

BUILDING SURVEY

Stuart Little

Chartered Building Surveyor Chartered Quantity Surveyor
RICS Accredited in Building Conservation



GENERAL INFORMATION

Instructions

We are acting on your verbal instructions as confirmed in our email and conditions of engagement dated 11th December 2019

This is a Building Survey report on the property and not a Schedule of Condition which would list every minor defect.

We have not arranged for any specialist tests or reports on the services installations but comments on the need for further investigation or specialist tests are included.

You are reminded of the general limitations of the inspection described in the Standard Conditions of Engagement, a copy of which is reproduced at the back of this report.

Property Address

Grade II Listed Barn at Loudwater Farm, Loudwater Lane, Loudwater, Rickmansworth, WD3 4HG

Name and address of client

Royal Masonic Trust for Girls and Boys, 60 Great Queen Street, London, WC2B 5AZ

Inspected by

Stuart Little Chartered Building Surveyor
88 Abbots Road, Abbots Langley, Hertfordshire, WD5 0BH

Date of Inspection

Tuesday 7th January 2020

Weather

During the inspection the weather was dry. The weather in recent weeks has been varied.

Orientation

The front of the property faces roughly north. All directions are given as if facing the front of the property looking towards the rear.

GENERAL DESCRIPTION

Description of the property

This is a detached farm barn. This is Grade II Listed as of Architectural or Historic interest. The property was first listed on 3rd October 1985. The barn is about 35 metres north of Loudwater Farm House. The Listed Building Description describes the building as:

“Barn. 17th Century. Timber frame on brick base, renewed and cemented. Weatherboarded. Tiled roof. 5 bays with 2 bay gabled midstrey facing house. Gabled central bay with entrance away from house. Inserted windows. Flint and brick lean-to addition to left facing house. Interior: curved braces from jowled posts to tie beams and wallplates. Queen struts to collars clasping purlins, curved windbraces.”

Accommodation

The accommodation briefly comprises: -

Ground floor: - open barn, separated kitchen area, internal toilet area, attached store.

Circumstances of inspection

During the site inspection the property was unoccupied and unfurnished. There were some fitted units in the kitchen area and some tables and chairs in the main barn. The building has not been used for some time. The facilities are not currently safe for public use.

Unseen / inaccessible areas

During the site inspection the underside of some roof coverings were concealed by plasterboard.

Location

The barn is located within the Loudwater Farm complex.

A river is located nearby. Although there is no evidence of previous flooding further enquiries would be prudent. The barn is elevated above the flood plain levels.

THE NEED FOR OLD BUILDINGS TO BREATHE

Modern buildings tend to rely on an impervious outer layer or a system of barriers to prevent moisture penetrating the walls. Traditional buildings constructed before 1919 were built with permeable lime mortar, lime render and lime plaster. These traditional buildings remain dry and stable by allowing the moisture which has been absorbed by the fabric to evaporate back out from the surface.

The use of impervious materials will cause problems in traditional buildings. In a modern building the damage or failure of one of its moisture barriers will lead to severe problems of damp penetration. In an old building prevention of evaporation of moisture from walls will lead to similar difficulties. Hence the two building types need to be handled completely differently. Old buildings will become damp if an impervious layer is applied to them because this prevents water within the structure from evaporating.

Modern paint systems for exterior use tend to prevent evaporation of moisture from the surface. They are designed to prevent the ingress of moisture but, when used on the solid walls of old buildings, water inevitably gets behind the paint film in time. Unable to evaporate from the surface, this moisture is trapped and unless it can evaporate from the inner face of the wall the moisture content of the wall will gradually increase. As the surface layer of paint begins to break down, further water penetration will occur leading to increased damp penetration.

Strong cement renders have a very similar effect to impervious paint but renders are even more susceptible to cracking and subsequent breakdown. Moisture then enters the wall and becomes trapped because evaporation is prevented by the impervious render. Where the render has been applied over soft brick or stone, severe breakdown of the weak underlying material can occur. The lime mortar bed joints can also weaken with prolonged dampness leading to increased risk of structural movement.

External cement rich pointing will have a detrimental affect where applied over walls bedded and pointed in lime mortar. Water will get into the wall through the masonry or through cracks in the pointing and due to the impervious mortar will be unable to evaporate from the joints, as originally intended. Moisture within the wall will have to evaporate from the surface of the masonry rather than the pointing, leading to increased decay of the masonry due to the deposition of salts or frost action at its surface.

Under normal circumstances, older buildings will function well if they are allowed to breathe as they were intended. Mortars, plasters, renders and finishes should all be of relatively permeable materials allowing moisture to pass through them and evaporate from the surface. Traditionally mortars, plasters and renders were usually lime-based and decoration was with limewash. Remedial action should ideally involve the removal of all impervious materials and their replacement with porous ones. This is not always possible without doing further damage to the fabric of the building and so a compromise may be necessary. All future repairs should use traditional breathable lime materials so that any current inappropriate repairs can be progressively reversed.

PERIOD TIMBER FRAME

The period timber framework will need repairing from time to time. Such repairs should use traditional materials and traditional techniques. The extent of the repairs will largely be dependent on any dampness and rot affecting the timbers.

Timbers should not needlessly be replaced or distorted frames necessarily straightened. Where serious decay exists, a section of matching new timber can frequently be scarfed in. With timber frame repairs, this should be two year air dried timber which can be easily worked without the risk of major twisting and distortion likely with 'green' freshly felled timber. Fully-seasoned timber should be used for complex joinery repairs to carved work. Strengthening using steel is not normally appropriate as this will cause stiffening to the frame which could result in failure elsewhere. The use of resins is not recommended as these will prevent the wood from breathing and the bond to the timber will eventually fail allowing water to enter and become trapped in the core of the timbers.

Sill plates are the horizontal bottom members of a timber frame that normally rest on masonry plinths. They can be subject to high moisture levels so are commonly the part of a frame most susceptible to decay. Partial or total renewal may be necessary, sometimes bolting together face-to-face more than one thickness of new timber. Occasionally, it can be acceptable to raise the plinth height to minimise future deterioration if other solutions are limited. When rebuilding a plinth and a damp-proof course (DPC) is felt justified, try not to place this under the sill plate but lower down in the masonry.

The feet of posts and studs sometimes decay, not infrequently, with a sill plate that supports them. Rotten ends can be cut back and replaced with new timber scarfed on and held with oak pegs or stainless steel bolts. The new timber should be selected carefully to minimise twisting, particularly for narrower uprights. Where only tenons have rotted, false ones ('slip tenons') can be inserted into sound posts or studs.

Shakes (splits) in timbers are rarely of structural significance but may allow rainwater penetration externally. As with empty mortices or peg holes, they can be filled with timber inserts or, if their awkward shape prevents this, packed with well-haired lime mortar and limewashed. Internal shakes can be left unfilled but minimising fluctuations in temperature and humidity will help prevent them opening up. Timber inserts can also be pieced in when part of a timber face has rotted away. Concealed holes may be filled with adhesive mixed with sawdust.

All impervious paint should be removed from the period timbers using chemical poultice strippers so the timbers can breathe and release any dampness. Sandblasting should not be used as this will destroy the surface of the timbers together with any medieval markings or paintings. The timbers should be left exposed or lightly coated with a natural breathable oil / wax mixture.

CHIMNEY STACKS, FLASHINGS AND SOAKERS

There are none.

ROOF AND VALLEYS

The main roofs are of pitched and clay tiled construction. There is a pitched and slated roof construction over the attached store.

The main roof framework is of period timber framed construction. There are signs to suggest that the roof has been affected by structural movement as evidenced by deflection and movement in the external walls. There have been some temporary repairs but the possibility of further movement occurring should be expected. Repair and strengthening works are required and all recommendation works should be carried out in full under professional supervision.

The observed main roof coverings consist of hand made plain clay peg tiles. They appear to have been stripped and relaid in about 1970 and galvanised clout nails have been used in place of original oak pegs. Some areas have more recently been stripped and relaid with a modern roofing felt underlay. There is a large amount of moss to north facing roof slopes. The verges appear to have recently been repaired with lime coloured mortar. Some tiles have been replaced with modern smooth faced tiles. The roof was previously insulated with polystyrene boards fixed with mastic between the rafters.

The main roof coverings are leaking in many areas. There are many isolated slipped and missing tiles which need replacing. The rear sloping valley gutters are in a poor condition and need repairing and partially renewing. If the roof is to be insulated again, the best solution would be to strip and relay the roof coverings over a Pavatex Isorooft Woodfibre Sarking board fixed above the rafters. This would require counter battens over the sarking board before fixing the underlay and roof battens. The woodfibre sarking board would provide some insulation; suitable for occasional use of the building.

The slate roof coverings to the attached store have failed where the nails have rusted through; the most economic solution is to strip and relay the slate roof coverings; some additional natural slates will be required. Some repairs to the roof structure will also be required. A similar over rafter insulation should also be provided to this roof structure.

RAINWATER GOODS

Rainwater goods are formed in replacement plastic fittings. Discharge from gutters is via downpipes directly onto the ground. The rainwater goods require an overhaul to deal with the numerous defects and overflowing gutters; renewal is recommended as their future life is limited. Given the Listed status of the building it is likely that all replacement rainwater goods should be with traditional cast iron fittings. Gulley gratings and surface water drains are required from the bottom of each rainwater pipe.

EXTERNAL WALLS AND ELEVATIONS

External walls to the barn consist of masonry dwarf walls, period timber frame construction, timber weather boarded external cladding and foam insulation infill panels fixed with mastic. The walls to the attached store are of brick and flint construction. There have been various repairs with expanding foam to seal up previous gaps in the cladding.

The timber weather boarding was renewed in about 1970; there are some missing and defective boards which need replacing. The period timber frame has previously been repaired; for example, the front sole plate has been removed and the frame under built with new brickwork. The brick and flint masonry supporting the rear wall has failed as a result of previous cementitious repairs and the timber sole plate is deflecting and distorting the frame above. There has been structural movement to various areas of the timber frame. Most areas of the frame are now damp to the touch and there are some associated defects to the joints. The brick and flint walls to the attached store are in a poor condition and there have been some cementitious repairs.

The loading needs to be removed from the period timber frame. All modern foam insulation boards should be removed and the frame cleaned. Cement render should be removed from all old brickwork and the walls repaired with lime mortar. All the old brick and flint masonry walls to the building need extensive repairs and some partial rebuilding; all cement mortar should be removed; lime mortar used for all repairs. A programme of traditional repairs is required to the entire period timber frame. Some existing timber sole plates may need replacing or refacing externally. Missing timber braces need replacing. A thin layer of moisture resistant sheathing plywood should be fixing to the outer face of the period timber frame. A breather membrane should be fixed to the plywood and vertical battens fixed behind each period timber stud. The timber weather boarding should be refixed with new boards to replace any defective boards. Weather boarding cover pieces are required at each corner to close all gaps in the weather boarded cladding. The weather boards should be finished with an approved breathable stain. The eaves detailing and barge boarding should also be repaired with similar cladding materials. Wood fibre insulation boards should be used as internal infill panels in the period timber frame and finished with a skim coat of lime plaster, painted with limewash.

DAMP PROOF COURSE

A damp proof course is a waterproof layer built into, or formed within, the walls to prevent ground dampness from rising. There is evidence of a horizontal damp proof course between new masonry walls and the underside of the timber frame. A damp proof membrane is not required between traditional breathable masonry and the underside of the period timber frame.

External ground levels to some areas are too high and should be lowered to a minimum of 200mm below the ground floor structure. In addition, a one metre wide free draining path should be provided next to all external walls to allow evaporation and thus reduce the risk of damp penetration. With the top of the path at the correct ground level, the construction should consist of a 100mm bed of well compacted MOT Type 1, crushed granite and topped with a thin layer of pea shingle. Garden retaining walls may be required beyond the path area.

EXTERNAL JOINERY

External joinery is of timber construction. A programme of extensive repairs is required. All the historic timber joinery should be retained and repaired on site. The large barn doors to the front of the building need a programme of repairs and improvements. Regular maintenance will be essential to avoid further deterioration to external joinery. It is recommended that breathable seals are maintained between door/window frames and adjacent walls in order to minimise the risk of damp penetration internally.

EXTERNAL DECORATIONS

These are subject to wear and tear; they will need redecoration after the external joinery repairs. The external joinery should be finished with breathable similar stain or linseed paint to windows. The timber weather boarding should also be redecorated with a suitable breathable stain finish. Decorations must be well maintained to reduce the risk of damage and timber decay. The removal or working onto old lead paint should comply with current health and safety regulations.

ROOF VOID

There is no roof void. The roof frame is fully exposed except for the attached store where the frame is concealed by plasterboard fixed to the underside of the rafters.

Inspection revealed a traditional timber frame design typical for this type of building with evidence of historic distortion and some more serious structural movement. Some general splitting and staining of the timbers was observed but this is merely consistent with the building's age. Additional bracing has been provided to the roof frame to prevent further deflection resulting from defective timbers. Repair and strengthening works are required. All recommended works should be carried out in full under professional supervision.

It is essential for insulated roof voids to be ventilated to reduce the risk of condensation and consequent rot to roof timbers. The previous insulation fixed between the rafters was trapping dampness resulting in dampness and timber defects. There are signs of current damp penetration through various parts of the roof coverings resulting in timber defects.

CEILINGS

These are plasterboard ceilings in the attached store. These have failed and should be removed. The provision of over rafter woodfibre sarking boards will remove the need for replacement ceilings. The underside of the sarking boards can be painted with limewash.

INTERNAL WALLS AND PARTITIONS

The internal faces of outside walls are faced with Celotex foam insulation infill panels fixed between the period timber frame studs with mastic. There is a new internal partition separating the kitchen area and the main barn area; this is a modern alteration and is unlikely to have been granted listed building consent. The existing wall insulation is harming the building and should be removed. The internal partition should also be removed. The period timbers should be cleaned down ready for external cladding and internal wood fibre infill panels to the external walls.

Structural movement was found in the period timber frame and would appear recent. The possibility of further movement should be expected. An extensive programme of period timber frame repairs is essential. Recommended works should be carried out in full under professional supervision.

FLOORS

Ground floors appear to consist of an old solid floor or paving bricks / stones, covered with a concrete screed. The solid floor has been covered with a modern timber framework covered with plywood sheets. Some repairs are required to the plywood sheeting and supports. The solid floor may need repairs. Full replacement may not be economic.

It is not possible to confirm whether the solid floor incorporates a damp-proof membrane. Given the age of the property, it is considered unlikely that a physical damp-proof membrane was incorporated in the solid floor structure, making a measure of dampness more likely. Although none was found the only effective remedy for any future dampness would be the renewal of the floor. Historic floors should be retained in their original breathable condition and remedial action for any dampness problems should follow the conservation approach described elsewhere.

INTERNAL JOINERY INCLUDING KITCHEN FITMENTS

Fitments in the kitchen are in basic range of average quality units. They have reached the end of their useful life and should be removed. Consideration should be given to siting the kitchen installation outside of the main barn for fire safety reasons.

INTERNAL DECORATIONS

The new exposed wood fibre finishes could be painted with breathable limewash paint. The period timber frame should be left unfinished to allow the timbers to breath and release dampness by evaporation.

DAMPNESS

Random checks for damp were made wherever possible using an electronic damp meter. Evidence of excessive dampness was found to many areas and a conservation approach is now required to reduce dampness down to acceptable limits. Some timbers adjoining damp walls have been affected by rot.

Chemically injected damp courses and waterproof plasters only treat the symptoms and do not address the cause of dampness. They are not recommended and will be harmful in a traditional breathing building. Wherever dampness occurs, it is essential to identify the source of dampness and to remedy this defect by repairs or other preventative measures. For example, repairs to roof coverings, repairs to rainwater goods, providing surface water drains, lowering external ground levels and removing impervious materials.

Evidence of condensation was noted to some areas. This is not an unusual problem and may be reduced by improving ventilation. Whilst the roof coverings and claddings need repairs, natural ventilation is also required to keep the building dry when not in use.

TIMBER DECAY AND INFESTATION

A representative sample of exposed timber was examined and whilst all reasonable care was taken the possibility of concealed defects cannot be entirely ruled out.

Evidence of timber decay and wood beetle infestation, including death watch beetle, was detected to period timber frame and is likely to have spread to other concealed areas. Such infestation is common in properties of this age and type. The possibility of further infestation occurring cannot be ruled out and it is recommended that all timbers should be continually monitored. Some external joinery has suffered wet rot softening and repairs are required. In the worst affected areas renewal may be more economic.

Biocides were for many years the most popular treatment for timber, being used on healthy wood as well as infected timber. Biocides were called “preservatives”, which implied that home owners and building professionals would be negligent if they did not treat the timber in their buildings. The benefits of remedial treatment to timber are so small and fleeting that the term “preservative” seems impossible to justify. Surface brush or spray treatments will not prevent decay. Current Historic England guidelines advise against the mere precautionary use of preservatives.

The primary control strategy for timber decay and wood beetle infestation must be based on repairs to remove the source of dampness and in so doing to restore dry conditions. All sources of moisture ingress need to be identified and repaired. Particular attention should be paid to roof coverings and rainwater goods. Penetrating and trapped dampness can also be caused by the use of impervious cement render and cement repointing in traditional buildings. Defective flashings and weathering around windows and doors will cause dampness. High external ground levels and poor surface water drainage will also cause dampness within the building fabric. All plumbing should also be inspected for leaks. Special attention should be paid to underfloor areas.

The best approach may not be to avoid biocides entirely, but to restrict their use to situations where there is some significant benefit: for example, for localised treatment where drying will be difficult to achieve or will take so long that some interim control over the decay organism is needed.

An integrated approach to furniture beetle control requires that the problem and its causes are correctly understood, and that active infestation is demonstrated. If significant infestation is present, then some form of intervention may be appropriate. All biocides must be used in accordance with the manufacturer's instructions, and appropriate health-and-safety precautions must be taken.

Deathwatch beetle in buildings are generally found in oak or elm. Sapwood is easily infested and damage may be significant if the timber is poor quality. Heartwood damage is only possible if fungi have first modified the chemistry and density of the timber, which will only occur where there has been prolonged exposure to water. Deathwatch beetle eradication with insecticides is generally impossible even with considerably expensive and destructive exposure work. Removal of all sources of water penetration will contain the beetle population and eventually eradicate it. If there is significant damage, then much of the infestation will be removed during repairs.

Despite its name, dry rot can only grow significantly and damage wood which has a moisture content above 25%, and it will only thrive if the moisture content is above fibre saturation (more than 28-30%). Dry rot is usually associated with softwoods and will rarely cause any damage to oak. There is no reason to discard or even cut back the hardwood and even softwoods will not automatically be lost. In practice, removing sound timber to halt dry rot can never be justified – particularly in an historic building – because it is the availability of moisture, not of wood, that is critical to the growth of the fungus. However, the strength characteristics of the timber will have been compromised, and some form of repair or support may be necessary.

THERMAL INSULATION

The property does not meet current standards in respect of thermal efficiency. Nevertheless, a number of measures can be taken to improve matters. For example, wood fibre sarking board can be installed over rafters. Plywood lining and wood fibre infill panels can be provided to the external walls. Whilst not up to the standard of modern buildings this will improve the building so that is it suitable for its current use without the risk of impervious modern materials harming the historic building fabric.

SERVICES

PLEASE NOTE THAT ONLY A GENERAL INSPECTION OF SERVICES HAS BEEN MADE. SUPPLIES AND SERVICE INSTALLATIONS HAVE NOT BEEN TESTED.

THE SERVICES INSTALLATIONS ARE IN A POOR CONDITION AND YOU SHOULD BUDGET FOR COMPLETE RENEWAL AFTER THE MAIN BUILDING CONSERVATION WORKS.

GAS

Mains gas is not connected.

ELECTRICITY

Mains electricity appears to be connected. The observed wiring and fittings appear to be of older style and give cause for concern over the safety of the installation. You should budget for complete renewal. All wiring should be surface fixed and within steel conduits.

COLD WATER

Your legal adviser should ensure that mains water is available. An internal rising main stopcock could not be located and further enquiries are recommended. If it is discovered that one does not exist you should budget for its installation. The condition of the unseen incoming supply is not known but in view of the buildings age the need for renewal within the term of your ownership cannot be ruled out. You should budget for further investigation and renewal of the installation.

HOT WATER

The hot water installation needs complete renewal.

SPACE HEATING

Electric radiant heating has been installed within the barn. You should budget for complete renewal with a similar modern installation.

SANITARY FITTINGS

These are dated and in a poor condition. The entire toilet area is suspended within the attached store. There is no safe access for the disabled. The toilet needs complete renewal and should provide safe access for the disabled. We would recommend that the toilets should be relocated outside the main building.

OTHER FACILITIES

Basic kitchen facilities have been installed within the early extension to the barn. These kitchen fittings are in a poor condition and need complete renewal. We would recommend that the kitchen facilities are located outside the main building.

Mains powered smoke detectors and other fire precautions are required for safety reasons.

DRAINAGE

The foul water drainage should be tested and the need for improvements should be expected.

There is no surface water drainage. A gulley grating and surface water drain is required from the bottom of each rainwater pipe. A land drain / French drain is required across the entire front of the building. The surface water drains should run to soakaways in the grounds with overflows into the river on the other side of the site.

THE SITE AND LOCAL FACTORS

The sloping character of the site necessitates retaining walls and external steps which will require occasional attention.

Pathway and drive surfaces inevitably suffer wear and deflection. Some external ground levels next to the building are too high and should be lowered. Hard landscaping next to the building should be removed and a free draining path margin provided as previously described. The patio area to the rear left hand side should also be of a similar construction after removal of the broken concrete slab. The central rear patio area will also need lowering and improvements.

Surface water drainage is required to the bottom of each rainwater pipe and a land drain across the front of the building; all as previously described.

The brick and flint garden walls adjoining the building need an extensive programme of repairs to remove cementitious materials and repairs with lime mortar.

TREES

Trees can cause problems to structures and services on or within shrinkable soils. The risk of damage can be reduced by restricting the size of any tree nearby. There are a number of trees within influencing distance of the building and these are a potential risk to the structural integrity of the property. A programme of reduction and management is essential to restrict future growth and reduce the risk of structural movement.

PLANNING AND ENVIRONMENTAL MATTERS

The building is Listed of architectural or historic merit. Such Listing imposes a number of obligations and restrictions upon the owner or occupier. Surrounding trees and walls will also enjoy special protection.

Extensive repairs and all alterations will require listed building consent. Some previous repairs may have been carried out without Listed Building Consent. Application for Listed Building consent is made to the local planning authority in the first instance. Most of the works listed within this report would be construed as requiring Listed Building Consent.

ASBESTOS

Some elements of construction contain asbestos. Asbestos is considered a health hazard and although commonly used in building in the past, its use is no longer permitted.

All work that may disturb any materials or components containing asbestos, including in particular their removal or treatment, is strictly controlled. Such work must comply with all current Health and Safety legislation and guidance. The removal of asbestos products from buildings has to be carried out by especially licensed firms operating to stringent safety standards which can prove an expensive exercise. All materials containing asbestos should be disposed of in accordance with current regulations.

Whilst a full asbestos survey is desirable it is likely to be too invasive and will damage some of the historic fabric of the building. Further investigation as work proceeds would be a more sympathetic approach.

LIMITATIONS

You are reminded that access was limited during the inspection and it is not possible to confirm that unseen areas are free from defect. Access to several areas and elements of the building were restricted. No ladders were raised for close inspection of the upper parts of the building. Our inspection was made entirely from ground level.

This report is for the private and confidential use of the Client for whom the report is undertaken and for the use of their professional advisers and should not be reproduced in whole or in part or relied upon by third parties for any purpose without the expressed written authority of the surveyor.

Our inspection of this property covered all those parts of the building that could be seen either from ground level externally or from the interior including accessible roof spaces. Many parts of a building were concealed; for example, foundations, ground floor slabs and some of the timber frame. We are unable to report that these areas are free from defect.

The suitability of the main supplies and acceptability of the installations connected to them is something on which the water and electricity companies have the final word.

Calculations of the load bearing capacity of structural timberwork have not been carried out and we can give no opinion to their strength or suitability for your purpose.

SUMMARY

The designs and methods used in building are continually improved and this property may not comply with current standards in many respects, but this is true for most buildings.

Most forms of decay which affect the fabric of old buildings can be attributed to the presence of excessive dampness.

Rising and penetrating dampness can attack building materials physically or chemically and damp conditions encourage timber decay/wood beetle infestation.

The primary control strategy must be based on aiming to restore and maintain dry conditions including reinstating original breathable materials.

Previous repairs and alterations may have been carried out without Listed Building Consent.

An extensive programme of repairs and improvements is now required to return the building to its current commercial use. The cost of the proposed repairs and alterations are summarised below.

A proper specification, schedule of works and proper control of the works are essential to ensure that the correct materials and workmanship are used for all work to the building.

Extensive repairs and all alterations will require Listed Building Consent. The works listed within this report would require consent.







BUILDING SURVEY

(formerly known as a structural survey)

RICS STANDARD CONDITIONS OF ENGAGEMENT

Subject to express agreement to the contrary and any agreed amendments/additions, the terms on which the Surveyor will undertake the Building Survey are set out below.

1. Based on inspection as defined below, the Surveyor, who will be a Chartered Surveyor will advise the Client by means of a written Report as to his opinion of the visible condition and state of repair of the subject property.

2. The Inspection

(a) Accessibility and Voids

The Surveyor will inspect as much of the surface area of the structure as is practicable but will not inspect those areas which are covered, unexposed or not reasonably accessible.

(b) Floors

The Surveyor will lift accessible sample loose floorboards and trap doors, if any, which are not covered by heavy furniture, ply or hardboard, fitted carpets or other fixed floor coverings. The Surveyor will not attempt to raise fixed floorboards without permission.

(c) Roofs

The Surveyor will inspect the roof spaces if there are available hatches. The Surveyor will have a ladder of sufficient height to gain access to a roof hatch or to a single storey roof, not more than 3.0m (10' 0") above the floor or adjacent ground. It might therefore not be possible to inspect roofs above this level; in such cases, pitched roofs will be inspected by binoculars. The Surveyor will follow the guidance given in *Surveying Safely* issued by the RICS in April 1991, which incorporates the guidance given in Guidance Note GS31 on the safe use of ladders and steps issued by the Health and Safety Executive.

(d) Boundaries, Grounds and Outbuildings

The inspection will include boundaries, grounds and outbuildings. Specialist leisure facilities, including swimming pools and tennis courts will not be inspected.

(e) Services

The Surveyor will carry out a visual inspection of the service installations where accessible. Manhole covers will be lifted where accessible and practicable. No tests will be applied unless previously agreed. The Surveyor will report if, as a result of his inspection, the Surveyor considers that tests are advisable and, if considered necessary, an inspection and report by a specialist should be obtained.

(f) Areas not inspected

The Surveyor will identify any areas which would normally be inspected but which he was unable to inspect and indicate where he considers that access should be obtained or formed and, furthermore, he will advise on possible or probable defects based on evidence from what he has been able to see.

(g) Flats

Unless otherwise agreed, the Surveyor will inspect only the subject flat and garage (if any), the related internal and external common parts and the structure of the building in which the subject flat is situated. Other flat or properties will not be inspected. The Surveyor will state whether he has seen a copy of the lease and, if not, the assumptions as to repairing obligations on which he is working. The Client is reminded that, particularly in the case of large blocks, the object of the inspection is to give guidance on the general standard of construction and maintenance, pointing out those items which will require attention within, say, the next decade and not to list those minor points which would normally be taken care of in the course of routine maintenance. (Many flats form part of large developments consisting of several blocks. In such cases the Surveyor will be inspecting only the block in which the flat is situated.)

3. Deleterious and Hazardous Materials

- (a) Unless otherwise expressly stated in the Report, the Surveyor will assume that no deleterious or hazardous materials or techniques have been used in the construction of the property. However, the Surveyor will advise in the Report if, in his view, there is a likelihood that high alumina cement (HAC) concrete has been used in the construction and that, in such cases, specific enquiries should be made or tests carried out by a specialist.
- (b) Lead water supply pipes and asbestos will be noted, and advice given, if these materials can be seen but it must be appreciated that such materials are often only visible after opening up which cannot be carried out at the risk of causing damage – see paragraph 2(a) above.
- (c) The Surveyor will advise in the Report if the property is in an area where, based on information published by the National Radiological Protection Board, there is a risk of radon. In such cases the Surveyor will advise that tests should be carried out to establish the radon level.
- (d) The Surveyor will advise if there are transformer stations or overhead power lines which might give rise to an electro-magnetic field, either over the subject property or visible immediately adjacent to the property, but the Surveyor cannot assess any possible effect on health. For obvious reasons, the Surveyor cannot report on any underground cables.

4. Contamination

The Surveyor will not comment upon the existence of contamination as this can only be established by appropriate specialists. Where, from his local knowledge or the inspection, he considers that contamination might be a problem he should advise as to the importance of obtaining a report from an appropriate specialist.

5. Consents, Approvals and Searches

- (a) The Surveyor will assume that the property is not subject to any unusual or especially onerous restrictions or covenants which apply to the structure of affect the reasonable enjoyment of the property.
- (b) The Surveyor will assume that all bye-laws, Building Regulations and other consents required have been obtained. In cases of new buildings, and alterations and extensions which require statutory consents or approvals, the Surveyor will not verify whether such consents have been obtained. Any enquiries should be made by the Client or his legal advisers. Drawings and specifications will not be inspected by the Surveyor.
- (c) The Surveyor will assume that the property is unaffected by any matters which would be revealed by a Local Search and replies to the usual enquiries, or by a Statutory Notice, and that neither the property, nor its condition, its use, or its intended use, is or will be unlawful.

6. Fees and Expenses

The Client will pay the Surveyor the agreed fee for the Report and any expressly agreed disbursements in addition.

7. Restriction on Disclosure

The Report is for the sole use of the named Client and is confidential to the Client and his professional advisers. Any other persons rely on the Report at their own risk.

LISTED BARN, LOUDWATER FARM, LOUDWATER, RICKMANSWORTH
REVISED FORECAST OF COST FOR ESSENTIAL REPAIRS ONLY

	£
1 Preliminaries and access equipment	10,000
2 Repair roof structure and coverings	16,000
3 Provide new cast iron rainwater goods	10,000
4 Repairs to masonry external walls	9,000
5 Repair timber frame and weatherboarding	30,000
6 Lower external ground levels	6,000
7 Repairs to external joinery	5,000
8 External redecorations	7,000
9 Remove existing infill insulation, etc	3,000
10 Provision for ground floor repairs	9,000
11 Remove kitchen and toilet fittings	2,000
12 Replace existing services in barn	15,000
13 Foul water drainage (not required)	-
14 Surface water drainage	12,000
15 Repair site areas next to building	15,000
16 Tree reduction and management	5,000
17 Contingency for unexpected repairs	15,000
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Total building cost	£ 169,000
Fees: drawings, specification, Listed)	
Building Consent, tenders, supervision)	35,000
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FORECAST OF COST	£ 204,000
(excluding Value Added Tax)	