SMITHERS PURSLOW
ENGINEERING ▪ SURVEYING ▪ ARCHITECTURE
Independent Professional Expertise

Our Ref: 212167/NMW/sej

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7 April 2022

Mr Edward Tudor Jones
Snowdonia National Park Authority
National Park Office
Penrhyndeudraeth
Gwynedd
LL48 6LF

by email only: edward.jones@eryri.llyw.cymru

Dear Edward

Re: PLAS TAN Y BWLCH, MAENTWROG, BLAENAU FFESTINIOG LL41 3YU

Executive Summary

With regards to the ancillary buildings, the conclusions and recommendations are broadly in alignment with the content of the main building's executive summary. There are some extensive repairs required to the external fabric. This relates to the following in summary: the lead valley gutters associated to the roofs, pitched / flat roofs generally, chimneys, parapet walls, gables and copings, external walls generally, timberwork, decorations, hard standings, drainage, as detailed by the report.

All our provided (Smithers Purslow's) approximate budget costs below are rounded and subject to **the addition of VAT and Fees**.

The most significant cost years are detailed below (in round figures): -

Year 1: £355,000.00

Year 2: £26,000.00

Year 3: £8,000.00

Year 4: £15,000.00

Internally, there are fire safety matters associated to egress routes, fire breaks, fire doors and the like, (together with fire alarm systems, as reported by the M&E Consultants).

The total approximate budget expenditure on the building fabric in Years 1 to 4 would be a sum of £404,000.00, to be spent in this period, plus VAT & Fees. This includes costs associated with below ground drainage as identified separately in the email appended to this report from the drainage consultant - First Local Services.

The total approximate budget costs associated to the 10 year period attributable to maintenance works at current day costs is £460,410.00 (plus VAT and Fees) related to the ancillary buildings.

There will also be the additional costs associated to the mechanical and electrical installations and the like as reported by the M&E consultants separately – please see their report as commented in Llion's Executive Summary report of the main house for clarity of such costs.

There are some immediate works required as detailed in the report, that need to be addressed promptly. Such as the auditorium's flat roof coverings and ongoing monitoring of the parapet wall to the three-storey annex's front elevation. Additionally, we recommend that the condition/stability of the parapet is assessed preceding and succeeding any storm event. Works to rebuild the wall should be scheduled for the next 12 to 24 months.

It may be possible to potentially defer some aspects of the works, however, this risks acceleration of the deterioration of the materials and fabric depending on the severity of weather in the coming years and increased scopes of work as a result. This will, however, require careful consideration.

Although the majority of the costs outlined in Years 1 to 4 are likely to be the initial focus of repairs and what must be done in the first instance, some deferment of internal decorations to some extent could be possible.

The phases of works require consideration to ensure economies of scale even in the event where some works are brought forward to make the best use of preliminaries, contractor's costs like scaffolding and so on.

There will need to be an overall project plan for the phasing of the works in line with the Authority's overall master plan for the premises for the future. This we can of course give guidance and advice on separately.

We trust the above meets with your approval, however, should you wish to discuss matters further, please do not hesitate to contact me.

Yours sincerely
SMITHERS PURSLOW

NICK WILLIAMSON MSc MCIOB MFPWS MRICS
Chartered Building Surveyor

BUILDING SURVEY

OF

ANCILLARY BUILDINGS

Our Ref: 212167/ NMW **Date: November 2021**

Cont'd overleaf…/

1.0 INSTRUCTIONS

Refer to main report.

2.0 INSPECTION

Refer to main report.

A PREMISES IDENTIFICATION

A1 Description of Property and Construction of Buildings

The ancillary buildings to the rear of the main house contain the former stables, (which now comprises offices on the first floor and a seminar room, kitchen and toilets to the ground floor). It has also been extended, presumably during the 1996 refurbishment / change – of – use and now contains an auditorium to the rear.

To the rear of the former stables, is the Field Work Room which is accessed via an external flight of steps situated to the side of the former stable block or via external doors to the first floor of the stable block.

There is a building containing rooms 27 – 29 which are residential rooms and contain en suites.

The two and three-storey annexes were presumably former servants' quarters associated with those individuals that worked at the main dwelling. They contain bedrooms, some of which include ensuites, communal bathroom and WC's, a caretaker's flat, boiler room, laundry, stores, meter room and substation.

The pitched roof slopes are covered in slate and include angled ridge and hip tiles. Flat roofs are covered in a green roof system or lead sheeting.

The external walls are generally ashlar, whilst the exception to this is the Field Work Room which has solid masonry which have been rough cast rendered.

Ground floors are formed from ground bearing concrete slabs whilst the upper floors are constructed from suspended timber.

A PREMISES IDENTIFICATION

A2 Description of Site and Location

Plas Tan Y Bwlch was constructed during the 19th century but it is believed that there has been a dwelling on the site since the early 17th century.

The surrounding site is a landscaped estate including gardens, wooded park, valley and estate village with Plas Tan Y Bwlch and the ancillary buildings occupying a prominent position overlooking the river Dwyryd valley in the middle of the Snowdonia National Park.

A3 Description of Accommodation

The accommodation comprises as follows:

- Former stables: offices, resource library, auditorium, translation room, male/female/disabled WCs, stalls, foyer, seminar room and AV room.
- Field Work Room.
- Building containing rooms 27 – 29: bedrooms (including en suites).
- Three-storey annex: bedrooms (one of which contains an en suite), communal bathrooms, shower room, WCs and caretaker's flat.
- Two-storey annex: bedrooms (containing en suites), boiler room, laundry, 2No stores, meter room and substation.
- Rooms over entrance: bedroom (including en suite) and WCs.

B CONDITION OF STRUCTURE AND FABRIC

B1 Structure Generally – Stability and Dampness

Stability

From our inspection, no structural issues of significance were noted other than the need for the parapet wall associated with the three-storey annex necessitating rebuilding within the next three years. Refer to comments within B2 'External Walls' section of the report.

Buildings of this type and age are more susceptible to issues with ground related movement than most more modern structures, as they are built over shallower foundations.

We noted some minor cracks to various walls, they appear longstanding, show no signs of being significantly progressive and are not unusually sizeable. Whilst we offer no guarantees that movement will not worsen in the future (necessitating further investigations and repairs) we have no particular reason to suspect that this is likely within the foreseeable future.

Dampness

Tests were undertaken internally, in accessible locations, with a handheld moisture detecting meter. We remind you that the property was fully furnished which together with the presence of kitchen units, etc inevitably restricted our inspection.

In addition, the provision of plasterboard used to line the inside faces of some of the external walls prohibited access to the walls themselves.

It would be rare to inspect buildings of this type and age and not find some evidence of dampness, these buildings are no exception, with evidence being found in various locations.

B CONDITION OF STRUCTURE AND FABRIC

B1 Structure Generally – Stability and Dampness

Dampness Cont'd…/

Where defects have been identified within this section, it should be assumed that remediation will be required. With regard to prioritising the remedial works, all the following defects which impact on the ability of the buildings to withstand the effects of water penetration, rot and where recommendations of further investigation are made, should be treated with priority.

Within the former stable block, there was evidence of penetrating dampness through the structural concrete deck of the flat room as a result of the failed green roof system which should be renewed in its entirety and also ensuring that the waterproof layer entirely covers the structural deck (where it currently does not). The EPDM single ply system waterproof layer is also not recommended for a green roof system as it can be easily pierced. We recommend that the single ply system is substituted for a hot melt waterproof layer which will bond to the concrete deck, is quick to install and comes with a long warranty.

The downpipes associated with the rear roof slope of the former stables discharge into channels on the flat roof and then expel via chutes cut into the parapet walls which are then directed into hoppers and downpipes. Presently the channels are heavily silted-up which prevents the adequate flow of surface water. When the flat roof is re-covered the surface water drainage layout will need to be improved.

B CONDITION OF STRUCTURE AND FABRIC

B1 Structure Generally – Stability and Dampness

Dampness Cont'd…/

There was evidence of penetrating dampness to the glazed mono-pitched roof over the AV Room which manifested as staining to plasterwork to the roof's supporting walls. This is likely to be a result of the missing and partially detached flashings combined with poor detailing at its junction with the flat roof. We also noted that part of the green roof's EPDM waterproofing layer appears to have been pulled away from the structural deck which will inevitably exacerbate this issue.

Within the AV Room and the lobby immediately adjacent, were water-damaged skirting boards, wall plaster and carpets. We suspect that this is a result of a leak associated with either the wastewater pipe or supply pipe serving the sink in the cleaner's cupboard off the AV Room. There is also staining to the boxing-in to an internal wall within the lobby which may also be linked with the aforementioned defect. Further investigation will be required to identify the source of the leak (s) and repairs effected.

There was evidence of a leak within the disabled WC and kitchen as the upstands to the vinyl floor coverings were partially detached from the wall and some staining was visible to the wall plaster at low level.

There was blistering wall plaster / paintwork to the lobby immediately adjacent to these rooms and also staining to the side lobby's carpet tiles. There were some elevated moisture meter readings to the walls in this area but it is unclear whether this is an ongoing issue or simply a one-off event which has since been resolved. Further investigation will be required and repairs effected as necessary.

B CONDITION OF STRUCTURE AND FABRIC

B1 Structure Generally – Stability and Dampness

Dampness Cont'd…/

To the rear wall of the female WC, elevated moisture meter readings up to 800mm above finished floor level were recorded. We suspect this is the same across the entirety of the wall, however, some timber panelling within the WC prohibited further investigation.

In the building containing rooms 27 – 29, we noted blistering / water stained wall plaster and elevated moisture meter readings to the rear external wall around windows, W15 and W16.

We suspect that in part this is due to the render applied to the wall extending all the way to the ground. It therefore allows moisture to "wick-up" the wall which can give rise to problems with dampness. Render should be removed to 150mm above ground level and a bell mouth drip detail formed at the base of the render, designed to encourage rainwater to fall away from the base of the wall and thereby reduce the chances of dampness penetrating.

Windows W15 & W16, are also in poor condition with some decay evident which is probably also contributing to the passage for moisture which has damaged the adjacent decorative finishes. In regard to these windows, refer to the recommendations in section B5 'Doors and Windows' of this report.

Within the three-storey annex, there is evidence of water penetration in Room 26. Damaged plasterboards have been removed, exposing the remains of the original lime plaster and ashlar substrate. This appears to be a consequence of a leak from services above, but equally some penetrating dampness cannot be ruled out as a contributary factor. Further investigation will be required and remedial works undertaken.

B CONDITION OF STRUCTURE AND FABRIC

B1 Structure Generally – Stability and Dampness

Dampness Cont'd…/

To the ground floor WC / shower room, there was extensive dampness to the rear external wall up to 1.2mm above finished floor level and around the associated window jamb. This we believe is also a consequence of the render extending to the base of the wall. Refer to previous comments and recommendations in this section.

Within the caretaker's flat, there is evidence of damaged plasterboard ceilings within the kitchen, possibly resulting from leaking services.

We also noted dampness to the walls within the entrance hall and the bathroom and to the rear left-hand reception room / office floor. We identified a stop tap positioned at high level within the bathroom was dripping onto the floor. Given the extent of staining to the floor coverings and wall surfaces immediately adjacent, it appears to have been ongoing for some time. It may have also caused at least some of the dampness within the immediate area and to the entrance hall and rear reception room / office. This should be repaired within the short term and allowed to dry out. Patch redecoration and renewal of floor coverings can then be undertaken.

Around the roof light in the two-storey annex's rear roof slope (immediately above the stairway which connects it to the three-storey annex), is evidence of penetrating dampness. When tested with a moisture meter, we identified that the plasterboard was dry, however, we recommend that investigation and remediation is undertaken.

B CONDITION OF STRUCTURE AND FABRIC

B1 Structure Generally – Stability and Dampness

Dampness Cont'd…/

We also noted some staining to the plasterboard ceilings immediately below the rear slope's valley, in proximity to the aforementioned rooflight. The cause of which is at least in part due to it being clogged with debris and leaf litter. As mentioned further in the report under section B3 Roof Coverings, valleys should always be kept clear.

Within Room 15, there was evidence of penetrating damp to the ceiling over the bay window and some staining further into the room which may be a result of a failure of the lead sheet covering and flashings to the flat roof immediately above or to the outlet associated with it. When tested with a moisture meter, we identified that the material was damp which suggests that this is an ongoing issue and should be repaired.

Once all appropriate remedial work has been completed externally, you will need to hack off the damp/damaged plaster (and go beyond the affected area by at least 300 mm). The existing plaster is very likely to have absorbed salts from the masonry and become hygroscopic (holding moisture, be it already in the masonry or from humidity in the room) and may well be preventing the wall itself from drying.

The exposed masonry then needs to dry out, a process that can be accelerated with the use of heaters and/or dehumidifiers. Then, the masonry joints need to be raked out by some 10 mm or so and a suitable salt resistant plaster finish, or a salt resistant render and skim applied as appropriate. The important thing is to avoid anything that absorbs salts, which many normal plasters do.

B CONDITION OF STRUCTURE AND FABRIC

B1 Structure Generally – Stability and Dampness

Dampness Cont'd…/

You should not add any impervious wall coverings until the finishes have dried out, a process that can take some 6 to 12 months or so, albeit you should be able to apply a water based "breathable" paint once it is visibly dry.

Additionally, in properties such as these, built from solid brickwork and ashlar, there is a tendency of condensation to form on the internal face of walls, particularly in exposed locations and in areas where air circulation is limited.

We therefore recommend that the buildings are properly heated and ventilated throughout the year.

Controlling dampness and condensation in properties is important for many reasons, including in order to help prevent mould growth. Whilst we did not find significant growths during our inspection, they might be present in areas currently concealed from sight. Mould growths have been linked to health problems in building occupiers and should be carefully removed. In certain cases further analysis may be warranted as care needs to be taken in remediation techniques.

Given that eradicating dampness altogether in historical properties is very difficult, if not impossible to achieve, the situation is often best "managed" on a practical level. In addition to the guidance given elsewhere in this section, we recommend that you anticipate the need for occasional redecoration, and the possible need for some replastering and replacing damaged timber components in contact with damp walls (for example skirting boards) from time to time.

B CONDITION OF STRUCTURE AND FABRIC

B1 Structure Generally – Stability and Dampness

Dampness Cont'd…/

Increasingly unpredictable weather conditions, including severe wind driven rainfall, are becoming more commonplace. This is resulting in previously unrecorded instances of damp related defects, sometimes occurring in areas previously unaffected. To help reduce the impact of such largely unforeseeable issues, you need to ensure that all external elements of the building are adequately maintained, including the walls. This in turn will help prevent water penetrating internally.

B2 External Walls

The majority of the external walls to the ancillary buildings are formed from random coursed dressed shale stone / poor quality slate stone ashlar and are in serviceable condition commensurate with the age of the buildings.

Ashlar walls are constructed from dressed stone to either face with a rubble infill and in this instance the walls area approximately 500mm thick.

Walls to the Field Work Room are formed in solid masonry which has been rendered externally.

Walls to the Auditorium are formed (at least in part) from cavity blockwork which has been strengthened by the inclusion of steel props between the rear wall and that of the retaining structure (as viewed from the covered passageway).

To the ashlar walls, there is evidence of eroded, friable and missing mortar to the joints of the external walls in various areas comprising the former stable's gable end walls and in various locations to the three-storey annex and to a lesser extent, the two-storey annex.

B CONDITION OF STRUCTURE AND FABRIC

B2 External Walls Cont'd…/

We recommend that repointing is undertaken within the short term in order to reduce the likelihood of penetrating dampness within the accommodation.

When repointing is carried out, it is important that the joints are raked out sufficiently, usually to a depth not less than 20mm so that the new mortar is given sufficient key. Failure to do this can result in the new mortar cracking and falling out over a relatively short timescale. The new mortar should not be too weak, but conversely it should not be stronger than the masonry to which it is applied, as this can cause deterioration of the masonry and sometimes damp penetration. This remedial work should therefore only be entrusted to a contractor experienced in working with heritage buildings.

We noted that in some areas, as is typically found, the mortar mix used in the repointing has a cement content that would not be present in the original mix and is therefore rather "hard". The original mortar would have had a mix incorporating lime to maintain breathability and a degree of flexibility to accommodate movement. Over the longer term the cement-based mix might result in earlier deterioration of the adjoining masonry and could lead to problems with water penetration.

The Auditorium's rear blockwork wall has a number of holes within it which should be "made good". Furthermore, whilst the steel props supporting the rear wall are galvanised in order to prevent corrosion, this protective covering can be easily damaged and the steel exposed. We therefore recommend they are treated with an appropriate proprietary rust inhibiting paint system.

The rough cast render to the Field Work Room was in broadly satisfactory condition commensurate with the age of the building.

B CONDITION OF STRUCTURE AND FABRIC

B2 External Walls Cont'd…/

Render is by its very nature a brittle material often affected by cracking. We recommend you anticipate the need for periodic crack repairs which should be undertaken when necessary in order to prevent rainwater from penetrating.

Some of the low level lead flashings to the front elevation of the Field Work Room were partially detached which will require reinstating.

A damp proof course (dpc) is a layer of an impervious material, incorporated in the main walls, near ground level, so as to prevent ground moisture from rising into the building.

As well as the provision of a dpc, it is important to ensure that a suitable gap exists between it and the ground level. Good building practice dictates that a gap of two brick courses (150mm) should be maintained.

Where it is not possible to verify the position of the dpc (or indeed whether one exists) a gap of 150mm should be maintained between the ground level externally and the floor level internally.

B CONDITION OF STRUCTURE AND FABRIC

B2 External Walls Cont'd…/

To the ashlar walls, we could find no evidence of the inclusion of a dpc which is often typical of buildings constructed at this time.

Equally, we could not ascertain whether the Field Work Room incorporates a dpc because the render on the walls extends to the ground thus covering any dpc which may be included.

When render extends below the level of the dpc, it is known as 'bridging' the dpc which can give rise to problems with dampness. Whilst we did not identify any dampness to the inner face of these external walls, as a precaution render covering the dpc should be removed and a bell mouth drip detail formed at the base of the render above the dpc, designed to encourage rainwater to fall away from the base of the wall and thereby reduce the chances of dampness penetrating.

The parapet wall to the three-storey annex's front elevation was in poor condition and is likely to require rebuilding within 2 years or so. This is unsurprising given the exposed location of parapet walls which are therefore suspectable to the elements and frequently "weather" more quickly than other external areas. Even after its reconstruction, the need for more frequent future maintenance compared with other areas is inevitably.

B3 Roof Coverings, Chimney Stacks and Flues

The pitched roof slopes are covered in slate tiles with angled ridge and hip tiles. Valleys, valley gutters and weatherings are formed in lead sheeting.

The roof slopes are generally in serviceable condition commensurate with their age.

B CONDITION OF STRUCTURE AND FABRIC

B3 Roof Coverings, Chimney Stacks and Flues Cont'd…/

We noted some minor quantities of moss and other vegetation to some slopes and verges which should be periodically removed as their presence can often lead to blockages within rainwater fittings below and damaged verge mortar.

The pitched roof slopes associated with the building containing rooms 27 – 29 are relatively shallow (approximately 18 degrees).

The slope to the roof is possibly too shallow for the covering and this may result in water penetration. To keep water out, tiles / slates need to be properly overlapped and laid on a steep enough slope. If not, wind driven rain and snow can penetrate between the tiles / slates, especially in stormy weather.

We recommend that an intrusive inspection is undertaken by a roofer in which parts of the roof area are opened-up and a report submitted including recommendations regarding the appropriateness of the roof covering in relation to the roof slope's pitch. Subject to their recommendations, it may be necessary for remedial work to be undertaken including the possibility of replacing the roof covering with a type better suited to the slope.

This work is likely to require Building Regulations approval from the Local Authority. To meet current standards, it might prove necessary to carry out additional work (for example strengthening the roof structure, improving thermal insulation, etc). This can make the work more costly.

The ridge tiles to the majority of the buildings appeared to have missing / eroded mortar joints which could allow penetrating dampness within the roof void and accommodation below. We recommend that the ridge tiles are lifted and re-bedded and pointed using a suitably gauged mortar.

B CONDITION OF STRUCTURE AND FABRIC

B3 Roof Coverings, Chimney Stacks and Flues Cont'd…/

The 3 pitched roof dormers associated with the former stables are covered in slates and angled ridge tiles to match the main roofs. They were in a satisfactory state of repair.

There is a mono-pitched roof to the rear left-hand corner of the green roof immediately above the AV room. The roof framework is constructed from powder-coated metal and incorporates glazed roof sheets which are in turn supported on rendered blockwork walls and lead flashings provide the weathering detail.

It is generally in serviceable condition, however, we noted evidence of penetrating damp internally which may relate to the lack / missing lead flashings at the junction with the green roof. We recommend that these are reinstated within the short term and that a robust weatherproofing detail is designed and formed with the former stable's green roof.

Valley gutters can be particularly prone to problems. During heavy rainfall or a heavy covering of snow the linings / defences can be breached resulting in rainwater penetration. Whilst we found no evidence to suggest this is likely to happen on a regular basis, exceptional conditions might reveal shortcomings. Regular checks are recommended, and valley gutters should be kept clear of obstruction on a regular basis.

We noted debris to (leaf litter, etc) to clogging a number of the valleys and valley gutters which should be cleared. Particularly of note was the valley to the rear roof slope of the two-storey annex which in allowing penetrating dampness which is manifesting as water-staining to the ceiling below.

B CONDITION OF STRUCTURE AND FABRIC

B3 Roof Coverings, Chimney Stacks and Flues Cont'd…/

Additionally, the three-storey annex's valley gutter was showing evidence of ponding water and was beginning to reach the end of its serviceable life. We recommend that it is reboarded, the frame adjusted to improved falls and the lead lining renewed. Two new outlets and a lead-lined chute should also be installed as the existing central outlet is susceptible to blockages.

The flat roofs are covered in lead sheeting and a green roof system.

The lead covered flat roof over Room 15 appeared superficially to be in serviceable condition, however, we noted evidence of penetrating dampness to the accommodation immediately below and further investigation and remedial work will be required within the short term.

The green roof is located over the auditorium which is a rear addition to the former stable block and is in poor condition.

It is built up with a layer of vegetation, beneath which is a filter fabric, plastic profiled drainage panels, solid insulation batts, EPDM roofing membrane (providing the waterproofing layer) and the concrete structural deck.

There is evidence of water penetration to the underside of the structural concrete deck, the extent of which could not be ascertained due to the provision of a suspended ceiling and a large quantity of services running within the void. We recommend that the green roof system is replaced within the short term to prevent any further damage to the structural deck and extended over the passageway. We also recommend that the EPDM single ply system waterproof layer is substituted for a hot melt waterproof layer which will bond to the concrete deck, is quick to install and comes with a long warranty. For more commentary refer to the dampness section of this report.

B CONDITION OF STRUCTURE AND FABRIC

B3 Roof Coverings, Chimney Stacks and Flues Cont'd…/

We also noted from a vantage point within a trench/passageway between the auditorium's rear external wall and the hillside, that the EPDM waterproofing layer stopped short of the rear wall. The effect of which allowed penetrating dampness within the trench/passageway and through the structural concrete deck.

To the rear left-hand corner of the flat roof is a services duct where various data and power cables are located. The duct has been covered by a loose-fitting piece of slate which only provides superficial protection against penetrating dampness and is therefore only considered a temporary solution. We recommend that a permanent and more satisfactory form of weather proofing detail is formed in order to prevent the ongoing water ingress within this area and should be done in conjunction with main re-roofing works to the flat roof.

For further commentary and recommendations regarding water penetration refer to the Dampness section of this report.

The UK is experiencing regular extreme weather events, which until quite recently only used to happen on rare occasions. This includes unusually heavy and sustained rainfall, sometimes with the added threat of high winds. The vast majority of buildings were not designed or built to cope with events of this type, and as a result there are increasing numbers of cases of water ingress. This is particularly the case where roofs are flat, but it can also affect pitched roofs, valley gutters, etc. For that reason, it is important to ensure that roofs are kept in good repair, rainwater outlets are regularly cleared, and that the adequacy of rainwater fittings is monitored and improvements made as necessary, to reduce the risk of leaks/flooding. Even with such measures in place, no guarantees can be given that you won't experience problems.

B CONDITION OF STRUCTURE AND FABRIC

B3 Roof Coverings, Chimney Stacks and Flues Cont'd…/

You should ensure that your buildings insurance policy covers you in the event that a claim for storm damage becomes necessary.

B4 Rainwater Disposal Systems

These consist of a mixture of cast metal and uPVC gutters and downpipes which drain to sealed and open gullies. We found no evidence of serious disrepair but it was not raining sufficiently heavy at the time of our inspection and therefore we are unable to confirm their adequacy. Nevertheless, whilst they appear capable of disposing of rainwater in all but exceptional conditions, we did note a number of leaking / stained joints which indicate that seals between components have perished. These should be replaced and you should ensure gutters and downpipes are kept clear of obstruction. We also noted evidence of defective fittings particularly to the rear roof slope of the former stable block where a number of downpipes and associated shoes were loose or detached.

To the covered walkway, which abuts the Field Work Room, there were missing downpipe connections and to the rear roof slope a gutter had been inappropriately formed from a section of plastic ducting, did not have stop ends or a downpipe connecting to appropriate below ground drainage. These items will need to be repaired / renewed within the short term.

We also noted some minor corrosion of the cast metal rainwater goods which can be addressed during the course of future routine decoration.

B CONDITION OF STRUCTURE AND FABRIC

B4 Rainwater Disposal Systems Cont'd…/

Inadequate disposal of rainwater can cause serious problems in a building including damp, timber decay and structural movement. Ensuring gutters, downpipes and the drains to which they connect are adequate to cope with increasingly unpredictable weather events and are kept in good repair and clear of obstruction is always important.

B5 Doors and Windows

These consist of timber framed casements which incorporate single glazing and are in variable condition. The paint finish of many items is heavily weathered, blistering and delaminating and in some instances exposing the timber substrate. There is also evidence of sporadic decay to parts of the frames. This is particularly evident to windows within the three-storey annex and will require the decayed sections cut out and new timber spliced in as necessary. These repairs should be undertaken within the short term in order to reduce the risk of water ingress.

A number of the windows to the rear elevation of the three-storey annex have reached the end of their economic life and require renewal. Like all maintenance activities, a stage is reached where the level of performance and cost of repair no longer justifies keeping the components, and replacement becomes increasingly viable. These windows are W23, W35, W46 and W52.

Where you replace a complete window or glazed door it will have to conform to modern standards. You will either need Building Regulations approval from the Local Authority or use a contractor registered with FENSA or another Government approved trade association whose members can self-certify that installations meet the standards of the Building Regulations.

B CONDITION OF STRUCTURE AND FABRIC

B5 Doors and Windows Cont'd…/

The windows are generally single glazed. The provision of double glazing would help to reduce heat loss and external noise and Conservation compliant components are available which are likely to be acceptable by the local authority's Conservation Officer.

Roof Lights

Roof lights to the former stable block are of composite construction and incorporate double glazed units and are in serviceable condition.

The roof lights to the Field Work Room are also of composite construction and incorporate double glazed units.

To these items, we noted evidence of failed hermetic seals. This causes a build-up of condensation between the two panes of glass, thus reducing their thermal and acoustic insulation qualities and impacting on their aesthetic appeal. Other windows may well follow suit. Repairs are possible in some instances, but generally speaking replacement units will be necessary as this occurs.

We also noted evidence of penetrating damp via the roof lights which manifested itself as water staining to adjacent plasterboard finishes within the accommodation below. This will require further investigation and repair as necessary and may be a consequence of a defect to the apron flashings. We recommend these repairs are undertaken within the short term.

B CONDITION OF STRUCTURE AND FABRIC

B5 Doors and Windows

Roof Lights Cont'd…/

Rooflights to the building containing rooms 27 – 29 and the two-storey annex are constructed from a metal framework incorporating Georgian-wired single glazing with weatherings formed from lead flashings and they have reached the end of their economic life.

Refer to comments within the roof covering section of the report regarding the building containing rooms 27 - 29. If, following further investigation, the slate coverings are found to be adequate for the pitch of the roof we recommend that the roof lights are simply removed and slated over given that there is a new horizontal ceiling within the accommodation below which negates the need for these items.

There is evidence of penetrating dampness via the roof light associated with the two-storey annex's rear slope as seen from the stairs connecting the two and three-storey annexes. This should be attended to within the short term.

Doors

The external doors are formed from a timber framework incorporating single glazed panes and are broadly in serviceable condition.

We noted that the paint finish was generally weathered, delaminating and exposing the timber substrate below in some instances. There were other instances of isolated areas of decay and loose thresholds, all of which will require attention within the short term.

B CONDITION OF STRUCTURE AND FABRIC

B5 Doors and Windows

Doors Cont'd…/

In keeping with the comments made in the sections above, we recommend that external redecoration of all timber components is undertaken within the short term and thereafter on a continual three to four yearly basis, in conjunction with appropriate overhauling works.

External door D14 which is located on the three-storey's annex's rear elevation to the first floor, has reached the end of its economic life and could allow penetrating damp, is potentially insecure and poses a security risk.

We recommend that the door and the associated frame is renewed within the short term.

B6 Metalwork, Woodwork and Paintwork

The eaves joinery fittings (which include soffits, fascias and bargeboards) have been formed in timber.

Given their height above ground level few were accessible. We noted no obvious evidence of serious disrepair, but rot can be found behind gutters and elsewhere; you should anticipate the need for some repairs when redecoration is undertaken, which we recommend you organise soon.

There are some localised areas of decay to the roofline joinery such as a section of bargeboard associated with Field Work Room's rear roof slope which will require cutting out and a splice repair undertaken. There is also a box end associated with the three-storey annex's rear roof slope which will also require repair.

B CONDITION OF STRUCTURE AND FABRIC

B6 Metalwork, Woodwork and Paintwork Cont'd…/

In keeping with the comments made in the sections above, we recommend that external redecoration of all timber components is undertaken within the short term and thereafter on a continual three to four yearly basis, in conjunction with appropriate overhauling works.

The cost of this work will be high due to the size / number of buildings and the quantity of components that will need maintaining, resulting in the need to use scaffolding or scaffold towers.

B7 Chimney Stacks

There are 3 chimney stacks associated with the ancillary buildings, one of which is located on the right-hand gable end of the three-storey annex, whilst both the second is positioned centrally on the ridge and the third is situated to the rear slope of the two-storey annex. They are constructed from dressed stone and incorporate clay chimney terminals with weatherings formed from lead flashings. They are generally in serviceable condition.

The chimney associated with the three-storey annex is redundant and has been partially dismantled and capped in lead sheeting. In order to prevent the risk of condensation within the flue, we recommend that the flues are fitted with external cowls or half round ridge tiles and then the lead sheeting can be reformed over. The blocked up fireplace within the accommodation below should also be fitted with a vent at low level in order to provide the cross - flow ventilation of the flue.

B CONDITION OF STRUCTURE AND FABRIC

B7 Chimney Stacks Cont'd…/

The chimneys to the two-storey annex will also require fitting with cowls in order to prevent penetrating damp within the accommodation below. We also noted there was a moderate quantity of vegetation around the upper courses of the chimney stacks and we recommend that this is removed and if necessary, the flaunching (the sloping fillet of mortar embedding the base of the chimney pots) may also need to be reformed.

By their very nature chimney stacks are susceptible to the elements and frequently "weather" more quickly than other external areas; the need for future maintenance and repairs is inevitable.

C INTERNAL FABRIC

C1 Roof Spaces

Given the vaulted nature of the former stable block, we were unable to inspect the roof framework and are therefore unable to report to you concerning levels of insulation, the condition of the framework in this area, etc. No areas of serious defects were apparent from those areas which were visible.

To the green roof associated with the auditorium, there were hatches within the AV room and auditorium which were opened in order to inspect the structural concrete deck, however, the quantity of services located within the void, severely reduced visibility of the roof structure itself. There were also further hatches which were unopened of which there were 3 in the foyer and 1 in the kitchen.

To the structural concrete deck within the immediate vicinity of the AV room's hatch, there was evidence of water staining due to penetrating dampness between the concrete roof deck sections, staining to the underside of the hatch immediately below and powdery/flaking paint finish to the steel beam in the immediate vicinity.

A handheld moisture detecting meter was used to test the stained loft hatch which indicated that the material was dry and therefore the water staining to the structural deck immediately above may be historical, however, we refer you to our comments in Section B3 Roof Coverings of the report.

Within the Field Work Room, much of the roof framework was hidden by plasterboard finishes except for 2No timber king trusses and 4No purlins which therefore limits the commentary we can provide. Those parts of the roof framework which were visible, however, appear to be performing adequately with no serious defects apparent.

C INTERNAL FABRIC

C1 Roof Spaces Cont'd…/

To the building containing rooms 27 – 29, there were access hatches in the lobby, corridor and room 29. The original roof was vaulted with much of the roof framework hidden behind timber cladding, although where the roof appears to have been extended / adapted to provide a covered walkway, more of the roof structure was visible.

The hand cut timber framework comprises rafters, purlins and where visible it appears to be performing satisfactorily. Although we could not identify and fixings between the original rafters and that of the new rafters (associated with the covered walkway). When further investigation is undertaken to the roof covering rafter fixings should also be identified and if not present coach-bolts used to secure the rafters together.

We noted evidence of water staining to the timber cladding in various areas which were tested with a handheld moisture detecting meter and indicated the timber was dry and therefore any water penetration is likely to be historical and presumably predates the newer roof covering.

There was also evidence of water staining around the roof lights, however, due to restrictions in access, we were unable to identify if this is also historical or ongoing.

We refer you to comments regarding both the roof and roof lights in sections B3 Roof Coverings and B5 Windows of the report.

The roof is provided with a secondary protective breather membrane. Where visible, it is in satisfactory condition with no notable defects present.

C INTERNAL FABRIC

C1 Roof Spaces Cont'd…/

Insulation levels are generally satisfactory, however, much has been displaced, presumably due to maintenance related activities. We recommend that it is reinstated / re-laid as necessary.

Access to the roof voids in the two and three-storey annexes were provided by hatches within rooms 17, 19 and 22. There were also hatches within the three-storey annex's stairwell and communal bathroom on the second floor which were inaccessible.

The hand cut timber framework comprises rafters and purlins. Where visible, it is performing satisfactorily.

Within the three-storey annex, instead of a layer of felt or a different "sarking" material, the tiles are secured directly over timber boards, known as close boarding. The boards will act as a secondary protective layer to some extent but will not be as effective as a modern sarking. This is not a defect, but it means that it is particularly important to maintain the tiles to reduce the chances of rainwater penetrating. Boards are likely to be damp stained periodically which is normal; no excessive penetration was noted.

We noted sporadic minor areas of water staining to the timber boarding but this is currently not of concern.

There was also a small area of damage to the boarding within the vicinity of the hatch within room 19 and there is associated water staining to the surrounding timberwork. This area appears to have been patched with a Bituminous / hessian sarking felt and a new section of rafter has been pieced in. It is possible that the water staining precedes the repair, however, due to inaccessibility this could not be confirmed.

C INTERNAL FABRIC

C1 Roof Spaces Cont'd…/

Sarking felt exists as a secondary protective membrane. This is laid above the rafters and beneath the battens over which the tiles are secured externally. Its presence will significantly reduce the opportunity for water to penetrate, no active evidence of which was apparent.

The sarking layer to the two-storey annex comprises a breather membrane to the front slope and a Bituminous / hessian layer to the rear slope. It is in broadly satisfactory condition with no notable defects present where visible.

To the rear roof slope within close vicinity of the hatch within room 17, there were approximately 4m^2 which lacked a sarking layer. The lack of sarking layer within this area does render this part of the roof at risk of damp penetration and inevitably results in more of a build up of more dust and dirt within the roof space. You may, therefore, wish to strip this area of the roof in order to install a patch of sarking layer prior to recovering.

Insulation layers are generally satisfactory within these roof voids.

We also recommend ventilation is provided to prevent a build-up of moisture laded air which can condensate on cool surfaces and damage the structural timber framework and reduce the thermal performance of loft insulation. This can most effectively be achieved by the incorporation of proprietary ventilated tiles to the front and rear roof slopes.

C INTERNAL FABRIC

C1 Roof Spaces Cont'd…/

During our inspection of all the loft areas, as is becoming increasingly commonplace, we came across evidence of vermin/rodent or similar activity. This was apparent from extensive mouse droppings across the loft insulation in the roof voids. Such activity can represent a potential health and safety hazard. You should take steps to investigate this further by engaging a suitable specialist. Costs could be incurred in sealing any openings through which they might enter the loft, removing faeces and/or spoiled insulation products, checking there is no contamination to any water storage vessels, and ensuring that any damage that may have been sustained to electrical cables is dealt with by a qualified electrician. In the less likely event that there is bat activity, advise should also be sought as they are a protected species which can impact on use of lofts, etc.

C2 Ceilings, Walls and Partitions

Ceilings

The plasterboard ceilings are finished in textured and smooth coatings. There are also suspended ceilings incorporating ceiling tiles.

The ceilings generally presented a range of typical minor imperfections including small cracks, visible fixings, etc in isolated locations. No evidence of unusual or serious defects were visible.

C INTERNAL FABRIC

C2 Ceilings, Walls and Partitions

Ceilings Cont'd…/

There was evidence of water ingress which manifested as water-staining as identified around the roof lights of the rear slope of the Field Work Room, to room 26 (where an area of the ceiling had been removed), to an area of the kitchen ceiling within the caretaker's flat and to the ceiling over the stairs connecting the two and three-storey annexes. Repairs should be undertaken within the short term. For further commentary refer to the Dampness and B3 Roof Coverings sections of the report.

Our inspection revealed no further obvious evidence of staining (which might otherwise have indicated water leaks or similar, but these often only become visible in certain light conditions and / or at certain times of the day.

The textured ceiling coatings within the three-storey annex's corridors may contain asbestos, sometimes incorporated in such applications until comparatively recently. Unless a finish is disturbed the risk to health is considered low and you should therefore not be unduly concerned. For further advice, please refer to section C8 Asbestos of the report.

Internal Walls

The internal walls and partitions are a mixture of ashlar, masonry and timber studwork lined with plasterboard. They are generally free from serious disrepair where visible although there are areas which have evidently been affected by dampness within the former stable block, the building containing rooms 27 – 29 and the two and three-storey annexes. For further commentary, refer to the dampness section of the report.

C INTERNAL FABRIC

C2 Ceilings, Walls and Partitions

Internal Walls Cont'd…/

We were not surprised to encounter a number of areas where the plaster is loosely keyed, cracked and/or uneven. As redecoration is undertaken in future, you should set aside a budget for carrying out some areas of replastering, although this is unlikely to be particularly extensive, unless a perfect finish is required.

C3 Doors, Windows and Woodwork

Doors

The internal doors are generally in satisfactory order requiring only minor adjustments / improvements, however, there were some specific exceptions.

The ensuite door in room 17 was warped and does not latch and we recommend this is renewed.

The rear reception room door within the caretaker's flat has loose ply panels to either face which catch on the damaged floor finish below the door swing. We recommend the door is renewed within the short term.

The kitchen door associated with the caretaker's flat incorporates a glazed pane. We found no markings to confirm it is toughened or safety glass and therefore poses a risk to the young or infirm. We advise you to replace the glass with appropriate glazing to reduce the risks or renew the door in its entirety.

C INTERNAL FABRIC

C3 Doors, Windows and Woodwork

Doors Cont'd…/

To the bedrooms within the two and three-storey annexes, door handles to all fire doors had been replaced which has compromised their fire retardancy. Other damage is also evident to a number of the fire doors which will require remediation within the short term. For further commentary and recommendation, refer to section C10 Fire Safety of the report.

Windows

A sample test of the windows revealed that a number were stiff in operation and would benefit from easing and adjusting.

The window boards to W18 and W21 were decayed and require renewing.

Woodwork

Woodwork items including architraves and skirting boards etc are in generally reasonable condition, save for relatively minor wear and tear as is fairly typical in an occupied property.

We were not surprised to find evidence of woodworm during our inspection. It was visible to the timber stalls within the former stables and to the timber lintel over window W18 and may be present elsewhere.

The presence of wood boring insect infestation (commonly referred to as woodworm) in a property of this age is quite common and it would be unusual if it had not affected the property at least to some extent.

C INTERNAL FABRIC

C3 Doors, Windows and Woodwork

Woodwork Cont'd…/

In the first instance, we recommend you ascertain whether the buildings have ever been treated against such infestation. If so, you should obtain details in this respect and find out whether a transferable insurance backed guarantee against any future outbreak was obtained. Failing this, and in the event that current activity is encountered following occupation, it may be necessary to carry out remedial treatment. However, assuming you ventilate and heat the property adequately the chances of serious recurring activity is considered to be fairly low.

During the course of our inspection, we came across evidence of wet rot to internal timbers, specifically the timber wall panelling which was still intact within the three-storey annex where it has been subject to penetrating damp or leaks and does not benefit from a vertical damp proof membrane.

Additionally, it is not possible to rule out the existence of such defects elsewhere as they may be present in areas which are inaccessible such as floor voids.

Timber panelling will require renewing in rooms 21 and 26, once the source of dampness is stopped and the walls have dried out.

C4 Internal Decorations

The standard of decoration is variable but generally redecoration is not considered necessary at this time except for those areas where dampness remedial works will be necessary.

We also recommend a budget be set aside for future cyclical redecoration.

C INTERNAL FABRIC

C5 Floors, Ramps, Staircases and Balconies (and permanent coverings ie quarry tiles)

Floors

The solid concrete ground floors and suspended timber upper floors are covered in slate flags, block paving, carpet sheeting / tiles, vinyl sheeting and quarry tiles.

Underfoot and where accessible, they felt no less level and stable than we would anticipate in buildings of this age.

We detected a broken floorboard within the three-storey annex's first floor corridor which should be repaired within the short term but otherwise no serious defects were apparent.

We noted what appear to be thermoplastic or similar tiles beneath the carpet tiles of the aforementioned damaged floor. This type of product and sometimes the adhesive below it can contain asbestos. We refer you to section C8 Asbestos of the report.

Some of the grout is missing to the slate floor within the former stable block's lobby. We recommend this is regrouted during the course of routine maintenance.

There are some water-stained / soiled floor coverings in various locations such as the former stable block's side foyer, disabled WC, kitchen and the caretaker's flat which will require renewal within the short term.

C INTERNAL FABRIC

C5 Floors, Ramps, Staircases and Balconies (and permanent coverings ie quarry tiles)

Floors Cont'd…/

There are also loose floor coverings to the communal bathroom and WC's within the three-storey annex's first and second floors and loose carpet sheeting to the landing on the first floor, all of which may pose trip hazards and should be repaired / replaced within the short term.

There is always a risk that water will have damaged the floors and adjacent components particularly below and around sanitary and / or kitchen fittings, water tanks, etc, due to defective seals, careless use and spillage, etc. If / when such fittings and floor coverings are replaced, repairs may prove necessary.

When the floors were tested with a handheld moisture detecting meter, we identified dampness in a number of areas including the former stable block's AV room, the lobby immediately adjacent to the auditorium and within the caretaker's flat's rear reception room and bathroom floors. For further commentary, refer to the Dampness section of the report. Once the source of dampness has been remedied, the floor should be allowed to dry out before the floor coverings are renewed.

Staircases

Within the former stable block is a spiral staircase. Due to the gaps between the treads and the balusters, they pose a risk to the very young, therefore, we recommend that you either adapt the staircase or renew it in its entirety.

C INTERNAL FABRIC

C5 Floors, Ramps, Staircases and Balconies (and permanent coverings ie quarry tiles)

Staircases Cont'd…/

The flight of stairs within the three-storey annex has horizontal balusters which represent a potential climbing hazard for children, therefore, we recommend that the stairs are adapted to more compliant vertical components. Additionally, there is approximately a $1m^2$ gap on the landing between the first and second floor where there are no balusters. This area is close to a window and a drop to a floor below, which represents a potential health and safety hazard. We recommend this is also addressed within the short term by the installation of vertical balusters.

There is also a flight of stairs between the two and three-storey annexes. The straight flight timber staircase felt firm underfoot and the handrail secure.

C6 Fixed Furniture and Fittings

The auditorium's fold down seating was in a satisfactory state of repair.

The kitchen fittings within the former stable block and the caretaker's flat had reached the end of their economic life and we recommend they are renewed within the short term.

Where present, the various fitted cupboards were in satisfactory order.

The worktops and associated Belfast sinks within the Field Work Room were somewhat worn but in serviceable condition.

C INTERNAL FABRIC

C6 Fixed Furniture and Fittings

The sanitaryware associated with the wet room within the building containing rooms 27 – 29 was somewhat worn and we recommend this be replaced within the medium term.

As a general comment, wet rooms do have inherent limitations / issues. There is a potentially greater risk of damage given the increased floor area onto which water is collected and accessing the room following use of the shower will mean visitors getting wet feet / shoes.

The communal bathrooms and WCs within the first and second floors of the three-storey annex were somewhat worn and the bathtubs stained and the shower screens loose. We recommend that the sanitaryware is upgraded within the short term. We also note that the cisterns associated with the WC in these rooms may contain asbestos (based on the labels visible). Therefore, care will need to be taken in their removal / disposal. For further information, refer to the asbestos section of the report.

The bathroom within the caretaker's flat has also reached the end of its useful life and will require renewal within the short term.

The remainder of the sanitaryware in the rest of the rooms appeared to be relatively modern and in satisfactory condition.

We recommend you keep a close eye on the condition of the mastic/silicone seals provided around the perimeter of the sanitary fittings, particularly showers. They have a tendency to leak and allow water to cause damage to adjacent areas.

C INTERNAL FABRIC

C6 Fixed Furniture and Fittings Cont'd…/

There is a risk of legionella infection, particularly in properties/ areas which are vacant and / or hot and cold water systems which have not been used for some time. You should ensure the pipes are thoroughly flushed through in a period of inactivity. For more advice you would need to obtain advice you would need to consult with a specialist including the need for periodic legionella tests.

When various sanitary fittings were operated briefly, water flow appeared reasonable.

The handwash basin in room 21 had a loose tap which will require minor repair.

C7 Below Ground Drainage (Where Visible / Accessible)

The drains have been inspection by First Local Services specialist drainage contractor and they have provided a commentary and recommendations on all below-ground drainage in their summary email appended to this report which we refer you to for more detail.

During the CCTV drains survey, the contractor identified that the below ground drainage is formed from a small quantity of newer PVC in addition to the original clay pipework. The PVC pipework is in satisfactory condition and is providing satisfactory functionality and flow to the system. The clay pipework being contemporary with the buildings is unsurprisingly beginning to show its age.

There is significant medium to large joint displacements between sections of pipework, circumferential cracks throughout the majority of areas and further defects such as scale build up and root ingression. Remediation to the entirety of the clay below ground drainage should be undertaken in the near term. This will comprise a de scale, root removals and installation of CIPP Liners.

C INTERNAL FABRIC

C8 Asbestos

The property was adapted during an era when asbestos containing materials were often incorporated into dwellings. Items we identified that could contain asbestos, include cement board sheeting to the boarded-up fanlights over the fire doors in the first floor of the three-storey annex, textured ceiling coatings and thermoplastic tiles. There may be other asbestos containing materials present. As you are no doubt aware, asbestos represents a hazard to health if it is disturbed or worked on. You should obtain further help and advice which is available from the Health and Safety Executive at www.hse.gov.uk.

Under the control of asbestos regulations 2012, there is an obligation to ensure that all commercial properties are asbestos audited and a management is then introduced as appropriate. Although at the time of our inspection, we were unaware if this had been implemented or not, we assume this is in place and there is an asbestos register which lists all asbestos containing materials within the ancillary buildings. This should be provided to any contractors who are going to undertake works within the affected areas.

C INTERNAL FABRIC

C9 General Comments Considering The Equalities Act (Formerly the Disability Discrimination Act)

This is not an accessibility audit but more so general comments on accessibility relating to the property for guidance purposes only.

We understand the client is considering overhauling and re-rationalising areas of the building to facilitate their future needs. Consequently, it would be important to consider the implications of the Equalities Act and ensuring sufficient access is provided to meet such legislation as is necessary depending upon the extent of the services provided by the Client at the premises and in relation to existing or other means they have for providing such facilities currently.

Depending upon the extent of the services offered by the Client on site, it would be reasonable to consider the duties which include the following:

- A duty not to treat disabled users less favourable than others for reasons relating to their disability.
- A duty to make all reasonable adjustments to the buildings in respect of the fact that it is a listed building and provide its services (including its policies and procedures which must include alternative approaches to ensure offered services are accessible to all) to assisted disabled users.
- A duty to make all reasonable adjustments to the physical features of the buildings which could prevent or restrict disabled people in accessing the property and its services within reason and in consideration of the fact that the building is listed, this will require areas of considering compromise to adjustments to alternative approached to the provision of services potentially provided.

C INTERNAL FABRIC

C9 General Comments Considering The Equalities Act (Formerly the Disability Discrimination Act) Cont'd…/

The following facilities have been provided to ensure disabled access to the ancillary buildings:

- Disabled parking bays and dedicated parking spaces.
- An accessible toilet within the former stable block and an accessible wet room within the building containing rooms 27 – 29.

The fire evacuation procedure should consider how disabled people will be safely evacuated from the buildings and there should be a clear evacuation strategy and accident plans at regular intervals, register of occupants and clearly defined assembly points. There should be regular fire drills, appointed fire marshals and the like and a clarified set of fire procedures for the premises. When repairs and improvements are undertaken, suitable fixtures and fittings should be selected and should be appropriately positioned so they can be operated by all individuals regardless of their physical disabilities.

When routine redecoration is undertaken or redecoration as part of the proposed refurbishment works to these areas inclusive of any alterations, it is important that colour schemes are selected which are sufficiently contrasting for the benefit of the visually impaired. This is also important with regards to stairwells associated with these ancillary buildings.

C INTERNAL FABRIC

C9 General Comments Considering The Equalities Act (Formerly the Disability Discrimination Act) Cont'd…/

We appreciate disabled adaptation is an ongoing process. We recommend that the Client review its policies, practices and procedures regarding facilities and services they provide on site as an ongoing matter which is reviewed on a regular basis and that it implements any obvious changes that needs to occur to reflect reviews and updates of such legislation and good practice. We appreciate this needs to be considered carefully in balance with the fact that the building is listed and at times, a compromise may need to be reached.

C10 Fire Safety

We are not Fire Risk Assessors or Fire Engineers and are therefore not qualified to comment in detail on the provision or adequacy of fire safety measures in the buildings. In addition, standards, codes of practice and statutory requirements which exist are regularly amended, particularly in light of disasters including the Grenfell Tower fire in 2017.

Under the Fire Safety (Regulatory Reform) Order 2005, the duties of the responsible person (s) would include:

- Duty to arrange a competent person to undertake a Fire Risk Assessment.
- Duty to consider who may be especially at risk.

C INTERNAL FABRIC

C10 Fire Safety Cont'd…/

- Duty to remove or reduce risks as far as is reasonably possible and to provide general fire precautions to deal with general residual risks.
- Duty to protect the storage of flammable or explosive materials or substances.
- Duty to create a Fire Action and Fire Evacuation Plan to deal with emergencies including procedures for safely evacuating disabled people (either directly to outside or into a fire safe refugee) for rescue by the fire service.
- Duty to record and regularly review the initial findings.

The following facilities have been provided to improve fire safety:

- Battery powered smoke detection in a number of rooms.
- Self-closing devices to relevant doors.
- Emergency lights in some locations.
- Fire escape signage.
- Fire extinguishers in some areas.
- Heat detectors.

C INTERNAL FABRIC

C10 Fire Safety Cont'd…/

We observed the following deficiencies in fire safety from our general inspection of the buildings:

- Fire doors in the two and three-storey annexes had their handles replaced which had compromised their fire retardancy by leaving screw holes, etc. Some of the cold smoke seals and intumescent strips around the edge of doors were missing or loose, a number of the door closers were broken or failed to shut the doors fully and 1No fire door had damage to its leading edge. The doors will need to be repaired with the Envirograf range of remedial products and the fire door to room 23 should be renewed.
- To three-storey annex's first floor, the fan lights over the fire doors had been blocked up (presumably for fire safety reasons) with a cement board type product. It is unclear whether this provides sufficient fire retardancy and whether the joints between the cement board and the door frames have been sealed with a fire rated mastic. We recommend that further information is obtained and reviewed from your records to ascertain whether this is a suitable repair.

The above list should not be regarded as a comprehensive schedule of all potential deficiencies. We recommend that a Fire Engineer or a Fire Risk Assessor is engaged to undertake a formal Fire Assessment and that remedial works and improvements are implemented within timescales recommended.

C INTERNAL FABRIC

C11 Health and Safety

We have identified from our general inspection of the areas of the ancillary buildings a number of matters which could have some potential implications upon health and safety and we have made recommendations on the remedial works or other actions within the body of the report.

We did note glazing to the kitchen door within the caretaker's flat appeared not to be toughened and could pose a risk to the very young or elderly. We also identified single glazing to windows at low level to the rear elevation of the three-storey annex which could also pose this very same health and safety hazard. For more commentary and recommendations, refer to the doors, windows and woodwork section of the report.

To the stairs between the first and second floor landing in the three-storey annex, there was no baluster and there was an area approximately $1m^2$ which was unprotected, close to a window and a drop. This could pose a hazard to small children. For further commentary and recommendations on remediation refer to the floors, ramps, staircases section of the report.

D THE SITE

The ancillary buildings are located against a South facing steeply sloping site within a valley.

Immediately in front of the ancillary buildings, the ground is relatively flat and there is a service road and hardstanding laid with granite sets and tarmacadam. To the rear of the buildings, the steeply sloping site has been excavated which has exposed the native rock in order to facilitate the erection of the ancillary buildings.

To the rear left-hand corner of the stable block there is a trench which allows access between the rear elevations of the buildings and the hillside. Much of this is challenging to negotiate particularly around the rear and the side of the auditorium as there is structural steelwork providing buttressing.

There are concrete steps running along the right-hand gable of the former stable block which provide access to the Field Work Room and the green roof area over the auditorium.

Running along the rear of the building containing rooms 27 - 29 and three-storey annex is a steel framed walkway which includes balustrades, at a height of first floor level in relation to the three-storey annex. This terminates at a rear entry door.

There are also steps to the front right-hand corner of the buildings which provide access onto the wooded slope and a footpath beyond.

D THE SITE

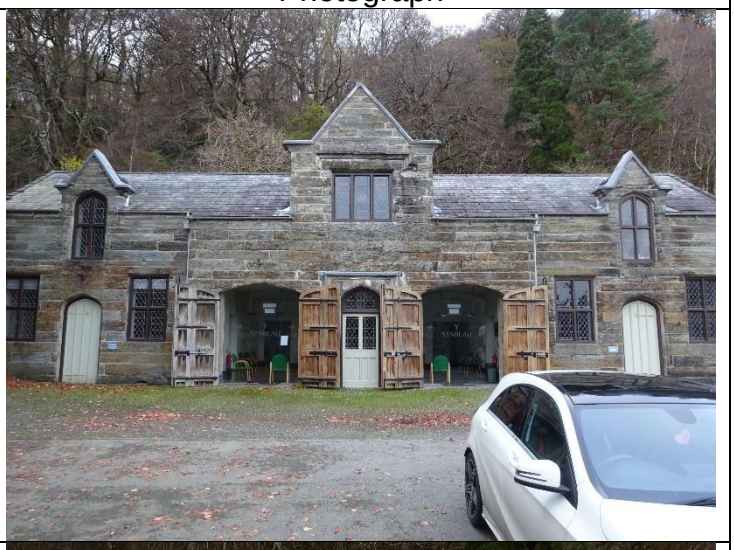
An inspection within an immediate 7 metre radius of the buildings did not reveal the presence of knotweed, but we are not botanists and cannot rule out the possibility that it could exist; it has been identified in an increasing number of gardens in the region. It can be cut back to prevent identification and is not always readily visible. Knotweed can cause damage to properties, paths, patios etc, is often difficult and costly to remove and can affect the value and saleability of homes. For further input you will need to engage the services of an appropriate specialist.

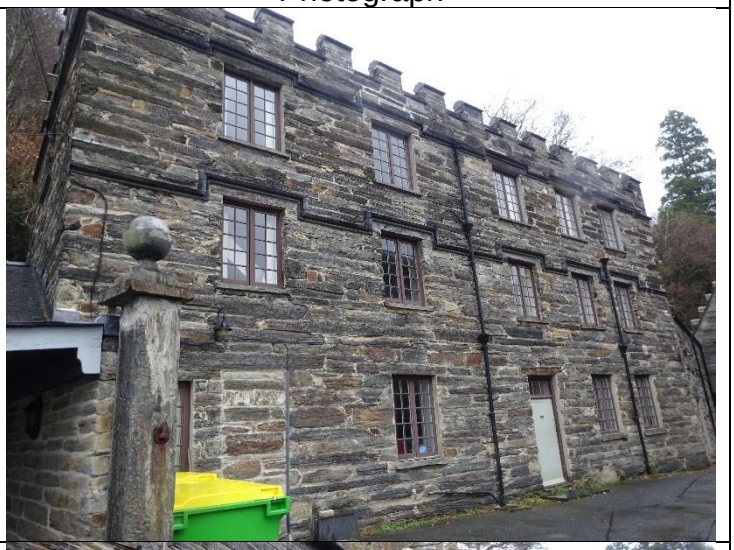
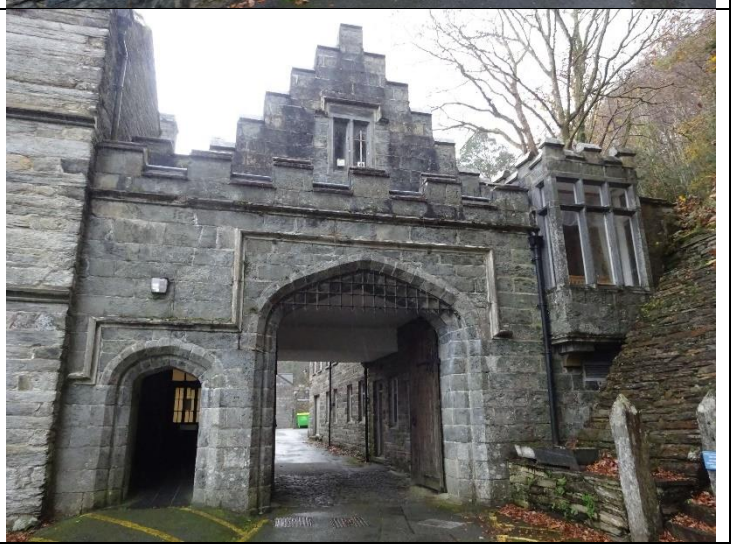
The steeply sloping nature of the site could represent a potential hazard, particularly to the young or infirm. During wet or icy conditions it could be very awkward if not occasionally impossible to navigate.

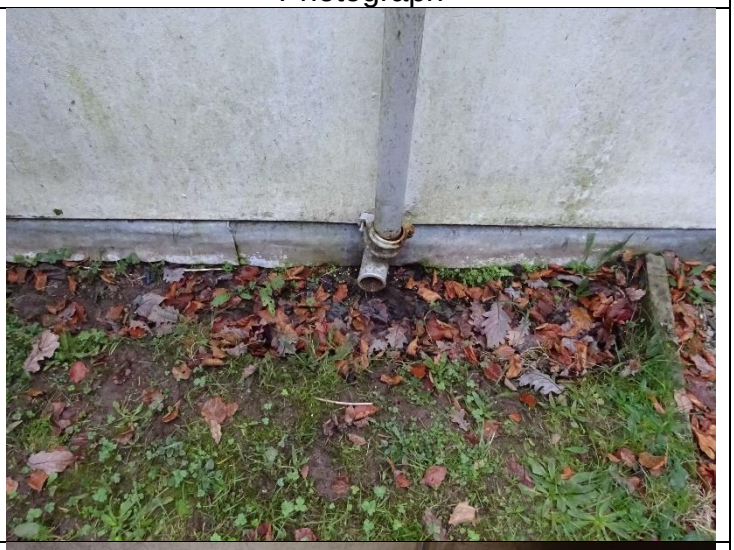
Given the size of the site, we only surveyed those areas of the grounds which were in the immediate vicinity of the ancillary buildings. The grounds appeared to be relatively well maintained and well stocked with mature shrubbery and trees both native and otherwise.

Signed ……..……. Date:

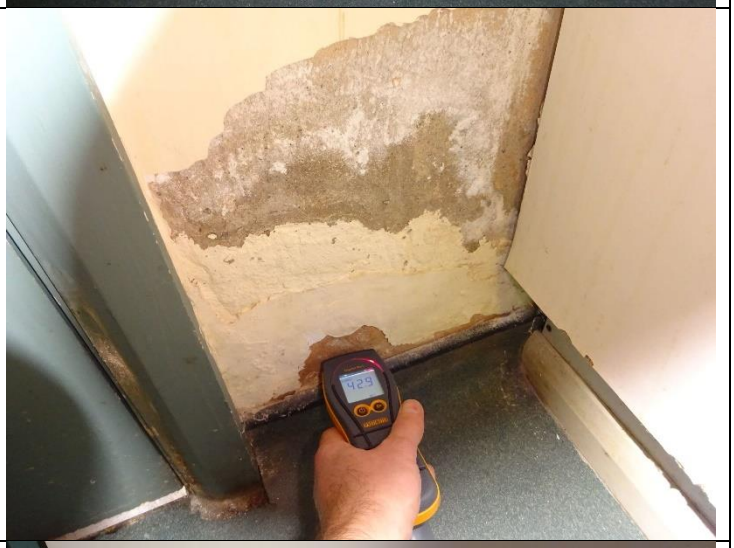
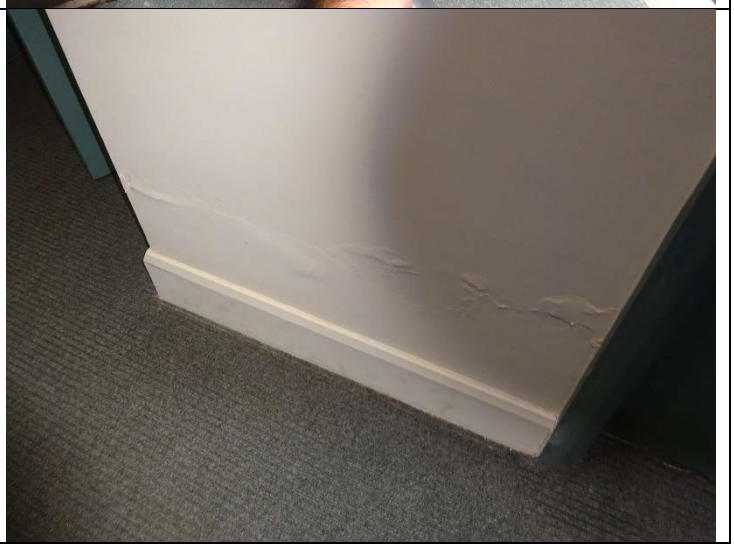
APPENDIX 1
PHOTOGRAPHS

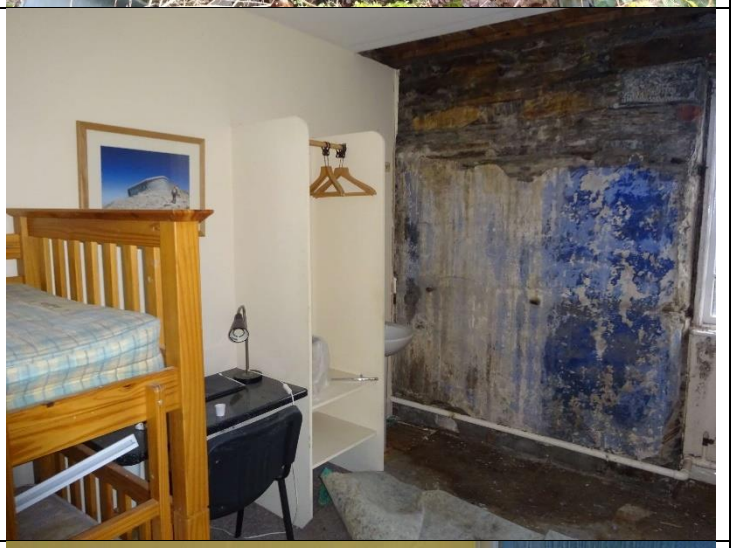
Comments	File	Photograph
Former stables (front elevation).	1	
Field Work Room (front elevation).	2	
Building containing rooms 27 – 29 (front elevation).	3	

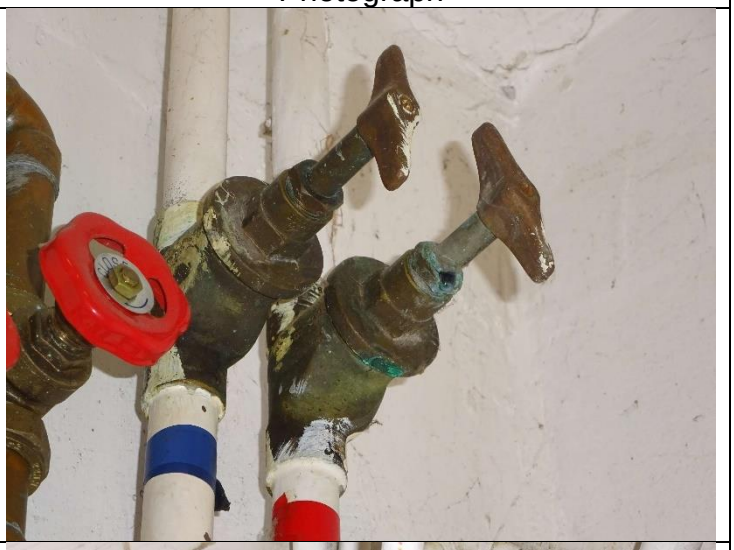
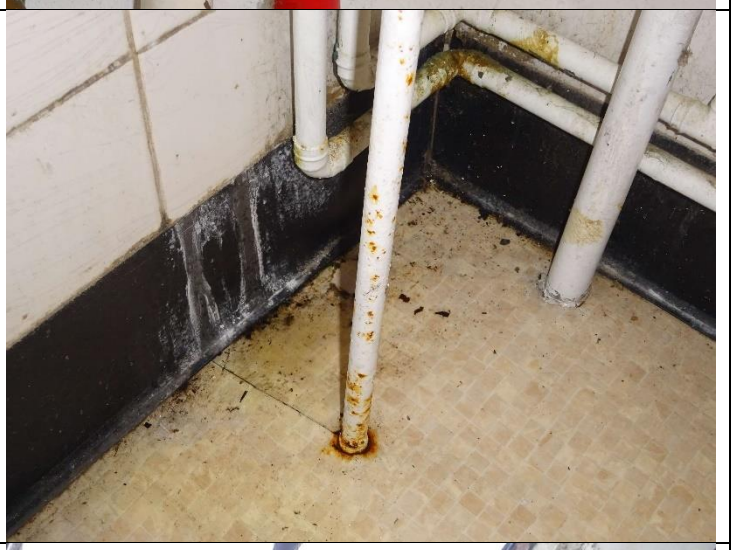
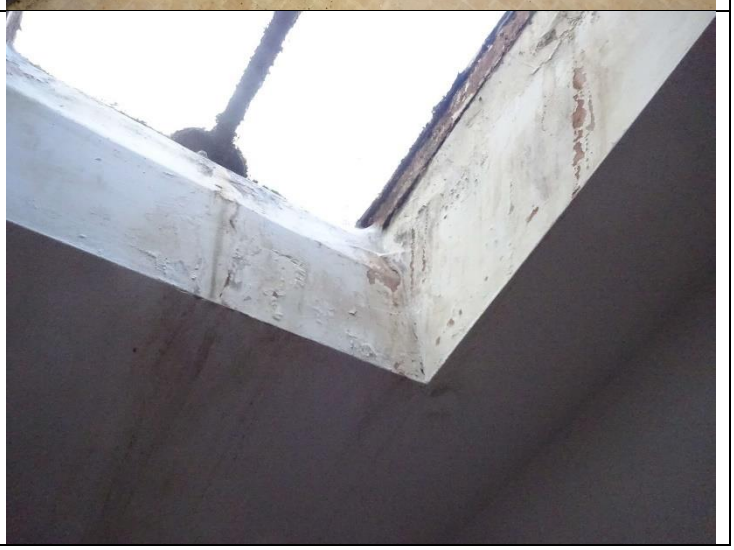
Comments	File	Photograph
Three-storey annex (front elevation).	4	
Two-storey annex (front elevation).	5	
Room 15 (front elevation).	6	

Comments	File	Photograph
Clogged surface water channel over the green roof.	7	
Water staining between the green roof's concrete sections.	8	
Water damaged plaster to wall supporting glazed roof.	9	

Comments	File	Photograph
Loose flashing to glazed roof and poor detailing at green roof junction.	10	
Water damaged skirting boards in AV Room.	11	
Water damaged boxing – in to lobby adjacent to AV Room.	12	

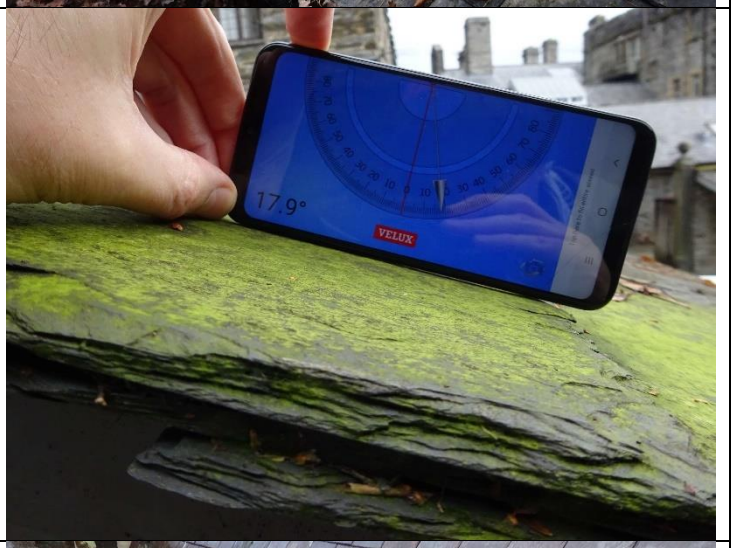
Comments	File	Photograph
Debonding vinyl upstands in disabled WC due to dampness.	13	
Water damaged wall plaster in kitchen.	14	
Water damaged wall plaster in the former stable's side lobby.	15	

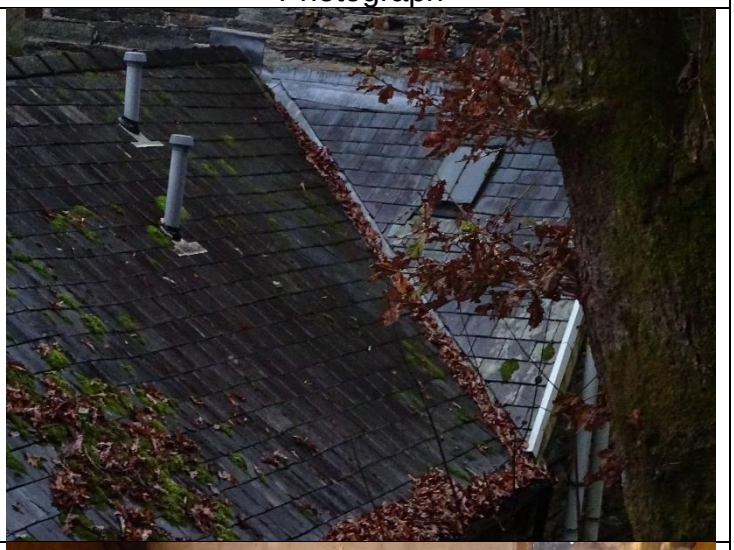
Comments	File	Photograph
Render extending to the ground which could cause dampness.	16	
Water damage to external walls (room 26).	17	
Water damage around ground floor WC / shower room's external walls (three-storey annex).	18	

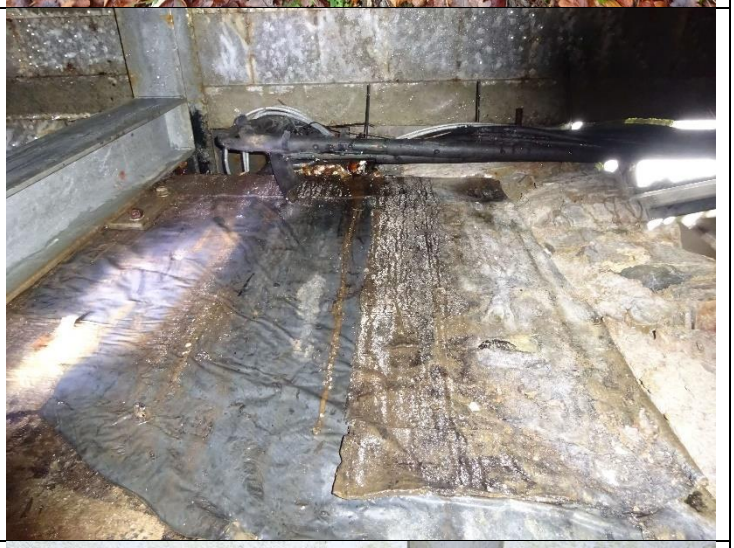
Comments	File	Photograph
Leaking stop tap in Caretaker's flat.	19	
Floor immediately below leaking stop tap.	20	
Water staining around two-storey annex's rooflight.	21	

Comments	File	Photograph
Penetrating dampness to ceiling over room 15's bay window.	22	
Missing / friable mortar to external walls.	23	
Further related image.	24	

Comments	File	Photograph
Inappropriate cementitious mortar repair.	25	
Further related image.	26	
Vegetation growing along roof verge.	27	

Comments	File	Photograph
Shallow roof pitch to building containing rooms 27 – 29.	28	
Further related image.	29	
Partially clogged valley gutter.	30	

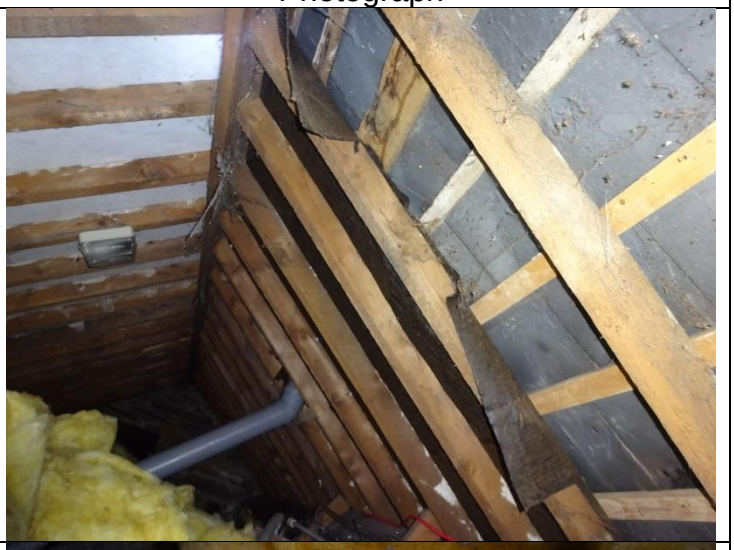
Comments	File	Photograph
Partially clogged valley.	31	
Penetrating dampness through the green roof into the trench / passageway.	32	

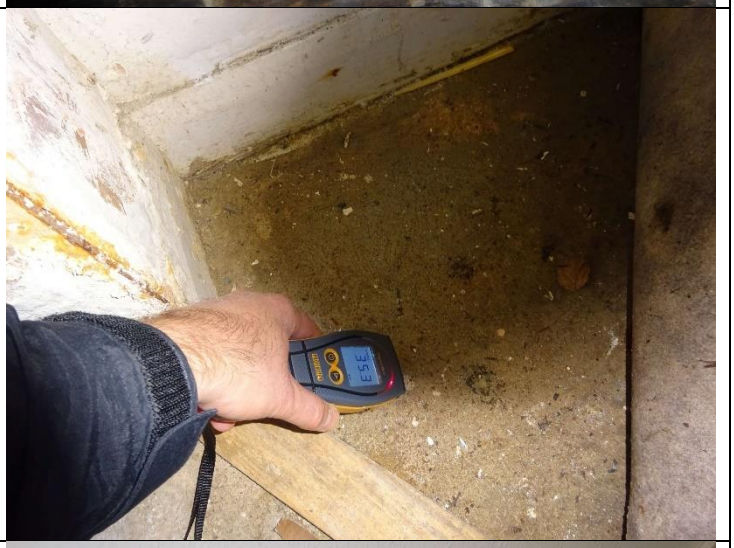
Comments	File	Photograph
Cable ducting temporary cover.	33	
Further view showing penetrating damp.	34	
Detached downpipe show to former stables.	35	

Comments	File	Photograph
Inappropriate rainwater disposal.	36	
Decay to window's timber frame.	37	
Hermetic seal failure to rooflight's double glazing.	38	

Comments	File	Photograph
Decayed bargeboard to Field Work Room.	39	
Chimney stack covered with extensive vegetation and no cowls.	40	
Flaking paintwork to steel beam as viewed from AV Room's loft hatch.	41	

Comments	File	Photograph
Water staining to underside of AV Room's loft hatch.	42	
Historical penetrating damp to roof's timber cladding (building containing rooms 27 – 29).	43	
Water staining to closeboarding in three-storey annex's roof void.	44	

Comments	File	Photograph
Area of missing sarking layer (two-storey annex).	45	
Mouse droppings in roof void.	46	
Gnawed lagging suggestive of vermin infestation within roof void.	47	

Comments	File	Photograph
Woodworm over timber lintel to window W18.	48	
Dampness to floor screed in caretaker's flat.	49	
Gap in stair balusters to three-storey annex stairs.	50	

Comments	File	Photograph
Example of missing cold smoke seal / inturmescent strip to fire door.	51	
Example of gap in fire door due to replacement door furniture.	52	

APPENDIX 2
INDICATIVE PLANNED MAINTENANCE APPROXIMATE BUDGET COST OPTIONS A & B

APPENDIX 3
ROOF PLAN AND FLOOR PLANS

APPENDIX 4
EMAIL FROM FIRST LOCAL SERVICES

SMITHERS PURSLOW
ENGINEERING ▪ SURVEYING ▪ ARCHITECTURE
Independent Professional Expertise

From: Jake White <[redacted]
Sent: 12 January 2022 14:36
To: Nick Williamson <[redacted]
Cc: [redacted]
Subject: LL41 3YU

Hi Nick,

Great to speak to you yesterday afternoon.

As discussed, when looking over the MINA CCTV Report, in a short term, its apparent that the small amount of PVC sections of the drainage system are in substantial condition, provide good functionality and good flow to the system, which is great news for the client.

The clay sections, as expected, being 100+ years old are showing their age. There are significant JDM (Joint Displacement - Medium), JDL (Joint Displacement - Large), CC (Circumferential Crack) throughout in the majority of areas and further defects like scale build up and root ingression. Essentially, as we discussed, the system just needs that level of attention and updating throughout. The issue we have is as time goes on, like many things, defected areas only proceed to worsen so small issues now, are large issues in the future and large issues now and critical in the future.

As we discussed, its more cost effective to look at updating the full clay system by use of de scale, root removals and installation of CIPP Liners throughout than to pick and choose parts however this is of course up to your client. Ive broken down some rough costs we discussed below;

CIPP Lining
(Costs include high pressure machinery/jetting to prep the area of works + labour).

- £145 per metre - Standard issue price.
- £125 per metre - Commercial / discounted price.
- £92.50 per metre - A cost I've managed to agree with our Commercial Manager due to the amount of lining that needs to be done. Please note this cost is based on the full area of clay system, if we look at individual smaller sections it will go to the commercial/discounted price.

(All prices are plus VAT)

As we discussed, we are looking around the 160 metres mark (approx) for a combined area of works, which at £92.50 per metre, this brings us to approximately £15,000 before VAT. We will then have some smaller costs for the de scale and removal of roots which at the expected area will come out around an additional £2,000 +VAT, so all in total we are sitting around the £17,000+VAT mark (approx) to update the full system, of which I would say, does not look like any excavations. If on the day areas have proceeded to worsen and areas do need excavating (which we discussed on our call), we will emergency quote that where necessary.

Let me know any questions you or your client has, I'm more than happy to help where I can.

Kind Regards,

Jake White
Operations Manager, First Local Services

E; [redacted]
T;
W; www.firstlocalservices.co.uk