

26 April, 2022

Ref. : 220369-001-I

Fowler Homes

Via Email: Samantha.Awad@fowlerhomes.com.au

Attention: Samantha Awad

**Flood Risk Assessment Report
Proposed Residential Development
7 Douglas Street, Earlwood**

1.0 Introduction

It is proposed to demolish the existing residence and construct a new single dwelling on the existing residential lot. The property is identified by Canterbury Bankstown Council as not being affected by the 1 in 100 mainstream flooding and is generally in a Low Flood Risk Precinct. Council's Cooks River Overland Study has provided flood information adopted by this report.

Canterbury Council Part B, Section B5 Development Control Plan 2012 – Catchments Affected by Stormwater Flooding. A Flood Risk Assessment Report has been undertaken in accordance with the controls provided within the policy.

Engineering Studio have been commissioned to undertake the required Flood Risk Assessment Report by Fowler Homes. This Report has relied upon the following documentation:

- Architectural drawings prepared by Fowler Homes, Job number 21-1499
- Site survey plan prepared by Aspect Development & Survey, reference 7/1060181/340746

2.0 Flood Information Obtained from Canterbury Bankstown Council

A stormwater System Report was provided by Council for existing property at 7 Douglas Street, Earlwood (Reference WP-SIA-837/2022). The site was noted to be clear of the 1:100 year flood extents, the peak flood level on the property to the rear of the site is RL21.1m AHD. The minimum floor level for the site would be RL21.6m providing 500mm freeboard, the proposed floor level on the architectural plans is RL21.685 which is adequate. The PMF flood depth is approximately 500-600mm across the site, the proposed first floor level will provide occupants with safe refuge during this event in the event of an emergency.

3.0 Flood Planning & Development Control Matrix Assessment

It is considered that the property 7 Douglas Street, Earlwood is generally in a Low Flood Risk Precinct and not affected by the 1:100 year flood extents. The subject property is "Residential".

Accordingly, the following Planning Considerations contained in Councils Development Control B5.12 Overland Flow Path apply:

B5.12 Overland Flow Path

Consideration C1 : Do not obstruct any overland flow path. Council will enforce the removal of any obstruction to overland flow within private properties, and recover from the owners the cost of carrying out such work.

Assessment: The site is not affected by overland flows, this consideration is not relevant to the site.

Consideration C2 : Do not obstruct existing runoff, entering the site from upstream properties or sub-catchments, from flowing into the subject site, or redirect it so as to increase the quantity or concentration of surface runoff entering adjoining properties.

Assessment: The site falls to the rear, the proposed building footprint will not impact any natural flows. This consideration is satisfied.

Consideration C3 : Consider potential runoff at the design stage and design so it will not have any adverse impact on adjoining properties. Overland flow should not be obstructed from flowing naturally and is not to pond or concentrate along boundaries of adjoining properties. Suitable channels, open dish drains, walls or any other measures may be necessary to accommodate the existing and potential overland flow paths throughout the subject site.

Assessment: As per previous points, no mainstream overland flow through the site and localised flows maintained through the site. This consideration is deemed to be satisfied.

Consideration C4 : Care must be exercised to ensure that provision of any of the above remedial measures will not result in diverting runoff into the OSD system, if this is unattainable, then the OSD system must be designed to cater for the additional stormwater runoff anticipated from upstream catchment area(s).

Assessment: Not applicable, no overland flow path.

Consideration C5 : Council may require that the design specify the extent of the overland flow path through the site, and that the development be located/ modified clear of the overland flow path, or set at an appropriate freeboard.

Assessment: applicable, no overland flow path.

4.0 Conclusions

It is concluded that the proposed residential development at 7 Douglas Street, Earlwood meets all planning considerations contained in the Flood Planning & Development Control Matrix (reference Canterbury Council Part B, Section B5 Development Control Plan 2012 – Catchments Affected by Stormwater Flooding) and/or concessional requirements granted by Council. This conclusion is made on the basis of :

- Architectural drawings prepared by Fowler Homes, Job number 21-1499
- Site survey plan prepared by Aspect Development & Survey, reference 7/1060181/340746
- Stormwater System Report was provided by Council Reference WP-SIA-837/2022

Disclaimer : This Flood Risk Assessment Report is intended for the purposes of the proposed residential development as depicted in reference architectural drawings and cannot be used for the purposes of planning other developments on the subject property of different layout/level/configuration nor for proposed developments on neighbouring properties. This Report is only valid for development conditions present on the subject and neighbouring properties which exist at the date of this report. This Report relies on the flood advice provided by Canterbury Bankstown Council.

Please feel free to contact the undersigned to discuss as required.

Yours faithfully,
Engineering Studio Pty Ltd



Ben Carruthers
Director
BE(Civil), MIEAust, CPEng, NER