

# Uungula Wind Farm

## Appendix C

Austral Archaeology:  
**Aboriginal Cultural Heritage**

September 2020

Reference: 2053

28 September 2020

Matthew Flower  
CWP Renewables Pty Ltd  
Project Manager  
Level 6, Suite A, 41-45 Hunter St  
Newcastle NSW 2300

Dear Matthew,

## **RE: UUNGULA WIND FARM – ABORIGINAL CULTURAL HERITAGE – RESPONSE TO SUBMISSION QUERIES**

Austral Archaeology (Austral) was commissioned to prepare an addendum to the Heritage Impact Assessment (HIA) for the Uungula Wind Farm (the project) for CWP Renewables Pty Ltd (CWPR). This addendum was required to be complementary to the Aboriginal Cultural Heritage Assessment Report (ACHAR) previously prepared by New South Wales Archaeology titled Uungula Wind Farm Aboriginal Cultural Heritage Assessment Report. Report for Uungula Wind Farm Pty Ltd (Didben 2018). The Project is a State Significant Development (SSD 6687) and is required to meet the standard as set by Secretary Environmental Assessment Requirements (SEARs) project requirements for the overall project issued on 11 November 2019.

Austral completed an addendum report titled Uungula Wind Farm, Uungula New South Wales (NSW): Aboriginal Archaeological Survey Report (addendum) (March 2020) which outlined the results of further consultation and survey for additional impact areas within the Uungula wind farm project area. The addendum report, along with the ACHA, was submitted to support the Environmental Impact Statement (EIS). Review of the EIS was undertaken by the Department of Planning, Industry and Environment (DPIE) during the EIS exhibition period. The following sections 1 to 6 provide a response to the submission made by the Biodiversity and Conservation Division of the DPIE (now NSW Heritage). Section 7 relates to the additional assessment area to allow for the intersection upgrade at Goolma Road and Twelve Mile Road.

### **1. Previous consultation with RAPs (5.1)**

Consultation for the addendum report was undertaken in accordance with the Aboriginal Cultural Heritage Consultation Requirements for proponents (DECCW 2010). Initially consultation was undertaken by NSW Archaeology Pty Ltd who undertook Stages 1-4 of the consultation requirements as well as project updates where required. Austral continued this consultation for the subsequent addendum report. A table outlining Austral's consultation, with RAPs on the project, can be found in Appendix 1.

### **2. Artefact Analysis (6.1)**

Austral acknowledges BCDs support of analysis of artefacts extracted from testing, salvage operations or unexpectant finds.

### **3. Subsurface Excavations (7.1)**

In line with BCDs recommendation, Austral undertook archaeological test excavations of sites described as having moderate or high potential to contain subsurface archaeology. The scope and scale of the excavations were relative to the proposed impact of the project on Aboriginal cultural

heritage. A preliminary report outlining the results of the test excavation is attached as Appendix 2. This is provided subject to the required RAP review and consultation process.

The results of these test excavations have revealed that the areas previously deemed to be of high archaeological potential are now categorised as having low archaeological potential (Table 1). Further subsurface archaeological investigation or salvage is not recommended; however, a program of surface salvage is recommended and the methodology for this will be included in the CHMP.

**Table 1 Additional survey areas coverage by landform and amendment to Table 8-36 in the EIS (p387-390), Table 5 from Appendix K to the EIS (pp 18)**

Survey Area*	PAD sensitivity as per survey (in EIS)	PAD area in m2	PAD sensitivity post-test excavations
Survey Area 2: Two PADs	High	34,398	Low
Survey Area 6: One PAD	Moderate	2,9389	Low
Survey Area 11: Two PADs	High	365,346	Low
Survey Area 22: One PAD	Moderate	41,933	Low
Survey Area 24: One PAD	High	22,850	Low
Total		493,916	

\* these are included in the last line of Table 8-36 in the EIS (p390) as "7 areas of PAD"

#### 4. Monitoring Program (8.1)

Austral acknowledges BCD's request to develop a methodology for a monitoring program to be included in the unexpected finds protocol. Austral will develop and include the methodology for a monitoring program in the CHMP.

#### 5. Clarification on artefact storage (9.1)

Austral will request clarification on artefact storage as part of the Stage 4 consultation on the results of the test excavation report. On completion of the test excavation report, in line with the requirements of the consultation requirements, Austral will request the RAPs review the test excavation results. As part of this assessment, Austral will consult with the RAPs to determine the long term care and control of the artefacts recovered from the test excavations as well as the surface salvage.

#### 6. Protection of portable grinding grooves.

Austral will develop a methodology for the protection of the portable grinding grooves, this will be done in consultation with the RAPs. This method will be included in the CHMP.

#### 7. Other matters – additional impact area.

An additional section associated with the corner of Twelve Mile Road and Goolma Road was identified as an area of potential impact (Figure in Appendix 3). The additional area to be surveyed at the intersection of Twelve Mile Road and Goolma Road is located on flat ground rising gently to

the north along Goolma Road. The area in general has undergone significant disturbance from construction of the current roads and the realignment of the intersection of Twelve Mile Road and Goolma Road. Based upon previous surveys conducted for the Uungula Wind Farm, a predictive model can be made for site locations. The sites located during the previous survey by Austral and an earlier survey by Dibden (2012) suggest sites will be located near or adjacent to watercourses and that isolated artefacts will be present throughout the area. As this survey area has undergone significant disturbance and it is in an area, not associated with watercourses it is unlikely that artefacts will be present.

An updated project corridor and impact area was submitted to Austral on 3 September 2020 and reveals that there are minor changes to the original mapping used to establish the parameters of the original survey design. These changes show there has been a minor alteration to Survey Area 6. However, predictive modelling suggests this area will be of low archaeological potential and therefore no further works are required.

Please do not hesitate to contact me on 0429 019 106 if you wish to discuss any aspect of this submission.

Yours sincerely,



Amanda Atkinson

Director

Austral Archaeology Pty Ltd

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**APPENDIX 1**

Organisation	Contact Date	Contact Method	Reason	Staff
<b>CWP Renewables</b>	<b>9/10/2019</b>	<b>Email</b>	<b>Emailed list of stakeholders registered by NSW Archaeology on the project. A review of the NSW Archaeology report showed consultation had been undertaken in accordance with the requirements to Stage 4, draft report review.</b>	<b>AA</b>
Bradley Bliss Wellington Valley Wiradjuri Aboriginal Corporation	<b>10/9/2019</b>	<b>Phone</b>	<b>Phonecall to invite to additional survey</b>	<b>AA</b>
Neville Williams	<b>10/9/2019</b>	<b>Phone</b>	<b>Phonecall to invite to additional survey</b>	<b>AA</b>
Stuart Cutmore	<b>10/9/2019</b>	<b>Phone</b>	<b>Phonecall to invite to additional survey</b>	<b>AA</b>
Lyn Syme North East Wiradjuri Company Ltd	<b>10/9/2019</b>	<b>Phone</b>	<b>Phonecall to invite to additional survey</b>	<b>AA</b>
Debbie Foley Murong Gialinga	<b>10/9/2019</b>	<b>Phone</b>	<b>Phonecall to invite to additional survey</b>	<b>AA</b>
Toney Lonsdale Mudgee LALC	<b>10/9/2019</b>	<b>Phone</b>	<b>Phonecall to invite to additional survey</b>	<b>AA</b>
<b>Larry Foley Buudang</b>	<b>10/9/2019</b>	<b>Phone</b>	<b>Phonecall to invite to additional survey</b>	<b>AA</b>
<b>Dorothy Stewart</b>	<b>10/9/2019</b>	<b>Phone</b>	<b>Phonecall to invite to</b>	<b>AA</b>

<b>Binjang Wellington Wiradjuri Heritage Survey</b>			<b>additional survey</b>	
<b>Luke Hickey</b>	<b>10/9/2019</b>	<b>Phone</b>	<b>Phonecall to invite to additional survey</b>	<b>AA</b>
<b>Donna Sampson</b>	<b>10/9/2019</b>	<b>Phone</b>	<b>Phonecall to invite to additional survey</b>	<b>AA</b>
Bradley Bliss Wellington Valley Wiradjuri Aboriginal Corporation	<b>14/9/2019</b>	<b>Email</b>	<b>Email to invite to additional survey</b>	<b>AA</b>
Neville Williams	<b>14/9/2019</b>	<b>Email</b>	<b>Email to invite to additional survey</b>	<b>AA</b>
Stuart Cutmore	<b>14/9/2019</b>	<b>Email</b>	<b>Email to invite to additional survey</b>	<b>AA</b>
Lyn Syme North East Wiradjuri Company Ltd	<b>14/9/2019</b>	<b>Email</b>	<b>Email to invite to additional survey</b>	<b>AA</b>
Debbie Foley Murong Gialinga	<b>14/9/2019</b>	<b>Email</b>	<b>Email to invite to additional survey</b>	<b>AA</b>
Toney Lonsdale Mudgee LALC	<b>14/9/2019</b>	<b>Email</b>	<b>Email to invite to additional survey</b>	<b>AA</b>
<b>Larry Foley Buudang</b>	<b>14/9/2019</b>	<b>Email</b>	<b>Email to invite to additional survey</b>	<b>AA</b>
<b>Dorothy Stewart Binjang Wellington Wiradjuri Heritage Survey</b>	<b>14/9/2019</b>	<b>Email</b>	<b>Email to invite to additional survey</b>	<b>AA</b>
<b>Luke Hickey</b>	<b>14/9/2019</b>	<b>Email</b>	<b>Email to invite to additional survey</b>	<b>AA</b>
<b>Donna Sampson</b>	<b>14/9/2019</b>	<b>Email</b>	<b>Email to invite to additional survey</b>	<b>AA</b>
<b>Brad Bliss</b>	<b>21/9/2019</b>	<b>Phone</b>	<b>Follow up on methodology for survey</b>	<b>NF</b>



Bradley Bliss Wellington Valley Wiradjuri Aboriginal Corporation	21/1/2020	Email	Draft report and excavation methodology sent out for review. Ends 18/2/20	NF
Neville Williams	21/1/2020	Email	Draft report and excavation methodology sent out for review. Ends 18/2/20	NF
Stuart Cutmore	21/1/2020	Email	Draft report and excavation methodology sent out for review. Ends 18/2/20	NF
Lyn Syme North East Wiradjuri Company Ltd	21/1/2020	Email	Draft report and excavation methodology sent out for review. Ends 18/2/20	NF
Debbie Foley Murong Gialinga	21/1/2020	Email	Draft report and excavation methodology sent out for review. Ends 18/2/20	NF
Toney Lonsdale Mudgee LALC	21/1/2020	Email	Draft report and excavation methodology sent out for review. Ends 18/2/20	NF
Larry Foley Buudang	21/1/2020	Email	Draft report and excavation methodology sent out for review. Ends 18/2/20	NF
Dorothy Stewart Binjang Wellington Wiradjuri Heritage Survey	21/1/2020	Email	Draft report and excavation methodology	NF



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<b>Luke Hickey</b>	<b>21/1/2020</b>	<b>Email</b>	<b>Draft report and excavation methodology sent out for review. Ends 18/2/20</b>	<b>NF</b>
<b>Donna Sampson</b>	<b>21/1/2020</b>	<b>Email</b>	<b>Draft report and excavation methodology sent out for review. Ends 18/2/20</b>	<b>NF</b>
<b>Brad Bliss</b>	<b>21/9/2019</b>	<b>Phone</b>	<b>Follow up on methodology for survey</b>	<b>NF</b>
Bradley Bliss Wellington Valley Wiradjuri Aboriginal Corporation	<b>30/7/2020</b>	<b>Email</b>	<b>Invite to participate in survey</b>	<b>NF</b>
Neville Williams	<b>30/7/2020</b>	<b>Email</b>	<b>Invite to participate in survey</b>	<b>NF</b>
Stuart Cutmore	<b>30/7/2020</b>	<b>Email</b>	<b>Invite to participate in survey</b>	<b>NF</b>
Lyn Syme North East Wiradjuri Company Ltd	<b>30/7/2020</b>	<b>Email</b>	<b>Invite to participate in survey</b>	<b>NF</b>
Debbie Foley Murong Gialinga	<b>30/7/2020</b>	<b>Email</b>	<b>Invite to participate in survey</b>	<b>NF</b>
Toney Lonsdale Mudgee LALC	<b>30/7/2020</b>	<b>Email</b>	<b>Invite to participate in survey</b>	<b>NF</b>
<b>Larry Foley Buudang</b>	<b>30/7/2020</b>	<b>Email</b>	<b>Invite to participate in survey</b>	<b>NF</b>
<b>Dorothy Stewart Binjang Wellington Wiradjuri Heritage Survey</b>	<b>30/7/2020</b>	<b>Email</b>	<b>Invite to participate in survey</b>	<b>NF</b>



<b>Luke Hickey</b>	<b>30/7/2020</b>	<b>Email</b>	<b>Invite to participate in survey</b>	<b>NF</b>
<b>Donna Sampson</b>	<b>30/7/2020</b>	<b>Email</b>	<b>Invite to participate in survey</b>	<b>NF</b>

## APPENDIX 2



Reference: AUSTRAL 2053

28 September 2020

CWP Renewables Pty Ltd  
Matthew Flower  
Development Manager  
matthew.flower@cwprenewables.com.au

Dear Matthew,

## RE: Ungula Wind Farm, NSW. Preliminary Archaeological Test Excavation Results

This Preliminary report aims to provide an initial assessment of the archaeological potential for Aboriginal material based on the results of the archaeological investigations conducted within the study area from 12 August 2020 to 02 September 2020, as part of the Ungula Wind Farm (the project) for CWP Renewables Pty Ltd (CWPR). The Project is a State Significant Development (SSD 6687) and is required to meet the standard as set by Secretary Environmental Assessment Requirements (SEARs) project requirements for the overall project issued on 11 November 2019.

This preliminary assessment has been undertaken in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (Department of Environment Climate Change and Water NSW 2010) [DECCW], the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (Office of Environment and Heritage 2011) and the Aboriginal Cultural Heritage Consultation Requirements for Proponents (Department of Environment Climate Change and Water NSW 2010).

The results of these test excavations have revealed that the areas previously deemed to be of high archaeological potential are now categorised as having low archaeological potential.

### SUMMARY OF PREVIOUS INVESTIGATIONS

Archaeological studies across the wider region have identified numerous archaeological sites, particularly in association with permanent or ephemeral water sources. The sites are almost entirely made up of single lithic artefacts or scatters of lithic artefacts.

**New South Wales Archaeology 2012.** This assessment consisted of a field survey program of the Ungula Wind Farm located to the southeast of Mudgee. Forty-four Aboriginal object locales with stone artefacts were recorded. These were assessed as part of very low-density background scatters.

**Didben 2018.** A revised report updating the project description and documenting the assessment of the Project including the Development Footprint. The assessment concluded that the majority of Aboriginal sites recorded within the study area were of low archaeological significance as the areas recorded have very low density and highly disturbed artefact distribution. As a result, it was determined that the areas investigated do not possess subsurface archaeological potential because of the high levels of soil erosion.

**Austral Archaeology 2020.** An addendum to the Aboriginal Cultural Heritage Assessment Report (ACHAR) previously prepared by New South Wales Archaeology covering areas of potential archaeology not previously surveyed (**Didben 2018**). The pedestrian survey undertaken as part of the assessment process identified 115 stone artefacts across 28 new Aboriginal site locations. There were also seven new areas of high and moderate potential archaeological deposits (PADs) recorded in five of the new survey areas.

It was recommended that if the areas of PAD could not be avoided that a sub-surface testing regime be undertaken. Furthermore, that if areas where surface deposits are present could not be avoided that these have a community collection undertaken prior to any works being carried out. The community collection would involve collecting surface artefacts from areas of impact.

## 1. Archaeological Test Excavation

The test excavation program, as recommended by the Aboriginal Archaeological Survey Report addendum (Austral Archaeology 2020, March 2020), was undertaken to determine whether any subsurface archaeological material denoting archaeologically sensitive landforms occur within the five individual PAD's of predicted high sensitivity identified within sections 2, 6, 11, 22 and 24 of the Ungula Wind Farm project (Figure 1). The testing aimed to determine the nature and extent of any intact archaeological deposit as well as its archaeological significance, primarily through the examination of density and nature of any stone artefacts discovered. Moreover, the character of the stratigraphic profile and any existing land disturbance across the study area was to be determined as well as the effect any such disturbance may have had on any archaeological deposit present.

### ABORIGINAL COMMUNITY CONSULTATION

Consultation with Aboriginal stakeholders has been completed in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW 2010b) [Consultation Requirements].

The following groups participated in the Archaeological Test Excavation Program:

- Bradley Bliss - Wellington Valley Wiradjuri Aboriginal Corporation
- Brendan Doherty - Gallangabang Aboriginal Corporation
- James Williams - Mudgee Local Aboriginal Land Council
- Steven 'George' Flick - Murong Gialinga

### TEST EXCAVATION METHODOLOGY AND SAMPLING

The test excavation program was undertaken according to the prescribed methodology of Requirement 14 to 20 and 23 to 26 of the Code of Practice (DECCW 2010a). Specifically, Requirement 15b of the Code of Practice, stipulates that a sampling strategy must be developed for all test excavations which take place prior to work commencing (DECCW 2010a, p.25). In summary, test pits must be placed on a systematic grid designed to target both areas likely to contain PADs and the location of proposed impacts. Test pits must be located a minimum of 5 metres apart.

The sampling strategy was based around a methodology which sought to test the landforms within the identified PAD's of high sensitivity identified within sections 2, 6, 11, 22 and 24 of the Ungula Wind Farm project (Figure 1), located adjacent to watercourses deemed to hold higher archaeological potential. This was done by setting up transects on flood plains, hill slopes and hill tops within the established PADs where surface artefacts were identified and where potential cultural landscapes could be present after consultation with the Aboriginal stakeholders on site. Each test pit was located 20 metres apart within each established transect and numbered sequentially. Some test pits were located 10 metres and 5 metres apart where landscape formation or access tracks prevent pits to be located 20 metres apart.

Each test pit was excavated following Requirement 16a of the Code of Practice using mattocks, shovels and trowels (DECCW 2010a, p.26). Sample units measured 500 X 500 millimetres, with the first test pit excavated in 50 millimetre spits to act as a geomorphologic example and the remaining test pits were excavated in 100 millimetre spits. The excavation was undertaken until the B-horizon was reached and then continued for another 100 millimetres to confirm that the following spit was culturally sterile. Pits located on areas of higher archaeological potential or containing diagnostic artefactual material were expanded into one by one-metre square.



## SECTION 2

Three transects were established within the individual PADs identified in this section, positioned on a north-south alignment (Figure 2).

## SECTION 6

A transect placed on a north west -south east alignment with 8 pits 20 metres apart was established within identified PAD (Figure 3).

## SECTION 11

Four transects positioned on a north south and east west alignments across identified PAD's within the section were established with a total of 17 pits (Figure 4).

## SECTION 22

This section consisted of three transects positioned on a north south alignment with a total of 12 pits (Figure 5).

## SECTION 24

Two transects were positioned on an east west alignment within identified pad with a total of 10 pits (Figure 6).

## TEST EXCAVATION RESULTS

In general, there was minimum disturbance across each section of the study area. Soil depths to the natural clay were variable, though often shallower than the deepest depth of 700 millimetres across all the sections of study area.

Soil profile was consistent in most of the sections, consisting of a shallow dark/brown clay loam topsoil A1 transitioning into a pale/brown A2 silty clay transitioning into a B-Horizon that comprised clay ranging in colour from red/brown to orange/yellow or reddish-brown. Sandy deposits were encountered within section 6 and section 22.

Top soil A1 horizon was generally very shallow with newly grown vegetation. Overall the topsoil and the A2 horizons, across all areas investigated, presented signs of heavy erosion potentially associated with the recent droughts. In some instances, the stratigraphic profile consisted only of an A2 horizon exposed on the surface overlying a clear B horizon.

Aboriginal cultural material was very low in density and distribution. An average of two test pits per transect contained evidence of cultural material. Except for test pit 3 on Section 11 transect A1 which was extended into a 1 square metre pit containing 12 artefacts, the minimum number of individual (MNI) artefacts per pit is 2.06. This is representative of a very low background scatter which is a common site type in the region.

## ARTEFACT ASSEMBLAGE

A preliminary lithic analysis was conducted by Ricardo Servin (Austral Archaeology). The lithic analysis was aimed at primarily identifying the presence of culturally modified lithic material within the archaeological record, with a secondary goal of identifying material, tool types and any indicators of in situ reduction that informs depositional integrity. All of the artefacts recovered were taken to temporary storage at the Austral Archaeology office in Liverpool (NSW) and are to be reburied within the study area. Aboriginal stakeholders are to be consulted as to an appropriate area to relocate these artefacts.

Note that this is a preliminary lithic analysis and further analysis of the assemblage recovered will be required for the final report. The terminology used in the identification of stone tools is outlined in Table 1.

**Table 1 Terminology used in the identification of stone tools (Holdaway & Stern 2013)**

Analytical Terms	Definition
<b>Angular fragment / Debitage</b>	A piece of debris exhibiting evidence of knapping but lacking key diagnostic traits (e.g. platform, termination, bulb of percussion)
<b>Backing</b>	Abrupt retouch normally found on one lateral margin of a tool and opposite the working edge.
<b>Bladelet</b>	A small (generally 8-12mm in width) example of a blade; a cutting or scraping tool that is prepared through retouch of an initial flake (blade blank) at least twice as long as it is wide.
<b>Core</b>	A nodule or block of siliceous rock from which sharp-edged slivers of stone are struck (generally with a hammerstone).
<b>Cortex</b>	The weathered outer layer of rock, differing in chemical and optical properties to the unweathered interior.
<b>Distal flake</b>	The termination end of a partial (broken) flake.
<b>Dorsal surface</b>	Outer surface of a flake (former surface of the core) characterised by cortex and/or negative concavities (flake scars) and ridges denoting prior removal of flakes.
<b>Flake</b>	A sliver of stone struck from a core exhibiting characteristic traits of force fracture.
<b>Knapping</b>	The process of fracturing flakes of stone from a core
<b>Lateral margin</b>	Left and right edges of a flake (platform-oriented upward when viewing the ventral surface and distal end oriented upward for the dorsal surface).
<b>Platform</b>	Planar surface marking the location from which the flake was struck from the core.
<b>Primary flake</b>	Initial flake struck from a weathered cobble with a dorsal surface covered in cortex and lacking prior flake scars.
<b>Proximal flake</b>	The platform end of a partial (broken) flake.
<b>Retouch</b>	Alteration of the cutting edges of a flake or tool to refine sharpness, shape, angle or strength.
<b>Termination</b>	End of a flake opposite the platform denoting the place the force applied by the hammerstone exited the core.
<b>Tertiary flake</b>	Flake lacking dorsal or platform cortex indicating a high degree of prior reduction of the core from which it was knapped.
<b>Ventral surface</b>	Inner surface of a flake originally attached to a core exhibiting one or more traits of conchoidal fracture including a bulb of percussion, bulbar scar and ripple marks.

**SECTION 2**

A total of 14 artefacts were recovered from this area (Table 2). Seven artefacts recovered from transect A1 and seven from A2. Of these, 2 (14.28%) were identified as tools. Raw material consisted of 11 (78.57%) quartz artefacts and 3 (21.42%) chert artefacts.

**Table 2 Section 2 Distribution of artefacts within test pits**

Transect No.	Pit No.	Number of artefacts	Percentage of the total assemblage
<b>A1</b>	2	1	7.14%
<b>A1</b>	3	5	35.71%

Transect No.	Pit No.	Number of artefacts	Percentage of the total assemblage
A1	4	1	7.14%
A3	1	2	14.28%
A3	3	2	14.28%
A3	4	3	21.42%

**SECTION 6**

A total of 3 artefacts were recovered from this area (Table 3). It consisted of 1 quartz tool, 1 longitudinal split quartz flake and one complete chert flake.

**Table 3 Section 6 Distribution of artefacts within test pits**

Transect No.	Pit No.	Number of Artefacts	Percentage of the total assemblage
A1	4	2	66.66%
A1	6	1	33.33%

**SECTION 11**

A total of 31 artefacts were recovered from section 11 (Table 4). Of these, 6 (19.35%) were identified as tools and 1 (3.22%) as a multidirectional core. Artefacts recovered were predominantly made from quartz (74%). 6 (19.35%) artefacts made from chert, 1 (3.22%) from silcrete and 1 (3.22%) from jasper.

**Table 4 Section 11 Distribution of artefacts within test pits**

Transect No.	Pit No.	Number of Artefacts	Percentage of the total assemblage
A1	2	1	3.22%
A1	3	12	41.93
A1	4	3	9.67%
A1	5	2	6.45%
A2	2	1	3.22%
A3	2	3	9.67%
A3	3	1	3.22%
A4	1	1	3.22%
A4	2	2	6.45%
A4	3	1	3.22%
A4	4	1	3.22%

Transect No.	Pit No.	Number of Artefacts	Percentage of the total assemblage
A4	5	2	6.45%

**SECTION 22**

A total of 6 artefacts were recovered from this section (Table 5). 3 (50%) artefacts were made from chert, 2 (33.33%) made from quartz and 1 (16.66%) made from basalt (Tables 5 & 7).

**Table 5 Section 22 Distribution of artefacts within test pits**

Transect No.	Pit No.	Number of Artefacts	Percentage of the total assemblage
A1	3	1	16.66%
A2	2	2	33.33%
A3	2	3	50%

**SECTION 24**

Based on the preliminary results, 6 artefacts were recovered within this section (Table 6). This is a preliminary assessment of the assemblage recovered from this area. Artefacts from pit 5 transect A1 require further analysis as the first three spits containing artefacts are considered to be redeposit soil associated to a nearby road track (Table 6).

**Table 6 Section 24 Distribution of artefacts within test pits**

Transect No.	Pit No.	Number of artefacts	Percentage of total assemblage
A1	1	1	16.66%
A1	2	1	16.66%
A1	4	4	66.66%

**DISCUSSION**

The test excavation program has demonstrated the presence of Aboriginal cultural material within the PADs identified within sections 2, 6, 11, 22 and 24 of the Ungula Wind Farm project. The stratigraphic profile depicts high levels of erosion with negligible levels of subsurface ground disturbance. Disturbances are predominately associated to pastoral activities. High levels of ground erosion has potentially resulted in the exposure of artefacts on the surface which initially indicated potentially high archaeological sensitivity within this PADs.

However, the cultural material contained within these areas is very low in frequency and distribution. The low presence of tools and the abundant presence of complete and split flakes are representative of a background scatter.

As a result, the PADs identified within sections 2, 6, 11, 22 and 24 as areas of high sensitivity in the environmental impact statement (specifically Austral Archaeology 2020) are now considered to have low archaeological potential.

**2. Preliminary Assessment of Significance**

The test pit excavation program has resulted in the identification of low density background scatters present within the individual PADs identified within sections 2, 6, 11, 22 and 24 of the Ungula

Wind Farm project. Therefore, the sites are assessed to be of low archaeological potential. Based on the results of the text excavation program, it is unlikely that further information on the occupation and land-use patterns of these sections could be obtained with further archaeological test investigation.

The Aboriginal cultural value of the landscape that surrounds the study area, rather than Aboriginal objects it contains, is considered to be of higher cultural heritage value. The landscape and the objects which are encompassed within it are a material testament to the lives of peoples' ancestors and the focus of their current identity, concerns and aspirations. Generally, the RAPs consulted as part of the project consider all Aboriginal objects, irrespective of distribution density or their nature, to be significant.

### 3. Conclusion

The archaeological test excavation program has demonstrated the presence of Aboriginal cultural material within the individual PADs identified within sections 2, 6, 11, 22 and 24 of the Uungula Wind Farm project. Extensive levels of erosion have exposed large number of artefacts on the surface. However, subsurface investigation of these areas revealed low density and distribution of artefacts.

Therefore, it has been determined that the individual PADs, initially evaluated as areas of high archaeological sensitivity (Austral Archaeology 2020), contain low archaeological potential based on the low artefactual frequency and distribution within each section.

### 4. Recommendations

The following recommendations are preliminary and derived from the test excavation results and refer to the findings described in this letter. The recommendations have been developed after considering the archaeological context, environmental information, the findings of the test excavation and the predicted impact of the planning proposal on archaeological resources.

It is recommended that:

1. No further subsurface archaeological investigation is required within sections 2, 6, 11, 22 and 24 of the Uungula Wind Farm project.
2. Before commencement of works a program community collection of the artefact scatters followed by an analysis of the retrieved artefacts must be undertaken.
3. If cultural heritage material is located during works that work must stop immediately and a suitably qualified person is engaged to ascertain whether the material is of cultural origins and if so, they can then advise how to proceed.

Please do not hesitate to contact me on 0431688859 if you wish to discuss any aspect of this submission.

Yours sincerely,



Ricardo Servin

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## 5. REFERENCES

Austral Expert Services Pty Ltd 2020, *Uungula Wind Farm, Uungula New South Wales: Aboriginal Archaeological Survey Report (addendum)*.

Australia ICOMOS 2013a, *The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance*, Australia ICOMOS, Burwood, VIC.

Australia ICOMOS 2013b, 'Practice Note: Interpretation'.

DECC 2009, 'Operational Policy: Protecting Aboriginal Cultural Heritage', <<https://www.environment.nsw.gov.au/resources/cultureheritage/09122ACHOpPolicy.pdf>>.

DECCW 2010a, 'Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW'.

DECCW 2010b, 'Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010'.

DECCW 2010c, 'Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales'.

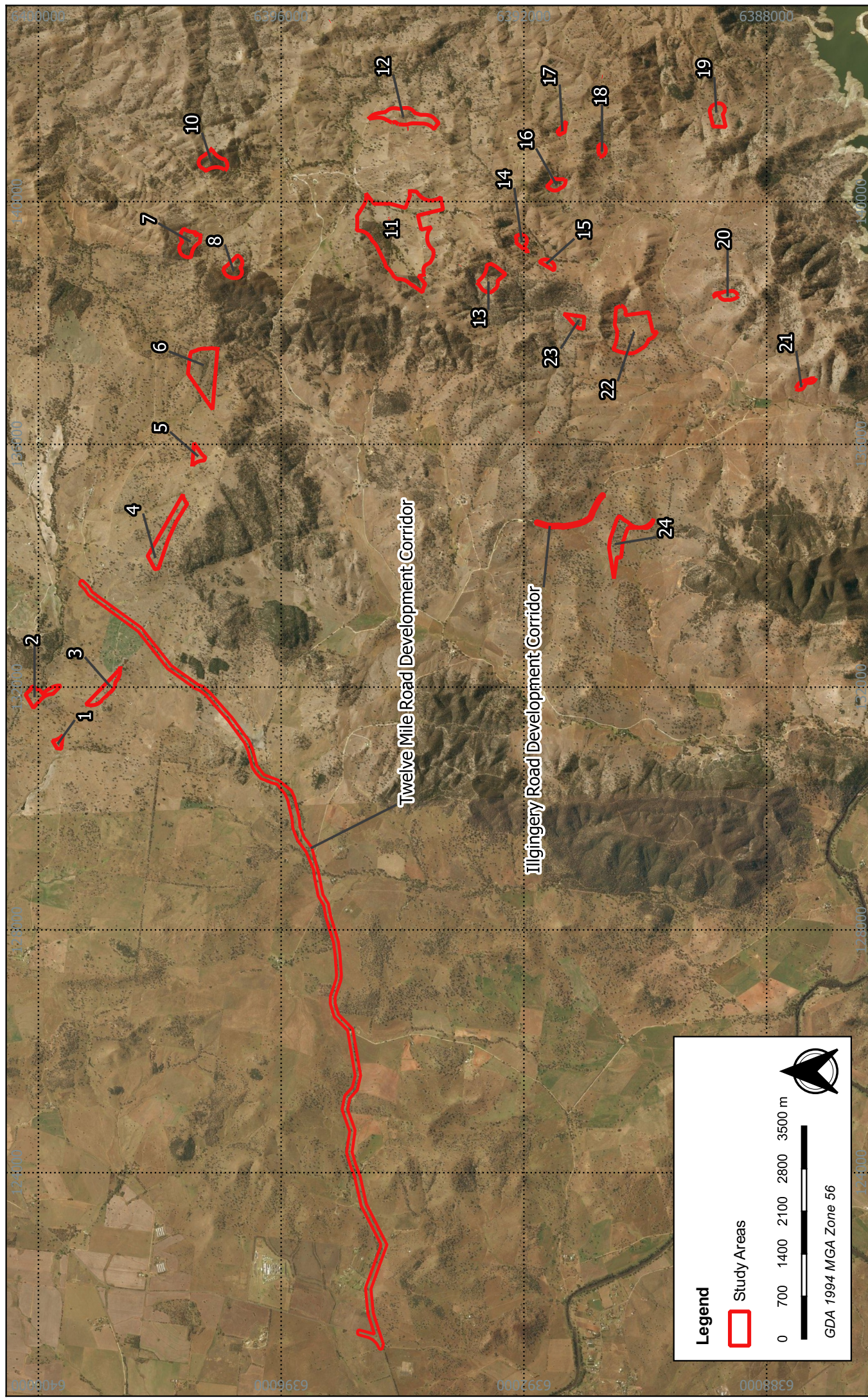
Didben, J 2018, *Uungula Wind Farm Aboriginal Cultural Heritage Assessment Report*.

Holdaway, S & Stern, N 2013, *A Record in Stone: The Study of Australia's Flaked Stone Artefacts.*, Aboriginal Studies Press, Melbourne.

New South Wales Archaeology 2012, *Revised Report Draft 2, Uungula Wind Farm, Aboriginal Cultural Heritage Assessment Report*.

**Figure 1**      **Detailed aerial of the study area**





**Figure 1. Location of section areas**

2053 Ungula Wind Farm - Test Excavations

Source: Bing, OSM

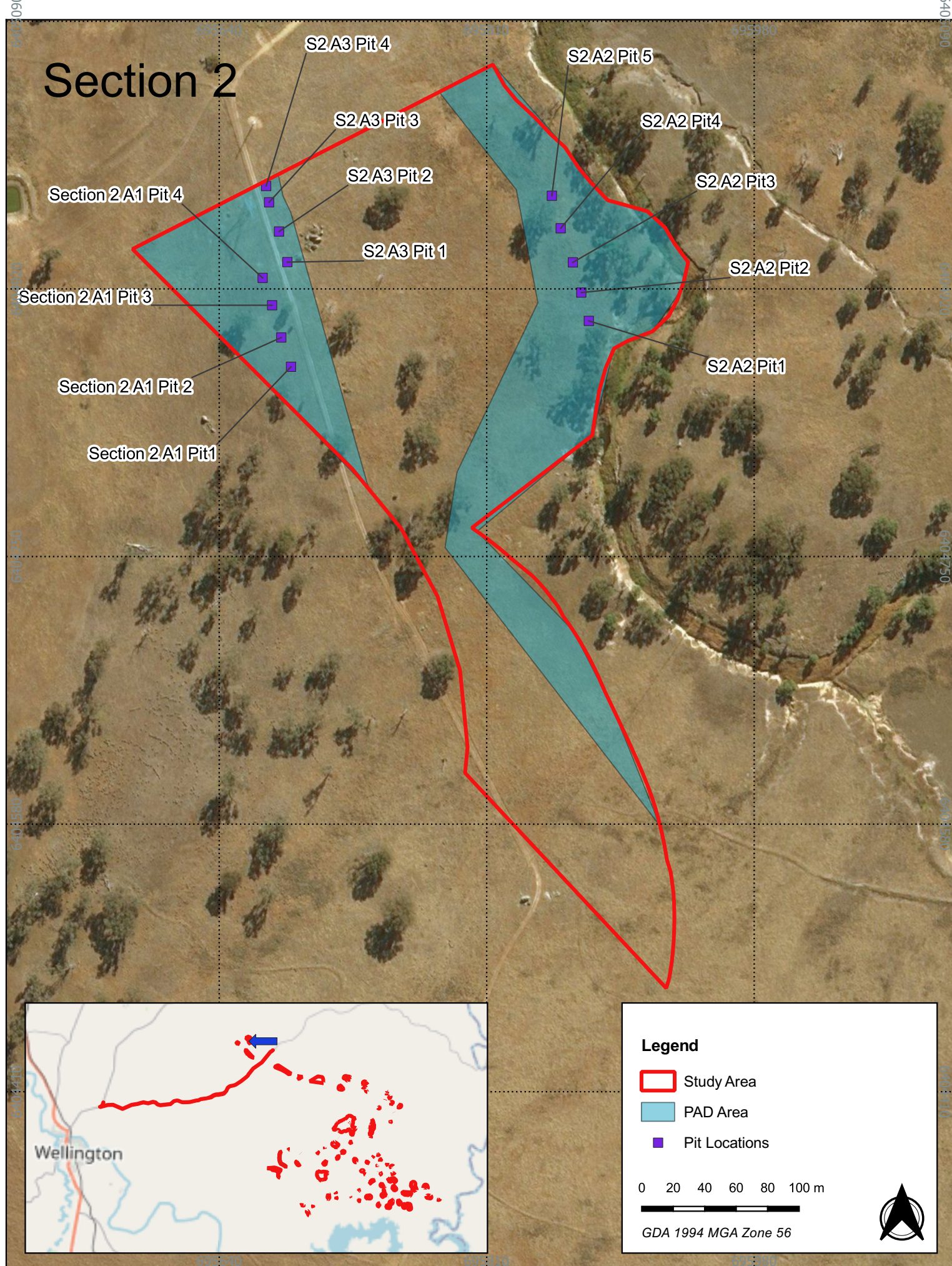
Drawn by: WA Date: 2020-09-11



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**Figure 2**      **Location of excavations in section 2**



**Figure 2. Location of excavations in section 2**

2053 - Uungula Wind Farm - Test Excavations

Source: Bing, OSM

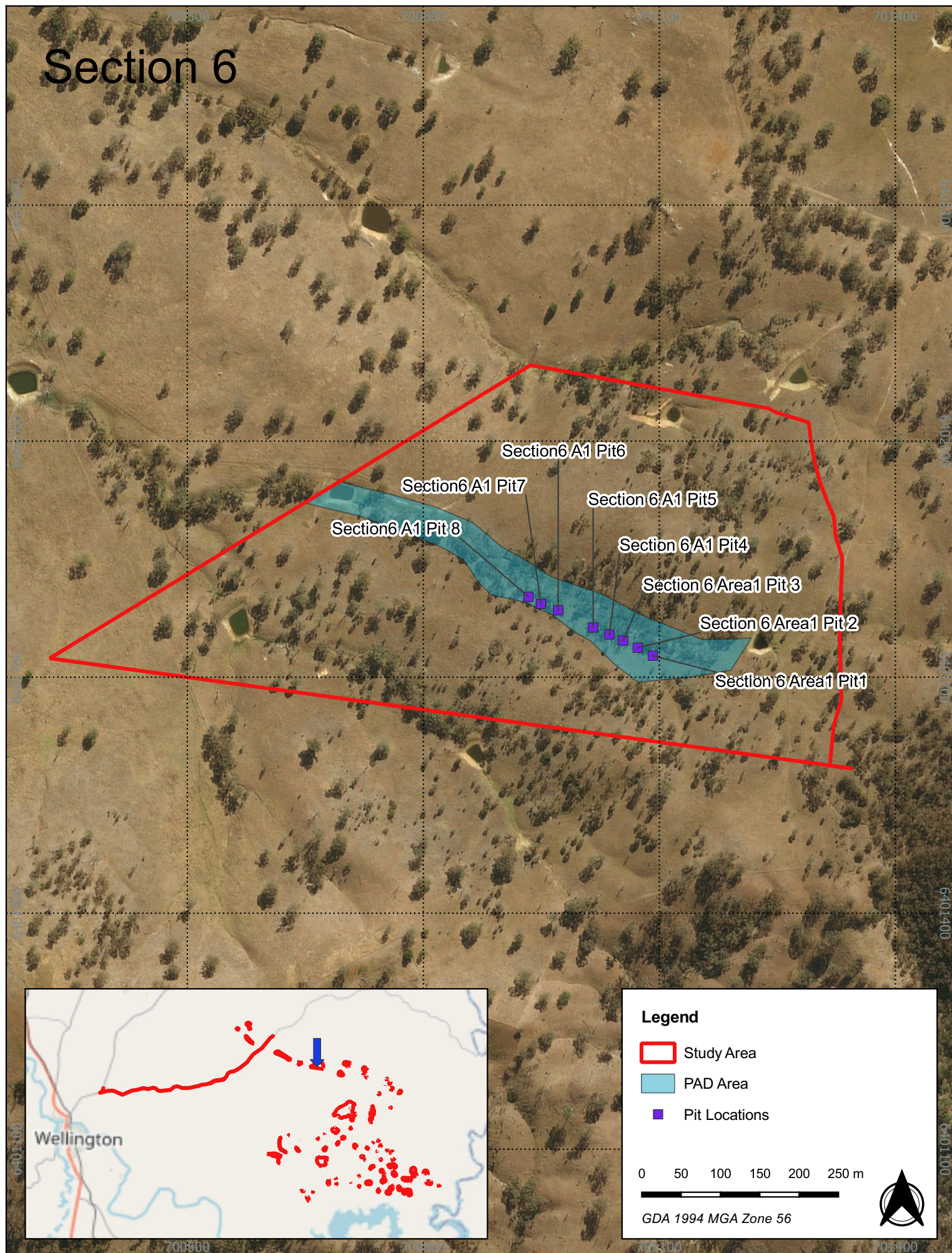
Drawn by: WA Date: 2020-09-10



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**Figure 3**      **Location of excavations in section 6**





**Figure 3. Location of excavations in section 6**

2053 - Uungula Wind Farm - Test Excavations

Source: Bing, OSM

Drawn by: WA Date: 2020-09-10



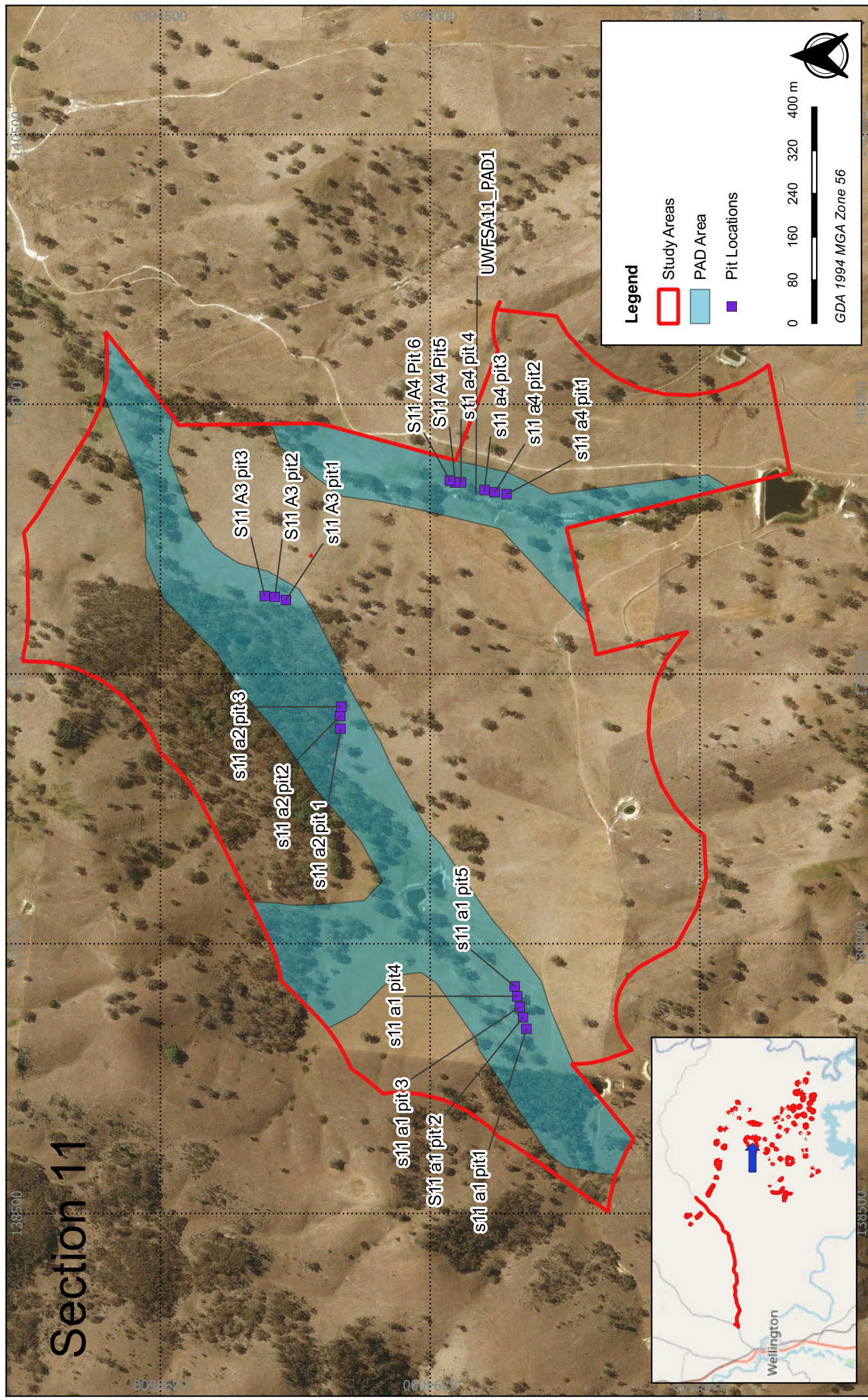
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**Figure 4**      **Location of excavations in section 11**

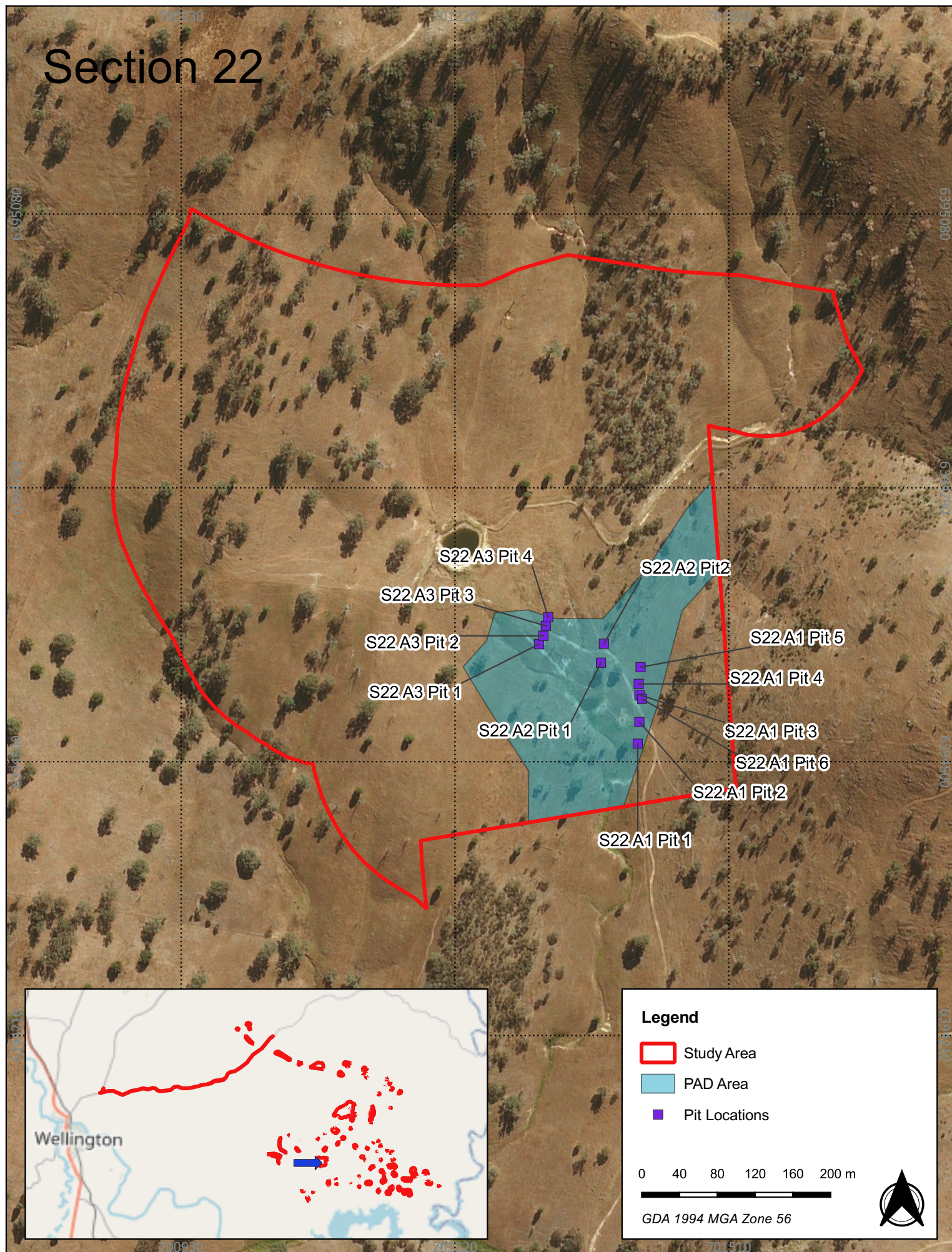






**Figure 5**      **Location of excavations in section 22**





**Figure 5. Location of excavations in section 22**

2053 - Uungula Wind Farm - Test Excavations

Source: Bing, OSM

Drawn by: WA Date: 2020-09-10

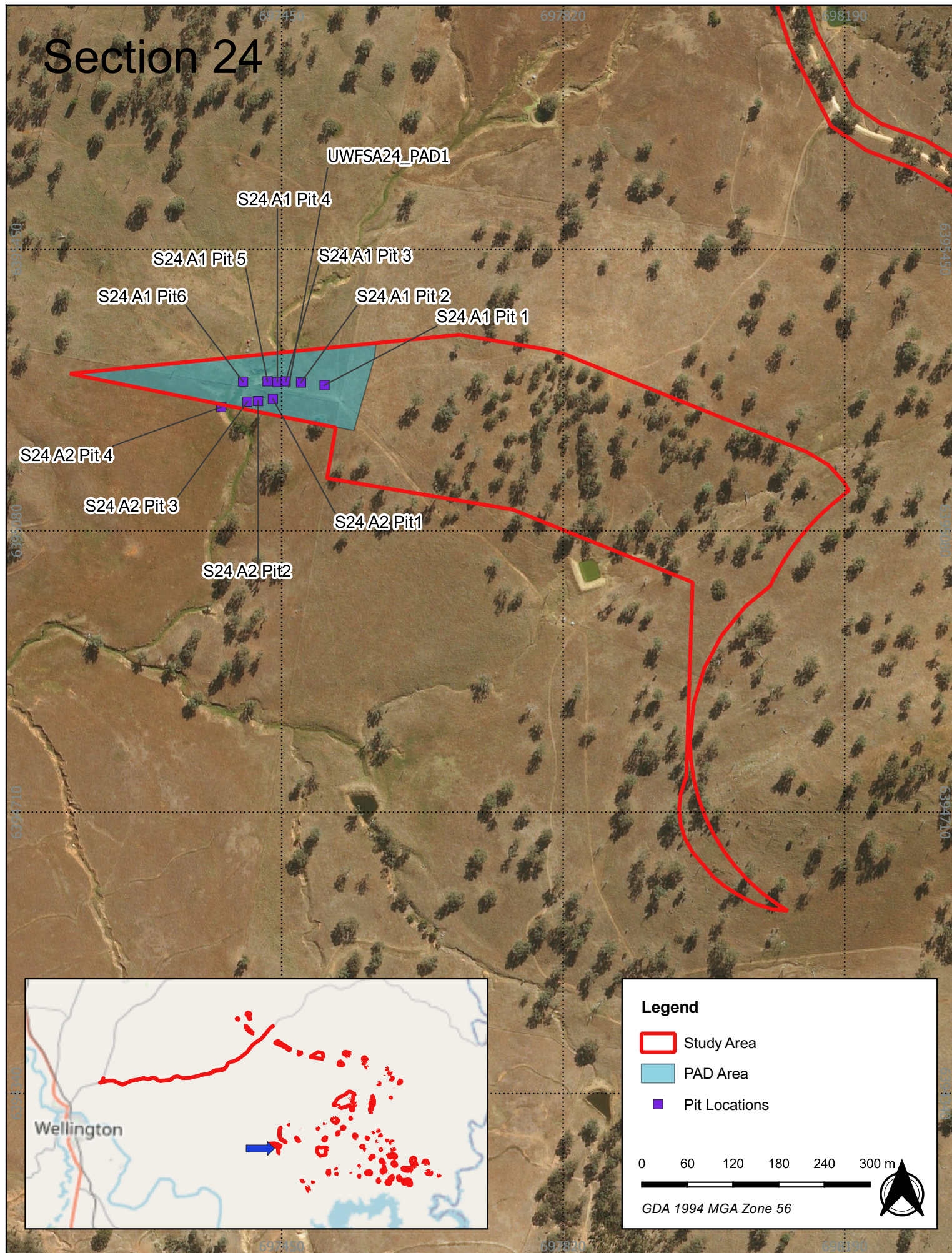


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**Figure 6**      **Location of excavations in section 24**





**Figure 6. Location of excavations in section 24**

2053 - Uungula Wind Farm - Test Excavations

Source: Bing, OSM

Drawn by: WA Date: 2020-09-10



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## APPENDIX 3





## New Study Area

Ungula Wind Farm

Source: Bing Aerial

Drawn by: WA Date: 2020-09-22



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