Condition Survey Report of Flat Roof Areas and Windows

at

[redacted] School

Ref: [redacted]J10121

21st July 2021

Pro[redacted]s

[redacted]

[redacted]: 03611608

CONTENTS

1.0 Introduction

1.1 During June 2021, Property Tectonics were appointed by [redacted] to undertake an inspection and prepare a condition survey report in respect of the flat roof coverings and windows at [redacted].

1.2 Accordingly, an inspection was undertaken by [redacted] on 21st July 2021. Weather conditions at the time of our inspection were dry and sunny.

2.0 Brief Description of Property

2.1 [redacted] is a mixed primary school providing classes from nursery up to Year 6. The current school role is approximately 261 pupils.

2.2 The original parts of the school date from the 1950's and comprise a number of single storey buildings, with brick cavity external walls and mineral felt covered flat roofs with part exposed, concrete flat roof decks. In addition to the cavity brickwork, sections of concrete and exposed aggregate concrete panels were also noted.

2.3 Concrete previously painted, slightly protruding surrounds were noted to the various window openings. The original windows to the school comprise single glazed, metal crittal, previously painted windows, with a number of relatively recently installed metal powder coated double glazed window units also evident.

2.4 To the rear of the school there is a detached modular building, with also a separate Year 5/Year 6 single storey building also provided, which we assume to be a more recent addition. This building is provided with a pitched hipped roof that has also been weathered with mineral felt with brick cavity and previously painted rendered external walls. Full height metal powder coated windows were also evident to this building.

2.5 The school is also provided with a gymnasium that again we assume is a more recent addition. At some point in the past, a link corridor has been provided to link the gymnasium building to the main school building. The gymnasium building is also provided with a pitched, mineral felt covered roof with brick cavity external walls and full storey height single glazed, metal windows.

2.6 A more recent extension has also been provided to the nursery to the school.

2.7 Accommodation within the school comprises classrooms, hall, gymnasium, kitchen, toilets and other facilities and amenities associated with a community primary school. To the front of the school there is a car park area, with hard surface external play area to the rear of the school. Also situated to the rear of the school is a large playing field area.

2.8 The property is not Listed and is not located within a Conservation Area.

3.0 Summary of Condition

Flat Roof Areas

There are a number of flat and pitched roof areas which are individually commented upon as follows:

3.1 Flat Roof Areas Above Key Stage 1

3.1.1 Above the Key Stage 1 area of the property there are a number of flat roof areas with a part exposed concrete deck which have been weathered with mineral felt roof coverings. Typically, the mineral felt flat roof coverings are dressed up a small, slightly raised, perimeter kerb detail, with mineral felt upstands also provided to adjoining and adjacent brickwork external walls. The flat roof areas typically fall towards centrally located internal rainwater outlets. **(Photo No.'s 1, 2 and 3).**

3.1.2 The flat roof coverings are penetrated by a number of proprietary polycarbonate roof lights, with mineral felt upstand details also provided to the roof lights.

3.1.3 The lower level flat roof area is also penetrated by a number of soil vent pipes which are provided with a mineral felt upstand detail.

3.1.4 The section of flat roof above the actual classrooms to this part of the property are at a higher level than the main adjacent areas. The higher level section of roof is provided with solar panels which bare onto a proprietary support system provided to the actual flat roof coverings. The high level roof discharges into rainwater outlets, which discharge onto the adjacent lower level flat roof areas. **(Photo No. 2).**

3.1.5 To the north facing elevation of the higher level roof here are small metal crittal windows with a previously painted concrete surround. There is no form of upstand detail provided to the junction of the window frame and the adjacent lower level flat roof coverings. A form of mastic sealant weathers the junction between the window frames and the flat roof coverings. **(Photo No.'s 10, 11 and 12).**

3.1.6 Cables and pipework serving the above described solar panels to the higher section of roof were also noted on the lower section of roof with a pre cast concrete proprietary support system provided to the pipework and cabling.

3.1.7 The lower level flat roof coverings are in a poor and deteriorating condition. Extensive weathering of the mineral finish to the flat roof coverings was noted, with in numerous areas the protective green mineral finish to the roof coverings, completely weathered away. **(Photo No.'s 1 and 39).**

3.1.8 The flat roof coverings are adversely affected by surface water ponding with extensive moss and vegetation growth noted to all areas. The internal rainwater outlets do not function properly, related to the poor inherent falls within the flat roof coverings. The rainwater outlets are also typically choked with vegetation and debris and are of an insufficient size to allow for proper surface water discharge from the roof. **(Photo No.'s 7, 8 and 9).**

3.1.9 Patch repairs have been undertaken to the section of flat roof adjacent to the front elevation of the property. The temporary repairs comprise the application of a liquid bitumen solution to the various joints to the flat roof coverings. In a similar context, in the same location, liquid bitumen has been applied to the upstand details to the roof lights.

3.1.10 Other patch repairs have been undertaken to the flat roof adjacent to the internal courtyard area with additional layers of felt applied over the original felt flat roof coverings. The provision of additional layers of felt has resulted in the height of the outlet being above adjacent flat roof areas, which has caused considerable surface water ponding, with surface water not being able to discharge into the outlet. **(Photo No. 13).**

3.1.11 To the section of flat roof adjacent to the higher hall building, extensive blistering and rippling of the mineral felt flat roof coverings was noted. **(Photo No. 14).**

3.1.12 The higher section of roof above the classroom areas is generally as previously described. Again, extensive and considerable ponding noted adjacent to the solar panels. **(Photo No. 38).** To this area the mineral finish to the flat roof coverings has been completely weathered and worn away. General crazing and cracking of the mineral felt coverings was also noted to all parts of the flat roof area. In addition to the above, loose and open joints to the mineral felt flat roof coverings were also noted.

3.1.13 The condition of the flat roof coverings to the higher level roof above the classrooms is similar to the flat roof coverings to the adjacent lower level areas. The cost of undertaking renewal works of the flat roof covering system to this part of the property would be increased by the need to temporarily remove and to subsequently reinstate the solar panels that have been provided to this roof area.

3.1.14 The thermal insulation provided within the existing roof system would not comply with current standards. The flat roof coverings are therefore thermally inefficient.

3.2 <u>Flat Roof Above Key Stage 2 Area</u>

3.2.1 The flat roof coverings above the Key Stage 2 area again comprise mineral felt flat roof coverings to a part exposed concrete deck. Again, the roof areas to this part of the property are at slightly different levels with typically the flat roof areas above the classroom areas, higher than adjacent areas. **(Photo No.'s 16 and 17).**

3.2.2 The flat roof coverings are generally as detailed above, with again a perimeter slightly raised kerb detail provided with the roof falling towards internal rainwater outlets. Mineral felt upstand details have been provided to weather the junction between the higher and lower level sections of flat roof.

3.2.3 The flat roof coverings are again penetrated by numerous proprietary single and double skinned polycarbonate roof lights, which again are provided with mineral felt upstand details. To the west facing elevation, immediately adjacent to the playground area, there would appear to be the remains of a form of small tank enclosure which has been capped with a concrete capping and has been totally encapsulated with mineral felt. Two copper overflow pipes penetrate this tank housing.

3.2.4 Again, extensive surface water ponding was evident to the flat roof coverings with moss, silt, vegetation and general debris noted to the flat roof coverings. Extensive weathering

of the finish to the mineral felt flat roof coverings, with again numerous areas of completely missing mineral felt finish noted. Large blisters were also evident to the flat roof coverings.

3.2.5 Patch repairs, again comprising the application of liquid bitumen, were noted in numerous areas to the various joints and laps to the flat roof coverings. Loose upstands were noted towards the rear of this flat roof area. **(Photo No. 18 and 40).** Other patch repairs have been undertaken comprising the application of additional layers of mineral felt cap sheet over the original flat roof coverings. **(Photo No.'s 20, 21 and 22).** In this respect, a number of the raised flat roof areas above the actual classroom areas have been almost completely covered with an additional layer of mineral felt.

3.2.6 The section of flat roof covering to the area immediately adjacent to the gymnasium was in a particular poor condition and has almost been completely covered with mineral felt. The joints to the additional layer of mineral felt are loose and are currently being held down by bricks. **(Photo No. 23).** Other patch repairs to this roof area, include the application of liquid bitumen. The mineral felt perimeter raised kerb details was in a particularly poor condition with damage to the felt noted together with generally loose sections of felt to almost the entire perimeter of the flat roof area.

3.2.7 Towards the front of this roof area there is a relatively recent extension above the nursery which has been provided with a flat roof with mineral felt flat roof coverings. The roof falls towards an adjacent lower level flat roof area with the felt dressed down the vertical face between the two flat roof areas. As with the other flat roof areas, a slightly raised perimeter kerb detail was evident to this newer flat roof area, which incorporates a proprietary external trim. The flat roof coverings to this part of the property were in a satisfactory condition, although there was a general build up of moss growth which should be removed.

3.2.8 The lower level flat roof area, immediately adjacent to the main hall, is also adversely affected by extensive surface water ponding and a considerable build up of moss growth adjacent to the slightly higher nursery flat roof area. **(Photo No. 28).** Our general comments regarding the condition of the flat roof to this part of the property are reiterated, with large blisters evident together with the extensive weathering of the mineral finish to the flat roof coverings. Again, patch repairs have been previously undertaken to the roof comprising the application of additional layers of felt which have subsequently failed.

3.2.9 This flat roof area is penetrated by a large domed polycarbonate roof light, which we believe accommodates the ductwork to the kitchen ventilation system. Some sections of exposed stainless steel ductwork were noted to this part of the property, which are supported by a proprietary support system.

3.2.10 To the junction with the adjacent higher level roof areas, there are again small centre pivot metal painted crittal windows. Our comments regarding the windows being obsolete once the recommended renewal of the flat roof coverings to this part of the property are undertaken, are reiterated.

3.2.11 The roof lights are provided with trickle vents to allow for permanent natural ventilation to the areas below. The actual polycarbonate domes to the roof lights are heavily weathered and soiled and therefore will have limited value in providing natural light to the areas below.

3.2.12 The section of flat roof that is located above the link building provided between the main school building and the gymnasium, is of slightly different construction to the other flat roof areas previously described. The flat roof coverings fall towards recessed perimeter gutters which discharge into internal rainwater outlets adjacent to the gymnasium building. The gutters are completely weathered with mineral felt which is dressed down the outer face of the link building. Mineral felt upstands have been provided to the actual gymnasium building. The condition of the flat roof coverings to the link building to the gymnasium are particularly poor. Extensive patch repairs have been previously undertaken to this part of the property. The upstand detail to the gymnasium building has become loose and cracked in numerous locations. The finish to the mineral felt flat roof coverings was generally crazed with extensive weathering of the mineral felt finish also noted. **(Photo No.'s 24, 25, 29 and 30).**

3.3 Year 5/6 Block

3.3.1 The main roof to the Year 5/6 block comprises a pitched, hipped assumed part steel, part timber framed roof that has been completely weathered with mineral felt. **(Photo No. 31).** Mineral felt has also been provided to the ridge and hip details to the roof. The main roof falls into a perimeter, approximate, 100mm wide uPVC eaves gutter which in turn discharges into 100mm diameter uPVC rainwater downpipes, connected directly to the underground drainage system.

3.3.2 The mineral felt roof coverings to this building are in a reasonable condition. There is some general weathering of the mineral felt with moss and lichen growth evident.

3.3.3 The Year 5/6 block is also provided with two small flat roofs. **(Photo No.'s 32 and 33).** To the left-hand side of the building there is a small flat roof area above the toilets and boiler room. The mineral felt is dressed up the external wall to the adjacent main building and dressed under the small high level windows in this location. The flat roof falls towards a 100mm diameter half round uPVC eaves gutter to the east elevation which is provided with two 75mm diameter rainwater downpipes that connect directly to the underground drainage system. To the north and south elevations to this flat roof area there are slightly raised kerb details. Timber stained and varnished fascia and verge boards were noted to this part of the property. The roof is penetrated by a soil vent pipe and an assumed boiler flue. The soil vent pipe is provided with a mineral felt upstand detail. A proprietary type of weathering collar has been provided to the flue.

3.3.4 The flat roof coverings to this part of the property were in a reasonable condition. Again, some weathering and ponding to the mineral felt was noted adjacent to the main building. It is also evident that temporary patch repair have been previously undertaken adjacent to the boiler flue. **(Photo No. 32).** In this respect, the proprietary collar provided was deformed. In the short term, the mineral felt flat roof coverings to this part of the property will require renewal.

3.3.5 The other flat roof is provided above the main entrance. Again, mineral felt flat roof coverings have been provided. The roof falls from the main entrance towards the main building where this is a slightly recessed parapet gutter. The gutter falls towards the left-hand side of the building where there is a hopper head and 75mm diameter rainwater downpipe. The rainwater downpipe is connected directly into the underground drainage system. The mineral felt to the front left and right-hand sides of this roof is dressed down onto uPVC fascia and verge details. A lead flashing has been provided to weather the

junction between the main building and the recessed parapet gutter. The lead flashing was weathered and we do not believe that it has been provided in the correct lengths to allow for thermal expansion. Cracking of the lead flashing has therefore occurred. In the short term, the lead flashing detail will require renewal. The mineral felt flat roof coverings were however in a reasonable condition.

3.4 Roof Above Hall

3.4.1 The roof above the hall is at a considerably higher level than the adjacent flat roof areas. The roof above the hall has been weathered with mineral felt flat roof coverings which have been dressed up and over a perimeter raised kerb detail and terminate into a proprietary trim detail above a uPVC perimeter verge board. To the north east corner of the roof there is a brick chimney stack, which is provided with a mineral felt upstand and a proprietary termination detail to weather the junction between the brickwork and the mineral felt upstand. The roof falls towards outlets provided to the front and rear elevations of the roof. The outlets discharge onto the adjacent lower level roof areas. **(Photo No.'s 34 and 35).**

3.4.2 The flat roof coverings to this part of the property are in a reasonable condition, with again some ponding evident, together with a general build up of moss and vegetation growth. The outlets adjacent to the front elevation were completely choked with vegetation growth. **(Photo No. 36).** It is necessary to remove the vegetation growth to the outlets and the moss growth to the flat roof coverings. In the medium to long term, no other repairs are required to this roof.

3.4.3 We suspect that the roof above the hall has been renewed within the relatively recent past. It is necessary to make enquiries to determine whether or not there is any form of warranty for the roof coverings to this part of the property.

3.4.4 We assume that the chimney stack to the north east corner is redundant. The chimney does have open flues with some cracked flaunching evident. We would recommend that if the flues are redundant that they be properly weathered and ventilated. **(Photo No. 37).**

3.5 Detached Modular Building

3.5.1 It is evident that works to replace the roof coverings to this building are about to commence. Accordingly, we have provided no further comment on the condition of the existing roof coverings.

3.6 Gymnasium Building

3.6.1 The gymnasium building is provided with an assumed part timber, part steel, multi-pitched roof that falls from a central high point to the various external elevations of the gymnasium building. **(Photo No.'s 41 and 42).** The gymnasium roof is weathered with mineral felt which terminates into proprietary verge details or is dressed down the vertical face of the timber fascia above the approximate 100mm diameter eaves guttering that have been provided. The eaves guttering is connected to approximate 75mm diameter uPVC rainwater downpipes that are connected directly to the underground drainage system. Mineral felt has also been provided to weather the various hips to the different sections of flat roof area. We also believe that in addition to the eaves guttering, adjacent to the full storey height external brickwork, slightly

recessed mineral felt gutters have been formed which are connected to 100mm diameter uPVC rainwater downpipes that are connected directly into the underground drainage system. A form of overflow pipe was noted to the flat roof areas in this location.

3.6.2 The mineral felt coverings provided to the gymnasium roof would appear to be in a reasonable condition. Some blistering and unevenness of the flat roof coverings was evident. Within the short term some minor repair works are required. The fascia details provided to the gymnasium roof were in a very poor condition with delaminating plywood evident in numerous locations. **(Photo No. 43).** The plywood fascia boards should be replaced in conjunction with renewal of the window/window walling provided to this building. In a similar context, plywood has also been provided to the rainwater downpipe/overflow detail provided adjacent to the full height brickwork to this building. Again, it will be necessary to replace the plywood in the above described locations within the short term.

3.6.3 A missing section of rainwater downpipe was noted to the rear elevation of the gymnasium building.

3.6.4 We are of the opinion that the roof coverings to this part of the property may have been replaced within the relatively recent past. Enquiries should be made to determine when the roof coverings were replaced and if there is a warranty in place for the roof coverings, prior to any repairs being carried out.

3.7 Windows and External Doors

3.7.1 It is evident that within the relative recent past, a number of the existing original metal single glazed crittal windows have been replaced with uPVC or metal powder coated double glazed metal windows and doors. The new windows typically comprise fixed lights with top hung outward opening or side hung opening casement windows.

3.7.2 The new external doors that have been installed are provided with appropriate panic bars and push pads to allow for ease of egress in an emergency situation.

3.7.3 A relatively minor number of defective double glazed units were noted to the new windows, with condensation noted to the double glazed units. The defective double glazed units should be replaced.

3.7.4 We were concerned to note that some of the new windows do not appear to be provided with suitable safety restrictors. We would recommend that safety restrictors be retrospectively installed.

3.7.5 The original windows to the property comprise metal, previously painted, single glazed crittal windows, comprising side hung, top hung and centre pivot opening casements. The windows are not provided with trickle vents. The windows are not provided with locking devices or restrictors.

3.7.6 Internally, there was extensive evidence of condensation adversely affecting the windows with stained and worn paint finishes noted to the window frames, together with stained glazing. In addition to the above, some mould growth was also evident to the internal window frames related to the adverse affects of condensation. **(Photo No.'s 52, 53 and 54).**

3.7.7 The majority of the exiting windows are adversely affected by the same defects. Extensive flaking and missing paint finishes was noted externally to the windows together with missing, cracked and defective window putties. **(Photo No.'s 47, 48 and 50).**

3.7.8 The metal single glazed crittal centre pivot windows provided to the north facing wall to the upper KS1 roof area are in a deteriorating condition where extensive flaking and missing paint evident, together with cracked window putties. The mastic sealant provided to seal the junction between the window frame and felt flat roof coverings is deteriorating with sections of loose and missing mastic sealant evident. Some sections of cracked concrete provided between the windows, were also noted, with exposed corroded reinforcement apparent. **(Photo No.'s 10, 11 and 12).**

3.7.9 The above described windows are not fit for purpose. It is inevitable that water ingress will occur to the window openings due to the failure of the mastic sealant and basically the absence of a proper upstand detail between the felt flat roof coverings and the windows.

3.7.10 Bearing in mind our comments above in respect of the proposed renewal of the flat roof coverings, which will incorporate additional insulation material, the various low level windows identified within this report will become obsolete and would be removed and infilled as part of the recommended flat roof renewal works.

3.7.11 To the west facing elevation of the hall building, metal centre pivot, single glazed, crittal windows were noted. The windows are provided with manually operated window winders. The high level windows to the hall were in a poor condition with extensive flaking and missing paint evident, together with cracked window putties. **(Photo No.'s 55 and 56).** Although the window winders were operable at the time of our inspection, they are original and therefore in the region of 70 years old.

3.7.12 The gymnasium building is provided with full height, single glazed metal crittal type windows which incorporate timber and uPVC infill panels. The windows are provided between assumed full height steel box column sections. The column sections have been previously painted. The existing high level casement windows within the gymnasium area are provided with manually operated window winders.

3.7.13 The windows and above described steel box column sit on an assumed 'slate' low level cill detail. It is possible that this slate material does contain asbestos with specialist testing required to confirm this. Some damage and disturbance to the 'slate' cill detail was evident.

3.7.14 The condition of the metal crittal type windows to the gymnasium building was poor, with extensive flaking and missing paint evident. In addition to the above, missing and cracked window putties were also evident. The timer previously painted cladding infill panels were also in a poor condition, with extensive wet rot noted, together with flaking and missing paint finishes to the timber cladding. In addition to the above, cracked sections of glass were also noted to the windows.

3.7.15 Doors that provide access/egress to the gymnasium building also comprise metal crittal type single glazed doors. Our comments regarding the decorations to the doors and the poor condition of the window putties are reiterated.

3.7.16 The timber doors provided to the Year 5/6 main entrance and boiler room were poor with wet rot noted. **(Photo No.'s 45 and 49).**

3.7.17 In conjunction with any works to replace the existing original windows, it is inevitable that repairs will be required to the concrete sub-frames and surrounds that have been provided to the window openings. Damage will occur to the sub-frames when the existing windows are removed.

3.7.18 A number of the doors and windows are glazed to full height. We cannot confirm if appropriate safety glass has been provided to the existing full height doors and windows. In this respect, Safety Kite markings were noted to the glass within the gymnasium building.

3.7.19 The existing windows are thermally inefficient and have a number of inherent health and safety issues and problems. It is necessary to instigate a programme of window and door replacement works and provide new thermally efficient double glazed, health and safety compliant windows and external doors.

4.0 Summary & Recommendations

4.1 After taking the above into consideration, we are of the opinion that the existing main flat roof coverings are in a poor and deteriorating condition. It is obvious that in the relative recent past, numerous patch repairs have been carried out to the flat roof areas. The standard and quality of the temporary repairs are considered to be poor and only a short term solution for the inherent problems and defects noted within this report.

4.2 In the relative short term, it is recommend that the various flat roof areas, with the exception of the roof above the hall, the gymnasium building and the Year 5/6 block, be replaced with a new felt flat roof system that incorporates thermal insulation to current standards. This will improve the overall thermal efficiency of the building and reduce ongoing heating costs. If the roof renewal works are not undertaken, it is very likely that within the short term, water ingress will occur into the buildings, adversely affecting the ongoing and continued use of the facilities and accommodation within the school.

4.3 The original metal crittal windows and external doors are also in a poor condition. We identified extensive flaking paint and missing and cracked window putties to the metal windows. We also noted various inherent problems from a health and safety perspective in respect of the existing windows and doors.

4.4 One of the main fundamental issues and problems with the existing metal windows and doors is that they are thermally inefficient. In this respect, evidence of extensive condensation and mould growth was noted internally.

4.5 We would recommend that the existing metal windows and external doors be replaced with metal powder coated double glazed window and door units. Not only would the new windows and doors be low maintenance, they would again improve the overall thermal efficiency of the building and again reduce overall heating costs to the property.

4.6 In summary, we would advise that the overall condition of the various roof areas and windows are as follows:-

Key Stage 1 and 2 Flat Roofs - Condition Grading of **D** and Prioritisation Rating of **1.**

Gymnasium/Hall/Year 5/6 Block Roofs - Condition Grading of **B** and Prioritisation Rating of **4.**

Original Windows and Doors – Condition Grading of **D** and Prioritisation Rating of **1**.

Gymnasium Fascia Board – Condition Grading **D** and Prioritisation Rating of **1**.

New Metal Powder Coated Windows – Condition Grading of **B** and Prioritisation Rating of **4**.

The Condition Grades and Priority Ratings are defined as follows:-

Condition Grade D = Bad. Life expired. Exhibits major deterioration. Serious risk of imminent failure or a health and safety hazard.

Condition Grade C = Poor. Exhibits major or multiple defects and or not operating as intended.

Condition Grade B = Satisfactory. Performing as intended but exhibiting minor faults/repairs.

Condition Grade A = Good. Performing as intended and operating efficiently.

Priority Grade 1 = Urgent. Needed to prevent closure of premises, address high H & S risk occupants or remedy serious breach of legislation.

Priority Grade 2 = Essential. Within 2 years to prevent serious deterioration of fabric/service, address Medium H & S risk to occupants or remedy less urgent breach of legislation.

Priority Grade 3 = Desirable. Required with 3-5 years to prevent deterioration of fabric/service, address low H & S risk to occupants and remedy minor breach of legislation.

Priority Grade 4 = Long Term. Required outside of 5 years planning to prevent possible deterioration of the fabric/service. Ongoing planned cyclical works.

5.0 Limitations of Survey

5.1 The purpose of this Report is to provide an overall assessment of the building's state of repair.

5.2 We have noted the works that require immediate attention and also any other matters which may give rise to concern in the foreseeable future. We do not intend to refer to each and every minor defect within the property, but rather to give a more general assessment of its overall condition. The Report does not therefore provide a detailed description of the accommodation or internal finishes.

5.3 In considering this Report, you should be aware that, whilst we have undertaken an inspection of the visible parts of the interior and exterior of the demised premises which are readily accessible, our assessment is made on the basis of a visual inspection of the exposed elements of the building only. Our Report does not, therefore, extend to the main structure, including foundations, which are unexposed, inaccessible, incapable of inspection, or hidden behind fittings and dry linings.

5.4 We have not opened up any part of the main structure to facilitate a more detailed inspection and have therefore not carried out any physical investigation, such as excavations, to establish the nature of the sub-soil or to ascertain the size and condition of the foundations.

5.5 In accordance with our Standard Practice we have not undertaken any examination of the services, installations or underground drainage to the property, and we are unable to state that these areas are free from defect.

5.6 We have not made Local Authority enquiries as far as Building Control and Planning are concerned. Your Solicitors should make independent pre-contract enquiries in the usual way covering these matters.

5.7 We will not undertake an Environmental Audit or similar investigation. No assessment will be made of current or past uses on the site which could have, or has, caused contamination.

5.8 In accordance with our Standard Practice we would advise that any and all disputes which may arise out of or in accordance with the terms and conditions of engagement should be governed and constructed in accordance with the Law of the United Kingdom.

5.9 Finally, we would state that this report is confidential to the party to whom it is addressed and for their sole use. Accordingly, no responsibility will be accepted to any third party in respect of the whole or any part of its contents.

We trust this report is satisfactory for your purposes, however, should you have any queries or require any further information, please do not hesitate to contact the writer.

Reported by:

XXXXXXX
XXXXXXX

Appendix A
Photographic Schedule

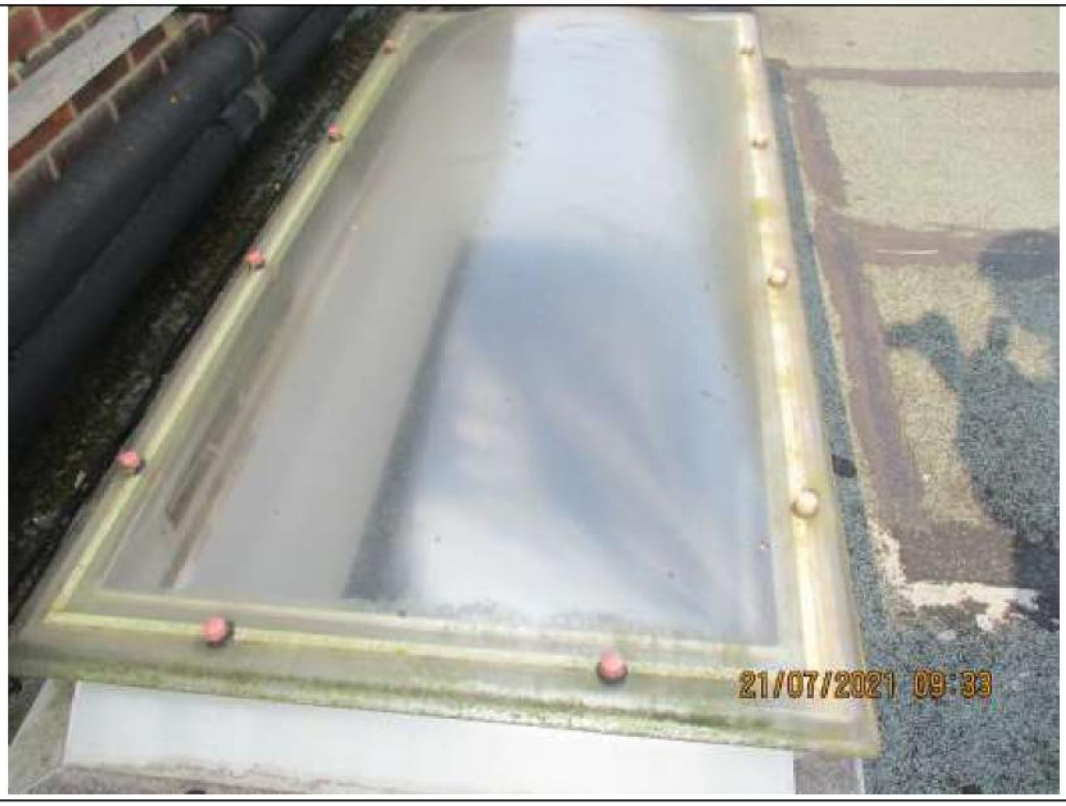
1) Lower level roof adjacent to the hall.

2) Flat roof above KS1 area.

3) Flat roof above KS1 area.

4) Temporary patch repairs to roof coverings.

5) Patch repairs to upstand detail to roof light.



6) Typical roof light.

7) Moss build up to roof coverings above KS1 area.

8) Evidence of surface water ponding to lower level roof adjacent to the hall.

9) Blocked outlet to KS1 area flat roof.

10) Low level windows to roof above KS1 area.

11) Cracked concrete adjacent to windows.

12) Defective mastic to joint of flat roof and window.

13) Patch repairs to flat roof area.

14) Evidence of surface water ponding to flat roof area.

15) Patch temporary repairs to roof light upstand.

16) Roof above KS2 area.

17) Roof above KS2 area.

18) Defective felt upstand detail to roof above KS2 area.

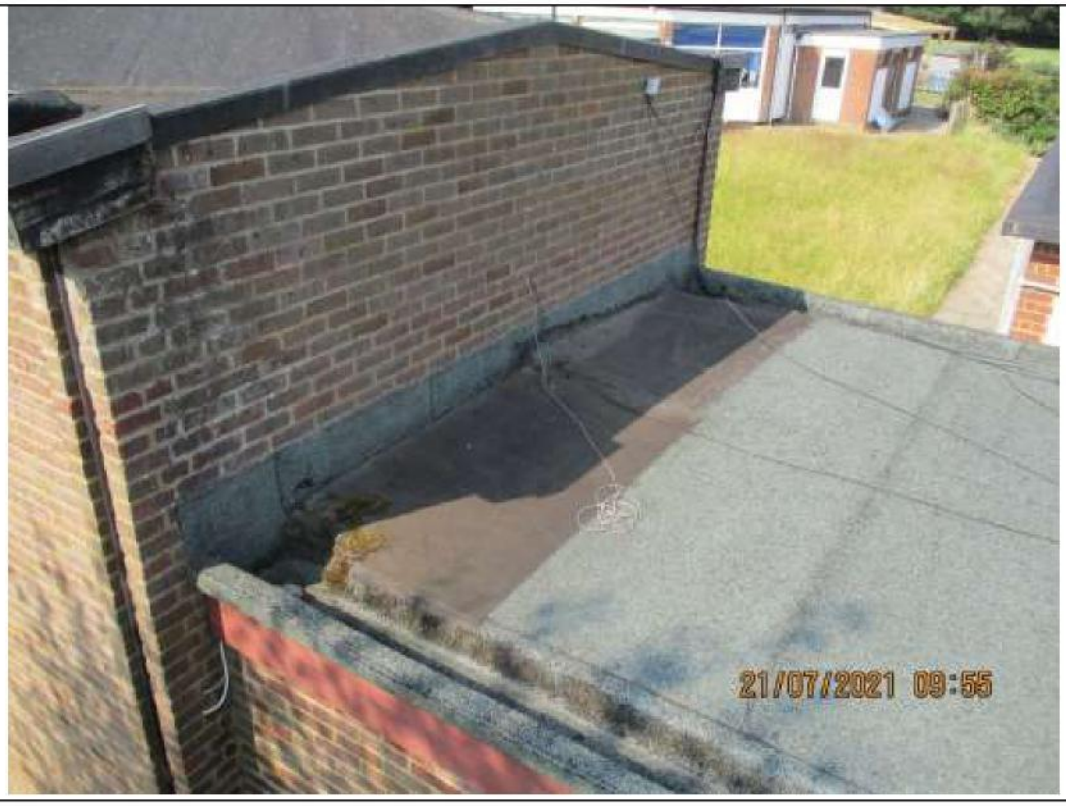
19) Build up of moss growth to flat roof.

20) Patch repairs to roof above KS2 area.

21) Patch repairs to roof above KS2 area.

22) Patch repairs to roof above KS2 area.

23) Patch repairs to roof above KS2 area.



24) Link roof to gymnasium building.

25) Failed patch repairs to link roof to gynmasium.

26) Low level windows to roof adjacent to the nursery.

27) Low level windows to roof adjacent to the nursery.

28) Build up of moss to the roof adjacent to the nursery.

29) Link roof to gymnasium building.

30) Defective upstand detail to link building to gymnasium.

31) Roof above Year 5/6 block.

32) Flat roof above Year 5/6 block.

33) Flat roof above Year 5/6 block.

34) Roof above hall.

35) Roof above hall.

36) Blocked outlet to hall roof.

37) Defective stack capping to hall roof.

38) Higher level roof to KS1 area.

39) Higher level roof to KS1 area.

40) Defective/open laps to roof coverings.

0)	Gymnasium roof.

41) Gymnasium roof.

43) Rotten timber cladding to gymnasium building.

44) Single glazed windows to Year 5/6 block.

45) Rotten timber door to Year 5/6 block.

46) Typical defective paint finishes to original windows.

47) Typical cracked and defective window putties to original windows.

48) Typical flaking and missing paint to original windows.

49) Rotten timber louvre door.

50) Typical flaking and missing paint to original metal door.

51) Example of defective concrete surround to windows.

52) Example of internal condensation damp staining.

53) Example of internal condensation damp staining to original windows.

54) Example of mould growth to internal windows.

55) Example of flaking paint to original windows.

56) Example of flaking paint to original windows.

Appendix B
Budget Cost Plan

The Russell School
Bushwood Drive
Chorleywood
Herts WD3 5RR

Issue : One

Client: [redacted]

Project: Flat Roof and Window Replacement Works Date: Jul-21

ITEM		QUANTITY			RATE	COST	
1	Temporary and enabling works.	Item	Item	£	2,500.00	£2,500.00	0.52
2	Renew roof coverings and upgrade insulation to KS1 and 2 areas.	1460	m^2	£	200.00	£292,000.00	60.40
3	Overhaul rainwater goods to KS1 and 2 roof areas.	Item	Item	£	1,500.00	£1,500.00	0.31
4	Renew original metal windows and doors.	77	No.	£	750.00	£57,750.00	11.95
5	Renew fascia detail to gymnasium building.	80	Lm	£	100.00	£8,000.00	1.65
6	Window concrete surround repairs .	Item	Item	£	2,000.00	£2,000.00	0.41
7	Remove and reinstate solar roof panels.	Item	Item	£	5,000.00	£5,000.00	1.03
8	Access scaffolding.	Item	Item	£	10,000.00	£10,000.00	2.07
9	Asbestos Survey	Item	Item	£	1,000.00	£1,000.00	0.21
10	Repair/weather/ventilate hall roof chimney stack.	Item	Item	£	1,000.00	£1,000.00	0.21
11	Patch repair gymnasium building pitched roof.	10	m^2	£	200.00	£2,000.00	0.41
12	Repair rainwater goods to rear of gymnasium building.	Item	Item	£	250.00	£250.00	0.05
	Sub-Total					**£380,500.00**	
13	Contingency @ 10%	Item	Item		£ 38,050.00	£38,050.00	7.87
	Sub-Total					**£418,550.00**	

14	Preliminaries @ 5%	Item	Item	£	20,927.50	£20,927.50	4.33
	Sub Total					**£439,477.50**	
15	Professional fees @ 10%	Item	Item		£ 43,947.75	£43,947.75	9.09
	TOTAL					**£483,425.25**	
Note:- Costs are exclusive of VAT.							100.00

Appendix C
Planned Maintenance Programme

The Russell School
Bushwood Drive
Chorleywood
Herts WD3 5RR

Building:			Surveyor:	Ian Haywood	J10121	Date:	22/07/2021		

The Russell School, Bushwood Drive, Chorleywood, Herts, WD3 5RR

Location (compass bearing externally	Element/ Component	Replacement Material/Repair Description	Condition Grade	Priority	Quantity	Unit	Rate	Cost of Access	Total Cost	Year 1-5	Year 6-15	Year 16-30
Main Hall	Felt Flat Roof Coverings	Renew flat roof coverings.	B	4	164	m2	£200.00	£5,000.00	£37,800.00		£37,800.00	
Year 5/6 Block	Felt Roof Coverings	Renew main roof coverings.	B	4	213	m2	£200.00	£2,500.00	£45,100.00		£45,100.00	
Gymnasium Building	Felt Flat Roof Coverings	Renew flat roof coverings.	B	2	151	m2	£200.00	£2,500.00	£32,700.00		£32,700.00	
Main Block	Felt Flat Roof Coverings	Renew flat roof coverings.	D	1	1460	m2	£200.00	£10,000.00	£302,000.00	£302,000.00		
All Areas	Surface Water Drainage System	Rod through and overhaul rainwater downpipes.	C	2	Item	Item	£1,500.00	£0.00	£1,500.00	£1,500.00		
All Areas	Felt Flat Roof Coverings	Remove rubbish and debris etc to flat roof areas.	C	2	Item	Item	£500.00	£0.00	£500.00	£2,500.00	£5,000.00	£5,000.00
Gymnasium Building	Fascia Board	Renew fascia boards.	D	1	80	Lm	£100.00	£2,500.00	£10,500.00	£10,500.00		
Main Block	Concrete Window Surrounds	Repair concrete window surrounds.	C	2	Item	Item	£2,000.00	£0.00	£2,000.00	£2,000.00		£2,000.00
All Areas	Windows and Doors	Renew existing metal windows and doors.	D	1	77	No.	£750.00	£0.00	£57,750.00	£57,750.00		
All Areas	Windows and Doors	Install restrictors to new windows.	D	1	Item	Item	£1,000.00	£0.00	£1,000.00	£1,000.00		
Year 5/6 Block	Felt Flat Roof Coverings	Renew flat roof coverings.	C	3	33	m2	£200.00	£2,000.00	£8,600.00		£8,600.00	
Hall	External Walls	Weather and ventilate open flue to chimney stack.	C	2	Item	Item	£1,000.00		£1,000.00	£1,000.00		
Gymnasium Building	Felt Roof Coverings	Minor repairs to felt.	C	3	10	m2	£200.00	£0.00	£2,000.00	£2,000.00		
Gymnasium Building	Rainwater goods	Repair rainwater goods.	C	2	Item	Item	£250.00	£0.00	£250.00	£250.00		
		TOTAL							**£502,450.00**	**£380,500.00**	**£129,200.00**	**£7,000.00**

All costs are budget costs exclusive of Preliminaries, Asbestos Related Works, VAT/Statutory & Professional Fees