 3	Main ridgeline – saddle on steep slopes	Artefact
Peel River/Woodleys Creek PAD	Elevated crest at confluence of Peel River and Woodleys Creek	Potential archaeological deposit (subsurface)

## 8 Cultural Heritage Values and Statement of Significance

### 8.1 Significance Assessment Criteria

One of the primary steps in the process of cultural heritage management is the assessment of significance. Not all sites are equally significant and not all are worthy of equal consideration and management (Sullivan and Bowdler 1984; Pearson and Sullivan 1995:7). The determination of significance can be a difficult process as the social and scientific context within which these decisions are made is subject to change (Sullivan and Bowdler 1984). This does not lessen the value of the heritage approach, but enriches both the process and the long term outcomes for future generations as the nature of what is conserved and why, also changes over time.

The assessment of significance is a key step in the process of impact assessment for a proposed activity as the significance or value of an object, site or place will be reflected in resultant recommendations for conservation, management or mitigation.

The *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (OEH 2010a) requires significance assessment according to criteria established in the Australia ICOMOS Burra Charter (Australia ICOMOS 2013). The Burra Charter and its accompanying guidelines are considered best practice standard for cultural heritage management, specifically conservation, in Australia. Guidelines to the Burra Charter set out four criteria for the assessment of cultural significance:

- Aesthetic value - relates to the sense of the beauty of a place, object, site or item
- Historic value - relates to the association of a place, object, site or item with historical events, people, activities or periods
- Scientific value - scientific (or research) value relates to the importance of the data available for a place, object, site or item, based on its rarity, quality or representativeness, as well as on the degree to which the place (object, site or item) may contribute further substantial information
- Social value - relates to the qualities for which a place, object, site or item has become a focus of spiritual, political, national or other cultural sentiment to a group of people. In accordance with the *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW*, the social or cultural value of a place (object, site or item) may be related to spiritual, traditional, historical or contemporary associations. According to Heritage NSW, "social or cultural value can only be identified through consultation with Aboriginal people" (OEH 2011:8).

There are seven locations of recorded Aboriginal cultural heritage value within the study area. The significance assessment for the identified archaeological sites has focussed on the social/cultural, historic, scientific and aesthetic significance of Aboriginal heritage values as identified in *The Burra Charter*.

#### **Social Values**

This area of assessment concerns the value/s of a place, feature or site to a particular community group, in this case the local Aboriginal community. Aspects of social significance are relevant to sites, objects and landscapes that are important or have become important to the local Aboriginal community. This importance involves both traditional links with specific areas as well as an overall concern by Aboriginal people for sites generally and their continued protection. Aboriginal cultural significance may include social, spiritual, historic and archaeological values.

It has been identified during the consultation process that the local area has cultural heritage value (social value) to the local Aboriginal community (see Section 6.6).

Regarding Aboriginal sites identified within the study area, no specific cultural or social values expressed by these sites have been identified to date.

#### **Historic Values**

Historical research did not identify any information regarding specific historical significance of identified Aboriginal archaeological sites within the study area. No specific historical significance for the sites within the study area has been provided by the registered Aboriginal stakeholders to date.



### **Scientific Values**

For archaeologists, scientific significance refers to the potential of a site to contribute to current research questions. Alternately, a site may be an in situ repository of demonstrably important information, for example rare artefacts of unusually high antiquity.

Scientific significance is assessed using criteria to evaluate the contents of a site, state of preservation, integrity of deposits, representativeness of the site type, rarity/uniqueness and potential to answer research questions on past human behaviour. The recommended criteria for assessing archaeological significance include:

- Archaeological Research Potential - significance may be based on the potential of a site or landscape to explain past human behaviour and can incorporate the intactness, stratigraphic integrity or state of preservation of a site, the association of the site to other sites in the region (connectivity), or a datable chronology.
- Representativeness - all sites are representative of those in their class (site type/subtype) however the issue here relates to whether particular sites should be conserved to ensure a representative sample of the archaeological record is retained. Representativeness is based on an understanding of the regional archaeological context in terms of site variability in and around the study area, the resources already conserved and the relationship of sites across the landscape.
- Rarity – which defines how distinctive a site may be, based on an understanding of what is unique in the archaeological record and consideration of key archaeological research questions (i.e. some sites are considered more important due to their ability to provide certain information). It may be assessed at local, regional, state and national levels.

High significance is usually attributed to sites which are so rare or unique that the loss of the site would affect our ability to understand an aspect of past Aboriginal use/occupation of an area. In some cases a site may be considered highly significant because it is now rare due to destruction of the archaeological record through development. Moderate (medium) significance is attributed to sites which provide information on an established research question. Sites with moderate significance are those that offer the potential to yield information that will contribute to the growing holistic understanding of the Aboriginal cultural landscape of the area. Archaeological investigation of moderately significant sites will contribute knowledge regarding site type interrelationships, cultural use of landscape features and occupation patterns. Low significance is attributed to sites which cannot contribute new information about past Aboriginal use/occupation of an area. This may be due to site disturbance or the nature of the site's contents.

### **Aesthetic Values**

Aesthetic values are often closely related to the social values of a site or broader cultural landscape. Aspects may include scenic sights, smells and sounds, architectural fabric and creative aspects of a place. Archaeological sites within the study area have no specific associated aesthetic values, or aesthetic values identified by registered Aboriginal community groups to date.

## 8.2 Statements of Significance

The study area contains seven identified Aboriginal archaeological sites and one potential archaeological deposit. Based on the values assessment, the following levels of significance were ascribed to the sites within the study area:

Hills of Gold AFT 1 represents a commonly occurring site in the region consisting of an open artefact scatter on an elevated landform in proximity to a watercourse; however, the site location is uncommon as it was identified up on the main ridge crest at elevation. The area would have been attractive to past Aboriginal people due to the presence of both level ground and a permanent water source, both of which are relatively rare on the elevated ridgetop system. The artefacts at the site are typical of the region in terms of type and raw material. The site demonstrates moderate scientific value and relatively low disturbance with apparently intact soils. It is likely that further investigation would contribute to our understanding of Aboriginal landscape use in the region. Based on the intactness, representativeness and research potential of the site, site Hills of Gold AFT 1 displays *moderate significance*.

Hills of Gold AFT 2 is a commonly occurring site type in the region, being a low density artefact scatter site located near a creekline (minor drainage line). Artefacts were identified in a disturbed context on a graded mound, next to an area of gully and sheet erosion. Potential for further subsurface deposit was assessed as low and the area is unlikely to have been a focus for Aboriginal land use. The site is representative of its type and includes typical raw materials and artefact types. Further investigation of the site is unlikely to contribute to our understanding of the local area's Aboriginal archaeological context. Based on the intactness, representativeness and research potential of the site, Hills of Gold AFT 2 displays *low significance*.

Hills of Gold AFT 3 was also an open artefact scatter site located near a watercourse, a common site type in the region. The site is located across a lower hillslope/elevated bank above Wardens Brook, a larger tributary of the upper Peel River, not far from the confluence. The artefacts at the site are typical of the region in terms of type and raw material. Some localised disturbance to the site area is evident but potential for subsurface archaeological deposit was assessed as moderate due to landform context. It is likely that further investigation would contribute to our understanding of Aboriginal landscape use in the region. Based on the intactness, representativeness and research potential of the site, site Hills of Gold AFT 3 displays *moderate significance*.

Hills of Gold AFT 4 comprised a low density surface artefact scatter in a disturbed context at Devils Elbow. Artefacts were identified on a disturbed track within the pine plantation on a small bench on a crest landform, surrounded by steep slopes. Potential for further subsurface deposit was assessed as low due to disturbance, thin soils, and the area is unlikely to have been a focus for Aboriginal land use. Artefacts were typical of the region in terms of type and raw material. Further investigation of the site is unlikely to contribute to our understanding of the local area's Aboriginal archaeological context. Based on the intactness, representativeness and research potential of the site, Hills of Gold AFT 4 displays *low significance*.

Hills of Gold IF 1 comprised an isolated artefact located on a small knoll landform up on the main ridgeline. The area was surrounded by steep slopes and potential for subsurface deposit was low due to the thin, rocky soils. The artefact was typical of the region in terms of type and raw material. The site is representative of an isolated discard event on the more marginal steep ridgetop landscape and further research potential is low. Based on the intactness, representativeness and research potential of the site, Hills of Gold IF 1 displays *low significance*.

Hills of Gold IF 2 was an isolated artefact located near a minor watercourse in the Peel River Valley. Site intactness and integrity were low due to existing disturbance and potential for associated subsurface deposit was assessed as low. The identified artefact is typical of archaeological sites in the region and is not rare. Based on the intactness, representativeness and research potential of the site, Hills of Gold IF 2 displays *low significance*.

Hills of Gold IF 3 was an isolated artefact located along the proposed overhead power line corridor. The area was cleared and displayed thin, rocky soils with evidence of disturbance from stock movement and erosion. Archaeological potential for subsurface deposit within the proposed overhead power line route was low. The site is representative of an isolated discard event on the more marginal steep ridgetop landscape and further research potential is low. Based on the intactness, representativeness and research potential of the site, Hills of Gold IF 3 displays *low significance*.

Peel River/Woodleys Creek PAD was a potential archaeological deposit located on an elevated crest landform located above the confluence of the Peel River and Woodley Creek, a west bank tributary which drains the western section of the Head of Peel valley. The crest containing the PAD is elevated above the floodplain of the river and subsurface disturbance appeared low. Archaeological potential for subsurface deposit within the PAD area is considered to be moderate due to low levels of apparent disturbance, favourable landform, aspect and environmental position close to the river but outside the flood zone, and above a key drainage confluence. Further investigation is likely to contribute to our understanding of Aboriginal landscape use in the area. Overall, Peel River/Woodleys Creek PAD was assessed as displaying *moderate archaeological potential*.

**Table 13. Assessed significance of Aboriginal archaeological sites/PAD within the study area**

Site Name	Site Feature	Assessed Significance/Potential
Hills of Gold AFT 1	Artefact	Moderate
Hills of Gold AFT 2	Artefact	Low
Hills of Gold AFT 3	Artefact	Moderate
Hills of Gold AFT 4	Artefact	Low
Hills of Gold IF 1	Artefact	Low
Hills of Gold IF 2	Artefact	Low
Hills of Gold IF 3	Artefact	Low
Peel River/Woodleys Creek PAD	Potential archaeological deposit (subsurface)	Moderate



## 9 The Proposed Activity and Impact Assessment

The Hills of Gold Wind Farm project is expected to have a power output of up to 420MW depending on the final design and subject to project approvals and in consultation with the community. The project will provide regional jobs and economic benefits for communities in and around Nundle, Hanging Rock and Crawney while producing enough electricity for approximately 185,000 typical homes on an average day. It is currently proposed that the wind farm would include development of the following infrastructure:

- Up to 70 wind turbines, mounted on tubular steel towers, with hardstand construction areas. It is currently proposed that each turbine will have a maximum tip height of 230m above ground level;
- Construction compound and temporary construction infrastructure, including concrete batching facilities;
- Electrical connections between wind turbines and the substations (likely to be underground, subject to constructability);
- Internal access tracks and upgrades to existing access roads, where required.
- A substation, control room and an operations and maintenance facility;
- Up to approximately 23km of high voltage, overhead power line with an estimated 60m wide easement, connecting the wind farm site to the TransGrid Liddell to Tamworth transmission line; and
- Connection infrastructure including a switching station and battery storage.

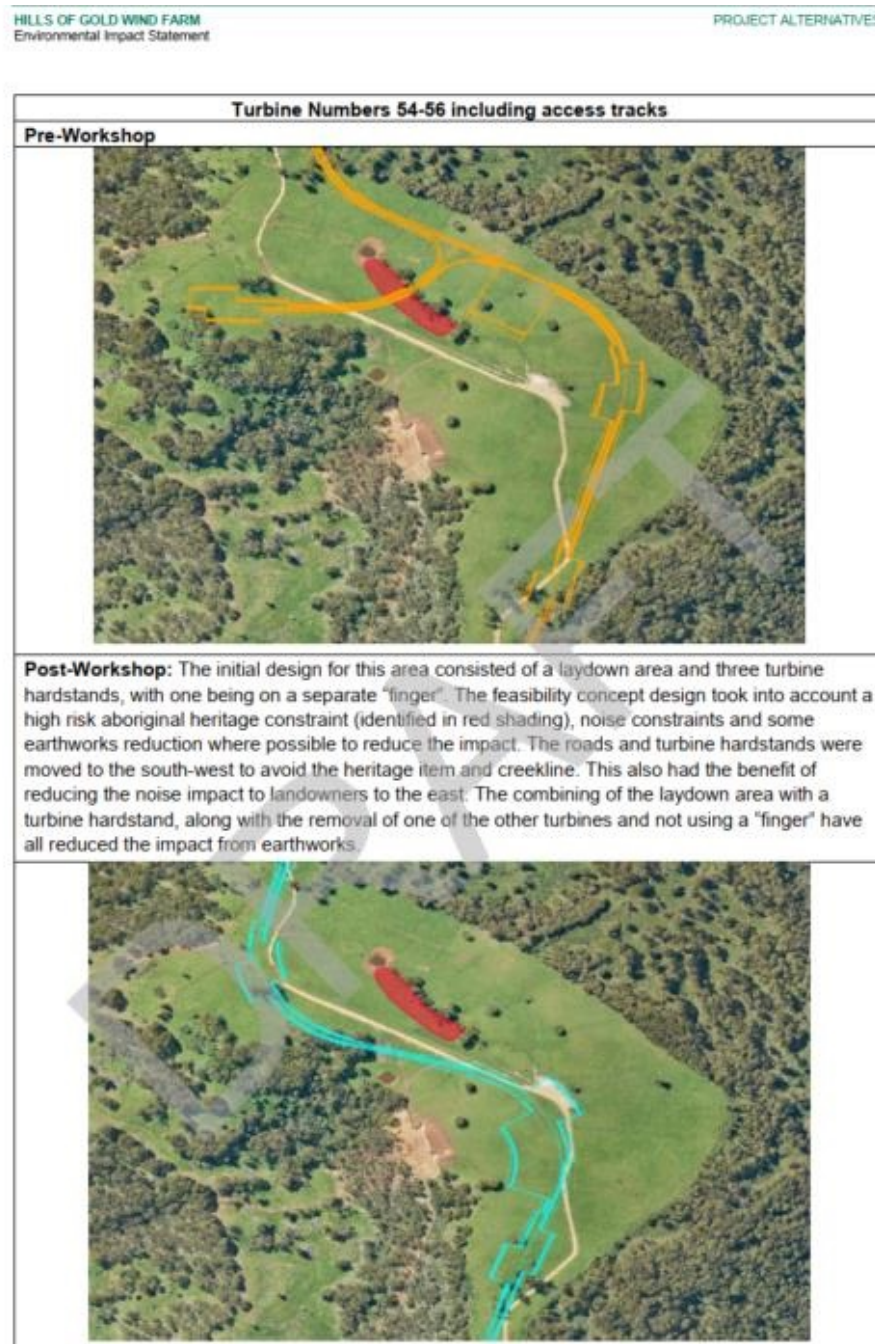
The project impact area for the purposes of this assessment comprises the 'study area' used throughout the CHAR:

- Wind Farm development corridor including proposed turbine locations WP1-WP70 and ancillary infrastructure (substation, operations and maintenance (O&M) facility)
- Proposed overhead power line route with 60m easement (30m either side), switching station and existing access tracks to transmission line
- Proposed access upgrades at Morrisons Gap Road, Head of Peel Road, Transverse Track, and Barry Road from Nundle to Hanging Rock - Devil's Elbow, and intersection adjustments at:
  - Lindsays Gap Road/Nundle Road
  - Happy Valley Road/Jenkins Street
  - Jenkins Street/Oakenville Street
  - Happy Valley Road/Barry Road
  - Oakenville Street/Barry Road
  - Lindsays Gap Road crossing of Goonoo Goonoo Creek

The assessment assumes that the entirety of the study area would be impacted by the project. A detailed infrastructure layout will be developed following the completion of further environmental and technical investigations and placement of some specific infrastructure elements (e.g. individual transmission towers along the overhead power line) would be determined at the detailed design stage; however a corridor-wide impact assessment presents the most comprehensive option for determining appropriate management and mitigation of Aboriginal heritage impacts, as potential changes within the assessed impact area prior to Project Approval are likely to represent avoidance or reduction of harm.

Wind Energy Partners has in iterations of the design process taken Aboriginal heritage into consideration by avoiding areas of moderately significant finds. This has included redesigning the proposed impact area at turbines 54-56 to avoid impacting identified site Hills of Gold AFT 1 on the main ridgeline. Figure 7 shows an extract from the draft EIS highlighting the changes made to the proposed works in this area. The redesign of this section of the proposal has avoided impacting on this moderately significant site.

Additional locations requiring minor transport infrastructure adjustments were also assessed for the project (Appendix E). No additional actual or potential impact to Aboriginal objects was identified at any of these locations (beyond that already proposed in Table 14).



**Figure 5-5 Workshop Outcome: realignment of access track, layout and removal of WTG**

**Figure 9-1. Extract from draft EIS showing impact avoidance measures at Hills of Gold AFT 1**

Early identification of Aboriginal heritage sites and areas of archaeological potential has and will continue to allow for more informed management of impacts and potential avoidance of sites and archaeologically sensitive areas (PAD) by the detailed design. Where required impacts are identified, these are likely to be unavoidable due to the scale of the project and complex environmental, topographical and logistical requirements. Appropriate management procedures and mitigation for likely unavoidable impacts have been developed and aim to minimise harm caused to Aboriginal heritage sites, as described in Sections 10-11.

Based on a corridor-wide impact assessment, proposed impacts to sites identified within the study area are detailed in Table 14 and shown in Figure 8.

**Table 14. Proposed impact to Aboriginal archaeological sites/PAD within the study area**

Site Name	Assessed Significance/Potential	Type/Degree of harm	Consequence of harm
Hills of Gold AFT 1	Moderate	None	N/A
Hills of Gold AFT 2	Low	Direct/Partial	Partial loss of value
Hills of Gold AFT 3	Moderate	Direct/Partial	Partial loss of value
Hills of Gold AFT 4	Low	Direct/Total	Total loss of value
Hills of Gold IF 1	Low	Direct/Total	Total loss of value
Hills of Gold IF 2	Low	Direct/Total	Total loss of value
Hills of Gold IF 3	Low	Direct/Total	Total loss of value
Peel River/Woodleys Creek PAD	Moderate	Direct/Partial	Partial loss of value



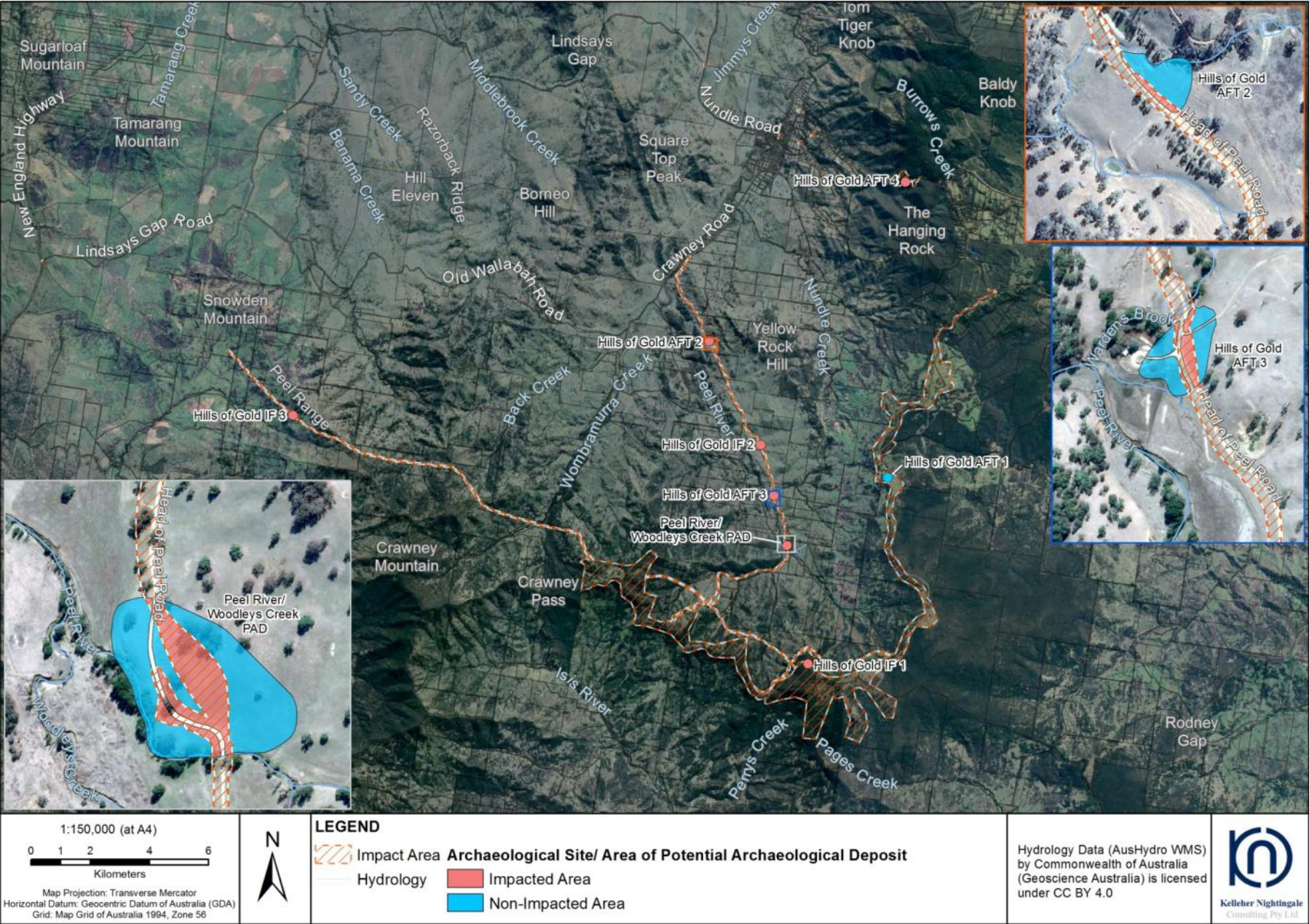


Figure 9-2. Proposed impact area and Aboriginal heritage



## 10 Mitigating Harm

All identified Aboriginal archaeological sites identified within the study area are being considered by Wind Energy Partners in relation to the development and ongoing design of the project. The first priority is to avoid harming Aboriginal cultural heritage where possible, which has been taken into consideration in the reduction of turbines and during a design workshop in which early heritage survey results were considered. Specifically, impact to moderately-significant site Hills of Gold AFT 1 has been avoided through redesign of infrastructure elements near the site location. Where possible, the construction footprint will continue to be limited as much as practical to reduce the cumulative harm to Aboriginal heritage.

Where impact to Aboriginal archaeological sites/PAD of moderate or higher archaeological significance/potential cannot be avoided, mitigative salvage excavation is required. The scientific value of archaeological sites is linked to the physical information the sites contain. The salvaged information will increase our understanding, strengthen our interpretations and improve ongoing and future management of Aboriginal heritage in the surrounding area. The spatial extent, presence of archaeological deposits and activities related to Aboriginal occupation at archaeological sites in the surrounding area are not yet fully understood due to limited archaeological investigations.

In this light, the project offers an opportunity to advance the interpretation and management of Aboriginal heritage of the surrounding area by contributing to the baseline of information available to future heritage assessments. Aboriginal stakeholders have previously expressed that all archaeological sites hold cultural value and significance, regardless of disturbance or low artefact densities, and the loss of intrinsic Aboriginal cultural value of impacted sites cannot be offset. However, information recovered from mitigation activities is equally as valuable to the contemporary Aboriginal community as it is to archaeologists as it expresses the overall cultural story of the area and has cultural and social value independent of its scientific significance.

Proposed mitigation and management measures have been developed for each site with the assumption they will be impacted by the project, however as noted previously, the detailed design phase may allow for avoidance of some impacts by sensitive placement of specific infrastructure for instances where this is practicable. Mitigation measures are not required where sites will not be impacted by the project.

Where impacts are likely to be unavoidable, mitigation measures have been developed based on environmental context and condition, background research, assessed site significance/potential and consultation with Aboriginal stakeholders. Proposed measures include the collection of recorded surface artefacts at low significance sites and the salvage excavation of sites/PAD which display moderate significance/potential. Both surface collection and salvage excavation should be undertaken with the involvement of Aboriginal stakeholders to enhance the archaeological interpretation with cultural knowledge, stories and values. Combining cultural and scientific values in this manner is a positive outcome for Aboriginal heritage.

Mitigation measures also include development of a policy for the ongoing management of Aboriginal heritage for the project (see Section 12) including procedures for unexpected heritage items such as Aboriginal objects, procedures for handling human remains, procedures for proposed changes to the Approved Project, and ongoing consultation and involvement of Aboriginal stakeholders.

Measures for mitigating harm to the sites if impact cannot be avoided are outlined in Table 15 below.

**Table 15. Mitigation measures for identified Aboriginal sites/PAD**

Site Name	Significance / Potential	Mitigating Harm
Hills of Gold AFT 1	Moderate	No impact
Hills of Gold AFT 2	Low	Project Approval from DPIE required. Collection of surface artefacts required prior to impact.
Hills of Gold AFT 3	Moderate	Project Approval from DPIE required. Archaeological salvage excavation c.25m <sup>2</sup> required prior to impact.
Hills of Gold AFT 4	Low	Project Approval from DPIE required. Collection of surface artefacts required prior to impact.
Hills of Gold IF 1	Low	Project Approval from DPIE required. Collection of surface artefacts required prior to impact.
Hills of Gold IF 2	Low	Project Approval from DPIE required. Collection of surface artefacts required prior to impact.
Hills of Gold IF 3	Low	Project Approval from DPIE required. Collection of surface artefacts required prior to impact.
Peel River/Woodleys Creek PAD	Moderate	Project Approval from DPIE required. Archaeological salvage excavation c. 50m <sup>2</sup> required prior to impact.

## 11 Management Outcomes

The following management outcomes will be implemented in accordance with the mitigation strategy for the proposal as outlined in Section 10 and the management policies in Section 12.

### 11.1 Mitigation through the collection of surface artefacts

Where impact to the sites listed in Table 16 cannot be avoided, sites will require collection of surface artefacts to mitigate the impact. The sites are of low assessed significance.

Collection can only occur after Project Approval from DPIE is obtained. The collection must be completed prior to any activities which may harm Aboriginal objects at the site location. An Aboriginal Site Impact Recording Form (ASIRF) must be completed and lodged with Heritage NSW within a reasonable time after the collection has been completed.

**Table 16. Aboriginal sites requiring mitigation (collection)**

Archaeological sites requiring mitigation (collection)	
Archaeological Sites (requiring the collection of surface artefacts)	Hills of Gold AFT 2 Hills of Gold AFT 4 Hills of Gold IF 1 Hills of Gold IF 2 Hills of Gold IF 3

### 11.2 Mitigation through archaeological salvage excavation

Where impact to the Aboriginal sites in Table 17 cannot be avoided, archaeological salvage excavation will be required as mitigation. The sites are of moderate assessed significance/potential. Salvage excavation can only occur after project approval is obtained. Salvage excavation must be completed prior to any activities which may harm Aboriginal objects at these locations.

Salvage excavation activities and scope would be dependent on the extent of the proposed impact and the archaeological content of the sites, up to 50m<sup>2</sup> at Peel River/Woodleys Creek PAD and up to 25m<sup>2</sup> at Hills of Gold AFT 3.

Salvage would be undertaken in partnership with registered Aboriginal stakeholders for the project. An Aboriginal Site Impact Recording Form (ASIRF) must be completed and lodged with Heritage NSW within a reasonable time after the salvage has been completed.

**Table 17. Aboriginal sites requiring mitigation (salvage excavation)**

Archaeological sites requiring mitigation (salvage excavation)	
Archaeological Sites (requiring archaeological salvage)	Hills of Gold AFT 3 Peel River/Woodleys Creek PAD



## 12 Management Procedures

### 12.1 Management Policy for Aboriginal Heritage

The policy for the management of Aboriginal heritage in relation to salvage activities and construction activities (or fencing, geotechnical investigations, minor clearing, establishing site compounds, adjustment to services/utilities etc.) is described below:

#### Responsibility for compliance with Management Policy

1. The Proponent must ensure all of its employees, contractors and subcontractors and agents are made aware of and comply with this management policy.
2. The Proponent must appoint a suitably qualified and experienced environmental manager who is responsible for overseeing the activities related to this management policy.
3. The Proponent must appoint a suitably qualified and experienced Archaeologist who is responsible for overseeing, for and on behalf of the Proponent, the archaeological activities relating to the project.

#### Operational constraints

4. Where the surface collection of artefacts or archaeological salvage excavation has been nominated for the impacted sites, no construction activities (or fencing, geotechnical investigations, minor clearing, establishing site compounds, adjustment to services/utilities etc.) can occur on the lands to be investigated until the relevant surface collection or salvage excavation at the nominated site has been completed.
5. Prior to the commencement of early works activity (e.g. fencing, minor clearing, establishing site compounds etc.) a construction heritage site map identifying the Aboriginal sites requiring the collection of surface artefacts, Aboriginal sites requiring salvage excavation, and Aboriginal sites to be avoided (for all sites in proximity to the project boundary) must be prepared. The construction heritage site map should be prepared to the satisfaction of Wind Energy Partners.
6. All employees, contractors, subcontractors and agents carrying out early works activities (e.g. fencing, minor clearing, geotechnical investigations, establishing site compounds etc) must undertake a Project induction (including the distribution of a construction heritage site map) to ensure that they have an understanding of and are aware of the Aboriginal heritage issues affecting the activity.

#### Areas of Aboriginal archaeological sites and objects to be impacted

7. Final impact to be confirmed at detailed design stage. Where impact cannot be avoided, mitigation is required for the sites as listed in Tables 16-17 of this report and in accordance with the Project Approval.

#### Human Remains

8. This management policy does not authorise any damage of human remains.
9. If potential human remains are disturbed the Proponent must follow the procedures outlined in section 12.2 below.

#### Mitigation activities

10. Surface collection where appropriate must be carried out in accordance with the recommendations specified in Section 11.1 of this report and in accordance with the Project Approval.
11. Archaeological salvage excavation where appropriate must be carried out in accordance with the recommendations specified in Section 11.2 of this report and in accordance with the Project Approval.

#### Involvement of Aboriginal groups and/or individuals

12. Opportunity must be provided to registered Aboriginal stakeholders to be involved in the following activities:
  - a. assist with the surface collection.
  - b. assist with archaeological salvage excavation.

#### Management of salvaged/collected Aboriginal objects

13. Department of Planning, Industry and Environment (DPIE), as the approval authority, will be consulted.
14. Registered Aboriginal stakeholders for the project will be consulted.
15. Requirement 26 "Stone artefact deposition and storage" in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (OEH 2010) must be complied with.
16. Management of the objects will comply with this requirement and conditions of Project Approval.

#### Reporting requirements

17. A written archaeological report documenting the salvage program must be provided to the Proponent within a reasonable time in accordance with the Project Approval following the completion of an archaeological salvage program for the project.
18. An Aboriginal Site Impact Recording Form (ASIRF) must be completed and lodged with Heritage NSW for each site impacted by the project within a reasonable time after the approved activities have been completed.

Notification and reporting about incidents that breach this management policy

19. Incident reporting requirements in accordance with the Project Approval is to include Aboriginal heritage.

## 12.2 Procedures for Handling Human Remains

- **Note that Project Approvals do not include the destruction of Aboriginal remains**

This section outlines the procedure for handling human remains in accordance with the Skeletal Remains – Guidelines for the Management of Human Skeletal Remains under the *Heritage Act 1977* (NSW Heritage Office 1998) and the Aboriginal Cultural Heritage Standards and Guidelines Kit (NPWS 1997). In the event that construction activity reveals possible human skeletal material (remains), the following procedure is to be followed:

1. as soon as remains are exposed, all work is to halt at that location immediately and the Project environmental manager on site is to be immediately notified to allow assessment and management;
  - i. stop all activities; and
  - ii. secure the site.
2. contact police, the discovery of human remains triggers a process which assumes that they are associated with a crime. The NSW Police retain carriage of the process until such time as the remains are confirmed to be Aboriginal or historic;
3. DPIE, as the approval authority, will be notified when human remains are found;
4. once the police process is complete and if remains are not associated with a contemporary crime contact DPIE. DPIE will determine the process, in consultation with Heritage NSW as appropriate;
  - i. if the remains are identified as Aboriginal, the site is to be secured and DPIE and all Aboriginal stakeholders are to be notified in writing. DPIE will act in consultation with Heritage NSW as appropriate. Heritage NSW will be notified in writing according to DPIE instructions; or
  - ii. if the remains are identified as non-Aboriginal (historical) remains, the site is to be secured and the DPIE is to be contacted. DPIE will act in consultation with the Heritage NSW as appropriate. Heritage NSW will be notified in writing according to DPIE instructions;
5. once the police process is complete and if the remains are identified as not being human work can recommence once the appropriate clearances have been given.

## 12.3 Procedures for Handling Unexpected Aboriginal Objects

This section outlines the procedure for handling unexpected archaeological sites and objects. In the event that construction activity reveals possible Aboriginal objects other than those identified in Tables 15-16 of this report, the following procedure is to be followed:

1. all work is to halt at that location immediately and the Project environmental manager on site is to be immediately notified to allow assessment and management;
  - i. stop all activities; and
  - ii. secure the site.
2. contact the project archaeologist to assess the find and determine if it is consistent with the Project Approval;
  - i. if the find is consistent, the archaeologist will allow work to continue
  - ii. if the find is inconsistent, Heritage NSW will be notified as soon as practical on 131555 providing any details of the Aboriginal object and its location. Work cannot recommence unless authorised in writing by Heritage NSW.

## 12.4 Procedure for proposed changes to Approved Projects

Wind Energy Partners recognises that during the construction of the project design alterations or other changes to the Approved Project may be required.

A proposed change to the Approved Project (such as an alteration of the current design, the location of ancillary facilities) within the project corridor may result in a:

- Reduced impact to Aboriginal cultural heritage; or an
- Increased impact to Aboriginal cultural heritage.

Note: the use of the word impact in this section is defined as an impact on the significance of Aboriginal cultural heritage rather than simply an increased physical impact.

To ensure consistency with the Approved Project and this document any change in the overall impact on Aboriginal cultural heritage will need to be considered. The process to determine consistency is outlined in section 12.4.1 below.

Where a proposed change to the Approved Project occurs outside of the project boundary considered for the EIS further heritage assessment will be required to determine if there would be an impact on Aboriginal cultural heritage and whether this represents a modification to the Approved Project (outlined below).

#### **12.4.1 Changes in heritage impact**

Where the Proponent seeks to make a change to the design and construction of the Approved Project which changes the assessed impact on Aboriginal cultural heritage the Proponent will need to prepare an assessment of the new impacts of this work in consultation with the appointed Archaeologist. The continued involvement of the Aboriginal stakeholders in this process is outlined in section 12.5.

- ♦ New impacts consistent with previously identified impacts

If a proposed change to the Approved Project is considered to have a neutral or lesser significant impact on Aboriginal cultural heritage than that identified in this document it would be considered a consistent impact.

If the proposed change is considered to be consistent with the Approved Project Wind Energy Partners may approve the change with no requirements to seek further approval. However, in certain circumstances, further consultation with Aboriginal stakeholders may still be required (see section 12.5 below).

- ♦ New impacts inconsistent with previously identified impacts

If a proposed change to the Approved Project is considered to have a more significant impact on Aboriginal cultural heritage than that identified in the EIS it would be considered an inconsistent impact.

If the proposed change is considered inconsistent with the assessed impact on Aboriginal cultural heritage, as detailed in the Project Approval, Wind Energy Partners would require an amendment to the mitigation measures agreed in this report. If this proposed change is considered inconsistent with the Approved Project Wind Energy Partners would require a modification of the Approved Project. Further consultation with Aboriginal stakeholders will be undertaken (see 12.5 below).

#### **12.5 Process for continued consultation with Aboriginal stakeholders**

The extent to which Wind Energy Partners will continue to consult with Aboriginal stakeholders is dependent upon the level of impact and whether the area was assessed as part of the EIS. The types of potential impacts are identified as reduced impacts, increased impacts or unknown impacts.

##### **a) Reduced or neutral impact**

If as a result of alterations to the project design (e.g. during detailed design phase) a previously identified impact to an Aboriginal heritage item is reduced or neutral then no further consultation is required.

If as a result of alterations to the project design an impact to an Aboriginal heritage item is proposed that results in a reduced impact on the overall heritage significance of the project area (i.e. the cumulative impact is reduced), then further consultation with Aboriginal stakeholders will be undertaken. This consultation may entail a site visit, phone call and phone log of comments received or the provision of a report for comment (10 working days).

##### **b) Increased Impact**

Where as a result of alterations to the project design an impact on Aboriginal heritage is considered to be greater than identified by the Approved Project further consultation will be undertaken. This consultation will entail either a site visit or the provision of a report for comment (10 working days).

##### **c) Unknown impacts: Assessment process**

Where a proposed change is in an area located outside of the project boundary assessed as part of the Approved Project the impact on Aboriginal cultural heritage is considered to be unknown. This area would require preliminary assessment to determine any impacts upon Aboriginal heritage. Should no impacts be identified then no consultation with Aboriginal stakeholders is required. Should potential impacts be identified consultation with Aboriginal stakeholders will be undertaken. This consultation will entail a site visit and the provision of a report for stakeholder comment (10 working days) detailing the impacts and mitigation strategies proposed.



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## **Appendix A AHIMS Extensive Search**





## Extensive search - Site list report

Client Service ID : 535821

[illegible]

Page 1 of 1

## Appendix B Advertisement for Registration of Interest

**Notice for Registration of Interest**

Wind Energy Partners Pty Ltd is proposing to construct and operate a wind farm south of Nundle, NSW. The proposal is known as the Hills of Gold Wind Farm project and is located across a prominent ridgeline that forms the boundary between the Tamworth Regional Local Government Area (LGA) and the adjacent Upper Hunter LGA. The proponent is Wind Energy Partners Pty Ltd (Jamie Chivers, Managing Director, 11 Lightcliff Ave, Lindfield NSW 2070).

The proposal is subject to assessment and approval under the NSW Environmental Planning and Assessment Act 1979. The purpose of this consultation is to inform the preparation of an Environmental Impact Statement for the proposal in accordance with the Department of Planning, Industry and Environment (DPIE) Secretary's Environmental Assessment Requirements issued on 22 November 2019 and supplementary SEARs issued on 18 February 2020.

Wind Energy Partners Pty Ltd invites Aboriginal groups and/or Aboriginal people who hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places at and around Nundle, NSW to register interest in a process of community consultation with the contact shown below (on behalf of Wind Energy Partners Pty Ltd):

Kelleher Nightingale Consulting  
Level 10, 25 Bligh Street  
Sydney NSW 2000  
phone 9232 5373

The closing date for registration is 4 May 2020.

Please be advised that in accordance with DPIE requirements, we are required to record the names and contact details of each Aboriginal person who has registered an interest in this project and provide a copy of that record to the relevant DPIE office and Local Aboriginal Land Council. If you are registering your interest, please let us know if you do not want your details forwarded to these organisations.

Appeared in: *Northern Daily Leader*, Monday 20 April 2020, page 13

## Appendix C Aboriginal Community Comments on draft CHAR

### Zac Thomas

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**From:** Darleen Johnson <murrabidgeemullangari@yahoo.com.au>  
**Sent:** Tuesday, 29 September 2020 1:02 PM  
**To:** Zac Thomas  
**Subject:** Re: 1849 Hills of Gold draft CHAR review - MBMAC  
**Attachments:** Hills of Gold\_CHAR\_Draft v0.2.pdf; 4.4\_MBMAC.pdf

Hi Zac,  
I have read the project information and ACHAR for the above project, I endorse the recommendations made.  
Kind regards  
Darleen Johnson

On Monday, 21 September 2020, 07:14:26 pm AEST, Cristany Milicich <[cristany.milicich@knconsult.com.au](mailto:cristany.milicich@knconsult.com.au)> wrote:

Dear Registered Aboriginal Stakeholder,

Please find attached a cover letter and a copy of the draft Aboriginal Cultural Heritage Assessment Report for the proposed Hills of Gold Wind Farm project near Nundle, NSW.

As a registered Aboriginal stakeholder for this project, we would like to invite you to review the report and provide us with any comments or feedback regarding the assessment and the Aboriginal cultural heritage significance of the study area/Aboriginal archaeological sites.

Please forward any comments to [zac.thomas@knconsult.com.au](mailto:zac.thomas@knconsult.com.au) or myself by 19 October 2020. Thank you and we look forward to hearing from you.

Kind regards,

**Cristany Milicich**

Project Archaeologist

**Kelleher Nightingale Consulting Pty Ltd**

Level 10, 25 Bligh St

Sydney NSW 2000

p 02 9232 5373

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<http://www.mailguard.com.au/mg>



**Zac Thomas**

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**From:** Aaron Talbott <Aaron@atgomilaroi.onmicrosoft.com>  
**Sent:** Monday, 5 October 2020 1:23 PM  
**To:** Zac Thomas  
**Subject:** CHAR DRAFT

Yaama Zac

In reading the CHAR draft report 7 sites were recorded. I am of the understanding that test pits will be required for further archaeological investigation and due to the minimal historical field investigations, I am asking for further investigation with other RAP's to fulfil the requirements of an ethical investigation. Salvaged will be required and AT Gomilaroi Cultural Consultancy would request to be involved in any further works. I am a native title claimant for the gomeroi claim and have cultural ties to the area through ancestral ceremony and trade.

Justification for further investigation is the statement in the CHAR draft report which states the whole footprint of the Hills of Gold Wind Farm will be impacted so ATGCC suggests more field investigations and test pitting and a cultural values assessment of the whole area. The CHAR draft suggests 2 PAD areas for further investigation but ATGCC identifies the requirement to expand this PAD potential to more through more thorough field investigations and test pitting.

These areas were generally pathways and semi occupation as constant areas as water was a continual presence. Semi occupation as in the winter months they would join tribes on the coast or to the west to avoid the winter.

I appreciate your response.

Regards

Aaron Talbott  
AT Gomilaroi Cultural Consultancy  
M 0457 601 685

Sent from [Mail](#) for Windows 10

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**Cristany Milicich**

**From:** philip khan <philipkhan.acn@live.com.au>  
**Sent:** Wednesday, 14 October 2020 9:24 AM  
**To:** Cristany Milicich  
**Subject:** RE: 1849 Hills of Gold draft CHAR review - KYWG

Hi Cristany,

I have read your report & agree with your findings & both surface collection & salvage excavations should be undertaken as this whole area is highly significant to us Aboriginal People. I must say you have done a great job in recording this project which is a large area & there is the possibility of finding burial sites as well. Also the Stakeholders to be included in the following activities,

- Assist with surface collection
- Assist with salvage excavations
- And all artefacts that have been recovered must be handed over to the local Land Council and recorded

Kind Regards  
Phil Khan



Sent from [Mail](#) for Windows 10

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**From:** [Cristany Milicich](#)  
**Sent:** Monday, 21 September 2020 7:12 PM  
**To:** '[philipkhan.acn@live.com.au](mailto:philipkhan.acn@live.com.au)'  
**Subject:** 1849 Hills of Gold draft CHAR review - KYWG

Dear Registered Aboriginal Stakeholder,

Please find attached a cover letter and a copy of the draft Aboriginal Cultural Heritage Assessment Report for the proposed Hills of Gold Wind Farm project near Nundle, NSW.  
As a registered Aboriginal stakeholder for this project, we would like to invite you to review the report and provide us with any comments or feedback regarding the assessment and the Aboriginal cultural heritage significance of the study area/Aboriginal archaeological sites.

Please forward any comments to [zac.thomas@knconsult.com.au](mailto:zac.thomas@knconsult.com.au) or myself by 19 October 2020. Thank you and we look forward to hearing from you.

Kind regards,

## Appendix D Consultation Log

### RECORD OF ABORIGINAL COMMUNITY CONSULTATION AND CONSULTATION LOG

Aboriginal cultural heritage consultation requirements for proponents 2010 (OEH)

Hills of Gold Wind Farm, Nundle NSW

Step	Task Requirement	Action	Outcome
4.1.1	Identify if native title exists in relation to the project area.	<p>Conducted National Native TitleVision (NNTV) search on 19/03/2020.</p> <p>Wrote to National Native Title Tribunal (NNTT) for a list of registered native title claimants, native title holders and registered Indigenous Land Use Agreements (letter dated 20/03/2020).</p>	<p>NNTV search showed study area falls within boundaries of a registered Native Title Claim, NC2011/006, with 'Gomerioi People' listed as Applicant (19/03/2020)</p> <p>23/03/2020 NNTT: Provided overlap reports for Tamworth and Upper Hunter LGAs, which confirmed the presence of the Gomerioi People claim. No native title holders or registered Indigenous Land Use Agreements within project area.</p>
4.1.2	<p>Ascertain, from reasonable sources of information, the names of Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places.</p> <p>Compile a list of Aboriginal people who may have an interest for the proposed project area and hold knowledge relevant to determining the cultural significance of Aboriginal objects and/or places</p>	<p>Wrote to various government agencies to obtain names and contact details of parties that may have an interest or hold cultural knowledge for the project area (letters and emails dated 20/03/2020):</p> <p>Tamworth Regional Council (TRC);</p> <p>Upper Hunter Shire Council (UHSC);</p> <p>Hunter Central Coast Branch EPRG, Department of Planning, Industry and Environment (DPIE);</p> <p>North West Branch EPRG, DPIE;</p> <p>Nungaroo Local Aboriginal Land Council (NLALC);</p> <p>Wanaruah Local Aboriginal Land Council (WLALC);</p> <p>The Registrar, <i>Aboriginal Land Rights Act 1983</i> for a list of Aboriginal owners (ORALRA);</p> <p>The National Native Title Tribunal (NNTT) for a list of registered native title claimants, native title holders and registered Indigenous Land Use Agreements;</p> <p>Native Title Services Corporation (NTSCorp);</p> <p>Hunter Branch Local Land Services (LLS), and;</p> <p>North West Branch LLS;</p> <p>(Letters dated 20/03/2020).</p>	<p>Responses received from:</p> <p>23/03/2020 NNTT: Provided overlap reports for Tamworth and Upper Hunter LGAs, which confirmed the presence of the Gomerioi People claim. No native title holders or registered Indigenous Land Use Agreements within project area.</p> <p>01/04/2020 DPIE: Provided a consolidated response from both Hunter Central Coast and North West branches. Provided a list of Aboriginal stakeholders known to DPIE that may have an interest in the project, for both Tamworth Regional and Upper Hunter LGAs. Noted that proponents must still advertise for interested parties</p> <p>03/04/2020 NTSCorp: Advised they had forwarded the request to the Gomerioi People Native Title Applicant and would provide names of individuals. Requested registration of the Gomerioi People Applicant group as a RAP, with correspondence to be sent c/- NTSCorp.</p> <p>UHSC 03/04/2020: Provided a list of people/organisations known to UHSC who may have an interest in the project and hold relevant cultural knowledge.</p> <p>WLALC 27/03/2020: Provided a list of people/organisations known to WLALC who may have an interest in the project and hold relevant cultural knowledge. Registered interest as a stakeholder.</p>



Step	Task Requirement	Action	Outcome
4.1.3	<p>Written notification and advertisement:</p> <p>Write to the Aboriginal people whose names were obtained in step 4.1.2 and the relevant LALC(s) to notify them of the proposed project.</p> <p>Place a notice in the local newspaper circulating in the general location of the proposed project, explaining the project and its exact location.</p> <p>Notification by letter and newspaper must include:</p> <p>(a) the name and contact details of the proponent</p> <p>(b) a brief overview of the proposed project that may be the subject of an application for an AHIP, including the location of the proposed project</p> <p>(c) a statement that the purpose of community consultation with Aboriginal people is to assist the proposed applicant in the preparation of an application for an AHIP and to assist the Director-General of OEH in his or her consideration and determination of the application</p> <p>(d) an invitation for Aboriginal people who hold cultural knowledge relevant to</p>	<p>Notification letters/emails (dated 20/04/2020) and invitation to register interest sent to people and groups identified in step 4.1.2, including:</p> <p>A1 Indigenous Services</p> <p>Aliera French Trading</p> <p>AGA Services</p> <p>Amanda Hickey Cultural Services</p> <p>Alison Sampson</p> <p>Aboriginal Native Title Consultants</p> <p>AT Gomilaroi Cultural Consultancy</p> <p>Barry French</p> <p>Black Creek Aboriginal Corporation</p> <p>Brent Mathews</p> <p>Bullen Bullen</p> <p>Corroboree Aboriginal Corporation</p> <p>Carrawonga Consultants</p> <p>Cacatua Culture Consultants</p> <p>Cacatua General Service</p> <p>Christine Archbold</p> <p>Clifford Mathews</p> <p>Crimson-Rosie Matthews</p> <p>Culturally Aware</p> <p>Darrell Mathews</p> <p>Divine Diggers Aboriginal Cultural Consultants</p> <p>DFTV Enterprises</p> <p>Didge Ngunawal Clan</p> <p>DRM Cultural Management</p> <p>Deslee Talbott Consultants</p> <p>Esther Tighe</p> <p>Giwiirr Consultants</p> <p>Gomeroi Murri Ganuurr Yuuray Wadi Palinka</p> <p>Griffiths Group</p> <p>Gidawaa Walang &amp; Barkuma Neighbourhood Centre Inc.</p> <p>Hunters &amp; Collectors</p> <p>Hazel Collins</p> <p>Paulette Ryan</p> <p>Hunter Valley Aboriginal Corporation</p> <p>Hunter Valley Cultural Consultants</p> <p>Hunter Valley Cultural Surveying</p> <p>Hunter Valley Natural &amp; Cultural Resources</p> <p>Indigenous Learning</p> <p>Indigenous Outcomes</p> <p>J&amp;A Leonardi</p> <p>Jarban &amp; Mugrebea</p>	<p>Responses for registration of interest from written notification and advertisement were received from:</p> <p>Wanaruah LALC (email dated 27/03/2020)</p> <p>Gomeroi People Native Title Claimant (email dated 03/04/2020)</p> <p>Didge Ngunawal Clan (email dated 20/04/2020)</p> <p>One Aboriginal stakeholder who chose to withhold their details (email dated 20/04/2020)</p> <p>Nunawanna Aboriginal Corporation (email dated 20/04/2020)</p> <p>Ungooroo Aboriginal Corporaiton (email dated 21/04/2020)</p> <p>Warragil Cultural Services (email dated 24/04/2020)</p> <p>Cacatua General Services (Cacatua Culture Consultants) (email dated 25/04/2020)</p> <p>AGA Service (AGA Culture Services ) (email dated 25/04/2020)</p> <p>Richard Slater (email dated 26/04/2020)</p> <p>A1 Indigenous Services (email dated 26/04/2020)</p> <p>Nungaroo LALC;</p> <p>Paul Frazer (phone call 27/04/2020)</p> <p>AT Gomilaroi Cultural Consultancy (email dated 27/04/2020)</p> <p>Culturally Aware (email dated 28/04/2020)</p> <p>Aliera French Trading (email dated 30/04/2020)</p> <p>Murra Bidgee Mullangari Aboriginal Corporation (phone call 30/04/2020)</p> <p>Muragadi Heritage Indigenous Corporation (phone call 30/04/2020)</p> <p>Kamilaroi Yankuntjatjara Working Group (email dated 30/04/2020)</p>

Step	Task Requirement	Action	Outcome
4.1.3 contd.	determining the significance of Aboriginal object(s) and/or place(s) in the area of the proposed project to register an interest in a process of community consultation with the proposed applicant regarding the proposed activity (e) a closing date for the registration of interests.	<p>Jeff Matthews</p> <p>JLC Cultural Services</p> <p>John Matthews</p> <p>Joshua Matthews</p> <p>Jumbunna Traffic Management Group Pty Ltd</p> <p>Justin Matthews</p> <p>Kayaway</p> <p>Kawul Cultural Services</p> <p>Kevin Sampson</p> <p>Kauma Pondee Inc.</p> <p>Luke Cameron Cultural Management</p> <p>Len Waters</p> <p>Lower Hunter Aboriginal Incorporated</p> <p>Lower Hunter Wonnarua Cultural Services</p> <p>Lloyd Matthews</p> <p>Lorraine Towney</p> <p>Lower Wonnarua Tribal Consultancy Pty Ltd</p> <p>Mandy Howard</p> <p>Mavonia Welsh</p> <p>Murra Bidgee Mullangari Aboriginal Corporation</p> <p>Muswellbrook Cultural Consultants</p> <p>Myland Cultural &amp; Heritage Group</p> <p>ME Griffiths Cultural Management</p> <p>Michael Green Cultural Heritage Consultant</p> <p>Michelle Saunders</p> <p>Mingga Consultants</p> <p>Moreeites</p> <p>Mooki Plains Management</p> <p>Mooki River Consultants</p> <p>Murrawan Cultural Consultants Pty Ltd</p> <p>Nunawanna Aboriginal Corporation</p> <p>Nyakka Aboriginal Corporation</p> <p>Ngarramang-Kuri Aboriginal Culture &amp; Heritage Group</p> <p>Nungaroo LALC</p> <p>Paul Moodie</p> <p>Rebecca Lester</p> <p>Richard Slater</p> <p>Rick Slater</p> <p>Roger Matthews Consultancy</p> <p>Rodney Matthews</p> <p>Ron Smith</p> <p>Rona Slater</p> <p>Roslyn Smith</p>	<p>Galamaay Cultural Consultants (email dated 30/04/2020)</p> <p>Tocomwall (email dated 01/05/2020)</p> <p>Wurrumay Pty Ltd (email dated 04/05/2020)</p> <p>Kevin Smith (email dated 06/05/2020)</p> <p>Malcolm Talbot (email dated 07/05/2020)</p> <p>Garry Binge (email dated 07/05/2020)</p> <p>Ian Worley (phone call 14/05/2020)</p> <p>Yinarr Cultural Services (email dated 16/05/2020)</p>

Step	Task Requirement	Action	Outcome
4.1.3 contd.		<p>Scott Smith</p> <p>St Clair Singleton Aboriginal Corporation</p> <p>Smith Dhagaans Cultural Group</p> <p>Steve Talbott</p> <p>Steven Saunders</p> <p>T&amp;G Culture Consultants</p> <p>Thawan Heritage Consultant</p> <p>Tracy Woltley</p> <p>Trevor Robinson</p> <p>Ungooroo Aboriginal Corporation</p> <p>Ungooroo Cultural &amp; Community Services</p> <p>Upper Hunter Heritage Consultants</p> <p>Upper Hunter Wonnarua Council Inc</p> <p>Valley Culture</p> <p>Valley Elm Corp</p> <p>Wanaruah Custodians</p> <p>Warren Taggrt</p> <p>Warrigil Cultural Services</p> <p>Wattaka Cultural Consultancy Service</p> <p>Wonnarua Culture Heritage</p> <p>Wallagan Cultural Services</p> <p>Wonnarua Elders Council</p> <p>Waabi Gabinya Cultural Consultancy</p> <p>Widescope Indigenous Group</p> <p>Wanaruah LALC</p> <p>Wonnarua Nation Aboriginal Corporation</p> <p>Kawul Pty Ltd t/a Wonn1 Sites</p> <p>Des Hickey, Wonnarua Traditional Custodian</p> <p>Wurrumay Consultants</p> <p>Wattaka Wonnarua CC Service</p> <p>Yarrawalk Tocomwall</p> <p>Yinarr Cultural Services</p> <p>Advertisement inviting people to register interest in consultation published in the <i>NORTHERN DAILY LEADER</i> Monday, April 20, 2020.</p> <p>Advertisement attached as CHAR Appendix B.</p> <p>Closing date for registration of interest was 04/05/2020</p>	
4.1.4	A minimum of 14 days from the date the letter was sent or notice published in the newspaper to register an interest.	<p>Closing date for registration of interest included in the notification letters and notice in the newspaper was at least 14 days from the date the letters were sent and notice appeared in the newspaper.</p>	Copy of notification letters and newspaper advertisement attached.



Step	Task Requirement	Action	Outcome
		Closing date was 04/05/2020	
4.1.5	Must advise Aboriginal people who are registering an interest that their details will be forwarded to OEH and the LALC unless they specify that they do not want their details released.	Groups informed by letters (dated 20/04/2020) or verbally over the phone if they registered by phone. Records of Discussions were made to record these phone calls.	One of the registered Aboriginal stakeholder groups specified that they did not want their details to be released.
4.1.6	Make a record of the names of each Aboriginal person who registered an interest. Provide a copy of that record and copy of the notification from step 4.1.3 to the relevant OEH EPRG regional office and LALC	List of registered stakeholders compiled.  One of the registered Aboriginal stakeholder groups specified that they did not want their details to be released.	Letters sent to DPIE, Wanaruah and Nungaroo LALCs with list of registered Aboriginal stakeholders (letters sent 05/05/2020).
4.1.7	LALCs holding cultural knowledge relevant to determining the significance of Aboriginal objects and places in the proposed project area who wish to register an interest to be involved in consultation must register their interest as an Aboriginal organisation rather than individuals.	Both Nungaroo and Wanaruah LALCs registered interest to be involved in consultation.	Both LALCs registered interest as an organisation.  Both provided contact details for the LALC and the name of a LALC representative to act as contact person ().
4.1.8	Where an Aboriginal organisation representing Aboriginal people who hold cultural knowledge has registered an interest, a contact person for that organisation must be nominated.  Aboriginal cultural knowledge holders who have registered an interest may indicate they have appointed a representative to act on their behalf. Where this occurs, the registered Aboriginal party must provide written confirmation and contact details of those individuals to act on their behalf.	Responses received from organisations and individuals registering interest in the project.  Contact details and names of representatives were also provided.	Aboriginal stakeholders have registered as an organisation name or as individuals.  Contact details and names of representatives for the organisations were also provided and confirmed during the registration of interest process.
4.2	Presentation of information about the proposed project	Information regarding the proposed project provided throughout the consultation process including letters/emails sent on 20/04/2020 and 05/05/2020.	No specific of formal responses to the provision of project information.

Step	Task Requirement	Action	Outcome
		Informal discussions also held during the registration of interest period.	
4.3.1-4.3.2	Notification of proposed assessment methodology	<p>Copy of the proposed assessment methodology sent to all registered stakeholders with an invitation to provide comment (letters/emails dated 05/05/2020).</p> <p>Stakeholders were invited to review and provide feedback (review period of 28 days, closing on 02/06/2020). An invitation was extended for Aboriginal cultural knowledge holders and stakeholders to provide comments on the proposed cultural heritage assessment methodology, including any protocols regarding the gathering of information and any matters such as issues/areas of cultural significance that might affect, inform or refine the assessment methodology</p>	<p>Formal responses to the proposed assessment methodology were received from A1 Indigenous Services (A1), AT Gomilaroi Cultural Consultancy (ATGCC), Culturally Aware, Didge Ngunawal Clan (DNC), Garry Binge, Galamaay Cultural Consultants (Galamaay), Gomeroi People Native Title Claimant (Gomeroi People NTC), Kamilaroi-Yankuntjatjara Working Group (KYWG), Murra Bidgee Mullangari Aboriginal Corporation (MBMAC), Muragadi Heritage Indigenous Corporation (MHIC), Warragil Cultural Services (Warragil) and Wurrumay Pty Ltd (Wurrumay).</p> <p>A1 stated they had read and reviewed the document and supported the proposed assessment methodology (email dated 18/05/2020).</p> <p>ATGCC noted the importance of integrating a cultural assessment of proposed impact locations, and suggested the addition of a cultural values footprint for the whole of the project area. ATGCC also noted the cultural importance of ecological and fauna studies from an Aboriginal cultural perspective (email dated 25/05/2020).</p> <p>Culturally Aware requested clarification on the extent to which the project crossed into the Wonnarua area of the Upper Hunter and was provided with a project map. Further discussion confirmed their organisation's interest for the portion on the Wonnarua side. Culturally Aware stated they supported the methodology and had no issues with the proposed approach (emails dated 6-18/05/2020).</p> <p>DNC stated they were happy to go ahead with the proposed approach (email dated 05/05/2020).</p> <p>Garry Binge confirmed his strong ties to the area, noting his personal and family history in the area including his grandparents, and also noted a connection to the Gomeroi People NTC (phone call 13/05/2020).</p>

Step	Task Requirement	Action	Outcome
4.3.1- 4.3.2 contd.			<p>Galamaay stated they supported the proposed assessment methodology for the project (email dated 07/05/2020).</p> <p>NTSCorp confirmed registration arrangements for the Gomeroi People NTC group and requested copies of the methodology be sent on to the identified individuals (Gary Binge, Malcolm Talbot and Kevin Smith). All were provided with the methodology (email 06/05/2020 and phone call 07/05/2020).</p> <p>KYWG confirmed their interest in the project area and provided additional cultural information on the Kamilaroi connections of the area (see Section 6.6, email dated 21/05/2020). KYWG also suggested some archaeological excavation might be required.</p> <p>MBMAC stated they had read and reviewed the proposed assessment methodology, and endorsed the assessment recommendations made (email dated 11/05/2020).</p> <p>MHIC stated their agreement with the recommendations of the project methodology (email dated 12/05/2020).</p> <p>Warragil stated their acceptance and agreement with the proposed assessment methodology (email dated 02/06/2020).</p> <p>Wurrumay stated they had read and reviewed the proposed assessment methodology and agreed with it (email dated 02/06/2020).</p>
4.3.3	Gathering information about cultural significance	<p>Aboriginal stakeholders invited to provide information about cultural significance of the area (letters dated 20/04/2020, 05/05/2020, and 21/09/2020).</p> <p>Previous comments recognised and additional comments sought.</p>	<p>Throughout the assessment process, cultural knowledge regarding the Aboriginal cultural/social values of the study area and identified archaeological sites was sought from registered stakeholders.</p> <p>Cultural values for the area identified by stakeholders are described in detail in section 6.6 of the CHAR.</p>
4.4	Review of draft cultural heritage assessment report	<p>Draft Cultural Heritage Assessment Report (CHAR) provided to registered Aboriginal stakeholders for review and comment (letters and emails dated 21/09/2020).</p> <p>Stakeholders were invited to comment on the cultural significance of the study area and identified Aboriginal heritage and archaeological sites. Stakeholders</p>	<p>Responses to the draft CHAR were received from Ian Worley, MBMAC, ATGCC and KYWG.</p> <p>Ian Worley contacted KNC to discuss a potential axe grinding groove site near the study area (email dated 22/09/2020). Ian indicated the potential site was located on the DAG Sheep Station, a property managed by John Krsulja at Crawney Road. Ian</p>



Step	Task Requirement	Action	Outcome
4.4 contd.		<p>were encouraged to contact KNC id they wished to discuss the project and findings further.</p> <p>A 28 day review and comment period was provided (closure of comment period on 21/09/2020).</p>	<p>expressed that the site may be significant and should be considered as the proposed development “will impact the entire feel of the area”. Ian provided KNC with contact details for John Krsulja.</p> <p>KNC contacted John to discuss the potential site and to confirm its location (phone calls 07/10/2020 and 08/10/2020). John confirmed it is located on the DAG Sheep Station property at Wombramurra and provided several photographs. The location is approximately 750 metres east of Crawney Road and the DAG complex. It is not in proximity to the current study area. John also noted that the general area was considered significant as it was a ‘meeting area’ for three different Aboriginal groups who had their traditional boundaries in this region.</p> <p>MBMAC acknowledged receipt of the draft CHAR and stated they had read and reviewed the information. MBMAC stated they endorsed the recommendations for Aboriginal heritage (email dated 29/09/2020).</p> <p>ATGCC affirmed their representative’s strong cultural ties to the area through ancestral ceremony and trade. ATGCC provided cultural knowledge stating that the areas generally functioned as pathways and were not occupied on a permanent basis, with people from the region moving towards the coast or further west during the winter months to avoid the harsh weather. ATGCC agreed with the requirement for further archaeological investigation of the identified archaeological sites, particularly given the assumed totality of impact. ATGCC suggested more field investigations including testing and salvaging of the sites, as well as a cultural values assessment (email dated 14/10/2020).</p> <p>KYWG stated they had read and reviewed the report and agreed with the findings and recommendations (email dated 14/10/2020). KYWG reiterated that the area was highly significant to Aboriginal people and agreed with the proposed surface artefact collection and salvage excavations for the identified sites. KYWG also expressed their approval for the report as a whole, noting that</p>

Step	Task Requirement	Action	Outcome
4.4 contd			<p>it was a large area, and the quality of the recordings. KYWG recommended stakeholder involvement in all aspects of potential fieldwork including assisting with the surface artefact collection and salvage excavation program. KYWG also indicated their preference for recovered artefacts to be subject to detailed recording and then transferred to the care of the LALC.</p> <p>Responses received are attached in full in Appendix C of the CHAR.</p>

## Appendix E Minor transport infrastructure adjustments

Additional locations requiring minor transport infrastructure adjustments were also assessed for the project. These adjustments are required in order to facilitate transport of the physical turbine infrastructure from Newcastle to the study area. Assessment comprised background information review (AHIMS database searches) and visual inspection where required. A list of the additional locations and the assessment findings is provided in the Table below. Figures E1-E2 show the general route, with the following Map series 1-10 showing specific work locations that were subject to assessment. Additional AHIMS searches conducted for the adjustment areas are also attached.

Item	Name	Figure	Aboriginal heritage assessment
M4	Mayfield #4 Port storage area	Map 1	No Aboriginal heritage impact identified at this location
M4	Mayfield #4 Berth	Map 1	No Aboriginal heritage impact identified at this location
BU1	Lindsay's Gap Road over Goonoo Goonoo Creek Bridge at Garoo.	Map 5	No Aboriginal heritage impact identified at this location
BU2	Middlebrook Creek Bridge	Map 5	No Aboriginal heritage impact identified at this location
BU3	Head of Peel Road at Nundle Image 13	Map 10	Located within extent of Peel River/Woodleys Creek PAD - Refer CHAR Tables 15 & 17 for mitigation requirements prior to works in the area
CC1	Creek Crossing 1	Map 10	No Aboriginal heritage impact identified at this location
CC2	Creek Crossing 2	Map 10	No Aboriginal heritage impact identified at this location
GU1	Head of Peel Road at Nundle Image 3	Map 9	No Aboriginal heritage impact identified at this location
GU1	Head of Peel Road at Nundle Image 10	Map 9	No Aboriginal heritage impact identified at this location
GU1	Head of Peel Road at Nundle Image 8	Map 9	No Aboriginal heritage impact identified at this location
GU2	Head of Peel Road at Nundle Image 9	Map 9	Located in proximity to Hills of Gold IF 2 – Refer CHAR Tables 15 & 16 for mitigation requirements prior to works in the area
GU3	Head of Peel Road at Nundle Image 13	Map 10	Located within extent of Peel River/Woodleys Creek PAD - Refer CHAR Tables 15 & 17 for mitigation requirements prior to works in the area
GU4	Head of Peel & Kirks Road intersection	Map 10	No Aboriginal heritage impact identified at this location
RU1	0.0 Km: Mayfield #4 onto Selwyn Street at Mayfield	Map 1	No Aboriginal heritage impact identified at this location
RU1	0.0 Km: Mayfield #4 onto Selwyn Street at Mayfield	Map 1	No Aboriginal heritage impact identified at this location
RU11	168.1 Km: Wybong Road onto Kayuga Road at Muswellbrook	Map 4	No Aboriginal heritage impact identified at this location
RU12	174.0 Km: Ivermein Street onto Dartbrook access Road at Muswellbrook	Map 4	No Aboriginal heritage impact identified at this location
RU12	174.0 Km: Ivermein Street onto Dartbrook access Road at Muswellbrook	Map 4	No Aboriginal heritage impact identified at this location
RU13	174.8 Km: Dartbrook access Road at Muswellbrook	Map 4	No Aboriginal heritage impact identified at this location
RU14	177.0 Km: Dartbrook access Road onto the New England Highway at Muswellbrook	Map 4	No Aboriginal heritage impact identified at this location
RU15	Right hand turn from the New England Highway onto Lindsay's Gap Road	Map 5	No Aboriginal heritage impact identified at this location
RU16	Right hand turn from Lindsay's Gap Road onto Nundle Road.	Map 6	No Aboriginal heritage impact identified at this location
RU17	Left hand turn from Oakenville Street onto Old Hanging Rock Road.	Map 7	No Aboriginal heritage impact identified at this location
RU18	Barry's Gap Road from Nundle to Hanging Rock - Image 6	Map 8	Located in proximity to Hills of Gold AFT 4 – Refer CHAR Tables 15 & 16 for mitigation requirements prior to works in the area
RU18	TTPP Devils Elbow Options	Map 8	Located in proximity to Hills of Gold AFT 4 – Refer CHAR Tables 15 & 16 for mitigation requirements prior to works in the area



RU19	Barry's Gap Road from Nundle to Hanging Rock - Image 7	Map 8	No Aboriginal heritage impact identified at this location
RU2	1.3 Km: Selwyn Street onto Industrial Drive, via George Street at Mayfield	Map 1	No Aboriginal heritage impact identified at this location
RU20	TTPP Morrisons Gap Road	Map 8	No Aboriginal heritage impact identified at this location
RU21	Left hand turn from Old Hanging Rock Road onto Happy Valley Road.	Map 7	No Aboriginal heritage impact identified at this location
RU21	Left hand turn from Old Hanging Rock Road onto Happy Valley Road.	Map 7	No Aboriginal heritage impact identified at this location
RU21	Left hand turn from Old Hanging Rock Road onto Happy Valley Road.	Map 7	No Aboriginal heritage impact identified at this location
RU22	Left hand turn from Happy Valley Road onto Jenkins Road.	Map 7	No Aboriginal heritage impact identified at this location
RU22	Left hand turn from Happy Valley Road onto Jenkins Road.	Map 7	No Aboriginal heritage impact identified at this location
RU22	Left hand turn from Happy Valley Road onto Jenkins Road.	Map 7	No Aboriginal heritage impact identified at this location
RU23	Left hand turn from Crawney Road onto Head of Peel Road.	Map 9	No Aboriginal heritage impact identified at this location
RU23	Left hand turn from Crawney Road onto Head of Peel Road.	Map 9	No Aboriginal heritage impact identified at this location
RU3	5.5 Km: Industrial Drive onto Maitland Road at Mayfield West	Map 1	No Aboriginal heritage impact identified at this location
RU4	28.7 Km: John Renshaw Drive onto the Hunter Expressway at Buchanan	Map 1	No Aboriginal heritage impact identified at this location
RU5	67.3 Km: New England Highway onto Golden Highway at Whittingham	Map 2	No Aboriginal heritage impact identified at this location
RU7	107.0 Km: Golden Highway through Jerrys Plains	Map 2	No Aboriginal heritage impact identified at this location
RU7	107.0 Km: Golden Highway through Jerrys Plains	Map 2	No Aboriginal heritage impact identified at this location
RU8	141.9 Km: Golden Highway intersection with Denman Road at Denman	Map 3	No Aboriginal heritage impact identified at this location
RU9	149.0 Km: Denman Road onto Bengalla Road at Muswellbrook	Map 3	No Aboriginal heritage impact identified at this location
RU9	149.0 Km: Denman Road onto Bengalla Road at Muswellbrook	Map 3	No Aboriginal heritage impact identified at this location
TTPP1	TTPP Oakenville St to Jenkins St options	Map 6	No Aboriginal heritage impact identified at this location
TTPP2	TTPP Gill St to Crawney Road	Map 6	No Aboriginal heritage impact identified at this location



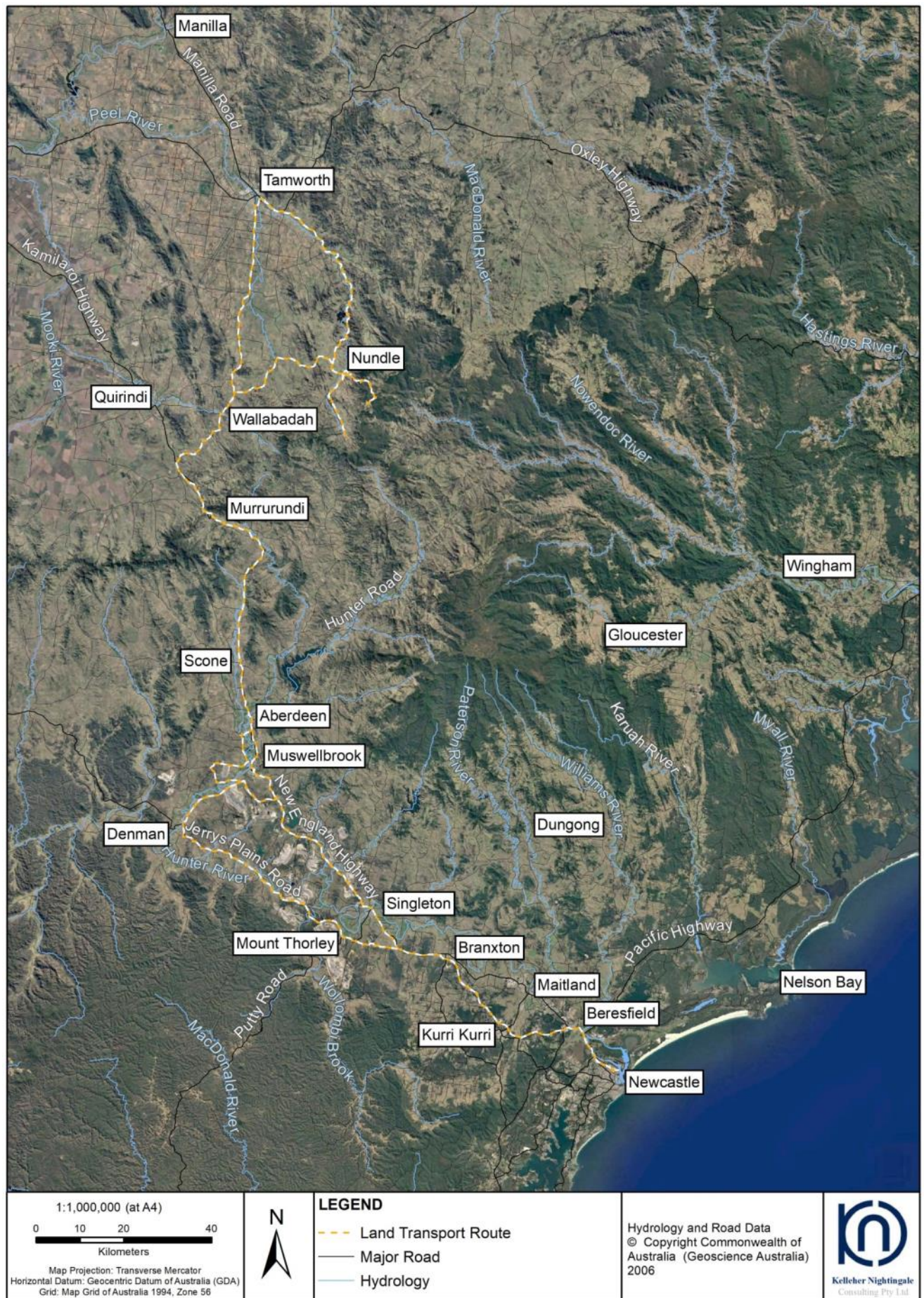


Figure E1. Transport route overview



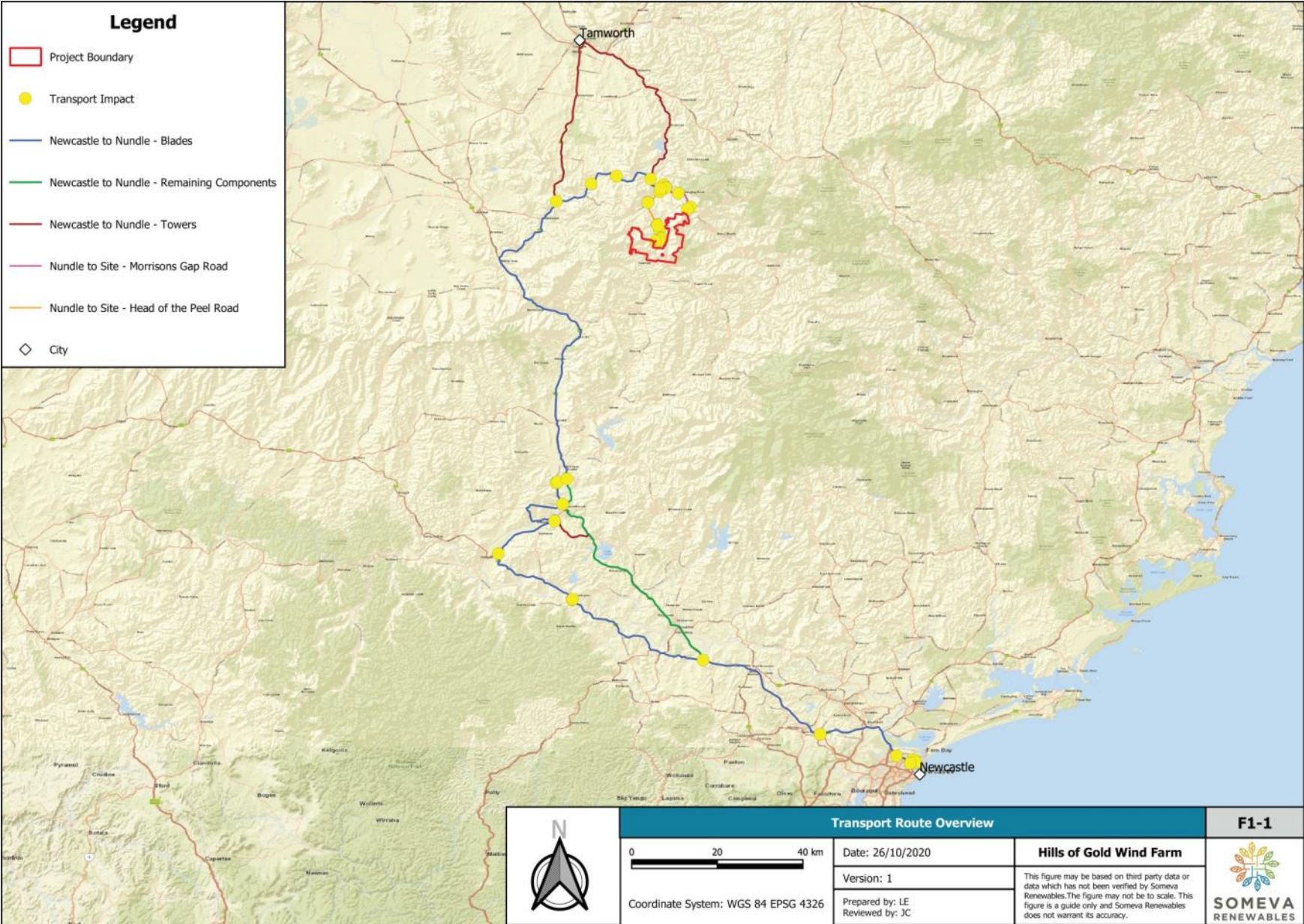
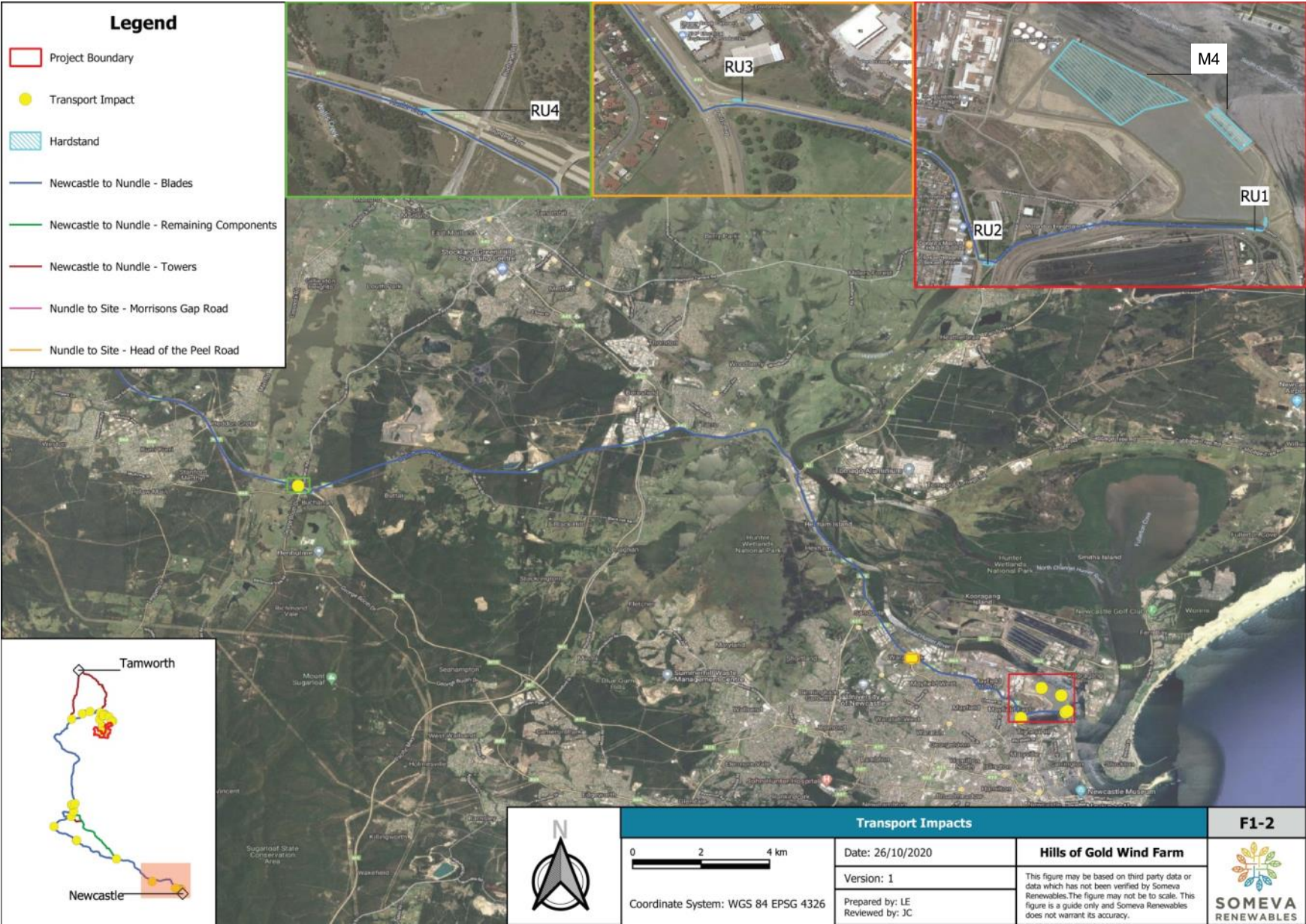


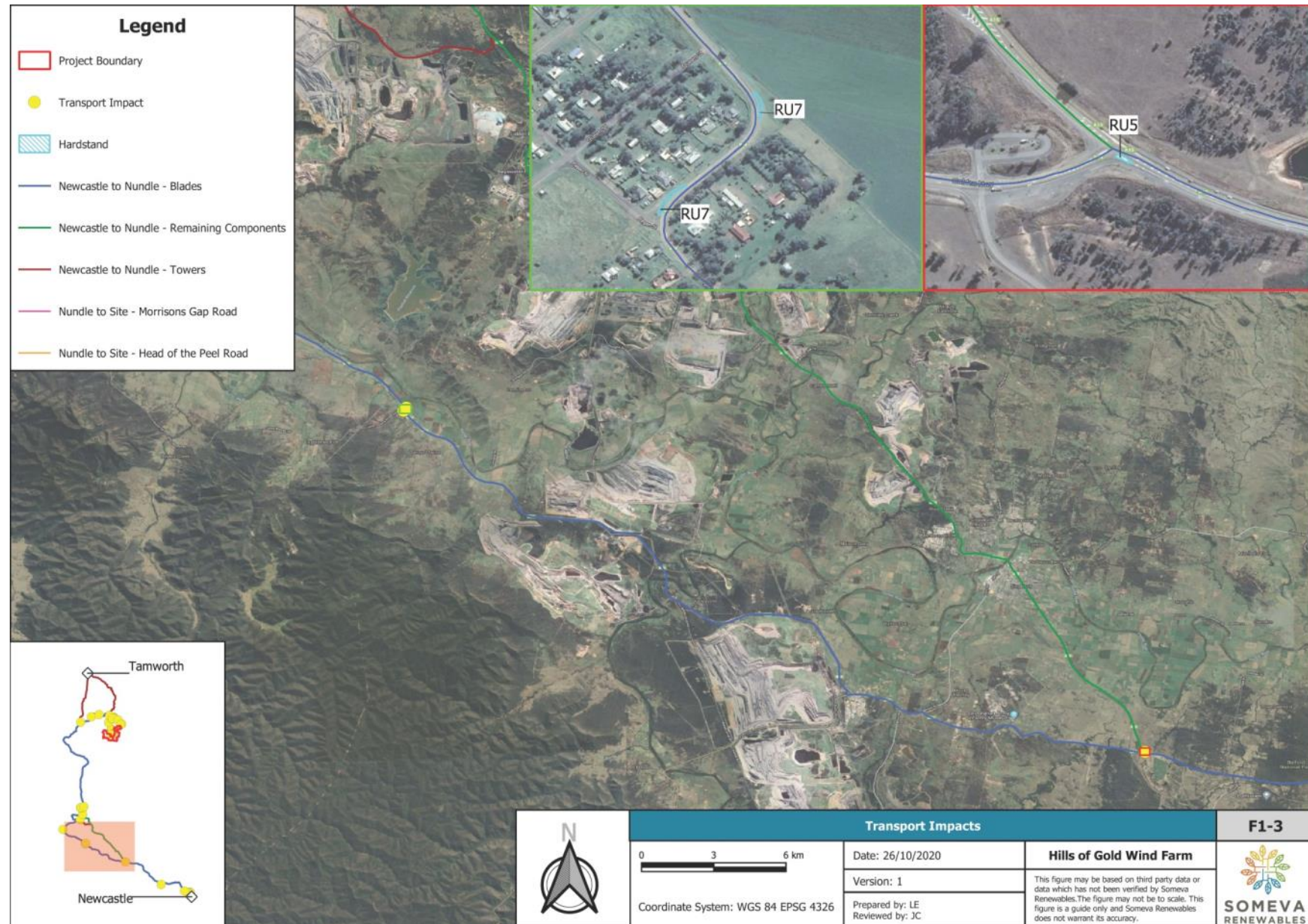
Figure E2. Transport route overview showing adjustment locations





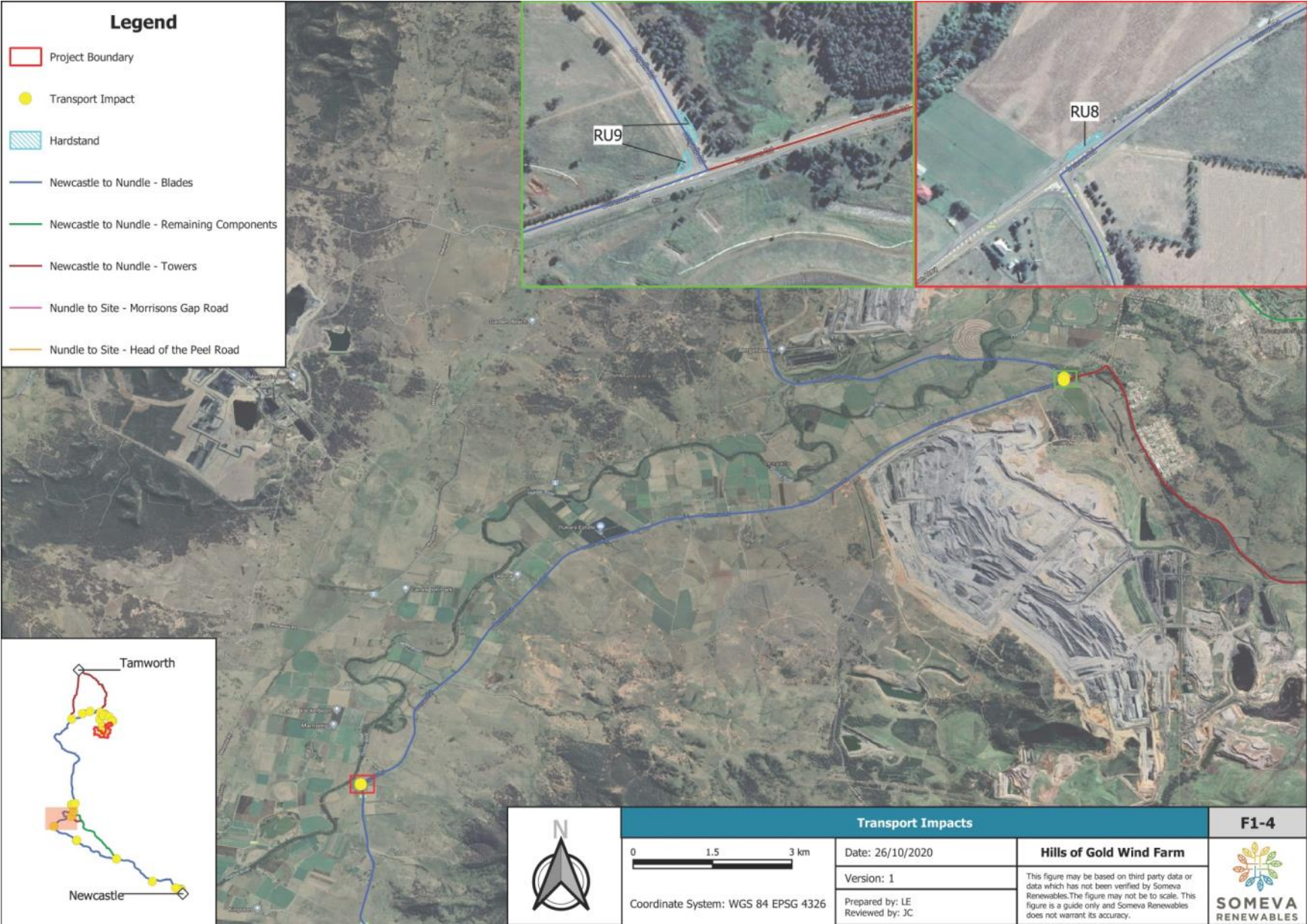
Transport route Map 1





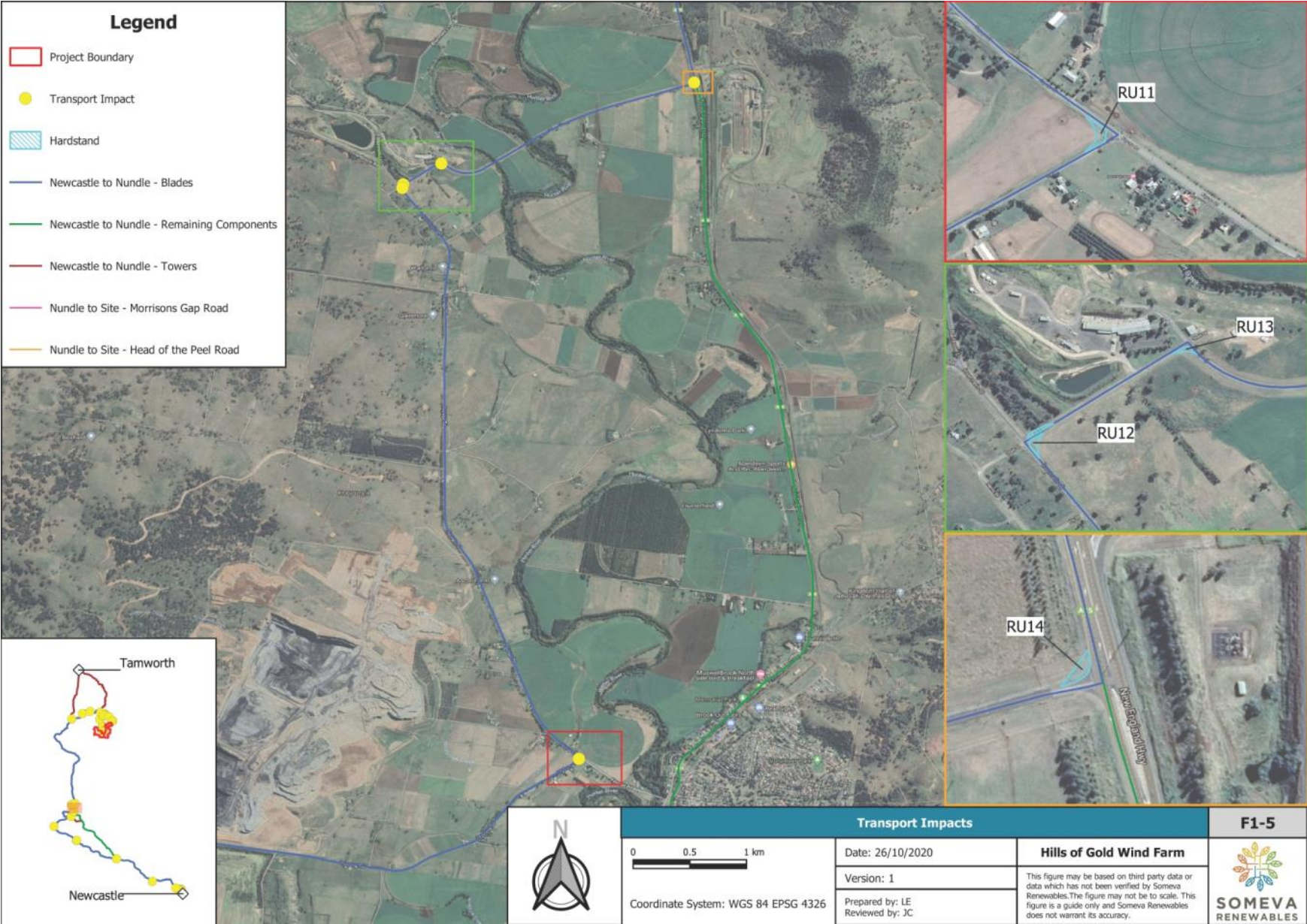
Transport route Map 2





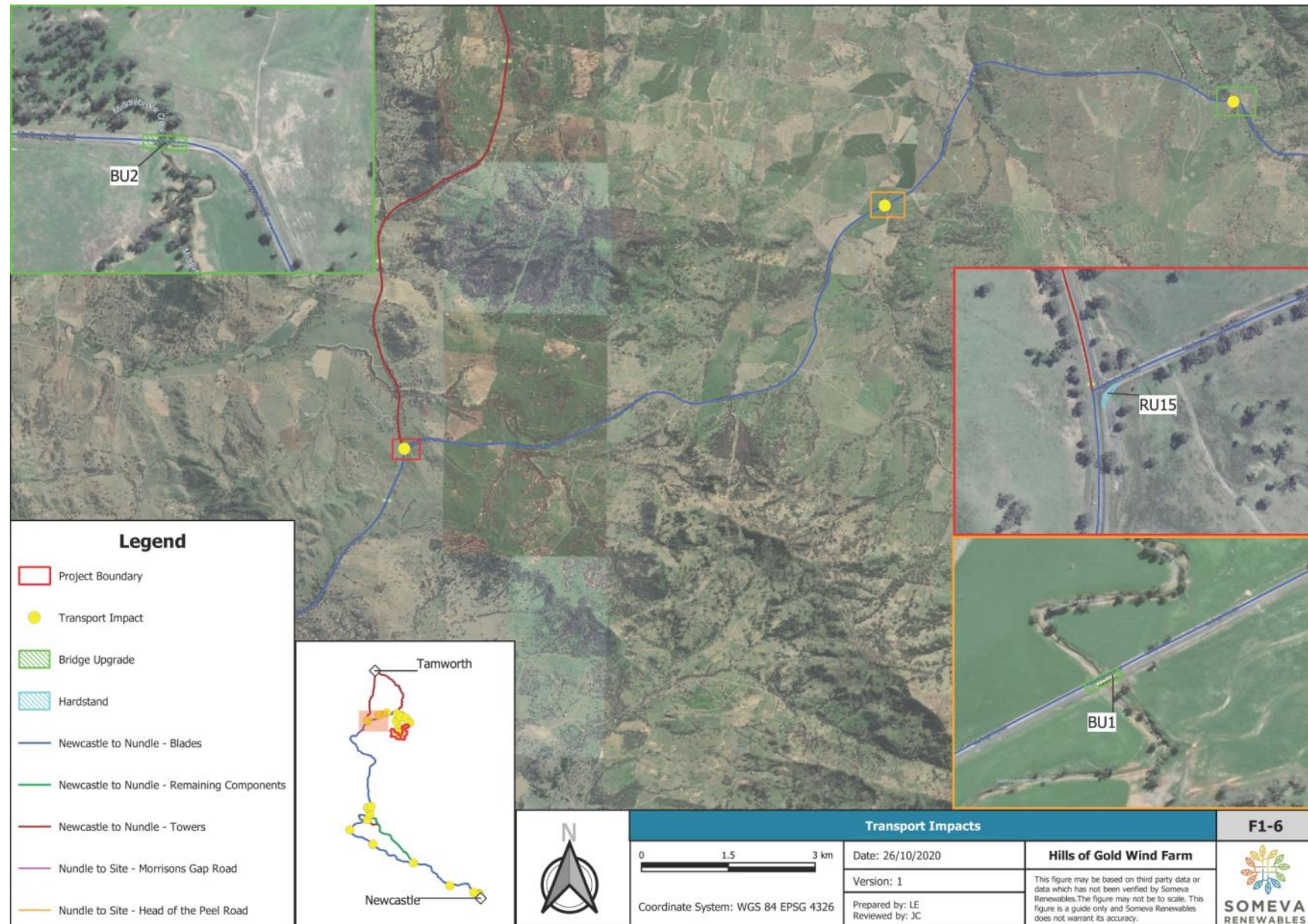
Transport route Map 3





Transport route Map 4



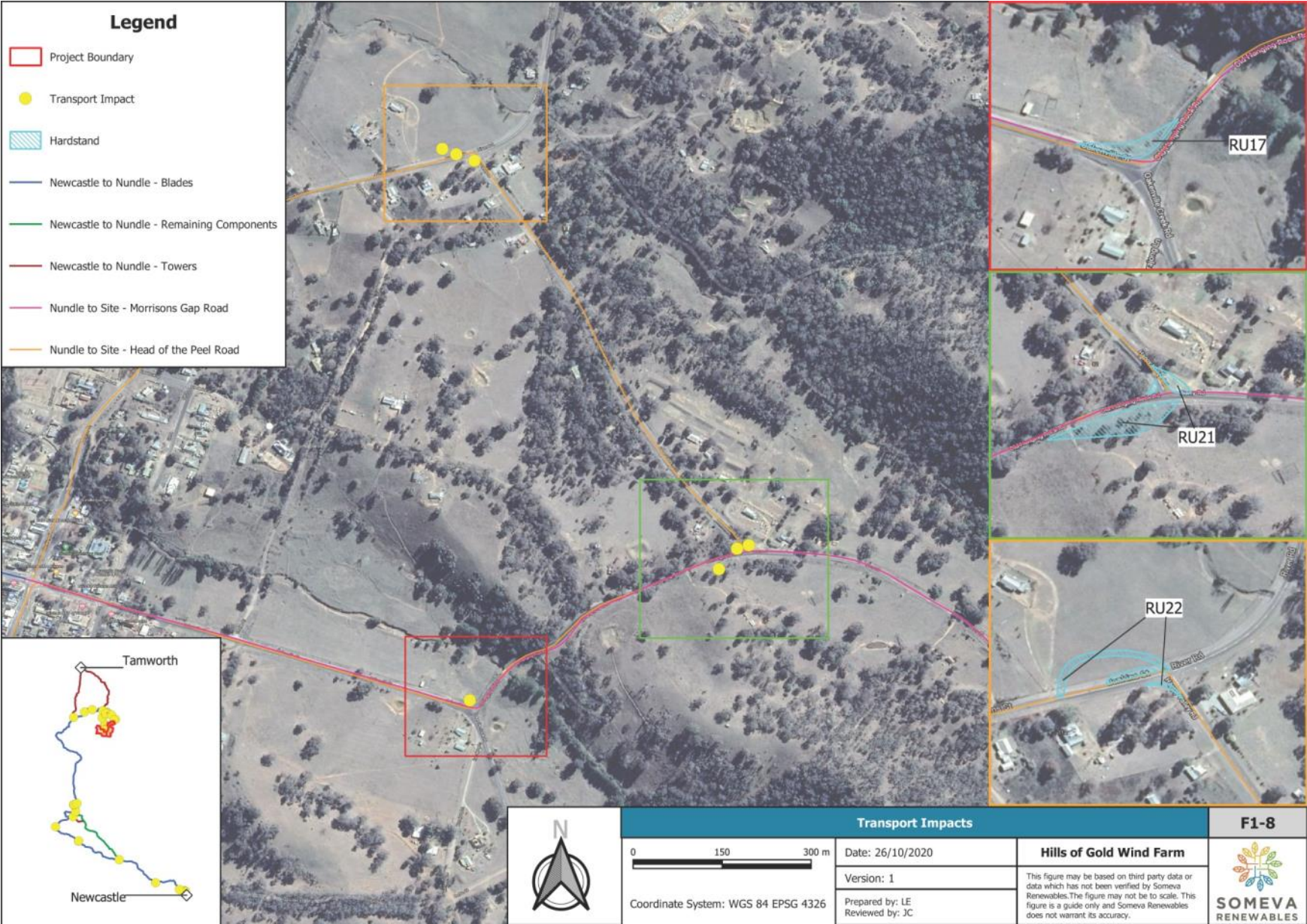


Transport Route Map 5



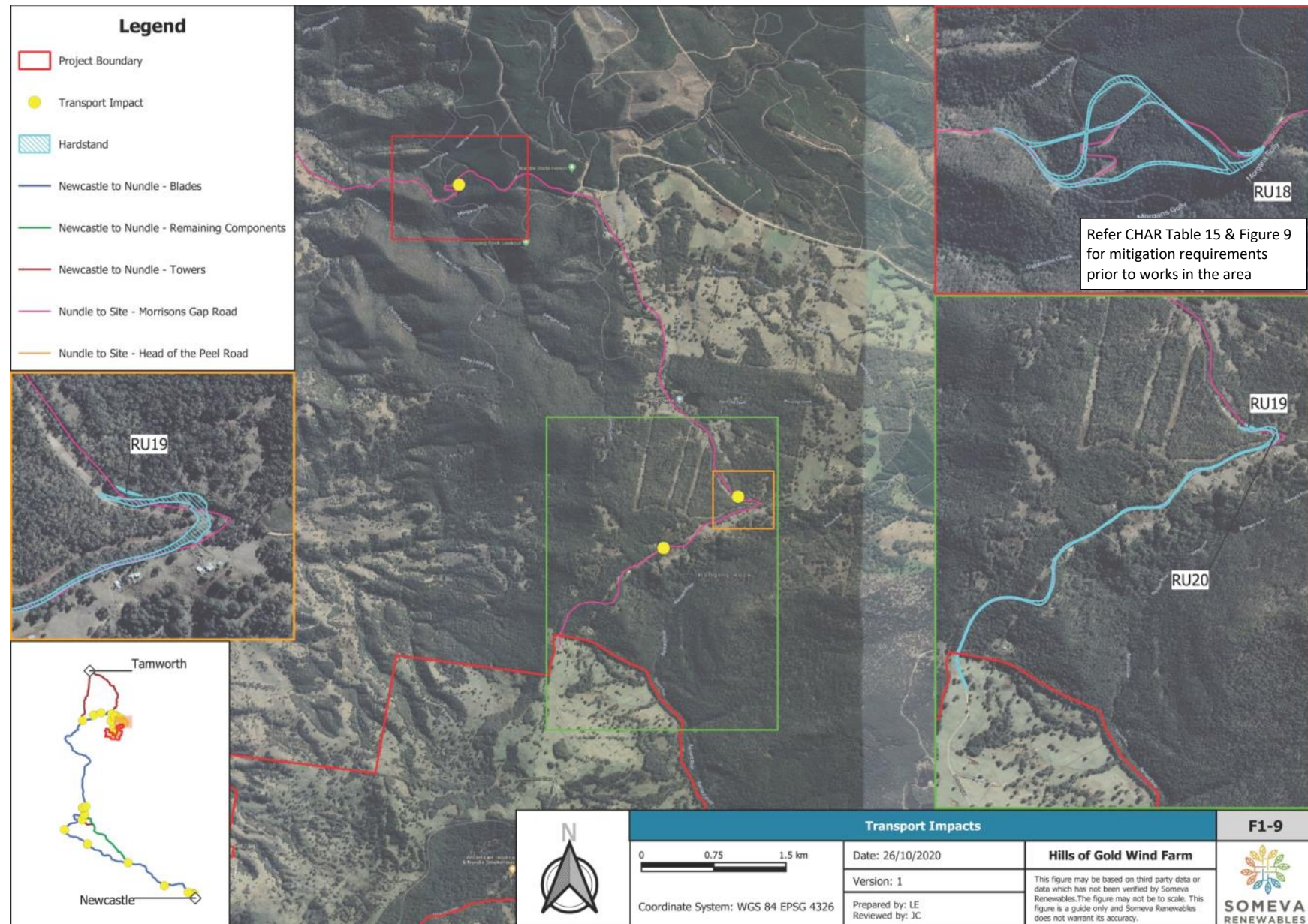






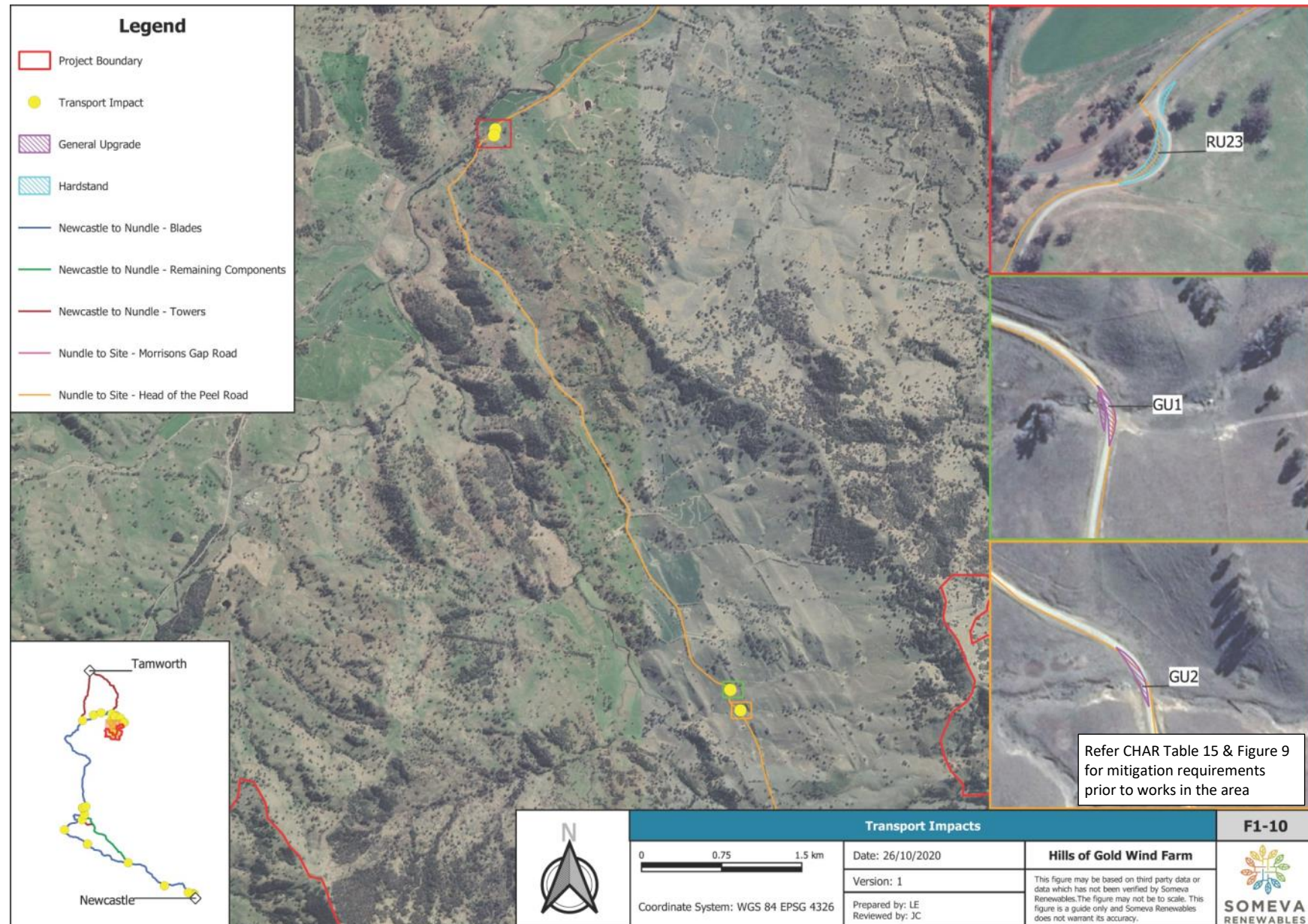
Transport Route Map 7





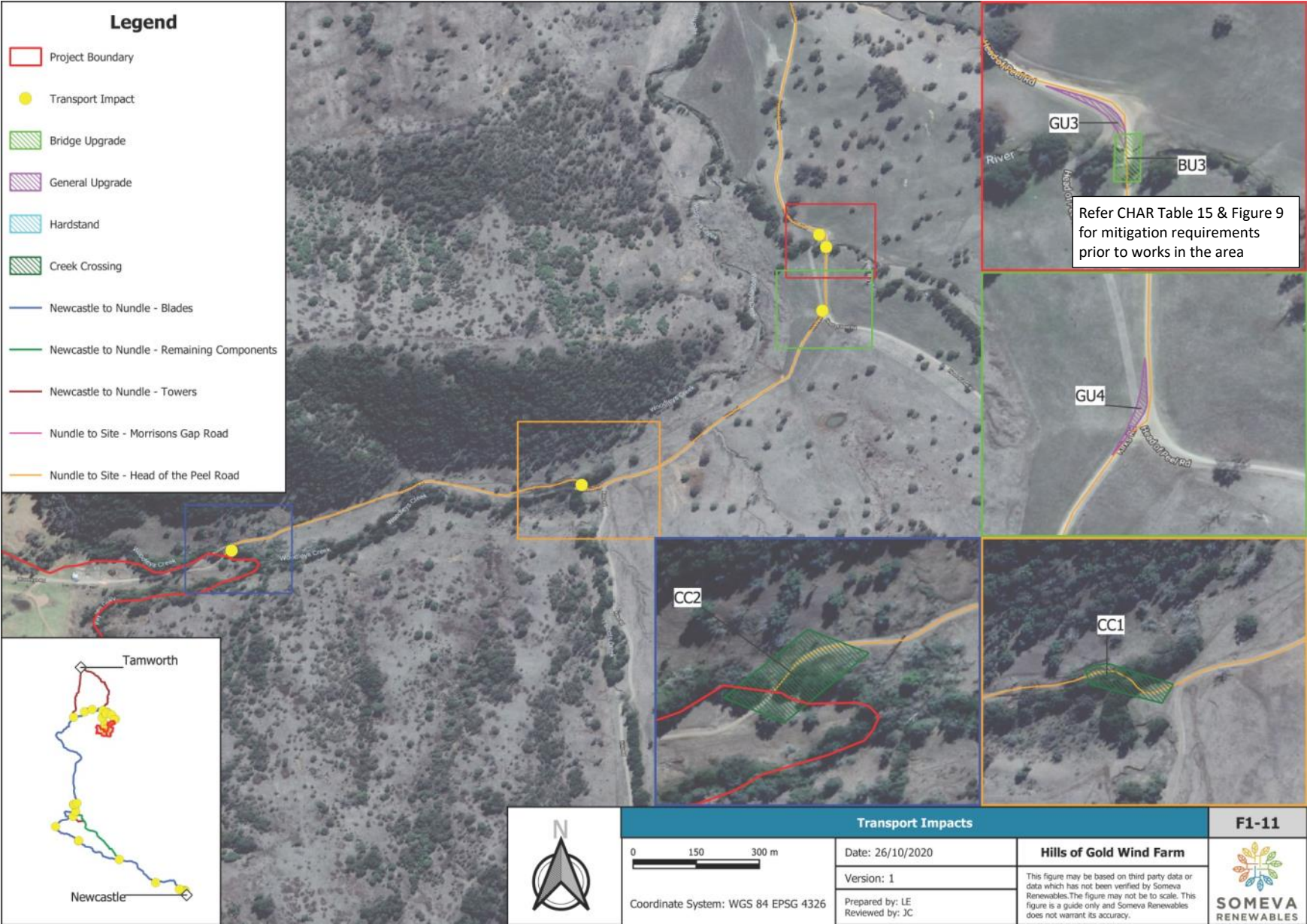
Transport Route Map 8





Transport Route Map 9





Transport Route Map 10



## AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : 1849\_M4, RU1, RU2

Client Service ID : 545984

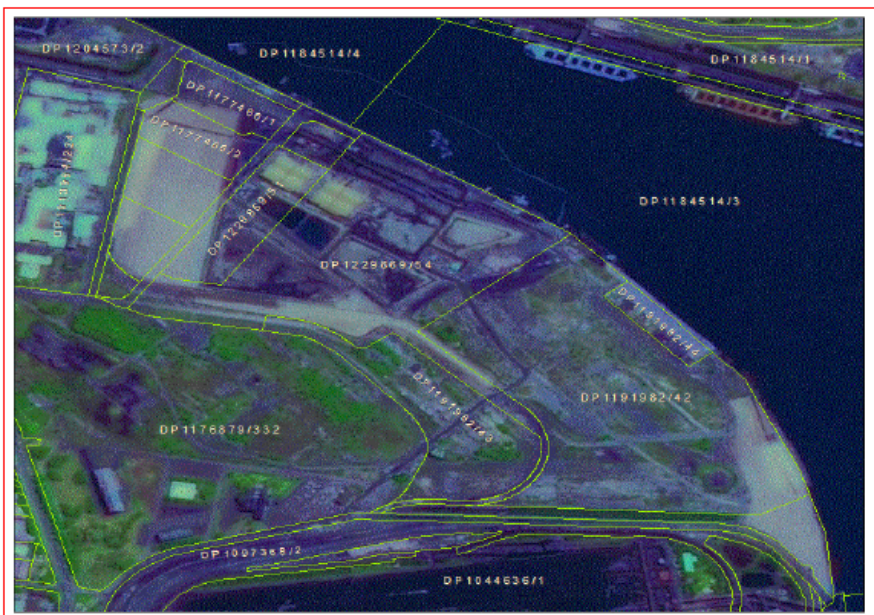
Kelleher Nightingale Consulting Pty Ltd (Generic users)  
Kelleher Knightingale Consulting Pty Ltd Level 10, 25 Blight Street  
Sydney New South Wales 2000  
Attention: Matthew Kelleher  
Email: knc.ahims@gmail.com

Date: 28 October 2020

Dear Sir or Madam:

AHIMS Web Service search for the following area at Datum :GDA, Zone : 56, Eastings : 383280 - 385006, Northings : 6359012 - 6360685 with a Buffer of 0 meters, conducted by Matthew Kelleher on 28 October 2020.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

- |   |   |
|---|---|
| 0 | Aboriginal sites are recorded in or near the above location.          |
| 0 | Aboriginal places have been declared in or near the above location. * |





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## AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : 1849\_RU3

Client Service ID : 545988

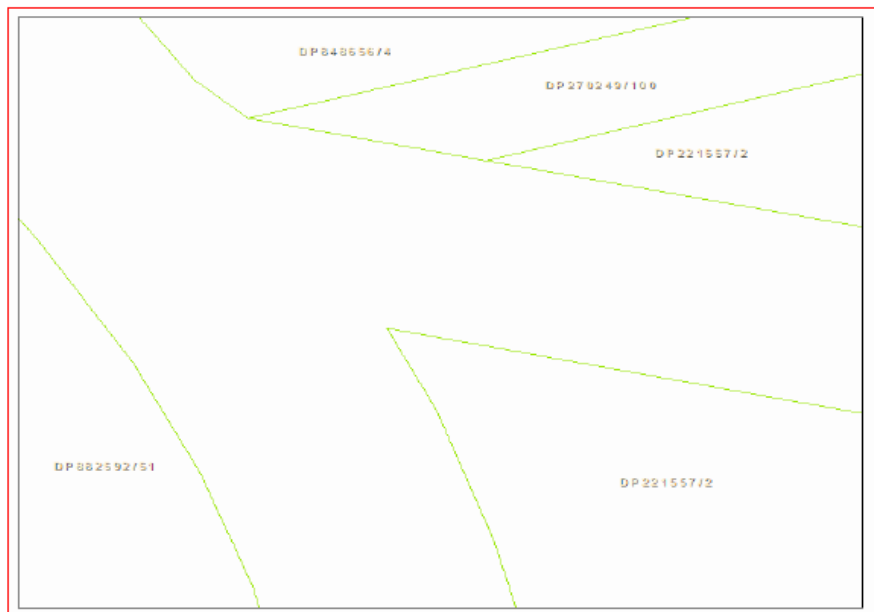
Kelleher Nightingale Consulting Pty Ltd (Generic users)  
Kelleher Knightingale Consulting Pty Ltd Level 10, 25 Blight Street  
Sydney New South Wales 2000  
Attention: Matthew Kelleher  
Email: knc.ahims@gmail.com

Date: 28 October 2020

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Datum :GDA, Zone : 56, Eastings : 380134 - 380268, Northings : 6361014 - 6361086 with a Buffer of 0 meters, conducted by Matthew Kelleher on 28 October 2020.**

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *



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## AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : 1849\_RU5

Client Service ID : 545994

Kelleher Nightingale Consulting Pty Ltd (Generic users)  
Kelleher Knightingale Consulting Pty Ltd Level 10, 25 Blight Street  
Sydney New South Wales 2000  
Attention: Matthew Kelleher  
Email: knc.ahims@gmail.com

Date: 28 October 2020

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Datum :GDA, Zone : 56, Eastings : 334297 - 334371, Northings : 6386897 - 6386951 with a Buffer of 0 meters, conducted by Matthew Kelleher on 28 October 2020.**

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *



## AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : 1849\_RU7

Client Service ID : 545997

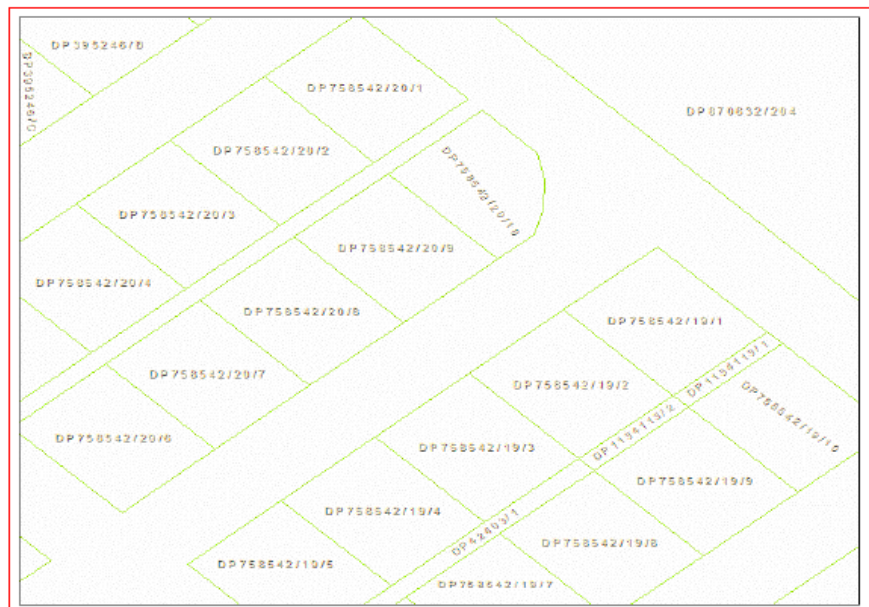
Kelleher Nightingale Consulting Pty Ltd (Generic users)  
Kelleher Knightingale Consulting Pty Ltd Level 10, 25 Blight Street  
Sydney New South Wales 2000  
Attention: Matthew Kelleher  
Email: knc.ahims@gmail.com

Date: 28 October 2020

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Datum :GDA, Zone : 56, Eastings : 303127 - 303363, Northings : 6403079 - 6403328 with a Buffer of 0 meters, conducted by Matthew Kelleher on 28 October 2020.**

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *





## AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : 1849\_RU8

Client Service ID : 546000

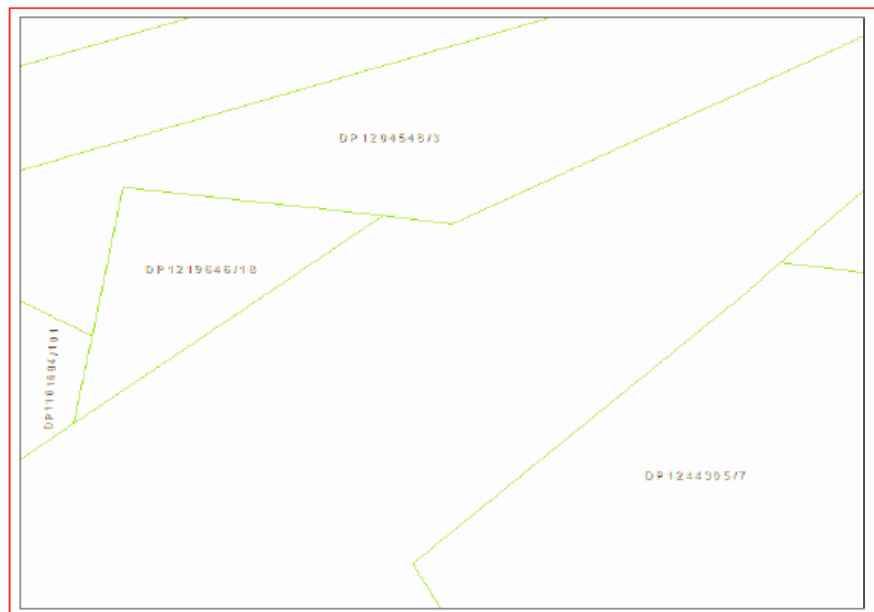
Kelleher Nightingale Consulting Pty Ltd (Generic users)  
Kelleher Knightingale Consulting Pty Ltd Level 10, 25 Blight Street  
Sydney New South Wales 2000  
Attention: Matthew Kelleher  
Email: knc.ahims@gmail.com

Date: 28 October 2020

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Datum :GDA, Zone : 56, Eastings : 285431 - 285553, Northings : 6415559 - 6415669 with a Buffer of 0 meters, conducted by Matthew Kelleher on 28 October 2020.**

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *



## AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : 1849\_RU9

Client Service ID : 546002

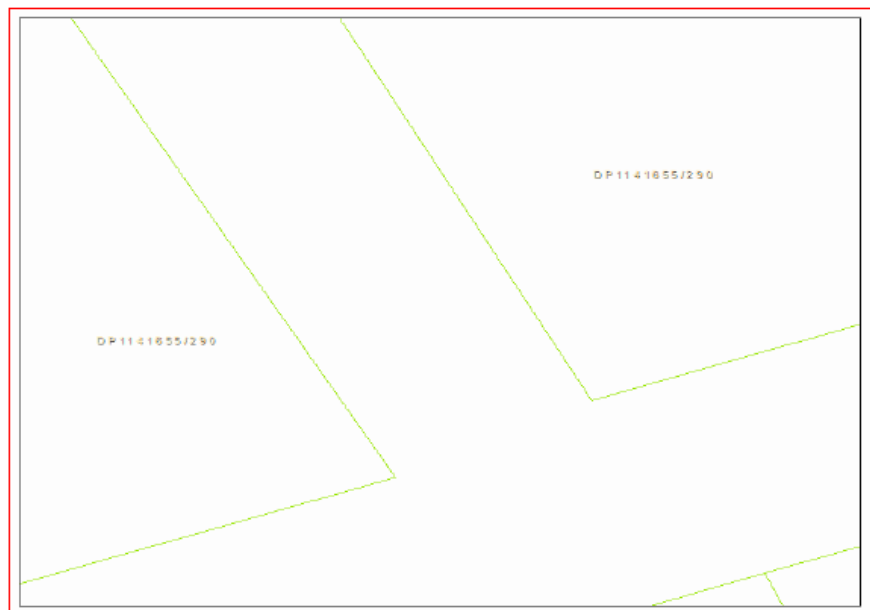
Kelleher Nightingale Consulting Pty Ltd (Generic users)  
Kelleher Nightingale Consulting Pty Ltd Level 10, 25 Blight Street  
Sydney New South Wales 2000  
Attention: Matthew Kelleher  
Email: knc.ahims@gmail.com

Date: 28 October 2020

Dear Sir or Madam:

AHIMS Web Service search for the following area at Datum :GDA, Zone : 56, Eastings : 298536 - 298639, Northings : 6424872 - 6424981 with a Buffer of 0 meters, conducted by Matthew Kelleher on 28 October 2020.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *



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## AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : 1848\_RU11

Client Service ID : 546004

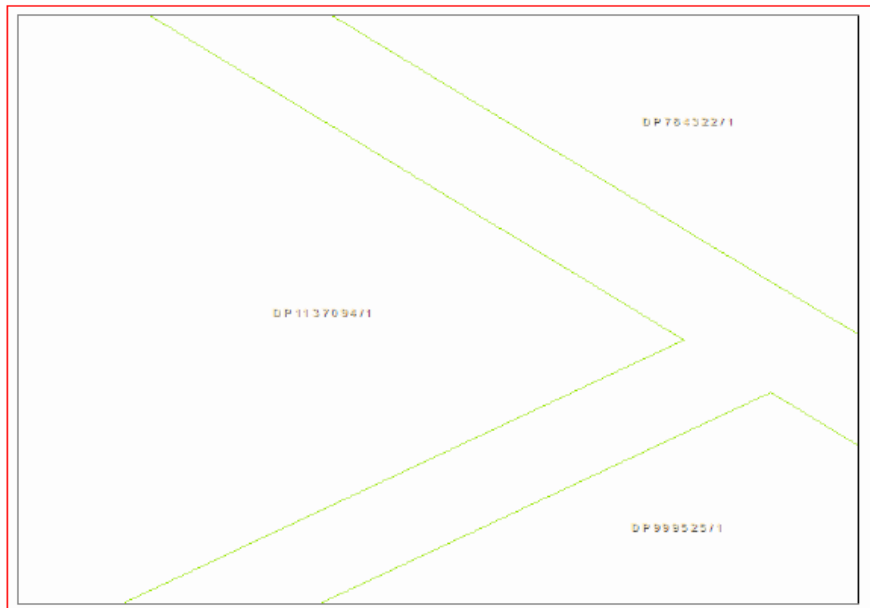
Kelleher Nightingale Consulting Pty Ltd (Generic users)  
Kelleher Knightingale Consulting Pty Ltd Level 10, 25 Blight Street  
Sydney New South Wales 2000  
Attention: Matthew Kelleher  
Email: knc.ahims@gmail.com

Date: 28 October 2020

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Datum :GDA, Zone : 56, Eastings : 300302 - 300448, Northings : 6429553 - 6429663 with a Buffer of 0 meters, conducted by Matthew Kelleher on 28 October 2020.**

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *





## AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : 1849\_RU14

Client Service ID : 546012

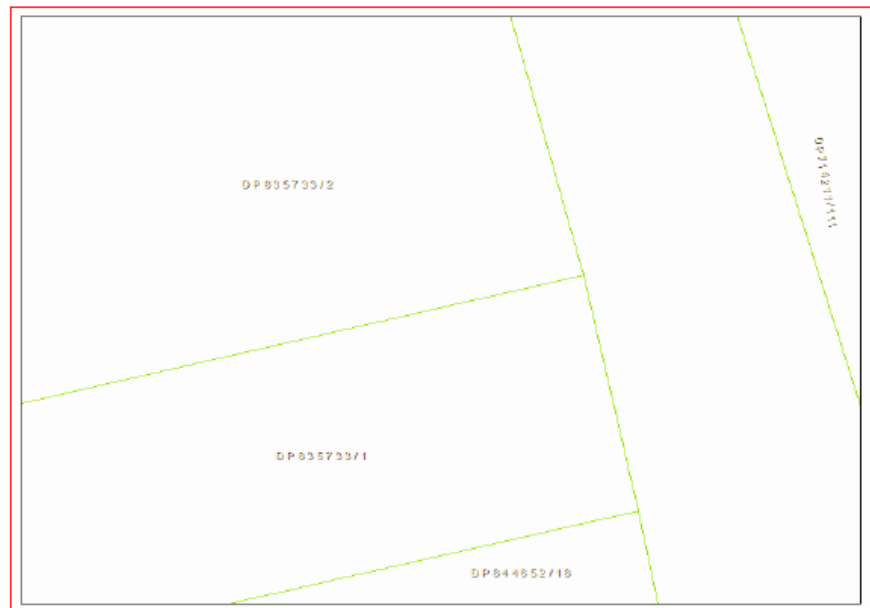
Kelleher Nightingale Consulting Pty Ltd (Generic users)  
Kelleher Knightingale Consulting Pty Ltd Level 10, 25 Blight Street  
Sydney New South Wales 2000  
Attention: Matthew Kelleher  
Email: knc.ahims@gmail.com

Date: 28 October 2020

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Datum :GDA, Zone : 56, Eastings : 301213 - 301306,  
Northings : 6436589 - 6436711 with a Buffer of 0 meters, conducted by Matthew Kelleher on 28 October  
2020.**

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *



## AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : 1849\_RU4

Client Service ID : 546026

Kelleher Nightingale Consulting Pty Ltd (Generic users)  
Kelleher Nightingale Consulting Pty Ltd Level 10, 25 Blight Street  
Sydney New South Wales 2000  
Attention: Matthew Kelleher  
Email: knc.ahims@gmail.com

Date: 28 October 2020

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Datum :GDA, Zone : 56, Eastings : 362382 - 362541, Northings : 6366785 - 6366824 with a Buffer of 0 meters, conducted by Matthew Kelleher on 28 October 2020.**

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *



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## AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : 1849\_RU12 and RU13

Client Service ID : 546028

Kelleher Nightingale Consulting Pty Ltd (Generic users)  
Kelleher Nightingale Consulting Pty Ltd Level 10, 25 Blight Street  
Sydney New South Wales 2000  
Attention: Matthew Kelleher  
Email: knc.ahims@gmail.com

Date: 28 October 2020

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Datum :GDA, Zone : 56, Eastings : 298671 - 299124, Northings : 6435445 - 6435794 with a Buffer of 0 meters, conducted by Matthew Kelleher on 28 October 2020.**

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *