Douglas Partners
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Integrated Practical Solutions

Report on
Preliminary Site Investigation

Proposed Appin (Part) Precinct
Appin, NSW

Prepared for
Walker Corporation Pty Ltd

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Douglas Partners
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The undersigned, on behalf of Douglas Partners Pty Ltd, confirm that this document and all attached drawings, logs and test results have been checked and reviewed for errors, omissions and inaccuracies.

	Signature		Date
Author			12 October 2022
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Executive Summary

Douglas Partners Pty Ltd (DP) has been engaged by Walker Corporation Pty Ltd (Walker) to prepare a Preliminary Site Investigation for Contamination ('PSI') to inform proposed rezoning of a portion of land referred to as the proposed Appin (Part) Precinct, Appin, NSW.

The objective of this PSI is to assess the site for any significant contamination constraints to the proposed rezoning. General advice on future stages of works to inform subdivision and construction is also provided with reference to SEPP 55. The PSI is being undertaken in conjunction with preliminary geotechnical and salinity investigations collectively referred to as 'the land capability study'.

The scope of works undertaken for the PSI included a desktop review of online databases, published regional information and historical aerial photographs as well as soil logs undertaken to inform the intrusive investigation undertaken for the geotechnical and salinity investigations as well as a site walk over and field mapping of possible contamination constraints.

The findings of the desk top study and site walk over identified a number of potential areas of environmental concern (PAEC) which could be defined in 12 PAEC Categories. A total of 280 individual PAECs were identified from the desk top study and the site walk over. Recommendations for future works ('risk management actions') were qualitatively provided based on whether the likelihood of significant contamination risk to be present is low, medium or high. Of the 280 individual PAECs, 128 (44%) were characterised 'low' risk, 144 (49%) were characterised as 'low – medium' risk, 20 (7%) were characterised as 'medium' risk and none were characterised as 'high' risk'. To better understand contamination risks associated with low – medium range PAECs, targeted investigations should be undertaken, in the form of a Detailed Site Investigation (DSI) to inform any future DA for the proposed development

Based on the findings of the PSI, the potential for significant, widespread contamination to be present at the site with respect to the proposed development is generally low and, as such the site is deemed suitable (from a contamination perspective) for proposed rezoning for mixed land use including residential. Localised evidence of contamination was observed at the site (i.e. PAEC low – medium range) which was typical for a site of this type and for the general region.

Portions of the site that were not accessible during the walk over should be inspected as part of the DSI. The coal seam gas well and network present on site (PAEC category 6) may require targeted soil and hazardous ground gas investigations which can be undertaken at the same time as the DSI or as a separate exercise. Depending on the findings of such investigations, some form of barrier or seal may be required in between the coal seam gas network and the development itself. If remediation is required to render the site suitable for the proposed development, a Remediation Action Plan (RAP) will be required to document remediation and validation works required to resolve any contamination identified in the DSI.

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1. The Appin Project

Greater Sydney's population is projected to grow to approximately 6.1 million by 2041 – over a million more people than currently live in the region.

The NSW Government has identified Growth Areas as major development areas that will assist in accommodating this growth. The Greater Macarthur Growth Area (**GMGA**) is one such growth area and is a logical extension of the urban form of south-west Sydney. The GMGA is divided into precincts. The Appin Precinct and North Appin Precincts are the southernmost land release precincts of the GMGA. The goal is to deliver 21,000+ dwellings.

The land is to be rezoned and released for development to achieve this goal. A submission has been prepared by Walker Corporation Pty Limited and Walker Group Holdings Pty Limited (the **Proponent**) to rezone 1,378 hectares of land (**the site**) within the Appin Precinct from *RU2 Rural Landscape* to the following zones:

Urban Development Zone

Zone 1 Urban Development (UD)

Special Purposes Zone

Zone SP2 Infrastructure (SP2)

Conservation Zone

Zone C2 Environmental Conservation (C2)

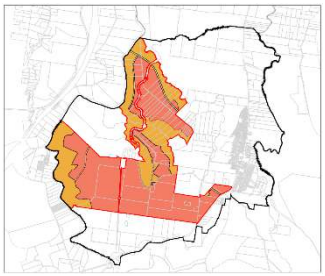
The zonings are shown on the Appin (Part) Precinct Plan (**the precinct plan**). 'The precinct plan' will be incorporated into the *State Environmental Planning Policy (Precincts – Western Parkland City) 2021* and contain the provisions (clauses and maps) that will apply to 'the site.' 'The precinct plan' envisages the delivery of 12,000+ new homes.

A structure plan has been prepared for the site and is shown on the Appin (Part) Precinct Structure Plan (**the structure plan**). It identifies staging and the first stage to be developed – Release Area 1. Release Area 1 is anticipated to deliver 3,500+ dwellings.

The submission is aligned with strategic land use planning, State and local government policies and infrastructure delivery. The development potential is tempered by a landscape-based approach that protects the environment and landscape values, shaping the character of new communities. A series of residential neighbourhoods are to be delivered within the landscape corridors of the Nepean and Cataract Rivers, supported by local amenities, transit corridors and community infrastructure.

The submission includes a hierarchy of plans. The plans and their purpose are summarised in Table 1.

Table 1: Draft Proposal Summary

(1) APPIN & NORTH APPIN PRECINCTS INDICATIVE PLAN	(2) APPIN (PART) PRECINCT PLAN (*THE PRECINCT PLAN*)	(3) APPIN (PART) PRECINCT STRUCTURE PLAN (*THE STRUCTURE PLAN*)
Broader context and for information purposes only. It has no statutory weight. It identifies: • *Higher-order transport network* • *Centres hierarchy* • *School sites* • *Conservation areas* • *Residential areas* • *Cultural sites and connections*	*It shows the land proposed to be rezoned and incorporated into a new schedule in the Western Parkland City SEPP 2021.* *The precinct plan contains the development provisions (clauses and maps) applicable to the site and is used in assessing development applications.*	*Structure plan for the site, showing staging of release areas.* *Development is to be generally consistent with the structure plan. It illustrates land use components including (but not limited to):* • *Low and medium-density residential* • *Retail and employment centres* • *School* • *Open space* • *Drainage network/basins* • *Transport network*
		
(21,000+ dwellings)	**(12,000+ dwellings)**	**(12,000+ dwellings)** **(Inc. Release Area 1 - 3,500+ dwellings)**

2. Introduction

Douglas Partners Pty Ltd (DP) have been engaged by the Proponent to prepare a Preliminary Site Investigation (PSI) to support the Appin (Part) Precinct Plan (the precinct plan) and Appin (Part) Precinct Structure Plan (the structure plan).

The precinct and structure plan boundaries are Wilton Road to the east, the Nepean River to the west and Ousedale Creek to the north. Refer to Figure 1 and Table 2 for key attributes of the precinct plan and structure plan area.

The Appin (Part) Precinct Plan zones land for conservation, urban development and infrastructure and establishes the statutory planning framework permitting the delivery of a range of residential typologies, retail, education, business premises, recreation areas, and infrastructure services and provides development standards that development must fulfil. Within the proposed urban development zone, 12,000+ dwellings can be delivered.

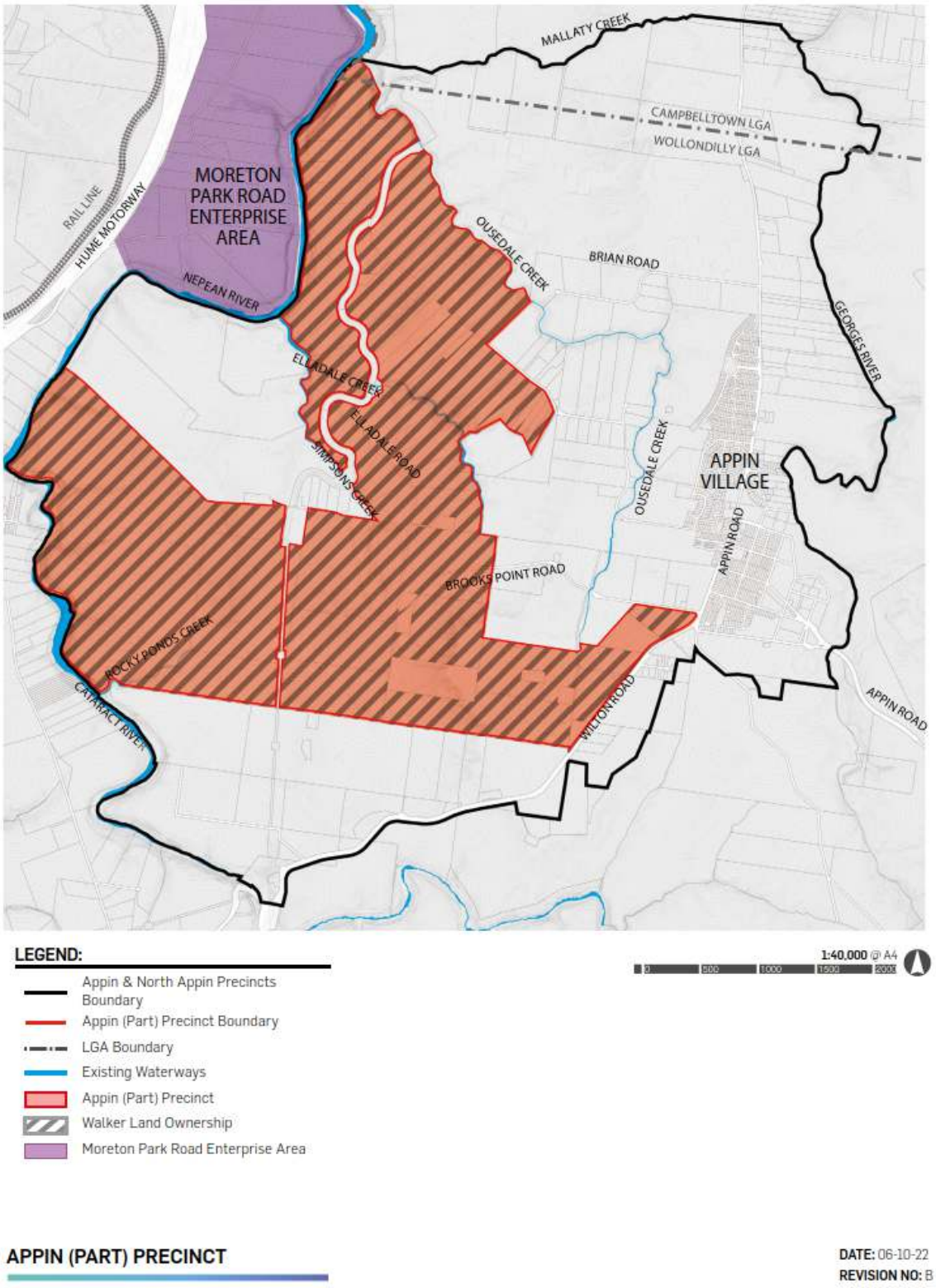
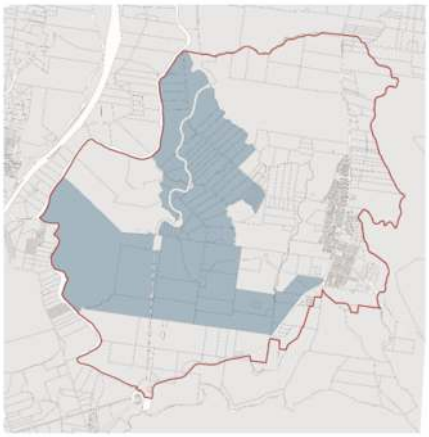


Figure 1: Appin (Part) Precinct Boundary

Table 2: Summary of Appin (Part) Precinct key attributes

Location		Key Attributes	
Appin (Part) Precinct		**Area**	- Total - 1,378 ha - Walker – 1,248ha - Private Ownership – 94ha
		LGA	Primarily Wollondilly LGA
		Proposed Dwellings	12,000+
		Proposed Population	36,000+

This PSI has been prepared with reference to and meets the reporting requirements for a Preliminary Site Investigation (PSI) as set out in NSW EPA guidelines under the *Contaminated Land Management (CLM) Act* 1997, NSW *State Environmental Planning Policy No. 55 - Remediation of Land* (SEPP 55) and NSW EPA endorsed guidelines, in particular the National Environment Protection Council National *Environment Protection (Assessment of Site Contamination) Measure, 1999*, as amended 2013 (NEPC, 2013) and NSW EPA *Consultants Reporting on Contaminated Land* (EPA, 2020).

The objective of this PSI is to assess the site for any significant contamination constraints to the proposed rezoning. General advice on future stages of works to inform subdivision and construction is also provided with reference to SEPP 55. The PSI is being undertaken in conjunction with preliminary geotechnical and salinity investigations (report references 76589.06.P.002 and 76589.06.P.003 respectively) collectively referred to as 'the land capability study'.

3. Scope of Works

The following scope of work was undertaken to inform this PSI:

- Desktop review of:
  - NSW EPA public registers under the Contaminated Land Management Act 1997 (CLM Act) and the Protection of the Environment Operations Act 1997 (POEO Act);
  - Published geological, soil landscape, salinity and acid sulphate soil maps;
  - Soil logs from limited intrusive investigations undertaken to inform the preliminary geotechnical and salinity investigations;
- A site walk over and field mapping of possible contamination constraints undertaken by DP Environmental Engineer Chris Kline, a chartered engineer and a certified consultant (CEnvP SC, awarded by EIANZ) to inform all three components of the land capability study;

- Review of test pits logs undertaken to inform the geotechnical investigation; and
- Preparation of this PSI report.

4. Site Information

4.1 Site Identification

The site, which has a total area of approximately 1450 hectares, is located in the local government area of Wollondilly Shire Council ('Council') and is currently zoned RU2 Rural Landscape with a small portion associated with Upper Canal zoned SP2 Infrastructure. Table 3 below and Drawing 1 attached (Appendix A) shows formally registered lots located in the site.

Table 3: Registered lots within the site boundary

Lot(s)	Deposited Plan (D.P.)	Lot(s)	D.P.
1 - 5	248044	1 – 8	209113
1	816861	Part of 1281, all of 1282 and 1283	1115045
60 – 62	1064019	1 – 6	209113
1	816861	3 – 12	245396
5	239247	1	338801
21 – 26	242574	100, 101	790844
6	557763	1 – 4	825014
Part of 7	816863	1	9866721
Part of 1 and 3	237433	1 – 5	825014
14	752012	60, 61	850925
Part of 1 and 2	518975	200 – 203	819476
2, 3	239247	1	816238
40	740878	2 – 4	249286
1, 2	616327	11 – 16	746335
9	563605	1	1158273
21	816862	9	123069
22, 23	572558	26, 28	752012
41	816859	1	57337

The site is bordered by the Nepean River along the western boundary, Ousedale Creek along the north eastern site boundary, Elladale Creek along the eastern site boundary, The Cataract River and Wilton Road along the south eastern and south western site boundary and rural residential/pastoral lots along the southern boundary.

4.2 Regional and Site-Specific Land Use

The site is primarily used for low density agricultural/pastoral and rural residential purposes and dairy farming in the south west portion of the site. The majority of residences are located along Macquariedale Road (in the northern portion of the site), Brooks Point Road and Quarter Sessions Road in the south and Wilton Road in the south east. A high-pressure gas main (eastern gas pipeline) runs through the site north east to south west and power lines run north to south and east to west across the site adjacent to Elladale Road, intersecting in the southern central portion of the site, near Brooks Point Road. The power lines running east to west across the site connect with Appin Power Station, located near the south eastern portion of the site (see Drawing 1, Appendix A). Appin Colliery is located next to the south western site boundary (also shown in Drawing 1, Appendix A).

Surrounding land use generally comprises low density agricultural/pastoral, rural residential and commercial land use as well as the power station site located near the south east boundary and Appin Colliery in the south west. Appin town centre is located approximately 1.8 km east of the site.

5. Environmental Setting

5.1 Topography, Hydrology and Hydrogeology

The site topography is gently undulating ranging from 250 m Australian Height Datum (AHD) in the south west portion to approximately 120 m AHD near the escarpment of the Nepean River and tributaries and between approximately 70 and 110 m AHD along the banks of the Nepean River and tributaries.

The slope gradient generally ranges from approximately 5% in low lying generally flat areas of the site to approximately 27% along a ridgeline in the south east portion and along the flanks of the Nepean River. The average slope gradient across the site is approximately 7 to 10%. The tributaries and Nepean River have sandstone escarpments of up to 30 m.

Figure 2 below presents regional topography mapping (10 m Australian Height Datum (AHD) intervals between contours) as obtained from NSW Spatial Services, key surface water features and registered groundwater bores as recorded by the NSW Department of Primary Industries (Water) and the Bureau of Meteorology Groundwater Explorer.

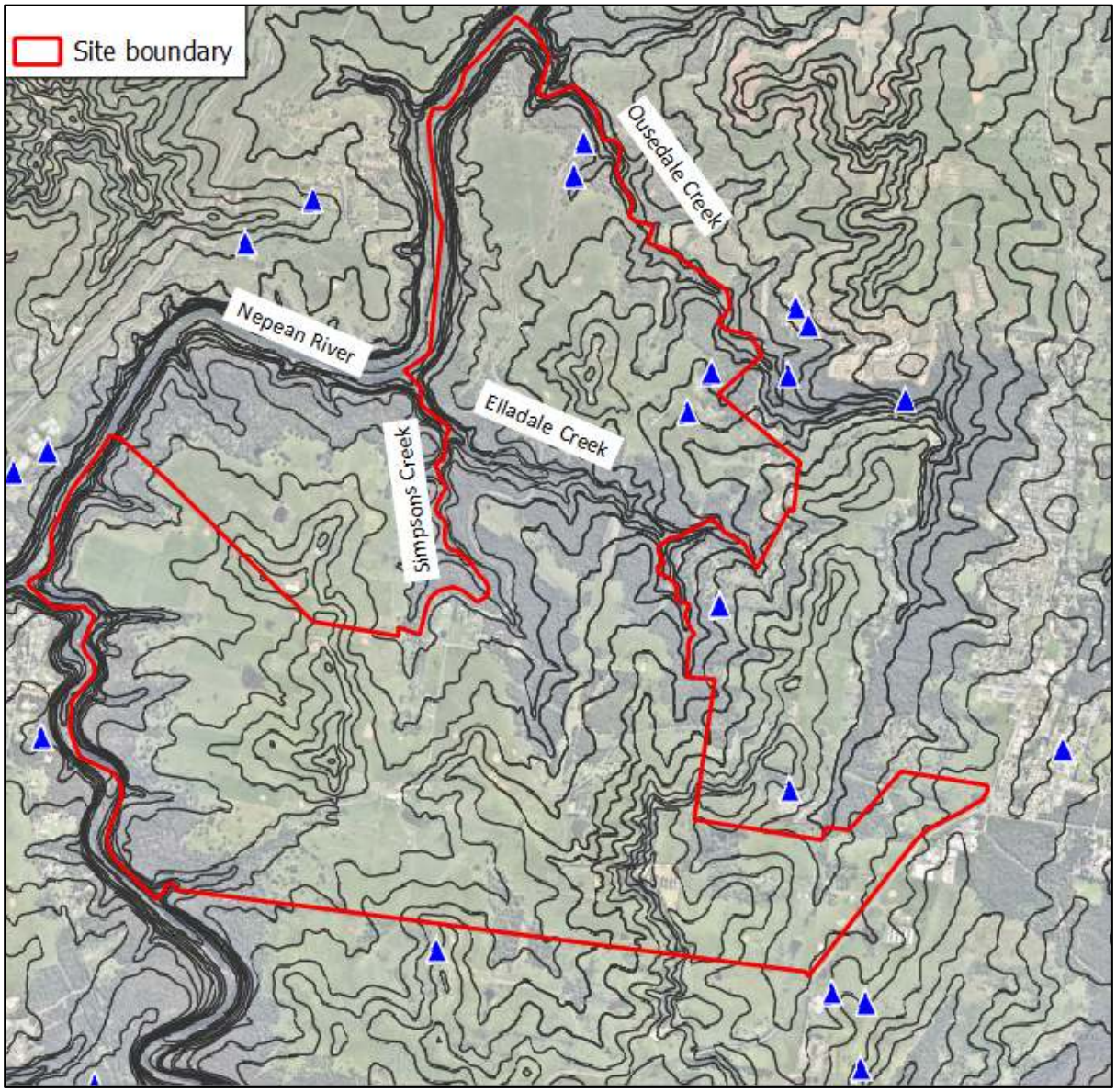


Figure 2: Site Topography (dark grey lines are 10 m intervals), Surface Water Features and Registered Groundwater Bores (blue triangles)

The Upper Canal System (UCS), a heritage-listed gravity-fed aqueduct runs through the site from the Cataract River from the south towards the north. The southern half of the UCS flows through the Cataract Tunnel and emerges near Brooks Point Road near the centre of the site where it flows for the remainder of the site through an aqueduct. The Nepean River runs parallel with the western site boundary and towards the north. Elladale Creek and Simpsons Creek, both tributaries of the Nepean River run east to west across the northern half of the site. Ousedale Creek, also a tributary of the Nepean River runs parallel with the northern site boundary. Five small unnamed creeks and drainage lines are present in the south west portion of the site which drain into the Nepean River.

Four groundwater bores are registered on site, and a further 17 close the site, on the eastern side of the Nepean River. Key recorded details for all 21 bores are presented in Table 4 below.

Table 4: Registered Groundwater Bores

Groundwater Bore Reference	General Location	Purpose	Geology	Groundwater / Bore Depth (m bgl)	Salinity (µS/cm)
On-site Bores					
GW040953	On-site	Monitoring	Sandstone with minor shale beds	NP/170 m	8,300 (saline)
GW040954	On-site	Water supply	Sandstone with minor shale beds	NP/205 m	6,000 (saline)
GW060887	On-site	Dewatering	Sandstone and shale with mudstone at depth	NP/395 m	NP
GW060889	On-site			NP/400 m	NP
Near-site Bores					
GW060888	North east of site			NP/395 m	NP
GW062169	North east of site	Exploration	Sandstone	NP/100 m	NP
GW060886	North east of site	Dewatering	Sandstone and shale with mudstone at depth	NP/381 m	NP
GW104633	North east of site	Water supply	Sandstone	NP/141 m	NP
GW100691 to GW100694 (four bores in one area)	North east of site	Monitoring	Sandstone	NP/8 m	NP
GW059446	Appin Power Station	Commercial and industrial	Sandstone with minor shale beds	NP, screened at 51 m and below/57 m	NP
GW015090	Appin Town Centre	Stock and Domestic	Sandstone	NP/37 m	NP
GW107116	Near-site	Unknown	NP	NP	NP
GW107117	Near-site	Unknown	NP	NP	NP
GW101942	Near-site	Monitoring	Sandstone	NP/245 m	NP
GW043863	Near-site	Water supply	Shale in top 32 m then Sandstone	NP/122 m	7,011 (saline)

NP: Not provided

The above recorded bores do not include any previously used by BHP Billiton or South32 which are present in the general region (refer to Section 7 for bores sighted on site). Whilst no groundwater depth information was made available for registered groundwater bores on, and near the site, observed geology, bore depths and installation details indicate saline groundwater is present in primarily sandstones at depths of more than 50 m.

5.2 Soils

Regional soils mapping for the site as obtained from Soil Conservation Service of NSW, *Soil Landscapes of the Penrith 1:100 000 Sheet* is presented in Figure 3, below.

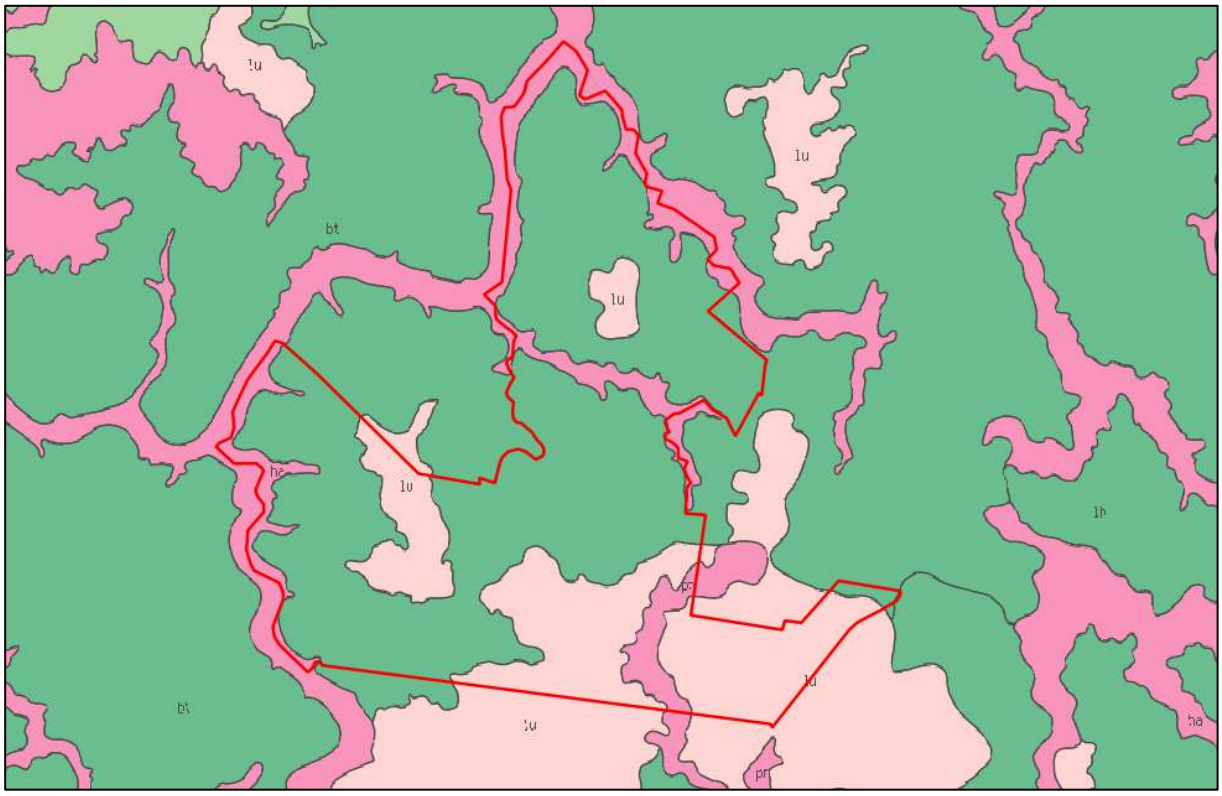


Figure 3: Regional soils mapping for the site (red boundary)

Regional soils mapping as presented and referenced above indicates that the majority of the site is mapped as Blacktown soils (dark green) which are associated with the gently undulating rises on Wianamatta Group shales and Hawkesbury Sandstone. Blacktown soils comprise shallow to moderately deep red and brown podzolic soils on crests, upper slopes and well drained areas and deep yellow podzolic soils and soloths on lower slopes and in areas of poor drainage. Such soils are generally moderately reactive highly plastic subsoil, of low soil fertility with poor soil drainage. Also mapped as present at the site are the following:

- Luddenham soils (light pink) in the south east and portions of the northern and western part of the site and comprising shallow dark podzolic or massive earthy clays on crests, erosional soils. Luddenham soils are associated with undulating to rolling low hills of the Wianamatta Group shales and lower slopes and drainage lines; and

- Hawkesbury soils (dark pink) which are colluvial lithosols/siliceous sands comprising podzolic soils, siliceous sands and secondary yellow earths associated with drainage lines dissecting Hawkesbury Sandstones, along the Nepean River and tributaries.

5.3 Geology

Regional geology mapping for the site as obtained from Geological Survey of New South Wales *Wollongong – Port Hacking 1:100 000 scale Geological Series Sheet 9029 - 9129*, 1st Edition 1985 is presented in Figure 4 below.

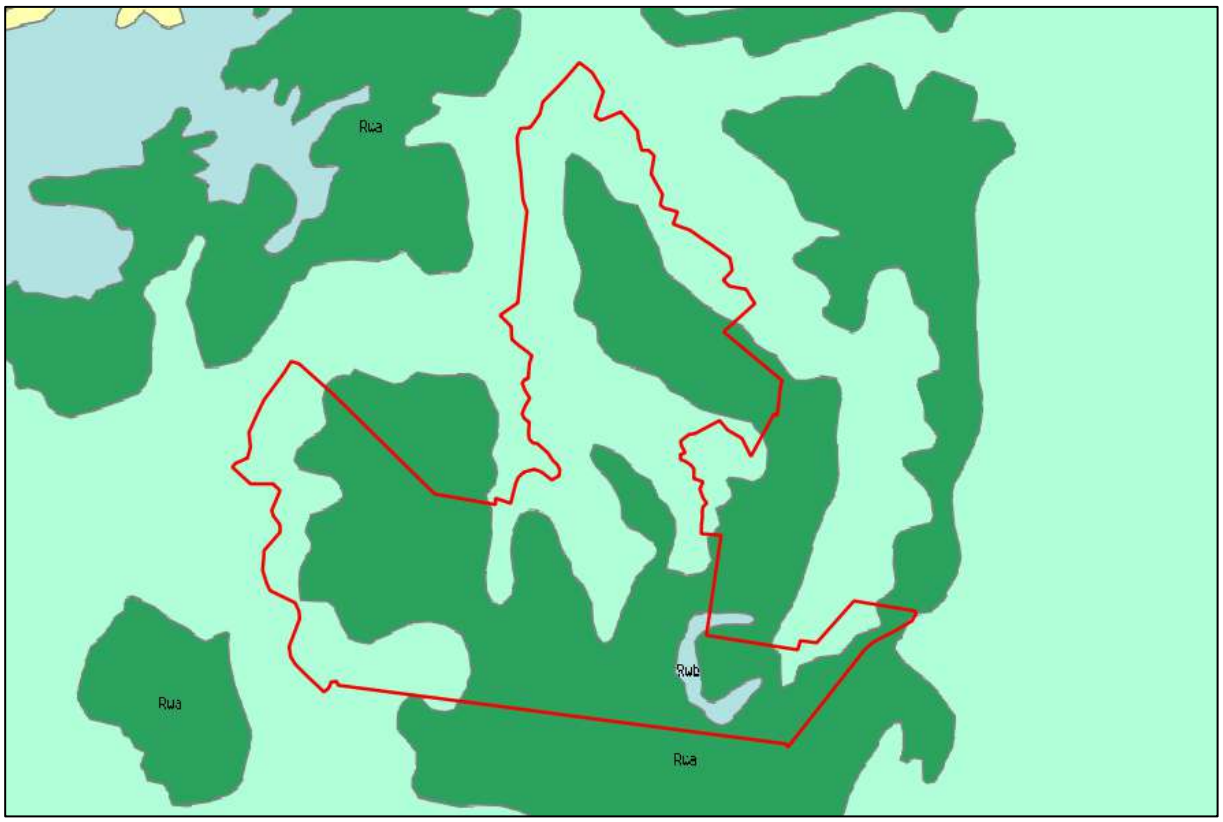


Figure 4: Regional geology mapping for the site (red boundary)

Regional geology mapping as presented and referenced above indicates that the majority of the site is underlain by Ashfield Shale of the Wianamatta Group (dark green) and Bringelly Shale in a small part of the site (light blue) comprising laminite and dark-grey siltstones primarily along ridges and topographical high-points through the site. Hawkesbury Sandstone (light green) comprising medium to coarse-grained quartz sandstone with very minor shale and laminite lenses are mapped as present around the site perimeter, including next to the Nepean River and topographical low-points across the site.

Figure 5 below presents regional salinity mapping for the site as obtained from the Department of Infrastructure, Planning and Natural Resources *Salinity Potential in Western Sydney* (2002).

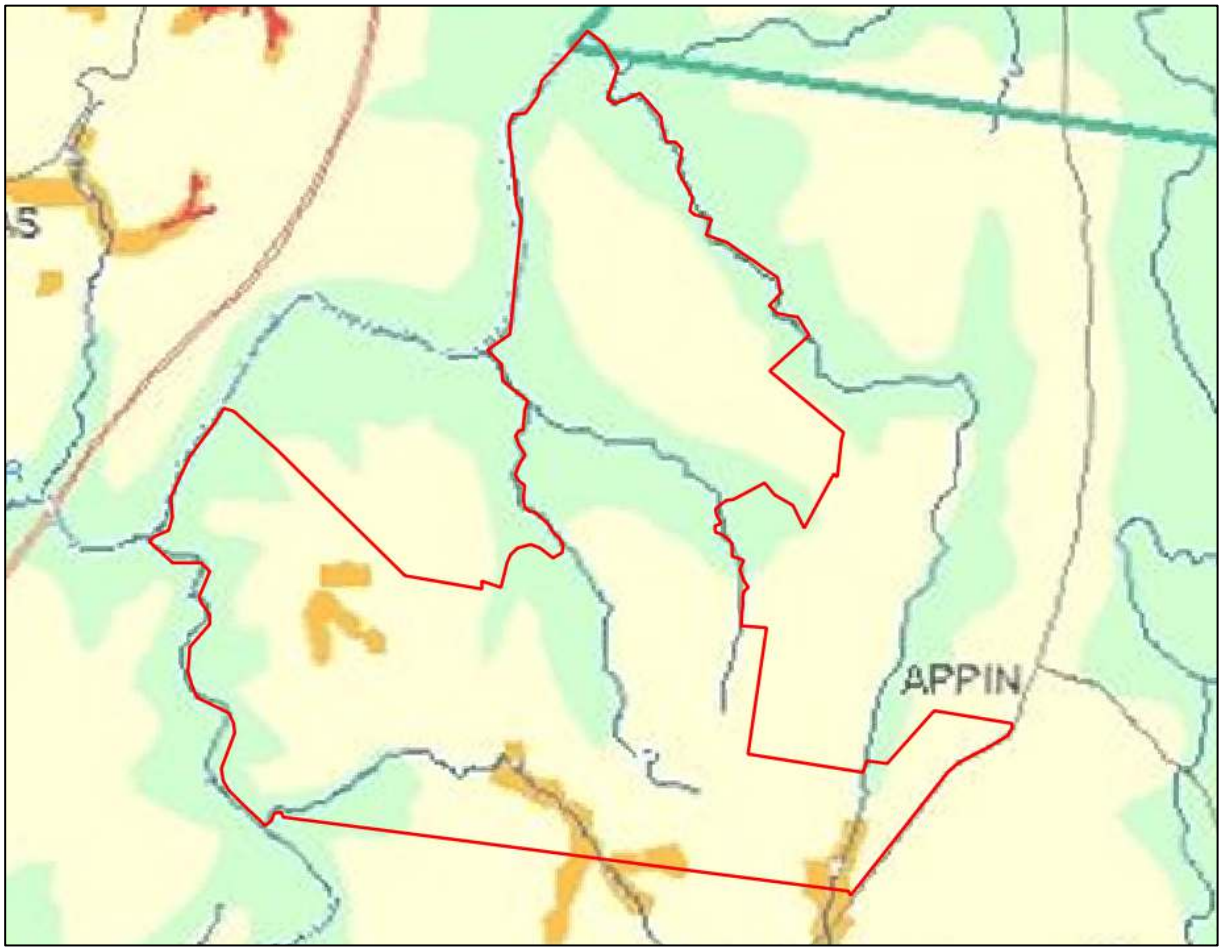


Figure 5: Regional Salinity Mapping

Regional salinity mapping as presented and referenced above indicates that the site is located in an area mapped as follows:

- Very low salinity potential (green) along the Nepean River and tributaries;
- Moderate salinity potential (pale yellow) across the majority (approximately 90%) of the site; and
- High salinity potential (orange) along the southernmost portion of Ousedale Creek, an unnamed creek in the southern portion of the site and along a ridgeline in the south west portion of the site.

6. Site History

6.1 Historical Aerial Photographs

A search was made using the NSW Spatial Data Services (SDS) online Spatial Mapping tool[1] (pre 2010 images) and Nearmap (2010 onwards) for historical aerial photographs covering the site area. Select years providing approximate ten-year intervals and based on the availability and quality of images covering the whole site were visually assessed for general site uses, changes in site activity between aerial photographs and to identify key site features for further assessment.

A summary of key observations are provided in Table 5, below. The key site features are presented on Drawings 2 to 10, Appendix A and further documented in Table B.1, Appendix B.

Table 5: Summary of key observations from historical aerial photographs

Year	Drawing Ref	Key Observations
1947	Drawing 2	Aerial photographs for 1947 were available for the northern portion of the site only – photographs for the remainder of the site were unavailable from SDS. The UCS aqueduct is visible. The site and surrounding area appear to be used for low density agricultural (e.g. pastoral) purposes. Key site features include small structures, farm dams (four, possibly five dams), localised areas of agriculture and ground disturbance including possible filling.
1956	Drawings 3a to 3c	Aerial photographs for 1956 were available for approximately 70% of the site covering the northern, central and western portions. The south eastern and southern portions of the site were not available. The general profile and land uses for the site and surrounding area remain generally consistent with 1947 with a small increase in residency evident along Macquariedale Road in the northern portion. Key site features include farm dams (35 not previously observed in the 1947 aerial photographs), structures, ground disturbance/possible filling, localised areas of agriculture activity and a possible quarry.
1961	Drawing 4	Aerial photographs for 1961 were only available for the northern portion of the site. Agricultural activity at the site has been further established since 1956 with the construction of four farm dams, new fields and one residence in the northern portion of the site, close to the UCS.

[1] https://portal.spatial.nsw.gov.au/portal/apps/webappviewer/index.html?id=44e72c6c7ccf498cb1c822b740c647d3. Last accessed 17 June 2020.

Year	Drawing Ref	Key Observations
1975	Drawing 5	Available aerial photographs for 1975 cover the whole site area and immediate surrounds, however some are of low resolution. The site continues to be subject to further establishment of agricultural activity, as additional farm dams (25, possibly 26 not previously observed) and fields have been constructed at the site since 1961. Ground disturbance near residences and agricultural areas are visible in the southern portion of the site. Scouring associated with the high-pressure gas and electricity power lines that traverse the site are evident. Some ground disturbance is visible in the western portion of the site, west of the UCS and west of Elladale Road. Appin Power Station is visible near the south eastern portion of the site (previous aerial photographs did not cover this portion of the surrounding area). Several greenhouses in clusters of between 15 and 20 structures are visible to the north east of the site.
1990	Drawing 6	Aerial photographs for 1990 were available for approximately 80% of the site covering the northern, central, western and eastern portions. The southern portion of the site were not available. Further residences have been constructed along Macquariedale Road, Wilton Road and Brooks Point Road since 1975 and fields and 20 farm dams not previously observed at the site. Localised areas of ground disturbance and possible filling were also observed.
1994	Drawing 7	Aerial photographs for 1994 were available for approximately 90% of the site; aerial photographs for a small portion of the southern central part of the site was not available. As with the previous aerial photographs, there was evidence of increasing occupancy (rural residency) and low-density agricultural land use, including the construction of more dams (12 not previously observed), paddocks and large fields. Some ground disturbance near the UCS in the northernmost portion of the site and may be publicly accessible. A possible airport was visible in the south west portion of the site, near Wilton Road.
2005	Drawing 8	Aerial photographs for 2005 were available for approximately 75% of the site; aerial photographs for the south western portion of the site were not available. Several residences and associated structures have been constructed along Macquariedale Road. Stockpiles (likely of soil) are visible on the westernmost portion of Elladale Road. Ground disturbance is visible in the corridor of the gas main and power lines near their intersection, next to Brooks Point Road. A small possible orchard is visible on Brooks Point Road. Residences have been constructed on lots in the south eastern portion of the site, next to Wilton Road. Seven new farm dams have been constructed on the site since 1994.

Year	Drawing Ref	Key Observations
2010	Drawing 9	Aerial photographs for 2010 were available for the whole site. New residences and associated structures are visible along Macquariedale Road with some localised ground disturbance visible in two lots. Further ground disturbance is evident along the corridor of power lines near Brooks Point Road and two residences have been constructed along the same road. The southern portion of the site appears to continue to be used for pastoral purposes with some localised ground disturbance visible. Eight farm dams not previously observed at the site are present.
2020	Drawing 10	Aerial photographs for 2020 were available for the whole site. Tracks are visible in bushland next to the Nepean River and Ousedale Creek in the northernmost portion of the site. More residences are now visible on the western portion of Brooks Point Road and on the southernmost portion of Elladale Road. Possible stockpiles and ground disturbance are visible in lots along Wilton Road, in the south eastern portion of the site. Evidence of crop cultivation are visible in the south west portion of the site. Three farm dams not previously observed at the site are present.

6.1.1 Summary of Key Site Features

A total of 260 key site features were identified from the aerial photograph review. The types of site features observed are broadly summarised in the below list:

- Ground disturbance which may indicate the installation of below ground structures/services, filling or quarrying activities;
- Small structures (e.g. animal shelters, pump sheds and storage sheds);
- Farm dams;
- Low density agricultural activity (e.g. fields enclosed in a fenced area);
- Possible horticultural or orchard farming;
- Possible building footprints;
- Structures (farm buildings, residences);
- Stockpiles;
- Tracks including racetracks;
- Material storage areas; and
- Model flying club.

Select key features were inspected during the site walk over to ascertain whether or not they require further assessment for contamination and are therefore a Potential Area of Environmental Concern (PAEC).

6.2 Government Database Searches

A search of NSW EPA public records for sites recorded under the CLM Act and POEO Act within the suburb of Appin was undertaken by DP on 16 June 2020. The search records are provided in Appendix C and the findings are summarised below:

- A search for records of notices made under the CLM Act did not identify any sites within Appin suburb;
- A total of 105 licences, applications and notices were made by 12 parties under the POEO Act were recorded in the suburb of Appin. Of these, one party (GLC Civil Pty Ltd) was located at the site (400 Brooks Point Road) and was subject to a clean-up notice in April 2017 which was later subject to a revocation (cancellation) of the clean-up notice in September 2017;
- No sites were recorded as subject to enforceable undertakings under the POEO Act in Appin;
- A review of the NSW EPA per-and polyfluoroalkyl substances (PFAS) investigation program records the nearest site included in the program is located at Camden Airport, 15 km north west of the site; and
- A search was made on the NSW Government's SEED Miners and Explorer's Map[2] for Coal Seam Gas Boreholes on the site and four were located on the site as recorded on the SEED map as 'permanently sealed' i.e. not producing gas and have been decommissioned. Their locations are shown on Drawings 11a and b attached.

6.3 Site History Integrity Assessment

The information used to establish the history of the site was sourced from reputable and reliable reference documents, many of which were official records held by Government departments and agencies. The databases maintained by various Government agencies potentially can contain high quality information, but some of these do not contain any data at all.

In particular, aerial photographs provide high quality information that is generally independent of memory or documentation. They are only available at intervals of several years, so some gaps exist in the information from this source. The observed site features are open to different interpretations and can be affected by the time of day and/or year at which they were taken, as well as specific events, such as flooding. Care has been taken to consider different possible interpretations of aerial photographs and to consider them in conjunction with other lines of evidence.

6.4 Summary of Site History

The site history information suggests that the site has been primarily used for a mixture of low density agricultural (pastoral), dairy farming and rural residential purposes. Major services (gas and electricity) corridors run through north to south and east to west through the site and the UCS and Cataract Tunnel aqueduct runs through the site from south to north. Surrounding land uses are similar with the exception of Appin Power Station to the south east and Appin Colliery to the south west.

[2] https://geo.seed.nsw.gov.au/Public_Viewer/index.html?viewer=Public_Viewer&locale=en-AU. Last accessed and WMS obtained 22 July 2020.

7. Site Walk Over

A site walk over was undertaken by Chris Kline CEnvP SC, a DP-employed Principal Engineer over the course of four days. The walk over was undertaken on foot and features of interest were logged.

Because of the large size of the site and to aid in presenting finding, the site walk over was approached in three main areas:

1. The Macquariedale Road area north of Elladale Creek (Northern Portion)
2. The Elladale Road area between Elladale Creek and Brooks Point Road (Central Portion)
3. The Morrisons Dairy Area located south of Brooks Point Road (Southern Portion)

Portions of the site were not accessible for the site walk over including small acreage residential lots in the south eastern end of Macquariedale Road. These areas are shown on Drawings 11a and b, Appendix A.

During the inspection key site features identified in the site history assessment were visited (where access was possible), mapping reference points (MRP) recorded for key observations made during the walk over and photographs taken of MRP. The MRP are shown on Drawings 11a and b and plates are provided in Appendix D. Inaccessible areas as noted where relevant below are also presented on Drawings 11a and b. The findings of the walk over are summarised below.

The walk over of the Northern Portion included a walk over of the lots on the north and south sides of Macquariedale Road and a large property extending north west to the junction of the Nepean and Ousedale Creek. This area was characterised by broad rolling hills with steep sandstone escarpments at the site margins. The area was bisected by the USC. The following general features were noted:

- Farm dams were scattered throughout the area, the majority of which, from inspection of the surface, appeared to have embankments constructed from locally derived material.
- Localised dumping was observed in some gullies and areas of the site which had not been secured, such as along the western portion near the Nepean River (MRP 5; plate 5, MRP12; plates 13 and 14, MRP 15 and 6; plates 17 to 21, MRP 45; plate 52) and to the rear (southern end) of lots on the eastern side of Macquariedale Road (MRP 51; plate 58, MRP 54; plates 61 and 62, MRP 56; plate 64).
- There were several houses in this area, some of which were derelict (MRP 38; plate 45) and many of which were of the age which would indicate that hazardous building materials may be present.
- Three monitoring bores belonging to BHP Billiton or South32 were observed on this portion of the site (MRP 8; plates 8 and 9, MRP28; plate 33 and MRP 53; plate 60).
- Several informal dirt bike tracks were noted throughout the site (MRP 2; plate 2).
- An underground water system linking water troughs was present on some portions of the site. These pipe networks are sometimes known to be made of asbestos cement, this was not confirmed during the inspection.
- Several timber power pole alignments were encountered. The bases of the pole are typically treated with pesticides and the poles themselves treated with chemicals to prevent corrosion which can impact surrounding soils.
- An area of possible livestock burial was observed in the northern portion (MRP30; plate 35).

- Stockpiles and small mounds were occasionally observed such as next to the USC (MRP27; plate 32) and to the rear (north) of lots north east of Macquariedale Road (MRP40 to 44; plates 45 to 51). Minor fill mounds were observed at MRP 55 (plate 63) located in the south eastern part of this portion of the site. Building rubble was observed north of Macquariedale Road, near the USC (MRP 24; plates 27 to 29) and minor building rubble was observed on the north east portion at MRP (plate 39). A small sand stockpile was noted on a lot on the northern side of Macquariedale Road (MRP 39).
- Small areas of coal wash material was observed on the ground surface near the USC, at MRP 19 (plate 23).
- Several large stockpiles were observed at the intersection of Macquariedale Road and the USC.

As recorded in Drawing 11, detailed inspection of the lots in the south eastern end of Macquariedale Road was not undertaken as access was not available. These lots appeared to be from roadside inspection to comprise acreage residential lots.

The central portion of the site comprised the lots surrounding Elladale Road, from the intersection with Brooks Point Road to the site boundary at the USC. This portion of the site was characterised by gently rolling hills fringed by thick vegetation and bushland. The heavily vegetated areas were not investigated as part of this walk over as they were largely inaccessible. The following general features were noted:

- Systematic dumping was observed along Elladale Road including construction and demolition materials (MRP 65; plates 74 to 76, MRP 67; plate 78, MRP 70; plate 81 and MNP 76; plates 86 to 88).
- Several stockpiles were noted along Elladale Road (MRP 59; plate 67, MRP60; plates 68 and 69, MRP 61 to 63; plates 71 and 72).
- Farm dams were scattered throughout the area, the majority of which were observed to have embankments constructed from locally derived material. One dam embankment was noted to contain building rubble.
- Several timber power pole alignments were encountered.
- There were several houses in this area (i.e. along Brooks Point Road) some of which may be derelict and many of which were of the age which would indicate that hazardous building materials may be present.

The Southern portion of the site encompassed the land south of Brooks Point Road between the Cataract River in the west and Wilton Road in the east. The land consisted of broad rolling hills with occasional steep ground at ridge crests and sandstone escarpments on the boundary of the Cataract River. The land was heavily vegetated in the western area adjacent the Nepean River but otherwise largely cleared. The following general features were noted:

- A coal seam gas well network was observed in the west (MRP 93; plates 103 to 105) near Appin Colliery) centre (MRP 94; plate 106) and south of the site (MRP 98 and 99; plates 113 and 114) and a pipeline extending towards the south west (MRP 101; plate 116, MRP 102; plate 117) adjacent to the creek in the south west portion of the site. A mine communication antenna was also observed (MRP 100; plate 115).
- As with the remainder of the site, several timber power pole alignments were encountered throughout.

- Localised dumping was observed in some gullies largely minor refuse (MRP 83; plate 93) and cars and machinery (MRP 105; plate 121) with the exception of MRP 96 (plates 108 – 111) and 97 (plate 112) where dumping appeared to be widespread and systematic. An area of waste tyre dumping was noted at MRP 111 (plates 125 to 127).
- An underground water system linking water troughs and pivot irrigators was present on some portions of the site, pipe work was largely noted to be steel (MRP 113; plate 129).
- An area of possible livestock burial was observed (MRP 103; plates 118 and 119).
- Fuel storages were noted in above ground storage tanks at water pumps, specifically MRPs 89, 108 and 115 (plates 130 and 131). A discarded AST was also noted at MRP 112 (plate 128).
- The dairy farm operations area (MRP 89) likely has some chemical storage but closer inspection was not possible at the time of the walk over.
- A model plane airfield was noted at MRP 85 however inspection of this portion of the site was not possible at the time of the walk over. A heritage house (former dairy farm) is located near to the airfield MRP 86; plate 96).
- Internal roads were surfaced with coal wash in places (MRP 110; plate 124).
- Stockpiles were observed at MRP 92 (plate 102) and large stockpiles at MRP 90 (plates 99 to 101), likely associated with construction of the Cataract Tunnel and possibly the USC.

8. Review of DP 202 Geotechnical Test Pit Logs

A total of 55 test pits were undertaken across the site to inform the geotechnical and salinity investigations. The soil logs were reviewed as part of this PSI to ascertain if soil conditions are consistent with regional setting (Section 5) and to review for fill containing anthropogenic material and any other physical or olfactory indicators of contamination.

In general, the soil conditions observed in the geotechnical investigation comprised silty clay topsoil above silty clay regolith and bedrock (sandstone and shale) which was expected and confirmed the geological mapping.

Fill material comprising silty clay was observed in six test pits; in Pits 21 (to 1 m depth), 25 (0.5 m depth), 28 (1.4 m depth), 50 (0.5 m depth) and 52 (0.4 m). The fill observed in Pit 28 may be associated with a nearby dam wall. Pit 51 was undertaken in a stockpile containing fill. No anthropogenic material or visual or olfactory indicators of possible contamination were observed in any of the fill observed in the test pits, and, as such, no significant contamination issues that would warrant further investigation (if observed) were observed during the geotechnical investigation. Refer to the geotechnical and salinity reports for soil logs and further detail on observed soil conditions. The location of the test pits is shown in Drawing 1, Appendix A.

9. Potential Areas of Environmental Concern

The findings of the desk top study and the site walk over were reviewed to identify whether or not key features and MRP are potential areas of environmental concern (PAEC) which warrant further investigation. If any of the PAEC indicate the potential for widespread contamination, then the need for further investigation to inform rezoning was considered. If PAEC were considered indicative of potential localised contamination, further investigations would be required to inform future Development Applications (DA).

No evidence of significant widespread potential contamination was observed in the desk top study or the site walk over. Table B.1 in Appendix B presents the key features and MRP that were identified as requiring further investigation and Table B.2. shows these grouped into PAEC categories, which can be summarised into twelve PAEC categories as follows in Table 6.

Table 6: PAEC Categories Observed

PAEC Category Reference	PAEC Type	Description	Number of Areas
PAEC 1	Low density agricultural land use and localised plant cultivation and cattle yard	Use of pesticides and herbicides as well as fuels and oils is common on agricultural sites, however the volume used is generally low and covers a large area.	19
PAEC 2	Current and historical farm dams	Dam walls may have been constructed using fill from elsewhere including construction and demolition waste. Sediments in farm dams often act as a sink for surface water runoff of diffuse source contamination such a from surrounding agricultural land use, and localised use of fuels and oils. Illegal dumping of waste into dams can also often occur which can potentially impact soils, sediments and in some instances surrounding surface water bodies and groundwater	111
PAEC 3	Areas of possible filling	The source of filling is unknown and may include construction and demolition waste as well as burial of domestic refuse.	32
PAEC 4	Current and historical structures	Many of the current and historical structures on site were constructed when asbestos and lead-based paints were in use in Australia. A fill platform is often constructed below structures and the source of fill (much like PAEC 3) is not known.	70
PAEC 5	Stockpiles and soil mounds	Stockpiles and soil mounds, some of which contain construction and demolition materials which is often linked with the presence of hazardous building materials, including asbestos.	10

PAEC Category Reference	PAEC Type	Description	Number of Areas
PAEC 6	Coal seam gas network and wells	A coal seam gas network including pipework and wells are present on site which can potentially impact the surrounding soils and groundwater.	7
PAEC 7	Coal wash filling on the site surface	Localised use of coal wash filling has been observed on the site surface along access roads.	3
PAEC 8	Illegal dumping and fly tipping	Localised areas of illegal dumping and fly tipping either on the site surface or in gullies which can often include discarded fuels, oils and construction and demolition waste including asbestos.	12
PAEC 9	Timber power poles	Power is serviced using a network of timber power poles which are coated with a chemical to prevent corrosion of the pole. Weathering of this chemical over time is known to impact surrounding soils with metals and hydrocarbons	10
PAEC 10	Above-ground storage tanks / fuel storage areas	Three storage tanks were observed on the site which may or may not have in the past been used to store oils, fuels and/or chemicals	4
PAEC 11	A fenced off area of which the purpose and history of usage is unclear	Such areas have on similar sites been used for storage of materials and/or stockpiles	1
PAEC 12	Small possible livestock burial area	Depending on soil conditions, livestock burial areas can have localised impact associated with any treatments used (pesticides and fungicides) and secondary contamination from the carcass itself (nutrients and bacterias)	1

The PAEC category types observed at the site are typical of such similar sites in the general region. A total of 280 individual PAECs were recorded across the site. Of the 280 individual PAEC, the two most common types were farm dams (40%) and current and historical structures (25%). The location of each PAEC is shown on Drawings 12a to g, Appendix A.

10. Preliminary Conceptual Site Model

A conceptual site model (CSM) is a representation of site-related information regarding contamination sources, receptors and exposure pathways between those sources and receptors. The CSM provides the framework for identifying the types of potential contamination at the site and how sensitive receptors may be exposed to such contamination, ie: it enables an assessment of the potential source - pathway - receptor linkages (complete pathways).

Potential Sources

A number of key site features were recorded in the desk top study and site walk over that can potentially indicate the presence of localised contamination and, as such have been recorded as PAEC which have been broadly categorised into the following source types and their associated contaminants of potential concern (CoPC):

- S1: Low density agricultural land use and localised instances of plant cultivation and a cattle yard. CoPC include metals, organochlorine pesticides (OCP), organophosphorus pesticides (OCP) and nutrients.
- S2: Current and historical farm dams. CoPC include metals, total recoverable hydrocarbons (TRH), benzene, toluene, ethylbenzene, xylene (BTEX), polycyclic aromatic hydrocarbons (PAH), polychlorinated biphenyls (PCB), total phenols and asbestos.
- S3: Possible filling. CoPC include metals, TRH, BTEX, PAH, PCBs, total phenols and asbestos.
- S4: Current and historical structures. CoPC include (for residual building materials) asbestos, PCBs and lead; (for fill in building footprints) metals, TRH, BTEX, PAH, PCBs, total phenols and asbestos.
- S5: Stockpiles and soil mounds. CoPC include metals, TRH, BTEX, PAH, PCBs, total phenols and asbestos.
- S6: Coal seam network and wells. CoPC include metals, TRH, BTEX and PAH.
- S7: Coal wash filling on the site surface. CoPC include metals, TRH, BTEX and PAH.
- S8: Illegal dumping and fly tipping. CoPC include metals, TRH, BTEX, PAH, PCBs, total phenols and asbestos.
- S9: Timber power poles. CoPC include metals, TRH, BTEX, PAH and total phenols.
- S10: Above-ground storage tanks and fuel storage. CoPC include metals, TRH, BTEX, PAH and total phenols.
- S11: Possible livestock burial area. CoPC includes metals, OCP, OPP, fungicides, nutrients, and bacteria.

Potential Receptors

The following potential human receptors have been identified:

- R1: Current users (rural residential);
- R2: Construction and maintenance workers;
- R3: End users (residential); and
- R4: Adjacent site users (residential).

The following potential environmental receptors have been identified:

- R5: Surface water (freshwater bodies including Ousedale Creek, Elladale Creek, Simpsons Creek, Cataract River and the Nepean River);
- R6: Groundwater (limited beneficial use – saline groundwater present in primarily sandstones at >50 m depth); and
- R7: Terrestrial ecology.

Potential Pathways

The following potential pathways have been identified:

- P1: Ingestion and dermal contact;
- P2: Inhalation of dust and/or ground gas and vapours;
- P3: Surface water run-off;
- P4: Lateral migration of groundwater providing base flow to water bodies;
- P5: Leaching of contaminants and vertical migration into groundwater; and
- P6: Contact with terrestrial ecology.

Summary of Potentially Complete Exposure Pathways

A 'source – pathway - receptor' approach has been used to assess the potential risks of harm being caused to human or environmental receptors from contamination sources on or in the vicinity of the site, via exposure pathways (potential complete pathways). The possible pathways between the above sources (S1 to S11) and receptors (R1 to R7) are provided in Table 7 below.

Table 7: Summary of Potentially Complete Exposure Pathways

Source and COPC	Transport Pathway	Receptor
S1: Low density agricultural land use/plant cultivation/cattle yard	P1: Ingestion and dermal contact P2: Inhalation of dust and/or vapours P3: Surface water run-off P4: Lateral migration of groundwater providing base flow to water bodies P5: Leaching of contaminants and vertical migration into groundwater P6: Contact with terrestrial ecology	R1: Current users (rural residential) R2: Construction and maintenance workers R3: End users (residential) R4: Adjacent site users (residential) R5: Surface water bodies R6: Groundwater R7: Terrestrial ecology
S2: Current/historical farm dams	P1 – P6	R1 – R6
S3: Possible filling	P1 – P6	R1 – R6

Source and COPC	Transport Pathway	Receptor
S4: Current/historical structures	P1 – P6	R1 – R6
S5: Stockpiles soil mounds	P1 – P6	R1 – R6
S6: Coal seam network and wells	P1 – P6	R1 – R6
S7: Coal wash fill on site surface	P1 – P6	R1 – R6
S8: Illegal dumping/fly tipping	P1 – P6	R1 – R6
S9: Timber power poles	P1 – P6	R1 – R6
S10: Above ground storage tanks and fuel storage	P1 – P6	R1 – R6
S11: Possible livestock burial area	P1 – P6	R1 – R6

11. Discussion

The scope of the PSI included a review of regional mapping, online Government databases and historical aerial photographs (desk top study) and a site walk over. The historical aerial photograph review identified a total of 260 key site features which were broadly summarised into the following types:

- Ground disturbance which may indicate the installation of below ground structures/services, filling or quarrying activities;
- Small structures (e.g. animal shelters, pump sheds and storage sheds);
- Farm dams;
- Low density agricultural activity (e.g. fields enclosed in a fenced area);
- Possible horticultural or orchard farming;
- Possible building footprints;
- Structures (farm buildings, residences);
- Stockpiles;
- Tracks including racetracks;
- Material storage areas; and

- Possible airport.

The site walk over included review of select key features as well as a walk over of accessible portions of the site. The findings of the site walk over were used to eliminate or confirm key features as PAEC.

A total of 280 individual PAECs were observed on the site which were broadly characterised in the following PAEC categories:

- PAEC Category 1: Low density agricultural land use and localised plant cultivation and cattle yard.
- PAEC Category 2: Current and historical farm dams
- PAEC Category 3: Areas of possible filling
- PAEC Category 4: Current and historical structures
- PAEC Category 5: Stockpiles and soil mounds
- PAEC Category 6: Coal seam gas network and wells
- PAEC Category 7: Coal wash filling on the site surface
- PAEC Category 8: Illegal dumping and fly tipping
- PAEC Category 9: Timber power poles
- PAEC Category 10: Above-ground storage tanks
- PAEC Category 11 – Fenced off area of which the purpose and history of usage is unclear (one location only)
- PAEC Category 12 – Possible livestock burial area (one location only)

11.1 Risk Management Actions

PAEC references and recommendations for future works ('risk management actions') for each PAEC are provided in Table B1, Appendix A. Risk management actions have been qualitatively provided based on whether the likelihood of significant contamination present is low, medium or high as follows:

Low: Contamination may or may not be present at these PAEC, however targeted investigations should be undertaken at a later stage (ie: for DA purposes) to assess accordingly. In the case of low-density agricultural land use, because any impact is likely to be consistent across a wider area, these targeted investigations can be undertaken as low density investigations (one test pit per hectare). Based on DP regional experience and observations made both in the desk top study, the likelihood of significant contamination associated with PAEC characterised as 'low' risk is generally negligible.

Of the 280 individual PAEC observed, 120 (42 %) were characterised 'low' risk.

As noted in Section 6, portions of the site were not accessible at the time of the walk over. Based on the findings of the site history search and aerial photography review the potential for large-scale contamination in this portion of the site was deemed to be low. These portions of the site should be inspected as part of any future contamination investigations.

Several PAEC have been characterised as 'low – medium' risk for PAEC where contamination has not been sighted but based on regional DP experience localised impact is likely present but not confirmed. These PAEC are primarily current and former structures which, based on their age, potentially contain hazardous building materials in the building fabric which when poorly demolished or left to disintegrate or the surrounding soil is disturbed can impact surrounding soil conditions. Infilled dams have also been included as 'low – medium' risk PAEC because the quality of fill is unknown at this time.

Of the 280 PAEC observed, 140 (50%) were characterised as 'low – medium' risk).

Medium: PAEC characterised as having a 'medium' risk rating are either localised contamination observed on site or PAEC where site conditions indicated localised contamination is potentially present. These PAEC are typical of the region and are not considered to be significant contaminant constraints to development (in the context of rezoning) but it is likely that some form of management or remediation will be required for DA purposes. Targeted investigations of these PAEC will be required to inform DA and (if required) remediation / management plans.

PAEC characterised as 'medium' risk include the coal seam gas well and network present on site where contamination may be present associated with drilling operations for the wells and leaks along the pipe network interconnecting the wells. Contamination investigations may include investigating for any hazardous ground gases that may be sourced from this PAEC. Depending on the findings of contamination investigations, some form of barrier or seal may be required between the coal seam gas network and the development.

Of the 280 individual PAEC observed, 20 (7%) were characterised 'medium' risk.

High: PAEC characterised as having a 'high' risk rating are PAEC types where significant and/or widespread contamination has been observed which may mean any management/remediation measures required to render the site suitable for rezoning to be cost prohibitive or technically infeasible. Sites where an immediate risk to human health and the environment and require notification to the NSW EPA (under Section 60 of the Contaminated Land Management Act 1997) would also be characterised as 'high' risk.

There are no PAEC characterised as 'high' risk on the site at this time.

12. Conclusions and Recommendations

Localised evidence of contamination was observed at the site which was typical for a site of this type and for the general region. Targeted investigations should be undertaken, in the form of a Detailed Site Investigation (DSI) to inform any future DA for the proposed development. Portions of the site that were not accessible during the walk over should be inspected as part of the DSI. The coal seam gas well and network present on site (PAEC category 6) may require targeted soil and hazardous ground gas investigations which can be undertaken at the same time as the DSI or as a separate exercise. Depending on the findings of such investigations, some form of barrier or seal may be required in between the coal seam gas network and the development itself. If remediation is required to render the site suitable for the proposed development, a Remediation Action Plan (RAP) will be required to document remediation and validation works required to resolve any contamination identified in the DSI.

Based on the findings of the PSI the potential for significant, widespread contamination to be present at the site with respect to the proposed development is generally low and, as such the site is deemed suitable (from a contamination perspective) for proposed rezoning for mixed land use including residential.

13. Limitations

Douglas Partners Pty Ltd (DP) has prepared this report (or services) for this project at Appin, NSW in accordance with DP's proposal MAC200172 dated 12 June 2020. The work was carried out under contract with Walker Corporation and engaged by email from Walker Corporation dated 15 June 2020. This report is provided for the exclusive use of Walker Corporation for this project only and for the purposes as described in the report. It should not be used by or relied upon for other projects or purposes on the same or other site or by a third party. Any party so relying upon this report beyond its exclusive use and purpose as stated above, and without the express written consent of DP, does so entirely at its own risk and without recourse to DP for any loss or damage. In preparing this report DP has necessarily relied upon information provided by the client and/or their agents.

The results provided in the report are indicative of the sub-surface conditions on the site only at the specific sampling and/or testing locations, and then only to the depths investigated and at the time the work was carried out. Sub-surface conditions can change abruptly due to variable geological processes and also as a result of human influences. Such changes may occur after DP's field testing has been completed.

DP's advice is based upon the conditions encountered during this investigation. The accuracy of the advice provided by DP in this report may be affected by undetected variations in ground conditions across the site between and beyond the sampling and/or testing locations. The advice may also be limited by budget constraints imposed by others or by site accessibility.

This report must be read in conjunction with all of the attached and should be kept in its entirety without separation of individual pages or sections. DP cannot be held responsible for interpretations or conclusions made by others unless they are supported by an expressed statement, interpretation, outcome or conclusion stated in this report.

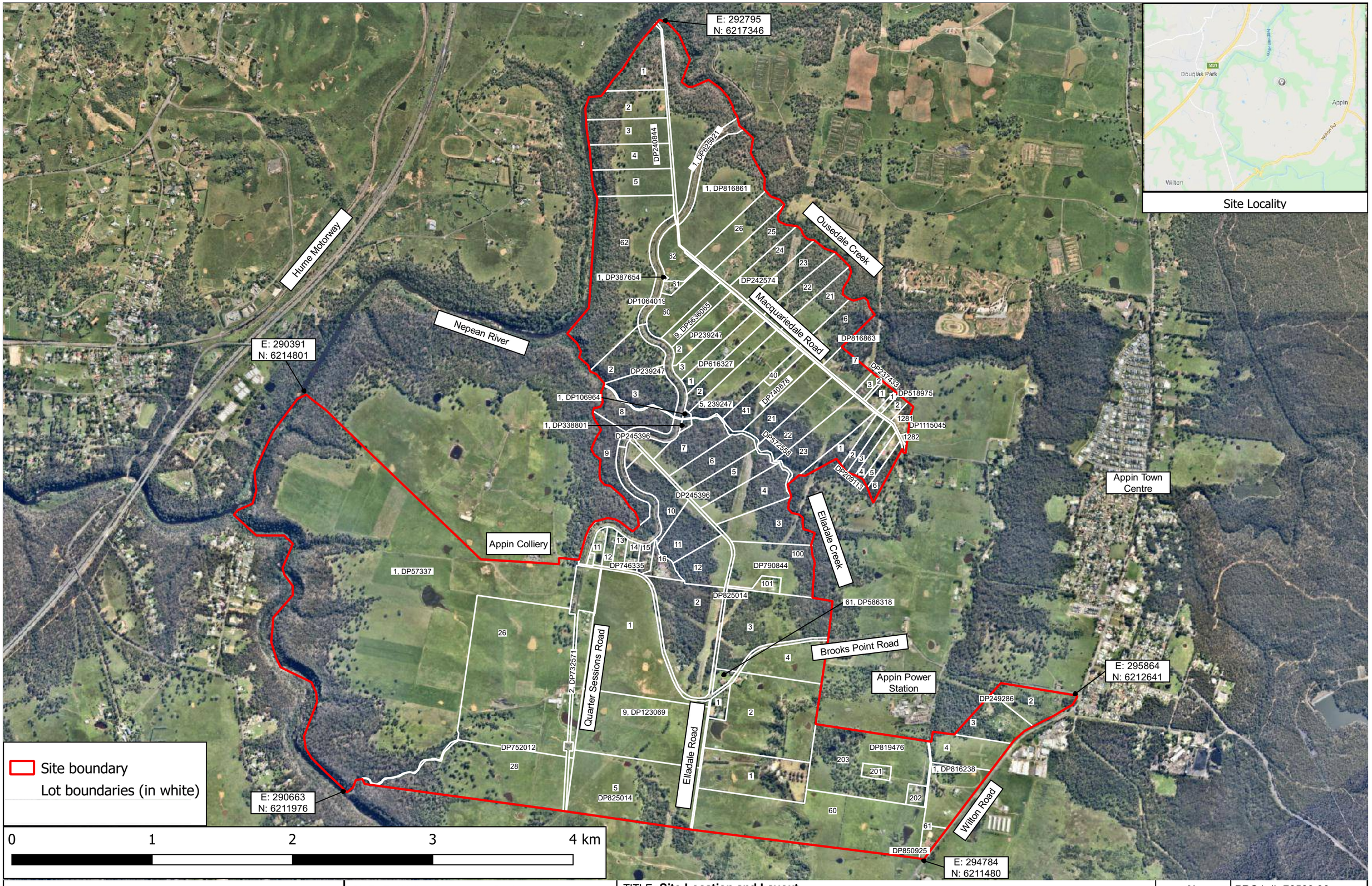
This report, or sections from this report, should not be used as part of a specification for a project, without review and agreement by DP. This is because this report has been written as advice and opinion rather than instructions for construction.

The contents of this report do not constitute formal design components such as are required, by the Health and Safety Legislation and Regulations, to be included in a Safety Report specifying the hazards likely to be encountered during construction and the controls required to mitigate risk. This design process requires risk assessment to be undertaken, with such assessment being dependent upon factors relating to likelihood of occurrence and consequences of damage to property and to life. This, in turn, requires project data and analysis presently beyond the knowledge and project role respectively of DP. DP may be able, however, to assist the client in carrying out a risk assessment of potential hazards contained in the Comments section of this report, as an extension to the current scope of works, if so requested, and provided that suitable additional information is made available to DP. Any such risk assessment would, however, be necessarily restricted to the (geotechnical / environmental / groundwater) components set out in this report and to their application by the project designers to project design, construction, maintenance and demolition.

Douglas Partners Pty Ltd

Appendix A

Drawings
About This Report



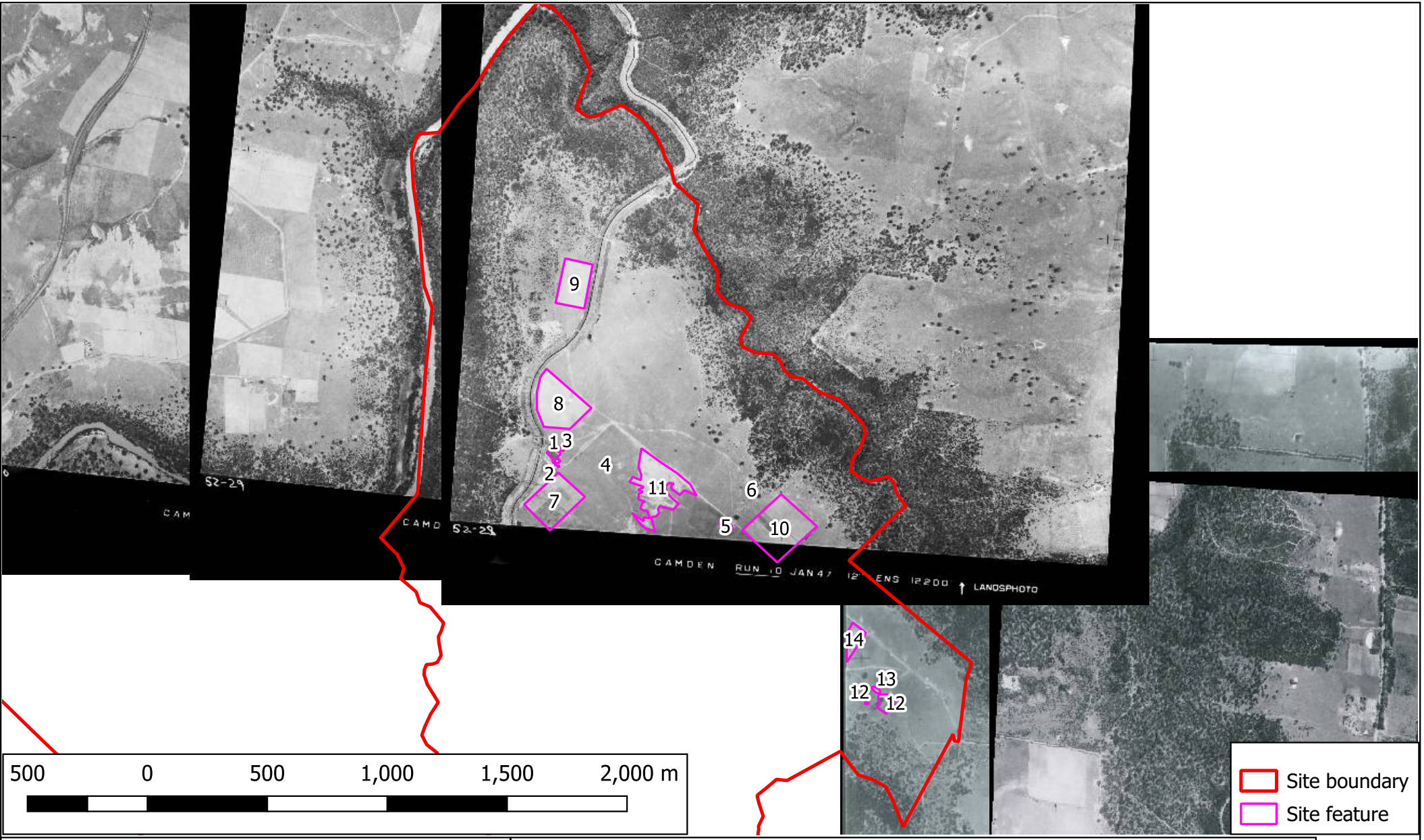
Douglas Partners
Geotechnics / Environment / Groundwater

CLIENT: Walker Corporation Pty Ltd		
OFFICE: Macarthur	DRAWN BY: EMG	
SCALE: As shown	DATE: 24 June 2020	

TITLE: **Site Location and Layout**
Proposed West Appin Precinct
Appin, NSW

N
MGA

PROJ. #:	76589.06
DRAWING No:	1
REVISION:	0

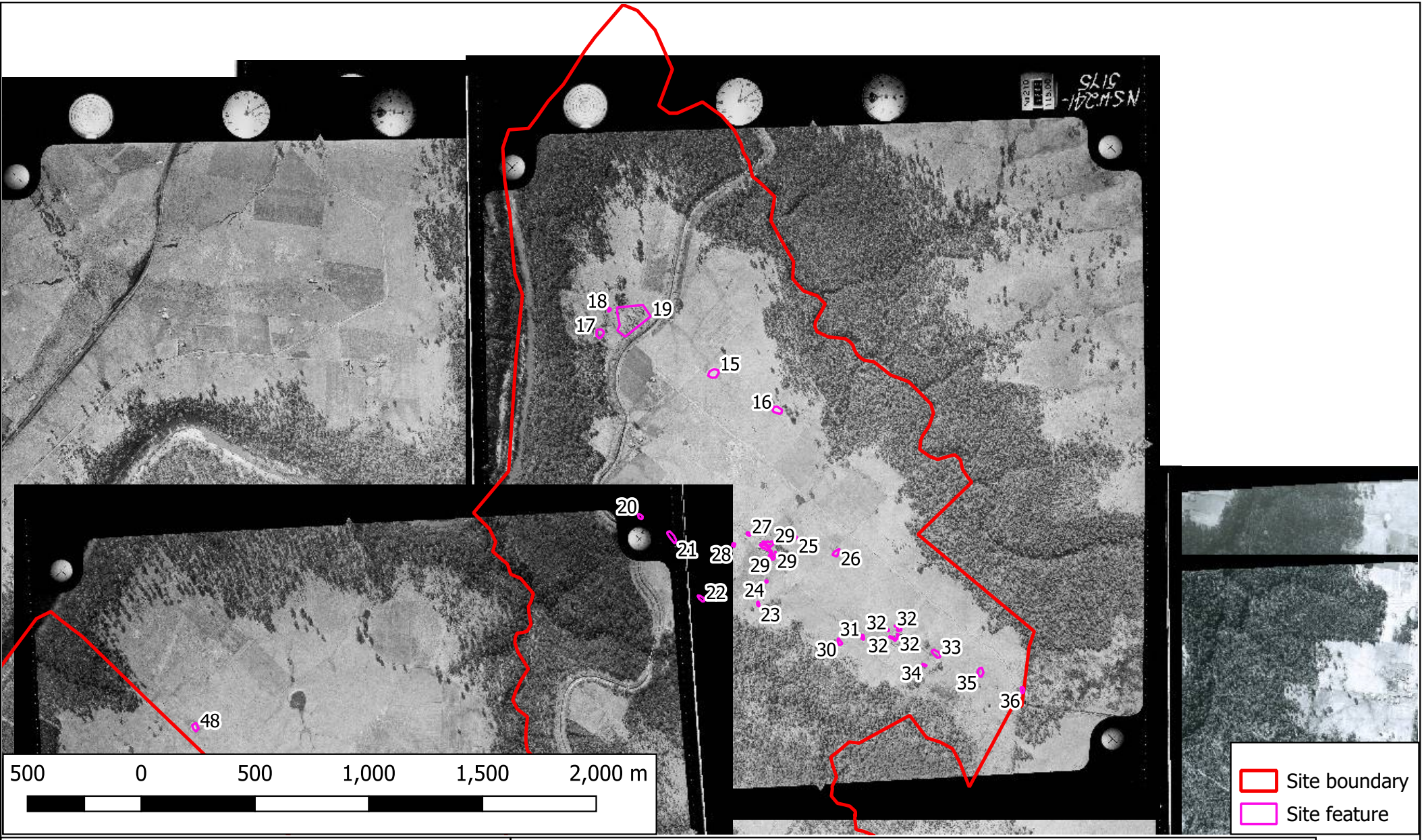


Douglas Partners
Geotechnics | Environment | Groundwater

TITLE: **Historical Aerial Photograph - 1947**
Proposed West Appin Precinct
Appin, NSW

N
MGA

CLIENT: Walker Corporation Pty Ltd	PROJECT No.: 76589.06	SCALE: As shown	DRAWING No: 2
OFFICE: Macarthur	DRAWN BY: EMG	DATE: 22 June 2020	REVISION: 0

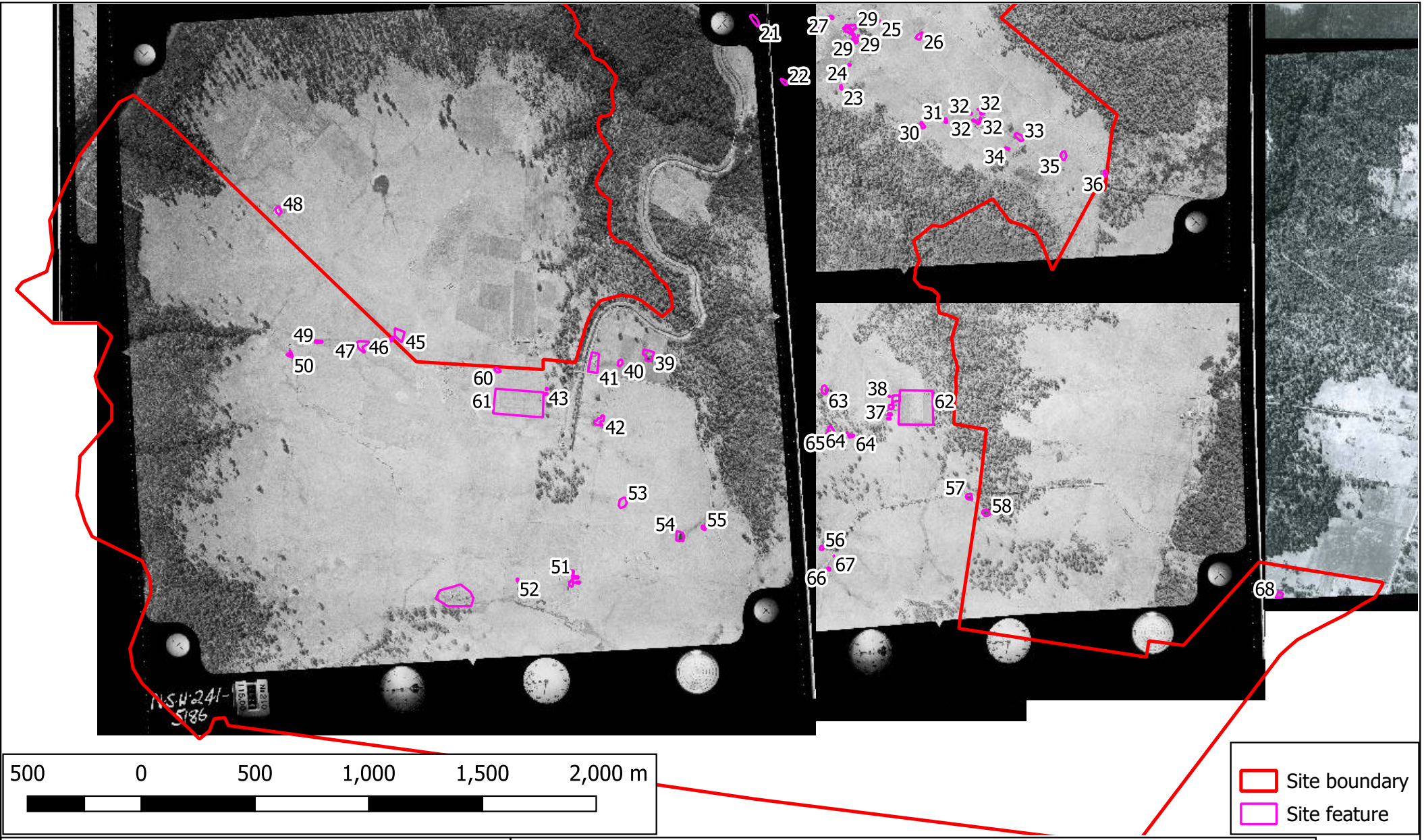


Douglas Partners
Geotechnics | Environment | Groundwater

TITLE: **Historical Aerial Photograph - 1956**
Proposed West Appin Precinct
Appin, NSW

N
MGA

CLIENT: Walker Corporation Pty Ltd	PROJECT No.: 76589.06	SCALE: As shown	DRAWING No: 3a
OFFICE: Macarthur	DRAWN BY: EMG	DATE: 22 June 2020	REVISION: 0

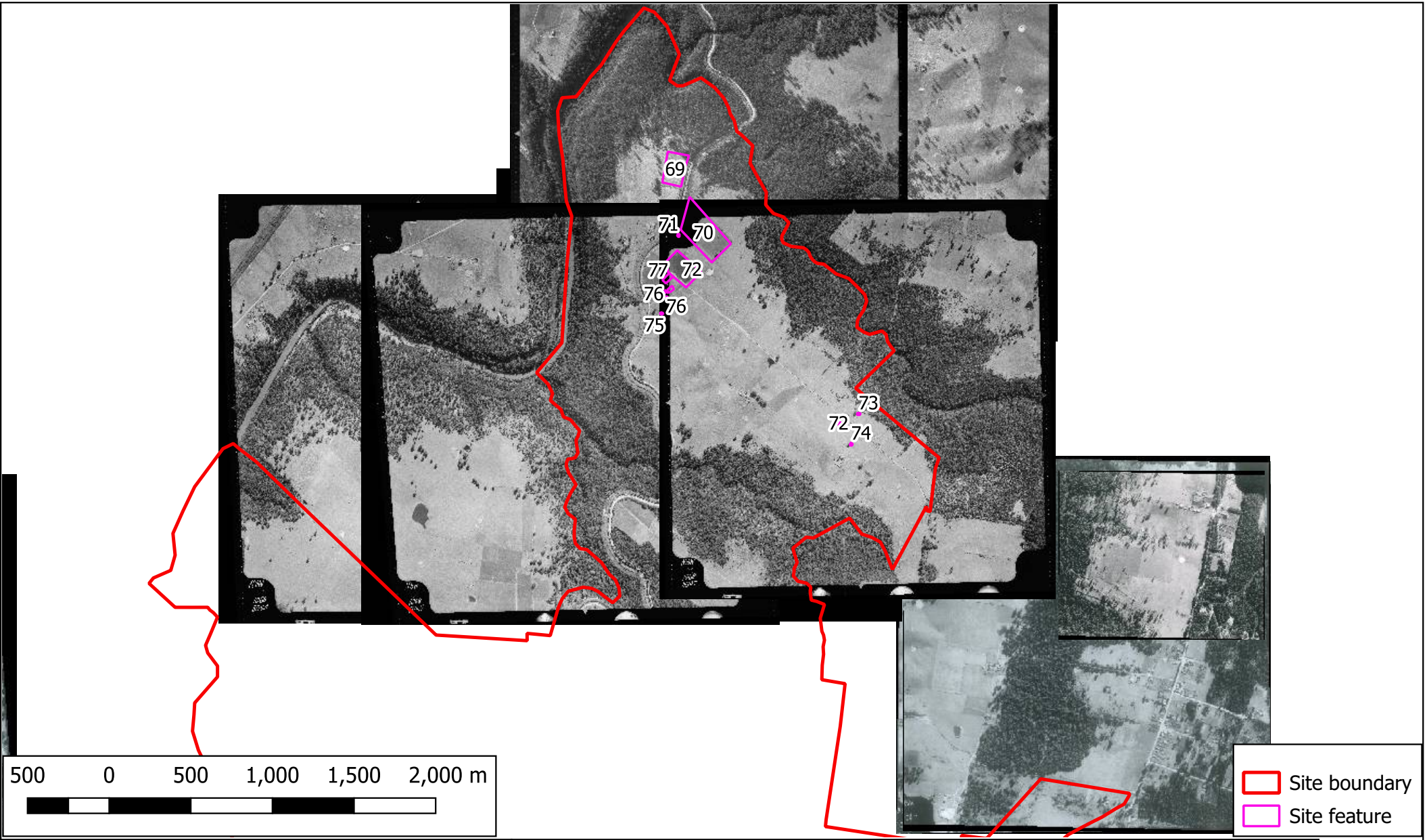


Douglas Partners
Geotechnics | Environment | Groundwater

TITLE: **Historical Aerial Photograph - 1956**
Proposed West Appin Precinct
Appin, NSW

N
MGA

CLIENT: Walker Corporation Pty Ltd	PROJECT No.: 76589.06	SCALE: As shown	DRAWING No: 3b
OFFICE: Macarthur	DRAWN BY: EMG	DATE: 22 June 2020	REVISION: 0

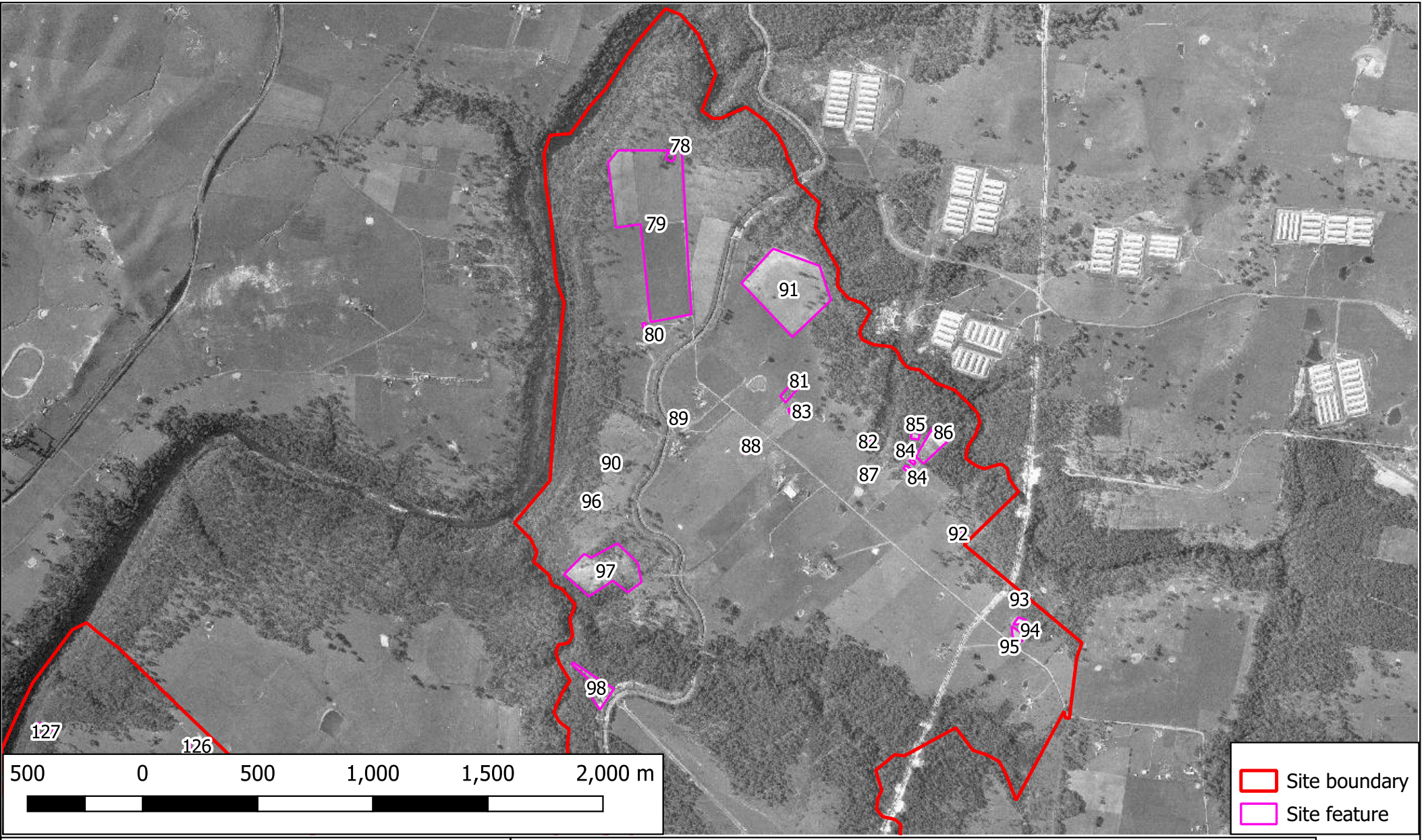


Douglas Partners
Geotechnics | Environment | Groundwater

TITLE: **Historical Aerial Photograph - 1961**
Proposed West Appin Precinct
Appin, NSW

N
MGA

CLIENT: Walker Corporation Pty Ltd	PROJECT No.: 76589.06	SCALE: As shown	DRAWING No: 4
OFFICE: Macarthur	DRAWN BY: EMG	DATE: 22 June 2020	REVISION: 0



Douglas Partners
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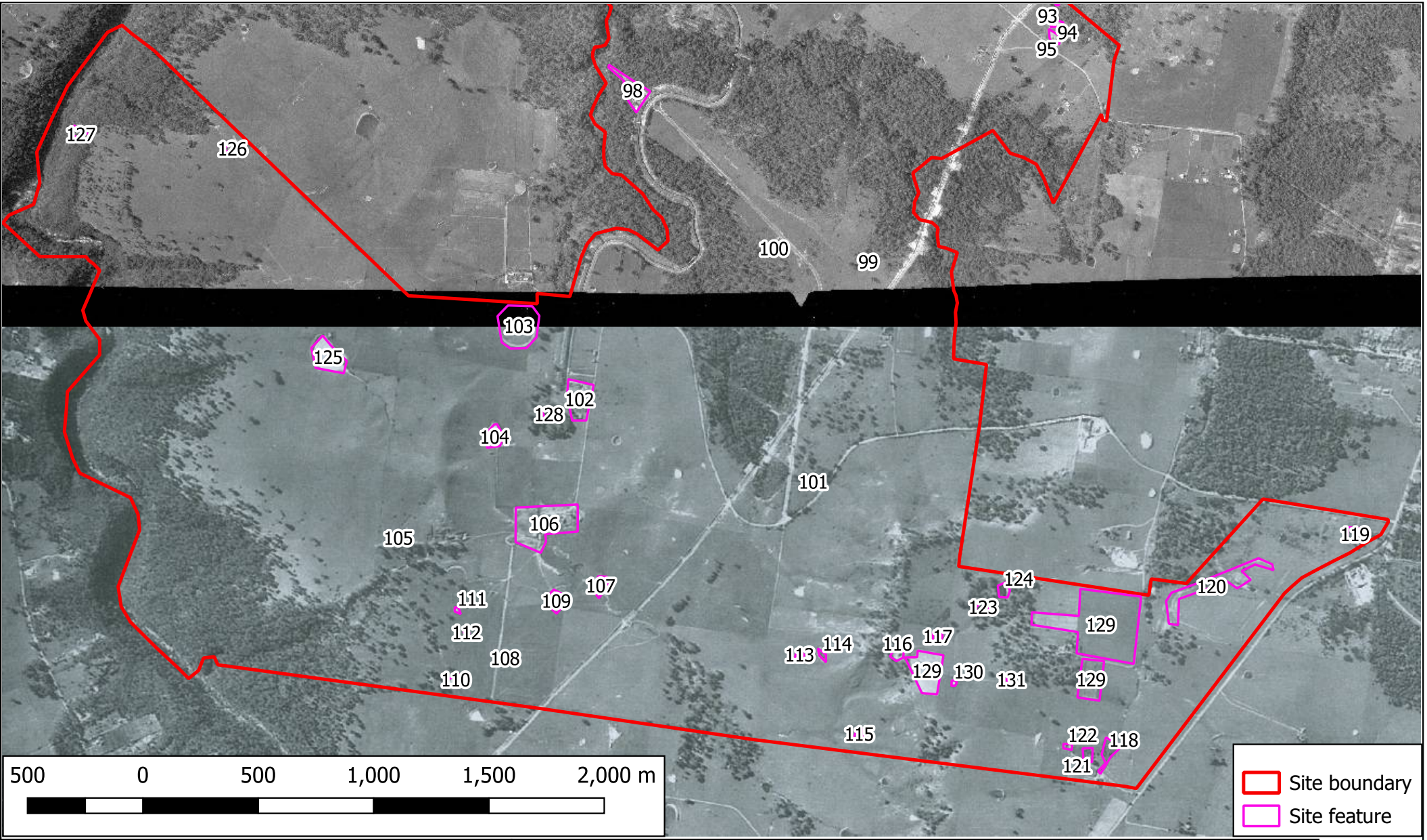
TITLE: **Historical Aerial Photograph - 1975**
Proposed West Appin Precinct
Appin, NSW

N
MGA

CLIENT: Walker Corporation Pty Ltd	PROJECT No.: 76589.06	SCALE: As shown	DRAWING No: 5a
OFFICE: Macarthur	DRAWN BY: EMG	DATE: 22 June 2020	REVISION: 0

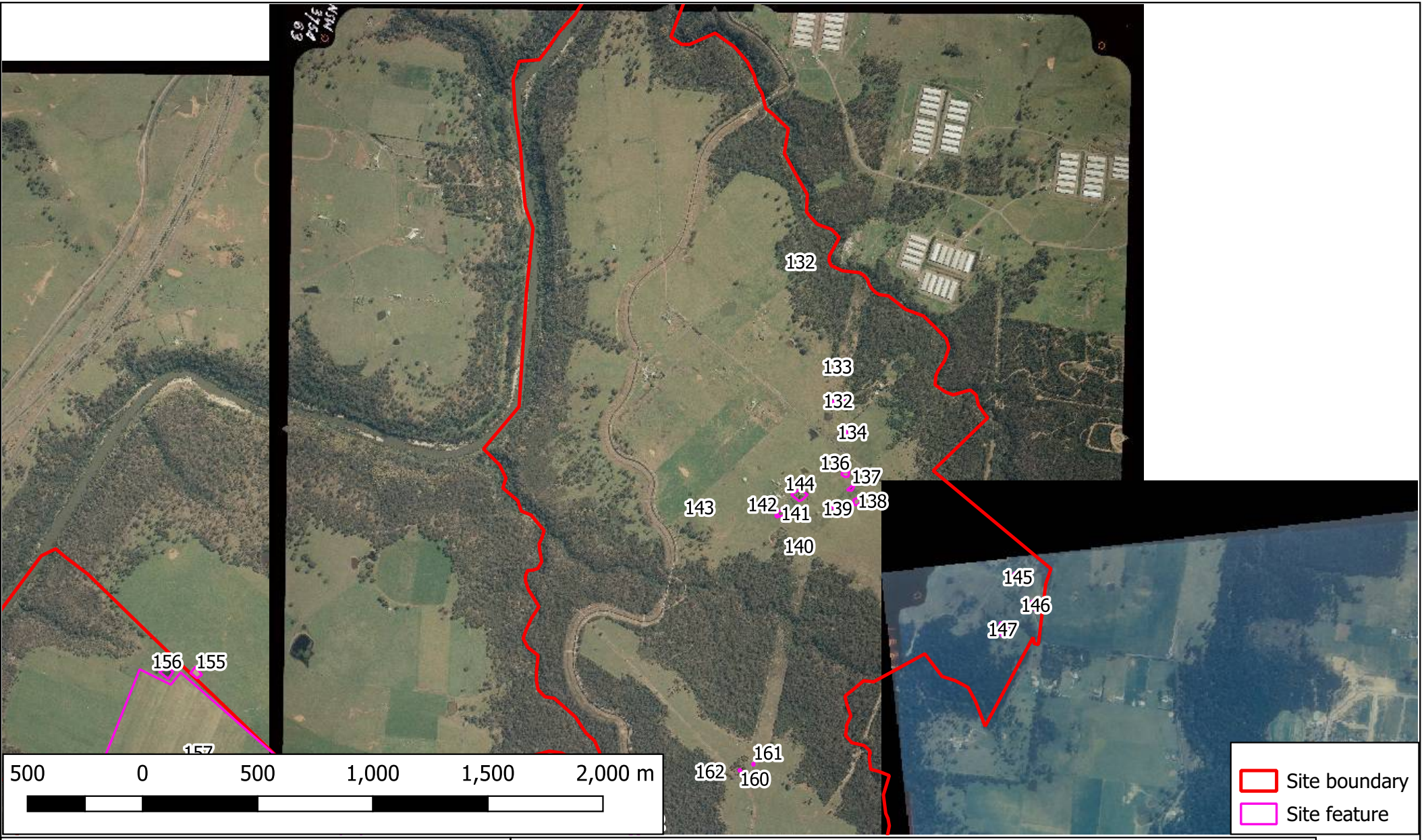


Douglas Partners
Geotechnics | Environment | Groundwater

TITLE: **Historical Aerial Photograph - 1975**
Proposed West Appin Precinct
Appin, NSW

N
MGA

CLIENT: Walker Corporation Pty Ltd	PROJECT No.: 76589.06	SCALE: As shown	DRAWING No: 5b
OFFICE: Macarthur	DRAWN BY: EMG	DATE: 22 June 2020	REVISION: 0



Douglas Partners
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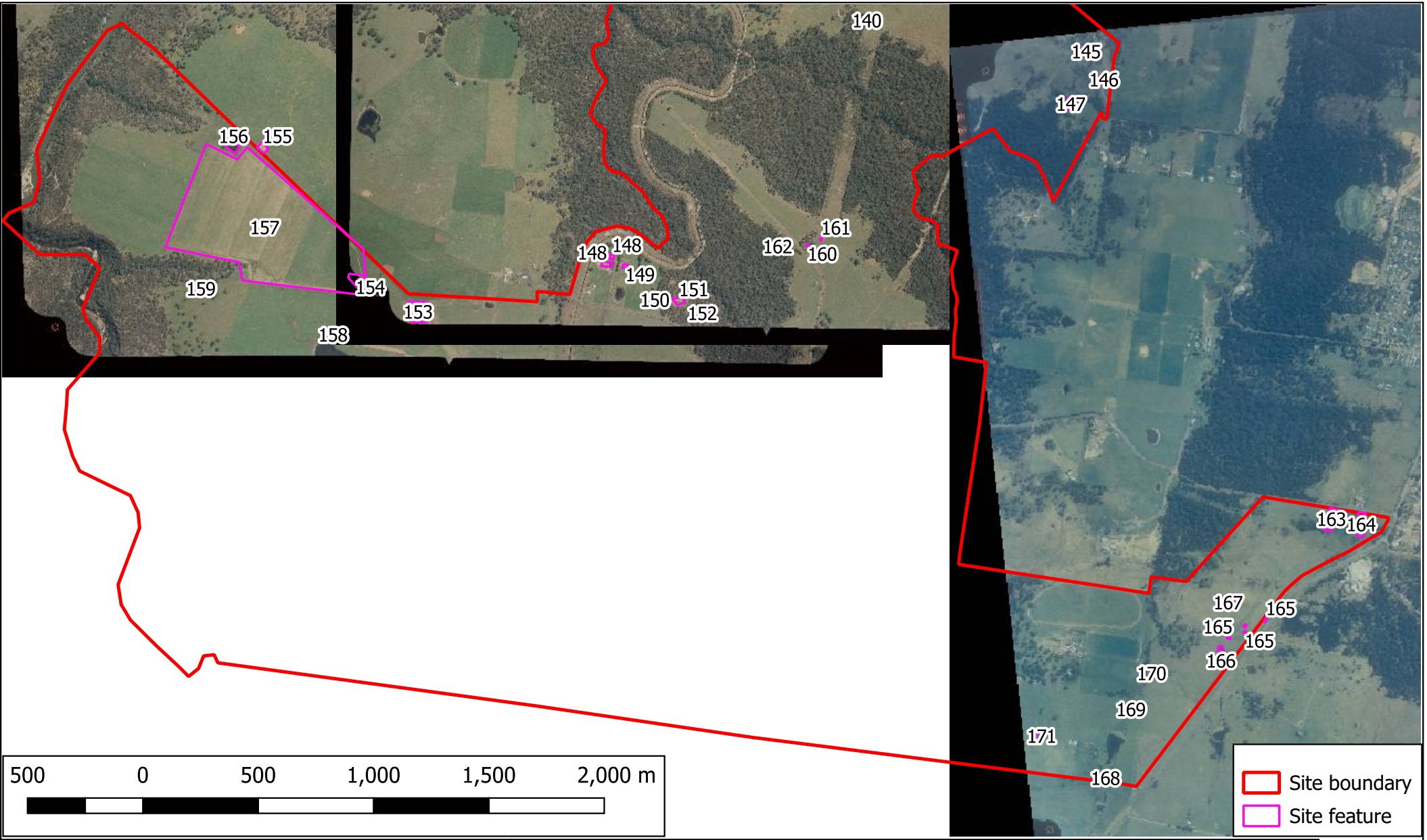
Proposed West Appin Precinct
Appin, NSW

N
MGA

CLIENT: Walker Corporation Pty Ltd	PROJECT No.: 76589.06	SCALE: As shown	DRAWING No: 6a
OFFICE: Macarthur	DRAWN BY: EMG	DATE: 22 June 2020	REVISION: 0



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TITLE: **Historical Aerial Photograph - 1990**
Proposed West Appin Precinct
Appin, NSW

N
MGA

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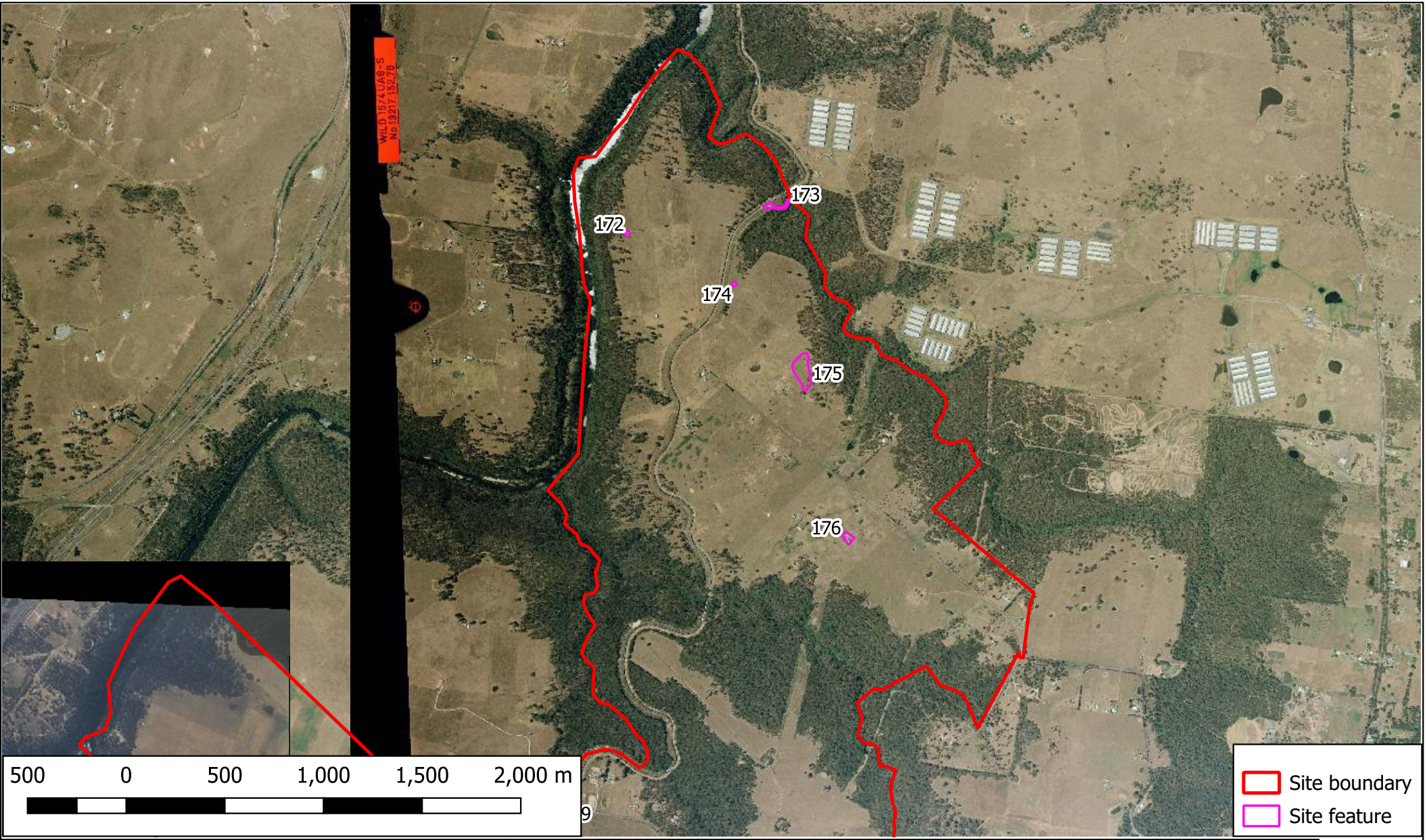
OFFICE: Macarthur	DRAWN BY: EMG	DATE: 22 June 2020	REVISION: 0



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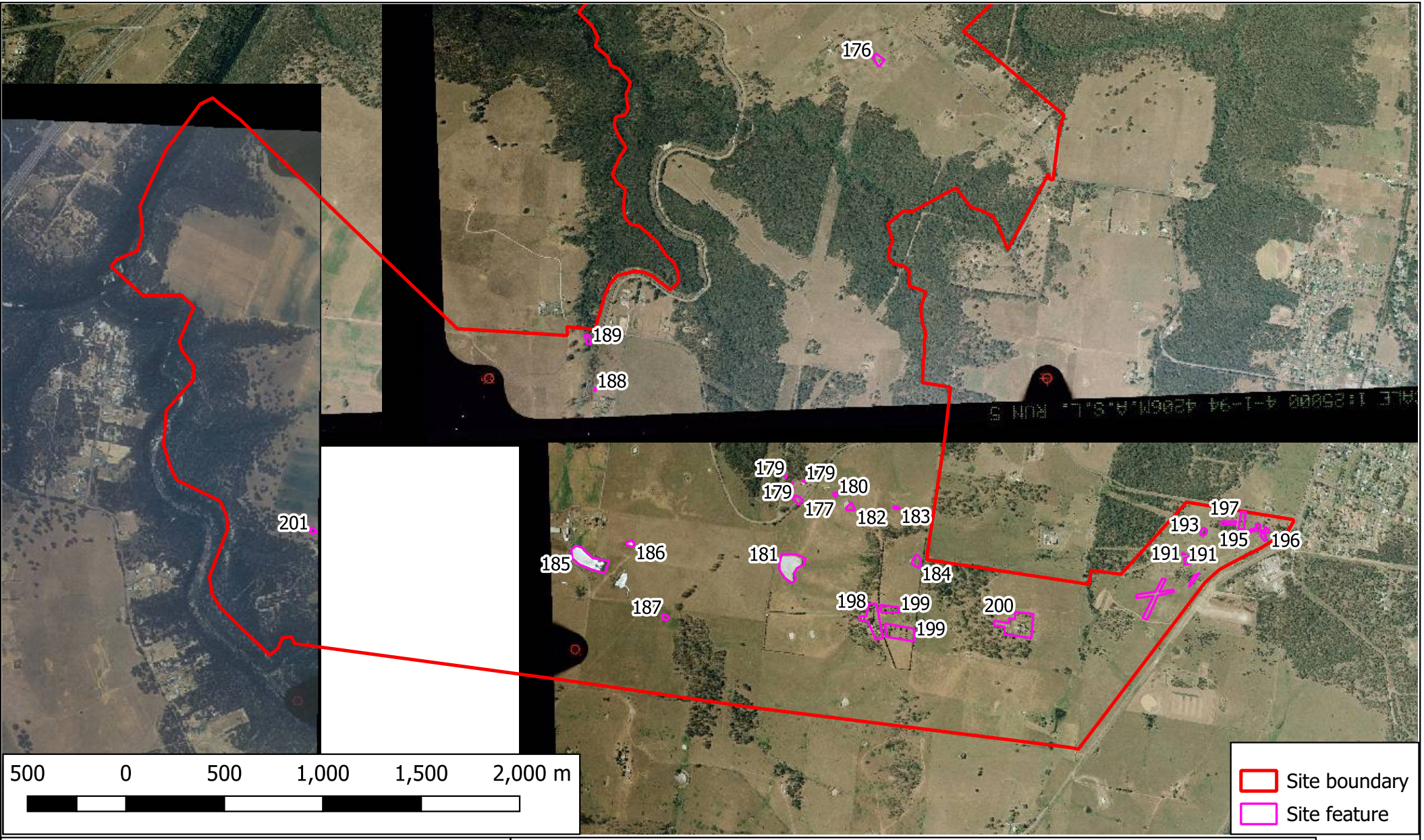
TITLE: **Historical Aerial Photograph - 1994**
Proposed West Appin Precinct
Appin, NSW

N
MGA

CLIENT: Walker Corporation Pty Ltd	PROJECT No.: 76589.06	SCALE: As shown	DRAWING No: 7a
OFFICE: Macarthur	DRAWN BY: EMG	DATE: 22 June 2020	REVISION: 0



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TITLE: **Historical Aerial Photograph - 1994**
Proposed West Appin Precinct
Appin, NSW

N
MGA

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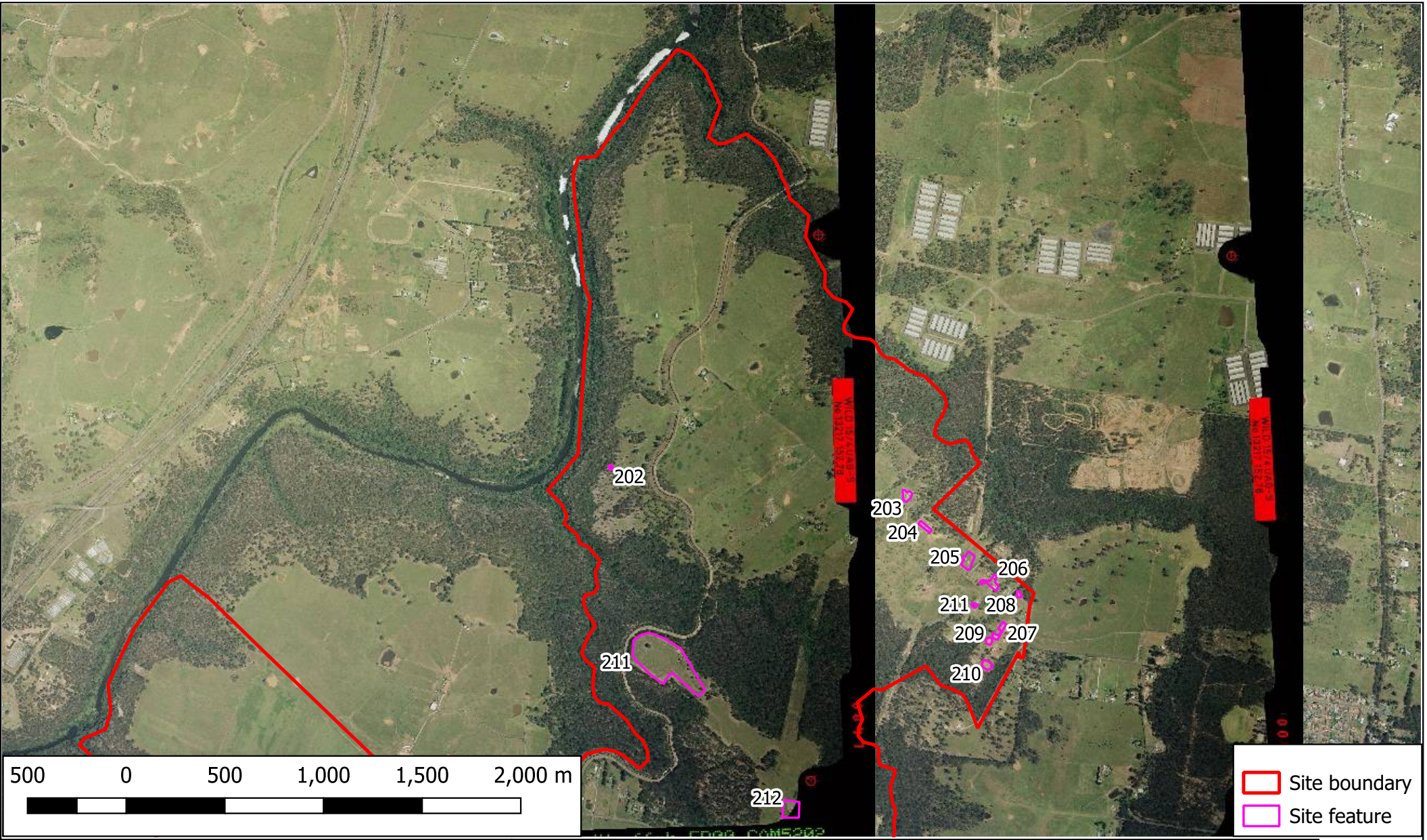
OFFICE: Macarthur	DRAWN BY: EMG	DATE: 22 June 2020	REVISION: 0

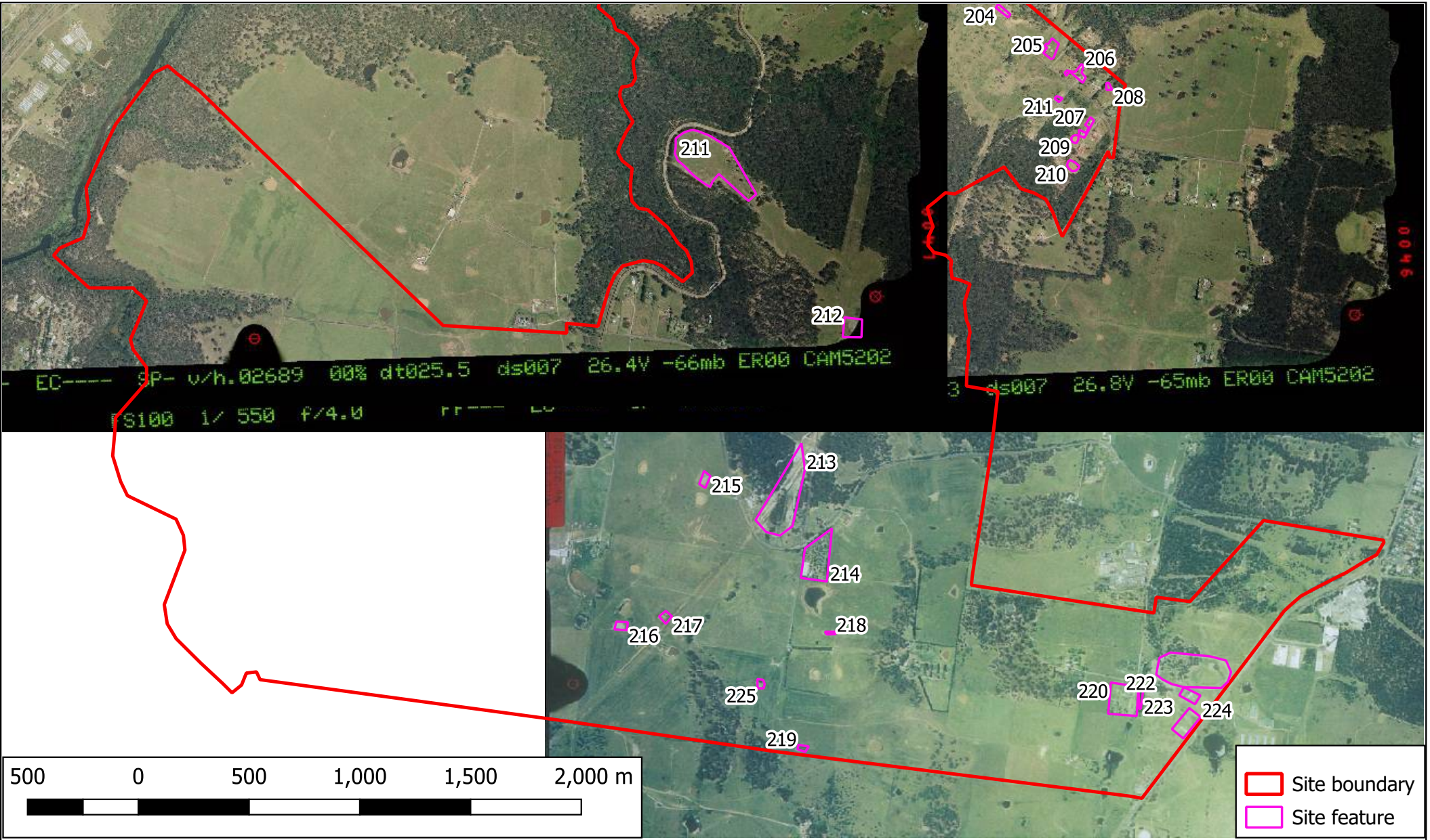


Douglas Partners
Geotechnics | Environment | Groundwater

TITLE: **Historical Aerial Photograph - 2005**
Proposed West Appin Precinct
Appin, NSW

N
MGA

CLIENT: Walker Corporation Pty Ltd	PROJECT No.: 76589.06	SCALE: As shown	DRAWING No: 8a
OFFICE: Macarthur	DRAWN BY: EMG	DATE: 22 June 2020	REVISION: 0



Douglas Partners
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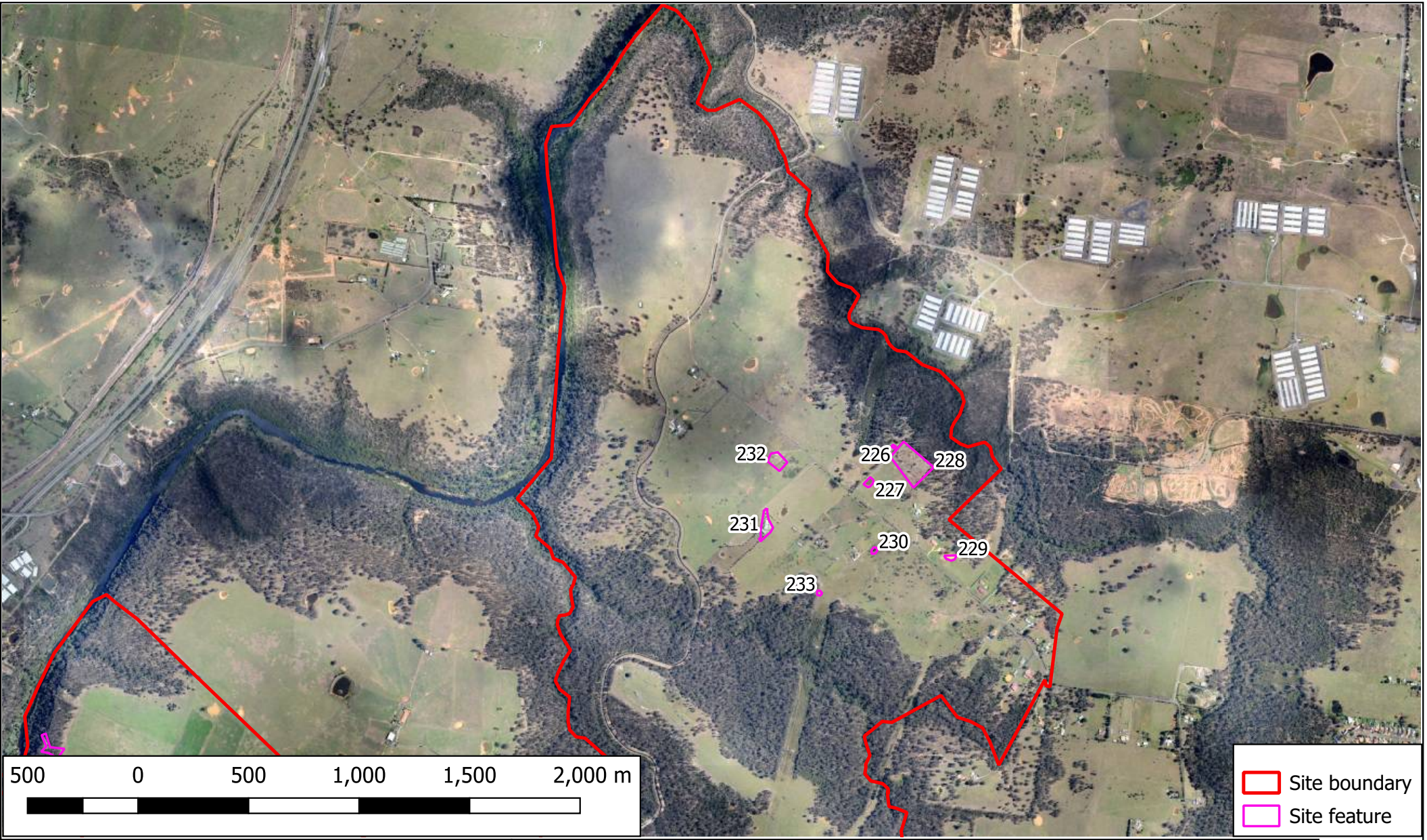
TITLE: **Historical Aerial Photograph - 2005**
Proposed West Appin Precinct
Appin, NSW

CLIENT: Walker Corporation Pty Ltd	PROJECT No.: 76589.06	SCALE: As shown	DRAWING No: 8b
OFFICE: Macarthur	DRAWN BY: EMG	DATE: 22 June 2020	REVISION: 0



Douglas Partners
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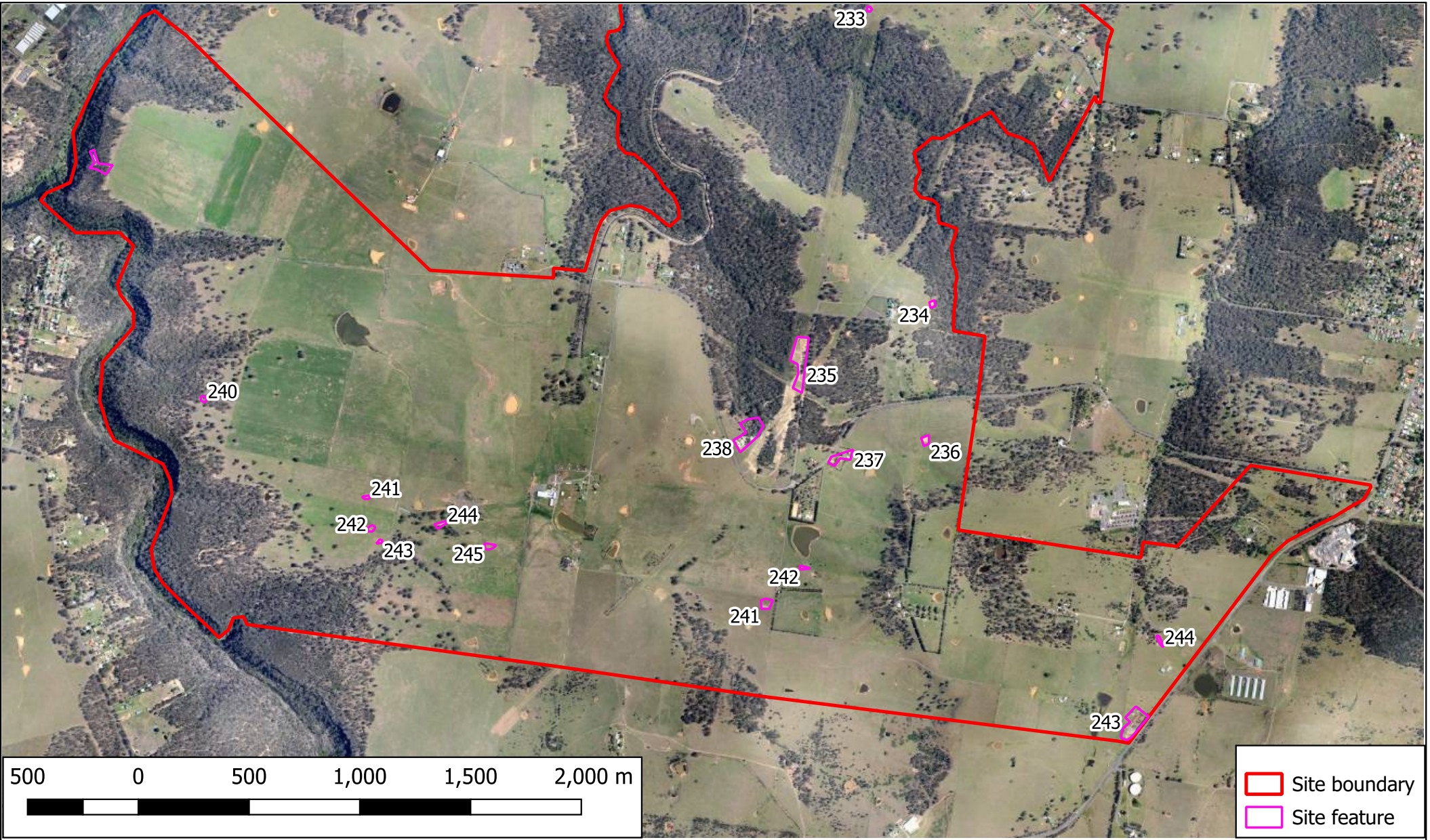
TITLE: **Historical Aerial Photograph - 2010**
Proposed West Appin Precinct
Appin, NSW

N
MGA

CLIENT: Walker Corporation Pty Ltd	PROJECT No.: 76589.06	SCALE: As shown	DRAWING No: 9a
OFFICE: Macarthur	DRAWN BY: EMG	DATE: 22 June 2020	REVISION: 0



Douglas Partners
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TITLE: **Historical Aerial Photograph - 2010**
Proposed West Appin Precinct
Appin, NSW

N
MGA

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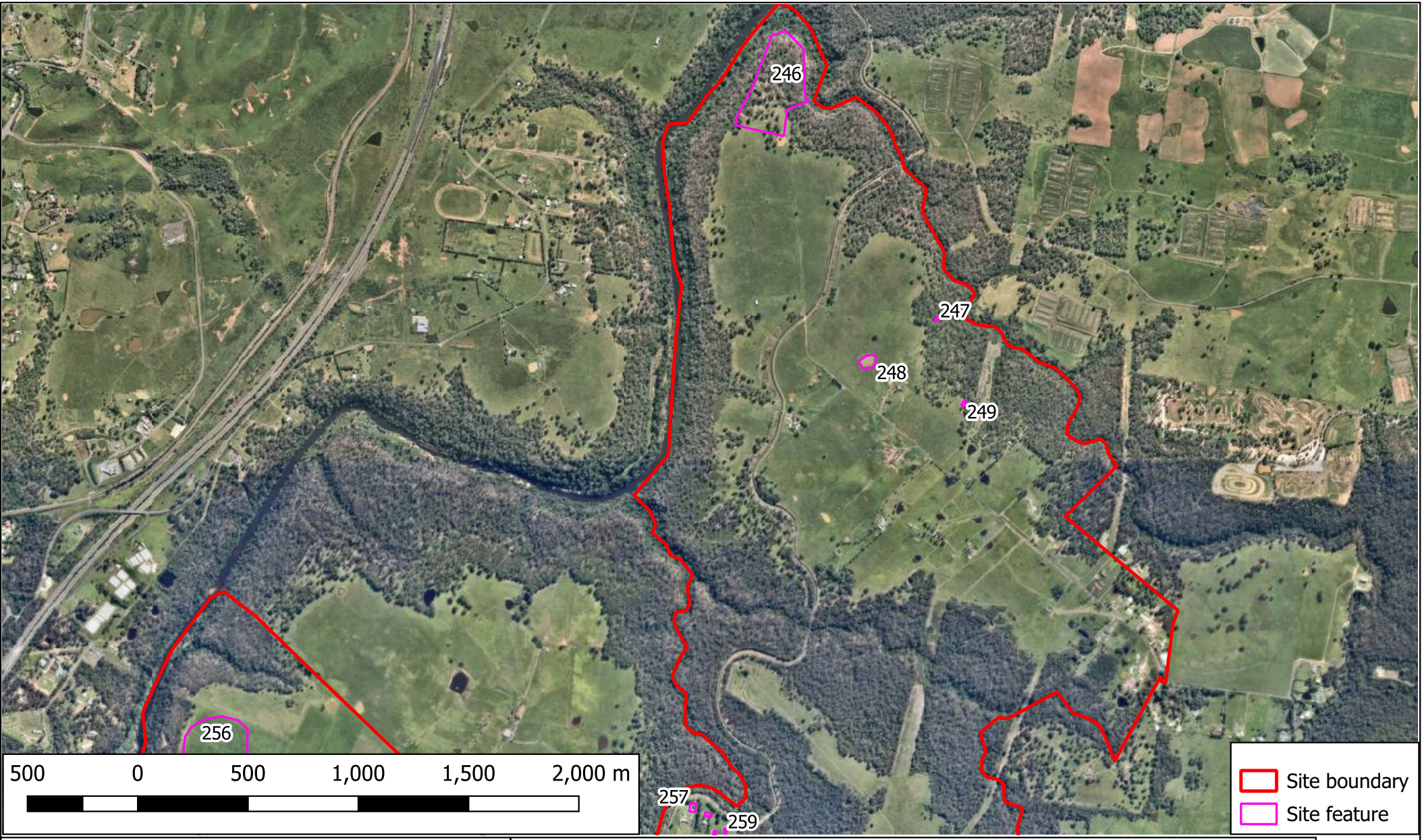
OFFICE: Macarthur	DRAWN BY: EMG	DATE: 22 June 2020	REVISION: 0

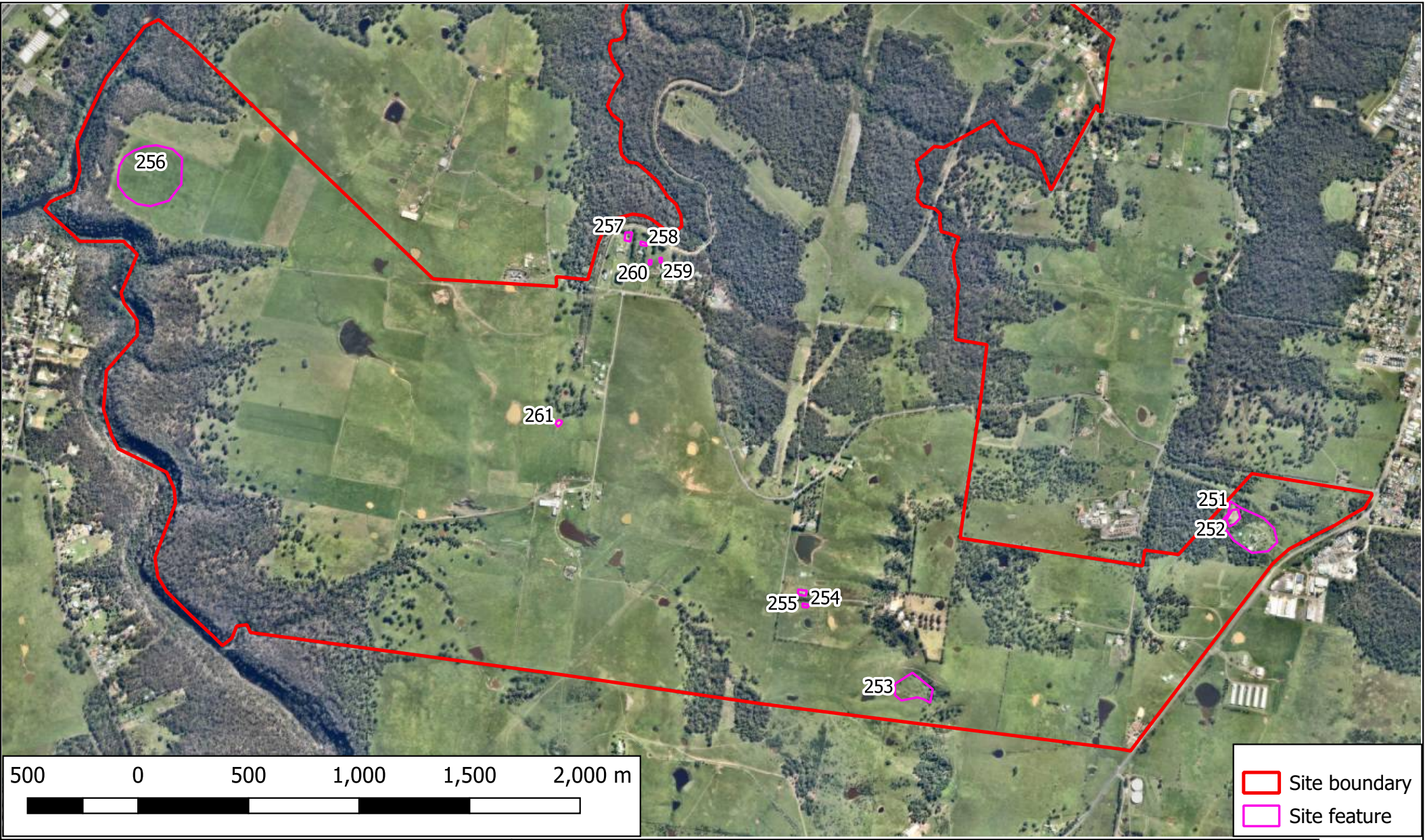


Douglas Partners
Geotechnics | Environment | Groundwater

TITLE: **Historical Aerial Photograph - 2020**
Proposed West Appin Precinct
Appin, NSW

N
MGA

CLIENT: Walker Corporation Pty Ltd	PROJECT No.: 76589.06	SCALE: As shown	DRAWING No: 10a
OFFICE: Macarthur	DRAWN BY: EMG	DATE: 22 June 2020	REVISION: 0



Douglas Partners
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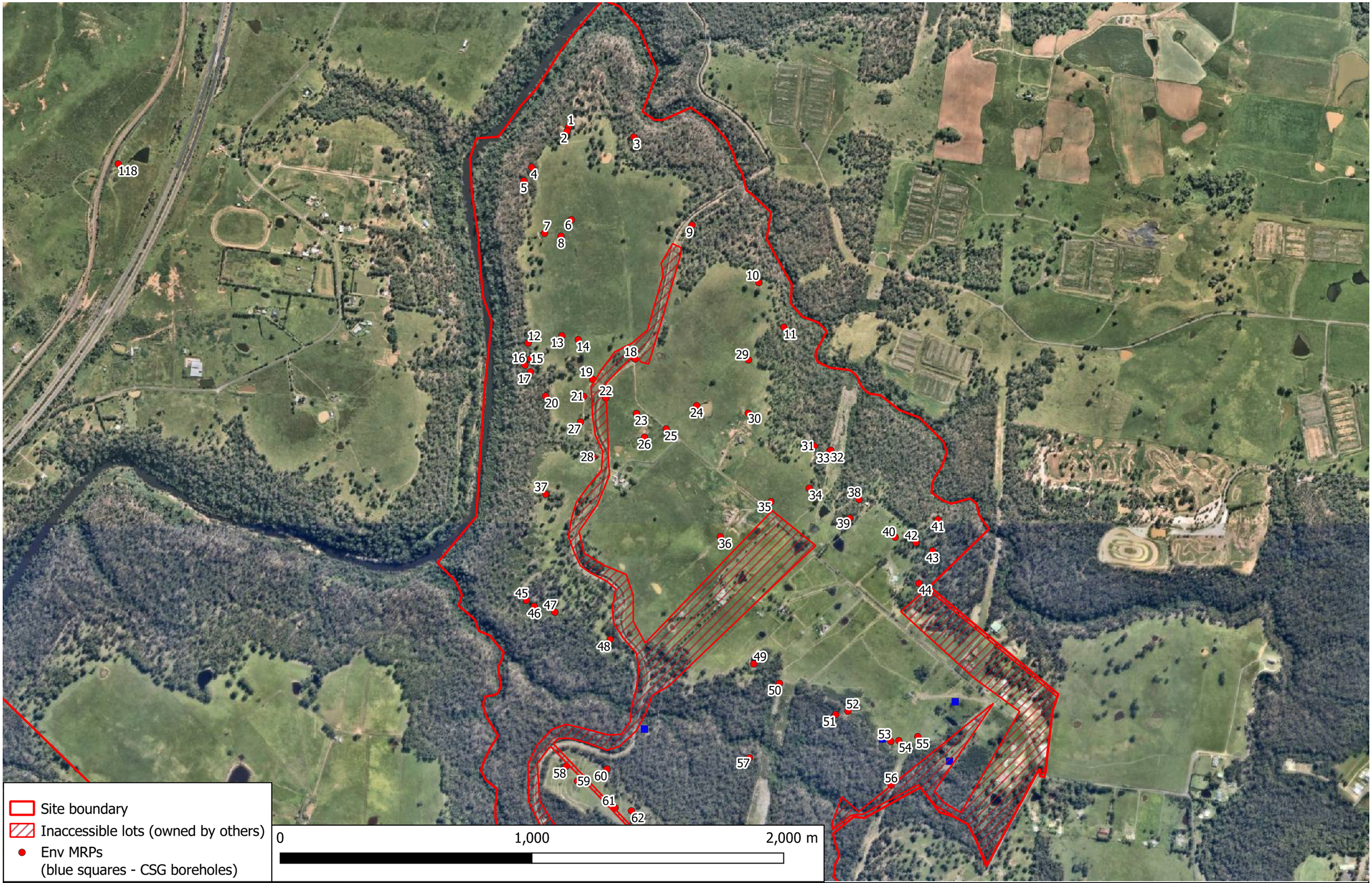
TITLE: **Historical Aerial Photograph - 2020**
Proposed West Appin Precinct
Appin, NSW

N
MGA

CLIENT: Walker Corporation Pty Ltd	PROJECT No.: 76589.06	SCALE: As shown	DRAWING No: 10b
OFFICE: Macarthur	DRAWN BY: EMG	DATE: 22 June 2020	REVISION: 0



Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		TITLE: **Site Walkover - MRP (North)** **Proposed West Appin Precinct** **Appin, NSW**
	OFFICE: Macarthur	DRAWN BY: EMG	
	SCALE: As shown	DATE: 17 August 2020	

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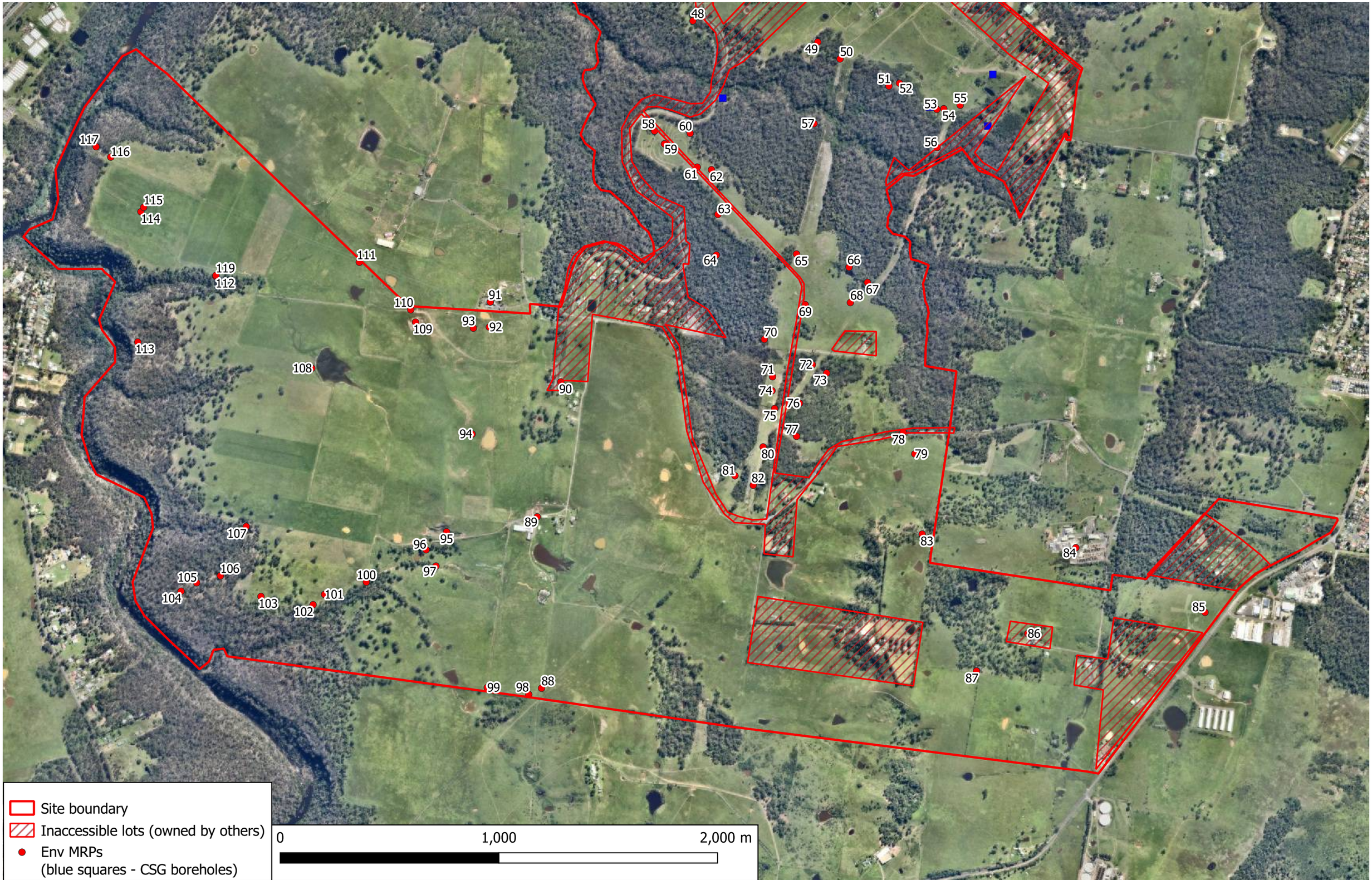
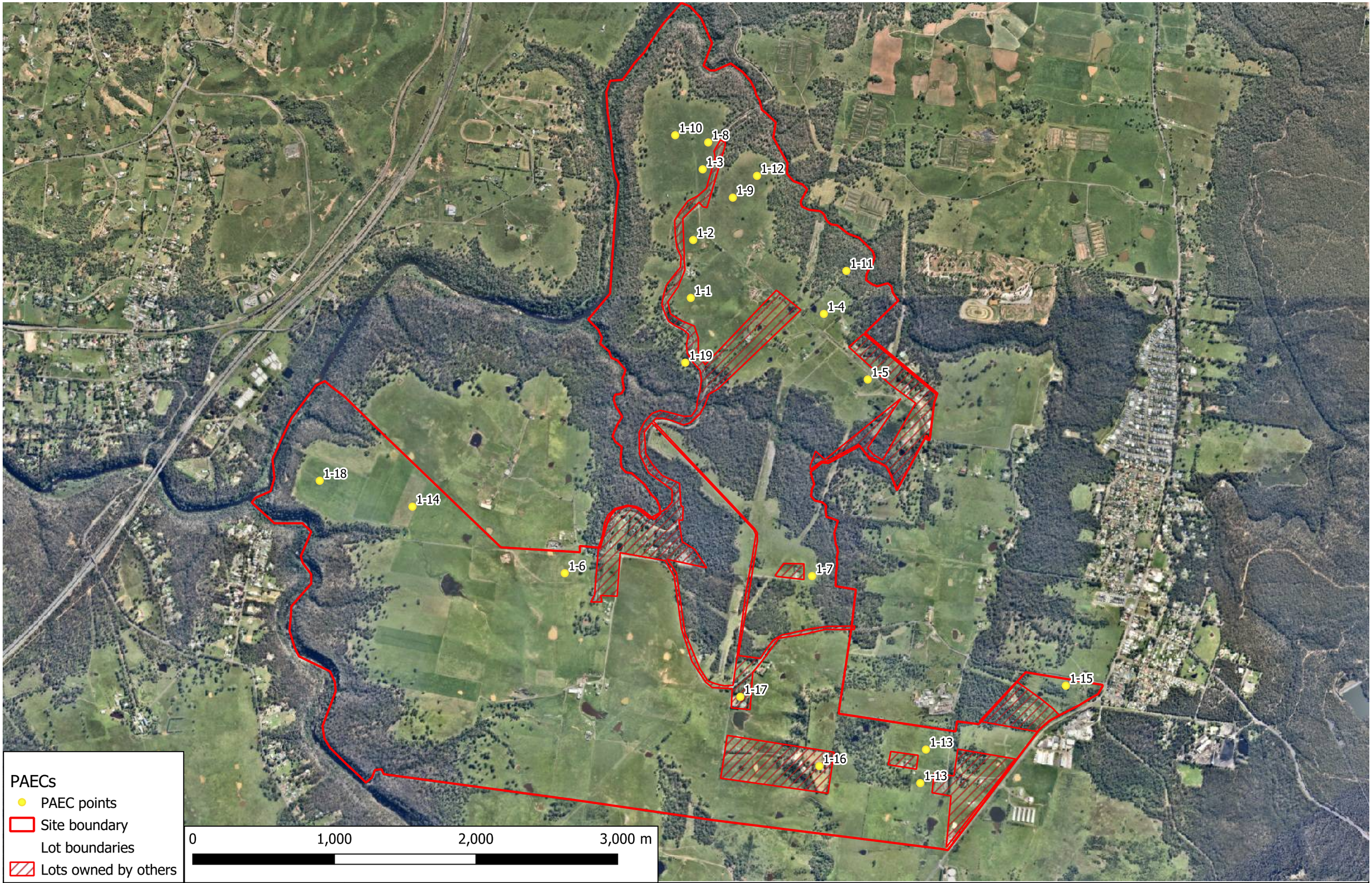
MGA

PROJ. #:	76589.06
DRAWING No:	11a
REVISION:	0



Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd	TITLE: **Site Walkover - MRP (South)** **Proposed West Appin Precinct** **Appin, NSW**	PROJ. #: 76589.06
	OFFICE: Macarthur DRAWN BY: EMG		DRAWING No: 11b
	SCALE: As shown DATE: 17 August 2020	N MGA	REVISION: 0



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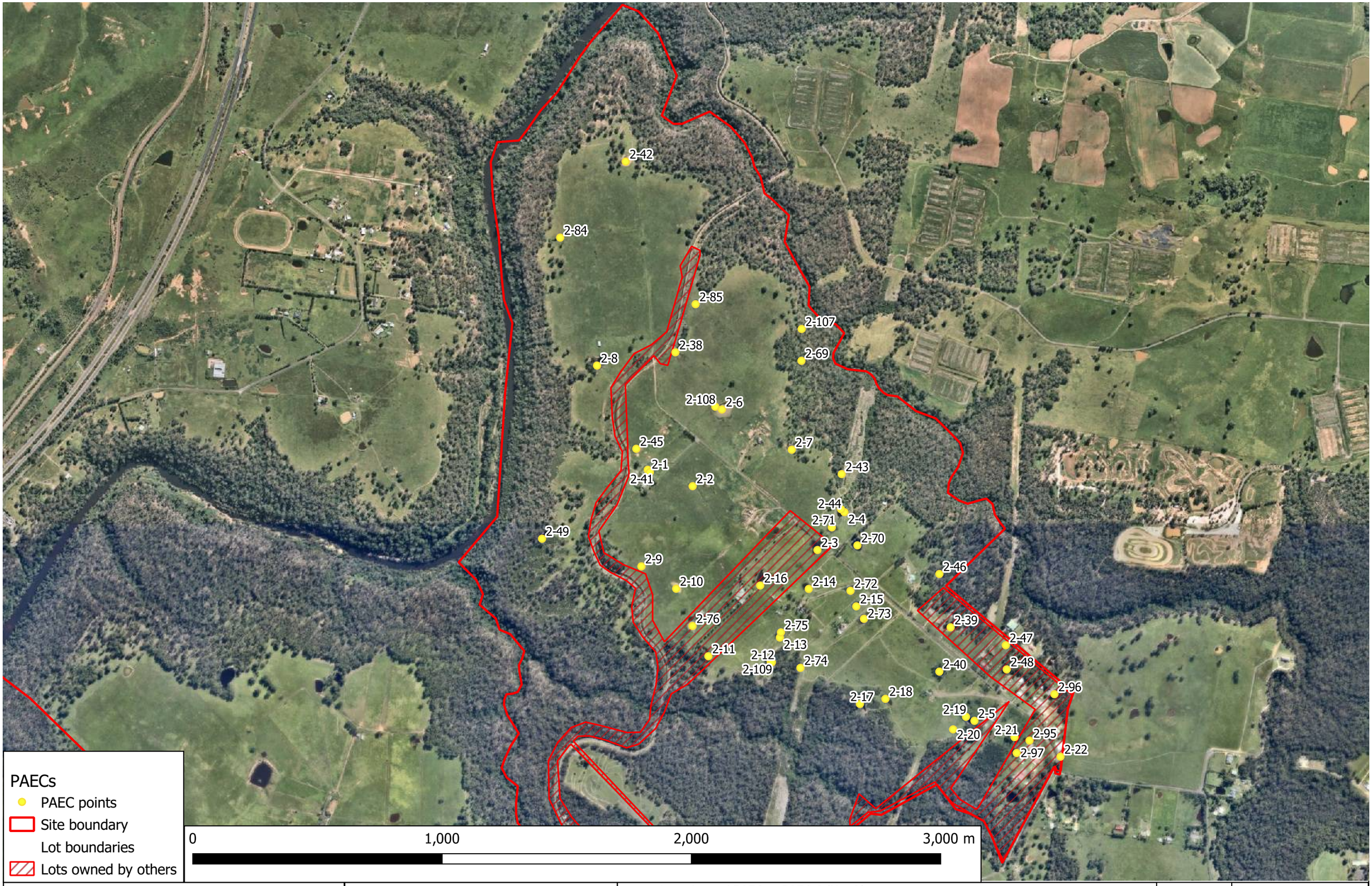
CLIENT: Walker Corporation Pty Ltd		
OFFICE: Macarthur	DRAWN BY: EMG	
SCALE: As shown	DATE: 17 August 2020	

TITLE: **Locations of PAECs - PAEC 1**
Proposed West Appin Precinct
Appin, NSW

PROJ. #:	76589.06
DRAWING No:	12a
REVISION:	0



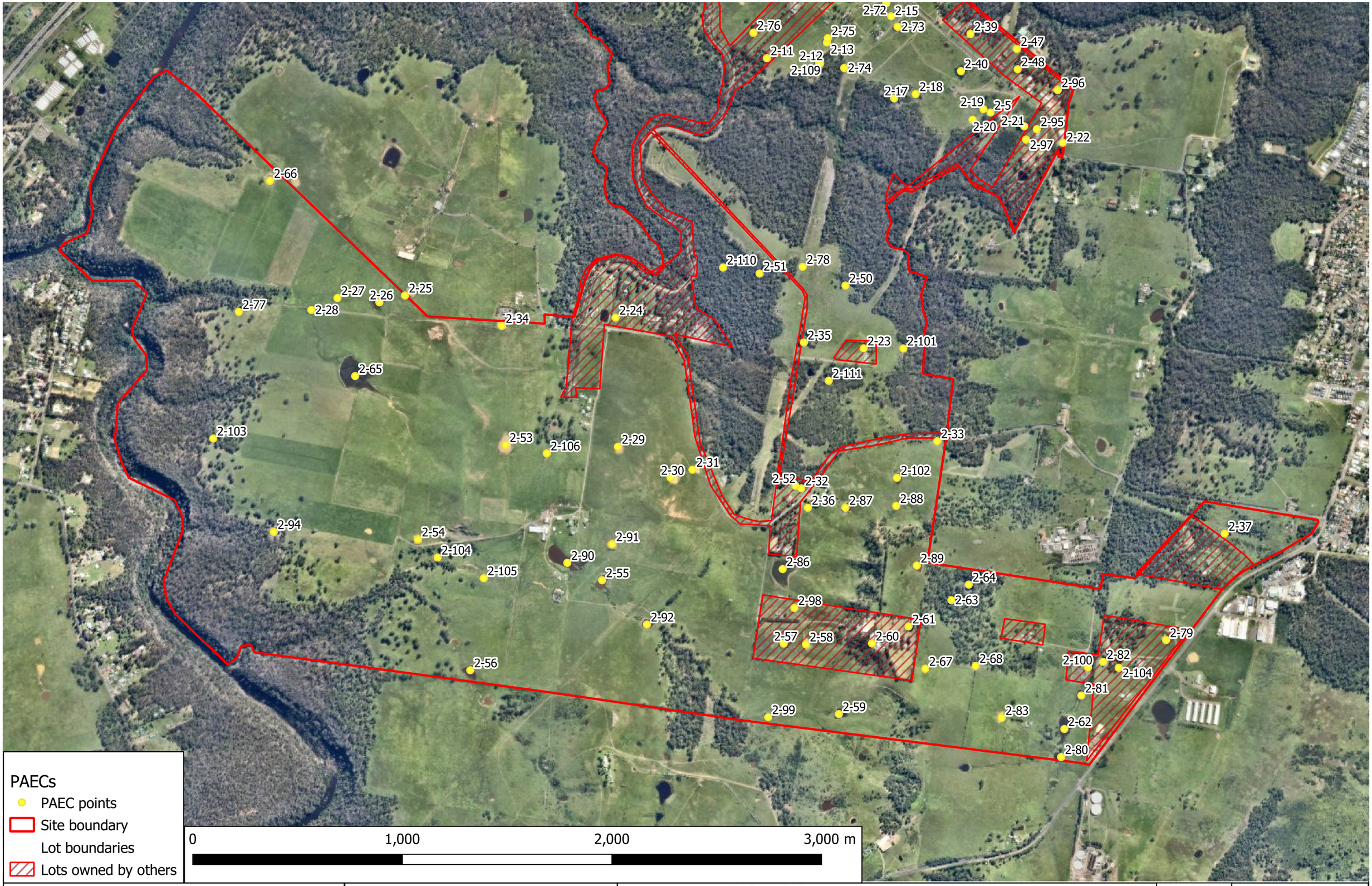
Douglas Partners
Geotechnics / Environment / Groundwater

CLIENT: Walker Corporation Pty Ltd		
OFFICE: Macarthur	DRAWN BY: EMG	
SCALE: As shown	DATE: 17 August 2020	

TITLE: **Locations of PAECs - PAEC 2 (North)**
Proposed West Appin Precinct
Appin, NSW

N
MGA

PROJ. #:	76589.06
DRAWING No:	12b
REVISION:	0



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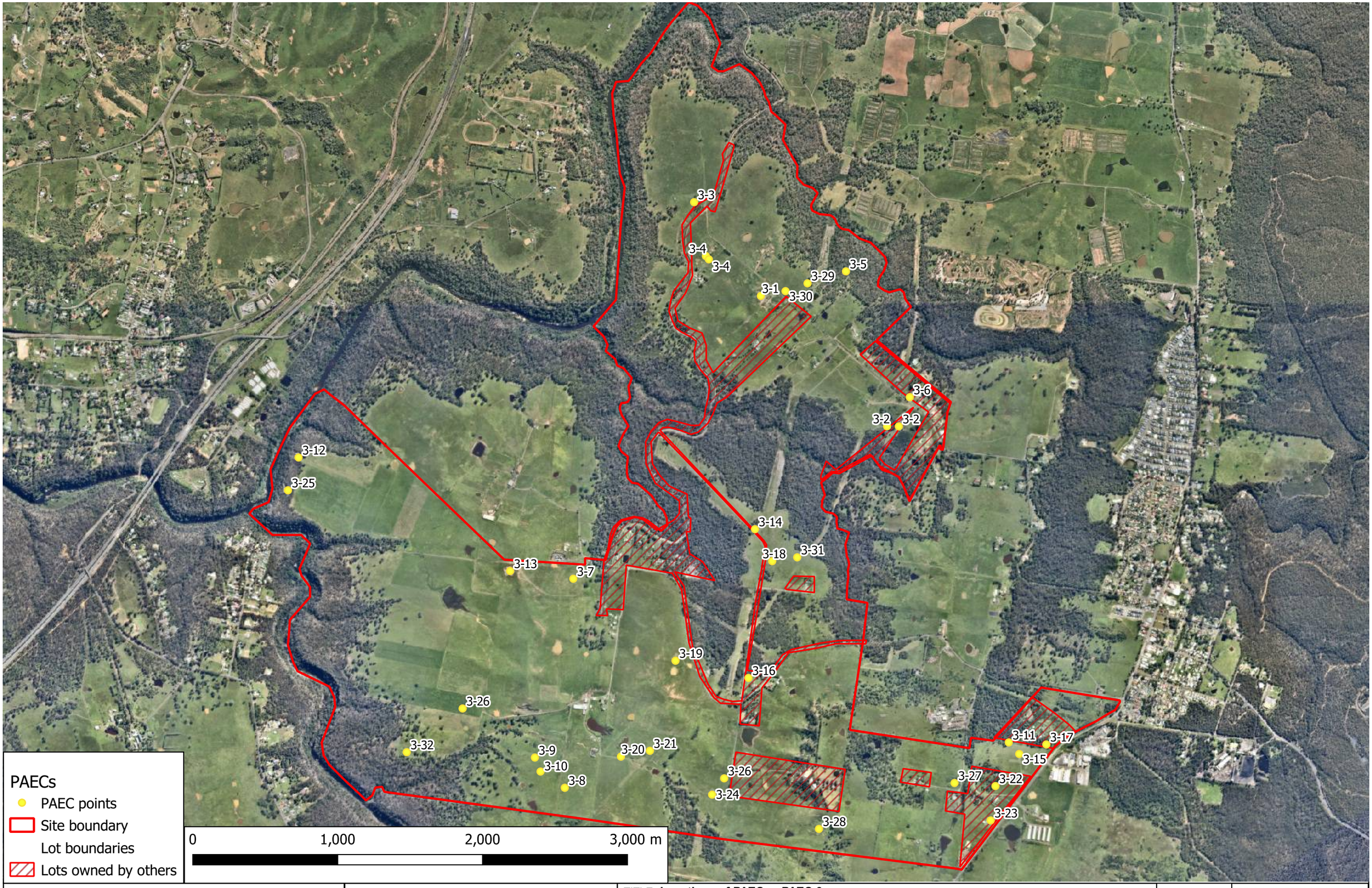
CLIENT: Walker Corporation Pty Ltd		
OFFICE: Macarthur	DRAWN BY: EMG	
SCALE: As shown	DATE: 17 August 2020	

TITLE: **Locations of PAECs - PAEC 2 (South)**
Proposed West Appin Precinct
Appin, NSW

N
MGA

PROJ. #: 76589.06	
DRAWING No:	12c
REVISION:	0



Douglas Partners
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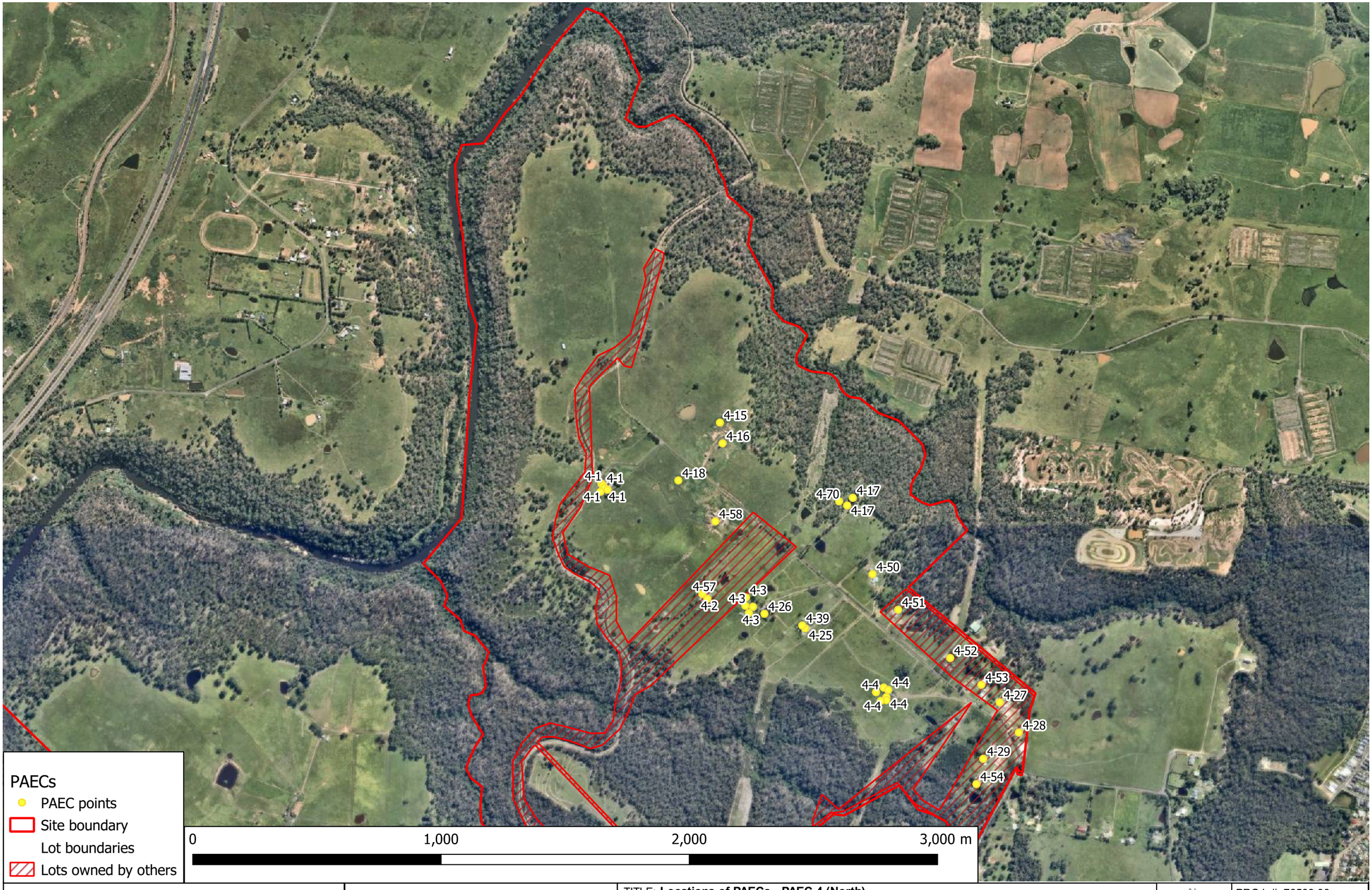
CLIENT: Walker Corporation Pty Ltd		
OFFICE: Macarthur	DRAWN BY: EMG	
SCALE: As shown	DATE: 17 August 2020	

TITLE: **Locations of PAECs - PAEC 3**
Proposed West Appin Precinct
Appin, NSW

N
MGA

PROJ. #: 76589.06	
DRAWING No:	12d
REVISION:	0



Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd	TITLE: **Locations of PAECs - PAEC 4 (North)** **Proposed West Appin Precinct** **Appin, NSW**	N MGA
	OFFICE: Macarthur / DRAWN BY: EMG		PROJ. #: 76589.06
	SCALE: As shown / DATE: 17 August 2020		DRAWING No: 12e
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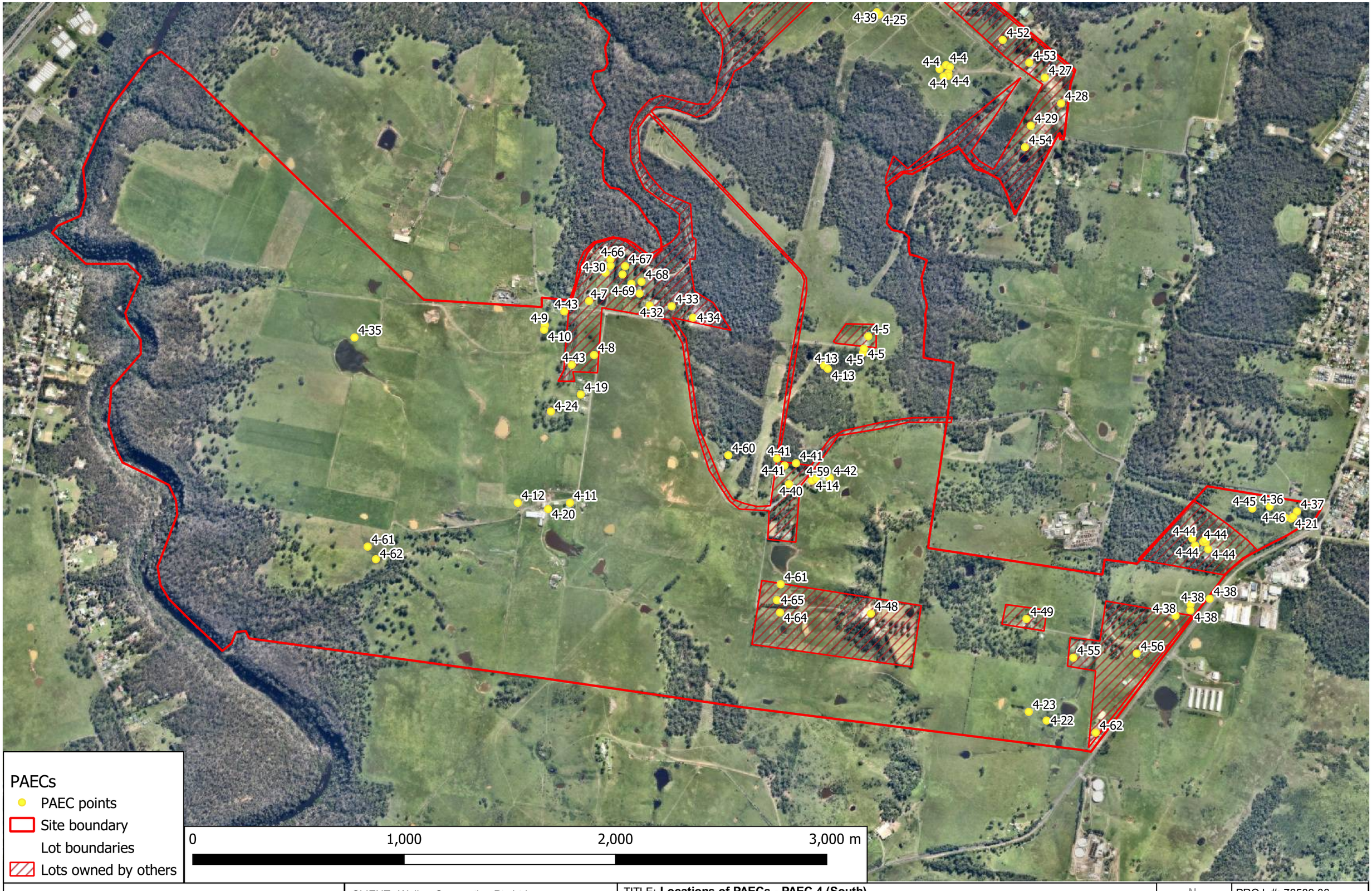


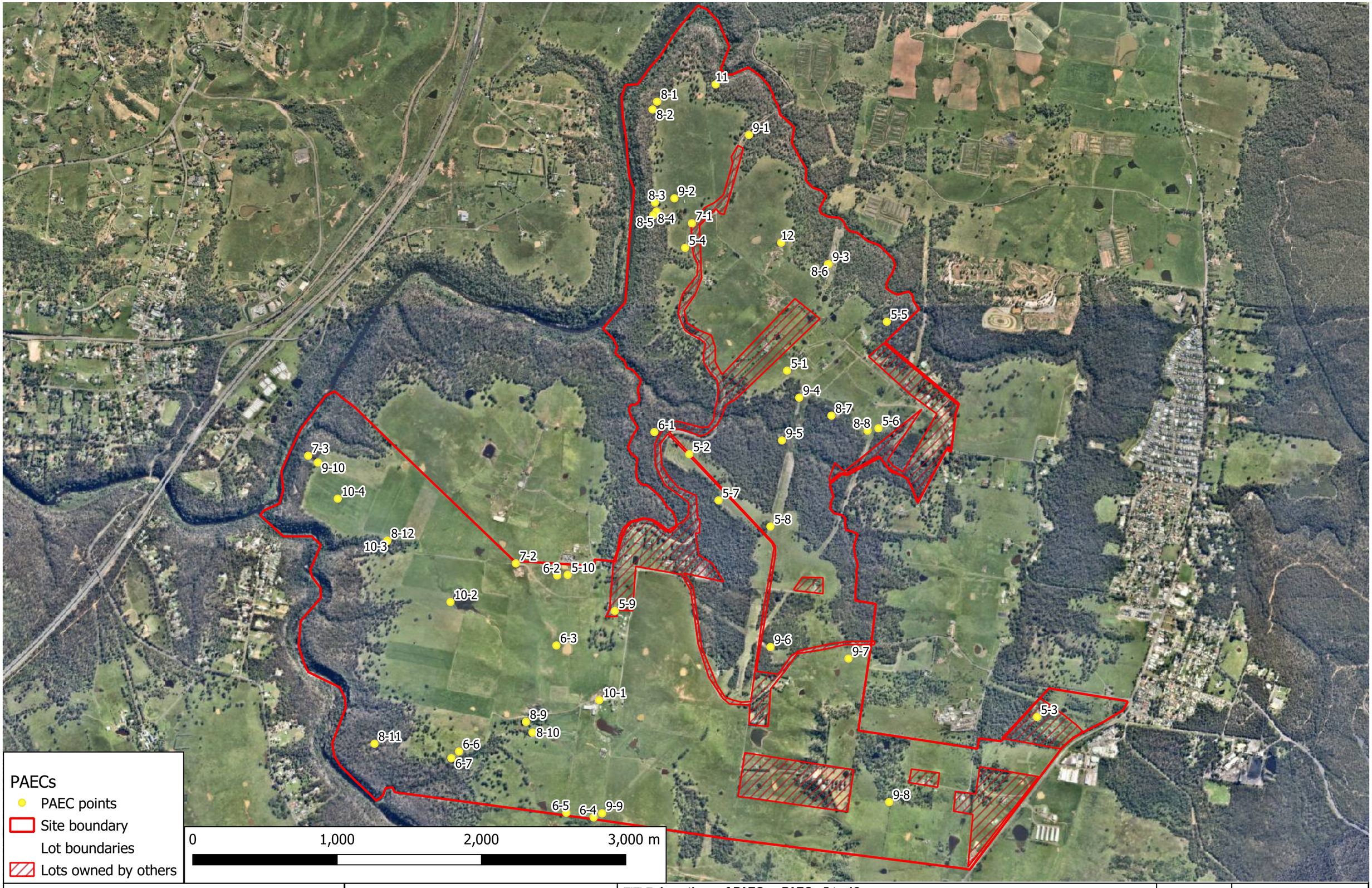
Douglas Partners
Geotechnics / Environment / Groundwater

CLIENT: Walker Corporation Pty Ltd		
OFFICE: Macarthur	DRAWN BY: EMG	
SCALE: As shown	DATE: 17 August 2020	

TITLE: **Locations of PAECs - PAEC 4 (South)**
Proposed West Appin Precinct
Appin, NSW

N
MGA

PROJ. #: 76589.06	
DRAWING No:	12f
REVISION:	0



Douglas Partners
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CLIENT: Walker Corporation Pty Ltd		
OFFICE: Macarthur	DRAWN BY: EMG	
SCALE: As shown	DATE: 17 August 2020	

TITLE: **Locations of PAECs - PAECs 5 to 12**
Proposed West Appin Precinct
Appin, NSW

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MGA

PROJ. #: 76589.06	
DRAWING No:	12g
REVISION:	0

About this Report

Douglas Partners

Introduction

These notes have been provided to amplify DP's report in regard to classification methods, field procedures and the comments section. Not all are necessarily relevant to all reports.

DP's reports are based on information gained from limited subsurface excavations and sampling, supplemented by knowledge of local geology and experience. For this reason, they must be regarded as interpretive rather than factual documents, limited to some extent by the scope of information on which they rely.

Copyright

Borehole and Test Pit Logs

The borehole and test pit logs presented in this report are an engineering and/or geological interpretation of the subsurface conditions, and their reliability will depend to some extent on frequency of sampling and the method of drilling or excavation. Ideally, continuous undisturbed sampling or core drilling will provide the most reliable assessment, but this is not always practicable or possible to justify on economic grounds. In any case the boreholes and test pits represent only a very small sample of the total subsurface profile.

Interpretation of the information and its application to design and construction should therefore take into account the spacing of boreholes or pits, the frequency of sampling, and the possibility of other than 'straight line' variations between the test locations.

Groundwater

Where groundwater levels are measured in boreholes there are several potential problems, namely:

- In low permeability soils groundwater may enter the hole very slowly or perhaps not at all during the time the hole is left open;
- A localised, perched water table may lead to an erroneous indication of the true water table;
- Water table levels will vary from time to time with seasons or recent weather changes. They may not be the same at the time of construction as are indicated in the report; and
- The use of water or mud as a drilling fluid will mask any groundwater inflow. Water has to be blown out of the hole and drilling mud must first be washed out of the hole if water measurements are to be made.

More reliable measurements can be made by installing standpipes which are read at intervals over several days, or perhaps weeks for low permeability soils. Piezometers, sealed in a particular stratum, may be advisable in low permeability soils or where there may be interference from a perched water table.

Reports

The report has been prepared by qualified personnel, is based on the information obtained from field and laboratory testing, and has been undertaken to current engineering standards of interpretation and analysis. Where the report has been prepared for a specific design proposal, the information and interpretation may not be relevant if the design proposal is changed. If this happens, DP will be pleased to review the report and the sufficiency of the investigation work.

Every care is taken with the report as it relates to interpretation of subsurface conditions, discussion of geotechnical and environmental aspects, and recommendations or suggestions for design and construction. However, DP cannot always anticipate or assume responsibility for:

- Unexpected variations in ground conditions. The potential for this will depend partly on borehole or pit spacing and sampling frequency;
- Changes in policy or interpretations of policy by statutory authorities; or
- The actions of contractors responding to commercial pressures.

If these occur, DP will be pleased to assist with investigations or advice to resolve the matter.

About this Report

Site Anomalies

In the event that conditions encountered on site during construction appear to vary from those which were expected from the information contained in the report, DP requests that it be immediately notified. Most problems are much more readily resolved when conditions are exposed rather than at some later stage, well after the event.

Information for Contractual Purposes

Where information obtained from this report is provided for tendering purposes, it is recommended that all information, including the written report and discussion, be made available. In circumstances where the discussion or comments section is not relevant to the contractual situation, it may be appropriate to prepare a specially edited document. DP would be pleased to assist in this regard and/or to make additional report copies available for contract purposes at a nominal charge.

Site Inspection

The company will always be pleased to provide engineering inspection services for geotechnical and environmental aspects of work to which this report is related. This could range from a site visit to confirm that conditions exposed are as expected, to full time engineering presence on site.

Appendix B

Table of Site Features

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Category / Number	Risk Management Rating	Risk Management Actions
2	1947 aerial	Small structures	Yes				Yes	4-1	Low - Medium	Investigation of building footpring post-demolition and building footprint investigation
3	1947 aerial	Dam	Yes	X			Yes	2-1	Low	Targeted investigation (wall / sediments)
4	1947 aerial	Dam	Yes				Yes	2-2	Low	Targeted investigation (wall / sediments)
5	1947 aerial	Dam	Yes				Yes	2-3	Low	Targeted investigation (wall / sediments)
6	1947 aerial	Dam	Yes				Yes	2-4	Low	Targeted investigation (wall / sediments)
7	1947 aerial	Fields - possible agricultural area	No				Yes	1-1	Low	Low density targeted investigation
8	1947 aerial	Fields - possible agricultural area	No				Yes	1-2	Low	Low density targeted investigation
9	1947 aerial	Fields - possible agricultural area	No				Yes	1-3	Low	Low density targeted investigation
10	1947 aerial	Fields - possible agricultural area	No				Yes	1-4	Low	Low density targeted investigation
11	1947 aerial	Ground disturbance	Yes				Yes	3-1	Low - Medium	Targeted intrusive investigation for possible filling
12	1947 aerial	Ground disturbance - possible filling	TBC - area covered with bushland in 2020	X	None		Yes	3-2	Low - Medium	Targeted intrusive investigation for possible filling
13	1947 aerial	Possible dam	Yes				Yes	2-5	Low	Targeted investigation (wall / sediments)
14	1947 aerial	Field - possible agricultural area	No				Yes	1-5	Low	Low density targeted investigation
15	1956 aerial	Dam	Yes				Yes	2-6	Low	Targeted investigation (wall / sediments)
16	1956 aerial	Dam	Yes				Yes	2-7	Low	Targeted investigation (wall / sediments)
17	1956 aerial	Dam	Yes				Yes	2-8	Low	Targeted investigation (wall / sediments)
19	1956 aerial	Possible ground disturbance	No	X	None		Yes	3-3	Low - Medium	Targeted investigation for filling
20	1956 aerial	Dam	Yes				Yes	2-9	Low	Targeted investigation (wall / sediments)
21	1956 aerial	Dam	Yes				Yes	2-10	Low	Targeted investigation (wall / sediments)
22	1956 aerial	Dam	Yes				Yes	2-11	Low	Targeted investigation (wall / sediments)
23	1956 aerial	Dam	Yes				Yes	2-12	Low	Targeted investigation (wall / sediments)
24	1956 aerial	Dam	Yes				Yes	2-13	Low	Targeted investigation (wall / sediments)

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Category / Number	Risk Management Rating	Risk Management Actions
25	1956 aerial	Dam	Yes				Yes	2-14	Low	Targeted investigation (wall / sediments)
26	1956 aerial	Dam	Yes				Yes	2-15	Low	Targeted investigation (wall / sediments)
27	1956 aerial	Dam	Yes				Yes	2-16	Low	Targeted investigation (wall / sediments)
28	1956 aerial	Possible building / structure footprint	Has since been built on - house is present				Yes	4-2	Low - Medium	Investigation of building footpring post-demolition
29	1956 aerial	Structures (farm / residence)	No				Yes	4-3	Low - Medium	Investigation of building footpring
30	1956 aerial	Dam	Yes		52	Dam	Yes	2-17	Low	Targeted investigation (wall / sediments)
31	1956 aerial	Dam	Yes				Yes	2-18	Low	Targeted investigation (wall / sediments)
32	1956 aerial	Structures (farm / residence)	Has since been altered - house is present				Yes	4-4	Low - Medium	Investigation of building footpring post-demolition
33	1956 aerial	Dam	Has since been altered - house is present				Yes	2-19	Low	Targeted investigation (fill / wall / sediments - if present)
34	1956 aerial	Dam	Yes				Yes	2-20	Low	Targeted investigation (wall / sediments)
35	1956 aerial	Dam	Yes				Yes	2-21	Low	Targeted investigation (wall / sediments)
36	1956 aerial	Dam	No - has since been filled and built around	X	None		Yes	2-22	Low - Medium	Targeted investigation (fill / wall / sediments - if present)
37	1956 aerial	Structures (farm / residence)	Yes				Yes	4-5	Low - Medium	Investigation of building footpring post-demolition
38	1956 aerial	Dam	Yes				Yes	2-23	Low	Targeted investigation (wall / sediments)
39	1956 aerial	Possible building / structure footprint	Yes				Yes	4-6	Low - Medium	Investigation of building footpring post-demolition
40	1956 aerial	Dam	No				Yes	2-24	Low - Medium	Targeted investigation of filling
41	1956 aerial	Structures	Has since been altered - house is present				Yes	4-7	Low - Medium	Investigation of building footpring post-demolition
42	1956 aerial	Structures	No				Yes	4-8	Low - Medium	Investigation of building footpring
43	1956 aerial	Structures	No				Yes	4-9	Low - Medium	Investigation of building footpring
44	1956 aerial	Structures	Yes - type of structure TBC	X			Yes	4-10	Low - Medium	Investigation of building footpring post-demolition
46	1956 aerial	Dam	Yes				Yes	2-25	Low	Targeted investigation (wall / sediments)
47	1956 aerial	Dam	Yes				Yes	2-26	Low	Targeted investigation (wall / sediments)

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Category / Number	Risk Management Rating	Risk Management Actions
49	1956 aerial	Dam	No				Yes	2-27	Low - Medium	Investigate dam extent for possible fill
50	1956 aerial	Dam	Yes				Yes	2-28	Low	Targeted investigation (wall / sediments)
51	1956 aerial	Structures	Yes				Yes	4-11	Low - Medium	Investigation of building footpring post-demolition
52	1956 aerial	Structures	Yes				Yes	4-12	Low - Medium	Investigation of building footpring post-demolition
53	1956 aerial	Dam	Yes				Yes	2-29	Low	Targeted investigation (wall / sediments)
54	1956 aerial	Dam	Yes				Yes	2-30	Low	Targeted investigation (wall / sediments)
55	1956 aerial	Dam	Yes				Yes	2-31	Low	Targeted investigation (wall / sediments)
56	1956 aerial	Dam	Yes - next to bushland				Yes	2-32	Low	Targeted investigation (wall / sediments)
57	1956 aerial	Dam	Yes				Yes	2-33	Low	Targeted investigation (wall / sediments)
60	1956 aerial	Dam	Yes				Yes	2-34	Low	Targeted investigation (wall / sediments)
61	1956 aerial	Fields - possible agricultural area	No				Yes	1-6	Low	Low density targeted investigation
62	1956 aerial	Fields - possible agricultural area	No				Yes	1-7	Low	Low density targeted investigation
63	1956 aerial	Dam	TBC - area covered with bushland in 2020	X	None		Yes	2-35	Low - Medium	Inspection of area and undertake targeted investigation
64	1956 aerial	Small structures	TBC - area covered with bushland in 2020	X	None		Yes	4-13	Low - Medium	Inspection of area and undertake targeted investigation
66	1956 aerial	Dam	No				Yes	2-36	Low - Medium	Investigate dam extent for possible fill
67	1956 aerial	Small structure	No	X	None		Yes	4-14	Low - Medium	Inspect footprint area for residual building material. Undertake targeted investigation for fill
68	1956 aerial	Dam	Yes				Yes	2-37	Low	Targeted investigation (wall / sediments)
69	1961 aerial	Fields - possible agricultural area	No				Yes	1-8	Low	Low density targeted investigation
70	1961 aerial	Fields - possible agricultural area	No				Yes	1-9	Low	Low density targeted investigation
71	1961 aerial	Dam	Yes				Yes	2-38	Low	Targeted investigation (wall / sediments)
73	1961 aerial	Dam	Yes				Yes	2-39	Low	Targeted investigation (wall / sediments)
74	1961 aerial	Dam	Yes				Yes	2-40	Low	Targeted investigation (wall / sediments)

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Category / Number	Risk Management Rating	Risk Management Actions
75	1961 aerial	Dam	Yes				Yes	2-41	Low	Targeted investigation (wall / sediments)
76	1961 aerial	Ground disturbance - possible filling	Yes	X	26	Cattle yards constructed of timber and metal	Yes	3-4	Low	Targeted investigation of soils
78	1975 aerial	Dam	Yes				Yes	2-42	Low	Targeted investigation (wall / sediments)
79	1975 aerial	Fields - possible agricultural area	No				Yes	1-10	Low	Low density targeted investigation
81	1975 aerial	Small structures (possible animal shelters)	Yes				Yes	4-15	Low	Inspect area for building materials
82	1975 aerial	Dam	TBC - area covered with bushland in 2020	X			Yes	2-43	Low - Medium	Inspect for dam and undertake targeted investigation (wall / sediments / filling)
83	1975 aerial	Structures (farm / residence)	Yes				Yes	4-16	Low - Medium	Investigation of building footpring post-demolition
84	1975 aerial	Structures (farm / residence)	Partially				Yes	4-17	Low - Medium	Investigation of building footpring post-demolition
85	1975 aerial	Ground disturbance	TBC - area covered with bushland in 2020	X	None		Yes	3-5	Low - Medium	Targeted investigation for filling
86	1975 aerial	Fields - possible agricultural area	No - area covered with bushland in 2020				Yes	1-11	Low	Low density targeted investigation
87	1975 aerial	Dam	Yes				Yes	2-44	Low	Targeted investigation (wall / sediments)
88	1975 aerial	Structures (farm / residence)	No	X	None		Yes	4-18	Low - Medium	Inspect footprint area for residual building material. Undertake targeted investigation for fill
89	1975 aerial	Dam	Yes				Yes	2-45	Low	Targeted investigation (wall / sediments)
91	1975 aerial	Fields - possible agricultural area	No				Yes	1-12	Low	Low density targeted investigation
92	1975 aerial	Dam	TBC - area covered with bushland in 2020	X			Yes	2-46	Low - Medium	Inspect for dam and undertake targeted investigation (wall / sediments / filling)
93	1975 aerial	Dam	No				Yes	2-47	Low - Medium	Investigate dam extent for possible fill
94	1975 aerial	Dam	Yes				Yes	2-48	Low	Targeted investigation (wall / sediments)
95	1975 aerial	Ground disturbance	No				Yes	3-6	Low - Medium	Targeted investigation of dam wall
96	1975 aerial	Dam	Yes				Yes	2-49	Low	Targeted investigation (wall / sediments)
98	1975 aerial	Ground disturbance	No	X	None	Coal seam gas well	Yes	6-1	Medium	Targeted investigation, identify mud pits and assess remediation and validation information provided by asset owner.
99	1975 aerial	Dam	Yes		66	Rubble in dam wall	Yes	2-50	Medium	Targeted investigation for possible filling

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Category / Number	Risk Management Rating	Risk Management Actions
100	1975 aerial	Dam	Yes				Yes	2-51	Low	Targeted investigation (wall / sediments)
101	1975 aerial	Dam	Yes				Yes	2-52	Low	Targeted investigation (wall / sediments)
102	1975 aerial	Structures (farm / residence)	Yes				Yes	4-19	Low - Medium	Investigation of building footpring post-demolition
103	1975 aerial	Track	Yes				Yes	3-7	Low - Medium	Inspect surface for any fill and sample
104	1975 aerial	Dam	Yes				Yes	2-53	Low	Targeted investigation (wall / sediments)
105	1975 aerial	Dam	Yes				Yes	2-54	Low	Targeted investigation (wall / sediments)
106	1975 aerial	Structures (farm / residence)	Yes				Yes	4-20	Low - Medium	Investigation of building footpring post-demolition
107	1975 aerial	Dam	Yes				Yes	2-55	Low	Targeted investigation (wall / sediments)
108	1975 aerial	Ground disturbance	No	X	None		Yes	3-8	Low - Medium	Undertake targeted investigation for filling
110	1975 aerial	Dam	Yes				Yes	2-56	Low	Targeted investigation (wall / sediments)
111	1975 aerial	Ground disturbance	No	X	None		Yes	3-9	Low - Medium	Undertake targeted investigation for filling
112	1975 aerial	Ground disturbance	No	X	None		Yes	3-10	Low - Medium	Undertake targeted investigation for filling
113	1975 aerial	Dam	Yes				Yes	2-57	Low	Targeted investigation (wall / sediments)
114	1975 aerial	Dam	Yes				Yes	2-58	Low	Targeted investigation (wall / sediments)
115	1975 aerial	Dam	Yes				Yes	2-59	Low	Targeted investigation (wall / sediments)
116	1975 aerial	Possible dam	No - appears to have been filled in, or is ground disturbance rather than a	X	None		Yes	2-60	Low - Medium	Undertake targeted investigation for filling
117	1975 aerial	Dam	Yes				Yes	2-61	Low	Targeted investigation (wall / sediments)
118	1975 aerial	Dam	Yes				Yes	2-62	Low	Targeted investigation (wall / sediments)
119	1975 aerial	Structures (farm / residence)	Yes				Yes	4-21	Low - Medium	Investigation of building footpring post-demolition
120	1975 aerial	Ground disturbance	TBC in walkover	X	None		Yes	3-11	Low - Medium	Undertake targeted investigation for filling
121	1975 aerial	Structures (farm / residence)	Yes				Yes	4-22	Low - Medium	Investigation of building footpring post-demolition
122	1975 aerial	Structures (farm / residence)	Yes				Yes	4-23	Low - Medium	Investigation of building footpring post-demolition

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Category / Number	Risk Management Rating	Risk Management Actions
123	1975 aerial	Dam	Yes				Yes	2-63	Low	Targeted investigation (wall / sediments)
124	1975 aerial	Dam	Yes				Yes	2-64	Low	Targeted investigation (wall / sediments)
125	1975 aerial	Dam	Yes				Yes	2-65	Low	Targeted investigation (wall / sediments)
126	1975 aerial	Dam	Yes				Yes	2-66	Low	Targeted investigation (wall / sediments)
127	1975 aerial	Ground clearance	No	X	116, 117	Power poles (3 sets) of timber power poles with concrete. Small metal shed and coal wash road also observed.	Yes	3-12	Low - Medium	Inspect contents of metal shed and targeted investigation of features observed
128	1975 aerial	Possible structures	TBC in walkover	X	None		Yes	4-24	Low - Medium	Inspect for residual buildaing material on the ground surface and undertake targeted investigation for filling
129	1975 aerial	Fields - possible agricultural area	No				Yes	1-13	Low	Low density targeted investigation
130	1975 aerial	Dam	Yes				Yes	2-67	Low	Targeted investigation (wall / sediments)
131	1975 aerial	Dam	Yes				Yes	2-68	Low	Targeted investigation (wall / sediments)
132	1990 aerial	Dam	Yes				Yes	2-69	Low	Targeted investigation (wall / sediments)
134	1990 aerial	Dam	Yes				Yes	2-70	Low	Targeted investigation (wall / sediments)
135	1990 aerial	Dam	Yes				Yes	2-71	Low	Targeted investigation (wall / sediments)
136	1990 aerial	Dam	Yes				Yes	2-72	Low	Targeted investigation (wall / sediments)
138	1990 aerial	Dam	Yes				Yes	2-73	Low	Targeted investigation (wall / sediments)
139	1990 aerial	Structures (farm / residence)	Yes				Yes	4-25	Low - Medium	Investigation of building footpring post-demolition
140	1990 aerial	Dam	Yes				Yes	2-74	Low	Targeted investigation (wall / sediments)
141	1990 aerial	Dam	Yes				Yes	2-75	Low	Targeted investigation (wall / sediments)
142	1990 aerial	Stockpile	TBC in walkover	X	None		Yes	5-1	Low - Medium	Targeted investigation of stockpiles
143	1990 aerial	Dam	Yes				Yes	2-76	Low	Targeted investigation (wall / sediments)
144	1990 aerial	Structures (farm / residence)	TBC in walkover	X	None		Yes	4-26	Low - Medium	Investigation of building footpring post-demolition
145	1990 aerial	Structures (farm / residence)	Yes				Yes	4-27	Low - Medium	Investigation of building footpring post-demolition

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Category / Number	Risk Management Rating	Risk Management Actions
146	1990 aerial	Structures (farm / residence)	Yes				Yes	4-28	Low - Medium	Investigation of building footpring post-demolition
147	1990 aerial	Structures (farm / residence)	Yes				Yes	4-29	Low - Medium	Investigation of building footpring post-demolition
148	1990 aerial	Structures (farm / residence)	Yes				Yes	4-30	Low - Medium	Investigation of building footpring post-demolition
149	1990 aerial	Structures (farm / residence)	Yes				Yes	4-31	Low - Medium	Investigation of building footpring post-demolition
150	1990 aerial	Structures (farm / residence)	Yes				Yes	4-32	Low - Medium	Investigation of building footpring post-demolition
151	1990 aerial	Structures (farm / residence)	Yes				Yes	4-33	Low - Medium	Investigation of building footpring post-demolition
152	1990 aerial	Structures (farm / residence)	Yes				Yes	4-34	Low - Medium	Investigation of building footpring post-demolition
153	1990 aerial	Ground disturbance	Yes		109	Possible footing and former structure	Yes	3-13	Low - Medium	Undertake targeted investigation for filling
154	1990 aerial	Dam	Yes				Yes	-	-	Captured in AEC 2-26 (confirmed same dam in review)
156	1990 aerial	Dam	No	X			Yes	-	-	Captured in AEC 2-66 (confirmed same dam in review)
157	1990 aerial	Fields - possible agricultural area	Yes				Yes	1-14	Low	Low density targeted investigation
158	1990 aerial	Small structure	No	X	None		Yes	4-35	Low - Medium	Inspect footprint area for residual building material. Undertake targeted investigation for fill
159	1990 aerial	Dam	Yes				Yes	2-77	Low	Targeted investigation (wall / sediments)
160	1990 aerial	Ground disturbance	Yes				Yes	3-14	Low - Medium	Targeted investigation for filling
161	1990 aerial	Dam	TBC in walkover	X			Yes	2-78	Low - Medium	Inspect for dam and undertake targeted investigation (wall / sediments / filling)
163	1990 aerial	Structures (farm / residence)	Yes				Yes	4-36	Low - Medium	Investigation of building footpring post-demolition
164	1990 aerial	Structures (farm / residence)	Yes				Yes	4-37	Low - Medium	Investigation of building footpring post-demolition
165	1990 aerial	Small structures	Yes				Yes	4-38	Low - Medium	Investigation of building footpring post-demolition
166	1990 aerial	Dam	Yes				Yes	2-79	Low	Targeted investigation (wall / sediments)
167	1990 aerial	Ground disturbance	No	X	None		Yes	3-15	Low - Medium	Targeted investigation for filling
168	1990 aerial	Dam	Yes				Yes	2-80	Low	Targeted investigation (wall / sediments)
169	1990 aerial	Dam	Yes				Yes	2-81	Low	Targeted investigation (wall / sediments)

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Category / Number	Risk Management Rating	Risk Management Actions
170	1990 aerial	Dam	Yes				Yes	2-82	Low	Targeted investigation (wall / sediments)
171	1990 aerial	Dam	Yes				Yes	2-83	Low	Targeted investigation (wall / sediments)
172	1994 aerial	Dam	Yes		7	Trough with steel pipe inlet riser next to dam	Yes	2-84	Low	Targeted investigation (wall / sediments)
174	1994 aerial	Dam	Yes				Yes	2-85	Low	Targeted investigation (wall / sediments)
176	1994 aerial	Structures (farm / residence)	Yes				Yes	4-39	Low - Medium	Investigation of building footpring post-demolition
177	1994 aerial	Structures (farm / residence)	Yes				Yes	4-40	Low - Medium	Investigation of building footpring post-demolition
178	1994 aerial	Ground disturbance	Yes				Yes	3-16	Low - Medium	Targeted investigation for filling
179	1994 aerial	Small structures	TBC in walkover	X	None		Yes	4-41	Low - Medium	Inspect footprint area for residual building material. Undertake targeted investigation for fill
180	1994 aerial	Structures (farm / residence)	Yes				Yes	4-42	Low - Medium	Investigation of building footpring post-demolition
181	1994 aerial	Dam	Yes				Yes	2-86	Low	Targeted investigation (wall / sediments)
182	1994 aerial	Dam	Yes				Yes	2-87	Low	Targeted investigation (wall / sediments)
183	1994 aerial	Dam	Yes				Yes	2-88	Low	Targeted investigation (wall / sediments)
184	1994 aerial	Dam	Yes				Yes	2-89	Low	Targeted investigation (wall / sediments)
185	1994 aerial	Dam	Yes				Yes	2-90	Low	Targeted investigation (wall / sediments)
186	1994 aerial	Dam	Yes				Yes	2-91	Low	Targeted investigation (wall / sediments)
187	1994 aerial	Dam	Yes				Yes	2-92	Low	Targeted investigation (wall / sediments)
188	1994 aerial	Small structure	Yes				Yes	4-43	Low - Medium	Investigation of building footpring post-demolition
189	1994 aerial	Dam	TBC in walkover	X	None		Yes	2-93	Low - Medium	Targeted investigation (wall / sediments)
191	1994 aerial	Possible private airport - structures	Yes				Yes	4-44	Low - Medium	Investigation of building footpring post-demolition
192	1994 aerial	Ground disturbance	Yes				Yes	3-17	Low - Medium	Targeted investigation for filling
193	1994 aerial	Dam	Yes				Yes	-	-	Captured in PAEC 2-37 (confirmed same dam in review)
194	1994 aerial	Small structures	No	X	None		Yes	4-45	Low - Medium	Inspect footprint area for residual building material. Undertake targeted investigation for fill

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Category / Number	Risk Management Rating	Risk Management Actions
195	1994 aerial	Small structures	Yes	X	None		Yes	4-46	Low - Medium	Investigation of building footpring post-demolition
196	1994 aerial	Structures (farm / residence)	TBC in walkover	X	None		Yes	4-47	Low - Medium	Inspect footprint area for residual building material. Undertake targeted investigation for fill
197	1994 aerial	Field - possible agricultural area	TBC in walkover	X	None		Yes	1-15	Low	Low density targeted investigation
198	1994 aerial	Structures (farm / residence)	Yes				Yes	4-48	Low - Medium	Investigation of building footpring post-demolition
199	1994 aerial	Small paddocks with small structure in each one	Yes				Yes	1-16	Low - Medium	Inspect structures, low density targeted investigation of paddocks
200	1994 aerial	Structures (farm / residence)	Yes		86	Heritage house - former dairy / farm	Yes	4-49	Low - Medium	Investigation of building footpring post-demolition
201	1994 aerial	Dam	Yes		107	Boulders in dam wall	Yes	2-94	Low - Medium	Targeted investigation (wall / sediments)
202	2005 aerial	Dam	TBC in walkover	X	None		Yes	-	-	Captured in PAEC 2-49 (confirmed same dam in review)
203	2005 aerial	Structures (farm / residence)	Yes				Yes	4-50	Low - Medium	Investigation of building footpring post-demolition
204	2005 aerial	Structures (farm / residence)	Yes				Yes	4-51	Low - Medium	Investigation of building footpring post-demolition
205	2005 aerial	Structures (farm / residence)	Yes				Yes	4-52	Low - Medium	Investigation of building footpring post-demolition
206	2005 aerial	Structures (farm / residence)	Yes				Yes	4-53	Low - Medium	Investigation of building footpring post-demolition
207	2005 aerial	Dam	Yes				Yes	2-95	Low	Targeted investigation (wall / sediments)
208	2005 aerial	Dam	Yes				Yes	2-96	Low	Targeted investigation (wall / sediments)
209	2005 aerial	Dam	Yes				Yes	2-97	Low	Targeted investigation (wall / sediments)
210	2005 aerial	Structures (farm / residence)	Yes				Yes	4-54	Low - Medium	Investigation of building footpring post-demolition
211	2005 aerial	Stockpiles	TBC in walkover	X	58 - 62	The length of the road has concrete headwall culvert, pipe under the road (58) and grass-covered stockpiles (59 and 61). Timber and soil waste (60) as well as shredded tyres (60) was also observed. A polypropylene pipe was present along the length of the road, sitting on the surface (62).	Yes	5-2	Low - Medium	Investigate stockpiles and footprint areas where waste observed
212	2005 aerial	Yard - storage of stockpiles / materials	No	X	69	No visible materials observed.	Yes	3-18	Low - Medium	Targeted investigation of footprints of stockpiles / materials
214	2005 aerial	Possible horticultural / orchard	Yes	X	None		Yes	1-17	Low - Medium	Low density targeted investigation

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Category / Number	Risk Management Rating	Risk Management Actions
215	2005 aerial	Ground disturbance	Yes	X	None		Yes	3-19	Low - Medium	Targeted investigation for filling
216	2005 aerial	Ground disturbance	No	X	None		Yes	3-20	Low - Medium	Targeted investigation for filling
217	2005 aerial	Ground disturbance	No	X	None		Yes	3-21	Low - Medium	Targeted investigation for filling
218	2005 aerial	Dam	Yes				Yes	2-98	Low	Targeted investigation (wall / sediments)
219	2005 aerial	Dam	Yes				Yes	2-99	Low	Targeted investigation (wall / sediments)
220	2005 aerial	Structures (farm / residence)	Yes				Yes	4-55	Low - Medium	Investigation of building footpring post-demolition
221	2005 aerial	Structures (farm / residence)	Yes				Yes	4-56	Low - Medium	Investigation of building footpring post-demolition
222	2005 aerial	Track	Yes				Yes	3-22	Low	Targeted sampling of any surfacing materials
223	2005 aerial	Dam	Yes				Yes	2-100	Low	Targeted investigation (wall / sediments)
224	2005 aerial	Ground disturbance	Yes				Yes	3-23	Low - Medium	Targeted investigation for filling
225	2005 aerial	Ground disturbance	Yes				Yes	3-24	Low - Medium	Targeted investigation for filling
226	2010 aerial	Small structure	Yes				Yes	-	-	Captured in PAEC 4-17 (confirmed likely same structure or footprint area in review)
227	2010 aerial	Dam	Yes				Yes	-	-	Captured in PAEC 2-70 (confirmed same dam in review)
229	2010 aerial	Ground disturbance	Yes	X	None		Yes	-	-	Captured in PAEC 2-39 (confirmed same area in review)
230	2010 aerial	Dam	Yes				Yes	-	-	Captured in PAEC 2-73 (confirmed same dam in review)
231	2010 aerial	Structures (farm / residence)	Yes				Yes	4-57	Low - Medium	Inspect footprint area for residual building material. Undertake targeted investigation for fill
232	2010 aerial	Structures (farm / residence)	Yes				Yes	4-58	Low - Medium	Inspect footprint area for residual building material. Undertake targeted investigation for fill
233	2010 aerial	Dam	Yes				Yes	-	-	Captured in PAEC 2-74 (confirmed same dam in review)
234	2010 aerial	Dam	Yes				Yes	2-101	Low	Targeted investigation (wall / sediments)
236	2010 aerial	Dam	Yes				Yes	2-102	Low	Targeted investigation (wall / sediments)
237	2010 aerial	Structures (farm / residence)	Yes				Yes	4-59	Low - Medium	Investigation of building footpring post-demolition and building footprint investigation

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Category / Number	Risk Management Rating	Risk Management Actions
238	2010 aerial	Structures (farm / residence) and possible storage yard to rear	Yes	X	None		Yes	4-60	Low - Medium	Investigation of building footpring post-demolition and building footprint investigation
239	2010 aerial	Ground disturbance	Yes	X	None		Yes	3-25	Low - Medium	Targeted investigation for filling
240	2010 aerial	Dam	Yes				Yes	2-103	Low	Targeted investigation (wall / sediments)
241	2010 aerial	Ground disturbance	Yes	X	None		Yes	3-26	Low - Medium	Targeted investigation for filling
242	2010 aerial	Small structures	Yes	X	None		Yes	4-61	Low - Medium	Investigation of building footpring post-demolition and building footprint investigation
243	2010 aerial	Structures (farm / residence) and possible stockpile to the south	Yes	X	None		Yes	4-62	Low - Medium	Investigation of building footpring post-demolition and building footprint and stockpile investigation
244	2010 aerial	Dam	Yes				Yes	2-104	Low	Targeted investigation (wall / sediments)
245	2010 aerial	Dam	Yes				Yes	2-105	Low	Targeted investigation (wall / sediments)
247	2020 aerial	Dam	Yes				Yes	-	-	Captured in 2-69 (confirmed same dam in review)
248	2020 aerial	Dam	Yes				Yes	-	-	Captured in PAEC as 2-6 (confirmed same dam in review)
250	2020 aerial	Ground disturbance	Yes				Yes	3-27	Low - Medium	Targeted investigation for filling
251	2020 aerial	Small structures	Yes	X	None		Yes	4-63	Low - Medium	Investigation of building footpring post-demolition and building footprint and stockpile investigation
252	2020 aerial	Possible stockpiles	Yes	X	None		Yes	5-3	Low - Medium	Targeted investigation of stockpiles
253	2020 aerial	Ground disturbance	Yes	X	None		Yes	3-28	Low - Medium	Targeted investigation for filling
254	2020 aerial	Structures (farm / residence)	Yes				Yes	4-64	Low - Medium	Investigation of building footpring post-demolition and building footprint and stockpile investigation
255	2020 aerial	Structures (farm / residence)	Yes				Yes	4-65	Low - Medium	Investigation of building footpring post-demolition and building footprint and stockpile investigation
256	2020 aerial	Crop circle	Yes				Yes	1-18	Low	Low density targeted investigation
257	2020 aerial	Structures (farm / residence)	Yes				Yes	4-66	Low - Medium	Investigation of building footpring post-demolition and building footprint and stockpile investigation
258	2020 aerial	Structures (farm / residence)	Yes				Yes	4-67	Low - Medium	Investigation of building footpring post-demolition and building footprint and stockpile investigation
259	2020 aerial	Structures (farm / residence)	Yes				Yes	4-68	Low - Medium	Investigation of building footpring post-demolition and building footprint and stockpile investigation

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Category / Number	Risk Management Rating	Risk Management Actions
260	2020 aerial	Structures (farm / residence)	Yes				Yes	4-69	Low - Medium	Investigation of building footpring post-demolition and building footprint and stockpile investigation
261	2020 aerial	Dam	Yes				Yes	2-106	Low	Targeted investigation (wall / sediments)
	Site walkover				3	Fenced off area - fencing comprising chain-link metal wire has disintegrated suggesting area has not been used for some time. Possible former storage or paddock area.	Yes	11	Low - Medium	Targeted investigation of area
	Site walkover				4	Dumped car - has been here for some time as entirely rusted.	Yes	8-1	Low - Medium	Targeted investigation of area
	Site walkover				5	Fly tipping - lots of glass bottles and occasional refuse.	Yes	8-2	Low - Medium	Targeted investigation of area
	Site walkover				9	Power poles in easement next to canal	Yes	9-1	Medium	Targeted investigation of immediate surrounding surface soils
	Site walkover				11	Dam	Yes	2-107	Low	Targeted investigation (wall / sediments)
	Site walkover				12	Minor refuse including metal and discarded white goods	Yes	8-3	Low	Targeted investigation of area
	Site walkover				13	Power poles - old (timber) and new	Yes	9-2	Low - Medium	Targeted investigation of immediate surrounding surface soils
	Site walkover				15	Refuse (tyres, white good, scrap metal)	Yes	8-4	Low	Targeted investigation of area
	Site walkover				16	Refuse continues (concrete rubble, white goods, soil, plastic fragments)	Yes	8-5	Low	Targeted investigation of area
	Site walkover				19	Coal wash on ground surface	Yes	7-1	Low	Targeted investigation of area
	Site walkover				24	Building Rubble next to dam (corrugated steel, plastic, concrete and brick sighted)	Yes	2-108	Low - Medium	Targeted investigation of area
	Site walkover				27	Stockpiles	Yes	5-4	Low - Medium	Targeted investigation of stockpiles
	Site walkover				30	Possible livestock burial and timber structures	Yes	12	Low - Medium	Targeted investigation of area
	Site walkover				32	Timber power poles	Yes	9-3	Medium	Targeted investigation of immediate surrounding surface soils
	Site walkover				33	Minor building rubble on ground surface including corrugated metal, cement board	Yes	8-6	Low - Medium	Targeted investigation of area
	Site walkover				34	Bare earth - possible filling.	Yes	3-29	Low - Medium	Targeted investigation of area
	Site walkover				35	Quarry and fill with small structures (not fixed)	Yes	3-30	Low - Medium	Targeted investigation of area
	Site walkover				38	Derelict house	Yes	4-70	Low - Medium	Investigation of building footpring post-demolition and building footprint and stockpile investigation

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Category / Number	Risk Management Rating	Risk Management Actions
	Site walkover				43	Stockpile	Yes	5-5	Low - Medium	Targeted investigation of stockpile
	Site walkover				48	Cattle yard	Yes	1-19	Low - Medium	Low density targeted investigation
	Site walkover				49	Dam	Yes	2-109	Low	Targeted investigation (wall / sediments)
	Site walkover				50	Timber power poles in clearing	Yes	9-4	Medium	Targeted investigation of immediate surrounding surface soils
	Site walkover				51	Small gully filled with minor amounts of dumped refuse including tyres, corrugated metal and rusted metal	Yes	8-7	Medium	Targeted investigation of gully
	Site walkover				54	Dumped refuse including brick, concrete, timber and household goods including a mattress and white goods	Yes	8-8	Low - Medium	Targeted investigation of area
	Site walkover				55	Minor fill mound covered with grass.	Yes	5-6	Low - Medium	Targeted investigation of stockpile
	Site walkover				57	Timber power poles	Yes	9-5	Medium	Targeted investigation of immediate surrounding surface soils
	Site walkover				63	Stockpiles containing brick and other construction and demolition rubble	Yes	5-7	Low - Medium	Targeted investigation of stockpile
	Site walkover				64	Dam wall	Yes	2-110	Low	Targeted investigation (wall / sediments)
	Site walkover				65	Building rubble and loose soil - appears to have been tipped here.	Yes	5-8	Low - Medium	Targeted investigation of stockpile
	Site walkover				68	Possible filled ground	Yes	3-31	Low - Medium	Targeted investigation for filling
	Site walkover				73	Second dam observed opposite key feature 65 / MRP 72	Yes	2-111	Low	Targeted investigation (wall / sediments)
	Site walkover				77	Timber power pole easement (likely part of Brooks Point Road easement)	Yes	9-6	Medium	Targeted investigation of immediate surrounding surface soils
	Site walkover				79	Timber power poles	Yes	9-7	Medium	Targeted investigation of immediate surrounding surface soils
	Site walkover				87	Timber power poles next to dam	Yes	9-8	Medium	Targeted investigation of immediate surrounding surface soils
	Site walkover				88	Timber power poles	Yes	9-9	Medium	Targeted investigation of immediate surrounding surface soils
	Site walkover				89	Above Ground Storage Tank	Yes	10-1	Low - Medium	Targeted investigation of soils below tank, post decommissioning
	Site walkover				90	Several spoil stockpiles - suspected to be from the construction of the Cataract tunnel. Appears to be natural spoil.	Yes	5-9	Low - Medium	Targeted investigation of stockpiles
	Site walkover				92	Stockpile of soil covered with grass - tyre fragment visible	Yes	5-10	Low - Medium	Targeted investigation of stockpile

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Category / Number	Risk Management Rating	Risk Management Actions
	Site walkover				93	Coal seam gas well (Bulgo gas pipeline)	Yes	6-2	Medium	Targeted investigation, identify mud pits and assess remediation and validation information provided by
	Site walkover				94	Pipework for coal seam gas wells including concrete cover	Yes	6-3	Medium	Targeted investigation, identify mud pits and assess remediation and validation information provided by
	Site walkover				96	Dumping in creek - white goods, tyre, timber power pole, loose building and demolition rubble	Yes	8-9	Medium	Targeted investigation of area of dumping
	Site walkover				97	Dumping in creek - corrugated metal, timber, rusted metal	Yes	8-10	Medium	Targeted investigation of area of dumping
	Site walkover				98	Coal seam gas well	Yes	6-4	Medium	Targeted investigation, identify mud pits and assess remediation and validation information provided by
	Site walkover				99	Coal seam gas well and pipework	Yes	6-5	Medium	Targeted investigation, identify mud pits and assess remediation and validation information provided by
	Site walkover				101	Coal seam gas well	Yes	6-6	Medium	Targeted investigation, identify mud pits and assess remediation and validation information provided by
	Site walkover				102	Below-ground pipeline for gas well (signage in place)	Yes	6-7	Medium	Targeted investigation, identify mud pits and assess remediation and validation information provided by
	Site walkover				103	Disturbed ground - possible burial of livestock carcasses.	Yes	3-32	Low - Medium	Targeted investigation of filling
	Site walkover				105	Dumped cars and machinery (rusted) on either side of the dirt road.	Yes	8-11	Low - Medium	Targeted investigation of area of dumping
	Site walkover				108	AST for pump	Yes	10-2	Low - Medium	Targeted investigation of soils below tank, post decommissioning
	Site walkover				110	Coal wash surfacing on road	Yes	7-2	Low - Medium	Targeted investigation of filling
	Site walkover				112	Disused AST on stilts - tipped over	Yes	10-3	Low - Medium	Targeted investigation of soils below tank, post removal
	Site walkover				113	Galvanised pipes in rock	No	-	-	-
	Site walkover				114	Fuel storage for irrigation pump	Yes	10-4	Low - Medium	Targeted investigation of fuel storage area
	Site walkover				116	Power poles timber and concrete 3 sets	Yes	9-10	Medium	Targeted investigation of immediate surrounding surface soils
	Site walkover				117	Small metal shed and coal wash road. Power is connected to the shed.	Yes	7-3	Low - Medium	Targeted investigation of coal wash road
	Site walkover				119	dumped refuse	Yes	8-12	Low - Medium	Targeted investigation of area of dumping

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Ref	Risk Management Rating	Risk Management Actions
PAEC 1										
7	1947 aerial	Fields - possible agricultural area	No				Yes	1-1	Low	Low density targeted investigation
8	1947 aerial	Fields - possible agricultural area	No				Yes	1-2	Low	Low density targeted investigation
9	1947 aerial	Fields - possible agricultural area	No				Yes	1-3	Low	Low density targeted investigation
10	1947 aerial	Fields - possible agricultural area	No				Yes	1-4	Low	Low density targeted investigation
14	1947 aerial	Field - possible agricultural area	No				Yes	1-5	Low	Low density targeted investigation
61	1956 aerial	Fields - possible agricultural area	No				Yes	1-6	Low	Low density targeted investigation
62	1956 aerial	Fields - possible agricultural area	No				Yes	1-7	Low	Low density targeted investigation
69	1961 aerial	Fields - possible agricultural area	No				Yes	1-8	Low	Low density targeted investigation
70	1961 aerial	Fields - possible agricultural area	No				Yes	1-9	Low	Low density targeted investigation
79	1975 aerial	Fields - possible agricultural area	No				Yes	1-10	Low	Low density targeted investigation
86	1975 aerial	Fields - possible agricultural area	No - area covered with bushland in 2020				Yes	1-11	Low	Low density targeted investigation
91	1975 aerial	Fields - possible agricultural area	No				Yes	1-12	Low	Low density targeted investigation
129	1975 aerial	Fields - possible agricultural area	No				Yes	1-13	Low	Low density targeted investigation
157	1990 aerial	Fields - possible agricultural area	Yes				Yes	1-14	Low	Low density targeted investigation
197	1994 aerial	Field - possible agricultural area	TBC in walkover	X	None		Yes	1-15	Low	Low density targeted investigation
199	1994 aerial	Small paddocks with small structure in each one	Yes				Yes	1-16	Low - Medium	Inspect structures, low density targeted investigation of paddocks
214	2005 aerial	Possible horticultural / orchard	Yes	X	None		Yes	1-17	Low - Medium	Low density targeted investigation
256	2020 aerial	Crop circle	Yes				Yes	1-18	Low	Low density targeted investigation
	Site walkover				48	Cattle yard	Yes	1-19	Low - Medium	Low density targeted investigation
PAEC 2										
3	1947 aerial	Dam	Yes	X			Yes	2-1	Low	Targeted investigation (wall / sediments)
4	1947 aerial	Dam	Yes				Yes	2-2	Low	Targeted investigation (wall / sediments)

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Ref	Risk Management Rating	Risk Management Actions
5	1947 aerial	Dam	Yes				Yes	2-3	Low	Targeted investigation (wall / sediments)
6	1947 aerial	Dam	Yes				Yes	2-4	Low	Targeted investigation (wall / sediments)
13	1947 aerial	Possible dam	Yes				Yes	2-5	Low	Targeted investigation (wall / sediments)
15	1956 aerial	Dam	Yes				Yes	2-6	Low	Targeted investigation (wall / sediments)
16	1956 aerial	Dam	Yes				Yes	2-7	Low	Targeted investigation (wall / sediments)
17	1956 aerial	Dam	Yes				Yes	2-8	Low	Targeted investigation (wall / sediments)
20	1956 aerial	Dam	Yes				Yes	2-9	Low	Targeted investigation (wall / sediments)
21	1956 aerial	Dam	Yes				Yes	2-10	Low	Targeted investigation (wall / sediments)
22	1956 aerial	Dam	Yes				Yes	2-11	Low	Targeted investigation (wall / sediments)
23	1956 aerial	Dam	Yes				Yes	2-12	Low	Targeted investigation (wall / sediments)
24	1956 aerial	Dam	Yes				Yes	2-13	Low	Targeted investigation (wall / sediments)
25	1956 aerial	Dam	Yes				Yes	2-14	Low	Targeted investigation (wall / sediments)
26	1956 aerial	Dam	Yes				Yes	2-15	Low	Targeted investigation (wall / sediments)
27	1956 aerial	Dam	Yes				Yes	2-16	Low	Targeted investigation (wall / sediments)
30	1956 aerial	Dam	Yes		52	Dam	Yes	2-17	Low	Targeted investigation (wall / sediments)
31	1956 aerial	Dam	Yes				Yes	2-18	Low	Targeted investigation (wall / sediments)
33	1956 aerial	Dam	Has since been altered - house is present				Yes	2-19	Low	Targeted investigation (fill / wall / sediments - if present)
34	1956 aerial	Dam	Yes				Yes	2-20	Low	Targeted investigation (wall / sediments)
35	1956 aerial	Dam	Yes				Yes	2-21	Low	Targeted investigation (wall / sediments)
36	1956 aerial	Dam	No - has since been filled and built around	X	None		Yes	2-22	Low - Medium	Targeted investigation (fill / wall / sediments - if present)
38	1956 aerial	Dam	Yes				Yes	2-23	Low	Targeted investigation (wall / sediments)
40	1956 aerial	Dam	No				Yes	2-24	Low - Medium	Targeted investigation of filling
46	1956 aerial	Dam	Yes				Yes	2-25	Low	Targeted investigation (wall / sediments)

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Ref	Risk Management Rating	Risk Management Actions
47	1956 aerial	Dam	Yes				Yes	2-26	Low	Targeted investigation (wall / sediments)
49	1956 aerial	Dam	No				Yes	2-27	Low - Medium	Investigate dam extent for possible fill
50	1956 aerial	Dam	Yes				Yes	2-28	Low	Targeted investigation (wall / sediments)
53	1956 aerial	Dam	Yes				Yes	2-29	Low	Targeted investigation (wall / sediments)
54	1956 aerial	Dam	Yes				Yes	2-30	Low	Targeted investigation (wall / sediments)
55	1956 aerial	Dam	Yes				Yes	2-31	Low	Targeted investigation (wall / sediments)
56	1956 aerial	Dam	Yes - next to bushland				Yes	2-32	Low	Targeted investigation (wall / sediments)
57	1956 aerial	Dam	Yes				Yes	2-33	Low	Targeted investigation (wall / sediments)
60	1956 aerial	Dam	Yes				Yes	2-34	Low	Targeted investigation (wall / sediments)
63	1956 aerial	Dam	TBC - area covered with bushland in 2020	X	None		Yes	2-35	Low - Medium	Inspection of area and undertake targeted investigation
66	1956 aerial	Dam	No				Yes	2-36	Low - Medium	Investigate dam extent for possible fill
68	1956 aerial	Dam	Yes				Yes	2-37	Low	Targeted investigation (wall / sediments)
71	1961 aerial	Dam	Yes				Yes	2-38	Low	Targeted investigation (wall / sediments)
73	1961 aerial	Dam	Yes				Yes	2-39	Low	Targeted investigation (wall / sediments)
74	1961 aerial	Dam	Yes				Yes	2-40	Low	Targeted investigation (wall / sediments)
75	1961 aerial	Dam	Yes				Yes	2-41	Low	Targeted investigation (wall / sediments)
78	1975 aerial	Dam	Yes				Yes	2-42	Low	Targeted investigation (wall / sediments)
82	1975 aerial	Dam	TBC - area covered with bushland in 2020	X			Yes	2-43	Low - Medium	Inspect for dam and undertake targeted investigation (wall / sediments / filling)
87	1975 aerial	Dam	Yes				Yes	2-44	Low	Targeted investigation (wall / sediments)
89	1975 aerial	Dam	Yes				Yes	2-45	Low	Targeted investigation (wall / sediments)
92	1975 aerial	Dam	TBC - area covered with bushland in 2020	X			Yes	2-46	Low - Medium	Inspect for dam and undertake targeted investigation (wall / sediments / filling)
93	1975 aerial	Dam	No				Yes	2-47	Low - Medium	Investigate dam extent for possible fill
94	1975 aerial	Dam	Yes				Yes	2-48	Low	Targeted investigation (wall / sediments)

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Ref	Risk Management Rating	Risk Management Actions
96	1975 aerial	Dam	Yes				Yes	2-49	Low	Targeted investigation (wall / sediments)
99	1975 aerial	Dam	Yes		66	Rubble in dam wall	Yes	2-50	Medium	Targeted investigation for possible filling
100	1975 aerial	Dam	Yes				Yes	2-51	Low	Targeted investigation (wall / sediments)
101	1975 aerial	Dam	Yes				Yes	2-52	Low	Targeted investigation (wall / sediments)
104	1975 aerial	Dam	Yes				Yes	2-53	Low	Targeted investigation (wall / sediments)
105	1975 aerial	Dam	Yes				Yes	2-54	Low	Targeted investigation (wall / sediments)
107	1975 aerial	Dam	Yes				Yes	2-55	Low	Targeted investigation (wall / sediments)
110	1975 aerial	Dam	Yes				Yes	2-56	Low	Targeted investigation (wall / sediments)
113	1975 aerial	Dam	Yes				Yes	2-57	Low	Targeted investigation (wall / sediments)
114	1975 aerial	Dam	Yes				Yes	2-58	Low	Targeted investigation (wall / sediments)
115	1975 aerial	Dam	Yes				Yes	2-59	Low	Targeted investigation (wall / sediments)
116	1975 aerial	Possible dam	No - appears to have been filled in, or is ground disturbance rather than a	X	None		Yes	2-60	Low - Medium	Undertake targeted investigation for filling
117	1975 aerial	Dam	Yes				Yes	2-61	Low	Targeted investigation (wall / sediments)
118	1975 aerial	Dam	Yes				Yes	2-62	Low	Targeted investigation (wall / sediments)
123	1975 aerial	Dam	Yes				Yes	2-63	Low	Targeted investigation (wall / sediments)
124	1975 aerial	Dam	Yes				Yes	2-64	Low	Targeted investigation (wall / sediments)
125	1975 aerial	Dam	Yes				Yes	2-65	Low	Targeted investigation (wall / sediments)
126	1975 aerial	Dam	Yes				Yes	2-66	Low	Targeted investigation (wall / sediments)
130	1975 aerial	Dam	Yes				Yes	2-67	Low	Targeted investigation (wall / sediments)
131	1975 aerial	Dam	Yes				Yes	2-68	Low	Targeted investigation (wall / sediments)
132	1990 aerial	Dam	Yes				Yes	2-69	Low	Targeted investigation (wall / sediments)
134	1990 aerial	Dam	Yes				Yes	2-70	Low	Targeted investigation (wall / sediments)

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Ref	Risk Management Rating	Risk Management Actions
135	1990 aerial	Dam	Yes				Yes	2-71	Low	Targeted investigation (wall / sediments)
136	1990 aerial	Dam	Yes				Yes	2-72	Low	Targeted investigation (wall / sediments)
138	1990 aerial	Dam	Yes				Yes	2-73	Low	Targeted investigation (wall / sediments)
140	1990 aerial	Dam	Yes				Yes	2-74	Low	Targeted investigation (wall / sediments)
141	1990 aerial	Dam	Yes				Yes	2-75	Low	Targeted investigation (wall / sediments)
143	1990 aerial	Dam	Yes				Yes	2-76	Low	Targeted investigation (wall / sediments)
159	1990 aerial	Dam	Yes				Yes	2-77	Low	Targeted investigation (wall / sediments)
161	1990 aerial	Dam	TBC in walkover	X			Yes	2-78	Low - Medium	Inspect for dam and undertake targeted investigation (wall / sediments / filling)
166	1990 aerial	Dam	Yes				Yes	2-79	Low	Targeted investigation (wall / sediments)
168	1990 aerial	Dam	Yes				Yes	2-80	Low	Targeted investigation (wall / sediments)
169	1990 aerial	Dam	Yes				Yes	2-81	Low	Targeted investigation (wall / sediments)
170	1990 aerial	Dam	Yes				Yes	2-82	Low	Targeted investigation (wall / sediments)
171	1990 aerial	Dam	Yes				Yes	2-83	Low	Targeted investigation (wall / sediments)
172	1994 aerial	Dam	Yes		7	Trough with steel pipe inlet riser next to dam	Yes	2-84	Low	Targeted investigation (wall / sediments)
174	1994 aerial	Dam	Yes				Yes	2-85	Low	Targeted investigation (wall / sediments)
181	1994 aerial	Dam	Yes				Yes	2-86	Low	Targeted investigation (wall / sediments)
182	1994 aerial	Dam	Yes				Yes	2-87	Low	Targeted investigation (wall / sediments)
183	1994 aerial	Dam	Yes				Yes	2-88	Low	Targeted investigation (wall / sediments)
184	1994 aerial	Dam	Yes				Yes	2-89	Low	Targeted investigation (wall / sediments)
185	1994 aerial	Dam	Yes				Yes	2-90	Low	Targeted investigation (wall / sediments)
186	1994 aerial	Dam	Yes				Yes	2-91	Low	Targeted investigation (wall / sediments)
187	1994 aerial	Dam	Yes				Yes	2-92	Low	Targeted investigation (wall / sediments)
189	1994 aerial	Dam	TBC in walkover	X	None		Yes	2-93	Low - Medium	Targeted investigation (wall / sediments)

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Ref	Risk Management Rating	Risk Management Actions
201	1994 aerial	Dam	Yes		107	Boulders in dam wall	Yes	2-94	Low - Medium	Targeted investigation (wall / sediments)
207	2005 aerial	Dam	Yes				Yes	2-95	Low	Targeted investigation (wall / sediments)
208	2005 aerial	Dam	Yes				Yes	2-96	Low	Targeted investigation (wall / sediments)
209	2005 aerial	Dam	Yes				Yes	2-97	Low	Targeted investigation (wall / sediments)
218	2005 aerial	Dam	Yes				Yes	2-98	Low	Targeted investigation (wall / sediments)
219	2005 aerial	Dam	Yes				Yes	2-99	Low	Targeted investigation (wall / sediments)
223	2005 aerial	Dam	Yes				Yes	2-100	Low	Targeted investigation (wall / sediments)
234	2010 aerial	Dam	Yes				Yes	2-101	Low	Targeted investigation (wall / sediments)
236	2010 aerial	Dam	Yes				Yes	2-102	Low	Targeted investigation (wall / sediments)
240	2010 aerial	Dam	Yes				Yes	2-103	Low	Targeted investigation (wall / sediments)
244	2010 aerial	Dam	Yes				Yes	2-104	Low	Targeted investigation (wall / sediments)
245	2010 aerial	Dam	Yes				Yes	2-105	Low	Targeted investigation (wall / sediments)
261	2020 aerial	Dam	Yes				Yes	2-106	Low	Targeted investigation (wall / sediments)
	Site walkover				11	Dam	Yes	2-107	Low	Targeted investigation (wall / sediments)
	Site walkover				24	Building Rubble next to dam (corrugated steel, plastic, concrete and brick sighted)	Yes	2-108	Low - Medium	Targeted investigation of area
	Site walkover				49	Dam	Yes	2-109	Low	Targeted investigation (wall / sediments)
	Site walkover				64	Dam wall	Yes	2-110	Low	Targeted investigation (wall / sediments)
	Site walkover				73	Second dam observed opposite key feature 65 / MRP 72	Yes	2-111	Low	Targeted investigation (wall / sediments)
PAEC 3										
11	1947 aerial	Ground disturbance	Yes				Yes	3-1	Low - Medium	Targeted intrusive investigation for possible filling
12	1947 aerial	Ground disturbance - possible filling	TBC - area covered with bushland in 2020	X	None		Yes	3-2	Low - Medium	Targeted intrusive investigation for possible filling
19	1956 aerial	Possible ground disturbance	No	X	None		Yes	3-3	Low - Medium	Targeted investigation for filling
76	1961 aerial	Ground disturbance - possible filling	Yes	X	26	Cattle yards constructed of timber and metal	Yes	3-4	Low	Targeted investigation of soils

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Ref	Risk Management Rating	Risk Management Actions
85	1975 aerial	Ground disturbance	TBC - area covered with bushland in 2020	X	None		Yes	3-5	Low - Medium	Targeted investigation for filling
95	1975 aerial	Ground disturbance	No				Yes	3-6	Low - Medium	Targeted investigation of dam wall
103	1975 aerial	Track	Yes				Yes	3-7	Low - Medium	Inspect surface for any fill and sample
108	1975 aerial	Ground disturbance	No	X	None		Yes	3-8	Low - Medium	Undertake targeted investigation for filling
111	1975 aerial	Ground disturbance	No	X	None		Yes	3-9	Low - Medium	Undertake targeted investigation for filling
112	1975 aerial	Ground disturbance	No	X	None		Yes	3-10	Low - Medium	Undertake targeted investigation for filling
120	1975 aerial	Ground disturbance	TBC in walkover	X	None		Yes	3-11	Low - Medium	Undertake targeted investigation for filling
127	1975 aerial	Ground clearance	No	X	116, 117	Power poles (3 sets) of timber power poles with concrete. Small metal shed and coal wash road also observed.	Yes	3-12	Low - Medium	Inspect contents of metal shed and targeted investigation of features observed
153	1990 aerial	Ground disturbance	Yes		109	Possible footing and former structure	Yes	3-13	Low - Medium	Undertake targeted investigation for filling
160	1990 aerial	Ground disturbance	Yes				Yes	3-14	Low - Medium	Targeted investigation for filling
162	1990 aerial	Ground disturbance	Yes					3-15	Low - Medium	Targeted investigation for filling
167	1990 aerial	Ground disturbance	No	X	None		Yes	3-15	Low - Medium	Targeted investigation for filling
178	1994 aerial	Ground disturbance	Yes				Yes	3-16	Low - Medium	Targeted investigation for filling
192	1994 aerial	Ground disturbance	Yes				Yes	3-17	Low - Medium	Targeted investigation for filling
212	2005 aerial	Yard - storage of stockpiles / materials	No	X	69	No visible materials observed.	Yes	3-18	Low - Medium	Targeted investigation of footprints of stockpiles / materials
215	2005 aerial	Ground disturbance	Yes	X	None		Yes	3-19	Low - Medium	Targeted investigation for filling
216	2005 aerial	Ground disturbance	No	X	None		Yes	3-20	Low - Medium	Targeted investigation for filling
217	2005 aerial	Ground disturbance	No	X	None		Yes	3-21	Low - Medium	Targeted investigation for filling
222	2005 aerial	Track	Yes				Yes	3-22	Low	Targeted sampling of any surfacing materials
224	2005 aerial	Ground disturbance	Yes				Yes	3-23	Low - Medium	Targeted investigation for filling
225	2005 aerial	Ground disturbance	Yes				Yes	3-24	Low - Medium	Targeted investigation for filling
239	2010 aerial	Ground disturbance	Yes	X	None		Yes	3-25	Low - Medium	Targeted investigation for filling

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Ref	Risk Management Rating	Risk Management Actions
241	2010 aerial	Ground disturbance	Yes	X	None		Yes	3-26	Low - Medium	Targeted investigation for filling
250	2020 aerial	Ground disturbance	Yes				Yes	3-27	Low - Medium	Targeted investigation for filling
253	2020 aerial	Ground disturbance	Yes	X	None		Yes	3-28	Low - Medium	Targeted investigation for filling
	Site walkover				34	Bare earth - possible filling.	Yes	3-29	Low - Medium	Targeted investigation of area
	Site walkover				35	Quarry and fill with small structures (not fixed)	Yes	3-30	Low - Medium	Targeted investigation of area
	Site walkover				68	Possible filled ground	Yes	3-31	Low - Medium	Targeted investigation for filling
	Site walkover				103	Disturbed ground - possible burial of livestock carcasses.	Yes	3-32	Low - Medium	Targeted investigation of filling
PAEC 4										
2	1947 aerial	Small structures	Yes				Yes	4-1	Low - Medium	Investigation of building footpring post-demolition and building footprint investigation
28	1956 aerial	Possible building / structure footprint	Has since been built on - house is present				Yes	4-2	Low - Medium	Investigation of building footpring post-demolition
29	1956 aerial	Structures (farm / residence)	No				Yes	4-3	Low - Medium	Investigation of building footpring
32	1956 aerial	Structures (farm / residence)	Has since been altered - house is present				Yes	4-4	Low - Medium	Investigation of building footpring post-demolition
37	1956 aerial	Structures (farm / residence)	Yes				Yes	4-5	Low - Medium	Investigation of building footpring post-demolition
39	1956 aerial	Possible building / structure footprint	Yes				Yes	4-6	Low - Medium	Investigation of building footpring post-demolition
41	1956 aerial	Structures	Has since been altered - house is present				Yes	4-7	Low - Medium	Investigation of building footpring post-demolition
42	1956 aerial	Structures	No				Yes	4-8	Low - Medium	Investigation of building footpring
43	1956 aerial	Structures	No				Yes	4-9	Low - Medium	Investigation of building footpring
44	1956 aerial	Structures	Yes - type of structure TBC	X			Yes	4-10	Low - Medium	Investigation of building footpring post-demolition
51	1956 aerial	Structures	Yes				Yes	4-11	Low - Medium	Investigation of building footpring post-demolition
52	1956 aerial	Structures	Yes				Yes	4-12	Low - Medium	Investigation of building footpring post-demolition
64	1956 aerial	Small structures	TBC - area covered with bushland in 2020	X	None		Yes	4-13	Low - Medium	Inspection of area and undertake targeted investigation
67	1956 aerial	Small structure	No	X	None		Yes	4-14	Low - Medium	Inspect footprint area for residual building material. Undertake targeted investigation for fill
81	1975 aerial	Small structures (possible animal shelters)	Yes				Yes	4-15	Low	Inspect area for building materials

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Ref	Risk Management Rating	Risk Management Actions
83	1975 aerial	Structures (farm / residence)	Yes				Yes	4-16	Low - Medium	Investigation of building footpring post-demolition
84	1975 aerial	Structures (farm / residence)	Partially				Yes	4-17	Low - Medium	Investigation of building footpring post-demolition
88	1975 aerial	Structures (farm / residence)	No	X	None		Yes	4-18	Low - Medium	Inspect footprint area for residual building material. Undertake targeted investigation for fill
102	1975 aerial	Structures (farm / residence)	Yes				Yes	4-19	Low - Medium	Investigation of building footpring post-demolition
106	1975 aerial	Structures (farm / residence)	Yes				Yes	4-20	Low - Medium	Investigation of building footpring post-demolition
119	1975 aerial	Structures (farm / residence)	Yes				Yes	4-21	Low - Medium	Investigation of building footpring post-demolition
121	1975 aerial	Structures (farm / residence)	Yes				Yes	4-22	Low - Medium	Investigation of building footpring post-demolition
122	1975 aerial	Structures (farm / residence)	Yes				Yes	4-23	Low - Medium	Investigation of building footpring post-demolition
128	1975 aerial	Possible structures	TBC in walkover	X	None		Yes	4-24	Low - Medium	Inspect for residual buildaing material on the ground surface and undertake targeted investigation for filling
139	1990 aerial	Structures (farm / residence)	Yes				Yes	4-25	Low - Medium	Investigation of building footpring post-demolition
144	1990 aerial	Structures (farm / residence)	TBC in walkover	X	None		Yes	4-26	Low - Medium	Investigation of building footpring post-demolition
145	1990 aerial	Structures (farm / residence)	Yes				Yes	4-27	Low - Medium	Investigation of building footpring post-demolition
146	1990 aerial	Structures (farm / residence)	Yes				Yes	4-28	Low - Medium	Investigation of building footpring post-demolition
147	1990 aerial	Structures (farm / residence)	Yes				Yes	4-29	Low - Medium	Investigation of building footpring post-demolition
148	1990 aerial	Structures (farm / residence)	Yes				Yes	4-30	Low - Medium	Investigation of building footpring post-demolition
149	1990 aerial	Structures (farm / residence)	Yes				Yes	4-31	Low - Medium	Investigation of building footpring post-demolition
150	1990 aerial	Structures (farm / residence)	Yes				Yes	4-32	Low - Medium	Investigation of building footpring post-demolition
151	1990 aerial	Structures (farm / residence)	Yes				Yes	4-33	Low - Medium	Investigation of building footpring post-demolition
152	1990 aerial	Structures (farm / residence)	Yes				Yes	4-34	Low - Medium	Investigation of building footpring post-demolition
158	1990 aerial	Small structure	No	X	None		Yes	4-35	Low - Medium	Inspect footprint area for residual building material. Undertake targeted investigation for fill
163	1990 aerial	Structures (farm / residence)	Yes				Yes	4-36	Low - Medium	Investigation of building footpring post-demolition

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Ref	Risk Management Rating	Risk Management Actions
164	1990 aerial	Structures (farm / residence)	Yes				Yes	4-37	Low - Medium	Investigation of building footpring post-demolition
165	1990 aerial	Small structures	Yes				Yes	4-38	Low - Medium	Investigation of building footpring post-demolition
176	1994 aerial	Structures (farm / residence)	Yes				Yes	4-39	Low - Medium	Investigation of building footpring post-demolition
177	1994 aerial	Structures (farm / residence)	Yes				Yes	4-40	Low - Medium	Investigation of building footpring post-demolition
179	1994 aerial	Small structures	TBC in walkover	X	None		Yes	4-41	Low - Medium	Inspect footprint area for residual building material. Undertake targeted investigation for fill
180	1994 aerial	Structures (farm / residence)	Yes				Yes	4-42	Low - Medium	Investigation of building footpring post-demolition
188	1994 aerial	Small structure	Yes				Yes	4-43	Low - Medium	Investigation of building footpring post-demolition
191	1994 aerial	Possible private airport - structures	Yes				Yes	4-44	Low - Medium	Investigation of building footpring post-demolition
194	1994 aerial	Small structures	No	X	None		Yes	4-45	Low - Medium	Inspect footprint area for residual building material. Undertake targeted investigation for fill
195	1994 aerial	Small structures	Yes	X	None		Yes	4-46	Low - Medium	Investigation of building footpring post-demolition
196	1994 aerial	Structures (farm / residence)	TBC in walkover	X	None		Yes	4-47	Low - Medium	Inspect footprint area for residual building material. Undertake targeted investigation for fill
198	1994 aerial	Structures (farm / residence)	Yes				Yes	4-48	Low - Medium	Investigation of building footpring post-demolition
200	1994 aerial	Structures (farm / residence)	Yes		86	Heritage house - former dairy / farm	Yes	4-49	Low - Medium	Investigation of building footpring post-demolition
203	2005 aerial	Structures (farm / residence)	Yes				Yes	4-50	Low - Medium	Investigation of building footpring post-demolition
204	2005 aerial	Structures (farm / residence)	Yes				Yes	4-51	Low - Medium	Investigation of building footpring post-demolition
205	2005 aerial	Structures (farm / residence)	Yes				Yes	4-52	Low - Medium	Investigation of building footpring post-demolition
206	2005 aerial	Structures (farm / residence)	Yes				Yes	4-53	Low - Medium	Investigation of building footpring post-demolition
210	2005 aerial	Structures (farm / residence)	Yes				Yes	4-54	Low - Medium	Investigation of building footpring post-demolition
220	2005 aerial	Structures (farm / residence)	Yes				Yes	4-55	Low - Medium	Investigation of building footpring post-demolition
221	2005 aerial	Structures (farm / residence)	Yes				Yes	4-56	Low - Medium	Investigation of building footpring post-demolition
231	2010 aerial	Structures (farm / residence)	Yes				Yes	4-57	Low - Medium	Inspect footprint area for residual building material. Undertake targeted investigation for fill

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Ref	Risk Management Rating	Risk Management Actions
232	2010 aerial	Structures (farm / residence)	Yes				Yes	4-58	Low - Medium	Inspect footprint area for residual building material. Undertake targeted investigation for fill
237	2010 aerial	Structures (farm / residence)	Yes				Yes	4-59	Low - Medium	Investigation of building footpring post-demolition and building footprint investigation
238	2010 aerial	Structures (farm / residence) and possible storage yard to rear	Yes	X	None		Yes	4-60	Low - Medium	Investigation of building footpring post-demolition and building footprint investigation
242	2010 aerial	Small structures	Yes	X	None		Yes	4-61	Low - Medium	Investigation of building footpring post-demolition and building footprint investigation
243	2010 aerial	Structures (farm / residence) and possible stockpile to the south	Yes	X	None		Yes	4-62	Low - Medium	Investigation of building footpring post-demolition and building footprint and stockpile investigation
251	2020 aerial	Small structures	Yes	X	None		Yes	4-63	Low - Medium	Investigation of building footpring post-demolition and building footprint and stockpile investigation
254	2020 aerial	Structures (farm / residence)	Yes				Yes	4-64	Low - Medium	Investigation of building footpring post-demolition and building footprint and stockpile investigation
255	2020 aerial	Structures (farm / residence)	Yes				Yes	4-65	Low - Medium	Investigation of building footpring post-demolition and building footprint and stockpile investigation
257	2020 aerial	Structures (farm / residence)	Yes				Yes	4-66	Low - Medium	Investigation of building footpring post-demolition and building footprint and stockpile investigation
258	2020 aerial	Structures (farm / residence)	Yes				Yes	4-67	Low - Medium	Investigation of building footpring post-demolition and building footprint and stockpile investigation
259	2020 aerial	Structures (farm / residence)	Yes				Yes	4-68	Low - Medium	Investigation of building footpring post-demolition and building footprint and stockpile investigation
260	2020 aerial	Structures (farm / residence)	Yes				Yes	4-69	Low - Medium	Investigation of building footpring post-demolition and building footprint and stockpile investigation
	Site walkover				38	Derelict house	Yes	4-70	Low - Medium	Investigation of building footpring post-demolition and building footprint and stockpile investigation
PAEC 5										
142	1990 aerial	Stockpile	TBC in walkover	X	None		Yes	5-1	Low - Medium	Targeted investigation of stockpiles
211	2005 aerial	Stockpiles	TBC in walkover	X	58 - 62	The length of the road has concrete headwall culvert, pipe under the road (58) and grass-covered stockpiles (59 and 61). Timber and soil waste (60) as well as shredded tyres (60) was also observed. A polypropylene pipe was present along the length of the road, sitting on the surface (62).	Yes	5-2	Low - Medium	Investigate stockpiles and footprint areas where waste observed
252	2020 aerial	Possible stockpiles	Yes	X	None		Yes	5-3	Low - Medium	Targeted investigation of stockpiles

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Ref	Risk Management Rating	Risk Management Actions
	Site walkover				27	Stockpiles	Yes	5-4	Low - Medium	Targeted investigation of stockpiles
	Site walkover				43	Stockpile	Yes	5-5	Low - Medium	Targeted investigation of stockpile
	Site walkover				55	Minor fill mound covered with grass.	Yes	5-6	Low - Medium	Targeted investigation of stockpile
	Site walkover				63	Stockpiles containing brick and other construction and demolition rubble	Yes	5-7	Low - Medium	Targeted investigation of stockpile
	Site walkover				65	Building rubble and loose soil - appears to have been tipped here.	Yes	5-8	Low - Medium	Targeted investigation of stockpile
	Site walkover				90	Several spoil stockpiles - suspected to be from the construction of the Cataract tunnel. Appears to be natural spoil.	Yes	5-9	Low - Medium	Targeted investigation of stockpiles
	Site walkover				92	Stockpile of soil covered with grass - tyre fragment visible	Yes	5-10	Low - Medium	Targeted investigation of stockpile
PAEC 6										
98	1975 aerial	Ground disturbance	No	X	None	Coal seam gas well	Yes	6-1	Medium	Targeted investigation, identify mud pits and assess remediation and validation information provided by asset owner.
	Site walkover				93	Coal seam gas well (Bulgo gas pipeline)	Yes	6-2	Medium	Targeted investigation, identify mud pits and assess remediation and validation information provided by
	Site walkover				94	Pipework for coal seam gas wells including concrete cover	Yes	6-3	Medium	Targeted investigation, identify mud pits and assess remediation and validation information provided by
	Site walkover				98	Coal seam gas well	Yes	6-4	Medium	Targeted investigation, identify mud pits and assess remediation and validation information provided by
	Site walkover				99	Coal seam gas well and pipework	Yes	6-5	Medium	Targeted investigation, identify mud pits and assess remediation and validation information provided by
	Site walkover				101	Coal seam gas well	Yes	6-6	Medium	Targeted investigation, identify mud pits and assess remediation and validation information provided by
	Site walkover				102	Below-ground pipeline for gas well (signage in place)	Yes	6-7	Medium	Targeted investigation, identify mud pits and assess remediation and validation information provided by
PAEC 7										
	Site walkover				19	Coal wash on ground surface	Yes	7-1	Low	Targeted investigation of area
	Site walkover				110	Coal wash surfacing on road	Yes	7-2	Low - Medium	Targeted investigation of filling
	Site walkover				117	Small metal shed and coal wash road. Power is connected to the shed.	Yes	7-3	Low - Medium	Targeted investigation of coal wash road
PAEC 8										
	Site walkover				4	Dumped car - has been here for some time as entirely rusted.	Yes	8-1	Low - Medium	Targeted investigation of area
	Site walkover				5	Fly tipping - lots of glass bottles and occasional refuse.	Yes	8-2	Low - Medium	Targeted investigation of area
	Site walkover				12	Minor refuse including metal and discarded white goods	Yes	8-3	Low	Targeted investigation of area

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Ref	Risk Management Rating	Risk Management Actions
	Site walkover				15	Refuse (tyres, white good, scrap metal)	Yes	8-4	Low	Targeted investigation of area
	Site walkover				16	Refuse continues (concrete rubble, white goods, soil, plastic fragments)	Yes	8-5	Low	Targeted investigation of area
	Site walkover				33	Minor building rubble on ground surface including corrugated metal, cement board	Yes	8-6	Low - Medium	Targeted investigation of area
	Site walkover				51	Small gully filled with minor amounts of dumped refuse including tyres, corrugated metal and rusted metal	Yes	8-7	Medium	Targeted investigation of gully
	Site walkover				54	Dumped refuse including brick, concrete, timber and household goods including a mattress and white goods	Yes	8-8	Low - Medium	Targeted investigation of area
	Site walkover				96	Dumping in creek - white goods, tyre, timber power pole, loose building and demolition rubble	Yes	8-9	Medium	Targeted investigation of area of dumping
	Site walkover				97	Dumping in creek - corrugated metal, timber, rusted metal	Yes	8-10	Medium	Targeted investigation of area of dumping
	Site walkover				105	Dumped cars and machinery (rusted) on either side of the dirt road.	Yes	8-11	Low - Medium	Targeted investigation of area of dumping
	Site walkover				119	dumped refuse	Yes	8-12	Low - Medium	Targeted investigation of area of dumping
PAEC 9										
	Site walkover				9	Power poles in easement next to canal	Yes	9-1	Medium	Targeted investigation of immediate surrounding surface soils
	Site walkover				13	Power poles - old (timber) and new	Yes	9-2	Low - Medium	Targeted investigation of immediate surrounding surface soils
	Site walkover				32	Timber power poles	Yes	9-3	Medium	Targeted investigation of immediate surrounding surface soils
	Site walkover				50	Timber power poles in clearing	Yes	9-4	Medium	Targeted investigation of immediate surrounding surface soils
	Site walkover				57	Timber power poles	Yes	9-5	Medium	Targeted investigation of immediate surrounding surface soils
	Site walkover				77	Timber power pole easement (likely part of Brooks Point Road easement)	Yes	9-6	Medium	Targeted investigation of immediate surrounding surface soils
	Site walkover				79	Timber power poles	Yes	9-7	Medium	Targeted investigation of immediate surrounding surface soils
	Site walkover				87	Timber power poles next to dam	Yes	9-8	Medium	Targeted investigation of immediate surrounding surface soils
	Site walkover				88	Timber power poles	Yes	9-9	Medium	Targeted investigation of immediate surrounding surface soils
	Site walkover				116	Power poles timber and concrete 3 sets	Yes	9-10	Medium	Targeted investigation of immediate surrounding surface soils
PAEC 10										

Key Feature Reference	Source	Description	Visible in 2020 Aerial Photographs?	Requires Inspection?	ENV MRP	DP Observations (from walkover)	PAEC?	PAEC Ref	Risk Management Rating	Risk Management Actions
	Site walkover				89	Above Ground Storage Tank	Yes	10-1	Low - Medium	Targeted investigation of soils below tank, post decommissioning
	Site walkover				108	AST for pump	Yes	10-2	Low - Medium	Targeted investigation of soils below tank, post decommissioning
	Site walkover				112	Disused AST on stilts - tipped over	Yes	10-3	Low - Medium	Targeted investigation of soils below tank, post removal
	Site walkover				114	Fuel storage for irrigation pump	Yes	10-4	Low - Medium	Targeted investigation of fuel storage area
PAEC 11										
	Site walkover				3	Fenced off area - fencing comprising chain-link metal wire has disintegrated suggesting area has not been used for some time. Possible former storage or paddock area.	Yes	11	Low - Medium	Targeted investigation of area
PAEC 12										
	Site walkover				30	Possible livestock burial and timber structures	Yes	12	Low - Medium	Targeted investigation of area

Appendix C

Government Database Searches

Search results

Your search for:Suburb: APPIN

Search Again
Refine Search

did not find any records in our database.

If a site does not appear on the record it may still be affected by contamination. For example:

- Contamination may be present but the site has not been regulated by the EPA under the Contaminated Land Management Act 1997 or the Environmentally Hazardous Chemicals Act 1985.
- The EPA may be regulating contamination at the site through a licence or notice under the Protection of the Environment Operations Act 1997 (POEO Act).
- Contamination at the site may be being managed under the planning process.

Search TIP

To search for a specific site, search by LGA (local government area) and carefully review all sites listed.

... more search tips

More information about particular sites may be available from:

- The POEO public register
- The appropriate planning authority: for example, on a planning certificate issued by the local council under section 149 of the Environmental Planning and Assessment Act.

See What's in the record and What's not in the record.

If you want to know whether a specific site has been the subject of notices issued by the EPA under the CLM Act, we suggest that you search by Local Government Area only and carefully review the sites that are listed.
This public record provides information about sites regulated by the EPA under the Contaminated Land Management Act 1997, including sites currently and previously regulated under the Environmentally Hazardous Chemicals Act 1985. Your inquiry using the above search criteria has not matched any record of current or former regulation. You should consider searching again using different criteria. The fact that a site does not appear on the record does not necessarily mean that it is not affected by contamination. The site may have been notified to the EPA but not yet assessed, or contamination may be present but the site is not yet being regulated by the EPA. Further information about particular sites may be available from the appropriate planning authority, for example, on a planning certificate issued by the local council under section 149 of the Environmental Planning and Assessment Act. In addition the EPA may be regulating contamination at the site through a licence under

For

the Protection of the Environment Operations Act 1997. You may wish to search the POEO public register.POEO public register

16 June 2020

business and industry

For local government

Contact us

- 131 555 (tel:131555)
- Online (https://yoursay.epa.nsw.gov.au/epa-website-feedback)
- info@epa.nsw.gov.au (mailto:info@epa.nsw.gov.au)
- EPA Office Locations (https://www.epa.nsw.gov.au/about-us/contact-us/locations)

Enforceable undertakings

Notice number: Issued to:

Suburb: appin

LGA: Catchment:

Search Clear

returned 0 results

Enforceable undertaking - the administrative power of the EPA to accept a written undertaking by a company or individual in relation to an actual or potential breach of the POEO Act, which is enforceable in the Land and Environment Court.

For more information, see the enforceable undertakings guidelines.

You can also view the media releases for all enforceable undertakings.

For business and industry

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Contact us

- 131 555 (tel:131555)
- Online (https://yoursay.epa.nsw.gov.au/epa-website-feedback)
- info@epa.nsw.gov.au (mailto:info@epa.nsw.gov.au)
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Number	Name	Location	Type	Status	Issued date
126	BAINES MASONARY BLOCKS PTY LTD	900 WILTON ROAD, APPIN, NSW 2560	POEO licence	Issued	11-Oct-99
1503384	BAINES MASONARY BLOCKS PTY LTD	900 WILTON ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	23-Jan-12
1574041	BAINES MASONARY BLOCKS PTY LTD	900 WILTON ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	21-Dec-18
4705	BAINES TRANSPORT PTY LTD	900 WILTON ROAD, APPIN, NSW 2560	POEO licence	No longer in force	9-May-00
1007942	BLUESCOPE STEEL (AIS) PTY. LTD.	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	28-Aug-01
1008874	BLUESCOPE STEEL (AIS) PTY. LTD.	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	9-Jan-02
1015370	BLUESCOPE STEEL (AIS) PTY. LTD.	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	27-Feb-02
1018271	BLUESCOPE STEEL (AIS) PTY. LTD.	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	24-Jun-02
11734	CLEANAWAY ORGANICS PTY LTD	APPIN ROAD, APPIN, NSW 2560	POEO licence	Surrendered	26-Sep-02
1043826	CLEANAWAY ORGANICS PTY LTD	APPIN ROAD, APPIN, NSW 2560	s.80 Surrender of a Licence	Issued	19-Jan-05
12231	CLEANAWAY ORGANICS PTY LTD	515 Appin Road, APPIN, NSW 2560	POEO licence	Surrendered	12-Aug-05
1062261	CLEANAWAY ORGANICS PTY LTD	515 Appin Road, APPIN, NSW 2560	s.58 Licence Variation	Issued	30-Jun-06
1064940	CLEANAWAY ORGANICS PTY LTD	515 Appin Road, APPIN, NSW 2560	s.58 Licence Variation	Issued	20-Sep-06
12547	CLEANAWAY ORGANICS PTY LTD	415-417 Appin Road, APPIN, NSW 2560	POEO licence	Surrendered	20-Sep-06
1100152	CLEANAWAY ORGANICS PTY LTD	515 Appin Road, APPIN, NSW 2560	s.58 Licence Variation	Issued	14-Jun-09
1119050	CLEANAWAY ORGANICS PTY LTD	515 Appin Road, APPIN, NSW 2560	s.58 Licence Variation	Issued	1-Nov-10
1122714	CLEANAWAY ORGANICS PTY LTD	415-417 Appin Road, APPIN, NSW 2560	s.80 Surrender of a Licence	Issued	3-May-11
1519917	CLEANAWAY ORGANICS PTY LTD	515 Appin Road, APPIN, NSW 2560	s.80 Surrender of a Licence	Issued	23-Jun-14
1524966	CLEANAWAY ORGANICS PTY LTD	515 Appin Road, APPIN, NSW 2560	s.81 Variation of a Surrender Condition	Issued	12-Sep-14
3173523019	CLEANAWAY ORGANICS PTY LTD	515 Appin Road, APPIN, NSW 2560	Penalty Notice	Issued	3-Aug-17
3173523037	CLEANAWAY ORGANICS PTY LTD	515 Appin Road, APPIN, NSW 2560	Penalty Notice	Issued	3-Aug-17
5482	EDL CSM (NSW) PTY LTD	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	POEO licence	Issued	30-Nov-00
1046327	EDL CSM (NSW) PTY LTD	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	21-Nov-05
1055196	EDL CSM (NSW) PTY LTD	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	11-Jan-06
1061556	EDL CSM (NSW) PTY LTD	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	2-Apr-07
1081784	EDL CSM (NSW) PTY LTD	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	8-Jan-08
1097957	EDL CSM (NSW) PTY LTD	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	19-Feb-09
1109651	EDL CSM (NSW) PTY LTD	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	12-Apr-10
1503243	EDL CSM (NSW) PTY LTD	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	8-Dec-11
1516553	EDL CSM (NSW) PTY LTD	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	3-Sep-13
1586962	EDL CSM (NSW) PTY LTD	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	13-Nov-19
758	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	POEO licence	Surrendered	10-May-00
2504	ENDEAVOUR COAL PTY LIMITED	WEDDERBURN ROAD, APPIN, NSW 2560	POEO licence	Issued	14-Feb-01
1021372	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	4-Oct-02
1022452	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	6-Feb-03
1025524	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	10-Jul-03
1025465	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	17-Jul-03
1029681	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	15-Sep-03
1029826	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	15-Oct-03
1031762	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	12-Feb-04
1035225	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	9-Mar-04
1034664	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	11-May-04
1035971	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	11-May-04
1037798	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	16-Jun-04
1037771	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	18-Jun-04
1039637	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	31-Aug-04
1040023	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	20-Sep-04
1041735	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	25-Oct-04
1041777	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	25-Oct-04
1043281	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	5-Jan-05
1043403	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	17-Feb-05
1046029	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	5-Apr-05
1045542	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	15-Apr-05
1048911	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	30-Jun-05
1050624	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	6-Sep-05
1059897	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	3-Aug-06
1073110	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	30-May-07
1074399	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	21-Jun-07
1085199	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	1-May-08
1080375	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	6-May-08
1085626	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	26-Jun-08
1095632	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	11-Dec-08
1096767	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	13-Jan-09
1104125	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	4-Nov-09
1104170	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	6-Nov-09
1110208	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	24-Dec-09
1114258	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	28-Jun-10
1116717	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.80 Surrender of a Licence	Issued	1-Jul-10
1129625	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	27-Jun-11
1501766	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	19-Oct-11
1502947	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	19-Dec-11
1504090	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	22-Mar-12
1508855	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	24-Apr-13
1515381	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	25-Feb-14

Number	Name	Location	Type	Status	Issued date
1525721	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	28-Oct-14
1527985	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	11-Feb-15
1539390	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	31-Mar-16
1542883	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	1-Aug-16
1546867	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	21-Dec-16
1550770	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	Compliance Audit	Complete	30-Mar-17
1554863	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	1-Aug-17
1560310	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	22-Dec-17
3173527116	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	Penalty Notice	Issued	7-Feb-19
3173527125	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	Penalty Notice	Issued	7-Feb-19
1575934	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	2-Sep-19
1588267	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	13-Mar-20
12990	ENVIRONMENTAL TREATMENT SOLUTIONS PTY LTD	Unit 12, 7-10 Technology Drive, APPIN, NSW 2560	POEO licence	Surrendered	30-Oct-08
1510708	ENVIRONMENTAL TREATMENT SOLUTIONS PTY LTD	Unit 12, 7-10 Technology Drive, APPIN, NSW 2560	s.80 Surrender of a Licence	Issued	14-Jan-13
1549627	GLC CIVIL PTY LTD	400 Brooks Point Road, APPIN, NSW 2560	s.91 Clean Up Notice	Issued	21-Apr-17
1555828	GLC CIVIL PTY LTD	400 Brooks Point Road, APPIN, NSW 2560	s.110 Revocation of Clean Up Notice	Issued	20-Sep-17
11636	INGHAMS ENTERPRISES PTY. LIMITED	345 APPIN ROAD, APPIN, NSW 2560	POEO licence	Issued	3-Apr-03
1505653	INGHAMS ENTERPRISES PTY. LIMITED	345 APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	30-Apr-12
1594628	INGHAMS ENTERPRISES PTY. LIMITED	345 APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	4-Jun-20
21180	JOE TAYLOR SAND PTY LTD	Appin Rd, APPIN, NSW 2560	POEO licence	Issued	13-Dec-18
1579902	JOE TAYLOR SAND PTY LTD	Appin Rd, APPIN, NSW 2560	s.58 Licence Variation	Issued	14-Aug-19
1587168	JOE TAYLOR SAND PTY LTD	Appin Rd, APPIN, NSW 2560	s.58 Licence Variation	Issued	6-Nov-19
13348	SYDNEY WATER CORPORATION	Streets identified within Scheme Envelope as per Fig 1-3 of Appin/245, APPIN, NSW 2560	POEO licence	Surrendered	19-Jan-11
1510152	SYDNEY WATER CORPORATION	Streets identified within Scheme Envelope as per Fig 1-3 of Appin/245, APPIN, NSW 2560	s.80 Surrender of a Licence	Issued	26-Feb-13
20327	SYDNEY WATER CORPORATION	275 Appin Road, APPIN, NSW 2560	POEO licence	Surrendered	11-Sep-13
1525991	SYDNEY WATER CORPORATION	275 Appin Road, APPIN, NSW 2560	s.80 Surrender of a Licence	Issued	3-Nov-14
2387	THE SCOUT ASSOCIATION OF AUSTRALIA	BADEN POWELL DRIVE, APPIN, NSW 2560	POEO licence	Surrendered	13-Oct-00
1029907	THE SCOUT ASSOCIATION OF AUSTRALIA	BADEN POWELL DRIVE, APPIN, NSW 2560	s.80 Surrender of a Licence	Issued	8-Aug-03
1015321	TOWER ENERGY PTY LIMITED	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	13-Aug-02
1021565	TOWER ENERGY PTY LIMITED	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	16-Oct-02
1028575	TOWER ENERGY PTY LIMITED	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	16-Jul-03

Number	Name	Location	Type	Status	Issued date	On / Off Site
126	BAINES MASONARY BLOCKS PTY LTD	900 WILTON ROAD, APPIN, NSW 2560	POEO licence	Issued	11-Oct-99	Off-site
1503384	BAINES MASONARY BLOCKS PTY LTD	900 WILTON ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	23-Jan-12	Off-site
1574041	BAINES MASONARY BLOCKS PTY LTD	900 WILTON ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	21-Dec-18	Off-site
4705	BAINES TRANSPORT PTY LTD	900 WILTON ROAD, APPIN, NSW 2560	POEO licence	No longer in force	9-May-00	Off-site
1007942	BLUESCOPE STEEL (AIS) PTY. LTD.	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	28-Aug-01	Off-site
1008874	BLUESCOPE STEEL (AIS) PTY. LTD.	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	9-Jan-02	Off-site
1015370	BLUESCOPE STEEL (AIS) PTY. LTD.	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	27-Feb-02	Off-site
1018271	BLUESCOPE STEEL (AIS) PTY. LTD.	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	24-Jun-02	Off-site
11734	CLEANAWAY ORGANICS PTY LTD	APPIN ROAD, APPIN, NSW 2560	POEO licence	Surrendered	26-Sep-02	Off-site
1043826	CLEANAWAY ORGANICS PTY LTD	APPIN ROAD, APPIN, NSW 2560	s.80 Surrender of a Licence	Issued	19-Jan-05	Off-site
12231	CLEANAWAY ORGANICS PTY LTD	515 Appin Road, APPIN, NSW 2560	POEO licence	Surrendered	12-Aug-05	Off-site
1062261	CLEANAWAY ORGANICS PTY LTD	515 Appin Road, APPIN, NSW 2560	s.58 Licence Variation	Issued	30-Jun-06	Off-site
1064940	CLEANAWAY ORGANICS PTY LTD	515 Appin Road, APPIN, NSW 2560	s.58 Licence Variation	Issued	20-Sep-06	Off-site
12547	CLEANAWAY ORGANICS PTY LTD	415-417 Appin Road, APPIN, NSW 2560	POEO licence	Surrendered	20-Sep-06	Off-site
1100152	CLEANAWAY ORGANICS PTY LTD	515 Appin Road, APPIN, NSW 2560	s.58 Licence Variation	Issued	14-Jun-09	Off-site
1119050	CLEANAWAY ORGANICS PTY LTD	515 Appin Road, APPIN, NSW 2560	s.58 Licence Variation	Issued	1-Nov-10	Off-site
1122714	CLEANAWAY ORGANICS PTY LTD	415-417 Appin Road, APPIN, NSW 2560	s.80 Surrender of a Licence	Issued	3-May-11	Off-site
1519917	CLEANAWAY ORGANICS PTY LTD	515 Appin Road, APPIN, NSW 2560	s.80 Surrender of a Licence	Issued	23-Jun-14	Off-site
1524966	CLEANAWAY ORGANICS PTY LTD	515 Appin Road, APPIN, NSW 2560	s.81 Variation of a Surrender Condition	Issued	12-Sep-14	Off-site
3173523019	CLEANAWAY ORGANICS PTY LTD	515 Appin Road, APPIN, NSW 2560	Penalty Notice	Issued	3-Aug-17	Off-site
3173523037	CLEANAWAY ORGANICS PTY LTD	515 Appin Road, APPIN, NSW 2560	Penalty Notice	Issued	3-Aug-17	Off-site
5482	EDL CSM (NSW) PTY LTD	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	POEO licence	Issued	30-Nov-00	Appin Power Station - off-site
1046327	EDL CSM (NSW) PTY LTD	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	21-Nov-05	Appin Power Station - off-site
1055196	EDL CSM (NSW) PTY LTD	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	11-Jan-06	Appin Power Station - off-site
1061556	EDL CSM (NSW) PTY LTD	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	2-Apr-07	Appin Power Station - off-site
1081784	EDL CSM (NSW) PTY LTD	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	8-Jan-08	Appin Power Station - off-site
1097957	EDL CSM (NSW) PTY LTD	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	19-Feb-09	Appin Power Station - off-site
1109651	EDL CSM (NSW) PTY LTD	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	12-Apr-10	Appin Power Station - off-site
1503243	EDL CSM (NSW) PTY LTD	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	8-Dec-11	Appin Power Station - off-site
1516553	EDL CSM (NSW) PTY LTD	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	3-Sep-13	Appin Power Station - off-site
1586962	EDL CSM (NSW) PTY LTD	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	13-Nov-19	Appin Power Station - off-site
758	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	POEO licence	Surrendered	10-May-00	Off-site
2504	ENDEAVOUR COAL PTY LIMITED	WEDDERBURN ROAD, APPIN, NSW 2560	POEO licence	Issued	14-Feb-01	Off-site
1021372	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	4-Oct-02	Off-site
1022452	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	6-Feb-03	Off-site
1025524	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	10-Jul-03	Off-site
1025465	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	17-Jul-03	Off-site
1029681	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	15-Sep-03	Off-site
1029826	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	15-Oct-03	Off-site
1031762	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	12-Feb-04	Off-site
1035225	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	9-Mar-04	Off-site
1034664	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	11-May-04	Off-site
1035971	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	11-May-04	Off-site
1037798	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	16-Jun-04	Off-site
1037771	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	18-Jun-04	Off-site
1039637	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	31-Aug-04	Off-site
1040023	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	20-Sep-04	Off-site
1041735	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	25-Oct-04	Off-site
1041777	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	25-Oct-04	Off-site
1043281	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	5-Jan-05	Off-site
1043403	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	17-Feb-05	Off-site
1046029	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	5-Apr-05	Off-site
1045542	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	15-Apr-05	Off-site
1048911	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	30-Jun-05	Off-site
1050624	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	6-Sep-05	Off-site
1059897	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	3-Aug-06	Off-site
1073110	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	30-May-07	Off-site
1074399	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	21-Jun-07	Off-site

Number	Name	Location	Type	Status	Issued date	On / Off Site
1085199	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	1-May-08	Off-site
1080375	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	6-May-08	Off-site
1085626	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	26-Jun-08	Off-site
1095632	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	11-Dec-08	Off-site
1096767	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	13-Jan-09	Off-site
1104125	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	4-Nov-09	Off-site
1104170	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	6-Nov-09	Off-site
1110208	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	24-Dec-09	Off-site
1114258	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	28-Jun-10	Off-site
1116717	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.80 Surrender of a Licence	Issued	1-Jul-10	Off-site
1129625	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	27-Jun-11	Off-site
1501766	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	19-Oct-11	Off-site
1502947	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	19-Dec-11	Off-site
1504090	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	22-Mar-12	Off-site
1508855	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	24-Apr-13	Off-site
1515381	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	25-Feb-14	Off-site
1525721	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	28-Oct-14	Off-site
1527985	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	11-Feb-15	Off-site
1539390	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	31-Mar-16	Off-site
1542883	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	1-Aug-16	Off-site
1546867	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	21-Dec-16	Off-site
1550770	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	Compliance Audit	Complete	30-Mar-17	Off-site
1554863	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	1-Aug-17	Off-site
1560310	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	22-Dec-17	Off-site
3173527116	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	Penalty Notice	Issued	7-Feb-19	Off-site
3173527125	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	Penalty Notice	Issued	7-Feb-19	Off-site
1575934	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	2-Sep-19	Off-site
1588267	ENDEAVOUR COAL PTY LIMITED	OFF APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	13-Mar-20	Off-site
12990	ENVIRONMENTAL TREATMENT SOLUTIONS PTY LTD	Unit 12, 7-10 Technology Drive, APPIN, NSW 2560	POEO licence	Surrendered	30-Oct-08	Off-site
1510708	ENVIRONMENTAL TREATMENT SOLUTIONS PTY LTD	Unit 12, 7-10 Technology Drive, APPIN, NSW 2560	s.80 Surrender of a Licence	Issued	14-Jan-13	Off-site
1549627	**GLC CIVIL PTY LTD**	**400 Brooks Point Road, APPIN, NSW 2560**	**s.91 Clean Up Notice**	**Issued**	**21-Apr-17**	**On-site**
1555828	**GLC CIVIL PTY LTD**	**400 Brooks Point Road, APPIN, NSW 2560**	**s.110 Revocation of Clean Up Notice**	**Issued**	**20-Sep-17**	**On-site**
11636	INGHAMS ENTERPRISES PTY. LIMITED	345 APPIN ROAD, APPIN, NSW 2560	POEO licence	Issued	3-Apr-03	Off-site
1505653	INGHAMS ENTERPRISES PTY. LIMITED	345 APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	30-Apr-12	Off-site
1594628	INGHAMS ENTERPRISES PTY. LIMITED	345 APPIN ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	4-Jun-20	Off-site
21180	JOE TAYLOR SAND PTY LTD	Appin Rd, APPIN, NSW 2560	POEO licence	Issued	13-Dec-18	Off-site
1579902	JOE TAYLOR SAND PTY LTD	Appin Rd, APPIN, NSW 2560	s.58 Licence Variation	Issued	14-Aug-19	Off-site
1587168	JOE TAYLOR SAND PTY LTD	Appin Rd, APPIN, NSW 2560	s.58 Licence Variation	Issued	6-Nov-19	Off-site
13348	SYDNEY WATER CORPORATION	Streets identified within Scheme Envelope as per Fig 1-3 of Appin/245, APPIN, NSW 2560	POEO licence	Surrendered	19-Jan-11	Not mappable
1510152	SYDNEY WATER CORPORATION	Streets identified within Scheme Envelope as per Fig 1-3 of Appin/245, APPIN, NSW 2560	s.80 Surrender of a Licence	Issued	26-Feb-13	Not mappable
20327	SYDNEY WATER CORPORATION	275 Appin Road, APPIN, NSW 2560	POEO licence	Surrendered	11-Sep-13	Off-site
1525991	SYDNEY WATER CORPORATION	275 Appin Road, APPIN, NSW 2560	s.80 Surrender of a Licence	Issued	3-Nov-14	Off-site
2387	THE SCOUT ASSOCIATION OF AUSTRALIA	BADEN POWELL DRIVE, APPIN, NSW 2560	POEO licence	Surrendered	13-Oct-00	Off-site
1029907	THE SCOUT ASSOCIATION OF AUSTRALIA	BADEN POWELL DRIVE, APPIN, NSW 2560	s.80 Surrender of a Licence	Issued	8-Aug-03	Off-site
1015321	TOWER ENERGY PTY LIMITED	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	13-Aug-02	Appin Power Station - off-site
1021565	TOWER ENERGY PTY LIMITED	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	16-Oct-02	Appin Power Station - off-site
1028575	TOWER ENERGY PTY LIMITED	NORTHHAMPTON DALE ROAD, APPIN, NSW 2560	s.58 Licence Variation	Issued	16-Jul-03	Appin Power Station - off-site

Appendix D

Photoplates rom the Site Walk Over

Photo 1 - General site (view from northernmost portion due south)

Photo 2 - MX Track (MRP2)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	1
	SCALE: NTS	DATE: 01-Jul-20	Appin, NSW	REVISION:	0

Photo 3 - Fenced Off Area (MRP3)

Photo 4 - Dumped Car (MRP4)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	2
	SCALE: NTS	DATE: 01-Jul-20	Appin, NSW	REVISION:	0

Photo 5 - Lots of Bottles and Occasional Refuse (MRP5)

Photo 6 - Water Trough (No Sign of Buried Pipe) (MRP6)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	3
	SCALE: NTS	DATE: 01-Jul-20	Appin, NSW	REVISION:	0

Photo 7 - Trough with Steel Pipe Inlet Riser (MRP7)

Photo 8 - BHP Monitoring Bore (MRP8)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	4
	SCALE: NTS	DATE: 01-Jul-20	Appin, NSW	REVISION:	0

Photo 9 - BHP Monitoring Bore (MRP8)

Photo 10 - BHP Monitoring Bore (MRP10)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	5
	SCALE: NTS	DATE: 01-Jul-20	Appin, NSW	REVISION:	0

Photo 11 - BHP Monitoring Bore (MRP10)

Photo 12 - Dam (MRP11)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	6
	SCALE: NTS	DATE: 01-Jul-20	Appin, NSW	REVISION:	0

Photo 13 - Minor Refuse (MRP12)

Photo 14 - Minor Refuse (MRP12)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	7
	SCALE: NTS	DATE: 01-Jul-20	Appin, NSW	REVISION:	0

Photo 15 - Power Poles (MRP13)

Photo 16 - Shed (MRP14)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
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Photo 17 - Refuse (MRP15)

Photo 18 - Refuse (MRP15)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	9
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Photo 19 - Refuse (MRP16)

Photo 20 - Refuse (MRP16)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	10
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Photo 21 - Refuse (MRP16)

Photo 22 - Slab Pump and Meter Box (MRP18)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	11
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Photo 23 - Coalwash (MRP19)

Photo 24 - Sandstone Chimney (MRP21)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
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Photo 25 - Trough (MRP22)

Photo 26 - Structure (Possible Pump House) (MRP23)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	13
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Photo 27 - Building Rubble (MRP24)

Photo 28 - Building Rubble (MRP24)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	14
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Photo 29 - Building Rubble (MRP24)

Photo 30 - Dam Wall (MRP25)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	15
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Photo 31 - Cattle Yards (MRP26)

Photo 32 - Stockpiles (MRP27)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	16
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Photo 33 - BHP Monitoring Well (MRP28)

Photo 34 - Pipe and Brick (MRP29)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	17
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Photo 35 - Livestock Burial (MRP30)

Photo 36 - Timber Structures (MRP32)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	17
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Photo 37 - MRP31

Photo 38 - Powerpole (MRP32)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	18
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Photo 39 - Minor Building Rubble (MRP33)

Photo 40 - Bare Eath (MRP34)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	19
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Photo 41 - Quarry and Fill (MRP35)

Photo 42 - Quarry and Fill (MRP35)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	20
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Photo 43 - Water Tank (MRP36)

Photo 44 - Dam Embankment (MRP37)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	21
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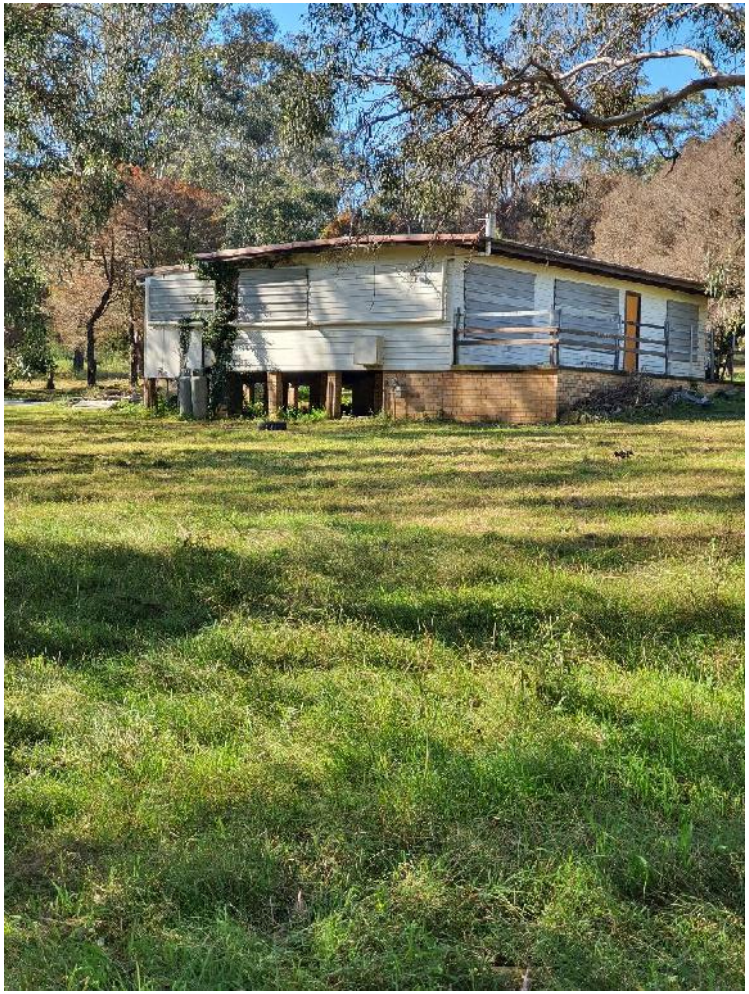

Photo 45 - Derelict House (MRP38)

Photo 46 - Minor Sand Stockpile (MRP39)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	22
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Photo 47 - MRP40

Photo 48 - Stockpile (MRP41)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	23
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Photo 49 - Stockpile (MRP42)

Photo 50 - Stockpile (MRP43)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	24
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Photo 51 - Stockpile (MRP44)

Photo 52 - Minor Refuce (MRP45)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	25
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Photo 53 - Filled Ground (MRP46)

Photo 54 - Filled Ground (MRP47)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	26
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Photo 55 - Cattle Yard (MRP48)

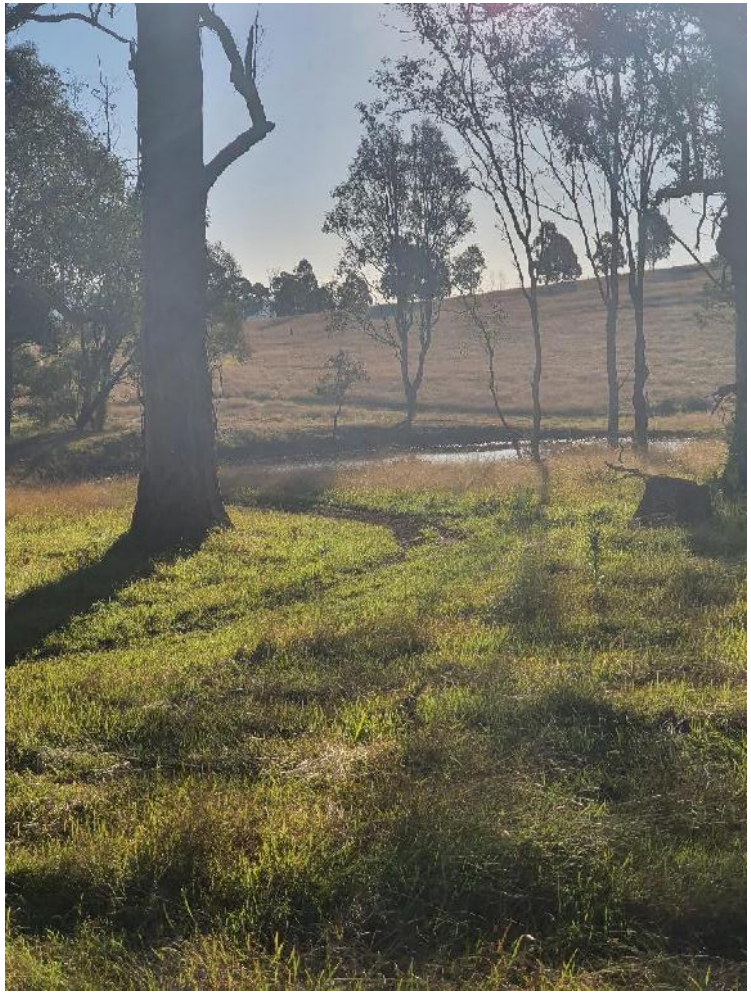

Photo 56 - Dam (MRP49)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	27
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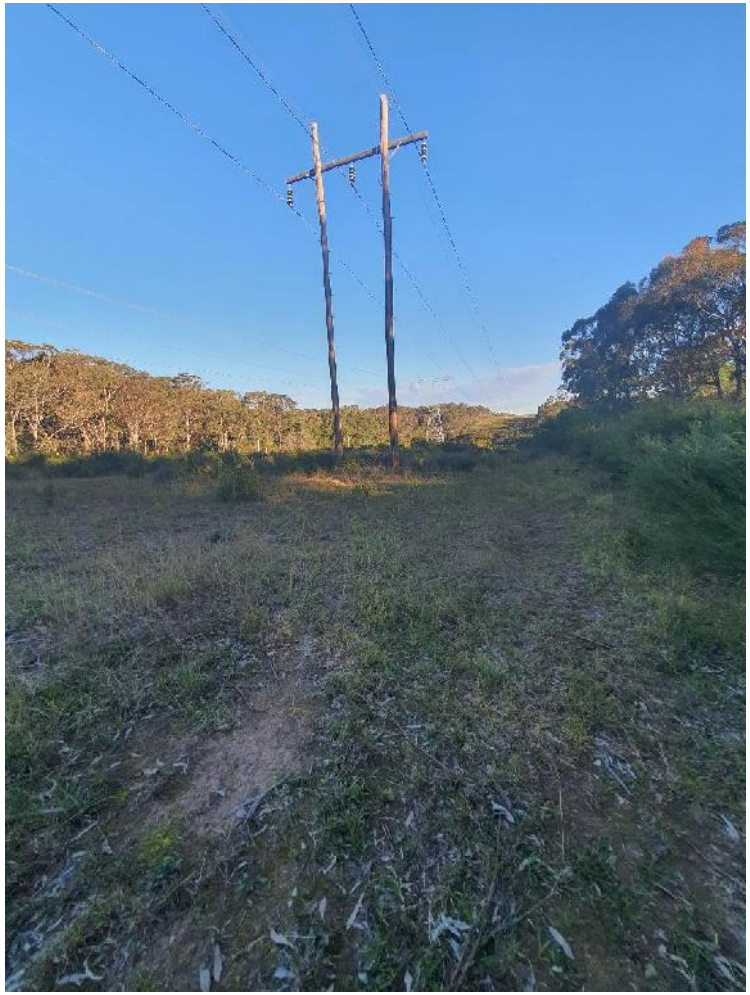

Photo 57 - Powerpoles (MRP50)

Photo 58 - Dumped Refuse Minor Gully (MRP51)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	28
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Photo 59- Dam (MRP 52)

Photo 60 - Appin 4 Well (MRP 53)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	29
	SCALE: NTS	DATE: 01-Jul-20	Appin, NSW	REVISION:	0

Photo 61 - Dumped Refuse (MRP54)

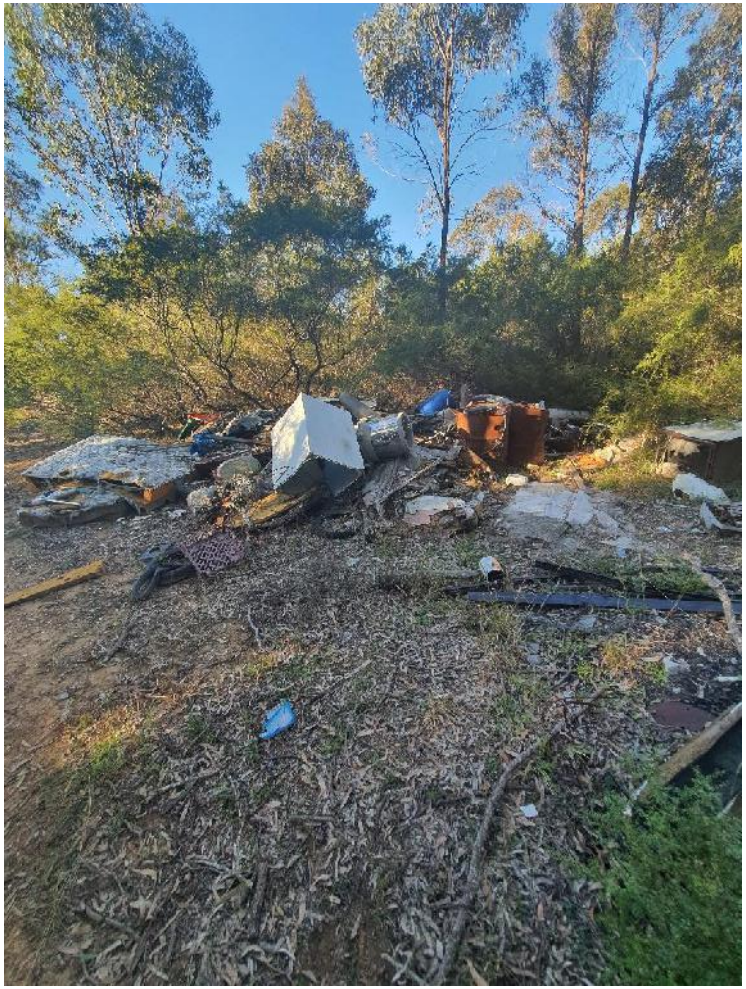

Photo 62 - Dumped Refuse (MRP54)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	30
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Photo 63 - Minor Fill Mound (MRP55)

Photo 64 - Minor Dumping (MRP56)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	31
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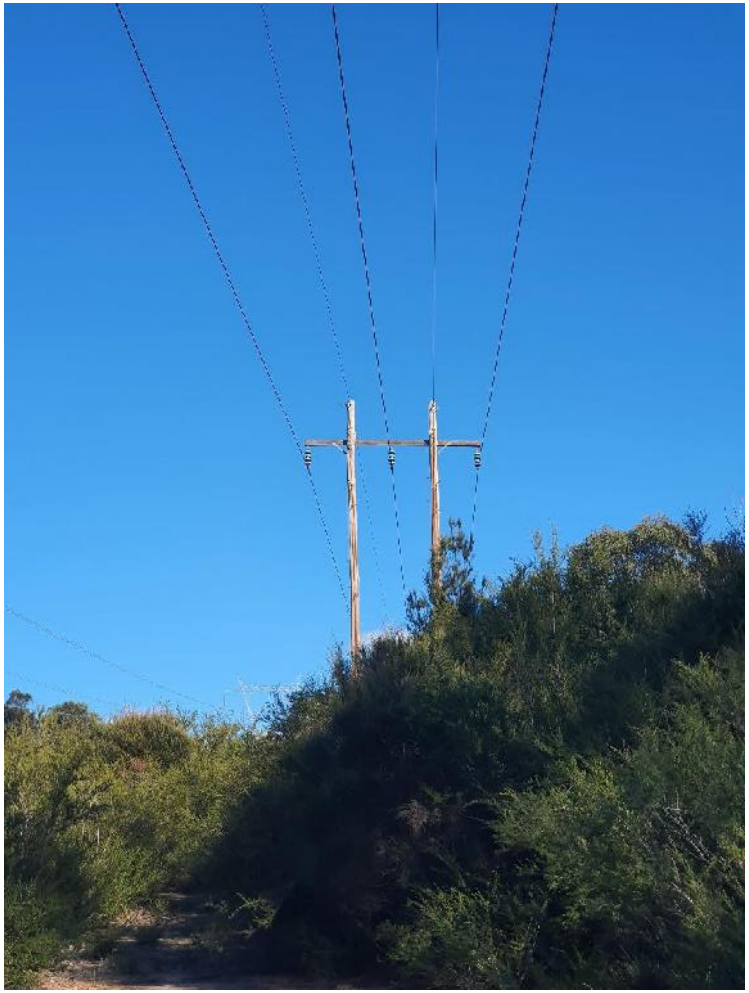

Photo 65 - Powerpoles (MRP57)

Photo 66 - Concrete Headwalls and Pipes Along Road (MRP58)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	32
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Photo 67 - Stockpiles (MRP59)

Photo 68 - Waste Stockpiles (MRP60)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	33
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Photo 69 - Waste Stockpiles (MRP60)

Photo 70 - Polypipe Along Road (MRP61)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	34
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Photo 71 - Stockpiles (MRP62)

Photo 72 - Stockpiles (MRP63)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	35
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Photo 73 - Dam Wall (MRP64)

Photo 74 - Dumped Building Rubble (MRP65)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	36
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Photo 75 - Dumped Building Rubble (MRP65)

Photo 76 - Dumped Building Rubble (MRP65)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd			Site Photographs	PROJECT No: 76589.06
	OFFICE: Macarthur	PREPARED BY: ERN		Land Capability AssessmentEnvironmental MRPs	PLATE No: 37
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Photo 77 - Rubble in Dam Wall (MRP66)

Photo 78 - Occasional Minor Refuse in Trees (MRP67)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	38
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Photo 79 - Possible Filled Ground (MRP68)

Photo 80 - MRP69

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	39
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Photo 81 - Minor Refuse (MRP70)

Photo 82 - Dam Wall, Locally Sourced (MRP71)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	40
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Photo 83 - Dam (MRP73)

Photo 84 - MRP74

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	41
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Photo 85 - Trough with IBC (MRP75)

Photo 86 - Dumped Cladding and Car (MRP76)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	42
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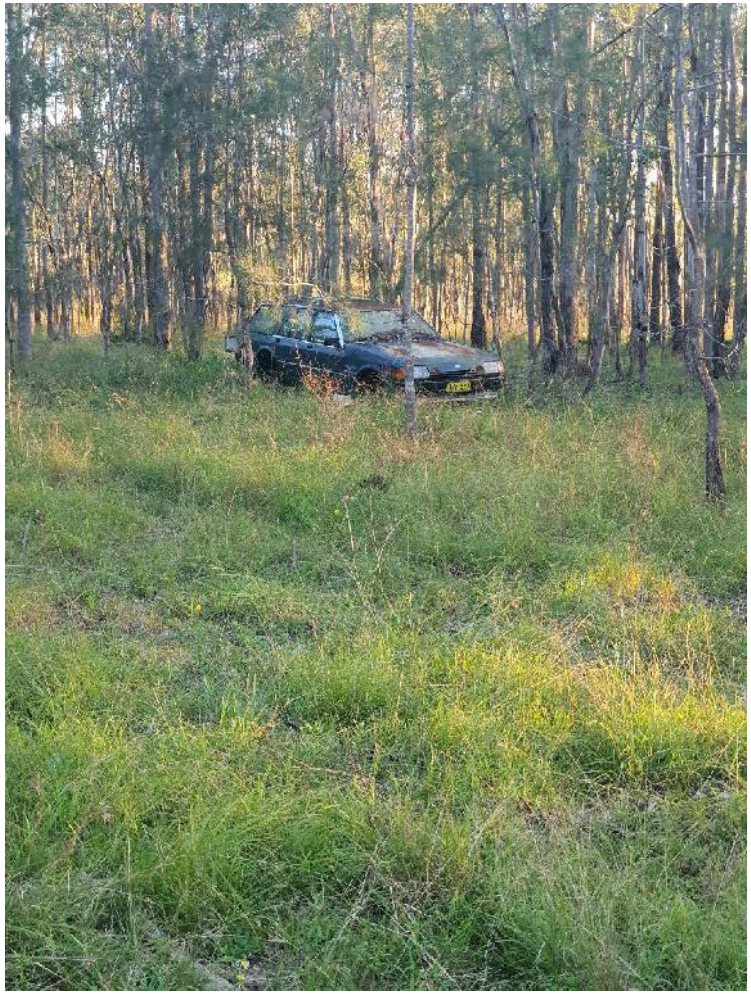

Photo 87 - Dumped Cladding and Car (MRP76)

Photo 88 - Dumped Cladding and Car (MRP76)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	43
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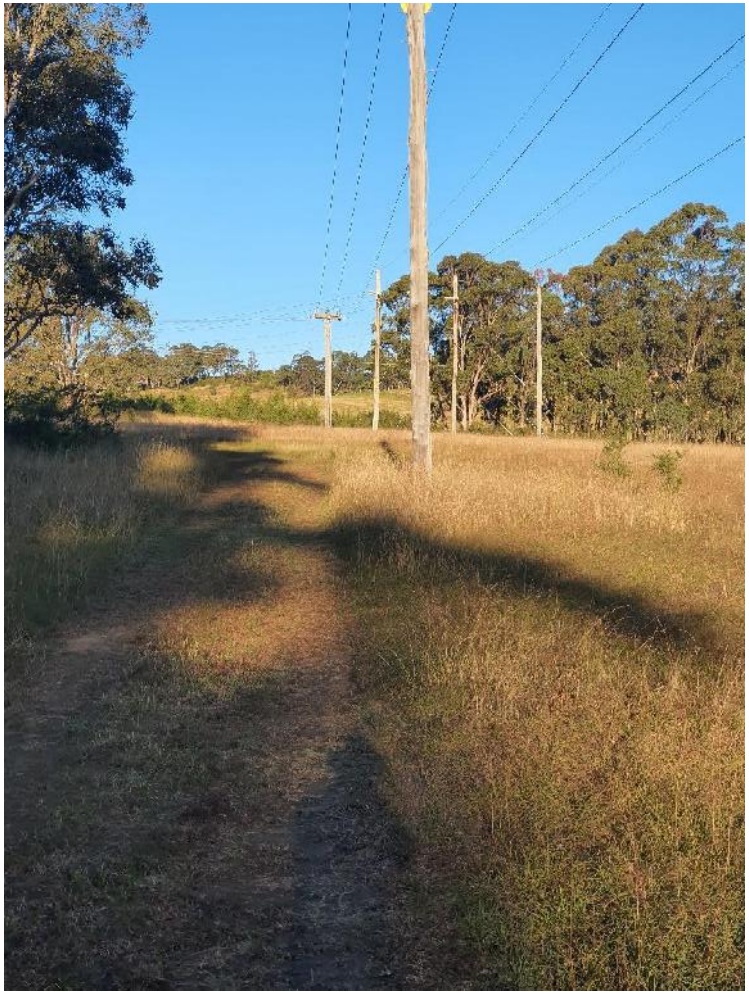

Photo 89 - Powerpole Easement (MRP77)

Photo 90 - Pump Station (MRP78)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	44
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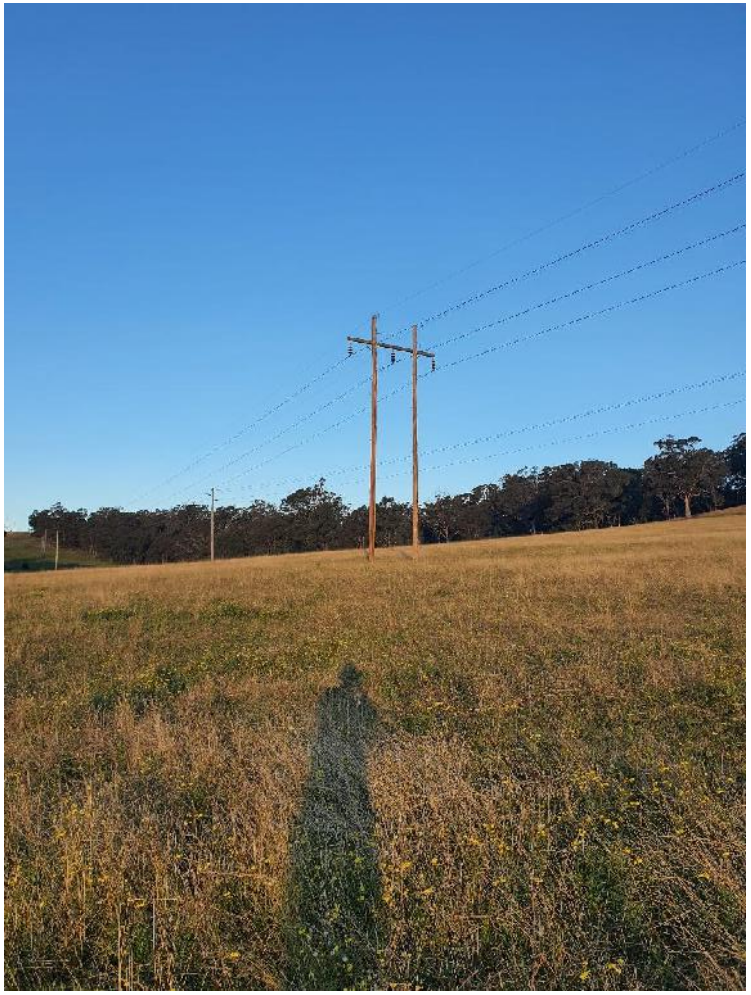

Photo 91 - Powerpoles (MRP79)

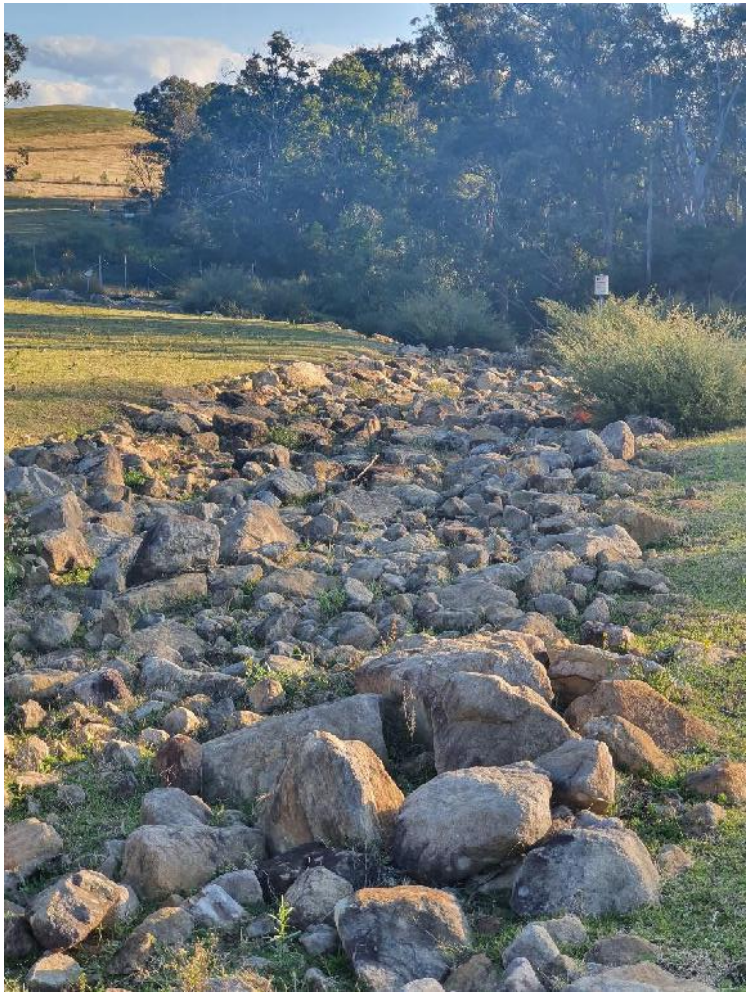

Photo 92 - Erosion Control (MRP80)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
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Photo 93 - Minor Refuse (MRP83)

Photo 94 - Appin Powerplant (MRP84)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	46
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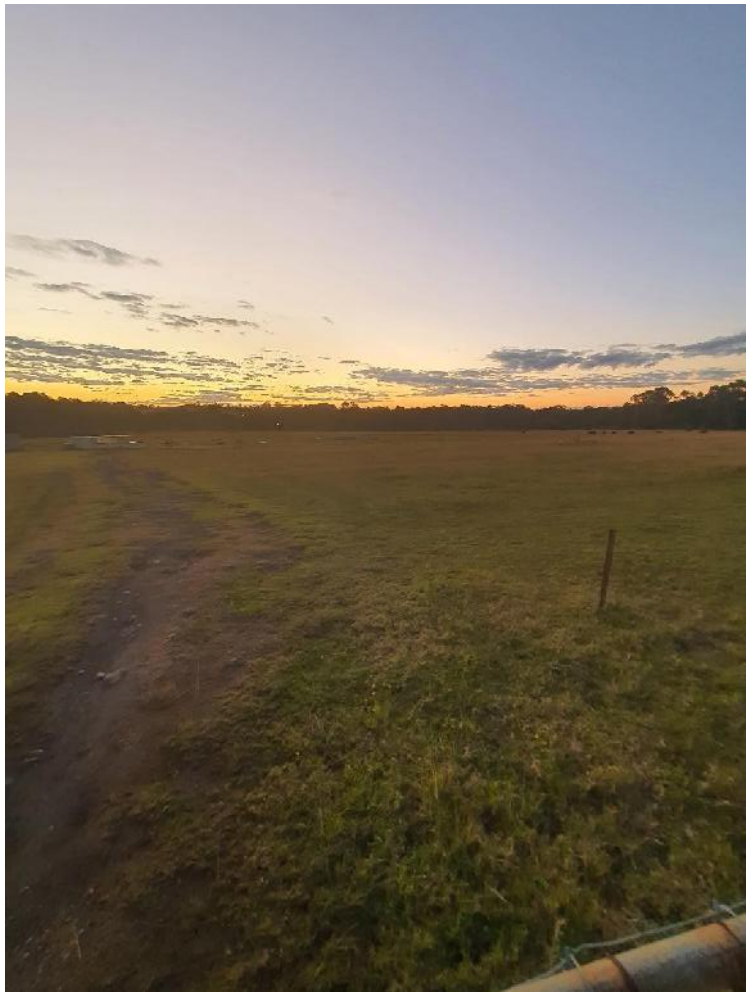

Photo 95 - Model Airfield (MRP85)

Photo 96 - Heritage House (MRP86)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	47
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Photo 97 - Powerpoles (MRP87)

Photo 98 - Powerpoles (MRP88)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	48
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Photo 99 - Spoil Stockpiles (MRP90)

Photo 100 - Spoil Stockpiles (MRP90)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	49
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Photo 101 - Spoil Stockpiles (MRP90)

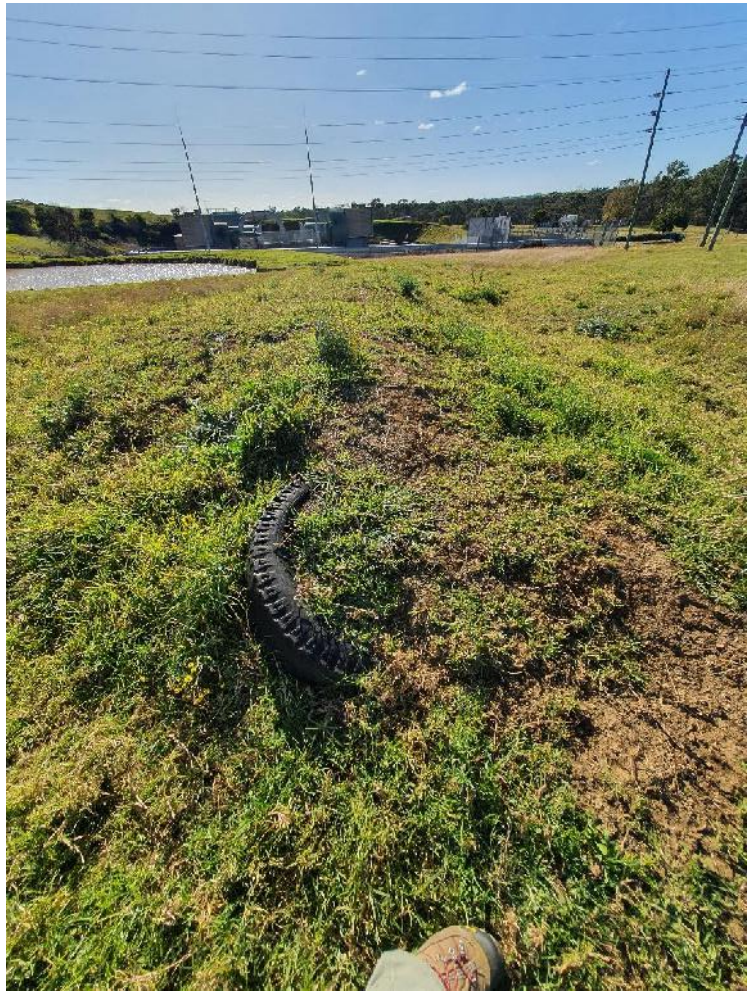

Photo 102 - Stockpile (MRP92)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	50
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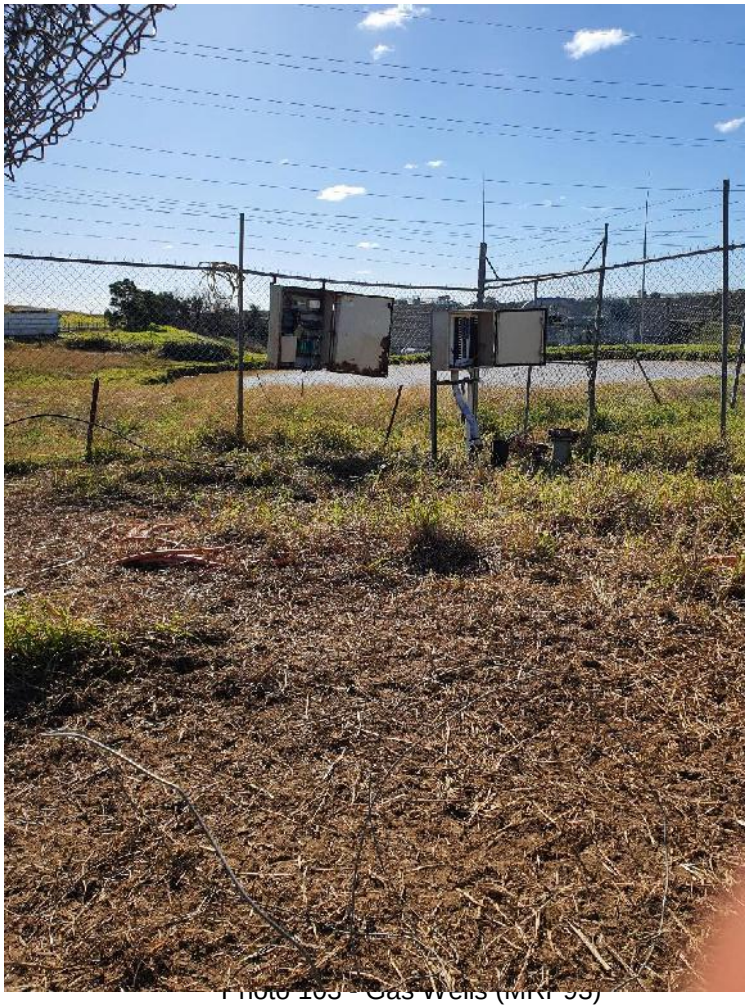

Photo 103 - Gas Wells (MRP93)

Photo 104 - Gas Wells (MRP93)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	51
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Photo 105 - Gas Wells (MRP93)

Photo 106 - Gas Well and Pipework (MRP94)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	52
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Photo 107 - Quarry (MRP95)

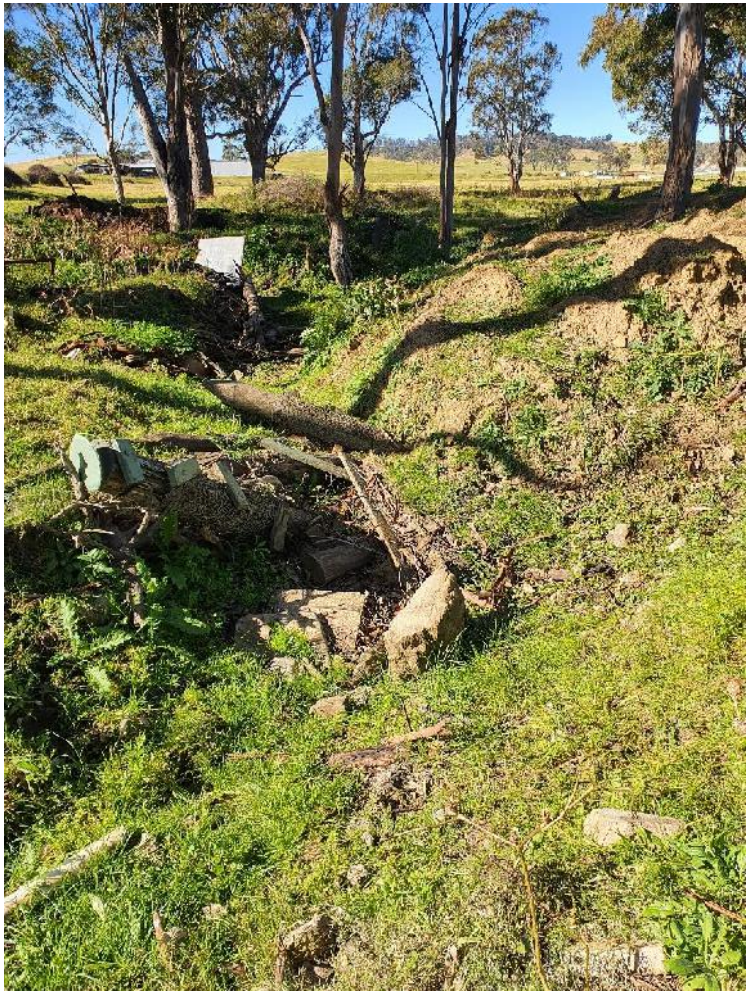

Photo 108 - Dumping in Creek (MRP96)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	53
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Photo 109 - Dumping in Creek (MRP96)

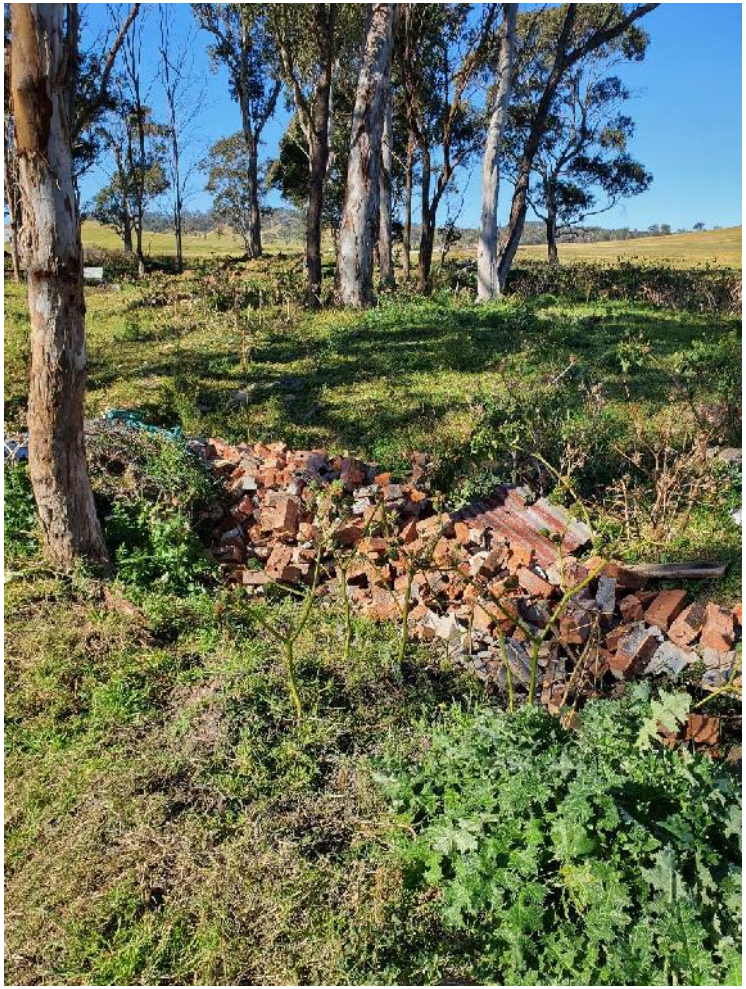

Photo 110 - Dumping in Creek (MRP96)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	54
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Photo 111 - Dumping in Creek (MRP96)

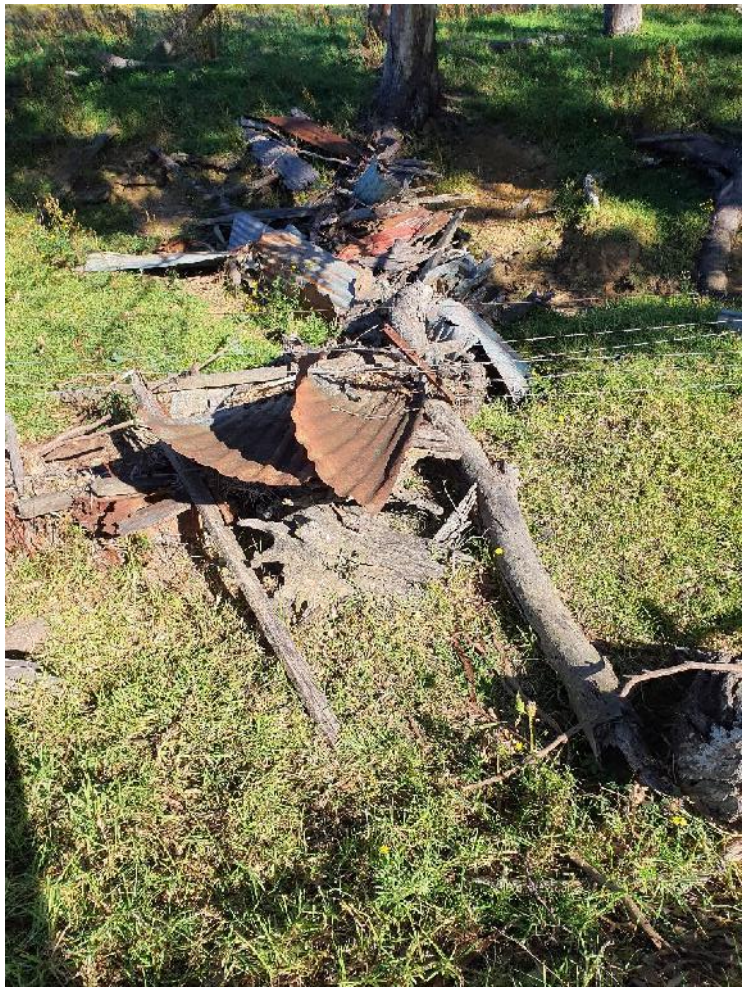

Photo 112 - Dumping in Creek (MRP97)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	55
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Photo 113 - Gas Wells (MRP98)

Photo 114 - Gas Wells (MRP99)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	56
	SCALE: NTS	DATE: 01-Jul-20	Appin, NSW	REVISION:	0

Photo 115 - Mine Communication Antenna (MRP100)

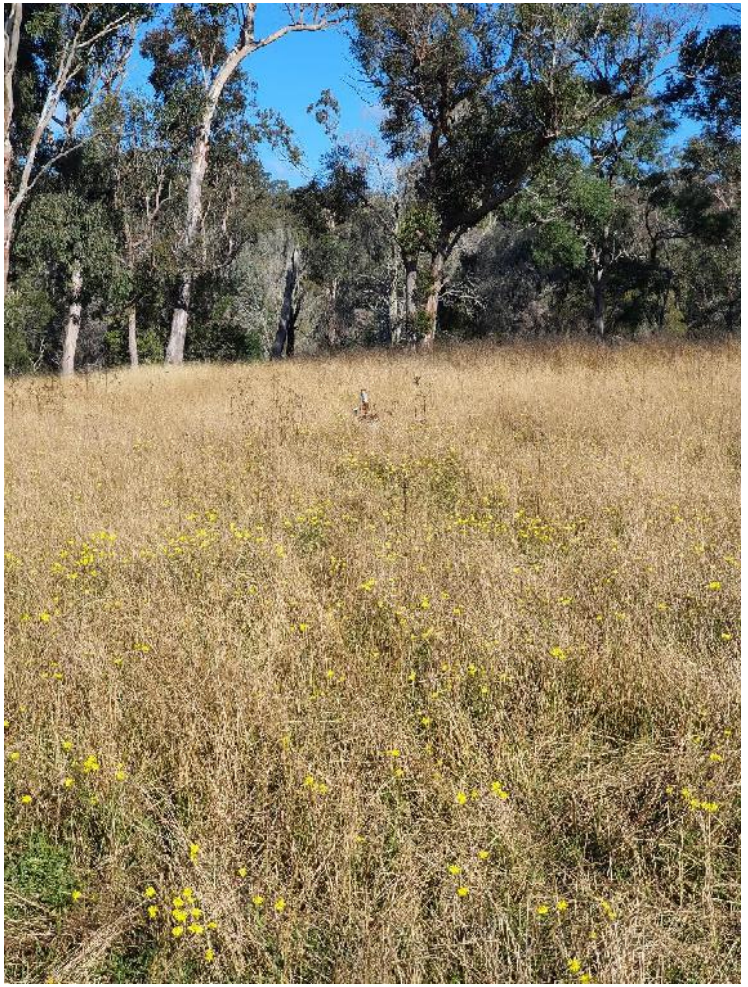

Photo 116 - Gas Wells (MRP101)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	57
	SCALE: NTS	DATE: 01-Jul-20	Appin, NSW	REVISION:	0

Photo 117 - Gas Pipeline (MRP102)

Photo 118 - Disturbed Ground (MRP103)

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	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	58
	SCALE: NTS	DATE: 01-Jul-20	Appin, NSW	REVISION:	0

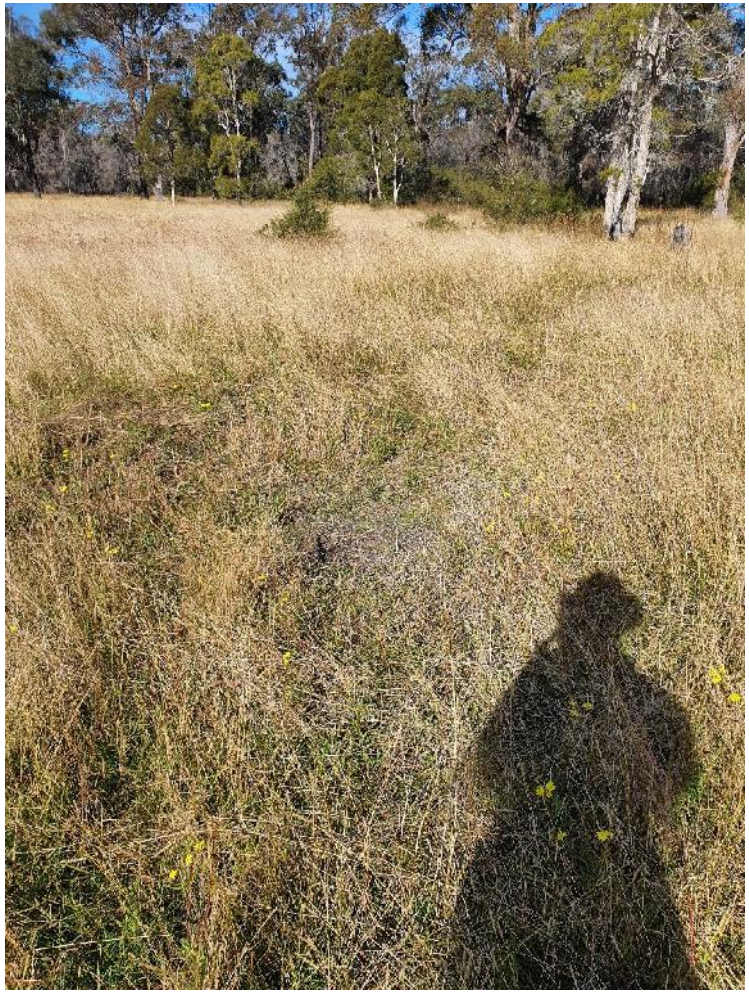

Photo 119 - Disturbed Ground (MRP103)

Photo 120 - 25 mm Pipe in Ground (MRP104)

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	SCALE: NTS	DATE: 01-Jul-20	Appin, NSW	REVISION:	0

Photo 121 - Dumped Cars and Machinery (MRP105)

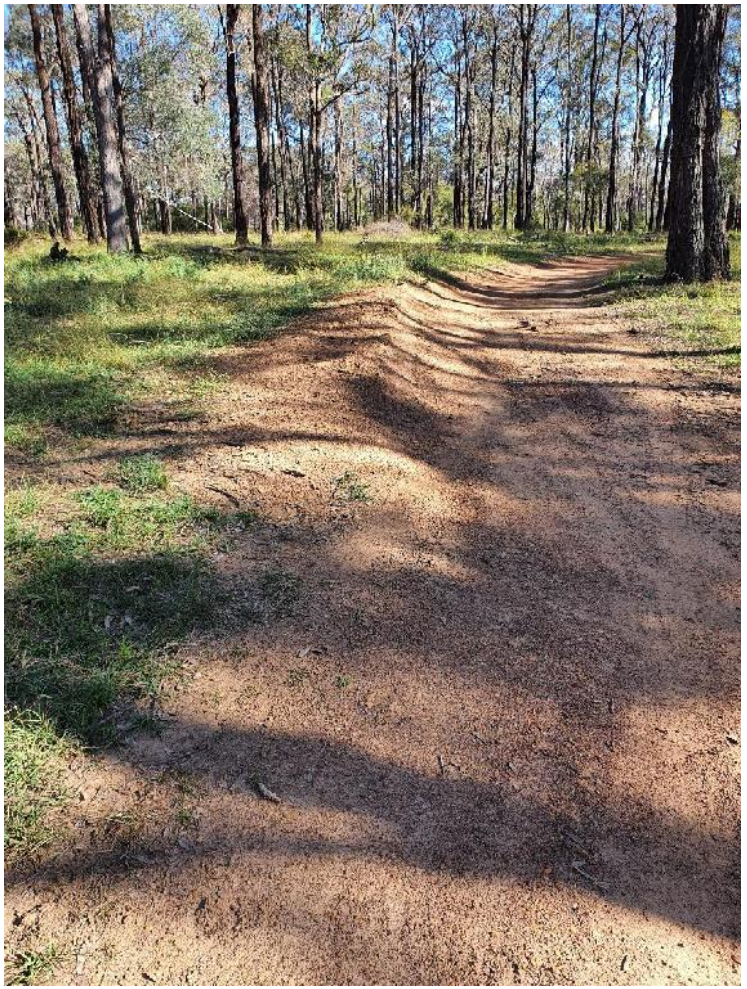

Photo 122 - Dirtbike Tracks (MRP106)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	60
	SCALE: NTS	DATE: 01-Jul-20	Appin, NSW	REVISION:	0

Photo 123 - Footing, Former Structure (MRP109)

Photo 124 - Coalwash Surfacing on Road (MRP110)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	61
	SCALE: NTS	DATE: 01-Jul-20	Appin, NSW	REVISION:	0

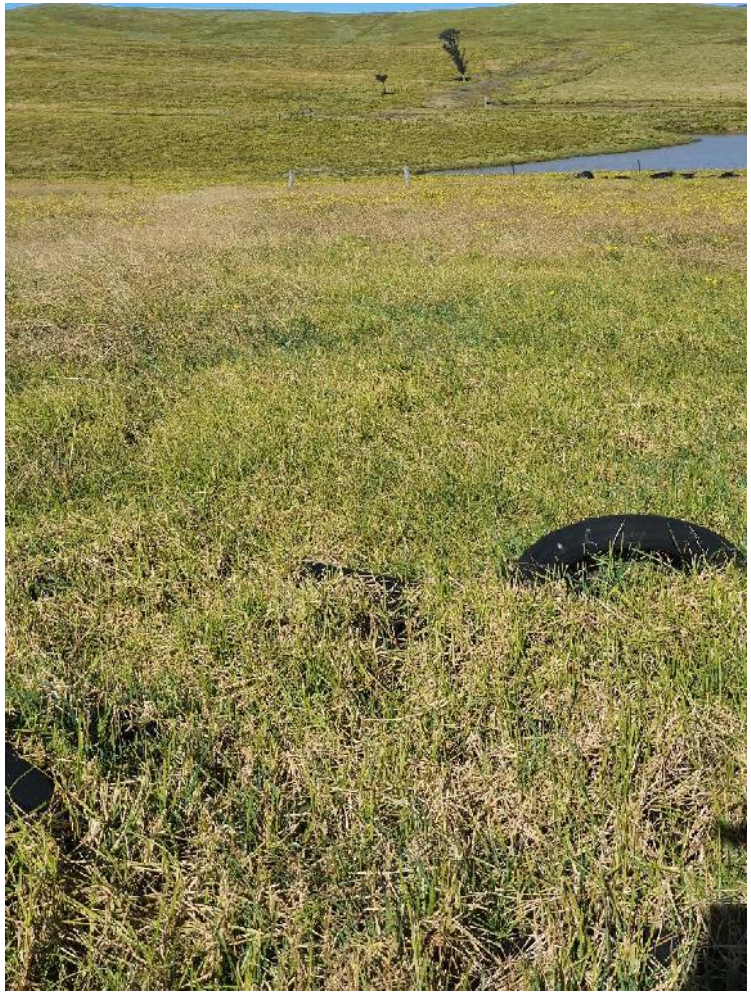

Photo 125 - Waste Tyres (MRP111)

Photo 126 - Waste Tyres (MRP111)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	62
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Photo 127 - Waste Tyres (MRP111)

Photo 128 - Disarded AST (MRP112)

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	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	63
	SCALE: NTS	DATE: 01-Jul-20	Appin, NSW	REVISION:	0

Photo 129 - Galvanised Pipes in Rock (MRP113)

Photo 130 - Fuel Storage for Irrigation Pump (MRP114)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	64
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Photo 131 - Pipe Network for Irrigation (MRP115)

Photo 132 - Powerpoles (MRP116)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
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Photo 133 - Shed and Coalwash Road (MRP117)

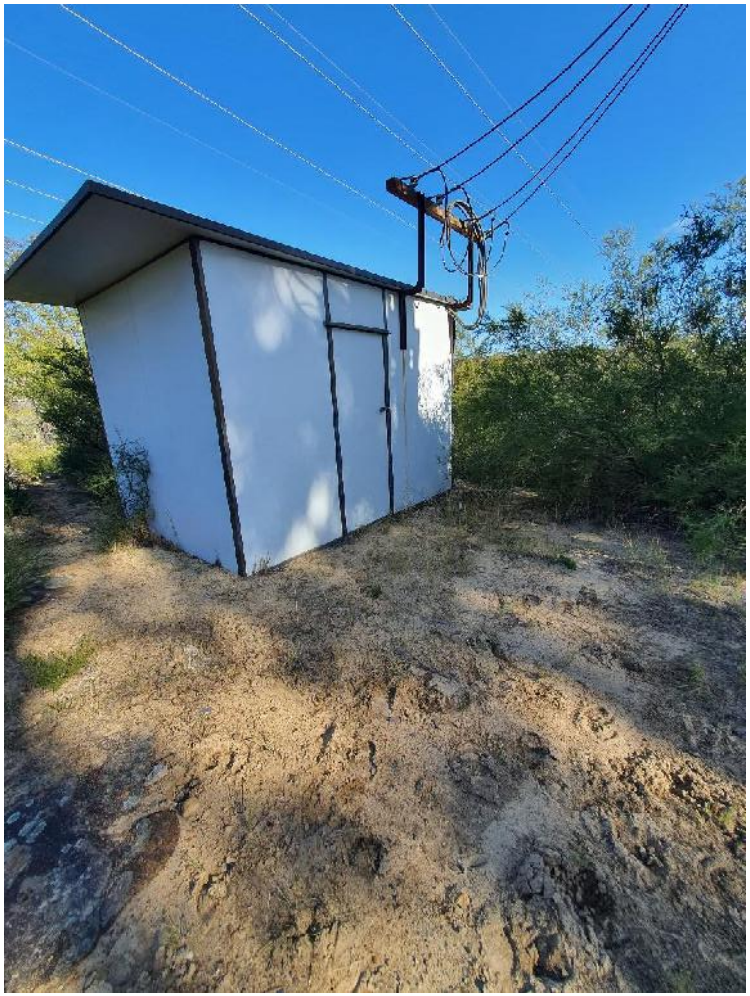

Photo 134 - Shed and Coalwash Road (MRP117)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: Walker Corporation Pty Ltd		Site Photographs	PROJECT No:	76589.06
	OFFICE: Macarthur	PREPARED BY: ERN	Land Capability AssessmentEnvironmental MRPs	PLATE No:	66
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