

## Identifying research aims at the earliest stage of large development plans, archaeological curation in England

*Tim Allen*

### ***Abstract***

*In the England (and much of the UK) there is a general separation of function between those providing archaeological advice to a public authority and those actually carrying out the archaeological work itself. All costs of assessing and mitigating the impact of development are generally born by the developer. A developer may employ heritage consultants to provide analysis and argument on their behalf, and much useful investigation and assessment takes place prior to application for consent. The archaeological curator has to critically examine material presented by the developer, engage in dialogue with the developer's archaeological advisors and make a justified case to the local or national government decision maker for assessments and mitigations they consider necessary. It is crucial therefore that curators; (Local Government Archaeological Officers and Inspectors of Ancient Monuments) ensure from an early stage that key research questions and methodologies are deployed. The earlier that broad scale research or investigation issues are recognised and introduced, the greater the opportunity is for them to be reflected in planning, conservation and scientific research outcomes.*

**Keywords:** *Development-lead Archaeology, Preventative Archaeology, Commercial Archaeology, Research Frameworks, Environmental Impact Assessment*

## Development-led archaeology in the England

Across Europe there is a significant variation in how archaeological work is overseen and funded in how necessary development led / preventive archaeology is embedded in systems of development management and infrastructure planning (see Bozóki-Ernyey K. 2007; D'Andrea & Guermandi 2008; Demoule 2007; Kristiansen 2009; Schlanger & Aitchison 2010; Schlanger & Salas-Rossenbach 2010). It is clear that the principles set out in the 1992 Valletta European Convention on the Protection of the Archaeological Heritage (Revised) are deliverable through a broad range of possible solutions in national jurisdictions; any assessment of their relative merits must however ultimately focus on the public interest outcomes achieved in the specific social, economic and political context in which it operates.

Public interest can be articulated as lying in the conservation of the significance of heritage assets and the historic landscape in a manner proportionate to their importance and the wider needs of society. Where significance is to be lost, the public interest lies in the best record and scientific understandings that can reasonably be made (proportionate to the importance of what is lost). In this context the word *significance* is applied to those *values* (English Heritage 2008; Priede 2009) for a heritage asset which make it special or interesting or as defined in the National Planning Policy Framework:

*Significance (for heritage policy)*

*The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting. (Department for Local Government and Communities 2012).*

The 'polluter pays' principle has since the introduction of Planning Policy Guidance Note 16 (Office of the Deputy Prime Minister 1990) and its successors Planning Policy Statement 5 (Communities and Local Government 2010) and latterly the NPPF (op. cit.) provided in England a positive economic pressure to minimise archaeological impact (thus underpinning the approach of assessment, minimisation and mitigation in Environmental Impact Assessment (Town and Country Planning (Environmental Impact Assessment) Regulations 2011 as amended) and hence cost, this supports heritage impact as a criteria in options appraisal for routes and designs because the cost of mitigating the archaeological impact falls on the specific project causing the impact, rather than being generalised across all development (as in a taxation funded archaeological model for preventative archaeology).

## Heritage Assets in the English planning and consent systems

Great weight is applied to the conservation of significance in the cases of buildings, landscapes and monuments subject to statutory designations and undesignated archaeological sites demonstrably of national importance in the NPPF (op. cit.). In these cases, public interests are prioritised over purely private benefits. Specific designation-based regulatory regimes (Listed Buildings, Scheduled Monuments, Areas of Archaeological Importance (in certain cities) and Protected Wrecks) are applied in addition to planning consent (Historic England 2016a). Specific criteria are applied within the main planning processes for these assets (and also for Conservation Areas, Registered Parks and Battlefields). The integration of heritage assets into the new design and a sympathetic approach to their conservation can offer many benefits to new developments adding economic value and richness to their project.

### Assessment and investigation - Consents and Controls

Key to all development-led / preventative archaeology is a clear understanding of the likely archaeological significance of the development site and its environs and the impact of the proposed project on significance via physical fabric or setting. This is central to both the information requirements in the National Planning Policy Framework (op. cit.) and the Environmental Impact Assessment regulations (op. cit.) which bring the EIA directive into UK legislation. The other principal decision frameworks relevant to archaeological matters (Development Consent Orders and Scheduled Monument Consent), require a similar emphasis on understanding the significance (Planning Inspectorate 2016 and Department for Culture Media and Sport 2013).

In the English planning system (NPPF op. cit.) heritage assets are a material consideration in the planning process. The National Planning Policy Framework (introduced Spring 2012) (supported by the March 2014 Planning Practice Guide) paragraph 128 of the NPPF states:

*In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum, the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.*

That requirement on the developer side for adequacy of information and assessment is mirrored for the decision maker in the next paragraph of the NPPF (op. cit. Para. 129) in terms of the decision maker's understanding and efforts in coming to a safe planning decision.

*Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.*

The setting of Heritage Assets is as set out above a substantive issue in understanding the impact of new development. Historic England (2015) has published on behalf of the heritage sector Historic Environment Good Practice Note 3, this and previous guidance on the subject issued in 2012 and has created a much more effect framework for analysis and professional discourse than existed formerly.

The other paragraph of the National Planning Policy Framework which deserves quotation in this context is NPPF (op. cit.) Para.141 which sets out clearly the need for appropriate mitigation of archaeological impacts and specifically that require that developers should advance understanding of the assets to be lost. This is important because to record and advance understanding requires research objectives.

*Local planning authorities should make information about the significance of the historic environment gathered as part of plan-making or development management publicly accessible. They should also require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.*

*Copies of evidence should be deposited with the relevant Historic Environment Record, and any archives with a local museum or other public depository.*

## Archaeological Roles

Since in the UK systems the developer is usually the client for archaeological assessment and mitigation work this might be assumed to tend (on the basis of maximisation

of profit) towards the lowest level of investigation, assessment and mitigation. This risk is offset by the role of the archaeological curator who provides independent and critical analysis of what is required (in terms of evidence, analysis and mitigation). The ultimate responsibility and accountability for ensuring a sound planning outcome remain always with the decision maker (in local or national government). Systems for individual and organisational accreditation, with standards and guidance from the Chartered Institute for Archaeologists (CIFA 2016) also make the system more robust. We construct ourselves in the profession as curators through practice, and the narratives we create about our role (Bourdieu 1990). For us to reconcile what we think we are doing, with the outcomes of our work as we and others experience them, we need clear understandings of how the system we operate and reproduce is structured.

The separate Scheduled Monument Consent system for works on protected archaeological sites (which is operated by Historic England (2016c) on behalf of the Secretary of State for Culture Media and Sport (DCMS 2013)). Advice must be sought by planning authorities and the Secretary of State from Historic England and the National Amenity Societies (DCLG 2015) on certain consent applications. The National Amenity Societies (Historic England 2016d) provide both specialist expertise and a breadth of perspective. Additional independent specialist advice from academic institutions, researchers and consultants can also be sought by curators and decision makers where this input is necessary.

Common access to the results of previous studies and investigations (as a baseline to site and setting assessment) is crucial to the functioning of the system. The principal location is the County or Unitary Authority Historic Environment Record (HER), alongside at a national level the National Record of the Historic Environment (NRHE). The National Heritage List for England (NHLE) covers statutory information for designated heritage assets. Signposting of previous mainly commercial interventions is provided through OASIS – soon to be re-launched as Herald (Archaeological Data Service 2016a). This is particularly important in a system with many different bodies undertaking investigations so that new work can readily benefit from the results of nearby or related investigation carried out by others.

Responsible developers understand that the benefits to the quality of the development and their reputation which accrue from engaging early with heritage issues. Early engagement is also vital to controlling financial and timetabling uncertainty that can result from leaving archaeological matters till later in the process (after design and costs have become more fixed). Unforeseen discoveries can still arise but this risk can normally be well managed through staged assessment and field evaluation. In truly exceptional circumstances such as the Bronze Age discoveries at Must Farm, by Cambridge Archaeological Unit, some public funding via Historic England may be found towards the additional expense of unexpected discoveries of the highest

importance. Such requests for assistance can normally only be considered where the process of evaluation, assessment and mitigation had been robustly applied with all reasonable efforts and funds, before and after consent was granted.

The funding and support of both basic research and period / subject based synthesis (Trow *this volume*) by Historic England (formerly English Heritage) and the production of published advice and research agenda by HE and the wider sector is crucial to ensuring that latest scientific and intellectual approaches are applied in commercial work and that research questions are at the heart of archaeological work. The direct relationship between development and the archaeological work done should not result in a formulaic process for the controlled and systematic removal of material. The focus of the work is the proper understanding of the significance of a site and the likely impact of the development (so that the decision maker can understand the planning balance) and should consent be granted the recovery of the public interest in the minimisation of loss of significance and the maximisation of understanding of the past through scientific archaeological investigation and analysis. Whilst it not reasonable in the UK systems to make a developer pay for research unrelated to their development, it is clear that the public interest protected through the planning system lies in the conservation and scientific understanding of the past not a merely the processing of remains into records.

The development of national and regional research assessments, agenda and strategies (e.g. in England 'Regional Research Frameworks', Historic England 2016b) has sought to ground archaeological practice in an explicitly aims and objectives based approach. For archaeological assessment and mitigation to produce meaningful results it must work iteratively, we need therefore to formulate initial questions from the first sight of a project. Archaeological curators are mostly public employees working for local and national governments, agencies and institutions; they have limited time and relationship capital to spend.

'Development led' (preventative) archaeology is still regularly contrasted to 'research archaeology'. In the UK the former is done largely by commercial organisations (contractors), the latter mainly by universities and community groups with public or charitable funds. This use of language belies however a considerable shift in intent over recent years, from both archaeological curators and contractors, and considerable crossover with many contractors undertaking both commercial and not for profit projects.

## **Curatorial Advice - Early Engagement**

For curatorial advice to be effective it needs to be timely and defensible. Governments and planning applicants are focused on the delivery of economic growth and the

advancing of specific development projects. As (for the most part) direct employees of public bodies curators are expected to engage constructively with developers and their representatives. This does not mean that one should ignore potential impacts and risks to the historic environment but it does mean that one should engage in an open and positive dialogue that helps the applicant to understand what information and understand is required and how their scheme might best minimise negative and maximise positive impacts on the historic environment. Sometimes this can mean highlighting positive opportunities in a development or key risks in terms of the costs or uncertainties in mitigating a heritage impact. On the rare occasions when there is an evident substantial practical or public policy obstacle to the delivery of a scheme it is also important (and fair) to make this clear as early as possible. This both gives the applicant the chance to shift their investment of time and resources in other directions and maximises the opportunity to explore other options and solutions. A developer may not always head the advice given but it is a much more defensible position for a curator to have mentioned at the earliest stage an issue which they characterise as material to the granting or refusal of development consent.

In an environment where it is the specific developer of a project who must fund required archaeological works the need for a robust, concise and defensible basis to curatorial advice is obvious, as this is open to challenge by the developer's archaeological advisors. Securely grounding ones' advice in professional judgement the specifics of site conditions and comparable material and locations is crucial. However, in a system where the necessity or efficacy of proposed investigatory methodologies is open to challenge, the role of published advice, guidance and standards that sets up common ground and a defined space for reasonable professional disagreement also of key importance.

To influence outcomes, key research questions must be identified early in the process (especially concerning the absence of knowledge). If an impact on the significance of a heritage asset is to be mitigated or eliminated (or a planning outcome influenced) both the affected historic asset's significance and the impact must be understood. Focused research is required to understand these issues, their gravity and what might be done, and it is rarely tenable to raise them late in project options and design process. This initial view of a project should not pre-speak an evidence-based and iterative approach but is crucial to support a robust Environmental Impact Assessment (EIA) which avoids a reductive and generic approach.

## **Getting the right assessment in place**

Best advice given at the EIA Scoping stage is the foundation of a reasonable and evidenced based approach based upon research. This supports both the public interest

in understanding of our past and in allowing the design process to minimise harm. Archaeological assessment and mitigation requires a research-based approach from day one, for better or worse we never have as little information or as much potential influence as we do at that first point.

For example, written collegiately with curators, academics and contractors the Research Agenda and Strategy for the East Midlands (where I work) was published in (Knight, D., Vyner, B. & Allen, C. 2012) and is applicable to all archaeological work in the region. That is not to say it proscribes other lines of research in any way but it offers a point of reference which is grounded in a Resource Assessment and Research Agenda 2006 (Cooper 2006). In curatorial terms, it offers a reasonable set of issues and questions which one could expect (where relevant) to be applied in the archaeological assessment and mitigation of development in the region. Over time the publication will naturally age and become more distant from current understanding and the results of recent fieldwork, therefore it is subject to an on-going process of review through web based updating and comment (Archaeological Data Service 2016b).

The East Midlands contains significant riverine systems and areas of former wetland. Geo-archaeological approaches to the assessment and understanding of wet and riverine deposits are therefore prominent in the regional research strategy. Quarrying operations present on-going needs for effective and consistent archaeological assessment and mitigation (e.g. Knight, & Spence 2013). On-going Historic England and partners' investment in the analysis of palaeo-channels on the Witham, Trent and Derwent valleys (through air photographic analysis and Lidar) provides a basis for curators and consultants to consistently assess site potential and the past and future landscape context (e.g. Crutchley 2006; Howard & Knight 2016).

The publication by Historic England of detailed technical advice (available on its website) supports both good current scientific practice and the more healthy operation of the market in archaeological services. Curators are able to refer to agreed methodological approaches which leads to better assessment and greater acceptance on the part of developers. Contractors should be able to draw up appropriate site-specific methodologies and prepare tenders with a degree of confidence that they will not be undercut by work that treats the material in a more cursory and cheaper manner.

Structured approaches to the understanding of development sites with complex geo-archaeological make-up are particularly important if areas of sensitivity, importance and mitigation are to be found (at a stage where this can be reflected in for instance quarry or housing layout or linear infrastructure routes). At the time of writing Historic England is about to publish advice on the assessment and preservation of wet remains and is supporting research led by Dr Chris Carey of the University of Brighton to develop national published advice on deposit modelling for archaeological projects. The prioritisation of specific published advice comes from the on-going



dialogue between HE Local Government Archaeologists, academic researchers and the commercial archaeological sector, in which the needs of all parties for reference points and agreed approaches are identified.

In work currently underway in the East Midlands illustrates the importance of early engagement between curators and large scale development. The Triton Knoll Electrical Connection (by RWE with Royal Haskoning, RSK, Headland and Allen Archaeology) was recently granted a Development Consent Order for a below ground cable project to bring wind energy from off-shore turbines. In early stages of project planning for the 60km on-shore section, desktop survey and analysis of Lidar data informed the avoidance of features with evidently high archaeological importance, as part of the submission for consent an outline scheme of archaeological investigation was provided on the basis of detailed discussion with curators. This has provided a degree of certainty as to the level of staged archaeological investigation which will be applied and the palette of techniques to mitigate impacts. In particular, a scheme wise approach to a landscape of complex alluvial and marine sediments is in place.

At the former Rugby Radio Station a twin scheme of urban extension and rail freight terminal is underway under separate Nationally Significant Infrastructure and local authority consents. Coordinated case handing from an early pre-application stage allowed the significance of the site's preserved landscape of open field farming (ridge and furrow) to be appreciated and common ground to be established between parties. Post-consent this has led to innovative analytical work now underway both in terms of the phasing and structure of the landscape and the fine grained understanding of the formation of field strips. This was only possible through a process of dialogue between curators at Historic England and Northamptonshire and Warwickshire Councils and the consultants and contractors for the developers CGMS, Oxford and Cotswold Archaeology.

The suburb of Little Chester in Derby has required a scheme of flood defence to protect lives and property from increasing dynamic weather events. Early in project planning and discussions between curators and the Environment Agency it became apparent that significant intrusive works were going to be required through the Roman fort which partly underlies the modern settlement. Whilst the fort itself was subject to additional protection as a scheduled monument it was suspected that the protected area did not capture the full extent of nationally important remains. A staged programme of the archaeological investigation was set in place with work by Oxford Archaeology and Trent and Peak Archaeology which minimised impact and also meant that the archaeological work could be practically achieved which would address substantive research questions about the site. Mitigation work in advance of construction is currently underway by Trent and Peak Archaeology reflexively using the results investigation to finesse the line of the flood defence. This has allowed the

engineering interventions to not only be minimal but also archaeologically meaningful. The archaeological work is delivering for the first time in a site previously subject to numerous interventions a clear sequence and layout for defences and occupation tied to an environmental sampling strategy in which specific research questions are addressed and the results of rapid assessment feedback into excavation.

## Conclusion

How can archaeological curators and contractors integrate research into large-scale development projects and avoid slipping into mechanical processes which simply translate and transform remains to archive? The answer lies, as explored above, in the early identification of the potential significance of a development site and the techniques of investigation and assessment required to effectively characterise this. Period and regionally based research frameworks and synthesis, current accessible local and national datasets and the results of mapping projects and specific technical research are all crucial. Timing remains of the greatest importance in bringing these resources to bear on a particular project. The UK systems largely separate the function of curatorial advice from that of archaeological fieldwork. In this model research priorities need to be identified as early as possible, ideally at pre-application / EIA scoping stage for them to be translated into tangible outcomes of heritage conservation or scientific research.

Without being able to tell to ourselves the story of our role in the archaeological research process we can neither defend our position nor critically assess our success.

## References

- Archaeological Data Service 2016a. <http://oasis.ac.uk/pages/wiki/Main>.
- Archaeological Data Service 2016b. <http://archaeologydataservice.ac.uk/researchframeworks/eastmidlands/wiki/>.
- Bozóki-Ernyey K. ed. 2007. *European Preventive Archaeology. Papers of the EPAC Meeting, Vilnius 2004*, National Office of Cultural Heritage, Hungary – Council of Europe.
- Bourdieu P. 1990. *The Logic of Practice*. Polity Press.
- Cooper, N. ed. 2006 *The Archaeology of the East Midlands*, University of Leicester.
- D'Andrea A. & Guermandi M.P. eds. 2008. *Strumenti per l'archeologia preventiva, Esperienze, Normative, Tecnologia*. Budapest: EPOCH/Archaeolingua.
- Department for Communities and Local Government 2012 National Planning Policy Framework. <https://www.gov.uk/government/publications/national-planning-policy-framework--2>.
- Department for Communities and Local Government 2014 Planning Practice Guide. <http://planningguidance.communities.gov.uk/>.

- Communities and Local Government 2004 - PPS5. <http://webarchive.nationalarchives.gov.uk/20120919132719/www.communities.gov.uk/documents/planningandbuilding/pdf/1514132.pdf>.
- Crutchley, S. 2006; Light Detection and Ranging (lidar) in the Witham Valley, Lincolnshire: an Assessment of New Remote Sensing Techniques. *Archaeological Prospection* 13.
- DCLG 2015 Arrangements for Handling Heritage Applications. <https://www.gov.uk/government/publications/arrangements-for-handling-heritage-applications-direction-2015>.
- DCMS 2013 - Scheduled Monuments. <https://content.historicengland.org.uk/content/docs/guidance/scheduled-monuments-policy-statement-dcms>.
- Demoule J-P. ed. 2007. *L'archéologie préventive dans le monde, Apports de l'archéologie préventive à la connaissance du passé*. Paris: La Découverte.
- English Heritage 2008. Conservation Principles <https://content.historicengland.org.uk/images-books/publications/conservation-principles-sustainable-management-historic-environment/conservationprinciplespoliciesguidanceapr08web.pdf/>.
- Historic England 2016a. Heritage Consents. <https://historicengland.org.uk/advice/planning/consents/>.
- Historic England 2016b. Research Frameworks. <https://historicengland.org.uk/research/support-and-collaboration/research-resources/research-frameworks/>.
- Historic England 2016c. Scheduled Monument Consent. <https://historicengland.org.uk/advice/planning/consents/smc/>.
- Historic England 2016d. Amenity Societies. <https://historicengland.org.uk/advice/hpg/hpr-definitions/n/536357/>.
- Howard, A.J., Knight, D., Coulthard, T., Hudson-Edwards, K, Kossoff D. & Malone S. 2016 Assessing riverine threats to heritage assets posed by future climate change through a geomorphological approach and predictive modelling in the Derwent Valley Mills WHS, UK. *Journal of Cultural Heritage* 19: 387–394.
- Knight, K., & Spence, U. 2013. *Aggregates and Archaeology in Nottinghamshire*. York Archaeological Trust.
- Knight, D., Vyner, B. & Allen, C. 2012. *East Midlands Heritage, An Updated Research Agenda*. University of Nottingham and York Archaeological Trust.
- Kristiansen, K. 2009. Contract archaeology in Europe: an experiment in diversity. *World Archaeology*, vol 41(4): 641–648.
- Office of the Deputy Prime Minister 1990 PPG16.
- Planning Inspectorate 2016 – Nationally Significant Infrastructure Projects. <https://infrastructure.planninginspectorate.gov.uk/>.
- Priede, C., 2009. *Understanding Landscape Values: A Scottish Highland Case Study*. British Archaeological Reports 502.
- Schlanger, N. & Aitchison, K. eds. 2010. *Archaeology and the global economic crisis. Multiple impacts, possible solutions*. Terevcuren: CultureLab Editions.
- Schlanger N., & Salas-Rossenbach, K. 2010. 'Quality' Advice from French Preventative Archaeology, *Current Swedish Archaeology*, Vol 18: 41–44.
- Town and Country Planning (Environmental Impact Assessment) Regulations 2011 as amended <http://www.legislation.gov.uk/uksi/2011/1824/contents/made>.