Planned Preventative Maintenance Survey Report

SUSSEX SURVEYORS

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Example 10-Year PPM

Property Name
Property Street Address
Property Town/City
Property Post Code

Sussex Surveyors
May 2021

Address	Property Name Property Street Address Property Town/City Property Post Code	**Prepared for**	Example 10-Year PPM Client Street Address Client Town/City Client Post Code

Survey Date 20th May 2021

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Contents

1.0 Executive Summary

1.1 Key Issues

1.1.1 Due to a lack of external repair and maintenance in recent years, and substandard repair and redecoration works carried out in 2018, certain parts of the building have fallen into disrepair. The majority of issues we identified during our inspection require remedial works in the short term.

- The plain clay roof tiles are generally in a satisfactory condition overall. However, we did identify approximately 50no. slipped broken or delaminated roof tiles. During our inspection, we removed two slipped clay tiles, one from the south elevation gutter, and one from the rear gutter.
- The bell roof above Flat 3 has a mineral felt shingle covering. This is a relatively short-lived low-quality roofing material, especially in an exposed environment such as this. We found severe deterioration of the high level shingles particular the joint cap sheets which have worn through exposing the timber structure on the south side. During our inspection, temporary repairs were carried out. We recommend that this roof is re-covered in the short term to prevent water ingress. Perimeter lead flashings at eaves level to this roof have slipped into the gutter and exposes a section of timber on the south west corner. Consequently, this timber has decayed.
- The chimney stacks are in a poor condition with spalled and eroded brickwork. Mortar joints have also deetiolated in large areas. The flaunching (mortar pot bedding) to all chimney stacks has cracked with the south chimney stack suffering the worst. This requires immediate attention to prevent the tall pots from becoming unstable. Repointing, re-flaunching and brick replacement should be carried out in the short term to all chimney stacks. We understand that Flat 6 is suffering from water ingress to the chimney breast below the south stack. This could be due to a number of contributing factors such as open chimney pots, defective rear flashings and deteriorated masonry.
- Over the south bay window, there were reports that this roof was allowing water ingress into Flat 3. This has since been patch repaired. This is a temporary repair only, and adjacent to this, a section of the original lead flashing is visible. This has been poorly installed as it does not extend down far enough over the roof covering upstand. In addition to this, the mortar chasing in (pointing between lead and external wall render), has deteriorated. New good quality code 4 lead flashings, of the correct depth, must be installed to this joint in the short term and chased in using lead mastic.
- Lead flashings to the porch roof and adjoining roof have also been installed to a poor standard using incorrect sized flashings. The mortar chasing in has also deteriorated. These should be replaced and chased in with lead mastic in the short term.
- The central lead covered flat roof to the crown roof is in a reasonable condition, although the front section of lead flashing has split. This must be replaced in the short term.
- There is a section of mineral felt covered flat roof over the north dormer to Flat 5. This is heavily worn and should therefore be replaced in the short term to avoid water ingress.
- The asphalt covered flat roof over Flat 4b has minor splits in areas, but is generally in a satisfactory condition. This has been coated with a solar reflective paint to prolong the life of the roof. You should plan for re-covering this roof in the medium term (circa 5-6 years). In the short

term, the asphalt capping to the parapet wall should be replaced as this has split, buckled and blistered in a series of locations.

- We understand that a scope of external repair and redecoration works were carried out in 2018, and you have expressed concerns regarding the quality of such works. We have reviewed the specification and the scope of works broadly comprised redecoration of windows, rainwater goods, stone work, fascia, soffit and barge boards. Render, chimney, brickwork, lead work, and roof tile replacement were also supposedly included. These works have been carried out to a poor standard as evidenced by cracking and flaking of the paint work to the windows, with the south elevation windows suffering the worst. It would appear that the contractor who carried out the works failed to use the correct number coats of paint, failed to adequately prepare the windows, failed to replace decayed timber, and failed to replace deteriorated glazing putty. South elevation windows must be redecorated in the short term. All other windows are in a better condition, and you should consider redecorating/ repairing these around the 3 year mark.
- At first glance, the rainwater goods appear to have been redecorated to a good standard. However, upon closer investigation, the contractor has failed to redecorate the inside of the gutters, and the rear face of the downpipes. Consequently, these areas are corroded. On the north east corner of the building, the downpipe on the side of Flat 4a, has severely corroded at the joint. As such, during periods of heavy rainfall, this leaks and is causing damp to penetrate Flat 4a internally. All rainwater goods must be redecorated in the short term. Failure to address this will lead to advanced corrosion, the likes of which cannot be repaired. In addition to this, gutters to the rear elevation are heavily blocked with vegetation. Gutters must be regularly be checked and cleared to prevent blockages. Failure to address this can result in penetrating damp.
- External brickwork is generally in a reasonable condition, however, mortar joints have deteriorated in areas across all elevations, mainly the south elevation. Widespread repointing works should be carried out in the short term to prevent penetrating damp. Repointing must be carried out using lime mortar which is flexible and breathable making it more suitable for solid wall construction. The use of cement mortar will prevent moisture from escaping the brickwork and in turn lead to penetrating damp.
- Scaffolding costs have been included under a separate row, and these are shown on the master spreadsheet. To easily distinguish between access and works costs, scaffolding has been included as an A grade item. This is the only A grade item shown on the tables within the PDF report. Full scaffolding for the entire building will be necessary in year 1 due to the nature and location of the works. Additional scaffolding costs have been included under year 3 and year 8 for front and rear external joinery redecoration (5 year activity cycle). Additional scaffolding costs have been included under year 6 for the next cycle of redecoration to the south elevation external joinery.
- In the cellar, we identified that the incoming water main to the property is of lead pipework. Lead is prone to splitting, and in addition to leaks, this can result in contamination of water and health defects. We recommend that all lead pipework is removed from the property and replaced with modern alkathene pipework by a competent plumber in the short term. The Water Regulations Advisory Scheme state the following: “Many water suppliers already have programmes in place to replace any lead pipes they find on their own network. However, homeowners and businesses are responsible for all pipes on their property – including internal pipes and the underground supply pipe which connects your home or business to the public water main. If you are replacing pipes within your boundary, make sure you contact your local water company, as they may be able to also replace the pipes beyond your house and garden."

- During our inspection, we were asked to inspect various damp patches internally to Flat 4a. Most of these can be attributed to external sources has as corroded rainwater goods, or poorly designed rainwater goods. However, where there is a damp stain to the carpet in the front bedroom of the flat, there is no obvious external source causing this. Mortar joints to the brickwork have deteriorated and this is a possible cause. When the area was checked with a moisture meter, it was found to be dry. We suggest that this area is monitored following external repointing. If damp persist, then further investigation will be necessary in the form of removing carpets and floorboards.

1.2 Health and Safety

1.2.1 During the survey the following items were identified as part of the survey which are considered to be significant Health and Safety issues which should be addressed as soon as possible.

- We understand that the flat roof above Flat 3 is used as a terrace by Flat 6. In its current condition, this area is not suitable to be used as a roof terrace. Without a guardrail, there is falling from height risk. If this is to be used as a terrace, then a guardrail must be installed before prior to its use.
- We understand that there are concerns regarding occupants of Flat 5 in the past using the flat roof above Flat 4b as a roof terrace. In its current condition, this is not safe to be used as a roof terrace due to the low height parapet wall. Again, this creates a falling from height risk. Aside from the obvious safety concerns, unless this roof was originally designed as a terrace (which is highly doubtful), then occupants should not use it as one. The structure will not have been designed to carry such loads. In addition to this, there is risk of damaging the roof covering through foot traffic.
- Our main concern is the leaning brick piers either side of the south entrance. Over time, trees and vegetation in the neighbours garden, and the front garden of Property Address have forced the piers outwards. As a result of this, the top sections have detached and are leaning over the public footpath. This creates a significant risk to health and safety for both the residents and the general public. Above all else, as soon as possible, the top rendered sections to the brick piers must be taken down and stored for later reinstatement.
- All chimney stacks to the roof are in a poor condition. However, our main concern is the south chimney stack flaunching which has cracked. This must be repaired in the immediate term to prevent the tall pots from becoming unstable.
- There is brick wall forming the north boundary to the site. Towards the front of the property, this is leaning outwards due to the tarmacadam hardstanding of Property Address. Where the ground has been built up against this wall over time, this has caused the wall to lean. We presume that this was never originally designed as a retaining wall. Therefore, it is incapable of supporting such loads. For now, this wall appears stable, but will certainly require rebuilding in the future. In the first instance, we suggest that you determine who is responsible for this wall. The rear section of this wall, between the rear boundary and garage building, is in a poor and unstable condition. Large trees adjacent to the wall have caused it to lean and become structural unstable. This section of wall must be rebuilt in the immediate term to prevent it collapsing.

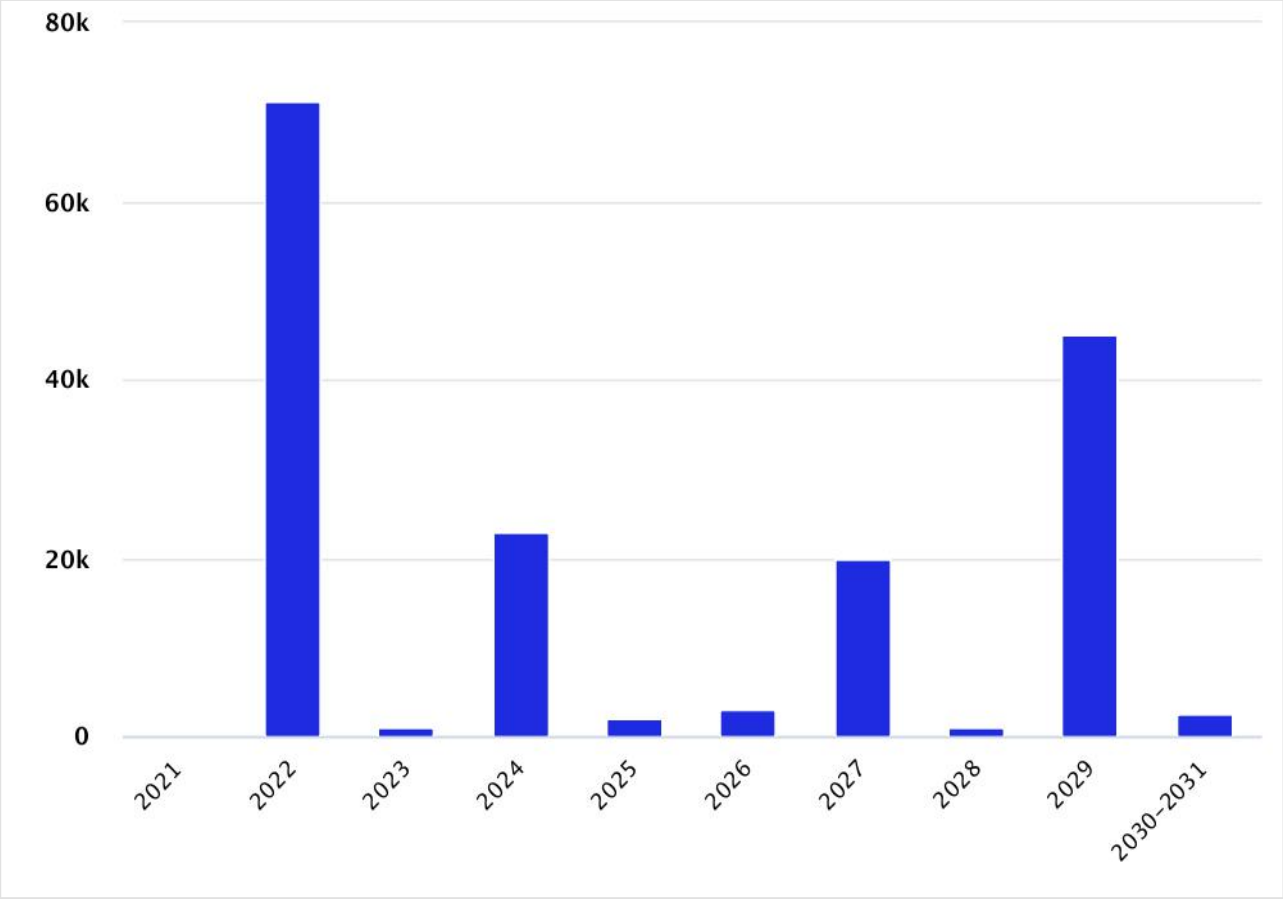
1.3 Costs Summary

1.3.1 The indicative net cost of works over the 10-year period to address the condition issues identified is **£120,290** (excl. VAT). All costings with this report and maintenance schedule are exclusive of VAT.

1.3.2 After adding on contingency, contractor's preliminaries, overhead and profit, professional fee and applying a location factor the indicative net cost of works over the 10-year period, inclusive of the above additional costs is **£168,406** (excl VAT).

1.4 Costs by Year

1.4.1 Set out below is the breakdown of the indicative inclusive costs for each year to address the condition related matters set out within this report



Grade	Year 0 2021	Year 1 2022	Year 2 2023	Year 3 2024	Year 4 2025	Year 5 2026	Year 6 2027	Year 7 2028	Year 8 2029	Years 9-10 2029-2030	Total
D	£0	£12,600	£0	£0	£0	£0	£0	£0	£0	£0	£12,600
C	£0	£41,882	£975	£10,957	£975	£975	£9,865	£975	£33,035	£1,950	£101,591
B	£0	£0	£0	£2,100	£1,120	£1,967	£6,440	£0	£2,100	£588	£14,315
A	£0	£16,800	£0	£9,800	£0	£0	£3,500	£0	£9,800	£0	£39,900
Total	£0	£71,282	£975	£22,857	£2,095	£2,942	£19,805	£975	£44,935	£2,538	£168,406

1.5 Costs by Element

1.5.1 Set out below is the breakdown of the indicative inclusive costs for each element over the 10-year period to address the condition related matters set out within this report

Element	D	C	B	A	Total
Roofs	£700	£35,423	£14,315	£39,900	**£90,338**
Structural Frame and Foundations	£0	£0	£0	£0	**£0**
Floors and stairs	£0	£0	£0	£0	**£0**
External walls, windows and doors	£0	£39,148	£0	£0	**£39,148**
Internal walls, windows and doors	£0	£0	£0	£0	**£0**
Internal Finishes	£0	£0	£0	£0	**£0**
Fittings, Furnishings and Equipment	£0	£0	£0	£0	**£0**
Sanitary Installations	£0	£0	£0	£0	**£0**
Electrical Services	£0	£0	£0	£0	**£0**
Mechanical Services	£0	£2,100	£0	£0	**£2,100**
External areas	£11,900	£24,920	£0	£0	**£36,820**
Total	**£12,600**	**£101,591**	**£14,315**	**£39,900**	**£168,406**

1.6 Statutory Compliance

1.6.1 The survey did not include a detailed Statutory Compliance assessment, whilst on site no issues were observed. Should a more comprehensive review be required it is advised that this be part of a future specialist on survey.

2.0 Introduction

2.1 A planned preventative maintenance (PPM) survey assesses the maintenance requirements of an asset over a given period in years, in order to enable a budget to be set and a structured plan for maintenance to be developed and implemented to prevent breakdowns and failures by replacing components and materials before the end of their expected usable life.

2.2 Sussex Surveyors were appointed by to undertake a 10-year planned preventative maintenance (PPM) survey and produce a maintenance schedule and survey report

2.3 The survey was carried out on dates by Luke Field of Sussex Surveyors.

2.4 The weather at the time of inspection was cold, wet and windy.

2.5 The property was subject to a visual non-disruptive inspection of the external building fabric only. No testing of services or opening of the structure was undertaken. Whilst our inspection was limited to the external building fabric, at the request of the client, we have inspected certain internal parts, mainly those which have been affected by water ingress through external disrepair.

2.6 Inspection of the roof was carried out with the use of a Mobile Elevated Work Platform.

2.7 Measurements stated within the maintenance schedule and survey report are approximate

2.8 The property was occupied at the time of the survey.

2.9 For the purposes of inspection and reporting, ‘left’ or ‘right’ assume a viewpoint facing the element, and the front elevation is that which incorporates the principal entrance.

2.10 A list of limitations that apply to the survey are set out in section 6 of this report.

2.11 Sussex Surveyors would welcome the opportunity to provide further advice on putting in place a strategic maintenance programme as part of the overall estates strategy, that takes forward the findings set out within this report with the budget available. Sussex Surveyors consultants can also provide advice on priorities, work packages and how these can be best procured to achieve best value, and project management to ensure any agreed works are delivered to time and on budget

3.0 Property Description

3.1 General Property Description

3.1.1 The property comprises a detached, three-storey Edwardian building believed to have been constructed circa 1900 and later converted into 6no. residential dwellings (Flats) in 1986. At an unknown date, presumably in the early 1900s, a two storey side extension was built on the north elevation.

The building comprises traditional solid masonry wall construction under a series of pitched and flat roofs. Windows consist of single glazed sliding timber sash units. Pitched roofs are covered with plain clay tiles, and flats roof are covered with lead, mineral felt, or asphalt. Above Flat 3, there is an asphalt covered flat roof which forms a terrace for Flat 6. The flat roof above Flat 4b also has an asphalt covering and asphalt dressed perimeter parapet walls. There is a pitched lead clad roof with an adjoining mineral felt covered roof to the dormer on north of Flat 5. In the centre of the roof, there is a crown design which consists of four pitched roofs that rise to a central lead covered flat roof. On the south east corner of the building, above Flat 3, there is a bell roof with a mineral felt shingle covering. On the front elevation, the porch projection has a mineral felt covering and the adjoining projection over the kitchen of Flat 2 has a GRP (fibreglass) covered flat roof. Adjacent to this is an asphalt covered flat roof above the bay window to Flat 2. There is a bay window on the south elevation with a GRP covered lead flat roof. The rear elevation of the side extension has a GRP covered flat roof, and an adjoining asphalt covered flat roof. There are a total of 6no. chimney stacks to the roof. Rainwater goods predominantly comprise cast iron gutters and downpipes with some uPVC in areas.

The property is located within a Conservation Area. Conservation Areas are designated to preserve the appearance and character of the locality. This means that if you propose to carry out any alterations which might affect the appearance of the property or the general area, Special Conservation Consent will be required in addition to normal planning permission. All trees in such an area must be treated as if they are the subject of a Tree Preservation Order and consent will be required to fell or prune them.

3.2 Condition and State of Repair

3.2.1 Due to a lack of external repair and maintenance in recent years, and substandard repair and redecoration works carried out in 2018, certain parts of the building have fallen into disrepair. The majority of issues we identified during our inspection require remedial works in the short term.

- The plain clay roof tiles are generally in a satisfactory condition overall. However, we did identify approximately 50no. slipped broken or delaminated roof tiles. During our inspection, we removed two slipped clay tiles, one from the south elevation gutter, and one from the rear gutter.
- The bell roof above Flat 3 has a mineral felt shingle covering. This is a relatively short-lived low-quality roofing material, especially in an exposed environment such as this. We found severe deterioration of the high level shingles particular the joint cap sheets which have worn through exposing the timber structure on the south side. During our inspection, temporary repairs were carried out. We recommend that this roof is re-covered in the short term to prevent water

ingress. Perimeter lead flashings at eaves level to this roof have slipped into the gutter and exposes a section of timber on the south west corner. Consequently, this timber has decayed.

- The chimney stacks are in a poor condition with spalled and eroded brickwork. Mortar joints have also deetiolated in large areas. The flaunching (mortar pot bedding) to all chimney stacks has cracked with the south chimney stack suffering the worst. This requires immediate attention to prevent the tall pots from becoming unstable. Repointing, re-flaunching and brick replacement should be carried out in the short term to all chimney stacks. We understand that Flat 6 is suffering from water ingress to the chimney breast below the south stack. This could be due to a number of contributing factors such as open chimney pots, defective rear flashings and deteriorated masonry.
- Over the south bay window, there were reports that this roof was allowing water ingress into Flat 3. This has since been patch repaired. This is a temporary repair only, and adjacent to this, a section of the original lead flashing is visible. This has been poorly installed as it does not extend down far enough over the roof covering upstand. In addition to this, the mortar chasing in (pointing between lead and external wall render), has deteriorated. New good quality code 4 lead flashings, of the correct depth, must be installed to this joint in the short term and chased in using lead mastic.
- Lead flashings to the porch roof and adjoining roof have also been installed to a poor standard using incorrect sized flashings. The mortar chasing in has also deteriorated. These should be replaced and chased in with lead mastic in the short term.
- The central lead covered flat roof to the crown roof is in a reasonable condition, although the front section of lead flashing has split. This must be replaced in the short term.
- There is a section of mineral felt covered flat roof over the north dormer to Flat 5. This is heavily worn and should therefore be replaced in the short term to avoid water ingress.
- The asphalt covered flat roof over Flat 4b has minor splits in areas, but is generally in a satisfactory condition. This has been coated with a solar reflective paint to prolong the life of the roof. You should plan for re-covering this roof in the medium term (circa 5-6 years). In the short term, the asphalt capping to the parapet wall should be replaced as this has split, buckled and blistered in a series of locations.
- We understand that a scope of external repair and redecoration works were carried out in 2018, and you have expressed concerns regarding the quality of such works. We have reviewed the specification and the scope of works broadly comprised redecoration of windows, rainwater goods, stone work, fascia, soffit and barge boards. Render, chimney, brickwork, lead work, and roof tile replacement were also supposedly included. These works have been carried out to a poor standard as evidenced by cracking and flaking of the paint work to the windows, with the south elevation windows suffering the worst. It would appear that the contractor who carried out the works failed to use the correct number coats of paint, failed to adequately prepare the windows, failed to replace decayed timber, and failed to replace deteriorated glazing putty. South elevation windows must be redecorated in the short term. All other windows are in a better condition, and you should consider redecorating/ repairing these around the 3 year mark.
- At first glance, the rainwater goods appear to have been redecorated to a good standard. However, upon closer investigation, the contractor has failed to redecorate the inside of the gutters, and the rear face of the downpipes. Consequently, these areas are corroded. On the north east corner of the building, the downpipe on the side of Flat 4a, has severely corroded at the joint. As such, during periods of heavy rainfall, this leaks and is causing damp to penetrate

Flat 4a internally. All rainwater goods must be redecorated in the short term. Failure to address this will lead to advanced corrosion, the likes of which cannot be repaired. In addition to this, gutters to the rear elevation are heavily blocked with vegetation. Gutters must be regularly be checked and cleared to prevent blockages. Failure to address this can result in penetrating damp.

- External brickwork is generally in a reasonable condition, however, mortar joints have deteriorated in areas across all elevations, mainly the south elevation. Widespread repointing works should be carried out in the short term to prevent penetrating damp. Repointing must be carried out using lime mortar which is flexible and breathable making it more suitable for solid wall construction. The use of cement mortar will prevent moisture from escaping the brickwork and in turn lead to penetrating damp.
- Scaffolding costs have been included under a separate row, and these are shown on the master spreadsheet. To easily distinguish between access and works costs, scaffolding has been included as an A grade item. This is the only A grade item shown on the tables within the PDF report. Full scaffolding for the entire building will be necessary in year 1 due to the nature and location of the works. Additional scaffolding costs have been included under year 3 and year 8 for front and rear external joinery redecoration (5 year activity cycle). Additional scaffolding costs have been included under year 6 for the next cycle of redecoration to the south elevation external joinery.
- In the cellar, we identified that the incoming water main to the property is of lead pipework. Lead is prone to splitting, and in addition to leaks, this can result in contamination of water and health defects. We recommend that all lead pipework is removed from the property and replaced with modern alkathene pipework by a competent plumber in the short term. The Water Regulations Advisory Scheme state the following: “Many water suppliers already have programmes in place to replace any lead pipes they find on their own network. However, homeowners and businesses are responsible for all pipes on their property – including internal pipes and the underground supply pipe which connects your home or business to the public water main. If you are replacing pipes within your boundary, make sure you contact your local water company, as they may be able to also replace the pipes beyond your house and garden."
- During our inspection, we were asked to inspect various damp patches internally to Flat 4a. Most of these can be attributed to external sources has as corroded rainwater goods, or poorly designed rainwater goods. However, where there is a damp stain to the carpet in the front bedroom of the flat, there is no obvious external source causing this. Mortar joints to the brickwork have deteriorated and this is a possible cause. When the area was checked with a moisture meter, it was found to be dry. We suggest that this area is monitored following external repointing. If damp persist, then further investigation will be necessary in the form of removing carpets and floorboards.

4.0 Costs

4.1 Cost Summary

4.1.1 The indicative net cost of works over the 10-year period to address the condition issues identified is **£120,290** (excl. VAT).

4.1.2 The above figure excludes contingency, contractor's preliminaries, overhead and profit and professional fees. We would propose to include the following indicative allowances for budgeting purposes:

- Contingency - 10%
- Contractor preliminaries - 15%
- Overhead and profit - 5%
- Professional fees - 10%

4.1.3 The above percentages are an estimate to reflect average rates. The actual percentages may be higher or lower depending on several factors, such as buoyancy of the market, risk, need for specialist consultants, duration of works, size of contract and the procurement method.

4.1.4 A location factor of 1 has been applied to above, taking account of the location of the property and regional differences across the UK.

4.1.5 After adding on contingency, contractor's preliminaries, overhead and profit, professional fees and applying a location factor the indicative net cost of works over the 10 period, inclusive of the above additional costs is **£168,406** (excl VAT).

4.1.6 The indicative costs:

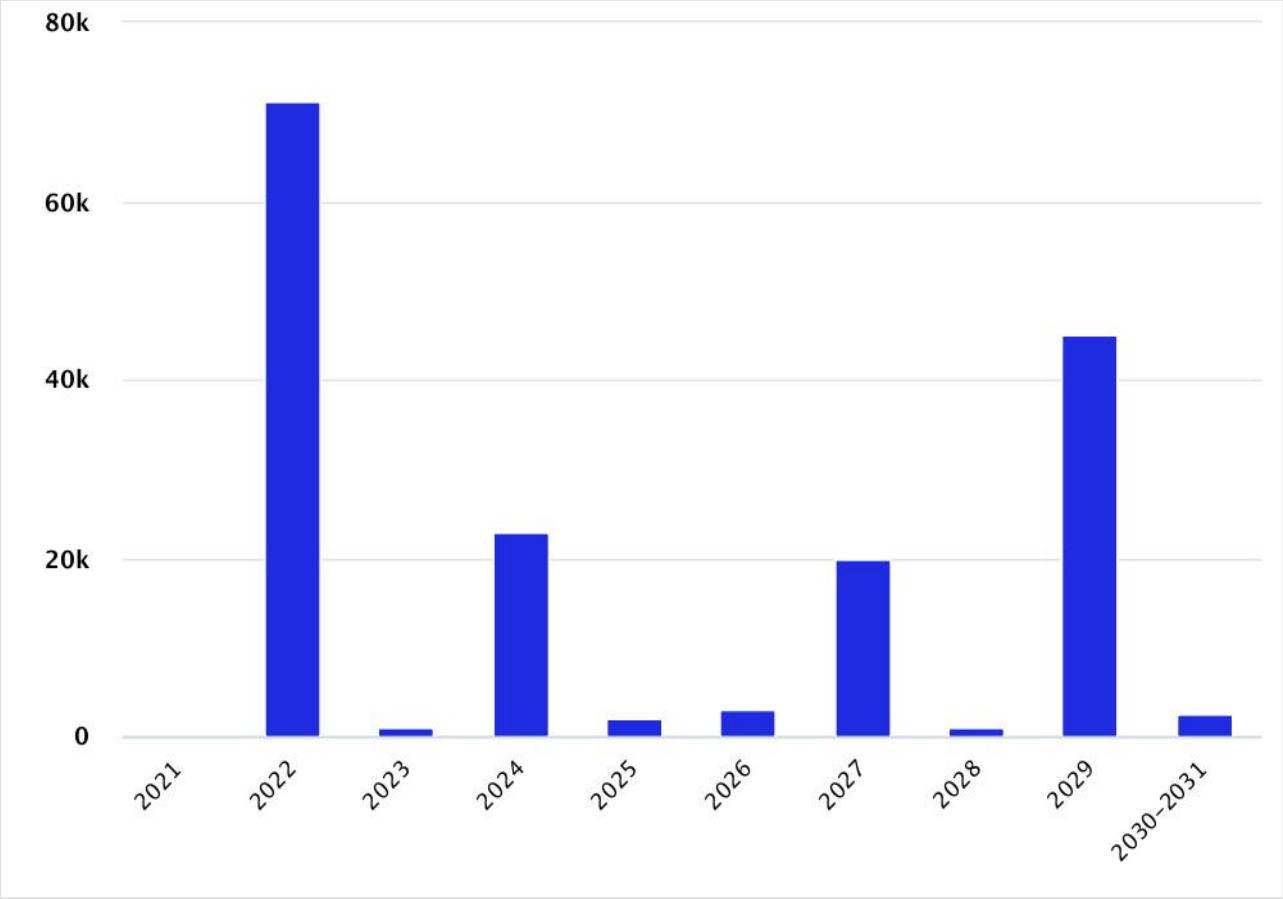
- Are based on repairing or replacing the element/sub element and uplifting to a condition grade A
- Are calculated using Building Cost Information Service (BCIS) cost and lifecycle data.
- All costs related to routine maintenance and servicing have been excluded.
- Do not include for any further investigation or specialist tests

4.1.7 The actual costs may be higher or lower depending on several factors as listed above. The figures calculated are indicative.

4.1.8 All costs set out in the tables below are exclusive of VAT.

4.2 Costs by Year

4.2.1 Set out below is the breakdown of the indicative inclusive costs for each year to address the condition related matters set out within this report.



Grade	Year 0 2021	Year 1 2022	Year 2 2023	Year 3 2024	Year 4 2025	Year 5 2026	Year 6 2027	Year 7 2028	Year 8 2029	Years 9-10 2029-2030	Total
D	£0	£12,600	£0	£0	£0	£0	£0	£0	£0	£0	£12,600
C	£0	£41,882	£975	£10,957	£975	£975	£9,865	£975	£33,035	£1,950	£101,591
B	£0	£0	£0	£2,100	£1,120	£1,967	£6,440	£0	£2,100	£588	£14,315
A	£0	£16,800	£0	£9,800	£0	£0	£3,500	£0	£9,800	£0	£39,900
Total	£0	£71,282	£975	£22,857	£2,095	£2,942	£19,805	£975	£44,935	£2,538	£168,406

4.3 Indicative Inclusive Costs by Element, by Year

Element	Year 0 2021	Year 1 2022	Year 2 2023	Year 3 2024	Year 4 2025	Year 5 2026	Year 6 2027	Year 7 2028	Year 8 2029	Years 9-10 2029-2030	Total
Roofs	£0	£41,654	£975	£13,197	£2,095	£2,942	£13,085	£975	£12,875	£2,538	**£90,338**
Structural Frame and Foundations	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	**£0**
Floors and stairs	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	**£0**
External walls, windows and doors	£0	£13,108	£0	£9,660	£0	£0	£6,720	£0	£9,660	£0	**£39,148**
Internal walls, windows and doors	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	**£0**
Internal Finishes	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	**£0**
Fittings, Furnishings and Equipment	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	**£0**
Sanitary Installations	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	**£0**
Electrical Services	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	**£0**
Mechanical Services	£0	£2,100	£0	£0	£0	£0	£0	£0	£0	£0	**£2,100**
External areas	£0	£14,420	£0	£0	£0	£0	£0	£0	£22,400	£0	**£36,820**
Total	**£0**	**£71,282**	**£975**	**£22,857**	**£2,095**	**£2,942**	**£19,805**	**£975**	**£44,935**	**£2,538**	**£168,406**

4.4 Indicative Inclusive Costs by Element, by Grade

Element	D	C	B	A	Total
Roofs	£700	£35,423	£14,315	£39,900	**£90,338**
Structural Frame and Foundations	£0	£0	£0	£0	**£0**
Floors and stairs	£0	£0	£0	£0	**£0**
External walls, windows and doors	£0	£39,148	£0	£0	**£39,148**
Internal walls, windows and doors	£0	£0	£0	£0	**£0**
Internal Finishes	£0	£0	£0	£0	**£0**
Fittings, Furnishings and Equipment	£0	£0	£0	£0	**£0**
Sanitary Installations	£0	£0	£0	£0	**£0**
Electrical Services	£0	£0	£0	£0	**£0**
Mechanical Services	£0	£2,100	£0	£0	**£2,100**
External areas	£11,900	£24,920	£0	£0	**£36,820**
Total	**£12,600**	**£101,591**	**£14,315**	**£39,900**	**£168,406**

4.5 Indicative Inclusive Costs by Grade, by Year

Grade	Year 0 2021	Year 1 2022	Year 2 2023	Year 3 2024	Year 4 2025	Year 5 2026	Year 6 2027	Year 7 2028	Year 8 2029	Years 9-10 2029-2030	Total
D	£0	£12,600	£0	£0	£0	£0	£0	£0	£0	£0	£12,600
C	£0	£41,882	£975	£10,957	£975	£975	£9,865	£975	£33,035	£1,950	£101,591
B	£0	£0	£0	£2,100	£1,120	£1,967	£6,440	£0	£2,100	£588	£14,315
A	£0	£16,800	£0	£9,800	£0	£0	£3,500	£0	£9,800	£0	£39,900
Total	£0	£71,282	£975	£22,857	£2,095	£2,942	£19,805	£975	£44,935	£2,538	£168,406

4.6 Indicative Inclusive Costs by Repair Type, by Year

Repair Type	Year 0 2021	Year 1 2022	Year 2 2023	Year 3 2024	Year 4 2025	Year 5 2026	Year 6 2027	Year 7 2028	Year 8 2029	Years 9-10 2029-2030	Total
Replace	£0	£15,143	£0	£196	£1,120	£1,967	£6,440	£0	£22,400	£588	**£47,854**
Part replace	£0	£2,744	£0	£126	£0	£0	£0	£0	£0	£0	**£2,870**
Clean	£0	£975	£975	£975	£975	£975	£975	£975	£975	£1,950	**£9,752**
Redecorate	£0	£13,090	£0	£11,760	£0	£0	£8,890	£0	£11,760	£0	**£45,500**
Repair	£0	£22,530	£0	£0	£0	£0	£0	£0	£0	£0	**£22,530**
Service	£0	£16,800	£0	£9,800	£0	£0	£3,500	£0	£9,800	£0	**£39,900**
Total	**£0**	**£71,282**	**£975**	**£22,857**	**£2,095**	**£2,942**	**£19,805**	**£975**	**£44,935**	**£2,538**	**£168,406**

5.0 Maintenance Schedule

5.1 Data Categories

5.1.1 The condition data contained within the maintenance schedule comprises of four categories:

- Condition Rating
- Residual Life
- Component Lifecycle
- Cost – see section 3 for detail on the approach.

Condition ratings and residual life data are captured on site, lifecycle and costs data are prepopulated from BCIS data. Collectively this data produces a planned preventative maintenance schedule. This is provided separately as an Excel spreadsheet to this report.

5.2 Condition Ratings

The condition rating is a simple but comprehensive description of the overall condition of the element expressed as complying with one of four categories:

Grade	Expression	Description
A	**Good**	As new and performing as intended and with regular maintenance will continue to operate efficiently.
B	**Satisfactory**	Performing as intended but exhibiting minor deterioration.
C	**Poor**	Exhibiting major defects and/or not operating as intended and will require attention in the short term, although not immediate.
D	**Bad**	Life expired and/or serious risk of imminent failure.

5.3 Residual Life

5.3.1 This is indication of the life remaining of a component based upon a visual observation whilst on site. The actual life is linked to a range of factors including use and maintenance and thus any figures stated are purely an estimate.

5.4 Component Life Cycle

5.4.1 This is indication of the full life of a component. As with residual life, the actual life is linked to a range of factors.

5.5 Health and Safety Issues

5.5.1 The table below lists the potential Health and Safety issues that were observed whilst carrying out the survey on site. The total indicative inclusive cost of the works linked to these are **£9,000** exc VAT. Please note the survey was not a detailed Health and Safety assessment.

Photo Location	Element	Issue	Action	Cost Estimate	Comments	Photo
Four pot south brick stack	Roofs/2.3. Roof/2.3.6. Roof Features	Cracks through masonry	Part replace	£500	Crack through over sailing brickwork and flaunching to front face. Brickwork has spalled and mortar joints have deteriorated. Repair works to this chimney should be carried out in the immediate term.	
Front wall	External areas/8.4. Fencing, Railings and Walls/8.4.2. Walls and Screens	Signs of structural distress	Repair	£1,000	Brick piers either side of south entrance to car park poor and unsafe condition. Top sections have displaced and are leaning over the public footpath. These must be repaired in the immediate term to avoid significant risk to the health and safety of the public and residents.	
Rear north brick boundary wall	External areas/8.4. Fencing, Railings and Walls/8.4.2. Walls and Screens	Signs of structural distress	Repair	£7,500	Rear section to north boundary wall leaning outwards and structurally unsound due to tree root damage. This section must be rebuilt in the immediate term.	

5.6 Schedules - Condition D and C Rated Items

5.6.1 The tables below lists condition D and C rated items. The Planned Preventative Maintenance Schedule provided as an Excel spread sheet contains all the items recorded - A, B C and D whilst on site.

5.6.2 Condition D

The table below lists condition D rated items. The total indicative inclusive cost of the works linked to the condition D rated items are **£9,000** exc VAT.

Photo Location	Element	Issue	Action	Cost Estimate	Comments	Photo
Four pot south brick stack	Roofs/2.3. Roof/2.3.6. Roof Features	Cracks through masonry	Part replace	£500	Crack through over sailing brickwork and flaunching to front face. Brickwork has spalled and mortar joints have deteriorated. Repair works to this chimney should be carried out in the immediate term.	
Front wall	External areas/8.4. Fencing, Railings and Walls/8.4.2. Walls and Screens	Signs of structural distress	Repair	£1,000	Brick piers either side of south entrance to car park poor and unsafe condition. Top sections have displaced and are leaning over the public footpath. These must be repaired in the immediate term to avoid significant risk to the health and safety of the public and residents.	

Photo Location	Element	Issue	Action	Cost Estimate	Comments	Photo
Rear north brick boundary wall	External areas/8.4. Fencing, Railings and Walls/8.4.2. Walls and Screens	Signs of structural distress	Repair	£7,500	Rear section to north boundary wall leaning outwards and structurally unsound due to tree root damage. This section must be rebuilt in the immediate term.	

5.6.3 Condition C

The table below lists condition C rated items. The total indicative inclusive cost of the works linked to the condition C rated items are **£71,869** exc VAT.

Photo Location	Element	Issue	Action	Cost Estimate	Comments	Photo
Entrance porch	Roofs/2.3. Roof/2.3.2. Roof Coverings	Poorly dressed flashings	Replace	£210	Lead flashings to the rear of entrance porch roof, below stairwell windows, has been poorly installed using inadequate depth flashings. Mortar chasing in has also deteriorated. This should be replaced in the short term.	
Flat roof above Flat 2	Roofs/2.3. Roof/2.3.2. Roof Coverings	Missing sections of flashing	Part replace	£70	Incorrect sized lead flashings and deteriorated mortar chasing in. Replace in the short term.	
Flat roof above Flat 2	Roofs/2.3. Roof/2.3.2. Roof Coverings	Reasonable Condition	Part replace	£90	Cement mortar should not be used to chase in lead flashings. This will lead to premature failure of the mortar due to the thermal movement of lead. Anticipate early renewal of this around the 3-year mark. Lead mastic must be used in future.	

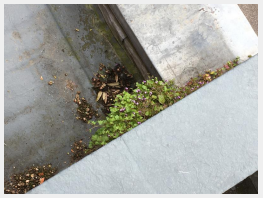
Photo Location	Element	Issue	Action	Cost Estimate	Comments	Photo
Flat roof above flat 2	Roofs/2.3. Roof/2.3.4. Roof Drainage	vegetation growth	Clean	£270	Vegetation growth to rainwater outlet. Clear in the immediate term, and annual clearance carried out thereafter.	
Cornice between Flat 1 and Flat 3	Roofs/2.3. Roof/2.3.2. Roof Coverings	Reasonable Condition	Replace	£180	Mortar chasing in has deteriorated to brick cornice lead capping. Replace with lead mastic in the short term.	
All elevations	Roofs/2.3. Roof/2.3.4. Roof Drainage	Reasonable Condition	Redecorate	£2,500	The contractor who carried out the redecoration works in 2018 failed to redecorate the inside of the gutters. Therefore, these have corroded. All gutters must be redecorated in the short term to prevent severe corrosion.	
Front elevation	Roofs/2.3. Roof/2.3.4. Roof Drainage	vegetation growth	Clean	£2,182	Partially blocked gutters to front elevation. Clear gutters in year one and annually thereafter.	

Photo Location	Element	Issue	Action	Cost Estimate	Comments	Photo
Flat 6 front parapet wall	Roofs/2.3. Roof/2.3.6. Roof Features	Delaminated bricks	Part replace	£200	Eroded brickwork to parapet cornice and deteriorated mortar joints. Repoint and replace defective brickwork in the short term.	
Bell roof to Flat 3	Roofs/2.3. Roof/2.3.2. Roof Coverings	Poor Condition	Replace	£2,000	Widespread deterioration to felt shingles on bell roof above Flat 3. Timber close boarding is visible where the roof slopes meet due to deterioration of the capping sheets. Further, less severe, deterioration, was also noted to the north roof slopes. This roof should be re-covered in the short term.	
Bell roof to Flat 3	Roofs/2.3. Roof/2.3.2. Roof Coverings	Inadequately dressed joints	Repair	£160	Lead flashings around the perimeter of the bell roof to Flat 3 have slipped. This has caused the timber wall plate on the south elevation to decay. Lead must be re-fixed promptly, and the decayed timber replaced.	
All pitched roofs	Roofs/2.3. Roof/2.3.2. Roof Coverings	Missing tile	Replace	£1,500	There are approximately 50no. slipped, broken or delaminated clay roof tiles. These should be replaced in the short term.	

Photo Location	Element	Issue	Action	Cost Estimate	Comments	Photo
Two pot front stack	Roofs/2.3. Roof/2.3.6. Roof Features	Cracks through masonry	Part replace	£300	Cracks to flaunching. Replace flaunching in the short term.	
Two pot front stack	Roofs/2.3. Roof/2.3.6. Roof Features	Other	Part replace	£400	Deteriorated mortar joints and spalled brickwork to north east corner. Replace spalled brickwork and repoint in the short term.	
Central flat roof above Flat 5	Roofs/2.3. Roof/2.3.2. Roof Coverings	Poor Condition	Part replace	£70	Split to lead flashing on the front of central flat roof. Replace in short term.	
South elevation bay window	Roofs/2.3. Roof/2.3.2. Roof Coverings	Poor condition	Replace	£280	Lead flashings are an incorrect depth and the mortar chasing has deteriorated towards the rear section. Temporary flashband and Acrypol repairs have been carried out to prevent water ingress. This is not a long lasting repair and should be replaced with good quality lead flashing is in the short term.	

Photo Location	Element	Issue	Action	Cost Estimate	Comments	Photo
Flat 6 front parapet wall	Roofs/2.3. Roof/2.3.6. Roof Features	Repointing required	Repair	£150	Deteriorated brickwork mortar joints and mortar chasing in for lead flashings has deteriorated. Repoint and re-chase in using lead mastic in the short term.	
Lead flashing to Flat 6 south parapet	Roofs/2.3. Roof/2.3.2. Roof Coverings	Poor condition	Replace	£140	Lead flashing has been laid in length longer than 1.5 m. Consequently, the lead has started to deform and is at risk of splitting due to the thermal movement of lead. Anticipate renewal of this around the 3-year mark.	
South gable end	Roofs/2.3. Roof/2.3.2. Roof Coverings	Poor condition	Redecorate	£600	South gable timber barge boards have been redecorated to a poor standard without sufficient coats of paint and preparation of the timber substrate. As such, the paint is cracking and peeling. Isolated areas of timber have also decayed and been painted over. Redecoration in the short term.	
Pitched roof above Flat 6	Roofs/2.3. Roof/2.3.2. Roof Coverings	Fragmenting Tiles	Repair	£300	Mortar bedding to the ridge tiles has deteriorated. The end tile meting the verge has also cracked. Replace cracked tile and re-bed ridge tiles in the short term.	

Photo Location	Element	Issue	Action	Cost Estimate	Comments	Photo
Four pot brick south stack	Roofs/2.3. Roof/2.3.6. Roof Features	Other	Replace	£350	Poor quality lead flashings to the south face of stack, potentially allowing water ingress into flat 6. Replace lead flashings in the short term.	
Rear gutters	Roofs/2.3. Roof/2.3.4. Roof Drainage	vegetation growth	Clean	£2,182	Gutters heavily blocked with vegetation. These must be cleared in the immediate term and annually thereafter.	
Rear central 3 pot stack	Roofs/2.3. Roof/2.3.6. Roof Features	Poor Condition	Repair	£500	Deteriorated brickwork mortar joints to stack. Repoint in the short term.	
Rear elevation	External walls, windows and doors/2.5. External Walls/2.5.1. External Walls Structure	Brickwork missing or displaced	Part replace	£60	Poor filling of aperture surrounding pipework to Flat 3 and damage boiler flue collar. Fill around pipe and replace flue collar in the short term.	

Photo Location	Element	Issue	Action	Cost Estimate	Comments	Photo
Conservatory	Roofs/2.3. Roof/2.3.2. Roof Coverings	Poorly dressed flashings	Repair	£180	Chasing in for lead flashings to conservatory roof has failed. Re-chase using lead mastic in the short term.	
Rear Elevation	Roofs/2.3. Roof/2.3.4. Roof Drainage	vegetation growth	Clean	£545	Vegetation to rear bay gutter and conservatory gutter. Clear in the immediate term and annually thereafter.	
North elevation (above Flat 4b)	Roofs/2.3. Roof/2.3.6. Roof Features	Cracks through masonry	Replace	£300	Severely cracked flaunching. Replace in the short term.	
North elevation (above Flat 4b)	Roofs/2.3. Roof/2.3.6. Roof Features	Cracks through masonry	Replace	£500	Cracked mortar benching and deteriorated brickwork mortar joints. Replace benching and repoint in the short term.	

Photo Location	Element	Issue	Action	Cost Estimate	Comments	Photo
North elevation 3 pot stack (above Flat 4)	Roofs/2.3. Roof/2.3.6. Roof Features	Cracks through masonry	Replace	£500	Cracked mortar benching and deteriorated brickwork mortar joints. Replace cracked mortar benching, flaunching and repoint brickwork in the short term.	
Flat 5 flat roof	Roofs/2.3. Roof/2.3.2. Roof Coverings	Poor Condition	Replace	£500	Heavily worn mineral felt covering over Flat 5 dormer on the north side. Replace in the short term.	
Central crown	Roofs/2.3. Roof/2.3.2. Roof Coverings	Slipped tile	Part replace	£360	Bonnet hip tiles have displaced to the north-west hip of the crown roof. Re-bed tiles in the short term.	
Rear of 4b	Roofs/2.3. Roof/2.3.4. Roof Drainage	vegetation growth	Clean	£1,091	Rear gutter is blocked with vegetation and debris. Clear in the immediate term and annually thereafter.	

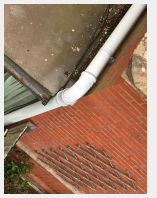
Photo Location	Element	Issue	Action	Cost Estimate	Comments	Photo
Rear of 4a	Roofs/2.3. Roof/2.3.4. Roof Drainage	Discharging to paving	Replace	£121	Poor gutter design where a section is missing on the opposite side of the SVP. Consequently, rainwater is discharging down the external wall and causing damp to penetrate the living room wall of Flat 4a. A new section of gutter should be fitted here in the short term.	
Rear elevation to Flat 4b	External walls, windows and doors/2.5. External Walls/2.5.1. External Walls Structure	eroded mortar	Repair	£700	Large areas of mortar joints to rear of Flat 4B have perished in particular to the north brick arch above the window. This should be repointed using lime mortar in the short term.	
Flat 5 roof terrace	Roofs/2.3. Roof/2.3.2. Roof Coverings	Blistering	Replace	£2,300	The asphalt capping to the perimeter parapet wall of Flat 5's roof terrace is blistering, sagging, and split in areas. We recommend that this is replaced in the short term.	
North elevation to Flat 4b	External walls, windows and doors/2.5. External Walls/2.5.1. External Walls Structure	eroded mortar	Repair	£300	Poor quality brickwork replacement to the rear section of the north elevation of Flat 4B. Missing brick cornice detailing and mortar ribbon pointing deteriorated. Repoint using lime mortar in the short term.	

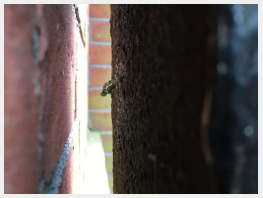
Photo Location	Element	Issue	Action	Cost Estimate	Comments	Photo
All downpipes	Roofs/2.3. Roof/2.3.4. Roof Drainage	corroded in areas	Redecorate	£3,000	There are 10no. cast iron square downpipes across all elevations. All of which were redecorated as part of the works carried out two years ago. The contractor has failed to remove the downpipes and to redecorate the rear face of the downpipes. Consequently, the rear faces are heavily corroded. The north east downpipe leaks during heavy rain through corroded joints. All downpipes should be redecorated in the short term and the joint to the north east downpipe repaired.	
Front Elevation	External walls, windows and doors/2.5. External Walls/2.5.1. External Walls Structure	eroded mortar	Repair	£800	Large areas of the brickwork mortar joints to the front elevation have deteriorated. Brickwork should be repointed using lime mortar in the short term.	
Front elevation of Flat 4a	External walls, windows and doors/2.5. External Walls/2.5.1. External Walls Structure	Evidence of cracking	Repair	£303	Crack to brickwork between Flat 4a and Flat 4b windows. Stitch repair using Helibars and repoint in the short term.	

Photo Location	Element	Issue	Action	Cost Estimate	Comments	Photo
South elevation	External walls, windows and doors/2.5. External Walls/2.5.1. External Walls Structure	eroded mortar	Repair	£1,500	Large areas of the brickwork mortar joints to the south elevation have perished. Brickwork should be repointed using lime mortar in the short term.	
South elevation	External walls, windows and doors/2.6. Windows and External Doors/ 2.6.1. External Windows	Poor Condition	Redecorate	£9,600	Windows to the south elevation have been redecorated to a very poor standard. Consequently, the paint is cracking and peeling after only two years of application. These must be redecorated in the short term. Allowances have been made for the replacement of decayed timber.	
Rear elevation	External walls, windows and doors/2.6. Windows and External Doors/ 2.6.1. External Windows	Reasonable Condition	Redecorate	£5,400	Rear windows are generally in a satisfactory condition. We recommend that these are redecorated in year 3. Allowances have been made for repairs to each window (replacement of glazing putty, replacement of decayed timber etc.).	
Front elevation	External walls, windows and doors/2.6. Windows and External Doors/ 2.6.1. External Windows	Reasonable Condition	Redecorate	£8,400	Front windows are generally in a satisfactory condition. We recommend that these are redecorated in year 3. Allowances have been made for repairs to each window (replacement of glazing putty, replacement of decayed timber etc.).	

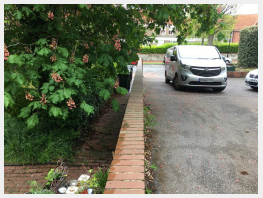
Photo Location	Element	Issue	Action	Cost Estimate	Comments	Photo
Rear elevation	External walls, windows and doors/2.5. External Walls/2.5.1. External Walls Structure	eroded mortar	Repair	£900	Large areas of mortar joints have deteriorated and perished particularly to the rear of Flat 2 and Flat 4.	
Front north brick boundary wall	External areas/8.4. Fencing, Railings and Walls/8.4.3. Retaining Walls	Poor alignment	Replace	£16,000	Leaning north boundary wall. Plan for rebuilding of this in the medium to long term. This is included as a C grade item because of the costs involved in rebuilding the wall.	
Front wall	External areas/8.4. Fencing, Railings and Walls/8.4.2. Walls and Screens	Defective mortar joints	Repair	£900	Perished mortar joints to front boundary wall. Repoint in the short term.	
South wall	External areas/8.4. Fencing, Railings and Walls/8.4.2. Walls and Screens	Defective mortar joints	Repair	£900	Perished mortar joints to south boundary wall. Repoint in the short term.	

Photo Location	Element	Issue	Action	Cost Estimate	Comments	Photo
Flat roof above Flat 3 (Flat 6 terrace)	Roofs/2.3. Roof/2.3.2. Roof Coverings	Crazing and Splits evident	Replace	£575	Asphalt gutter linings have split in areas. Part replacement should be carried out in the short term to prevent water ingress.	
Cellar	Mechanical Services/5.4. Water Installations/ 5.4.1. Mains Water Supply	Not fit for purpose	Replace	£1,500	Lead water main. Lead is prone to splitting and can cause health defects. Replace with alkathene pipework in the short term. Not considered a health and safety issue at present, although it should be replaced to avoid this.	

6.0 Limitations to the Report

Our inspection was limited to the external building fabric only, with the exception of certain defects inspected in Flat 3, 4B, and 4A, all involving damp issues. This was at the request of Leaseholders.

We were unable to inspect woodwork or other parts of the structure which were built-in, covered, unexposed or inaccessible in the normal course of construction, alteration or fitting out. We are therefore unable to report that such parts remain free from rot, insect attack, corrosion or other defect.

We were unable to inspect flues, ducts, voids or any similarly enclosed areas, access to which was not readily available at the time of our inspection. We are therefore unable to report that such areas remain free from defect.

This report excludes any investigation into structural engineering design, compliance with legislation relating to buildings and no specific inspection or specialist testing was undertaken to establish whether High Alumina Cement concrete, calcium chloride additives, calcium silicate brickwork, woodwool slab permanent formwork, asbestos PBCB or other deleterious materials, calcium silicate reaction in concrete, cavity wall tie failure, radon gas seepage were present within the construction.

No samples were taken nor analysis made of the sulphate content of the load bearing sub-soil adjacent to the foundations nor were any enquiries made as to general ground conditions.

We have not commissioned inspections or tests of electrical, mechanical, water, drainage or other services other than where specified and are therefore unable to report that such parts remain free from defect. Our inspection of the services (if required) was based on a visual inspection to ascertain their general type and condition.

We have not made any formal written enquiries in respect of Existing User Rights, Proposed Use, Town Planning and road widening, Legal Interests, Prescriptive Rights, Easements, Wayleaves or Statutory Consents, but we would advise that such enquiries are made by your solicitor.

The Report shall be for the private and confidential use of the client for whom it is prepared and should not be reproduced - either in whole or in part - or relied upon by any third parties for any use without the express written authority of the Surveyor. We will not unreasonably withhold this permission should you want a copy of the Report to go to your Legal Advisers for example.

No part of the property was opened up for inspection and we must point out that timbers such as plates, rafter feet, joists, lintels and the like can be affected by wood boring insect infestation, dry rot or other forms of fungal decay without visible signs of such an attack being apparent on their surfaces. Consequently, we cannot accept responsibility for any instances of hidden decay or infestation which may subsequently be revealed.

Appendices

Appendix A Photographs

Appendix A
Photographs

Photo 2

Photo 4

Photo 5

Photo 6

Photo 7

Photo 8

Photo 9

Photo 10

Photo 11

Photo 12

Photo 13

Photo 14

Photo 15

Photo 16

Photo 17

Photo 18

Photo 20

Photo 21

Photo 22

Photo 23 -

Photo 24

Photo 25

Photo 26

Photo 27

Photo 29

Photo 30 - Damaged collar

Photo 31 -

Photo 32

Photo 33

Photo 34

Photo 35

Photo 36

Photo 37

Photo 38

Photo 39

Photo 40

Photo 42

Photo 43

Photo 44

Photo 45

Photo 47

Photo 48

Photo 49

Photo 50

Photo 51

Photo 52

Photo 53

Photo 54

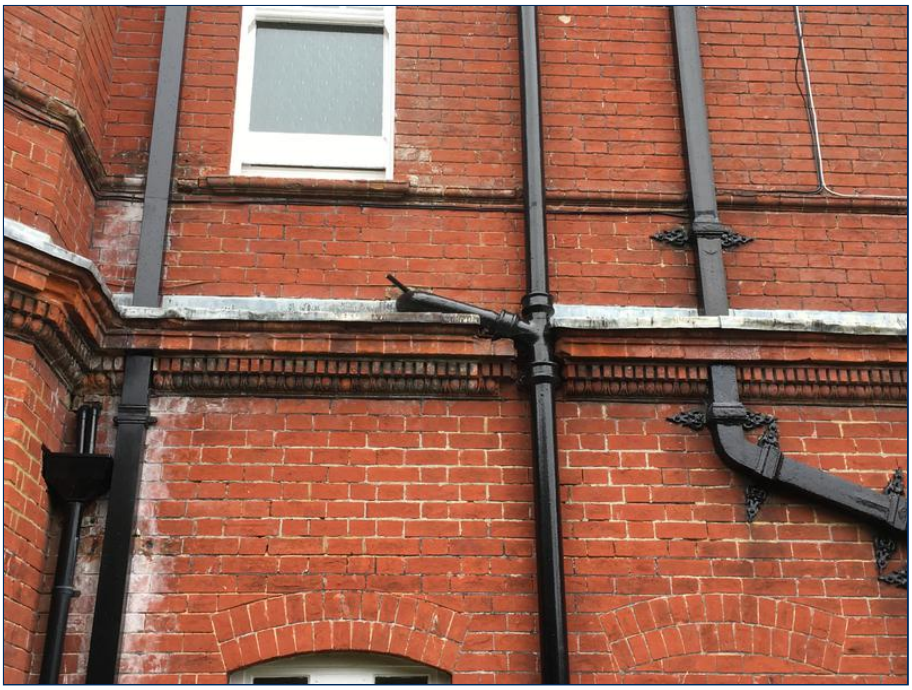


Photo 55

Photo 56

Photo 57

Photo 58

Photo 59

Photo 60

Photo 61

Photo 62

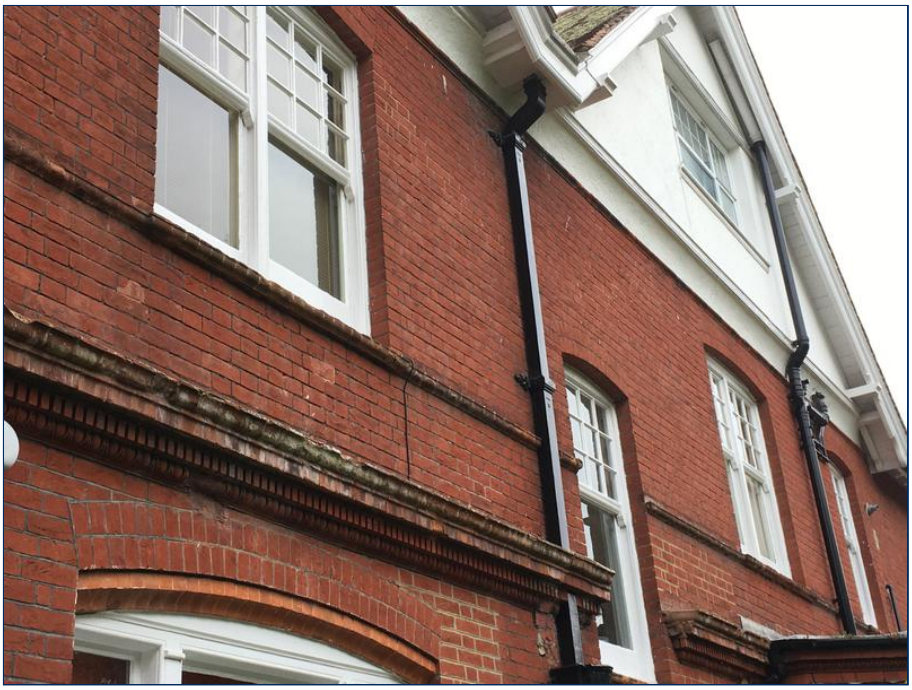


Photo 63

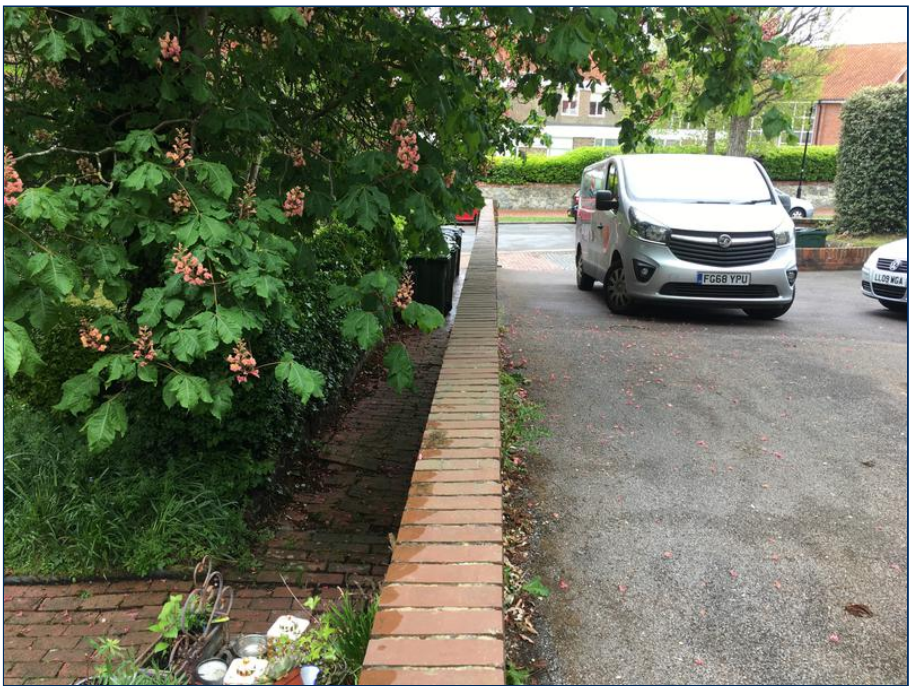


Photo 64

Photo 65

Photo 66 -

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Photo 71

Photo 73

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Photo 77