

GEOTECHNICAL REVIEW

23RD January 2026

Project Name: 18 Midford Lane, Limpley Stoke, Bath

Project No: -----

Revision: P01

Reference: ML-BWB-ZZ-XX-TDN-GE-4002-S2-P01

Author: Ian Gardner

Reviewer

Approver:

1. INTRODUCTION

BWB Consulting Ltd (BWB) had been appointed by ARC Property Development Ltd (ARC) to act as their Designers Geotechnical Advisor (DGA) as defined by DMRB CD 622 Rev 1, with a specific remit related to the proposed drainage strategy for 18 Midford Lane, Limpley Stoke, Bath.

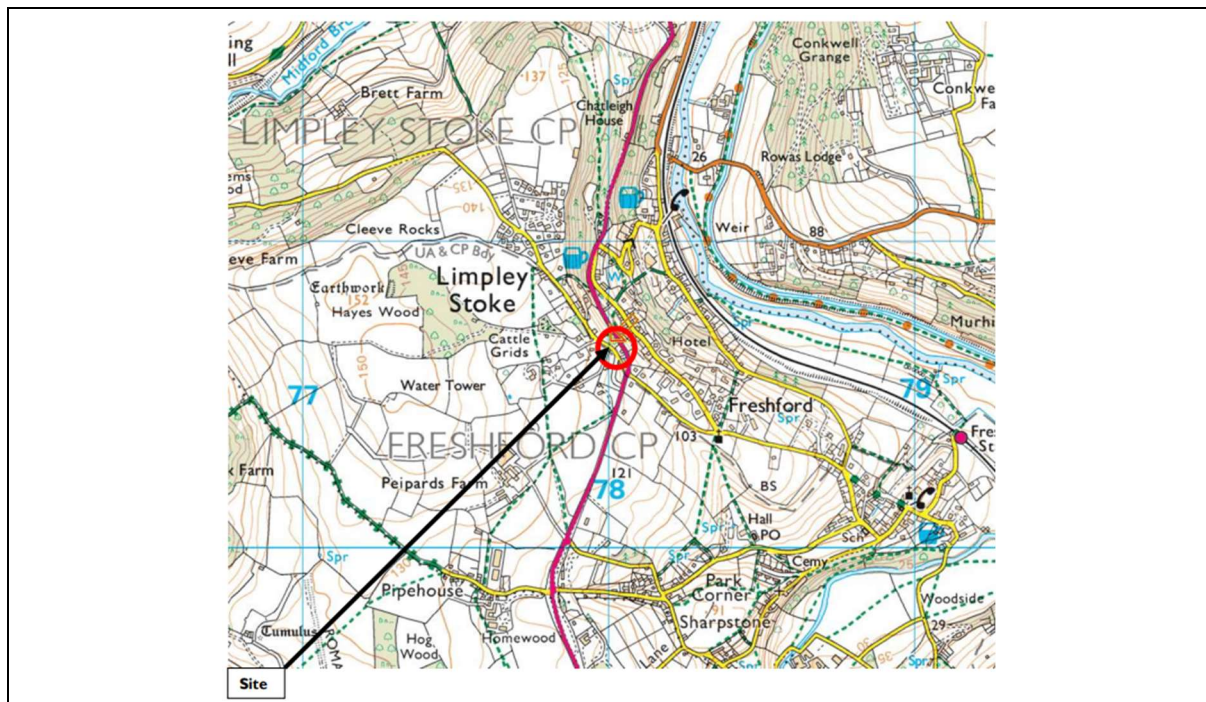


Figure 1-1: Site Location Plan

The development at 18 Midford Lane will comprise the construction of a pair of semi-detached properties, that shall be supported off piled foundations. The development will include minor re-profiling of the land, as well as the installation of drainage and the connection of other

services. The site itself is located to the immediate West of the A36, Warminster Road, as indicated in **Figure 1-1**.

As part of the planning process, NH are a Statutory Consultee. Prior to BWB's involvement with the project, a protracted period of discussion had been on-going between ARC, their other Consultants, and National Highways (NH). NH had raised concerns related to the proposed development.

An outstanding issue prior to BWB's involvement, related to the proposed drainage of the site. Due to a number of other constraints, it is understood that the site would have to adopt a drainage strategy without a permanent discharge for storm and surface water. As such the site would require some form of onsite soakway, to enable the development to be completed. It was to address this specific point that BWB had become engaged in the project with Ian Gardner acting as the DGA on behalf of ARC.

Technical Design note (TDN) ML-BWB-ZZ-XXD-TDN-GE-4001 dated October 2025 presented BWB's independent review of the factual records, in conjunction with the proposed development. It has been prepared by Ian Gardner, acting as an approved Designer's Geotechnical Advisor (DGA). The preparation of that TDN had followed a series of meetings and discussions held with National Highways (NH) Sophie Collins, who is the Principal Geotechnical Advisor, for their Southwest Division.

It was understood that the only outstanding planning issue had been to satisfy NH that the drainage strategy would not impact their assets, principally the A, and the content of the TDN had been drafted to satisfy this requirement.

Following submission of ML-BWB-ZZ-XXD-TDN-GE-4002, a series of observations and recommendations have been provided from Wiltshire Council, dated 07/01/26. This TDN has been prepared to address any of these recommendations, where there is a direct relationship to the review undertaken by BWB in response to the A36 Warminster Road.

2. REVIEW OF RECOMMENDATIONS

The following sub-sections are intended to provide information, as understood by BWB, with respect to the recommendations made. They relate to the memorandum for Planning Application Reference PL/2025/09682 dated 07/01/2026, entitled Drainage.

- Provision of further information:
 - Gravel filled soakaway.
 - Filling of the soakaway. At the time the original TDN has been drafted, the construction of the soakaway had been completed concurrently with the installation of the piled foundations and the sub-structure of the properties
 - Stability impact on property and highway. The excavation for the soakaway was through the upper weathered limestone. The properties are supported off piled foundations. The works have been completed and no adverse effects or impacts have been reported.
 - Location of soakaway. The structures are supported off piled foundations. The limestone upon which the soakaways are embedded have a high permeability. Reference should be made to the cross-sections prepared as part of ML-BWB-ZZ-XXD-TDN-GE-4001, where the

installed length of each pile is recorded, as is the horizon of the intact competent limestone. This information is based on factual records of pile installation and supported by photographic records.

- Size of soakaway. Calculations had been provided to BWB as part of their review process, and it is understood that these will be available under a separate cover.
- Soil Conditions
 - Soakaway test records are presented in Report 18022, prepared by Integral, and dated January 2019. This report was provided to BWB as part of the background information, as detailed in ML-BWB-ZZ-XXD-TDN-GE-4001.
 - It is understood that the two ground investigation reports detailed in ML-BWB-ZZ-XXD-TDN-GE-4001 will be provided under a separate cover.
 - The aquifer status of the limestone is detailed in the Ground Investigation Reports (GIR).
 - The records of materials encountered during the piling are summarised in the records provided by GMech. It is understood that these are available under a separate cover. The records of encountered materials were included on the cross-sections prepared by BWB, on drawing series ML-BWB-ZZ-XX-DR-GE-4001, sheets 1 to 3 inclusive.
 - Slope stability had been undertaken as part of the GIR by Integral, however as per the review undertaken by BWB, it is considered that the ground model they had adopted was incorrect and overly conservative. The slope from the site to the A36 has been formed by a cut face into the Limestone, and has been set at a profile in the order of 1:1.5. The profile of the slope has remained unchanged, and there had been no reports of slope instability, including a detailed review of the NH GDMS (as required as part of the technical submission to NH). The structural loads from the new buildings are supported off piles, with these loads transferred to a depth which has been deemed to be below the depth of influence that could affect the stability of the cut face of limestone, as presented on the BWB cross-sections presented in ML-BWB-ZZ-XX-DR-GE-4001.
- Surface water drainage strategy
 - Design rainfall. This aspect is outside of the scope of the review undertaken by BWB, and reference is made to the drainage design undertaken by others and presented under a separate cover.
- Filter strip to intercept overland flow
 - This aspect is outside of the scope of the review undertaken by BWB, and reference is made to the drainage design undertaken by others and presented under a separate cover.
- Maintenance Plan

- This aspect is outside of the scope of the review undertaken by BWB, and reference is made to the drainage design undertaken by others and presented under a separate cover.
- Construction management plan
 - This aspect is outside of the scope of the review undertaken by BWB, and reference is made to the drainage design undertaken by others and presented under a separate cover.

3. CONCLUSIONS

A series of responses have been provided, to these aspects which either directly relate to the works undertaken by BWB on behalf of the Client, or where BWB feel they can offer an opinion or information.

There are a number of documents and sources of information described in the responses, which it is understood can be provided by the Client. This includes the following items:

- M2 Civil & Structural Engineers. 2025. 18 Midford Lane, Limpley Stoke. Gravel Filled Soakaway Sections.
- M2 Civil & Structural Engineers. 2025. 18 Midford Lane, Limpley Stoke. Drainage Layout Drawing. Drawing reference M2-2801-SK-606-P2.
- M2 Civil & Structural Engineers. 2025. 18 Midford Lane, Limpley Stoke. Surface Water Drainage Layout Drawing. Drawing reference M2-2801-SK-603-P1.
- M2 Civil & Structural Engineers. 2025. 18 Midford Lane, Limpley Stoke. Drainage Strategy Drawing. Drawing reference M2-2801-SK-602-P1.
- M2 Civil & Structural Engineers. 2024. 18 Midford Lane. Piling Setting Out Drawing. Drawing reference M2-2081-GA-099-C3.
- GeMech Foundations Ltd. 18 Midford Lane, Limpley Stoke, Bath. Site diary Piling, for the installation of Odex piles.
- Integrale Limited. 2019. Proposed Residential Development, Land Southeast of 18 Midford Lane, Limpley Stoke. Geotechnical and Phase II Contamination Report. Document Reference 18022.
- Greenfield Environmental Ltd. 2018. Midford Lane Desk Study & Ground Investigation Report. Document Reference 20180309 Rev0