

12.0 Heritage

12.1 Site Preservation

Archaeological site MRM4 is a stone artefact quarry site. It has been assessed (Begnaze, 2005) as having moderate to high archaeological significance.

MRM4 is in part of the area previously proposed for the overburden emplacement facility (OEF). In view of concerns raised about the site's archaeological significance, MRM has altered the design of the OEF to avoid its disturbance. Figure 12.1 shows how the footprint of the OEF has been altered so that MRM4 will be preserved.

The toe of the OEF will be offset a minimum distance of 10 m from the boundary of the site, which will be identified by a construction fence and appropriate signage to prevent construction activities or disturbance of the archaeological site. Drainage from the OEF will be diverted around the MRM4 site. Photographs of the site protection measures will be sent to Heritage Conservation Services in the Department of Natural Resources, Environment and the Arts prior to construction of the OEF.

MRM recognises that it will be required to obtain permission from the Minister for Natural Resources, Environment and Heritage to disturb or destroy any archaeological sites that may be located within the area required for the Open Cut Project including sites MRM1 and MRM2 which have been described in the EIS Supplement (URS, 2005b). Sites MRM1 and MRM2 will be subjected to a detailed surface analysis and excavation by a qualified archaeologist prior to any disturbance. A copy of the report of this work will be forwarded to Heritage Conservation Services in the Department of Natural Resources, Environment and the Arts.

12.2 Traditional Owner Consultation

Four Traditional Owners visited MRM on 17 May 2006 to further assess the significance of archaeological site MRM4 as a sacred site. A summary of the discussion that took place during the visit is provided in Appendix D.

The conclusion of the Traditional Owners was that the site had no cultural significance and they would not be concerned if it was to be disturbed.

The visit was arranged by MRM in accordance with its policy of developing and maintaining direct relationships with the communities in the region in recognition of the company's responsibility towards the communities in which it operates.



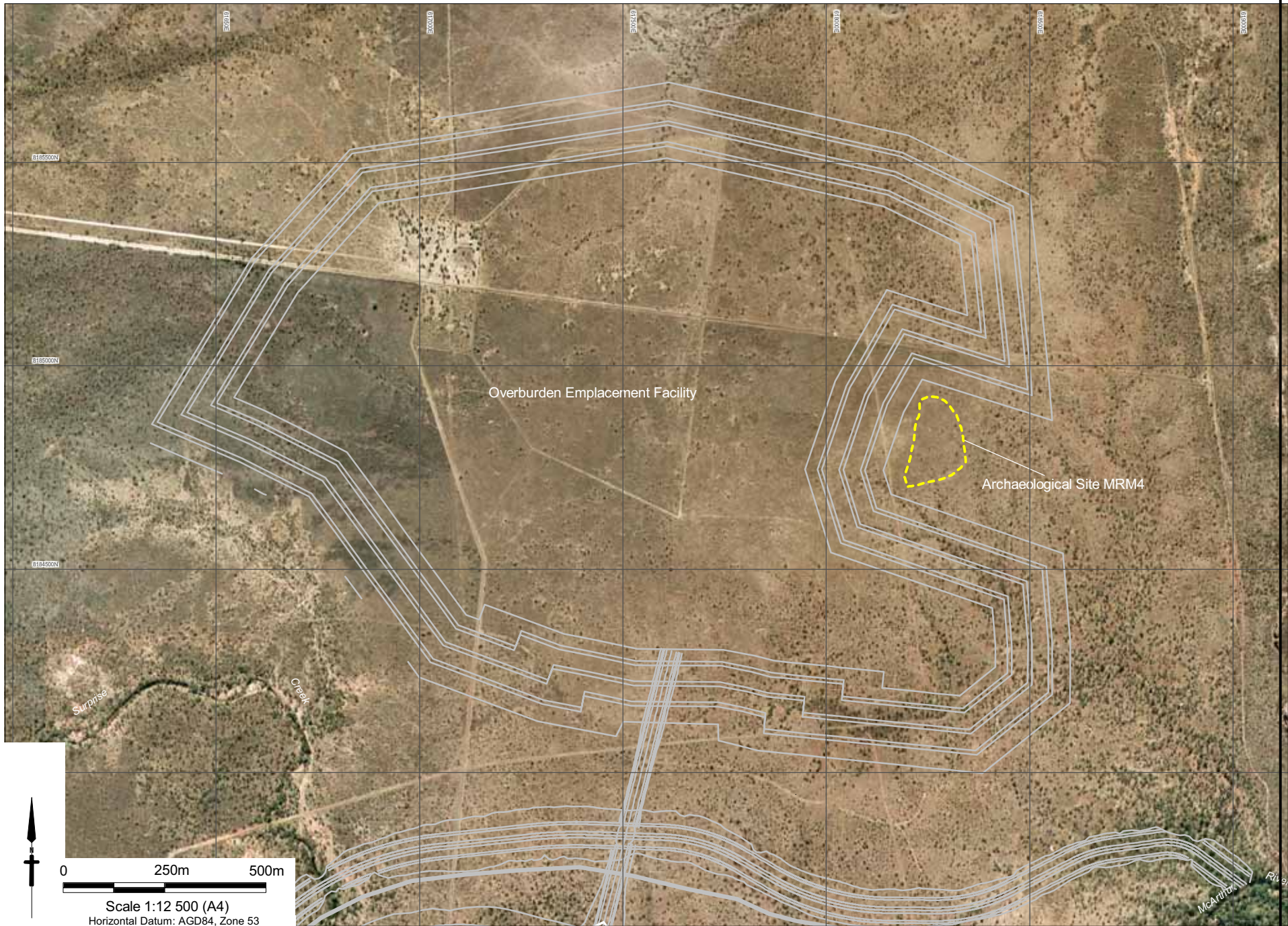
Drawn: VH
Job No: 42625552
Approved: CMP
File No: 42625552-g-176.wor
Date: 27-06-2006

McARTHUR RIVER MINE
OPEN CUT PROJECT
PUBLIC ENVIRONMENTAL REPORT

REVISED OVERBURDEN EMPLACEMENT
FACILITY FOOTPRINT

Figure: 12.1

Rev: A
A4



0 250m 500m

Scale 1:12 500 (A4)
Horizontal Datum: AGD84, Zone 53
Date of Aerial Photography, 2001

12.3 Flood Impacts

The Aboriginal Areas Protection Authority has indicated that some custodians have expressed concerns that particular sites both upstream and downstream and in the area between the McArthur River and Bull Creek will be excessively flooded.

The Draft EIS (URS, 2005a) statements relating to potential increases in peak flood levels refer specifically to levels which only occur for periods less than 6 hours within the 24 to 72 hour period of the typical flood hydrograph. The potential increase in peak flood levels is minor relative to scale of the existing peak flooding depths which are in the order of 15 m deep for 5-year ARI event and over 20 m deep for a 100-year ARI event. It is highly unlikely that there would be any adverse physical impact to sacred sites due to the minor increases in inundation depth caused by the project within the short duration of peak flood conditions. The Open Cut Project will not impact on the duration of peak flood conditions.

Furthermore, with the minor increases in peak flood levels will come slight reductions in peak flood velocities upstream of the diversion channel. This would slightly reduce any potential for physical impact (damage) to sacred sites from exposure to the highest flood velocities that occur in peak flood conditions.