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232 MORTIMER STREET

FLOODING ASSESSMENT

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1 INTRODUCTION

Triaxial have been engaged by Innovative Commercial Projects to prepare a traffic assessment report for the proposed redevelopment of the premises located at 232 Mortimer Street, Mudgee.

The purpose of this report is to assess the potential impacts of flooding and overland flow over the development site. The existing site position is indicated in Figure 1 below:



Figure 1: Existing Site

2 PROPOSAL

2.1 DEVELOPMENT SITE

The site located at 232 Mortimer Street Mudgee is currently utilised as follows:

- Residential property (single dwelling).

The site will be developed as a multi-housing site, with the proposed construction of 7 new dwellings. This traffic summary will provide information on the expected increase in traffic due to the development and the measures to be undertaken to manage this increase.

3 EXISTING FLOODING CONDITIONS

The site is located within a minor overland flow path as assessed in the Mudgee Flood Study February 2021 produced by WMA Water.

The flood levels produced for the 1% AEP flood event indicate that the flood depths are in the 0-200mm range, and that flood levels will vary from between 450.8m at the Northern end of the site to 452.2m at the Southern end of the site. In comparison the ground levels vary from 450.7m at the Northern end of the site to 452.3m at the Southern end of the site. From the flood mapping it appears that the overland flow only affects part of the site, with the South Eastern corner of the site not affected.

The flood contours obtained from the flood study are shown in the image below:

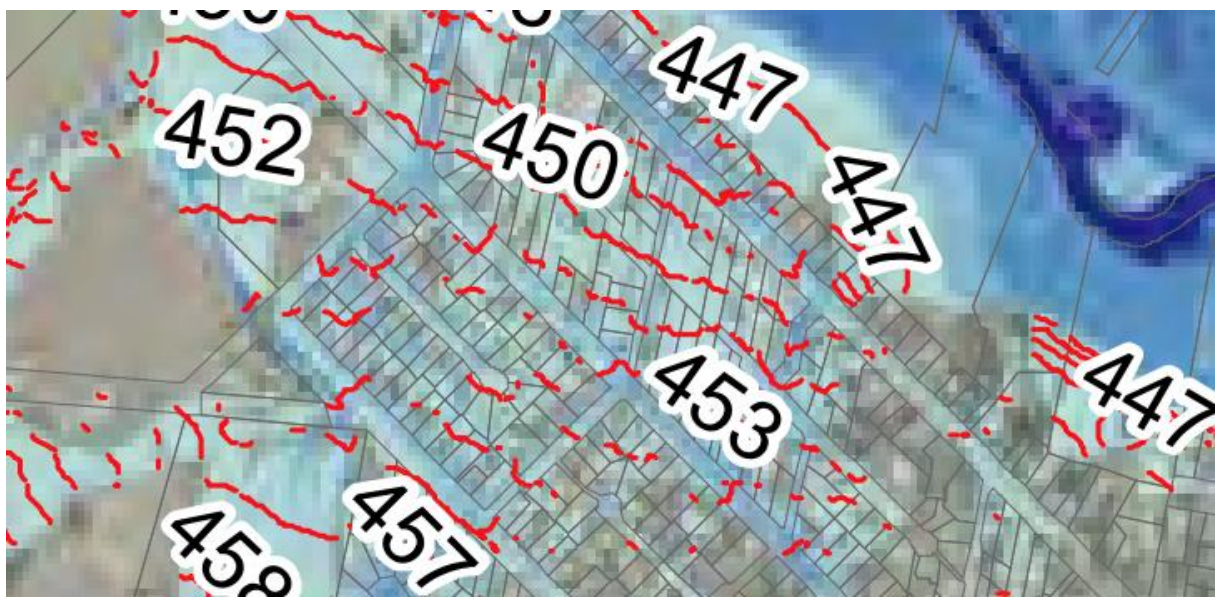


Figure 2: Flood contours in the 1% AEP event. Source: Mudgee Flood Study 2021.

4 EXPECTED IMPACT

Due to the predicted site flood levels in the 1% AEP sitting in the <200mm flood depth range for the site, it will be easily able to be accommodated with careful site civil design and contouring. Provision of all habitable floor levels to be above the 100yr level, as well as a provision for water to flow through the site will be incorporated in the detailed design plans at construction certificate stage.

The site layout consists of a central driveway with buildings along the perimeter of the site. This will facilitate an overland flow path through the site designed at appropriate levels to ensure that upstream and downstream properties are not affected by flood water flowing through the site.

5 SITE ACCESS

Site access will not be impeded in a 1% flood event. Safe passage will be available from each proposed dwelling to Mortimer Street as the depth x velocity (DV) is anticipated to be under 0.2, which is below the maximum allowable of 0.4.

6 SUMMARY

In summary, the proposed development of 232 Mortimer Street with the addition of 6 new dwellings experiences minor overland flows through part of the site according to results shown in the Mudgee Flood Study 2021.

These flows are mapped as being in the range of 0-200mm in depth and as such can be managed during the detailed design stage to ensure no upstream or downstream effects while also providing safe passage during the 100yr event.