

# Structural Survey





# STRUCTURAL ENGINEERS REPORT

## HIGH PATH ESTATE

### MERTON

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## ISSUE STATUS

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## 1.0 **Brief**

Ellis and Moore were instructed by PRP Architects in their e mail dated 3<sup>rd</sup> November 2014 to undertake a visual inspection of all the external elevations of the properties on the Estate and to undertake internal surveys on a limited number of properties. The survey was required to check on the existing structural condition and the likely work that may be required in the future to keep the properties in serviceable condition.

There was no exploratory work undertaken as part of this work.

In the surveys all directions are given assuming an observer standing facing the front of the building.

## 2. **Executive Summary**

All buildings that were surveyed are in good structural condition given their age. As far as could be seen no immediate emergency work needs to be undertaken to the structure of the properties.

On the tower blocks concrete repairs will be required to be undertaken on the concrete upstand at each floor level and to the render which covers the concrete. The situation with regard to cavity ties and insulation to the flank walls needs to be investigated. Also as a precaution concrete testing needs to be undertaken on the blocks to determine their longevity.

On the mansion blocks there are very few defects to the external envelope apart from cracking in the concrete edge beams and in the deck access slabs. Further concrete repairs will be required in the next 10-15 years.

The 1960's blocks are generally in good condition externally. Concrete repairs will be required to the edge beams and the lintels as the repairs that have been undertaken to date have limited life.

On the 1970's blocks it was considered that the recessed pointing is a potential defect for the future due to weathering of both the brick and the raking out of the mortar. It is likely that repointing will be required in the next 10-15 years. Concrete repairs will be required on a number of the beams and slabs where there is exposed reinforcement and an exposed aggregate finish.

In the 1980's blocks the comments are the same as the 1970's with the raked out pointing.

## 3.0 **Visual survey**

- 3.1 The surveys were undertaken on the 27<sup>th</sup> October, 6<sup>th</sup> November and 10<sup>th</sup> November 2014 and the details are recorded on a block by block basis together with limited internal surveys. The internal surveys are included with the relevant blocks. The report is to be read in conjunction with the photographs in Appendix 1 and the block plans in Appendix 2.

### 3.2 **TOWER BLOCKS**

#### **MAY COURT**

This is a 12 storey block of flats constructed in insitu reinforced concrete. There is a band of render at each floor level. There is also brickwork above the render band at all floors.

On the render bands there is cracking which is vertical and of the order of 2mm at the present time on the majority of the floors. There are no expansion joints on any of the elevations.

On the flank walls remedial ties have been inserted between the inner and outer leaf of the brickwork to prevent it falling to the ground. Also insulation may have been pumped into the cavity through the holes. There is some weathering of the brickwork and numerous areas of loose pointing.

The building is likely to be supported on piles.

No foundation defect was observed.

The building is in good structural condition.

#### **65 MAY COURT – INTERNAL SURVEY**

This is a two bedroom flat on the 11<sup>th</sup> floor.

In the kitchen there are signs of an old crack which had been made good on the rear wall.

In the living room at the front right hand corner there is damp under the roof on all the ceiling wall junctions.

In the bathroom there is condensation on the ceiling but no structural damage.

In the middle bedroom there is dampness showing on the front wall at the ceiling wall junction.

The balcony is similar to the other flats, the concrete upstand covered in render on the external face.

In the bedroom nearest the front door there are signs of dampness in the ceiling near the window.

The roof is reinforced concrete as are the floors

#### **MARSH COURT**

This is a 12 storey tower block constructed in insitu reinforced concrete with render bands at every floor level and brickwork above to the underside of the concrete floors.



There is vertical cracking on the render band that is between the floors at all levels. The crack is of the order of 2-3mm at most. There are no expansion joints in the block either on the front elevation or the flank walls.

There are signs that remedial ties have been installed on the flank walls to support the outer leaf and the inner leaf or insulation may have been pumped into the cavity.

The building is likely to be founded on piles.

No foundation defect was observed.

The building is in good structural condition.

#### **27 MARSH COURT- INTERNAL SURVEY**

This is a flat on the 5<sup>th</sup> floor.

There is a concrete upstand approximately 1 metre high by 150 thick which spans between the party walls of the flats. There are no specific defects in it. It has been rendered on the front face and the remainder is painted.

The external wall is a cavity wall of approximately 270mm thick. The brickwork appears to be a sand faced Flettons in coloured mortar. As viewed from the balcony there are no significant defects at the present time.

The construction appears to be flat slab as there are no beams visible. It is likely that there are reinforced concrete walls and columns buried in the blockwork in the internal walls.

#### **48 MARSH COURT – INTERNAL SURVEY**

This is a two bedroom flat on the 8<sup>th</sup> floor.

In the sitting room which is on the corner of the building there are signs of condensation at the ceiling wall junction. There are no specific structural defects.

In the kitchen there are no specific defects. The same applies in the hall.

In the bathroom there are signs of mould on the ceiling but no structural defects.

In the rear bedroom there are signs of condensation and peeling of the wallpaper on the rear wall. Again there are no structural defects.

In the second bedroom of the flat there are signs of condensation in the ceiling near the windows, but no structural defects.

#### **HUDSON COURT**

This is a 12 storey block of flats built in the 1960's. It is a insitu reinforced concrete framed building with external brick cladding between the floors. At each floor level there is a render band which covers a concrete upstand at the edge of the slab.

On the external elevations there is vertical cracking in the render bands at the majority of the levels as there are no expansion joints for the full length of the building on either the front elevation of the flank wall. Normal render expansion joints would be positioned at 6 metre centres in blockwork, 12 metres in brickwork and 6 metres in render.

On the flank walls there have been remedial ties added in external skin of the brickwork into the internal to prevent the brickwork from popping out and falling to the ground. The holes may have been to pump insulation into the cavity.

There is no foundation defect observed in this building. The building is likely to be founded on piles.

Generally the building is in good structural condition.

### **38 HUDSON COURT – INTERNAL SURVEY**

This is a two bedroom flat on the 7<sup>th</sup> floor.

This flat is generally in good structural condition.

In the kitchen there are no specific structural defects.

In the living room there are no specific defects at the present time.

In the bathroom there are signs of condensation but no structural defects.

There are no defects in the hallway.

In the middle bedroom there are signs of some dampness on the front wall but no structural defects.

The balcony is similar to the other flats with no specific defects.

In the bedroom nearest the front door there are no structural defects

### **1930's BLOCKS**

#### **PRIORY CLOSE**

This is a four storey block of flats constructed in the 1930's. There is exposed concrete at the first floor.

The brickwork is mainly solid construction in English Bond but there are extensions to the buildings which are constructed in cavity work. Generally the brickwork is in good condition and there is no significant weathering of the bricks. Over the windows there are arches with a significant rise, all in good condition.

On the access walkways there is cracking to the underside of the concrete as they are likely to be constructed with filler joists. There are no expansion joints in the brickwork and there is cracking in the exposed slab edge at first floor level.

No foundation defects were observed.

In general the block is in good structural condition.

### **RAMSEY HOUSE**

This is a 4 storey block of flats constructed in the 1930's. The flats are accessed by means of the reinforced concrete walkway with brick balustrading. The wall construction is in English Bond with rows of headers and rows of stretchers.

The brickwork is in good condition apart from loose pointing due to weathering.

The concrete balconies have been painted in the past but there are areas of spalling paint. There is also cracking on the underside of the balconies as there are no expansion joints in the block to take up thermal movement. At low level the walls consist of a red bricks and Stocks at first floor level and above. The Stock brickwork is constructed in cavity construction.

The existing roof is covered in tiles. As viewed from the ground it is not showing any significant deflection.

At first floor level there are bands of concrete which are exposed at the floor levels which are not at the upper levels.

No foundation defects were observed.

Externally the block is in good structural condition.

### **RAMSEY HOUSE – FLAT 6 – FIRST FLOOR – INTERNAL SURVEY**

This is a two bedroom flat on the first floor.

In the entrance hall there are signs of spalling paint in the ceiling, no structural defects.

In the bedroom facing the entrance there are no significant defects at the present time.

In the bedroom at the rear there are no significant defects.

In the rear sitting room there are no significant defects.

In the kitchen again there are no structural defects.

In the toilet and the bathroom there are no defects.

### **BECKET CLOSE**

This is a four storey block of flats built in the 1930's. It is constructed in solid wall construction apart from the extensions.

There is some cracking in the concrete slab which is projecting at first floor and also on the underside of the access deck. This indicates that it is likely that it is filler joist construction. There is some weathering of the brickwork at higher level, but generally it is satisfactory.

No foundation defect is visible at the present.

The block is generally in good structural condition.

### **RYDER HOUSE**

This is a four storey block of flats constructed in the 1930's. The walls are solid wall construction. The brickwork is in good condition apart from some weathering at the upper levels.

The windows have arches over them with a significant rise.

There is no foundation defect visible at the present time despite the presence of trees near the block.

The block is generally in good structural condition.

### **ELEANOR HOUSE**

This is a four storey 1930's block of flats built of solid construction. There is an exposed concrete slab at first floor and access balconies.

Generally there is some weathering of the brickwork at high level, but no significant defect in the brickwork. There are arches over the windows. At first floor the brickwork is cavity work and red brickwork at ground floor level.

At viewed from the ground the roof which is pitched does not show any significant deflections.

At the present time there is no foundation defect visible.

The block is in good structural condition.

### **PINCOTT ROAD**

This is a row of two storey houses constructed in the 1930's. The external walls are cavity construction and there are concrete slabs forming porches.

The roof is generally flat with no obvious deflections as viewed from the ground. The eaves boards are badly weathered.

No foundation defect was observed.

The buildings are generally in good structural condition.

### **GILBERT CLOSE**

This is a 1930's block of four storey block of flats.

The external walls are constructed in solid brickwork in English Bond and there are some additions in stretcher bond.

At first floor level the concrete slab is exposed and there were some vertical cracks of the order of 2mm as there were no expansion joints in the building.

There are walkways which lead to the flats which are concrete with brick balustrading.

Generally the brickwork is in good condition apart from minor weathering at high level.

The roof was not inspected as it is flat and not pitched.

There are arches over all the windows which have a satisfactory rise.

No foundation defect was observed.

The block is generally in good structural condition.

### **1960's BLOCKS**

#### **TANNER HOUSE**

This is a 3 storey 1960's block of flats with deck access at each floor level constructed in load bearing masonry.

Generally the external cavity brickwork which is cavity is satisfactory. Concrete repairs have been undertaken on the slabs which project from the floors. There are some hairline cracks in the edge beams to the balconies and to the general slabs which project. There are no expansion joints in this block in the external walls.

The access decks have reinforced concrete upstands forming the balustrading. In some areas there are signs of corrosion of the reinforcement near the surface.

No foundation defect was observed.

The building is in good structural condition.

#### **DE BURGH HOUSE**

This is a 3 storey block of flats built in the 1960's constructed in load bearing masonry.

The external walls are cavity brickwork and there is exposed concrete slabs and beams on the elevations. Some of the beams have exposed aggregate and others have had concrete repairs undertaken on them. Similarly the beams and slab edges appear to be satisfactory apart from some weathering.

At eaves level the eaves boards are badly weathered.

Generally the brickwork is cavity construction and is satisfactory.

No foundation defect was observed.

The block is generally in good structural condition.

### **MERTON PLACE**

This is a block of maisonettes of 4 storeys with deck access at the second floor constructed in load bearing masonry.

The deck access consist of reinforced concrete slabs which appear to be filler joists as there are a number of cracks at right angles to the main rear wall. The main external walls consist of cavity brickwork and the lintels are downstands on the concrete slabs. Concrete repairs have been undertaken in the past and there are still signs of some weathering but generally the concrete appears to be satisfactory at the present time.

The access stair is external and is reinforced concrete. This is generally in good condition, but there are signs of hairline cracks.

The roof is pitched and not suffering from any deflection at the present time.

At the rear there are a number of cantilevering reinforced concrete balconies with steel balustrading. At viewed from the ground they appear to be satisfactory although there is some minor cracking on the leading edge.

No foundation defect was observed.

The building is generally in good structural condition.

### **MYCHELL HOUSE**

This is a 3 storey block of flats with commercial at the ground floor constructed in load bearing masonry.

The external brickwork is cavity construction and is in good condition. There are exposed concrete slabs at first and second floor. Concrete repairs have been undertaken but there is hairline cracking in the concrete. The concrete is generally in good condition. The building has a pitched roof this is not showing any signs of deflection.

No foundation defect was observed.

The building is generally in good structural condition.

### **HILLBOROUGH CLOSE**

This is a 3 storey blocks of flats with desk access constructed in load bearing masonry.

The structure consists of reinforced concrete slabs and is of cross wall construction. The deck access slab has had concrete repairs undertaken in the past and there are signs of cracking on the underside and on the face.

The brickwork to the building is in good condition. The lintels are formed as an edge beam to the slab. They have had concrete repairs undertaken and are generally satisfactory.

On the front face of the building there are cantilevering concrete balconies which have had repairs undertaken. There are signs of more recent cracking.

This block is not currently suffering from any foundation defect.

### **NORFOLK HOUSE**

This is a 3 storey block of flats built in the 1960's. It is of cavity wall and load bearing masonry construction.

At the rear there are reinforced concrete access slabs which appear to be constructed using filler joists. There are a number of cracks which run at right angles to the building. This occurs at all levels. There is no evidence of any expansion joints either in the walls or in the slabs.

At roof level the eaves boards are badly weathered but the roof is not suffering from any significant deflections.

There are numerous cantilevering concrete balconies on the front of the building that had repairs undertaken which are generally satisfactory.

No foundation defect was observed.

The block is generally in good structural condition.

### **1970's BUILDINGS**

#### **DOWMAN CLOSE**

These are 3 storey townhouses which are in two terraces. They were constructed in the 1970's generally in good structural condition externally. There are no expansion joints in the external brickwork. The roofs are not suffering from any deflections as viewed from the ground.

There are concrete lintels over the garages which are showing signs of wear as the aggregate has been exposed. Concrete repairs have been undertaken in the past.

Under the roof there is concrete ring beam which is in good condition generally.

There is some rust staining on a few of the lintels over the windows.

The blocks are not suffering from any foundation defect at the present time.

Both blocks are in good structural condition.

#### **9 DOWMAN CLOSE – INTERNAL SURVEY**

This is a 3 storey townhouse.

In the kitchen at the rear in the ground floor there are no structural defects. The floor is concrete covered in vinyl.

In the entrance hall there is minor cracking in the ceiling which has been patched up but no significant defects.

The staircase is timber to the first floor level and is in good condition.

In the first floor front bedroom no significant defects. The floor is timber.

In the first floor rear room there is coving at the ceiling wall junction and there are no structural defects at the present time.

In the second floor front bedroom there are no significant defects.

In the rear bedroom at second floor level. The rear wall appears to be drylined but not the party wall. The floor is timber.

In the bathroom there are no significant defects. Hint of a crack at the ceiling wall junctions.

The flat is generally in very good condition having been well maintained.

#### **DOEL CLOSE**

This is a 1970's block with a commercial unit at ground floor and then a two storey maisonette above. It is constructed in a combination of load bearing masonry and a reinforced concrete frame up to first floor.

The external brickwork generally in good condition. There is some cracking on the concrete at the first floor level where it cantilevers to form the balconies.

At the rear there is a series of columns, which are in good condition.

There is no foundation defect visible on this block at the present time.

The block is in good structural condition.

#### **No. 5 DOEL CLOSE - INTERNAL SURVEY**

This is a three bedroom maisonette built in 1978.

In the kitchen there are no specific defects.

The same applies in the hallway.

In the living room there are no specific defects again.

At the rear there is a balcony which consists of a concrete slab covered with asphalt. It is in good condition.



Above the doors leading to the balcony there is a lintel which is suffering from some damage. There is cracking which is horizontal and the aggregate is exposed. It is likely that the concrete is part of the edge of the slab to the floor above. The joints in the brickwork are raked out.

On the staircase there is a horizontal crack down the side of the first floor. It is of the order of 1-2mm at the present time.

In the front bedroom at first floor level there are no significant defects. The same applies in the hallway between the front and back.

In the rear bedroom there are no significant defects.

There are no defects in the bathroom at the present time or in the toilet adjacent.

The property has been well maintained over the years.

### **VANGUARD HOUSE**

This is a 3 storey block of flats built in the 1970's constructed in load bearing masonry.

It consists of cavity construction and projecting concrete lintels above the windows. The brickwork is generally in very good condition. There is a mono pitched roof on the property which is not suffering from deflection as viewed from the ground.

No foundation defect was observed.

The building is generally in good structural condition.

### **LOVELL HOUSE**

This block consists of a series of flats and maisonettes and is three storeys high. Constructed in the 1970's and is load bearing crosswall construction with tile hanging on the front elevation.

Generally the walls are in good condition including the flank wall which is built in cavity work.

The rear elevation is similar to the front with cavity brickwork up to first floor and an exposed concrete slab with tile hung walls above.

The roof is pitched and not suffering from any significant deflections at the present time.

These properties are not suffering from any foundation defect at the present time.

The block is generally in good structural condition.

### **STANE CLOSE**

This is a terrace of two storey houses built in the 1970's constructed in load bearing masonry.

The construction is cavity brickwork with reinforced concrete projecting lintels over the windows. There is a concrete ring beam at roof level and pitched roof.

The roof is not suffering from any deflections at the present time and the brickwork is generally in good condition front and back and the two flank walls.

The block is not currently suffering from a foundation defect.

The properties are generally in good structural condition.

### **HAYWARD CLOSE**

This is a series of terraced town houses of 3 storeys of crosswall construction in load bearing masonry.

The external walls are cavity brickwork, the blocks were constructed in the 1970's.

There are garages at the front which have a concrete beam with exposed aggregate over the entrance doors. This has become weathered and repairs have been done to the soffit.

There is a concrete ring beam at roof level which appears to be satisfactory. Also the lintels appear to be part of the concrete slab at first and second floor. They have had concrete repairs undertaken on them and appear to be satisfactory.

The front elevation brickwork is similar to the rear and in good condition.

The buildings are not suffering from any foundation defect at the present time despite the close proximity of trees.

The buildings are in good structural condition.

### **1980's**

### **WILL MILES COURT**

This is a 1980's development of two storey flats constructed in load bearing masonry.

Generally the brickwork is in good condition although there are no expansion joints. On the rear face above the entrance there are cracks in the render and there is also weathering of the timber at the eaves level of the roof.

As viewed from the ground the roofs are not suffering from any deflection. They are pitched and tiled.

There are no foundation defects visible at the present time despite the close proximity of a row of trees on the main road.

The properties are in good structural condition.

## **4.0 DISCUSSION AND CONCLUSIONS**

### **General**

To conclude it was decided to group the buildings together in types and dates of construction because many of the forms of construction are similar.

In the absence of soils investigation reports for the estate the geological maps indicate that the site is underlain by sand and gravel. This explains in part why no foundation defects were observed in any of the blocks.

The comments included in this report are based on a visual inspection. If work is to be undertaken on the buildings intrusive investigative work will have to be undertaken before any work commences so that a realistic assessment can be made on the scope of work required.

### **Tower blocks**

As reported in survey section of this report there are three 12 storey tower blocks which were completed in 1972.

From the visual survey information the main defects which will need to be dealt with in the future is the external render on the concrete upstand which is all round the buildings.

It is likely that the render will have to be covered with additional render including expanded metal reinforcement back to the concrete. Joints will be required in the new render at 6 metre centres so that the same defect visible currently will not reappear.

In the long term repointing will be required to the brickwork as there are currently some areas of loose pointing and also loose bricks. There is no immediate danger to people walking around the building of masonry falling off. In the longer term this will need attention in the future.

On the flank walls of the buildings it was noted that there are a number of holes which would appear to be either additional wall ties so that the inner skin and outer skin are tied together. It could also be holes where insulation had been pumped into the cavity. It is recommended that a boroscope survey is undertaken to check the cavities at low level in the area of the holes to see what has been done. It is a well known defect that external brickwork on this height of building require additional ties to prevent bricks from popping out as a result of vertical thermal movement. On these blocks there is no current evidence that there is movement as very few structural defects have been observed. Possibly additional brick ties may be required following the investigation.

The buildings are essentially a robust concrete frame with a flat slab construction, reinforced concrete walls and columns and likely to be supported on piled foundations.

As there are no foundation defects visible it is not proposed that any investigation is required to the foundations at this time.

It is necessary to undertake some testing of the concrete on all blocks to check the current levels of cover, carbonation and chloride content so that the life of the concrete can be estimated more accurately. It is proposed the tests will be taken from the balconies at the first floor level and the tenth floor level on all blocks as there could be variations in the concrete in the height of the

building. Visually at this time there are no major defects in the concrete in these buildings either externally or internally.

Given a programme of maintenance and testing as proposed above these buildings could last another 30 years.

As the blocks were completed in 1972 it is assumed that as they are insitu concrete framed that they have been designed in accordance with the requirement for progressive collapse that applied at the time of construction. From 1968 onwards the requirements changed following the incident at Ronan Point. It was noted that all three blocks had gas risers internally.

### **Mansion blocks**

These blocks are a series of 1930's Mansion blocks of four storeys.

Generally the external brickwork is solid wall construction with some buildings having cavity work above first floor level. In general the brickwork is in very good condition considering the age of the buildings.

On a number of the blocks there are concrete access decks which appear to be constructed with steel filler joists and concrete in between. They are generally showing signs of movement as there is cracking at right angles to the building and also through the leading edge of the balcony which is exposed concrete. Repairs have been undertaken generally on all the blocks, but the defects have reappeared. This is a long term maintenance problem as concrete repairs only last about 10-15 years in reality before they have to be redone.

The roofs where they are pitched appear to be satisfactory but the flat roofs were not inspected during this survey.

Externally the buildings appear to be unaltered since their construction.

There does not appear to be any foundation movement to any of the blocks.

### **1960's blocks**

These buildings consist of a series of 3 and 4 storey buildings consisting of maisonettes and flats.

Generally the external brickwork is satisfactory and the majority of the buildings are cross wall construction hence they are very robust.

There are a number of areas where concrete edge beams have been exposed. Concrete repairs have been carried out but again these have limited life and will need doing in future in approximately 10-15 years time. Again there are cantilevered balconies and access decks these will require concrete repairs, particularly on the leading edge and on the soffit, there are some cracks currently.

Generally on all of the blocks there are no expansion joints in brickwork in accordance with current practice. There are however no major defects visible at the present time due to their omission.

None of the blocks have any type of foundation defect.

Where there are pitched roofs, these appear to be in satisfactory condition and not suffering from deflections at the present time.

### **1970's blocks**

These blocks are a mixture of terraces of town houses, 2 storey houses and various small blocks of flats.

In general there are no defects in the external brickwork. As was the fashion at that time the brickwork has raked out joints which in the long term will result in weathering of the brickwork. For now because the bricks are hard burnt this has been minimal but in the future years it is likely that there will be weathering. Also it is likely that the pointing which is very vulnerable to frost and water damage will require to be replaced. Recessed pointing is very vulnerable to freeze thaw cycle and this is likely to increase with changing climatic conditions which we have experienced in the last few years. To repoint all the buildings is a major task.

There are a number of concrete beams and edge slabs to the buildings which are exposed. Some will need to have concrete repairs undertaken on them as there are a number of reinforcing bars exposed in a few areas, although there is nothing too serious that needs immediate action.

In particular where there are beams with an exposed aggregate finish these should be checked for chloride content, carbonation and reinforcement cover. These beams are likely to require concrete repairs in the next 10 years.

### **1980's blocks**

This applies to Will Miles Court only and the comments are the same as for the 1970's blocks in terms of the long term problem with the raked out pointing to the brickwork.

In addition there are exposed areas of timber which will need to be protected against the weather and render repairs are required over the main entrance at the rear.

Generally the buildings are in good structural condition externally including the roof which is not suffering from any deflections at the present time.

## DISCLAIMERS

1. This report does not constitute a full survey of the premises.
2. Except where specifically indicated in the report, woodwork, brickwork or other parts of the property or its services, which are covered, unexposed, or inaccessible, have not been inspected and this report does not constitute any warranty that any such parts of the property are free from defects.
3. This report is prepared for the use of the person, firm or company to whom it is addressed (and that of any other person, firm or company whose interest was disclosed to us prior to its preparation) and no responsibility is accepted by us to any other party whatsoever for the whole or any part of its contents.
4. It is necessary as a result of specific changes in professional indemnity insurance to clarify the scope of our services in respect of asbestos, fungus and mould. For the avoidance of doubt this practice does not accept any liability or responsibility for or in connection with the detection, monitoring, treatment, eradication or removal of these substances either implied or otherwise within the scope of our services. Notwithstanding your legal obligations it is strongly recommended independent professional surveys be carried out on any existing building that is to be the subject of development, refurbishment or alteration works to identify the presence of such substances and give recommendations for treatment and or removal.

# **APPENDIX 1**

## **PHOTOGRAPHS**



May Court



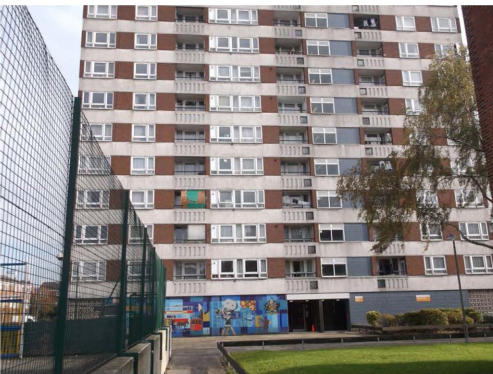
May Court



Marsh Court



Marsh Court



Hudson Court



Hudson Court



Hudson Court



Priory Close





Priority Close



Ramsay House



Ramsay House



Becket Close



Becket Close



Ryder House



Eleanor House



Pincott Road



Pincott Road



Gilbert Close



Gilbert Close



Tanner House



Tanner House



Tanner House



De Burgh House



De Burgh House



Merton Place



Merton Place



Merton Place



Mychell House



Hillborough Close



Hillborough Close



Norfolk House



Norfolk House



Dowman Close



Doel Close



Doel Close



Doel Close



Vanguard House



Vanguard House



Lovell Court



Lovell Court



Stane Close



Stane Close



Hayward Close



Hayward Close



Will Miles Court



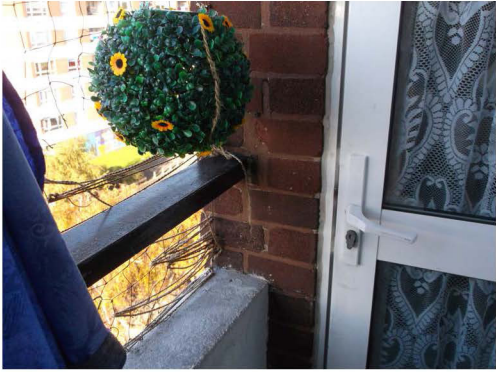
Will Miles Court

## **INTERNAL SURVEY**

## **PHOTOGRAPHS**



27 Marsh Court



27 Marsh Court



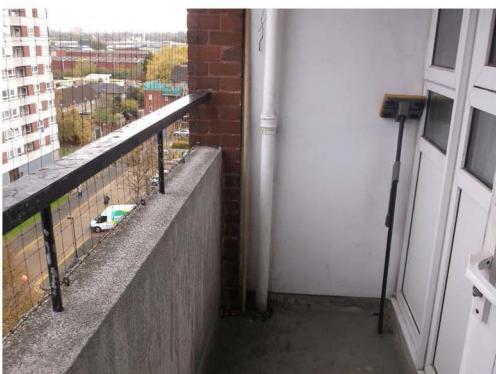
48 Marsh Court



65 May Court



65 May Court



38 Hudson Court

## **APPENDIX 2**

### **LAYOUTS**



## KEY PLANS

