

BUILDING SURVEY REPORT

for

**5 ALLEN ROAD
OLD TOWN
NE20 1AZ**

on behalf of

MR & MRS A SMITH

CONTENTS

1.0 INTRODUCTION

- 1.1 Client
- 1.2 Subject Property
- 1.3 Property Surveyed by
- 1.4 Date of Survey
- 1.5 Weather Conditions
- 1.6 Tenure
- 1.7 Roads
- 1.8 Instructions
- 1.9 Limitations
- 1.10 Location/Amenities
- 1.11 Brief Description of the Property
- 1.12 Access and Parking
- 1.13 Accommodation
- 1.14 Planning and Legislation

2.0 BUILDING SURVEY REPORT

- 2.1 Structure / Movement
- 2.2 Timber Defects
- 2.3 Dampness
- 2.4 Condensation & Insulation

- 2.5 External
 - 2.5.1 Roofs
 - 2.5.2 Chimney Stacks and Flashings
 - 2.5.3 External Rainwater Goods
 - 2.5.4 External Walls and Structure
 - 2.5.5 Foundations
 - 2.5.6 Damp Proof Course and Sub Floor Ventilation
 - 2.5.7 Windows, Doors and External Joinery
 - 2.5.8 External Decoration
 - 2.5.9 Drainage
 - 2.5.10 External Areas including Outbuildings

- 2.6 Internal
 - 2.6.1 Roof Space
 - 2.6.2 Ceilings
 - 2.6.3 Internal Walls and Partitions
 - 2.6.4 Fireplaces, Chimney Breasts and Flues
 - 2.6.5 Floors
 - 2.6.6 Internal Doors and Joinery
 - 2.6.7 Internal Decoration

- 2.7 Building Services
 - 2.7.1 Electricity
 - 2.7.2 Gas
 - 2.7.3 Cold Water, Plumbing and Sanitary Fittings
 - 2.7.4 Hot Water and Central Heating
 - 2.7.5 Fire and Security

3.0 CONCLUSIONS & RECOMMENDATIONS

INTRODUCTION

1.1 Client

Mr & Mrs A Smith.

1.2 Subject Property

5 Allen Road, Old Town, NE20 1AZ.

1.3 Property Surveyed by

Alan Potter MRICS.

1.4 Date of Survey

28th March 2013.

1.5 Weather Conditions

Dry and fine, with an ambient air temperature of around 12°C.

1.6 Tenure

The property is understood to be of Freehold Tenure and that full vacant possession will be available on completion. Your Legal Advisers should check and confirm this prior to legal commitment to purchase.

1.7 Roads

Local authority maintained roads and footpaths.

1.8 Instructions

In accordance with the instruction received from Mr & Mrs Smith, I have carried out a Building Survey of the subject property, primarily to determine the general condition of the property concentrating on matters of significance which might prevent a purchase or reduce the price to be paid. This report is not intended to be a specification of every minor defect which might exist or be discovered when occupation is ultimately taken.

1.9 Limitations

This report is for the use of the party to whom it is addressed and should be used within the context of the instruction under which it is prepared and which is set out in item 1.8. It may be disclosed to other professional advisers in respect of this purpose. No responsibility is accepted to any third party for the whole or part of its contents.

No opening up works have been carried out to expose foundations and it is, therefore, not possible to comment on their form of construction or condition.

No investigations have been carried out to determine whether or not high alumina cement concrete, calcium chloride additive, asbestos or any other deleterious materials have been used in the construction of the building and therefore no assurance can be given as to the presence of such.

I have not inspected any part of the structure, which is covered, unexposed or inaccessible and I am therefore unable to report that any such part of the property is free from defect.

A detailed examination of floor joists, wall plates, and the backs of fitted joinery or other inaccessible timbers was not made and it is therefore not possible to report that these timbers are entirely free of rot, timber disease, woodworm or any other infestation.

No tests were carried out on the drainage, electrical or mechanical systems.

A mining search has not been specifically made through British Coal. This is a region with which mining activity is generally associated and I would therefore recommend that your Legal Advisers arrange for a mining report.

The property incorporated fitted floor coverings throughout, which restricted the extent of the inspection somewhat and my comments are therefore limited accordingly.

1.10 Location/Amenities

The property is within an established residential location and is afforded the usual restricted range of localised services/amenities with reasonable public/private transport links to Old Town city centre and other parts of the region.

Where referred to, the terms "left" and "right" are taken from a point externally when facing the front elevation of the property from outside, with the front elevation deemed to be that facing onto Allen Road, in a south easterly direction.

1.11 Brief Description of the Property

The property consists of a three bedroom detached bungalow.

The property is of traditional construction, with cavity external walls, under a pitched slate covered roof, and which is believed to have been built circa 1935.

The ground floor of the property is generally of traditional suspended timber construction; with the kitchen, sun room and WC to the rear incorporating solid concrete floors.

The property is located on a moderately sloping site, with the ground sloping upwards toward the rear; and downward from right to left when facing the front elevation.

1.12 Access and Parking

Off-street parking is provided via a concrete surfaced drive and detached garage.

1.13 Accommodation

Ground Floor	Entrance hall, lounge, dining room, kitchen, rear sun porch, bathroom, bedroom 1, bedroom 2, bedroom 3 and dressing room.
External	Concrete paved drive to the side of the property with a garage to the rear and gardens to the front, side and rear.

1.14 Planning and Legislation

No enquiries have been made as to the Planning Status of the property. Your Legal Advisers should check this during the course of their normal searches.

Trees within the curtilage of the property are understood to be the subject of a Tree Preservation Order(s). Such orders make it an offence to cut down, uproot, prune, lop or damage the tree in question without first obtaining the Council's consent. Your Legal Advisers should check this during the course of their normal searches.

2.0 BUILDING SURVEY REPORT

2.1 STRUCTURE / MOVEMENT

Evidence of what is considered significant structural movement was noted to the property, with the location and nature of notable cracking and displacement as follows:

- Externally to the right side front facing bay, vertically affecting brickwork below cill level and of around 4mm in width.
- Downward movement/rotation of the side facing bay, noted externally to the front facing side at low level.
- Bulging of brickwork and distorted mortar bed joints externally to the side facing bay.
- Cracked and misaligned brickwork externally to the front right corner, at low level
- Cracking around 1mm wide to the lounge internally, with vertical cracking to wall plaster corresponding with the cracking of brickwork noted externally.
- Cracking around 1mm wide to wall plaster within the lounge, vertically to the rear external corner of the room; diagonally above the side facing window; and with hairline cracking to the chimney breast.
- Cracking around 1mm wide diagonally to wall plaster and the bay ceiling within the dining room.
- Horizontal cracking along the top edge of skirting within the dining room, abutting the external wall.
- Cracking around 1mm wide vertically and diagonally to ceiling level plaster cornice within the front facing bedroom; and which extends horizontally along the overall length of the cornice/ceiling junction.
- Cracking around 1mm wide vertically and horizontally, affecting the front bedroom bay wall plaster and ceiling.
- Cracking around ½ mm wide to the ceiling within the dressing room.
- Cracking around 1mm wide to the wall and ceiling adjacent to the external corner of the dressing room; extending vertically to the right side window head.
- Cracking around 1mm wide affecting both sides of the internal partition sub-dividing the dressing room and bedroom, extending vertically above the door opening.
- Cracking around 1mm wide to the ceiling and vertically to the adjacent wall plaster between internal doors to the left side of the entrance hall.
- Cracking around 4mm in width vertically to the right side brickwork wall of the garage.

In addition, extensive cracking is affecting ceilings throughout the property, but notably those within the lounge, dining room and front facing bedroom.

Suspended timber floors are significantly out-of-level, notably affecting the entrance hall, lounge, front facing bedroom and dressing room.

Internal doors are generally provided with hook-and-eye fasteners, suggesting that doors may not remain closed when held by the latch alone.

Bulging of brickwork and cracking through mortar joints at intervals of around 5/6 vertical course may be an indication of cavity wall tie failure and investigation and any remedial repairs necessary should be undertaken by a specialist firm at the earliest opportunity.

However, the primary source of cracking noted to the property is considered to be the mature trees located in relatively close proximity to the property. Such defects can essentially arise due to the following:

1. Roots removing moisture from shrinkable clay, resulting in subsequent downward movement of foundations; with older properties often more susceptible due to their relatively shallow foundations.
2. Roots damaging (generally older) drains, leading to the softening and erosion of load-bearing clay.

The mature trees under consideration would appear to be Sycamores, and which are located at distances of approximately 6.000m and 10.500m away from the front left and right corners of the property respectively; with a further tree located immediately adjacent to the detached garage, on adjoining land. Trees are estimated as being around 15 to 20.000m in height.

For guidance, published data indicates that the safe distance for a Sycamore trees is around 17.000m from a property.

Whilst damage relating to the actions of roots on ground moisture and clay cannot be discounted; the apparent blockage, by roots, of a drainage branch to the front garden area including settlement of the adjacent ground, would strongly suggest that some below ground drainage may have become damaged or broken due to the actions of roots and in the first instance, it is recommended that a detailed CCTV investigation be undertaken, in order to establish the condition of below ground drainage.

As a minimum measure, therefore, you should anticipate the need to carry out replacement of damaged below ground drainage and repairs to cracked masonry, both internally and externally. It should be further noted that such works are also likely to require the making good of external hard and soft surfaces and internal decoration and finishes; with associated cost implications.

Cracking of brickwork was noted over timber lintels to the kitchen window opening and the window and door openings to the left side of the garage and replacement with modern metal lintels, including associated brickwork repairs, is recommended.

2.2 TIMBER DEFECTS

No signs were generally found of significant wet or dry rot in structural and main joinery timbers, nor of infestation by wood-boring insects.

However, wet rot noted to timbers adjacent to the left side roof valley raises the potential for roof timbers in this location to be similarly affected; and which would correspond with dishing of the external roof slope noted in general proximity to the valley. Consequently, the need to carry out timber repairs at the time of future roofing works should be anticipated.

Timber lintels provided to window and door openings to the kitchen and garage were noted as being “dished” i.e. downward bowing, and requiring replacement.

Isolated incipient wet rot was also noted to external timber elements, including windows, doors and the rear sun porch and if affected elements are to be retained, the need for pre-paint repairs at the time of re-decoration should be anticipated.

2.3 DAMPNES

All accessible internal and external walls were tested internally with an electronic moisture meter at intervals of approximately 500mm.

Accessible roof timbers were similarly tested.

No indication of significant penetrating or rising damp was found.

However, moisture meter readings were noted to roof timbers and appropriate external repairs are recommended to be undertaken at the earliest opportunity; and which are likely to include the need for isolated replacement of defective timber.

2.4 CONDENSATION & INSULATION

No indications of any significant problems with condensation were noted.

However, extensive mould growth was noted to the wall and ceiling surfaces within the rear WC, including failed decoration, with condensation likely exacerbated by the relatively cold wall and ceiling surfaces and the lack of heating in this location.

Ceilings are adequately insulated within the main roof space, with quilt upgraded to an overall thickness of around 250mm.

The presence of mortar plugs to the external facing brickwork would suggest that cavity injection thermal insulation may have been installed and enquiries should be made of the vendor in this regard, including the presence of any valid guarantees.

Sub floor ventilation is provided by way of air bricks to the front, rear and side elevations, which appear adequate and functional.

The thermal efficiency of the single glazed windows is likely to be substantially below that offered by modern double glazed elements and their future replacement is recommended. In this regard, isolated staining was noted to internal decoration beneath window cills, suggesting the occurrence of condensation when the property was previously occupied.

It was noted that the kitchen and bathroom did not incorporate any means of mechanical extraction and you may wish to consider such provision following occupation.

2.5 EXTERNAL

2.5.1 Roofs

Main roof coverings were checked from ground level, with the aid of binoculars and a 3.000m ladder.

The main roof is of dual pitched and hipped design, with a natural slate covering and clay tiled ridge lines running parallel and perpendicular to the front elevation.

Main roof hips are of a traditional mitred design.

It is generally considered that natural slate can last up to 100 years, depending on quality, source, thickness and the skill with which it was cut. Slipped slates that are otherwise in good condition can be an indication of “nail sickness”, which basically means that the existing nail fixings are rusting. This together with cracked slates is usually a reliable indicator that the roof covering is coming to the end of its recommended lifespan.

Whilst the roof slopes are generally uniform, some dishing and misalignment is evident.

The ridge lines are generally uniform, being without signs of significant misalignment. Isolated dishing to the ridge lines is considered as being commensurate with age and not of concern

A significant number of cracked, slipped, delaminated and missing slates were evident to the roof slopes.

Replacement slates were noted, including where a chimney stack has previously been removed and adjacent to front facing gable verges. See also section 2.5.2 and 2.6.1.

Front facing gable verges are poorly formed, with mortar pointing necessary to seal junction between slates and timber barge boards, absent. Consequently, timber tiling battens were exposed to the right side gable, raising the potential for moisture ingress and timber becoming rot affected.

Several lead or metal wire “tingles” were noted, installed in order to retain slates in place where original fixings have failed.

Pointing to ridge tiling was in a deteriorated condition, with cracked and displaced mortar noted and which raises the potential for water/frost ingress and accelerated deterioration.

The aforementioned mitred hip details are generally formed using angle-cut slates interleaved with lead soakers beneath the slates. However, soakers did not appear to have been provided in this instance; with the water tightness of the hips dependent upon the mortar pointed joint between the opposing angle-cut slate faces. As a consequence, the hip details have generally failed, with “daylight” evident from within the roof space, along with associated damp ingress. See also section 2.6.1.

The front facing bays incorporate slate covered hipped roofs, which were in a worn and weathered condition, with several slipped slates evident.

Stepped flashings at the abutment of the bay roofs with facing brickwork are formed in lead, mortar pointed into brickwork joints. Loose joints were noted to the flashing upstands, with the application of cement mortar pointing to lead work inherently prone to cracking and failure, given the differential thermal movement between the materials and consequently, an appropriate flexible lead sealant should be incorporated.

The main entrance canopy is of timber construction with a slate covering; with slates being in a similar deteriorated condition to that noted above.

A single glazed rooflight is provided to the rear facing slope, which is in a dated and weathered condition and you may wish to consider removal, rather than replacement, during future roofing works.

A visual inspection around the eaves of the roof to the left of the main entrance, directly beneath the adjacent lead lined valley, noted extensive rot to exposed timber rafter feet and timber sarking boards over the rafters at eaves level. In this regard, dishing of the roof slope was evident in this general location and which raises the potential for roof timbers to be similarly rot affected.

Notwithstanding the above, lead lined valleys were in a generally weathered condition, including several loose and displaced valley slates.

Having regard to the current condition of the slate covered roofs, they are considered to have reached the end of its useful lifespan and you should anticipate total renewal as being necessary following occupation. This should include removal of the slates and timber battens and the provision of new natural slate coverings.

Whilst periodic maintenance work may extend the life of the slate roof coverings, the level of deterioration noted would suggest this as unlikely to be an economical approach, taking into account all circumstances, including the need to provide scaffold access for maintenance works.

You should be aware that complete renewal of a roof covering including the tiling battens and underlay felt is subject to a full Building Regulation application, with the additional associated costs to be anticipated.

No means of ventilation to the main roof space was noted. The absence of ventilation to a roof structure can result in the build-up of stagnant air/condensation, with potential rot attack to timbers as a consequence. Whilst specific ventilation was not provided to the roof, this is not of immediate concern since the slate covering in its present condition was allowing the free-flow of air into the roof space. However, at the time of future roofing works, it is recommended that appropriate ventilation be provided, either by vent tiles or the incorporation of an appropriate breathable underlay.

The flat roofed bay serving the dining room to the right side of the property incorporates a mineralised bitumen felt covering, assumed as having been laid over a timber deck. Felt has been dressed beneath the rainwater gutter serving the main roof and consequently, access was not available to inspect any flashing detail formed at the junction of the roof with the main external wall.

The roof covering is in poor condition, with extensive erosion of the mineralised finish and exposed bitumen at joints evident. Given the apparent age of the

roof covering, appropriate thermal insulation is considered unlikely to be present.

Bitumen based felts have a limited lifespan of approximately 15 years, with the lifespan of the roof covering being in large part, subject to the quality of the installation and the adhesion of the felt to the substrate.

In this regard, the roof covering is considered to have reached the end of its useful lifespan and you should anticipate total renewal as being necessary following occupation.

The flat roof to the rear WC offshoot incorporates a mineralised bitumen felt covering, laid over a concrete deck and including a combination of felt upstand flashings and cement mortar fillets at abutments; with felt mortar pointed into brickwork joints.

Mineral felt was in a weathered condition, with blistering of the surface indicating a failure of the bond between the felt and the concrete substrate, with damp ingress also considered likely.

In addition, the cement mortar fillet, formed at the abutment with the vertical timber boarding to the adjacent sun porch, was in a deteriorated condition, with timber wet rot affected and which is likely being exacerbated by moisture trapped by the mortar. Furthermore, cement mortar pointing to felt flashings is prone to premature failure, similar to that for lead noted above.

In this regard, the roof covering and flashings are considered to have reached the end of their useful lifespan and you should anticipate total renewal as being necessary following occupation.

The mono-pitched roof to the rear sun porch also incorporates a mineralised bitumen felt covering, assumed as having been laid over a timber deck and which includes 2 no. single glazed rooflights.

This roof covering is in a significantly deteriorated condition and at the end of its useful lifespan. In addition, the rooflights are of very poor quality and which incorporate flashings to their perimeter formed in a material generically known as "flashband". Such material should only be viewed as a temporary water proofing measure, having a very limited effective lifespan; with material in this instance being in a worn and deteriorated condition.

Consequently, you should anticipate the need to renew this roof covering following occupation. In this regard, should you wish to retain rooflights to the area, it is recommended that appropriate proprietary manufactured double glazed elements be considered.

Given the deteriorated condition of the mineral felt covered roofs noted above, the need to carry out the replacement of timber decks (where applicable), along with potential repairs to structural timbers should be anticipated.

Re-roofing works should incorporate new coded lead flashings and, where applicable, soakers at the brickwork/timber cladding abutments; with junctions suitably pointed using the aforementioned flexible lead sealant.

External inspection of the roofs indicated a significant degree of lichen and moss build-up, with such organic material often contributing to the deterioration of roofing materials due to the trapping of moisture and which should be cleared during the course of periodic maintenance.

2.5.2 Chimney Stacks and Flashings

There are two chimney stacks provided to the property; to the front facing roof slope adjacent to the ridge; and to the right facing roof slope/hip.

Stacks are of brickwork construction, surmounted with cement mortar flaunching; and with a single clay pot and two clay pots to the front and right side stacks respectively.

Flashing details between the stack brickwork and roof tiling are formed in lead.

The front facing stack is in generally functional condition, commensurate with age, with no significant distortion of brickwork evident.

Isolated weathering was noted to the cement mortar flaunching and which should be monitored during the course of periodic maintenance.

Isolated erosion and cracking of mortar pointing was noted, commensurate with age and location and which should be suitably made good following occupation.

Inspection of the stepped lead flashings indicated missing sections to both sides of the stack, with cement mortar fillets applied as remedial measures in these locations, and it is recommended that at the time of future maintenance works, new suitably dressed and coded lead flashing and soakers be provided to the stack, in order to prevent accelerated deterioration of adjacent building elements and which should incorporate an appropriate flexible lead sealant at brickwork abutments.

With regard to the right side stack, whilst no significant distortion of brickwork was evident to the stack generally, misalignment of the brickwork forming the upper level corbel detail was noted; being a common occurrence to elements of this age and nature and arising due to the actions of weathering over time. Whilst not of immediate concern, you should anticipate the need to take down the affected upper level brickwork and re-build within the initial 2-3 years following occupation; or at the time of the future stack maintenance works noted below.

Inspection of the cement mortar flaunching surmounting the stack indicated this as being in poor condition, with extensive cracking and erosion evident and it is recommended that following occupation, defective cement mortar flaunching be hacked clear and new cement mortar applied, including the cleaning and re-bedding of the clay pots.

Extensive eroded/missing mortar pointing was evident, along with previous patch re-pointing, which was of poor quality workmanship, with mortar "flashed over" the original joints, without adequate raking out of the original mortar and which is prone to the actions of frost and general weathering. It is therefore recommended that affected brickwork joints be raked out to a depth at least twice their width and re-pointing carried out using a suitable mortar mix following occupation. It should be noted that the application of a hard cement mortar will impede the evaporation of moisture from the brickwork, increasing the likelihood of frost damage occurring.

Stepped lead flashings and soakers which though a little worn, appeared functional. It was noted that lead had generally been mortar pointed into brickwork; as previously noted to the adjacent stack.

Given the need for scaffold access to carry out stack maintenance and likely economies of scale benefits, you may wish to consider the taking down and re-building of the aforementioned distorted brickwork at this time.

External and internal inspection indicated a stack serving the left side of the property had previously been removed; which was confirmed from within the roof space; with brickwork terminated at the underside of the pitched roof and the slate covering patched as necessary.

In this regard, it should be noted that where redundant flues are present to chimney stacks, these should be capped in a manner that allows ventilation of the flue. Ventilation is necessary in order to limit the opportunity of condensation occurring within the flues, with potential dampness as a consequence.

2.5.3 External Rainwater Goods

Inadequate disposal of rainwater can cause serious problems in a building including damp, timber decay and structural movement. Keeping gutters and downpipes (and the drains to which they connect) clean and in good condition is always important.

The property is afforded PVCu gutters and downpipes and which are free from significant defect.

The appearance of the installation and the presence of redundant screw fixings to brickwork would indicate the previous renewal of rainwater goods.

It was dry for the duration of the survey and I am unable to make specific comment as to whether rainwater goods are watertight. However, a visual inspection did not raise any reason for particular concern in this regard.

A significant degree of silt build-up was generally noted to rainwater guttering and which should be periodically cleared to ensure gutters remain free-flowing.

PVCu rainwater goods have generally discoloured due to the actions of sunlight over time; and which can also weaken the material.

It should be noted that periodic maintenance, such as checking of pipe joints and clearing of silt build-up from gutters can be effective in prolonging the useful lifespan of these elements.

2.5.4 External Walls and Structure

The walls to the main building are of traditional cavity brickwork construction, with an overall thickness of around 290mm.

As is common in buildings of this age/type, brickwork to the front elevation is of a higher quality than that adopted for the rear.

The walls to the rear facing sun porch are of cavity construction, with an overall thickness of around 300mm and which incorporates a stone-effect outer leaf.

The wall construction to the rear WC is in "half-brick", i.e. a single brick thickness of around 100mm.

Mortar “plugs” to brickwork would indicate the previous installation of cavity injected insulation and your Legal Advisers should confirm the existence of any valid guarantees relative to these works.

Inspection of the external brickwork indicated a degree of outward bulging as occurring along with isolated cracking of mortar bed joints, notably affecting the right side facing bay, but also evident elsewhere. A brief visual inspection of a nearby property of similar age indicated patch repaired cracking to the front facing walls; all of which is consistent with cavity wall tie failure; being the corrosion, expansion and failure of metal ties typical to properties of this age and type.

It is therefore recommended that an appropriate specialist firm investigate the ties to ascertain the cause and extent of any problem and carry out any remedial works and associated repairs; at the earliest opportunity.

Furthermore and potentially of greater concern was the movement and associated cracking evident around the exterior of the property; notably affecting the aforementioned bay at low level, the front right hand corner of the property at low level and significantly, cracking noted to the front facing right side bay; with cracking up to around 4mm in width.

In this regard, the presence of several mature Sycamore trees was noted within the curtilage of the property and which are considered to be a significant contributory factor toward the defects noted. See also section 2.1.

Notwithstanding the above comments, mortar pointing of brickwork was generally in a weathered and deteriorated condition, with extensive eroded, cracked and missing mortar and associated frost damaged bricks evident.

Timber lintels are provided over the window opening to the kitchen and to the door and window openings to the garage; with significant dishing of the lintels and associated cracking of brickwork noted. It is therefore recommended that following occupation, the defective lintels and brickwork be carefully removed and new steel lintels installed; with the associated need to carry out internal repairs and re-decoration to be anticipated.

External openings generally incorporate stone lintels and which appeared to be functional. However, gaps were evident between the vertical face of the lintels and adjacent brickwork, notably to the left side of the property and which is taken as being a further indication of structural movement.

2.5.5 Foundations

No opening up works or excavations have been carried out to expose the foundations beneath the building and we are therefore unable to determine their form of construction or condition.

2.5.6 Damp Proof Course and Sub Floor Ventilation

Virtually every urban property built in the last 120 years or so will have some sort of damp proof course (DPC) in its walls. Many materials are in use, some being better than others. The majority of the houses built in the last 60 years or so have a felt or PVC based damp proof course. Before then slate or bitumen were frequently used. Many old houses have no built-in anti-damp protection.

In order that a damp proof course can perform properly its line should always be at least two clear courses of brick (150mm) above paths or garden surfaces. Whenever a lesser distance exists the damp proof course can become ineffective and internal dampness can occur.

The existence of a physical damp proof course within the external walls of the main building was only apparent in isolated locations, but this is not to say there is not one sandwiched and concealed within a brickwork mortar joint. However, any DPC present is likely to have deteriorated over time, becoming susceptible to damp ingress.

However, notwithstanding the above, no significant defects indicating a failure of the DPC were noted.

Sub-floor ventilation to the suspended timber floor is provided by air bricks to the front, rear and sides of the property and which appeared clear and free-flowing at the time of inspection, with nothing noted which would have suggested a failure or deficiency of this element. However, an air brick to the front left side wall of the property appeared to have previously been renewed.

2.5.7 Windows, Doors and External Joinery

Windows are of single glazed timber framed design, generally with leaded lights and a combination of top and side hung opening casements. Windows are in a deteriorated condition, with incipient wet rot evident, along with most opening sashes having been painted closed. Furthermore, the thermal efficiency of such windows is significantly below that provided by modern double glazed units and windows are therefore considered as being at the end of their useful lifespan and complete replacement should be undertaken following occupation.

Timber framed single glazed windows adjacent to the main entrance door appear to be later replacements and whilst in functional condition, are providing relatively poor levels of thermal efficiency.

The rear sun room incorporates single glazed timber framed windows, which are in a similarly deteriorated condition and at the end of their useful lifespan.

Cracked glazing was noted to the dining room window.

Glazing would appear to have been recently replaced to the kitchen window; but with timber glazing beads left undecorated and susceptible to accelerated deterioration. In this regard, several shards of broken glass were present to the adjacent drive and which should be disposed of at the earliest opportunity.

Window openings incorporate feature brickwork to cills, which have received a painted finish and which were in functional but weathered condition.

The external door to the main entrance is of panelled timber construction, set within a timber frame and which was in functional condition. However, glazing panels are not of the toughened safety standard necessary in such locations and which should be addressed at the earliest opportunity.

The main roof incorporates timber fascias and barge boards, with rafter feet exposed and overlaid with timber sarking; which were in generally functional but weathered condition; but with isolated wet rot noted around the left side front facing roof valley.

Vertical timber cladding to the rear sun porch is in a deteriorated condition, with incipient wet rot present where cladding abuts the flat roof serving the WC. In order to prevent accelerated deterioration of this and adjacent building fabric, if this element is to be retained, repairs are required at the earliest opportunity.

Window and door frames are generally mortar pointed externally at their junctions with brickwork and which is in a deteriorated condition, with extensive cracking evident.

Polysulphide silicon sealant is provided around openings to the main entrance door and adjacent windows, which is in a generally sound condition. As such material is perishable; it should be periodically maintained in order to ensure its integrity is retained

The main entrance canopy is in functional condition, notwithstanding that the slate covering is in a deteriorated condition.

2.5.8 External Decoration

External decoration is provided to timber windows, doors, entrance canopy, eaves level fascias and rafters, cladding to the rear sun porch, brick cills to windows; and to boundary fencing and walls.

Decoration was generally in a functional but weathered condition and the need to carry out re-decoration should be anticipated as necessary during the next available season.

In this regard, isolated corrosion was noted to the metal railings to the front facing boundary and appropriate rust treatment and metal primer should be included at the time of future re-decoration.

External elements should be subject to redecoration on a 3-5 yearly basis.

2.5.9 Drainage

Foul

I believe the property is connected to adopted mains drainage.

The water tightness of drainage can only be determined by carrying out a formal test.

Testing of the below ground drainage system or a CCTV survey was not carried out as part of this instruction.

Two inspection chambers are present to the property, located to the drive, adjacent to the main entrance and garage respectively; of traditional brickwork construction with concrete benching, branch inlets and cast iron covers and frames; and around 900mm and 700mm deep respectively.

A cover-lift inspection of the chamber adjacent to the front of the property indicated a branch inlet as being blocked with organic material, with numerous vegetation roots also present. It should be further noted that an area of the lawn adjacent to the chamber and along the general line of the affected branch, was quite significantly sunk/depressed and it may reasonably be concluded

that breakage/failure of the below ground drainage has occurred, arising as a consequence of the mature tree present in this location.

It is therefore considered feasible that defective below ground drainage arising due to the actions of tree roots may be the source of cracking and structural movement noted as affecting the external and internal building fabric, including walls, floors and ceilings. It is therefore recommended that at the earliest opportunity, in the first instance, an appropriate contractor be engaged to undertake a detailed CCTV survey of all below ground drainage, in order to establish condition and the need for any associated repairs.

A soil and vent pipe is located externally to the rear, of PVCu composition and which appeared sound and functional. You may wish to consider the installation of a wire or similar bird-cage to the top of the stack in future.

Surface Water

Rainwater downpipes to the property discharge into trapped gullies or via pipe shoes directly onto adjacent paving.

At the time of inspection, gullies were generally choked with leaves and organic material, with such blockages likely to impede the efficient discharge of surface water over time. It is therefore recommended that the affected gullies be cleared at the earliest opportunity, with periodic maintenance necessary thereafter.

Furthermore, the rainwater pipe serving the main rear roof slope discharges into a channel formed within the concrete surfacing, and thereafter, to the adjacent gully. However, the channel is choked with leaves and organic material, preventing adequate discharge of surface water and which should be cleared at the earliest opportunity.

A redundant gully is present to the right side of the main entrance; with what is presumed to be a further gully having been over-boarded to the left side.

The shoe serving the rainwater pipe to the rear sun porch is broken.

2.5.10 External Areas including Outbuildings

The property incorporates a concrete paved drive and footpaths. These are in a deteriorated condition, with extensive cracking evident; which is considered a consequence of the aforementioned tree roots. In addition, concrete surfaces were subject to significant levels of moss build-up generally.

Timber fencing is provided to the left side boundary of the property and which was in sound condition. However, timber fencing adjacent to the rear WC was in a worn and weathered condition.

The front facing boundary incorporates a low level brickwork wall surmounted with metal railings. The brickwork was in a significantly deteriorated condition, with eroded mortar and moss growth evident. Whilst railings are functional, isolated corrosion was evident and it is recommended that in order to prevent accelerated deterioration, repair and re-decoration, including re-pointing of brickwork is undertaken following occupation.

A brickwork wall is provided to the right side boundary to the front of the property, including a masonry painted finish. The wall was in a deteriorated

condition, with eroded mortar pointing and extensive failure of the applied decoration noted; requiring remedial repair following occupation. In this regard and whilst this cannot be confirmed from a visual inspection, it is important that any such applied decoration is of a “breathable” type; thus allowing moisture and air to be released whilst preventing rain from penetrating; with the adoption of decoration potentially increasing the likelihood of accelerated deterioration when applied to brickwork in an already weathered condition.

A high level brickwork wall is provided to the rear boundary which was also in a weathered condition; with brickwork also being out of vertical plumb and it is recommended that at the earliest opportunity, affected sections of brickwork be taken down and re-built, along with the re-pointing of brickwork generally.

The detached garage incorporates solid brickwork walls with an overall thickness of around 220mm and a dual pitched roof of profiled fibre cement composition.

The adjacent store incorporates a solid concrete slab roof.

Whilst this cannot be confirmed from a visual inspection alone, its age and appearance would strongly suggest the roof sheeting as being Asbestos based material. Asbestos is a toxic material, with its maintenance, removal and disposal controlled by strict legislation and should you wish to replace this roof covering, specialist advice must be sought. They must not be cut or drilled etc without taking safety precautions or seeking specialist advice.

The roof to the store was in functional condition, commensurate with age and type; but with moss build-up requiring periodic clearance.

Cement mortar pointing to brickwork was in a weathered and worn condition, with eroded and missing mortar noted.

Internal inspection indicated significant vertical cracking to the right side brickwork wall and which is considered a likely consequence of the mature Sycamore tree located immediately adjacent to the wall. See also section 2.1.

Movement/dishing has occurred to timber lintels over door and window openings, with cracking of brickwork as a consequence, with suitable lintel replacement and brickwork repairs required.

The garage is provided with a manually operated up-and-over door. This door was binding on the frame to the upper right side vertical jamb and consequently, could not be opened.

Timber doors and frames to the garage and store; and the window to the garage, are in a worn condition, with incipient wet rot evident. In addition, glazing to the window was cracked.

The garage pedestrian door frame/brickwork junction is mortar pointed; with cracking and gaps evident.

2.6 INTERNAL

2.6.1 Roof Space

Inspection of the roof space was undertaken via the access hatch located to the bathroom.

The structure consisted of 2 no. 170 x 70 site cut timber purlins (horizontal member) to each slope of the roof, supporting 65 x 65mm common rafters (diagonal members) at 450mm centres and which included 2 no. king-post trusses; all typical to properties of this age and type.

Roof timbers appear reasonably well formed, being free from significant deflection, distortion or spread; with isolated splits and shakes to timber considered commensurate with age and not of concern.

Being typical of properties of this age and type, no underlay or sarking material is provided to the roof slopes internally, with mortar torching applied internally along horizontal slate joints. Torching was in a deteriorated condition, commensurate with age, having generally eroded over time.

As noted under Section 2.5.1, daylight was evident around roof hips

Testing with an electronic moisture meter indicated damp ingress to timbers generally; with damp staining of timbers also noted to members adjacent to chimney stacks and around the aforementioned hip details.

Rafters at low level, adjacent to the front facing valleys could not be accessed, due to their location and the presence of insulation quilt. See also section 2.2 and 2.5.1.

The aforementioned mortar torching is inherently prone to moisture absorption and along with voids to the roof tiling, is considered to have exacerbated the moisture ingress noted.

This supports the conclusion that the main roof coverings are at the end of their useful lifespan and in order to prevent the further deterioration of internal building fabric, their complete renewal is now required.

Thermal insulation of the roof space was noted as having been upgraded with an overall depth of mineral quilt of around 250mm and which is considered satisfactory. The vendor should confirm the presence of any associated valid guarantees in this regard

The roof access hatch had been insulated.

It should be noted that ceiling joists are unlikely to have been designed to carry significant additional loadings and excessive storage within the roof space should be avoided.

Given the presence of upgraded insulation quilt, the ceiling joists are generally concealed from view and consequently, care must be exercised at all times when accessing the area.

2.6.2 Ceilings

Ceilings are generally the original lath & plaster, with emulsion painted or papered finishes.

Cracking was noted to ceilings, affecting the majority of the property but which were most significant within the lounge and dining room, to the front and right sides of the dwelling. See also section 2.1.

In this regard, whilst key loss to varying degrees is usual to ceilings of this type and age, the extent and pattern of cracking noted was in excess of what might usually be anticipated and is considered a further indication of structural movement, related to tree roots, as affecting the property.

Notwithstanding the above, it should be noted that future re-decoration involving the removal of paper finishes is likely to result in further damage to the lath & plaster and as part of any overall refurbishment; you may wish to consider replacement with plasterboard.

2.6.3 Internal Walls and Partitions

External walls are of traditional cavity construction with internal plastered finishes.

The internal partitions are generally plastered masonry.

Extensive cracking was noted to internal walls throughout the property, affecting the internal face of external walls and internal partition walls. See also section 2.1.

Cracked and de-bonded plaster was noted adjacent to the internal door to the sun porch, requiring appropriate repair.

2.6.4 Fireplaces, Chimney Breasts and Flues

Chimney breasts are located within the front facing bedroom, entrance hall, lounge and dining room.

The stack serving the bedroom is noted as having been taken down to internal roof level; with associated flues assumed to now be redundant.

The lounge and dining room incorporated old-style gas fires and which are assumed to be ventilated via the main stack to the right side of the property. The fire to the lounge incorporated a note stating it must not be used, with the unit to the dining room also not tested for function at the time of survey.

The chimney breast within the entrance hall did not incorporate any fire places.

Due to the concealed nature of construction, it is not possible to comment on the condition of flues or the presence of flue liners. If it were your intention to re-use the chimney breast for fires emitting exhaust gasses, specialist advice on installation should be sought with particular regard being had to ventilation requirements. Any disused flues should be capped off and ventilated both top and bottom.

It is recommended that the gas fires and flue installation be tested as part of the gas servicing requirements noted below, prior to legal commitment to purchase.

2.6.5 Floors

Floors throughout incorporate carpet and vinyl finishes

The floors are generally of suspended board on joist construction; with a solid concrete floor provided to the kitchen, sun porch and WC.

The timber floors were generally noted as being out-of-level/deflected, with significant falls noted across the span of floors, particularly within the entrance hall, the front facing lounge and bedroom and dressing room.

Notwithstanding the above, the floors are generally firm underfoot, being free from significant springing or vibration within their span; which indicates that level variance may be related to defects within the walls onto which floors are bearing, rather than within the timber itself.

Solid concrete floors appeared to be in sound and functional condition, commensurate with age and type.

2.6.6 Internal Doors and Joinery

Internal doors are generally the original timber flush design, including timber faced "pull handle" type hardware and which were in worn but functional condition.

However, it should be noted that doors generally incorporated hook-and-eye fastenings and which suggests that doors may not remain closed by the force of latches alone and whilst this could not be confirmed at the time inspection, this may be related to the property being "out-of-level".

Glazed doors are provided to the kitchen and sun porch. In this regard, glazing is not of the toughened safety standard necessary in such locations and if these elements are to be retained should be addressed at the earliest opportunity.

The rear WC incorporates a timber ledged and framed type door, which was considered at the end of its useful lifespan.

What appear to be the original timber skirting boards and architraves are in place and whilst wear and tear was evident, are free from significant defects.

Fitted base and wall units to the kitchen were in a worn but functional condition. However, the sink base unit to the rear sun porch was in a worn and dated condition and the need to carry out refurbishment should be anticipated.

2.6.7 Internal Decoration

Internal decorations are very much a question of personal taste, and the extent to which redecoration is carried out will largely depend upon personal preference.

Internal decorations were generally worn and dated in appearance.

2.7 BUILDING SERVICES

2.7.1 Electricity

The property is connected to the mains electricity, with the meter and an older style re-wireable fuse board located to the entrance hall cupboard.

The digital meter would appear to have been installed in around 2004; with an isolated degree of upgrading of the mains installation also having taken place previously.

However, due to the age of the majority of fittings and the distribution board, including socket outlets fitted to skirting, it is likely that the installation does not comply with current legislation and as such, it is possible that the property will require a full re-wire, including the provision of a modern consumer unit/residual current circuit breaker.

Current IEE Regulations recommend that electrical installations be checked upon change of ownership. I would recommend that you instruct a qualified electrician (preferably NICEIC registered) to confirm condition and compliance with current safety standards and including written quotations for any necessary work prior to legal commitment to purchase.

There are power points located throughout the property. However, these were considered potentially insufficient in number to suit modern requirements. You will therefore need to assess the adequacy and spacing/positioning of these points in terms of your own particular requirements.

It was noted that the kitchen and bathroom did not incorporate any means of mechanical extraction and you may wish to consider such provision following occupation.

Future electrical upgrading works should include the provision of earth bonding to metallic water pipe work, not presently incorporated.

2.7.2 Gas

Mains gas is provided to the property, with a low level meter located within the entrance hall.

All gas appliances must be serviced annually and ventilation/flues examined by a Gas Safe (formerly CORGI) registered gas engineer to ensure that they are serviceable and you are advised to arrange a full test, including written quotations for any necessary work, before legal commitment to purchase.

2.7.3 Cold Water, Plumbing and Sanitary Fittings

The property is understood to be connected to the mains cold water supply.

Where visible, plumbing is in copper pipe work and plastic waste pipes are present to appliances. Pipe work and wastes are in satisfactory condition where visible.

The stop valve is located to the sun porch, within the sink base unit.

A three piece suite is provided to the bathroom comprising wash basin, plastic bath and a WC with low level cistern. Fittings appeared from a visual inspection to be in a worn and dated condition.

The rear WC incorporates a WC pan and high level cistern, which were near to the end of their useful lifespan.

Traps, wastes and gullies were not tested for water tightness. You should always ensure that adequate seals are maintained around sanitary fittings to avoid water spillage.

2.7.4 Hot Water and Central Heating

Hot water and central heating to double and single panel steel radiators is provided by a wall mounted energy efficient Worcester 24i Junior gas condensing combi-boiler located within a fitted unit to the kitchen; with the boiler vented by means of a fan-assisted flue located to the adjacent external wall.

Two redundant water tanks are present to the roof space, along with cast iron pipework to the rear bedroom; and which you may wish to consider removing during the course of future maintenance.

Radiators appeared from a visual inspection to be in a worn but serviceable condition. However, standards of energy efficiency are likely to be below that provided by modern units.

The sun porch and WC do not incorporate any form of heating. In this regard, extensive condensation related mould growth is present to the WC and to which the lack of heating is considered a contributory factor. See also section 2.4.

An electrically heated towel rail is provided to the bathroom, but which was not functional at the time of inspection.

A ceiling mounted heater is provided to the bathroom, operated by means of a pull cord switch but which was dated and worn in appearance and not functional at the time of inspection.

The hot water installation was functional at the time of survey.

The central heating installation was not tested for function at the time of survey and which the vendor should confirm.

A thermostat and heating control were present to the entrance hall.

The majority of radiators incorporate thermostatic valves (TRV) which should improve control and energy efficiency levels.

You should arrange for the hot water and central heating installation, including the gas boiler and flue, to be tested/serviced by a Gas Safe registered engineer prior to legal commitment to purchase.

2.7.5 Fire and Security

A battery powered smoke detector is provided to the entrance hall and which appeared functional at the time of inspection.

However, it is recommended that at least one mains powered smoke alarm with battery back-up should be installed and thereafter regularly maintained, which should be considered prior to occupation.

The property is provided with an intruder alarm with the control panel provided to the entrance hall. This was functional at the time of survey.

3.0 CONCLUSIONS & RECOMMENDATIONS

The property is of traditional design and construction.

Evidence of significant structural movement was noted to the property, with extensive cracking and displacement of the internal and external building fabric. In this regard, whilst the apparent failure of metallic cavity wall ties was noted; structural defects are considered to be largely arising due to the presence of several mature Sycamore trees and their associated potential effects upon load-bearing clay, foundations and below ground drainage.

There was no evidence of any significant rot to timber during the inspection, nor evidence of wood-boring insects. However, given the deteriorated condition of the slate and mineral felt roof coverings and associated details, the presence of rot within concealed timbers cannot be discounted.

The property was investigated for damp in accessible areas and no significant damp was found; but with moisture ingress generally noted to accessible roof timbers internally.

The defects brought forward in this report are not unexpected in a property of this age, construction and location.

This is not an exhaustive list of all those repairs which would normally be undertaken during the course of general redecoration, refurbishment and/or maintenance works. Additional works may be required due to statutory requirements or as a result of opening up works during the course of normal refurbishment/alteration works

The costs are for budgetary purposes only and are based on experience and rates obtained from previous refurbishment projects and price books. No competitive quotations have been obtained from contractors.

Provision of new slate roofing, including bays	£13,000.00
Provision of new felt roofing to side bay and WC	£1,000.00
Repairs to stack brickwork, flaunching and flashings	£1,500.00
Remedial wall tie replacement	£7,000.00
Remedial "stitching" of structural cracking	£5,000.00
Re-pointing of facing brickwork	£5,000.00
Replacement of defective lintels	£1,000.00
Replacement of defective below ground drainage (provisional)	£5,000.00
Partial re-building of rear boundary wall	£2,500.00
Testing of electrical installation by NICEIC registered Electrician	£350.00
Electrical re-wire	£3,500.00
Testing of gas/heating installation by Gas Safe registered Engineer	£350.00