









VOLUME 1

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Welcome

From 2006 to 2009 the site of the old Marulan township, in the NSW Southern Highlands, was investigated as part of the environmental assessment and compliance process for the development of a new hard rock quarry near the town. This development, by Holcim (Australia) Pty Ltd, formerly CEMEX Australia Pty Limited, would result in some impact to the site of the former town, which was recognised as being a place of high state heritage significance. The archaeological works were aimed at establishing exactly what was there and how any impacts to the archaeology or the site's significance should be mitigated. As a result, archaeologists undertook survey, recording and detailed archaeological excavation on the site of Marulan. These volumes collate the information together into a single series of volumes, so that the town's contribution to Australian history can be better understood.

This is **Volume 1 - Old Marulan 2007 - Overview and Summary of the Archaeological Program**. It reports on the permits issued for the archaeological program, how these were implemented and provides a summary of the results of the excavation and a guide to the records and information generated by the project.

The other volumes in the series are:

Volume 2 Old Marulan 2007 – Archaeological Investigations Final Report
 Volume 3 Old Marulan 2007 - Archival Recording
 Volume 4 Old Marulan 2007 - Specialist Reports
 Volume 5 Old Marulan 2007 – Appendices [several parts]
 Volume 6 Old Marulan 2007 – Electronic data [provided at back of Volume 1]

Some of this material has also appeared in earlier stage reports. The information previously presented formed the basis of the present volumes but in some instances this has been substantially updated and revised. The present volumes supersede all earlier volumes where there is any conflict in data or interpretation.

Authorship

This volume was primarily written by Denis Gojak of *Banksia Heritage + Archaeology*, who acted as the Excavation Director and Principal Archaeologist for the work, and has been finalised by Umwelt [Australia] Pty Ltd [Umwelt] on behalf of Holcim.

Even though I take responsibility for the overall performance of the archaeological work and the conclusions presented in this report, this has relied on the support of many people through all stages of the work. These are listed below in the acknowledgements. In particular Tim Adams, Jan Wilson and John Merrell of Umwelt contributed with detailed reading, review and discussion of all of the results of the archaeological work. Richard Savage, of Readymix / CEMEX / Holcim, as Project Manager of the Lynwood Quarry Development at the time of the Old Marulan archaeological project represented the client and was able to provide relevant and useful contributions to the reporting at all stages of the work. Rachel Heath [Holcim Project Manager – Aggregates] oversaw the finalisation of the reporting.

A number of specialists contributed analytical reports that were essential to understanding the site, including Jeanne Harris, Martin Gibbs, Caroline Wilby, Roy Lawrie and Mike Macphail. These are reproduced in the following volumes. I have relied on their knowledge and insights to help form my own views and interpretations of the data. I would particularly like to acknowledge Jeanne Harris's contribution to the overall understanding of the site. I have relied heavily on her detailed analysis and many discussions about what it all means.

Abbreviations

AHD Australian Height Datum, expressed in metres, used to relate all elevations

above sea level.

DMR NSW Department of Main Roads, succeeded by RTA [now RMS].

HC NSW Heritage Council, established under the Heritage Act 1977,

determines matters of state heritage significance.

HB Heritage Branch, now Heritage Division; part of the NSW Office of

Environment and Heritage [OEH].

MIC Minimum item count of artefacts

OM7 Old Marulan 2007 Archaeological Project

PCO Permanent conservation order issued under the NSW Heritage Act

RMS Roads and Maritime Services [formerly NSW Roads and Traffic Authority

[RTA]]

SHR State Heritage Register

SRNSW State Records of New South Wales, formerly Archives Office of NSW

TPW Transfer printed ware ceramic, such as Willow pattern

Acknowledgements

No archaeological project, however small, can be carried out from an office as modest as the one Banksia Heritage occupies, without the assistance of many other people who contributed their labour, dedication and ideas to the task. I would therefore like to acknowledge and thank the following people and organisations for their involvement in this project over a considerable period. If any names are omitted it is my oversight and I would welcome this being brought to my attention.

Holcim [Australia] Pty Ltd [Holcim] – and earlier as CEMEX Australia Pty Limited, and Readymix / Rinker Pty Ltd prior to CEMEX – is the client for the archaeological work. Holcim's representative and project manager for the Lynwood Quarry development at the time of the Old Marulan archaeological project was Richard Savage. I would particularly like to recognise Richard's willingness to support the archaeological work and its aim of doing things properly and in the spirit of best practice, and his active participation throughout the archaeological excavation. Richard was always encouraging and ready to provide assistance to the project and the field teams.

Umwelt [Australia] Pty Ltd [Umwelt] – were the lead environmental consultants and their staff was closely involved in all stages of the archaeological work. It would not be unfair to single out Mary Jean Sutton in the initial stages of the project for her encouragement, and, during the main digging season and afterwards, Tim Adams for assistance in direction and management and in making it so very much easier to do my job without hindrance. The full roster of participants from Umwelt worked in a range of capacities. They are:

- Tim Adams Assistant Excavation Director
- Jill Ford
- John Merrell
- Meaghan Russell
- Sue Singleton [formerly Umwelt]
- Mary-Jean Sutton
- Julian Travaglia
- Jan Wilson

Old Marulan 2007 Archaeological Field Team

- Tim Adams
- Alice Beale
- Justin Boney
- Jason Brown
- Nathan Brown
- Sharon Brown
- Tom Brown
- Virginia Falk
- Alecx Falk
- Peter Falk
- Christine Gant-Thompson
- Denis Gojak
- Sharyn Halls

- Jeanne Harris
- Kathy Kengike
- Vaimoana Kengike
- Mirani Litster
- James McGuiness
- Jack McIlroy
- Rebecca Parkes
- Sarah Peisley
- Daniel Rayner
- Mary-Jean Sutton
- Jenny Winnett
- Anita Yousif

Volunteers

- Geraldine Berkemeier
- Daphne Gooley

Aboriginal Stakeholder Participants

- Gundungurra Aboriginal Heritage Association Incorporated
- Gundungurra Tribal Council Aboriginal Corporation
- Pejar Local Aboriginal Land Council
- Peter Falk Consultancy

Marulan and District Historical Society

The Marulan and District Historical Society worked closely with us in all stages of the work, being frequent visitors, caterers and thoughtful questioners of our findings. Their welcoming attitude to these strangers coming in to investigate their past made our task so much easier.

- Maureen Eddy
- Russell Montgomery President
- Sue Montgomery Secretary
- Lorna Parr
- Rosemary Turner Vice President
- John Feltham, also lessee of the land on which we worked

Banksia Heritage + Archaeology

- Angela So
- Jenny Winnett

Specialists

- Tom Bryant, Goulburn
- Martin Gibbs, Department of Historical Archaeology, University of Sydney
- Jeanne Harris, Urban Analysts
- Roy Lawrie, NSW Dept of Agriculture
- Phillip Leighton-Daly, Goulburn
- Mike Macphail, Australian National University
- Caroline Wilby

Heritage Branch, Office of Environment and Heritage

- Siobhan Lavelle
- Fiona Leslie
- Katrina Stankowski

Others who helped us in many ways

- Russell Cooper
- Helen Dawson
- Christine McGilly

Conventions

Archaeology In this report series refers to non-indigenous 'European' archaeological evidence and artefacts, except where specifically stated. A separate Aboriginal archaeological investigation program examined the site and the surrounding region.

Features/squares/trenches/units These are all different ways of dividing up the site into analytical components. Some are 'natural', i.e. they exist independently of the archaeological process, while others are arbitrary. The archaeological site consists of natural layers of soil, deposits created by humans, such as introduced fills, dumps, post hole cuts and fills and structural evidence such as footings, building demolition material and constructed surfaces. These are termed units, and are numbered consecutively from [01] onwards. The convention is that they are written in square brackets and drawn within a circle in documentation. Different units can be part of the same object or thing, such as a dozen separate post holes, refuse layers and footings being part of the same building. These groupings are called features and usually represent objects or constructions that are described in functional terms that ideally are the same as those of the people who created them, such as a hut, drainage line or fence. Features are given an OMF numbering. To provide spatial control, so that all artefacts recovered could be accurately described and related to each other, hand excavation took place within squares, usually measuring 2 x 2 metres.

Gundungurra/Gandangara The spelling of this language group name varies according to different historical sources and these variations persist to the present, including in the names of organisations. Gundungurra is used in this report, except where spelled differently in quotations, to refer to the language and as a collective name for its speakers. This extends from the Nepean to Goulburn and towards Bathurst.

Heritage Office/Branch/Division The NSW Heritage Office was part of the NSW Department of Planning until it was re-established as a separate agency, which made most of the decisions concerning Marulan reported here. It was then merged again into the Department of Planning, as the Heritage Branch. It is now the Heritage Division; part of the NSW Office of Environment and Heritage. The terms are effectively interchangeable, but Heritage Branch [HB] is used as the general term.

Holcim

The Lynwood Quarry project was initiated by Readymix Pty Ltd, part of the Rinker Group. Readymix remains the name most commonly associated with the development and will probably continue so for some time. In 2007 Rinker was taken over by CEMEX Australia Pty Limited [CEMEX]. In 2009 CEMEX sold its Australian operations, with the company name changing to Holcim (Australia) Pty Ltd. Holcim is used in this report in most contexts to refer to the client and their activities through the duration of the work, including those undertaken by Readymix and CEMEX prior to the change in company name.

Marulan

Generally refers to the original town until 1870, and then the later town, but 'old Marulan' and 'new Marulan' are used where it is not clear from the immediate context which of the towns is being discussed.

Orientation

Old Marulan straddles the Hume Highway. Although this section of the road runs approximately northeast-southwest, the sides will be distinguished as the **northern** [Holcim development] and **southern** [Illawarra escarpment] sides in this report, unless required by the specific context. The **eastern** end of the former town is therefore that part nearest to new Marulan and the **western** end is nearest to Goulburn. Lots alongside the road are described as being to the east or west of each other consistently with this usage.

The archaeological excavation is based on a grid that is also oriented in the same way, with north towards the Holcim Lynwood quarry development.

The site

Generally used to mean the potential area of impact from the Holcim development works, i.e. the northern margin of the Hume Highway and the hinterland where the quarry and its infrastructure will be located, and its immediate margins. This includes an area that falls mainly inside the town allotments and SHR boundary, but also some land that falls outside.

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- 2. Archaeological interpretation plan 18 April 2008 [post-dig]
- 3. Weekly reports issued to Heritage Branch
- 4. End of field season summary report issued to Heritage Branch
- 5. Section 65A permit additional content
- 6. MRNH 1 Circular sheep-dip specification
- 7. MRNH 8 Timber lined well specification
- 8. Artefact collection management policy
- 9. Heritage Branch letter confirming Well specification and interpretation plan
- 10. Heritage Branch letter confirming Artefact collection management policy and sheep dip specification
- 11. Section 57 application for work in the road reserve
- 12. Interim report on 2009 road reserve excavations
- Heritage Branch completion of archaeological works permit conditions 'sign off'
- 14. Heritage Branch letter confirming protection of cess pit
- 15. Section 65A Modification amending Condition 20 due date for final report
- 16. Section 65A Modification consent for work in road reserve



1.0 An Overview of the Project

1.1 Project Initiation

Readymix, now Holcim, was established just before the Second World War as a supplier of ready-mixed concrete that was delivered to sites in a fleet of cement mixers, most famously painted pink. Later the company expanded into quarrying the raw materials for building construction, and was one of the companies that conducted quarrying on the sands and gravels of the Nepean River, north of Penrith. This supply has been predicted to run out within a decade. During the 1990s Holcim identified that it would need to develop a long-term source for hard rock aggregate for the Sydney and regional NSW market. It had an existing quarry at Johnniefields, to the west of Marulan and identified the locality as being suitable for an expanded quarry, extracting the extremely hard igneous stone porphyryite.

The development required the establishment of a new quarry, near the Lynwood property which was bisected by the Main Southern Railway. While most of the quarry material would be moved by rail, using a new siding, there was also a need to safely access the Hume Highway with laden trucks. This effectively required that a traffic interchange be constructed. The location that was determined as acceptable by the then NSW Roads and Traffic Authority [now Roads and Maritime Services [RMS], referred to as RMS throughout remainder of this report series for consistency] was to modify the existing at-grade junction of the Hume Highway with the South Marulan Road and the Jerara Road. This location was in the centre of the former town of Old Marulan [refer to Figures 1.1 and 1.2].

Construction of the interchange would be possible partly within the existing road reserve, which was expanded in the 1960s for the initial widening of the Hume Highway. However, it also required construction of ramps and a northern approach road on private land on the north side of the highway. The Heritage Council of NSW, which had protected the town as a state-significant archaeological site firstly with a Permanent Conservation Order [PCO] in 1982, and then entry on the NSW State Heritage Register in 1999, required that any impact on the site and its important archaeological resource was effectively mitigated [refer to Figure 1.3].

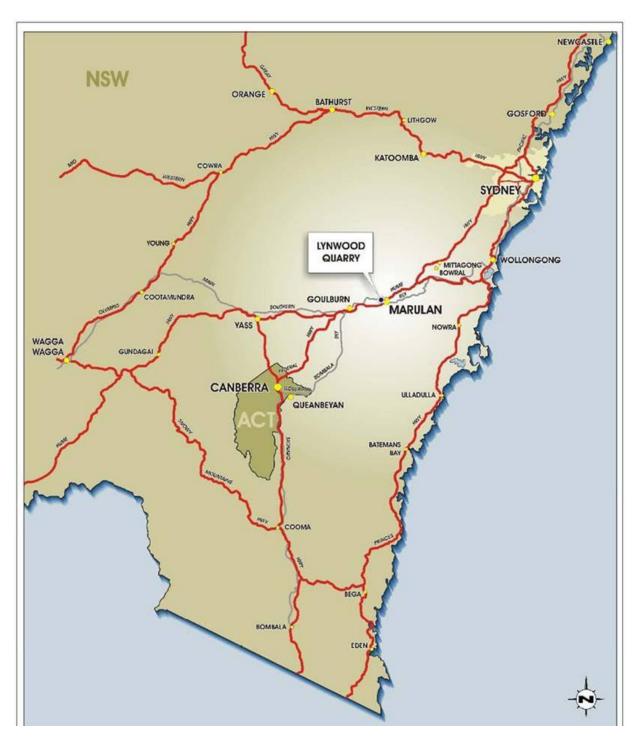


Figure 1.1 - The location of Marulan [Umwelt]

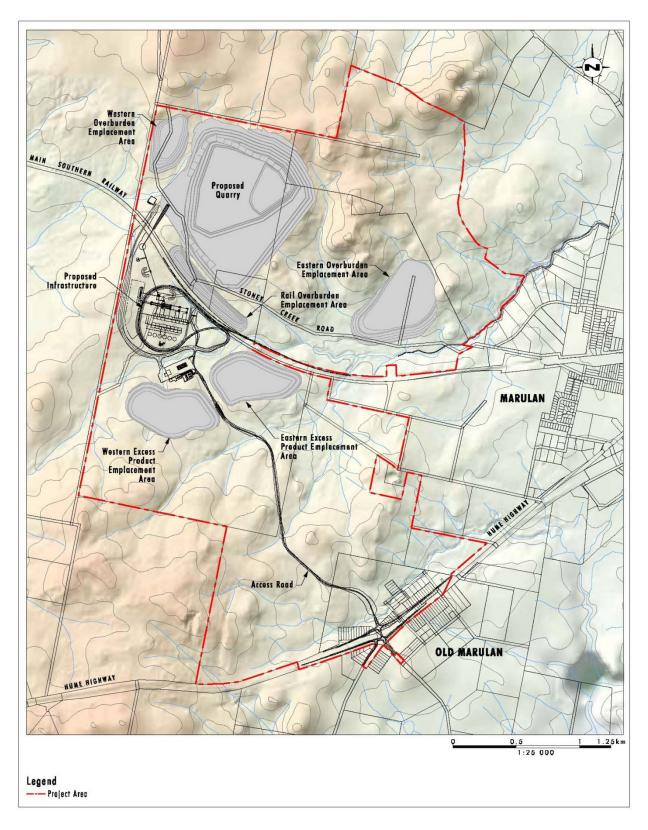


Figure 1.2 - The proposed Lynwood development [Umwelt]



Figure 1.3 - Old Marulan cadastre and State Heritage Register listing [base image NSW Dept of Lands]

1.2 Environmental Impact Assessment [EIS]

1.2.1 Preparation of the EIS

Holcim was required to prepare an EIS as part of its application for development approval. As the consent required approvals from a range of state agencies and was a significant strategic development it required integrated development approval [IDA] from the NSW Department of Planning.

The environmental consultancy Umwelt [Australia] Pty Limited [Umwelt] was engaged to undertake the preparation of the EIS. This included a consideration of the potential for impacts to Aboriginal and non-indigenous heritage.

The main report discussing the historical heritage significance of old Marulan for this stage is:

Umwelt 2005

Non-indigenous archaeological assessment: proposed Lynwood Quarry, Marulan report to Readymix Holdings Pty Ltd, Appendix 12 in Umwelt Environmental Consultants, May 2005

Environmental Impact Statement: Readymix Holdings Pty Ltd proposed Lynwood Quarry, Marulan.

1.2.2 Heritage Council Response

The information presented in the EIS in relation to the town site's historical heritage significance was of a general nature only. More detailed investigation was needed to establish what comprised the historical archaeological resource and how it would be affected by the development. The NSW Heritage Council therefore required further discussion with Holcim and other key agencies¹. In September 2005 general terms of agreement about the proposed interchange were established. These essentially stated that while the Heritage Council preferred an alternative to construction of the interchange within the SHR boundary, it recognised that this would not be feasible. As a result they required that issue of the IDA would be followed by further detailed archaeological studies, which would be subject to approvals processes under s.60 and s.140 of the Heritage Act 1977.

The Heritage Council requirements were set out in detail, and were reflected in conditions issued as part of the IDA consent. Development consent for the Lynwood Quarry was issued on 21 December 2005.

1.2.3 Conditions of the Development Consent

The historic heritage conditions within the development consent are listed below in Section 2.1, with all comments on how compliance has been achieved and, where relevant, cross-reference to specific sections of the final or earlier reports.

The heritage conditions appeared in a general 'Heritage' section and a more detailed Appendix to the consent.

The applicant was also required to apply for a s.140 excavation permit for works that impacted on relics as defined by the Act. These were for items which are outside the SHR boundaries. The sites that are subject to this application and the activities to be included were:

No.	Site	Impact	Actions
MRNH4	Stone line	Demolish	s.140 permit to cover impact
			Recording prior to development
MRNH6	Brick clamp	None	s.140 permit to cover impact
			Sampling of bricks for comparison with archaeological materials from town excavation
MRNH9	Sheep dip	Demolish	s.140 permit to cover impact
			Recording prior to development

Old Marulan 2007 archaeological investigations – Volume 1 – Overview and Summary

¹ NSW Heritage Council, minutes of meeting No. 316 – 8 September 2005.

1.3 Archaeological Research Design

1.3.1 Archaeological survey

This was undertaken in May 2006 by Denis Gojak [Banksia Heritage + Archaeology] and Julian Travaglia [Umwelt]. The purpose was to closely survey the interchange footprint, relocate all existing sites recognised in the EIS, and to identify other possible archaeological evidence.

Prolonged drought, grazing and the general reduction of growth in winter allowed for excellent visibility. Pedestrian survey examined all areas within the impact area, which allowed for a considerable buffer beyond the edge of the interchange construction footprint. All potential archaeological sites, designated elements, were recorded in a number series as OM 1, OM 2 and so on. Each element was briefly recorded on a standard pro forma and photographed. One or more marker flags were used to mark the location, either as a centroid or boundary, and their locations recorded by unrectified GPS. A land surveyor would later provide a more accurate position for each marker flag.

The results were that 45 possible archaeological elements were identified. These consisted of a range of different types of feature, from levelled areas, exotic plantings, drainage lines, artefact scatters and the remains of one substantial structure [refer to Figure 1.4].

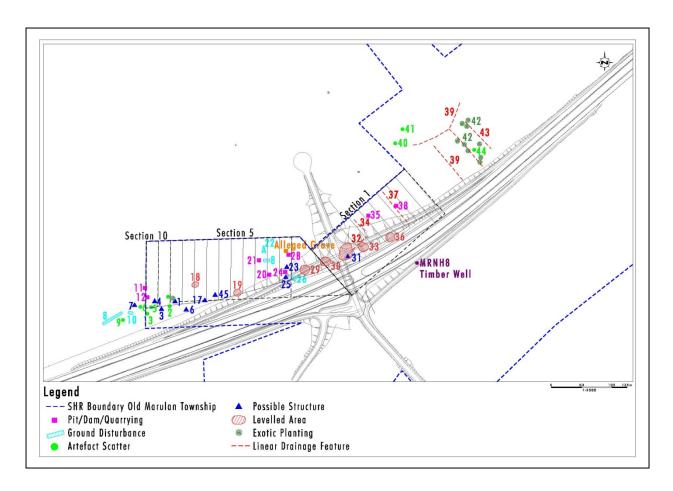


Figure 1.4 - Heritage elements identified in the 2006 archaeological survey

1.3.2 Preparation of a Site History

The history of the impact area required considerable work. Maureen Eddy's history of Marulan², which includes both the old and new towns, was an invaluable start, but a further level of detail was required to understand what happened on the site. This was needed so that the archaeological evidence could be tied to specific events, people and processes.

Archival research at Mitchell Library, State Records of NSW and Fisher Library at Sydney University provided a framework for writing the history. The main themes that gradually resolved themselves in the material were:

 how exploration and settlement of County Argyle³ was both part of a process of finding new land, and also a reflection of social relations in early colonial NSW;

² Maureen Eddy 2000, *Marulan – a unique heritage*, revised edition.

³ County Argyle runs from Paddys River in the north to Lake George, and was the main way that this area was identified in historical records of the 19th century.

- the creation of a Great South Road Surveyor-General Thomas Mitchell's intention to build a major route that would open up the newly discovered southern regions, and how roadside towns fitted into that scheme;
- civic life in a small rural town during the mid 19th century, and how it changed;
 and
- the lives of key people in the town, and how they reflected the broader population and changing rural life.

A detailed land title search for all owners in the impact area was conducted. This allowed for a detailed matrix of ownership through time to be produced. This allowed the analysis to tie evidence of occupation to specific individual ownership, although not necessarily tenancy.

The site history prepared for the research design was found to be robust and comprehensive when tested against later information. It did require updating and more detailed research being undertaken. The updated version of the history of Old Marulan is presented in Volume 2 of this report, and it supersedes all previous historical information.

1.3.3 **Section 139 [4] Exception**

A Section 140 application was submitted as part of the research design to cover archaeological and development works that impacted on specific features identified outside the SHR boundary. These works included:

- minor excavation to clarify the extent and form of a line of stones [MRNH 4];
- excavation to expose remains of a sheep dip and possible holding and draining pens [MRNH 9].

In both cases this was regarded as necessary to allow them to be comprehensively recorded before any impact from the development of the Lynwood Quarry.

Also to be undertaken were archival recording of:

- the original section of Lynwood Homestead [MRNH 5].
- clay pits and brick clamps [MRNH 6 and 7].

The Heritage Branch, then part of the Department of Planning, considered that the s.140 application could be treated as an exception issued under s.139 [4] of the Heritage Act, on the basis that the works proposed for MRNH 9 were considered to have 'minor impact' on the resource. The exception was issued on 28 November 2006.

1.3.4 Section 60 Permit

The results of the archaeological survey, historical research and the creation of a predictive model of the potential archaeological resource were used to reassess the archaeological significance of the site. This, in turn, was used to develop a research design that looked at what sorts of information was likely to be recoverable from the site, limited to the possible impact area, and how it could best be used to increase our understanding of what took place in the town. Particularly important was the recognition that as a rare form of archaeological site – the essentially undisturbed archaeological footprint of a mid-19th century town – the results had broader applicability to a more general view of the history of NSW.

The development's impact on the township, while small in proportion to the size of the town, had the opportunity to add considerable new information about the history of the town and this was also considered to have potential broader importance. The survey information and the historical research were used to develop research questions – particular lines of investigation that were likely to be addressed by archaeological information. These identified how the archaeological significance of the site could be realised, and also directed the best means of investigating the site to maximise the recovery of high quality archaeological information.

This material was presented in a single volume that accompanied the s.60 and s.140 permit applications:

- Banksia Heritage + Archaeology, September 2006
- Old Marulan, County Argyle: a research design and archaeological compliance program for work by Readymix.

1.4 Stage 1 Archaeological Excavation

The Heritage Council approved the archaeological research design and issued the s.60 permit, which called for a staged approach to investigation, with an initial testing program, referred to here as Stage 1. The Stage 1 archaeological excavation was aimed at testing the archaeological potential of possible archaeological features identified during the archaeological survey in June 2006. A selection of the different types of sites identified – levelled areas, drainage ditches, depressions and possible occupation sites were excavated [refer to Figure 1.5].

As executed, the Stage 1 work confirmed that there was an abundant archaeological resource beneath the ground on the levelled areas and in some other parts of the impact area. The levelled areas were particularly dense in artefact material, which rested in a shallow topsoil layer that was quite distinct to the underlying natural soil. Other specific conclusions were:

- the highly structured natural stratigraphy [podsolic soils that have contrasting A1 and A2 horizons] provided a good opportunity for separating out different chronological periods, and for revealing post-holes and other sub-surface features;
- it was very difficult to distinguish between limited exposures of natural rock and stone reused for fireplaces or in clearing piles;
- archaeological evidence [structural and artefact concentrations] was present below the ground even when there was no visible surface indication;
- the archaeological horizon was shallow, less than 150 mm, making it very fragile in the presence of machinery;
- although there was evidence of later pastoral use, the presumed lack of disturbance was confirmed; and
- there was some potential for the undisturbed preservation of biological information, e.g. pollens.

The major recommendation arising from Stage 1 was that the archaeological resource required further investigation and that this should be carried out in such a way as to maximise its research and information contribution to our understanding of the site. It was clear that a comprehensive archaeological program was needed and that the entire development impact footprint needed to be investigated. The initial research design was shown to be largely viable and only minor changes to it were considered to be required.

The Stage 1 archaeological program was reported as:

- Banksia Heritage + Archaeology, March 2007; and
- Marulan Stage 1 archaeological investigation, report to Rinker Australia Ltd and Umwelt [Australia] Pty Ltd.



Figure 1.5 - Stage 1 Archaeological Excavations

1.5 Geotechnical Investigation

This took place in March 2007. It consisted of the boring of a number of cores to determine geological and soil conditions in parts of the development area. The locations are shown in Figure 1.6.

The drilling of bores was monitored and some encountered loose artefact material in the topsoil. No identifiable structural remains were encountered.



Figure 1.6 - Geotechnical Test Sites at The Interchange Site

1.6 Remote Sensing – Ground Penetrating Radar

Banksia Heritage + Archaeology has a cooperative research partnership with the University of Sydney's Department of Archaeology in developing a capability in archaeological remote sensing. An opportunity arose to investigate the site following the Stage 1 work using ground penetrating radar.

A selection of sites were gridded out and trialled. Generally, the results were not positive due to the proximity of the highway and services, and the extremely variable nature of the bedrock in the area.

The one interesting result was that a feature excavated during Stage 1 was believed to be a structure floor. Disturbance to it was attributed to an initial miscalculated scrape from our backhoe. The GPR showed clearly that in fact the disturbance related to a buried service of unknown origin [refer to Figure 1.7]. The delineation of PMG / Australia Post / Telecom / Telstra lines through the site is poor and has resulted in the need to avoid areas because of the risk of damage.

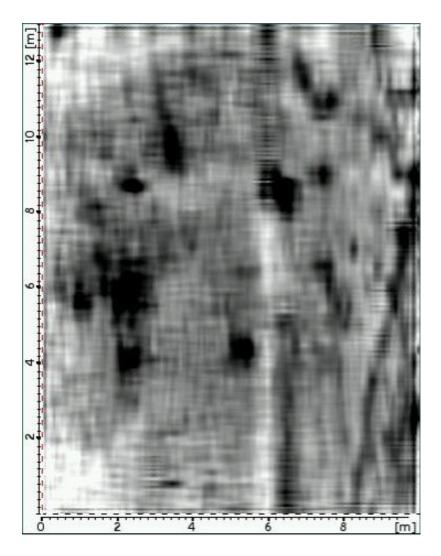


Figure 1.7 - Ground penetrating radar plot of survey area, showing unknown linear feature running vertically through centre of survey area [site E to W] and partial known Telstra line in bottom right [M. Gibbs 2007]. The highway is towards the right of the image.

1.7 Stage 2 Archaeological Excavation

Following the submission of the Stage 1 report with the revised research design, reflecting a much clearer idea of what the potential archaeological resource comprised, the Heritage Council approved the next stage of the works. This was done through the issuing of a s.65A variation to the existing s.60 permit. The variation required that the modifications to the research design and proposed excavation strategy that were recommended in the Stage 1 report were adopted.

A large scale archaeological investigation was required to realise the site's archaeological potential and to mitigate impact, so planning began on conducting an

excavation for August 2007, but the takeover of Readymix / Rinker by CEMEX [now Holcim] delayed the excavation so that it eventually took place in late November and December 2007.

1.7.1 Compliance With Permit Conditions

The s.60 permit and s.65 variation require Holcim to conduct the archaeological project with appropriate resources and levels of authority.

The permits also specify in considerable detail how the work should be carried out, with reference to applicable best practice standards, and to specific endorsed method statements such as the archaeological research design.

A detailed accounting for compliance with the conditions of all permits follows in Section 2.0.

1.7.2 Main Excavation Season

A team of qualified archaeologists was recruited through advertisements on industry email lists and personal contact. The selection of candidates ensured that a range of skill levels from beginner to very experienced were recruited, with a broad geographical base, and gender equity. The professional archaeological team were supplemented by staff provided by four different Aboriginal stakeholder groups [Gundungurra Aboriginal Heritage Association Incorporated, Gundungurra Tribal Council Aboriginal Corporation, Pejar Local Aboriginal Land Council and Peter Falk Consultancy], who were also involved in the parallel Aboriginal cultural heritage investigation and management process [undertaken as part of the Stage 2C Aboriginal archaeological subsurface testing works; refer to Volume 2 Section 4.3.3 of this Old Marulan 2007 report series for details].

A base camp of hired buildings was established on site, and the team were bussed daily to and from Goulburn. Meals on site were catered for through a contract with the Marulan and District Historical Society, which provided a novel but very successful means of involving the local community in the work and giving something back to the local economy.

Excavation within the impact area began with the laying out of a control grid that allowed all of the dispersed excavations to be securely tied back to a single coordinate system. Most of the initial excavation took place by hand, removing layers of soil in 2 x 2 metre squares [refer to Figure 1.8]. The 'Big Rectangle' – an area 24×8 metres – set back from the fence was dug in this way and provided a well-controlled sample of the sheet midden material present in the topsoil, as well as allowing us to become familiar with the nature of the stratigraphy. Other squares were opened up to test different parts of the site.



Figure 1.8 - Stage 2 archaeological excavation, December 2007

All work undertaken during the main stage of excavation took place within the Holcimowned land north of the Hume Highway road reserve.

The main features uncovered during this stage of the excavation included ephemeral remains of buildings in the Crown Reserve and in the lots associated with the Woolpack Inn. These were represented by postholes, shallow lines of brickwork, or simply dark stains within the soil showing where a timber bearer had rested on the ground. These were overshadowed by the uncovering of the cess pit, the structure that sat just inside the road reserve boundary fence. This was a deep pit built solidly of the local igneous stone, filled with deposit sealed in by the collapse of its brick superstructure [refer to Figure 1.9]. The deposit contained a large number of artefacts, many of them broken but entire or nearly complete. These formed the majority of the artefact material recovered from the site.

Artefact analysis revealed that the material in the cess pit was all most likely to be connected with the inn, and represented an accumulation of hotel ware spanning the full history of the town site. Because of its secure provenance, range and condition, and the availability of other information about the Woolpack's occupants, the recovered assemblage has the ability to be a major source for future research and analysis [refer to Figure 1.10].



Figure 1.9 - The Woolpack Inn Cesspit



Figure 1.10 - Representative Artefacts Recovered From the Cesspit

The next component of the main excavation stage was to clear as much of the impact area as possible that had not already been hand excavated using monitored mechanical excavation [refer to Figure 1.11]. This took place over the final eight days of the excavation. Apart from an area that had to be avoided because of the possibility of buried cables, and a section of extremely boggy ground that could not be properly cleared, all the remainder of the impact area was scraped back. This was done in two layers – firstly the turf covering, and then the remainder of the topsoil. The topsoil was removed down to the A2 horizon which was coloured very differently. From the hand excavation it was known that historic occupation was restricted to the topsoil, so once it was removed it would reveal any postholes, pits or depressions that would have been present.



Figure 1.11 - The Main Excavation Stage Work, Showing Areas Excavated Using Monitored Mechanical Excavation

As a result of the clearance two large clusters of postholes were identified in the eastern portion of the impact area, along with remains of a building that is securely now identified as the former post office, and dating from c.1847. The two clusters of post holes represent a range of buildings, fences and, most interestingly, evidence of market gardening or similar planting on the site [refer to Figures 1.12 and 1.13].

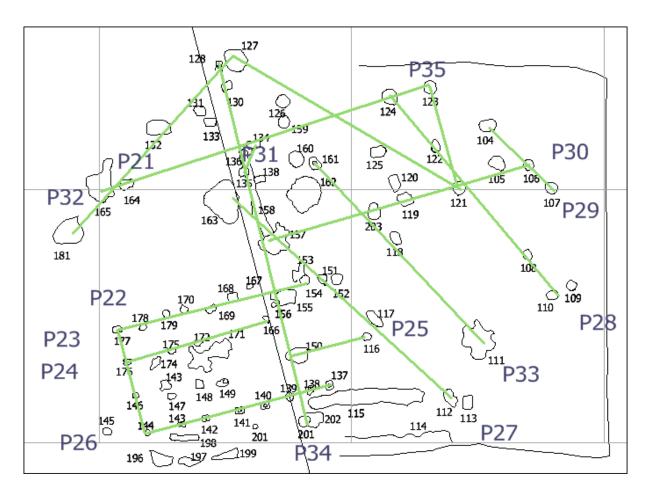


Figure 1.12 - Posthole Alignments Identified During Stage 2 Excavations



Figure 1.13 – Example of a Posthole Identified During Stage 2 Excavations.

1.7.3 Specialist Studies

A range of specialists were engaged to contribute their expertise to the archaeological program. Dr Roy Lawrie of the NSW Department of Agriculture is a senior soil scientist and Australia's most expert analyst of soils on archaeological sites. His work characterised the different soil types present on the site and tested them for trace elements that may reflect past land use and modification.

Dr Mike Macphail of the Australian National University examined a series of soil samples for their microbiological content. This included pollens and other evidence of former environments. In samples taken from the cess pit he was able to provide details of parasites and dietary evidence based on the biosolids present. Unfortunately the site's environmental conditions were not ideal for high quality preservation of fragile evidence, but the findings do add to a corpus of information on 19th century human and social environment.

Dr Martin Gibbs of the University of Sydney undertook gradiometer [magnetometer] survey of brick clamps that were found on the other side of the creek from the Woolpack Inn. This helped to define their overall plan and arrangement and to delimit their extent.

Jeanne Harris of Urban Analysts was the project's artefact analysis specialist. She is considered one of the leading artefact analysts in Australia and has an extensive comparative knowledge of urban and rural 19th century sites. The artefact analysis is discussed further below.

Caroline Wilby is a faunal analyst and archaeologist. She analysed the bone material from the site, which included a range of introduced species, an unusually high quantity of native animals [including a koala in the cess pit!], and a mixture of remains that were butchered or natural inclusions in the deposit [refer to Figure 1.14]. The analysis of the faunal material provides a comparison and check to the conclusions drawn from other sources about the socio-economic status of the creators of archaeological deposits.

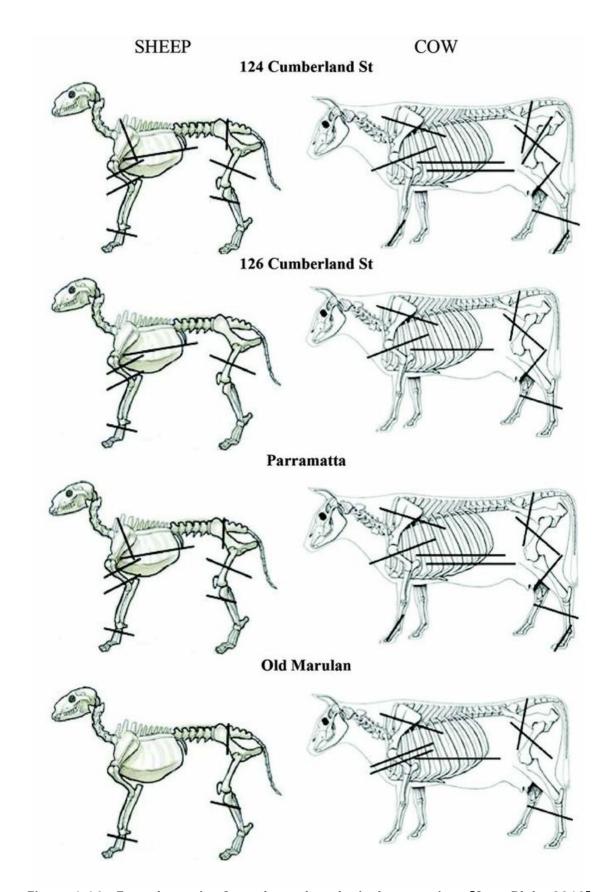


Figure 1.14 - Faunal remains from the archaeological excavations [from Blake 2010]

The project also benefited greatly from the contribution of local history researchers and genealogists, who were able to provide a great amount of biographical information about former Marulan residents. Particular mention goes to Tom Bryant who generously shared his long-time research on the life of Joseph Peters, which was able to correct a number of factual errors that had been made in the initial research design and Stage 1 reports.

All of the specialist reports are presented in Volume 4 of this final report series.

1.7.4 Artefacts

More than 52,000 artefacts were recovered during the archaeological excavation. These constitute a major corpus of information about 19th century life in rural Australia. All artefacts were documented with a provenance [find location] expressed as coordinates to a 2 x 2 metre or smaller excavation square or an exact point, and the stratigraphic unit from which they came. Artefact processing on site meant that the majority had been cleaned and sorted before the completion of the excavation, and the remainder were processed in early 2008.

All artefacts were entered into a database. This recorded a description of what the artefact was, its material, the function it served, how complete it was, possible date ranges of manufacture and use and any other specific information such as any maker's marks that may provide further clues. The artefact analyst, Jeanne Harris, then prepared a report collating and synthesising all of this information, and relating the evidence back to the interpretation of the site. This had to be done iteratively, with the Excavation Director providing information on the grouping and phasing of the units, setting out the known history of the site, and the analyst using that in her interpretation. This in turn provided further ideas that needed to be tested by using the archaeological material, so there has been a solid to-and-fro process between the analyst and the Excavation Director to share information and spark ideas off each others' work.

The faunal analysis was done separately because of its specialised nature, but it similarly required an active dialogue between the analyst and the known history and archaeology of the site.

The overall artefact analysis has resulted in the dating of many of the soil layers that were found, and further refined the interpretation of what went on in the site. Artefacts from specific locations such as the cess pit could provide a valuable resource for future researchers and students.

The artefact collection is now boxed and in storage. It has been divided into three sub-collections – Display collection, Study collection and Discard collection, reflecting the potential further information value of the artefacts and their utility in interpretation.

The artefact collection is managed in accordance with a protocol developed in consultation with the Heritage Branch [refer to Attachments 8 and 10 – this volume].

1.7.5 Report Preparation

The preparation of this final report of the excavation has involved revising and extending the substantial body of research undertaken in advance of the archaeological research design, and correcting many errors and misconceptions in our earlier work and other's research. The different substantial excavations and other investigations had to be analysed and synthesised into a coherent story of the town. A range of subsidiary documents had to be emplaced. These are detailed in the specific permit compliance sections below.

The broader scope of the final report's history arises from the requirement to interpret the history of the entire town as a condition of the permit. Fully understanding the area excavated within the town would only be possible by placing it into its context within the town, and putting the town's history into a broader regional history.

The s.60 permit requires this report to be prepared to publication standard. Condition 12 of DA 128-5-2005 requires an archaeological publication for the general public of Old Marulan Township incorporating the results of the archaeological programme at the site be prepared. The text of the history and archaeology volume [Volume 2 of this report series] is intended to form the basis for a book-length treatment of the dig. Report text has therefore been written with the view of it being free of technical jargon and readily readable to an educated public audience.

1.7.6 Conservation Of Items

Two items within the SHR boundary were identified as requiring conservation works.

MRNH 1 – the circular sheep-dip was damaged by farm machinery prior to the commencement of the Lynwood Quarry development project and this archaeological investigation. The project has committed to the Heritage Branch to stabilise the structure. It has now been archivally recorded, and a specification for the stabilisation endorsed by the Heritage Branch [refer to Attachments 6 and 10 – this volume].

MRNH 8 – the timber-lined well will be affected by the construction of a maintenance road beside the southbound up-ramp of the interchange. The well has been archivally recorded. A specification has been prepared and endorsed by the Heritage Branch, detailing how the well will be documented, then backfilled using inert materials prior to construction of the interchange [refer to Attachments 7 and 9 – this volume].

1.7.7 Value Adding

Throughout the project there have been opportunities to undertake additional work that does not fall within the specifications of the permits, but adds to the value of the archaeological work. This work has been undertaken with negligible cost to the project, but with considerable benefits to the client in terms of demonstrating best practice, innovation, realising the full potential of the archaeological resource and engaging with the community. These have created an extremely positive community and professional recognition of the Old Marulan archaeological project and of the broader Lynwood Quarry development.

Examples of value adding include:

- Banksia Heritage + Archaeology supporting the transcription of the Woolpack Inn ledger, as a significant source of information about 19th century rural businesses and trade patterns. It is also a very useful genealogical resource. This work is in progress.
- The Woolpack Inn faunal assemblage was studied as part of a comparison of rural and urban consumption patterns in the 19th century. This was subsequently presented at the 2010 Australasian Society for Historical Archaeology Conference, Adelaide, and published in the journal *Australasian Journal of Historical Archaeology*⁴.
- Excavation Director paper to 2008 Australasian Society for Historical Archaeology Conference, Adelaide 'Archaeology from the bottom: Joseph Peters' cess pit and the death of old Marulan'.
- Excavation Director talk to Marulan and District Historical Society on the project.
- Excavation Director talk to Horbury Hunt Club [architectural heritage group] on the project.
- Excavation Director talk to Berrima and District Historical Society on the project.
- Excavation Director talk to University of Sydney archaeology students.
- Use of the artefact collection for Laboratory Methods archaeological teaching at the University of Sydney, and specialist workshop on historical artefact identification and analysis.
- Donation of video footage to the University of Sydney as a teaching collection for excavation work and providing a stock of material for training in editing techniques.
- Partner in Goulburn Regional Art Gallery exhibition centred on archaeology and rural landscapes, with special emphasis on Marulan.
- Papers for publication in academic journals in preparation.

⁴ Natalie Blake 2010, 'Diet in urban and rural nineteenth century New South Wales: the evidence from the faunal remains', Australasian Historical Archaeology, 28, pp. 25-34.

1.8 Archival Recording

A number of sites identified during the initial Umwelt survey undertaken as part of the 2005 EIS were recommended for archival recording. These are:

MRNH 1 Circular sheep dip

MRNH 4 Stone line

MRNH 5 Lynwood Homestead

MRNH 6 Brick clamps MRNH 7 Clay pits

MRNH 8 Timber-lined well

MRNH 9 Sheep dip

MRNH 1 and MRNH 8 are within the SHR boundary, but the other elements are outside. All of the sites, with the possible exception of MRNH 8, reflect the later rural heritage of the site, following the demise of Old Marulan. Further examination has determined that MRNH 4 is either completely natural or has been augmented with stray stones and does not constitute a valid element.

Archival recording was carried out in accordance with the current NSW Heritage Branch Standards for Archival recording of heritage items.

The report for this work is presented as Volume 3 of this final report series:

- Banksia Heritage + Archaeology 2010
- Old Marulan 2007 Volume 3: Archival Recording Report to Holcim Australia Pty Ltd and Umwelt [Australia] Pty Ltd.

1.9 Stage 4 Archaeological Excavation

Previous archaeological work had been restricted to the Holcim-owned land to the north of the Hume Highway road reserve, a modern boundary line. Excavations had shown that archaeological remains of the township were likely to continue into the reserve.

As the construction work for the interchange would impact the road reserve area an application for an exemption under the s.57 [4] of the Heritage Act was submitted to the Heritage Council. This would allow superficial deposits within the Hume Highway road reserve to be investigated as part of the archaeological investigations. It was noted that the deposits on the highway side were notably higher than in the Holcimowned land. This was likely to be as a result of overburden placed there during the 1970s widening of the road. The s.57 exemption required the removal of this disturbed overburden to expose any in situ material beneath. Based on the area already excavated it was likely that any remains would be visible on the former land surface. In particular it was not clear whether the cesspit on the northern side of the fence was a standalone building or connected to other structures.

Excavation took place in March 2009. As expected the surface deposit removed was fill from the 1970s road works, but containing artefacts spanning the previous 150 years. This overlay a fairly small intact area which contained the remains of one demolished structure. This could not be securely interpreted but may have had something to do with processing carcasses as there were large mammal bones present. All exposed archaeological evidence was recorded but none was removed. The cess pit was found to be a stand alone building, not connected to any other structure. Together with the other building this may have been a deliberate placement of two malodorous structures together away from other parts of the site.

The main source for this is:

- Banksia Heritage + Archaeology March 2009
- Interim Report on Road Reserve Excavations March 2009
- Report to Heritage Branch of the Department of Planning [refer to Attachment 12 this volume]

Following this, monitoring of final site clearance of the road reserve area was undertaken in June 2011 by Umwelt archaeologists prior to the commencement of construction work. No further archaeological remains were identified.

The results of Stage 4 road reserve excavations and monitoring have been incorporated into the main excavation report [Volume 2].

1.10 Site Management Before/During/After Construction Works

- * Fencing of specified sites in the broader construction zone
- * MRNH 1 Infill of the sheep dip in accordance with specification [refer to Attachment 6 this volume]
- * MRNH 8 infill and protective covering of well in accordance with specification [refer to Attachment 7 this volume]

MRNH1 and MRNH8 have been managed through in situ conservation in accordance with the specifications accepted by the Heritage Council. The fencing of sites has also been undertaken.

1.11 Public Archaeology and Heritage Interpretation

The involvement of the public and development of interpretation of the significance of the excavation was a requirement of the s.60 permit.

The main mechanism used to direct how this would take place was an interpretation plan, prepared by Banksia Heritage + Archaeology, with input from Umwelt and Peter Tonkin of specialist heritage interpreters 3D Designs.

The interpretation plan went through several editions that served different purposes. The version issued 28 May 2007 prior to the late 2007 Stage 2 archaeological excavation was focussed on interpretation of the archaeological excavation, using a number of frequently used means of generating public engagement, such as open days, web site, opportunities for volunteering and signage [refer to Attachment 1 – this volume]. The physical constraints of the site – distance from town, safety risk for any signage, highway noise – required modifications to our approach. Effectively this meant that public visitation had to be controlled through public open days. Two of these – one general access and one for the Marulan Historical Society and invitees – were well-attended and positively received.

Despite advertising, there was only limited interest in volunteering. This was probably because of the closeness to Christmas, but to compensate for this and to encourage interaction with the local Marulan community by other means, the Marulan Historical Society was contracted to provide catering during the dig.

Following the excavation, many of the elements in the interpretation plan were acquitted, but consideration needed to be given to the interpretation of the archaeological discovery process, its results and the broader history of the old town. A revised interpretation plan was prepared and submitted to the Heritage Branch, for approval [dated 18 April 2008; refer to Attachment 2 – this volume]. The revised interpretation plan was subsequently endorsed by the Heritage Branch as a delegate of the Heritage Council on 5 March 2009 [refer to Attachment 9 – this volume].

In 2009 the implementation of the plan was hindered by the lack of resolution as to whether the Marulan community will be able to establish a museum. The Marulan and District Historical Society will be now opening a new building at 97 George Street, Marulan [to the rear of the Marulan Uniting Church] in mid 2015. The building will allow interpretative objectives like the establishment of a permanent display and the long-term management of the archaeological collection [for research and display] to be achieved.

Open Days

An open day was held on Saturday 8 December 2007. A total of 19 people attended. Although these were small numbers, the time of year and inclement weather probably reduced numbers. Many Marulan locals did not attend because they regularly visited the site as part of the Marulan and District Historical Society catering crew.

Community Participation

As noted above, the Marulan and District Historical Society was contracted to provide catering during the excavation. This proved to be extremely successful, as it gave a much more flexible means of encouraging people to visit the site, spend time there and watch the work or meet team members.

Holcim also liaised with Marulan Public School, in the hope of arranging a tour and possible class talks related to the Primary syllabus. Unfortunately the timing of the excavation late in the school year prevented this from taking place.

<u>Website</u>

A temporary website was established at http://projects.umwelt.com.au/lynwood-heritage/ during the archaeological program of works.

This provided the weekly reports that were also submitted to the Heritage Branch [refer to Attachment 3 – this volume], and links to the major reports.

Information relating to the archaeology and heritage of Lynwood is now permanently located on Holcim's website:

http://www.holcim.com.au/about-us/community-link/lynwood/our-environment.html

There is no available data on number of visits to these websites, although the Excavation Director has been contacted by a number of people through reading the Research Design on the website, mainly for family history research, but also embracing a broad range of historical and regional issues.

This final report series will be added to the website.

Public Talks

Denis Gojak gave a talk to the Marulan Historical Society in August 2008. The talk was attended by about 80 people, who heard an overview of the results of the archaeological work.

A subsequent public talk at the opening of the exhibition of art inspired by the Marulan archaeological excavation took place in August 2009. This talk was attended by about 70 people. The exhibition proved to be popular and is being considered for display in other regional galleries.

Specialist Audiences

Denis Gojak presented a paper titled 'Archaeology from the bottom: Joseph Peters' cess pit and the death of Old Marulan', to the October 2008 Australasian Society for Historical Archaeology Conference, Adelaide.

Sections of this talk were also given to the Horbury Hunt Club [an architectural heritage enthusiasts group] in February 2009.

A Sydney University Archaeology honours student, Ms Natalie Blake, used the Woolpack Inn faunal material collection for her honours thesis. This compared differences between urban and rural diets in the nineteenth century using analysis of food remains. Her work on comparative collections identified the Woolpack Inn assemblages as the only high quality 19th century rural faunal assemblage available from anywhere in Australia. Ms Blake's thesis was submitted in 2009.

In May 2009 the University of Sydney Department Of Archaeology used selected materials from the Old Marulan artefact collection for undergraduate practical and theoretical teaching in their Laboratory Methods course, supported by the Excavation Director and excavation and analysis staff.

In 2010 the Excavation Director presented a paper on 'Interpretation at Old Marulan' to a workshop on the interpretation of archaeological heritage.

Artist In Residence and Artist Program

It is a principle of archaeological interpretation that, no matter how exciting the process of archaeological discovery can be, there are also other values of significance that are embodied in archaeological sites, whether these relate to historical association, rarity or aesthetic appeal [particularly for grand ruins]. A further aspect of significance that is not frequently explored in archaeological interpretation is to develop emotional responses based on the sensations and thoughts that inevitably arise from watching an archaeological site being revealed.

Ms Geraldine Berkemeier was approached to consider the role of being an artist in residence, with the opportunity to produce works that documented the dig in a way different to the 'scientific' approach reflected in these volumes. Geraldine is a well-established print artist and painter whose work specialises in exploring the historical layering of Australian landscapes. While Ms Berkemeier was interested, the arrangement of having an artist in residence was not feasible. However, she was able

to spend several days as a volunteer on the site while documenting processes for her work.

Ms Berkemeier and another volunteer, Daphne Gooley, prepared the content of an exhibition held in August – October 2009 at the Goulburn Regional Art Gallery, with the support of Banksia Heritage + Archaeology. This examined how archaeologists map the land and impose order upon a mosaic of soil discolourations, broken artefacts and historical data. The exhibition proved to be very popular and later appeared at the Gosford Regional Gallery.

Holcim Open Day 2014

Holcim held a very successful open day on 10 May 2014 at Lynwood Quarry. Over 480 people attended the open day.

Several posters relating to the history of Old Marulan, the archaeological excavations, an overview of the results of the archaeological work and Lynwood's rural heritage were prepared and presented by Umwelt at the open day. A selection of the display collection artefacts were also on display during the open day.

1.12 Collection Management

An artefact collection management policy was prepared in and subsequently approved by the Heritage Branch on behalf of the Heritage Council [refer to Attachments 8 and 10 – this volume].

This is set out in more detail in Section 4.4 below.

All artefacts have been recorded to the standards set out in the Artefact management collection policy.

Pending the resolution of the long-term repository issue with Goulburn-Mulwaree Council and the Marulan and District Historical Society the artefacts were held in a secure storage facility in environmentally acceptable conditions. Custody of the artefact collection was transferred from Banksia Heritage to Holcim in August 2013.

The Marulan and District Historical Society will be now opening a new building in mid 2015. The building will allow interpretative objectives like the establishment of a permanent display and the long-term management of the archaeological collection [for research and display] to be achieved.

1.13 Economic Impact of Works

The NSW Heritage Council requests basic information about the archaeological work and the broader development to assess its economic impact. The following responses were provided by Holcim in October 2009 and confirmed in March 2015.

- 1. The estimated total cost of the archaeological investigation [both in the field and laboratory], including GST to date is \$600,000. This includes employment for approximately 20 archaeologists during the 2007 Stage 2 archaeological excavation works. Final costs following completion of all reports, interpretation and associated work is likely to be approximately \$650,000.
- 2. The initial cost of the development is \$180,000,000. Total final cost of the development, including GST, is estimated to be over \$200,000,000.
- 3. The project will create 20 25 new permanent positions in the quarry at start up, possibly increasing by a further 5 10 as the scale of the operation grows, with potential for additional truck driver positions. There is also potential for new positions to be created by maintenance contractors in the area who will service the quarry.
- 4. Approximately 120 140 construction and professional workers will be engaged by the project during its lifetime.



2.0 Statutory Compliance

In this section detailed responses are given to all relevant conditions of all consents issued for archaeological work. Please note that the wording of the conditions are summarised in this presentation. Copies of the permits are included as attachments if the exact wording is essential [refer to attachments 5, 15 and 16 – this volume].

2.1 Environmental Impact Assessment

These are conditions relating to archaeology contained in DA 128-5-2005 issued on 28.12.2006.

Development consent requirement [edited text]

38. The Applicant may carry out the development in the area identified in the State Heritage Register as the Old Marulan Township [SHR No. 00127] with the written approval of the NSW Heritage Council.

Approval was given as s.60 consent 2006/S60/082.

39. Prior to seeking this approval, the Applicant shall undertake a detailed investigation of the archaeological potential of the proposed development area in the Old Marulan Township...

A detailed archaeological survey was undertaken of the site and an archaeological research design prepared. These were submitted with the s.60 application.

The report reference is:

Banksia Heritage + Archaeology, September 2006 Old Marulan, County Argyle: a research design and archaeological compliance program for work by Readymix.

The historical and archaeological findings presented in this report have been considerably extended and revised following further investigation, and should be seen as only an initial statement of the archaeological potential.

- 40. In seeking this approval, the Applicant shall submit the following information to the NSW Heritage Council:
- [a] the final design of the proposed Hume Highway interchange, incorporating the results of the archaeological investigations [see condition 39], and including information on landscaping, lighting, and stormwater management;

Final designs for the interchange were submitted to the Heritage Council on 1 June 2007.

- [b] an Archaeological Assessment of the area to be impacted by the proposed interchange, that includes the:
- nomination of an Excavation Director and archaeology team which will be approved by the Director of the NSW Heritage Office;
- assessment of the significance of the archaeological remains to be impacted within the development area,
- plans and details of the location and depth of excavation works and assessment of the exact impact on potential archaeological remains;
- identification of research themes and identification of both site specific and general research questions,
- details of the proposed on-site excavation methodology including details on philosophical approach
 to on-site work and the process and procedures proposed for recovery and recording of
 archaeological data, and details on how the archaeological research is proposed to be satisfactorily
 completed,
- details of the proposed post-excavation methodology; and
- details of the Interpretation Plan for the entire Old Marulan Township precinct.

The Research Design and Archaeological Compliance Program (the Compliance Plan) included the information set out above:

- Excavation director and key team members
- Significance assessment
- Plans and details of archaeological works
- Identification of research questions
- Excavation method and approach
- Post-excavation method and approach
- Interpretation plan

Detailed separately to HB Section 3.7 of Compliance Plan Section 4 of Compliance Plan

Section 4.1.5 of Compliance Plan

Section 4.3 of Compliance Plan

Section 4.3.4 of Compliance Plan

Section 5 of Compliance Plan See also Section 1.11 above

- 41. The Applicant shall ensure that:
- [a] the development does not have any impact on:
- the archaeological remains within Lot 1, DP210885;
- heritage items MRNH1, MRNH2, and MRNH3;
- the section of the State Heritage Register curtilage located at the eastern side of the Hume Highway, other than the impact upon the timber lined cistern/well [MRNH8];
- [b] as much fabric of the timber-lined cistern/well [MRNH8] and the archaeological remains uncovered through the archaeological excavation as possible is salvaged and incorporated as a key element in the interpretation of the site as part of the new development; and
- [c] the movement of machines across archaeologically sensitive areas is kept to a minimum.

Lot 1 DP 210885 is within the road reserve and falls outside the area covered by this permit. It was the subject of a separate exemption application dated 2 Feb 2009 for investigation. This was granted by the Heritage Branch as delegate of the Heritage Council and investigation took place in March 2009 [see Sections 1.9 above and 2.3 below].

No impact occurred to MRNH 1, MRNH 2 and MRNH 3 during the archaeological program. All will be fenced and clearly identified before on-site development works commence.

MRNH 1 will be stabilised and backfilled in accordance with the specification approved by the Heritage Branch [refer to Attachment 6 – this volume].

MRNH 2 – stone lined well. Not disturbed and outside the development impact footprint.

MRNH 3 – alleged convict graves. Not disturbed, but their status as graves is disputed.

Note that Condition 41[a] of the development consent [DA 128-5-2005] has now been modified as part of a Section 96 [1A] modification application granted 7 May 2009. Condition 41[a] was modified as indicated below to allow for impacts/disturbance to any archaeological resource identified in the Hume Highway Road Reserve [formerly part of Lot 1 DP 210885] if written approval is obtained from the NSW Heritage Council [modified wording is underlined]:

- 41. The Applicant shall ensure that:
- [a] the development does not have any impact on:
- the archaeological remains within the former Lot 1, DP210885;
- heritage items MRNH1, MRNH2, and MRNH3;
- the section of the State Heritage Register curtilage located at the eastern side of the Hume Highway, other than the impact upon the timber lined cistern/well [MRNH8] <u>except where undertaken in accordance with the written approval of the NSW Heritage Council</u>;
- [b] as much fabric of the timber-lined cistern/well [MRNH8] and the archaeological remains uncovered through the archaeological excavation as possible is salvaged and incorporated as a key element in the interpretation of the site as part of the new development; and
- [c] the movement of machines across archaeologically sensitive areas is kept to a minimum.

Section 65A Application No 2009/S65A/13 was subsequently approved by the Heritage Branch, as delegate of NSW Heritage Council, on 22 October 2009 to allow for the recording and removal of any potential archaeological remains surviving in the Hume Highway road reserve [refer to Section 2.5 – this volume].

Archaeological Field Work/Excavations

1. The Applicant shall comply with the detailed requirements in Appendix 7 [of the approval] to the satisfaction of the NSW Heritage Office.

See specific commentary below addressing the requirements in Appendix 7.

1. The NSW Heritage Office must be informed in writing of the start of the archaeological investigation at least five [5] days prior to the commencement of, and within five [5] days of the completion of on-site archaeological work.

Notification was sent to the Heritage Branch, dated 15.5.2006, before commencement.

Notification was sent to the Heritage Branch, dated 24.1.2007, following completion of the field survey season.

2. The Heritage Council and staff of the NSW Heritage Office authorised under section 148[1] of the 'Heritage Act, 1977' reserve the right to inspect the site and records at all times, as well as access any relics recovered from the site.

An official inspection of archaeological work in progress was undertaken by Heritage Branch archaeologists on 22 December 2007.

No request has been made to examine records or artefacts.

3. The Applicant must ensure that all personnel involved in excavation works attend a comprehensive briefing on the requirements of the 'Heritage Act, 1977' in relation to archaeological relics and the proposed archaeological programme. The briefing is to be presented by the Excavation Director nominated in the section 60 application and is to be undertaken prior to the commencement of onsite works. A copy of this approval and conditions of consent should be made available to all archaeological on-site staff.

A comprehensive half-day background briefing on the project, site significance and archaeological procedures was held on 25.11.2007 before work commenced on site. Written material circulated to all team members in advance of the main excavation program included a copy of the excavation permit.

Later additions to the team and other site workers were individually inducted by the Excavation Director and senior archaeologists on site.

4. The Applicant must ensure that if substantial intact archaeological deposits and/or State significant relics not identified in *Environmental Impact Statement, Readymix Holding Pty Ltd Proposed Lynwood Quarry, Marulan*, prepared by Umwelt Environmental Consultants, are discovered, work must cease in the affected area[s] and the Heritage Council of NSW must be notified. Additional assessment and approval may be required prior to works continuing in the affected area[s] based on the nature of the discovery.

No archaeological deposits or other archaeological evidence that was inconsistent with, or not predicted by, the archaeological research design was found during the works.

5. The Heritage Council of NSW must approve any substantial deviations from the approved research design outlined in *Environmental Impact Statement, Readymix Holding Pty Ltd Proposed Lynwood Quarry, Marulan*, prepared by Umwelt Environmental Consultants, including extent and techniques of excavations, as an application for the variation of an approval under section 65A or a new application under section 60 of the 'Heritage Act, 1977'.

The archaeological program and research design was planned so that the initial Stage 1 investigation provided detail on the archaeological resource, and that a variation or new s.60 application would be sought before the main excavation program using this information.

Stage 1 was carried out consistently with the research design, and a s.65A variation of the permit was issued by the Heritage Council prior to the main excavation program, and undertaken in accordance with the revised research design. See Section 2.3 below.

6. The Applicant must ensure that the nominated Excavation Director is present at the site supervising all archaeological fieldwork activity likely to expose significant relics 100% of the duration of the archaeological activity. Should this not be possible, then the Applicant must forward for the approval of the Heritage Council or Director of the NSW Heritage Office the details of a Site Director in charge for this period.

This condition was modified by a variation appointing Tim Adams as Assistant Excavation Director. See Section 2.3 below.

Denis Gojak was present on site as Excavation Director during the archaeological work for the entire time, apart from an absence on 19.12.2007 to attend off-site meetings, following approval of the variation.

7. ... Applicant must comply with any directions of the nominated Excavation Director in relation to works likely to impact on this resource...

The Applicant – Holcim – has complied with all requirements of the archaeological consents and directions of the Excavation Director.

8. ... Applicant must ensure that the nominated Excavation Director, and archaeological excavation team, are given priority when allocating resources ...

The Applicant ensured that all work undertaken in accordance with the permits was able to done comprehensively and professionally. Sufficient resources were provided to allow the work to be undertaken to professional best practice standards.

- 9. Throughout the archaeological excavation works and post-excavation analysis, the Applicant must ensure that:
- [a] Appropriate signage to explain the history of the site and the archaeological excavation works is placed at the site during the work,

This issue of signage was discussed as part of the archaeological interpretation plan. It was considered that the position of the site would not make signage effective.

This is discussed in more detail in Section 1.11 above. See also Attachment 1 – this volume.

[b] A local public information program is implemented including press releases to ensure the public is informed about the project and its outcomes,

A public information campaign was developed as part of the archaeological interpretation plan.

This is discussed in more detail in Section 1.11 above.

[c] Community participation in the archaeological works on the site is allowed ...

The Marulan and broader community were invited to participate as volunteers on the excavation, but this elicited little response.

As an alternative, the Marulan and District Historical Society was contracted to provide on-site catering during the excavation. This allowed a roster of community members to visit the site each day, meet team members and see work in progress. It also engendered positive messages about putting money into local businesses and recognising that people had established skills they could contribute rather than volunteering.

[d] A website addressing the archaeological works on the site must be created...

A temporary website was established during the archaeological program of works – at http://projects.umwelt.com.au/lynwood-heritage/.

It contained links to relevant agencies and community initiatives, copies of the key archaeological reports [Archaeological research design, Stage 1 report and the final report series].

Weekly reports prepared during the dig present the excavation story in progress, along with images from the dig.

Information relating to the archaeology and heritage of Lynwood is now permanently located on Holcim's website:

http://www.holcim.com.au/about-us/community-link/lynwood/our-environment.html

This final report series will be added to the website.

[e] The progress on the archaeological works on site is systematically video recorded,

All aspects of the archaeological program were video recorded.

Banksia Heritage + Archaeology is now partnering with the Department of Archaeology at the University of Sydney to develop the footage into a permanent teaching resource for students.

See Section 4.5 below for more details.

[f] The services of a conservator must be utilised for conservation of significant artefacts,

Sydney Artefact Conservation was retained to provide specialist materials conservation services if required during the field work.

No call was made on their specialist skills as artefacts were assessed to be sufficiently stable to retain their informational value using standard field recovery, cleaning and storage techniques.

[g] The Heritage Office is notified weekly, in writing, of the progress of work during excavation and monthly during post excavation analysis,

Weekly reports were produced following each week of fieldwork. Copies of these are presented in Attachment 3. They were also posted on the excavation website and can be found on the permanent Holcim website.

The revised excavation permit – 2007/S65/011 – removed the requirement for monthly progress reports of the analysis. The analysis is described in the excavation report [this report series], particularly Volumes 2 and 4.

[h] All affected areas of the site are signed off by the Heritage Office prior to commencement of bulk excavation in those identified locations, and ...

Umwelt [Australia] submitted a letter dated 27.10.2010 to the Heritage Branch as Heritage Council delegate, advising that all archaeological requirements on site had been completed and that the archaeological report was being finalised.

Confirmation was subsequently received from the Heritage Branch [dated 16.12.2010] that there was 'no objection to the commencement of the intended Hume Highway road reserve construction works' [refer to Attachment 13 – this volume].

[i] At the completion of the archaeological works on site the results of the archaeological programme are interpreted as part of an interpretation programme for the Old Marulan Township precinct.

A comprehensive archaeological interpretation plan has been developed and is being implemented. This is discussed in more detail in Sections 1.11 above and 3.3 below. Also see Attachments 1 and 2, which are the pre- and post-excavation interpretation plans for details.

Since the completion of the main field excavation program the work has been presented in a range of different forums, including to public and specialist audiences. See Section 1.7.7 for a comprehensive listing.

- 10. It is essential that the Applicant and nominated Excavation Director allow for and present opportunities for interpretation, public education and public access to the results of the archaeological investigation during and upon completion of the works programme...
- 11. An interpretation programme for the entire Old Marulan Township heritage precinct incorporating the results of the archaeological excavation must be implemented...

Consideration of these issues was incorporated into the archaeological interpretation plan.

This is discussed in more detail in Section 1.11 above.

12. The Applicant must ensure that an archaeological publication for the general public of Old Marulan Township incorporating the results of the archaeological programme at the site is prepared...

An archaeological publication is in preparation, providing an overview of the town's history and the results of the archaeological investigation.

13. The Applicant must ensure that the nominated Excavation Director takes adequate steps to record in detail relics, structures and features discovered on the site during the archaeological works in accordance with current best practice...

All archaeological evidence was recorded in accordance with the requirements of the research design.

The methodological basis for stratigraphic recording by units follows that set out in the Port Arthur Archaeological Procedures Manual⁵, which has become a de facto standard for much historical archaeological work in Australia.

14. The Applicant is responsible for the safe-keeping of all relics recovered from the site.

All artefacts, apart from those undergoing specialist analyses, will be stored in a secure storage facility in Petersham until the end of 2013. From there they will be transferred to a secure facility owned by Holcim pending resolution of the Marulan museum issue. Further management of the collection will be undertaken in accordance with the Artefact management policy – see Section 4.4 below.

15. The Applicant must ensure that the site under archaeological investigation is made secure and that the unexcavated artefacts, structures and features are not subject to deterioration, damage or destruction during and after fieldwork.

⁵ Davies, M. and K. Buckley 1987 *Archaeological procedures manual - Port Arthur Conservation and Development Project*, Tasmania - Dept Lands, Parks, Wildlife, Occasional paper 13.

The site was fenced to prevent trespass from humans and stock and no issues arose during the main excavation season.

Immediately following excavation all trenches apart from the cesspit were backfilled. The cesspit has been monitored to ensure it does not deteriorate and has since been filled and protected following consultation with the Heritage Branch [refer to Attachment 14 – this volume].

16. ... Excavation Director cleans, stabilises, labels, analyses, catalogues and stores any artefacts recovered from the site ...

All artefacts recovered were processed in accordance with the requirements of the research design and under the direction of an experienced specialist Archaeological Finds Manager [Ms Jeanne Harris of Urban Analysts]. All artefacts were retained in bags with detailed provenance information tied to excavation units and a separate Field Inventory system.

Artefacts were cleaned on site and stabilised where necessary. No artefacts were recovered that were considered to require specialist materials conservation. The artefacts were analysed at archaeological lab spaces at Stanmore and Urban Analysts, Sanctuary Point.

All artefacts, apart from those undergoing specialist analyses or being used for teaching, are currently stored in a secure storage facility in Petersham. Further management of the collection will be undertaken in accordance with the Artefact management policy – see Section 4.4 below.

17. The Applicant must ensure that a summary of the results of the field work, up to 500 words in length, is submitted to the Heritage Council of NSW for approval ...

A summary of the results of the main fieldwork program was submitted to the Heritage Branch in April 2008.

A copy of this summary is included as Attachment 4.

18. The Applicant must ensure that a final excavation report is prepared by the nominated Excavation Director, to publication standard, within one [1] year of the completion of the field based archaeological activity unless an extension of time or other variation is approved by the Heritage Council of NSW.

The main season of field based archaeology was completed in December 2007, with supplementary excavation work in the road reserve carried out in March 2009. Final monitoring in the road reserve was undertaken in June 2011 prior to the commencement of construction work.

The report [this report series] will include all stages of archaeological work undertaken.

Approval to modify the s65A permit [2009/S65A/13] was granted 16.10.2012 to amend the due date for the final report [refer to Attachment 15 – this volume].

19. The Applicant must ensure that one [1] electronic copy of the final excavation report is submitted on CD to the Heritage Council of NSW together with two [2] printed copies of the final excavation report. ...

Copies of the final excavation reports will be provided to the Heritage Council of NSW as specified and also placed in other repositories to allow the results to be disseminated more widely.

Complete lodgement details can be found in this volume – Section 4.1.

- 20. The Applicant must ensure that the information presented in a final excavation report includes the following:
- (a) An executive summary,

The format of this report is consistent with the requirements of this section. The description of the results of the archaeological investigation in Section 1 above, summarises the different stages of the work, and leads into more specific discussion of compliance under the different permits issued in relation to the project.

2.2 Heritage Act Section 60 Permit – Approval of Stage 1 Excavations

Section 60 approval – No 2006/S60/082

Date of issue - 28.11.2006

1. Stage 1 to be undertaken in accordance with approved research design [BH+A September 2006]

The work was carried out in accordance with the research design. Aims of this were to:

- clear and record sites identified in initial survey;
- complete testpits in selected features;
- complete sectioning of linear features to reveal original profiles;
- complete mechanical clearing of selected levelled areas to expose postholes, structures and artefact density; and
- re-evaluate significance of all elements.
- 2. Before Stage 1 commences:
- nomination of site director and team

Denis Gojak was nominated as Excavation Director, assisted by qualified archaeologist Julian Travaglia [Umwelt] and John Barton, experienced archaeological excavator on Aboriginal sites and machinery operator.

analysis of aerial photos to identify further archaeological remains

Four images spanning from the first available in 1953 to 1975, when road widening was effectively complete, were studied. A report was prepared and provided to HB. No changes to research design were required from information available from this analysis.

Refer to Volume 2, Attachment 1 of this report series for a copy of the air photo examination report.

survey and set-out borders of town lots on the ground

This was undertaken by land surveyors, and consisted of survey pegs marking the corners of all extant lot boundaries.

3. Work to be carried out within impact area only to clarify nature, extent and significance of relics only

Work carried out on 11 elements within the impact area. Design of work for each element aimed to identify archaeological potential and to clarify significance.

3. Results of Stage 1 to be used to determine how Stage 2 of process will proceed.

The results of the Stage 1 archaeological testing were used to establish a more targeted excavation strategy for Stage 2.

- 4. At completion of Stage 1 submit:
- assessment of significance of resource to be impacted
- revised research design and research questions
- final design of interchange
- plans and details of location and depth of excavation works
- details of proposed on-site excavation methods
- details of proposed post-excavation methods
- draft interpretation plan for entire Old Marulan Township precinct

These results were presented in the Stage 1 report. Refer to Volume 2 for a more detailed discussion of the results of Stage 1.

- 5. No impact on
- archaeological remains in Lot 1 DP 210885
- items MRNH1, MRNH2, MRNH3
- Old Marulan township on southern side of Highway
- Salvage of MRNH 8

The former Lot 1 DP210885 has now been resumed into the Hume Highway road reserve. There was no impact to this area during the Stage 1 archaeological works. A subsequent application to the Heritage Council [Section 57[2] exemption – refer to section 2.4 of this report] allowed the removal of disturbed overburden so that the presence and significance of any archaeological remains could be established. A Section 65A Application [2009/S65A/13] was also later approved to allow for the recording and removal of any potential archaeological remains surviving in the Hume Highway road reserve [refer to section 2.5 of this report].

No impact was proposed on MRNH 1, MRNH 2 or MRNH 3.

No impact was proposed or undertaken in the area on the southern side of the Highway.

Work on MRNH 8 was deferred because it involved potential access to private land and traffic management along the highway. A specification was prepared to conserve the structure beneath the service road beside the interchange [refer to Attachment 7 – this volume]. This was approved by the Heritage Branch on 5 March 2009.

Machinery operation was restricted to a single rubber tyred backhoe operating only in conjunction with an archaeologist.

6. Compliance with detailed requirements of Appendix 7 of DA 128-5-2005

See Section 2.1 above.

7. Approval void if not commenced within 5 years

Approval was granted in November 2006 and works commenced in January 2007.

2.3 Heritage Act Section 65A Variation – Approval of Stage 2

Section 65A approval – 2007/S65/011 Date of issue – 4.9.2007 The initial Section 60 permit was issued on the basis that it allowed for limited archaeological testing to take place. Once the results of this testing program were assessed then Holcim would be required to design an archaeological program that was tailored to the demonstrated significance and potential of the archaeological resource. This was presented as a series of recommendations in the Stage 1 report, which either supported or modified that set out in the initial Archaeological compliance plan.

Section 65A approval was sought following Stage 1 to allow further recording and excavation of the impact area within the SHR boundary of old Marulan.

The work in Stage 1 had provided much greater detail about the nature of the archaeological resource and confirmed that it held great potential to tell us about the past of Marulan, and other 19th century settlement in Australia.

The work was required to conform to all original conditions of Permit 2006/S60/082 except where modified by additional conditions, the revised research design and Archaeological interpretation plan.

A copy of the permit is included here as Attachment 5 – this volume.

The conditions of the permit were, in summary:

1. All works shall be in accordance with the methodology outlined in the S60 excavation permit application number 2006/S60/082 and supporting documents ...[Archaeological compliance plan, Stage 1 report] ... except as amended by the following conditions.

The work was conducted in accordance with these documents, as modified by permit conditions.

2. This permit is issued for archaeological investigations associated with the redevelopment of parts of the SHR listed site of Old Marulan for a new Highway interchange ... This will involve a multistage strategy as indicated in the reports [Archaeological compliance plan, Stage 1 report]

See condition [1] above.

3. This permit allows the archaeological salvage excavation of associated deposits, sites and features from the colonial-era town of Old Marulan ... as required; and for future archaeological monitoring and site clearance as required.

The work to date has been restricted to controlled archaeological excavation in advance of development.

4. This archaeological approval allows the removal of any State significant relics in accordance with the methodology given in supporting documents as noted in Condition 1, above. All salvaged 'relics' should be available for future display at the completion of archaeological work.

All relics [i.e. archaeological artefacts] were removed in accordance with the approved methodology.

The artefact collection has been divided into three categories - 'Special Finds/Display collection', which includes items of high display potential, 'Study collection' representing the range of material and types of artefacts recovered, and 'Discard collection', which includes material of negligible archaeological value. The three collections are to be managed in accordance with the Artefact management policy [refer to Attachment 8 – this volume].

The Department of Archaeology at the University of Sydney was approached regarding possible teaching use of the collection in 2010 and again in 2011. This has been declined.

- 5. Notification of commencement and completion of fieldwork
- 6. Heritage Council and Heritage Branch staff have the right to inspect the site and records from investigations
- 7. If any additional State significant relics or evidence not specified in the supporting documents are uncovered then the Heritage Office must be contacted.
- 8. Excavation Director to be present 80% of the time, and specified Site directors to be responsible in his absence.
- 9. Excavation Director must record relics, structures and features in accordance with best practice standards and Heritage Office guideline documents for archival recording and photography.
- 10. Ensure security of the site, artefacts and archaeological remains.
- 11. Public archaeology measures such as Web-site and press releases, brochures, involvement of volunteers to be available. Use of materials conservator.
- 14. Applicant is responsible for safe-keeping of all artefacts, until such time as a repository for relics is identified and approved by the Heritage Council or its delegate.
- 15. Applicant must ensure the Excavation Director cleans, catalogues and analyses all artefacts recovered from the dig.
- 17. A weekly report on the results of the fieldwork must be submitted to the Heritage Council.
- 19. Written advice must be received from the Heritage Council or its delegate, that the proposed treatment of the site and relics is acceptable before any bulk excavation or construction work is commenced.
- 20. Final report to be prepared to publication standard within 12 months of the completion of fieldwork. Copies to the Heritage Office and to a suitable repository in Goulburn-Mulwaree Shire.
- 21. The final report shall include ... [specific content].
- 22. The Heritage Council must approve any substantial deviations from the approved research design ... as a new Section 60 application or Section 65A variation.

These conditions are identical in wording or intent to those in the initial approval contained in DA 128-5-2005

For responses to the specific conditions please refer to Section 2.1 above for details.

12. A Public open day or public tours to be conducted on the site during the work. It should be held on the weekend, following discussion with the Heritage Branch and subject to Heritage Council approval.

A public tour was held on Saturday 8.12.2007. Four tour times were set during the day, with visitors assembling at the Marulan Community Hall and receiving a briefing from Holcim representatives about the Lynwood development. They were then taken by coach to the site and were conducted around by the Excavation Director and selected staff to hear about the site's history and to examine the archaeological remains exposed to date.

A total of 19 people attended the open day.

13. The Applicant must ensure that local historical societies and other relevant cultural organisations are formally notified and invited to the Public Open Day or supervised Public tour.

An unofficial open day was arranged with the Marulan and District Historical Society and other invited guests, and held on Thursday 22.12.2007. This involved an extended site tour, speeches of thanks to the Historical Society and was also attended by Heritage Branch archaeologists.

About 30 members of the community attended this event.

16. The timber-lined cistern/well [MRNH8] is to be managed through either limited salvage of deposits and then conservation in-situ through filling/burial; or if this proves impractical, by the full salvage of fabric and deposits for incorporation in future interpretation about the site. The most appropriate treatment of MRNH 8 should be determined through more precise identification of the need to disturb surrounding allotments within the existing SHR curtilage. The Heritage Council or its delegate must be informed about the specific details of the final proposal for MRNH 8 and must concur with the proposed treatment of the structure and any associated deposits or 'relics' ...

Design work on the interchange allowed the well to be positioned beneath a service road that will run between the southbound up-ramp for the interchange and the adjoining property boundary. It is considered possible to stabilise and securely cover the well so that it will remain preserved beneath the access road without the need for excavation and only limited modification to the top surface.

A specification was prepared and submitted to the Heritage Council's delegate for approval on 31.7.2008 [refer to Attachment 7 – this volume]. The Heritage Branch as delegate of the Heritage Council subsequently accepted the specification on 5 March 2009 as fulfilling its requirements under this clause [refer to Attachment 9 – this volume].

MRNH8 has been managed through in situ conservation in accordance with the specification accepted by the Heritage Council.

18. After the completion of the archaeological fieldwork the previously prepared 'Old Marulan Interpretation Plan' ... should be reviewed to incorporate the findings from the archaeological work. An updated final interpretation plan should be submitted for the approval of the Heritage Council or its delegate within 3 months of the conclusion of the archaeological fieldwork.

The Archaeological Interpretation Plan was extensively revised to reflect the findings of the archaeological excavation, and taking account of continuing efforts to identify a suitable permanent display and repository for the archaeological collection [refer to Attachment 2 – this volume].

The final was submitted to the Heritage Council delegate for their consideration in May 2008. The Heritage Branch as delegate of the Heritage Council subsequently accepted the Interpretation Plan on 5.3.2009 [refer to Attachment 9 – this volume].

23. Any Aboriginal 'objects' present on the site must be managed in accordance with advice from the Department of Environment and Climate change and in accordance with a permit under the NPW Act 1974.

DECCW issued a consent [Section 87/90 permit no. 1077294 issued 27 August 2007] that related to archaeological work across the area of Old Marulan within the Lynwood Quarry development footprint. A component of that permit was a program of archaeological testing immediately outside the SHR boundary, and the management of Aboriginal artefact material recovered during the historical archaeological works.

The recovery of Aboriginal material during the archaeological investigation was done in accordance with the methodology approved in the s87/90 Aboriginal Heritage Impact Permit [AHIP] and undertaken as part of the Stage 2C Aboriginal archaeological subsurface testing work [refer to Volume 2 Section 4.3.3 of this Old Marulan 2007 report series for details]. Representatives of the Aboriginal stakeholder groups participated in the recovery of Aboriginal artefact material as members of the excavation team.

24. This approval will be void if activity does not commence within five years of the date of approval or the final date of the EPA Act consent.

Not applicable.

2.4 Heritage Act Section 57[2] Exemption

The main excavation program took place within the confines of Holcim property north of the Hume Highway road reserve. However construction of the interchange would require impact to an area within the road reserve between the boundary of Holcim's property and the edge of the road cutting. This is a strip of land averaging about 10 metres wide.

Examination of the strip showed many surface artefacts from mid-19th century to modern in date. An assessment of the archaeological potential of this strip of land determined that there was a possibility that in situ archaeological material, such as building footings and artefacts still remained within the strip. The visible artefact material, however, was considered to represent disturbed deposit, bulldozed into its present position during the 1970s widening of the highway. The archaeological assessment is presented in Attachment 11 of this volume.

Based upon the archaeological assessment an exemption was sought under section 57[2] of the Heritage Act to remove the disturbed material from a section of the road reserve strip. This would allow any *in situ* material such as building footings to be revealed, and would allow Holcim and the Heritage Branch to determine whether the construction would have an adverse impact on Marulan's significance or archaeological resource. The main excavation stage had shown that there was most likely to be remains within the original Section 1 Lots 1 and 2, which were the two lots originally purchased by Joseph Peters and on which he built the Woolpack Inn. There were unlikely to be any substantial archaeological remains in the road reserve section of the Crown reserve and Lots 3 and 4 of Section 1.

A section 57[2] exemption was issued under delegated authority on 9 March 2009.

The investigation of the road reserve strip took place in March 2009. As much of the strip frontage over the two lots as possible was cleared. This generally constituted the removal of about 5 metres south of the northern road reserve boundary, to a line of trees near the edge of the road cutting. This revealed a number of important findings that assisted our understanding of the site's history.

- 1. The cesspit was a stand-alone structure and was not connected to any part of the Woolpack Inn or other building.
- 2. An adjacent ephemeral structure was found, along with a substantial number of large cattle bone elements, suggesting that the area may have been used for processing animal carcasses. In that case it may be a grouping of similarly noisome or foul-smelling activities in a distinct zone of the site.

- 4. There was no evidence to indicate that the Woolpack Inn was sited within the road reserve strip, e.g. no brick demolition rubble, footings or hard surfaces were encountered.
- 3. The interpretation of an intact in situ surface overlain by later bulldozed material was confirmed.

The interim findings of the investigation were written up and forwarded to the Heritage Branch in April 2009 [refer to Attachment 12 – this volume]. The findings are incorporated into the comprehensive archaeological and historical analysis in Volume 2.

The interim report's recommendations were:

- 1. Due to the proximity of the highway and RMS requirements no further substantial removal of road fill [301] or exposure of earlier deposits [303] is possible until the trees are removed and traffic control measures are put into place.
- 2. There is a low probability of any substantial archaeological remains surviving in the unexplored section of road reserve.
- 3. Although it is likely that there are no substantial archaeological remains within the road reserve, the work to date has shown that there is some likelihood of further ephemeral evidence remaining. These are relics under the Heritage Act 1977 and subject to the requirements of the Act, and also subject to the SHR provisions. They are considered to be of contributory significance in increasing our knowledge of the layout and activities that took place at the Woolpack Inn, the town's most significant building and the focus of archaeological and historical research.
- 4. All remaining archaeological evidence is likely to have been disturbed as a result of the 1970s road widening, and subsequent growth of trees and rabbit burrowing.
- 5. It is considered extremely unlikely that any archaeological deposits would be found whose significance would justify either retention *in situ* or substantial modification of the interchange design. For example the cess-pit and its assemblage, archaeologically significant as they are, would not be considered to meet this level of significance.
- 6. A s.65 variation to the current s.60 permit to allow archaeological remains to be removed is considered appropriate [refer to Section 2.5 below]. Note that Condition 41 of the development consent [DA 128-5-2005] has been modified to allow for impacts to the Hume Highway road reserve area if written approval is obtained from the NSW Heritage Council [see Section 2.1 above].
- 7. Given the critical nature of work programming for the interchange it would be desirable for the variation to be issued in advance of works.

- 8. Once the variation is issued the archaeologically monitored removal of the remainder of the road fill [unit 301] should be undertaken and any archaeological evidence documented to established standards consistent with the existing exemption issued on 9.3.2009.
- 9. At the completion of removal of [unit 301] deposits the Heritage Branch should be advised on the nature of any archaeological evidence uncovered and confirm what further work, if any, is required under the variation.
- 10. Once all road reserve fill deposit has been removed and visible archaeological remains recorded any necessary further excavation or collection of archaeological material should be carried out in accordance with the variation.
- 11. All archaeological evidence to be treated as part of the continuation of the existing excavation.
- 12. Any reporting associated with the s65 variation would be forwarded to the Heritage Branch for incorporation into the Old Marulan 2007 report as an addendum [note that the timing of the completion of this report series has meant that the results of the work have been incorporated into this report rather than incorporated as an addendum].
- 13. Confirm that Tim Adams [nominated assistant excavation director for the 2007 excavation] can act as excavation director in the possible absence of Denis Gojak.

2.5 Heritage Act S65A Variation – Road Reserve Works

Section 65A Application No 2009/S65A/13 was approved by the Heritage Branch, as delegate of NSW Heritage Council, on 22 October 2009 to allow for the recording and removal of any potential archaeological remains surviving in the Hume Highway road reserve.

The work is required to conform to all original conditions of Permit 2006/S60/082 except where modified to make it specific to works undertaken:

...within the Hume Highway road reserve and specifically, allotments previously associated with the "Woolpack Inn" [Condition 3 S65A No. 2009/S65A/13]

Monitoring of final site clearance of the road reserve area was undertaken in June 2011 prior to the commencement of construction work. No archaeological features or deposits were uncovered during works. The area had been considerably disturbed by tree growth and extensive rabbit burrowing.

The findings are incorporated into the comprehensive archaeological and historical analysis in Volume 2 of this report series.

A copy of the permit is included here as Attachment 16 of this volume.

2.6 Heritage Act Section 140 Application

An application for a s.140 permit under the Heritage Act was submitted following the completion of the Archaeological Research Design. This set out proposed works on items that were outside the SHR area. The proposed works included:

- Removal of samples of bricks from MRNH 6 [brick clamp] for detailed recording and comparison with excavated samples from the township.
- Minor excavations to expose and facilitate recording of MRNH 9 [sheep dip] and MRNH 4 [a line of stones].

In addition, items identified in the Umwelt 2005 report would be archivally recorded, and some would be removed as part of the establishment of Lynwood Quarry. These included MRNH5 [Lynwood Homestead], MRNH7 [clay pits], MRNH 4 [a line of stones] and MRNH 6 [brick clamp].

The Heritage Branch considered that the works were limited in nature and conformed to the exception criteria in s.139[4] of the Heritage Act. In consequence the s.140 permit application was withdrawn and a s.139[4] exception to cover these actions was issued on 28.11.2006.

The consent applied only to the works described above.

As executed the work carried out included:

- 1. Removal of one representative whole brick for comparison, plus 7 partial brick fragments representing the range of fabric colours and main firing defects observed in MRNH6. All were removed from Clamp A, which was the largest remaining.
 - A detailed description of the bricks is included in the archival recording of MRNH 6.
- 2. Minor exposure of MRNH 9 was limited to removal of vegetation growing within the fill to allow for clearer photographic recording and measurement. None of the fill material within the sheep dip was disturbed.
- 3. MRNH 4 line of stones was examined. It is not considered to be a definite cultural artefact, but as it is located close to an igneous outcrop exposed in the creek bed, it is likely to be a remnant of an exposed section of the outcrop.

4. Archival recording of MRNH 4, 5, 6, 7 and 9 was undertaken in accordance with Heritage Branch guidelines. The archival recording comprises Volume 3 of Old Marulan 2007 report.

2.7 Heritage Act Section 139 [4] Exception Works

In August 2009 Umwelt notified the Heritage Branch that it would undertake limited investigation of two areas at the Lynwood Homestead Site [MRNH5] where potential archaeological remains had been identified during site recording. The exception issued in November 2006 remained operative and applied to the work.

The investigation examined two areas where possible previous structures were identified. One was overlain by the most recent arrangement of holding yards for the shearing shed, and consisted of a cement slab with what appeared to be a chimney butt at one end. The other was an aggregation of stone beside the road between the shearing shed and the homestead building.

Investigation consisting of the removal of overlying grass and soil cover took place in September 2009. They revealed that the structure beneath the yards was a large concrete slab with a wall footing, which appeared to relate to an earlier arrangement of the homestead's work area. The second possible feature was confirmed to be loose natural stone, probably cleared from elsewhere on the site.

The information derived from this investigation will be included in the archival recording of the Homestead [Volume 3].



3.0 Summary Findings

The following section sets out in very simple terms the main findings of our archaeological work. The interested reader is referred to Volume 2 where these are explored in much more detail.

3.1 The History of Old Marulan

Although a very good local history of Marulan was prepared for its 150th anniversary celebrations, the anniversary history dealt with the new town much more than the old. It was thus important to revisit old Marulan's history in detail, re-examining almost every original surviving document held in archives and libraries. The aim was, as far as possible, to flesh out what the town was like during its brief period of occupation from 1835 to the late 1860s.

The historical research looked at what this part of the land was like at the time of the town's founding, so paid a lot of attention to the presence of Aboriginal people following the arrival of Europeans in 1788, and how the populations in the region around Marulan were affected by the process of settlement. This tied to an account of early land exploration and settlement from 1820 onwards within County Argyle, stretching from near Sutton Forest to Lake Bathurst. By the time that Marulan was established there was already a substantial pastoral presence in the Goulburn Plains and in the open forest land around the town. The politics of land ownership, the growing power of the squattocracy and the significant ex-convict population all figure in the growth of the region and affected the early history of Marulan. Its history is most strongly associated with the development of the Great South Road, one of three that radiated from Sydney. The NSW Surveyor-General, Major Thomas Mitchell, personally surveyed the route of the road and made the decision to branch the road, one line going towards Bungonia, the other to Goulburn. He sited a town at the junction. Marulan was officially 'born' when its town plan was approved by the Executive Council on 10 March 1835.

The historical research then looked in detail at how the town was set up, noting that towns in the bush were somewhat of a novelty at the time, as they came right at the start of the development of a rural working and mercantile class that was not tied to particular landholders as were assigned convicts. There are some sources of information, although patchy, that tell us who owned land in the town and who actually lived there. These sources are discussed in detail, so that we can build a profile of the town and its inhabitants. Some of these are explored in detail where sources allow – Joseph Peters, the publican at the Woolpack Inn, William and Mary Ann Hawthorne, who carried out an ugly marriage collapse through the media and letters to the Colonial Secretary, the wife-murdering William Drover and his dutiful, hard-drinking son and Goodman Hart, professional publican in three colonies and dodgy customer. Their biographies give us a sense of the range of people and their stories which we would find in even the smallest towns of colonial NSW, and allow us to move beyond generic profiles to understanding Marulan as a human landscape.

The history also explores what it can of the townscape, the way it was structured, the businesses present and the civic functions that it served. While all of the buildings that were dealt with in the archaeological work remain largely mysterious we have found detailed information about some others in town, so that even though the Woolpack Inn, the main focus of the excavation, remains shadowy we can say with great accuracy how another pub in the town was set up and what it sold. There is a major resource for the Woolpack Inn, however – its ledger for a period from 1839 to 1842. This tells us an enormous amount about the role of the inn in the town and the surrounding area, not just about what people were drinking, but also how they used credit, who came from where, and how social relations in the bush operated.

The last section of the history deals with the death of old Marulan, the coming of the railway and the rise of the new town of Mooroowoollen up the road. Despite our expectations Marulan died slowly, and there is evidence of unfolding social collapse in the records that again reminds us that this is a story about people. After the town 'died' it fell from knowledge, but the land continued to be used. The history of the following 100 years is also presented, but it becomes part of a larger rural history of the Southern Highlands. The arrival of the car did not change the Great South Road much but it made [new] Marulan an essential stop on the drive south. It was only in the late 1960s, when car ownership boomed, that 'the deadly Hume' was improved by widening, which resulted in the probable loss of much of the archaeological evidence on the northern side of the road. The story is taken to the present; old Marulan has become an archaeological site and the Lynwood Quarry is being planned.

3.2 Archaeological Investigation

Archaeological investigation of the European heritage of Marulan took place in a number of stages. Apart from the initial 1981 survey that showed that the town site was a 'snapshot' of the mid-19th century, no other work had been done until the site was revisited as part of the Lynwood Quarry environmental assessment process. This confirmed that the earlier ideas about the site were correct – it had the potential to be a major source of information about rural town life in the 19th century, with possibly very few sites being as archaeologically intact, despite the complete loss of standing buildings.

Our work began with a re-survey of the site, largely limited to the highway interchange on the northern side of the road. This had not been covered in detail in 1981, so it showed for the first time that there were promising remains present. Of note were a series of levelled areas that were breaks in the natural rolling contours of the land, and were likely to be building platforms or at least activity areas. As well, there were ditches, probably for drainage, but of unknown date, artefact scatters of mid-19th century glass and ceramics, depressions that held who knows what, and a single visible stone structure just inside the road reserve fence.

Once it was clear what the land may contain it was necessary to get a s.60 excavation permit under the Heritage Act to allow us to investigate these remains further, so we could say more precisely what they were and to refine exactly what was likely to survive, and be lost in the development.

The investigations carried out for Stage 1 were test excavations only. Representative surface features were selected and excavated by hand or with machines to find out what they were likely to be. This provided a great amount of useful information. The drainage ditches were certainly filled in during the post-township period, but it was not altogether certain whether they had been dug while the town was occupied. Several of the many depressions along the western part of the site were excavated during Stage 1, and we had hoped that they were used as rubbish pits or had damp, boggy bottoms that preserved fragile environmental evidence. Sadly neither turned out to be the case. The flat areas contained many artefacts of the township period, and some stone that could have been structural. Overall, the testing program in Stage 1 showed that there was a lot of archaeological potential present, and that the surface exposure, even after a prolonged drought, was not a good indicator of what lay beneath.

Based on the testing program it became clear that the impact footprint of the development had the potential to cause serious impact on an important and fragile archaeological resource. Further, there was no way of getting the same information from further historical research or just by using the surface evidence. Therefore a major excavation was planned. Initially aimed at taking place in August 2007, it had to be deferred to December 2007. A team of experienced archaeologists and representatives of the Aboriginal community excavated for four weeks before Christmas. A detailed interpretation plan made provision for a website, a public open day and involvement of Marulan locals.

The excavation had a lot of ground to investigate, so a combination of manual excavation, opening up a large area and separate squares by hand, was combined with mechanical excavation. Together these methods were able to reveal almost all of the remains still present in the impact area for the interchange. The only exception was a corridor within which former and current Telstra cables were buried. avoided during the main excavation stage, but areas of higher archaeological potential were cleared in March 2009. The only intact structure found was the one identified during the survey - it was a cesspit [toilet pit] built of the hard local stone porphyryite, with a brick superstructure that had partly collapsed and been demolished over it. Evidence of a number of other structures was found in what had been the crown reserve and on blocks associated with the Woolpack Inn. These were all represented by slight remains - postholes cut into the subsoil, scatters of brick and lines of discoloured soil. Without careful excavation little of this material would have been identified. A number of artefact scatters were dumped in and around the holes where trees once stood. These were able to be dated and provide an insight into the personal lives of the town's occupants. There was also evidence of farming having taken place on the site, with narrow parallel trenches from garden beds being found. Further to the east there was at least one small cottage and the probable remains of the post office built in 1847.

The main find was undoubtedly the cesspit. It was the outermost of the Woolpack Inn's outbuildings, the remainder of them and the inn being within the road reserve, and in all likelihood destroyed. The cess pit contained an abundance of artefact material – mainly ceramics, glass and animal bone, but also metal. The artefact assemblage provides an important insight into the operation of the Woolpack Inn. From our historical research we knew that Joseph Peters tried hard to advantage his own position by cultivating contacts with the rural elite, from whom he was able to gain valuable information and advice and the sort of support that was essential in operating in business in early colonial Australia. The many ceramic serving dishes – including large platters, dish covers and other settings – reflect quality purchases. They were clearly intended to serve customers who would feel special. The cuts of food also reflect the same thing – young cuts of lamb and beef, other cuts of meat reflecting quality dishes, and even oysters.

Outside the impact area archaeological work continued to survey and record the landscape. Elements of the early town present in the landscape included the timber-lined well or cistern on the southern side of the road and evidence of brick clamps, probably used to fire the bricks used on the Woolpack Inn, located beyond the creek north of the town. A brief survey was made of the rest of the town located on the southern side of the Hume Highway to verify Temple's 1981 archaeological survey report.

The rural heritage of the Marulan landscape is found scattered through the rest of the development area, and even within the former town. Sheep dips of various vintages were recorded. The Lynwood Homestead complex, built early in the 20^{th} century, was also thoroughly recorded, showing a mixture of traditional technology and gradual adoption of newer technology. On the road heading to the homestead there are even remains of three brick clamps and the clay pits that supplied them. These probably date to the period of the extension of the railway line from Marulan to Goulburn in 1867-69, and may have been used to fire the bricks that were used in the first generation of culverts along the line.

3.3 Realising the Archaeological Potential of the Site

Marulan is special to the people of NSW because it is considered to be a rare surviving example of a rural town of the mid 19th century that has not had subsequent development, and therefore is likely to be archaeologically intact. While that has to be qualified by the impact of the widening of the Hume Highway, and the likely recycling of building materials, it still remains largely true. Therefore impacts on the archaeological resource of the town site have to be avoided as much as possible. If they cannot be avoided then they have to be mitigated by retrieving as much of the archaeological

value, and other significance, as possible. This was the rationale for the design of the Old Marulan 2007 archaeological project.

The archaeological work was not just the main excavation, which was the most visible part of the work. It included archaeological survey, analysis of the excavated material, archival recording, detailed historical research and engagement with the community. All were necessary to make sense of the resource in a way that realised its potential and recognised significance. The writing up of this work, curating a permanent collection of the most important artefacts and disseminating it is the essential last step in the process of making it a lasting contribution to knowledge.

3.4 A Revised Significance Assessment For Old Marulan

3.4.1 State Heritage Register Statement Of Significance

Marulan is recognised for its significance as a rare archaeological resource. The NSW State Heritage Register entry, which itself is based on the results of a Commission of Enquiry, reads in part:

The site of Old Marulan Town is considered to be an outstanding archaeological resource which is able to vividly illustrate unrecorded details of Australian history relating to the form and functions of an early colonial service town, and the way of life of its inhabitants. Examination of the ground surface indicates that the total area of the site contains relics relating to the early occupation of the town. Future archaeological research of the site should result in a wealth of information which is only suggested from surface findings. The significance of the relics and deposits within the land is heightened by the limited period of the towns existence and the subsequent lack of further development of the land. The site therefore is a rare "time capsule" relating to colonial town life from 1835-67 which has suffered minimal contamination from latter phases of use. Exploitation of the site in order to gather historic information would necessitate the preparation of a full research study prior to archaeological excavation of any part of the site in order that all possible avenues of research be considered. [Temple]

SHR Criterion C - The town site is a valuable historical and archaeological site rich in information relative to the form and function of an early colonial country town and the way of life of its inhabitants. It was established in the earliest expansions of town and village settlement beyond the Cumberland Plain. [Temple]

SHR Criterion F - [Rarity] Old Marulan's significance is two-fold. First, the number of towns dating from this early period which were not developed after the 1860's is very small. Those known to exist include Carrington, Boydtown and towns associated with mining activities.

Second, although roughly of the same period, Old Marulan is unlike these other town sites. The mining "towns" were mainly canvas settlements built for a transient and itinerant population and generally contained few buildings of even a semipermanent nature. Examples of this type of township include Hill End, Byng and Silvertown from the 1850's and 60's and Newnes and Glen Davis and Joadja from the turn of the century [Temple]

The archaeological investigations provide an opportunity to re-evaluate and refine the heritage significance of the Old Marulan site. The results broadly confirm the importance placed on Marulan's archaeology in this statement of significance. Although it only investigated a small proportion of the township, some more general statements can be made in addition to the above.

3.4.2 Additional Significance

The SHR statement of significance for Old Marulan could be supplemented as follows.

<u>Criterion A - An Item Is Important In The Course, Or Pattern, Of NSW's Cultural Or Natural History</u>

Marulan did not figure as a significant place in the course of NSW's colonial history. It was, however, founded as part of a major expansion of colonial governance, and was supposed to play a role in creating a regulated and settled land. The town plan, the settlement and land purchase processes and subsequent occupational history are all reflective of that process. Being associated with the foundation of the Great Southern Road and subsequent settlement, and this being legible in its layout and occupation history, it assumes an importance in reflecting how that process took place on the ground.

This criterion is met as a State level.

<u>Criterion B - An Item Has Strong Or Special Association With The Life Or Works Of A Person, Or Group Of Persons, Of Importance In NSW's Cultural Or Natural History</u>

The detailed historical work undertaken for the archaeological project tried to identify a range of representative individuals in the town. These were Joseph Peters – the publican of the Woolpack Inn, Goodman Hart – a later publican and businessman, the unfortunate couple, William Hawthorne and Mary Ann Winter, and the possible wife murderer John Drover and his son William. While they live in our pages as exemplars of

the town and its diverse population, none was really that different to many others in the colony, except that more about them was committed to paper. No figures associated with the town had any enduring presence beyond the bounds of a normal life.

This criterion is not met at a Local level.

<u>Criterion C - An Item Is Important In Demonstrating Aesthetic Characteristics And/Or A High Degree Of Creative Or Technical Achievement In NSW</u>

The township layout represents the application of surveying and town planning principles that were in an early stage of their evolution in the colony. When considered with other towns laid out by government surveyors in this period, such as Berrima, Goulburn and Bungonia the town plan reveals an understanding of how urban design developed, and what theories underlay the settlement process.

This criterion is met at a Local level for the town plan.

<u>Criterion D - An Item Has Strong Or Special Association With A Particular Community Or Cultural Group In NSW For Social, Cultural Or Spiritual Reasons</u>

The old township is important to the people of the new Marulan and its immediate region as part of the area's history and, for some, because they feel a strong sense of stewardship and responsibility to maintain it for future generations. However there is little direct connection through close association, kinship or familiarity with the site.

This criterion is met at a Local level.

<u>Criterion E - An Item Has Potential To Yield Information That Will Contribute To An</u> Understanding Of NSW's Cultural Or Natural History

The expectations that were expressed in the Commission of Enquiry that Marulan would be able to provide a 'snapshot' of 19th century life have been proven. Even taking into consideration the loss of evidence resulting from the widening of the Hume Highway and the impact of the Holcim development there remains an abundant archaeological resource of a high degree of intactness. As demonstrated in this excavation report this evidence provides an opportunity to use archaeological and historical techniques to explore questions about the past, both specific to the town and of far broader application to Australian colonial history.

This criterion is met at a State level.

<u>Criterion F - An Item Possesses Uncommon, Rare Or Endangered Aspects Of NSW's Cultural Or Natural History</u>

There is no overall survey of failed townships in NSW. Some of those cited above were very different in character as private township ventures and being reliant upon a single resource. Many have been compromised by subsequent development or continued occupation.

The integrity of the archaeological resource of the majority of the township has been confirmed by the archaeological investigations. The combination of an abandoned 19th century township and high archaeological integrity is rare in NSW.

This criterion is met at a State level.

<u>Criterion G - An Item Is Important In Demonstrating The Principal Characteristics Of A Class Of NSW's Cultural Or Natural Places</u>

Marulan is representative of small towns established during the first half of the 19th century. There is no indication from historical research that it differed markedly from other towns of comparable size in terms of layout, response to the prevailing economic processes, demography or pattern of town life.

The physical evidence and supporting documentary evidence has been demonstrated to show these processes. Because it died in the 19th century and has much intact archaeological evidence it presents opportunities to demonstrate these township characteristics in a different way to a town that continued into the past century.

This criterion is met at a State level.

These additional considerations against the SHR criteria demonstrate that Marulan's original identification as being of state significance was correct. This assessment follows on from the impact arising from the archaeological stage of the Holcim development, and confirms that its significance not only remains intact but that the archaeological and historical investigations and the process of minimising impacts to the town site have allowed some of the site's potential to be effectively realised.



4.0 A Guide To The Records

4.1 The Final Report

4.1.1 Final Report Contents

The final report consists of six volumes. These are:

Volume 1	Old Marulan 2007 - Overview and Summary of the Archaeological Program
Volume 2	Old Marulan 2007 - Archaeological Investigations Final Report
Volume 3	Old Marulan 2007 - Archival Recording
Volume 4	Old Marulan 2007 - Specialist Reports
Volume 5	Old Marulan 2007 – Appendices [several parts]
Volume 6	Old Marulan 2007 – Electronic Data [provided at back of Volume 1]

4.1.2 Final Report Lodgement

The Section 60 permit requires the lodgement of electronic and bound copies of the final excavation report with the NSW Heritage Council.

In addition to this the following copies will also be lodged to disseminate the results of the archaeological work.

<u>Marulan and District Historical Society – permanent collection</u> Complete report – electronic format. Complete bound copy.

<u>Goulburn-Mulwaree Council - Local Resources Library</u> Complete report – electronic format. Bound copies volumes 1-4.

A copy of the complete report will also be held by Holcim at the Lynwood facilities and additional electronic copies will be available if required.

The final report series will be added to the Holcim website [refer to Section 1.11].

4.2 Archaeological Documentation

Documentation of the archaeological survey and Stage 1 excavation has been completely integrated into the current final report, often being heavily reinterpreted.

4.2.1 Stratigraphic Unit Recording Sheets

Stratigraphic unit recording sheets are pre-printed pro formas with fields for detailed descriptions of soil and other characteristics, space for a schematic plan drawing and other relevant information. One sheet was used per identified stratigraphic unit.

Completed unit sheets are numbered in a single continuous sequence from [01] onwards. There are some gaps in numbering as blocks of sequential numbers were allocated to specific purposes, e.g. Unit [100] onwards for post holes, [300] onwards for road reserve excavation. A unit sheet is for that specific unit within a defined excavation area, normally a 2 x 2 metre square. Therefore the same unit can be found in a succession of adjoining squares.

Post-excavation processing includes converting all spot-height elevations to AHD, correcting errors and annotating descriptions. All post-excavation changes have been made in red ink on a photocopy. The original masters have not been annotated and are retained as a single reference series.

In the final collection unit sheets are grouped according to the trench and square of excavation. This applies to both hard copies and digital copies.

A summary of all unit sheets is found in Volume 2 Attachment 5. Details on each unit are found in the discussion of excavation results in Volume 2 Section 6 by trench and square.

Unit sheets, arranged by trench area and square number, are reproduced as PDF files in Volume 6

4.2.2 Director's Notes

A notebook was kept by the Director during the excavation. This includes daily observations on material being exposed, planning, and lists of actions. It forms a useful supplement to the Stratigraphic unit recording sheets.

A digital copy of the notebook in PDF format is included in Volume 6.

The original is retained by Banksia Heritage + Archaeology.

4.2.3 Administrative Files

Different administrative files relating to the archaeological project are held by:

Banksia Heritage + Archaeology
 Reference - P06~09

• Umwelt [Australia] Pty Ltd Reference – Job No. 2290

The NSW Heritage Council will also retain copies of permits and letters relating to the archaeological project at File S90/07432.

These administrative files include matters such as the contractual material relating to the engagement of team members, correspondence with the Heritage Council and Heritage Branch, payment records and so on.

The set retained by Banksia Heritage includes copies of all 'official' correspondence, i.e. between the client and its consultant and state agencies and all reportage. The key parts of this material – consisting of the permits and specialist reports – are also included as attachments to the final report [as attachments to this volume where appropriate and as Volume 4 – Specialist Reports]. Other material will be retained in the file.

Banksia Heritage also retains original copies of the stratigraphic unit sheets without later annotations, drafts of reports and drawings. It is intended to file all of this material in a permanent repository. Banksia Heritage should be contacted to establish the location of this material.

4.3 Pictorial and Drawing Records

4.3.1 Overview of Photographic record

Archaeology is primarily a visual discipline, and photography is an essential component of creating a permanent record of an archaeological investigation such as that which took place at Old Marulan.

This section describes the photographic conventions used and the structure of the photographic record. This will allow any researcher to find photographic coverage of an area they are interested in. The photographic record is likely to contain much additional detail and information beyond what was needed to create the synthesis presented in Volume 2, and should be considered a major information resource in its own right.

At Marulan we took advantage of digital photography to shoot comprehensively and capture work at all stages. This represents a very different approach to that of the previous century, where archaeological photography was generally used to capture the 'finality' of an excavation process that was already determined to have something to say. The costs of stopping work, cleaning the immediate area, straightening string lines and removing all non-essential elements from the image already go a long way to removing the subject from being a true record, to one that is manipulated to emphasise certain content. Most of the time this works well, and a photograph can clearly explain the way a skeleton was laid out, or a strata intercut much better than any writing or drawing could. But the time and logistic cost, as well as the need to print and develop images individually, meant that it was used sparingly, so choices had to be made about what was typical and what was worth special attention.

At Marulan digital photography allowed us to take multiple photographs of all areas throughout the course of the work. As a result there are several thousand photographs created, in excess of 10,000 individual image files in total. These have been arranged to provide a logical structure to assist their retrieval.

The main series of photographs are:

- The archaeological record series work, covering the main 2007 dig and later work in 2008-11 = 2700+ files.
- Informal photographs [the 'happy snap series'] taken by various members of the archaeological team = 800+ files.
- Artefact photographs = 6200+ files.
- Archival record photographs = 370+ files.

4.3.2 Digital Photography

Digital photography was undertaken with two Canon EOS 400D digital cameras and a variety of lenses as the main site cameras. Additional smaller point and shoot type digital cameras were also used by a number of field members.

<u>Archaeological Record Photographs</u>

These were taken in RAW format at 10 megabyte or greater file size [average about 13 mb file size]. All were saved as RAW format pictures with a smaller TIFF duplicate image. Where appropriate images make use of scale bars, generally segmented surveyors stadia in 3 and 4 metre lengths, and a whiteboard providing shot data.

Selected images are reproduced as figures in the archaeological report. All images are included in electronic format in Volume 6.

File numbering follows a single successive sequence prefixed OM7 and then excavation stage and shot number, e.g. 'OM7 – Wk 2 – 516.RAW'. Duplicate TIFF images are numbered the same but with the TIFF suffix.

Archaeological record photographs from the Road Reserve investigations undertaken in 2009 and 2011 [refer to Sections 2.4 and 2.5] are numbered in a successive sequence prefixed OM7 and then Road Res. 2009 or 2011 and shot number, e.g. 'OM7 – Road Res. 2009 – 001'

The collection of archaeological record photographs and photographic catalogue are included in Volume 6 – electronic data. The photographic catalogue is also included in Volume 5 of this report series.

'Happy Snaps'

A complementary record of the site and the activities of the dig team was taken with small digital cameras. In some cases these form a valuable additional resource for interpreting the archaeology, and also capture the human dimension of working on the site, and are therefore more likely to be of interest to non-archaeologists wishing to understand about the Old Marulan project.

A number of people donated images to the collection and these have been identified in the folder or file name. The collection of 'happy snaps' are included in Volume 6 – electronic data.

Artefact Photographs

As discussed, the artefact collection is now boxed and in storage. It has been divided into three sub-collections – Display collection, Study collection and Discard collection. Photographs of the artefacts have been divided into the three sub-collections and numbered accordingly; including where appropriate with the box number. Catalogue number and other relevant details are indicated in each photograph for cross-referencing.

The collection of artefact photographs are included in Volume 6 – electronic data.

Archival Record Photographs

Volume 3 of this report series comprises the archival record of heritage items identified as being at risk of impact as part of the establishment of Lynwood Quarry. The archival record [Volume 3 of this report series] includes colour prints and electronic copies of the archival photographs. Volume 3 also includes the catalogue of the archival photographs.

The collection of archival photographs is also included in Volume 6 – electronic data sorted in folders in accordance with the respective name of each of the recorded items.

4.3.4 Plan Drawing

Plan drawings made during the work on tracing media have been inked and re-drawn as fair copies.

As the site does not contain complex stratigraphy most of the drawings have been able to be reproduced in whole or part in Volume 2 as figures accompanying the text.

4.3.5 Digital Drawing

The final collation of all graphic information was undertaken using a computer-aided drawing program [TurboCAD]. This compiled the following data:

- topography [creek-lines, contours];
- major features [highway, other roads];
- cadastre [lot boundaries, SHR curtilage, modern and original lot designations];
- archaeological elements [stages 1 and 2, other survey items];
- excavation grid and coordinate system;
- location of trenches and mechanically cleared areas;
- archaeological features [former structures, postholes, cess pit, unit boundaries];
- historical mapping information;
- original ownership information.

4.4 The Artefact Collection

4.4.1 The Excavated Collection

The excavated collection consists of 52,319 artefacts, as well as a small number of additional samples collected for soil and pollen testing.

All artefacts are currently retained by Holcim in secure storage within their Lynwood Quarry facilities.

4.4.2 Permanent Repository

From the beginning of the project Banksia Heritage, Umwelt and Holcim have been working with the Marulan and District Historical Society to determine their feasibility as custodians of the permanent archaeological collection. Initial discussions were restricted by not knowing what volume of material was being discussed, or whether it required particular storage conditions.

Various sites were investigated for a local history museum that would be suitable to house the collection. These included the historic Marulan railway station building, and a relocated school from South Marulan; neither of these proposals eventuated.

The Marulan and District Historical Society will be now opening a new building in Marulan in mid 2015. The building will allow for a permanent display of the archaeological collection.

Custody of the artefact collection was transferred from Banksia Heritage to Holcim in August 2013. While custody of the artefacts will remain with Holcim, custody of the collection [or part of the collection] may be transferred to the Marulan and District Historical Society once the new building is complete.

There is also the potential for loans to other suitable establishments for further research and teaching opportunities.

4.5 Other Records and Data

4.5.1 Video

DA 128-5-2005 requires the progress of the archaeological works on site be systematically video recorded.

A Sony video Mini-DV tape camera was used to record a progression of general images and representative activities during the Stage 1 and Stage 2 excavations, and notable events such as the Open Days.

The **master footage** is saved as a collection of Mini-DV 60 minute format magnetic video tape. These original tapes are retained by *Banksia Heritage + Archaeology*.

By arrangement with the Department of Archaeology at the University of Sydney the video footage has been made available for use as a teaching resource, both for its archaeological content and to teach visual production techniques for e-learning. This has resulted in the creation of a **culled master footage series**. This is stored as an archival collection on the digital servers of the University of Sydney, and will form part of their permanent digital data archive, meaning that it will be progressively migrated to new formats as required. The culled master footage series consists of all footage following the removal of poor quality film and audio footage, and unnecessarily lengthy shots of static subjects. Occasional segments have been edited to reduce their length.

As a condition of engagement all staff present during the archaeological works were informed that footage could be taken and used without their further consent. All people visible in close-up in the footage have been identified and the annotated listing for the selected footage DVD identifies which ones are covered by this consent. Further permission from individuals would be required to allow their image to be used.

4.5.3 Miscellaneous Digital Data

The Woolpack Inn ledger records credit transactions at the hotel in the period from 1834-1839. It is an almost unique historical resource in documenting rural economy, travellers and otherwise unknown people at an early stage in the region's settlement.

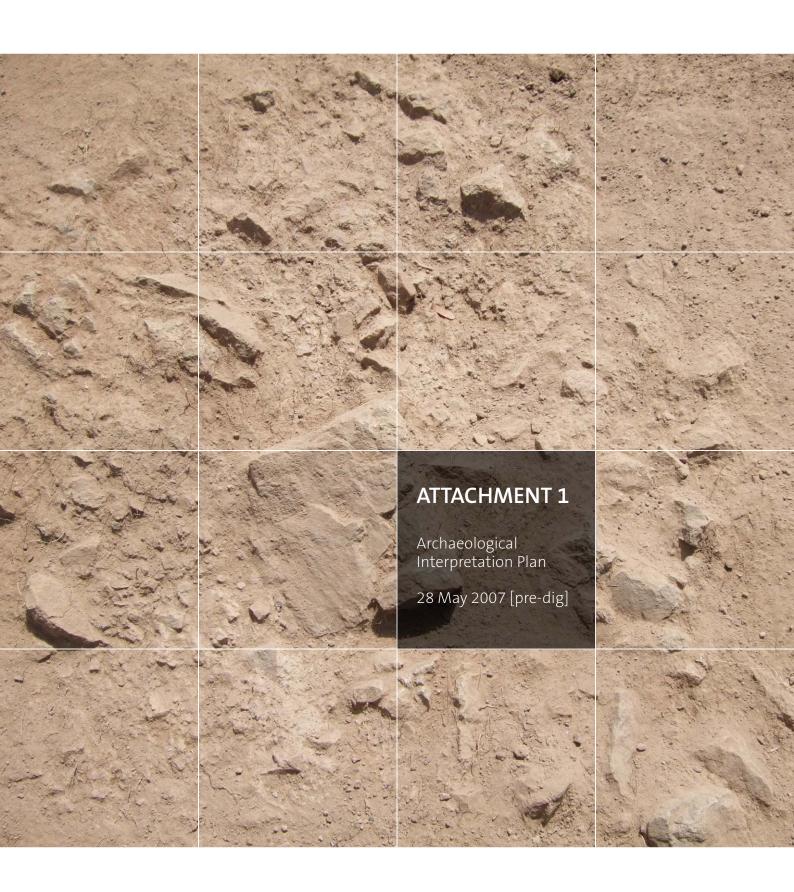
Banksia Heritage has been undertaking transcription of the ledger into a spreadsheet format that will allow ready searching and analysis of the abundant information presented in the document. Transcription is incomplete and will take some time to be finished.

4.5.4 Research Notes

Research notes documenting historical and archaeological research undertaken in a number of libraries in NSW and the ACT include photocopies, handwritten notes, reference collection order slips and other material.

The collection of research notes will be culled at the end of the project and material of general use added to Banksia's main reference library. Other remaining notes are indexed and housed in folders.

The research notes will be retained by Banksia Heritage. They are available for examination upon request by other researchers.



Old Marulan Interpretation Plan

1. Introduction

The consent conditions for the Lynwood Quarry require that the archaeological excavation is adequately interpreted to allow the significance of Old Marulan to be realised and communicated to the local and broader public. The entire township also has to be interpreted in a permanent manner following the completion of the archaeological excavation.

A commentary on interpretation options was presented to the Heritage Office as part of the documentation required for a s.60 application, in compliance with the consent conditions. Since the approval of the s.60 application Readymix [client], Umwelt [principal environmental consultant] and *Banksia Heritage + Archaeology* [historical archaeological consultant] have been engaged in refining the direction of the interpretation plan. Key activities have been:

- Stage 1 archaeological excavations tested the resource and confirmed the predictions about the extent and nature of the archaeological remains.
- Continuing consultation with Marulan District Historical Society [MDHS] has engendered their active support for interpretation during the excavation and for permanent interpretation in some form.
- MDHS has progressed, although not definitively, with plans to create a town museum.
- A heritage museum consultant [Peter Tonkin of 3-D Projects] has been engaged and has prepared an assessment of possible interpretation options in compliance with development consent.
- Readymix sees the heritage interpretation as potentially a component of a long-term community contribution program.

As can be seen, this is a continuing process and some critical steps - the confirmation of a museum for Marulan and the nature of the archaeological finds that will ultimately be recovered - remain unresolved. This plan therefore sets out the structure for the interpretation compliance as far as it can be established, for the consideration of the Heritage Office, along with recognition that the obligation for interpretation and collection management remains even if the museum option fails to eventuate. Approval of the interpretation plan is an essential step in allowing Stage 2 archaeology to proceed.

2. Overall approach

There are two integrated but discrete components to the interpretation plan:

- interpretation of the archaeological process of discovery
- interpretation of the significance of Old Marulan in a permanent form.

The interpretation of the archaeological investigation will primarily take place during the excavation, but will also include elements that carry on to a more enduring form. These include a publication summarising the results of the excavation in the context of Marulan's history, and possibly some elements of the permanent display.

The mechanisms used to interpret the dig are now well established and need to be varied only to accommodate the specific logistic requirements of the dig site. A regularly updated ['live'] website during the excavation and analysis period, promoting site tours supported by printed material, and opportunities for volunteer placement are being developed. The distance from Marulan and the position on the highway mean that normal 'Hey look at this' type signage is not appropriate in this instance, meaning that the interpretation plan has to identify other ways to attract the interest of possible audiences.

The other component is creating a permanent interpretation about Old Marulan. What options should be considered was the subject of a study by Peter Tonkin, a heritage museum consultant of 3-D Projects. His report is appended [Attachment 1]. In summary its key findings were:

- Creating a permanent interpretation feature at the township site is problematic because of traffic safety, security and privacy issues.
- The complexity of the information to be conveyed about Marulan makes a public park display too limiting.
- MDHS has been planning to establish a museum for some time and this would permit better interpretative opportunities than other locations.
- Long-term management of the archaeological collection [for research and display] needs to be factored into the interpretation process.
- Therefore the plan for permanent interpretation should be reconsidered as a museum plan, with the interpretation being primarily in the form of a museum display.

Current status of museum proposal

MDHS has been negotiating for a considerable time with the Australian Rail Track Corporation [ARTC] for a long-term lease of the Marulan Railway Station building. The station platform is in active use but the building is sealed up. The proposal has had the support of Goulburn Council, who would be the nominated lessee. Funding for the establishment of the museum is being sought from the Mulwaree Trust, set up to support cultural activities following the merger of Goulburn and Mulwaree Councils. Goulburn Council supports a number of museums and has the support service of a part-time museums adviser [currently Ms Roxanne Fae].

Planning for the museum has not progressed beyond an in-principle agreement between ARTC and Council to lease the building. As at 14 May ARTC has promised that paperwork to permit the lease would be reaching Council shortly. MDHS is also considering an alternative museum location in the Community Hall if no progress is evident on the Station. In the absence of a museum the MDHS has also not gone very far in developing collection policy, has no substantial existing holdings, nor any museum experience apart from the Museum Adviser's potential contribution.

Both locations would require considerable work to make them suitable for the proposed interpretation and use as a repository. Such adaptation work would need to be carried out by Council, with Readymix effectively providing ready-to-install content.

3. Interpreting the archaeological investigation

3.1 Parameters

Audience

- Marulan locals and the region from Goulburn to Mittagong, especially private landowners of Old Marulan
- School children with a relevant syllabus component although access difficulties and distance make this a minor component outside the Mittagong-Goulburn region
- Stakeholders Goulburn Council, indigenous representative groups, Heritage Office
- Heritage and archaeological communities, individuals and groups.

Limitations

- Parking and access to the site is problematic due to the location of the lay-by being only accessible to northbound traffic.
- Accessing the site requires pulling off a high speed motorway.
- The archaeology is not necessarily legible or readily comprehended.
- There is no ready opportunity to cross the road to get a sense of the town's extent or structure.
- Pedestrian movement across the site will need to be strictly controlled to prevent damage. Unlike many urban digs there are no natural vantage points that provide a good overview.

Requirements

The development consent requires that weekend open days be provided on the dig, subject to demand. A website will be developed to act as a contact point for the public and help to convey information about the dig. As well as interpretation of the dig a broader Old Marulan town interpretation plan needs to be developed.

3.2 Marulan dig – interpretation plan

The public interpretation of the dig will have the following components:

- General promotion
- Website
- Open Days
- Project newsletter
- Specialist talks
- Volunteering
- Publications
- Documentation video and audio
- An artist's view

General promotion

This will be required to draw people's attention to opportunities to find out about the dig and to direct them to the website. The strategy will include:

- Press releases upon confirmation of Stage 2 approval to Southern Highlands – Goulburn media
- Attractive shop posters
- Inclusion on local area 'What's on' type listings
- Flyers for local communities.

Website

The website will be developed as a self-contained site, which will be housed on the Umwelt Pty Ltd server [umwelt.com.au], with a link from Readymix and other sites such as Heritage Office, Goulburn Council and email lists. It will be the focus for public information as the relative number of people who visit or live in NSW will be a small part of the audience.

The website will contain:

- History of the town layered so there is an opportunity to get adequate information at different levels of detail, from a general onepage introduction to the archaeological program, to more detailed information on particular aspects of the dig. This will essentially reproduce the historical and background information provided in the s.60 application archaeological compliance plan and the Stage 1 archaeological report.
- Copies of major historical documents and plans.
- Genealogical information on town occupants.
- Archaeological research design
- Weekly updates on the project during excavation, monthly during analysis.
- Open Day and public access information
- Comment and contact portal.

Contact has already been made by a number of people who found the research design online as a result of genealogical research, and who have been able to provide additional useful information.

Open Days

Given the access problems that the site presents open days will be by invitation or pre-registration only. There will be no signage on the highway as this will be a motorist safety risk.

Open day tours will be conducted by 1-2 professional archaeologists, with a practical limit of 15 people per group. All visitors will be given a safety and site protocol briefing before accessing the site. Handouts will be provided with further detailed information and directing visitors to the website.

Open days will be restricted to Stage 2, when there will be the best combination of visible archaeological evidence and available workers for tour guiding.

The site will need to be protected so pedestrian walk zones will be designated. Outlines of buildings may be demarcated to make them more visible. Artefact processing procedures and samples may be presented, although the main lab space is away from the site and will be out of bounds to the public as it is also a private residence area.

Visitors on open days [and other VIP guests] will receive an information package as a permanent record of the event.

Project newsletter

This is being produced by Readymix as part of a broader public consultation process. One or more issues can be themed for the archaeological work. These are distributed to the local community and also to Goulburn-Mulwaree Council.

The most recent issue of the newsletter announced that Stage 1 work was about to commence. The next newsletter will be issued at the start of Stage 2 investigations, and will announce open day and volunteer contact information.

Specialist talks

These will be offered from Stage 2 onwards to different audiences, including professional archaeological forums such as conferences, the MDHS, other regional historical societies and interest groups.

Volunteering

Opportunities will be provided for locals interested in archaeology to become volunteers on the dig. A minimum health and time commitment restriction will be set, and any volunteer accepted will be taken in as part of the team.

There will be other opportunities for volunteering apart from excavation support. These will include providing and researching website content, artefact processing, surveying and other roles, depending on skills and interests.

<u>Signage</u>

Roadside signage can be considered as a safety and security risk given the site's location. No signage is proposed.

Publications

The development consent requires a publication on the dig to be prepared. The University of Queensland publication on the abandoned mining town of Paradise, prepared by Prangnell, Cheshire and Quirk will be used as a model of a readable archaeology-focussed social town history for the project. Aternatives would be Susan Lawrence's *Dolly's Creek* and *Whalers and free men* publications, based on her PhD and Australian Research Council research investigations.

Documentation – audio and video

The entire investigation process is being documented on video by *Banksia Heritage + Archaeology*, in accordance with the conditions of consent. *BH+A* has an informal arrangement with the University of Sydney Archaeology department to provide footage of archaeological work in return for access to video editing facilities. The intention is to use the Marulan dig footage to train students in the preparation of visual teaching and documentary materials.

The footage will remain copyright of *BH+A* with an unrestricted use right to Readymix and the University of Sydney for promotional and educational purposes.

Subject to availability of video editing software consideration is being given to creating 'shorts' of each week's work for placement on You-Tube as part of the weekly dig reports.

An additional avenue for documenting the dig is through the offer to the ABC's Social History and Features Unit to provide some coverage of the archaeological process, such as an audio documentary.

An artist's view

The documentation of the dig through audio-visual means captures a lot of the process involved. However it does not capture either the excitement or emotion or other intangible sensations that participants in archaeological discovery find important, particularly the way we interact with the past as humans rather than archaeologists.

The archaeological team is investigating the possibility of inviting Southern Highlands artists to participate as artists-on-site, using the dig and Old

Marulan as subjects. Selected items may be purchased as part of the permanent interpretative collection, or be displayed in a themed exhibition in the Council area.

3.3 Some practicalities

The artefact collection

Based on the results of Stage 1 there will be a considerable archaeological artefact collection. This is to be culled following analysis, based on the approval by Heritage Office of a culling protocol recommended as part of the final archaeological report. Items that are of no archaeological value but which may have display potential will be retained and may require conservation. The remainder of the material will be stored in conditions as part of the museum collection, and subject to condition monitoring.

Monitoring and material conservation prior to display is allowed for as part of the overall Stage 2 budget.

The well [MRNH 8]

The initial s.60 application and Stage 1 report proposed to empty and document the well and, if at all possible, to extract the timbers and reinterpret them as part of the permanent display. Although the visible timbers appear sound there is currently no indication of how the buried timber frame is conserved.

Readymix is to discuss a range of possible options for how the well is investigated as part of the construction of the interchange in the immediate vicinity with the Heritage Office as a number of personal safety, traffic management and engineering issues have now been identified.

Ownership of the artefact collection

Ownership of the collection will rest with Readymix, apart from the remains of the well, which will be owned by RTA. Upon satisfactory completion of any museum conversion it is proposed to vest ownership of the collection in Goulburn Council.

Separate negotiations are to take place with RTA to determine whether they wish to retain ownership of the well remains or similarly transfer them to another body.

Visits by VIPs

VIP in this context is anyone with a professional interest in the progress of the dig. The s.60 consent conditions require that access is granted to Heritage Office staff for regulatory purposes, for example. Other VIPs would include esteemed archaeological colleagues, Readymix big-wigs, Council alderpersons and the media.

Where possible, the dig crew will aim to accommodate all such requests. Conducting a small party around the site will be less disruptive than the arrangements required for an open day. As all visitors are to be personally conducted they do not require a safety induction. Spare personal protective equipment will be provided for visitors.

4. Permanent interpretation

As stated above and in Attachment 1, Readymix's professional museological advice is that permanent interpretation on the site itself, or substantial interpretation elsewhere on the Old Marulan site is not appropriate.

Achieving the interpretation objectives through the establishment of a permanent display component as part of MDHS and Council's plans for a new museum at Marulan is recommended as it provides opportunities to interpret the stories of Old Marulan in ways that are otherwise not feasible. This approach is still tentative due to arrangements between Council and ARTC not being resolved, and the results of the Stage 2 dig will not be known for some time. However, a museum housed in the Community Hall is likely even if the Marulan Station option does not eventuate.

4.1 Components of the Interpretation Plan

3-D Projects recommends that the interpretation plan should be re-oriented as a museum plan, and therefore needs to address some aspects that are additional or different to an interpretation plan as set out in the Heritage Office's *Interpreting heritage places and items guidelines*.

The interpretation has to focus on the entire town site, with the archaeological excavation opening a window on some specific aspects of the larger view.

The following section applies the considerations that are listed in the HO Interpretation guidelines.

Is the significance of the item readily understood?

The statement of heritage significance in the SHR requires further refinement and expansion. The material produced for the Commission of Enquiry in 1981 indicates that it may also meet the other SHR criteria at least at local level, particularly Criterion A – historical significance, Criterion D – association with a specific community and Criterion G – representativeness. Without exploring these values for the entire town, not just the section represented by the study area, it is not possible to specify what will be the building blocks for interpretation.

Is interpretation needed for this item?

The need for an overall interpretation plan results from the need to realise the significance of State significant places. Local knowledge about the site is incidental and selective and not founded on a sound history, despite there being a good local history available. Lack of awareness about its heritage significance also risks neglect, inadvertent and wilful damage and downgrading of its value to the community and the State. For all of these reasons the site should be interpreted to promote its heritage significance.

Are there themes or aspects of significance that haven't been adequately researched? For example historical themes, associations and meanings, or related items and objects?

From this revised assessment of the broader town site it will be possible to identify key themes that should be interpreted, building on those discussed above. These may not necessarily all be restricted to the town, such as the coming of the railway, important precisely because it is not in the town. Some of the main themes / story lines are likely to be:

- Indigenous history
- Establishment of the Great South Road
- Founding of the town
- Transforming the natural landscape
- Lives of the inhabitants in the early-mid 19th century people and stories
- Abandonment of the town
- Coming of the railway
- Archaeological heritage value
- Rural heritage
- New Marulan
- Modern industry and Readymix

These may be reducible to a number of general themes such as 'how people lived' which contrasts indigenous, colonial, rural and modern town life.

Is more information needed about the importance of some aspects?

The existing work for Readymix only deals in detail with a section of the town. The material reviewed for this research design is the great majority of relevant primary source material. The only likely large bodies of information related to the remainder of the township not reviewed to date are land title records, and the probate records that derive from known ownership.

Is access for interpretation appropriate, having regard to meanings?

On-site interpretation is not feasible due to safety concerns, much of the town remains private property and there is insufficient passive surveillance for interpretation to be secure. For these reasons museological advice is that interpretation does not take place on site. Some signage directing attention to the museum would be appropriate at the two cemetery sites.

If access to the item is likely to be part of its interpretation: are there any parts of the item whose significance or conditions mean that visitation should be restricted or not allowed?

See above.

4.2 Components of the museum plan

These are issues that need to be considered for a museum plan, additional to those identified above.

Exhibition design and content

This will be dependent upon the overarching themes being established, and what display materials become available through excavation and calls for donations from Marulanites.

Consultation with stakeholders

The draft museum plan will be provided to stakeholders such as the Heritage Office, MDHS and Goulburn Council for their input.

Suitability of the building for display and collection requirements

This has not been assessed in detail. It may be found that the station building is insufficiently secure, too small or has too variable a climate to operate effectively as a museum.

Readymix will not permit either display or storage of materials in the museum until it is satisfied of the suitability of the environment and its operation. Its expectation is that these will be remedied by Council's adaptation and modification of the building prior to museum use.

Preparation and installation of displays

This is outside the scope of the museum plan but follows directly from it.

Continuing assessment

Provision has been made for some assessment of the condition of displays and deposited archaeological materials to ensure that they are stable and are not likely to deteriorate in the environment.

4.3 Contingency for non-museum interpretation

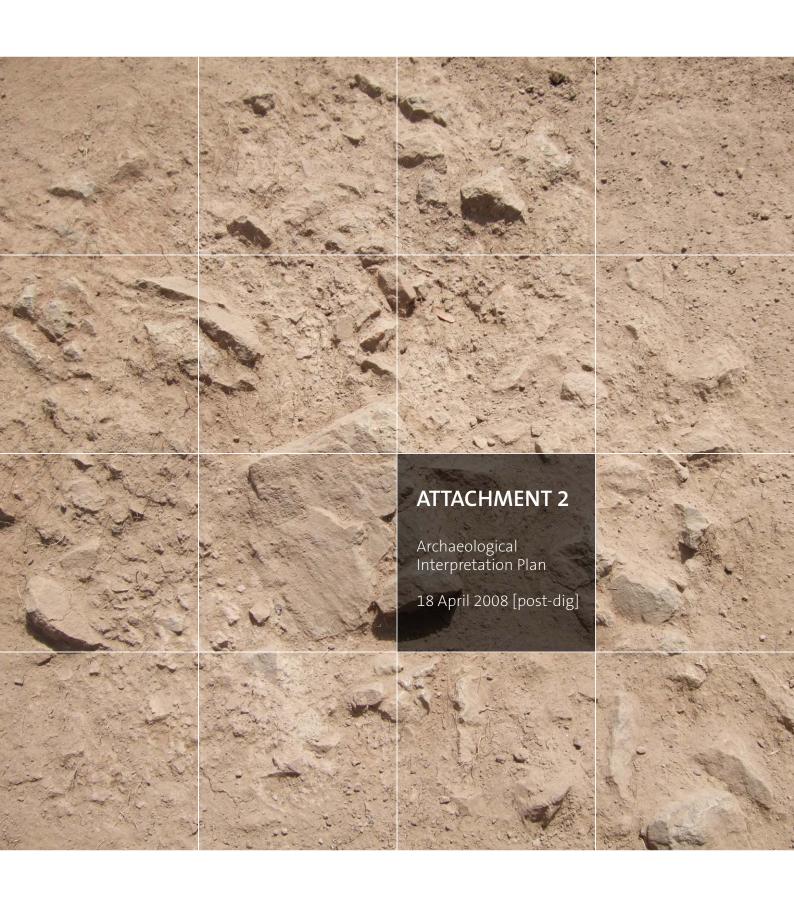
While all parties are hopeful that the preferred option for the museum to be placed in the Marulan Railway Station is achieved, it may potentially not eventuate or occur within the study timeframe, or may prove to not be suitable for housing the collection to an adequate standard. The community hall as a back-up has space limitations that may also make it unsuitable for am. As a result some consideration needs to be given to a third option that is not reliant upon a museum in the town.

The preferred solution is to develop a smaller multi-panel exhibition that meets the Heritage office requirements for representing significant themes of Old Marulan and be designed to be transportable. As a result it would not contain significant or rare original material, although it could readily display representative archaeological finds from the excavation. The display would be housed in a venue in Marulan, but would also be available for travel throughout the Council / Southern Highlands area for display in libraries or community centres.

Management of the archaeological collection

If no town museum is established then the curation of the archaeological collection needs to be reconsidered. Goulburn Council operates a number of museums and would be the preferred custodian of the collection. No negotiations regarding this have been undertaken, pending resolution of the museum issue.

Collection management guidelines would need to be developed for the eventual repository.



Old Marulan Interpretation Plan

Preparation of an interpretation plan was a requirement of the archaeological permits issued to Cemex. This version of the plan follows the successful completion of archaeological excavations within the former Marulan town site.

1. Introduction

The consent conditions for the Lynwood Quarry require that the archaeological excavation is adequately interpreted to allow the significance of Old Marulan to be realised and communicated to the local and broader public. The entire township also has to be interpreted in a permanent manner following the completion of the archaeological excavation.

A commentary on interpretation options was presented to the Heritage Branch, Department of Planning as part of the documentation required for a s.60 application, in compliance with the consent conditions. Since the approval of the s.60 application *Cemex* [the client – formerly *Readymix*], *Umwelt* [principal environmental consultant] and *Banksia Heritage + Archaeology* [historical archaeological consultant] have been engaged in refining the direction of the interpretation plan. A condition of s.60 consent was that the interpretation plan be updated following the completion of excavation.

Key interpretation activities have been:

- Stage 1 archaeological excavations tested the resource and confirmed the predictions about the extent and nature of the archaeological remains.
- Stage 2 archaeological excavations recovered the archaeological resource of the construction footprint of the interchange within the SHR-listed Old Marulan township. Archaeological material from the excavation is now under analysis.
- Continuing consultation with Marulan District Historical Society [MDHS] engendered their active support for interpretation during the excavation and for permanent interpretation in some form.
- A proposal to develop a town museum within the Marulan railway station building was suspended as a result of Goulburn Mulwaree Council being unable to obtain a suitable lease. MDHS and Council are investigating possible alternative museum locations.
- A heritage museum consultant [Peter Tonkin of 3-D Projects] has been engaged and has prepared an assessment of possible interpretation options in compliance with the development consent. He has also been involved in the updating of the interpretation plan.

• Cemex sees the heritage interpretation as potentially a component of a long-term community contribution program.

This plan therefore sets out the structure for the interpretation plan as far as it can be established, for the consideration of the Heritage Branch, Department of Planning. The issue of a permanent Marulan museum was expected to be resolved in 2007 but further investigation is being conducted. Interim arrangements for interpretation of the results of the excavation and management of the archaeological collection are therefore necessary.

2. Overall approach

There are two integrated but discrete components to the interpretation plan:

- interpretation of the archaeological process of discovery
- interpretation of the significance of Old Marulan in an interim and permanent form.

The interpretation of the archaeological investigation primarily took place during the excavation, but will also include elements that carry on to a more enduring form. The interpretation of the archaeological dig during November-December 2007 took place in accordance with the provisions of the previous version of this interpretation plan [May 2007]. These are detailed below in Section 3. Continuing interpretation of the dig includes a publication summarising the results of the excavation in the context of Marulan's history, and possibly some elements of the interim and permanent display.

The other component is creating a permanent interpretation about Old Marulan. What options should be considered was the subject of a study by Peter Tonkin, a heritage museum consultant of 3-D Projects. His report is appended [Attachment 1]. In summary its key findings were:

- Creating a permanent interpretation feature at the township site is problematic because of traffic safety, security and privacy issues.
- The complexity of the information to be conveyed about Marulan makes a public park display too limiting.
- MDHS has been planning to establish a museum for some time and this would permit better interpretative opportunities than other locations.
- Long-term management of the archaeological collection [for research and display] needs to be factored into the interpretation process.
- Therefore the plan for permanent interpretation should be reconsidered as a museum plan, with the interpretation being primarily in the form of a museum display.

Current status of museum proposal

MDHS, via Goulburn Mulwaree Council had been negotiating for a considerable time with the Australian Rail Track Corporation [ARTC] for a

long-term lease of the Marulan Railway Station building, so that it could be used as a museum of the town's history. The station platform is in active use but the station building is sealed up. Council supports a number of museums and has the support service of a part-time museums adviser [currently Ms Roxanne Fae]. In late 2007 ARTC responded to Council's request for a lease. Unfortunately a suitable lease arrangement could not be obtained by Council. Instead Council resolved to investigate other options for a town museum. To date this has not produced any likely candidates for a museum.

In the absence of a museum the MDHS has also not gone very far in developing collection policy, has no substantial existing holdings, nor any museum experience apart from the Museum Adviser's potential contribution.

3. Interpreting the archaeological investigation

3.1 Approach

The previous version of this interpretation plan discussed the audience for interpretation of the archaeological dig and how communication with them would work.

Our strategy was to promote the dig on a website, through print media and town circulars. The key event was to be an open day half way through the dig, as well as providing opportunities for special access to students and artists. Volunteers were also sought as another way of participating in the excavation.

3.2 Marulan dig – interpretation plan

General promotion

Notice of the archaeological excavation was circulated through press releases to the local press and the regular Cemex information newsletter which is distributed to all local residents.

It was also specifically circulated to the historical society for notice to members, several meetings in advance of the dig.

Announcements about the dig have also been posted on the Southern Highlands History website, which acts as a central point for heritage information in the Southern Highlands / Goulburn region.

The *Goulburn Post* ran a well-illustrated two page story on the results of the excavation in late December.

Website

A website was developed for the dig, to act as central point for reporting the conduct of the work and in handling enquiries, which was a permit

requirement. The website - http://projects.umwelt.com.au/lynwood-heritage/ is managed by Umwelt.

The website contains background information on the dig and the broader development of which it is a part, weekly and monthly reports on progress, useful links and contact information.

Contact has already been made by a number of people who found the research design online as a result of genealogical research, and who have been able to provide additional useful information.

Open Days

An open day was planned for Saturday 8th December. This was the halfway point of the dig and was chosen with the best prospects of having archaeological evidence to display but not too close to Christmas. The open day was advertised on the website and print media. Visitors had to preregister to allow transport to be arranged.

The structure of the open day was that visitors would firstly come to the Marulan Community Hall, where Cemex had established a poster display about the archaeological work and the Lynwood Quarry development. Cemex staff were on hand to meet visitors and to answer any questions. A bus took visitors to the site. There were four such tours, each just under 2 hours in duration. When the visitors reached the site they were given a brief safety induction, a Welcome to Country by representatives of the Aboriginal community and then conducted around the excavations.

Although the tour varied in detail the themes covered included:

- Marulan was established as part of the Great Southern Road.
- The layout of the town in relation to current landmarks the former road line, the Woolpack Inn and lot arrangements.
- The reasons for excavation significance of the town site, mitigation of development impact, digging to find information and record data.
- Excavation strategies visitors saw test pits, open area excavation and mechanical excavation clearance.
- History of the township and sources of information written, oral historical and family traditions, map / pictorial / archaeological.
- What we had found to date Aboriginal occupation and environment, the Woolpack Inn, artefacts from excavation, the cess pit, landscape evidence.
- Where next our expectations for further evidence, preliminary interpretation of the evidence.

There were 20 visitors who attended the open day. Although this was fewer than hoped all of them were engaged by the tour and asked questions. Several were also conducting private research into aspects of local and

regional history that included Marulan, and allowed us to establish a continuing exchange of information.

Another event which was effectively an open day was held on Thursday 20th December for the Marulan District Historical Society. We arranged with them to hold a barbecue lunch and tour for members. The MDHS undertook the catering for the dig, meaning that many of the members had already been out on site and had become friendly with the team. This allowed other members to view the site at a more advanced stage than the open day. The tour was very successful with about 25 – 30 participants.

Project newsletter

This is being produced by Cemex as part of a broader public consultation process. The archaeological and heritage work has been a feature of recent issues and as it is distributed to all local residents has allowed them to keep up to date with our progress.

Specialist talks

MDHS has invited the excavation director to do a public talk on the dig in June-July, when preliminary results from the analysis will be available. Other specialist talks are planned as analysis proceeds to university seminar series.

Volunteering

Our conditions for volunteers were that they required committing for several days, to allow us to benefit from the time needed for coaching and supervision and had to be fit enough to either dig or carry out artefact processing and cleaning under supervision. Volunteers would be fed.

Despite advertising and encouraging local participants to volunteer we were disappointed with the lack of uptake. Only a few students offered assistance, which may be explained by the late confirmation of the Stage 2 works. Some Goulburn locals also expressed interest and were able to help.

Signage

No roadside signage was used due to safety and security concerns.

Publications

The development consent requires a publication on the dig to be prepared. The University of Queensland publication on the abandoned mining town of Paradise, prepared by Prangnell, Cheshire and Quirk will be used as a model of a readable archaeology-focussed social town history for the project. Aternatives would be Susan Lawrence's *Dolly's Creek* and *Whalers and free men* publications, based on her PhD and Australian Research Council research investigations.

Documentation – audio and video

The entire investigation process is being documented on video by *Banksia Heritage + Archaeology*, in accordance with the conditions of consent. *BH+A*

has an arrangement with the University of Sydney Archaeology department to provide footage of archaeological work in return for access to video editing facilities. The intention is to use copies of the Marulan dig footage to train students in the preparation of visual teaching and documentary materials.

The footage will remain copyright of BH+A with an unrestricted use right to Cemex and the University of Sydney for promotional and educational purposes.

The video archive will be edited down from raw footage into a retention archive of good quality footage with metadata, to be stored in a number of suitable long-term formats.

An artist's view

The documentation of the dig through audio-visual means captures a lot of the process involved. However it does not capture either the excitement or emotion or other intangible sensations that participants in archaeological discovery find important, particularly the way we interact with the past as humans rather than archaeologists.

Arrangements were made to invite an established artist with an archaeological background, Geraldine Berkemeier, to work as a volunteer on site, and to use this as the initial stage of work documentation for later art production. Another Goulburn based artist also worked as a volunteer and used this as an opportunity to do some sketch studies of the site and workers.

Although it was not practical to develop the site as an 'Open Artist' scheme, discussion with Goulburn Regional Gallery and the Regional Arts Development Officer of the Ministry for the Arts indicated that there was great potential to pursue such an approach on a similar site in any future development.

3.3 Some practicalities

The artefact collection

The artefact collection from the Stage 2 excavation comprises the equivalent of 50-60 standard boxes in total. This is to be culled following analysis, based on the approval by Heritage Branch, Department of Planning of a culling protocol recommended as part of the final archaeological report. Items that are culled will be discarded unless they exhibit display potential or are of interest to other researchers for analysis or reference. The remainder of the collection will be stored in stable conditions as part of the museum collection, and subject to condition monitoring. Interim storage during analysis will be in secure storage facilities supervised by archaeologists.

Items with display potential will be identified during analysis and may have further cleaning or other conservation work carried out on them.

The well [MRNH 8]

The initial s.60 application and Stage 1 report proposed to empty and document the well and, if at all possible, to extract the timbers and reinterpret them as part of the permanent display. Although the visible timbers appear sound there is currently no indication of how the buried timber frame is conserved.

The design of the interchange does not impact on the well. However, its location is within a corridor to be used for maintenance access. The proposed management of the well is to record the structure in accordance with Heritage Office guidelines [How to prepare Archival Records of heritage Items [1998]] and conserve in situ through filling/burial, in accordance with Condition 16 of Permit No. 2007/S65/11. The Heritage Branch, Department of Planning (as a delegate of the Heritage Council) will be informed of the proposed management strategy.

If further work, including any salvage of fabric and deposits, is needed a number of issues including personal safety, traffic management and engineering need to be considered.

Ownership of the artefact collection

Ownership of the collection will rest with Cemex, apart from any salvaged remains of the well, which will be owned by RTA as it lies within the road reserve. Upon satisfactory completion of any museum conversion, ownership of the collection could be vested with Goulburn Mulwaree Council. Cemex propose to contact Council with regard to the ownership/future management of the artefacts once the permanent collection has been finalised (following the program of Heritage Branch approved culling). At present the analysis of the artefacts is being undertaken. If necessary, following analysis and any required stabilisation, while ownership/final repository is being finalised, Cemex propose to store the permanent collection of artefacts in secure and dry premises within the Lynwood homestead property.

Visits by VIPs

The excavation was visited by a number of archaeologists who were keen to see work in progress.

Also visiting the site were two representatives of the NSW Heritage Branch, Department of Planning, who were given a tour and demonstration of how s.60 permit requirements were being met.

4. Permanent interpretation

As stated above and in Attachment 1, Cemex's professional museological advice is that permanent interpretation on the site itself, or substantial interpretation elsewhere on the Old Marulan site, is not appropriate. Achieving the interpretation objectives through the establishment of a

permanent display component as part of MDHS and Council's plans for a new museum at Marulan is recommended as it provides opportunities to interpret the stories of Old Marulan in ways that are otherwise not feasible.

This approach is still tentative due to the railway station proposal being suspended. Pending resolution of the museum issue, Cemex has proposed that a portable exhibition be developed around the excavation to meet the requirements for a timely exhibit. This would allow for an interpretation to be erected in a suitable venue in Marulan and which would then travel to other locations within the Council area. This would provide a different but effective means of disseminating messages from the archaeological work without the need to wait until the museum issue is resolved. This interim display will need to abide by the considerations of the permanent display but it cannot aim for comprehensive treatment or impractically large display.

4.1 Components of the Interpretation Plan

These items refer mainly to the needs of the permanent display, but are also relevant to the interim portable display.

3-D Projects recommends that the interpretation plan should be re-oriented as a museum plan, and therefore needs to address some aspects that are additional or different to an interpretation plan as set out in the Heritage Office's *Interpreting heritage places and items guidelines*.

The interpretation has to focus on the entire town site, with the archaeological excavation opening a window on some specific aspects of the larger view.

The following section applies the considerations that are listed in the HO Interpretation guidelines.

Is the significance of the item readily understood?

The statement of heritage significance in the SHR requires further refinement and expansion. The material produced for the Commission of Enquiry in 1981 indicates that it may also meet the other SHR criteria at least at local level, particularly Criterion A - historical significance, Criterion D - association with a specific community and Criterion G - representativeness. Without exploring these values for the entire town, not just the section represented by the study area, it is not possible to specify what will be the building blocks for interpretation.

The work in Phase 2 confirmed the very high archaeological potential of the town, and some survey at the invitation of neighbours has confirmed that remains, especially on the other side of the highway, are extremely well preserved.

Is interpretation needed for this item?

The need for an overall interpretation plan results from the need to realise the significance of State significant places. Local knowledge about the site is incidental and selective and not founded on a sound history, despite there being a good local history available. Lack of awareness about its heritage significance also risks neglect, inadvertent and wilful damage and downgrading of its value to the community and the State. For all of these reasons the site should be interpreted to promote its heritage significance.

Discussion with locals reveals both lack of awareness of the nature of the town's heritage significance and resentment that this has prevented development. When the richness of the site has been demonstrated and its importance placed into context there was acknowledgement that conservation and promotion of heritage were legitimate approaches.

Are there themes or aspects of significance that haven't been adequately researched? For example historical themes, associations and meanings, or related items and objects?

From this revised assessment of the broader town site it will be possible to identify key themes that should be interpreted, building on those discussed above. These may not necessarily all be restricted to the town, such as the coming of the railway, important precisely because it is not in the town. Some of the main themes / story lines are likely to be:

- Indigenous history
- Establishment of the Great Southern Road
- Founding of the town
- Transforming the natural landscape
- Lives of the inhabitants in the early-mid 19th century people and stories
- Abandonment of the town
- Coming of the railway
- Archaeological heritage value
- Rural heritage
- Mooroowoollen / New Marulan
- Modern industry and Cemex

These may be reducible to a number of general themes such as 'how people lived' which contrasts indigenous, colonial, rural and modern town life.

Is more information needed about the importance of some aspects?

The existing work for Cemex only deals in detail with a section of the town. The material reviewed for this research design is the great majority of relevant primary source material. The only likely large bodies of information related to the remainder of the township not reviewed to date are land title records, and the probate records that derive from known ownership.

Good relationships have been established with landowners for other sections of the township site, with an invitation to survey and record any evidence on

their property. These properties are on the south side of the highway, outside the construction footprint of the new Highway Interchange. Inspection confirms the 1977 archaeological assessment of the richness of the remainder of the town site.

Is access for interpretation appropriate, having regard to meanings?

On-site interpretation is not feasible due to safety concerns, much of the town remains private property and there is insufficient passive surveillance for interpretation to be secure. For these reasons museological advice is that interpretation does not take place on site. Some signage directing attention to the museum would be appropriate at the two cemetery sites.

If access to the item is likely to be part of its interpretation: are there any parts of the item whose significance or conditions mean that visitation should be restricted or not allowed?

See above.

4.2 Components of the museum plan

These are issues that need to be considered for a museum plan, additional to those identified above.

Exhibition design and content

This will be dependent upon the overarching themes being established, and what display materials become available through excavation and calls for donations to the permanent collection from local Marulan residents.

Consultation with stakeholders

The draft museum plan will be provided to stakeholders such as the Heritage Branch, Department of Planning, MDHS and Council for their input.

Suitability of the building for display and collection requirements

The previously proposed building is no longer available. Council and MDHS are investigating alternative venues.

Cemex will not permit either display or storage of materials in any museum until it is satisfied of the suitability of the environment and its operation. Its expectation is that these will be remedied by Council's adaptation and modification of the building prior to museum use.

Preparation and installation of displays

This is outside the scope of the museum plan but follows directly from it.

The interim portable display may be able to be designed to become a part of the permanent display.

Continuing assessment

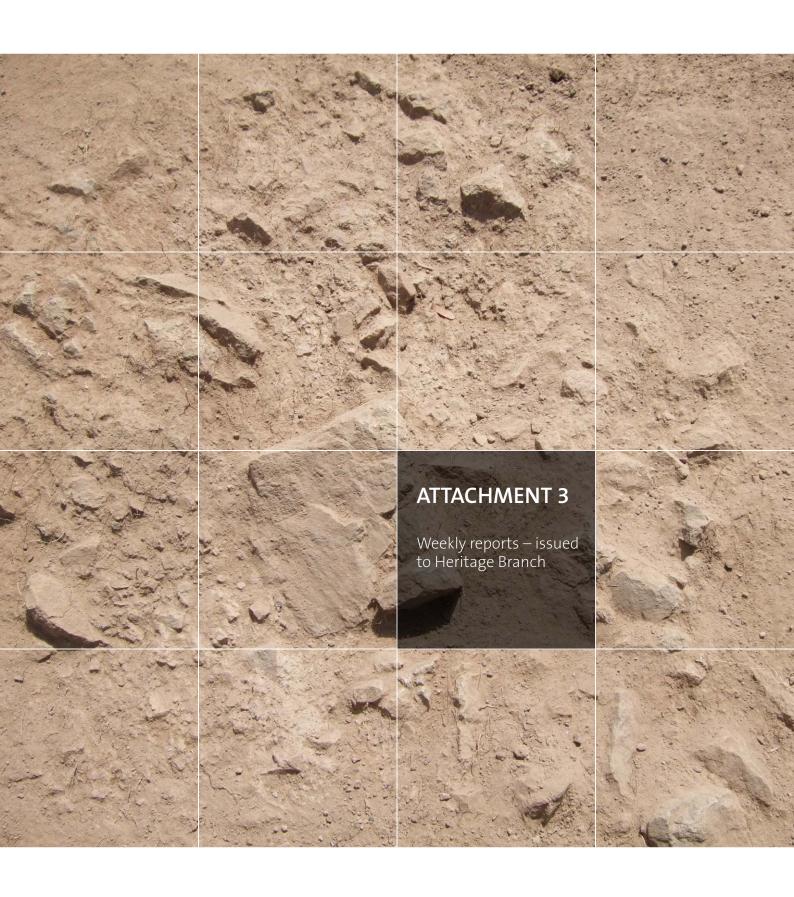
Provision has been made for some assessment of the condition of displays and deposited archaeological materials to ensure that they are stable and are not likely to deteriorate in the environment.

4.3 Contingency for non-museum interpretation

Management of the archaeological collection

If no town museum is established then the curation of the archaeological collection needs to be reconsidered. Council operates a number of museums and would be the preferred custodian of the collection. No negotiations regarding this have been undertaken, pending resolution of the museum issue.

Collection management guidelines would need to be developed for the eventual repository.



Old Marulan 2007 – Weekly Report 1 – 26-30 November 2007

The first week of work on the Old Marulan site was preceded by a day of setting up – a site office and artefact store were established, along with secure stores for equipment and amenities for the team. A surveyor re-established all of the critical points needed for the archaeological work to begin, including the exact extent of the construction footprint of the overpass. The surveyor also set up a site grid that will provide our spatial control for plotting excavations across the site and a datum control. From the control baseline we established a grid covering an area of 8 metres by 24 metres, centred on a large levelled area near the current road alignment. As a result, when our first day of digging started on Monday 26 November, our team was ready to get stuck into Old Marulan's archaeology.

The area we had chosen first, designated OM 30, was one of a number of levelled areas that were very visible a year ago, when the region was still in the grip of a severe drought. Now these areas are covered with a lush growth that makes them far more difficult to define. We do not know what the levelled areas are, except that there were at least five of them. Some may have been building platforms cut back into the slope leading down towards the creek, while others may have developed as informal site terracing or even have been drought related scours. OM 30 sits in the rear of two lots bought by Joseph Peters and upon which he built the Woolpack Inn. the first building in Marulan and the longest established of the three pubs in town. The front half of the Woolpack Inn lots were included in the widening of the Hume Highway. We know from a copy of a very rare ledger of the Woolpack Inn held by the Mitchell Library that it did much more than just serve beer. The detailed records in the ledger tell us that travellers and locals could be fed and accommodated, have their horses fed, shod, re-saddled or even new horses loaned. The rear of the inn could be expected to have stables, feed sheds, yards, perhaps small staff quarters and other buildings.

Our excavations in this area, informally known as the 'Big Rectangle', introduced the team to the relatively simple stratigraphy of Old Marulan. At the top is a lush and strong grass cover, in a thin dark brown soft silty loam. Below that is a light yellow-brown sandy silt, which is the ubiquitous natural topsoil across the site. This varies in depth from 25mm to 100 mm and comes down on to a very light grey silt, almost like talcum powder, which is the leached B horizon. The area is igneous with natural, and probably some deliberately moved, field stones varying in size from watermelons down to peas, occurring naturally throughout this sequence. In some cases the natural stone has broken down into a fine gravel, while elsewhere into a heavy red-orange clay. Other changes to the natural stratigraphy have included the action of rabbits whose burrowings have been mapped out clearly in parts of the site, and the decay or burning *in situ* of tree roots. Several separate tree roots and burrows have been identified so far.





Excavating one of the squares in the 'Big Rectangle'. The contrast in soil colours can be easily seen. (Photo: Denis Gojak)

Excavation of a former tree bole, filled with smashed bottles and food bones. (Photo: Denis Gojak)

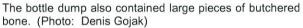
The cultural stratigraphy merges into but does not replace the natural patterning of soil layers. The most noticeable pattern is where deposits of refuse have been thrown away, mainly in the northwestern part of the Big Rectangle. These very dark brown soils lie over the top of the yellow-brown topsoil, or even directly over the subsoil. Artefacts occur through the yellow-brown topsoil, variably distributed throughout the profile. We have not come across any evidence for either different yard surfaces or spatially different patterns of artefact distribution so far either in or on the topsoil. Aboriginal artefacts also occur in the topsoil, most commonly near its base and junction with the silty sub-soil. Currently we are finding one Aboriginal artefact per 3-4 square metres opened, and have not come across any dense concentrations in any locations.

All artefacts are being recovered within a 2 x 2 metre grid framework, so that even in the extensive topsoil we can look at the overall distribution patterns. The refuse layers in the northwest have revealed an abundance of artefacts. There is the ubiquitous black cylindrical and case [square] 'black' bottle glass which forms the majority of the assemblage, but also representation of other bottle and glass types. Clay tobacco pipes are present, and currently reveal a range of well-known Scottish manufacturers who are known to have dominated the trade to Australia, including William White and McDougall. The ceramics reflect a range of styles – there are a number of pieces of probable colonial manufacture, with red bodies and red or yellow glaze, as well as the many sherds of Willow Pattern blue and a myriad of other decorative schemes and transfer print colours. Dateable trade-marks are unfortunately lacking but the overall assemblage looks more consistent with an 1840s date rather than later, making it potentially a reflection of pre-Goldrush Marulan. The few obviously modern artefacts have been restricted to the surface, and none contaminate the dump assemblage.

There are also a number of large bones of food animals that will reflect both butchery patterns and diet. Some oyster shells are present, which would have required an elaborate distribution network to arrive fresh and edible on the Woolpack's table. Metal remains are relatively sparse, and heavily corroded. Recognisable machinecut square nails are present, along with horse shoes, occasional buttons and other artefacts. Our artefact specialist begins work in two weeks and we hope to have a

better idea of the range and date of the different assemblages before we finish on site.







The sieving station was kept well away from the area of excavation to avoid dust. (Photo: Denis Gojak)

Our first week has focussed on the fundamentals of excavating a large site – establishing the grid, developing and fine-tuning our procedures, making sure that our team of archaeologists recruited from around Australia with very different backgrounds and types of experience all use the same language to describe the soils and finds they are recovering and, most importantly, understanding the archaeological evidence including what the stratigraphy reveals and what information it can hold. The first week has been ably assisted by the Marulan District Historical Society which has taken on the role of caterers and whose members have also added an important dimension of information about the more recent history of the site, and allowed us to work more effectively within their community.

Next week we will complete the Big Rectangle and a small extension from it to the one definite brick and stone structure that is present on the site. Other squares and trenches will be opened up across the site to test areas where there are surface indications of archaeological evidence being present. These will also sample the spread of artefact material across the site. Volunteers will begin to join the team and on December 8th we will host our site's Open Day.

Old Marulan 2007 – Weekly Report 2 – 3-8 December 2007

During our second week we extended the area being opened up under controlled excavation. Moving out from the 'Big Rectangle' [element OM 30] we started to open out more areas to the rear of the location of the Woolpack Inn, concentrating particularly on a brick structure right at the roadside edge of the site.



The 'Big Rectangle' on completion. (Photo: Denis Gojak)

Our main aim was to expose the rectangular brick structure that sat just within the site against the road reserve fence. This was the only definite structure that we had. Excavating the grid squares between it and the 'Big Rectangle' revealed a rocky surface, partly natural but supplemented by fist-sized cobbles pressed into the ground. This extended towards the structure, making a hard-wearing durable outdoor surface. Above the cobbles sat a layer of broken pieces of brick, almost certainly from the collapse of structures associated with the Woolpack Inn. The collapsed brick continued over the rectangular structure. When the collapsed brick was removed the structure was revealed as being a rectangle of roughly shaped local stone, measuring 2.3 m x 1.4 m, and with walls measuring almost half a metre thick. Fragments of a brick superstructure survived around its top.



The cobbled surface near the cess-pit. Note the outline of the cesspit is becoming clearer. (Photo: Denis Gojak)



The cesspit exposed with collapsed brick superstructure partly cleared away. The former location of the Woolpack Inn is to the left of the photo beyond the fence, outside the area of excavation. The former location of the Woolpack Inn is now occupied by the Hume Highway. (Photo: Denis Gojak)

Once we exposed it we were certain that it was a cess pit or pit toilet, and almost certainly from the initial construction of the Woolpack Inn. Tellingly, the stone used to build it is of the same incredibly hard material that Cemex [formerly Readymix] will be quarrying. It speaks of the optimism that accompanied the construction of Marulan's first building that even the pub toilet would be made from some of the hardest stone imaginable. If built even a decade later would they have felt justified at making the same effort?

Excavating the cess pit revealed a large number of artefacts from the Woolpack Inn. Many were in only a few pieces, broken in use and then thrown away. Large platters for serving communal meals were common, as were many designs of plates, bowls and cups. Both cylindrical and square ['case'] bottles for alcohol were common as well. Many large food bones reveal what the weary traveller could expect to be offered.

Towards the end of week 2 we began to use local machine operators for mechanical excavation. Working closely with an archaeologist, the machines would remove the grass and underlying soft soil held by root material, exposing the top of the lighter coloured soil beneath. This exposed evidence of *in situ* artefacts and post holes. The post holes show up as sharp sided discolorations, usually darker than the surrounding soil, and often in a regular, round or square shape. Some have a clearly visible post mould, the rotted remains of the original post set into the hole and surrounded by packing clay. As well as the post holes there were more diffuse patches of soil discolouration, some of which were probably the remains of trees and plants.

When the excavator had moved on, members of the team would scrape back the ground surface with flat-bladed hoes, revealing the outlines of any post holes or other possible features. As the post holes quickly disappear when the ground dries out, a numbered marker was used to locate them, so that they could later be drawn, photographed and recorded. Some were also sectioned – cut in half so that the shape of the pit and post could be recorded.

We explored the levelled areas to the east and west of the 'Big Rectangle'. To the west, in the area that fell within the crown reserve, we found ephemeral remains of at least one structure. It was impossible to determine which clusters of stone were natural or deliberately placed, although there were later discoveries of fragments of brick and post holes that supported the interpretation of there being at least one structure.

To the east we found large post holes but these would have to wait until broader exposure was possible to make sense of them.

The end of Week 2 also brought the Open Day, on Saturday the 8th December 2007. The open day had been advertised on our website and in local media. Visitors came first to the Marulan Community Hall where Cemex had a display on the archaeological project and the Lynwood development. Cemex staff were on hand to answer questions before a shuttle bus took them to the site. Once on site the visitors were given a brief safety induction, then a welcome to country on behalf of the Aboriginal groups represented on the dig team and a tour of the archaeological excavation. Even though we only had 20 people attending they were all enthusiastic participants and asked many questions. Several of the visitors were doing their own historical research that touched on Marulan and this has provided the opportunity to get involved in continuing exchange of information.



Machine-stripping of topsoil allowed us to expose postholes and other features across the entire construction footprint. (Photo: Tim Adams)



An Open Day was held half way through the Dig. Here Peter Falk, one of the Aboriginal community representatives on the team, talks to site visitors. (Photo: Denis Gojak)

The owner of the land immediately opposite the site invited us to examine his property, where there are the remains of a number of substantial stone buildings still visible above the ground in much better condition than anything that we found. We have committed to doing some basic recording of these sites so that we can make sense of the evidence as part of the broader history of Marulan.

Old Marulan 2007 – Weekly Report 3 – 10-14 December 2007

During Stage 1 test excavations we used a backhoe to cut trenches across drainage lines to examine and record their cross-sections. In one location at the bottom of the slope near the creek we found a closely packed cluster of stones with greasy black soil. Stopping the machine, we opened up a one metre square test pit. We found densely packed pieces of angular stone, with the black soil sitting in and on it, and lots of artefacts, mainly fragments of clay tobacco pipe. We interpreted this as the floor of a structure. When planning Stage 2 we noted that it fell outside the construction footprint but was sufficiently close to the area of potential impact to be at risk. It was also important to make sense of it properly and this meant that the initial test pit needed to be expanded.

When we undertook this as part of Stage 2 we marked out an area that covered the rubble 'floor', the drainage line that seemed to run next to it and another possible level area to the west. Our initial theory was that the two levelled areas were a single structure and were cut through by later drainage works. Excavation would test whether this was the case.

What was found confused us greatly [and still does after the end of the dig]. In a trench 6 x 8 metres straddling the drainage line we found two piles of stones. To the east was a pile of limestone and fine grained sandstone. Neither of these is found naturally on the site. These stones lay under the black greasy soil, and may have originally formed a ring with a central space of about a metre in diameter. The black soil contained even more clay tobacco pipes. In the western half there were wellconstructed surfaces of small cobbles made from local stone, with rougher cobbles lying in a pile on top. There seem to be four sequential events – small cobble surface first, larger cobble pile, sandstone in a possible circle, black greasy soil and, presumably, lots of tobacco smoking. The events may have been separated by days or decades. Currently the preferred hypothesis is that the cobbles represent a working surface close to the creek, possibly even a hard surface that could be swept, for example for laundry work. Later additions are just dumps of spare stone, possibly because this corner of the lot was the lowest and boggiest. That does not explain the greasy soil, which may even be residue from fat cooking, or even tallow making. The tobacco pipes may be from workers doing some particular task, or they may just be smoking where they think the boss can't see them.



Excavation of area containing piles of stone rubble brought from off-site, greasy black soil and piles of clay tobacco pipes. We hope that analysis will clarify what took place here at the back of the Woolpack Inn lots. (Photo: Denis Gojak)



Three large postholes in a line probably mark a fence within the rear yard of the Woolpack Inn. All postholes and other features were recorded and photographed. (Photo: Jack McIlroy)

The grading of the site continued throughout the week. The shallow topsoil and grass cover deepened as we moved to the east, into a shallow drainage depression that runs across the site near the Telstra repeater building. Just to the west of the repeater station, in one of the blocks owned by the descendants of George Barber, we found an abundance of post holes within one lot. These describe fences and possible buildings and are restricted to one of the two lots belonging to the Barbers. It is likely that any occupant was a tenant, but there are no clear indications of what they may have been doing. The rear of their lot was not within the development area so we have not accessed any of the potential evidence from that part of the site.

To the east of the cess pit we found a concentrated cluster of post holes. Some of these had long, dark and narrow soil stains between them, possibly the former locations of floor bearers or wall plates for buildings. At least one definite and possibly two more buildings were recognised. These are within the land that was owned by Joseph Peters. Near to them we found about five or six faint but clear parallel patches of darker soil, separated by about 1.5-2 metres, and running for up to 10 metres. We have interpreted these as the troughs between vegetable garden beds. Some post holes followed the lines of the beds, suggesting trellises. It is not clear yet whether these were to grow food, or possibly grapes or even hops to produce drink for the hotel.



Team members Sharyn Halls and Jenny Winnett excavating the cesspit. (Photo: Denis Gojak)



Looking into the excavated cesspit. The hole in the end wall allowed liquid to seep out into the soil. (Photo: Denis Gojak)

Remains of another building was found at the very eastern end of the site, where the construction footprint tapers down to almost nothing against the road reserve. The impact area here is about 2 metres wide and about half of it has been heavily disturbed with road construction or the laying of underground services. A line of bricks with diamond-shaped frogs [the indent on one face of the brick] was exposed, running at right angles to the road, along with what appears to be a sandstone flagstone. The limits of the building are hard to determine as there was later cable-digging disturbance. The bricks are different to those from the Woolpack Inn, but similar ones are found among the structures on the other side of the highway.

There were few artefacts associated with the structure, but they appear to be representative of those found elsewhere on the site.

This week our Artefact Analyst, Jeanne Harris, commenced work on site. Jeanne's first task was to bring order to the process of managing artefacts from the numerous excavation squares. Using members of the dig team she started boxing and bagging the finds bags we had produced over the past two weeks, including the large amounts of material coming from the cess pit, and several bottle dumps associated with burnt out tree stumps. Jeanne allocated people to starting to wash or brush the artefacts, which produced a much better idea of the range of material we were recovering. It became clear that some deposits were composed of earlier, nominally pre-1850 / pre-goldrush, type ceramics and glass, while others had material more typical of later goods. If this is confirmed by more detailed analysis then we will be able to contrast assemblages of artefacts, and presumably something about life in Marulan, before and after the gold-rushes. One of the great questions of Australian

history is just how did they transform life in the colony, and the assemblage may show us what happened in some detail.



Examples of the types of ceramic found in the cesspit. (Photo: Denis Gojak)



One of the largest pieces of well-preserved food bone recovered from the cesspit deposit. These will provide information about the diet and local economy of Marulan. (Photo: Denis Gojak)

Old Marulan 2007 – Weekly Report 4 – 17-21 December 2007

The final week in any dig usually passes as a blur. In our case we were trying to complete work on the site before the end of the week, to avoid having to come back the following year. This would mean re-engaging team members, organising a new lease for site sheds and equipment and securing the site for several weeks. If we were to avoid this we would need to carry out the remainder of the grading and subsurface clearance. Our two senior archaeologists, Jack McIlroy and Anita Yousif, were trying to finish off a couple of confusing and problematic areas and to make sense of them.

The second last day was a busy day for the team. Steady drizzle made it harder to carry out the final recording that we needed to do. At lunch time we were to host the Marulan District Historical Society for a barbecue and site tour. We'd come to know many of the members who had helped with the catering but it was our final chance to show off the site before it was filled in.

As well as the Historical Society, we had representatives of Cemex and the NSW Heritage Office attending, which allowed us to offer them all thanks for their part in ensuring the success of the dig. It is important to record that whatever we did ultimately depended on the wholehearted support of our client, the statutory body regulating heritage in NSW and the local community.

Lunch on Thursday was a great occasion, despite the rain, as we were able to show off the site and finally take stock of the discoveries. As excavation director it is often very easy to get lost in the detail, and it is only when you have to explain it to a live audience that it transforms in your own mind from a collection of archaeological unit numbers, layers and bits of glass to a human story.



Team members Christine Gant-Thompson and Bec Parkes recording cross-sections cut through the plough marks. These are clearly visible in the trench wall. (Photo: Denis Gojak)

Despite the time we lost earlier in the week we were able to finish off everything on Friday morning. Once all of the gear had been cleaned and packed away and our notes finalised we were able to leave the site in the early afternoon; all done and dusted on Day 20. I always find it sad leaving a site after such an intense relationship with it. The pyramids of spoil, lumps of rock and bits of flagging tape

take on the makings of a familiar landscape, each accompanied by flashes of memory from the previous four weeks. A big part of being excavation director is trying to take a magisterial overview of things, making sure you do not lose yourself in the detail of the site so that you can understand how all of the different types of evidence fit together. Doing that properly must fit you up well for being a Zen master as you keep eyes, ears, brain and sometimes nose open, recording bits of information and sensations without necessarily taking conscious note of them. They sit as half formed impressions in your mind, only called forth again when something found elsewhere on site suddenly makes you think 'there's another posthole with exactly that pattern of rocks around it', or 'we found some of this same stone near the creek'. Sometimes the hard part is recognising the patterns, while at others it's realising that the similarities may not mean anything, and always the trickiest is being able to get these thoughts and insights on paper before they disappear.

It was pleasing to be able to leave the site, knowing that we had done what we set out to do in the time that had been allowed. The archaeology had been recovered, and this done to a standard that meant that we could write the story of Marulan with confidence and authority.

In closing, it would be wrong to finish these weekly reports without offering my sincere thanks to Tim Adams and Mary-Jean Sutton who handled the logistics for the dig, making it run so smoothly and seamlessly. Tim was also Deputy Dig Director, which meant that he shared all of my responsibilities but gets none of the credit or glory that I eventually hope to receive. We also could not have done it without a first-rate team who were a joy to work with, and who kept us on our toes all the time.



Old Marulan 2007 – a summary report on completion of field work

The excavation of Old Marulan focussed on the recovery of the archaeological remains of Old Marulan township that fell within the approved development footprint of the Lynwood Quarry project. The excavation uncovered both substantial and well-built remains and far more ephemeral evidence of buildings and site activities. Much of the evidence was in the form of post-holes which are still being analysed to identify structures. The site was excavated with a combination of hand excavation, examining areas within a 2 metre grid overlay, and large-scale mechanical stripping of topsoil. Archaeological artefacts were found in abundance in several dense deposits, as well as a more general diffuse distribution of both Aboriginal and historic artefacts.

The excavation was entirely within the impact area for the Hume Highway interchange to be constructed as part of the Lynwood Quarry project, plus one excavation area that opened up a structure identified during the Stage 1 testing works just outside the construction footprint. Most of the excavation area fell within town lots that had been the first sold to Joseph Peters for the erection of the Woolpack Inn. Adjoining this land to the west was a crown reserve, and to the east an additional two lots bought later by Peters and lots belonging to a range of owners. The patterning of remains showed that the lot boundaries were maintained and controlled land use.

The main focus of the excavation was a group of four lots which were owned by Joseph Peters, including two on which he built the Woolpack Inn. The Woolpack Inn itself has been lost through widening of the Hume Highway. The only substantial remains that fell within the site boundary were a cesspit built from blocks of the hard local porphyryite with a brick superstructure and an exterior cobbled surface. The cesspit contained an abundance of artefacts, including many large butchered bones, serving platters broken into pieces, smashed tumblers and plates. Behind it was an extensive but discontinuous area of rough cobbled paving.

To the east of the cesspit we found an extensive area of post-holes, at least one set of which combined with evidence of posts laid flat on the ground seem to indicate the location of a small post-built structure. Immediately next to it was a series of at least five parallel long shallow depressions. These are currently interpreted as furrows in a planted area, possibly a vegetable garden. Probably associated with these are lines of postholes which could be fences or possibly trellises or climbing frames for whatever was being grown in the garden.

Further east only one structure was found, at the eastern end of the area, probably belonging to a tenant farmer. Former telecommunication lines have badly disturbed some areas east of a Telstra repeater station building.

To the rear of the cesspit, there are no evident remains within the Woolpack Inn lots. This is surprising as we expected there to be considerable activity in the rear of the pub,

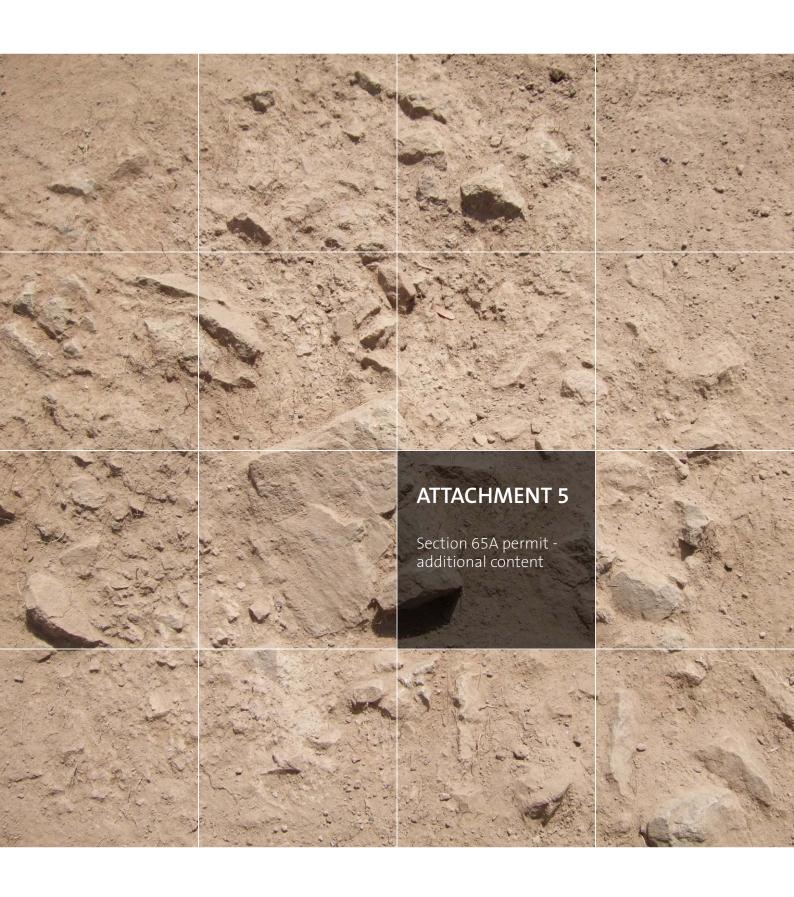
as we know that it offered a blacksmith, stabling and spare horses. Nonetheless the absence of postholes indicating any sort of fencing appears to be real. The soil here is very shallow and the bedrock erupts in exposures close to the surface, which may have made it unsuitable for building or horse grazing.

In Stage 1 a test pit encountered what appeared to be a deliberately formed pavement made of limestone or sandstone, upon which was a dense concentration of artefacts including clay tobacco pipes. We opened up an area of 6 x 8 metres without being able to definitively establish what was going on. Our current theory, pending analysis, is that this is the lowest point of the Peters blocks nearest the creek and there is one or possibly two cobbled surfaces, over which have been dumped discrete piles of sandstone and limestone pieces. These do not appear to have been demolition rubble but could be construction refuse. The dense artefact concentration is associated with a localised deposit of thick black greasy soil that overlies the dumping events.

West of the Woolpack Inn, within the Crown Reserve careful excavation exposed the ephemeral remains of a structure. A number of fragmentary brick lines, staining from timbers and possibly a small increase in artefact density point to at least some occupation.

The excavation demonstrated the relatively rich and intact nature of the subsurface archaeological resource. It has provided archaeological data and artefact material that has good potential to reveal more about Marulan and colonial Australian history. This potential will be realised through detailed analysis and reporting to be undertaken as the next phase of the project.

Denis Gojak Director **Banksia Heritage + Archaeology** 15 March 2008





3 Marist Place Parramatta NSW 2150 Locked Bag 5020 Parramatta NSW 2124 DX 8225 PARRAMATTA Telephone: 61 2 9873 8500 Facsimile: 61 2 9873 8599 heritageoffice@heritage.nsw.gov.au www.heritage.nsw.gov.au

Contact: Siobhan Lavelle Telephone: 02-9873 8525 siobhan.lavelle@heritage.nsw.gov.au File: S90/07432/00

File: S90/07432/00**2**4 Our Ref: HRL45943

Mr Richard Savage Rinker Australia Pty Ltd PO Box 258 PENRITH NSW 2751

Dear Mr Savage,

APPLICATION UNDER S65A OF THE NSW HERITAGE ACT, 1977

RE: OLD MARULAN TOWNSHIP, SHR00127, MARULAN NSW

Proposal: Proposed amendment to the s60 Approval No. 2006/S60/082 to allow for recording and removal of some archaeological remains within the SHR curtilage. These remains were identified during the Stage 1 archaeological testing work and will be impacted by the new highway interchange works.

S65A Application No: 2007/S65/11

Information received with the s65A application:

- S65A Application Form, letter, & attachments dated 1 June 07 providing updated research design for the works, site plan and nominated personnel (Site Directors)
- Report on 'Marulan Stage 1 Archaeological Investigation', March 2007, prepared by Banksia Heritage for Rinker Australia and Umwelt.
- 'Old Marulan Interpretation Plan' dated 28 May 2007, prepared by Banksia Heritage

Additional information requested: N/A Date additional information received: N/A

As delegate of the NSW Heritage Council, I have considered the above application and found it substantially the same as the approval under s60 of the Heritage Act, No. 2006/S60/082 for archaeological works at the site of the Old Marulan township. Pursuant to Section 63 of the NSW Heritage Act 1977, the Heritage Council hereby informs Mr Richard Savage that approval is granted to modify the s60 Approval No. 2006/S60/082 dated 17 November 2006 as follows:

1. All works shall be in accordance with the methodology outlined in the S60 Excavation Permit Application number 2006/S60/082 and supporting documents, in particular the 'Old Marulan, County Argyle: a research design and archaeological compliance program for work by Readymix' prepared by Banksia Heritage & Archaeology in 2006 and also in the S65A Application number 2007/S65A/11 dated 1 June 2007 and supporting documents, 'Marulan Stage 1 Archaeological Investigation' March 2007, prepared by Banksia Heritage & Archaeology Pty Ltd,

EXCEPT AS AMENDED BY THE FOLLOWING CONDITIONS:

- 2. This permit is issued for archaeological investigations associated with the redevelopment of parts of the SHR listed site of Old Marulan for a new Highway interchange as part of the Lynwood Quarry project. This will involve a multistage strategy as indicated in the reports 'Old Marulan, County Argyle: a research design and archaeological compliance program for work by Readymix' prepared by Banksia Heritage & Archaeology in 2006 and also in 'Marulan Stage 1 Archaeological Investigation' prepared by Banksia Heritage & Archaeology Pty Ltd in 2007
- This permit allows the archaeological salvage excavation of associated deposits, sites and features from the Colonial-era town of Old Marulan (c.1835-1870) as required; and for future archaeological monitoring and site clearance as required.
- 4. This archaeological approval allows the removal of any State significant relics in accordance with the methodology given in supporting documents as noted in Condition 1, above. All salvaged 'relics' should be available for future display at the completion of the archaeological work.
- 5. The Applicant must ensure that the Heritage Office, Department of Planning, is informed in writing of the start of the on site archaeological fieldwork at least five (5) days prior to its commencement and, that the Heritage Office is informed of the end of the on site fieldwork within five (5) days of its completion.
- The Heritage Council and staff of the NSW Heritage Office authorised under section 148(1) of the 'Heritage Act, 1977' reserve the right to inspect the site and records at all times, as well as access any relics recovered from the site.
- 7. The Applicant must ensure that if any additional substantial intact archaeological deposits and/or State significant relics not already identified in the Application for S65A Excavation Permit number 2007/S65A/11 are discovered, the Heritage Office must be contacted for advice. Additional assessment and approval may be required prior to works continuing in the affected area(s) based on the nature of the discovery.
- 8. The Applicant must ensure that the nominated Excavation Director, Mr Denis Gojak, or in his absence the nominated Site Directors, Ms Mary-Jean Sutton and Ms Meaghan Russell, carry out the excavation work. This approval requires the nominated Excavation Director, Mr Gojak, to be present for a minimum of 80% of the field excavation time. Under the supervision of the approved Excavation Director the work is to be completed in accordance with the methodology outlined in the supporting documents for S65A Application number 2007/S65A/11.
- 9. The Applicant must ensure that the Excavation Director takes adequate steps to record to scale and in detail relics, structures and features discovered on the site during the archaeological works in accordance with the approved research design and current best practice guidelines. This work must be undertaken in accordance with the Heritage Office guidelines, How to Prepare Archival Records of Heritage Items (1998) and Photographic Recording of Heritage Items Using Film or Digital Capture (2006). Photography must include archivally stable formats including black and white photographic prints and colour slides.
- 10. The Applicant must ensure that during the period of excavation, the site is made secure and that artefacts, structures and features are not subject to deterioration, damage or destruction, during the fieldwork.
- 11. Throughout the archaeological excavation works the Applicant must ensure that:
 - a. A local public information programme is implemented including press releases and a website to ensure the public is informed about the archaeology project and its outcomes.
 - b. Free public brochures must be available for the public to collect. These public brochures must be available from the first week of the archaeological works on the site and may be distributed via a website or other means such as letter-box drop.

- Volunteers are used where possible to assist with the archaeological works.
- d. The services of a conservator are utilised for conservation of significant artefacts and structural items or features as necessary.
- 12. The Applicant must ensure that a Public Open Day or supervised Public Tour is conducted on the site during the work. The Public Open Day should be carried out in a day during the weekend to facilitate public attendance and should be advertised at least one week ahead. Details of the proposed Public Open Day during the excavation program must be discussed with the Heritage Office once the archaeological findings are known, and should be submitted for the approval of the Heritage Council or its delegate.
- 13. The Applicant must ensure that local historical societies and other relevant cultural organisations are formally notified and invited to the Public Open Day or supervised Public Tour.
- 14. The Applicant is responsible for the safe-keeping of all relics recovered from the site, during and after fieldwork. Adequate security measures shall be maintained until such time as a repository for relics is identified and approved by the Heritage Council or its delegate.
- 15. The Applicant must ensure that the nominated Excavation Director cleans, stabilises, identifies, labels, catalogues and stores any artefacts uncovered from the site in a way that allows them to be retrieved according to both type and provenance.
- 16. The timber lined cistern/well (MRNH8) is to be managed either through limited salvage of deposits and then conservation in-situ through filling/burial; or if this proves impractical, by the full salvage of fabric and deposits for incorporation in future interpretation about the site. The most appropriate treatment of MRNH8 should be determined through more precise identification of the need to disturb surrounding allotments within the existing SHR curtilage. The Heritage Council or its delegate must be informed about the specific details of the final proposal for MRNH8 and must concur with the proposed treatment of the structure and any associated deposits or 'relics' within the meaning of the NSW Heritage Act, 1977.
- 17. A weekly report on the results must be submitted to the Heritage Council or its delegate as the archaeological fieldwork proceeds.
- 18. After the completion of the archaeological fieldwork the previously prepared 'Old Marulan Interpretation Plan' prepared by Banksia Heritage and Archaeology dated May 2007 should be revised to incorporate the findings from the archaeological works. An updated final Interpretation Plan should be submitted for the approval of the Heritage Council or its delegate within 3 months of the conclusion of the archaeological fieldwork.
- 19. Written advice must be received from the Heritage Council or its delegate, that the proposed treatment of the site and relics is acceptable before any bulk excavation or construction work is commenced for the new roadworks.
- 20. The Applicant must ensure that the final report is prepared by the nominated Excavation Director, to publication standard, within one (1) year of the completion of the field based archaeological activity unless an extension of time is approved by the Heritage Council of NSW. Two hard copies and one electronic copy of this report must be submitted to the Heritage Office. A least one further copy must be lodged in the local library, or another appropriate local repository in the Goulburn-Mulwaree Council area.
- 21. The Heritage Council of NSW requires that the final report shall include:
 - a. An executive summary;
 - b. Due credit to the client paying for the excavation on the title page;
 - c. An accurate site location and site plan;
 - d. Historical research, references, and bibliography.
 - e. Detailed information on the excavation including the aim, context of the excavation, procedures, analysis, treatment of artefacts (cleaning,

conserving, sorting, cataloguing, labelling, scale drawings, photographs, repository);

- f. Nominated repository for the items;
- g. Detailed response to research questions; and
- h. Details of how information about this excavation has been publicly disseminated.
- 22. The Heritage Council or its delegate must approve any substantial deviations from the approved research design (including extent and techniques of excavations) as an application for the variation of the permit under Section 65A of the NSW Heritage Act, 1977. If substantial variations are proposed a new application under \$60 may be required.
- 23. Any Aboriginal 'objects' present at the site, must be managed in accordance with advice from the Department of Environment and Climate Change and in accordance with a permit under the *National Parks and Wildlife Act, 1974*.
- 24. This approval shall be void if the activity to which it refers is not physically commenced within five years after the date of the approval or within the period of consent specified in the relevant development consent granted under the Environmental Planning and Assessment Act, 1979, whichever occurs first.

The above conditions have been imposed to ensure compatibility of the proposed work with the existing heritage values of the item and to ensure consistency with the *Environmental Planning and Assessment Act, 1979*. Your attention is drawn to the right of appeal against these conditions.

It should be noted that an approval under the Heritage Act is additional to that which may be required from other Local Government and State Government Authorities. If you have any questions regarding the above matter please contact Siobhan Lavelle at the Heritage Office on (02) 9873 8546.

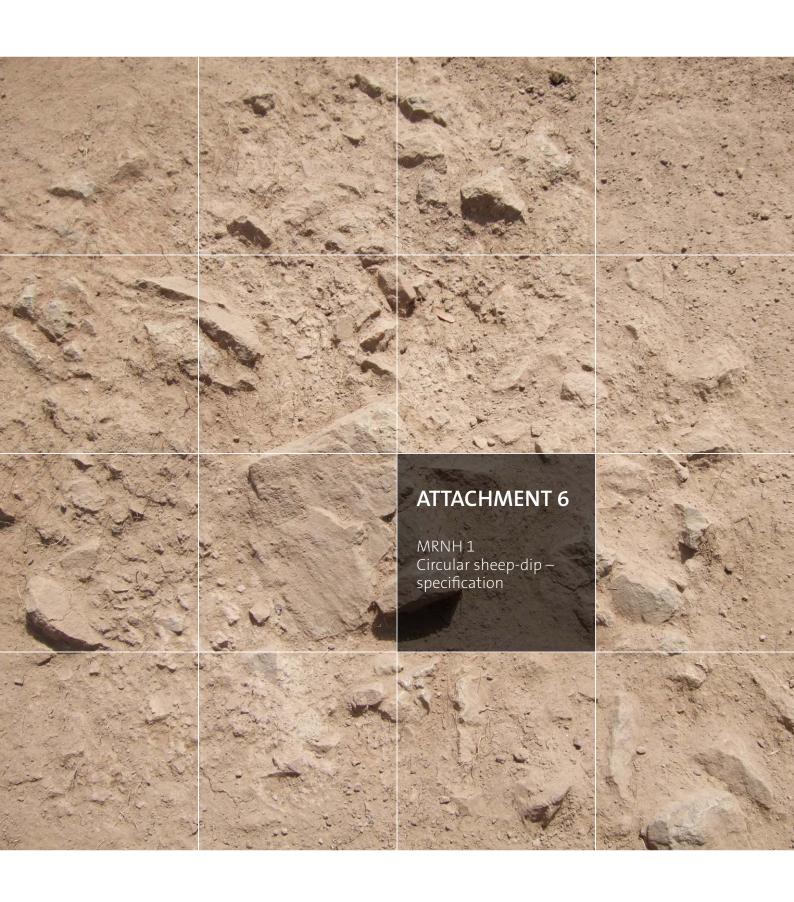
Yours sincerely

Vincent Sicari

Manager
Conservation Team
Heritage Office
Department of Planning

ear 4/09/07

cc. General Manager, Goulburn Mulwaree Council, Locked Bag 22, Goulburn, NSW, 2580 Mr. Denis Gojak, Banksia Heritage & Archaeology, PO Box 457, Newtown NSW 2042



Old Marulan – Circular Sheep Dip MRNH 1 Specification for conservation

1. Background

CEMEX Australia Pty Ltd [CEMEX] is developing a new hard rock quarry at 'Lynwood', immediately to the west of the current Marulan township. As part of the approved development quarry traffic will leave and enter the Hume Highway through a new interchange at the junction of the highway with the roads to South Marulan and Bungonia. The positioning of these roads will result in the interchange being placed partly within the State Heritage Register-listed site of Old Marulan.

Old Marulan was a township established in the 1830s as a stopping point on the Hume Highway. It was gradually abandoned from the mid-1860s when the Southern Railway by-passed the town and a new settlement began to develop around the rail terminus, forming the present town of Marulan. The brief flourishing of the original town for a limited period and the lack of later development prompted the NSW Government to place a permanent conservation order on the entire township site in 1981 in recognition of its high archaeological significance. When the NSW Heritage Act was amended in 1987 it became one of the founding entries on the NSW State Heritage Register [SHR].

As required by the Heritage Act 1977, any development impacting a place on the SHR must only be carried out in accordance with the consent of the NSW Heritage Council. CEMEX engaged Umwelt [Australia] Pty Limited [Umwelt] to undertake an archaeological survey of the township, which confirmed the position of key elements that may be affected by the construction of the interchange. The majority of these were to be on the north-western [quarry] side of the highway. On the south-eastern side, all work was to be confined to within the road reserve of the Hume Highway.

Development consent was granted for the Lynwood Quarry Project under the Environmental Planning and Assessment Act 1979 in December 2005 [DA 128-5-2005]. Subsequently CEMEX sought approval under s.60 of the Heritage Act to undertake archaeological works within the SHR area to retrieve the information potential of the relics on the site. The s.60 permit was issued 17 November 2006. This permit provided for archaeological testing and full excavation of the north-western area to be affected by the construction of the interchange. The required excavation work has been completed.

MRNH 1 is an unusual surviving circular sheep dip that is located within the State Heritage Register boundary of the Marulan township site. It dates to a later period than the township, for which the Marulan town site received its SHR listing, but is considered to be part of the broader area's rural heritage. MRNH 1 is located near the northeastern boundary of the site, and is not within the proposed development area [Figure 1].

In 2006 the sheep dip was identified during an ecological survey for the initial EIS for the Lynwood Quarry [Figure 2]. At this stage it was intact, did not contain a significant fill deposit and was structurally sound. At some time following this the lessee of the land backfilled the sheep dip, causing some damage to the walls [Figure 3]. This appears to have been a misguided attempt to make the site safe and to prevent agisted stock from falling into the dip. The archaeological survey for the EIS subsequently recorded the sheep dip as a heritage site and CEMEX was then notified of its significance.

The sheep dip is not within the proposed development impact area or included in the conditions of the most recent permit variation issued by the Heritage Branch, Department of Planning [s.65A 2007/S65/11 - 4/9/2007]] however, CEMEX have indicated to the Heritage Branch that they wish to stabilise the structure. This specification sets out how this is intended to be achieved.

2. Description

The sheep dip and surrounding land has been recorded [Figure 4]. It consists of a squarish concrete slab measuring approximately 2.65 x 2.10, which was originally surrounded by several courses of brickwork. The brick used is second hand machinemade bricks, with no evidence of Marulan-period bricks being used. The shape of the slab is most likely the result of it being formed by eye rather than accurate setting out. At ground level it appears reasonably square. The slab drains towards a channel that abuts the centre of the northern side.

The channel is approximately 0.39-0.45 metres wide, lined on both sides with cemented recycled bricks. The channel continues for 3.80 metres, ending in a circular washing chamber that is 1.55-1.90 metres in diameter. Its original depth was about 1.10 metres based on photographic evidence. The floor of the channel drops in a steep even slope to feed the sheep into the washing chamber.

The sheep dip is built immediately beside the current roadway leading from a nearby farm house along the southern side of the creek, towards the old town site. It is approximately 40 metres from the current creek bank and 35 metres from a shallow dam. Near the sheep dip site and probably associated with it are:

- a large metal cauldron
- a timber gate lying on the ground
- scatters of brick

The damage to the structure was likely caused by fill that has been poured into the channel and washing chamber, bringing them up to near ground level. The fill consists of a mixture of clean soil fill, broken brick fragments and natural stone.

Several edges of the structure have been cracked and dislodged in the damage [Figure 3].

3. Specification for proposed stabilisation of the sheep dip

i. Archival recording

The sheep dip is to be archivally recorded in its current form as part of the Old Marulan 2007 archaeological project.

Note – this is complete apart from documenting the work carried out under this specification.

ii. Prepare the site

Outlying elements – the cauldron, timber gate pieces and intact bricks – will be collected and placed on the concrete slab.

Dislodged brickwork sections of the sheep dip will be reinstated in their correct position where possible, but not adhered. Where they cannot be reinstated the extant bricks will be sorted into those that are sound and reusable and stacked on the concrete slab, with the remainder of the material added to the fill within the sheep dip.

The fill within the channel and washing chamber will be levelled by hand to form an even surface. This will be covered in geotextile fabric that extends up the inner brickwork sides.

iii. Fill

A clean inert fill, probably crusher sand derived from local igneous stone, will be placed over the geotextile within the structure and shaped into a slight mound that will shed water outside the structure.

Hollows and dips around the sheep dip will be filled to prevent water ponding or seeping into the structure below ground level.

iv. Protect the site

As there will be machinery travelling near the structure during the construction of the interchange it will be fenced with star pickets and high visibility barrier tape for the duration of construction.

Stock-proof fencing is not considered desirable as it is likely to increase vegetation and therefore attract more burrowing by rabbits.

On-site contractors would be informed of the sheep dip and its location within the SHR area as part of the site induction process.

Regular visual inspection of the sheep dip site will be undertaken during construction works, ensuring barrier fencing is intact and materials have not been removed. Risks to the integrity of the sheep dip associated with rabbit or other feral animal impacts will be managed on an ongoing basis as part of CEMEX's ongoing land management practices.

Denis Gojak Director

Banksia Heritage + Archaeology

20 April 2009

- Figure 1. Location of the sheep dip in relation to the SHR boundary and major landscape features.
- Figure 2. Sheep dip as photographed in 2005 before structural damage
- Figure 3. Sheep dip as photographed in March 2008 showing infilling and damage to walls.
- Figure 4. Recording of the sheep dip in its current form.



Old Marulan - Timber-lined well MRNH8

Specification for in situ conservation

1. Background

Cemex is developing a new hard rock quarry at 'Lynwood', immediately to the west of the current Marulan township. As part of the approved development quarry traffic will leave and enter the Hume Highway through a new interchange at the junction of the highway with the roads to South Marulan and Bungonia. The positioning of these roads will result in the interchange being placed partly within the State Heritage Register-listed site of Old Marulan.

Old Marulan was a township established in the 1830s as a stopping point on the Hume Highway. It was gradually abandoned from the mid-1860s when the Southern Railway by-passed the town and a new settlement began to develop around the rail terminus, forming the present town of Marulan. The brief flourishing of the original town for a limited period and the lack of later development prompted the NSW Government to place a permanent conservation order on the entire township site in 1981 in recognition of its high archaeological significance. When the NSW Heritage Act was amended in 1987 it became one of the founding entries on the NSW State Heritage Register [SHR].

As required by the Heritage Act 1977, any development impacting a place on the SHR must only be carried out in accordance with the consent of the NSW Heritage Council. Cemex engaged Umwelt (Australia) Pty Limited to undertake an archaeological survey of the township, which confirmed the position of key elements that may be affected by the construction of the interchange. The majority of these were to be on the north-western [quarry] side of the highway. On the south-eastern side, as all work was to be confined to within the road reserve of the Hume Highway, the only feature likely to be affected is a square-shafted timber-lined well, designated MRNH8. It was also identified as Site 20 in Temple's 1981 survey.

Development consent was granted for the Lynwood Quarry Project under the Environmental Planning and Assessment Act 1979 in December 2005 [DA 128-5-2005]. Subsequently Cemex sought approval under s.60 of the Heritage Act to undertake archaeological works within the SHR area to retrieve the information potential of the relics on the site, issued 17 November 2006. This has included archaeological testing and full excavation of the north-western area to be affected by the construction of the interchange. The initial s.60 approval indicated that MRNH8 may be affected by construction works and that, once construction plans were finalised, all surface evidence was to be archivally recorded and any material evidence salvaged.

Subsequent redesign of this part of the interchange allows the well to be avoided by construction works. Cemex has designed the southbound up-ramp to the interchange to avoid the well, with the base of an earthen embankment approaching no closer than

2 metres. However, a maintenance access road is required along the side of the interchange and this road will interact with the location of the well. As there is no room to route this maintenance access road to avoid passing over the well without entering into SHR-listed private property, Cemex intends to conserve the well *in situ* and to establish the maintenance access road over it.

The most recent permit variation issued by the Heritage Office requires:

"16. The timber-lined cistern / well [MRNH 8] is to be managed either through limited salvage of deposits and then conservation in-situ through filling / burial; or if this proves impractical, by the full salvage of fabric and deposits for incorporation in future interpretation about the site. The most appropriate treatment of MRNH8 should be determined through more precise identification of the need to disturb surrounding allotments within the existing SHR curtilage. The Heritage Council or its delegate must be informed about the specific details of the final proposal for MRNH8 and must concur with the proposed treatment of the structure and any associated deposits or 'relics' within the meaning of the NSW Heritage Act 1977." [s.65A 2007/S65/11 - 4/9/2007]

This specification sets out how Cemex will meet the requirements of the s60 permit, in such a way that will allow the well to be preserved securely beneath the road, but unaffected by it.

2. Specification for proposed treatment of the well

The following steps are to be taken in ensuring the *in situ* conservation of the well.

i. Archival recording

The well is to be archivally recorded in accordance with the NSW Heritage Office Guidelines for the archival recording of heritage items.

Note – this has commenced and is to be completed.

ii. Prepare well

Prepare the well by limited removal of modern items of fill and refuse inside the well to an even and firm surface.

Remove all vegetation and loose surface material to about 1 metre from the well's edge.

Timber pieces that are loose are to be removed, marked with their provenance and laid on the fill of the well, enclosed in geotextile.

Where necessary, use sand-bags to fill in voids and to support remaining timber elements.

Lay geo-textile over the base and sides of the well to about 1 metre beyond its perimeter.

Lay on the surface of the geotextile an explanatory note laminated and encapsulated in plastic explaining the significance of the well and directing the finder to the NSW Department of Planning.

<u>iii. Fill</u>

Use inert clean sand to fill the well to level with the top and about 100 mm over, levelling out to cover the geotextile. The inert clean sand to be used will be either clean river sand or manufactured sand. The sand to be used will be reviewed by the Excavation Director prior to filling of the well to ensure that it is suitable in terms of pH and grain size fractions.

Lay plastic flagging tape across the top of the well to act as an alert for any inadvertent exposure of the fill.

Road base fill as used in the maintenance access road is to be laid on the fill initially BY HAND to prevent damage to the well or dislodgement of the covering. Once covered by a layer of the road base fill, the remainder of depth can be laid and shaped mechanically to provide the base of the access road. The final road surface will be either road base or a concrete pavement depending on final RTA requirements. If the concrete pavement is required, it will be established on top of the road base with sufficient road material to be used between the well and the concrete pavement to ensure protection of the well.

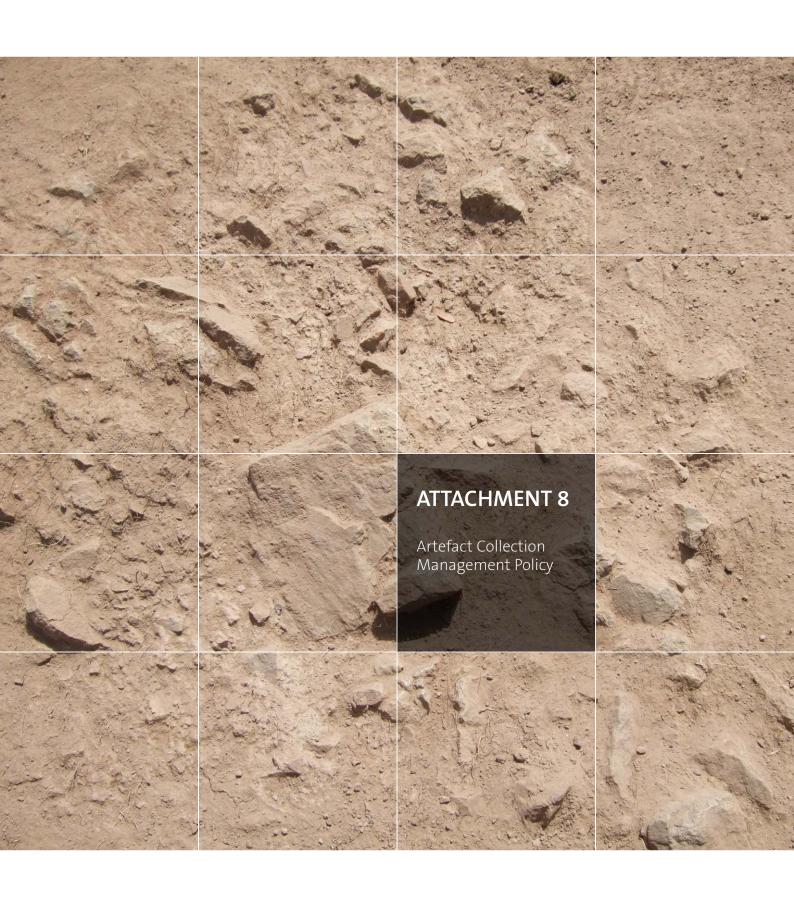
Drainage around the base of the access road to be formed to direct water away from the well.

iv. Documentation

The archival recording of the well will include details of the covering method and include recording its exact position in relation to the overpass.

3. Approval process

This specification is to be approved by the NSW Heritage Council or its representative before work commences.



Old Marulan 2007 [OM7] – Artefact processing and collection management policy

1. Background

CEMEX Australia Pty Ltd [CEMEX] is developing a new hard rock quarry at 'Lynwood', immediately to the west of the current Marulan township. As part of the approved development quarry traffic will leave and enter the Hume Highway through a new interchange at the junction of the highway with the roads to South Marulan and Bungonia. The positioning of these roads will result in the interchange being placed partly within the State Heritage Register-listed site of Old Marulan.

Old Marulan was a township established in the 1830s as a stopping point on the Great South Road [now the Hume Highway]. It was gradually abandoned from the mid-1860s when the Main Southern Railway by-passed the town and a new settlement began to develop around the rail terminus, forming the present town of Marulan. The brief flourishing of the original town for a limited period and the lack of later development prompted the NSW Government to place a permanent conservation order on the entire township site in 1981 in recognition of its high archaeological significance. When the NSW Heritage Act was amended in 1987 it became one of the founding entries on the NSW State Heritage Register [SHR].

As required by the Heritage Act 1977, any development impacting a place on the SHR must only be carried out in accordance with the consent of the NSW Heritage Council. CEMEX engaged Umwelt [Australia] Pty Limited [Umwelt] to undertake an archaeological survey of the township, which confirmed the position of key elements that may be affected by the construction of the interchange.

Development consent was granted for the Lynwood Quarry Project under the Environmental Planning and Assessment Act 1979 in December 2005 [DA 128-5-2005]. Subsequently CEMEX sought approval under s.60 of the Heritage Act to undertake archaeological works within the SHR area to retrieve the information potential of the relics on the site, issued 17 November 2006. This has included archaeological testing and full excavation of the north-western area to be affected by the construction of the interchange.

In its research design accompanying the s.60 consent [Sept 2006] and the subsequent Stage 1 archaeological assessment [March 2007] the Lynwood Quarry Project archaeological consultant, Banksia Heritage + Archaeology, indicated that there would probably be substantial quantities of artefact material recovered. These documents identified that following analysis not all of it would be considered necessary for further retention as its information potential would have been realised. Therefore what was termed a 'culling schedule' would be prepared to set out the

basis for determining what material should be retained and under what conditions any material could be de-accessioned and removed from the permanent collection. This issue forms part of a broader artefact management issue as the Heritage Act consent conditions also require the consideration of the use of artefacts as part of the longer-term interpretation of the archaeological heritage of the site, and the creation of a permanent archaeological archive that includes excavated material.

Therefore this artefact processing and collection management policy considers these related issues together. It ensures that CEMEX meets its obligations under specific conditions of its Heritage Act consents, and that it meets acceptable practice standards for the management of archaeological collections. The policy also recognises that a sustainable solution requires that the collection is as manageable as possible and that its long-term stewardship lies with organisations well placed to manage it so that its research significance is retained.

2. Process of artefact collection

Artefacts recovered during the excavation were retained for analysis and form part of the archaeological collection. The general procedure for artefact collection was carried out was as follows:

i. Excavation took place in stratigraphic units. This was documented by a unique number for each stratigraphic context, such as a layer of soil, structure, posthole cut, surface or fill.

Excavation took place in a grid system consisting of [usually] 2 x 2 metre squares for spatial control. Each square was designated with the Cartesian coordinate of its southwestern corner in 6 digits, for example 250 / 592. The same stratigraphic unit could extend into two or more adjacent squares. Also in post-excavation analysis differently numbered stratigraphic units could be identified as identical or equivalent. Generally, in such cases the original numbering is retained but the data have been aggregated where necessary.

Provenance was recorded as a unique combination of excavation unit and grid square. There are about 500 distinct unit / grid square provenances for archaeological evidence, although only about half generated artefact material.

There were two exceptions to this general system. Firstly, during the mechanical excavator grading of large areas, artefacts were recovered and retained within 10 x 10 metre blocks rather than in more closely delineated areas. Secondly, all Aboriginal artefacts were individually given exact Map Grid of Australia coordinates using an unrectified GPS.

ii. All artefacts uncovered during excavation were retained. Most excavation units were sieved through 5mm sieves, and all artefact material retained. Generally

this meant anything that was not the soil, plant or root material or natural stone outcrop was kept for cleaning. Within the sieves particularly small pieces of glass [<5mm], charcoal and other material were not retained.

All retained artefacts, whether from digging or sieving, were kept together with their provenance information as a single find context.

- iii. A field specimen number was allocated to each find context or bag of artefacts, as the same unit could be excavated over successive days. This was in the form FS XXX.
- iv. Artefacts were examined and separated into washable items ceramics and glass and items to be hand cleaned only. At this point any fragile material or associated items were also attended to, such as by creating a separate bag for associated but loose pieces of the same item.

Where possible, all artefacts were sorted and cleaned as soon as possible after excavation, which also allowed for feedback on possible contextual information.

- v. Once cleaned, artefacts were sorted according to fabric, and then systematically described and entered into a Microsoft Access-based relational database. The database application has been developed by Jeanne Harris of Urban Analysts. It is based on a database structure developed by La Trobe University for the Casselden Place archaeological investigations in Melbourne and has been widely used for other historical archaeological assemblages in Australia such as:
 - 22-36 Mountain Street and 16-20 Smail Street, Ultimo [for GML]
 - Argyle Street excavation, Parramatta [for GML]
 - 'Menevia', Ballast Point, Balmain [for Heritage Concepts]
 - Northern Hume Highway duplication for RTA [for AHMS].

An initial decision was made to use a computerised version of the Port Arthur Artefact database. However, it was found to be cumbersome in operation, and was set aside in favour of the Urban Analysts database.

vi. Artefacts were described according to set descriptive fields used by the database, quantified and then re-bagged into specially labelled bags that have a unique catalogue number printed on card. The catalogue number corresponds to the database entry number.

An example of a completed collection label is shown below.

vii. All artefacts were sorted into one of three collection categories on the basis of sorting criteria as set out in Section 3 below:

- Display collection
- Study collection
- Discard collection

This reflects the relative informational value of the finds as well as other interpretative or educative value that they may have.

OLD MARULAN 07

CATNO 1579
NORTH 276 EAST 612 Unit 40
Pipe, tobacco
Personal – tobacco
Ceramic, earthenware
Ball clay [kaolin] stamped
QUANTITY 1 MIC 1

Excavation name

Catalogue and database entry number
Square coordinates and stratigraphic unit
Object name
Function
Material from which object made
Techno-morphological attributes
Quantity of pieces; minimum item count

Figure 1. Standard format of OM7 artefact tags used in final collection.

- viii. All artefacts were boxed according to which collection they belonged in numbered boxes. These are robust top-opening boxes supplied by NSW State Records Office which are reasonably standard in Australian historical archaeology. They are supplied disassembled and fold into shape without the use of glue. The boxes measure 395 x 250 x 170 mm. All boxes were numbered and the box number was added to the information for each item record. Large items were boxed in a larger tub or separately tagged and stored loose.
- ix. The boxes are temporarily housed in a commercial storage facility. Long term management and storage is discussed in Sections 4 to 8.

3. Collection principles and sorting criteria

During analysis all artefacts were divided into three categories – display quality collection, study [or reference] collection and discard collection [material to be culled].

3.1 The Display quality collection

The display collection consists of those items that are:

- i. Complete or fine examples of representative items from the entire collection
- ii. Unique and / or rare items.

This collection is dominated by ceramic vessels from the Woolpack Inn cess pit deposit, which include a large number of complete or near-complete pieces that could be re-assembled from fragments found in the deposits.

3.2 The Study collection

The Study collection consists of samples and examples of each artefact type from each context. The Study collection is integral to any future research on the site or study of the collection. This collection allows any future research to readily identify artefacts as described in the artefact catalogue.

An essential purpose of the Study collection is to provide tangible evidence of the descriptive categories and data generated by the artefact analyst, ie. it allows a later researcher to validate the original description and interpretation made of the object and therefore assemblage. There is a fundamental archaeological principle that data are separated from interpretation. The Study collection allows data to be independently reviewed by future researchers, who may have an expanded knowledge of the artefacts or different analytical tools at their disposal.

3.3 The Discard collection

The intention of the Discard category was to identify material that could be safely discarded or separated out without compromising the analytical potential of the collection as a whole.

The criteria used to determine what material could be removed or culled from the Marulan collection were:

- i. The artefact had no diagnostic value its form could not be determined, e.g. a ceramic body sherd with no rim.
- ii. Form was determined, but the artefact provided no temporal, functional and / or techno-morphological information. Examples include:
 - bottle glass
 - strap or hoop iron
 - brick fragments
- iii. Form could not be determined, but is temporally and functionally identified. There are multiple examples of these items. An example or sample was retained as part of the Study collection. Examples include:
 - a. fragmented ceramic vessels
 - ware and/or decoration is datable
 - multiple examples of the same artefact type that is in poor condition, e.g. by fabric decay or fragmentation.

- b. fragmented glass bottles
- c. fragmented decorated ceramic tableware
- d. fragmented nails.

3.4 Quantification of the collections

The final Old Marulan 2007 artefact collection is represented as follows:

By Artefact Quantity

Collection Type	Quantity	Percentage	
Display collection	332	0.7%	
Study collection	6557	13.5%	
Discard collection	41791	85.8%	

By Minimum Item Count:

Collection Type	MIC	Percentage	
Display collection	175	3.6%	
Study collection	2429	49.4%	
Discard collection	2310	47.0%	

Within the Discard collection the material represented consists of the following categories:

Material	Quantity		MIC	
Biological	31	0.1%	5	0.2%
Ceramic	3524	8.4%	814	35.2%
Glass	36706	87.8%	824	35.7%
Metal	1439	3.4%	648	28.1%
Mineral	35	0.1%	13	0.6%
Stone	56	0.1%	6	0.3%
TOTAL	41791		2310	

Note: The totals do not include the faunal / shell material of which an additional 3098 items are to be added to the database.

4. Collection management principles

CEMEX will manage the collection according to the following good practise principles [see Sections 5-8 below for more detailed discussion].

- Housing the collection in a nominated secure, environmentally stable location;
- Managing the whole collection, which means the complete Display and Study collections and their associated documentation;
- Taking responsibility for any work required under the endorsed Interpretation strategy, such as the travelling display;
- Ensuring care and maintenance of the collection, including bearing any associated costs;
- Allowing research access to the collection;
- Advising the NSW Heritage Council [or delegate] about any major changes to the management of the collection, such as relocation or transfer of ownership

5. Management of the Display collection

The Display collection is currently housed in a secure storage facility within standard archive boxes. CEMEX currently retains ownership of the collection and Banksia Heritage + Archaeology manages it as part of the post-excavation analysis process.

The Display collection is to be retained in perpetuity, and managed jointly with the Study collection. The Study collection and the Display collection are to be retained as a coherent collection, i.e. physically kept together apart from objects actually on display or being actively studied or conserved.

The final storage location is to be secured, sufficiently environmentally stable to ensure no deterioration of the collection, and under the control of an agency or organisation that accepts the long-term responsibility for its care and management. As the collection includes negligible organic material the environmental storage conditions can be more flexible than for some collections, although the use of paper labels requires careful control of light, humidity and pests such as silverfish.

All artefacts to be retained as part of the Display collection have been photographed digitally, with their provenance information visible in the image or in the image file name. Generally either a scale or a grid background to allow for scale comparison was included in the image.

All glass artefacts proposed for display will be examined as part of the Aboriginal Cultural Heritage artefact analysis component of works [scheduled for commencement in 2010] for flake scarring to determine whether there was any evidence of retouch or use-wear that may be attributable to either Aboriginal or post-contact flaking or reuse.

The collection will include a hard copy of the artefact catalogue, and all boxes will be clearly labelled to prevent accidental misplacement of material.

The final repository of the Display collection will include:

- a full hard copy artefact catalogue
- paper copies of all related reports
- box lists with the contents of each box identified.

6. Management of the Study collection

The Study collection is currently housed in a secure storage facility within standard archive boxes. CEMEX currently retains ownership of the collection and Banksia Heritage + Archaeology manages it as part of the post-excavation analysis process.

The study collection is to be retained in perpetuity, and managed jointly with the Display collection. The Study collection and the Display collection are to be retained as a coherent collection, i.e. physically kept together apart from objects actually on display or being actively studied or conserved.

The final storage location is to be secured, sufficiently environmentally stable to ensure no deterioration of the collection, and under the control of an agency or organisation that accepts the long-term responsibility for its care and management. As the collection includes negligible organic material the environmental storage conditions can be more flexible than for some collections, although the use of paper labels requires careful control of light, humidity and pests such as silverfish.

All glass artefacts proposed as part of the study collection will be examined as part of the Aboriginal Cultural Heritage artefact analysis component of works [scheduled for commencement in 2010] for flake scarring to determine whether there was any evidence of retouch or use-wear that may be attributable to either Aboriginal or post-contact flaking or re-use.

The collection will include a hard copy of the artefact catalogue, and all boxes will be clearly labelled to prevent accidental misplacement of material.

The final repository of the Study collection will include:

- a full hard copy artefact catalogue
- paper copies of all related reports
- box lists with the contents of each box identified.

7. Management of the Discard collection

7.1 Documentation prior to discard

All artefacts identified for discard are to be photographed digitally, in appropriate groups of artefacts/material, prior to disposal, with their provenance information visible in the image or in the image file name. Generally either a scale or a grid background to allow for scale comparison will be included in the image.

Some material will receive special consideration prior to discard. Prior to disposal, all glass proposed for discard will be examined as part of the Aboriginal Cultural Heritage artefact analysis component of works [scheduled for commencement in 2010] for flake scarring to determine whether there was any evidence of retouch or use-wear that may be attributable to either Aboriginal or post-contact flaking or re-use.

7.2 Discard procedures

The following process was established to ensure that reducing the size of the archaeological assemblage would not reduce its interpretative, analytical or public value.

- i. All artefacts were sorted into Display collection / Study collection / Discard collection at the time of initial analysis and data entry by the Artefact Analyst [Jeanne Harris], using the criteria set out in Section 3.3 above.
- ii. Following the completion of the draft report the entire Discard collection was reviewed by the Excavation Director to ensure that the initial sorting [Step i] was consistent and justifiable. This was done at the end of the main analysis, and involved re-examination of all discard collection material in relation to their source contexts to determine whether further analysis was required or more specific information could be derived from particular artefacts.
- iii. Documentation completed including photography.
- iv. If the discard collection is not accepted for use by an institution or other user [for example University of Sydney Department of Archaeology or Marulan Primary School], then the different material groups would be disposed of as follows:

Glass sorted by colour and taken to a glass recycling facility, following

Aboriginal Cultural Heritage analysis

Ceramic into normal refuse stream

Metal ferrous - into normal refuse stream

copper – into specialised metal recycling facility

Packaging boxes – reused

labels – paper recycling

plastic bags – retained if sound, otherwise into refuse stream.

8. Transfer of ownership

In the s.60 permit conditions it is recognised that CEMEX may transfer ownership and management responsibilities of the artefact collection to another organisation. CEMEX recognises that it is not the most appropriate steward for the collection, as others are more able to both manage its long-term needs and to realise its significance as a research resource and for its interpretative value.

CEMEX will continue to maintain ownership and management of the collection until a satisfactory transfer takes place. As well as Goulburn-Mulwaree Shire Council / Marulan District Historical Society contact has been made with the University of Sydney to determine if they are interested in taking ownership of the collection.

CEMEX has previously prepared an Interpretation strategy [April 2008] that considers the requirements for the display and management of the artefact collection as one component of interpreting the archaeological work to the public. In brief, although the Goulburn-Mulwaree Shire Council is interested in supporting a local museum managed by the Marulan and District Historical Society that would house the collection, there has been no progress on the establishment of a local museum at Maulan to date.

As an interim solution CEMEX propose to develop a transportable display that incorporates artefact material that can then be placed in a number of locations within the Shire. This will allow the interpretation to build on existing public awareness and would reach far more local people than a static display.

Cemex may transfer ownership and responsibility for the artefact collection to another party provided that it agrees to maintain the same good practise principles set out in Section 4 and commits to managing the collection for its archaeological and aesthetic significance

As required by permit conditions CEMEX will advise the NSW Heritage Council of the proposed and successful transfer of the collection when it takes place.

9. Heritage Council notifications

Notification of completion of the discard procedure is not required as a permit condition. It will, however, be documented for inclusion into the Final excavation report – Volumes 1 and 2, and also annotated onto hard copy printouts of the artefact collection.

Notification of the transfer of ownership of the collection or the location of a final repository, regardless of ownership, is to be advised to the Heritage Council.

As any new owner of the collection has to abide by collection management principles that have been endorsed by the Heritage Council, any significant proposed change should be only made after further consultation with them and professionally qualified managers such as the Goulburn-Mulwaree Shire Museums Curator.

10. Endorsement of Artefact Management Policy

CEMEX seeks the endorsement of its Artefact processing collection management policy by the NSW Heritage Council.

Specific endorsement is sought for:

- i. Dividing the Old Marulan 2007 collection into a Display Collection, Study Collection and Discard Collection, based on criteria set out in Sections 3.1 3.3.
- ii. Documenting and managing the Discard collection as set out in Sections 7.1-7.2.
- iii. The conditions under which transfer of ownership is to take place, including the criteria in Section 4.

Denis Gojak Director

Banksia Heritage + Archaeology

20 April 2009





3 Marist Place Parramatta NSW 2150 Locked Bag 5020 Parramatta NSW 2124 DX 8225 PARRAMATTA Telephone: 61 2 9873 8500 Facsimile: 61 2 9873 8599 heritageoffice@heritage.nsw.gov.au

www.heritage.nsw.gov.au

Rec. 13.3.2009.

Contact: Siobhan Lavelle
Telephone: 9873 8546
siobhan.lavelle@planning.nsw.gov.au
File: S90/07432/04
HRL: 51547 & 51548

Mr Denis Gojak Banksia Heritage + Archaeology PO Box 457 **NEWTOWN NSW 2042**

Dear Mr Gojak,

RE: OLD MARULAN TOWNSHIP, SHR NO. 00127, MARULAN NSW 2530, GOULBURN-MULWAREE LGA — COMPLIANCE WITH CONDITIONS FOR SECTION 60 APPROVAL NUMBER 2006/S60/082 AND SUBSEQUENT S65A VARIATION 2007/S65A/11

I refer to your correspondence received in September 2008 providing specifications and updates related to existing consent conditions arising from the Section 60 approval number 2006/S60/082 and subsequent variation number 2007/S65A/11. The Heritage Branch of the Department of Planning regrets the delay in issue of this formal correspondence.

The following documents have now been reviewed by Heritage Branch staff:

- Old Marulan Timber-lined well MRNH8 Specification for in situ conservation
- Old Marulan Interpretation Plan (update following completion of on-site excavation)

Condition 16 of approval 2007/S65A/11 requires that the timber-lined cistern/well is to be managed through in-situ conservation with details of the proposed works to be provided to the Heritage Council or its delegate for concurrence.

As delegate of the Heritage Council I advise you that the measures outlined in the abovementioned document are deemed acceptable and that future works may proceed on the basis of the work methods proposed.

In regard to the second document, it is noted that the original Section 60 application provided a commentary on interpretation options. The approved permit required updating of the interpretation plan following completion of the on-site archaeological excavation work.

As delegate of the Heritage Council I have noted that during the archaeological excavation phase that the results of the work and the process of archaeology was interpreted to the local community and general public in accordance with the consent conditions, through public open days (8 and 20 December 2007), press releases and a project website. Your advice that continuing interpretation of the dig will include a publication and possibly some elements of both interim and more permanent display has been noted.

As delegate of the Heritage Council I have also noted your advice that consideration of the creation of a permanent interpretative display at the Old Marulan township site is currently regarded as problematic because of traffic safety, security and privacy issues. Accordingly a museum display in associated with the Local historical society would be preferred. It is also

understood that, as yet, a permanent Museum within the town of Marulan has not been secured, but that investigations in partnership with Goulburn-Mulwaree Council are ongoing. I look forward to an update on the progress with this matter in due course as investigations continue.

Thank you for supplying the documentation required under the existing Conditions for the previously issued approvals associated with the Lynwood Quarry project (Old Marulan Township).

I trust that the above comments will be of assistance to you. If you have any further questions on this matter, please contact Siobhan Lavelle at the Heritage Branch of the Department of Planning using the details provided with this letter.

Yours sincerely

Vincent Sicari

Manager Conservation Team Heritage Branch

Department of Planning

AS DELEGATE OF THE HERITAGE COUNCIL OF NSW

CC: Mr R Savage, Cemex Australia, 1 Sheens Lane, Castlereagh NSW 2749
Mr J Merrell, Umwelt Australia PO Box 838 Toronto NSW 2283
Goulburn-Mulwaree Council, Locked Bag 22, Goulburn NSW 2580 – Attn: Ian Aldridge





3 Marist Place Parramatta NSW 2150 Locked Bag 5020 Parramatta NSW 2124 DX 8225 PARRAMATTA Telephone: 61 2 9873 8500 Facsimile: 61 2 9873 8599 heritageoffice@heritage.nsw.gov.au www.heritage.nsw.gov.au

cc John M

RECEIVED

- 7 SEP 2009

Contact: Telephone:

Siobhan Lavelle 02-9873 8546 siobhan.lavelle@planning.nsw.gov.au S90/07432/003

Our Ref: Your Ref:

53743 N/A

Mr Tim Adams Senior Archaeologist Umwelt Pty Ltd PO Box 838 **TORONTO NSW 2283**

Dear Mr Adams

Re: Old Marulan Township, Hume Highway, (SHR number 0127) Goulburn Mulwaree LGA - Compliance with Conditions for the Lynwood Quarry Project

Reference is made to a letter prepared by Mr Denis Gojak of Banksia Heritage + Archaeology (BH+A) received on 21 April 2009 advising of the results of archaeological monitoring in accordance with an endorsed S57(2) Exemption issued in March 2009 and also reporting upon other matters arising from the approved Section 60 Permit and subsequent S65A variation (2006/S60/082 and 2007/S65A/11). The Heritage Branch regrets the delay in replying to that initial correspondence.

Reference is also made to an email relating to proposed archival recording works in the vicinity of Lynwood Homestead which was received on 11 August 2009.

Matters raised in the letter dated 21 April include the following:

- 1. Artefact Management Policy
- 2. Report on Work under S57(2) Exemption
- 3. Specification for works to item MRNH1 Circular Sheep Dip

Matters raised in the email of 11 August 2009 were:

4. Limited hand-excavation for Final Archival recording of Lynwood Homestead

Item 1 – Artefact Management Policy

It is noted by the Heritage Branch that the work completed included recovery of artefacts through archaeological excavation from stratigraphic units with all artefacts recovered being retained. Following analysis the artefact collection has been divided into three categories: Display, Study and Discard. The methodology used was developed by Ms Jeanne Harris of Urban Analysts and has been utilised on other archaeological projects, including some sites for which the Heritage Council has previously allowed the disposal of a portion of the artefact collection.

The policy advises that Cemex as the client for the project intend to retain the Display collection in perpetuity in a secure and environmentally stable location (yet to be advised as part of final permit reporting conditions and will include a full artefact catalogue). The Study collection will be similarly retained. The Discard collection will be recorded through digital photography, offered for use elsewhere and then discarded as refuse.

As Delegate of the Heritage Council of NSW I advise you that the Artefact Management Policy prepared by BH+A for the Old Marulan excavations is considered appropriate. It is expected that all actions undertaken will be covered in the final report.

Item 2 - Report on Work under S57(2) Exemption

This archaeological monitoring work was undertaken in March 2009 involving removal of fill within the Hume Highway road reserve, adjoining the Cemex property. The interim report was prepared to allow consideration of what further action (if any) should follow. The data revealed will also be included in the final report on the Old Marulan project.

The prior work of 2007 had indicated the survival of a substantial cess-pit beside the road reserve which possibly connected with other old structures or deposits within the road reserve. The March 2009 work revealed various modern fill deposits overlying some remnant earlier layers related to older Marulan-town occupation. Only the previously identified cess-pit and evidence of some ephemeral structures possibly related to animal butchering were found. The cess-pit was found to be an isolated element, it did not connect to other structures. No evidence for substantial structures related to the historically documented 'Woolpack Inn' was found. Some parts of the area have been cut back to below the original ground level meaning older deposits are lost.

Banksia Heritage has concluded that the remaining unexcavated area of the road reserve (40m long by 2.5 to 5 metres wide) is unlikely to contain any substantial archaeological remains based on the 'sample to date' and 'trends in the evidence'. Consequently a further S65A has been recommended to allow for the removal of any further archaeological remains which may exist within the road reserve. Such remains should be identified by archaeological monitoring with recording and recovery of any further archaeological evidence.

As Delegate of the Heritage Council of NSW I advise you that there would be no objection to the removal of any extant remains within the road reserve, given the low archaeological potential of the area and the fact that any surviving evidence has been compromised by disturbance. On this basis it is considered that the work could be undertaken as a further S65A variation supported by an appropriate methodology and with all actions and recording to be documented in the final report on the project.

Item 3 - Circular Sheep Dip Conservation

MRNH 1 is an unusual circular sheep dip which is situated within the SHR listed area of the Old Marulan township site. It dates to a later period than the archaeological site of the township but is a contributory element to the area's broader rural heritage. The sheep deep has been previously recorded and has suffered minor damage due to the introduction of fill and partial dislodging of the walls of the entry channel.

BH+A have provided a specification for Cemex, recommending that outlying items associated with the sheep dip (gates, cauldron and intact bricks) should be collected;

clean inert fill and geotextile to be placed into and over the structure; fencing with high visibility barrier tape to prevent inadvertent damage from passing construction traffic.

As Delegate of the Heritage Council of NSW I advise you that the conservation recommendations prepared by BH+A for the sheep dip are acceptable.

Item 4 - Limited hand-excavation for Archival recording of Lynwood Homestead

Your email of 11 August 2009 has advised the Heritage Branch that some 'archaeological clarification works' may be needed in the vicinity of the Lynwood Homestead. A comprehensive archival record of the homestead (site MRNH 5) was previously prepared by BH+A arising from the approval of an Exception under S139(4) in November 2006. As part of that work BH+A identified some additional potential yards and structures beneath part of the existing Lynwood Homestead complex. If present, such yards and structures would form part of the homestead complex and would be associated with the post-Old Marulan township rural heritage of the area.

Your email advises that the proposed methodology would involve some limited hand excavation or scraping away of turf layers to further expose features noted by the prior work, principally: stone slabs/flags and a possible line of stones. These elements may form part of prior structures/surfaces associated with earlier configurations of the yards.

As Delegate of the Heritage Council of NSW I advise you that there is no objection to the completion of such work, provided that the results are documented and included as part of the final archival record to be prepared by BH+A as per the issued S139(4).

You are also advised that in the event the work reveals unanticipated substantial intact archaeological deposits or significant 'relics' associated with prior structures, that the Heritage Branch of the Department of Planning should be notified in accordance with Section 146 of the NSW Heritage Act, 1977. Work must cease until advice is obtained. Further approval may be necessary before works may recommence in the area.

Please contact Siobhan Lavelle at the Heritage Branch if you have any further queries in regard to the matters covered in this letter.

Yours sincerely

Vincent Sicari

Manager

Conservation Team

Heritage Branch

Department of Planning

AS DELEGATE OF THE NSW HERITAGE COUNCIL

a0 1/09/09

cc. Mr D Gojak, Banksia Heritage + Archaeology, PO Box 457 NEWTOWN NSW 2042 Mr R Savage, CEMEX Pty Ltd PO Box 258 PENRITH, NSW 2751





Application for s.57 [1] exemption to the NSW Heritage Act 1977 – Old Marulan township – work inside Hume Highway road reserve.

Our ref: P06~09

23 January 2009

Cross-references

 SHR Item
 00127

 IDA Application
 128-5-2008

 HO File
 \$90/07432/004

 Section 60 permit
 2006/\$60/082

 Section 65A variation
 2007/\$65A/11

Background

This exemption application arises from a requirement to undertake construction work for an overpass over the Hume Highway at the site of Old Marulan township, which is on the NSW State Heritage Register [Item 00127]. The construction of the overpass over the Hume is part of an existing Part 4 development approval for the Lynwood Quarry [relevant consents are identified above].

A main s.60 archaeological excavation permit was issued for private land immediately adjoining the road reserve to allow the site to be investigated and all significant archaeological material to be recovered. The fieldwork portion of this work has been completed, and analysis is in progress. This work identified that archaeological remains were likely to extend from private land into the road reserve. This came about because of a reserve boundary adjustment to allow for the widening of the Hume Highway in the 1970s.

To allow a clear determination of whether archaeological remains do occur in the road reserve area it is necessary to clear away fill material to expose earlier soils and any buried original structures. The suitability of seeking an exemption of closely defined scope to undertake this work was previously discussed with the Heritage Branch Senior Archaeologist. If significant archaeological remains are uncovered then further consents will be required.

The specific reason for seeking an exemption is that the archaeological deposits to be removed in the work described below are not significant [Exemption 4].

Statutory basis of the work

The site of Old Marulan is listed on the NSW State Heritage Register as Item 00127. This includes the Hume Highway road reserve within the town limits [see Figure 1 for

SHR boundary]. Only standard exemptions are listed for the SHR item, and no specific arrangements are in place for the road reserve.

The land subject to this application was formerly part of two town lots, now gazetted as part of the road reserve. The table below identifies the former cadastral location:

Original cadastral	Current residual cadastral following road widening	Comment
Section 1 – Lot 1	Lot 7 DP 797340	Both bought by Joseph Peters in 1834, and location of his Woolpack Inn
Section 1 – Lot 2	Lot 8 DP 797340	

The site

Old Marulan is sited at the junction of the Hume Highway, Jerara and South Marulan Roads, about 3 km south of the current town of Marulan, within Goulburn-Mulwaree Shire. In 1981 a permanent conservation order [PCO] was placed over the great majority of the town site in recognition of its very likely high potential archaeological resource and the significance of that resource. In the years before the PCO was placed the NSW Department of Main Roads moved the northern boundary of its road reserve further out to allow the Hume Highway to be widened and straightened. Note that in this application the road is assumed to run west-east and north refers to the Cemex project side of the road.

The road widening truncated a number of the former town lots and a crown reserve, [Figure 2]. This included what were originally Section 1 Lots 1 and 2, which were the site of the Woolpack Inn, the first and most prominent building in the town. The present roadside fence in this area lies slightly off the actual road reserve boundary, being about 0.5 metres north of the true line.

Archaeological work carried out under the s.60 application is thus far restricted to the northern side of the fence line, ie entirely within private land owned by Cemex Pty Ltd.

The road reserve is owned by the NSW Roads and Traffic Authority and managed as part of the Hume Highway by Goulburn-Mulwaree Shire Council. The road reserve in this area consists of a multi-lane highway cut down from the original surface about 1.3 metres. Beyond the cutting there is a line of young trees. Behind these the land slopes down northwards towards a creek line. The distance from the cutting to the road reserve fence is about 7-8 metres. It is elevated above the run of land in the adjoining paddock, partly by lack of grazing, but mainly by significant dumping of unstructured soil containing mid-19th century artefacts. This is likely to have been dumped as part of the road widening as it appears to be mixed with modern roadside materials. There is local anecdotal knowledge that during the widening material was bulldozed back within the road reserve.

Site history

The town was surveyed as part of Major Mitchell's alignment of the Great Southern Road, in which he sought to find a preferred line to Goulburn intermediate between two *ad hoc* and meandering roads¹. At the locality called *Moorooaulin* he established a road junction, with lines heading to both Goulburn and the new town of Bungonia. At the time he was not certain which of the two routes would become more significant, opting to initially name the Bungonia line as the Great South Road².

The area had not been granted prior to the town survey. Town lots formally began to be auctioned off starting in 1834. The purchaser of two of the first lots offered was former convict Joseph Peters. He intended to build a hotel on the site of his purchase – Lots 1 and 2, Section 1 of the town plan. He already had an inn near the Wollondilly River southwest of Sutton Forest, and as that road was going to be by-passed by Mitchell's Great South Road, he moved his license to take advantage of the new opportunities.

We do not know what the Woolpack Inn looked like. There are no detailed descriptions, no survey plans or illustrations. Our direct knowledge is very restricted. The only features found in the 2007 archaeological excavations relating to the Inn were a substantial cess-pit [see below] and a cobbled surface near it. Associated with the hotel on the original and two adjoining blocks Peters bought were more ephemeral structures, evidence of farming or gardening and extensive surface scatters of artefacts, but these shed no light on the construction.

Here is what we know.

- 1. Peters refers in a letter of complaint about indecision in finalising the road route that he spent nearly £500 on the hotel³.
- 2. Notice in newspaper describes it being opened for business and being a 'substantial building' with 'well-appointed accommodation'⁴.
- 3. The cess-pit found during the excavation is a rectangular structure set into the ground at the road reserve boundary. It was the outermost outbuilding, but it is not clear whether it was a separate building or connected to the main body of the inn. It is excavated into natural soil, lined with split or roughly dressed porphyryite [extremely hard igneous stone] blocks, and had a brick superstructure.

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¹ Historical research was undertaken as part of the s.60 application and developed further in the analysis phase. Only salient references are identified here, and the reader is referred to the more comprehensive works.

² SRNSW Map 3087 – Village Marulan, Parish Marulan

³ SRNSW 2/44935 Colonial Secretary's letters re roads – Southern Road 1827-45 Letter Joseph Peters to Col Sec 20.6.1835

⁴ The Australian 26 January 1836

To the west and north of the cess-pit there is a cobbled surface. This consists in part of natural stone outcropping on the site, broken down to a level surface, and supplemented with pieces of local stone embedded in a clay deposit. It is a rough, non-decorative, and somewhat uneven surface presumably aimed at providing a hard-wearing surface that did not generate much mud when wet. It is diffuse and does not extend more than 2 metres from the cess-pit walls.

The solidity of construction for the cess-pit suggests that the main building would be of at least equal robustness.

- 4. Anecdotal evidence⁵ is that machine operators recalled removing large blocks of stone during the 1970s work in the area of the Woolpack Inn.
- 5. Town planning regulations of 1828 prescribe the arrangement of lots in the towns, and specify a 14 feet [4.5 metre] building line. All evidence to date is that the town planning and construction conformed to these requirements.
- 6. On the road reserve the ground level in the c.5 metres between the fence and edge of cutting is raised relative to the Cemex property. This appears from examination to be a result of dumping of bulldozed deposit from the road widening onto this part of the reserve. The spoil contains a substantial quantity of artefacts of the Marulan period [c. 1834 1867], as well as bits of modern motor-age prang debris [Figure 3].
- 7. The depth of cutting to the current road bed is about 1.5 metres below the ground surface at the cess-pit [Figure 4]. The cutting commences about 7 metres in from the fence line, behind a row of trees. This leaves about 5 metres of ground remaining at original elevation.
- 8. The road alignment survey carried out by Surveyor Deering in 1868⁶ shows a probably stylised building marked 'INN' located in Lot 1 immediately adjacent to the [then] road reserve. Some other buildings known to be extant in 1868 are not shown suggesting it was shown as a landmark building only.

Here is what we can reasonably assume based on the evidence above and comparison with other sites.

9. There are two main styles of roadside inn built during this period – low and flat with central verandah and flanking travellers' rooms [eg. examples at Hartley Historic Site], and massive, usually two storey 'box' constructions [eg. White Horse Inn, Berrima]. It is likely, based on the amount Peters spent in construction and his own continuing development of social relationships with the

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⁵ 'Mouse' – owner of lot opposite site

⁶ NSW Department of Lands LPI Map 824-1603 'Plan of the Main Southern Road from Goulburn to Marulan' Surveyor Deering

rural elite that he went for the large type of construction. This was typically a roughly symmetrical plan, with a central hall leading to public rooms along the front range, dining and office rooms at the rear, and accommodation upstairs. The owner may have lived elsewhere on the site or at some remove from the hotel. Peters built a new home at Marian Vale for himself and his family in 1839, and probably lived off-site from then onwards.

- 9. From the current site boundary at the cess-pit to the original road frontage is 50-60 metres, making it possible to construct a building within a maximum footprint of 40 metres across by 40-50 metres deep, assuming town planning regulations were adhered to.
- 10. The material on the surface of the road reserve is likely to be directly associated with the Woolpack Inn, but has been bulldozed out of context. It will overlie any intact deposits and structures. There is no evidence indicating that the road verges were directly impacted by bulldozing.
- 11. There is no clear evidence of a terminal date for either use of the inn, except that it was extant in 1863 and had ceased operation before 1867, nor for the demolition of the building.

Significance of the deposit

Based on the known and likely site history the road reserve will contain distinct layering of deposits, with a modern [1970s] deposit consisting of redeposited soil containing modern and mid-19th century artefacts, overlying an established paddock surface. It is likely that any structural remains present would be visible on the original lower surface, either as wall alignments or dense patches of demolition rubble.

Known impacts to the upper deposit include rabbit burrowing and the growth of trees along the top of the cutting. These may have also affected any *in situ* material that may be present below it.

The archaeological significance of the upper deposit is low, as it consists of redeposited material. There is also admixture of roadside refuse.

If *in situ* structural remains or deposits are present within the lower deposit, the archaeological significance of the lower deposit is likely to be high, as part of the *in situ* evidence relating to the Woolpack Inn site. It is likely to reveal substantial new information about the building which cannot otherwise be found through other sources and would build on a well-documented archaeological resource already explored.

Scope of the proposed works

The aim of the proposed work for which the exemption is sought is to remove overburden lying over any *in situ* remains or original ground surfaces in the area to be affected by construction of the overpass [Figure 5]. This will establish whether there are structural remains present, their condition and their likely extent. This is a necessary prelude to any application for consent to investigate or salvage them as part of the construction program for the overpass.

Work methods

The established excavation grid, site height datums and spatial control system used in the Old Marulan 2007 excavation are able to be extended into the new area as the origin point for our XY coordinate system lies outside the SHR listing area.

Actions to be undertaken are:

- 1. Re-establish site grid into area to be investigated.
- 2. Erect safety barricade bounding the excavation area within the road reserve from where fence removed and along top of road cutting.
- 2. Remove fence for c.50 metres in area covered by Lots 1 and 2, Section 5.
- 3. Record surface before any impact, noting possible archaeological remains, rabbit burrows and other features.
- 4. Using a long-armed excavator with a 1 metre wide flat bucket sitting on the northern side of the Cemex land, scrape deposit from near the base of the trees towards the fence. Spoil is to be stockpiled near its origin point so that spoil heaps can be related to specific points of origin.
 - The deposit to be removed is to be only soil that has been redeposited during road widening. It is likely, given our familiarity with the stratigraphy of the site obtained during careful hand excavation as part of the 2007 archaeological excavation, that we can identify the difference between redeposited and older soils.
- 5. Archaeologist to monitor scraping back to ensure no earlier land surfaces or structural remains are disturbed.
- 6. All exposures are to be recorded, with limited trowel work to clean and clarify what has been exposed.

- 7. Spoil heaps will be examined for artefactual material, which may be collected and analysed as a comparative sample to the main site collection.
- 8. At completion of recording of evidence, the site will be reinstated with a protective soil covering, subject to negotiations with RTA / Goulburn-Mulwaree Council.
- 9. A short report presenting the results of the archaeological activity will be prepared for the information of the Heritage Council. A lengthier analysis, if required, will be integrated into the main archaeological report.
- 10. Based upon the results of the investigation the archaeologist will recommend what further archaeological action is appropriate for construction within the road reserve.

Archaeological issues

The nominated archaeologist to undertake the work is Denis Gojak of Banksia Heritage + Archaeology, on behalf of Umwelt [Australia] Pty Ltd and Cemex Pty Ltd.

Artefacts collected from the spoil, either before or after being graded, will be catalogued and analysed as part of the analysis of the Old Marulan 2007 excavation. As they are likely to be redeposited from other locations it is expected that these materials will be eventually recommended for culling, with items being kept only because of display potential, rarity or analytical potential.

Any exposed archaeological remains will be documented to a standard consistent with those recorded in the archaeological excavation. This may require some careful manual cleaning to allow for clear photography. No structural evidence will be dislodged or otherwise disturbed during this process.

Please feel free to contact me if you have any questions regarding this application. I am available on 02 9558 0220 or 0413 030 293.

Yours sincerely

Denis Gojak

Director

Banksia Heritage + Archaeology

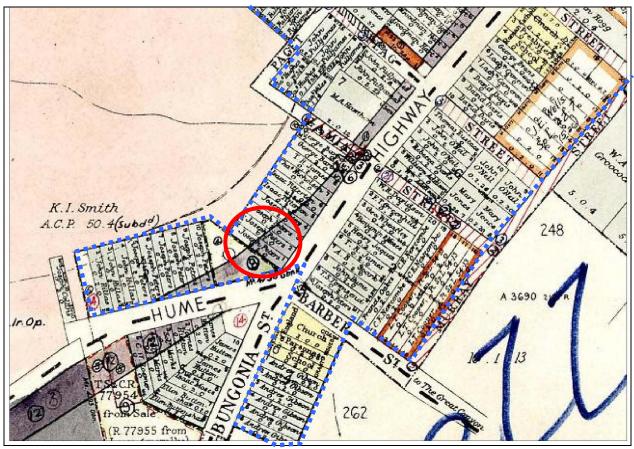


Figure 1. Old Marulan town plan, showing the lots affected by widening of the Hume Highway. The dashed blue outline marks the State Heritage Register boundary, and the red circle the area shown in more detail in figures 2 and 5 below [Dept of Lands Parish Marulan -9^{th} edition - undated].



Figure 2. The two lots on which Joseph Peters' Woolpack Inn stood are marked by dashed black line, with the surviving portion shaded blue. Also shown are the SHR boundary [dashed blue line]; northern road reserve boundary [solid red line]; new interchange construction work [shaded red], flanking the existing road surface, median and road shoulders [unshaded].



Figure 3. Inside the road reserve boundary facing towards the cesspit and boundary fence. The uneven raised overburden from road widening is visible on the near side of the fence.



Figure 4. View of the proposed exemption area from the median divider. The strip of bunting above the sign identifies the position of the cesspit. For scale, the 'Sydney' sign is about 1.2 metres above ground level.

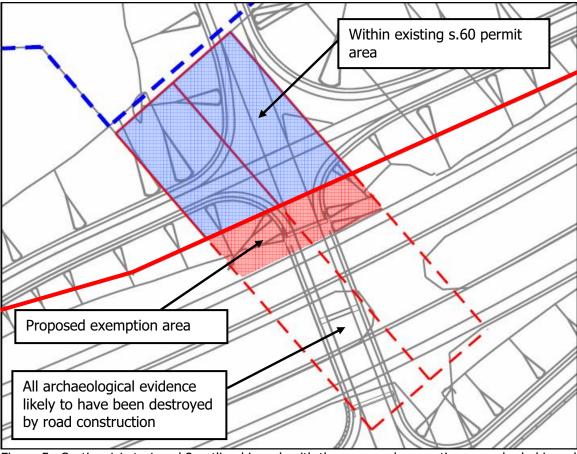
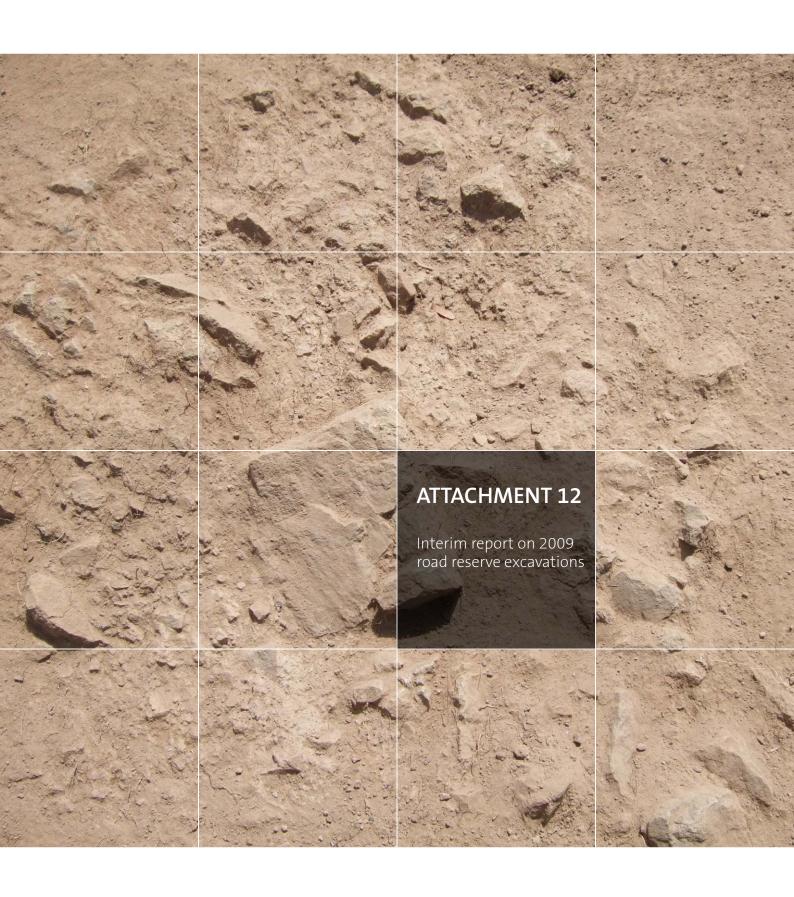


Figure 5. Section 1 Lots 1 and 2 outlined in red, with the proposed exemption area shaded in red.



Old Marulan – interim report on road reserve excavations – March 2009

Cross-references

 SHR Item
 00127

 IDA Application
 128-5-2008

 HO File
 \$90/07432/004

 Section 60 permit
 2006/\$60/082

 Section 65A variation
 2007/\$65A/11

Section 57 exemption issued 09 March 2009

1. Introduction

In March 2009 CEMEX Australia Pty Ltd [CEMEX] was issued an exemption under s. 57 of the Heritage Act 1977, to undertake the controlled removal of fill deposits from an area within the Hume Highway road reserve immediately adjoining CEMEX property. The aim was to identify whether archaeological remains that were found on the CEMEX property near the boundary continued into the road reserve, or whether other archaeological remains existed.

The summary result of work to date [as at end of March 2009] is that more than half of the identified fill deposit has been removed. A number of archaeological features of moderate contributory significance have been identified, and it is possible to provide informed opinion on the likelihood of other remains surviving.

This report is being prepared to allow for a consideration of what further action should be undertaken within the road reserve. The data uncovered will be incorporated into the overall Old Marulan 2007 archaeological report.

2. Background

In late 2007 CEMEX undertook an archaeological excavation of the impact area for a new interchange intersection to be built at the Hume Highway / Jerara Road / South Marulan Road intersection. The excavations took place entirely within private property owned by CEMEX and within the State Heritage Register-listed site of the Old Marulan township.

Originally, the town lots on the northern side of the Hume Highway continued to about the current line of the median strip on the dual carriageway. In the 1970s the highway was widened to its present size, which involved the resumption of parts of the town lots on the northern side. The most heavily affected lots were Lots 1 and 2 of Section 1, which were the location of Joseph Peters' Woolpack Inn, the first building in town.

These two blocks lost about 50% of their overall size and with that any building remains within the road footprint. The only material that would have survived was in the section of the lots remaining in private ownership and possibly part of the road reserve where construction had not taken place.

For the purposes of this report the main result of the 2007 excavation was the identification of the remains of a substantial stone and brick cess-pit located just within the private property boundary. The cess-pit was full of artefacts of high archaeological research potential and interpretative value. ,At the time of the 2007 excavation it was not possible to determine whether the cess-pit was a free-standing structure or part of a larger connected structure potentially extending into the road reserve.

CEMEX therefore applied for an exemption under s.57 of the Heritage Act to allow the removal of overburden on the road reserve that had probably been dumped during construction of the road in the 1970s. This work was required to determine if the removal of this fill would expose earlier pre-1970s ground surfaces and reveal any evidence of buildings or archaeological evidence within the road reserve area without disturbing them.

The exemption application was granted and the work of removing the disturbed deposits took place on 25-26 March 2009. The remainder of this report outlines the process and results.

3. Archaeological investigation

3.1 Data controls

Spatial control for the Old Marulan archaeological work is provided by an established Cartesian coordinate system that has been used for the excavation and site recording work. This allows all finds from different stages of the work to be correlated.

For the purposes of mapping features in the road reserve a baseline following the fence line was used to measure offsets. The baseline ran across the two lots, taking the Lot 1 / Crown Reserve boundary intersection as 0 Point, and heading roughly east to the intersection with the Lots 2 and 3 boundary.

Elevation was calculated back to a local datum used during 2007, with a reduced level of 654.150m above sea level.

3.2 Extent of excavation

The area of excavation was restricted to a frontage of about 43 metres, representing town lots 1 and 2 of Section 1. These were chosen as historical evidence indicated that Peters had constructed the Woolpack Inn on one or both of these lots. Town lots measured 1 chain [c.20 metres] wide by 5 chains deep, for an area of 0.5 acres [Figure 1].

The depth of the road reserve in this location was about 8.0 - 8.5 metres from the fence line to the top of the embankment formed by the cutting in of the current road bed. This space includes a number of mature acacia trees placed roughly centrally [Figure 2].

The road reserve is owned by Goulburn-Mulwaree Council and managed by the NSW Roads and Traffic Authority. Consent to investigate within the reserve was provided by the Council and the work was undertaken following consultation with the NSW Roads and Traffic Authority.

3.3 Investigation method

The use of machinery close to the Hume Highway embankment or the felling of trees would require significant traffic management measures. To avoid this, the method adopted was as set out below.

- i. The road reserve was mapped and photographed prior to disturbance.
- ii. The boundary fence had its upper two strands loosened and lowered.

- iii. A backhoe with a long-reaching arm was positioned against the fence.
- iv. Starting at the fence line the backhoe pushed surface deposits away from it for about 1.5-2 metres to expose the sub-surface. This was checked for possible archaeological evidence and to establish the type of deposit. Then the arm reached out to c.4 metres and pulled soil back towards the scraped area, exposing a further 2-2.5 metres of the surface. This allowed for a good view of all deposits as they were exposed. An archaeological monitor was present on the road reserve side examining all surfaces as they were exposed. The deposit was cut back in spits of variable depth, relying on the monitor's appreciation of the stratigraphy and nature of the deposit.
- v. If potential remains were identified the machine was stopped and hand examination of the evidence took place.
- vi. Only one area was identified with archaeological remains [see below] and was kept open for recording.
- vii. The initial scraping out to c.3.5 4 metres covered almost all of the 42 metre distance, except where tree roots were encountered. Where possible the digging avoided tree roots to prevent them becoming loose and vulnerable to high winds.
- viii. Once recording was completed three areas between trees were scraped back to the maximum extent of the backhoe arm, about 5.5 metres, to increase coverage, and further recording took place [Figures 3 and 4].
- ix. Upon the completion of all recording the entire scraped area was backfilled and levelled mechanically.

Artefacts present in the surface fill deposit were removed for examination during monitored machine work. As these were not considered to be *in situ* or to reflect prior use patterns they were not collected. No other archaeological samples were collected.

3.4 Archaeological results

The stratigraphy revealed conformed to what was expected. A modern loosely compacted fill deposit overlay a modern destruction interface which overlay or truncated town-period deposits and the natural soil profile.

Provisional unit numbers have been assigned to the deposits, within a [300+] series to distinguish them from previously excavated deposits. Units are shown in Figure 4 and discussed below.

[301] Modern [1970s+] fill deposit consisting of redeposited soil, varying from excavated B horizon soils to former cultural deposits. Loosely compacted, with

occasional areas of more densely compacted deposit. Contains localised extensive subsurface natural material including rounded and angular igneous bedrock.

Artefact material is randomly scattered throughout the deposit. It is a mixture of town period [19th century] and modern [Plastic Age] material. The material is scattered throughout the deposit at a fairly low density, not evidently any greater than found during the 2007 topsoil excavations further north. There is no evidence of a high concentration of artefacts such as would have been found if a dump or similar deposit was redistributed. Increased densities of material in the removed deposit would have been quite obvious and stood out from the background rate of exposure. The removed deposit does not contain any greater concentration of demolition rubble such as masonry stone, sandstock brick or set mortar than generally present throughout surface deposits elsewhere on site.

The deposit was partly disturbed by extensive rabbit burrows along the crest of the road reserve, as well as root action from the mature acacia trees along the centre line. At the westernmost end there is a concentration of blue metal aggregate mixed in with the deposit which is indicative of the road working.

The deposit is consistent with the bulldozing of surface deposits, resembling those of the 2007 'Big Rectangle' excavation immediately to the north of the road reserve, being pushed up and over the top of the ridge. The artefact material in content and density appears to resemble general field scatter rather than demolition or concentrated refuse deposits. Once deposited it does not appear to have been compacted or disturbed apart from later action of burrowing animals. As the current ground surface, it has also accumulated modern refuse and prang material which has entered the body of the deposit through rabbit burrowing.

[301] unconformably overlies an interface of destruction [302].

[302] Interface of destruction, representing one or more episodes where earlier deposits have been removed. This is most evident at the northern and southern ends of the excavation area, where there is a distinct unconformity between natural soil and overlying [301] deposit and no clear evidence of either topsoil or other deposits exists. Where examined it generally came down on to A2 soils, ie the lower lighter grey silty soil layer within the podsolic topsoil.

In the central section of the site the interface is either absent or consists of removed superficial deposits overlying in situ township features.

The date of the removal of deposits cannot be securely demonstrated, but is most likely to be directly related to the Hume Highway widening works of the mid-1970s, and took place immediately before [301] was deposited.

- [302] truncates township period deposits [303] and natural soils [69].
- [303] This is a general unit covering all remaining town period deposits. These were exposed only to the south of the cess-pit and in the central area of the road reserve. Specific features within [303] are [304], [305] and [306].
- [304] Around the cess-pit the scatter of brick demolition rubble gradually tapered out to occasional sparse bricks within about 3 metres of the cess-pit wall. This correlates with previously excavated [31]. While some of the brick rubble material was intact and probably overlays township surface, a lot of it appears to have been impacted by previous mechanical disturbance, leaving the brick fragments in a loose matrix of dark soil, different from the undisturbed deposits found in the main excavation. As this lay at the far end of the road reserve this is interpreted as disturbance of *in situ* brick demolition rubble deposit, taking place as part of the 1970s works, but leaving the potential for undisturbed deposits underneath.

This is correlated with the main cess-pit brick demolition layer [31], but possibly disturbed by later road activity.

[305] To the southwest of the cess-pit there was a shallow but distinctive layer of scattered hydrated lime nodules that covered an area of about 2 x 2 metres [Figure 4]. This is considered to be of township period, and where encountered varied from about 15 mm in thickness to ephemeral white flecks that smeared the base of mechanical blade scrapes. This is interpreted as being of township period, and representing a construction feature, as quicklime is only hydrated [mixed with water and undergoing a chemical change] immediately before it is needed, and this would normally be done as close to the worksite as possible. The quantity of material is not large and may possibly have been the lime used in the mortar for the construction of the cess-pit.

However, there is no secure evidence that the lime does relate to the township period. In this location there was either no interface of destruction [302] or it retained some earlier deposits. As such it is possible that the lime was prepared at some later stage, before the Hume Highway works were undertaken, but this is speculative.

[306] The main feature identified as belonging to the township period comprises evidence of a structure or structures exposed in plan in the centre of the road reserve and set back about 1.5 metres from the fence. The evidence consists of a patch of light yellow-brown soil that is visually distinct from both the overlying [301] and surviving natural soil of [303] [Figure 4]. It occupies an area of about 1.5 x 1.5 metres immediately to the west of the lime scatter [305]. It was not possible to say which was earlier, but appears to be stratigraphically later than [305].

The soil feature is bounded by a series of stones buried within the deposit. Those to the west appear to be deliberately placed, while those on the east seem more natural. However, as established during the main excavation it remained extremely difficult to distinguish natural and reused stone and often natural stone exposures were incorporated into formed surfaces.

Above and around the structure were found the only evidence of nails encountered in the road reserve. About six were identified, all lying flat on or near the light yellow-brown deposit. All were square-shafted, none had been clenched [bent over] or showed signs of use. This makes their attribution as part of a former timber building less certain. Also found in concentration notably higher than elsewhere during the road reserve excavation were large animal bones – including metacarpal / metatarsals and teeth. This increased frequency only relates to about 6 bone pieces total so is only a relative concentration.

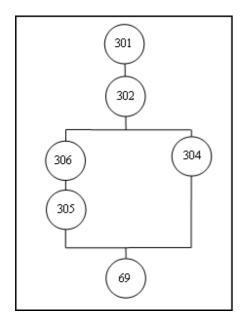
Once this feature had been recorded it was covered over and [301] deposit in the centre of the reserve was removed. This revealed further stones set into the presumed original ground surface, with the natural soil flecked with ash and fine charcoal [Figure 4]. Some artefacts – willow pattern ceramic, black bottle glass – lay flat on the surface.

No postholes or other structural framing evidence was identified.

This evidence is interpreted as a single structure with an uneven stone floor, represented by some or all of the identified stone, and the light yellow brown soil as a probable internal floor deposit. A fireplace or open hearth may have been located in one area. From the nails it may have had a timber superstructure, although this is not conclusive. If the evidence of animal bones is indicative of activities that took place, possible explanations would include a shelter for hanging carcasses before butchery, with the cranial and feet elements being indicative of basic butchery, the removal of the lower value items. Alternately it may be a place where hides from butchered carcasses were dressed. There was no sign of gnawing by dogs or rodents on the bone.

[69] Natural soil – undifferentiated demonstrably natural soil profile from A2 to stone bedrock. The majority of natural soil exposure that is evident as a result of scraping [302] has exposed basal A2 and B horizon of the soil profile.

The Harris Matrix for the road reserve is set out below:



4. Interpretation of the results

4.1 A model of site formation

Based upon the archaeological evidence and limited historical information available it is possible to develop a model for what took place within the road reserve that is consistent with all that we know and guides us in describing the unexplored portion of the reserve.

Natural topography

Based on available data, prior to disturbance, there was a natural highpoint located immediately to the south of the current road embankment, which has been cut away in the road widening. This would have been approximately in the north of Mitchell's road junction, where he placed his finger post that marked the fork in the roads going south and southwest.

It is likely that this high point was about 1.5-2.5 metres above the road level at the finger-post. It was a small localised ridge probably formed around a core of emergent igneous material that resisted erosion better than the surrounding land. It created a shallow rise that ran more or less southwards to the cemetery, so that drainage to the east of this line fell towards the timber-lined well MRNH 8, while that to the west ran into the crown reserve and the present creek.

ii. Mitchell's road and the Marulan town plan

Mitchell would have laid his road so that it avoided the crest of the ridge, and he aimed to the southward of its peak. This would have avoided ramping and minimised the need for more than modest cutting and benching.

All evidence of 19th century road building is well to the south of the studied road reserve and has probably been destroyed by later road construction.

Section 1 of the town survey included the slight ridge. It is possible that Mitchell chose an objective landscape feature, such as the junction of the two drainage lines and the road reserve as the point of commencement for the boundary between Section 1 and the Crown Reserve. This unambiguous point would have allowed all other parts of the township plan to have been derived by progressive measurement.

iii. Joseph Peters and the Woolpack Inn

Peters bought Lots 1 and 2 of Section 1 for the construction of the Woolpack Inn. Although he later bought Lots 3 and 4, the inn was announced as being ready to take customers before these additional blocks were bought. It can be assumed that all of the primary construction of the Woolpack Inn, ie the main building and substantial outbuildings, were all located on the two blocks.

The layout and placement of the Woolpack Inn remains speculative, apart from the cess-pit found during the main excavation stage in 2007. Given that the cess-pit was so robustly constructed it is highly likely that all other major buildings were equally massive. The cess-pit was oriented parallel to the lot boundaries and this is likely to have been a general feature of at least the more substantial buildings on site.

The road reserve investigation confirmed that the cess-pit was a single stand-alone building, and was not connected to other buildings.

As well as the main substantial Woolpack Inn buildings, there are likely to have been remains of more ephemeral buildings constructed. One of these is likely to have been encountered during the exemption works. It consists of a scatter of definitely placed local field stone, and possibly some natural stone, associated with a deposit of differently coloured soil, square-cut nails, and areas of ashy soil. This area is probably associated with a larger than usual number of uncut animal bones. This is interpreted as being the footprint of a timber structure containing a small fireplace or hearth, and possibly used for animal processing, eg dressing down carcasses or processing hides from slaughtered animals.

The cess-pit and the ephemeral structure represent the only two buildings found within the footprint of the surviving section of Peters' original two lots. Both represented possibly foul-smelling activities and may have been placed away from other buildings. If so, there could reasonably be some distance between them and the other inn buildings.

It is unlikely that there are any substantial archaeological remains surviving in the unexplored section of road reserve. This is based upon the following observations:

- the remaining area unexcavated is 40 metres long x 2.5-5 metres, making it extremely narrow
- the eastern and western ends of this area have been cut back to below original ground level and all township period deposits are likely to have been lost
- substantial buildings are unlikely to be able to be concealed in an area this size
- substantial buildings are likely to have been oriented to the original lot boundaries and road, making oblique wall exposures likely [ie they are set at an angle to the current road reserve alignment and more likely to stick out the sides of the unexcavated area]
- no structural evidence is visible in the face of the road embankment
- there is no demolition rubble such as building stone, brick or mortar indicative of any masonry structures being present; in contrast the cess-pit demolition rubble created a distinct broken brick and mortar zone of about 10 metres diameter
- the bulldozed fill deposits are likely to derive from the immediate south of the road reserve, and these contain no clear demolition rubble.

The area investigated appears to represent mainly additional yard deposit, containing at least one structure. It may represent a foul smelling area – toilet and building

associated with carcass butchery or hide processing – and this would explain possible distance from other buildings.

iv. Abandonment

Abandonment of the Woolpack Inn is dated from other evidence at c.1880, later than the general decline of the town, coinciding with the death of John O'Neil, the last known occupant.

It is not known when the Woolpack Inn was finally demolished, and no evidence of a demolition episode has been found. Given the size of the building, brick construction, mortar and internal plastering should have left abundant and distinctive evidence of the demolition process. The absence of any such material strongly suggests that the main building was some distance away.

v. Highway construction

Highway construction is evidenced by partial removal of original surface at the western and eastern ends of the road reserve.

4.2 Archaeological research potential and significance

The archaeological evidence – the ephemeral structure, hydrated lime patch and the town period surface – are likely to present the main evidence remaining within the road reserve. Later road construction has compromised some of this evidence and reduced its evidentiary value.

Yard deposits of the Woolpack Inn have been thoroughly investigated by spatially controlled stratigraphic excavation in 2007, primarily in the 'Big Rectangle' and it is not considered that additional open area deposits will contribute additional useful information unless they possess substantial integrity or features that are absent from the areas already excavated.

The presence of at least one ephemeral building is important, as it reinforces the idea that the Woolpack Inn was a complex of structures of greater and lesser permanence that were all part of the diverse role that it played in providing services to travellers. If the initial interpretation that it represents a building associated with butchery or hide processing is correct, then this can complement information on diet derived from the analysis of the cess-pit faunal material, which identified specific patterns of butchery that reflected selection of more expensive meat cuts and possible indications of herd management to produce a sustainable supply of butchery carcasses.

It is considered unlikely that remains of any substantial buildings or structures will be found in the road reserve based on the sample excavated to date and trends in the evidence.

Therefore the archaeological deposits known or likely to be present in the road reserve are considered to have some archaeological potential to demonstrate activities that took place in that part of the site, but their usefulness in providing more general information has been compromised by later disturbance. The archaeological deposits known or likely to be present in the road reserve are therefore ranked as being of moderate contributory significance to the state significant archaeological site. As a discrete set of archaeological remains they are of low-medium archaeological or research significance.

5. Further action

Based on the evidence presented above, a number of conclusions can be drawn regarding the archaeological potential of the road reserve. These are presented below. From these findings it is possible to recommend a preferred course of action.

5.1 Conclusions

- 1. Due to the proximity of the highway and RTA requirements no further substantial removal of road fill [301] or exposure of earlier deposits [303] is possible until the trees are removed and traffic control measures are put into place.
- 2. There is a low probability of any substantial archaeological remains surviving in the unexplored section of road reserve.
- 3. Although it is likely that there are no substantial archaeological remains within the road reserve, the work to date has shown that there is some likelihood of further ephemeral evidence remaining. These are relics under the Heritage Act 1977 and subject to the requirements of the Act, and also subject to the SHR provisions. They are considered to be of contributory significance in increasing our knowledge of the layout and activities that took place at the Woolpack Inn, the town's most significant building and the focus of archaeological and historical research.
- 4. All remaining archaeological evidence is likely to have been disturbed as a result of the 1970s road widening, and subsequent growth of trees and rabbit burrowing.
- 5. It is considered extremely unlikely that any archaeological deposits would be found whose significance would justify either retention *in situ* or substantial modification of the interchange design. For example the cess-pit and its assemblage, archaeologically significant as they are, would not be considered to meet this level of significance.

5.2 Recommendations

- 6. A s.65 variation to the current s.60 permit to allow archaeological remains to be removed is considered appropriate.
- 7. Given the critical nature of work programming for the interchange it would be desirable for the variation to be issued in advance of works.
- 8. Once the variation is issued the archaeologically monitored removal of the remainder of the road fill [301] should be undertaken and any archaeological evidence documented to established standards consistent with the existing

- exemption issued on 9.3.2009. This work is likely to undertaken as part of the first stage of construction works, once construction traffic controls are in place
- 9. At the completion of removal of [301] deposits the Heritage Branch should be advised on the nature of any archaeological evidence uncovered and confirm what further work, if any, is required under the variation.
- 10. Once all road reserve fill deposit has been removed and visible archaeological remains recorded any necessary further excavation or collection of archaeological material should be carried out in accordance with the variation.
- 11. All archaeological evidence to be treated as part of the continuation of the existing excavation.
- 12. Any reporting associated with the s 65 variation would be forwarded to the Heritage Branch for incorporation into the Old Marulan 2007 report as an addendum.
- 13. Confirm that Tim Adams [nominated assistant excavation director for the 2007 excavation] can act as excavation director in the possible absence of Denis Gojak.

Denis Gojak Director

Banksia Heritage + Archaeology

20 April 2009

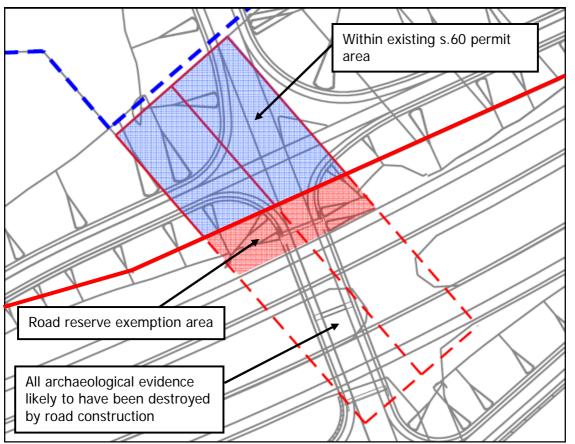


Figure 1. Section 1 Lots 1 and 2 outlined in red, with the road reserve exemption area shaded in red.

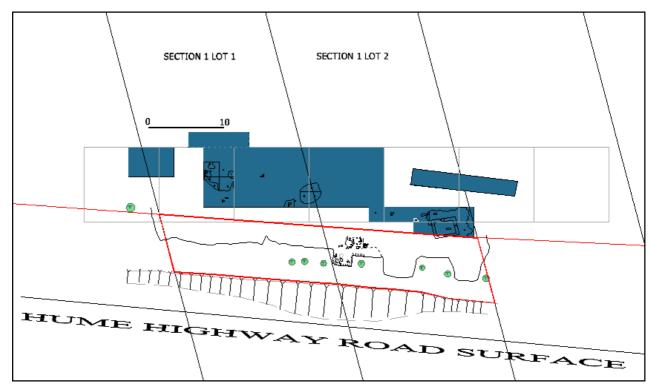


Figure 2. The road reserve excavation area delineated in red, bounded by CEMEX property to north and embankment cut to south, and extending across the original Lots 1 and 2. The original lot frontages extend about 40 metres south of the embankment. Dark blue areas were excavated by hand in main 2007 excavation stage. Green circles indicate tree locations.

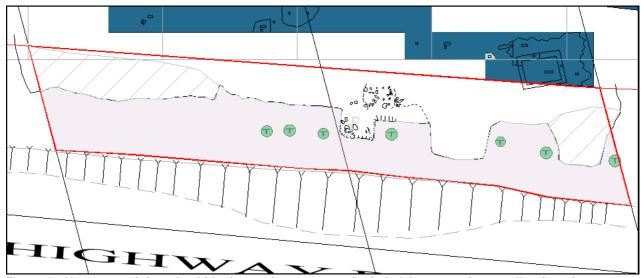


Figure 3. Unexcavated deposit within the road reserve are shaded pink, areas where earlier deposits have been removed by highway construction are hatched.

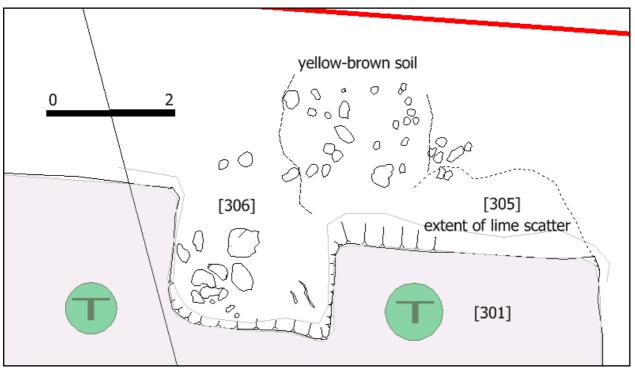


Figure 4. Archaeological features exposed during excavation and removal of [301] – road reserve fill.





3 Marist Place Parramatta NSW 2150

Locked Bag 5020 Parramatta NSW 2124 DX 8225 PARRAMATTA Telephone: 61 2 9873 8500 Facsimile: 61 2 9873 8599 heritage@planning.nsw.gov.a

heritage@planning.nsw.gov.au www.heritage.nsw.gov.au

Contact: Siobhan Lavelle
Phone: 02 9873 8546
Fax: 02 9873 8599

Email: <u>siobhan.lavelle@planning.nsw.gov.au</u>

Our ref: PCU016131; B219104

File: \$90/07432

Your ref: 290/JMíTA/TA/271010

Mr Tim Adams Umwelt (Australia) Pty Ltd PO Box 838 TORONTO NSW 2283

Dear Mr Adams

Re: Completion of Archaeological Works at Old Marulan Township under S65A Application No 2009/S65A/13) - Request for 'sign off' of Permit Conditions

Reference is made to a letter dated 27 October 2010, prepared by the nominated Excavation Director under the above approval, Mr Denis Gojak of Banksia Heritage & Archaeology.

I understand that the letter was prepared having regard to Condition 19 of the approval which states:

19. Written advice must be received from the Heritage Council or its delegate, that the proposed treatment of the site and relics is acceptable before any bulk excavation or construction work is commenced for the new road works.

This Condition requires the Applicant to provide evidence that the fieldwork component of the project has been completed in accordance with the requirements of the permit/approval and also a commitment that the post excavation works will also be undertaken to meet the requirements of the remaining conditions. Other permit conditions refer to those requirements such as completion of artefact cataloguing and analysis, a final report and on site interpretation.

I understand that the submitted letter comprises the request, on behalf of Holcim as the Applicant, for written advice that the treatment of the site and relics is acceptable and for confirmation that the Heritage Council (Heritage Branch, Department of Planning) has no objection to the commencement of construction works on site.

I understand that the Hume Highway road reserve construction works are likely to be undertaken as part of the first stage of construction works. These works are expected to commence in early 2011.

The letter of 27 October 2010 has provided a comprehensive acquittal of each permit condition and an explanation which illustrates how all works have been undertaken in accordance with the relevant approvals. The letter covers all approvals which have been issued, as follows:

- Section 60 (2006/S60/082) 28 November 2006
- Section 65A Variation (2007/S65/11) 04 September 2007
- Section 65A Variation (2009/S65A/13) 22 October 2009

The Heritage Branch notes that a number of relevant reports on the archaeological project have been provided, as well as the Interpretation Strategy which was 'signed off' in May 2009.

It is noted that the comprehensive acquittal of the Conditions of Approval provided in the letter dated 27 October 2010 has also flagged that some issues remain subject to final resolution in particular the location of artefacts if these are not accepted by the Local Historical Society due to absence of a storage/display space, and also that some minor works which require archaeological monitoring are yet to be completed.

The advice that a final report will be prepared to include all work carried out to date, with any supplementary results arising from any Hume Highway road reserve archaeological works to be incorporated into the Excavation Report series as an addendum, has also been noted.

As Delegate of the Heritage Council I advise you that, following review by the Branch staff of the letter which has documented the progress made against the listed Conditions of Approval of the various permit approvals, there is agreement with the assessment of 'met' conditions provided by the Excavation Director.

As Delegate of the Heritage Council I therefore advise you that there is no objection to the commencement of the intended Hume Highway road reserve construction works proposed for early 2011.

Please contact Siobhan Lavelle at the Heritage Branch using the details provided with this letter if you have any further queries at this time.

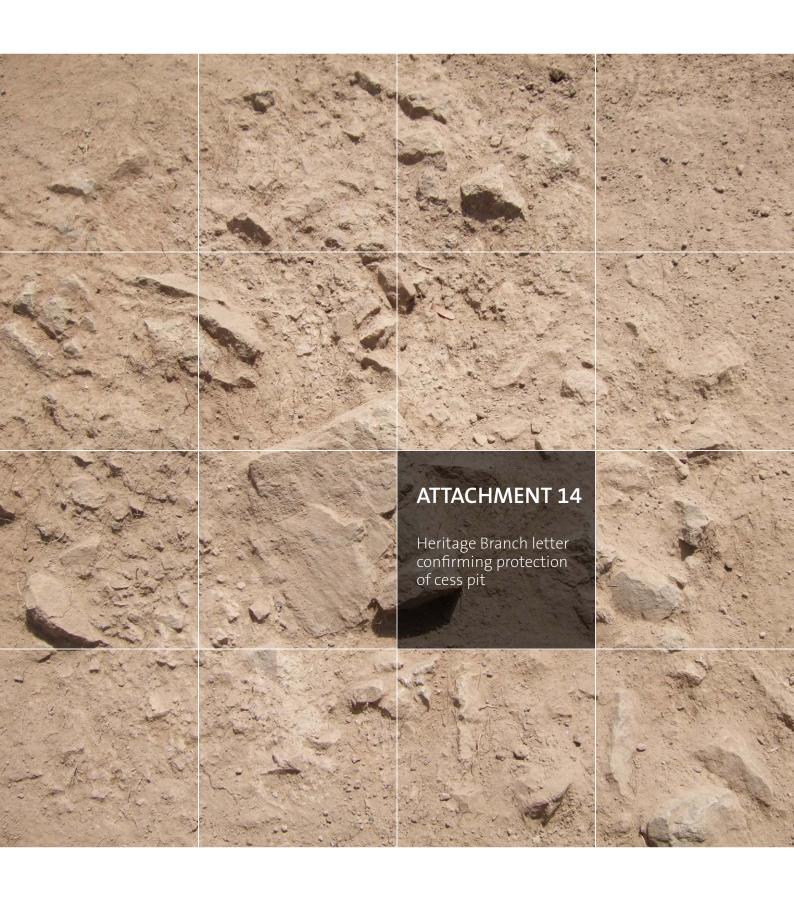
Yours sincerely,

16/12/2010

Vincent Sicari Manager Conservation Team Heritage Branch

AS DELEGATE OF THE NSW HERITAGE COUNCIL

cc. Richard Savage, Project Coordinator Holcim (Australia) Pty Ltd PO Box 258, PENRITH NSW 2751 Denis Gojak, Banksia Heritage & Archaeology PO Box 457 NEWTOWN NSW 2042





3 Marist Place Parramatta NSW 2150 Locked Bag 5020 Parramatta NSW 2124

DX 8225 PARRAMATTA

Telephone: 61 2 9873 8500 Facsimile: 61 2 9873 8599 heritage@planning.nsw.gov.au www.heritage.nsw.gov.au

Contact: Siobhan Lavelle
Telephone: 9873 8546
siobhan.lavelle@planning.nsw.gov.au
File: 10/24736

Our ref: B477109 (via email)

Ms Suzannah Mitchell Environmental / Community Coordinator Lynwood Quarry Holcim (Australia) Pty Ltd PO Box 76 MARULAN NSW 2579

Dear Ms Mitchell,

Re: Old Marulan Township, Hume Highway, (SHR number 0127) Goulburn – Mulwaree LGA – Compliance with Conditions for the Lynwood Quarry Project

Reference is made to recent emails regarding the treatment of a cess-pit previously excavated during archaeological works undertaken in 2007.

The cesspit has previously been lined with geotextile fabric and filled with a clean sand fill. It is understood from the emails received, that Holcim now propose to lay another layer of geo fabric on top of the current fill and top course of stone lining of the pit and extending out around the exposed remains. The additional layer of geo fabric will be covered with approximately 500 millimetres of clean sand prior to any further works.

The procedure outlined has been devised by the consultant archaeologist, Mr Tim Adams, and is intended to preserve the cess-pit and protect it into the future.

As Delegate of the Heritage Council of NSW I advise you that there is no objection to the completion of such work, provided that the results are documented and included as part of the final reporting which is to be submitted at the conclusion of the overall project.

Inquiries on this matter may be directed to Siobhan Lavelle using the details on this letter.

Yours sincerely

25/08/2011

Vincent Sicari

Manager, Conservation Team

Heritage Branch, Environment and Heritage, Policy and Programs

Office of Environment and Heritage

AS DELEGATE OF THE HERITAGE COUNCIL OF NSW

CC: General Manager, Goulburn-Mulwaree Council, Locked Bag 22, Goulburn NSW 2580
Mr Tim Adams, Umwelt Pty Ltd, PO Box 838 Toronto NSW 2283





2 3 OCT 2012





3 Marist Place Parramatta NSW 2150

Locked Bag 5020 Parramatta NSW 2124 DX 8225 PARRAMATTA Telephone: 61 2 9873 8500 Facsimile: 61 2 9873 8599

heritage@heritage.nsw.gov.au www.heritage.nsw.gov.au

Contact:

Siobhan Lavelle

Telephone:

9873 8546 siobhan.lavelle@heritage.nsw.gov.au

File: Our ref:

10/24736 A1079041

Mr Tim Adams Senior Archaeologist Umwelt Australia Ptv Ltd PO Box 838 **TORONTO NSW 2283**

Dear Mr Adams

RE: OLD MARULAN TOWNSHIP. HUME HIGHWAY - SHR NUMBER 0127 **GOULBURN - MULWAREE LGA**

Proposal: Proposed amendment to the prior approvals:

- Initial Excavation Permit (2006/S60/082) approved on 17 November 2006; and
- Section 65A Modification (2009/S65A/013) recording and removal of remains within Hume Highway Road Reserve, approved 22 October 2009

The modification is requested to amend the due date for a final report on the project.

S65A Application No: 2012/S65A/22

Information received with the s65A application:

S65A Application – letter & attachments, dated 30 August 2012 prepared by Umwelt Australia P/L providing justification and assessment

Additional information requested: not applicable Date additional information received: not applicable

As delegate of the NSW Heritage Council, I have considered the above application and found it substantially the same as the previous approval issued for archaeological works in the Old Marulan Township and the adjacent Hume Highway Reserve to salvage and record archaeological 'relics' affected by the approved Lynwood Quarry Project - DA 128-5-2005.

Pursuant to Section 63 of the NSW Heritage Act 1977, the Heritage Council hereby informs Mr Tim Adams that approval is granted to modify the S65 Approval No. 2009/S65A/13.

This Section 65A amends Condition 20 of the prior approval as follows:

20. The Applicant must ensure that the final report is prepared by the nominated Excavation Director, in combination with the approved Site Director to publication standard, by 30 September 2013. Two hard copies and one electronic copy of this report must be submitted to the Heritage Council of NSW. A least one further copy must be lodged in the local library, or another appropriate local repository in the Goulburn-Mulwaree Council area.



The existing requirements established by previous Heritage Council Conditions of Consent must still be met unless a further specific alteration is granted by the Heritage Council of NSW or its delegate.

Matters established by those approvals include: archaeological work and recording of 'relics'; completion of a final report on the archaeological work, and other requirements.

The above conditions were imposed to ensure compatibility of the proposed work with the existing heritage values of the item and to ensure consistency with the *Environmental Planning and Assessment Act, 1979*. Your attention is drawn to the right of appeal against the conditions.

It should be noted that an approval under the Heritage Act is additional to that which may be required from other Local Government and State Government Authorities. If you have any questions regarding the above matter please contact the Heritage Branch on (02) 9873 8500.

Yours sincerely

16/10/2012

Vincent Sicari

Manager, Conservation Team

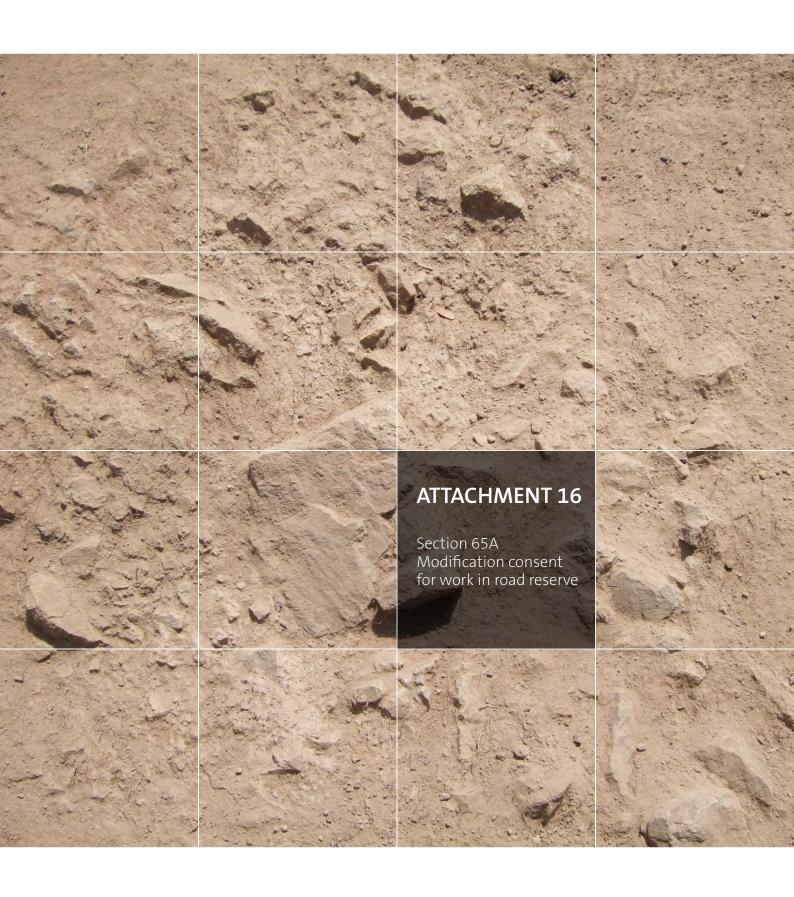
Heritage Branch

Office of Environment and Heritage

AS DELEGATE OF THE HERITAGE COUNCIL OF NSW

CC:

General Manager, Goulburn-Mulwaree Council, Locked Bag 22, Goulburn NSW 2580 Ms Suzannah Mitchell, Environmental and Community Coordinator, Lynwood Quarry Holcim (Australia) Pty Ltd PO Box 76 MARULAN NSW 2579







C Merist Place Parramatta NSW 2150 Locked Bag 5020 Parramatta NSW 2124 DX 8225 PARRAMATTA Telephone: 61 2 9873 8500 Facsimile: 61 2 9873 8599 heritageoffice@heritage.nsw.gov.au

www.heritage.nsw.gov.au

RECEIVED 28 OCT 2009

Contact: Sìobhan Lavelle 02-9873 8546 Telephone:

siobhan.lavelle@planning.nsw.gov.au

File: S90/07432/004 Our Ref: HRL55534

Mr Richard Savage

1 Sheens Lane, **CASTLEREAGH NSW 2749**

Dear Mr Savage,

APPLICATION UNDER S65A OF THE NSW HERITAGE ACT, 1977

RE: OLD MARULAN TOWNSHIP, SHR00127, MARULAN NSW

Proposal: Proposed amendment to the s60 Approval No. 2006/S60/082 to allow for recording and removal of some archaeological remains within the Hume Highway reserve. These remains were identified during works undertaken in accordance with a S57(2) Exemption, and will be impacted by the new highway interchange works.

S65A Application No: 2009/S65A/13 Information received with the s65A application:

S65A Application - letter & attachments dated 27 August 2009 providing justification and methodology for the works, prepared by Mr Tim Adams of Umwelt Pty Ltd on behalf of CEMEX Australia.

Additional information requested: N/A Date additional information received: N/A

As delegate of the NSW Heritage Council, I have considered the above application and found it substantially the same as the approval under s60 of the Heritage Act, No. 2006/S60/082 for archaeological works at the site of the Old Marulan township. Pursuant to Section 63 of the NSW Heritage Act 1977, the Heritage Council hereby informs Mr Richard Savage that approval is granted to modify the s60 Approval No. 2006/S60/082 dated 17 November 2006 as follows:

1. All works shall be in accordance with the methodology outlined in the S60 Excavation Permit Application number 2006/S60/082 and supporting documents, in particular the 'Old Marulan, County Argyle: a research design and archaeological compliance program for work by Readymix' prepared by Banksia Heritage & Archaeology in 2006 and also in the S65A Application number 2007/S65A/11 dated 1 June 2007, and S65A Application number 2009/S65A/13 dated 31 August 2009, and previously submitted supporting documents, such as 'Marulan Stage 1 Archaeological Investigation' March 2007, prepared by Banksia Heritage & Archaeology Pty Ltd,

EXCEPT AS AMENDED BY THE FOLLOWING CONDITIONS:

2. This permit is issued for archaeological investigations associated with the redevelopment of parts of the SHR listed site of Old Marulan for a new Highway interchange as part of the Lynwood Quarry project. This will involve a multi-stage strategy as indicated in the reports 'Old Marulan, County Argyle: a research design and archaeological compliance program for work by Readymix' prepared by Banksia Heritage & Archaeology in 2006 and also in 'Marulan Stage 1 Archaeological Investigation' prepared by Banksia Heritage & Archaeology Pty Ltd in 2007. This permit also allows for works to be undertaken within the Hume Highway road reserve to recover significant archaeological evidence related to Old Marulan and specifically, allotments previously associated with the "Woolpack Inn".

....

3. This permit allows the archaeological salvage excavation of associated deposits, sites and features from the Colonial-era town of Old Marulan (c.1835-

as required. This permit also allows for works within works to be undertaken within the Hume Highway road reserve and specifically, allotments previously associated with the "Woolpack Inn".

- 4. This archaeological approval allows the removal of any State significant relics in accordance with the methodology given in supporting documents as noted in Condition 1, above. All salvaged 'relics' should be available for future display at the completion of the archaeological work.
- 5. The Applicant must ensure that the Heritage Branch, Department of Planning, is informed in writing of the start of the on site archaeological fieldwork at least five (5) days prior to its commencement and, that the Heritage Branch is informed of the end of the on site fieldwork within five (5) days of its completion.
- 6. The Heritage Council and staff of the Heritage Branch authorised under section 148(1) of the 'Heritage Act, 1977' reserve the right to inspect the site and records at all times, as well as access any relics recovered from the site.
- 7. The Applicant must ensure that if any additional substantial intact archaeological deposits and/or State significant relics not already identified in the Application for S65A Excavation Permit number 2009/S65A/13 are discovered, the Heritage Office must be contacted for advice. Additional assessment and approval may be required prior to works continuing in the affected area(s) based on the nature of the discovery.
- 8. The Applicant must ensure that the nominated Excavation Director, Mr Denis Gojak, or in his absence the nominated Site Director, Mr Tim Adams, carry out the excavation work. This approval requires the nominated Excavation Director, Mr Gojak, to be present for a minimum of 80% of the field excavation time (Stage 1 & 2). Under the supervision of the approved Excavation Director or the approved Site Director, the work is to be completed in accordance with the methodology outlined in the supporting documents for S65A Application number 2009/S65A/13.
- 9. The Applicant must ensure that the Excavation Director takes adequate steps to record to scale and in detail relics, structures and features discovered on the site during the archaeological works in accordance with the approved research design and current best practice guidelines. This work must be undertaken in accordance with the Heritage Office guidelines, How to Prepare Archival Records of Heritage Items (1998) and Photographic Recording of Heritage Items Using Film or Digital Capture (2006). Photography must include archivally stable formats including black and white photographic prints and colour slides.
- 10. The Applicant must ensure that during the period of excavation, the site is made secure and that artefacts, structures and features are not subject to deterioration, damage or destruction, during the fieldwork.
- 11. Throughout the archaeological excavation works the Applicant must ensure that:
 - a. A local public information programme is implemented including press releases and a website to ensure the public is informed about the archaeology project and its outcomes.

- b. Free public brochures must be available for the public to collect. These public brochures must be available from the first week of the archaeological works on the site and may be distributed via a website or other means such as letter-box drop.
- Volunteers are used where possible to assist with the archaeological works.
- d. The services of a conservator are utilised for conservation of significant artefacts and structural items or features as necessary.
- 12. The Applicant must ensure that a Public Open Day or supervised Public Tour is conducted on the site during the work. The Public Open Day should be carried out in a day during the weekend to facilitate public attendance and should be
 - during the excavation program must be discussed with the Heritage Office once the archaeological findings are known, and should be submitted for the approval of the Heritage Council or its delegate.
- 13. The Applicant must ensure that local historical societies and other relevant cultural organisations are formally notified and invited to the Public Open Day or supervised Public Tour.
- 14. The Applicant is responsible for the safe-keeping of all relics recovered from the site, during and after fieldwork. Adequate security measures shall be maintained until such time as a repository for relics is identified and approved by the Heritage Council or its delegate.
- 15. The Applicant must ensure that the nominated Excavation Director cleans, stabilises, identifies, labels, catalogues and stores any artefacts uncovered from the site in a way that allows them to be retrieved according to both type and provenance.
- 16. The timber lined cistern/well (MRNH8) is to be managed either through limited salvage of deposits and then conservation in-situ through filling/burial; or if this proves impractical, by the full salvage of fabric and deposits for incorporation in future interpretation about the site. The most appropriate treatment of MRNH8 should be determined through more precise identification of the need to disturb surrounding allotments within the existing SHR curtilage. The Heritage Council or its delegate must be informed about the specific details of the final proposal for MRNH8 and must concur with the proposed treatment of the structure and any associated deposits or 'relics' within the meaning of the NSW Heritage Act, 1977.
- 17. A weekly report on the results must be submitted to the Heritage Council or its delegate as the archaeological fieldwork proceeds.
- 18. After the completion of the archaeological fieldwork the previously prepared 'Old Marulan Interpretation Plan' prepared by Banksia Heritage and Archaeology dated May 2007 should be revised to incorporate the findings from the archaeological works. An updated final Interpretation Plan should be submitted for the approval of the Heritage Council or its delegate within 3 months of the conclusion of the archaeological fieldwork.
- 19. Written advice must be received from the Heritage Council or its delegate, that the proposed treatment of the site and relics is acceptable before any bulk excavation or construction work is commenced for the new roadworks.
- 20. The Applicant must ensure that the final report is prepared by the nominated Excavation Director, to publication standard, within one (1) year of the completion of the field based archaeological activity unless an extension of time is approved by the Heritage Council of NSW. Two hard copies and one electronic copy of this report must be submitted to the Heritage Office. A least one further copy must be lodged in the local library, or another appropriate local repository in the Goulburn-Mulwaree Council area.
- 21. The Heritage Council of NSW requires that the final report shall include:
 - a. An executive summary;
 - b. Due credit to the client paying for the excavation on the title page;
 - c. An accurate site location and site plan;

- d. Historical research, references, and bibliography.
- e. Detailed information on the excavation including the aim, context of the excavation, procedures, analysis, treatment of artefacts (cleaning, conserving, sorting, cataloguing, labelling, scale drawings, photographs, repository);
- f. Nominated repository for the items;
- g. Detailed response to research questions; and
- h. Details of how information about this excavation has been publicly disseminated.
- excavations) as an application for the variation of the permit under Section 65A of the NSW Heritage Act, 1977. If substantial variations are proposed a new application under S60 may be required.
- 23. Any Aboriginal 'objects' present at the site, must be managed in accordance with advice from the Department of Environment and Climate Change and in accordance with a permit under the National Parks and Wildlife Act, 1974.
- 24. This approval shall be void if the activity to which it refers is not physically commenced within five years after the date of the approval or within the period of consent specified in the relevant development consent granted under the Environmental Planning and Assessment Act, 1979, whichever occurs first.

The above conditions have been imposed to ensure compatibility of the proposed work with the existing heritage values of the item and to ensure consistency with the *Environmental Planning and Assessment Act, 1979*. Your attention is drawn to the right of appeal against these conditions.

It should be noted that an approval under the Heritage Act is additional to that which may be required from other Local Government and State Government Authorities. If you have any questions regarding the above matter please contact Siobhan Lavelle at the Heritage Branch on (02) 9873 8546.

Yours sincerely

Vincent Sicari

Manager
Conservation Team
Heritage Branch
Department of Planning

AS DELEGATE OF THE NSW HERITAGE COUNCIL

The cas 22/10/09

cc. General Manager, Goulburn Mulwaree Council, Locked Bag 22, Goulburn, NSW, 2580 Mr. Denis Gojak, Banksia Heritage & Archaeology, PO Box 457, Newtown NSW 2042 Mr Tim Adams, Umwelt Pty Ltd, PO Box 838 Toronto NSW 2283







