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# Report Document

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**Project: 16873 – Barbican Estate****Existing Langley Waterproofing System Guaranteed Roofs Only**

Ben Jonson House  
John Trundle Court  
Bunyan Court  
Bryer Court  
Breton House  
Mountjoy House  
City of London  
EC2Y

**Client:**

Paul Murtagh  
City of London Corporation

**Report written by**

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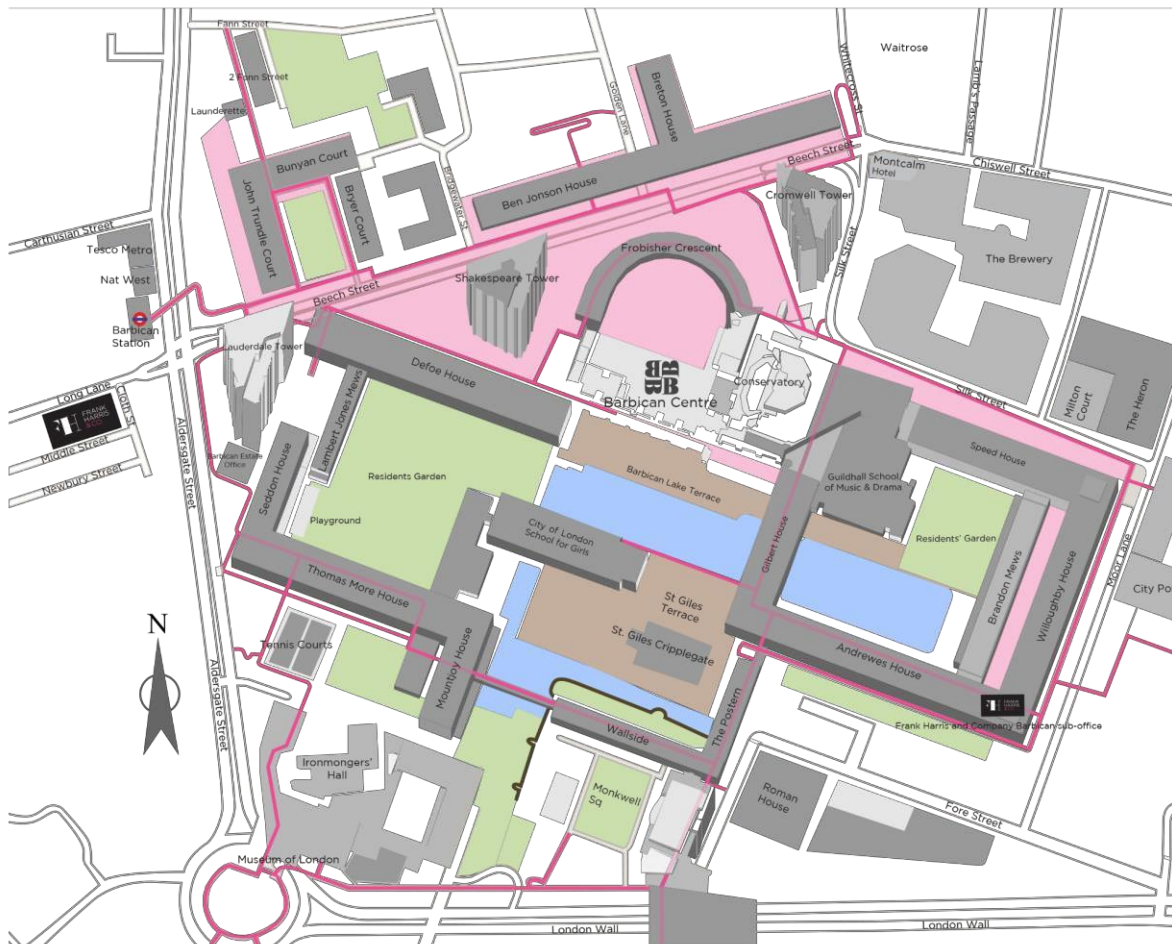
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## Roof Survey Report & Recommendations

Roof areas covered by this report: as identified below:



### 1.0 Outline Description:

- This report has been produced for Paul Murtagh of the City of London Corporation for the express use in evaluating the condition of the currently Langley Waterproofing Systems (LWS) Ltd Guaranteed roof areas.
- The report is based upon our site inspection survey undertaken in February 2017 and should be read in conjunction with the enclosed photographs.
- All buildings are under City of London Corporation.
- Access to the roofs is via communal staircases.
- Weather conditions at time of survey: Dry and Cold.

## **2.0 Scope of Report:**

- Information contained within this report relates to the property as identified in the title headers of this document only.
- This report is not a structural survey.
- Any comments on roof structure or other building related issues in this report should not be taken to imply that its integrity has been assessed or deemed acceptable. A qualified party should verify any concerns relating to the integrity and / or capabilities of any part of the structure.
- Langley Waterproofing Systems Ltd reports are written on the basis that the substrates, roof deck and structure are sound and durable. We cannot accept responsibility for the consequences of the latent defects in the roof deck and structure.
- No tests were carried out to establish the presence of deleterious materials on, around, or within the property. However, suspected items will be highlighted within this report that may require further investigation if noted.
- No tests were carried out to service installations.
- General Note: "Listed Building Status" It is the responsibility of the building surveyor and / or client to ascertain the status of the building/s in question.

## **3.0 Analysis**

The inspections were carried out to analyse the current condition of all roof areas currently under guarantee to ascertain if the specified areas were one of the following:-

- A In good condition and remaining under guarantee for the specified period, with no signs of factors that would negate the guarantee.
- B In good condition but for isolated factors that can be simply repaired to enable the roofing areas to remain under guarantee for the specified period.
- C In poor condition due to various factors, meaning the guarantee is now void and works are required in order to refurbish the roof area and place under a new guarantee.

The inspections were carried out by a member of the Langley Waterproofing System Technical Team, Graham Jackson, along with the Senior Area Manager Tim Gardner, and a member of the Barbican Estate Management Team, Ray Sibson.

### Overview of All Roof Areas inspected:-

	Area	System	Guaranteed Until:	Condition	Comments
<b>John Trundle Court</b>	Main Roof Areas	BUR, 90mm Insulation	2025	Good	N/A
	Low / High Level Roofs	BUR	2025	Good	N/A
	Lower Balcony (Walkways)	BUR	2025	Good	N/A
<b>Bunyan Court</b>	Main Roof, Staircase & LMR	BUR, 90mm Insulation	2025	Good	N/A
	Upper & Lower Balconies	BUR	2025	Good	Note: Some broken paving slabs were seen and maintenance to clear gutters and outlets should be carried out.
<b>Bryer Court</b>	Main Roof & Tank House	BUR, 100mm insulation	2025	Good	N/A
	Balconies	BUR	2025	Good	N/A
	Walkway Areas	BUR	2025	Good	Broken paving slabs and some areas with none at all as used for access to cables below. Maintenance of drainage outlets also required.
<b>Ben Jonson House</b>	Main Roof Areas	BUR, Insulated Over dwellings only	2023	Some Attention Required	Water blisters found in some areas due to damaged detailing to door thresholds and window cills. Area burnt by roofing maintenance contractors (likely)
	8 <sup>th</sup> Floor Staircases, LMR's	BUR, 25mm Insulation	2023	Good	N/A
	7 <sup>th</sup> Floor Upper Balconies	Asphalt, Spartan Tiles	2023	Generally good-issue to area over 506 (Plant room 17/4)	This area is reported to have been re-laid and there are signs of felt repairs to the perimeter edge. However, the issue previously reported to the maintenance team has re-occurred and further inspection is required.
	6 <sup>th</sup> Floor Lower Balconies	Asphalt, Spartan Tiles	2023	Good	N/A

	Area	System	Guaranteed Until:	Condition	Comments
Breton House	Main, Lower & Plant Areas	BUR, 25mm insulation	2023	Good	N/A
	Lower Balconies	Asphalt, Spartan Tiles	2023	Some minor repairs required	Some minor cracks were found in a walkway / lower balcony
Mountjoy House	Main Roof Areas	BUR, Tapered	2024	One area needs full replacement	Roof area is divided in to sections and one area has been cut into and is holding large amounts of moisture due to failing drainage system within building structure
	Tank / LMR's	BUR	2024	Good	N/A
	Terrace / Balconies	BUR	2024	Good	N/A

### 3.8 Photographic Record:



1. John Trundle Court  
– Overview of the roof area.



2.  
-Low level roofs.

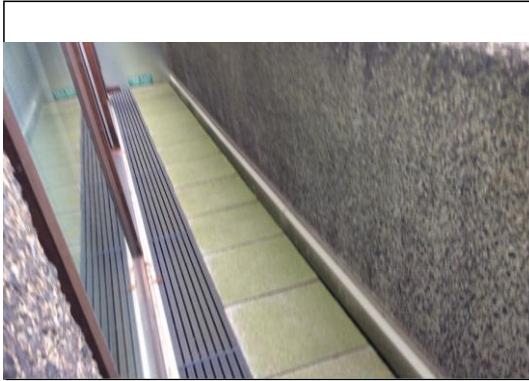


3.  
- As above.



4.  
- Service ducts.





5.  
- Walkway.



6.  
- Exposed area of walkway.



7. Bunyan Court  
- Main roof area.



8.  
- Walkway.



- 9.
- Maintenance required to outlets to clear debris and plant growth.



10. Bryer Court
- Example of broken paving slabs.



- 11.
- Main roof area.



12. Breton House
- Main roof area.





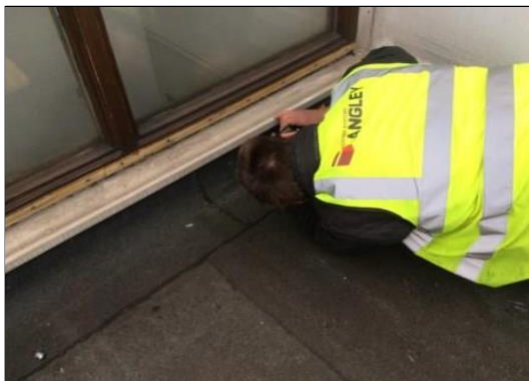
13.  
- Lower Roof area.



14.  
- Lower Terrace area / Balconies.



15.  
- Crack found in asphalt in corner of walkway.



16. Ben Jonson House  
- Water ingress found from detail below window cill.



17.

- Water found beneath the cap sheet in area by door threshold.



18.

- As above.



19.

- Water blister within the waterproofing.



20.

- As above



21.  
- Debris left on the roof area.



22.  
- Equipment found left on end roof area.  
Note: this may well be the cause of the burn on the roof area as per below:-



23.  
- Roof has been burned from hot equipment with patch repairs also evident nearby.



24.  
- As above.





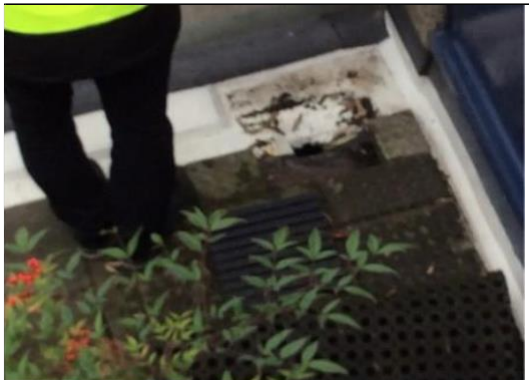
25.

- Position of problematic terrace area below, above unit "506".



26.

- External perimeter has been overlaid with felt membrane.



27.

- Issue appears to be centred round the outlet, likely the drainage system itself.
- There appears to be little evidence that this area has indeed been fully repaired, with likely localised repairs only carried out.



28. Mountjoy House

- General detail to roof areas.

Note: the roof is divided into sections by dividing Tank / LMR rooms. Sections 1 and 2 were found to be in good condition for the age of the system.



29.  
- As above.



30.  
- Section "3" - Area has been stripped and a form of temporary repair carried out.



31.  
- Heavy staining across the roof area, likely also debris from repair works carried out.



32.  
- Saturated insulation within the waterproofing.





33.

- Outlet has been waterproofed, indicating the issue may be related to the structural drainage.



34.

- Overview of repair carried out.

#### **4: Works required**

Based on the above analysis, we would therefore recommend the following works be carried out:

##### **Ben Jonson House**

###### **Upper Roofs**

All areas of roof where water blisters exist (5 small areas) need to be cut back or stripped out and re-install new Reinforced Bituminous Membrane system (with new insulation as required) ensuring details where possible water ingress occurred is also correctly finished. Note: blisters mainly appear to only be between the underlay and cap sheet.

Area where surface has been burned to be patched with new cap sheet, over an area circa 2m<sup>2</sup>.

The Guarantee will continue in place for the remainder of the 20 year term.

**As a gesture of goodwill, Langley Waterproofing Ltd would be willing to carry out the above works without charge to support the current guarantee.**

###### **Upper Balcony - over "506" / below Plant room 17/4**

We would recommend that a CCTV survey is carried out to the drainage outlet and internal drainage pipework, as in our opinion, this would be the likely cause of the water ingress issues. Following this, a full assessment can be made to decide on an appropriate course of action with regards to the current waterproofing.

All other areas remain under the guarantee and we are happy that the guarantee remains in place.

**An external CCTV specialist will be required to carry out this survey and further analysis to be carried out following the report.**

##### **Breton House**

###### **Walkway defect**

The crack in the asphalt should be repaired and protected with solar paint on completion.

The Guarantee will continue in place for the remainder of the 20 year term.

**As a gesture of goodwill, Langley Waterproofing Ltd would be willing to carry out the above works without charge to support the current guarantee.**

##### **Mountjoy House**

###### **Third roof section**

The roof area has been compromised considerably with wet insulation, degradation of the cap sheet and numerous repairs carried out across the roof area.

We would suggest that this roof area is fully stripped back to the deck, and a new waterproofing system installed, including tapered insulation as original. A new 20 year guarantee would be supplied for this area, while the existing guarantee remains in place on all other areas.

**A Roofing contractor would be required for these works and LWS will provide a bespoke specification.**

## **MAINTENANCE**

It is recommended that standard routine maintenance continue to include the clearing of all rainwater outlets, gutters and other drainage outlets, as well as removing any vegetation, loose debris and repair of any paving slabs as required.

In addition all asphalt areas exposed to UV degradation (i.e. not protected by Spartan tiles) should be painted with White Solar reflective paint at least every 5 years, and all areas should be ensured to be protected.

**Please note that Langley Waterproofing Systems Limited does not accept any responsibility or liability for all repairs that have been carried out during the guarantee period, and have prepared this report purely on the basis of the inspection recently carried out.**