

## **Property History – 3 Hamlin Road, Liverpool, L19 5NL.**

When originally purchased by the previous owner in 2012, a standard mortgage survey was conducted at the time, revealing no inherent issues. Following the purchase, the owner immediately let the property via a previous agent. ABC Property Shop took over management in 2013, and the tenant remains on a Statutory Periodic Tenancy. The property is a three-bedroom, right-handed semi-detached ex-local authority house with a stable 12-year tenancy by a single tenant.

The property was sold to the current owner on 22<sup>nd</sup> March 2023. Since then, no works have been undertaken.

### **Event**

In June 2020, heavy rain and localised flooding, likely due to a surcharge of the local surface water systems, caused significant subsidence in the garden areas of No.1 and No.3. A substantial hole appeared, absorbing a considerable amount of floodwater. The hole in the back garden aligned with a subsequent collapse at the front, suggesting a linked cause. Similar issues have affected other houses on this side of the road (numbers 1 – 11) over the years since construction.

On 19<sup>th</sup> June 2020, the holes were temporarily filled with a dry mix of hardcore and Portland cement at a 10:1 ratio to form a weak dry mix concrete. This was placed in 150 cm compacted layers up to 150 mm below ground level, using MOT2 (6F2) crushed stone for the hardcore. This formed a temporary, washout-resistant reinstatement that can be easily removed when necessary.

### **Investigations**

- Local drainage records show a substantial combined sewer (culvert) running the length of the gardens. Historical maps suggest this is a culverted watercourse.
- Communication with South Liverpool Homes revealed a past sewer collapse and repair.

- Initial investigations pointed to the UU sewer, but on 11<sup>th</sup> August 2020, it was found to be well-built and in good condition, though potentially silted at its downstream end. UU located and repaired a collapse at 29 metres but found no evidence linking it to the subsidence.
- A private drain survey on 1<sup>st</sup> December 2020 identified issues (report available) that remain unrepaired.

## **Findings**

Philip Wright Associates conducted trial pits, boreholes, and further investigations in November 2021. Key findings include:

- The property has relatively minor damage due to the sinkholes at the front and rear.
- External walls show little misalignment, and floors are reasonably level, with minor cracking between walls and ceilings.
- UU's inspection of surface water drains, and the culvert revealed no significant leakage likely to cause soakaways.
- A drainage survey of private drains around the property showed no significant distress likely to cause soakaways.
- Ground investigations revealed the property is built on weak ash and cinders extending down to 6.6 – 7.6 meters, overlying pink sandstone. The underpinning appears ineffective due to the poor bearing capacity of the underlying strata.
- Historical maps (OS 1892 – 1914) indicate a watercourse originally ran beneath the house in a valley about 23 feet deep, correlating with the level of sandstone found in boreholes. The culvert noted in UU records likely corresponds to this watercourse.

## **Discussion of Results**

Detailed results are available in the Philip Wright Report, available on request.

## **Suggested Remedial Action**

Recommendations are available in the Philip Wright Report, available on request.