

Management of Research Projects in the Historic Environment

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1. Introduction

Management of Archaeological Projects (MAP2) has been the model for archaeological projects undertaken or funded by English Heritage since its publication in 1991 and has been influential in establishing benchmarks and standards for the profession as a whole.

It was always intended that MAP2 would be reviewed and revised in the light of practical experience, and that other groups should apply, interpret, and develop this framework with reference to their own particular areas of interest. Accordingly, English Heritage is now reviewing the project management model set out in MAP2 in the light of developments in project management and data handling across the historic environment sector with the intention of issuing new project management guidance.

MAP2 specifically focussed on field archaeology although its general principles are widely applicable across the whole historic environment sector. Specifically, MAP2 established the formal requirement that projects funded by English Heritage should have an explicit research agenda, be properly planned, transparently documented and effectively managed; that the results be promptly and appropriately disseminated; and that the potential of the data should be subject to critical evaluation against the research agenda throughout the lifetime of a project.

The revised guidance will build on these principles, embracing data sets and traditions of investigation which did not fall within the specifically archaeological remit of MAP2. It will cover all fields of academic research on the historic environment, from the technical to the social and economic. This guidance will be applicable to the full range of historic environment research projects commissioned and undertaken by English Heritage. These research programmes will investigate the buried, submerged, and up-standing, built, and landscape components of the historic environment; and will have the strategic aim of enabling understanding, enjoyment, and protection of the historic environment in the context of current national and regional priorities. The new guidance will incorporate current thinking and practice on project management and will emphasise a dynamic, flexible approach to the collection and analysis of information.

The new guidance will form the specification for historic environment research projects funded or undertaken by English Heritage. It will consist of:

- this generic statement of the principles of project management to be applied to historic environment research. This will operate alongside MAP2 http://www.english-heritage.org.uk/upload/pdf/management_of_archaeological_projects.pdf for EH funded projects until the production of:-

- fuller project management guidance, which will be supported by more detailed information on the practical application of the guidance to the various specialist areas within historic environment research (e.g. maritime archaeology or building analysis and recording).

The more detailed project management guidance will be launched in March 2006 and this will then replace MAP2 as the standard for EH funded projects. This guidance will be further supported by English Heritage technical and specialist papers. It will be web based in order to ensure easy access and wide dissemination and also for ease of update.

2. Summary

- 2.1 Historic environment projects are carried out to add to our information, knowledge and understanding of the interaction of people with their surroundings. Any project will have specific objectives which need to be met within time and cost restraints. Sound project management is fundamental to ensure that a project will deliver its objectives on time, to budget, and to the required standards.
- 2.2 Individual projects will vary in scope, methodology, and scale but the principles of sound project management will remain common to all. In framing its new guidance English Heritage will build on the fundamental project management principles and practice articulated in MAP2 to produce flexible and responsive guidance for the management of historic environment research projects. The new guidance will:
- develop and reinforce iterative approaches to the collection of information, the process of review, and decision making;
 - integrate approaches across the full range of historic environment projects, through flexible, responsive guidance supported by specific guidelines, case studies, and advice notes;
 - support delivery of the English Heritage Research Strategy [English Heritage Research Strategy 2005 - 2010 : Research Strategy : Archaeology & Buildings : Research & Conservation : English Heritage](#) by establishing a common model for historic environment research projects undertaken or funded by English Heritage;
 - contribute by example to the development of good practice within the historic environment sector as a whole.
- 2.3 A project is set up to produce one or more products within set parameters of time and cost. The justification for the project must be agreed, clearly formulated, and expressed at its outset. The end product must always be suitable dissemination of the results, and where appropriate, deposition of a properly curated and accessible public archive for continuing curation and legitimate public access. A public archive can be taken to include the National Monuments Record, Local Historic Environment Records, Museums, Public Record Offices, and Digital Data repositories such as the Archaeology Data Service.
- 2.4 For any project, a team must be assembled that has the relevant knowledge and skills to achieve the project aims. It is a basic principle of good management practice, and fundamental to the success of a project that all the members of the team should have a common understanding of the project objectives and communicate effectively with each other. For all but the simplest of projects a suitably experienced project manager must be appointed.

- 2.5 A project must have at least one formal review cycle. A large project may require several reviews, where interim findings are considered against the aims, objectives, and agreed resources, so that any necessary changes can be instigated as required. All change to a project must be documented and will normally result either in an updated project programme or a revised project design.
- 2.6 A project should be internally monitored as part of the day-to-day progress within the project management programme. There will also normally be an agreed level of external monitoring. Any change to the project design must be agreed via the monitoring process and recorded and communicated to all concerned. A system of quality control and risk management must also be in place to ensure that work is carried out to a acceptable professional standards.

3. Project Management

3.1 General Principles

3.1.1 In any project, a team is assembled to carry out a number of defined and linked tasks to achieve predetermined objectives. These tasks will be planned to occur in a specific order within time and cost parameters. The purpose of project management is to ensure that the tasks undertaken are organised and monitored to best achieve the required outputs. For historic environment research projects the final output is defined as the appropriate dissemination of the project results, supported where appropriate by a properly curated and accessible public archive.

3.1.2 To set up and run any project effectively it is necessary:

- to formulate clearly defined aims and objectives with a specified output;
- to determine an appropriate timeframe;
- to determine an appropriate methodology;
- to establish soundly based estimates of the resources required to achieve the project objectives;
- to establish an appropriate and visible method of project management;
- to assemble an appropriately sized and resourced project team with the requisite knowledge and skills to carry out the project;
- to establish and maintain effective communication between all team members and project partners;
- to establish and operate a system of quality control, which includes at least one review cycle;
- to identify and agree clear roles for all members of the team and the end user of the products of the project and to ensure that both interests are represented throughout the management of the project;
- to identify any risks which might adversely affect the smooth running of the project and manage them effectively;
- to resource the management and implementation of the project adequately;
- to monitor progress against the project programme.

3.1.2 Depending on its size and complexity a project will normally progress through a distinct number of phases. For simple short projects such as evaluation or desk based research, these phases could represent the minimal cycle of proposal, decision, execution, and dissemination. It is still essential however that even the simplest of projects should undertake at least one critical review during its course. At the other end

of the scale (for example large-scale archaeological fieldwork) a project will go through a number of periodic reviews and subsequent recasting of objectives or programmes. A review need not be complex but its function should be to determine whether the project is able to deliver its planned objectives within the timescale and cost originally proposed, or whether any change is necessary. Reviews must be planned as project milestones within the project design. A review may be undertaken both within a project stage and also as a formal process which makes the case for moving the project to the next stage.

- 3.1.3 MAP2 established the *Assessment of Potential for Analysis* as the major stage for review and redesign in archaeological projects. Not all historic environment research projects will require such a formal assessment stage. In all cases, however, the process of assessment – the continuous evaluation of the potential of information to meet the project research aims – will inform the collection and analysis of information, and will feed into the project review cycle. When a formal assessment is appropriate and necessary this should deliver a statement of professional judgement which should be informed by the project research strategy. Formal assessment should involve the minimum of work necessary to allow sound professional judgement and should be undertaken as seamlessly as possible within the information collection stage.
- 3.1.4 A project can be described as a repeated cycle: activity – review – re-plan – activity, which should be iterated until the objectives have been achieved and the project can move to the dissemination stage.

3.2 Project Planning

- 3.2.1 Project management begins when a decision has been taken to initiate a project. Whatever the planned scale or scope of the project, a decision on whether to proceed is usually taken on the basis of priority, need, and resources, which together express the value of the project. This is usually set out in a costed outline or brief. This should be a fairly high level document which outlines the whole project with projected (but at this stage not necessarily accurate) costs, timescales, and resources. There should be enough detail in the proposal to allow those authorising or funding the project to make an informed decision on whether to proceed with it or not.
- 3.2.2 The main stage of planning ends with the production of the detailed Project Design. This defines the objectives of the whole project, the methodology by which the outcomes will be achieved, the resources necessary to achieve them, and the means by which the project results will be disseminated. It may be possible for the project design to plan and cost the entire lifespan of the project at the outset, but in some cases, such as large scale archaeological fieldwork or the development of Conservation Plans, it may be necessary to re-plan the project once

the results of earlier stages are available. In such cases, the initial project design will provide the framework for the execution of the project through to completion. Even if the funding is agreed in stages, it is necessary to have an overview of the aims and a projection of total costs at the outset. It is at this stage that the full project team is likely to come together and when all the roles and responsibilities and lines of communication should be made explicit.

3.2.3 The project design should be written with the input and agreement of the core project team. The core team should include a project manager, representatives of all relevant specialisms, and any external partners. The project manager should ensure that contact is maintained with stakeholders (e.g. steering committees, project mentors, local authority staff, and public archives) throughout the duration of the project. The dissemination strategy must be considered and agreed in principle at the planning stage. If a formal archive is to be compiled then the chosen repository must be included at the planning stage and agreement reached on any deposition requirements. If the project research record is to be lodged with a body such as the National Monuments Record or a Local Authority Historic Environment Record then early negotiations will help ascertain any special requirements that may apply.

3.2.4 The project design is the specification to which all stakeholders sign up and it should explicitly set out these heads of information which are generated by the project planning process.

Background

Sufficient background information should be presented in order to demonstrate the context and the importance of the work to be undertaken

Aims and objectives

The aims are the main project goals to which specific objectives contribute to achieving. Aims and objectives should be linked to relevant research or management frameworks. Aims and objectives must be linked to methodology and both should have explicit links to resources.

Methodology

This should be an explicit statement on the means by which the project aims and objectives will be achieved.

Resources and programming

Details of the timetable; task list including reviews; staffing; project costs; health and safety practice; risk assessments; accommodation and equipment.

3.2 Project Execution

3.2.1 It should be part of the project manager's role to ensure that the role of the team in achieving the project goals is made clear and that the entire team is fully familiar with the project design. Particular attention should be paid to ensuring that:

- there is a common understanding of the project objectives and of each individual's role in achieving them;
- individuals are clear about their own role, their relationship to other team members, and the time and resources available to them;
- policy, procedures and practice are explained and any necessary training (collective or individual) is provided.

3.2.2 Historic environment projects should add value to our understanding, appreciation, and conservation/management of the component of the historic environment with which they are concerned. The project execution phase should involve regular and routine appraisal of progress against objectives to ensure that they are still achievable and relevant, and will deliver the necessary added value. This phase may involve information capture, recording, original research, or interpretation and will produce an evolving narrative or record which represents the results to date in achieving the project aims. Information captured, whether in the form of data or material culture, should be targeted at answering the lines of enquiry outlined in the project objectives. Where lines of enquiry and/or results lead to the formation of new project objectives, any changes should be formally agreed and documented and the project should either be re-planned or an up-dated project design should be produced as appropriate.

3.2.3 Management of the project throughout its duration should draw on standard project management techniques that will include project team meetings, monitoring by the project manager; review by the project team, communication between project team members, and appropriate external liaison (with steering or user groups). It is essential that resources and timescales are kept realistic and that everyone is kept fully informed of changes and developments as they occur and that they are consulted on decisions which will affect them.

3.2.4 The assessment process should begin as soon as information collection is in train and will be driven by the research agenda, reflecting the need to formulate and regularly revisit the principal research questions that the project is addressing within a wider research context. The collection of information should be structured by explicit aims and objectives; and assessment, whether undertaken continuously as part of an information-collection strategy or as part of a separate formal stage, will measure the potential of the information against these lines of enquiry and allow the identification of new directions of research.

3.2.5 Any work undertaken as part of a formal assessment must be directed towards allowing decisions to be made about the potential of the information collected and the nature of the future programme. Assessment is an exercise in professional judgement and it is important that this process is inclusive and co-operative. The assessment process provides an opportunity for all members of the project team to think critically about the potential of their information, its relation to other data sets and the project aims, and how it should best be tackled. Assessment also gives the project sponsor confidence that the resource allocation is based on a sound critical evaluation of what is necessary.

3.3 Project Review and Redesign

3.3.1 Project review evaluates the quality and performance of the project to reach its stated aims and objectives within the parameters of time and resource identified in the project design. Review can take place at any point in the project but it is more effective if it is programmed at the planning stage and if it coincides with another project milestone, such as the transition from one phase of activity to another. As noted above, MAP2 identifies the formal assessment on potential for analysis as a major review stage for archaeology projects. It is important that the project team is involved in any review. This allows all interested parties to work together in maintaining project quality and reinforces shared ownership of and commitment to the project design, aims and objectives. Project review provides the checks and balances to ensure a project remains on track and it also provides a fixed point at which a project can be formally re-planned or designed.

3.3.2 A Project Review will:

- measure the performance of a project against its stated objectives, milestones and any internal or external factors;
- provide a formal point at which the continuing evaluation of the potential of the project to answer the stated research or management question can be expressed and challenged;
- reinforce commitment from the project team, partners and sponsors to the project;
- provide a mechanism for formal re-planning or redesign of the project as necessary or appropriate.

3.3.3 A project review is normally held as a formal meeting and it should result in either a project design update note which either endorses current progress according to the original design, or details how it is intended to revise or redesign the project or its programme.

3.3.4 Project reviews should always be planned with the size and complexity of the project in mind. For example a simple one-week recording project may only require a brief on-site check that all is going to plan,

whereas a large-scale landscape study may go through several phases and will require periodic and formal review cycles.

- 3.3.5 If a project is re-programmed this will involve discussion with the project sponsors to ensure that any alterations in programming or costs can be accommodated. A project re-design will involve the project team in revising or up-dating the project design and will also involve agreement and sign off by the project sponsors.

3.4 Project Research Record or Archive

- 3.4.1 Historic environment research projects normally have a responsibility to maintain a research record or an archive which can be curated for posterity. Such archives should always be created for any project that compiles unique information about the historic environment. Examples of this type of information would be photographs or surveys of historic buildings prior to change of use; mapping of historic landscapes; or records of an archaeological excavation.
- 3.4.2 The archive of a project should be systematically organised and actively compiled during the progress of the project. It should contain the information collected in pursuit of the project objectives. This should be in all appropriate formats (from written and digital evidence to items of material culture), and should provide the full detail of how the project reached its goals. In all cases current standards for the creation and maintenance of an archive in whatever medium must be followed from the outset of the project. The project archive is complete only at the close of the project and it should be capable of independent interrogation by a third party. The specific mechanisms to achieve this must be explicitly set out in the project design. The archive should be constructed to demonstrate how the work responded to the management or research questions contained in the project aims. Information or material should be selected for inclusion in the project archive on this basis throughout the life of the project. Information or material extraneous to these purposes can be considered for disposal as the project progresses.

3.5 Project Delivery

- 3.5.1 Appropriate dissemination of results is fundamental to the success of any project. The products of the project and the means of dissemination must always be agreed by the project team and set out in the original project design. The appropriate means of dissemination may change over the course of the project and this should be considered as part of the review cycle.
- 3.5.2 Dissemination may be achieved by a range of strategies. This can be straightforward, such as an entry in the Local Authority Historic

Environment Record; or it may comprise of a combination of strategies including, for example, the publication of a full scale academic monograph, and the delivery of an on-line resource and an exhibition. It is essential to ensure that the right audiences, whether public, professional or academic, are identified, and their needs addressed. Opportunities for outreach and local community engagement should be built into dissemination strategies wherever possible.

- 3.5.3 The final quality assurance checks on the project should be made prior to the point of delivery to ensure that it is ready for use, delivery, and/or dissemination. This may involve internal review, peer review, formal external refereeing, or any combination of these depending on the type of project. The quality assurance process should always be agreed in advance with both the project team and sponsor and set out in the project design.
- 3.5.4 Public dissemination of the project product should normally include the following:
- the research or management objectives as expressed in the project design;
 - the circumstances and organisation of the work and the date it was undertaken;
 - a summary account of the results of the project with a full index of the project archive or record, together with the names and affiliations of the members of the project team;
 - a summary account of the project archive or record, where it is housed or whether it is web based, and how it can be consulted.
- 3.5.5 The product should appropriately reflect the importance of the results of the project. It should present the information in a well balanced, logical, accessible, and structured way. Where possible, attention should be drawn to the potential of future areas of study which could not be explored fully within the agreed parameters of the project
- 3.5.6 Project delivery should include, where appropriate, a final project archive which is complete, internally consistent and deposited in a public repository for consultation.

3.6 Project Evaluation

- 3.6.1 Project evaluation is a fundamental tool of project management which provides a formal framework for the examination of the successes and failures of the project, and a mechanism to document the lessons learnt. These experiences are then available for future projects.
- 3.6.2 A project evaluation should be formally planned as the last milestone in the project design and it should bring the project to its final conclusion the project. It should involve the core project team and project partners

and sponsors. The scale of the process should be relative to the size of the project (for example a two day one man recording project may only involve a simple checklist). The aim of this process is to evaluate how successful the project has been in achieving its aims and to identify the lessons learnt from its successes and the failures of the project in this respect.

3.6.3 A project evaluation should be systematic and the success criteria should be clearly defined. It should ask the following questions:

- has the project achieved the aims and objectives required in the project design?
- what project processes worked successfully and why?
- what project processes encountered problems and why?
- did quality assurance procedures work well? If not why not?
- was the project team sufficiently skilled, empowered and trained?
- were sufficient risk strategies in place and managed?
- were the allocated time and resources sufficient?

3.6.4 The outcome of the project evaluation stage should be a report which details the lessons learnt and demonstrates what should be done differently in any future project. This report should be lodged in the archive and presented to the project sponsor.