

Confidential to:

Name

By Email:



Surveyor's Name

I R Johnson MRICS, Chartered Building Surveyor

Inspection Date

The property was inspected on

Our Reference

IRJ/AH/S1596/L2

Introduction to the Report

Instructions received are to carry out an RICS Level 2 Building Survey of the property which were accepted and confirmed in my letter of the

This service is delivered in accordance with Home Survey Standards (First Edition) RICS Professional Statement and is equivalent to a Level 2 building survey.

The Royal Institution of Chartered Surveyors requires me to inform you that the report has been written for you to see and if you decide not to act on the advice in the report you do this at your own risk. The report is also confidential to yourself and may not be reproduced or passed on without the written prior approval of both surveyor and yourself.

Weather

The weather at the time of the inspection was cloudy.

1. INSPECTION GENERALLY

- 1.1. The property was furnished at the time of inspection which has restricted examination.
- 1.2. I would refer you to the limits of my inspection as outlined in the Survey Conditions of Engagement, in that no exploratory work has been conducted and that the inspection is not intended to be a Schedule of Condition itemising minor defects. There will be items of normal routine maintenance that will not be covered.
- 1.3. Whilst endeavours have been made to determine the condition of all concealed areas, the comments in the report can only be conclusive for those areas inspected. Unseen areas will not be inspected, and no destructive testing, x-rays or thermal images are carried out.
- 1.4. The service does not include a specific asbestos survey and falls outside *The Control of Asbestos Regulations 2012*. However, where the surveyor suspects the presence of asbestos-containing materials this will be noted for your information. If asbestos is highlighted then it is possible that there may be further occurrences in the property and you should discuss the need for a management or refurbishment/demolition asbestos survey with the surveyor.
- 1.5. The photographs included in the report sometimes do not clearly indicate the defect e.g. where cracking is only slight. In these instances, the photographs are included to indicate the area of damage rather than the actual damage in question.
- 1.6. For ease of identification all descriptions given in the report will be as though facing the front of the property, with rear left and right being described accordingly.
- 1.7. Where the expressions immediate, short term, medium term, long term, and very long term are used they generally mean the following:

Immediate	Within 1 year
Short term	Within the next 1 to 3 years
Medium term	Within the next 4 to 10 years
Long term	Within 11 to 20 years
Very long term	Over 20 years

- 1.8. Where relating to structural damage and cracking width the expressions negligible, very slight, slight, moderate, severe, and very severe are used they generally mean the following:

Category 0	Negligible/Hairline	< 0.1mm
Category 1	Fine	0.1mm - 1mm
Category 2	Slight	> 1mm but < 5mm
Category 3	Moderate	> 5mm but < 15mm
Category 4	Severe	> 15mm but < 25mm
Category 5	Very severe	> 25mm

- 1.9. In addition to the contract of this report we have included a number of appendices listed below:

Appendix A – Matters for Legal Adviser's Attention
Appendix B – Environment and Health Hazards
Appendix C – What To Do Next
Appendix D – Glossary of Building Terms
Appendix E – Maintenance Tips

These appendices should be read in conjunction with the main body of the report.

2. BRIEF HISTORY AND DESCRIPTION

- 2.1. The property is a detached bungalow built, I would anticipate, approximately 50-55 years ago, although the exact date of construction may be confirmed by examination of the Title Deeds.



Photograph 1



Photograph 2

- 2.2. The property is of traditional construction comprising load bearing masonry walls supporting timber framed pitched roofs.

- 2.3. The accommodation briefly comprises:- Front entrance door leading into conservatory, front-right living room leading through to rear-right dining room, rear kitchen/breakfast room leading through to rear utility and wet room, front-left bedroom, left-side bedroom, rear-left bedroom and rear bathroom.
- 2.4. There is an undercroft beneath the rear extension.
- 2.5. The property occupies a sloping site and has a detached single garage to the left side.
- 2.6. The property has been extended to the front and rear by previous owners.
- 2.7. The vendors purchased the property 16-17 years ago and have undertaken no alterations or extensions to the property, although I understand that the window to the dining room has been enlarged.

3. EXAMINATION

External

3.1. Roofs

- 3.1.1. The roofs have been viewed from ground level with the aid of a pair of binoculars where appropriate.
- 3.1.2. The roofs are of duo-pitched and hipped construction with ridges running parallel and perpendicular to the front elevation.
- 3.1.3. The roof slopes are covered with profiled, interlocking, concrete tiles and have mortar bedded and pointed half-round, concrete ridges.
- 3.1.4. Concrete roof tiles have a life expectancy of between 50-70 years, therefore the roof tiles are approaching the end of their anticipated life.
- 3.1.5. There is moss growing on the roof and ridges which has restricted the examination and should be periodically cleaned off.
- 3.1.6. Examination of the right side of the roof has been very limited due to lack of vantage point.
- 3.1.7. There is an isolated cracked tile evident to the front-left corner and there may be others, although the cracked tile is not damaged to an extent whereby water penetration would be a problem.



Photograph 3

- 3.1.8. Mortar to the ridges is eroding, cracked and partially missing to some areas and should be replaced.



Photograph 4



Photograph 5



Photograph 6

- 3.1.9. At the intersection of the roof slopes there are valley gutters.
- 3.1.10. I understand from the vendor that the valley has recently overflowed due to blockage, causing damage to the ceiling below, which has been repaired and the valley tiles re-pointed.
- 3.1.11. The valley is tiled, although two pieces of lead have been inserted, I assume where valley tiles may have broken.



Photograph 7

- 3.1.12. The rear valley is lead lined and has significant vegetation growth to the base, requiring clearing out.



Photograph 8

- 3.1.13. There is some defective/loose mortar pointing to the underside of tiles bedded into the valleys which requires replacement.



Photograph 9



Photograph 10

- 3.1.14. The conservatory has a polycarbonate sheet roof which appears to be in reasonable condition.

- 3.1.15. There is a polycarbonate sheet roof to a canopy over the rear of the property.
- 3.1.16. The canopy is supported on steel posts and timber framework.
- 3.1.17. There is decay to some of the timber eaves beam on the left corner which will require repair/replacement in the short to medium term.



Photograph 11

3.2. Chimney Stacks and Flashings

- 3.2.1. There is a single brick-built chimney stack to the rear roof slope, just off the ridge line which has a clay pot and metal cowl.



Photograph 12

- 3.2.2. Mortar joints to the brickwork are eroding and should be programmed for re-pointing.



Photograph 13

- 3.2.3. There are lead flashings to the base of the stack and lead lined back gutter which, where visible, are seen to be in satisfactory condition but some of the mortar pointing is missing, requiring replacement.
- 3.2.4. It is not unreasonable to assume that the back gutter would be in similar condition to the flashings.
- 3.2.5. The abutment of the conservatory roof is partially concealed, however where visible to the left side, there is a lead flashing.
- 3.3. **External Plumbing and Rainwater Goods**
- 3.3.1. The roof slopes discharge to eaves gutters which are square section, white plastic, in turn discharging to square section, white plastic downpipes with the exception of the rear, where there is a round, black downpipe.
- 3.3.2. The weather remained dry during the survey and therefore the rainwater goods were not seen under operational conditions.
- 3.3.3. There is vegetation visible in the gutters which should be cleaned out.



Photograph 14

- 3.3.4. The rainwater goods appeared free from significant defects.
- 3.3.5. Inadequate disposal of rainwater can cause serious defects within a building, including damp, timber decay and structural movement. It is therefore important that rainwater goods are kept in a well-maintained condition. In particular, it is recommended that gutters are kept clear and cleaned of any leaves, silt and rubbish on a regular basis. In addition, joints and brackets should be checked periodically.
- 3.3.6. There is a black plastic vent stack to the rear and a soil pipe and waste pipes visible within the undercroft.



Photograph 15

- 3.3.7. There are black plastic waste pipes serving the kitchen and bathroom which are concealed beneath a ramp.
- 3.3.8. The vents and associated waste pipework are seen to be in satisfactory condition.

3.4. External Walls

- 3.4.1. Our inspection of the external surfaces of the main walls was made from ground level and from within readily accessible windows.
- 3.4.2. The foundations to the property have not been exposed; therefore you must accept the risk of unseen defects. However, there was no evidence to those parts readily visible that would indicate problems with the foundations, nor where there any above ground level defects that would normally have an adverse effect on the foundations.
- 3.4.3. External walls are of cavity construction with a facing brick outer leaf.
- 3.4.4. Cavity construction comprises outer and inner brick, stone or concrete block skins with a space in between. The two skins should be connected at intervals with metal wall ties. In recent years properties in many areas of the country have suffered from rusting of these metal ties. Deterioration of the wall ties will almost undoubtedly have taken place to some degree and will of course continue.

- 3.4.5. In general, all cavity walls built before 1983 and some of later construction will be at risk before the end of their lives. Symptoms of tie failure and remedies depend on the age of the property, the type of tie used and the degree of rusting which has taken place. The effects of tie failure may, but not necessarily, result initially in horizontal cracking along the mortar joints followed in extreme cases by bulges in the walls and eventual collapse.
- 3.4.6. There are no outward and visible signs of corrosion of the wall ties at present but this is a progressive condition. You must accept the possibility of having to replace rusted wall ties as part of your long-term routine maintenance.
- 3.4.7. There is a bitumen damp-proof course to the base of the walls and air bricks providing ventilation to the suspended timber floors.
- 3.4.8. The conservatory has a polyethylene damp-proof course.
- 3.4.9. Pointed up drill holes to the original walls indicate that cavity wall insulation has been injected, however this was undertaken prior to purchase by the vendors and I believe that there is no paperwork available.



Photograph 16

- 3.4.10. Injected cavity wall insulation can cause problems of dampness internally however there were no such problems evident.
- 3.4.11. At the abutment of the conservatory dwarf walls and original walls there is hairline cracking which is not considered to be of structural significance and should be pointed up.



Photograph 17



Photograph 18

3.4.12. Mortar joints are eroding at lower level to the original walls, requiring re-pointing.



Photograph 19



Photograph 20



Photograph 21

3.4.13. There are art stone heads to window and door openings.

3.4.14. At each end of the heads there is a crack in the mortar joint due to differential expansion and contraction of the art stone and brickwork, which is not considered to be a structural problem.



Photograph 22

3.4.15. When sighted through, the external walls were seen to be free from any significant bowing, bulging or distortion.

3.5. External Joinery

3.5.1. The windows, doors and external joinery were inspected from ground level and from within accessible windows.

3.5.2. Our comments can only be of a general nature, as the presence or the extent of some defects can only be fully identified during the course of re-decoration, or following disruptive investigations.

3.5.3. Windows and doors are double-glazed PVCu, as is the superstructure of the conservatory above dwarf brick walls.

3.5.4. All the windows and doors, with the exception of the dining room, were installed by previous owners.

3.5.5. There is a cat flap in the rear entrance door which is damaged.



Photograph 23

3.5.6. It is common for seals between the two panes of glass in a sealed double-glazing unit to break down, typically after about ten years. When this happens, condensation forms between the panes. Replacement of the sealed unit (but not always of the frame) is then necessary. You should expect this to happen in due course.

3.5.7. Legislation introduced in April 2002 requires all double-glazed windows and doors to have building regulations approval or be installed by a FENSA registered contractor.

3.5.8. Your legal adviser should confirm that any replacement windows and doors which may have been fitted since 2002 have the relevant accreditation.

3.5.9. Brick slips or mortar pointing has been provided to each side of the window cills, many areas of which are now loose, requiring replacement.



Photograph 24



Photograph 25

- 3.5.10. The right-side opening sash to the front-left bedroom does not close properly, requiring adjustment.



Photograph 26

- 3.5.11. The right-side sash to the living room window is also faulty, requiring adjustment.

3.5.12. There are PVCu fascias and soffits which may have been fitted to the older timber fascias and soffits and if so, the condition of the underlying timber is not known. Decay to the underlying timber could reduce the life of the PVCu and therefore you should anticipate that remedial works may be required in the future.

3.5.13. There is a general need for cleaning down of the fascias, soffits and rainwater goods.

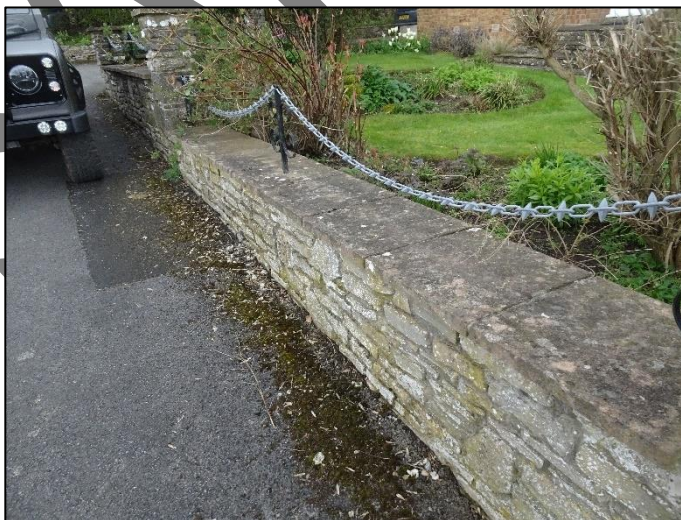
3.6. External Grounds and Boundaries

3.6.1. The property occupies a quiet end of cul-de-sac location with views over open countryside to the rear.

3.6.2. The front boundary has a dwarf stone wall with piers between which there is a metal chain and supporting brackets.



Photograph 27



Photograph 28

3.6.3. There are concrete copings to the top of the wall which are loose and have eroded mortar joints requiring lifting and re-bedding.



Photograph 29

- 3.6.4. There is an ornamental metal personnel gate and pair of vehicular entrance gates which are corroding, requiring fully cleaning down and re-decorating.



Photograph 30



Photograph 31



Photograph 32

- 3.6.5. The left-side boundary is a dry stone wall which leans, bows and bulges and will inevitably require repairs as part of ongoing maintenance.



Photograph 33



Photograph 34

- 3.6.6. The wall has been undermined to some areas which will reduce its stability and should be made good.



Photograph 35

- 3.6.7. To the right side, there is timber fencing, vertical overlapping boards to the front, post and rail and wire to the side of the house and vertical close board to the rear, the latter being very relatively new.
- 3.6.8. The fencing to the front right is deteriorating and has limited life remaining.
- 3.6.9. To the rear there is a woven lap fence which is in poor condition and should be replaced.



Photograph 36

- 3.6.10. The ownership of the boundaries should be ascertained in order that repairing liabilities are known.
- 3.6.11. There are cast insitu, natural stone and concrete flagged paths and patio areas.

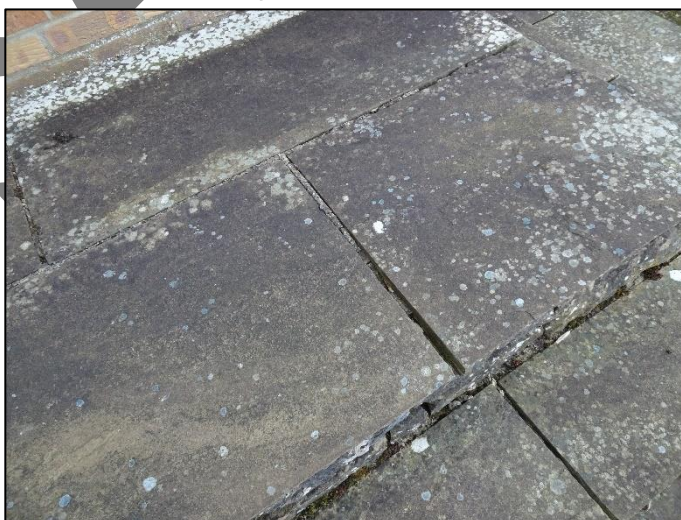


Photograph 37



Photograph 38

- 3.6.12. There are cracks to the cast insitu concrete and defective joints to the majority of the concrete flagged areas.

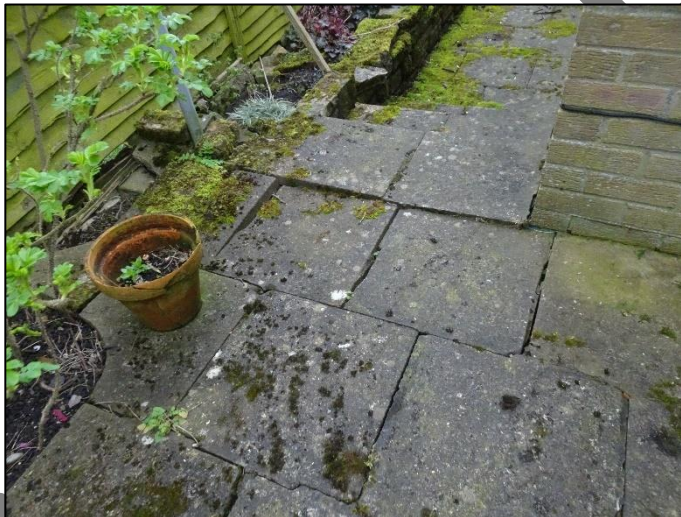


Photograph 39

- 3.6.13. Some of the flags are uneven, requiring re-laying.

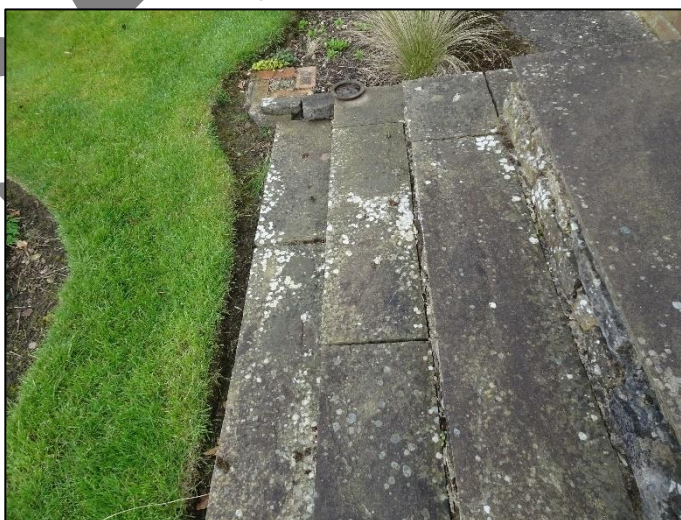


Photograph 40



Photograph 41

- 3.6.14. To the front there are steps leading up to the front entrance door with natural stone flagged treads and random stone risers.



Photograph 42

- 3.6.15. Mortar pointing to the joints is eroding, requiring replacement.

- 3.6.16. There is random stone flags (crazy paving) to the right side of the front garden which has some eroded joints requiring re-pointing.



Photograph 43

- 3.6.17. To the left side there is a cast insitu concrete drive leading up to a detached single garage.



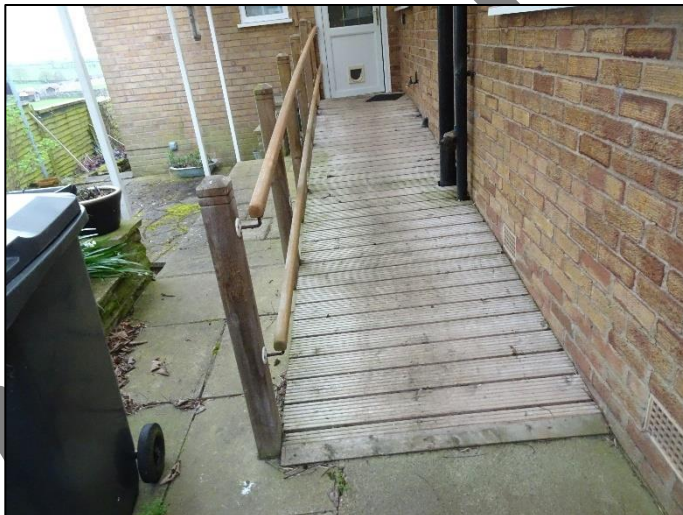
Photograph 44

- 3.6.18. The concrete is beginning to deteriorate and has isolated cracks, requiring repairs.



Photograph 45

- 3.6.19. To the rear there is a timber framed ramp and handrails giving access to the entrance door, which I understand is easily removed.

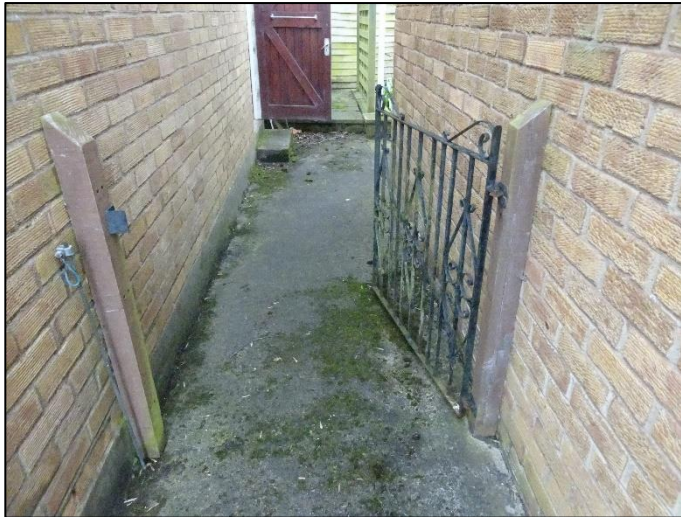


Photograph 46



Photograph 47

- 3.6.20. There is an ornamental metal gate hung in timber posts between the garage and left side of the property.



Photograph 48

- 3.6.21. The gate is corroding, requiring cleaning down and re-decoration.

Garage

3.7. Roof



Photograph 49

- 3.7.1. The roof is of duo-pitched construction with ridge running perpendicular to the front elevation.
- 3.7.2. The roof is covered with the same tiles as the dwelling.
- 3.7.3. There is significant moss growth to the roof which has restricted examination and should be cleaned off.
- 3.7.4. There is eroded/cracked mortar to the ridges which requires replacement as necessary.
- 3.7.5. There are mortar pointed verges to the roof which are cracked and eroding, particularly to the rear requiring replacement.



Photograph 50



Photograph 51

- 3.7.6. There is slight deflection of the roof slopes.
- 3.7.7. The roof structure is a traditional rafter roof with raised ties to every other pair of rafters.



Photograph 52



Photograph 53

- 3.7.8. The rafters are undersized, which has resulted in the deflection but which is unlikely to become any worse.
- 3.7.9. There was no evidence of any active woodworm infestation to roof timbers where these could be inspected.
- 3.7.10. There is a bitumen-based roofing underfelt beneath the tiled covering.
- 3.7.11. Underfelts provide a secondary barrier to water penetration.
- 3.7.12. Bitumen underfelts used in construction prior to the early 1990s are likely to contain asbestos fibres although these are bound up in bitumen and risk to health is minimal but I would recommend not to access the roof space unnecessarily and a particle mask should be worn.
- 3.7.13. Repairs have been undertaken at eaves level with polyethylene damp course and plywood evident.

3.8. Rainwater Goods

- 3.8.1. The roof slopes discharge to square section, white plastic gutters and downpipes.
- 3.8.2. The gutters are blocked requiring cleaning out.



Photograph 54

3.9. External Walls

- 3.9.1. The walls are of half-brick thick construction with intermediate piers.
- 3.9.2. The walls are built off a concrete raft.



Photograph 55

- 3.9.3. To the left side, ground levels are higher, which is resulting in lateral damp penetration and a cementitious tanking solution has been applied to the walls to reduce the damp penetration.
- 3.9.4. The dampness cannot easily be resolved other than by reducing ground levels externally and constructing a retaining wall to hold back the higher ground.
- 3.9.5. There are eroded mortar joints to the base of the front-left corner requiring re-pointing.



Photograph 56

- 3.9.6. There is a bitumen damp-proof course to the base of the walls
- 3.9.7. To the front there is a concrete lintel over the vehicular door entrance.
- 3.9.8. There is cracking at each end of the lintel and above the lintel as a result of differential thermal expansion.



Photograph 57

- 3.9.9. Similarly, to the rear there is a concrete lintel over the window opening and personnel door on the right side.
- 3.9.10. To the rear-left corner there is stepped cracking at higher level but which is very localised and appears to be old standing.



Photograph 58

3.10. Joinery

- 3.10.1. There are PVCu fascias and soffits which may have been fitted to the older timber fascias and soffits and if so, the condition of the underlying timber is not known. Decay to the underlying timber could reduce the life of the PVCu and therefore you should anticipate that remedial works may be required in the future.
- 3.10.2. There is a galvanised pressed steel up and over door hung in a timber frame.
- 3.10.3. The frame is decaying to the base, particularly the left side, requiring splice repair.



Photograph 59

- 3.10.4. The door was operating at the time of the survey but is in need of re-decoration.
- 3.10.5. There is a framed, ledged and braced personnel timber door to the rear right hung in a timber frame.
- 3.10.6. The door is binding in the frame, requiring adjustment.

3.10.7. There does not appear to be any significant decay evident, however the door frame requires cleaning down and re-decoration.

3.10.8. There is a double-glazed, PVCu window to the rear of the garage which was installed by the vendors approximately 5-6 years ago and which is in good condition.

3.11. Floor

3.11.1. The floor is concrete raft which is noted to be free from any structural cracking.

3.11.2. There is some salting to the front-left corner as a result of the damp penetration.



Photograph 60

Internal

3.12. Roof Void

3.12.1. Access is gained to the roof void via a hatch and pull-down, retractable, aluminium ladder located within the hall ceiling.

3.12.2. The roof structure is traditional, comprising two rows of purlins to each roof slope, supported between load bearing masonry piers and principal hip and valley rafters and in turn supporting common rafters, over which there is bitumen-based roofing underfelt.



Photograph 61



Photograph 62



Photograph 63



Photograph 64

- 3.12.3. Underfelts provide a secondary barrier to water penetration.
- 3.12.4. Bitumen underfelts used in construction prior to the early 1990s are likely to contain asbestos fibres although these are bound up in bitumen and risk to health is minimal but I would recommend not to access the roof space unnecessarily and a particle mask should be worn.
- 3.12.5. The underfelt has decayed where it is draped into the gutters and consideration should be given to the fitting of plastic eaves trays.
- 3.12.6. There is an old wasps' nest to the rear-right corner.



Photograph 65

- 3.12.7. The roof structure appeared to be free from significant defects and active woodworm infestation where timbers were inspected.
- 3.12.8. To the front left, there is water staining to the purlin where previous water penetration has occurred.



Photograph 66

- 3.12.9. Where the rafter feet are built into the wall or are not visible there is the possibility of decay or woodworm infestation.
- 3.12.10. There is approximately 100-150mm thickness of insulation quilt laid between and over the ceiling joists which is significantly below current guidelines of 270mm and I would recommend that additional insulation is provided to an overall thickness of approximately 300mm.
- 3.12.11. Where the ceiling has been repaired from the overflowing valley gutter, the insulation has been removed and not reinstated.
- 3.12.12. The loft access hatch is not insulated, nor are there draught seals and these should be fitted.
- 3.12.13. There is an area boarded out for storage purposes in the centre of the roof void and platform with a redundant water header tank.



Photograph 67

- 3.12.14. There is mains lighting to the central section of the roof void.

- 3.12.15. There are soffit ventilators which provide ventilation to the roof space and it is important that when insulation is upgraded, the passage of air is not restricted, otherwise condensation problems can result.

3.13. Ceilings

- 3.13.1. Ceilings are of plasterboard and skim construction with emulsion, papered and polystyrene tile finishes.
- 3.13.2. There are cornices to virtually all rooms.
- 3.13.3. Polystyrene tiles are flammable and ideally would be removed.
- 3.13.4. The ceilings were seen to be free from significant defects.
- 3.13.5. Patch repair has been undertaken in the front-left bedroom, as previously reported.



Photograph 68

- 3.13.6. The cornice has been cut to replace the plasterboard and not reinstated.
- 3.13.7. There are hairline cracks across some of the board joints which is not unusual and not a structural problem, but one which will prove difficult to resolve and often results in re-skimming or overboarding of ceilings.
- 3.13.8. There is mould growth above the window in the bathroom which will be due to condensation. There is no extractor fan in the bathroom and therefore there will have been high moisture levels.
- 3.13.9. The ceiling within the undercroft is stained which the vendor advised is due to a previous leak from the wet room but which, the vendor advised, has been resolved.



Photograph 69

3.14. Walls

- 3.14.1. Internal separating walls are solid masonry, with the exception of the wall between the utility and wet room and the dining room and utility/wet room, which is a stud partition.
- 3.14.2. The stud walls have plasterboard linings.
- 3.14.3. The internal surface of the external walls and solid internal separating walls are directly plastered.
- 3.14.4. The walls were seen to be free from any visible dampness or structural cracking.
- 3.14.5. There will likely be internal timber backing lintels to the heads over window and door openings and timber lintels over internal openings. The condition of these cannot be confirmed without exploratory work. Given the age of the property there is a risk that there may be woodworm infestation or decay to the backing lintels, however there is no evidence to suggest that any of these had failed.
- 3.14.6. There is some damage to the walls as a result of impact by wheelchair which will require repair.



Photograph 70

3.14.7. There are many areas of damage to wallpaper finishes.

3.15. Floors

3.15.1. With the exception of the conservatory, floors are of suspended timber construction with carpet and vinyl finishes to most areas.

3.15.2. There are no coverings to the hall, front-left and left-side bedrooms.

3.15.3. Within the conservatory, there is a solid floor with tiled finish.



Photograph 71

3.15.4. The suspended timber floors were noted to be free from significant springiness or deflection and there was no woodworm infestation evident where the floorboards were exposed.



Photograph 72

- 3.15.5. The floors will have no thermal insulation within their construction other than perhaps to the rear extension.

3.16. Internal Joinery

- 3.16.1. Internal doors are of varying styles, original doors being flush, typical for the period.
- 3.16.2. Multi-paned doors with bevelled glass have been fitted to the kitchen between the hall and dining room and there is a multi-paned, obscured glazed door between the kitchen and utility.
- 3.16.3. One of the panes is cracked.
- 3.16.4. There is a sliding, hollow core 4-panelled door to the wet room.
- 3.16.5. Skirtings and architraves are painted with a simple profile.
- 3.16.6. There is significant damage to the lower sections of the doorframes, doors and architraves as a result of wheelchair use.



Photograph 73

- 3.16.7. There are built-in cupboards to the front and rear-left bedroom which are original to the property.

3.17. Kitchen and Bathroom Fittings

- 3.17.1. Within the kitchen there is a range of fitted wall and floor units with laminate worktop and single drainer stainless steel sink with mono-block mixer tap.
- 3.17.2. The units have oak door and drawer fronts which are in reasonably good condition although dated.
- 3.17.3. There is minor burn to one of the wall unit doors.



Photograph 74

- 3.17.4. The capping to the end of one of the worktops is damaged.



Photograph 75

- 3.17.5. Within the bathroom there is an acrylic bath with mixer tap and shower fitting, pedestal wash hand basin, WC pan with close coupled cistern.
- 3.17.6. The sanitaryware is in reasonably good condition for its age.

- 3.17.7. The wet room contains a WC pan with close coupled cistern, pedestal wash hand basin and thermostatic shower.
- 3.17.8. There is laminate wall cladding around the shower area and walls are tiled elsewhere.
- 3.17.9. I understand that there as previously a shower cubicle in the room which has been removed to create the wet room. the outline of the cubicle wall is visible on the ceiling.



Photograph 76

- 3.17.10. The appliances are in reasonable condition.
- 3.17.11. The WC pan seat is white, whereas the suite is grey.
- 3.17.12. The sanitaryware was operating the time of the survey.
- 3.17.13. Within the utility room there is a single base unit and space for a washing machine, fridge over which there is a laminate worktop and splash back tiling above the unit.
- 3.17.14. The unit is dated and showing general age-related wear and tear.

SERVICES

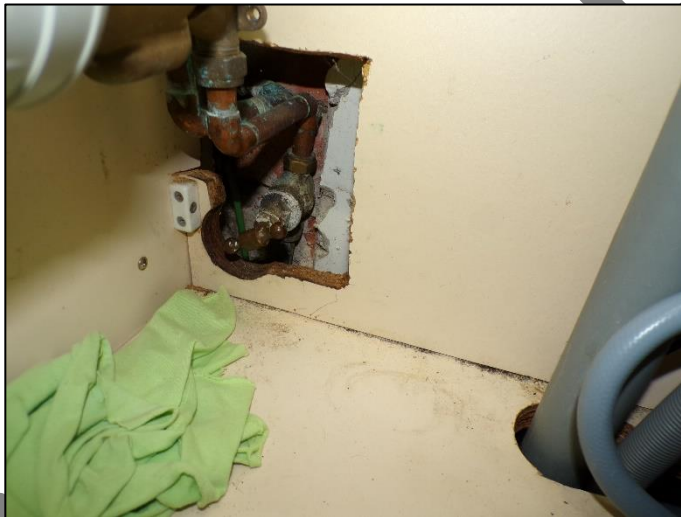
Services are generally hidden within the construction of the property. This means that we can only inspect the visible parts of the available services, and we do not carry out specialist tests. The visual inspection cannot assess the services to make sure they work efficiently and safely and meet modern standards.

3.18. Hot and Cold Water Supply

- 3.18.1. The property is connected to mains water which is a metered supply.
- 3.18.2. The meter is located beneath the kitchen sink adjacent to the incoming water stop tap.



Photograph 77



Photograph 78

- 3.18.3. I could not locate the external stop tap and the vendor did not know its location.
- 3.18.4. Hot water is provided from a combination boiler.
- 3.18.5. Water service pipework, where visible, is noted to be copper.
- 3.18.6. There is an external water tap beneath the kitchen window.



Photograph 79

3.18.7. There was no evidence of any leaks at the time of the survey.

3.19. Space Heating

3.19.1. All gas and oil appliances and equipment should regularly be inspected, tested and maintained and serviced by a registered “competent person” and in line with the manufacturer’s instruction. This is important to make sure that the equipment is working correctly, to limit the risk of fire and carbon monoxide poisoning and to prevent carbon dioxide and other greenhouse gases for leaking into the air. For more advice contact the Gas Safe Register for gas installations, and OFTEC for oil installations.

3.19.2. The property has central heating which comprises a Worcester wall-mounted, gas-fired boiler with high level discharge flue which penetrates the roof via a proprietary sleeve and collar.



Photograph 80

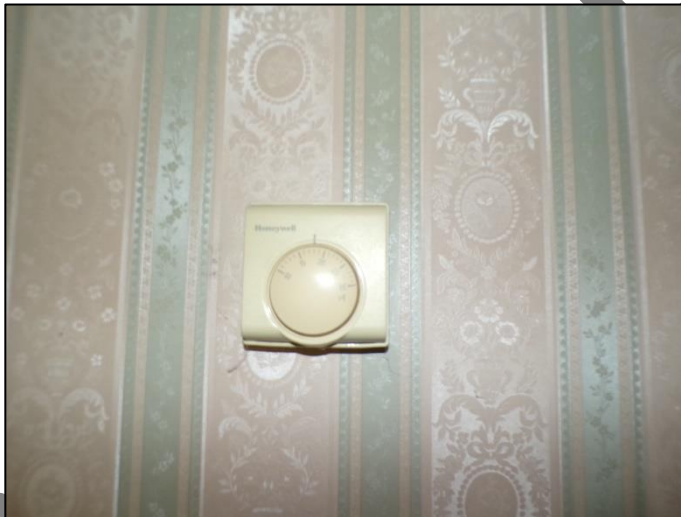


Photograph 81

- 3.19.3. I understand that the boiler is approximately 5 years old and has been serviced annually, being last serviced in September 2023.
- 3.19.4. Gas boilers have an anticipated life of 10-15 years.
- 3.19.5. The boiler is connected to pressed steel radiators with small bore copper pipework.
- 3.19.6. Within the wet room there is a chrome heated towel rail which is dual fuel, also having an electric element.
- 3.19.7. Control over the system is via a programmable thermostat in the hall and thermostatic radiator valves.
- 3.19.8. The heating system was operating at the time of the survey.
- 3.19.9. There is a gas fire within the living room which I understand was installed soon after the vendors purchased the property.
- 3.19.10. Any relevant certification should be obtained by your legal adviser and the fire should not be used until it has been tested/checked by a suitably accredited engineer.
- 3.19.11. There is a redundant boiler in the undercroft and associated thermostat in the hall which have not been removed but are disconnected.



Photograph 82



Photograph 83

3.20. Electrical Installation

- 3.20.1. The Electrical Safety Council recommends that you should get a registered electrician to check the property and its electrical fittings at least every ten years, or on change of occupancy. All electrical installation work undertaken after 01 January 2005 should have appropriate certification. For more advice contact the Electrical Safety Council.
- 3.20.2. The property is connected to mains electricity.
- 3.20.3. There is a digital meter located within the garage adjacent to which there is a consumer unit with RCD protected circuits and mini circuit breakers.



Photograph 84



Photograph 85

- 3.20.4. The consumer unit has a plastic casing which would not comply with regulations for a new installation however there is no legal requirement to upgrade the unit.
- 3.20.5. The installation is original to the property and which has been added onto as the property has been extended.
- 3.20.6. Circuits are wired with twin and earth PVC sheathed cables, connected to flush fitting power outlet sockets and switches which have white plastic covers.
- 3.20.7. There is a surface fixed double power outlet socket within the right-side bedroom which has been installed as part of alterations.
- 3.20.8. The wet room has a defective light bulb.
- 3.20.9. There is external lighting to the front and rear of the property.
- 3.20.10. There are elements of the installation which are redundant, such as the immersion heater switch still present within the kitchen and old thermostat for a redundant boiler.

- 3.20.11. There is an independent battery-operated smoke detector in the hall.
- 3.20.12. Smoke detectors have a life span of 10 years, after which they should be replaced.
- 3.20.13. The detector should be checked and replaced if necessary, however I would recommend the installation of mains-wired, interconnected smoke detectors.
- 3.20.14. There is a mechanical extractor fan in the wet room which was operating at the time of the survey.
- 3.20.15. Within the kitchen there is an extractor fan within a cooker hood which was operating at the time of the survey.
- 3.20.16. There is no mechanical extractor fan to the bathroom and I would recommend that one is installed.
- 3.20.17. The provision of sockets throughout the property is considered to be sparse to some areas by current expectations.
- 3.20.18. There is power and lighting in the garage.
- 3.21. **Gas Installation**
- 3.21.1. The property is connected to mains gas.
- 3.21.2. The meter is located within a proprietary cabinet fixed to the right side wall of the property.



Photograph 86



Photograph 87

3.21.3. Gas service pipework is copper and connected to the central heating boiler and fire.

3.22. Below Ground Drainage

3.22.1. Drains can only be inspected at the point of access. Drainage surveys can be arranged separately.

3.22.2. The property is connected to mains below ground drainage which I believe will be a combined system for both foul and surface water.

3.22.3. This should be confirmed by your legal adviser.

3.22.4. Rainwater downpipes discharge directly into the below ground drainage system.

3.22.5. There is an inspection chamber to the front right of the site beneath plants, the cover of which could not be lifted.



Photograph 88

- 3.22.6. To the rear right, there is a chamber close to the boundary which has a light duty steel cover and frame.



Photograph 89

- 3.22.7. The cover and frame are badly corroded and should be replaced.
- 3.22.8. The chamber is brick built with clay channels and mortar benching.
- 3.22.9. Although in reasonably good condition, there is spalled brickwork blocking the channel, which has caused backing up of water and which requires cleaning out.



Photograph 90

- 3.22.10. To the rear left of the extension, there is a chamber which has a cover inset with concrete flags and which could not be lifted.



Photograph 91

- 3.22.11. There appears to have been an inspection chamber within the undercroft floor which, given the very low headroom, will be extremely difficult to lift the cover.



Photograph 92

- 3.22.12. There is at least one rainwater gulley beneath the rear ramp which could not be inspected. The vendor advised that the boards are screw down to allow access for cleaning. It is inevitable that the gulley will require cleaning.
- 3.22.13. Rainwater from the garage roof discharges into a water butt and from there onto the ground, therefore requiring frequently emptying.

3.23. **Energy Matters**

- 3.23.1. The Energy Performance Certificate gives an energy efficiency rating of D.
- 3.23.2. The assessor has made various assumptions and observations when preparing the EPC which generally appear to be reasonable and accurate, although the observation of 200mm thickness of insulation in the roof space is considered generous.

3.23.3. The assessor has made recommendations to improve the energy performance of the property which include:

- Floor insulation (suspended floor)
- Solar water heating
- Solar photovoltaic panels

3.23.4. The assessor has estimated that the provision of floor insulation would be up to £1,200, although I anticipate it would be significantly more, as it would involve lifting all of the floorboards and re-laying or replacing them and which I anticipate would be possibly four or five times that figure.

3.23.5. Annual savings are estimated at approximately £150 per year, therefore taking decades to recover the costs from savings made.

3.23.6. Solar water heating would require the installation of a water cylinder and is expensive to install, with very modest savings of only £26 per year, therefore taking in excess of 100 years to recover the costs from savings made.

3.23.7. Solar photovoltaic panels could be considered and should take approximately 15 years to recover the costs from savings made.

3.24. **Matters For Legal Adviser's Attention**

3.24.1. Within this section of the property specific matters will be highlighted with additional information provided in Appendix A.

3.24.2. Confirm that any windows installed since April 2002 have relevant accreditation (paragraph 3.5.8).

3.24.3. Obtain certification for installation of gas fire in living room (paragraph 3.19.10).

3.24.4. Confirm ownership of boundaries (paragraph 3.6.10).

3.25. **Environment and Health Risk**

3.25.1. Within this section of the property, specific matters will be highlighted with additional information provided in Appendix B.

3.25.2. We are not aware of the content of any environmental audit or other environmental investigation or soil survey which may have been carried out on the property and which may draw attention to any contamination or the possibility of any such contamination. In undertaking our work, we have been instructed to assume that no contaminative or potentially contaminative uses have ever been carried out in the property. We have not carried out any investigation into past or present uses, either of the property or any neighbouring land, to establish whether there is any contamination or potential for contamination to the subject property from these uses or sites and have therefore assumed that none exists.

- 3.25.3. The property is in an area identified by the National Radiological Protection Board (NRPB) as being at risk of contamination from radon. This is a radioactive gas, invisible and with no smell, which escapes from some types of rock. If trapped in houses, it can (over time) be a risk to health. Radon can only be detected by test instruments, and the minimum testing period of three months. Testing should be considered (the NRPB can supply details). If corrective measures are recommended, they should not be expensive in proportion to the value of the property.
- 3.25.4. The property is located in an area that to the best of our knowledge is not subject to any flooding or adverse ground conditions, although we have not carried out any soil or ground investigations. We strongly advise you to make routine enquiries via your solicitor, to establish whether or not the property is built on made up or contaminated ground.

4. CONCLUSION AND RECOMMENDATIONS

- 4.1. Within the scope of the examination undertaken to this property in that it has been restricted to a visual inspection only of elements presenting at the time of the inspection and no exploratory/disruptive work has been conducted, I conclude my findings and recommendations as follows.
- 4.2. The property is a detached bungalow which has been altered and extended by previous owners.
- 4.3. The general structural integrity appears to be sound with no significant shortcomings evident.
- 4.4. The roof covering is approaching the end of its anticipated design life expectancy, with perhaps another 10-15 years' useful life remaining.
- 4.5. Mortar bedding and pointing to the ridges is eroded, cracked and missing, some areas requiring replacement.
- 4.6. There is at least one isolated cracked tile, moss having restricted the examination and when this is cleaned off, there may be further isolated cracked tiles.
- 4.7. The chimney stack has eroded mortar joints requiring re-pointing.
- 4.8. The rear valley and the rainwater goods require cleaning out and mortar pointing to the tiles in the valley should be re-pointed as necessary.
- 4.9. The front valley is tiled and has had lead fitted in two locations, indicative of the tiles beneath being cracked.
- 4.10. There are areas of eroded mortar joints to the brickwork at low level to the external walls which should be programmed for re-pointing.

- 4.11. The windows to the front-left bedroom and front-right living room have defective sashes requiring adjustment, but otherwise windows and doors appeared free from defects.
- 4.12. There is a cat flap in the rear entrance door which is damaged.
- 4.13. Brick slips and mortar pointing to the window cills are loose and should be replaced.
- 4.14. The garden requires some maintenance work, re-pointing of defective joints to pavings where necessary and replacement of the rear fence.
- 4.15. The gates require re-decoration and the copings to the front wall re-bedding and re-pointing.
- 4.16. The left-side boundary wall has been partially undermined and is bulging and distorted, inevitably requiring repairs/re-building at some time in the future.
- 4.17. The roof structure was noted to be free from significant defects, however insulation is below current guidelines and should be upgraded accordingly, to include insulating and draught seals to the access hatch.
- 4.18. The ceiling to the front-left bedroom has been repaired following previous water penetration due to an overflowing valley.
- 4.19. Coving has been removed as part of the repair and not reinstated.
- 4.20. Some of the ceilings have polystyrene tiles which would ideally be removed.
- 4.21. The walls were noted to be free from any significant structural defects, however there is general damage as a result of wheelchair impact which will require repair.
- 4.22. Similarly, the internal joinery has been damaged.
- 4.23. The heating system was operating at the time of the survey and the boiler is due for service in September.
- 4.24. There is a gas fire in the living room which should be serviced by a suitably accredited engineer prior to use.
- 4.25. The electrical installation is original and has been added to as the property has been extended. The installation should be tested and upgraded as necessary.
- 4.26. I would recommend that mains-wired, interconnected smoke detectors are installed and a mechanical extractor fan fitted to the bathroom.

- 4.27. Repairs are required to the garage, although where lateral penetrating dampness is a problem, this will be difficult and potentially costly to resolve if required to be so.
- 4.28. I have identified various defects within the main body of the report and below set out a schedule of the most significant.
- 4.29. This takes no account of any defects which may currently be hidden but become apparent during building works.

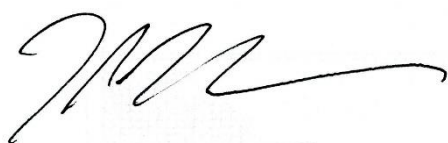
Ref:	Repair	Priority
1.	Clean moss from roofs, replaced cracked tile(s), clean out valleys and rainwater gutters and re-point ridges and valley tiles as necessary.	1-2
2.	Replace/repair decaying timber to rear canopy eaves beam.	2
3.	Re-point chimney stack.	2
4.	Point cracks at abutment of conservatory walls and re-point eroded mortar joints to original brickwork as necessary.	2
5.	Replace loose mortar/brick slips to sides of window cills.	2
6.	Adjust defective windows.	2
7.	Repairs to stone boundary walls and replace rear boundary fence.	2-3
8.	Re-decorate garden gates.	2
9.	Re-point joints to flags and re-lay uneven flags as necessary.	3
10.	Re-pointing to garage ridges and verges.	2
11.	Repairs to garage door framework and ease personnel door.	2
12.	Re-point eroded joints to garage walls.	2
13.	Fit plastic eaves trays.	3
14.	Upgrade loft insulation.	3
15.	Replace cornice in front-left bedroom	3
16.	Repairs to internal walls.	2
17.	Repairs/replacement damaged internal joinery.	2-3
18.	Electrical testing and upgrading as necessary.	1

Ref:	Repair	Priority
19.	Provide mains-wired, interconnected smoke detectors.	3
20.	Provide mechanical extractor fan to bathroom.	3
21.	Clean out brick slip from inspection chamber.	1
22.	Clean out gulley(s) beneath ramp.	1
23.	Inspection/test of gas fire.	1

PRIORITY - How important I feel the repair is:-

1. **Urgent** – Needs immediate attention.
2. **Essential** – Should be done.
3. **Desirable** – Needs to be done but could be left.

- 4.30. Within Appendix C (What To Do Now) we have provided additional information on obtaining quotes for any remedial/repair works and instructing further investigation that may have been recommended within the report.
- 4.31. Please note that the report is confidential to the Client and may not be reproduced or passed on without the written prior approval of both Surveyor and Client.
- 4.32. Following this report, if you require architectural services on the property, we can offer a scope of services that covers an initial measured survey with existing drawings, a design development stage, a technical compliance stage, tendering of the works and contract administration at the construction stages. We can include sourcing and co-ordinating the input of any other consultants required during the process and assistance in obtaining the necessary planning, listed building and building regulation approvals. We would be happy to review your specific requirements and provide a fee proposal for your consideration.
- 4.33. It is important that you fully understand the content of this report and its limitations. As part of our service, we would encourage you to contact us if you require clarification or wish to discuss any aspect of this report.



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Table of Appendices

Appendix A - Matters for Legal Adviser's Attention

Appendix B – Environment and Health Hazards

Appendix C - What To Do Now

Appendix D - Glossary of Building Terms

Appendix E - Maintenance Tips

SAMPLE

Appendix A

Matters for Legal Adviser's Attention

Building regulations

The building will not satisfy a variety of contemporary standards of construction and performance criteria set out in the current Building Regulations such as, for example, thermal insulation. This statement is true of the vast majority of buildings in the UK.

The statute under which the Building Regulations are made in the UK is the Building Act 1984. Neither this Act, nor the Regulations themselves are applicable retrospectively. This avoids the need for constant improvement of properties to satisfy current standards.

Planning permission

We have not been requested to investigate and set out in detail the planning history of this property. We have not been provided with any Planning documents on which to comment. Consequently, from our inspection, we cannot comment on the existence or otherwise of any infringements of any Planning Consents or conditions attached to such Consents.

We assume that this matter will be considered by solicitors.

Heritage Consents

Due to the age of the property, it may be protected by heritage legislation, necessitating the requirement to obtain statutory consents for either planned or previously completed works. We recommend obtaining confirmation from your Solicitor that any necessary heritage consents have been obtained for previously completed works, and that all works have been completed in accordance with any conditions contained within those heritage consents.

If the property is found to be protected, then listed building consent will be required for 'any works for the demolition of the building or for its alteration or extension in any manner which would affect its character as a building of special architectural or historic interest'. In addition, listed building consent may be required for works to ancillary buildings, objects or structures within the curtilage of a listed building, which affect the special character of the listed building (commonly referred to as curtilage listing).

If the property is found to be in a conservation area, then planning consent will likely be required for the demolition of any buildings even if unlisted building, but are within a designated Conservation Area. This consent is now addressed under Planning Consent controls.

Statutory

- Confirm all Statutory Approvals for all alteration and construction work. Obtain copies of all Approved Plans for any alterations or extensions to the property.
- Any rights or responsibilities for the maintenance and upkeep of jointly used services including drainage, gutters, down pipes and chimneys should be established.

- The right for you to enter adjacent property to maintain any structure situated on or near the boundary and any similar rights your neighbour may have to enter on to your property.
- Any responsibilities to maintain access roads and driveways, which may not be adopted by the Local Authority, should be established.
- Obtain any certificates or guarantees, accompanying reports and plans for damp-proof course and timber treatment, which may have been carried out in the property.
- Investigate if any fire, public health or other requirements or regulations are satisfied and that up to date certificates are available.
- Investigate any proposed use of adjoining land and clarify the likelihood of any future type of development, which could adversely affect this property.
- Where there are trees in the adjacent gardens, which are growing sufficiently close to the property to cause possible damage, we would suggest that the owners are notified of the situation.
- Whilst there were clearly defined physical boundaries to the site, these may not necessarily lie on the legal boundaries. These matters should be checked through your Solicitors.
- You should obtain all guarantees relevant to the property, including matters such as replacement glazing, damp-proof course, etc. The guarantees should be formally assigned to you and preferably indemnified against eventualities such as contractors going out of business.
- The tenure is assumed to be Freehold, or Long Leasehold subject to nil or nominal Chief or Ground Rent. Your legal adviser should confirm all details.
- Confirmation should be obtained that all mains services are indeed connected.
- Confirmation should be obtained by the provision of service documentation, of when the electric and gas installations were last tested.

Rights of Way, Easements, Shared Services, etc.

Your legal adviser should check boundary positions and the responsibilities

Guarantees/Warranties

Where work has been carried out to the property previously, it is recommended that guarantees be obtained prior to a legal commitment to purchase. These should ideally be indemnified against eventualities such as the contractors going out of business, and should cover workmanship as well as materials. Confirmation should be obtained as to the residue of the guarantee and that a transfer will occur upon change in ownership.

Legal enquiries should be made to confirm if any testing of the electrical, gas and heating appliances have been undertaken, with any testing of service records being obtained prior to a legal commitment to purchase.

Thermal Insulation and Energy Efficiency

As part of the marketing process current regulations require the provision of an Energy Performance Certificate. Legal enquiries are advised to confirm that such a Certificate has been obtained. This document provides the usual information regarding advice on energy efficiency and thermal improvement, which will assist in potentially reducing heating expenditure.

From 1 April 2018, under the Minimum Energy Efficiency Standards (MEES) 2015, it became illegal to lease a property with an F or G rating on an Energy Performance Certificate. In the residential market the regulations extend to all properties with a valid EPC on 1 April 2020. This report does not provide extended advice on Minimum Energy Efficiency Standards (MEES) Regulations (2015) and is not designed to be used as evidence for the PRS Exemption Register. The responsibility for complying with MEES is allocated to the landlord and/or owner of the property.

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Appendix B

Environment and Health Hazards

Below we have provided advice regarding certain issues of an environmental nature. The potential issues outlined below should not be considered an exhaustive list of matters to be considered.

Flooding risk

We have not undertaken detailed investigations into the potential for flooding of the land on which the property lies. However, a search on the website www.environment-agency.gov.uk, of the Environment Agency will provide information regarding the potential for flooding on any site.

Tree proximity

The proximity of trees to buildings can give rise to concern because structural damage can be caused by root systems growing around, under and sometimes through foundations and subterranean walls. The risk of damage caused by tree roots depends on:

- the proximity of the tree to the building concerned
- the height, age and species of tree
- the design and depth of a building's foundations
- the type of sub-soil

If there are trees near the building. The growth of these trees should be monitored and, if necessary, controlled in due course.

Radon risk

Radon is a radioactive gas that occurs naturally in the ground. It occurs when uranium decays. Uranium is found in small quantities in all soil and rocks. Decaying uranium turns into radium and when radium, in turn, decays, it becomes radon. Uranium can also be found in building materials derived from the rocks.

Radon rises through cracks and fissures in the ground into the air. Outdoors, radon is diluted and the risk it poses is negligible. Problems occur when it enters enclosed spaces, such as a building, where concentration levels can build up. When this happens, it can cause a significant health hazard to the occupants of a building by increasing the risk of lung cancer.

Radon is everywhere, but usually in insignificant quantities. General technical information on Radon can be obtained from Public Health England. Their website address is <https://www.gov.uk/government/organisations/public-health-england>

Following the legal searches, if Radon, as an environmental hazard, is something that you are particularly sensitive to, further investigations and, if necessary, testing should be considered for an assessment of the site's exposure.

Electromagnetic fields and microwave exposure

There has been concern that electromagnetic fields from both natural and artificial sources can cause a wide range of illnesses such as blackouts, insomnia and headaches to depression, allergies and cancer. Artificial sources commonly comprise overhead or subterranean high voltage electrical power cables.

It is suggested that the electrical discharges from these high voltage cables upset the balance of minute electrical impulses employed by the human body to regulate itself in much the same way as television and radio signals can be disrupted.

Controversy and uncertainty prevail with regard to this matter; no strong evidence that is generally accepted to be conclusive has been developed to prove or disprove this alleged hazard. More information is available from the National Radiological Protection Board's website. You should be aware that the presence of power cabling in the vicinity of a building can affect its value and liquidity in addition to the health of those occupying the property.

We have not undertaken any separate inquiries with the relevant statutory authority as part of this inspection.

Invasive vegetation

The existence of any Knotweed or Hogweed around the property many have been highlighted with this report. However, we have not carried out a thorough inspection of the whole garden.

Japanese Knotweed was introduced into the UK in the 19th century. It grows vigorously and can cover large areas to the exclusion of most other plant species. It has been known to grow through bitumen macadam, house floors and sometimes through foundations.

Wood Boring Insects (Woodworm)

We have not undertaken a detailed investigation into the potential for Woodworm as this would cause for intrusive works to be carried out, however we will highlight if presenting at the time of the inspection any evidence of an active infestation.

Woodworm may manifest itself in a number of varieties ranging from 3mm in size to 25mm. Eggs are laid on or in the timber and the larvae that hatch feed and bore into the timber which consequently results in weakening of timbers and a risk to the structural integrity of the property. Treatment of active woodworm involves applying insecticides to the timbers. In extreme cases where the timbers structural integrity has been compromised by the attack, replacement may be the only solution.

Fungal Decay (Dry Rot & Wet Rot)

Moist and damp conditions provide an ideal environment for fungal attack. In cases where the moisture content is over 20% this is classified as 'dry rot'. Fine grey strands of fungus spread through wood and other materials developing into sporophores which give off spores which in turn spread the fungus further. Timber suffering from dry rot becomes very dry and brittle and begins to fracture to such an extent that it can be broken and crumble by hand. When the moisture content is higher than 40% to 50% this is classified as 'wet rot'. The presence of wet rot in timber is recognised by a dark brown staining colour and splitting or longitudinal cracking.

Treatment of fungal decay is initially to remove the source of the dampness which is enabling the fungus to 'feed' and develop. Exposure works will then be

necessary to determine the full extent of the damage caused. Following any repairs or replacement works it will be necessary to treat the timbers with an approved fungicide to safeguard against recurrence.

SAMPLE

Appendix C

What To Do Now

If the surveyor is concerned about the condition of a hidden part of the building, could only see part of a defect or does not have the specialist knowledge to assess part of the property fully, the surveyor may have recommended that further investigations should be carried out to discover the true extent of the problem. You should be mindful that the investigations may highlight additional or more extensive defects than presenting at the time of the inspection.

The cost of remedial works and/or repairs may influence the amount you are prepared to pay for the property. Before you make a legal commitment to buy the property, you should instruct further investigations and obtain quotations for all the remedial works and/or repairs.

Getting quotations

You should get at least two quotations from experienced contractors who are properly insured. You should also:

- ask them for references from people they have worked for.
- Ensure they have the skills needed to carry out the works.
- describe in writing exactly what you will want them to do.
(this may be outlined within the report, be a result of further investigation or something the contractor can advise on)
- get the contractors to put the quotations in writing.

Some repairs will need contractors with specialist skills and who are members of regulated organisations (for example, electricians, gas engineers, plumbers and so on). Some work may also need you to get Building Regulations permission or planning permission from your local authority.

Who you should use for these further investigations

You should ask an appropriately qualified person, though it is not possible to tell you which one. Specialists belonging to different types of organisations will be able to do this. For example, qualified electricians can belong to five different government approved schemes. If you want further advice, please contact the surveyor.

What the further investigations will involve

This will depend on the type of problem, but to do this properly, parts of the home may have to be disturbed and so you should discuss this matter with the current owner. In some cases, the cost of investigation may be high.

Appendix D

Glossary of Building Terms

A

Air Brick A perforated brick usually to be found in external walls to provide - ventilation to ground floor joists.

Alcove A room access often found to both sides of a chimney breast.

Angle Irons Wrought iron right angle shaped bars.

Apron or Apron Flashing Traditionally of lead and correctly used to describe a strip of lead built into a wall and dressed up the wall, eg where a flat roof abuts a vertical wall.

Arch A curved structure built to distribute weight over an opening in a wall.

Architrave Traditionally a moulded wood strip around the edge of a door, covering the joint of door frame and plaster or other wall finish.

Arris The sharp external edge where two surfaces meet at a point.

Ashlar Stone walls built with cut blocks of stone.

B

Baluster A vertical pillar supporting the hand rail of a staircase; may be carved or plain.

Balustrade A row of balusters joined to a horizontal rail at, for example, the edge of a landing.

Barge Board The board placed along the verge of a roof at the gable end.

Bat A cut brick, either half bat or three-quarter bat.

Batten Timber fillets to which slates and tiles are nailed or fixed.

Benchings Originally called bolstering - this refers to the cement finish to the space between open pipes where they join in a manhole.

Birdsmouth (joint) The notch cut in the end of a rafter where it joins the wall plate.

Bond The placing of bricks in mortar to form a wall - English bond, Flemish bond, garden wall bond.

Bottom Rail The lowest horizontal part of a door.

Box Girder A hollow girder.

Boxing A term for the recess into which internal window shutters are folded.

Braced Door A type of door with diagonal supported braces.

Breeze (as in breeze block) Ashes, coke or cinders formed into a building block used for partition walls or inner skins of cavity walls.

Brick Noggin Brickwork built into a timber framework.

Buttress A brick or stone support to a wall designed to resist thrust movement and give added stability.

C

Cames The lead bars in leaded lights

Cased Frame Adjoining sash windows with a cased frame in the middle for the weights.

Casement A window hinged at one end and designed to open inwards or outwards.

Ceiling Joist Joist which supports a ceiling.

Cement Fillet A cement joint, generally used to describe cement joints between roof slopes and walls.

Cesspool A construction to hold sewage and foul waste.

Chair Rail The top of the dado fixed about 3ft above ground level.

Chamfer Where the edge or arris of adjoining walls has been cut to form a flat surface.

Chase A cut in plaster, brickwork, etc, to receive cables, pipes, etc.

Chimney Breast That part of the chimney flue that projects into a room.

Chimney Stack That part of the chimney built above roof level.

Close End (or Stopped End) The end of a gutter.

Closer As in Queen closer, is a brick cut along its horizontal length; or as in King closer, with a cut corner.

Cogging A notch in a wall plate for joist.

Collar A horizontal timber joining rafters, the cross piece in a single frame.

Coping Brick or stonework on top of a wall.

Corbelling Bricks projecting in step from a wall, often found at the top of a wall immediately below the roof.

Cornice Ornamental plaster around the joint of wall and ceiling.

Couple Roof A roof without a collar.

Coursed Rubble Squared stone laid in course, but with courses of different sizes.

Cowl A movable cap to the chimney or vent pipe which moves in the wind to keep the opening away from the direction of the wind.

Creasing Projecting courses of tiles at the top of a wall or chimney stack to stop rain from running down the face of the wall.

Crown The top of an archway.

Cupola A glazed structure in the shape of a lantern found at the top of a dome.

D

Dado The lower 3ft or so of wall where finished in timber, providing protection to the wall and covering the brickwork most likely to be effected by rising damp.

Damp-proof Course (dpc) An impervious membrane laid about two brick courses above ground level to prevent damp from rising.

Dormer Window A window formed in a roof slope which projects from the slope.

Double-hung Sash Window A window where the upper and lower sashes are hung on cords or slides and can move up and down.

Dowel Usually used to describe a timber pin holding jointed section of timber together.

Dress, Dressing Terms used by plumbers when working with lead. Dressed lead has been beaten into shape.

E

Ear part of cast-iron or lead rainwater goods used for fixing pipes to walls.

Eaves The lower edge of a roof near the gutter.

English Bond A brick wall with alternate courses of headers and stretchers.

English Garden Wall Bond Brickwork constructed with three courses of stretchers and one of headers.

Entablature The finish at the top of a column.

Escutcheon The metal plate covering the key hole.

Espagnolette Bolt Typically found on continental windows were, when turned the casement is bolted at top and bottom.

F

Fanlight A light (window) over a door or casement.

Fascia The board to which the gutters are fixed.

Fillet A small strip of wood, slate, cement.

Finial An ornament, often of terracotta, fixed at the gable end of the ridge.

Fire Bricks Special bricks for fireplaces designed to withstand intense heat.

Firring Tapered pieces of timber laid on joists of flat roofs to provide an adequate fall to gutters.

Fish Plates Iron plates for joining large beams.

Flag A large paving stone - as in flagstone.

Flank Wall A side wall.

Flashings Usually made of lead and fixed to provide a waterproof protection at the joint of flat roofs and adjoining walls between pitched roofs and walls or around chimneys.

Flat A flat roof.

Flaunching The cement work around chimney pots.

Flemish Bond Brickwork with alternate headers and stretchers in each course.

Footings A term sometimes used for foundations, effectively where the brick wall widens out at its base on top of the foundations.

Framed and Braced Door A door made up of rails, styles, battens and braces.

French Casement (or Door) A pair of sashes the height of a door and hinged to serve as a door and window. Used to describe any casement door from living room into garden.

Fresco Painting done on plaster.

Frog The depression in the top of a brick.

Furniture In building terms - the handles, knobs, locks etc, fitted to doors, windows and fitted or built-in cupboards.

G

Gable As in gable end, is the triangular part of a wall under a roof end.

Gauged Arch Where the bricks forming the arch are cut to the radial form.

Gauged Brickwork Bricks rubbed to an exact size and laid with very fine joints.

Girder A large beam made from iron or steel.

Granolithic A floor finish of crushed stone or aggregate.

Grout Used for filling the joints in wall tiles.

H

Half Timbered Timber framed walls filled with brick or stone and frequently plastered.

Header The end of a brick.

Herring-bone Bond Bricks bonded in diagonal lines.

Herring-bone Strutting Pieces of wood nailed between joists to reduce movement.

Hip The angle where two roof plans meet at a ridge.

Hopperhead A funnel of hopper-shaped head to the top of the rainwater pipes to

collect rainwater and waste from one or more pipes.

I

Interlocking Tiles Tiles which lock together to form a water tight roof without the need for lapping.

Invert of Invert Levels The lowest part of a drain.

J

Jamb The side of a door or window.

Joists Timbers built into or hung from walls to provide support for floors or fixing for ceiling or both.

K

Key A surface can be roughened to form as a key, eg for rendering purposes. It also refers in lath and plaster work to the early coats which are forced through the gaps in the laths to form a key.

Keystone The centre stone or an arch.

Kingpost The central post of a timber roof truss.

Knotting A liquid applied to knots in woodwork prior to painting. Knots not treated will always show through.

L

Lantern Light A roof light (window) constructed like a lantern with opening or fixed glazing.

Lap To overlap a course of slates.

Lean-to A structure, the sloping roof which abuts a higher wall.

Ledged and Braced Door A door which is strengthened with diagonal braces.

Ledged Door A door where vertical boards are fixed to ledges only.

Linings The wood finish to door and window jambs.

Lintel The horizontal beam over a window or door opening.

M

Mansard Roof A roof made with two slopes - effectively provides a top floor of usable space within a roof structure.

Mastic A generic term for any sealant used in the building process, eg for sealing the joint around window openings.

Mezzanine A floor between the ground floor and first floor.

Mullion An upright division of a window.

N

Newel The post at the bottom and top of a stair to which the handrail is fixed.

North Light Generally refers to factory roof construction which includes a glazed slope facing north.

Nosing The rounded projecting edge of a step in a staircase.

O

Oriel Window A window projecting from an upper floor.

Oversailing Course A projecting course of brickwork.

P

Padstone A stone laid under the end of and RSJ to distribute weight.

Panelled Door A door which is inset with panels - these may be glazed.

Pantile A curved roofing tile which hooks over adjoining tiles.

Parapet As in parapet wall - the external wall is built up above the eaves with a gutter formed behind it, or mansard constructed behind it.

Pargetting Plaster finish to the inside of a new flue.

Parquet Floor Small strips of wood usually laid on a solid floor to form a pattern.

Parting Bead The timber fillet that separates sliding sashes in the window frame.

Parting Slip The timber fillet inside the frame of a sash window to keep the weights of the two sashes apart.

Partition A wall dividing internal space can be stud partition, ie non-loadbearing.

Party Wall The wall which separates, but is shared by adjoining properties.

Pitch The slope of the roof, technically the ratio of span to height.

Plinth The projecting base of a wall.

Pointing To point is to fill the joints of brickwork with mortar. A process carried out while laying the bricks or at a later stage.

Purlins The horizontal roof member on which the rafters rest.

Q

Quoin Bricks or stones used at corners of walls.

R

Rafters The roof timbers to which felt and battens are fixed.

Rail A horizontal part of a door frame or window.

Raking Bond Diagonal or herring-bone brick bond.

Random Rubble Stone walls built without courses.

Rebate A set-back in timber, stone, etc.

Relieving Arch An arch over a lintel.

Retaining Wall A wall built to hold back or retain a bank of soil.

Ridge The top of the roof where the two slopes meet.

Ridge Course The course of tiles or slates fixed next to the ridge which may be of a different size to the rest.

Ridge Piece A horizontal timber running the length of the ridge to which rafters may be fixed.

Ridge Tile A shaped tile placed along the ridge.

Rising Butt A door hinge which raises a door as it opens.

Roof Boarding Where rafters are covered in boards before battens are laid.

Rough Cast A rough render finish to external walls usually made with gravel.

RSJ Rolled steel joists used for supporting upper load-bearing walls above wide opening.

S

Sarking A felt used for covering roofs before laying battens.

Sash The frame of a window that holds the glass.

Settlement Sinking of foundations.

Sill The piece of timber at the bottom of a window - window sill.

Skirting A board fixed to the bottom of a wall at joint of the wall and floor.

Skylight A window in the slope of a roof.

Sleeper Wall A low wall built to support ground - floor joists.

Soakers Lead strips to provide water-proof joint between a roof slope and adjoining wall.

Stack Pipe The correct name for vertical rainwater pipe.

Stretcher A brick laid length ways in a wall.

String The sloping board to which the steps of the staircase are attached.

String Course A course of brickwork that projects beyond the face of an external wall.

Struck Joint Pointing depressed with a trowel handles or shaped wood.

Stucco A type of external plaster finish.

Style A vertical part of a door.

T

Tilting Fillet A timber fillet fixed at eaves to raise the edge of the first row of slates.

Tingles Strips of lead or other metal used to secure the edge of flashings or to hold slipped slates in position.

Tongue and Groove Boarding Close-fitted boards where the edge of one board fits into a groove of an adjoining board.

Trimmer Joists Used where openings are made in roofs and floors, eg for roof hatches, stairwells.

Truss As in roof truss, ie timber framed together off site.

Tusk Pointing Projecting pointing.

U

Underpin To strengthen existing walls and foundations.

V

Valley The junction between two sloping-roof planes.

Vent As in vent pipe, to allow ventilation of foul air from sewers.

W

Wainscot Panel boarding to walls.

Wallplate Timber placed on a wall to receive floor joists or roof rafters.

Weatherboard A board fixed to the bottom of a door on the outside to prevent rain driving in.

Weepholes Holes at the base of walls to allow moisture to drain out.

Appendix E

Maintenance Tips

Your home needs maintaining in the normal way, and this general advice may be useful when read together with your report. It is not specific to this property and does not include comprehensive details. Problems in construction may develop slowly over time. If you are concerned contact a RICS qualified surveyor for further advice.

Outside the Property

You should check the condition of your property at least once a year and after unusual storms. Your routine redecoration of the outside of the property will also give you an opportunity to closely examine the building.

- **Chimney stacks:** Check these occasionally for signs of cracked cement, split or broken pots, or loose and gaping joints in the brickwork or render. Storms may loosen aerials or other fixings, including the materials used to form the joints with the roof coverings.
- **Roof coverings:** Check these occasionally for slipped, broken and missing tiles or slates, particularly after storms.

Flat roofing has a limited life, and is at risk of cracking and blistering. You should not walk on a flat roof except for maintenance work. Where possible keep it free from debris. If it is covered with spar chippings, make sure the coverage is even, and replace chippings where necessary.

- **Rainwater pipes and gutters:** Clear any debris at least once a year, and check for leaks when it is raining. You should also check for any loose downpipe connectors and broken fixings.
- **Main walls:** Check main walls for cracks and any uneven bulging. Maintain the joints in brickwork and repair loose or broken rendering. Re-paint decorated walls regularly. Cut back or remove any plants that are harmful to mortar and render. Keep the soil level well below the level of any damp proof course (150mm minimum recommended) and make sure any ventilation bricks are kept clear. Check over cladding for broken, rotted or damaged areas that need repairing.

- **Windows and doors:** Once a year check all frames for signs of rot in wood frames, for any splits in plastic or metal frames and for rusting to latches and hinges in metal frames. Maintain all decorated frames by repairing or redecorating at the first sign of any deterioration. In autumn check double glazing for condensation between the glazing, as this is a sign of a faulty unit. Have broken or cracked glass replaced by a qualified specialist. Check for broken sash cords on sliding sash windows, and sills and window boards for any damage.
- **Conservatories and porches:** Keep all glass surfaces clean, and clear all rainwater gutters and downpipes. Look for broken glazing and for any leaks when its raining. Arrange for repairs by a qualified specialist.
- **Other joinery and finishes:** Regularly redecorate all joinery, and check for rot and decay which you should repair at the same time.

Inside the Property

You can check the inside of your property regularly when cleaning, decorating and replacing carpets or floor coverings. You should also check the roof area occasionally.

- **Roof structure:** When you access the roof area, check for signs of any leaks and the presence of vermin, rot or decay to timbers. Also look for tears to the under-felting of the roof, and check pipes, lagging and insulated areas.
- **Ceilings:** If you have a leak in the roof the first sign is often damp on the ceiling beneath the roof. Be aware if your ceiling begins to look uneven as this may indicate a serious problem particularly for older ceilings.
- **Walls and partitions:** Check these when you are cleaning or redecorating. Look for cracking and impact damage, or damp areas which may be caused by plumbing faults or defects on the outside of the property.
- **Floors:** Be alert for signs of unevenness when you are cleaning or moving furniture, particularly with timber floors.

- **Fireplaces, chimney breast and flues:** You should arrange for a qualified specialist to regularly sweep all used open chimneys. Also, make sure that bricked-up flues are ventilated. Flues to gas appliances should be checked annually by a qualified gas technician.
- **Built-in fittings, woodwork and joinery:** Check for broken fittings.

Services

- Ensure all meters and control valves are easy to access and not hidden or covered over.
- Arrange for an appropriately qualified technician to check and test all gas and oil services, boilers, heating systems and connected devices once a year.
- Electrical installations should only be replaced or modified by a suitably qualified electrician and tested as specified by the Electrical Safety Council (recommended minimum of a ten year period if no alterations or additions are made, or on change of occupancy).

- Monitor plumbing regularly during use and when you are cleaning. Look out for leakage and breakages, and check insulation to tanks and pipes are adequate particularly as winter approaches.
- Lift drain covers annually to check for blockages and clean these as necessary. Check any private drainage systems annually, and arrange for a qualified contractor to clear these as necessary. Keep gullies free from debris.

Grounds

- **Garages and outbuildings:** Follow the maintenance advice given for the main building.
- **Other:** Regularly prune trees, shrubs and hedges as necessary. Look out for any overhanging and unsafe branches, loose walls, fences and ornaments, particularly after storms. Clear leaves and other debris, moss and algae growth. Making sure all hard surfaces are stable and level and not slippery or a trip hazard.

Important Information for Purchasers of Older, Listed and Historic Properties

Modern properties, those built after 1900 or so, are essentially constructed as sealed boxes which are designed to keep all moisture out. This is achieved by the use of impermeable membranes at ground level (such as a damp-proof course) to prevent moisture rising up from the ground below and cavity walls which are designed to prevent moisture penetrating through the walls. Windows and doors are made to seal tightly and most houses built today are constructed without any chimneys at all.

In this type of property, where dampness is found inside, then it is generally due to some specific defect which will require repair.

Older properties, generally those built before 1850 or so, were constructed in a very different way and one in which moisture will naturally enter the property. They do not have damp-proof courses or cavity walls and are not intended to be a sealed unit.

However, these properties are designed to manage the movement of moisture in such a way as to prevent it becoming a hazard to health or to the structure of the building and it is important to understand the mechanisms by which it does this in order to protect the structural elements of the building from becoming defective.

At the time that these properties were constructed, it was normal for them to have many openings where draughts could enter the building, such as multiple open fireplaces, ill-fitting doors and windows and gaps in floorboards. As a result, ventilation levels were very high, allowing moisture to evaporate readily in the moving air and to be carried away to the outside. So, for example, where moisture penetrated the walls, although the inside surfaces of those walls would be damp, the levels of moisture would achieve equilibrium as the rate of evaporation compensated for the rate of penetration.

Today, we try to minimise draughts by blocking fireplaces, adding secondary or double glazing, laying laminate floors and sealing the gaps around doors and windows. As a result, moisture levels rise due to the decreased air movement that is a consequence of the reduced ventilation. This then leads to dampness becoming evident, particularly in areas of minimal air movement, such as behind large objects of furniture and within cupboards and wardrobes.

Many older homes were built at a time when lime mortar was the primary method of setting bricks and stones. Lime mortar is both flexible and porous, unlike the very hard, inflexible and non-porous cement mortars used in more modern construction. Lime mortar, therefore, allows the moisture evaporation process to continue by acting as a wick for moisture to leave the main walls between the bricks and/or stones that make up the bulk of the wall. This is a further step in the process of managing moisture within the property.

Today, we see many repairs carried out to older homes using cement mortar. This seals the gaps between the bricks and/or stones, trapping the moisture in the wall and forcing it into the surface of the bricks and stones, causing them to fail when that moisture freezes in the surface of those materials and by reducing the amount of moisture that can evaporate through the wall to the outside, it increases dampness levels inside.

As a result of the actions described above, it is common, today, to find higher than average moisture levels in older properties. The consequences of this can cause significant defects within the property. In particular, high moisture levels, especially in roof spaces and cellars, can promote the development of wood boring insects such as Common Furniture Beetle and Death Watch Beetle in structural timbers such as roof and floor joists. High levels of dampness in walls causes plaster to fail, decorations to become damaged and, in some properties, significant damage to the timber frame of the building.

To avoid these defects developing and becoming a serious threat to the building, it is important to be aware of the consequences of any actions which may have an impact on moisture management within the building.

The following is a list of suggestions and recommendations that will help maintain the building in a good and sound condition. It is by no means an exhaustive list and it is recommended that all owners of listed, historic and older buildings inform themselves of the best way to protect such a property.

1. Consider ways to improve ventilation within the property. This may include the installation of mechanical extractors in kitchens and bathrooms, removing secondary glazing units, ensuring that windows can be opened easily and that they are used regularly, removing insulation from the eaves area of the roof where it may block ventilation and not leaving the property closed up and unoccupied for extended periods.
2. Where repairs are necessary, ensure they are carried out by tradespeople who are knowledgeable and competent in traditional building methods and that materials are sympathetic to those used originally. In particular, where walls are to be re-pointed, then lime mortar (which is very different from cement mortar with some lime added) should be used and any earlier cement mortar repairs removed and re-finished.
3. Ensure that the guttering and rainwater handling systems are in a well maintained and fully operative condition. Very significant damage can be caused in a very short period of time due to simple leaking gutters, downpipes, hoppers and other elements of the rainwater handling system. It is therefore essential that these are inspected regularly, at least three or four times a year and any damages or defects repaired as quickly as possible. In particular, they should be cleared after autumn leaf fall to ensure they are as effective as possible during the winter.
4. Maintain a regular and vigilant inspection process. Unidentified or unrepaired defects can rapidly become more significant and therefore more costly to repair. A regular process of inspection is more likely to ensure that defects are identified at an early stage and can be rectified before further damage is caused. Such a process should include inspection of all the outside elements such as chimneys, roofs, walls, guttering and downpipes, windows and doors and roof edge timbers etc. Internal inspections should include a detailed examination of the roof timbers, moving of large objects of furniture to assess the wall condition behind, examination of floors, doors and timber fittings to identify signs of movement and the condition of the heating and plumbing systems to ensure no leaks are present. This is in addition to a general and normal maintenance programme.

5. Avoid the introduction of unnecessary interventions. Many companies will recommend the use of chemical processes such as spraying of timbers or injection of damp-proof courses as a means of rectifying the effects of dampness. In most cases, in respect of older properties, these processes are completely unnecessary, usually ineffective and in many instances counter-productive. Attempting to prevent the passage of moisture through a wall which was always intended to be damp is unlikely to affect a cure. In fact, it is likely to push the problem elsewhere and may cause even more significant damage.

Remember that, if a property is listed, any works you wish to carry out may require listed building consent and it is always best to check with the local authority Conservation Officer before undertaking any activities.

There are many useful resources of information available from, for instance English Heritage and the Society of Protection of Ancient Buildings, which can help you in understanding how to manage an older property in a sympathetic and considered way. It is strongly recommended that you gain an understanding of the means and methods that they advocate in order to protect your investment.

