

RICS Practice Standards, UK

Historic building conservation

1st edition, guidance note



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Foreword

This guidance note should be regarded as essential reading for any RICS member practising or working on any old and traditionally constructed building or structure. One in five buildings in the UK date from before 1914, meaning that surveyors of all disciplines are likely to encounter such a building at some stage in their career.

General guidance does not cover all situations and the practitioner's skill will lie in tailoring his or her knowledge to suit each case. The diverse nature of historic buildings and the owner and user's interests in them means that surveyors working in this field, however briefly, require a rounded understanding of the whole subject before any truly successful solution can be identified. The chapter on the philosophy of historic building conservation is intended to help equip the competent surveyor to balance apparently conflicting demands in the best interests of owners and the wider community.

It is hoped, therefore, that surveyors will draw upon this guidance note to develop their skills and expertise in this area. An appendix of further reading and study opportunities has been included to assist readers in this endeavour. There are many formal learning opportunities at post-graduate level and the RICS Conservation Forum welcomes new practitioners providing discussion and peer support as they explore the past through our built heritage.

Chartered surveyors accredited in the field of historic building conservation have demonstrated skills for complex work involving protected structures in curatorship or the administration of publicly-funded aid. Surveyors who have extensive experience of historic building work are encouraged to gain this highly-respected acknowledgment. The weblink to the RICS Accreditation Scheme is appended with further information and advice.

The diverse nature of conservation projects dictates that no single approach can embrace all situations. For conservation projects, the case for developing the approach to suit the project is far greater than usual. In spite of the unique technical and management challenges our old buildings pose, it is the history of these buildings, their previous use and how to adapt them for a modern sustainable use that provides interest and can inspire in us a passion for conservation. The modern contexts of sustainability, cultural identity and placemaking add to these challenges, which makes working with our historic environment far from easy, but ultimately a highly rewarding experience. This guidance note is designed to assist the practitioner in this aim.

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Chairman of the RICS Conservation Forum

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Contents

<i>Foreword</i>	<i>iii</i>
<i>Acknowledgments</i>	<i>iv</i>
RICS guidance notes	1
1 Philosophy	2
1.1 Introduction	2
1.2 Working with old buildings	2
1.3 Philosophy	3
1.4 Research	5
1.5 Beneficial use	5
1.6 Taking advice	6
1.7 Securing the future	6
1.8 Guidelines – philosophical and practical	6
1.9 Questions	7
2 Conservation Plans	8
2.1 Definitions	8
2.2 Purpose of the Conservation Plan	8
2.3 Production of the Conservation Plan	9
2.4 Briefing	10
2.5 The implementation of Conservation Plans	11
2.6 Management Plans	11
3 Survey and inspection	13
3.1 Development of brief and agreement with client	13
3.2 Further considerations	14
3.3 Appraisal of historic and cultural development	15
3.4 Appraisal of the public/statutory legal environment	15
3.5 Appraisal of the physical environment	16
4 Maintenance management for heritage buildings	20
4.1 Introduction	20
4.2 Maintenance: the optimum intervention	20
4.3 Implications of building conservation objectives for organising maintenance	22
4.4 Best practice approach to the maintenance of heritage buildings	25
5 Projects	27
5.1 Generally	27
5.2 Preliminary services – Stages A and B: briefing and appraisal	28
5.3 Pre-contract services – Stage C: outline sketch proposals	29
5.4 Pre-contract services – Stage D: detailed design	30
5.5 Pre-contract services – Stage E: approval	31
5.6 Pre-contract services – Stages F to H: tender documentation and tenders	31
5.7 Post contract services – Stages I and J: administer contract works	32
Appendix A Further reading	34
Appendix B Web resources	35

RICS guidance notes

This is a guidance note. It provides advice to RICS members on aspects of their practice. Where procedures are recommended for specific professional tasks, these are intended to embody 'best practice', i.e. procedures which in the opinion of RICS meet a high standard of professional competence.

Members are not required to follow the advice and recommendations contained in the note. They should, however, note the following points.

When an allegation of professional negligence is made against a surveyor, the court is likely to take account of the contents of any relevant guidance notes published by RICS in deciding whether or not the surveyor had acted with reasonable competence.

In the opinion of RICS, a member conforming to the practices recommended in this note should have at least a partial defence to an allegation of negligence by virtue of having followed those practices. However, members have the responsibility of deciding when it is inappropriate to follow the guidance.

On the other hand, it does not follow that members will be adjudged negligent if they have not followed the practices recommended in this note. It is for each surveyor to decide on the appropriate procedure to follow in any professional task. However, where members depart from the practice recommended in this note, they should do so only for a good reason. In the event of litigation, the court may require them to explain why they decided not to adopt the recommended practice. Also, if you have not followed this guidance, and your actions are called into question in a RICS disciplinary case, you will be asked to justify the steps you did take and this may be taken into account.

In addition, guidance notes are relevant to professional competence in that each surveyor should be up-to-date and should have informed him- or herself of guidance notes within a reasonable time of their promulgation.

1 Philosophy

1.1 Introduction

This opening chapter attempts to provide a brief oversight of building conservation in relation to surveying practice. Later chapters deal in more detail with all the issues raised here, but for the guidance note to serve its purpose it should be read from the beginning, without jumping to the chapter or chapters that seem most relevant to the individual reader. ‘Best practice’ in the field of building conservation cannot be neatly subdivided into rules and precedents relating to each subject heading or each professional specialisation. It calls for a broad understanding of the whole subject before attention can usefully be focused on a particular object.

1.2 Working with old buildings

Old buildings of traditional construction account for a significant proportion of the national building stock. Their sheer numbers make it certain that nearly all building professionals will have to deal with them from time to time and some practitioners will be involved with them all of the time. Whether protected by listing or not, these are the buildings that determine the familiar character of many of our towns and villages and they need to be handled with knowledge and skill.

The practitioner needs to be familiar at the outset with the formal protective measures for buildings of special architectural or historic interest. The principles embodied in the legislation, the way buildings are selected for listing and the consequences of listing in terms of the control mechanisms are clearly set out in the official circulars and English Heritage guidance notes listed in Appendix B. Parallel systems exist for Northern Ireland, Wales (by CADW) and Scotland (by Historic Scotland).

Designation in Northern Ireland

Under Article 42(1)(a) of the *Planning (Northern Ireland) Order* 1991, the Department has a statutory duty to compile lists of buildings of special architectural or historic interest.

‘42(1) The Department

(a) shall compile lists of buildings of special architectural or historic interest and

(b) may amend any list so compiled.’

PPS6 ‘Planning, Archaeology and the Built Heritage’ March 1999, amplifies the listing criterion. Although the Northern Ireland Environment Agency (NEIA) has non-statutory rules on their website, a new ‘Principles of Selection’ document is in preparation.

It is worth noting that the majority of buildings that do enjoy formal protection are not great national monuments or rare objects from remote times. They are predominantly of architecturally familiar kinds, most of them built in the last 300 years and happily serving a variety of modern beneficial uses. Domestic buildings alone account for a very large number. It is a simple statistical fact that, one in five of all houses in Britain was built before 1900.

Heritage Protection Reform

After industry-wide consultation, a new *Heritage Protection Bill* has been prepared which aims to merge heritage protection for buildings, monuments, wrecks, battlefields, and parks and gardens combining them in a single Historic Asset Register, and using a single historic asset consent system to monitor and control change, replacing the current Listed Building and Scheduled Ancient Monument Consent. Conservation Area controls, previously weakened by the decision in *Shimizu*, are to be restored formalising the withdrawal of permitted development rights, including for part demolition, and using area-based design guides to preserve the character of the designated areas. Detailed parts of the legislation are proposed to perpetuate ecclesiastical exemption and current enforcement and repair procedures. An interesting innovation is the proposed introduction of heritage partnership agreements aimed at reducing bureaucracy on large or dispersed estates by agreeing consent parameters for repetitive or staged work.

Such buildings, domestic and non-domestic, generate a great volume of maintenance, restoration and refurbishment work and it is inevitable that much of this work will continue to fall to practices with no established claim to building conservation expertise.

It is hoped that the guidance given in this note will be found useful by all practices that deal, one way or another, with old buildings, but it is not to be regarded as a substitute for specialist conservation training. Post-graduate diploma and degree courses in building conservation are now readily available (a number of them are listed in Appendix B) and many practices will find it advisable to have at least one member of staff who has successfully completed such a course. Those that undertake much work on Listed Buildings, (particularly if they are likely to seek grants from national agencies) will need to have a fully accredited conservation surveyor leading the team.

1.3 Philosophy

Before embarking on works to a building of special architectural or historic interest, it is necessary to have an understanding of the philosophical basis of building conservation. This is not an arcane concept, beyond the grasp of the practically minded. Practitioners with a keen interest in the nature of streetscapes, landscapes and structures, coupled with a sufficient knowledge of architectural and building history will find that philosophical questions often have common sense answers.

Perhaps the first thing to recognise in dealing with protected buildings is that the practitioner has an additional, invisible client. Preservation laws, since the earliest times, have been shaped by the idea that old buildings, in many different ways and at many different levels, embody the past history of a place, a society or a way of life. They bring us (again, in a variety of different ways) important messages from the past, which we should take care to pass on intact to future generations. This imposes obligations of custodianship that go beyond the interests of the owner at any particular time.

The professional adviser in dealing with a protected building has the onerous responsibility of safeguarding the special interest of the fabric for the future, as well as serving the interests of his or her client for the present. The skilled

conservationist does not see this as an unreasonable additional burden, to be shrugged off as quickly as possible (an attitude that frequently ends up by creating unnecessary conflict, delay and expense) but rather as an interesting challenge, to be met with care and ingenuity.

Different cases will present different problems and may call for quite different solutions, but it is possible to make some general points applicable to practically all cases. It will be observed that philosophical and practical considerations run closely hand in hand:

- The use that best reflects the history of a building and the one most likely to secure its effective preservation is usually the one for which it was originally designed. The farther that one moves from that use, imposing different patterns of activity, intensity of occupation, spatial demands and distribution of loads, the greater the conservation problems that are likely to arise.
- Aside from questions of use, the historical significance of a building and the ‘messages’ it brings from the past, reside in its architecture and its built fabric. If the fabric is subjected to wholesale renewal or unnecessary disturbance, its interest will be damaged. It follows from this that a policy of minimum intervention is nearly always to be recommended. It is rarely wrong to leave undone that which does not, actually and unarguably, need to be done to maintain structural and architectural integrity.
- Traditional buildings quite often have structural features peculiar to their time, which seem questionable to modern eyes but are simply the historical norm. The buildings may have also often undergone a series of early structural movements, which have reached equilibrium. Neither the unusual features nor evidence of past movements should be treated as defects requiring remedy until it is firmly established that they are a present threat to the life of the building.
- The introduction of modern technologies, structural elements and materials into an old building, however well-intentioned, can produce unexpected and irreversible consequences. A building made up of small, traditional components with short spans, numerous joints, soft mortars, porous renders, lacking a damp proof course but having the ability to ‘breathe’, can tolerate many little interferences and atmospheric variations. The intrusion of large inflexible components with long spans and fewer joints, with cement mortars, hard plasters and unyielding barriers to moisture and air movement, is nearly always inadvisable. The existing materials and structural methods have given the building the long life it has already enjoyed and should, to a large extent, determine the nature of any new work.
- Dealing with these issues makes demands on the practitioner. There are no shortcuts. It is an intimate knowledge of the building itself, rather than the application of a set of rigid commandments that will produce the ‘right’ answers to the problems that the building presents. The first need for practitioners is a sound background knowledge of architectural and building history (and, as importantly, local history) to enable them to ‘read’ and understand the building and its context. As already noted, they also need to have an absorbing curiosity about the nature of buildings and the ways that different kinds of buildings behave. Given these personal qualities, the detailed physical examination of a fabric, together with any documentary research that may be needed, will reveal far more than would

be evident to a less well-informed observer and will direct thinking toward the least intrusive and most sustainable solutions.

1.4 Research

The building itself, properly investigated, will provide the most reliable information about itself and about what has happened to it in the past. In many cases, however, some documentary research will be needed to obtain a full understanding before any judgments are made regarding interventions into a building fabric. In this connection, it should be understood that research does not consist solely of reading what (if anything) has appeared in print. It is not possible here to offer a beginner's guide to primary sources or to the working methods of the documentary researcher, but two simple points may be made:

- The description of a building given in the statutory list is no more than a starting point for the investigator. It has no statutory force, being intended to do little more than identify the building. Even the more recent list descriptions, which may seem to be quite detailed, are always (at least, at present) largely based on secondary sources. They are not definitive statements of what is and what is not of importance.
- Published accounts vary widely in reliability. Popular histories containing no references to primary sources should always be treated with reserve. The fact that two or three such books contain the same 'facts' may simply mean that the later authors have copied the mistakes or unsupported conclusions of the first.

1.5 Beneficial use

The question of use has already been touched on but needs to be considered further.

- Most buildings that the practitioner will be dealing with will be, or could be, in modern beneficial uses and the maintenance (or re-establishment) of such uses will nearly always be a vital consideration. Questions of utility should not be seen as invariably being in conflict with the demands of conservation. An appropriately employed building is less at risk than one that is ill-employed or under-employed.
- Some economically desirable uses may, nevertheless, be damaging from a conservation viewpoint. An important duty of the practitioner is to advise on the ways in which a building should best be used and what intensity of such uses it can reasonably sustain without damage to its fabric or its special interest.
- The question of interpretation should not be underrated. A use that leaves the old fabric almost intact but which makes so many visual interferences that the essential character of the building becomes thoroughly obscured, may be as undesirable as physical erosion.
- Particularly destructive pressures can arise when a building changes hands at a valuation based on unrealistic expectations. This can often lead to proposals for major reconstruction to accommodate uses that the building cannot reasonably adapt to, culminating, after an inevitable refusal of consent, in an insistence that a perfectly sound building has 'reached the end of its useful life' and should be demolished.

1.6 Taking advice

Even acknowledged conservation specialists cannot be expert in all things. It is necessary to know the limits to one's own knowledge and when and from whom expert advice needs to be obtained. The lead professional is, nevertheless, responsible for the ultimate outcome and is not absolved from responsibility for those areas where external expert advice has been sought.

Uncommon, vulnerable and fragile buildings and those exhibiting complex problems may call for teams of conservationists from a variety of disciplines (structural engineers, building scientists, archaeologists, and so on) and the leader of the team must be able to organise their skills to produce satisfactory solutions, working within a clear philosophical framework.

1.7 Securing the future

The conservationist's responsibility does not end with making the building structurally safe and architecturally whole. Its future health also needs to be provided for:

- In many important cases, a Conservation Management Plan will have been prepared and formally adopted by the stakeholders. At the very least, a maintenance plan, incorporating advice on conservation issues, should be presented to the client. The practitioner may not be in a position to see that the plan will be acted on in future, but it has been truly said that a great deal of what is called preservation is actually a matter of catching up with unwisely deferred maintenance. A well-maintained building should never need an expensive rescue campaign.
- Knowledge gained during any major programme of works should be made available to those involved with the building in the future. Detailed photographic, drawn and written records of the building 'as found' and of what was subsequently done to it should be kept in a readily accessible archive. Consideration should be given to depositing representative records with local or, in the more important cases, national collections.

1.8 Guidelines – philosophical and practical

Manifestos and charters setting standards and guidelines for conservation work have appeared regularly over the last century and more. Nearly all have validity for the modern practitioner engaged in the particular areas they deal with, but such documents are mainly concerned with establishing fundamental principles and inculcating sound attitudes in practitioners. They are not designed to provide simple formulae for solving complex problems.

Every building or place encountered will present its own peculiar problems calling for individual solutions. Guidelines and charters should be observed so far as they can be seen to be applicable to the particular case, but it is the practitioner alone who must arrive at appropriate solutions, through an intimate knowledge of the building or the place.

In this connection the Burra Charter (Australian, but one that has achieved world-wide recognition), places emphasis on the 'cultural significance' of a place or building as a basis for informed action. This approach insists on acquiring an intimate knowledge of the building, its authorship, origin, structural character and pathology and its geographical, historical and social

contexts before any intervention is decided upon. It is a practical approach with a sound philosophical basis and has proved to be of value to practitioners at every level of conservation activity. It is recommended as essential reading.

1.9 Questions

It will be clear from all the foregoing that conservation practitioners will, at the outset of any project, need to formulate questions that call for answers before courses of action are determined. The questions will vary according to the nature of the building and its present circumstances, but the following may be regarded as a minimum list:

- What is the precise nature of the special architectural or historic interest that makes this building or place worthy of protection?
- What is its place in architectural, vernacular or industrial building history. What were the circumstances that led to its being built?
- Is it associated with important people or events?
- How is it constructed? Of what materials? Is it typical or unusual of its kind? Does it have notable artistic, structural, technical, etc. features?
- What alterations, additions and subtractions has it undergone in the past and for what reasons?
- What was its designed use and is that, or a closely similar use practicable today?
- What is its physical state? Are any life-threatening conditions present?
- What external pressures are at work to help or hinder its preservation and best use?
- What is its relationship to its context?
- What contributes to its setting?
- How does it contribute to its setting?

2 Conservation Plans

2.1 Definitions

Understanding a historic site is a pre-requisite to contemplating interventions. This means understanding what is significant and important about it.

There are two basic ways in which one can gain an understanding of significance and importance, a re-active way and a pro-active way. The re-active way is to undertake a Heritage Impact Assessment assessing the impact of any proposal and determining mitigation measures.

The pro-active way is to prepare a Conservation Plan or a Conservation Statement. A Conservation Plan, produced as a result of a detailed study, should be sufficient to support major interventions into important sites. A Conservation Statement is a mini Conservation Plan (also described as an Outline Conservation Plan). This should contain all available information, at least containing the chronology of history and historical development, and can form the basis of a Conservation Plan.

Identifying significance is the foundation of a Conservation Plan taking into account present and historical use. This requires an understanding of the definition of significance. The Australian Burra Charter provides the following meaning of 'Cultural Significance': *'aesthetic, historic, scientific or social value for past, present or future generations'*.

Vulnerability describes the susceptibility of the asset's cultural significance to harm from neglect, interventions and alterations. The means of improving resilience and reducing vulnerability should be established in the Conservation Plan. The Conservation Plan can also include measures to enhance significance, for example, carrying out interpretive work.

The Conservation Plan should include conservation policies, setting out the approaches suggested by the research. The means to implement policy is contained in a Management Plan, which may be separate document as it is likely cover broader matters than those targeted by the Conservation Plan, such as resources, phasing, and risk management.

2.2 Purpose of the Conservation Plan

Production of a Conservation Plan provides an opportunity to:

- (a) establish research or facts that would or should be required at some stage in the future, for example, when producing the detailed specifications of work;
- (b) draw together information into one place;
- (c) provide a management tool;
- (d) test opinion on difficult technical and philosophical issues;
- (e) set down policies in an open, formal consultation giving credibility to policy and the decisions taken from them;
- (f) fill gaps in information; and
- (g) prioritise work.

2.3 Production of the Conservation Plan

There is no set method by which Conservation Plans or Management Plans are produced. Obvious options for clients to choose from include:

- (a) taking the 'star approach', as advocated by James Semple Kerr, in which one person with all the required experience, expertise and skill should produce the plan;
- (b) directly appointing an in-house team leader to coordinate specialist input and then collate the plan; and
- (c) appointing an external consultant who will form an expert team with other sub-consultants.

Before deciding the method by which the plan is going to be produced, one must determine:

- what the plan will actually entail;
- when it has to be completed;
- what information is readily available and has any of the work already been done;
- what resources are available (of any kind) to produce it; and
- requirements of any external funding bodies.

A useful guidance note in deciding what is required is the Heritage Lottery Fund publication, *Conservation Plans for Historic Places*, which sets out the primary objectives of Conservation Plans.

- Understand the site by drawing together information about it, including documents and physical evidence in order to present an overall description of the site through time, as well as a description of each of the components which make up the site.
- Assess the significance of the site both generally and in detail for each of the main components, making specific value judgments about the historical, biological, wildlife, geological, cultural, archaeological, technological, social (recreational, public), and other types of significance.
- Define those issues which are affecting the significance of the site or have the potential to do so in the future, including physical condition, ownership objectives, uses, areas and boundaries, siting, available resources, external factors, existing information and gaps in our knowledge, past damage, public and community expectations, access, statutory controls, and potential conflicts.
- Develop conservation policies that will ensure that the significance of the site is retained in any future management, use or alteration. These policies will be in accordance with all relevant legislation, government guidance, local/structure plan policies, European Community directives, and other forms of policy, and will make use of guidance from non-statutory organisations.

2.4 Briefing

Briefs for the producers of Conservation Plans should cover the following scope as a suggested minimum:

- overall purpose of the plan;
- what will be done;
- why it will be done;
- by whom;
- timescales;
- any specific requirements; and
- targets and benchmarks by which outcomes can be measured.

English Heritage has produced a 'Model Brief for a Conservation Plan'. This is a good template for drafting a brief, which should then be tailored to each commission and clearly set out the procurement process.

There is no prescribed way to procure a Conservation Plan from a consultant. It is important to detail the attributes sought from a consultant through a pre-qualification process. Views on the importance of attributes can vary; some will be considered more important than others and so these are weighted in the selection process. Consultants considered for an appointment should be assessed for:

- a broad understanding of historic sites, the issues that arise, from management to technicalities and philosophies, including all related legalities. Having knowledge of fabric analysis techniques and understanding what ingredients make up significance;
- leadership and teamwork; project management and co-ordination skills; communication. Having the ability to brief other consultants, ensuring efficient delivery without gaps or overlaps;
- ability to assimilate large amounts of information and summarise it. Drafting skill to produce informative and interesting documentation;
- proof of the required skills; and
- resources.

The production of a Conservation Plan is a most demanding process requiring consultant skills from some or all of the following areas:

- archaeology;
- architectural history;
- conservation architecture and new design;
- collections management;
- conservation engineering;
- conservation planning;
- ecology;
- garden or landscape history;
- heritage management;
- interpretation;
- measured survey and recording;
- museum curation;
- object conservation;

- project management;
- technological history; and
- wildlife and nature conservation.

The same principles as are applied to the lead consultant appointment should be used for the appointment of consultants for individual parts of the work. The lead consultant should spell out the required outputs in any sub-consultancy briefs to ensure consistency.

The lead consultant has a difficult task assessing the amount of work involved before accepting the brief. Some sites are not well recorded, adding to the difficulty of understanding the site. Other sites are so well recorded that the available information is overwhelming. It is important for the consultant to understand this issue at the outset. A well developed brief can avoid misunderstandings at this stage.

2.5 The implementation of Conservation Plans

During implementation, a completed Conservation Plan is a working document and a valuable management tool.

The process of producing a Conservation Plan enhances stakeholder confidence during implementation, provided that:

- the plan has been properly resourced and that it is a proper Conservation Plan and not simply a Heritage Impact Assessment or justification statement;
- it is produced by experts with proven credibility; and
- it is produced in consultation with the interested parties (e.g. CADW, Northern Ireland Environment Agency – Built Heritage, English Heritage, Historic Scotland as well as user groups and partners).

If a Conservation Plan does not meet these conditions its usefulness will be diminished. The advantage of implementing works based on a sound Conservation Plan is that sensitive issues have been properly considered.

A Conservation Plan does not have to be in place for significance to be considered. Good information enables good decisions. A good decision about the treatment of a historic building, however, would consider significance, even if a Conservation Plan did not exist.

2.6 Management Plans

Conservation policies identified in Conservation Plans are advanced using Management Plans. It is beneficial to produce a Management Plan concurrently with a Conservation Plan ensuring both have the same degree of credibility.

2.6.1 Policies into action

The Conservation Plan can contain policies that can be acted upon in different ways. For example, a policy endorsing minimum intervention can be contradictory when applied to vulnerable and deteriorating elements. Taken in context, with a policy for monitoring deterioration, the proper conservation work would be commissioned, but simultaneously preparing a Management Plan allows apparently conflicting policies to be resolved early on.

Because of the diversity of historic places, conservation policies often address broader issues. The Management Plan for a property to implement a policy for improved access and interpretation would not only deal with the intellectual and physical issues, but also the resources and business case to support any intervention.

2.6.2 Management Plan document

The Management Plan document may be as detailed as the Conservation Plan document containing guidance on:

- the endorsement of the conservation policies by the accountable bodies;
- decision making processes which embody conservation policies;
- planning for interventions in detail. Policy might cover a range of issues from minimum intervention to contractor selection, which requires additional research and analysis as appropriate; and
- specific areas that have to be managed (e.g. maintenance, development of visitor facilities, etc.).

2.6.3 Heritage Impact Assessments

When work is proposed heritage impact assessments are used reactively to ensure that significance is protected or enhanced. In practice, using a heritage impact assessment ensures that conservation is undertaken, on the basis that if significance is not protected, the work that is undertaken cannot be regarded as conservation.

2.6.4 Producing a Heritage Impact Assessment

The work proposed in drawings or specifications is assessed against a study of significance explaining why the fabric is important. The impact of the work proposed on the significance of the building fabric is assessed using new research as necessary.

Just as a Conservation Plan would link to a Business Plan or Management Plan in order to consider economic sustainability, a Heritage Impact Assessment might include an economic justification or options appraisal to show how the relative merits of the scheme have been considered.

3 Survey and inspection

3.1 Development of brief and agreement with client

The instruction to survey or inspect a property is usually framed up within the client's brief. In taking a brief from the client, the surveyor is responsible for assessing the client's requirements and formulating an agreement. There is extensive RICS guidance on this subject contained in guidance notes and model forms of agreement.

In common with all areas of professional services provided by RICS members the following points should be considered in forming such an agreement:

- the terms of the agreement should be clearly understood by the client or their surveyor and wherever possible confirmed in writing prior to the commencement of work;
- the context of the instruction should be set out, identifying the properties, client, surveyors and any other participants in the research process;
- the agreement should clarify the scope of work, identifying the quantity and quality of work, and agreeing a timescale for delivery, format of reporting, and payment structure;
- the relevant legal system should be stated (say English Law applies) and any subsidiary legislation taken into account (such as *Contract (Rights of Third Parties) Act 1999*, *Housing Grants, Construction and Regeneration Act 1996*; and
- the agreement must conform to RICS rules for the management of client accounts, conflicts of interest, and dispute resolution.

Where the survey foreseeably includes protected structures, the following services should generally be specifically included:

- ascertainment of the status and extent of protection;
- ascertainment and advice on the likely effects of protection on the client's duties and proposed use;
- advice on the effects of protection within the context of the specific instructions; and
- assessment of the existing structure by inspection for obvious physical deviation from the list entry or non-compliance.

Additional desk study work for Historic Buildings Surveys

- Contact with English Heritage, CADW, Historic Scotland, Northern Ireland Environment Agency or the Local Planning Authority to find out if the building is listed, at what grade, and the date of listing, obtaining where available, a copy of the list description.
- Contact with the Local Planning Authority to find out if the building is located in a Conservation Area.
- Contact with the County Archaeological Service to establish if it is a scheduled ancient monument or otherwise entered on the Heritage Asset register (designated to be of local archaeological interest, battlefield, parks, garden, World Heritage Site etc).
- Contact with the Local Authority to find out if the building is included on a Local List, or Register of Buildings at Risk.
- Establish by physical inspection the location of the ‘curtilage’ and establish what parts of the structures post date 1947, whether the building complies with its lists description, whether any breach of statutory control has occurred.
- Establish from the Local Planning Authority whether any breach is ongoing, whether any notices in respect of *Planning (Listed Buildings and Conservation Areas) Act 1990* or other enforcement notices are in force, or likely to be served.

3.2 Further considerations

For instructions concerning historic assets there are particular identifiable risks which should be borne in mind by surveyors when taking a client’s brief:

- The surveyor’s work could be unusually curtailed or limited by statutory controls on destructive exploratory works.
- For historic and culturally unique assets, the surveyor may be required to identify and analyse construction techniques, materials and elements which are rare, fragile or unstable. This may entail specialist survey techniques, access, or research, beyond the scope of the surveyor’s experience.
- In following a reasonable trail of inquiry, the surveyor may be expected to carry out a level of research beyond the scope of the usual agreements for professional services.
- A chartered surveyor will owe a duty of care above the legal minimum, and will be required by professional standards to act both in the client’s and the public’s interest.

It is recommended, therefore, that surveyors build into their agreements with their clients some flexibility or agreed parameters to bring the client’s attention to these risks, controlling possible exposure, for instance:

- agreed hourly rates for work which cannot be accurately forecast at the outset. This could include agreed fee ceilings where the client can agree to successive stages of inquiry without entering into an open-ended commitment;
- tendered sub-consultancy rates/fee quotes/contractor’s estimates for specialist access, survey techniques or research; and
- clear identification of professional services that might be required but which are not included in the agreed brief, e.g. archaeological recording.

3.3 Appraisal of historic and cultural development

The surveyor, in carrying out the usual pre-inspection desk studies, would be expected to carry out a desk study of the relevant documentary evidence to establish the age, constructional form and performance of a site, or artefact. The common form of research includes examination of:

- deeds and papers held on the public record or provided by the client, their advisors to the surveyor. Documents may also include records held by the existing owner, former owners, occupiers and may include a previous archaeological investigation, Conservation Plan, or a statement of significance.
- land registry data;
- records held by the National Monuments Record of English Heritage, Historic Scotland, Northern Ireland Environment Agency and CADW;
- records held by the County Records Office, County Buildings Archive or the Irish National Architectural Archive; and
- maps, plans, photographs, aerial photographs and planning data (old Ordnance Survey Maps and tithe maps are particularly useful for assessing development in the last 200 years).

The surveyor will be attempting to establish a hierarchy of knowledge with the most important items being the age, purpose and constructional form. The architect's identity and owner's status in the context of contemporary trends are particularly desirable details. The history, dates of major remodelling, periods of redundancy and changes of ownership are also relevant.

In collecting and appraising the information, there is a limit to the amount of data that can reasonably be collected within the context of a surveyor's brief, and there may be limiting time constraints. The surveyor's skill in analysis is in deciding whether the data not collected is imperative to the client's decision-making. The surveyor should make recommendations for further research and set out the limitations of the research carried out, including advice as to how this might affect the client, and the expense of additional research.

Specialist research facilities operate through archaeological firms, academic departments and museums and collections. The surveyor would be expected to have a working knowledge of these specialist research facilities in order to advise the client about services which are beyond the limit of their expertise but reasonably required for the proper fulfilment of the brief. The surveyor would be expected to advise the client in the procurement of specialist research and interpret the results for the client's proper understanding of the outcomes.

3.4 Appraisal of the public/statutory/legal environment

The public, statutory and legal environment for the site or artefact should be finite and fully explored by the surveyor. Where any doubt or limitations exist, the surveyor should make clear recommendations to the client for referral to the client's legal advisers. For example, it is possible to identify for Listed Buildings in England or Wales the data in the example above as this is a matter of public record. However, if the boundaries on site are not clear, the extent of the building's 'curtilage' may require further investigation. It is possible to get clarity from the authorities on statutory matters by applying for certificate of immunity from listing or requesting a written opinion from the Local Planning Authority.

3.5 Appraisal of the physical environment

3.5.1 Inspection

Physical inspection for the vast majority of surveys would be deemed to include the following:

- physical inspection (with the aid of binoculars and magnifying glass) of all visible surfaces;
- investigation by non-destructive probing or opening of construction, materials and condition;
- investigation of normally not visible parts as far as possible using a 3m ladder, lifting covers, entering voids etc;
- all physical access should be arranged in accordance with the RICS guidance note *Surveying Safely*; and
- measurement and dimensional recording in accordance with RICS guidance notes on *EDM calibration* and *Code of measuring Practice*. English Heritage published the authoritative work, *Measured and Drawn* in 2003 which summarises measured survey techniques applicable for historic assets.

3.5.2 Recording

Recording of the physical inspection is usually supported by detailed note-taking and photographic recording. The purpose of the records is to enable the surveyor to reconstruct post-survey the extent of the physical information available to a person conducting physical inspection at the time of survey. Subjective assessments are required to tailor the amount of detail collected to the instructions. One widely used survey recording technique is to order by the following hierarchy: location, element, construction, condition, and then note other observations and limitations, usually with subordinate hierarchies operating within each level. However, the following guidelines are useful additions appropriate for historic environments and artefacts:

- the materials used, sequence of construction and condition should be recorded for most elements;
- sketches of layouts, details and impressions should be recorded for dateable details and fittings;
- the age, form and condition of adjacent and similar local buildings, sites and artefacts;
- limitations on inspection or available information including where access was not possible or materials/construction defied classification by inspection alone;
- the effect of interventions (repairs, alterations and reconstruction), even historic interventions, on the continuing performance of the elements; and
- the areas where further investigation, possibly by specialists, was deemed appropriate.

3.5.3 Inspection techniques

The experienced conservation surveyor would be expected to adopt certain archaeological and pathology techniques during physical inspection to obtain a proper record of the inspection:

- The surveyor should ‘read’ the building to assess the construction sequence of each element or component, looking for anomalies such as redundant lintels, traces of rooflines and gables, evidence of substantial remodelling or demolition. At the initial inspection of complex sites and artefacts the pattern of development is unlikely to be fully apparent. The surveyor’s skill will be required to assess the significance of the visible record and adequate recording is vital when this data is later analysed in context.
- The manner and rate of deterioration for each element, component and material should be compared to the norms for the subject’s age, type and location. Particular attention should be given to recording the presence, source, progress and effects of dampness (because of its consequential effect of accelerating decay and erosion). Long-term structural, thermal, and aesthetic performance as well as localised failure or distress should be noted and assessed. For physical appraisals, a surveyor’s working knowledge of empirical performance standards and the effect of previous (possibly modern and/ or recent) interventions is likely to require research for more unusual constructional forms and materials.
- The locations and extent of opening-up, sampling and specialist investigations should be identified and recorded.
- The matters which require desk-study after inspection should be identified and recorded. It will often be necessary for the surveyor to carry out further desk studies post inspection to follow-up visible evidence.

The surveyor should aim not to:

- Damage the structure or finishes. Statutory protection afforded in the relevant territory may lead to a criminal or civil offence being committed. The surveyor is advised to discuss any areas of doubt with insurers and the authorities before opening-up is agreed with the client. The surveyor will be expected to advise the client of the most appropriate course of action in each case.
- Mislead or overstate the extent of available evidence from physical inspection. The survey will provide a ‘snapshot’ of performance on the given day. Advice about dampness and structural performance may require monitoring to give a more balanced view of overall performance.
- Give more emphasis to analysis over recording during inspection. The purpose of inspection is to establish a trail of enquiry and record the evidence for that.

3.5.4 Further Investigation

Specialist physical appraisals are particularly useful for historic and unique buildings and artefacts, such as:

- dendrochronology;
- X-Ray, magnetic resonance, infra-red, thermal and other specialist imaging techniques;
- photogrammetry and ariel photography;
- EDM, satellite and other digital and large-scale dimensional recording techniques;
- paint, mortar, plaster, thatch, pollen, glass sampling and laboratory analysis;
- hand measurement and drawing, recording, and archaeological excavation, watching brief and soil sampling; and
- specialist environmental monitoring for physical change such as humidity, chemical and structural stability.

The surveyor would be expected to have or obtain a working knowledge of the uses and application of such specialist techniques in order to advise the client of specialist survey techniques which are beyond the limit of their expertise but reasonably required for the proper fulfilment of the brief. The surveyor would be expected to advise the client in the procurement of specialist physical appraisals and interpret the results for the client's proper understanding of the outcomes.

3.5.5 Reporting

In reporting the findings to the client, the surveyor should include:

- a reiteration of the brief and any agreed variations from it;
- the limitations agreed at the outset and any additional limitations that transpired through the desk studies and inspection processes. The effect of any limitations on the client's objectives should be noted;
- the findings of each point of enquiry set out logically, to lead the reader. The surveyor should distinguish fact from opinion, and refer to the sources relied on in forming opinions;
- the recommendation arising from each point, including whether further investigation or monitoring is recommended and advice on the procurement of additional investigation; and
- advice as to how the surveyor's findings should inform the client's future actions. For historic assets it is most important that clients understand how to maintain and manage the asset.

3.5.6 Data collection and storage

In the UK, there is no statutory minimum period for the storage of data. The surveyor's professional indemnity insurance usually specifies the period for which records should be retained, which is typically based on the contractual liability of the surveyor and surveying firm. This is in conflict with best practice in conservation, as documentary evidence collected during surveys and projects continues to be useful long after the contractual obligations of the parties have been fulfilled. It is therefore advisable to ensure that records which could add to the understanding of sites and artefacts are not arbitrarily

destroyed. Conversely, placing documents into long term (and possibly publicly-accessed) archives may contravene the surveyor's contractual obligations for confidentiality. In all cases, the clients and insurers consent should be sought for publication, archiving or destruction of records.

Images of England

The Images Of England website comprises over 300,000 photographs of Listed Buildings and structures taken between 1999 and 2005 to provide a 'snapshot' for the Millennium. Each image is accompanied by a description, prepared during the listing process.

www.imagesofengland.org.uk/learningzone/default.aspx

Documents describing historic monuments often become valuable or irreplaceable in their own right. It is recommended that surveyors adopt handling and storage techniques which are appropriate to the work in hand. It is particularly important that valuable documents are protected from fire and moisture, even when on very short loan from the archive. It is recommended that surveyors work from copies wherever possible, and undertake specialist training in document handling if especially important documents are to be loaned.

Some clients may employ an archivist, or hold their own archives, in which case, this is the natural home for data collected during survey. The National Monuments Record curates a national archive for England of photographs and drawings. The RIBA Library, and Public Records Offices may also accept new documents, mostly in hard copy format. Grant aid may be available from the Heritage Lottery Fund for large scale and important research and archiving projects.

Digital formats have the advantage of being easy to store and transfer, but obvious problems follow about confidentiality and security. Digital formats change often, and are not suitable for long term storage.

All documents, digital or hard copy, should state the site to which they pertain, the date collected, and the provenance of the data. Copies and revisions should be clearly marked. A record should be kept of the whereabouts of items borrowed from large archives, and any document containing an inherent discrepancy should be tagged for future reference (for instance, a metric CAD drawing of new work if it is derived from an imperial as-built drawing).

Guidance on the care of archaeological finds is available from the Institute of Field Archaeologists.

Bats

Older buildings can provide important habitats for bats and other protected species identified in The *Wildlife and Countryside Act* 1981 and the *Conservation (Natural Habitats, etc) Regulations* 1994. Where roosts are present, it is an offence to disturb the habitat without a licence, which in England, can be obtained from Natural England.

4 Maintenance management for heritage buildings

4.1 Introduction

This chapter identifies the relevance of maintenance as an intervention in the conservation cycle, and explains the implications this has for the maintenance management of heritage buildings for both individual occupiers and for organisations who occupy such buildings.

4.2 Maintenance: the optimum intervention

4.2.1 Understanding cultural significance

The identification of cultural significance and its vulnerability are the strategic starting point for any building conservation activity. Such an identification is fundamental to the strategic aim of building conservation, i.e. managing changes to a building in a way which ensures that the maximum identified cultural significance is passed on to the future.

4.2.2 Conservation Principles

Conservation Principles

English Heritage published *Conservation Principles, Policies and Guidance* in 2008. The guidelines aim to give clarity and transparency to statutory decision-making by deploying six key principles:

Principle 1: The historic environment is a shared resource.

Principle 2: Everyone should be able to participate in sustaining the historic environment.

Principle 3: Understanding the significance of places is vital.

Principle 4: Significant places should be managed to sustain their values.

Principle 5: Decisions about change must be reasonable, transparent and consistent.

Principle 6: Documenting and learning from decisions is essential.

The principles, along with a new PPS for the historic environment, and subsidiary circulars and guidance are aimed at supporting and the transition from the existing statutory system to a modernised statutory heritage protection system.

Table 1 explains the benefits of a number of guiding tactics, specific to building repair, which have become established over the last century.

Table 1: Key issues and potential benefits related to building conservation

Conserve as found	<ul style="list-style-type: none"> ● an ideal, as any intervention can potentially damage the significance of the building; ● to avoid the conundrum of restoration to a specific temporal state.
Minimal intervention	<ul style="list-style-type: none"> ● to avoid conscious and unconscious removal of significance embodied in the material existence of the structure.
Like for like repairs	<ul style="list-style-type: none"> ● to enable materially/culturally sympathetic repair (see below); ● to avoid experimentation with new and potentially untested materials/techniques, thus reducing potential problems of longevity and compatibility of repairs.
Reversible repairs	<ul style="list-style-type: none"> ● to enable benefit of future development in repair technology; ● to enable future removal of repair if found to be defective; ● if repeatable, will not preclude future repair if required.
Sympathetic repairs	<ul style="list-style-type: none"> ● to enable the cultural significance, the aesthetic qualities and the architectural coherence of the structure to survive. Defining sympathetic repair requires consideration of: <ul style="list-style-type: none"> – aesthetically appropriate, yet honest repair; – the historical authenticity of the repair; – fitting the new to the old.
The importance of recording	<ul style="list-style-type: none"> ● to enable understanding before action and to record thoroughly what has occurred to inform future conservation tasks.

4.2.3 Hierarchy of intervention

There is a hierarchy of intervention in the fabric of historic buildings. At one end the ideal intervention is to ‘do nothing’. This potentially does the least damage, but can be problematic professionally and requires extremely fine judgments regarding the nature and evolution of putative defects. Minimal intervention can lead to difficulties for some building professionals who feel that their involvement with buildings should be ‘visible’. This ‘let’s do something’ attitude is clearly contradicted by the notion of minimal intervention. More time, and perhaps, more care in analysing putative defects is also implied by a minimal intervention approach and this too can create difficulties for less experienced professionals.

Next in the hierarchical chain of intervention is maintenance. This is defined as:

‘The continuous protective care of elements of the building i.e. its fabric, contents and setting, seeking to extend the life of such elements (rather than replacing them), and hence to extend the life of the building as a whole. It includes day-to-day activities such as cleaning, painting and very minor repair.’

What distinguishes maintenance for heritage buildings is that, unlike other buildings, the fabric has cultural significance, and, is therefore effectively an artefact. Whilst repair, the next level of intervention, can extend the life of an element and thus the building, it will also necessitate damage to the fabric of the building, which is precisely what building conservation is trying to avoid. Maintenance is thus the optimum building conservation intervention.

Explaining and encouraging building owners and occupiers to follow a minimal intervention approach to maintenance is an important part of the role of a conservation surveyor.

4.3 Implications of building conservation objectives for organising maintenance

4.3.1 Understanding the nature and cultural significance

The importance of understanding the nature and cultural significance of the building before any action (i.e. inspection, specification or intervention) cannot be over-emphasised. Whether or not this understanding is formalised into a conservation statement or a Conservation Plan, the process is essential in determining relative priorities for both inspection and intervention, as well as a range of other building management activities (development proposals, visitor management, security policies, etc.). Because of its importance to a wide range of building management activities, the process should be recorded and made as accessible as possible to all those who have a role managing the building or those who simply have an interest in the building. The analysis should also be periodically reviewed and updated.

4.3.2 Planned preventative approach – ‘just-in-time’ rather than anticipative maintenance

Maintenance management theory and practice emphasises the importance of planned approaches to maintenance: reducing the reliance on reactive maintenance intervention and adopting a planned preventative approach. For non-heritage buildings, such planned approaches have included preventative repair and replacement in order to avoid failure of a component/element and all the consequential functional, legal and management implications which flow from such failure.

Preventative repair and replacement is philosophically unacceptable for heritage buildings, where protection of existing fabric and minimal intervention are the essential principles. But the planning and prioritisation of inspections of heritage buildings as a planned preventative approach to maintenance is both possible and desirable. Developing a ‘just-in-time’ approach to maintenance – where intervention occurs at a point in time just before failure/consequential damage, rather than in anticipation of it – is the ideal for heritage buildings. The three key pre-requisites for such an approach are:

- suitable experience to make the fine judgments regarding life cycle and modes of failure related to the building(s) in question;
- a system of prioritised inspection; and
- good information management which supports such an approach.

4.3.3 Regular prioritised inspection system

Establishing a regular prioritised inspection system is an essential maintenance management task. Prioritisation should be established relative to:

- the cultural significance and vulnerability of the building and its elements;
- the function of specific elements of the building (roofs, rainwater drainage, ventilation elements, electrical wiring, gas installations etc.);
- health and safety issues;
- statutory compliance in relation to specific regulation; and
- legal liability beyond compliance to specific regulation.

Balancing these issues is a matter of professional judgment in the light of fact and degree related to specific circumstances.

The vulnerability and consequences of failure of specific elements of buildings should lead decisions regarding the frequency of inspection. The 1955 Inspection of Churches measure specifies a five-yearly cycle for inspections for the Anglican Church. Such a frequency is specified in many organisations. Whilst this period may well pick up on most significant maintenance issues it is far too infrequent for more vulnerable elements (i.e. those whose failure may have very serious consequential effects, or those whose consequential failure could impact on identified cultural significance, or elements close to the end of their lives, etc.). Thus a quinquennial frequency for inspection is useful in providing a medium term review of condition (and obviously can pick up on specific maintenance issues) but this needs to be backed up by far more frequent inspections prioritised in relation to the cultural significance, vulnerability and other previously mentioned issues. For example, as an absolute minimum, rainwater goods and roof voids should be inspected on an annual basis, and ideally during a period of rainfall. Formally establishing and recording a series of maintenance inspection routines/timings is useful for future management of individual buildings and helps establish a 'maintenance mapping' exercise which is also a significant part of establishing and recording the cultural significance of the building.

A related issue is responding to and dealing with reports of maintenance problems from occupiers of buildings. Whilst such reactive requests can be expensive to follow-up, they can provide vital information between formal inspections where minimal intervention is the intention. Suitable management approaches and procedures together with appropriate communication systems are required.

Commonly the most significant maintenance inspections need to occur to parts of buildings which are relatively inaccessible. Thus a key requirement, and hence a priority, should be enabling safe and appropriately detailed access arrangements.

Clarity of purpose for inspections is vital if the expense and effort made is not to be wasted. Inspections should provide the essential information required to plan and enable minimal intervention maintenance approach:

- what needs doing;
- when it needs doing;
- potential impact on significance if maintenance not undertaken; and
- what it will cost.

Inspections also provide an opportunity to review the effectiveness of past maintenance arrangements and its management, and, where necessary, make changes to the maintenance plan.

4.3.4 Good information and records

Good information and records are vital for effective management of maintenance and are a key issue for all maintenance management processes at both tactical and strategic levels. In addition to enabling good management practice, effective records detailing changes and development of a building are an integral part of the cultural development of the building, and help to explain the significance of the building.

Most of the condition reports of inspections for historic buildings follow a somewhat outdated format. They start with a (frequently) repetitious explanation of the historic development of the building and continue with an element by element 'description, condition and recommendation' format. Sometimes this is because external consultants have been employed via a standardised brief, which can unnecessarily constrain the process. Whilst such an approach may have been useful in the past, information technology, in particular the use of digital data in spreadsheets, has enabled far more sophisticated (yet simple) data collection and analysis methods to be developed.

Maintenance information comes in a wide variety of forms (from cost data, photographic and digital images, metric surveys, to textual documents, etc.) that requires sophisticated storage and retrieval systems. Combine the need to record, retrieve and process such a wide range of information (including spreadsheet information from condition inspection reports) and it is clear that an integrated database is ideal for the maintenance management of heritage buildings. The evidence is that many of the advances in information management in other property management sectors have not been widely re-contextualised in the heritage sector. The opportunities for strategic assessment of short, medium and long term options (for example, in developing investment strategies, 'what if...?' enquiries, option appraisals, etc.) can enable a far more holistic and sustainable approach to the management of heritage assets.

For individual owners a logbook, with an appropriately brief analysis of the history and cultural significance together with an on-going maintenance record and attendant documentation, not only is this an ideal opportunity to record the developing maintenance history of the building, it will also be a valuable document in regard to the information required in the house selling process.

4.3.5 Appropriate budgeting

As with any predictive exercise, figuring out what the likely future maintenance requirements of buildings is fraught with difficulties. Arguably this task becomes more complex for heritage buildings given the desired philosophical approach to their care. There is a significant coincidence between a well-maintained building and its functional and investment performance. Persuading owners of the need to think and act in the long-term interests of the building should be made in this light. Budgets should ideally be planned over the medium to long term to give increased certainty in regard to the costs of occupation and greater likelihood that the building will be appropriately

maintained; and to demonstrate how a sinking fund investment could be a more attractive, as well as a more cost effective, means to budget for maintenance.

4.4 Best practice approach to the maintenance of heritage buildings

In conclusion, the following table summarises the key elements of a best practice approach to the maintenance of built cultural heritage:

Table 2: Key elements of a best practice approach to the maintenance of built cultural heritage

Maintenance management area	Characteristics of a best practice approach
Corporate objectives and maintenance strategy/policy	<ul style="list-style-type: none"> ● Conservation principles (see Table 1) should be the overarching intellectual framework which informs the ethos and implementation of maintenance. Maintenance should primarily be concerned with the protection and enhancement of cultural significance. ● Maintenance management goals and the purpose of the maintenance management function should be explicitly integrated with wider corporate goals.
Management processes, Conservation Plans and Management Plans	<ul style="list-style-type: none"> ● Assessments of cultural significance are fundamental to the appropriate management of Listed Buildings (including their maintenance) and should be implemented through appropriate Management Plans. The principle of minimal intervention should inform and be reinforced by such Management Plans.
Programmes and prioritisation	<ul style="list-style-type: none"> ● Maintenance programming should place the emphasis on cyclical preventative maintenance tasks and be driven by the overarching goal of minimal intervention. ● Assessments of cultural significance should be central to the prioritisation of maintenance activity.
Condition surveys, inspections and stock data	<ul style="list-style-type: none"> ● A range of inspections at varying frequencies should be carried out. These should be tailored to the significance and vulnerability of the element or material. ● Condition surveys should provide an assessment of condition, identify the optimum moment for intervention, and aid the prioritisation of actions and planning for the future.

Information management	<ul style="list-style-type: none"> ● Information on building condition should be stored on an integrated database. It should be easily retrievable and easy to handle for both tactical and strategic purposes. ● Systems should be in place which enable information about building condition provided by users other than those directly related to the maintenance department (e.g. visitors) to be incorporated into the maintenance information database.
Financial management and performance measurement	<ul style="list-style-type: none"> ● Budgets should reflect and be informed by the maintenance policy. ● A mechanism for feeding back information about maintenance performance to managers and other interested parties should be in place.

5 Projects

5.1 Generally

Many of the same issues occur in managing and administering specialist conservation projects as with any construction projects. However, the conservation issues can be particularly demanding, requiring considerable time and effort to resolve. Each conservation project will have its own particular issues, some totally unique to that project.

Surveyors without appropriate experience should recognise their limitations, advising the client accordingly, where appropriate, recommending another surveyor with relevant experience (for example, a surveyor accredited by the RICS in historic building conservation) or using other consultants (such as structural engineers, etc.). Several professional institutions recognise conservation expertise through their own accreditation schemes in conservation. Appendix B contains a weblink to the RICS accreditation scheme.

The reading of this guidance note alone would not be regarded as appropriate experience.

The diverse nature of conservation projects dictates that no single approach can embrace all situations. For conservation projects, the case for developing the approach to suit the project is far greater than usual. It should be clear that gaining a full and comprehensive understanding of the building is essential to correctly advise clients, and provide the best solutions. Great emphasis should be placed on allowing adequate time during the earliest stages for consultation with relevant outside bodies, allowing the project to advance in the later stages with the least interruption and change.

Perhaps the only general principle that applies to conservation projects is the need to assess all the issues upfront and then provide enough time within the project programme to deal with them.

Whatever unique difficulties a conservation project presents, the surveyor should always use to best practice guidance in their appointment. This note takes the project stage headings from the RIBA *Outline Plan of Work* 2007 to which reference is made in the RICS *Building surveying services guide* which would normally be used with the *Short and standard form of agreement for consultancy services*. Advice on the appointment of a project manager, quantity surveyor or architect is provided in Appendix A.

The following applies to projects involving substantial repair or conservation works but the principles are equally relevant to smaller scale maintenance, repair and alteration works.

5.2 Preliminary services – Stages A and B: briefing and appraisal

Appraisal itself is dealt with in a separate RICS Valuation information paper. Emphasis should be placed on allocating enough time to the briefing and appraisal stage to allow detailed consideration of the project's influences that may require further work beyond the initial stage.

Such factors may include (but this list not exhaustive):

- project status – statutory constraints such as scheduled monument status, Listed Building grade, Conservation Area;
- condition – establish current condition and any need for emergency stabilisation, weatherproofing or protection works;
- environment – statutory in terms of Conservation Area, SSSI, archaeological sensitivity, proximity of other designated restricted areas or works within occupied building/parkland (private or public);
- project size – in volume, physical extent and value, possible necessity to enact OJEU processes;
- location – proximity, access for and ability to assess condition, ease of operation, site specific risks;
- scope of work – single trade, multiple trades, traditional skills, specialist skills, ability to specify, special materials/specifications, need for other specialist consultants, how to document, risks, how then to procure, effect on programme, choice of contract;
- archaeological – identify need for archival, fieldwork and anecdotal work;
- health and Safety – presence of asbestos, lead and arsenic in decorations, anthrax in plaster, psittacosis, Weil's disease, etc.;
- client – nature, brief, procurement limitations, funding, grant aid (for more guidance on sources of grants visit www.ffhb.org.uk);
- conditions and timing constraints of outside bodies – statutory consent bodies (Local Authorities, English Heritage, CADW, Historic Scotland, NIEA), other influencing bodies such as SPAB, The Georgian Group, etc. and grant bodies; and
- nature and ecological – presence of bats, badgers, swallows and other protected species, TPO's, historic landscapes, effect on programme.

The initial appraisal should identify and explore all the issues surrounding the project. The surveyor will then be able to advise the client on the direction of the project and the significant risks.

Identifying risks, and the procedures to eliminate or mitigate risks, will inform the procurement strategy. This is normally undertaken using a risk register. The register establishes which risks require resolution before the project can advance to the next stage, and establishes any level of remaining risk the client is content to carry or eventually place within the contract. This technique is widely used in construction procurement but the complex relationship of risks in conservation projects demands methodical management to ensure a suitable procurement route is settled upon.

It may be appropriate at Stage A or B to undertake a smaller 'enabling' contract of opening-up work in order to carry out specialist investigations. These are used to inform in eliminating or mitigating some of the risks. It is important,

however, that the statutory consents process is followed, even for small works, and the surveyor may be required to negotiate a balance between the need to investigate and the need to justify any harm to historic fabric.

Project management methodologies

The development of a project structure must be compatible with the method of procurement.

- 1 *Traditional procurement* whereby the client engages the project team and contractor direct and is the most common form of procurement for conservation work.
- 2 *Design and build* is not normally appropriate for conservation work. However, it can be used to contractually discharge responsibilities where the 'design' has been undertaken by the contractor. This could include situations where the conservator (i.e. the contractor) determines the content and techniques for conservation work in accordance with the scope detailed in a performance specification written by others.
- 3 *Management contracting* where the contractor performs the role of managing the works of other contractors who carry out the works. Conservation work can be undertaken within this arrangement, but it is not recommended. It is best for a direct interface between the designer (specifier) and the conservation contractor.
- 4 *Construction management* is where a construction manager is employed to arrange trade contracts and monitor them. This is not generally suitable for conservation work.
- 5 *Framework agreements* are term or template contracts agreed for a series of projects usually over a period of time.
- 6 *Two stage tender*. The normal arrangement is for the contractor to be selected for first stage on basis of limited scope i.e. preliminaries, overheads and profit. In the second stage a full price is negotiated through an open book tendering of subcontracts. Where conservation work is concerned, the first stage could involve targeted specialist investigations and trial works.
- 7 *PFI and PPP*. Here, the private sector designs, builds, operates and finances the asset for the public sector who pays an annual charge.

5.3 Pre-contract services – Stage C: outline sketch proposals

This stage is critical. Consultant briefs, identifying roles and responsibilities, are established at or before Stage C (see chapter 2 – consultant selection).

At this stage, the consultant team advises the client on strategic decisions addressing the issues identified during the appraisal stage. It is crucial to allocate adequate time to this stage. Stage C can be protracted taking into account the time necessary to liaise with the relevant authorities and funding bodies, prepare information and submit it for further discussion prior to 'in-principle' agreement.

Flexibility can be achieved by building-in options and contingencies for areas where it is not possible to identify the exact requirements.

In considering solutions to the issues, the team should adopt a conservation philosophy based upon sound Conservation Principles (see 4.2.2).

Conservation projects usually require more detail than new-build or standard repair projects at Stage C. Along with outline sketch proposals, outline schedules of repair and specifications often have to be prepared identifying the nature and scope of works. These need to be understood in the context of both the particular element's and the site's overall significance. For more historically significant projects this analysis will usually form part of a Conservation Plan (see chapter 2) where the project is put in context with the building's history and future maintenance strategy. To secure funding and statutory approvals where there is no Conservation Plan, the planned works often still have to be tallied to the context, possibly either using a justification statement or Heritage Impact Assessment. This may be the earliest point at which an enabling contract can be undertaken to carry out specialist investigations.

Inadequate time, thought and liaison at this stage places increases the risk of significant re-design and delay at a later stage.

5.4 Pre-contract services – Stage D: detailed design

To reduce the risk of error, conservation project documents need to be as comprehensive and detailed as possible. Standard solutions and generic building library documents are unlikely to be appropriate and site-specific drawings, schedules and specifications will need to be drawn up. One should expect to produce a greater number of drawings and documents for a conservation project than usual. Document control measures should therefore be given special attention.

Historic buildings also often require an above-average standard of workmanship, employing specialist materials or techniques. Specifications should set out clearly what is required, and where the pricing document is separate, these items need to be drawn-out again, to avoid doubt and ensure compliance. It is important that if the specifier require samples and tests before materials can be ordered (or even quarried in some cases), that these requirements are clearly set out. Likewise, materials may need to be matured or acclimatised on site before use, and this should be clearly stated in the specification.

Detailed design needs to take account of any special programming constraints. For example, roof works can be delayed if bat roosts are found when work is planned for the maternity season. Lime work is best undertaken with clement weather conditions. Such sequencing or programme constraints must be set out in the project documents.

The standard for the specification of protections is often higher than usual. Areas of historic fabric retained in-situ during the works are at risk of damage and should be carefully protected. This should not be left to the contractor who, if pricing in competition, may include only minimal protections that later prove inadequate. It is often necessary to specify the minimum protections required to avoid such situations. Protections specification, where buildings are to remain open to the public or privately occupied during the work, requires the highest level of detail.

Generally, one should avoid leaving matters to be resolved by the contractor on site. The surveyor should endeavour to specify and detail what works are to be carried out, if necessary, obtaining specialist advice and assistance.

Provisional sums should be avoided. If they are unavoidable, provide as much description and quantification as possible to allow the contractor to adequately plan, programme and manage the works.

The pricing document should identify which works are grant-aided to aid prompt and accurate applications for payment. Parts of the works attracting varying rates of VAT should be itemised to aid calculation, payment, and wherever possible, recovery. Grant-aided or publicly-funded projects are usually subject to external audit. Drafting at Stage D should therefore facilitate audit.

5.5 Pre-contract services – Stage E: approval

The documents need to be assembled to streamline grant and statutory approvals.

The surveyor should submit only the relevant documents to each authority maintaining a flexible and helpful approach. Additional information is often requested during appraisal, but submitting full sets to each as a matter of course complicates and confuses submissions, risking delay and even jeopardising approvals.

5.6 Pre-contract services – Stages F to H: tender documentation and tenders

The selection of the contractor can have a profound effect on the success of the project. Competitive tenders are still required in the majority of cases. A ‘best value’ approach, however, is adopted in an increasing number of cases to secure the quality of the work.

Best value

Best value is a system of appraising contractors’ and consultants’ offers deployed predominantly by public and voluntary sector clients. It entails using weighted qualitative assessments alongside, or instead of, cost-based comparisons of the goods and services they wish to procure.

Both contractor selection techniques require the contractors to go through a pre-selection process based on experience and ability. If performed correctly, pre-selection can reduce the importance of the ‘best value’ assessment.

As they cannot be assured of any instruction for some while and cannot afford to hold workforce open indefinitely, contractors are unlikely to be able to commit any workforce prior to the tender process. The experience and attitude of the contractor’s agent and workforce can be crucial for conservation projects so a final post-tender interview is often necessary to assess those attributes and would be considered appropriate.

In all pre-selection processes all contractors should be treated equally and given the same questionnaire. In cases where a post-tender interview takes place as part of a ‘best value’ approach, all contractors should be made aware of the process pre-tender. The grounds for assessment, including the weighting of price and the various quality criteria, should be made available to contractors.

For projects of a certain size and/or for certain clients the OJEU tender process may operate.

OJEU

OJEU is the acronym for Official Journal of the European Union. This is the publication in which all contracts from the public sector valued above a certain financial threshold, must be published to ensure fair competition as required by *European and UK Procurement Regulations* (SI 2006/6, SI 2006/1). The 2008 thresholds (excluding VAT) are €133,000 for services and €5,150,000 for works.

5.7 Post-contract services – Stages I and J: administer contract works

The choice of contract profoundly affects the success of the project. With any construction project it is essential a formal contract is entered into. There is no standard form of contract specific to conservation works. If one were produced, it is unlikely it could meet the requirements of the diverse nature of conservation projects. It is also not possible to recommend any one particular form of contract or suite of contracts from the selection of standard contracts available. The surveyor, client and project team need to consider the projects attributes thoroughly to identify the risks and ensure the best contractual mechanisms are employed to control the risks. The surveyor should balance certainty to avoid disputes, whilst retaining enough flexibility for the larger than usual unforeseen elements and still allowing any external liabilities for tax and grant issues to be adequately discharged.

Adequate attention should be given during formal contract selection to control and timing clauses matching the attributes and risks of the project. Failure to properly assess the risks and select the most appropriate contract (for later administration) can have a very serious impact, significantly exposing the client to unacceptable or uncontrolled risks.

The client should be made aware that not all risks can be covered using standard contracts, even when amended. The client should be made aware of the retained risks, and refer to specialist legal advisors if a bespoke contract is required.

Conservation projects often involve consent issues that remain outstanding at the start of the works, often controlled by planning or contractual conditions. There are also likely to be some repairs that can only be ascertained once the works are underway. One should consider setting a contract period pre-tender that allows for inspection and approval of samples, so any outstanding conditions can be discharged without causing delay to the contract.

During the term of conservation contracts there is often a need for increased site inspection. Increased supervision, assessment and control of quality through sampling and testing place demands on the contract team at this stage. Time will be required to consider solutions to defects that only become exposed as part of the works. Some work will have been predicted, but could not be detailed until after access has been provided. Such considerations and approvals may well include further involvement from consultants, statutory bodies and grant fund representatives. Where adequate time is not allocated in the programme for such instances, undue pressure is placed upon the contractor to meet the programme. Contractors may respond by expediting the works, re-phasing or requesting an extension of time. All these options

have potential cost implications and it is best to agree pre-contract a programme containing contingencies for inspections and approvals, foreseen and unforeseen.

Further justification statements and/ or heritage impact assessments may be required for significant variations. Significant variations from the agreed design and specification will also require further statutory approval in their own right.

In projects that demand post-contract specification of inaccessible or concealed details, consideration should be given to the use of an information release schedule clause. These clauses avoid the situation where a contractor demands information before it can be provided, allowing the consultant team to smooth the specification work-flow, and generally manage all aspects of the project. Providing dates or milestones for the provision of design and costing information is helpful to the project team co-ordinating and programming the works, and reduces the risk of disputes.

Like all projects ensuring satisfactory completion of the works is essential. Conservation works involving grants and consent issues can also often involve further requirements that need to be addressed on completion, possibly involving approval by such parties. Understanding, planning for and concluding any such issues efficiently must therefore also be taken into account.

Lastly, at handover it is usual to pass over operation and maintenance manuals. Such documents need to be carefully considered for conservation projects as some of the materials used or construction techniques employed could be beyond the normal experience of the building owner or maintenance team. It is also rare to be able to completely 'design out' inherent risks associated with the buildings historic design.

It is therefore important to draw such items to the clients' attention to ensure the correct maintenance procedures can be employed and safely undertaken to ensure the future well-being of the building.

Appendix A : Further reading

RICS publications

RICS guidance notes

Building maintenance: planning, strategy and procurement, RICS Books (2009) ISBN 978 1842194 80 5

Building surveys and inspections of commercial and industrial property, RICS Books (2005) ISBN 978 184219 193 4

Building surveys of residential property, RICS Books (2005) ISBN 978 184219 095 1

Stock condition surveys, RICS Books (2005) ISBN 978 184219 227 6

RICS code of practice

Code of measuring practice, RICS Books (2007) ISBN 978 184219 332 7

RICS information paper

Archaeology and historic buildings: guidelines for minerals surveyors, RICS Books (2006) ISBN 0 85406 798 1

RICS forms of consultants appointments

RICS Short and standard forms of consultants agreement (and explanatory notes)
building surveying services
project management services
quantity surveyor services

RICS research and other publications

Saint, A. and Earl, J., *Building Conservation Philosophy*, Donhead (2003) ISBN 978 187339 456 4

Mynors, C. *Listed Buildings, Conservation and Monuments*, Sweet and Maxwell (2006) ISBN 978 042175 830 8

Watt and Swallow, *Surveying Historic Buildings*, Donhead (1995) ISBN 978 187339 416 8

English Heritage, *Measured and Drawn* (2003) ISBN 1 873592 72 8

Valuing Heritage Assets – RICS Research paper, prepared by Kingston University on behalf of RICS and HM Treasury (2009)

Potts J., *VAT and Historic Buildings*, SPAB (2002)

Appendix B: Web resources

Directories of courses in the study of historic building conservation

www.buildingconservation.com/directory/ys.htm

www.ihbc.org.uk/ed_training_courses.htm

Manifestos, charters and principles

www.icomos.org/australia/burracharter.html

www.spab.org.uk/html/what-is-spab/the-manifesto/

www.english-heritage.org.uk/upload/pdf/Conservation_Principles_Policies_and_Guidance_April08_Web.pdf?1241031381

www.english-heritage.org.uk/server/show/nav.8833

(Principles of selection for designation)

Advice on producing Conservation Plans

www.hlf.org.uk/HLF/Docs/HelpingYourApplication/Conservation_management_planning.pdf

Guidance on the recording of standing structures and historic buildings

www.archaeologists.net/modules/icontent/inPages/docs/codes/build2.pdf

Guidance on the care of archaeological finds

www.archaeologists.net/modules/icontent/inPages/docs/codes/Finds2008.pdf

Directory of funding for historic assets

www.ffhb.org.uk/

Advice on RICS accreditation in historic building conservation

www.rics.org/site/scripts/documents_info.aspx?documentID=315&pageNumber=1

Historic building conservation

1st edition, guidance note

Historic buildings or structures are not just Listed Buildings or Scheduled Monuments. A significant proportion of our national building stock is made up of 'old' buildings of traditional construction, with one in five built before the first World War. Such numbers make it certain that nearly all building professionals will have to deal with them from time to time and thus acquaintance with this guidance note should be essential for all surveyors.

Guidance notes are intended to embody best practice and on occasions will be used in establishing a surveyor's competence in cases where negligence is alleged. However, the purpose of this guidance note is more specifically to avoid such situations, for if such a stage is reached it is likely that a historic building, or a part of its fabric, will have been damaged or lost. Although one might pursue the perpetrator it is unlikely the damage can ever be remedied.

It is therefore essential that all surveyors who are asked to advise on aspects of works associated with a historic building or structure have adequate knowledge and are familiar with best practice before commencing any activity.

Best practice in the field of building conservation cannot be neatly sub-divided in various professional specialisations; it calls for a rounded understanding of the whole subject before truly successful solutions can be identified for any one particular area. General conservation philosophy, appraisal of a building and its environment, identification of statutory constraints, and planning for existing and future maintenance regimes all need to be understood for surveyors to give sound advice.

The authors are emphatic about the importance of best practice within this guidance note: All surveyors who come to work on traditional buildings should be 'educated' in their approach, knowing and working within their limitations and experience to ensure the well-being of our built heritage as a resource for the future.