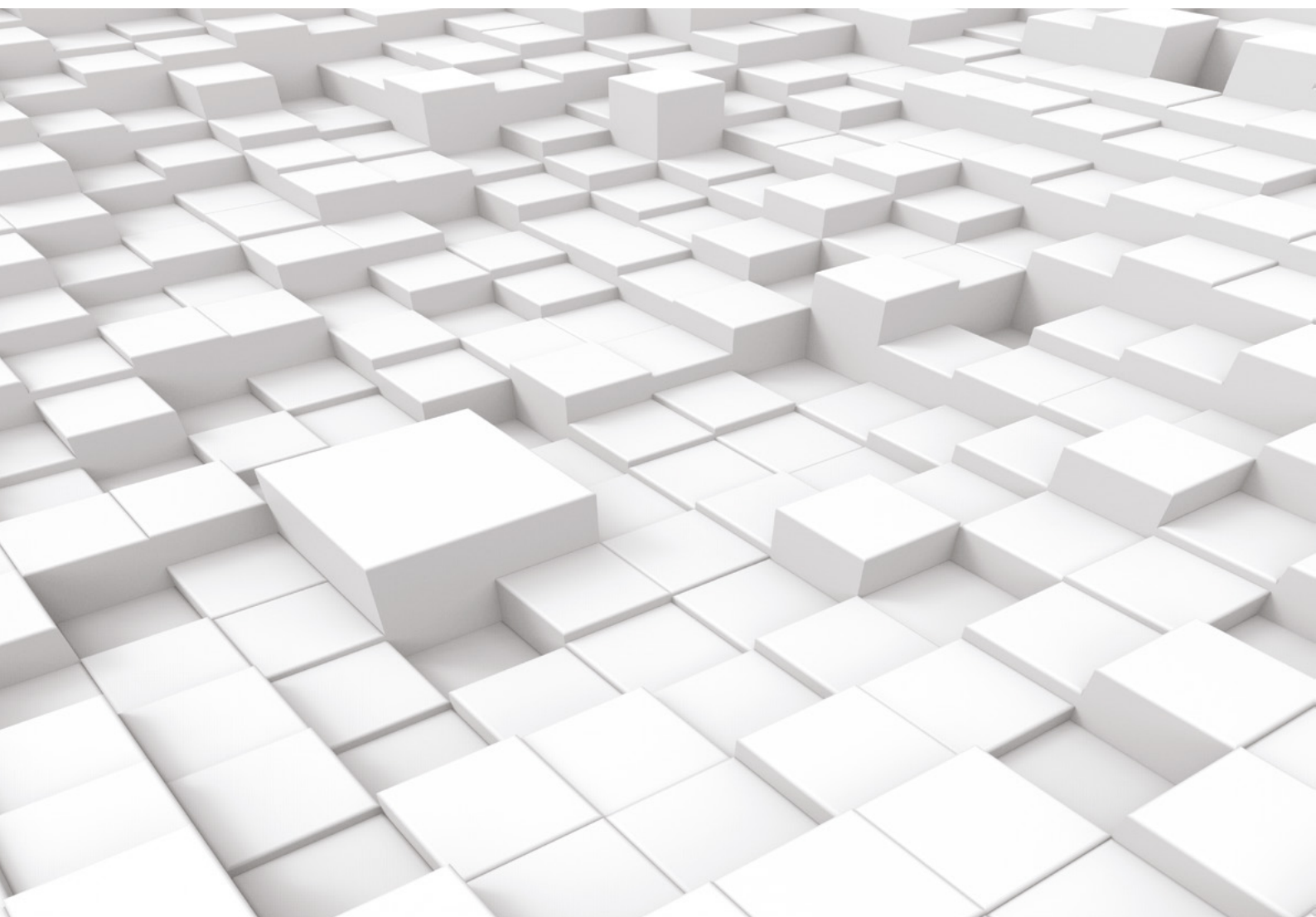




RICS professional standards and guidance, UK

Surveying assets in the built environment

1st edition, March 2017



Surveying assets in the built environment

Guidance note

1st edition, March 2017



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RICS would like to remember the late Craig McGuire and his valuable contribution to this guidance note

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RICS professional standards and guidance

International standards

RICS is at the forefront of developing international standards, working in coalitions with organisations around the world, acting in the public interest to raise standards and increase transparency within markets. International Property Measurement Standards (IPMS – www.ipmsc.org), International Construction Measurement Standards (ICMS), International Ethics Standards (IES) and others will be published and will be mandatory for RICS members. This guidance note links directly to these standards and underpins them. RICS members are advised to make themselves aware of the international standards (see www.rics.org) and the overarching principles with which this guidance note complies. Members of RICS are uniquely placed in the market by being trained, qualified and regulated by working to international standards and complying with this guidance note.

RICS guidance notes

This is a guidance note. Where recommendations are made for specific professional tasks, these are intended to represent 'best practice', i.e. recommendations that in the opinion of RICS meet a high standard of professional competence.

Although members are not required to follow the recommendations contained in the guidance note, they should take into account the following points.

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

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

It is for each member to decide on the appropriate procedure to follow in any professional task. However, where members do not comply with the practice recommended in this guidance note, they should do so only for good reason. In the event of a legal dispute, a court or tribunal may require them to explain why they decided not to adopt the recommended practice.

Also, if members have not followed this guidance, and their actions are questioned in an RICS disciplinary case, they will be asked to explain the actions they did take and this may be taken into account by the Panel.

In some cases there may be existing national standards that may take precedence over this guidance note.

National standards can be defined as professional standards that are either prescribed in law or federal/local legislation, or developed in collaboration with other relevant bodies.

In addition, guidance notes are relevant to professional competence in that each member should be up to date and should have knowledge of guidance notes within a reasonable time of their coming into effect.

This guidance note is believed to reflect case law and legislation applicable at its date of publication. It is the member's responsibility to establish if any changes in case law or legislation after the publication date have an impact on the guidance or information in this document.

Document status defined

RICS produces a range of professional standards, guidance and information documents. These have been defined in the table below. This document is a guidance note.

Publications status

Type of document	Definition	Status
Standard		
International standard	An international high-level principle-based standard developed in collaboration with other relevant bodies.	Mandatory.
Professional statement		
RICS professional statement [PS]	<p>A document that provides members with mandatory requirements or a rule that a member or firm is expected to adhere to.</p> <p>This term also encompasses practice statements, Red Book professional standards, global valuation practice statements, regulatory rules, RICS Rules of Conduct and government codes of practice.</p>	Mandatory.
Guidance and information		
RICS code of practice	Document approved by RICS, and endorsed by another professional body/ stakeholder, that provides users with recommendations for accepted good practice as followed by conscientious practitioners.	<p>Mandatory or recommended good practice (will be confirmed in the document itself).</p> <p>Usual principles apply in cases of negligence if best practice is not followed.</p>
RICS guidance note [GN]	Document that provides users with recommendations or approach for accepted good practice as followed by competent and conscientious practitioners.	<p>Recommended best practice.</p> <p>Usual principles apply in cases of negligence if best practice is not followed.</p>
RICS information paper [IP]	Practice-based information that provides users with the latest technical information, knowledge or common findings from regulatory reviews.	<p>Information and/or recommended best practice.</p> <p>Usual principles apply in cases of negligence if technical information is known in the market.</p>
RICS insight	Issues-based input that provides users with the latest information. This term encompasses thought leadership papers, market updates, topical items of interest, white papers, futures, reports and news alerts.	Information only.
RICS economic/ market report	A document usually based on a survey of members, or a document highlighting economic trends.	Information only.
RICS consumer guide	A document designed solely for use by consumers, providing some limited technical advice.	Information only.
Research	An independent peer-reviewed arm's-length research document designed to inform members, market professionals, end users and other stakeholders.	Information only.

1 Scope

This guidance note provides a professional practitioner or individual commissioned to undertake a survey with outlined guidance on fulfilling elements of a client's brief, along with unique aspects arising from the myriad of asset type and their usages.

General principles of surveying are not covered in this guidance, but references are made to other specific RICS guidance and publications, such as *Building surveys and technical due diligence of commercial property* and *Reinstatement cost assessment of buildings*.

These surveys can take many forms but there are general characteristics shared between the different methodologies of recording core information about the asset(s). However, professional practitioners or individuals are strongly advised to consider in full the following sections that are relevant to each market sector and type of survey.

While the purpose of the survey will differ for each and every instruction, the common denominator is to establish a full brief from the client and agreement on their expectations.

Not all assets are covered in this guidance note, and while the occupational use of the assets may differ (the surveyor is reminded to establish from the client any hazardous environments), the asset types should be covered within the categories identified on the following pages.

This guidance note is effective immediately on publication.

2 Client brief

The successful delivery of a survey can only be achieved if it has met the client's expectations as well as its purpose. It is important the practitioner or individual understands from the client at inception and prior to any on-site inspection or survey, how the information is to be used and if there is a need for the data's ongoing use within their business compared to the report providing only a 'snapshot' in time of the assets.

A detailed brief derived from an in-depth discussion with the client is therefore essential. An understanding of the key drivers for the survey needs to be gained in order to ensure the principles behind and findings from the survey meet the required expectations. This will include defining the parameters of the survey, including the need for any sub-consultant input, specialist site surveys and any specific methods for data capture and reporting.

See figure 1 for a typical overview of the contracting process.

2.1 Understanding the occupational profile of the client's assets

It is a fundamental part of this initial process to establish the client's requirements and, where necessary, interrogate the existing brief to obtain a full and complete understanding of the client's expectations. This may include reporting formats to meet those of the client's existing asset management system.

Reporting format, style and content will differ for each client and reporting situation, and ultimately it will be developed to meet the requirements of each individual client brief. Therefore, it is essential that the survey and final report should be checked for compliance with the client's brief.

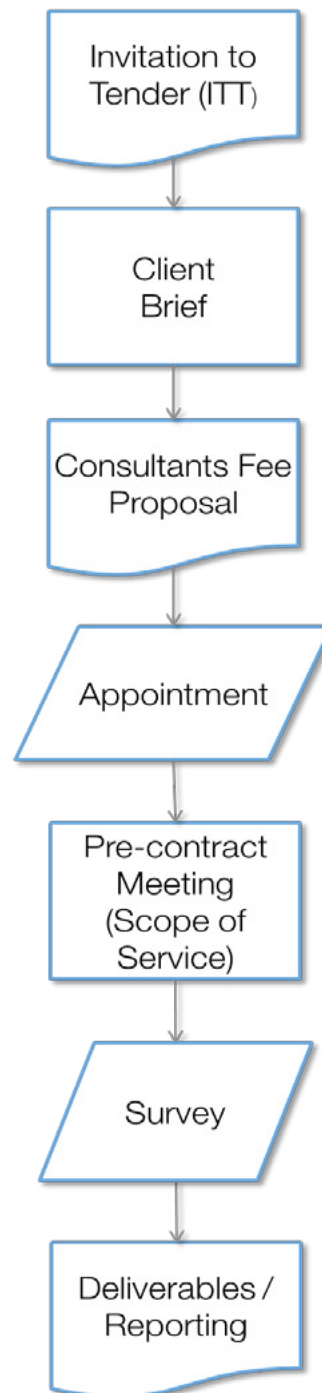
An outline of the purpose, outcome and limitations of the survey and the information in the report should be noted and recorded in the surveyor's terms of engagement. Please refer to the RICS Scope of Building Surveyor Services, found at

www.rics.org/uk/shop/Building-Surveyor-Services-Scopes-of-Service-Pack-of-5-17281.aspx

Also refer to RICS Standard Form of Consultants Appointment

www.isurv.com/site/scripts/download_info.aspx?downloadID=287&categoryID=249

Figure 1: Typical overview of the contracting process



3 Survey content

There are many types of survey that are common to the various market sectors.

The surveyor tasked with a survey in a particular sector should consider the following aspects to ensure their survey meets the requirements of the agreed client brief and that the desired output will be obtained.

Many of the sections may form only part of a larger commissioned piece of work to be incorporated into the survey in addition to any specialist surveys.

3.1 Building assets

3.1.1 Types of assessment for consideration

An assessment of assets can include many types of survey, including, but not limited to:

- Technical Due Diligence, see *Building surveys and technical due diligence* guidance note at www.rics.org/uk/knowledge/professional-guidance/guidance-notes/building-surveys-and-technical-due-diligence-of-commercial-property/
- Building Reinstatement Cost Assessment (BRCA).
- Fire Risk Assessments (FRA).
- Dilapidations, see *Dilapidations in England and Wales* guidance note at www.rics.org/uk/knowledge/professional-guidance/guidance-notes/dilapidations-7th-edition/
- Building Services.
- Party Wall Awards.
- *Equality Act*.

3.2 Sampling or survey size

For clients with larger portfolios of assets, it is not always practical or necessary for 100 per cent of the assets to be surveyed at any one time. This will be influenced by the information already held by the client and the robustness of the existing information.

Based on the asset management strategy of the client, a sample of the stock can be undertaken. It is important to ensure that when sampling a stock all assets are adequately represented. A best practice approach is to use a methodology of sampling of no less than ten per cent to provide an initial appraisal with a rolling year on year programme to boost and refine the findings. This will be based on whether the client already has sufficient information on the current assets and the size of the portfolio.

Where existing information is considered by the client as valid (up to date) it is important for an on-site survey to be

conducted to confirm the validity of existing information before the data/information is used to prepare any reports. Where a small representation of information is present this should be enhanced by further surveys. These surveys can include information gathered on a single asset or a collective number of assets covering a wide range of building types. Where large numbers of properties are involved, unless there is a requirement for a 100 per cent survey of all assets, a representative or statistical sample needs to be drawn. The results from the sample surveys can be either 'extrapolated' or 'cloned', determined by the end use of the information and reporting requirements.

3.3 Other aspects

In addition, the surveyor is often required to produce surveys incorporating the following:

3.3.1 Planned Preventive Maintenance policies (PPM)

To assess the maintenance requirements of an asset over an agreed period of time (these can range from up to 5 years and over 30 year cost projection) in order to enable a budget to be set and a structured plan for maintenance to be developed and implemented.

Often derived from an asset register, the O&Ms (operation and maintenance manuals) and from a survey, a PPM strategy of cyclic and periodic maintenance is produced and prioritised to provide information on a year on year projected expenditure.

To help minimise unexpected failure, clients and operators like to have predictable and stable year on year expenditure.

3.3.2 Elemental life cycle cost planning/ Long Term Asset Replacement (LTAR)

LTAR is the evaluation of asset components to assess their individual life cycle and future replacement. This contributes to the overall costed profile of the asset to be assessed as a budgeting tool for asset replacement.

3.3.3 Pre-acquisition, securitisation and valuation surveys

This is a detailed survey of the asset to determine its suitability to purchase as a standing investment when acquiring as a freehold or leasehold interest.

It can be used to fully assess the condition of a building or demise and any potential, current and future liabilities. It can also be linked to the repairing and lease termination liabilities or as part of a revaluation exercise.

To confirm the existence of an asset, its location, function, age and general condition must be presented to enable

a purchaser, lessee or funder to assess the value and suitability of purpose. This type of survey is often geared to the financial requirements of property funding, mainly for lending organisations and funders.

3.3.4 Tenant fit out and alterations

These are surveys carried out for the benefit of tenants, often accompanied by a condition survey, to inform the occupier's future needs within their demise.

3.3.5 Schedule of Condition

A survey to record the current condition of an existing asset as evidence of the state of repair, etc. for future reference should a dispute arise.

3.3.6 Lease and warranty compliance

A survey to assess if a tenant is undertaking a regime of maintenance and repair in accordance with the lease and to ensure warranties are maintained. Often centred around schedules of dilapidations.

See RICS *Dilapidations in England and Wales* guidance note, 7th edition.

3.3.7 Estate assets

Many buildings, particularly commercial, healthcare, hospital and education environments are surrounded by an estate or may have areas of public realm. It is notable that many of the hard and soft finishes, street furniture, estate lighting, public artwork and water features are bespoke one-off components of high quality and value.

This information should be available from the client estate terrier defining ownership of assets.

While many clients are aware of their responsibility for the upkeep of these assets, the cost associated with these should be included in any report as they can attract significant cost. This may also encompass areas such as loading bays, yards, service and un-adopted roadways.

3.4 Specialist surveys

A brief may also require the appointment of a specialist consultant. Specialist consultancy services will include building services, the advice of structural engineers and any specialists where there is a need for intrusive surveys of the existing fabric. These specialisms are sometimes considered outside the expertise of the building surveyor, therefore separate appointments may be needed.

These appointments often form a subcontractual relationship with the building surveyor. It is important that the surveyor ensures the contents of the specialist report are compatible with other service deliverables.

3.4.1 Building services

Mechanical, electrical, above and below ground services can form a significant part of the asset and therefore the survey and report. The building surveyor should consider

the appointment of these specialists in a timely manner and provide a full and clear brief.

- Structural engineers: to advise as appropriate on structural matters.
- Acoustic engineers: to advise as appropriate on acoustic matters.
- Energy performance certificates: the assessment of energy performance of the existing asset.
- Accessibility: to advise on the provisions of the *Equality Act*.
- Environmental assessment: assessment of future and current environmental impact of asset/oblique area.
- Estate security: surveyors are often instructed in matters of security on an estate or public realm. There are regulations governing the recording and viewing of CCTV images and the siting of cameras. The surveyor should be familiar with these regulations. Advice regarding active security measures may be relevant on certain high profile sites. For example HVM (Hostile Vehicle Mitigation) can be obtained by reference to CTSA (Counter Terrorism Security Advice) publications. It should be noted that many of the requirements for CTSA fall under PAS (Publicly Available Specification). These specifications refer to the standard of a piece of equipment to be installed and the method of installation. There is also a list of accredited RSES (Registered Security Engineering Specialist) who can warrant PAS installations. The surveyor should seek counter terrorism advice when considering this type of security.
- Hazardous material survey: primarily for consideration of asbestos and other deleterious materials. HSE 264 Asbestos guidance refers to two survey types:
 - management survey and
 - refurbishment and demolition survey.
- UKAS accredited or ABICS certified surveyors should be employed to undertake these surveys.

4 Asset types

The following asset types are by no means exhaustive, however, they are considered to cover the majority of the survey evaluation required to meet the client brief:

- commercial
- residential
- agricultural and Industrial
- healthcare and
- education.

4.1 Commercial

4.1.1 Overview

Surveys of office and retail buildings are often commissioned to provide owners, tenants and asset managers with information to inform and support strategic and operational needs. They may also be used to identify building elements, materials and systems with potential problems and therefore associated remedial costs.

Many commercial buildings are large with multiple tenants, therefore if access to all parts is needed, due regard to tenant needs and access terms contained in the lease must be considered.

Similarly where access to the external façade is needed, particularly for multi-storey buildings, the use of Building Maintenance Units (house cradles, MEWPs or other specialist access) must be given careful consideration.

4.1.2 Assessment types

Typically the commercial drivers for surveys of office/retail buildings are:

- pre-acquisition surveys
- due diligence
- securitisation
- lease and warranty compliance
- building and insurance calculation
- tenant fit-out and alterations
- landlord forward funding
- Planned Preventive Maintenance (PPM) policies
- use of budgeting tools
- performance monitoring and benchmarking over time
- mechanical, electrical and plumbing inspections
- energy performance and consumption, and EPCs (Energy Performance Certificates)
- space utilisation
- minimising unexpected failure

- determining breaches in legislation and cost of rectification
- quantifying backlog maintenance
- integration of repairs in a capital or refurbishment program
- Fire Risk Assessment (FRA) and
- assessing repair liabilities to support due diligence or valuation.

4.1.3 Additional considerations

Strategic and asset management needs:

- assembling a property asset register, information database or building manual
- costs for improvement
- demonstrating compliance with legislation, best practice and standards; of particular interest to a client will be the nature and extent of any warranties and maintenance evidence and
- to assist in resource planning and allocation.

Public realm and building estate areas:

Many buildings are surrounded by an estate or have areas of public realm. It should be noted that tenants are often proportionately responsible for the upkeep of some of these assets, including cleaning, all of which may have significant cost. These are the assets of the 'estate' excluding the main buildings.

4.2 Residential

4.2.1 Overview

The information collected in a condition survey is used by the client to assess, manage and plan the condition of their assets to make informed decisions on repair and maintenance and to enable effective programming.

In the same context they can be used for social or private housing, with each having their own bespoke reporting requirements, but the outturns as to condition are similar.

Information from the survey is used by the client for the purposes of business planning and to support returns to government and the regulatory bodies with information about their business. For Local Authorities and landlords with an asset portfolio, this is commonly referred to as the stock condition survey assessment.

Assessment types:

- roof coverings - main and extensions
- main wall construction – traditional and non-traditional forms of construction
- wall construction finishes

- main structures – roof, walls, floors
- windows/doors
- ancillary structures – porches/garages (anything that makes up the asset the client has a repairing obligation for)
- external assets – boundaries, paths, hardstandings within the defined boundary of the asset(s) requiring survey
- kitchens
- bathrooms
- electrical installations
- heating and distribution and
- internal components where the client has a repair responsibility.

4.2.2 Additional considerations

Added value/specialist reports:

Information already gathered by the client about their assets, e.g. works that are of a cyclical nature (painting, lift maintenance, servicing) together with responsive maintenance (day to day reported repairs) also form an important part of an overall summary of total maintenance and repair obligations of the client. These can be assessed based upon historic records held by the client and projected across the yearly summary of expenditure to help inform future maintenance budgets. This information will be adjusted accordingly to reflect the business plans of the client, e.g. if there is a requirement in the business plan to replace all decorated items with those of a maintenance free material and these have been included in the business plan over the next five years, beyond this period there would be no allowance for cyclical decoration of these components as they no longer exist.

Based upon the country or region there may be a number of pre-defined benchmarks that are enforced and to which the data must be collected for the purposes of reporting.

Across the UK, a housing quality standard was developed by the governing bodies of England, Scotland and Wales and referred to a decent homes standard. This was a typical benchmark applied and collected as part of a survey of an individual existing residential asset to bring homes to a minimum standard. This standard, while no longer current, is considered a best practice standard to follow.

Additional benchmarks may have been drawn up by the client to enhance the quality and standard of their assets. These will normally form part of a data collection brief over and above the general survey requirements. It is always important to try and bring value for money into a project by identifying any current grant that may be available to a client to improve their assets, of which they may be unaware, in particular smaller landlords.

Further supplementary information that is also commonly collected, to assist the business plan and strategic financial decisions about the stock, includes:

- energy surveys and/or Energy Performance Certificates (EPCs) in the UK where assets are being disposed of
- measures against the client's benchmarking standards
- improvement measures
- socioeconomic data (to provide information on fuel poverty as an example)
- *Equality Act 2010* and
- *Control of Asbestos at Work Regulations 2012/HSG 264 Management.*

4.3 Agricultural and industrial

4.3.1 Agricultural overview

Agricultural buildings are mainly of simple construction and designed to be versatile. They typically have low hours of human occupation meaning they are generally required to be of a lesser specification than comparable commercial or industrial buildings. They have a variety of uses and are generally simple to design and quick and cost effective to construct. However, sometimes they can be very specialist such as intensive livestock buildings and therefore lack the normal versatility.

Whether clients are purchasing or leasing agricultural property, there is rarely a requirement for a condition survey to be undertaken. This is partly due to the fact that agricultural buildings are often relatively low in value compared with the whole and partly because the buildings are usually fairly simple in design and therefore readily understood by the user. However, there will be certain situations when a condition survey will be required, especially when being purchased by someone with little or no experience of agriculture.

The scope of the survey will vary, however the principles and processes in completing the survey remain the same. Once the brief and scope of the survey have been agreed then preparation for the site survey can begin.

4.3.2 Industrial overview

Industrial property is one of the most simple and effective methods of building construction in commercial property. They have a variety of uses and are generally simple to design and quick and cost effective to construct. For these principle reasons there is always great demand for this type of property, which is why it has been at the forefront of commercial property worldwide for decades.

Whether clients are purchasing, developing or leasing new industrial property, there will be the requirement for a condition survey to be undertaken. The scope of the survey will vary, however the principles and processes in completing the survey remain the same. Once the brief and scope of the survey have been agreed, preparation for the site survey can begin.

Assessment types:

- pre-acquisition surveys
- due diligence

- securitisation
- lease and warranty compliance
- building and insurance calculation
- tenant fit-out and alterations
- landlord forward funding
- Planned Preventive Maintenance (PPM) policies
- use of budgeting tools
- performance monitoring and benchmarking over time
- mechanical, electrical and plumbing inspections
- energy performance and consumption, and EPCs (Energy Performance Certificates)
- space utilisation
- minimising unexpected failure
- determining breaches in legislation and cost of rectification
- quantifying backlog maintenance
- integration of repairs in a capital or refurbishment program
- FRA and
- assessing repair liabilities to support due diligence or valuation.

4.3.3 Additional considerations

Other factors to consider include the building superstructure, internal surface finishes and external surface and boundary areas. These can be bespoke to agricultural and industrial assets through their very nature of construction and use. However, the collection and reporting of information can be very similar to that covered in the previous asset types.

4.4 Healthcare

4.4.1 Overview

Surveys of healthcare buildings are often commissioned to provide public and private bodies within the healthcare sector with information to inform and support strategic and operational needs. They may also be used to identify building elements, materials and systems with the potential to cause problems and therefore costs.

The ability to project future maintenance costs is very important for Health Authorities in planning their annual budget.

Assessment types:

Healthcare very much follows a different structure in terms of the methodology of the data collection and reporting of these asset types. It is tailored towards a six facet survey (NHS Estatecode).

There is a structure to be followed when undertaking a six facet survey in order to provide a uniform way of reporting to health organisations and to enable them to

share information for comparative purposes across the organisation as a whole.

Each of the individual facets should be fully understood in advance of any survey to ensure correct and robust data is gathered and reported upon. Any issues with the information being reported on should be discussed, but this will be based upon the type and nature of the assets to be included as part of the brief.

See Appendix A for NHS Estatecode.

4.4.2 Current key drivers for surveys of healthcare buildings

The main key driver is to confirm core information that represents a summary of the general condition of healthcare buildings, covering general condition, usage and compliance with current requirements, and forms the basis for informed decisions and an estates strategy. To provide this information, specialist survey teams and auditors are required to carry out six separate surveys and reviews. This is probably the single most common survey you will be asked to do and covers:

- 1 physical condition
- 2 functional suitability
- 3 space utilisation
- 4 quality
- 5 fire, health and safety requirements - knowledge of fire code and
- 6 environmental management.

4.4.3 Additional considerations

Each facet is further subdivided into fabric and buildings services and scored typically under an A,B,C and D scale with A equalling favourable down to D meaning unfavourable as appropriate for each facet, although this terminology varies with the facets (e.g. space utilisation uses different classification). Data can be gathered via hand held electronic gathering tools.

Supplementary rating of X is applied to scores of C and D to indicate nothing other than total rebuild or relocation will suffice. It is important that reference is made to the NHS Estatecode.

4.4.4 Other surveys

- legionella and aspergillus
- *Equality Act 2010* access audit
- gender segregation audit:
 - this is an aspect that should be considered as part of the move within healthcare to provide gender segregation in wards and other critical areas in hospitals (statutory requirement), unless there are overriding clinical reasons against this. Now hospitals report that they are effectively being fined for not achieving segregation. This issue is important background information and could form part of the assessment of the suitability of an existing facility.

- assembling a property asset register, information database or building manual and
- operational asset management needs.

4.4.5 Infection

The following issues require a thorough understanding of Health Technical Memorandum (HTM) and Health Building Note (HBN) guidance documents when undertaking surveys to healthcare assets.

- **Infection control** – containment of MRSA is a key issue in hospital design and a surveyor may be expected to identify critical areas on a survey, such as the nature of floor coverings or the type of taps used in clinical areas.
- **Legionella issues** – input from a specialist mechanical and electrical services engineer will indicate if sufficient measures have been taken.
- **Aspergillus** – emerging issue to be aware of that require specialist input.
- Isolation of services in occupied buildings:
 - The routine of the hospital cannot be disturbed, and this may mean surveys being completed ‘out of hours’, early morning or evening, although even this can be problematic in a 24 hour facility such as A&E.
 - Means of evacuation should remain accessible at all times.
- Infection control during surveys and inspections:
 - Appropriate measures (hand washing in alcohol gel) should be taken and appropriate clothing worn before entering clinical areas. You should agree with management prior to embarking on any survey work.

4.5 Education

4.5.1 Overview

Surveys of school buildings provides the data that enables those responsible for school estates to monitor and control costs and more accurately prioritise where works should be carried out.

The survey method, structure and grading adopted is likely to vary across the UK, Europe and the rest of the world and what is set out below is general good practice. Reference should be made to national agency guidance in connection with agreed methodologies of data collections prior to commencing a survey

Most school surveys are a high level, visual, non-intrusive, block-by-block condition assessment to enable the key issues to be identified and works prioritised. However, there will be occasions where more detailed surveys are required and where this is the case the same grading can be employed by at a room-by-room level.

Surveys of Higher Education Institutions (HEI) allow the recording of data to enable the calculation of a building condition assessment to be reported back to the Higher Education Statistics Agency (HESA) on an annual basis

within the UK. When undertaking surveys outside of the UK, reference should be made to national agency guidance in connection with agreed methodologies of data collection.

HESA provides best practice guidance on the calculation of the building condition assessment, although this is not a formal requirement. However, it is expected that the assessment will be undertaken using an objective assessment methodology.

4.5.2 Number of sites/ buildings

It is common that a higher education institute may have buildings spread across several sites. In the UK, HESA, who are experts in UK higher education data and analysis, provide independent guidance definitions in classification of sites and their location to one another. More information can be found at <https://www.hesa.ac.uk>

Where a HEI is uncertain as to what is considered a site they must provide HESA with clarification on their assumptions.

HESA state that the assessment should exclude sites held for investment or primarily income generation purposes (e.g. commercial farm not used for academic purposes, commercial property). Any survey of such premises shall form part of a separate instruction from the HEIs.

In determining what defines a building for the purposes of undertaking the survey, a separate building should be recorded where:

- the building has a different entrance (but a building can have more than one entrance)
- the building is served by different service cores and staircases (although, again, a building may have more than one set of these)
- the building has floor space recorded as Net Internal Area (NIA) under private finance initiative or public private partnership
- the building is fully enclosed (i.e. open-sided buildings do not count) and
- the building is capable of functioning as a self-contained unit.

All buildings should be recorded, however temporary, e.g. portacabins. Farm buildings should be included if maintained and operated by the HEI.

Exclude individual buildings used entirely for commercial purposes and therefore not included elsewhere in this return.

If a space is both academic and commercial, HEIs should use their own judgment based on its primary function. If the predominant use of a building is for residential purposes it should be returned under the residential sub-heading and vice-versa for non-residential. The number of buildings is included for the purposes of making comparisons and not as a performance indicator in its own right.

Assessment types:

Reference documents

Guidance for recording survey data for HEIs is provided by HESA, and sets out the requirements for recording the division of estates, age of construction of buildings, defining building blocks, lease types and methodology to score defects.

However, HESA guidance does not define the methodology or approach to undertake during the on-site survey to meet your client's requirements.

Approach

Prior to undertaking any survey of a school property, the surveyor should confirm any requirement for background tests on members of staff, such as Disclosure and Barring Service (DBS) checks, needed when working with children.

Condition information

Educational establishments are assessed and the following needs to be taken into consideration:

1 Construction age and types

Typically the age of school buildings is broken down into six categories. This information should be obtained from the school's representative prior to commencing the survey or, should they not know, is a judgment based on the construction. School types typically fall into the following age band categories:

- pre-1919
- inter war (1919-1939)
- 1945-1966
- 1967-1976
- post 1976 and
- modular building (post 1976).

In a scenario where a block may have been constructed over more than one age band, and it is not appropriate to segregate the sections relating to each age band into separate blocks, then the age band of the section that represents the largest proportion of the block should be used.

2 Elements and sub elements

The building should be broken down into elements with a suggested format of 12 primary elements, with each having a sub element, the condition recorded and priority rating.

It is advisable that each sub-element is broken down further into construction types, against which the elemental data set is captured. The surveyor needs to identify as part of the survey the construction types present for each sub-element.

3 Condition grades and priority ratings

The surveyor is required to allocate a condition grade and a priority rating to each selected construction type. Categorisation of condition is subjective. Educational surveys are usually graded A-D and priority rating graded 1-4. This 'elemental data structure' is used by the Education Funding Agency for England. It is important that the structure follows

the current property data technical manuals in the EFA *Property data technical manuals*, found at

<https://www.gov.uk/government/publications/property-data-survey-programme>

4.5.3 Additional considerations

Costing of works

HESA recommendation is that BCIS costings are used as a guide to price defects identified.

Building condition assessment

HESA includes guidance for providing a condition grade based on the relationship between repair and rebuilding costs. This information references the BCIS published costs, found at www.rics.org/uk/knowledge/bcis

As a general guide, the building component 'Condition' is assessed using a scale of A-D, where:

- < 5%, this indicates condition A (or where the building is less than 5 years old)
- between 5% and 20% indicates condition B
- between 20% and 50% indicates condition C and
- > 50% indicates condition D.

The proportion of the overall estate that falls into each of the condition categories should be calculated on floor area.

Building condition assessment cost to upgrade

The HESA requirement is for the HEI to report back the overall building condition cost for the estate. This definition is based around the maintenance costs required to upgrade the whole estate (excluding any commercial space) to condition B.

The costs should include ensuring legislative compliance in meeting current regulations and standards enforced at the time of survey. Costs to upgrade should include professional fees, statutory fees, contingencies and VAT but should exclude inflation.

Define the cost to upgrade all space in Condition D to Condition B, and the cost to upgrade all space in Condition C to Condition B.

A building or proportion of building could be classed, for example, as Condition C relative to original condition gradings but would have the additional notation identifying costs necessary at today's figures to return the building to Condition B. This may result in the condition grade C-675,000 for example.

This provides a summary of building condition through grading but also an indication of cost scale/magnitude to rectify. It also enables the difference between planned maintenance and overall 'backlog' works to be reconciled.

5 Pre-site survey preparation

5.1 Desktop study

5.1.1 Existing documents

In preparation for the site survey it is important to complete a thorough desktop study where information is available from the client to help inform the survey process. Refer to RICS guidance note *Surveys of residential property*, 3rd edition, found at www.rics.org/uk/knowledge/professional-guidance/guidance-notes/surveys-of-residential-property-3rd-edition/

The desktop study list within *Surveys of residential property* can be used as a further guide for other types of assets referred to in this guidance.

Collection and study of information such as that listed below will enable some knowledge and understanding of the asset to be gained prior to attending the site. This will mean the survey is prepared for and executed appropriately; ultimately ensuring the survey is a success and the client's brief is met.

Pre-survey information checklist

- Data capture device or Pro-forma record sheets.
- Referenced as built drawings, block plans and additional supporting maps/plans.
- Camera device.
- Personal Identification.
- Torch.
- Measuring device - laser measure or measuring tape.
- Personal protective equipment (PPE).
- Binoculars.
- Asset registers.
- Operation and maintenance manuals.
- Leases/license for alteration.
- Agreement for lease.
- Schedules of Dilapidations.
- Street view/aerial map to determine any site constraints.
- Fit-out and licence to alter.
- Commissioning and testing surveys and reports, particularly for M&E installations.
- Fire Risk Assessment (FRA).
- Previous Condition Survey reports.
- Any existing Technical Due Diligence Reports.
- Details of any site and building risks and site restrictions.
- Confirmation of general access arrangements.
- Details of any specific requirements for high level access.
- Copy of the Health and Safety File.
- Check with the client for the existence of an Asbestos Management Plan.
- Copies of any Planning Permissions or Listed Building Consents.

The above list is not exhaustive and it can be developed to suit the requirements of the survey or property usage. Clients may also have specific asset management software/registers containing information in relation to their property portfolio and this should be reviewed pre-survey.

Organisations may have their own databases and experience of component performance. It is important to understand the structure of this information where it needs to be incorporated into an existing automated management system (AMS). The surveyor should also establish any existing framework costs for undertaking works and any bespoke expected service life of components is considered and taken into account as part of their survey. Most organisations have comprehensive websites that can be interrogated for background information.

It is not unusual for some of the information listed to be limited, often as the asset(s) change ownership. However, it is important to closely study all information in order to determine the best approach for the survey, as well as anticipating any potential risks, defects and shortcomings.

An initial site visit (could be combined with a client meeting) will help develop an understanding of the issues.

5.2 Health and safety

The health, safety and welfare of the surveyor are paramount and gaining knowledge of the building will enable any potential risks to be prepared for. A site-based risk assessment must be undertaken prior to commencing the survey, and any risks identified must be managed by whichever means necessary to ensure no harm is brought to the surveyor.

Advance checks may include:

- confirm any site induction procedures that need to be followed with regards to health and safety
- establish if there are any hazardous areas or areas that may require a permit to work
- evidence Asbestos Register where available
- enquire if there is an up to date Asbestos Management Plan
- establish if there are any current areas of concern with regards to health and safety

- evidence any site specific health and safety files available and
- establish if any maintenance or other works are ongoing.

Typical risks might be as follows:

- fragile roof coverings
- falls from height
- moving vehicle traffic and plant
- operational plant and machinery
- spillages/exposure of/to hazardous materials
- unstable and highly stacked stored goods and materials
- high noise and dust levels
- confined spaces
- high and low voltage electricity and switchgear
- ponds, lakes and watercourses
- livestock and wildlife and
- working in unoccupied and void premises – unseen risk of structural failure (see RICS guidance note *Surveying safely*, 1st edition, section 6.2.2 on 'lone working', found at www.rics.org/uk/knowledge/professional-guidance/guidance-notes/surveying-safely/)

6 Survey and data collection

Benchmarking condition is crucial to the quality and reliability of the survey and the final report and associated recommendations. There are various publications provided by RICS, such as *The life expectancy of building components and materials*, and publications from other industry recognised organisations such as BMI, BICS, HAPM/BPG and CIBSE. Understanding the anticipated life expectancy of materials, mechanisms for failure, remedial techniques and the need for accurately prioritising maintenance, repairs or replacement is paramount. Refer to Appendix A for more information.

6.1 Published data sources

Published service life data provides guidance as to the anticipated life expectancy of individual building components. While these are only for guidance, other factors must be taken into consideration that influence life expectancy such as quality, environmental location and a matter of professional judgment.

Where available to the surveyor, existing maintenance documentation should be used as a guide to assist the likely life expectancy of building components and/or services using known build dates/installation dates of materials or reference to guarantees.

In conjunction with the above, a number of possible approaches can be used and clear reference should be made in any report as to methodologies used. This may include:

6.1.1 RICS building maintenance information categorisation

Historically, information has been categorised under this heading as shown below, however care should be taken when using this method of assessment. Further reference should be made to the bespoke categorisation in each asset type.

The overall condition of the property is expressed as complying with one of four categories as defined by RICS building maintenance information:

- **New:** with the expectancy that with proper routine maintenance the building will continue to provide a satisfactory standard of service.
- **Satisfactory:** safe with only minor deterioration in standards of finishes, decorations, etc.
- **Operational:** major repair or replacement will be necessary within a reasonably short period with costs outside the current maintenance programme.
- **Inoperable:** unsafe, with risk of immediate breakdown requiring urgent expenditure.

6.1.2 Red, amber, green (RAG) rating

A simple method of reporting priorities may be agreed in advance, e.g. applying a scale 1-3 or colour coding to suit the client's needs.

6.1.3 Condition and priority rating

Many other surveys are also driven by a condition rating and a priority (in years) in order to produce a costed output as an assessment of the asset.

6.2 Data collection

It is considered best practice to test any data collection or survey design used to collect the data and provide information to the client through a pilot survey. A small sample of the assets would be selected to ensure all aspects from data collection to reporting are working as intended.

It is extremely important to understand from the commissioning client at inception and prior to any on-site inspections/survey, how the information is to be used and if there is a need for the data's ongoing use within their business or if the report is to provide only a 'snap shot' in time.

As a basis to the survey, this will assist you in helping to formulate a structured plan in the approach and methodology for the information necessary to be collected as part of the inspection/survey of the asset(s). This should include as a minimum the key asset features to be reported upon.

Where an immediate health and safety risk has been identified during the course of the visit the surveyor should report the particular details in a polite and courteous manner to the establishment representative before leaving site.

6.2.1 Data capture

The knowledge gained from the pre-survey stage will allow the preferred method of data collection to be implemented. Depending on the agreed brief and scope of survey, specialist equipment or survey specialists may also be required to complete the survey. Accurate data captured through the correct medium is essential to the success of the survey and quality of the final report.

Hand written or dictated notes to record the specific description and condition of the element are of the utmost importance. Clear supporting photographs of the condition of the element are of a similar importance.

Electronic data collection and reporting tools utilised for the survey and report generation, need to be robust and secure for future retrieval or reference. Such technology is not intended to reduce how long it takes to survey, rather

to allow time on site focused less on administration tasks and more on the skillful assessment of asset condition and the level of compliance. The time efficiencies typically come in the post survey reporting process.

There are many 'off the shelf' ready-to-use applications and more bespoke software packages available to a surveyor, however it is important to ensure they are fit for purpose in meeting both surveyor and client needs for a particular survey commission. The following is a checklist of the 15 key points to consider when selecting a solution:

- 1 Data storage – always ask where survey data is stored. Many clients will insist on data being stored in the UK or EU, especially the UK government. Data centres used by software providers are often more secure than local servers or PCs but data centres should have a disaster recovery plan and fail safe in the event of a fire or flood with backup between two separate data centres. Data storage should also not be limited by volume or time.
- 2 Backup of data – most RICS approved PII policies will state that data stored in electronic media should be backed up every 24 hours to protect client data. Most software providers will provide this cover and backup the data once it's securely stored. It is suggested that online data backup should be every 20 minutes, in line with best practice.
- 3 Data and software availability – you should ask your software provider for a service level agreement (SLA) that sets out the availability of data, and best practice is 99.9 per cent of the time. This is critical in the event of reports being issued to clients on short turnarounds.
- 4 Ownership of data – always check who ultimately owns the data collected in order to protect your client confidentiality. Some providers will ask to aggregate and benchmark data with your permission.
- 5 Data security 3rd party certification – your software provider should provide evidence of security certification for the software and the data hosting separately, and the industry standard for this is ISO 27001.
- 6 Pre-population of site data – the ability to pre-load or pre-populate existing known site, room and asset data, to avoid having to record this information on site when it is already known.
- 7 Photograph handling – the solution should not limit the number of photographs that can be taken or uploaded. It not uncommon for a detailed condition survey to have 500+ hundred photos. Always check photo resolution and labelling methods.
- 8 Flexibility of survey forms and templates – most surveyors undertake a wide range of survey types and it's important to select a solution that enables for different survey types to be undertaken cost effectively, through template libraries.
- 9 Recording of site notes – it is advisable that notes can be dictated and stored as voice notes or text notes even if the notes are not included in the report. Many data collection apps make use of voice dictation or voice recognition software that converts voice to text. Many systems now allow for libraries of dropdowns or selectable phrase books accessible on site, which increases the consistency and accuracy of reporting.
- 10 Data interrogation – ideally the data collection solution should have a database supporting it that enables data to be interrogated by any search criteria and allows dynamic QA checking of survey data.
- 11 Report building – solutions should allow for flexibility in report production and the ability to change report layouts, logos, column headers, order of data, and photo schedules, etc.
- 12 Reporting outputs – software should allow for report customisation and report outputs to be in MS formats such as Word and Excel as well as PDF. Check that your software provider does not limit the size or frequency of reporting.
- 13 Links with pricing data and other RICS standards – many systems will now allow price books such as the BCIS BMI to be linked to surveys, enabling immediate pricing of survey remedial works. You should also check that software can support important data standards such as the NRM for building elements.
- 14 Ability to project long term PPM or lifecycle plans – many clients require an integrated condition survey and costed PPM, say five or ten years or beyond. The software should allow this process to be linked to the survey data and cost profiles generated within reports at the same time as condition reports are issued.
- 15 Link with Building Information Modelling (BIM) and other systems – with advances in technology and the movement of BIM into the surveying process there are many ways to better embed existing asset information into the survey process, such as room names and elemental asset lists. These developments mean that a surveyor is working on a 'single point of truth' and so the client can better align the results of the survey back into BIM or other asset management processes and facilities management systems. To future proof your software selection, check if the solution can provide this level of integration through the use of software programme interfaces commonly called APIs.

7 Post-reporting deliverables

Upon completion of the report, a meeting with the client should be held to discuss the content and any recommendations. This will provide an opportunity to ensure the client is satisfied the brief has been met, as well as discussing strategy for dealing with any findings and recommendations made. There may be an opportunity to provide further additional advice or services if the findings of the report are to be developed further. This may include services such as implementation of planned or lifecycle maintenance repair works and development of a programme of works to ensure compliance with statute. Clear, reasoned advice is what your client is seeking from you as a chartered building surveyor.

The executive summary and conclusion sections of the report should identify the most important and salient matters discovered by the survey. They should give clear unambiguous advice and conclusions. Any further or proposed surveys or work should be clearly identified.

Following on from a survey, a client may decide to commission other relevant services leading on from preparation of the report.

Appendix A: Further reading

Below are suggestions for further reading. This list is not exhaustive and there might be further documentation available for you to read that is not covered below.

Fire safety and means of escape:

www.firesafe.org.uk/basic-means-of-escape-from-fire/

Workplace (health, safety and welfare) Regulations 1992:

www.legislation.gov.uk/uksi/1992/3004/contents/made

Equality Act 2010:

www.legislation.gov.uk/ukpga/2010/15/contents

Control of Asbestos Regulations 2012:

www.legislation.gov.uk/uksi/2012/632/contents/made

NHS Estatecode:

webarchive.nationalarchives.gov.uk/20130314172230/https://publications.spaceforhealth.nhs.uk/stream.php?id=p8545A47qsrG207pot65n761sp2ro40488qo

Lifting Operations and Lifting Equipment Regulations 1998 (LOLER):

www.legislation.gov.uk/uksi/1998/2307/contents/made

Pressure Vessels – Pressure Equipment Regulations 1999:

www.legislation.gov.uk/uksi/1999/2001/contents/made

London Building (Amendment) Acts 1939:

www.legislation.gov.uk/ukla/1939/97/contents/enacted

BS 5266-1:2016: Emergency lighting. Code of practice for the emergency lighting of premises:

shop.bsigroup.com/ProductDetail/?pid=000000000030331554

BS 9251:2014: Fire sprinkler systems for domestic and residential occupancies. Code of practice:

shop.bsigroup.com/ProductDetail/?pid=000000000030280482

Approval Document B of the Building Regulations (2000) [as amended]:

www.gov.uk/government/uploads/system/uploads/attachment_data/file/441669/BR_PDF_AD_B2_2013.pdf

Health and Safety at Work etc. Act 1974:

www.legislation.gov.uk/ukpga/1974/37/contents

Please see the RICS website for further professional guidance:

www.rics.org/guidance



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