

Beyond the breach: Advancing strategies for archaeological management plans

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This paper reviews some of the existing historical Archaeological Zoning Plans prepared in New South Wales and Victoria. These plans have been used as management tools since the 1980s and have generally followed a simple format of identifying and mapping the location of archaeological sites as an early warning system for developers, heritage advisors and local government.

The paper examines the evolution of the plans, their current status and their implementation. It also challenges the notion that the plans are in themselves a sufficient warning system. Finally the paper argues for a considered expansion of ways in which appropriate identification, assessment and management of archaeological resources could be incorporated into the local government and heritage planning systems for New South Wales and Victoria.

INTRODUCTION

This paper is based upon research conducted for an ongoing ARC-funded PhD thesis at La Trobe University, 'Managing the Archaeology of Central Sydney and Melbourne 1788–1900'. The aims of the project are to reconsider the methods we use to produce archaeological management plans for Central Business Districts (CBDs), using those of Melbourne and Sydney as case studies. The thesis addresses the absence of streamlined processes for managing archaeological resources in CBDs both in Australia and overseas, providing a new and considered response to the relevant requirements of those involved in the management process including statutory authorities, land owners, archaeologists and property managers.

The paper provides more detailed consideration of the NSW context than that of Victoria as comprehensive research is yet to be undertaken there.

A critical objective in providing a useful and successful plan is the recognition that appropriate management of archaeological resources requires focus on the requirements of three separate stakeholders: developers or site owners; government representatives, such as council planners; and archaeologists. Furthermore three quite different sets of information and outcomes are required by these groups. Any plan that is tailored to assist one or two particular groups is unlikely to coincide with the needs and priorities of the others. The overall style of AMPs, including their language, layout and presentation, needs more detailed consideration than has been provided for in the past. Design of a management plan concept that identifies and addresses the requirements of all relevant users in an intelligible and open manner is imperative.

EVOLUTION OF MANAGEMENT PLANS

Archaeological Management Plans (AMPs) or Archaeological Zoning Plans (AZPs), as they are variously described, have been produced within New South Wales and Victoria for more than a decade. A number of terms exist to describe planning methods designed to identify potential archaeological sites and features. In this paper I will refer to these collectively as 'management plans'. These plans have followed a fairly straight-forward format of identifying potential archaeological resources based on a combination of outline historical research and physical survey. A graphic component has usually been included to identify archaeological sites within the relevant study area. The presentation of graphic data has var-

ied from a grey-scale or colour-coded hard copy plan, to digital plans produced in a Geographical Information System (GIS). For most of the Plans the level of report detail has been determined by the parameters of available project budget and scope. The archaeological component of the earliest heritage plans were without precedent in Australia.

The use of a zoning plan specifically conceived for archaeological purposes was first introduced on the Royal Mint and Hyde Park Barracks sites in a program devised by Wendy Thorp between 1980 and 1981 (Thorp 1987).¹ These were site-specific. The first inclusion of a historical archaeological component in a historical study was in the Hunter Region in 1981. The primary focus was on above-ground industrial archaeological sites such as defunct mines.² Edward Higginbotham's 'The Future of Parramatta's Past: An Archaeological Zoning Plan 1788–1844' was the first broad-scale archaeological zoning plan undertaken in Australia. This report was commissioned in 1987, completed and trialled in 1988–1989 and then published by the Department of Planning, Sydney, in 1991. The plan was modelled on an earlier zoning plan designed for London city (Biddle et al. 1973).

Broad-scale archaeological management plans have been prepared for major urban areas including Central Sydney (Thorp, Green & Assoc. and Anglin & Assoc. 1989, Mider & Lavelle 1992), Pyrmont–Ultimo (Anglin 1990), the Rocks and Millers Point (Higginbotham et al. 1991), Parramatta (Higginbotham 1991, Godden Mackay Logan 2000), Melbourne (Fels et al. 1992) and Pyrmont Point (Godden Mackay 1993). Regional studies and plans have also been completed for Port Macquarie (Higginbotham 1995), Liverpool (Casey & Lowe and Ireland 1997), Newcastle (Suters Architects et al. 1997), Richmond (Higginbotham 1996) and Bathurst (Bairstow 1992) in NSW. Melbourne studies include reports for the Portland area (Eslick 1983), Footscray (HLA-Envirosciences 2001) and the city of Port Phillip (Dawe 2000). Numerous site-specific plans also exist, commonly undertaken for government-owned places such as those belonging to National Parks and Wildlife Service (NPWS) and the Historic Houses Trust (HHT). In more recent practice, archaeological assessment reports sometimes include a site-specific or area zoning plan. In 1994 a revised *Excavation Master Strategy* was prepared for the site-specific area of Millers Point, in Sydney (Bairstow 1994).³ The first Sydney study and the Pyrmont–Ultimo report were undertaken within the scope of larger heritage studies which incorporated elements of the built environment.

To date little debate has occurred about the appropriateness of archaeological zoning plans as tools to identify and manage existing and potential archaeological resources. Notwithstanding the fact that such plans have been produced, there are still several questions that remain unanswered. For example, how effective are AMPs in assisting the development process? Which ones work and why? Is an archaeological management plan a suitable instrument for its purposes? To discern whether these plans are an appropriate management tool requires assessment of existing plans, and any refinement of their procedures requires a rigorous review process. None of the existing plans have ever been reviewed, despite all of them including recommendations to that effect.⁴

Policy and Legislation

Though it is not intended to provide a detailed account of the statutes and instruments which serve to protect, manage and regulate Australian historical archaeological resources, a review of historical archaeological management plans requires knowledge of relevant legislation.⁵ Management of archaeological 'relics' is primarily the responsibility of state government agencies. It is at local and state levels that archaeological management and practices are regulated. Through legislation such as the *NSW Heritage Act 1977*, the *NSW Environmental Planning and Assessment Act 1979*, the *Victorian Heritage Act 1995*, the *Victorian Planning and Environment Act 1987* and associated environmental planning instruments, shared responsibility for care and administration of heritage issues is encouraged between state and local governments (Snelgrove 1994: 4).

DEVELOPMENT OF MANAGEMENT PLAN ELEMENTS

The main developments in the evolution of management plan strategies have been the inclusion of an inventory of sites with ranges of significance, and potential research themes and/or questions based on the historic development phases associated with study areas. The Newcastle Archaeological Management Plan (1997: vi) provided a summary overview of plans available at the time, specifically in relation to the manner in which they deal with research design issues and the development of this concept within the context of archaeological resource management. The Parramatta Historical Archaeological Landscape Management Study (PHALMS; 2000: 13–28) includes a chapter that discusses some of the theoretical approaches to historical archaeology that have influenced Australian practice in the past decades. The study reflects on the benefits of regional research designs, suggesting a series of outcomes to reflect best-practice management and research framework objectives.

The Heritage Inventory for Central Sydney (1989) was the first study to include a comprehensive response to management issues for archaeological resources in an Australian city centre. The study was part of a project undertaken to review and revise the 1971 Strategic Plan developed for Sydney City. The report was intended as 'a bridging mechanism between current crisis management and the [report's] recommended long-term objectives' (Thorp, Green & Assoc. 1989: 60). Assessment and recommended action for potential archaeological sites was based on the existing Heritage Inventory (formulated for above-ground building stock). Thorp emphasised the unreliability of this process, explaining that financial and time constraints resulted in the need to use 'the only extensive data base which exist(ed) at the time' (Thorp, Green & Assoc. 1989: 61). The study recommended specific actions for archaeological sites based on broad chronological subdivisions relating to existing structures in the CBD. The report was referred to as a 'chronological zoning plan'.

More recently, the PHALMS project (2000) has proceeded beyond the basic identification of potential archaeological sites. The PHALMS plan is certainly the most complex and detailed of the archaeological management plans produced either in NSW or Victoria to date. The report gathered information for the whole of the Parramatta region, providing a regional research design for the area, and recommending appropriate management strategies for each identified site.

The PHALMS report proposes a statutory consent process that allows for 'over the counter' permit issue for sites that are not of State significance and that comply with the research framework formulated in the report.⁶ This research framework was 'designed to mesh with established historical themes at a variety of scales.' It was intended to 'operate as a guiding framework for the development of site specific research questions' (Godden Mackay Logan 2000: 221). The framework provided a checklist of evidence to be gathered for analysis, corresponding to each proposed research question. This evidence included sub-categories of landscape types, Aboriginal, structural, personal artefacts and others. A scale of inter-site analysis is presented, ranging from local to global. Comparative site or subject examples were also indicated for some research questions where further studies would be possible. These notes included both local and international themes and concepts.

EXISTING AMPS AND THEIR IMPLEMENTATION

Melbourne and Sydney Archaeological Management Plans

Although the AMPs of Sydney and Melbourne were significant documents for their time, their capacity appears to have been restricted by the project briefs and available resources. The 1992 Melbourne AMP remains in draft form, although the base plan was revised in 2001. The 1992 Sydney AZP was reprinted in 1997 without update or review of the graphic element or main report, so that numerous sites currently identified as having archaeological potential have since been developed or modified.

The Plans were never intended to function as exhaustive management frameworks. This was made clear in the primary aim of each report:

...to identify and document the remaining below ground archaeological resource within the study area to a basic but consistent level, enabling an overview of the survival and general nature of the resource...
(Lavelle & Mider 1992: 2 and Fels et al. 1992: 2)

Certainly the authors describe the intended function of the reports as 'an early warning system' for potential archaeological resources in the CBDs (Lavelle & Mider 1992: 39; Fels et al. 1992: 16).

The Central Sydney AZP was not designed to identify the archaeological or historical significance of individual sites. Instead, it provided a basic assessment of survival rates for potential sites, as required by the project brief. Four area types were identified: Areas of Archaeological Potential (AAP); Areas of Archaeological Potential—Partially Disturbed (AAP-PD); Areas of Archaeological Potential—Deeper Sub-surface Features (AAP-DSF) and Areas of No Archaeological Potential.

The Melbourne AMP provided a more detailed framework, including assessment and conservation of the city's resources and guidelines for both broad-scale and case-by-case site management. A detailed land-use history was also incorporated. The graphic component of the plan, revised in 2001, includes sites which appear on the Victorian Heritage

Register. Three other area types are identified: those having site potential; partially disturbed areas; and totally disturbed sites. These categories were altered slightly from those in the original 1992 report to distinguish sites where archaeological excavation work had already taken place. Developed research design principles were not included in the brief for either city study.

Implementation of the Central Sydney AZP is conducted primarily by Sydney City Council staff, particularly planners, though the plan is also used by people outside Council, such as consultant archaeologists and heritage planners who advise on archaeological matters. Initiative for creating the plan came from council planners who wanted a simple and clear guide that identified potential sites, to assist with archaeological issues arising from development proposals. A brochure, 'Archaeology in the City Handbook' (1995), was also produced to promote and explain the AZP and general issues relating to CBD archaeological management. The plan was originally available for sale to developers and other interested parties. Both the AZP and the handbook are now available as free, downloadable documents on the City of Sydney web site (<http://www.cityofsydney.nsw.gov.au>).

The Melbourne AMP was commissioned by the then Victoria Archaeological Survey. By contrast with the Central Sydney AZP, it is currently managed by Heritage Victoria (a specialist state government agency), rather than by Melbourne City Council. The Plan forms the basis for the city's archaeology management process. Its data were revised in the 2001 colour-coded plan. The Melbourne AMP has not been integrated into the Melbourne Planning Scheme. Instead, the Victorian Heritage Certificate process, which informs applicants if their site is listed on the Heritage Inventory, is used as an early warning system for development proposals that have the potential to affect archaeological sites.⁷ The colour coded plan is accessible on the Heritage Victoria web site (<http://www.heritage.vic.gov.au/pdfforms/ArchaeologyPlan.pdf>).

Parramatta Historical Archaeological Landscape Management Study (PHALMS)

The PHALMS project was completed in November 2000. The study area incorporated sites in the jurisdiction of Parramatta City and Holroyd Councils. The plan supersedes an earlier zoning plan for the Parramatta area (Higginbotham 1991) which 'had limitations in area, scale and thematic development' (Godden Mackay Logan 2000: 30). The proposed archaeological heritage management framework resulting from the project has not yet been fully implemented.

At the time of writing, access to the database and mapping information was available on the Heritage Office web site within the State Heritage Inventory (<http://www.heritage.nsw.gov.au>). The PHALMS database is publicly available for comment and is under review prior to implementation. Officers at Parramatta City and Holroyd Councils have hard copies of the report and plans which may be used to identify and locate archaeological sites in their areas. In order to obtain more detailed information about a particular site they currently need to search the State Heritage Inventory database on the Heritage Office web site.

The new plan has been demonstrated to council staff. However, Parramatta City Council's Heritage Officer indicated that he had become the 'unofficial council archaeologist' whom other staff consulted when archaeological management issues arose or application of the plan was required for a site (M. Wells, pers. comm., 17 April 2002). Prior to his resignation from Parramatta Council in late April 2002, Wells raised a key concern regarding current implementation of the plan. Although Council is able to refer to a map that identifies potential archaeological sites and areas, the

more detailed management recommendations for these sites were not accessible.

It is hoped that both councils will eventually acquire GIS software that can facilitate the PHALMS database and maintain access to the plan within their offices. It is anticipated that delegation by Parramatta City Council for standard Section 140 permit applications⁸ will occur by mid-2003, once appropriate systems have been established. In February 2002, the Heritage Council of NSW approved a twelve-month trial allowing Sydney City Council delegated authority to process standard Section 140 permit applications where monitoring or test excavation is required. It is expected that the results of this trial will assist in informing an appropriate and effective system of delegation for Parramatta City Council.

SOME CHALLENGES FOR ARCHAEOLOGICAL MANAGEMENT PRACTICE

Despite the existence of AMPs for Sydney and Melbourne CBDs, a seamless and timely process of identification and effective involvement of archaeological managers on sites containing potential archaeological resources is still not commonplace. Although archaeological assessments are becoming more frequently required as part of development-application documentation, some are still requested as a consent condition of a development application. By that stage, budgets, designs and work schedules have been usually set for development projects (NSW Heritage Office 2000a: 8). Thus valuable archaeological input and necessary constraints, including issues such as potential for preservation of significant fabric, may be compromised by omission of archaeological advice early in the project planning and design process.

Professional archaeologists usually enter the process after approval has been sought for a development (often during site demolition and clearance stages) to manage archaeological matters at 'the eleventh hour'. When archaeology is not integrated at an appropriate stage of a development project, several negative consequences may follow. As one archaeologist commented, there is the immediate inconvenience of having to put aside other equally urgent projects in order to satisfactorily assess unexpected relics exposed on a site (P. Douglas⁹, pers. comm. June 2000). Whilst this kind of outcome is inevitable given the generally sub-surface nature of archaeological resources, timely provision of archaeological advice would be significantly improved if planning policies provided more comprehensive integration of archaeological components.

Current planning regulation and practice are magnifying the problems inherent in archaeological work on development sites. Historical archaeologists are accustomed to working at short notice with critical deadlines on sites where relics have been exposed unexpectedly. This is an endemic aspect of modern archaeological heritage management procedure. Identification of on-site archaeological issues at an earlier stage in the development consideration process would reduce the critical aspect of archaeology and allow it a more linear integration within that process. This would assist in ensuring that necessary archaeological involvement on development projects would be appropriately programmed into the overall project timetable, as well as providing less stressful timeframes and work environments for archaeologists responsible for ensuring adequate management of the resources on a given site. Mitigation and management of archaeological issues on development sites cannot improve without the support of the policies and provisions that govern its practices.

There is always the pressure in contract archaeology to inspect and assess site sensitivity with minimal interruption to site development, particularly in cases where archaeological monitoring is the main requirement. In many of these cases the archaeological resources are assessed as having minimal

significance. Yet, as they constitute a 'relic' under definitions provided by both the NSW and Victorian Heritage Acts, standard recording and report procedures are required. In NSW¹⁰ this situation relates more to issues concerning the adequacy of 'relics' provisions within the Act, aptly identified by Thorp (1994: 13) as allowing:

...archaeologists to be lazy. If a relic exists, that is a site or object fifty or more years old it can be the subject of an archaeological excavation. That, however, does not ensure that the site or object is significant or worthy of investigation.

NSW Heritage Act Exemptions

New exceptions under Section 139 (4) of the NSW Heritage Act were gazetted in February 2000.¹¹ These were aimed at allowing certain types of projects which had previously required an excavation permit to proceed without the need for an excavation permit application and approval from the NSW Heritage Council.

Theoretically, such exceptions should be of overall benefit by reducing the workload of the NSW Heritage Office at the same time as streamlining the development-approval process for works. Also, their effect on the retrieval of archaeological information would be negligible as the exemptions are targeted at disturbed contexts or types of excavations that would not ultimately provide worthwhile and significant data. However, in practice in some cases these exemptions may be restrictive. For example, in exempting excavations in existing service trenches (Exemption [ii]) the precise location or even existence of the trenches is not always known until after they have been discovered and exposed by an excavation. That requires a permit application to have been already made. Exposed services are regularly found to have impacted on earlier structures and features within the streets and footpaths of developed city centres.

Exemption (v) which involves approval for excavation of foundations for standing structures has also raised some concern. This exemption may run into logical difficulties because, by definition, the construction trench backfill (that is, a deposit older than 50 years and associated with European settlement) will always be a 'relic' under the NSW Heritage Act. Also, the presence of other 'relics' and additional archaeological information, such as construction trench cuts, robber trenches etc, is not apparent until the excavation takes place. If exemptions are granted in cases such as these they may not be conditional upon the work being monitored by an archaeologist and valuable information relating to construction of the structure is thereby lost.

Most of the exemptions state that 'due care is taken to avoid impacts upon relics other than' the one in that exemption, or where 'other relics need not be disturbed to carry out these work' but do not require the involvement of an archaeologist to make that judgement on site. The responsibility for this decision is given to the site owner, developer or utility manager who has been granted the exemption. The provision of NSW Heritage Office guidelines regarding the granting of exemptions, including advice about how to deal with issues that may arise during works, would assist in clarifying the responsibilities of those involved in such projects. It is understood that the exemptions are aimed at reducing unnecessary Section 140 excavation permit applications and that Section 146 of the Act still applies for relic protection. In practice, however, those involved on sites operating under these exemptions will not necessarily know this and are likely to simply assume that any relic they expose has been granted the exemption.

In the long term, the results of small-scale monitoring briefs and emergency excavation projects frequently con-

tribute to what Mackay (1996: 126) articulates as those:

...numerous reports...and catalogued collections of tens of thousands of excavated artefacts and designer databases (that) have cleared the way for many new developments, but really have done relatively little to change our understanding of Australian history.

For a variety of reasons, usually including project budget and timing restrictions, these emergency rescue investigations often necessitate site-specific assessment with little scope for broader analysis. Projects that may be considered small or minor, such as street-work upgrades, may end up requiring a 'rescue excavation' or 'damage limitation' approach for the archaeological component in order to mitigate unforeseen project delays. That is, research, assessment and understanding of the resource and its significance is done as work progresses, rather than with timely preparation and necessary overview. This is clearly not ideal, although it is certainly common within Sydney's city area.¹²

Not all investigations require complex research designs. Yet, case after case indicates that without adequate allowance for the archaeological component of projects, the appropriate treatment of archaeological resources is compromised, whether that requirement is simple or complex. The introduction of more progressive archaeological provisions within planning frameworks encourages an environment of initiative where protection and management of archaeological resources is honoured in the observance rather than the breach, which is the more common experience.

ARCHAEOLOGY AND STATUTORY POLICY

A number of issues contribute to the lack of early identification and integration of archaeology within relevant development projects in NSW. Most significantly, archaeological sites are rarely acknowledged, included or cross-referenced in state or local registers, schedules, heritage studies and planning instruments. Allen and North provide a list of the only 13 sites included on the NSW State Heritage Register to emphasise the omission of archaeological sites within the wider heritage and planning context (NSW Heritage Office 2000: 6).

Under Section 170 of the NSW Heritage Act, state agencies such as the Department of Land and Water Conservation, the Sydney Harbour Foreshore Authority (SHFA) and the National Parks and Wildlife Service (NPWS) are required to formulate Section 170 registers and management policies and plans for sites in their possession which contain heritage assets. Whilst some agencies such as NPWS and SHFA promote progressive and influential management plans and policies, others are unaware of archaeological sites within their ownership. The implication of these irregularities in management and provisions for archaeological sites is discussed in detail by Allen and North (NSW Heritage Office 2000: 9). They also consider some of the archaeological issues encountered in the process of compiling heritage studies (NSW Heritage Office 2000: 10). These include the general tendency to focus such studies on built heritage and associated values, rather than the most appropriate heritage resource of a given region. That review also raised the important issue of the current trend to split heritage values into different studies that rarely integrate.

Local Authorities, Councils and AMPs

Effective implementation of management plans depends largely on the commitment and skill of relevant local government personnel dealing with heritage matters, particularly in NSW where archaeological management plans are implemented at a local government level. The responsibility and potential contribution of these specialists is far-reaching in relation to facilitating archaeological issues. In some cases

council officers have objected to the suggestion of accommodating 'another layer' in the development-approval process, emphasising that there are already a plethora of urban design and planning priorities to deal with (J. Smith¹³, pers. Comm., March 2002). The simplicity and ease of use of management plans is therefore critical in encouraging the co-operation and commitment of local council staff. It appears that council personnel are more reticent to use management plans where complex databases, state-of-the-art information technologies such as GIS mapping devices and multi-volume reports are generated within the strategy framework (M. Wells, J. Faddy¹⁴ pers. comm.).

In NSW there is a current trend towards heritage delegation in general.¹⁵ In relation to archaeology the delegation of archaeological permit applications to local authorities and councils may be one way to strengthen understanding and application of archaeological requirements and procedures at a local government level. In endorsing council responsibility for aspects of archaeological management a culture of awareness is created where many would argue it currently does not thrive. This emphasis would particularly benefit from the employment or contract of a qualified archaeologist to advise (even temporarily) on implementation and management of these procedures within government authorities. Such positions are few in NSW. At present, provision for an archaeologist exists only at Sydney City Council and the Sydney Harbour Foreshore Authority (SHFA).

In the absence of appropriate procedures and practices to protect archaeological resources at a local government level, the delegation process may prove disadvantageous, particularly in relation to reliance on the stability of the responsible presiding local government body. As local governments tend towards constant internal review, the consistency needed for successful implementation and regular revision of AMPs may be overlooked in these renewal phases. For example, when the boundaries of a local government area are altered and the AMP is not updated to reflect this change, the plan becomes obsolete in one aspect. With the departure of employees from large establishments where systems of assessment are dependent on individuals, it is not uncommon for particular critical elements of the corporate memory to go with them, such as the location of a computerised component of a management plan or database. It is soon after this stage that valuable time, resources and expertise may then be deployed to jog the bureaucratic memory on any given project—funds that could have been better used to review and improve existing projects, plans or methodologies.

In the case of the Melbourne AMP, Snelgrove (1994: 2) indicated that:

Institutional involvement in the implementation of archaeological zoning plans can also be problematic when political changes within a department occur, or when there is a lack of commitment to the project from within the commissioning incitation.

The Victorian Archaeology Survey (VAS), the body that originally commissioned the Melbourne AMP project, was affected by changes in departments and responsible administrators of the then relevant Victorian Act (*Aboriginal and Archaeological Relics Preservation Act 1972* [AARPA]). Snelgrove suggested that as a result of these changes the Melbourne AMP was never implemented nor was the draft report finalised.

Non-Aboriginal archaeological matters within Victoria are dealt with by archaeologists within Heritage Victoria. The Victorian Planning Provisions include a Heritage Overlay that may be used to 'ensure the conservation of places of special importance'. Such places include those which appear on the Australian Heritage Commission's Register of the National

Estate and the Register of the National Trust of Australia (Melbourne). Within the Melbourne Planning Scheme the policy basis which applies to the Capital City Zone (CCZ) describes the heritage of the zone area as comprising 'individual buildings, precincts, significant trees, and aboriginal [sic] sites' (Clause 22.04:1). Historical archaeology is not included within that definition. Although the Heritage Overlay is in the process of being updated, the definition of heritage items contained within the Capital City Zone is likely to remain the same (Melbourne City Council Heritage Planner, pers. comm.). A favourable relationship exists between planners at Melbourne City Council and archaeologists at Heritage Victoria regarding exchange of advice and information in relation to archaeological resource management. Council assists Heritage Victoria by providing a standard note on planning permits if the site is indicated on the Victorian Heritage Inventory, where the application involves works which would impact subsurface deposits. The Victorian Heritage Inventory is a statutory list with specific processes established and maintained in accordance with the *Victorian Heritage Act 1995* (Part 6, Division 1).¹⁶ Though there are no provisions for historical archaeology in the Melbourne Planning Scheme itself, Council does refer to the Melbourne AMP.

Lack of understanding and use of appropriate archaeological management procedures and relevant legislation, particularly by local council employees (planners, officers etc) contributes to the weakness of an archaeological presence within Australian government bodies responsible for the application and administration of development controls. The examples presented above are a few of the many indicators that a program of intensive, on-going training of relevant individuals within local, state and federal sectors needs to be addressed.

In Situ Preservation Issues

At present there is no consistency in the regulation of archaeological management procedures for the preservation of items in situ. Within NSW to date the issue has been dealt with on a site-by-site basis, at the behest of the archaeologist advising the Minister for Urban Affairs and Planning. The situation is much the same in Victoria. This has resulted in disparity in the perceived significance and treatment of archaeological items requiring retention in one form or another. Additionally these inconsistencies result in an inability to adequately advise councils, land owners and developers of the level of requirements for items that may need in situ preservation. Advice has ranged from 'put a slab over it and excavate in the future' to reinstate it in its original position, suspended two storeys above the heads of those occupying the underground foyer of the Conservatorium in Sydney (Ireland 2001). The NSW Heritage Office has suggested that guidelines for in situ retention of significant sites be prepared to assist in appropriate management decisions on these matters (NSW Heritage Office 2000a: 38). It is generally recognised that the small percentage of archaeological sites and features remaining in the city centres of Melbourne and Sydney are a rare, finite and endangered resource. However a more precise and quantified understanding of potential remains is needed to determine which site types and features, if any, may be considered for retention. Such a study is intended for the Sydney and Melbourne city areas.¹⁷

GETTING AHEAD IN ARCHAEOLOGICAL RESOURCE MANAGEMENT

The Scope of Management Plans

Where archaeological management plans are successfully implemented, is this a result of the documents themselves or

does it relate to the diligence and commitment of the people who use them, or both? Or is accessibility a major factor in their success? If these plans are to continue as the preferred framework for management of archaeological resources, these questions need to be answered.

A great plan is nothing without the co-operation of those who use it, and the commitment to maintenance of those who manage it. Also, the more accessible the plan, the more regularly it is referred to. Discussions with those who are responsible for implementing and using existing plans reveal that the simpler the plan, the more it seems to get used and remembered. This certainly appears to be the case with the Central Sydney AZP, a slim, compact document accompanied by a map of city sites denoting areas of graded archaeological potential. When significance assessment of the archaeology is introduced, management plans immediately becomes more complex (yet arguably more helpful). When recommended levels of action for different site types is added (for example, full-scale excavation, monitoring or sampling), the report gets thicker, heavier and it can take longer to find information (in hard copy anyway). More complex plan formats often also require access to a computer which has appropriate software loaded to search a database or collection of layered maps to locate a site and advise of its archaeological status.

The inclusion of a graphic component within a management plan is considered to be a significant factor for successful implementation. A plan or map of the study area which clearly indicates potential archaeological resources and sites allows quick and simple identification of these sites by all users. Management plans work because of this component. When this element is developed as a Geographical Information System (GIS) that dataset is taken to another more sophisticated level, with considerable disadvantages. GIS plans require particular expertise that is not needed when referring to a hard-copy plan. Use of GIS plans requires access to and some knowledge of computer technology. Not everyone who wishes to refer to a management plan has access to a computer. A large hard-copy plan prominently displayed is not only more likely to be remembered, it is also less likely to be lost than information stored on a computer. Where databases, digital plans, GIS maps and the like are (commonly) stored on one (or few) office computers it is not uncommon for information to be lost, for example, after the departure of staff who maintain or store those files.

If future management plans are to be prepared based on the existing formats of archaeological zoning plans, a range of approaches is available. These vary from the simple but effective plan style of the Central Sydney AZP, to the more detailed format of the most recent GIS-based Parramatta Historical Archaeological Landscape Management Study (PHALMS).

An Alternative AMP Model

An alternative option is being prepared as part of my doctoral research. In brief, that option considers inclusion of information within a staged plan, where initial site identification, significance assessment and recommended actions are produced in separate but integrated reports. This style of presentation may look something like an updated version of the Central Sydney AZP, containing more site-specific detail including potential sites and elements below the streets and walkways. The Plan would include a hard-copy map denoting areas of graded archaeological potential. The benefit of this approach would be to provide a simple, slim-line Plan for public use so that developers, site managers and owners may locate their site, check the archaeological potential level and then proceed to the relevant advising body (local council in NSW and Heritage Victoria in Victoria) for further advice, if required. Where potential archaeological sites may be affected by pro-

posed development, the following section of the plan could then be referred to by the appropriate advising body for more detailed information such as recommended actions and, if appropriate, research frameworks. All components of the AMP would be made publicly available, both in hard copy and as downloadable documents via government web sites such as those of the relevant local councils and state heritage offices. A GIS component could also be incorporated, but not as a requisite for data-access.

A 'normalising' of archaeological practice and procedure is needed in order to have its place within planning controls accepted as being no different to issues of urban form or building height restrictions. Again, this cannot be addressed or achieved without provision of on-going training programs for relevant local, state and federal sector personnel.

A review of the value of the PHALMS study would not be feasible until its implementation procedures have been applied to identified archaeological sites. Some integration of its methodology and recommendations also needs to have been achieved within the relevant local council areas before the effectiveness of PHALMS can be established. The management and implementation issues encountered by council staff are more likely to be the result of lack of integration and follow up of recommendations from the study at this early stage. Though the approach used by this study appears somewhat complex and unfamiliar to most users, with correct computer software, training and practice the extraction of relevant information through such a GIS format may retrieve more detailed and informative data in a shorter time space than that capable for earlier plan styles.

Some Options for Integration of Archaeological Provisions in NSW

Local and Regional Environmental Plans

In NSW inclusion of archaeological provisions within existing and future Local and Regional Environmental Plans (LEPs and REPs)¹⁸ would provide immediate benefits for archaeological resource management and the resources themselves. This action would provide improved protection and recognition for known and potential significant sites within the broader heritage and planning frameworks. A set of Model LEP Heritage Provisions were prepared by the NSW Heritage Office in 1999.¹⁹ These act as a template for local councils to include in their LEPs and are a significant step towards enabling greater recognition and identification of archaeological issues at that level. Their presence within LEPs must also encourage and assist council personnel to consider potential heritage issues, and at a more timely stage in project development procedures. The PHALMS study (2000: 229–230) recommended that relevant components of that study be incorporated into a Development Control Plan (DCP).²⁰

Environmental Planning and Assessment Act 1979, Section 149 certificates

Another procedure which has potential for assisting integration of provisions for archaeological resources within NSW would be inclusion of archaeological details in the *Environmental Planning and Assessment Act 1979*, Section 149 certificates. These could be included, at the discrimination of the local council, within information provided to property owners in relation to Point No. 5 of certificates:

*A council may, in a planning certificate, include advice on such other relevant matters affecting the land of which it may be aware.*²¹

Section 149 Planning Certificates are required to be attached to a contract of sale when selling property in NSW. They specify matters relating to a particular land parcel,

including how or if the property is affected by zoning, flooding, heritage, road widening, any state government policy (Regional Environmental Plans or State Environmental Planning Policies) and any other plan or information that affects the development potential of a parcel of land within the Local Government Area. Provision of archaeological information in these certificates could benefit owners of smaller private properties, assisting awareness of possible archaeological issues associated with their property at the time of purchase. With regard to commercial properties, advice on archaeological matters may be included in the certificate, or made available for identification by council heritage advisors within an in-house database system, for use at their discretion. In this way, Section 149 Planning Certificates may be used in a manner somewhat similar to that of the Victorian Heritage Certificate process, mentioned previously.

It would seem appropriate to suggest a contextual approach that integrates the many existing planning documents and frameworks in the NSW planning system such as LEPs, REPs, heritage studies, Section 170 registers and archaeological management plans. This would not only avoid duplication of information, but would provide a more refined and consistent strategy of potential benefit to all stakeholders. Such a framework would enable more appropriate identification of significant heritage sites and improve decision-making process with regards to holistic management of these resources.²²

While archaeological management plans are prepared by private consultants there will likely be resistance from other professionals to be guided by reports produced by 'the competition'. The PHALMS project involved workshops and a consultation process with the intention of providing a forum for discussion of the project aims and methodology. Though invited, few practising consultant archaeologists and historians participated in those meetings. There are fewer avenues for informal yet constructive discussion amongst archaeologists than there was a decade ago when Sydney Historical Archaeology Meetings (SHAM) and other forums were available to discuss and challenge new concepts and query methodologies and practices. Channels of this kind need to be encouraged and supported to enable continued reappraisal of the objectives and focus of Australian historical archaeology. Without this we will continue to facilitate its direction as nothing more than a continuous damage limitation exercise where 'managing' the resource becomes more a case of managing its destruction.²³

CONCLUSION

Clear and appropriate management strategies have potential to bridge the gap between the conflicting needs of modern development and protection of our archaeological heritage. Revision of the existing Melbourne and Sydney Archaeological Management Plans provides opportunities to foster an environment of support and incentives which may facilitate management of archaeological resources. AMPs need to focus on clear identification of the requirements and objectives of all involved parties including developers and site owners, council planners and heritage officers, and archaeologists, if they are to provide outcomes that proactively address best-practice archaeological resource management.

This paper was written with more than the intention of providing a vignette of the current state of historical archaeology management issues in the city centres of Sydney and Melbourne. Some of what has been stated may be obvious to those who live this work each day. The intention has not been to preach to the converted. On the contrary, it is hoped that issues raised in the paper may encourage constructive discussion, feedback and re-appraisal of the foundations that inform our responsibilities and options for best-practice cultural resource

management. A fresh inspection of these footings may enable us to determine which, if any, are subsiding and need strengthening or replacement.

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NOTES

- 1 Those zoning plans were devised by Thorp for site-specific use. Her model was subsequently adopted and developed for other sites and forms the basis of broad-scale zoning plan methodology. Thorp discusses her methodology in a publication (Thorp 1987) which also explains the first 'predictive model' approach used in Australia (now referred to as the Archaeological Assessment).
- 2 The archaeological components of the Hunter Region Historical Study were undertaken by Damaris Bairstow and Meredith Walker in 1981 (D. Bairstow, pers. comm., 19 Aug 2002).
- 3 An archaeological Survey of Kingston and Arthursvale, Norfolk Island was also done by Graham Wilson and Martin Davies in 1982 for the Department of Housing and Construction, Canberra.
- 4 Although the Melbourne AMP has not been reviewed, significant update of some base plan information was undertaken in 2001.
- 5 Information regarding these statutes and instruments can be obtained from NSW and Victorian government web sites for example: <http://www.duap.nsw.gov.au/> and <http://www.heritage.vic.gov.au>
- 6 The PHALMS report proposed that 'the research framework that underpins the proposed Parramatta archaeological management be embodied in a Development Control Plan' (2000: 210). The Study described this proposed Plan as an Archaeological Management Development Control Plan (AMDCP). A Development Control Plan is a plan prepared by a local council to provide more detailed development controls and guidelines to accompany a Local Environmental Plan. These plans are often applied to heritage conservation areas.
- 7 Heritage Certificates are property inquiry forms which advise applicants of whether any heritage listings relate to their property, when enquiries are directed to Heritage Victoria. The Certificates are used to inform applicants of whether sites are included in the Victorian Heritage Register, or in the Heritage Inventory of archaeological sites. The Certificates are a convenient way of informing applicants about heritage issues, but as they are not a compulsory requirement in the planning process, applicants may remain unaware of archaeological listings if they do not apply for a certificate.
- 8 Approval for most archaeological investigations is sought under Section 140 of the NSW Heritage Act. Section 139 of that Act (as amended in April 1999) specifies that:
a person must not disturb or excavate any land knowing or having reasonable cause to suspect that the dis-

turbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed unless the disturbance or excavation is carried out in accordance with an excavation permit.

- 9 Archaeologist, Archaeological and Heritage Management Solutions, NSW.
- 10 And also applicable to Victoria.
- 11 The exemptions are:
 - i **Demolition And Maintenance Of Bridges** An exception is created for an excavation or disturbance for the purpose of the demolition or maintenance of a bridge, not being a bridge listed on the State Heritage Register, where demolition or maintenance will impact solely upon the bridge, its pilings, footings and abutments and upon no other relics.
 - ii **Underground Utility Services** An exception is created for an excavation or disturbance for the purpose of exposing underground utility services infrastructure greater than 50 years in age where:
 - a) The excavation or disturbance occurs within an existing trench.
 - b) The excavation or disturbance is not in an area listed on the State Heritage Register.
 - c) The excavation or disturbance will not affect a known or identified relic other than the service infrastructure itself.
 - iii **Emergency Maintenance Works to Underground Utility Services** An exception is created for an excavation or disturbance for the purpose of carrying out emergency maintenance work on underground utility services where no environmental impact assessment or development application is required and due care is taken to avoid impacts upon relics other than the utility infrastructure to be repaired.
 - iv **Active Underground Domestic Services** An exception is created for an excavation or disturbance for the purpose of works affecting active underground services (eg water, sewerage, drainage, gas, telecommunications) connected to a domestic residence where other relics need not be disturbed to carry out those works.
 - v **Foundations of Standing Buildings** An exception is created for an excavation or disturbance for the purpose of carrying out work affecting the foundations of a standing building where other relics need not be disturbed to carry out those works.
 - vi **Monuments and Grave Markers** An exception is created for an excavation or disturbance for the purpose of carrying out conservation or repair of monuments and grave markers in a cemetery or burial ground and where there will be no disturbance to human remains or relics in the form of grave goods.
 - vii **Survey Marks** An exception is created for an excavation or disturbance for the purpose of exposing survey marks for their use in the course of conducting a survey operation.
- 12 A few examples of 'emergency rescue' style investigations include: in Sydney, 513–519 Wattle Street, Ultimo (2000) and the Archaeological Investigation of William Kemp's Grave site (1802), Jamison Street, Sydney (1999) conducted by Archaeological and Heritage Management Solutions and West Circular Quay (c1999) and Park Street pavement works (1999) conducted by Godden Mackay Logan Heritage Consultants; and in Melbourne the 1998 Cohen Place and the 1999 Fox and Hound excavations.
- 13 Archaeologist, Heritage Victoria.
- 14 Personal communication with past and present council staff including Michael Wells and Jenny Faddy.
- 15 A lack of skills and experience at a local government level is recognised by heritage practitioners as an issue which urgently needs to be addressed.
- 16 Part 6 Section 1 of the Victorian Heritage Act, 1995 states that *The Executive Director must record in the Heritage Inventory—*
 - a) all places or objects identified as historic archaeological sites, areas or relics on the register under the Archaeological and Aboriginal Relics Preservation Act 1972 immediately before the commencement of this section; and
 - b) all known areas where archaeological relics are located; and
 - c) all known occurrences of archaeological relics; and
 - d) all persons known to be holding private collections of artefacts or unique specimens that include archaeological relics.
- 17 That study comprises part of the dissertation that this paper is based on.
- 18 An LEP is a statutory plan prepared by a local council in accordance with the Environmental Planning & Assessment Act (1979). Following its exhibition in draft form for public comment, it is made by the Minister for Urban Affairs and Planning, and then gazetted. An LEP regulates the carrying out of development within a local government area and controls the use and development of land and the conditions under which change may occur. An REP is a plan prepared by the Department of Planning under the EP&A Act and made by the Minister following public exhibition. REPs are similar to LEPs but usually cover a wider area. They can identify heritage items and include controls for their protection and development.
- 19 These provisions can be accessed on the NSW Heritage Office web site within their Local Government Resource link : www.heritage.nsw.gov.au/08index.html.
- 20 A Development Control Plan is a plan prepared by local council to provide more detailed development controls and guidelines to accompany an LEP. These are often used for heritage conservation areas, such as Parramatta in Sydney's west.
- 21 Environmental Planning and Assessment Act 1979, Section 149 Planning certificates information: http://www.austlii.edu.au/cgi-bin/disp.pl/au/legis/nsw/consol_act/epaaa1979389/s149.html. Section 149 Planning Certificates are required to be attached to a contract of sale when selling property in NSW. They specify matters relating to a particular land parcel, including how/if the property is affected by zoning, flooding, heritage, road widening, any State Government Policy (Regional Environmental Plans or State Environmental Planning Policies) and any other plan or information that affects the development potential of a parcel of land within the Local Government Area.
- 22 The NSW Heritage Office also recognises some of the inconsistencies outlined here and has formulated a proposed 'Heritage Research and Management Framework Structure' (2000: 12) which aims to integrate regional and thematic research frameworks into a broader heritage management strategy. This model expands a framework conceived for management of archaeological sites.
- 23 See Blinkhorn and Cumberpatch 1999: 1 and Graves-Brown 1997: 1 for similar discussions regarding the effect of commercial constraints on management and practise within English archaeology.

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