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U909

3 July 2002

Ms Margrit Koettig
National Parks and Wildlife Service
PO Box 1967
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Dear Margrit

Ashton Coal Mine Project

The NPWS review dated 25 June 2002 made reference to a series of short comings in the Witter report on archaeological impacts from the proposed Ashton Coal Mining Project. Most of the issues raised by the NPWS were addressed by specific recommendations in the report which was based on information distributed through the text.

An Aboriginal Heritage Management Plan was proposed in the report recommendations, and at the time of report writing this seemed to be a suitable place to elaborate on the reasoning behind the management strategy recommended. There is extensive material in note form resulting from consultation sessions involving the Aboriginal community and the proponent. To further develop the management process ongoing dialogs with the proponent, the NPWS, and the Aboriginal communities needs to be undertaken.

It is proposed therefore that specific requirements outlined for an Aboriginal Heritage Management Plan be a condition of approval for the Ashton Coal Mining Project. The NPWS comments are discussed below with that as an objective.

1. **Assessment of impacts.** Various impacts need to be defined and discussion is needed to outline options to minimise such impacts. The main points are:

- Haul roads. For engineering reasons haul road which passes under the bridge and through the Waterhole Site cannot be changed if there is to be a Western Emplacement. The place where it runs through the Waterhole is mainly through the most disturbed area. A straight line of sight under the bridge is required (50 metres) then the curve of the road through the site can be adjusted minimally. The exact amount of any impact on the undisturbed portion will be difficult to determine until the road is pegged. There were lengthy discussions which included the Aboriginal community on the avoidance of the rest of the Waterhole Site from accidental impact during the construction of the haul road. This includes the fencing and protection of the waterhole, its grinding grooves and the associated undisturbed deposit.

Do we need
to know etc
how much

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- **Emplacement areas.** There is no room to alter the Eastern Emplacement. Discussions with White Mining about the possibility of protecting the Tributary Site made it clear that there was no room for this option.

The Western Emplacement area "footprint" was redesigned after consultation with White Mining to protect the fringes of the Oxbow Site (although a small microblade workshop may be unavoidably impacted). The High Ridge Workshop Site however is in the central area for the Western Emplacement and no reconfiguration could have provided protection. This also could have been elaborated upon in the report.

- **T/L (transmission line).** This perhaps should be "P/L" for power line? Impacts from a new powerline and the establishment of a telecommunications corridor on the south side of the New England Highway were discussed and alterations to the proposed bund wall were made to protect the artefacts on the Waterhole Site.
2. **Bowmans Creek diversion.** There were extensive discussions with White Mining, in which the Aboriginal community was represented, on the construction of the diversion. While for engineering reasons this begins at the waterhole, it will not impact on the waterhole nor the site. Protective fencing was included in the recommendations as a precautionary measure. It would be difficult to propose an effective subsurface testing program.
 3. **Geomorphology.** It was the opinion of the geomorphologist that the potential buried surfaces, both inside and outside of the impact areas, had been adequately tested. The most likely location was a high terrace on Glennies Creek next to a very steep slope. This produced a buried soil which contained an artefact. No other analogous situations occur in the study area. Further response to this issue should be provided by the geomorphologist.
 4. **Subsidence.** The recommendation of on-going monitoring in the report apparently did not satisfy the subsidence issue for the NPWS. A detailed discussion on the effects of subsidence also has been prepared in a previous report on Ashton archaeology (Hardy 2002). This material needs to be brought together as an "Ashton Subsidence Management Plan", a draft document is attached.
 5. **Extrapolation of data.** An argument could be made to support the proposition that there are probably no other large sites in the impact area by describing the exposure transects provided by dirt vehicle tracks. The potential archaeology on the terraces however remains unknown. There seems to be no real analogue study for comparison. Even the Narama case on Bayswater Creek is not the same situation. It also is difficult to see how a subsurface testing program could be helpful. Extensive grader scraping in the southern section may be an option, but would seem to have more of an impact on the archaeology than the effects of subsidence.
 6. **Conservation outcomes.** There are some major conservation outcomes from this project, and these were discussed with the proponent and Aboriginal community representatives. In particular fencing the intact parts of the Waterhole Site and the fragile grinding grooves to prevent accidental damage was considered important. Protective fencing for erosional stabilisation of the main artefact concentration in the Oxbow Site was also included in the recommendations. It also was discussed with the proponent that an Aboriginal Place under the NP&W Act for the Glennies Creek site could be appropriate. The proponent agreed that an unofficial conservation area in the mine plan was satisfactory, but requested some time to consider the idea of Gazettal of an Aboriginal Place. Included in these discussions was a method of locating access to this site which would make it available to members of the Aboriginal community, and allow them to visit the place during mining and without having to clear a mine induction.

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What
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Bowmans

What
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New sites

Sites
along
creeks



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In summary, it is argued that the Witter and Hardy reports on the archaeology of Ashton provides a sufficient basis for an Aboriginal Heritage Management Plan. This needs to be combined with the records on the consultation process and developed into well supported arguments for management methods and procedures.

Yours faithfully
HLA-ENVIROSCIENCES PTY LIMITED

A handwritten signature in black ink that reads 'Alan Wells'.

Alan Wells
Regional Manager

Encl.

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INITIAL DRAFT

→ DW.

ASHTON MINE SUBSIDENCE PLAN FOR ABORIGINAL HERITAGE

The subsidence area for the Ashton underground mine has the potential to have adverse effects on Aboriginal archaeological sites. The subsidence area is shown in Figure 5 ("Cumulative subsidence impacts") in Hardy (2002). In addition to subsidence, additional impacts include the Western Emplacement area, a bund wall, and a new farm road.

The sites and isolated finds which would be destroyed by the Western Emplacement and bund wall are recommended for collection. A small salvage excavation for the High Ridge Workshop Site (EWA84) is also recommended, as well as possibly also the workshop area EWA87 belonging to the Oxbow Site.

The remaining archaeological material recorded within the subsidence area is liable to disturbance from up to a 5.9 metre lowering of the surface over long walls panels. The actual damage to particular sites however is difficult to predict. A subsidence map (Figure 5) has been prepared by HLA Envirosiences to show cumulative subsidence contours.

The impacts on the archaeology are predicted to be:

- Erosion of a site due to ground cracking and change of slope;
- Burial by sediment due to ponding and the removal of accessibility to the site;
- Displacement of parts of a site due to subsidence.

The archaeology consists of isolated finds and "sites". Most of the isolated finds recorded are probably part of the background distribution of artefacts. These appear to be randomly scattered within a particular land unit. Their density is very low, and any patterning is expected to be at a gross level. These are not a major conservation priority. Isolated finds which are exposed as part of larger artefact concentrations are at a greater risk. However, it is probably not until there is increased erosion and exposure that an assessment can be made.

The site will be subject to ongoing monitoring and where unavoidable impact is identified the sites will be salvaged. Thus the risk to these can be assessed after the mine is in operation through a monitoring process.

The archaeological survey of the Ashton Coal Project produced three major sites which are not threatened by direct impact, and are in or near the subsidence area. These sites are:

1. Glennies Creek. This is a site of outstanding size and integrity with abundant artefacts and three sets of grinding grooves. The analysis of the artefacts shows that it has small specialised flake tools, but little microblade production. It is inferred from the flake material that there was an extensive use of heavy-duty tools at the site. From the size of the encampment it is suggested that this was a place where numerous Aboriginal groups would gather. The purpose for this may have been as a drought retreat at a permanent water source, or for the use of fish traps for migratory mullet or eels. Other functions also are possible. This site needs to be in a conservation area and to be kept as intact as possible. Long wall #1 is on the western margin of this site, and no subsidence is expected to occur within the site area.
2. Waterhole Site. The Waterhole Site is another very large site with abundant artefacts and three sets of grinding grooves. This site has been severely degraded by a gravel crushing plant set up near the New England Highway bridge for Bowmans Creek. There also has been extensive destruction by the construction of the New England Highway. The artefact assemblage from this site is similar to the Glennies Creek Site, except there seems to be a greater microblade component. This site also is conjectured to be a multi-group encampment

such as might occur at a drought retreat or for fish traps. The only apparent intact part is near the waterhole on Bowmans Creek where the grinding grooves are located. This part of the site is supported by the long wall headings, and no subsidence is expected. There may be some subsidence for the rest of the site, but this has already been heavily stripped of soil and lagged. Significant impact from subsidence to this site is suggested to be negligible.

3. Oxbow Site. This is the third very large site. Although there are no grinding grooves, the artefact assemblage is very similar to the Glennies Creek Site. Being next to the outside bend of the Bowmans Creek oxbow, the function of the site may have been similar such as a permanent waterhole or place to trap fish. The main artefact concentration of this site is between long walls #4 and #5. The loop of Bowmans Creek is also between these two long walls, and this is a likely place for a pond to form. The Oxbow Site is within the middle of the subsidence area and that a monitoring strategy be implemented. *what are impacts*
4. High Spur Site. This is a small concentration of artefacts which includes a workshop of "burnt" silcrete that is high on a spur of Ashton Ridge. It is located between long walls #2 and #3 near the southern end. The effects of subsidence are difficult to predict and mitigation work if needed, would be determined from the monitoring process.
5. Ridge Peak Site. This is a small concentration of artefacts on the highest point of Ashton Ridge and overlooks the Glennies Creek Site. It appears to be a location where a variety of activities took place at a vantage point. This site is between long walls #1 and #2, and subsidence would be expected. The effects of this subsidence on the site are difficult to assess, and mitigation work if needed would be determined from the monitoring process.

Other sites, such as the Glennies Bluff and Hunter River Slope Sites are close to the subsidence area, but not actually within it or on a long wall. *?*

The management and mitigation strategy for the above sites, as well as the recorded isolated finds, is as follows:

1. Mark on the ground all of the EWAs (exposures with artefacts in Witter 2002) and "Ash" sites (Hardy 2002) within the subsidence area, but not in the direct impact and salvage areas. The position of these would be navigated using a GPS, and the elevations surveyed in.
2. Monitoring would take place at least annually. *at least longwall passes.* All of the marked locations would be inspected and the elevations re-surveyed. Any adverse effects found would be evaluated and projections for future deterioration made.
3. On the basis of the monitoring information, mitigative measures will be taken. This may include collection or salvage.
4. Aboriginal settlement model and salvage strategy for the open cut, infrastructure and emplacement areas. The northern part of the Ashton Coal Project is to be completely destroyed by these works, and a salvage program needs to be considered.
5. A model of artefact distribution over the landscape is needed as a foundation for methods of subsurface testing (in the process of top soil and gravel reclamation). It is also essential for the development of a salvage strategy.
6. An explanation is needed for which recorded sites require salvage works, and others where this cannot be justified.
7. A detailed rationale for the scope of work required for those sites needing salvage.