

Cowal Gold Operation

Indigenous Archaeology and Cultural Heritage Management Plan

October 2003



COWAL GOLD PROJECT
INDIGENOUS ARCHAEOLOGY AND CULTURAL HERITAGE MANAGEMENT
PLAN
15 OCTOBER 2003



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1 INTRODUCTION

In 1999, the NSW Minister for Planning granted Development Consent for the Cowal Gold Project, located 38 km northeast of West Wyalong in New South Wales (a map of the Cowal Gold Project Area is at Figure 1).

The Cowal Gold Project (the **Project**) is owned by Barrick Australia Limited (**Barrick**). The Project involves the development of an open pit gold mine adjacent to and within a small section of Lake Cowal.

The Development Consent granted by the Minister included conditions which were formulated at the culmination of an environmental impact assessment process which commenced in 1995 and included:

- an Environmental Impact Statement and Development Application lodged in 1996;
- a Commission of Inquiry in 1996;
- an Environmental Impact Statement and Development Application lodged in 1998; and
- a Commission of Inquiry in 1998/99.

The Development Consent conditions included the requirement to prepare an Indigenous Archaeology and Cultural Heritage Management Plan (**IACHMP**) for the development consent area to address Aboriginal cultural heritage issues. The detail of the conditions was derived from the Aboriginal heritage surveys and assessments undertaken specifically for the Cowal Gold Project EIS.

1.1 LAND SUBJECT TO THIS IACHMP

This IACHMP applies to the following land:

- the land the subject of the Cowal Gold Project Development Consent as follows:
 - the area of Mining Lease No. 1535 (Act 1992) (**ML Area**) (granted in satisfaction of Mining Lease Application No.45);
 - the area of the 4 proposed bores west of the ML Area (the **borefield**);
 - the area of the proposed water pipeline from the ML Area to the borefield;
 - the area of the proposed relocated travelling stock reserve; and
- the land the subject of the approved road upgrade from Wamboyne Road to the ML Area (approved by Bland Shire Council under Part 5 of the *Environmental Planning and Assessment Act 1979* on 21 April 1999 (No.83/98) (**road upgrade area**), (the **Cowal Gold Project Area**).

1.2 PERMITS AND CONSENTS RELEVANT TO THIS IACHMP

Barrick and its consultant archaeologists have obtained permits and consents under s 87 and s 90 of the *National Parks and Wildlife Act 1974* (NSW) (the **NPW Act**) for the Project. They are:

- Permit 1468 authorising certain archaeological works in the ML Area, water pipeline area and borefield area;
- Consent 1467 authorising the destruction of Aboriginal objects (in certain circumstances) in the ML Area, water pipeline area and borefield area;
- Permit 1681 authorising certain archaeological works in the relocated travelling stock reserve area and road upgrade area;
- Consent 1680 authorising the destruction of Aboriginal objects (in certain circumstances) in the relocated travelling stock reserve area and road upgrade area.

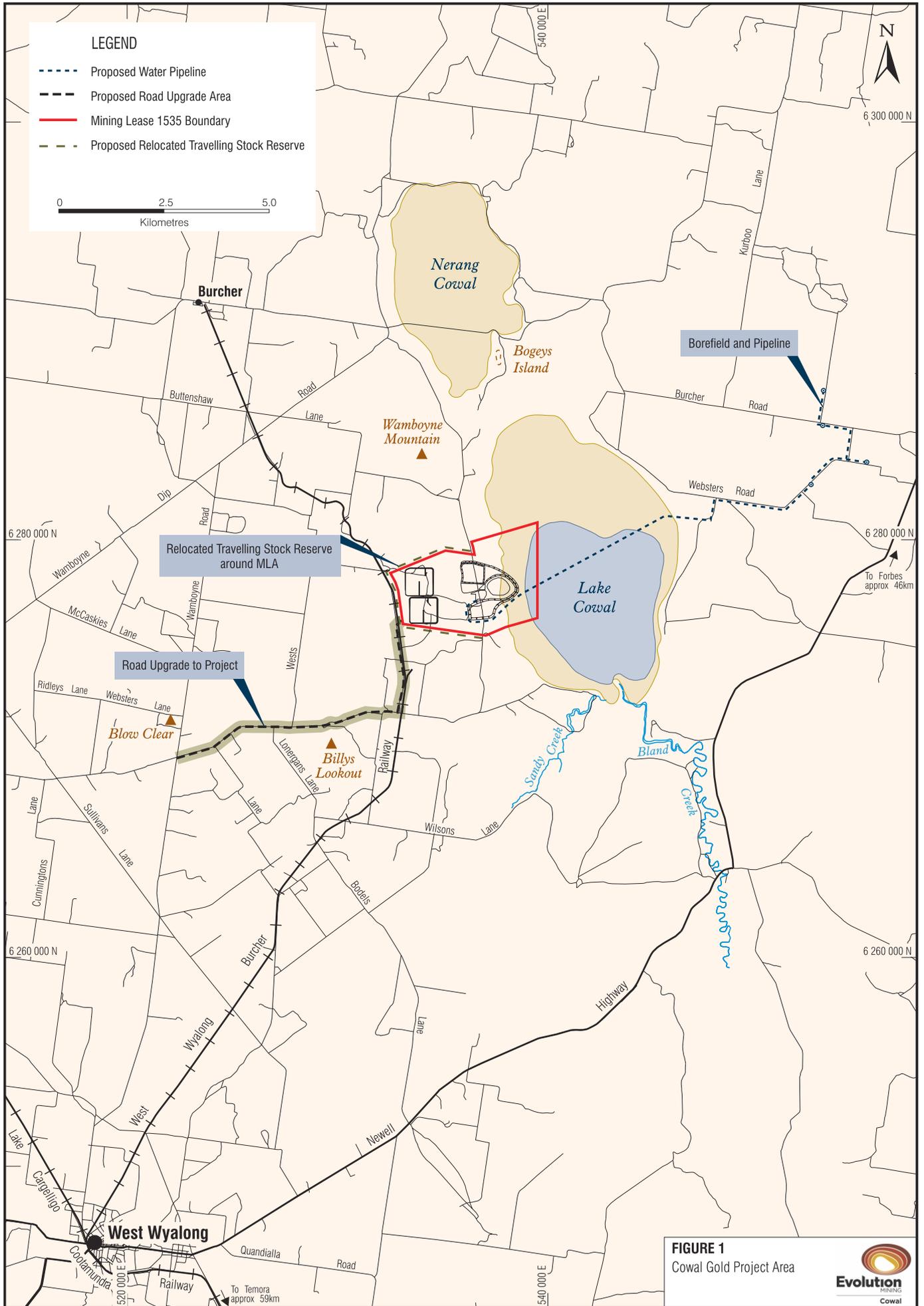


FIGURE 1
Cowl Gold Project Area



1.3 BARRICK CORPORATE POLICIES & COMMITMENTS

1.3.1 Corporate Policies

This IACHMP has been prepared in accordance with Barrick's Environment Health and Safety, and Indigenous People's Policies, wherein Barrick:

- respects the relationship indigenous people have with their traditional country and acknowledges their entitlement to have this properly considered in Barrick's on-going activities; and
- is committed to protect the environment by conducting all its activities in an environmentally acceptable manner with continual improvement in environmental performance.

Barrick's Environment Health and Safety Policy and Indigenous People's Policy are presented in Figures 2 and 3 respectively.

1.3.2 Involvement of Aboriginal people in cultural heritage management activities in the Cowal Gold Project Area

The Cowal Gold Project Area falls within the traditional country of the Wiradjuri people, and in particular the Wiradjuri people of Condobolin.

Barrick acknowledges that under the traditional laws and customs of the Wiradjuri Condobolin people, custodianship and responsibility for cultural heritage places in Wiradjuri Condobolin country lies with the Wiradjuri Condobolin people.

Barrick entered into an agreement with the registered native title claim group for the ML Area (N6002/02), who represent the Wiradjuri Condobolin people, on 15 April 2003 pursuant to the right to negotiate process of the *Native Title Act 1993* (Cth) (the **Native Title Agreement**). The Native Title Agreement contains extensive commitments regarding cultural heritage management.

Pursuant to the Native Title Agreement, Barrick has agreed to fund the establishment of a Wiradjuri Cultural Heritage Company (the **CH Company**) by the registered native title claim group to provide cultural heritage services in Wiradjuri Condobolin country (including the Cowal Gold Project Area). Barrick will seek to contract with the CH Company to provide the services of Wiradjuri Condobolin persons to assist in the conduct of cultural heritage management activities within the Cowal Gold Project Area, including persons to act as cultural heritage officer, field assistants and monitors. If the CH Company is not established, or advises Barrick that it does not wish to provide the above services, the Native Title Agreement provides that Barrick may seek to retain Wiradjuri Condobolin people directly to assist in the conduct of cultural heritage management activities in the Cowal Gold Project Area.

1.4 OBJECTIVES AND PURPOSE

The objective of this IACHMP is to identify future salvage, excavation and monitoring of archaeological sites within the Cowal Gold Project Area prior to and during development and to address Aboriginal cultural heritage issues (see condition 3.3(a)(ii) of the Development Consent).



ENVIRONMENT, HEALTH AND SAFETY POLICY

Barrick Gold of Australia is committed to protect the environment by conducting all its activities in an environmentally acceptable manner with continual improvement in our environmental performance. It is Barrick's policy that all employees and contractors are provided with a safe and healthy workplace.

To accomplish this, Barrick Gold of Australia:

- Ensures compliance with all environment, health and safety laws and regulations as the minimum standard for its management practices;
- Establishes positive co-operative relationships with government agencies that regulate its business;
- Establishes annual goals for improvement of each operation and assigns responsibilities and accountability for environment, health and safety performance;
- Establishes standards and procedures to protect the environment and to protect employee and public safety and health;
- Works to mitigate the effects of its activities on people, the environment and natural resources;
- Maintains and tests its ability to respond effectively to emergencies;
- Contributes to the economic and social well being of its employees and communities in which it operates;
- Audits its environment, health and safety performance, regularly reports the results and makes appropriate improvements;
- Keeps its stakeholders informed.

FIGURE 2
Environmental, Health and
Safety Policy





INDIGENOUS PEOPLES POLICY

Barrick respects the relationship Indigenous people have to their traditional country and acknowledges their entitlement to have this properly considered in its on-going activities.

Barrick's principles in dealing with land access are:

- Establish and maintain constructive, long term relationships with Indigenous communities.
- Identify the Indigenous interests in the areas where we operate and define whether such interests are based on cultural traditions, historical association, occupation, social or economic need.
- Strive for a timely and fair resolution of issues. Proceed by way of negotiated outcome, wherever possible.
- Any compensation for the granting of tenements should, to the extent practicable, be community oriented, sustainable and include employment, training, facilities and services.
- When conducting Indigenous heritage surveys, give representatives from all those Indigenous groups having a traditional connection with the land concerned an opportunity to be consulted.

Barrick also recognises that there are broader responsibilities associated with its activities and, as such, approaches issues relating to Indigenous people in a progressive and inclusive way. In particular, Barrick provides:

- Opportunities to Indigenous people to participate in employment and to supply goods and services necessary for Barrick's local activities.
- Culturally sensitive training and education to enable employees dealing with Indigenous people and issues to understand the potential impact of Barrick's activities on Indigenous people.

Overall, as well as complying with all laws and regulations relating to Indigenous people, Barrick aims to conduct its operations in a way that fosters the support of the Indigenous communities.

FIGURE 3
Indigenous People Policy



This IACHMP addresses the following :

- statutory requirements (Section 2);
- consultation undertaken in the preparation of the IACHMP (Section 3);
- archaeological sites in the Cowal Gold Project Area (Section 4);
- management of Registered Sites and other Aboriginal objects (Section 5);
- dissemination of cultural heritage information and offsets (Section 6).

Compliance with this IACHMP is mandatory for all Barrick employees and contractors working at the Cowal Gold Project.

2 LEGISLATIVE FRAMEWORK

2.1 DEVELOPMENT CONSENT

The Project was approved by the Minister for Planning under the *Environmental Planning and Assessment Act 1979 (EP&A Act)*, as a State significant project. In accordance with the EP&A Act, approval for operation of the Project required development consent and any relevant approvals listed in Section 91 of the EP&A Act.

Consent under Section 90 of the *National Parks and Wildlife Act 1974 (NPW Act)* was included as an approval requirement. Put simply, obtaining development consent under the EP&A Act did not negate the requirement to obtain consent under the NPW Act for any damage to or destruction of "Aboriginal objects", or "Aboriginal Places" within the meaning of those terms in the NPW Act.

The Development Consent includes the following relevant Aboriginal heritage consent conditions:

Table 1
Cowel Gold Project Development Consent Condition 3.3

Condition	
3.3	HERITAGE ASSESSMENT AND MANAGEMENT
(a)	The Applicant shall prior to the commencement of construction works: <ol style="list-style-type: none"> i) prepare a Heritage Management Plan (HMP) to address non-indigenous heritage issues. The HMP shall be prepared in consultation with Bland Historical Society, BSC and Lake landholders/residents and to the satisfaction of the Director-General; ii) prepare an Indigenous Archaeology and Cultural Management Plan (IACMP) to identify future salvage, excavation and monitoring of any archaeological sites within the DA area prior to and during development, and to address Aboriginal cultural heritage issues. The IACMP shall be prepared in consultation with NPWS, the Local Aboriginal Land Council, a consultant archaeologist, any other stakeholders identified by NPWS, and to the satisfaction of the Director-General; iii) retain a Cultural Heritage Officer approved by the West Wyalong Local Aboriginal Land Council who is to be available on site during construction and earthworks; and iv) submit to and have approved by the Director-General of NPWS, a consent to Destroy application under section 90 of the <i>National Parks and Wildlife Act 1974</i> for Aboriginal archaeological sites that have been identified to be damaged or destroyed as a result of the development prior to consent and/or by the archaeology and cultural management plan.
(b)	In the event that artefacts not previously identified, are identified in the DA area during development through earthworks, construction or operation of the mine, the Applicant shall immediately contact the NPWS and cease work in the relevant location pending investigation and assessment of its heritage value.

2.2 NATIONAL PARKS & WILDLIFE ACT 1974

The NPW Act governs the management of "Aboriginal objects" and "Aboriginal places" in New South Wales. An "Aboriginal object" is any deposit, object or material evidence (not being a handicraft made for sale) relating to indigenous and non-European habitation of New South Wales (see s 5 NPW Act). An "Aboriginal place" is a place declared by the Minister as an Aboriginal place pursuant to s 84 of the NPW Act. There are no Aboriginal places in the Cowal Gold Project Area. There are numerous Aboriginal objects.

Aboriginal objects are the property of the Crown. The Director-General of the Department of Environment and Conservation (**DEC**) is responsible for the protection of Aboriginal objects in New South Wales (see ss 83 and 84 NPW Act). The Cultural Heritage Branch of the DEC maintains the Aboriginal Heritage Information Management System (**AHIMS**), which contains a record of all recorded Aboriginal sites in New South Wales.

The term "Aboriginal site" is not defined in the NPW Act. However, the DEC has guidelines for the registration of Aboriginal sites (*Standards Manual for Archaeological Practice in Aboriginal Heritage Management*). The AHIMS includes a wide variety of sites, including places that comprise "Aboriginal objects" as defined in the NPW Act.

The NPW Act provides that certain permits and consents are required before carrying out work that will disturb, damage or destroy Aboriginal objects. A permit under Section 87 of the NPW Act is required before a person:

- disturbs or excavates any land, or causes any land to be disturbed or excavated, for the purpose of discovering an Aboriginal object; and
- disturbs or moves on any land an Aboriginal object that is the property of the Crown, other than an Aboriginal object that is in the custody or under the control of the Australian Museum Trust.

A consent under Section 90 of the NPW Act is required before a person knowingly destroys, defaces or damages, or knowingly causes or permits the destruction or defacement of or damage to, an Aboriginal object.

Carrying out the above without a permit or consent is an offence under the NPW Act.

Barrick and its consultant archaeologists have obtained permits and consents under s 87 and s 90 of the NPW Act for the Cowal Gold Project. They are:

- Permit 1468 authorising certain archaeological works in the ML Area, water pipeline area and borefield area;
- Consent 1467 authorising the destruction of Aboriginal objects (in certain circumstances) in the ML Area, water pipeline area and borefield area;
- Permit 1681 authorising certain archaeological works in the relocated travelling stock reserve area and road upgrade area;
- Consent 1680 authorising the destruction of Aboriginal objects (in certain circumstances) in the relocated travelling stock reserve area and road upgrade area.

A copy of these permits and consents is at Appendix 1, 2, 3, and 4.

2.3 DEC GUIDELINES – MINING INDUSTRY

In addition to the requirements of the NPW Act, the DEC has issued Guidelines for Aboriginal Heritage Impact Assessment in the Exploration and Mining Industries (DEC, 1997). The objectives of these guidelines are to:

- ensure that the actual management of Aboriginal heritage assessment processes by the exploration and mining industries follows a predictable path which leads to improved results for both Aboriginal heritage conservation and the industry; and
- to assist the exploration and mining industries to plan and conduct projects that may impact on Aboriginal heritage in an informed and responsible manner.

The guidelines outline that the DEC may approve a consent application conditionally or unconditionally or refuse it, depending on the significance of the sites and the justification for the action.

3 CONSULTATION UNDERTAKEN IN PREPARATION OF THIS IACHMP

This IACHMP was prepared after consultation with the Cultural Heritage Branch of DEC, the West Wyalong Local Aboriginal Land Council, the Wiradjuri Regional Aboriginal Land Council, the New South Wales Aboriginal Land Council, the Wiradjuri Council of Elders, the Wiradjuri registered native title claim group and the Wiradjuri community in Condobolin. It incorporates the views and comments raised during consultation undertaken during the 1995 and 1997 EIS proceedings, Barrick's applications for section 87 permits and section 90 consents in 2002 and the negotiation of the Native Title Agreement in 2002-2003.

Consultation for this project commenced in late 1994 via discussions with the Wiradjuri Regional Aboriginal Land Council and West Wyalong Local Aboriginal Land Council. Representatives of both Land Councils participated in archaeological surveys and management discussions in relation to the Cowal Gold Project EIS. Management options were formalised in a draft report circulated to the Wiradjuri Regional Land Council and the West Wyalong Local Aboriginal Land Council for comment. These were endorsed in 1998 and incorporated into the EIS.

In May 2001 Barrick acquired the Project and recommenced consultation with Aboriginal groups. Introductory meetings were held with representatives of the Wiradjuri Council of Elders, West Wyalong Local Aboriginal Land Council and the New South Wales Aboriginal Lands Council. In these meetings Barrick committed to honour EIS commitments and to consult with Aboriginal people.

During 2002 Barrick conducted extensive consultation with interested parties with respect to Barrick's applications for permits and consents under s 87 and 90 of the NPW Act for the Project. This consultation included the West Wyalong Local Aboriginal Land Council, the Wiradjuri Regional Aboriginal Land Council, the New South Wales Aboriginal Land Council, the Wiradjuri Council of Elders, the Wiradjuri registered native title claim group and the Wiradjuri community in Condobolin. Attempts were also made to consult the Mooka Traditional Owners Council. The views of these parties and persons were included in the various applications under s 87 and s 90 lodged by Barrick with DEC.

The negotiation of the Native Title Agreement between April 2002 and April 2003 dealt extensively with cultural heritage management in the Cowal Gold Project Area and the commitments in that agreement are reflected in this IACHMP.

The abovementioned consultation fulfils the requirement of Condition 3.3(a)(ii) of the Development Consent as well as the requirements of DEC policies.

4 ARCHAEOLOGICAL SITES WITHIN COWAL GOLD PROJECT AREA

4.1 ARCHAEOLOGICAL SURVEYS AND ASSESSMENTS WITHIN THE COWAL GOLD PROJECT AREA

A total of five different archaeological surveys and assessments have been conducted in the vicinity of the Cowal Gold Project Area since 1989. Further archaeological surveys were conducted in 2002-2003.

Preliminary archaeological inspections were made at Lake Cowal in 1989 by Paton (Paton 1989). In 1995 project feasibility studies were approved and detailed archaeological surveys along the lake shore and in the vicinity of the gold bearing ore and the potential infrastructure of the mine were conducted by Scott Cane and Roley Williams (Wiradjuri Regional Aboriginal Land Council) (Cane 1995a). Subsequent development planning led to another archaeological survey of a possible access road, a water pipeline and a transmission line for the proposed mine (Huys and Johnston 1995). A further archaeological investigation was conducted in the area west of the Lake later that year by Scott Cane assisted by Roley Williams (Wiradjuri Regional Aboriginal Land Council) and a member of the West Wyalong Aboriginal community (Cane 1995b).

Following the refusal of the Development Application in 1995, another archaeological survey of new locations for tailings storages, part of the water pipeline, a small road realignment and a new electricity transmission line route to the south of the lake was undertaken (Nicholson 1997).

Since recommencement of exploration activities there have been a number of further surveys conducted by archaeologists Dr Colin Pardoe, Dr Johan Kamminga, emeritus Professor Jim Allen, emeritus Professor Richard Wright, Dr Peter Hiscock, Dr Sally Brockwell, Mr David Johnston and Mr Francis Shawcross.

The areas of the Cowal Gold Project Area investigated by archaeological surveys include:

- the ML Area;
- the area of the 4 proposed bores west of the ML Area;
- the area of the proposed water pipeline from the ML Area to the borefield;
- the area of the proposed relocated travelling stock reserve; and
- the road upgrade area.

A number of sites containing Aboriginal objects were identified during the archaeological surveys and assessments referred to above and registered with DEC.

Barrick's consultant archaeologist, Dr Colin Pardoe, prepared a Research Design and Study Plan describing the archaeological works proposed for the Cowal Gold Project Area which was attached to Barrick's application for Permit 1468 and Permit 1681. This identifies 5 zones of management within the Cowal Gold Project Area delineated by their local environment, including soils, potential erosion impact, observed archaeological record and potential for subsurface sites/features/Aboriginal objects. The zones are also practical landform units useful for both management purposes and archaeological investigation.

The management zones are:

- lake bed zone;
- beach zone;
- slope zone;
- lake edge ridge zone;
- back plain zone.

A copy of the Research Design and Study Plan is at Appendix 5.

Summaries of the survey results and the registered Aboriginal sites identified in each management zone are outlined in sections 4.2 through to 4.10, below and identified on Figure 4.

4.2 LAKE BED ZONE

No sites were identified in this zone by any of the surveys.

4.3 BEACH ZONE

During the 1995 survey (Cane 1995a), 1 site was identified in the beach zone, Site P2 (refer to Figure 4).

4.3.1 Site P2

Site P2 is a scarred tree on the southwest margin of the proposed mining pit. The tree, an older red gum, is located on the edge of the Lake floor. The scar is 35 centimetres wide, 1.2 metres long and is broadly oval in shape. Regrowth has extended 10 centimetres in from the original scar outline into the inner wood. This wood is now dead, and the top of the scar can be seen as a convex crack in the dead wood.

4.4 SLOPE ZONE

No sites were identified in this zone by any of the surveys.

4.5 LAKE EDGE RIDGE ZONE

During the 1995 survey (Cane 1995a), a number of sites were identified in the lake edge ridge zone, Sites P1, LC1, LC2, LC3 and LC4 (refer to Figure 4).

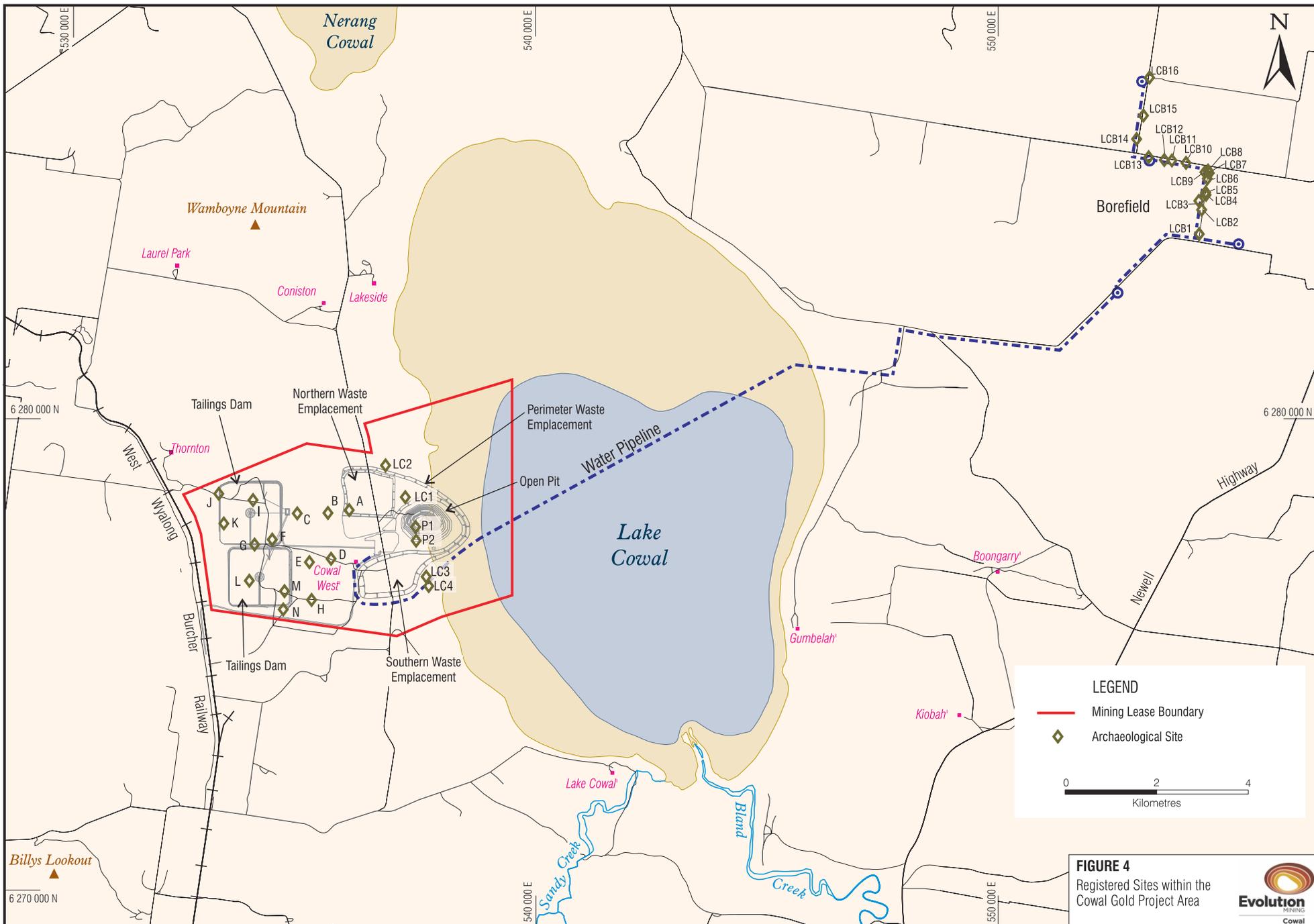


FIGURE 4
Registered Sites within the Cowl Gold Project Area



Table 2
Summary of Artefacts & Materials – Lake Edge Ridge Zone

Site	P1	LC1	LC2	LC3	LC4
AMG Easting	537359	537000	537000	537000	537000
AMG Northing	6277700	6278000	6279000	6276000	6275000
Density (#/100 m²)	3	½50	100	7	10
Artefacts					
Flake	66%	56%	60%	40%	61%
Flaked Piece	1%	13%	14%	25%	18.5%
Mod Flake	4%		3%	3%	
Core	10%	13%	13%	7%	4.5%
Backed Blade	6%	3.5%	5%	7%	4.5%
B Blade Blank	5%	3.5%			
Blade	4%	4%	1%	7%	4.5%
Hammer	1%	2%	1%	3.5%	
Burin	3%	2%			2%
Adze	1%		1%		4.5%
Adze Slug		1%			
Axe			1%		
Grinding St		2%	2%	2.5%	
Point					
Sharpening St					
Materials					
Indurated mudstone	75%	71%	60.5%	60%	65%
Quartz	19%	17%	27%	32%	28%
Silcrete	4%	4%		4%	
Quartzite	2%	3.5%	1%		7%
Sandstone		3.5%	11.5%	4%	
Volcanic					
Fercrete		1%			

Source: North Limited (1998)

4.5.1 Site P1

Site P1 contains a continuous scatter of artefacts concentrated in a band 50 – 100 metres from the Lake shore. This band is composed principally of unmodified flakes, cores, backed blades, blades, small blades and a burin. Table 2 summarises the artefacts and materials found at this site.

4.5.2 Site LC1

Site LC1 is a comparatively rich site. It contains one artefact for every two to three square metres, twenty times higher than in the pit area just to the south. The site also contains a range of artefacts characteristic of a number of men's activities (adze flakes, burins, cores, and backed blades). Other tools such as seed grinding implements and modified artefacts are notably absent. Three hearths with heat retainers were located. The site is located about 150 metres west of the Lakeshore. It is thought to be a men's activity area (Cane 1995a). Table 2 summarises the artefacts and materials found at this site.

4.5.3 Site LC2

Site LC2 is more typical of a "base camp" with flaked material scattered along both sides of a stream running into Lake Cowal. Artefact densities are as high as four to five per square metre over the larger site area. The raw materials present were typical of the other sites with about 60% of the assemblage composed of fine black chert. Table 2 summarises the artefacts and materials found at this site which include flakes, flaked pieces, cores, modified flakes, backed blades, blades, hand axes, hammerstones, adze flakes and ground artefacts.

4.5.4 Site LC3

Site LC3 is relatively sparse and contains 28 artefacts in a sampled area of 400 square metres. The area has also been disturbed by the construction and use of four dams, camping on the Lake Shore, and vehicle access along fence lines, through gates and around the dams. The site is thus not thought to have a great deal of interpretive value. Table 2 outlines the artefacts and materials found at Site LC3.

4.5.5 Site LC4

Site LC4 is a sparse, small artefact scatter adjacent to a small creek. Forty four artefacts were recorded in an area of 360 square metres (a density of approximately 1 artefact every 10 square metres). The site has been disturbed by dam construction and vehicle movement along fence lines to the lake shore.

Table 2 shows the range of artefacts at LC4 is broadly similar to site LC3 with a high proportion of flaked pieces, blades, backed blades, adze flakes and burins. The artefacts are highly reduced and this may be associated with hunting and woodworking or be the result of artefact breakage through disturbance.

4.6 BACK PLAIN ZONE

This zone has been subject to a number of surveys and assessments, concentrating on different areas.

A survey of the western side of the ML Area and the relocated travelling stock reserve area was undertaken in 1995 (Cane 1995b). Eight sites were located in this area (Exposure A through to Exposure H) as provided in Table 3.

Table 3
Summary of Artefacts & Materials – Back Plain Zone - Western side of ML Area and Relocated
TSR Area

Exposure	A	B	C	D	E	F	G	H
AMG Easting	536100	536100	534918	535640	535180	534393	534000	535214
AMG Northing	6278065	6278065	6278000	6277016	6276950	6277443	6277344	6276163
Density	1/350 m ²	1/300 m ²	1/23 m ²	1/55 m ²	1/19 m ²	1/25 m ²	1/8 m ²	1/5 m ²
Artefacts								
Flake	•	11 (92%)	32 (97%)	18 (95%)	38 (97%)	35 (100%)	16 (84%)	29 (97%)
Core	2 (100%)	•	•	•	•	•	•	•
Hammer	•	•	•	1 (5%)	•	•	1 (5%)	•
Grinding St	•	1 (8%)	1 (3%)	•	1 (3%)	•	2 (11%)	1 (3%)
Materials								
Chert	•	17%	9 %	11%	8%	14%	24%	21%
Quartz	50%	75%	79%	84%	90%	86%	59%	68%
Silcrete	•	•	6%	•	•	•	•	•
Quartzite	50%	•	3%	5%	•	•	5%	7%
Sandstone	•	8%	3%	•	2%	•	12%	4%

Source: North Limited (1998)

4.6.1 Exposure A

Exposure A is located on the southeast side of Cowal West Hill. Two artefacts were located in an area measuring 50 m x 40 m. These included one quartz core and one quartzite block with recent fractures (see Table 3).

4.6.2 Exposure B

Exposure B is located to the west of the foot slopes Cowal West Hill near a number of gilgai depressions. Thirteen artefacts were identified in an area of 40 m x 100 m. Most were quartz flakes and the number of artefacts recorded implies a density of about 1/300 square metres (see Table 3).

4.6.3 Exposure C

Exposure C is located half a kilometre to the west of Cowal West Hill. Twenty six artefacts were found exposed in an area measuring 30 m x 25 m under a tree. The artefacts and materials found are summarised in Table 3.

4.6.4 Exposure D

This exposure is located a short distance from a ephemeral drainage line running diagonally across the plains to the west of Cowal West Homestead. Three hearths were noted. Table 3 summarises the artefacts found at Exposure D.

4.6.5 Exposure E

Exposure E is located in a cleared area of 30 m x 25 m under a tree within a large area adjacent to a discrete gilgai. Thirty nine artefacts were recorded, most of which were quartz as shown in Table 3. Five heat retainers were also noted.

4.6.6 Exposure F

Exposure F is located adjacent to a dam, tow wheat silos, water troughs and a gate on the eastern margin of the proposed tailings storage area. Thirty five artefacts were noted in an area of 70 m x 50 m. Quartz made up 86% of the material recorded (refer to Table 3).

4.6.7 Exposure G

Exposure G is located on a scald, next to a small gilgai in the middle of the proposed tailings storage area. Nineteen artefacts were noted in a small area measuring 12 m x 12 m, giving a density of 1/8 square metres. These artefacts included three heat retainers. Table 3 summarises the artefacts found at Exposure G.

4.6.8 Exposure H

Exposure H is located on a track adjacent to the same creek that passes Exposure D. Thirty artefacts were recorded in an area measuring 40 m x 10 m consisting primarily of quartz and chert (see Table 3).

Another survey of the western side of the ML Area and the relocated travelling stock reserve area was undertaken in 1997 (Nicholson 1997). This identified six additional sites (Exposures I to N). A summary of the sites identified in this area is provided in Table 4 below.

Table 4
Summary of Artefacts & Materials – Back Plain Zone - further survey of western side of ML Area and Relocated TSR Area

Exposure	I	J	K	L	M	N
AMG Easting	533960	533279	533279	533900	534655	534622
AMG Northing	6278262	6278393	6277770	6276590	6276360	6276033
Density	1/15 m ²	1/11 m ²	1/3 m ²	1/200 m ²	1/33 m ²	1/17 m ²
Artefacts						
Flake	62%	8 (38%)	25 (86%)	4 (80%)	6 (40%)	16 (70%)
Flaked Piece	7%	3 (14%)	•	•	3 (20%)	1 (4%)
Mod Flake	7%	3 (14%)	2 (7%)	•	4 (27%)	2 (9%)
Core	10%	•	2 (7%)	•	2 (13%)	3 (13%)
Hammer	•	•	•	1 (20%)	•	•
Axe	•	1 (5%)	•	•	•	•
Grinding St	7%	5 (24%)	•	•	•	1 (4%)
Materials						
Chert	38%	32%	48%	20%	53%	39%
Quartz	38%	10%	38%	60%	7%	35%
Silcrete	10%	•	7%	•	13%	9%
Quartzite	4%	19%	•	20%	27%	4%
Sandstone	10%	29%	•	•	•	4%
Volcanic	•	10%	7%	•	•	9%

Source: North Limited (1998)

4.6.9 Exposure I

Artefacts were found scattered across exposures associated with a track which extends east west through the northern tailings storage. Artefacts were found along the track and on adjacent exposures, across an area measuring 60 m x 20 m. Several hearth features consisting of burnt clay nodules were visible in the exposures next to the track. Table 4 summarises the artefacts found at Exposure I.

4.6.10 Exposure J

This exposure is located on the east west track running through the northern tailings storage, 200 metres to the west of Exposure I. Artefacts were found scattered across an exposure associated with the track and across adjacent grass covered areas. Twenty one artefacts were recorded in a 15 m x 15 m sample area. Table 4 summarises the artefacts found at Exposure J.

4.6.11 Exposure K

This Exposure was identified near a dam on a drainage line to the south of Exposures I and J. A high density scatter of chert and quartz flakes was identified on an eroded area 50 m from the dam (visibility 90%). Twenty nine artefacts were recorded in a 100 square metre area, an average density of 1/3 square meters (see Table 4 below).

4.6.12 Exposure L

A small scatter of artefacts was recorded in the central part of the southern tailings storage. Exposure L was identified in a narrow band of remnant scrub between two cropped paddocks. A broken hammer stone, three quartz flakes and a chert flake were found scattered over an area of 100 x 10 m along a track (illustrated in Table 4). The artefacts were associated with a gilgai depression.

4.6.13 Exposure M

Artefacts were found scattered along a track, which leads south, through the southern tailings storage area. A drainage line located immediately to the east, outside the tailings storage area. Fifteen artefacts were recorded over a 500 square metre sample area along the track and adjacent exposures. Table 4 indicates an average density of one artefact per 33 square metres. Some cores and several broken quartzite pebbles were identified as well as a cluster of burnt clay nodules indicating the remains of a hearth.

4.6.14 Exposure N

Another Exposure was recorded 200 m to the south of exposure M, on the margin of the tailings storage area. Twenty three artefacts were found scattered over a 120 m length of track, or 400 square metres giving a density of 1/17 square metres. As shown in Table 4, these were mostly flakes with cores and a fragment of ground sandstone also present.

4.7 WATER PIPELINE AND BOREFIELD (PART OF THE BACK PLAINS ZONE)

The route of the proposed water pipeline and borefield was inspected by Johnston and Huys in 1997 and by Dr Pardoe in 2002. No sites were identified by Huys and Johnston. Dr Pardoe identified 16 localities (LCB1 to LCB16) during his inspection of the eastern end of the water pipeline route and borefield. (The western end of the water pipeline route is within the Lake Bed Zone and contains no Aboriginal sites).

A summary of the artefacts scatters identified in this area is provided in Table 5 below. All of these sites were submitted to DEC for registration on the AHIMS.

Table 5
Summary of Artefacts & Materials – Back Plain Zone - Eastern End of the Water Pipeline and Borefield

Site	AMG Easting	AMG Northing	Site Type	Contents
LCB1	554334	6283966	Stone artefact	Flake or flake fragment of black ?indurated mudstone (4.7X2.8X1.8 mm).
LCB2	554401 to 554419	6284412 to 6284528	Open site	Item 1. Conchoidal flake of black ?indurated mudstone (3.8X3.2X1.0 mm). Item 2. Flake fragment of black ?indurated mudstone (about 45 m north of Item 1). Item 3. Flake or flake fragment of black ?indurated mudstone (3.0X2.5X1.5 mm) Item 4. Small flake of black ?indurated mudstone. Items 5-7. Three small flake fragments of black ?indurated mudstone.
LCB3	554419	6284593	Stone artefact	Small flake of black ?indurated mudstone.
LCB4	554485	6284821	Stone artefact	Flake of black ?indurated mudstone from a microblade core.
LCB5	554470	6284845	Stone artefact	Flake of black ?indurated mudstone.
LCB6	554517	6285144	Stone artefact	Fragment of a large microlith of unidentified stone type (fine-grained siliceous stone, dull red in colour).
LCB7	554541	6285295	Stone artefact	Patinated flake; unidentified black stone type.
LCB8	554543	6285318	Stone artefact	Flake of unidentified stone type (fine-grained siliceous stone, dull red in colour).
LCB9	554560 to 554548	6285399 to 6285407	Open site	Item 1. Flake of black ?indurated mudstone. Item 2. Triangular microlith of black ?indurated mudstone. Item 4. Flake of black ?indurated mudstone. Item 5. Flake of quartz. Item 6. Proximal part of flake of ?indurated mudstone. Item 7. Flake of black ?indurated mudstone. Item 8. Flake of black ?indurated mudstone.
LCB10	554045	6285490	Stone artefact	Microblade core of black ?indurated mudstone.
LCB11	553756	6285529	Stone artefact	Flake of ?indurated mudstone.
LCB12	553607	6285559	Stone artefact	Small flake fragment of ?indurated mudstone.
LCB13	553314 to 553181	6285598 to 6285620	Open site	Item 1. Quartz flake. Item 2. Microlith backing flake of grey chert. Item 3. Flake of unidentified grey siliceous stone. Items 4-5. Flake of grey-orange silcrete and flake (probably from a microblade core) of ?indurated mudstone. Items 6-9. Three flakes and a flake fragment of ?indurated mudstone. Items 9-10. A large flake and a proximal portion of a flake.
LCB14	553085 to 553090	6286144 to 6286180	Open site	Items 1-4. A cluster of one small core and three conchoidal flakes of ?indurated mudstone. Item 4. A conchoidal flake of ?indurated mudstone.
LCB15	553143	6286501	Stone artefact	Flake portion of ?indurated mudstone.
LCB16	553269	6287320	Stone artefact	Proximal portion of flake of ?indurated mudstone.

Source: Pardoe (2002)

4.8 ROAD UPGRADE AREA (PART OF THE BACK PLAINS ZONE)

No sites were identified during the survey of this land by Huys and Johnston in 1995.

4.9 2002-2003 SURVEY RESULTS

Since recommencement of exploration activities there have been a number of further surveys conducted by Dr Colin Pardoe, Dr Johan Kamminga, emeritus Professor Jim Allen, emeritus Professor Richard Wright, Dr Peter Hiscock, Dr Sally Brockwell, Mr David Johnston and Mr Francis Shawcross.

Permit 1361 issued in May 2002 authorised the survey and collection of Aboriginal objects from within Lots 23, 24 and the Game Reserve (on the eastern side of the ML Area). The permit allows for the collection of surface Aboriginal objects and the excavation of a 250 x 250 x 250 mm test pit at every proposed drill hole site and collection of any Aboriginal objects contained within. The works conducted under the permit were undertaken in conjunction with Bill Rutter (a representative of the West Wyalong Local Aboriginal Land Council) and Wiradjuri Community representatives..

A survey and collection program was carried out in May/June 2003 and August 2003 pursuant to Permit 1468 on a range of areas within the ML Area and pursuant to Permit 1681 in August 2003 within the relocation travelling stock reserve area. The works conducted under the permits were undertaken in conjunction Wiradjuri Community representatives.

Analysis of the collected Aboriginal objects is to be reported on in due course. The collected Aboriginal objects are currently curated in the temporary keeping place located within the Project compound. Access to this keeping place is restricted to Wiradjuri Community representatives, consultant archaeologists and DEC staff.

4.10 INTERPRETATION OF SURVEY RESULTS

The primary activities displayed at each site have been interpreted by the various archaeologists who undertook the surveys in the Cowal Gold Project Area. A summary of their interpretations are included in Table 6.

Table 6
Primary Activities Registered Sites

Site	Primary Activities
P1	Occupation and hunting activities.
LC1	Residential, including microlithic workshop. Site may date between 4000 and 1500 years – coinciding with the time span of the backed blade tradition in Australia.
LC2	Activities associated with routine subsistence.
LC3 LC4	Hunting areas, quartz-based industries supplementing backed blade industry and occupation within the last 2000 years.
Exposures A to I and L to M	Transient occupation around the principle food and water resource of Lake Cowal itself.
Exposure J	More diverse occupation activities, including tool manufacture and seed grinding.
Exposure K	Tool manufacture and maintenance.
LCB1 - LCB16	By product of stone tool manufacture and unspecified tool use.

The above descriptions give an indication of the potential heritage values of each site.

5 MANAGEMENT OF REGISTERED SITES AND OTHER ABORIGINAL OBJECTS IN THE COWAL GOLD PROJECT AREA

5.1 BACKGROUND

Sites located within the Cowal Gold Project Area will be impacted to some extent by drilling activities, Project construction and/or support activities (including rehabilitation). The requirement to contain all Project components within the ML Area and Development Consent area limits the ability to locate all Project components away from registered sites and other Aboriginal objects. Depending on the activity, impacts/damage may vary from vehicle movements to excavation of land. Barrick aims to minimise impacts at all stages through project design, traffic management and cultural heritage management activities.

Management recommendations approved by the West Wyalong Local Aboriginal Land Council, Wiradjuri Regional Aboriginal Land Council and New South Wales Aboriginal Land Council were contained in the Cowal Gold Project EIS (see page E16 – E-17 of Appendix E). These were discussed during the consultation carried out in 2002 for Barrick's applications for section 87 permits and section 90 consents for the Cowal Gold Project. The parties consulted included the West Wyalong Local Aboriginal Land Council, Wiradjuri Regional Aboriginal Land Council, Wiradjuri registered native title claim group, Condobolin Community and the NSW Aboriginal Land Council.

Taking all of the above into account, Dr Pardoe developed the Research Design and Study Plan referred to in Section 4 of this IACHMP. Barrick's application for Permit 1468, Consent 1467, Permit 1681 and Consent 1680 attached Dr Pardoe's Research Design and Study Plan and sought permission to carry out the archaeological works in that plan.

Permit 1468 and Permit 1681 authorise the archaeological works proposed in the Research Design and Study Plan with a number of modifications. Consent 1468 and Consent 1680 authorise the destruction of certain Aboriginal objects in certain circumstances.

This section of the IACHMP sets out the salvage, excavation, monitoring and other management measures that will be taken for each of the registered archaeological sites and other Aboriginal objects within the Cowal Gold Project Area, in light of the EIS, the Research Design and Study Plan, Permit 1468, Consent 1467, Permit 1681 and Consent 1680.

The management measures include strategies for registered sites and other Aboriginal objects. In general, the strategies include: protection; investigation; collection; excavation; documentation and storage in an onsite "Keeping Place"; and collection and storage during topsoil stripping and stockpiling. The management measures for Aboriginal objects other than the registered sites are consistent within each of the management zones identified in the Research Design and Study Plan. These zones include:

- Lake bed zone;
- Beach zone;
- Slope zone;
- Lake edge ridge zone; and
- Back plain zone.

The general location and description of these zones is discussed in the Research Design and Study Plan.

During the consultation undertaken during 2002, the Wiradjuri people consulted indicated that regardless of archaeological type and characteristics, all sites and Aboriginal objects are of cultural importance and considered significant. This IACHMP has incorporated the outcomes of these consultations.

5.2 MANAGEMENT OF REGISTERED SITES

A summary of the major approved management measures for each of the registered sites is provided in Table 7. The details of the management measures for each registered site is contained in the Research Design and Study Plan as amended by Permit 1468 and Permit 1681. Both documents should be read carefully before the management measures are carried out.

Table 7
Summary of Major Management Measures for Registered Sites

Site Name	Zone and Location Relative to Currently Proposed Disturbance areas	Condition of Permit 1468	Management Summary
Site P1	Lake Edge Ridge Zone Proposed Open Pit	Special Conditions 6, 12 and 13	Representative sample of surface Aboriginal objects to be collected, documented and stored at an onsite "Keeping Place". Remaining Aboriginal objects to be collected with the top soil during soil stripping and temporarily stored in soil stockpiles. Collected surface Aboriginal objects to be eventually replaced.
		Special Condition 3	Excavation of 3 alluvial fans within footprint of proposed open pit and Site P1. A representative sample of sub-surface Aboriginal objects to be collected, documented and stored at an onsite "Keeping Place".
Site P2	Beach Zone Proposed Open Pit	Special Condition 4	Section of the scarred tree to be removed, conserved and stored or displayed at an onsite "Keeping Place".
Site LC1	Lake Edge Ridge Zone Between Northern Waste Emplacement and Open Pit	Special Conditions 6, 12 and 13	Representative sample of surface Aboriginal objects to be collected, documented and stored for safe-keeping at an onsite "Keeping Place. Remaining Aboriginal objects to be collected with the top soil during soil stripping and temporarily stored in soil stockpiles. Collected surface Aboriginal objects to be eventually replaced.
		Special Condition 5.	Excavation of Site LC1. A representative sample of sub-surface Aboriginal objects to be collected, documented and stored at an onsite "Keeping Place".
Site LC2	Lake Edge Ridge Zone Close to Northern Waste Emplacement	Special Conditions 6, 12 and 13	If site can be avoided – fencing and sign posting to protect site. If site cannot be avoided - representative sample of surface Aboriginal objects to be collected, documented and stored for safe-keeping at an onsite "Keeping Place". Remaining Aboriginal objects to be collected with the top soil during soil stripping and temporarily stored in soil stockpiles. All collected Aboriginal objects to be eventually replaced.
Site LC3	Lake Edge Ridge Zone Close to Southern Waste Emplacement	Special Conditions 6, 12 and 13	Representative sample of surface Aboriginal objects to be collected, documented and stored for safe-keeping at an onsite "Keeping Place. Remaining Aboriginal objects to be collected with the top soil during soil stripping and temporarily stored in soil stockpiles. All collected Aboriginal objects to be eventually replaced.
Site LC4	Lake Edge Ridge Zone Close to Southern Waste Emplacement	Special Conditions 6, 12 and 13	Representative sample of surface Aboriginal objects to be collected, documented and stored for safe-keeping at an onsite "Keeping Place. Remaining Aboriginal objects to be collected with the top soil during soil stripping and temporarily stored in soil stockpiles. All collected Aboriginal objects to be eventually replaced.

Site Name	Zone and Location Relative to Currently Proposed Disturbance areas	Condition of Permit 1468	Management Summary
Exposure A	Back Plain Zone Within Northern Waste Emplacement	Special Conditions 6, 12 and 13	Representative sample of surface Aboriginal objects to be collected, documented and stored for safe-keeping at an onsite "Keeping Place". Remaining Aboriginal objects to be collected with the top soil during soil stripping and temporarily stored in soil stockpiles. All collected Aboriginal objects to be eventually replaced.
Exposure B	Back Plain Zone Close to Northern Waste Emplacement	Special Condition 8	Conservation works - covering by geo-textile blanket and sign posting to protect site. If Site is proposed to be utilised – procedure in Special Condition 6 is authorised after notice to DEC and consultation with Aboriginal community.
Exposure C	Back Plain Zone Close to Reclaim Water Dam	Special Condition 8	Conservation works - covering by geo-textile blanket and sign posting to protect site. If Site is proposed to be utilised – procedure in Special Condition 6 is authorised after notice to DEC and consultation with Aboriginal community.
Exposure D	Back Plain Zone Close to Service Corridor	Special Condition 8	Conservation works - covering as much as possible of the site by geo-textile blanket and sign posting to protect site. If Site is proposed to be utilised – procedure in Special Condition 6 is authorised after notice to DEC and consultation with Aboriginal community.
Exposure E	Back Plain Zone Close to Southern Tailings Storage	Special Condition 8	Conservation works - covering by geo-textile blanket and sign posting to protect site. If Site is proposed to be utilised – procedure in Special Condition 6 is authorised after notice to DEC and consultation with Aboriginal community.
Exposure F	Back Plain Zone Within Northern Tailings Storage	Special Conditions 6, 12 and 13	Representative sample of surface Aboriginal objects to be collected, documented and stored for safe-keeping at an onsite "Keeping Place". Remaining Aboriginal objects to be collected with the top soil during soil stripping and temporarily stored in soil stockpiles. All collected Aboriginal objects to be eventually replaced.
Exposure G	Back Plain Zone Within Northern Tailings Storage	Special Conditions 6, 12 and 13	Representative sample of surface Aboriginal objects to be collected, documented and stored for safe-keeping at an onsite "Keeping Place". Remaining Aboriginal objects to be collected with the top soil during soil stripping and temporarily stored in soil stockpiles. All collected Aboriginal objects to be eventually replaced.
Exposure H	Back Plain Zone Close to Access Road and Southern Tailings Storage	Special Condition 8	Conservation works - covering by geo-textile blanket and sign posting to protect site. If Site is proposed to be utilised – procedure in Special Condition 6 is authorised after notice to DEC and consultation with Aboriginal community.
Exposure I	Back Plain Zone Within Northern Tailings Storage	Special Conditions 6, 12 and 13	Representative sample of surface Aboriginal objects to be collected, documented and stored for safe-keeping at an onsite "Keeping Place". Remaining Aboriginal objects to be collected with the top soil during soil stripping and temporarily stored in soil stockpiles. All collected Aboriginal objects to be eventually replaced.
Exposure J	Back Plain Zone Within Northern Tailings Storage	Special Conditions 6, 12 and 13.	Representative sample of surface Aboriginal objects to be collected, documented and stored for safe-keeping at an onsite "Keeping Place". Remaining Aboriginal objects to be collected with the top soil during soil stripping and temporarily stored in soil stockpiles. All collected Aboriginal objects to be eventually replaced.
Exposure K	Back Plain Zone Within Northern Tailings Storage	Special Conditions 6, 12 and 13.	Representative sample of surface Aboriginal objects to be collected, documented and stored for safe-keeping at an onsite "Keeping Place". Remaining Aboriginal objects to be collected with the top soil during soil stripping and temporarily stored in soil stockpiles. All collected Aboriginal objects to be eventually replaced.
Exposure L	Back Plain Zone Within Southern Tailings Storage	Special Conditions 6, 12 and 13	Representative sample of surface Aboriginal objects to be collected, documented and stored for safe-keeping at an onsite "Keeping Place". Remaining Aboriginal objects to be collected with the top soil during soil stripping and temporarily stored in soil stockpiles. All collected Aboriginal objects to be eventually replaced.
Exposure M	Back Plain Zone Within Southern Tailings Storage	Special Conditions 6, 12 and 13	Representative sample of surface Aboriginal objects to be collected, documented and stored for safe-keeping at an onsite "Keeping Place". Remaining Aboriginal objects to be collected with the top soil during soil stripping and temporarily stored in soil stockpiles. All

Site Name	Zone and Location Relative to Currently Proposed Disturbance areas	Condition of Permit 1468	Management Summary
			collected Aboriginal objects to be eventually replaced.
Exposure N	Back Plain Zone Within Southern Tailings Storage and close to Access Road	Special Conditions 6, 12 and 13.	If site can be avoided – fencing and sign posting to protect site. If site cannot be avoided - Representative sample of surface Aboriginal objects to be collected, documented and stored for safe-keeping at an onsite “Keeping Place”. Remaining Aboriginal objects to be collected with the top soil during soil stripping and temporarily stored in soil stockpiles. All collected Aboriginal objects to be eventually replaced.
Site LCB9	Back Plain Zone Within water pipeline area/borefield	Special Condition 7	Representative sample of surface Aboriginal objects to be collected, documented and stored for safe-keeping at an onsite “Keeping Place”. Excavation of test pits and possible extended excavation. A representative sample of sub-surface Aboriginal objects to be collected, documented and stored at an onsite “Keeping Place”. All collected Aboriginal objects to be eventually replaced.
Site LCB14	Back Plain Zone Within water pipeline area/borefield	Special Condition 7	Representative sample of surface Aboriginal objects to be collected, documented and stored for safe-keeping at an onsite “Keeping Place”. Excavation of test pits and possible extended excavation. A representative sample of sub-surface Aboriginal objects to be collected, documented and stored at an onsite “Keeping Place”. All collected Aboriginal objects to be eventually replaced.
Site LCB1-LCB8, LCB10-LCB13, LCB15, LCB16	Back Plain Zone Within water pipeline area/borefield	Special Condition 2	No specific archaeological works required.

Source: North Limited (1998); Pardoe (2002)

5.3 MANAGEMENT OF OTHER ABORIGINAL OBJECTS

Management measures are not limited to the Registered Sites. Permit 1468 and Permit 1681 authorise a range of management measures proposed in the Research Design and Study Plan for other Aboriginal objects in the Cowal Gold Project Area that are not contained within the Registered Sites.

A summary of the major approved management measures for other Aboriginal objects is set out below. The details of the management and mitigation measures for other Aboriginal objects is contained in the Research Design and Study Plan as amended by Permit 1468 and Permit 1681. These documents should be read carefully before the management measures are carried out.

5.3.1 Lake Bed Zone

No management measures are required in this area.

5.3.2 Beach Zone

Representative sample of surface Aboriginal objects to be collected, documented and stored for safe-keeping at an onsite “Keeping Place”. Remaining Aboriginal objects to be collected with the top soil during soil stripping and temporarily stored in soil stockpiles. Collected surface Aboriginal objects to be eventually replaced. (See Special Condition 10 of Permit 1468).

Excavation of 3 alluvial fans within footprint of proposed open pit and Site P1. A representative sample of sub-surface Aboriginal objects to be collected, documented and stored at an onsite "Keeping Place". (See Special Condition 4 of Permit 1468).

5.3.3 Slope Zone

No management measures are required in this area.

5.3.4 Lake Edge Ridge Zone

Representative sample of surface Aboriginal objects to be collected, documented and stored for safe-keeping at an onsite "Keeping Place". Remaining Aboriginal objects to be collected with the top soil during soil stripping and temporarily stored in soil stockpiles. Collected Aboriginal objects to be eventually replaced. (See Special Condition 10 of Permit 1468).

5.3.5 Back Plain Zone

Within the ML Area, water pipeline area and borefield area (Permit 1468) - Inspection of land to identify concentrations of surface Aboriginal objects. Where encountered, concentrations to be measured and recorded. Aboriginal objects to be collected with the top soil during soil stripping and temporarily stored in soil stockpiles. Collected Aboriginal objects to be eventually replaced. (See Special Condition 9 of Permit 1468).

Within the road upgrade area and relocated travelling stock reserve area (Permit 1681 – Representative sample of surface Aboriginal objects to be collected, documented and stored for safe-keeping at an onsite "Keeping Place". (See Special Condition 3 of Permit 1681).

5.4 FURTHER MANAGEMENT MEASURES (INCLUDING MONITORING) AFTER MAJOR STEPS IN 5.2 AND 5.3 HAVE BEEN TAKEN

In all areas within the ML Area, water pipeline area and borefield area where soil stripping occurs, the area will be further inspected after the top soil removal to identify "datable materials". Samples will be obtained and submitted for chronological analysis (see Special Condition 11 of Permit 1468).

A cultural heritage officer approved by the West Wyalong Aboriginal Land Council will be available on site to monitor construction earthworks within the Development Consent Area, as required by Condition 3.3(a) of the Development Consent. An archaeologist will also be on site to monitor the construction earthworks to the maximum depth that Aboriginal objects are likely to exist (this may range from 10 cm on the lake bed to 50 cm in other places).

Construction earthworks comprises the following activities:

- vegetation clearance and top soil removal from the surface of the land within the footprint of each facility (tailings dams, processing facilities, waste dumps, temporary bund, permanent bund, pit, pipelines, ancillary infrastructure and roads);
- preparation of stockpile areas;
- construction of roads;
- construction of temporary isolation bund and associated infrastructure;

- initial activities associated with construction of permanent bund (construction to a height of approximately 2 m);
- construction of pipelines;
- earthworks investigations, inspection and monitoring activities;
- preparation of tailings dams footprints, construction of foundations and construction and inspection access; and
- preparation of processing facilities footprint, construction of foundations and construction and inspection access.

If an Aboriginal object (other than human skeletal remains) of a type that has not been previously identified during the archaeological works referred to in section 5.2 and 5.3 above, is identified during construction earthworks, the Aboriginal object will be collected (see Special Condition 10 of Permit 1468 and Special Condition 11 of Permit 1681).

Construction will stop if human skeletal remains are identified, and DEC will be immediately notified (see Special Condition 1 in each of Permit 1468, Consent 1467, Permit 1681 and Consent 1680).

A cultural heritage officer will also periodically monitor works in close proximity to protected Aboriginal sites throughout the construction period.

5.5 STUDY OF COLLECTED ABORIGINAL OBJECTS

Special Condition 12 of Permit 1468 and Special Condition 4 of Permit 1681 provide that all collected Aboriginal objects must be dealt with as follows:

- sufficient data must be taken from each Aboriginal object, including material type and size characteristics, to enable a technological analysis to be undertaken for report purposes;
- this information must form the basis of a master inventory which must be maintained at all times; and
- after collected items have been closely examined and classified, each collected item that has been classified as an Aboriginal object shall be separately bagged and labelled duplicating the above information and placed in a separate, clearly labelled box detailing the specific area of collection.

5.6 CURATION OF COLLECTED ABORIGINAL OBJECTS – KEEPING PLACE

Special Condition 13 of Permit 1468 and Special Condition 5 of Permit 1681 provides that all collected Aboriginal objects must be kept in the existing temporary Keeping Place within the Project Compound. It notes that these are temporary facilities and a more permanent on site Keeping Place may be required in the future for Aboriginal objects removed from the mine footprint area in the event that this area remains a water filled void.

Special Condition 9 of Consent 1467 provides that Barrick must fund the design and construction of a keeping place for Aboriginal objects collected pursuant to Permit 1468, at a location to be agreed with the registered native title claimants for the ML Area and the West Wyalong Local Aboriginal Land Council.

Barrick must reach an agreement with the registered native title claimants for the ML Area and the West Wyalong Local Aboriginal Land Council about the details and scope of the keeping place, but if no agreement is reached before the commencement of construction, the details and scope will be determined by DEC. See section 6 of this IACHMP.

5.7 ROLES AND RESPONSIBILITIES FOR CULTURAL HERITAGE MANAGEMENT

Overall responsibility for the Cowal Gold Project lies with the General Manager of the Cowal Gold Project. The General Manager will ensure that the management measures in this IACHMP are implemented, including by delegation. Permit 1468 and Permit 1681 are held by Barrick's consultant archaeologists Dr Pardoe and Dr Kamminga, and they are responsible for ensuring that the terms and condition of the permits are complied with.

Barrick no longer intends to employ a "Land, Environment and Wiradjuri Heritage Officer" as referred to in the Research Design and Study Plan. During the negotiation of the Native Title Agreement and the consultation with the registered Wiradjuri claim group about Barrick's application for a section 87 permit and section 90 consent for the Cowal Gold Project, the registered Wiradjuri claim group were not supportive of Barrick directly employing Wiradjuri people to do cultural heritage work. They asked Barrick not to employ a "Land, Environment and Wiradjuri Heritage Officer" or sponsor a Land Council position. Instead, they asked Barrick to fund the creation of the CH Company to contract with Barrick to provide cultural heritage services so that the Wiradjuri Condobolin people could directly exercise their custodial responsibilities for cultural heritage. Barrick agreed to do so in the Native Title Agreement.

Accordingly, Barrick will seek to contract with the CH Company to provide the services of Wiradjuri Condobolin persons to assist in the conduct of the management measures referred to above, including persons to act as cultural heritage officers and Wiradjuri field assistants.

If the CH Company is not established, or advises Barrick that it does not wish to provide the above services, Barrick will retain Wiradjuri Condobolin people directly to act as Wiradjuri field assistants and cultural heritage officers to assist in the conduct of cultural heritage management activities.

The responsibilities for the various roles are set out in the table below.

Table 8
Roles and Responsibilities

Role	Responsibilities
General Manager, Cowal Gold Project	<ul style="list-style-type: none"> ▪ Overall responsibility for the implementation of the cultural heritage management measures required by the Research Design and Study Plan, Permit 1468, Permit 1681 and this IACHMP (including by delegation). ▪ Overall responsibility for the on site Keeping Place. ▪ Liaison with the CH Company to contract for the provision of cultural heritage services, including the provision of Wiradjuri field assistants and cultural heritage officers ▪ Retaining Wiradjuri Condobolin people as Wiradjuri field assistants and cultural heritage officers if CH Company does not wish to provide the services • Engagement of archaeologists • Supervise the Barrick field coordinator (on matters not supervised by the Project Consultant Archaeologist)
Project Consultant Archaeologist (holder of Permit 1468 and Permit 1681)	<ul style="list-style-type: none"> ▪ Conduct archaeological works authorised by Permit 1468 and Permit 1681 and monitor construction earthworks to a depth where Aboriginal objects are likely to exist ▪ Supervise the Barrick field coordinator, cultural heritage officers and Wiradjuri field assistants ▪ Provide technical supervision of the Keeping Place ▪ Carry out technical work and meet reporting obligations in Permit 1468 and Permit 1681 ▪ Assess the effectiveness of conservation and mitigation measures and monitor Registered Sites that are conserved or otherwise not within proposed disturbance areas ▪ Provide any cultural heritage services required as a result of the offset condition in Consent 1467 • Advise Barrick with respect to all cultural heritage matters arising in relation to the Project
Barrick Field Coordinator (Barrick employee)	<ul style="list-style-type: none"> ▪ Liaison with the CH Company ▪ Coordination and management of the archaeological works under the supervision of the Project Consulting Archaeologist or General Manager Cowal Gold Project (as appropriate), including working arrangements for the Wiradjuri field assistants and cultural heritage officers (but not participate in collection works) ▪ Supervise the management and maintenance of the Registered Sites that are conserved or otherwise not within proposed disturbance areas ▪ Supervise the management and maintenance of the onsite Keeping Place
Cultural Heritage Officers ⁽¹⁾ (this role may be split between different personnel, particularly the management/field work elements)	<ul style="list-style-type: none"> ▪ Act as a point of contact for liaison between Barrick and the Wiradjuri Condobolin people with respect to the conduct of cultural heritage management activities ▪ Provide suitable Wiradjuri persons to act as Wiradjuri field assistants and cultural heritage officers and to provide other cultural heritage services in accordance with the Native Title Agreement ▪ Monitor construction earthworks ▪ Periodically monitor works in close proximity to protected Aboriginal sites throughout the construction period ▪ Monitor the replacement of Aboriginal objects pursuant to Permit 1468 and Permit 1681
Wiradjuri Field assistants ⁽²⁾	<ul style="list-style-type: none"> ▪ Assist in the conduct of archaeological works under the supervision of the Project Consulting Archaeologist ▪ Assist in the conduct of other management activities

Notes:

- (1) In the event that the CH Company does not wish to provide the above cultural heritage services to Barrick, Barrick will engage a suitable Wiradjuri person directly in the role of cultural heritage officer to carry out these responsibilities.
- (2) In the event that the CH Company does not wish to provide the above cultural heritage services to Barrick, Barrick will engage suitable Wiradjuri people directly in the role of Wiradjuri field assistants to carry out these responsibilities.

6 CULTURAL HERITAGE DISSEMINATION AND OFFSETS

6.1 RECOMMENDATIONS IN EIS

The EIS contains a number of recommendations regarding cultural heritage offsets and dissemination including the establishment of displays reflecting aspects of the cultural heritage at Lake Cowal, sponsoring a booklet that provides a readable account of Aboriginal heritage and history at Lake Cowal and West Wyalong and sponsoring the search for and return of the carved trees originally taken from the Bland.

Barrick committed to providing all of these offsets during the consultation about Barrick's application for a section 87 permit and section 90 consent for the Cowal Gold Project. It also committed to providing a keeping place for Aboriginal objects collected from the Cowal Gold Project Area. These commitments are reflected in the offset conditions of Consent 1467, as set out below.

6.2 OFFSET CONDITIONS IN CONSENT 1467

Special Condition 9 of Consent 1467 is headed "Offset Conditions" and provides as follows:

- 9.1 The obligations contained in this condition are subject to the following:
- (a) subject to subparagraph (b) below, the details and scope of each of the matters referred to in this condition are to be agreed in writing with the [registered native title claimants for the area of MLA45 and the West Wyalong Local Aboriginal Land Council (hereafter, the "**Aboriginal Community**"), unless such agreement is not reached before the commencement of construction, when they will be determined by the Director-General;
 - (b) if the Aboriginal Community advises Barrick Australia Limited and the Director-General in writing that they do not want Barrick Australia Limited to fund one of the obligations referred to in paragraphs 9.2 to 9.5, the obligation contained in the relevant condition immediately ceases;
 - (c) the total amount of funds dedicated to complying with the obligations referred to in paragraphs 9.2 to 9.5 need not exceed \$250,000; and
 - (d) the deadline for completion of any of the obligations referred to in paragraphs 9.2 to 9.5 may be extended by the Director-General if he considers that it is reasonable in the circumstances to do so.
- 9.2 Barrick Australia Limited must fund the design and construction of a keeping place for Aboriginal objects collected pursuant to Permit 1468, at a location to be agreed with the Aboriginal Community. The keeping place must be constructed within 12 months of the commencement of mining operations.
- 9.3 Barrick Australia Limited must fund a regional cultural heritage study and the associated research and publication of a booklet about Wiradjuri cultural heritage and associations with land. The study and booklet must be centred on Lake Cowal and the area between Lake Cowal and the Lachlan River. The scope and methodology of the study shall be agreed with the Director-General. The regional study shall identify areas of cultural significance to Aboriginal people including areas within Barrick Australia Limited's land holdings which may be considered for future conservation. The study must be completed and the booklet published within 3 years of the commencement of construction, subject to any requests for extensions of time by the Aboriginal Community to allow additional study to be carried out. 1000 copies of the booklet must be produced. The booklet must be distributed to the Wiradjuri Council of Elders, the West Wyalong Local Aboriginal Land Council, the Condobolin Local Aboriginal Land Council, the Mooka Traditional Owners Council, the Wiradjuri Regional Aboriginal Land Council, the New South Wales Aboriginal Land Council, NPWS, the Australian Museum, NSW Heritage Office, local public libraries, local councils, local schools, the Mitchell Library and other bodies nominated by the Aboriginal Community

- 9.4 Barrick Australia Limited must fund the creation of a transportable display consisting of information and material on the Wiradjuri people in the context of Lake Cowal and the region generally, to be available for educational purposes at schools, public libraries, council offices, public buildings and other places nominated by the Aboriginal Community. The display must be completed within 6 months of publication of the booklet referred to in paragraph 9.3 above.
- 9.5 Barrick Australia Limited must fund a survey to document the whereabouts of Aboriginal objects taken from Wiradjuri land and held in public and private collections around Australia, and support (by financial and other means) any submission by the Aboriginal Community for the return of that material to the Wiradjuri people. The survey must be completed within 12 months from the commencement of construction.

Barrick has commenced negotiations about this agreement with the registered Wiradjuri claim group and the West Wyalong Local Aboriginal Land Council.

6.3 REPORTING WIRADJURI HERITAGE MANAGEMENT

6.3.1 Briefings to the Wiradjuri Condobolin community on cultural heritage issues

In the Native Title Agreement, Barrick agrees to brief the Wiradjuri Condobolin people:

- within 30 days of Board Approval for the project, on matters including cultural heritage issues;
- annually, on matters including cultural heritage issues; and
- on any cultural heritage issues that Barrick reasonably believes they should or might wish to be informed of as soon as possible after they arise, and on any material changes in the circumstances which were the subject of a briefing.

Barrick is also required by the Native Title Agreement to keep the CH Company fully informed about Barrick's intentions and timing with respect to cultural heritage management activities.

6.3.2 Mining Rehabilitation and Environmental Management Process (MREMP)

The environmental management of the Project would be conducted in accordance with the MREMP. The MREMP is a statutory requirement of the Department of Mineral Resources for the operation of a mine. The process requires two forms of statutory documentation, the Mining Operations Plan (MOP) and the Annual Environmental Management Report (AEMR).

Both the MOP and the AEMR provide a means by which compliance with lease conditions and licenses is demonstrated. The environmental monitoring programs provide data for the measurement of compliance.

Mining Operations Plan (MOP)

Barrick will produce a MOP, to give a detailed account of the proposed mine site activities for a nominated term. It will include all mining and rehabilitation operations and relevant environmental controls and procedures necessary for compliance with lease conditions. It will include the relevant Aboriginal heritage management measures to be included during works for the nominated MOP term.

Annual Environmental Management Report (AEMR)

The AEMR, issued by Barrick, will annually report relevant cultural heritage management measures conducted for the previous year. Proposed management measures for the next year will also be reported.

6.4 AHIMS

The DEC maintains a register of known sites including occupation sites (open sites and Aboriginal reserves), rock engravings, carved/scarred trees, ceremonial grounds, stone arrangements to mark special sites, quarry sites, stone tools and workshops, axe-grinding grooves, burials and natural sacred sites, called the AHIMS (DEC, 1997).

Results of previously conducted and future surveys would be made available to DEC for inclusion on the AHIMS.

7 REFERENCES

Cane, S.B. 1995a *Camp sites at Lake Cowal: an archaeological survey in central NSW*. Culture and Heritage, SA. Report to NSR, Environmental Consultants.

Cane, S.B. 1995b *Camp sites at Lake Cowal: a supplementary report*. Culture and Heritage, SA. Report to NSR, Environmental Consultants.

Huys, S. and Johnson, D. 1995 *An archaeological survey of areas between Forbes and Lake Cowal*. A report to North Limited. Australian Archaeological Survey Consultants.

Kammaing, J. 2002 *Archaeological survey of the borefield for the Cowal Gold Project, NSW*. National Heritage Consultants Draft Report to Barrick Australia Ltd. August 2002.

Nicholson, A.F. 1997 *An archaeological survey of a proposed transmission line between Temora and Lake Cowal*. Report to Resource Strategies.

North Limited., 1998 Cowal Gold Project, Environmental Impact Statement.

Pardoe, C 2002 *Supplementary archaeological survey of part of the proposed borefield and pipeline for the Cowal Gold Project, Lake Cowal, NSW*. Draft Report to Barrick Australia Ltd.

Paton, R. 1989 *Preliminary archaeological inspection of Lake Cowal Mining Exploration Lease*. Report to NSR Environmental Consultants, Melbourne.

Appendix 1

Permit 1468





PERMIT #: 1468
(HO use only)

NATIONAL PARKS AND WILDLIFE ACT 1974
SECTION 57 (1)

PERMIT (AMENDED)

PERMIT TO CARRY OUT PRELIMINARY RESEARCH, EXCAVATE, SALVAGE and COLLECT

PERMIT ISSUED TO:

- | | | | |
|---|--|---|--|
| 1 | Dr Colin Pardoe
Bio-anthropology and Archaeology
3 Rose Street
Gilberton
Sth Australia, 5081 | 2 | Dr Johan Kamminga
National Heritage Consultants
34 Simpson Street
Watson
ACT, 2602 |
|---|--|---|--|

Postal Address:
As Above

AUTHORITY is hereby given for the person/s named above to:

- disturb or excavate any land, or cause any land to be disturbed or excavated, for the purpose of discovering an Aboriginal object within the meaning of that term in section 5(1) of the *National Parks and Wildlife Act 1974 (NSW)* ("Aboriginal object"); and
- to disturb or move on any land an Aboriginal object that is the property of the Crown, in the course of undertaking research, excavation, salvage, collection and storage/curation of Aboriginal objects as described in the Research Design and Study Plan for the Barrick Australia Limited Cowal Gold Project which was Attachment 5 to the application for this permit dated 15 August 2002 (the "Application"), as modified by the special and specific conditions contained in this permit.

AREA COVERED by Permit for purpose as named above: as described in Schedule B of Consent # 1467 issued in conjunction with this permit.

TERM OF PERMIT: As specified in Specific Condition 5 of Consent #1467 issued in conjunction with this permit.

TERMS AND CONDITIONS OF THIS PERMIT

This permit is issued subject to the General Terms and Conditions covering archaeological permits and consents, as well as those Specific and Special Terms and Conditions pertaining to each type of permit as determined by the Director-General, which may appear hereunder: See attached page.

DATED at *Burrumbidgee* this *27th* day of *October* 2003

Director-General of the Department of Environment and Conservation

Terry Keon A/Director Control
27-10-03

SPECIAL and SPECIFIC CONDITIONS

1. This permit does not cover human skeletal remains. Should human remains be uncovered all work at the particular location shall cease and the Department of Environment and Conservation, Cultural Heritage Branch, archaeologist at Dubbo shall be notified immediately.
2. All work shall be carried out in accordance with the Research Design and Study Plan that is Attachment 5 to the Application (the "Research Design and Study Plan") as modified by the Special and Specific Conditions applying to the permit.
3. This permit allows for test pit investigations and extended excavation (if warranted) of three alluvial fans within the footprint of the proposed open cut pit and site P1 (NPWS# 43-4-7). It further allows for the salvage, collection and storage/curation of a representative sample of Aboriginal objects located during these works in accordance with Special Condition 12. These works must be carried out in the following manner:
 - Excavation need not proceed beyond the test pit investigation stage in the absence of any cultural material.
 - All test pits and excavations shall be conducted in accordance with the Research Design and Study Plan except that test pits for the alluvial fans on the open cut footprint shall be placed as follows. A 10 metre (or less) x 1 metre trench shall be placed on the fan on any axis as determined by the permit holders and/or their instructed delegates who must be qualified archaeologists. This shall be intersected by a second trench of the same dimensions perpendicular to the first such that the trenches will define and fall within the boundaries of an extended 10 m x 10 m excavation should cultural material be encountered.
4. The scarred tree known as P2 (NPWS # 43-4-8) shall be treated as per the Research Design and Study Plan with the following qualifications:
 - The tree shall be cut a minimum of 40-50 cm above and below the scar (where possible). Where this is not possible cuts will be made as far away from the scar edge as practicable.
 - The cut surfaces of the scarred sections shall be bored with a number of holes which shall be filled with an insecticide to provide termite resistance. The holes should then be plugged and the surfaces sealed to exclude moisture.
 - The tree shall be temporarily stored in the temporary keeping place (as approved for Section 87 permit no 1361) in a manner that will provide freedom from incidental damage yet allow for continuous air circulation. That is, the tree shall not be wrapped or constrained in any manner that prevents the timber from breathing or causes it to become wet such that it may be subject to undue cracking or fungal attack.
 - The final location of the tree shall be determined in consultation with the Wiradjuri Condobolin Corporation. The final location of the tree must satisfy the following. A concrete slab or similar shall be laid and the super structure of the shelter be prefabricated and ready for immediate installation before moving the object to the selected location. This is to avoid any undue exposure to the weather that may negatively impact upon the integrity of the object. Said shelter shall be constructed in a manner that provides security but visual access only to the object.
 - Interpretive signage shall be provided by Barrick Australia Limited to the shelter briefly explaining the traditional function of the object.
5. This permit allows for the excavation of site LC 1 (NPWS# 43-3-21). It further allows for the salvage, collection and storage/curation of a representative sample of Aboriginal objects located during these works in accordance with Special Condition 12. The excavation shall be undertaken in accordance with the Research Design and Study Plan by a specialist archaeologist nominated by the registered native title claimants for the area of MLA 45 as specified in the Research Design and Study Plan. If the registered native title claimants for the area of MLA 45 advise the permit holders in writing that they do not wish to nominate a specialist archaeologist to undertake these works, the excavation works shall be undertaken by the permit holder and/or his instructed delegates who must be qualified archaeologists. The excavations will however be overseen by a holder of this

permit and the nominated archaeologist must comply with any directions from the permit holders.

6. Salvage works at sites LC1, LC2, LC3, LC4, PL, A, F, G, I, J, K, L, M and N, defined in Attachment S of the Application and situated on the land described in Schedule B of Consent # 1467 shall be completed in the following manner:
 - A permit holder and/or his instructed delegates shall inspect the land in these site locations and identify surface Aboriginal objects. The Wiradjuri Condobolin Corporation, West Wyalong Local Aboriginal Land Council and Mooka Traditional Owners Council (hereafter the "Aboriginal community") shall be notified of the programme and a representative/s shall be invited to observe and where appropriate participate in recording and collection works.
 - A representative sample of Aboriginal objects from each site shall be taken. Their position shall be recorded by a GPS and they shall be bagged and temporarily stored in accordance with Special Condition 13 until they are dealt with in accordance with the procedures outlined in Special Condition 12.
 - The collected Aboriginal objects shall be replaced in a location as close as possible to their original location at a time when the works within the specific area do not pose a future threat to them. Replacement will be supervised by a permit holder and/or his instructed delegates. The Aboriginal community shall be notified of the programme and a representative/s shall be invited to observe and where appropriate participate in replacement works.
 - Remaining Aboriginal objects shall be collected with the soil during soil stripping operations and temporarily stored in soil stockpiles before being replaced during rehabilitation activities.
 - A Cultural Heritage Officer retained by Barrick shall undertake routine monitoring following replacement as a threat abatement measure. Should this officer identify a likely threat, the officer shall be empowered to halt proceedings. Barrick Australia Limited shall immediately upon notification, investigate the matter, and should the threat be verified, take necessary action to remove or mitigate the threat.

7. Salvage works at sites LCB9 and LCB14 defined in Attachment S of the Application and situated on land described in Schedule B of Consent # 1467 shall be completed in the following manner:
 - A permit holder and/or his instructed delegates shall inspect the land in these site locations and identify surface Aboriginal objects. The Aboriginal community shall be notified of the programme and a representative/s shall be invited to observe and where appropriate participate in recording and collection works.
 - A representative sample of surface Aboriginal objects from each of these sites shall be collected. Their position shall be recorded by a GPS and they shall be bagged and temporarily stored in accordance with Special Condition 13 until they are dealt with in accordance with the procedures described in Special Condition 12.
 - a permit holder and/or his instructed delegates who must be qualified archaeologists shall excavate test pits of the width of the pipeline trench x 50 cm long x 50 cm deep, in 5 cm spits, at 5 metre intervals along that part of the proposed pipeline trench that is within Sites LCB9 and LCB14 to determine the existence of sub-surface cultural materials;
 - if sub-surface cultural materials are identified, an extended excavation shall be carried out along the length of the proposed pipeline trench within the relevant site to a maximum depth of 1 metre;
 - a representative sample of Aboriginal objects located during the test pit excavations and extended excavations (if any) shall be collected. Their position shall be recorded by a GPS and they shall be bagged and temporarily stored in accordance with the procedures described in Special Condition 12.
 - During the pipe laying activities, the trench and spoil shall be monitored for the incidence of sub-surface Aboriginal objects during removal. A representative sample of any Aboriginal objects so located shall be collected and treated in the manner set out above.
 - At the completion of pipe laying activities, the Aboriginal objects shall be replaced as near as practicable to their original location. The Aboriginal community shall be notified

of the programme and a representative /s shall be invited to observe and where appropriate participate in replacement works.

8. The following five sites defined in Attachment S of the Application and situated on the land described in Schedule B of Consent # 1467 shall have conservation works effected as follows:
 - Sites B, C, E and H shall be covered by a geo-textile blanket extending a minimum of two metres beyond all visible artefacts defining their boundaries. A layer of loam or sand, a minimum of 200 mm thick, shall be hand spread over this blanket, working progressively over fill as it is placed. That is, traffic directly on the blanket shall be avoided. A secondary geo-textile blanket shall cover the loam and be pegged down at the edges.
 - Topsoil stockpiles may be placed over these protected sites. If so, removal of top soil from the stockpiles for rehabilitation works shall stop when the first (top layer) of geo-textile is encountered. This blanket shall then be removed to facilitate hand seedfying of the loam for reconstitution and subsequent revegetation in accordance with the mine rehabilitation plan.
 - Site D lies on or very close to an existing drainage contour. A permit holder shall in consultation with design engineering staff determine if the contour can be shifted to avoid the site. The maximum area of the site that can reasonably be conserved shall be protected in the manner described for B, C, E and H.
 - After the completion of the above conservation works, the protected areas shall be sign-posted.
 - These measures shall be undertaken within 90 days of the period commencing 19th May 2003.
 - However, if the area of any of these sites is proposed to be utilised by Barrick Australia Limited for its activities, other than vehicular passage, within the area of MLA 45, the following shall occur:
 - A permit holder shall give 21 days written notice to the Director-General of their intention to undertake the archaeological works referred to below, together with evidence of Barrick Australia Limited's consultation with the Aboriginal community about the proposed archaeological works and any compensatory measures proposed to be undertaken by Barrick Australia Limited; and
 - A permit holder and/or his instructed delegates shall carry out inspection, salvage and collection works at each site in accordance with the procedure contained in Special Condition 6.
9. Additional works on the Back Plain (as that term is described in the Research Design and Study Plan) - Areas outside of the sites on the Back Plain that are identified in the Application shall be inspected to identify, where possible, other concentrations of surface Aboriginal objects within the Permit Area. The Aboriginal Community shall be notified of the programme and a representative/s shall be invited to observe and where appropriate participate in inspection and recording works.
 - In relation to 15 concentrations of Aboriginal objects, artefact densities in those concentrations shall be measured across areas of approximately 10m x 10 m. Their position shall be recorded by a GPS and the concentrations of Aboriginal objects shall be individually measured and described to provide supplementary detail for subsequent spatial and technological analysis.
 - The Aboriginal objects shall be left where found to be collected with the soil during soil stripping operations and temporarily stored in soil stockpiles before being replaced during rehabilitation activities.
10. Additional works generally - where the Research Design and Study Plan provides for the inspection of land and the collection of Aboriginal objects prior to construction earthworks other than as referred to in Special Conditions 6, 7, 8 and 9, such inspection and collection shall be carried out in accordance with the procedure contained in Special Condition 6.
11. All areas where soil stripping occurs shall be further inspected following this operation in the event that datable materials might be revealed. Samples shall be obtained by a permit

holder and/or his instructed delegates and be submitted for chronological analysis. Costs for such analysis shall be borne by Barrick Australia Limited.

12. All Aboriginal objects subject to salvage and collection shall be dealt with in accordance with this special condition. Sufficient data will be taken from each Aboriginal object, including material type and size characteristics, to enable a technological analysis to be undertaken for report purposes provided always that numbers are large enough for meaningful analysis. This information shall form the basis of a master inventory which must be maintained at all times. After collected items have been closely examined and classified by a permit holder and/or his instructed delegates who must be qualified archaeologists, each collected item that has been classified as an Aboriginal object shall be separately bagged and labelled duplicating the above information and placed in a clearly labelled box detailing the specific area of collection. They shall be dealt with in accordance with Special Condition 13.
13. All collected Aboriginal objects shall be retained in the existing temporary Keeping Place within the Barrick Cowal Gold Project Compound. Keys shall be held by the Cowal Gold Project Site Coordinator and access shall be limited to Aboriginal Community representatives, the permit holders and/or their instructed delegates, the Land, Environment and Wiradjuri Heritage Officer and for audit purposes, Department of Environment and Conservation, Cultural Heritage Branch staff. Note that these are temporary facilities and a more permanent on site Keeping Place may be required in the future for Aboriginal objects removed from the mine footprint area in the event that this area remains a water filled void.
14. Unless otherwise directed by the special conditions, any Aboriginal objects recovered being the property of the Crown shall be deposited at the Australian Museum, in accordance with the adopted procedures for the deposition of objects as prescribed by The Australian Museum, at or before a period of 2 years from the date of expiration of the permit or any renewal whichever occurs first. Information about deposition requirements can be obtained from the Aboriginal Collections Manager, Division of Anthropology, the Australian Museum.
15. The holder/s of the permit shall furnish the Department of Environment and Conservation, Cultural Heritage Branch with a final report detailing the results of investigations within 9 months of the completion of the excavations and field investigations. Said report will be expected to address matters relating to the spatial distribution of sites, technological and chronological considerations, and inferences of land use histories related to palaeo- environments. A separate plain English report shall also be produced for the Aboriginal community within the same time frame.
16. When the archaeological works authorised by this permit for a particular area have been completed, a permit holder will certify that fact in writing to Barrick Australia Limited. Such certification may be given before the examination and classification of collected items pursuant to Special Condition 12. A copy of that certification shall be provided to the Director-General.
17. Where the Research Design and Study Plan refers to the Land, Environment and Wiradjuri Heritage Officer, it shall be read as referring to a cultural heritage officer retained by Barrick (and approved by the West Wyalong Local Aboriginal Land Council).
18. Where the Research design and Study Plan provides in relation to each zone that "works will stop in the relevant location when Barrick become aware of Aboriginal objects not previously identified during earthworks, construction or operation of the project, individual Aboriginal objects will be collected. Necessary permits or consents already in place shall be complied with prior to resumption of work in the relevant area" the following shall occur instead:
 - A Cultural Heritage Officer retained by Barrick (and approved by the West Wyalong Local Aboriginal Land Council) shall monitor construction earthworks;

- If an Aboriginal object (other than human skeletal remains) of a type that has not been previously identified during the archaeological works referred to in the Research Design and Study Plans and Special Conditions 3-10 of this permit, is identified, the Aboriginal object shall be collected and its position recorded by GPS. The collected Aboriginal object shall then be bagged and temporarily stored in accordance with Special condition 13 until it is dealt with in accordance with Special Condition 12.

GENERAL TERMS AND CONDITIONS

1. Permits and Consents are not transferable.
2. A Permit covers only that area stated in the Permit.
3. Consent covers only that area stated in the instrument of Consent and in any Schedules thereto.
4. Terms and conditions of Permits may be varied at any time at the discretion of the Director-General.
5. The Person to whom the Permit is issued or the Consent granted shall be responsible for the manner in which the work covered by the Permit or Consent is performed.
6. An officer of the, acting on the authority of the Director-General, may at any time examine work done or any objects recovered under any Permit or Consent.
7. Permits and Consents are necessary for all activities for which they are issued or granted, but do not in themselves give authority to enter or work on freehold land or leased Crown Land. Permission must be sought from the owner or occupier and arrangements made with him/her.
8. The holder of the Permit or Consent shall furnish, when required to do so, an undertaking to indemnify the Department of Environment and Conservation against all actions, suits, claims and demands of whatsoever nature and all costs, charges and expenses in respect of any accident or injury to any person or property which may arise solely out of the existence of any works associated with the Permit or Consent.
9. All reports received in connection with work carried out under a Permit or Consent shall be treated as confidential but the Department of Environment and Conservation shall have the right to copy all such reports, to allow consideration thereof by qualified referees.
10. For a period of five years from the date of issue of the Permit or Consent, the holder of the Permit or Consent may refuse to allow the Department of Environment and Conservation and The Australian Museum, if such information is held by those institutions, to make public any information contained in any report referred to in Condition 2 (specific Conditions) above, except where it is deemed necessary for management, protection or research reasons. After this period of five years from the date of issue of the Permit or Consent, the Service and The Australian Museum shall have the right to use and authorise the use of information contained in all reports submitted under the Permit or Consent, except where specifically requested by the holder of the Permit or Consent.
11. Upon publication of any information relating to work done under a Permit or Consent, a copy of such publication(s) shall be forwarded to the Department of Environment and Conservation, The Australian Museum, Sydney, and the Australian Institute of Aboriginal and Torres Strait Islander Studies, Canberra, unless permission to do otherwise has been obtained from the Service.

12. The holder of the Permit or Consent shall consult with the local Aboriginal community regarding the work covered by the Permit or Consent and shall respond to any reasonable request to involve the Aboriginal community in the work.
13. The Department of Environment and Conservation and The Australian Museum may supply copies of relevant reports as furnished by the holder of the Permit or Consent to local Aboriginal communities.
14. The holder of the Permit or Consent shall keep field records and a copy of all such records shall be lodged with the Department of Environment and Conservation at the termination of each field work period.
15. The holder of the Permit or Consent shall notify the Dobbo office of the Department of Environment and Conservation at the commencement and completion of fieldwork, and shall supply to District officers details of field work programs and results if requested.

Appendix 2
Consent 1467



CONSENT: 1467
(HO use only)

**NATIONAL PARKS AND WILDLIFE ACT 1974
SECTION 90**

CONSENT

**CONSENT TO CARRY OUT THE DESTRUCTION OF AN
ABORIGINAL OBJECT/PLACE**

WHEREAS the Aboriginal objects described in Schedule "A" are situated upon the land described in Schedule "B", and which constitute Aboriginal objects within the meaning of Sections 5(1) and 90 of the National Parks and Wildlife Act 1974 ("Aboriginal objects"), and WHEREAS application has been made by:

Barrick Australia Limited
10th Floor, 2 Mill Street,
Perth, WA, 6000

Postal Address:
Locked Bag 12
Cloisters Square
Perth WA 6850

FOR CONSENT to destroy those objects identified in Schedule A and situated in the lands described in Schedule B of the proposed new open cut gold mine at Lake Cowal.

NOW I, Brian Gilligan, Director-General of National Parks and Wildlife, in pursuance of Section 90 of the said Act, and subject to the Conditions hereunder set out DO HEREBY CONSENT to the destruction of the said objects by the said applicant.

TERMS AND CONDITIONS OF THIS CONSENT

This Consent is issued subject to General Terms and Conditions covering all archaeological Permits and Consents, as well as the Special and Specific Terms and Conditions pertaining to Consents to Destroy Aboriginal objects all of which conditions are detailed in the attached pages.

DATED at *Draft* this *27* day of *November* 2002

Tony Kern

for Director-General of
National Parks and Wildlife



112069981

SCHEDULE A:

All Aboriginal objects situated within the boundaries of the lands described in schedule B, unless excluded in the Special and Specific conditions.

SCHEDULE B:

- The area of Mining Lease Application 45 under the *Mining Act 1992 (NSW)* lodged by Barrick Australia Limited ("MLA 45") (as shown on the map in Schedule C to this Consent);
- The area of the following proposed bores (as shown on the map in Schedule D of this Consent) as follows:
 - the proposed bore within the road reserve to the west of Portion 69, Parish of Gibrigal, County of Gipps;
 - the proposed bore within Travelling Stock Reserve 84719 to the south of Portion 19, Parish of Gibrigal, County of Gipps;
 - the proposed bore within the road reserve to the north of Portion 105, Parish of Cadalgulee, County of Gipps; and
 - the proposed bore within the road reserve to the west of Portion 104, Parish of Cadalgulee, County of Gipps.
- The area of the proposed water pipeline (and its 40 metre wide corridor) which runs from the borefield to MLA45 within the following land (as shown on the map in Schedule C, D and E of this Consent):
 - the road reserve that runs to the west of Portions 69 and 19, Parish of Gibrigal, County of Gipps;
 - the road reserve (part of Burcher Road) and part of Travelling Stock Reserve 84719 that runs to the south of Portion 19, Parish of Gibrigal, County of Gipps;
 - the road reserve that runs to the east of Portion 66, Parish of Cadalgulee, County of Gipps;
 - the road reserve that runs to the north of Portion 105, Parish of Cadalgulee, County of Gipps, until it reaches the proposed bore;
 - the road reserve (part of Webster's Road) that runs in a south westerly direction adjacent to Portions 104 and 102, Parish of Cadalgulee, County of Gipps until it reaches the north west corner of Portion 93, Parish of Cadalgulee, County of Gipps;
 - the road reserve that runs to the west of Portion 93, Parish of Cadalgulee, County of Gipps for approximately 1 kilometre;
 - Lots 44, 45 and 46 on DP42918 - in an east/west direction parallel to, and approximately 175 metres from, the northern boundary of Lots 44, 45 and 46, for approximately 2 kilometres; and
 - Lots 46 and 47 on DP 42918 and Lots 18, 23 and 24 on DP753097 - in a south westerly direction for approximately 7 kilometres until it reaches MLA 45.

SPECIAL and SPECIFIC CONDITIONS

1. The Consent does not cover human skeletal remains. Should human remains be discovered all work at the particular location shall cease and the NPWS archaeologist at Dubbo shall be notified immediately.
2. The Consent covers only those objects described in the instrument of Consent and in any Schedules thereto.
3. This Consent operates in respect of the land covered by MLA 45 only for the period that the following approvals remain in force:
 - Exploration Licence 2864 and Exploration Licence 4510 or any renewals of the same; or
 - the development consent granted for the Cowal Gold Mine by the Minister for Urban Affairs and Planning on 26 February 1999 or a modification of the same or any new development consent which authorises the Cowal Gold Mine.



112069981

4. This Consent operates as follows:
- 4.1 Subject to paragraph 4.3, 4.4 and 4.5 below, this Consent does not operate in relation to a specific area until a holder of Permit # 1468 has certified in writing, in accordance with Special Condition 16 of that permit, that the archaeological works authorised by Permit # 1468 for that specific area have been completed;
- 4.2 Subject to the Special and Specific Conditions of this Instrument of Consent, once that certification has been given in relation to a specific area, this Consent authorises the destruction of Aboriginal objects in the area specified in the certification by Barrick Australia Limited, its employees and contractors and the employees and contractors of its parent company Barrick Gold of Australia Limited in the course of their lawful activities in that area. In particular:
- Where Permit # 1468 authorises the collection of a representative sample of Aboriginal objects from the surface of land, this Consent authorises the destruction of surface and sub-surface Aboriginal objects that remain after the representative sample (as determined by the permit holder and/or his instructed delegates) has been collected;
 - where Permit # 1468 authorises the collection of a representative sample of Aboriginal objects after excavation, this Consent authorises the destruction of Aboriginal objects that remain after excavated Aboriginal objects identified by the permit holder and/or his instructed delegates have been collected;
 - where Special Condition 9 of Permit # 1468 authorises the identification of concentrations of Aboriginal objects on the back plain, this Consent authorises the destruction of Aboriginal objects on the back plain after the permit holder and/or his instructed delegates have undertaken the measuring and recording activities authorised by Special Condition 9.
- 4.3 If Permit # 1468 does not authorise any archaeological works within a specific area, this Consent authorises the destruction of all Aboriginal objects within that specific area.
- 4.4 This Consent may operate within the footprint of the proposed open cut pit and site P1 (NPWS#43-4-7) before the test pit excavations and extended excavations authorised by Special Condition 3 of Permit # 1468 have been carried out, provided that a permit holder has certified pursuant to Special Condition 16 of Permit # 1468 that the salvage and collection activities in relation to surface Aboriginal objects in that area have been completed.
- 4.5 Nothing in this Consent or Permit # 1468 should be interpreted to mean that all surface and/or sub-surface Aboriginal objects must be collected from any specific area before a holder of Permit # 1468 may certify that the collection activities for that specific area have been completed and this Consent may operate in relation to the relevant area.
5. This consent shall lapse when the Minister for Mineral Resources acknowledges that satisfactory rehabilitation work has been completed under a mining lease granted in respect of MLA 45 or eighteen (18) years after the completion of construction works, which ever occurs first. For the purpose of this condition, construction works are the earthworks, engineering and building works which are required to be completed before mining operations commence.
6. Should any Aboriginal objects listed in Schedule 'A' above remain in existence/in situ at the date of the lapse of this Consent, any destruction of the Aboriginal objects will be unlawful unless authorised by a new consent granted under section 90 of the *National Parks and Wildlife Act 1974*.
7. During the term of this Consent, Barrick Australia Limited shall furnish the National Parks and Wildlife Service with a report on the activities carried out under the Consent, if required by the Director General.
8. A copy of this consent and the Permit # 1468 shall be available for inspection as per General Condition 6 (see below) at the Cowal Gold Project Office at all times during the period of the consent.

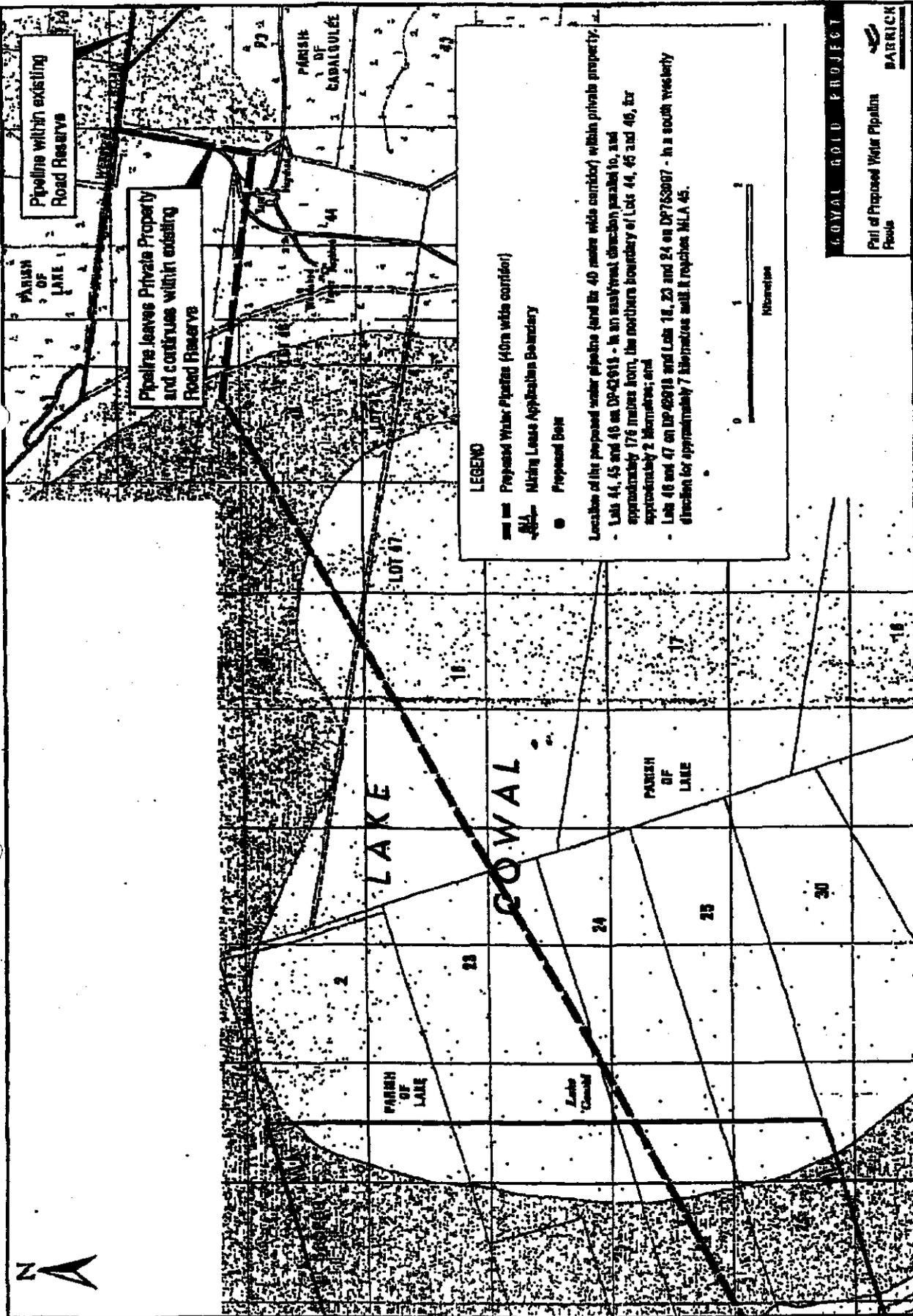


9. Offset Conditions

- 9.1 The obligations contained in this condition are subject to the following:
- subject to subparagraph (b) below, the details and scope of each of the matters referred to in this condition are to be agreed in writing with the registered native title claimants for the area of MLA45 and the West Wyalong Local Aboriginal Land Council (hereafter, the "Aboriginal Community"), unless such agreement is not reached before the commencement of construction, when they will be determined by the Director-General;
 - if the Aboriginal Community advises Barrick Australia Limited and the Director-General in writing that they do not want Barrick Australia Limited to fund one of the obligations referred to in paragraphs 9.2 to 9.5, the obligation contained in the relevant condition immediately ceases;
 - the total amount of funds dedicated to complying with the obligations referred to in paragraphs 9.2 to 9.5 need not exceed \$250,000; and
 - the deadline for completion of any of the obligations referred to in paragraphs 9.2 to 9.5 may be extended by the Director-General if he considers that it is reasonable in the circumstances to do so.
- 9.2 Barrick Australia Limited must fund the design and construction of a keeping place for Aboriginal objects collected pursuant to Permit # 1468, at a location to be agreed with the Aboriginal Community. The keeping place must be constructed within 12 months of the commencement of mining operations.
- 9.3 Barrick Australia Limited must fund a regional cultural heritage study and the associated research and publication of a booklet about Wiradjuri cultural heritage and associations with land. The study and booklet must be centred on Lake Cowal and the area between Lake Cowal and the Lachlan River. The scope and methodology of the study shall be agreed with the Director-General. The regional study shall identify areas of cultural significance to Aboriginal people including areas within Barrick Australia Limited's land holdings which may be considered for future conservation. The study must be completed and the booklet published within 3 years of the commencement of construction, subject to any requests for extensions of time by the Aboriginal Community to allow additional study to be carried out. 1000 copies of the booklet must be produced. The booklet must be distributed to the Wiradjuri Council of Elders, the West Wyalong Local Aboriginal Land Council, the Condobolin Local Aboriginal Land Council, the Mooka Traditional Owners Council, the Wiradjuri Regional Aboriginal Land Council, the New South Wales Aboriginal Land Council, NPWS, the Australian Museum, NSW Heritage Office, local public libraries, local councils, local schools, the Mitchell Library and other bodies nominated by the Aboriginal Community.
- 9.4 Barrick Australia Limited must fund the creation of a transportable display consisting of information and material on the Wiradjuri people in the context of Lake Cowal and the region generally, to be available for educational purposes at schools, public libraries, council offices, public buildings and other places nominated by the Aboriginal Community. The display must be completed within 6 months of publication of the booklet referred to in paragraph 9.3 above.
- 9.5 Barrick Australia Limited must fund a survey to document the whereabouts of Aboriginal objects taken from Wiradjuri land and held in public and private collections around Australia, and support (by financial and other means) any submission by the Aboriginal Community for the return of that material to the Wiradjuri people. The survey must be completed within 12 months from the commencement of construction.
10. This Consent authorises any destruction of Aboriginal objects which may occur at Sites B, C, D, E and H as a result of vehicular movements following completion of the conservation works required by special condition 8 of Permit # 1468 at any such site.
11. Whenever the word "destroy" is used in this consent it includes destroy, deface, damage or desecrate. Whenever the word "destruction" is used in this consent it includes destruction, defacement, damage or desecration.



Schedule E



GENERAL TERMS AND CONDITIONS

1. Permits and Consents are not transferable.
2. A Permit covers only that area stated in the Permit.
3. A Consent covers only that area stated in the instrument of Consent and in any Schedules thereto.
4. Terms and conditions of Permits may be varied at any time at the discretion of the Director-General.
5. The Person to whom the Permit is issued or the Consent granted shall be responsible for the manner in which the work covered by the Permit or Consent is performed.
6. An officer of the National Parks and Wildlife Service, acting on the authority of the Director-General, may at any time examine work done or any objects recovered under any Permit or Consent.
7. Permits and Consents are necessary for all activities for which they are issued or granted, but do not in themselves give authority to enter or work on freehold land or leased Crown Land. Permission must be sought from the owner or occupier and arrangements made with him/her.
8. The holder of the Permit or Consent shall furnish, when required to do so, an undertaking to indemnify the National Parks and Wildlife Service against all actions, suits, claims and demands of whatsoever nature and all costs, charges and expenses in respect of any accident or injury to any person or property which may arise solely out of the existence of any works associated with the Permit or Consent.
9. All reports received in connection with work carried out under a Permit or Consent shall be treated as confidential but the National Parks and Wildlife Service shall have the right to copy all such reports, to allow consideration thereof by qualified referees.
10. For a period of five years from the date of issue of the Permit or Consent, the holder of the Permit or Consent may refuse to allow the National Parks and Wildlife Service and The Australian Museum, if such information is held by those institutions, to make public any information contained in any report referred to in Condition 9 above, except where it is deemed necessary for management, protection or research reasons. After this period of five years from the date of issue of the Permit or Consent, the Service and The Australian Museum shall have the right to use and authorise the use of information contained in all reports submitted under the Permit or Consent, except where specifically requested by the holder of the Permit or Consent.
11. Upon publication of any information relating to work done under a Permit or Consent, a copy of such publication(s) shall be forwarded to the National Parks and Wildlife Service, The Australian Museum, Sydney, and the Australian Institute of Aboriginal and Torres Strait Islander Studies, Canberra, unless permission to do otherwise has been obtained from the Service.
12. The holder of the Permit or Consent shall consult with the local Aboriginal community regarding the work covered by the Permit or Consent and shall respond to any reasonable request to involve the Aboriginal community in the work.
13. The National Parks and Wildlife Service and The Australian Museum may supply copies of relevant reports as furnished by the holder of the permit or Consent to local Aboriginal communities. Upon request by the Service, the holder of the Permit or Consent shall supply a



summary of his/her findings with photographs, diagrams, etc., as required, to local Aboriginal communities or other interest local groups.

14. The holder of the Permit or Consent shall keep field records and a copy of all such records shall be lodged with the National Parks and Wildlife Service at the termination of each field work period. A copy of all field records shall be lodged with The Australian Museum at the time the archaeological materials are deposited with the Museum.
15. The holder of the Permit or Consent shall notify the Dubbo office of the National Parks and Wildlife Service at the commencement and completion of fieldwork, and shall supply to District officers details of field work programs and results if requested.



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Appendix 3

Permit 1681





PERMIT #: 1681

**NATIONAL PARKS AND WILDLIFE ACT 1974
SECTION 87 (1)**

PERMIT

PERMIT TO SALVAGE and COLLECT

PERMIT ISSUED TO:

- | | | | |
|---|--|---|--|
| 1 | Dr Colin Pardoe
Bio-anthropology and Archaeology
3 Rose Street
Gilberton
Sth Australia, 5081 | 2 | Dr Johan Kamminga
National Heritage Consultants
34 Simpson Street
Watson
ACT, 2602 |
|---|--|---|--|

Postal Address:
As Above

AUTHORITY is hereby given for the person/s named above to:

- disturb or excavate any land, or cause any land to be disturbed or excavated, for the purpose of discovering an Aboriginal object within the meaning of that term in section 5(1) of the *National Parks and Wildlife Act 1974* (NSW) ("Aboriginal object"); and
- to disturb or move on any land an Aboriginal object that is the property of the Crown, in the course of undertaking salvage, collection and storage/curation of Aboriginal objects as described in the Research Design and Study Plan for the Barrick Australia Limited Cowal Gold Project which was Attachment 5 to the application for this permit dated 15 August 2002 (the "Application"), as modified by the special and specific conditions contained in this permit.

AREA COVERED by Permit for purpose as named above: as described in Schedule B of Consent # 1680 issued in conjunction within this permit.

TERM OF PERMIT: As specified in Special Condition 3 and 5 of Consent #1680 issued in conjunction with this permit.

TERMS AND CONDITIONS OF THIS PERMIT

This permit is issued subject to the General Terms and Conditions covering archaeological permits and consents, as well as those Specific and Special Terms and Conditions pertaining to each type of permit as determined by the Director, which may appear hereunder: See attached page.

DATED at Dubbo this ^{Twenty}~~Eight~~ day of, July 2003
Terry Kinn
Director General of National Parks and Wildlife

SPECIAL and SPECIFIC CONDITIONS

1. The permit does not cover human skeletal remains. Should human remains be uncovered all work at the particular location shall cease and the NPWS archaeologist at Dubbo shall be notified immediately.
2. All work shall be carried out in accordance with the Research Design and Study Plan that is Attachment 5 to the Application (the "**Research Design and Study Plan**") as modified by the Special and Specific Conditions applying to the permit.
3. Although no sites are known to occur in the Permit Area a permit holder and/or his instructed delegates shall inspect the land in the Permit Area which is proposed to be disturbed by construction work in connection with the development consent granted for the Cowal Gold Mine by the Minister for Urban Affairs and Planning on 26 February 1999 and the approval granted for the Cowal Gold Project Access Road Upgrade by the Bland Shire Council on 21 April 1999 pursuant to Part 5 of the *Environmental Planning and Assessment Act 1979*. Should surface Aboriginal objects be identified, a representative sample of Aboriginal objects shall be taken. Their position shall be recorded by GPS and they shall be bagged and temporarily stored according to Special Condition 5 until they are dealt with in accordance with the procedures outlined in Special Condition 4.
4. All Aboriginal objects subject to salvage and collection shall be dealt with in accordance with this Special Condition. Sufficient data will be taken from each Aboriginal object, including material type and size characteristics, to enable a technological analysis to be undertaken for report purposes provided always that numbers are large enough for meaningful analysis. This information shall form the basis of a master inventory which must be maintained at all times. After collected items have been closely examined and classified by a permit holder and/or his instructed delegates who must be qualified archaeologists, each collected item that has been classified as an Aboriginal object shall be separately bagged and labelled duplicating the above information and placed in a clearly labelled box detailing the specific area of collection. Examination and classification shall follow collection as expediently as possible so that development of the master inventory does not significantly lag behind collection works.
5. All collected Aboriginal objects shall be retained in the existing temporary Keeping Place within the Barrick Cowal Gold Project Compound. Keys shall be held by the General Manager Cowal Gold Project or his delegate, the Cowal Gold Project Site Coordinator, and access shall be limited to Aboriginal Community representatives, the permit holders and/or their instructed delegates, a cultural heritage officer retained by Barrick and for audit purposes, NPWS staff. Note that these are temporary facilities and a more permanent Keeping Place is required as a condition of Consent # 1467 for Aboriginal objects removed from the mine footprint area in the event that this area remains a water filled void.
6. Unless otherwise directed by the special conditions, any Aboriginal objects recovered, being the property of the Crown shall be deposited at the Australian Museum, in accordance with the adopted procedures for the deposition of objects as prescribed by The Australian Museum, at or before a period of 2 years from the date of expiration of the permit or any renewal whichever occurs first. Information about deposition requirements can be obtained from the Aboriginal Collections Manager, Division of Anthropology, the Australian Museum.
7. The holder/s of the permit shall furnish the National Parks and Wildlife Service with a final report detailing the results of investigations within 9 months of the completion of the excavations and field investigations. Said report will be expected to address matters relating to the spatial distribution of sites, technological and chronological considerations, and inferences of land use histories related to palaeo- environments. A separate plain

English report shall also be produced for the Aboriginal community within the same time frame.

8. When the archaeological works authorised by this permit for a particular area have been completed, a permit holder or his delegate, emeritus Professor Frederick James Allen, will certify that fact in writing to Barrick Australia Limited. Such certification may be given before the examination and classification of collected items pursuant to Special Condition 4. A copy of that certification shall be provided to the Director-General.
9. The inspecting, measuring and recording activities (for concentrations of surface Aboriginal objects) proposed in the Research Design and Study Plan for the back plain zone shall not be read as applying to the Permit Area.
10. Where the Research Design and Study Plan refers to the "*Land, Environment and Wiradjuri Heritage Officer*" in relation to the back plain zone, for the purposes of this permit, it shall instead be read as referring to a cultural heritage officer retained by Barrick (and approved by the West Wyalong Local Aboriginal Land Council).
11. Where the Research Design and Study Plan provides in relation to the back plain zone that "*works will stop in the relevant location when Barrick become aware of Aboriginal relics not previously identified during earthworks, construction or operation of the project. Individual Aboriginal objects will be collected. Necessary permits or consents already in place shall be complied with prior to the recommencement of work in the relevant area*" the following shall occur in the Permit Area instead:
 - A cultural heritage officer retained by Barrick (and approved by the West Wyalong Local Aboriginal Land Council) shall monitor construction earthworks;
 - If an Aboriginal object (other than human skeletal remains) of a type that has not been previously identified during the archaeological works referred to in Special Condition 3 of this permit, is identified, the Aboriginal object shall be collected and its position recorded by a GPS. The collected Aboriginal object shall then be bagged and temporarily stored in accordance with Special Condition 5 until it is dealt with in accordance with Special Condition 4.

GENERAL TERMS AND CONDITIONS

1. Permits and Consents are not transferable.
2. A Permit covers only that area stated in the Permit.
3. Consent covers only that area stated in the instrument of Consent and in any Schedules thereto.
4. Terms and conditions of Permits may be varied at any time at the discretion of the Director-General.
5. The Person to whom the Permit is issued or the Consent granted shall be responsible for the manner in which the work covered by the Permit or Consent is performed.
6. An officer of the National Parks and Wildlife Service, acting on the authority of the Director-General, may at any time examine work done or any objects recovered under any Permit or Consent.
7. Permits and Consents are necessary for all activities for which they are issued or granted, but do not in themselves give authority to enter or work on freehold land or leased Crown Land. Permission must be sought from the owner or occupier and arrangements made with him/her.

8. The holder of the Permit or Consent shall furnish, when required to do so, an undertaking to indemnify the National Parks and Wildlife Service against all actions, suits, claims and demands of whatsoever nature and all costs, charges and expenses in respect of any accident or injury to any person or property which may arise solely out of the existence of any works associated with the Permit or Consent.
9. All reports received in connection with work carried out under a Permit or Consent shall be treated as confidential but the National Parks and Wildlife Service shall have the right to copy all such reports, to allow consideration thereof by qualified referees.
10. For a period of five years from the date of issue of the Permit or Consent, the holder of the Permit or Consent may refuse to allow the National Parks and Wildlife Service and The Australian Museum, if such information is held by those institutions, to make public any information contained in any report referred to in Condition 2 (specific Conditions) above, except where it is deemed necessary for management, protection or research reasons. After this period of five years from the date of issue of the Permit or Consent, the Service and The Australian Museum shall have the right to use and authorise the use of information contained in all reports submitted under the Permit or Consent, except where specifically requested by the holder of the Permit or Consent.
11. Upon publication of any information relating to work done under a Permit or Consent, a copy of such publication(s) shall be forwarded to the National Parks and Wildlife Service, The Australian Museum, Sydney, and the Australian Institute of Aboriginal and Torres Strait Islander Studies, Canberra, unless permission to do otherwise has been obtained from the Service.
12. The holder of the Permit or Consent shall consult with the local Aboriginal community regarding the work covered by the Permit or Consent and shall respond to any reasonable request to involve the Aboriginal community in the work.
13. The National Parks and Wildlife Service and The Australian Museum may supply copies of relevant reports as furnished by the holder of the Permit or Consent to local Aboriginal communities.
14. The holder of the Permit or Consent shall keep field records and a copy of all such records shall be lodged with the National Parks and Wildlife Service at the termination of each field work period.
15. The holder of the Permit or Consent shall notify the Dubbo office of the National Parks and Wildlife Service at the commencement and completion of fieldwork, and shall supply to District officers details of field work programs and results if requested.

Appendix 4
Consent 1680



CONSENT : 1680

**NATIONAL PARKS AND WILDLIFE ACT 1974
SECTION 90**

CONSENT

**CONSENT TO CARRY OUT THE DESTRUCTION OF AN
ABORIGINAL OBJECT/PLACE**

WHEREAS the Aboriginal objects described in Schedule "A" are situated upon the land described in Schedule "B", and which constitute Aboriginal objects within the meaning of Sections 5(1) and 90 of the National Parks and Wildlife Act 1974 ("Aboriginal objects"), and WHEREAS application has been made by:

Barrick Australia Limited
10th Floor, 2 Mill Street,
Perth. WA. 6000

Postal Address:
Locked Bag 12
Cloisters Square
Perth WA 6850

FOR CONSENT to destroy those objects identified in Schedule A and situated in the lands described in Schedule B of the proposed road upgrade and relocated travelling stock route at Lake Cowal.

NOW I, Brian Gilligan, Director-General of National Parks and Wildlife, in pursuance of Section 90 of the said Act, and subject to the Conditions hereunder set out DO HEREBY CONSENT to the destruction of the said objects by the said applicant.

TERMS AND CONDITIONS OF THIS CONSENT

This Consent is issued subject to General Terms and Conditions covering all archaeological Permits and Consents, as well as the Special and Specific Terms and Conditions pertaining to Consents to Destroy Aboriginal objects all of which conditions are detailed in the attached pages.

DATED at *Dubbo* this *Twenty Eighth* day of, *July* 2003

for Director-General of
National Parks and Wildlife

SCHEDULE A:

All Aboriginal objects situated within the boundaries of the lands described in schedule B, unless excluded in the Special and Specific conditions.

SCHEDULE B:

- The area of the proposed road upgrade as follows (and as shown on the maps attached as schedule C and D)
 - The road reserve that runs from the south west corner on Mining Lease 1535, parallel to the western side of the West Wyalong-Burcher Railway, for a distance of approximately 3.3 kilometres until its intersection with Lake Cowal/Blow Clear Road.
 - The road reserve that runs west from this point for a distance of approximately 10.5 kilometres (Blow Clear/Lake Cowal Road) to its intersection with Wamboyne Road at Blow Clear.
- The area of the proposed relocated Travelling Stock Route as follows (and as shown on the maps attached as schedule C):
 - From Lake Cowal Road on the northern side of Mining Lease 1535 westwards to the north west corner of Mining Lease 1535 (which is a corridor approximately 290 metres wide until it meets Lot 57 where it narrow to approximately 200 metres wide);
 - South from this point along the western boundary of Mining Lease 1535 to the south west corner of Mining Lease 1535 (which is a corridor approximately 200 metres wide);
 - Then east from this point along the southern boundary of Mining Lease 1535 until again intersecting the Lake Cowal Road (which is a corridor approximately 200 metres wide).

SPECIAL and SPECIFIC CONDITIONS

1. The Consent does not cover human skeletal remains. Should human remains be discovered all work at the particular location shall cease and the NPWS archaeologist at Dubbo shall be notified immediately.
2. The Consent covers only those objects described in the instrument of Consent and in any Schedules thereto.
3. This Consent operates in respect of the land nominated above only for the period that the following approvals remain in force:
 - the development consent granted for the Cowal Gold Mine by the Minister for Urban Affairs and Planning on 26 February 1999 or a modification of the same or any new development consent which authorises the Cowal Gold Mine; or
 - the approval granted for the Cowal Gold Project Access Road Upgrade by the Bland Shire Council on 21 April 1999 pursuant to Part 5 of the *Environmental Planning and Assessment Act 1979* (NSW), or a modification of the same or any new approval which authorises the Cowal Gold Project Access Road Upgrade.
4. This Consent operates as follows:
 - 4.1 Subject to paragraph 4.3 below, this Consent does not operate in relation to a specific area until it has been certified in writing, in accordance with Special Condition 8 of Permit # 1681, that the archaeological works authorised by Special Condition 3 of Permit # 1681 for that specific area have been completed;
 - 4.2 Subject to the Special and Specific Conditions of this Instrument of Consent and the obligation to comply with Special Condition 11 of Permit #1681, once that certification has been given in relation to a specific area, this Consent authorises the

destruction of Aboriginal objects in the area specified in the certification by Barrick Australia Limited, its employees and contractors and the employees and contractors of its parent company Barrick Gold of Australia Limited in the course of their lawful activities in that area. In particular, where Permit # 1681 authorises the collection of a representative sample of Aboriginal objects from the surface of land, this Consent authorises the destruction of surface and sub-surface Aboriginal objects that remain after the representative sample (as determined by the permit holder and/or his instructed delegates) has been collected.

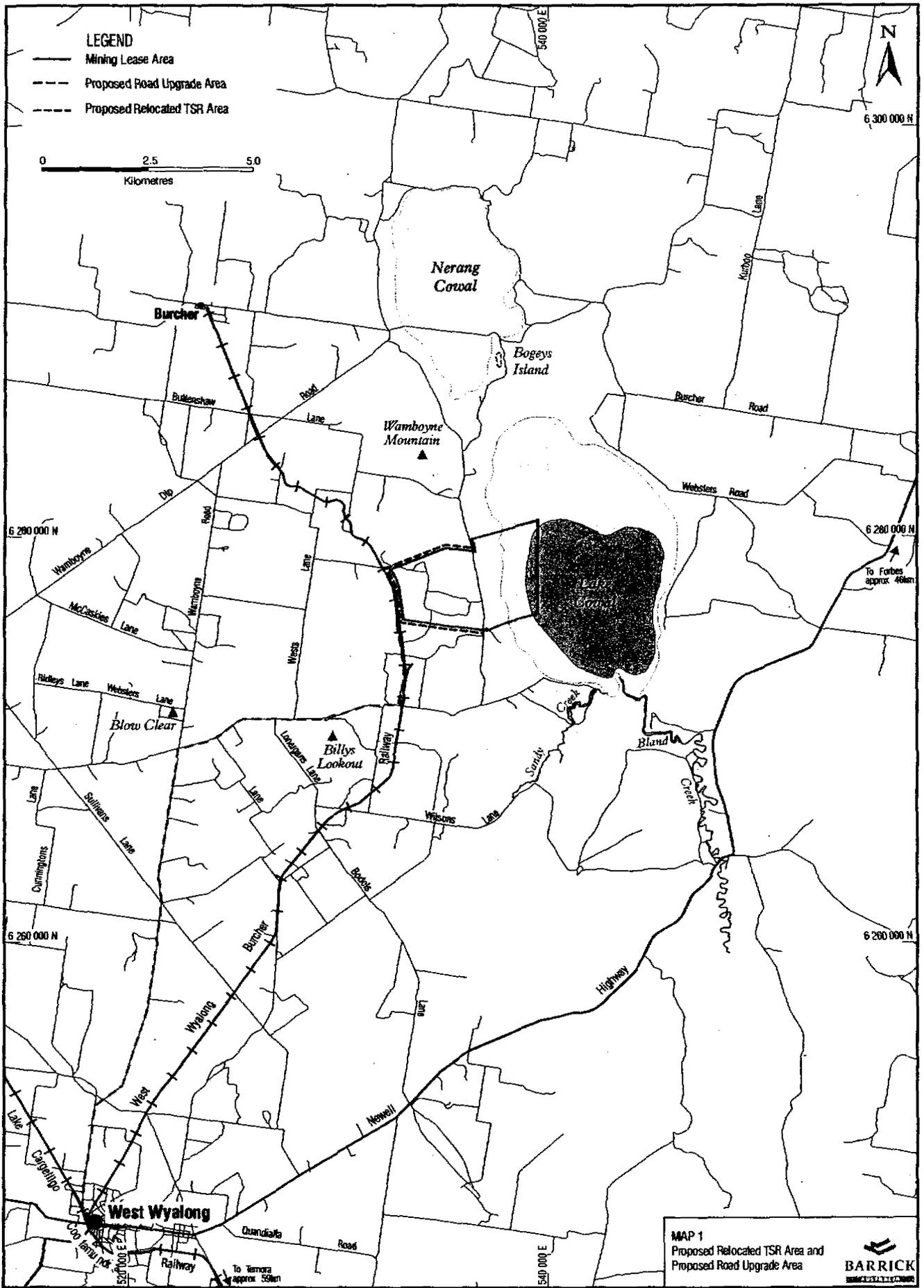
- 4.3 Nothing in this Consent or Permit # 1681 should be interpreted to mean that all surface and/or sub-surface Aboriginal objects must be collected from any specific area before it may be certified pursuant to Permit # 1681 that the collection activities for that specific area have been completed and this Consent may operate in relation to the relevant area.
5. This consent shall lapse when the Minister for Mineral Resources acknowledges that satisfactory rehabilitation work has been completed under Mining Lease 1535 or eighteen (18) years after the completion of construction works, whichever ever occurs first. For the purpose of this condition, construction works are the earthworks, engineering and building works which are required to be completed before mining operations commence.
6. Should any Aboriginal objects listed in Schedule 'A' above remain in existence/insitu at the date of the lapse of this Consent, any destruction of the Aboriginal objects will be unlawful unless authorised by a new consent granted under section 90 of the *National Parks and Wildlife Act 1974*.
7. During the term of this Consent, Barrick Australia Limited shall furnish the National Parks and Wildlife Service with a report on the activities carried out under the Consent, if required by the Director General.
8. A copy of this consent and the Permit # 1681 shall be available for inspection as per General Condition 6 (see below) at the Cowal Gold Project Office at all times during the period of the consent.
9. Wherever the word "destroy" is used in this consent it includes destroy, deface, damage or desecrate. Wherever the word "destruction" is used in this consent it includes destruction, defacement, damage or desecration.

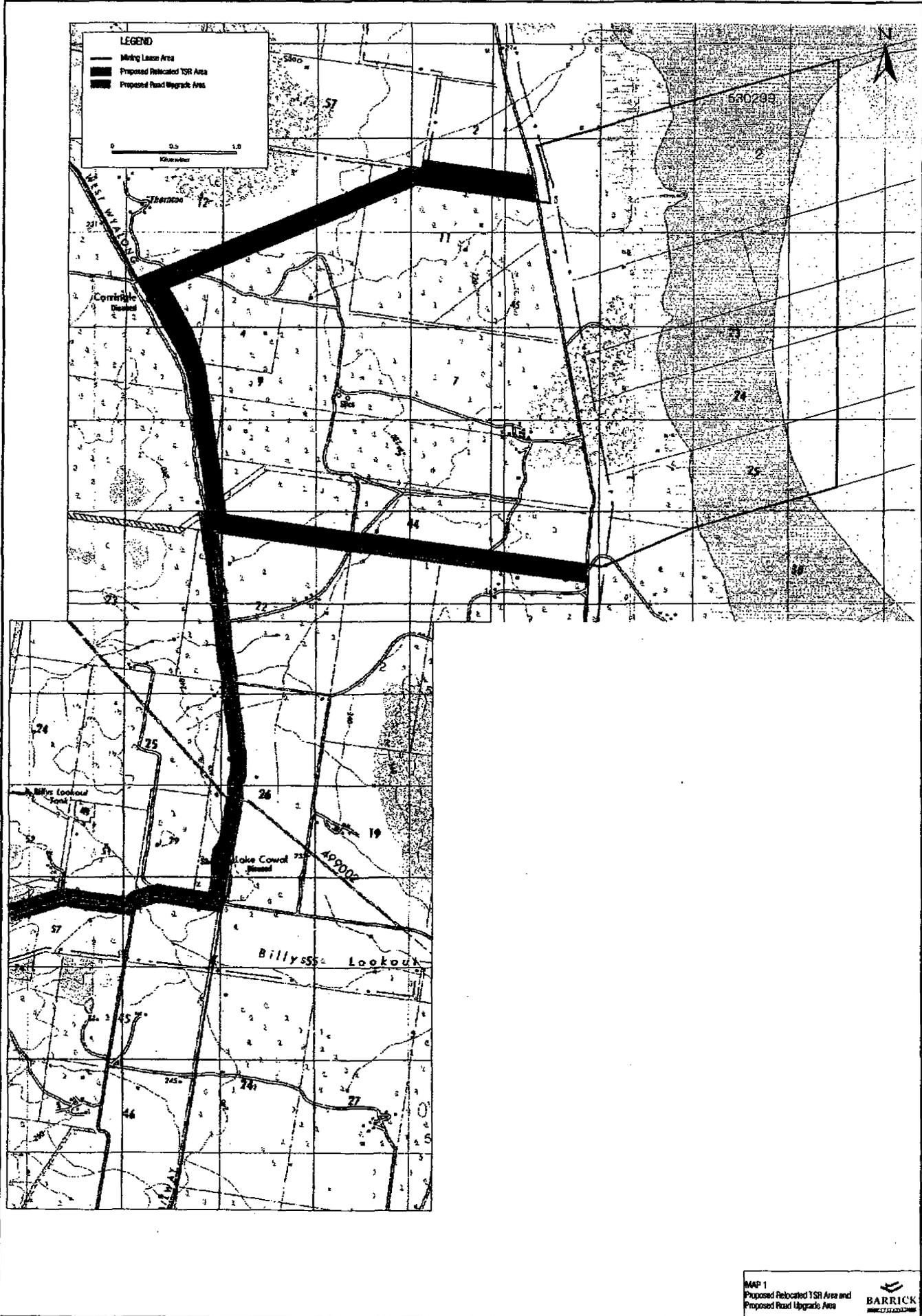
GENERAL TERMS AND CONDITIONS

1. Permits and Consents are not transferable.
2. A Permit covers only that area stated in the Permit.
3. A Consent covers only that area stated in the instrument of Consent and in any Schedules thereto.
4. Terms and conditions of Permits may be varied at any time at the discretion of the Director-General.
5. The Person to whom the Permit is issued or the Consent granted shall be responsible for the manner in which the work covered by the Permit or Consent is performed.
6. An officer of the National Parks and Wildlife Service, acting on the authority of the Director-General, may at any time examine work done or any objects recovered under any Permit or Consent.

7. Permits and Consents are necessary for all activities for which they are issued or granted, but do not in themselves give authority to enter or work on freehold land or leased Crown Land. Permission must be sought from the owner or occupier and arrangements made with him/her.
8. The holder of the Permit or Consent shall furnish, when required to do so, an undertaking to indemnify the National Parks and Wildlife Service against all actions, suits, claims and demands of whatsoever nature and all costs, charges and expenses in respect of any accident or injury to any person or property which may arise solely out of the existence of any works associated with the Permit or Consent.
9. All reports received in connection with work carried out under a Permit or Consent shall be treated as confidential but the National Parks and Wildlife Service shall have the right to copy all such reports, to allow consideration thereof by qualified referees.
10. For a period of five years from the date of issue of the Permit or Consent, the holder of the Permit or Consent may refuse to allow the National Parks and Wildlife Service and The Australian Museum, if such information is held by those institutions, to make public any information contained in any report referred to in Condition 9 above, except where it is deemed necessary for management, protection or research reasons. After this period of five years from the date of issue of the Permit or Consent, the Service and The Australian Museum shall have the right to use and authorise the use of information contained in all reports submitted under the Permit or Consent, except where specifically requested by the holder of the Permit or Consent.
11. Upon publication of any information relating to work done under a Permit or Consent, a copy of such publication(s) shall be forwarded to the National Parks and Wildlife Service, The Australian Museum, Sydney, and the Australian Institute of Aboriginal and Torres Strait Islander Studies, Canberra, unless permission to do otherwise has been obtained from the Service.
12. The holder of the Permit or Consent shall consult with the local Aboriginal community regarding the work covered by the Permit or Consent and shall respond to any reasonable request to involve the Aboriginal community in the work.
13. The National Parks and Wildlife Service and The Australian Museum may supply copies of relevant reports as furnished by the holder of the permit or Consent to local Aboriginal communities. Upon request by the Service, the holder of the Permit or Consent shall supply a summary of his/her findings with photographs, diagrams, etc., as required, to local Aboriginal communities or other interest local groups.
14. The holder of the Permit or Consent shall keep field records and a copy of all such records shall be lodged with the National Parks and Wildlife Service at the termination of each field work period. A copy of all field records shall be lodged with The Australian Museum at the time the archaeological materials are deposited with the Museum.
15. The holder of the Permit or Consent shall notify the Dubbo office of the National Parks and Wildlife Service at the commencement and completion of fieldwork, and shall supply to District officers details of field work programs and results if requested.

SCHEDULE C







LEGEND

-  Mining Lease Area
-  Proposed Relocated TSR Area
-  Proposed Road Upgrade Area

0 0.5 1.0
Kilometres



MAP 3
Proposed Relocated TSR Area and
Proposed Road Upgrade Area



Appendix 5

Research Design and Study Plan



Attachment 5

Cowal Gold Project – Aboriginal Heritage Section 90 Consent & Section 87 Permit Applications Research Design & Study Plan

The following research design / study plan is based on:

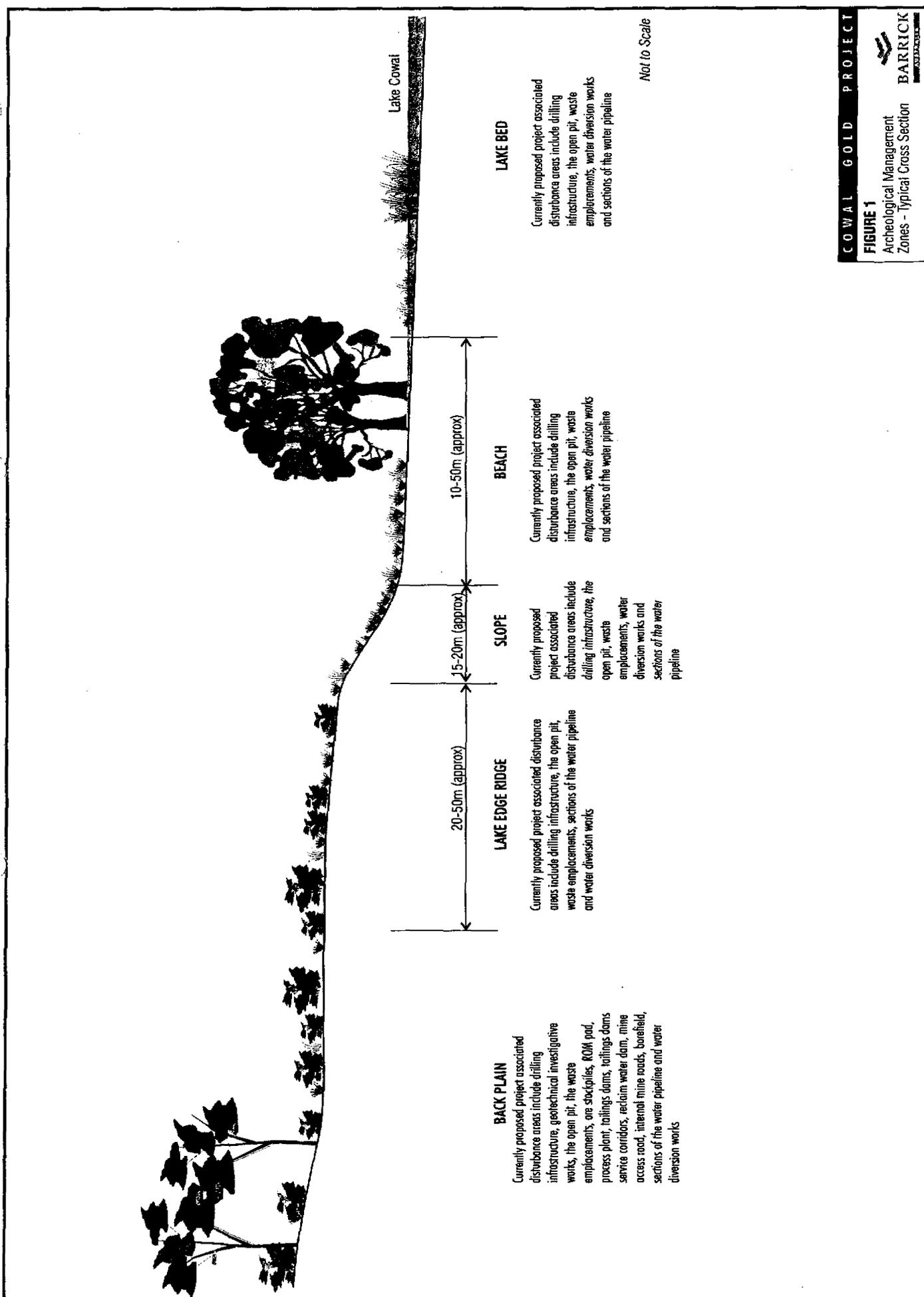
- the findings and recommendations of the archaeological surveys and assessments conducted for the Cowal Gold Project since 1995;
- the 1998 recommendations to North Limited made by the West Wyalong Local Aboriginal Land Council and the NSW Aboriginal Land Council; and
- the consultation programme conducted in association with the 2002 Section 90 and Section 87 applications.

This research design provides for the collection, salvage, excavation, curation and/or replacement of relics from within the Application Area (including the NPWS registered sites) as well as the addition of information to the archaeological database for the Lake Cowal region. The research design includes the following general works:

- collection;
- recording;
- excavation;
- storage in Keeping Places; and
- replacement.

The above general works will be undertaken within zones of management at Lake Cowal (Figure 1). These zones are delineated by their local environment, including soils, potential erosion impact, observed archaeological record and potential for subsurface sites/features/relics. The zones are also practical landform units useful for both management purposes (similar to the Site Designation Units used by NPWS in the western region of NSW) and archaeological investigation. The management zones are as follows:

- Lake bed zone.
- Beach zone.
- Slope zone.
- Lake edge ridge zone.
- Back plain zone.



The location of the NPWS registered sites within the above zones is detailed in the table below.

Management Zone	NPWS Registered Site (and Site Name)	Sites Pending NPWS Registration
Lake Bed	No registered sites occur in this zone	
Beach	43-4-8 (P2)	
Slope	No registered sites occur in this zone	
Lake Edge Ridge	43-3-21 (LC1) 43-3-22 (LC2) 43-3-23 (LC3) 43-3-24 (LC4) 43-4-7 (P1)	
Backplain	43-4-20 (A) 43-4-21 (B) 43-4-22 (C) 43-4-23 (D) 43-4-24 (E) 43-4-25 (F) 43-4-26 (G) 43-4-27 (H) 43-4-28 (I) 43-4-29 (J) 43-4-30 (K) 43-4-31 (L) 43-4-32 (M) 43-4-33 (N)	LCB9 LCB14

Lake Bed Zone

There are no known NPWS registered sites within this zone.

No specific management measures are proposed for this zone due to the low likelihood of the occurrence of relics in this zone and the low interpretation potential for relics if relics were to be identified in this zone. If relics were to be located, it is expected that they would have been transported from sites outside this zone (eg through erosion processes). For relics that might be found within this zone, none are expected to be *in situ*. They would have been relocated constantly by water movement within the lake. General archaeological works within this zone include:

- Co-ordination and management of Project works by a Land, Environment and Wiradjuri Heritage Officer and assistance of conduct of Project works by Wiradjuri Heritage Field Assistants. The Land, Environment and Wiradjuri Heritage Officer and/or Wiradjuri Heritage Field Assistant will be a representative of the Wiradjuri Council of Elders (Registered Native Title Claimants). In accordance with the Development Consent, works will stop in the relevant location when Barrick become aware of Aboriginal relics not previously identified during earthworks, construction or operation of the project. Individual relics will be collected. Necessary permits or consents already in place shall be complied with prior to the recommencement of work in the relevant area.

Beach Zone

Site P2 is the known NPWS registered site located within this zone. Site P2 is a scarred tree.

Proposed archaeological work at site P2 will be carried out in the following manner:

1. Removal of the scarred section of the tree under supervision of Dr Pardoe or another qualified archaeologist and a Wiradjuri representative.
2. Treatment of the removed section to preserve the scarred section to prevent its deterioration (the tree has suffered from termite damage). Treatment would be undertaken by a suitably qualified curator.

3. Storage within a "Keeping Place" at Lake Cowal.
4. Relocation to a position as close as possible to its original location away from potential harm. When relocated, the scarred tree section would be sheltered to further protect it from weathering and damage.

Additional proposed archaeological work would be conducted on the alluvial fans which occur within the footprints of Project disturbance areas in this zone. Proposed archaeological work would be carried out in the following manner:

1. Dr Pardoe, or another qualified archaeologist, will inspect the land in the beach zone and identify surface relics within the proposed project disturbance areas. A representative of the Wiradjuri Council of Elders (the Registered Native Title Claimants) and/or the West Wyalong LALC will be consulted on the programme and will be invited to observe and, where appropriate, participate in (eg recording and storage) works.
2. In relation an identified relic, Dr Pardoe or another qualified archaeologist will record its position with a GPS and/or map, measure and describe it, separately bag and label it and store it according to its zone location in a Keeping Place at Lake Cowal.
3. For the purpose of adding to the archaeological and Aboriginal heritage database for the Lake Cowal region, excavation at three separate alluvial fans are proposed.
4. Test excavations will be carried out on the fans in order to determine the integrity of the sediments. If archaeological relics or features were found in these test excavations, then a larger scale excavation would be carried out.
5. An area approximately 10m x 10m at each alluvial fan would be excavated to a depth of 0.3m or the extent of sediment deposition (which would be determined by the supervising archaeologist, but in any event the alluvial fans are not deeper than 0.3m) whichever comes first. Any identified relics would be dealt with in accordance with Step 2.
6. Excavations would be mapped with section diagrams and point-plotting of individual relics and features, if found. Standard excavation procedures would be followed, including sieving of all excavated soils, photographic record, plan and section drawings. Relics would be measured and analyzed.
7. Following the test excavations, and the larger excavations if warranted, the alluvial fans would be scraped with an earth mover in 5cm thick strips in order to verify that no human or dog burials are to be found within the fan deposits.
8. The earth moving of the upper soil layers of the alluvial fans would be monitored by Dr Pardoe, or another qualified archaeologist, and a representative of the Wiradjuri Council of Elders (the Registered Native Title Claimants) and/or the West Wyalong LALC.

General archaeological works within this zone include:

- Co-ordination and management of Project works by a Land, Environment and Wiradjuri Heritage Officer and assistance of conduct of Project works by Wiradjuri Heritage Field Assistants. The Land, Environment and Wiradjuri Heritage Officer and/or Wiradjuri Heritage Field Assistant will be a representative of the Wiradjuri Council of Elders (Registered Native Title Claimants). In accordance with the Development Consent, works will stop in the relevant location when Barrick become aware of Aboriginal relics not previously identified during earthworks, construction or operation of the project. Individual relics will be collected. Necessary permits or consents already in place shall be complied with prior to the recommencement of work in the relevant area.

Slope Zone

There are no known NPWS registered sites within this zone.

No specific management measures are proposed for this zone due to the low interpretation potential for these relics if relics were to be located in this zone. If relics were located, it is expected that they would have been transported by erosion and bioturbation from sites upslope of this zone. General archaeological works within this zone include:

- Co-ordination and management of Project works by a Land, Environment and Wiradjuri Heritage Officer and assistance of conduct of Project works by Wiradjuri Heritage Field Assistants. The Land, Environment and Wiradjuri Heritage Officer and/or Wiradjuri Heritage Field Assistant will be a representative of the Wiradjuri Council of Elders (Registered Native Title Claimants). In accordance with the Development Consent, works will stop in the relevant location when Barrick become aware of Aboriginal relics not previously identified during earthworks, construction or operation of the project. Individual relics will be collected. Necessary permits or consents already in place shall be complied with prior to the recommencement of work in the relevant area.

Lake Edge Ridge Zone

Sites LC1, LC2, LC3, LC4 and P1 are the NPWS registered sites located within this zone. Sites P1, LC3 and LC4 are artefact scatters. Site LC1 is referred to as a "Men's site". Site LC2 is referred to as a "Base camp".

Proposed archaeological work at sites P1, LC3 and LC4 will be carried out in the following manner:

1. Dr Pardoe, or another qualified archaeologist, will inspect the land in the locations of these sites and identify surface relics. A representative of the Wiradjuri Council of Elders (the Registered Native Title Claimants) and/or the West Wyalong LALC will be consulted on the programme and will be invited to observe and, where appropriate, participate in (eg recording and storage) works.
2. In relation to an identified relic, Dr Pardoe or another qualified archaeologist will record its position with a GPS and/or map, measure and describe it, separately bag and label it and store it according to its zone location in a Keeping Place at Lake Cowal.
3. These relics will be replaced in a location as close as possible to their original location at a time when works within the specific area do not pose a threat to the relics when they are to be replaced (eg during the rehabilitation programme). A representative of the Wiradjuri Council of Elders (the Registered Native Title Claimants) and/or the West Wyalong LALC will be consulted on the programme and will be invited to observe and, where appropriate, participate in replacement works.

Proposed archaeological works at Site LC1 will be carried out in the following manner:

1. Dr Pardoe, or another qualified archaeologist, will inspect the land in the location of this site and identify surface relics. A representative of the Wiradjuri Council of Elders (the Registered Native Title Claimants) and/or the West Wyalong LALC will be consulted on the programme and will be invited to observe and, where appropriate, participate in (eg recording and storage) works.
2. In relation to identified relics, Dr Pardoe or another qualified archaeologist will record its position with a GPS and/or map, measure and describe it, separately bag and label it and store it according to its zone location in a Keeping Place at Lake Cowal.
3. An open area excavation will also be conducted for this site. The excavation will be sponsored by Barrick and undertaken by representatives of the Wiradjuri Council of Elders (the Registered Native Title Claimants) and/or the West Wyalong LALC with a specialist archaeologist recommended by the Wiradjuri Council of Elders. The purpose of the excavation would be to determine the extent, chronology and function of the site with a view to understanding its purpose in the context of the Lake Cowal region.
4. The extent of the site would be determined by test excavations in some of the less eroded sediments. These are small hillocks less than 50cm in height. Scalds appear throughout the site.
5. The open area excavation would be set up adjacent to one of the scalds and extending away from the minor drainage gully. The excavation would proceed in an area approximately 5m x 10m to a depth of 0.5m or the extent of sediment deposition (which would be determined by the supervising archaeologist, but in any event the relatively less eroded sediments are not deeper than 0.5m) whichever comes first.
6. Excavations would be mapped with section diagrams and point plotting of individual relics and features. Standard excavation procedures would be followed, including sieving of all excavated soils, photographic record, plan and section drawings. Relics would be measured and analyzed.

7. Relics will be kept at the Keeping Place until such time as representatives of the Wiradjuri Council of Elders (the Registered Native Title Claimants) and/or the West Wyalong LALC decide on future storage or rehabilitation.
8. If found, samples of organic material (charcoal or residues on grinding pieces) will be submitted for radiocarbon dating. Other dating techniques will be examined and might be used, however these would not be destructive.

Site LC2 is located close to the proposed location of the currently proposed northern waste emplacement. The predominant strategy for this site will be to avoid damage to this site. Avoidance works will be carried out in the following manner:

1. The area of the main artefact scatter concentration will be fenced and sign-posted. Sign-posting will be general in nature indicating the presence of "cultural materials" and placed so as not to draw attention to key components of the site. Fencing and sign-posting will be carried out by representatives of the Wiradjuri Council of Elders (the Registered Native Title Claimants) and/or the West Wyalong LALC.

Should mine works proceed too close to this site to avoid damage, archaeological works will be carried out as for works outlined for Sites P1, LC3 and LC4 (above).

In addition to the works associated with the lake edge ridge zone NPWS registered sites, further archaeological works will be carried out in the following manner:

1. Dr Pardoe, or another qualified archaeologist, will inspect the land in the lake edge ridge zone and identify surface relics within the proposed project disturbance areas. A representative of the Wiradjuri Council of Elders (the Registered Native Title Claimants) and/or the West Wyalong LALC will be consulted on the programme and will be invited to observe and, where appropriate, participate in (eg recording and storage) works.
2. In relation to each identified relic, Dr Pardoe or another qualified archaeologist will record its position with a GPS and/or map, measure and describe it, separately bag and label it and store it according to its zone location in a Keeping Place at Lake Cowal.
3. These relics will be replaced in a location as close as possible to their original location at a time when works within the specific area do not pose a threat to the relics when they are to be replaced (eg during the rehabilitation programme). Relic replacement will be supervised by Dr Pardoe, or another qualified archaeologist. A representative of the Wiradjuri Council of Elders (the Registered Native Title Claimants) and/or the West Wyalong LALC will be consulted on the programme and will be invited to observe and, where appropriate, participate in replacement works.

General archaeological works within this zone include:

- Co-ordination and management of Project works by a Land, Environment and Wiradjuri Heritage Officer and assistance of conduct of Project works by Wiradjuri Heritage Field Assistants. The Land, Environment and Wiradjuri Heritage Officer and/or Wiradjuri Heritage Field Assistant will be a representative of the Wiradjuri Council of Elders (Registered Native Title Claimants). In accordance with the Development Consent, works will stop in the relevant location when Barrick become aware of Aboriginal relics not previously identified during earthworks, construction or operation of the project. Individual relics will be collected. Necessary permits or consents already in place shall be complied with prior to the recommencement of work in the relevant area.
- Collection of relics as described in s87 permit # 1361 'permit to carry out collection and excavate'.

Back-Plain Zone

Sites A, B, C, D, E, F, F, G, H, I, J, K, L, M and N are the NPWS registered sites located within this zone. Two sites are currently pending NPWS registration (LCB9 and LCB14). These sites are artefact scatters on a denuded plain. The plain has been subject to widespread erosion, leaving a lag surface of small (pea-sized) gravel. Artefacts are to be found throughout this area at different densities. The registered sites are concentrations of relics that probably relate to the ephemeral water sources of the gilgai depressions. Relics are to be found only rarely dispersed through this region away from the concentrations.

The predominant strategy for sites B, C, D, E, H and N will be to avoid damage to these sites. Avoidance works will be carried out in the following manner:

1. The area of the main artefact scatter concentrations will be fenced and sign-posted. Sign-posting will be general in nature indicating the presence of "cultural materials" and placed so as not to draw attention to key components of the site. Fencing and sign-posting will be carried out by representatives of the Wiradjuri Council of Elders (the Registered Native Title Claimants) and/or the West Wyalong LALC.

Should mine works proceed too close to these sites to avoid damage, archaeological works will be carried out in the following manner:

1. Dr Pardoe, or another qualified archaeologist, will inspect the land in the location of these sites and identify surface relics. A representative of the Wiradjuri Council of Elders (the Registered Native Title Claimants) and/or the West Wyalong LALC will be consulted on the programme and will be invited to observe and, where appropriate, participate in (eg recording and collection) works.
2. In relation to relics which are representative of each of these sites, Dr Pardoe or another qualified archaeologist will record their position with a GPS and/or map, measure and describe them, separately bag and label them and store them according to their zone location in a Keeping Place at Lake Cowal.
3. These relics will be replaced in a location as close as possible to their original location at a time when works within the specific area do not pose a threat to the relics when they are to be replaced (eg during the rehabilitation programme). Relic replacement will be supervised by Dr Pardoe, or another qualified archaeologist. A representative of the Wiradjuri Council of Elders (the Registered Native Title Claimants) and/or the West Wyalong LALC will be consulted on the programme and will be invited to observe and, where appropriate, participate in replacement works.
4. Remaining relics will be collected with soil during soil stripping operations and stored temporarily in soil stockpiles before being replaced during rehabilitation activities (ie. when soil is replaced on mine landforms as a component of the revegetation programme).

Proposed archaeological works at sites A, F, G, I, J, K, L and M will be carried out in the following manner:

1. Dr Pardoe, or another qualified archaeologist, will inspect the land in the location of these sites and identify surface relics. A representative of the Wiradjuri Council of Elders (the Registered Native Title Claimants) and/or the West Wyalong LALC will be consulted on the programme and will be invited to observe and, where appropriate, participate in (eg recording and collection) works.
2. In relation to relics which are representative of each of these sites, Dr Pardoe or another qualified archaeologist will record their position with a GPS and/or map, measure and describe them, separately bag and label them and store them according to their zone location in a Keeping Place at Lake Cowal.
3. These relics will be replaced in a location as close as possible to their original location at a time when works within the specific area do not pose a threat to the relics when they are to be replaced (eg during the rehabilitation programme). Relic replacement will be supervised by Dr Pardoe, or another qualified archaeologist. A representative of the Wiradjuri Council of Elders (the Registered Native Title Claimants) and/or the West Wyalong LALC will be consulted on the programme and will be invited to observe and, where appropriate, participate in replacement works.
4. Remaining relics will be collected with soil during soil stripping operations and stored temporarily in soil stockpiles before being replaced during rehabilitation activities (ie. when soil is replaced on mine landforms as a component of the revegetation programme).

In addition to the works associated with the back-plain zone NPWS registered sites, further archaeological works will be carried out in the following manner:

1. Dr Pardoe, or another qualified archaeologist, will inspect the land in the back-plain zone and identify all concentrations of surface relics within the proposed project disturbance areas. A representative of the Wiradjuri Council of Elders (the Registered Native Title Claimants) and/or the West Wyalong LALC will be consulted on the programme and will be invited to observe and, where appropriate, participate in (eg recording and storage) works.

2. Artefact densities across this zone will be measured in approximately 15 places. Areas of approximately 10m x 10m will be inspected for relics. This information will provide a better indicator of the nature of the distribution and density of relics (almost exclusively flaked stone pieces) across the landscape.
3. Relics located in this zone are not expected to contribute to the diversity or interpretation values of the Lake Cowal regional archaeology. In relation to each identified concentration of relics, Dr Pardoe or another qualified archaeologist will record its position with a GPS and/or map, measure and describe it. The relics will be left *in situ* to be collected with soil during soil stripping operations and stored temporarily in soil stockpiles before being replaced during rehabilitation activities (ie. when soil is replaced on mine landforms as a component of the revegetation programme).

General archaeological works within this zone include:

- Co-ordination and management of Project works by a Land, Environment and Wiradjuri Heritage Officer and assistance of conduct of Project works by Wiradjuri Heritage Field Assistants. The Land, Environment and Wiradjuri Heritage Officer and/or Wiradjuri Heritage Field Assistant will be a representative of the Wiradjuri Council of Elders (Registered Native Title Claimants). In accordance with the Development Consent, works will stop in the relevant location when Barrick become aware of Aboriginal relics not previously identified during earthworks, construction or operation of the project. Individual relics will be collected. Necessary permits or consents already in place shall be complied with prior to the recommencement of work in the relevant area.