Culvert Investigation Summary Report

At

Varley Street Masterplan – Oldham Road

Client: Jigsaw Homes

Reference: 34901LG

Date: July 2026

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SUTCLIFFE INVESTIGATIONS

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1 Introduction

Sutcliffe have set out below a summary of the investigations undertaken in relation to the culverted watercourse identified at the Oldham Road development site, together with the current position following discussions with the Lead Local Flood Authority.

2 Background

During the early review of the site, Sutcliffe undertook a Phase 1 Desktop Study. This identified a potential historic watercourse shown on one of the early 1850s mapping records.

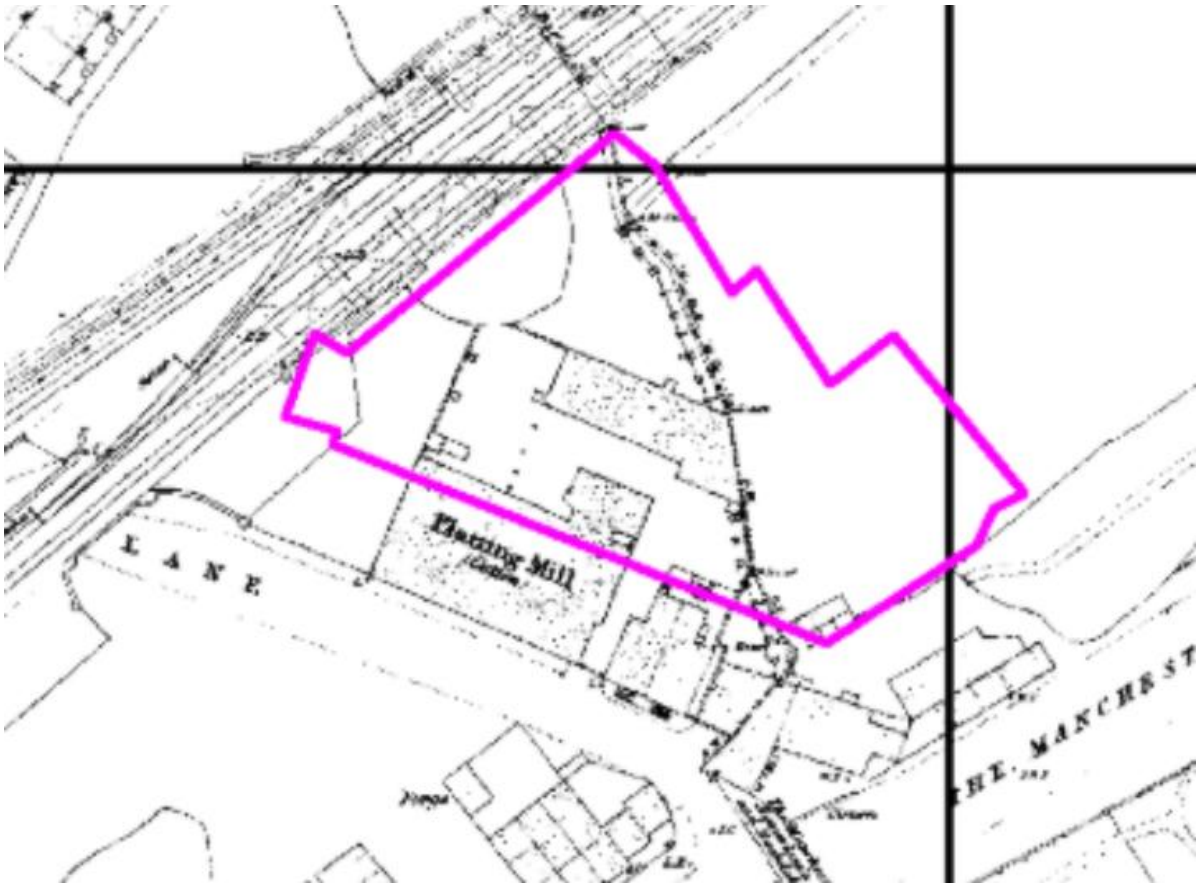


Figure 1: 1850 mapping extract showing potential watercourse

As part of the wider drainage review, we also obtained the latest United Utilities records. These showed a **1050 mm x 600 mm culverted watercourse** diverted along Oldham Road.

Sutcliffe has previous knowledge of this watercourse, having dealt with and diverted it further downstream as part of the Miles Platting developments. On those previous sites, the United Utilities records were found to be accurate.

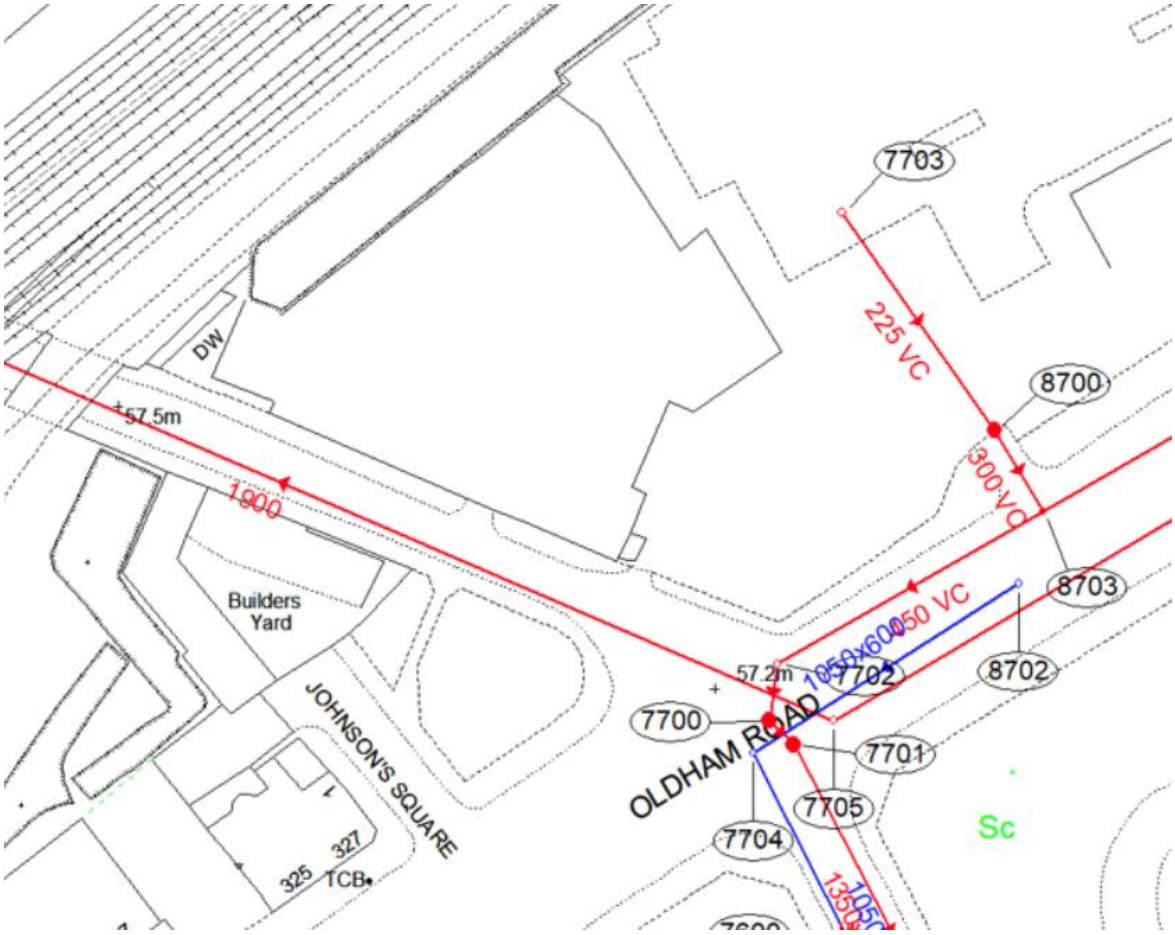


Figure 2: United Utilities plan showing diverted drain

We subsequently applied to United Utilities for discharge consent and were advised to connect the site surface water drainage into the **1050 mm x 600 mm culvert** in Oldham Road. This confirmed that United Utilities considered the culvert to be present and operational.

3 Manchester City Council Watercourse Information

Later in the process, we were provided with a plan from a report commissioned by Manchester City Council. This suggested that the watercourse may still be present through the Oldham Road site, rather than being fully diverted along Oldham Road.



Figure 3: Extract from Manchester City Council watercourse report

Following receipt of this information, we returned to site to carry out trial holes to confirm the location and condition of the culvert.

4 Site Investigation Findings

The trial holes confirmed the presence of the culvert within the site. The culvert is a brick-built oval structure, with water present.

The crown of the culvert was found to be relatively shallow, at approximately **1.2m below current site level**. This creates a constraint for the proposed development, particularly in relation to foundation design and any proposed building over or adjacent to the culvert.



Figure 4: Photograph from inside the culvert



Figure 5: Photograph of culvert exposed on site

It is also noted that during the investigation works, the foul connection manhole was also located. This should assist with the drainage strategy for the Oldham Road development.

In addition, the proposed new culvert manhole could potentially be used to connect the site surface water drainage. This would avoid the need to undertake drainage connection works within Oldham Road, reducing programme, cost, traffic management and highway disruption risks.

5 Discussions with LLFA

Once the culvert was confirmed on site, we submitted an enquiry to the Local Lead Flood Authority, the LLFA.

The initial response was a standard position that the culvert should not be built over. A meeting was therefore arranged with the LLFA in their role as statutory consultee.

During the meeting, we explained the background to the site and advised that both upstream and downstream of the site the culvert is already built over in a number of locations. The LLFA acknowledged this; however, they reiterated that their preference would be for the culvert not to be built over.

We explained the constraints affecting the site, including:

- Existing and proposed site levels.
- The adjacent railway embankment.
- BAPA requirements.
- Sightline/visibility constraints for train drivers if the building were lifted higher.
- The restricted nature of Oldham Road and Varley Street.
- The impact that diversion works would have on the highway network.
- No other possible route for a diversion on site

We also discussed that following the culvert downstream would likely require temporary traffic lights and junction closures at the corner of Oldham Road and Varley Street.

The culverted watercourse has been traced adjacent to the Apollo Pub development and runs under houses on Farnborough Road and along Droitwich Road toward Varley Road.

6 Proposed Engineering Solution

We presented a proposal to provide a new manhole either side of the proposed building footprint and replace the section of culvert between the manholes with a thinner engineered section suitable for build-over.

We also explained the proposed foundation solution, using augered piles to minimise vibration and reduce the risk of damage to the culvert during construction.

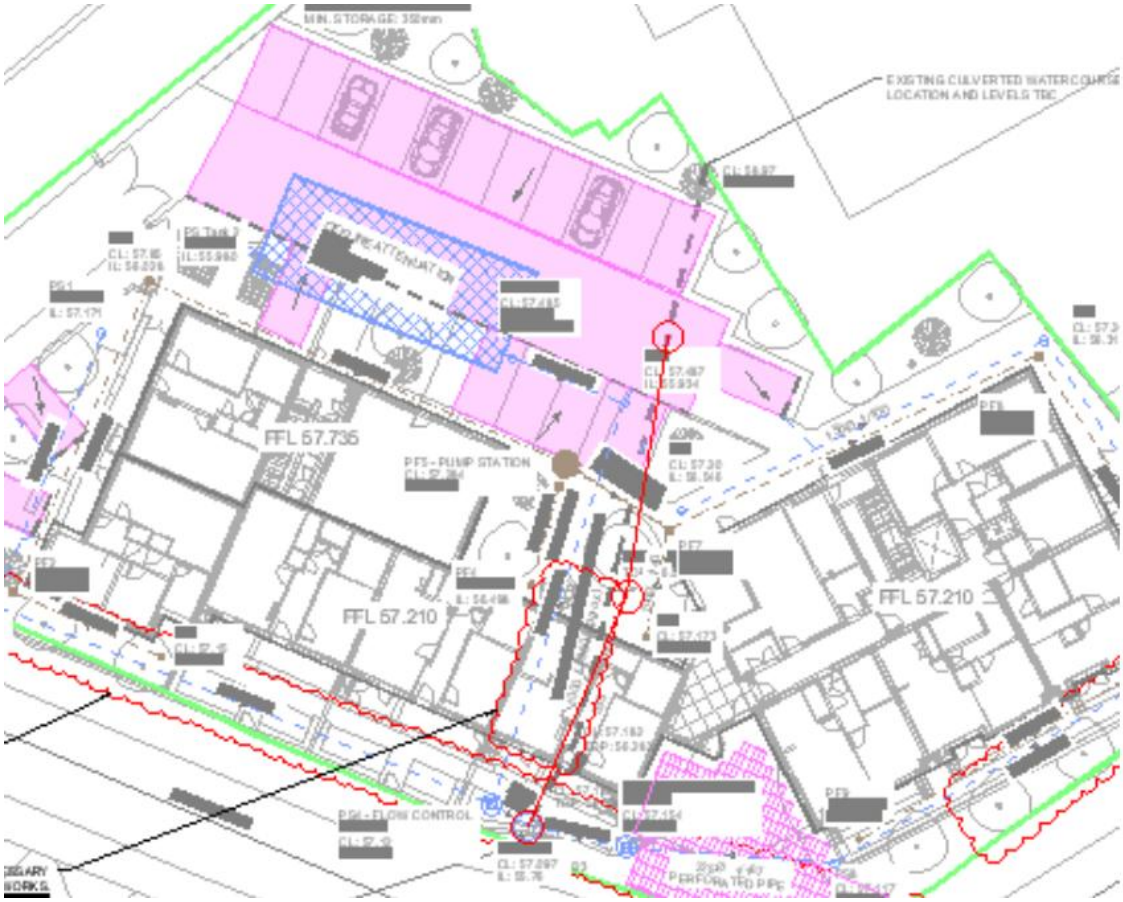


Figure 6: Current proposed drainage strategy showing two new manholes and replacement pipe section

The proposed arrangement would provide betterment by:

- Improving future access to the culvert through new manholes;
- Replacing the existing culvert section beneath the building with a designed and more robust structure;
- Reducing construction risk through low-vibration piling techniques;
- Allowing the site drainage strategy to connect into the new manhole, avoiding the need to work within the busy Oldham Road carriageway.

7 LLFA Position

Whilst the LLFA understood the site constraints and acknowledged the betterment offered by the proposed solution, they remained non-committal in terms of formally agreeing to the culvert being built over.

They reiterated that they are a statutory consultee only and that the final planning decision rests with the Local Planning Authority.

However, the LLFA indicated that they understood the constraints of the site and would seek to word their consultation response sympathetically to the planners, recognising the betterment proposed.

There therefore remains a planning risk that the scheme may still be challenged or objected to on the basis of building over the culvert.

During the meeting, further mitigation options were discussed, including:

- Reducing the number of units.
- Raising the building level.
- Introducing a “flying” first floor to leave an easement above and to the sides of the culvert.

The option of a flying first floor has also been discussed with Dave Dickerson, who is reviewing this as a potential alternative proposal.

8 Summary and Current Risk Position

In summary, the culvert has now been confirmed within the site boundary. Although the United Utilities records suggested the culvert had been diverted along Oldham Road, the Manchester City Council watercourse information and subsequent site investigation confirmed that the culvert is still present through the site.

The late issue of the Manchester City Council information has created a design and planning challenge. However, it is clearly preferable that the issue has been identified now rather than later in the construction process.

The proposed solution provides engineering betterment through the introduction of new manholes, replacement of the culvert section beneath the building, and a foundation solution designed to minimise vibration and construction risk.

The LLFA has not formally approved building over the culvert and remains non-committal. However, they have acknowledged the constraints and indicated that they are sympathetic to the position. They also confirmed that they are a statutory consultee only, with the final decision resting with the planners.

The key residual risk is therefore that the planners may still object to the current scheme based on the LLFA consultation response. This should be treated as an ongoing planning risk until the LLFA response and planning position are formally confirmed.

It would be our proposal that the application is submitted on the current layout with a potential alternative solution being looked at by the Architects.