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**Project No.:** 2016-276.1

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Crossing Roads Pty. Ltd.  
147 Forest Way,  
Belrose.  
N.S.W. 2085.

### **Preliminary Landslip Assessment for 147 Forest Way, Belrose.**

This letter report details the results of a preliminary landslip assessment required by Warringah Council as part of their 2011 LEP to accompany all new Development or Building Certificate Applications. It is a review of the design plans followed by a walk over visual assessment of the stability of the existing property, no insitu testing was undertaken.

The assessment follows the guidelines as set out in Section E10-Landslip Risk of Warringah Councils 2011 LEP Planning Rules.

#### **1. Landslip Risk Class:**

The site is located within Landslip Risk Class "A" which is classified as Flanking Slopes of less than 5°.

#### **2. Site Location:**

The site, 147 Forest Way, is located on the high east side of the road, not far from the intersection with Dawes Road at Belrose. It is a rear irregular shaped block with long south side boundary of 123.7m and eastern end boundary of 16.13m.

#### **3. Proposed Development:**

It is understood that the proposed works involve the construction of a new garage to the west of the main residence. The proposed garage is a broadly rectangular, single storey structure, covering an area of approximately 52m<sup>2</sup> in plan. No bulk excavation or significant footing works are proposed.

#### **4. Existing Site Description:**

The site is located on a north to south striking ridgeline that starts at Terrey Hills and falls towards Frenchs Forest. It is located on the high east side of the road near the ridge crest with the eastern half overlooking Oxford Creek. It has an average slope angle of about -5° towards 036° magnetic north while the west half has an average slope angle of about -2° towards 236° magnetic north.

The main road pavement is bitumen with concrete kerb, it is gentle sloping (-2°/173°mN) and in fairly good condition where it passes the site. The road reserve contains a gentle west sloping (-3°) lawn area with footpath followed by a break in slope near the sites front boundary. There is a long narrow concrete driveway with slope increments that vary between -1° to -5° that leads from the road to the main part of the site.

The house is located on the front part of the block with wide concrete parking area in front of the house with driveway and gate at the southern end. The house is elongated across the site, it comprises a slightly raised single storey 1980's style rendered brick residence with tiled roof and single garage. It has a covered entertaining area in the south-east corner and along the east side of the house.

Access to the backyard is available along both ends of the house via either a gentle sloping ( $-1^{\circ}$ ) concrete driveway on the south end or gravel/grass access path at the north end. The backyard comprises a grass covered ridge crest near the back of the house then gentle east sloping ( $-2^{\circ}$  to  $-8^{\circ}$ ) lawn. There is a large metal clad storage shed in the south-east quadrant of the backyard then a 0.5m to 1.7m high concrete block retaining wall some 3.0m from the east boundary fence. A large grated stormwater drain occupies the central part of the near level terrace between the retaining wall and metal east boundary fence.

The rear east boundary of the site is marked by an 8.0m to 9.0m high concrete block retaining wall that appears to cover the face of a sandstone cliff. This wall forms the boundary between the site and Seaview Estate swimming pool and entertaining area located immediately to the east. The east boundary is located approximately 70m from the east side of the proposed garage.

The exterior of the house appears to be in fairly good condition. The tiled roof has gutters and downpipes that are connected to a sub-surface stormwater system. The high east boundary retaining wall is in good condition and shows no signs of settlement or deformation

#### 5. Neighbouring Property Conditions:

The property to the south Number: 145 Forest Way has a 1950's style partly raised single storey fibro clad house with brick foundations located on the middle of the site. The front boundary fence/retaining wall is about 1.1m in height and supports a gentle sloping ( $-3^{\circ}$ ) lawn. While the backyard is lawn covered and lined by large trees, there is a metal storage shed in one back corner and children's activity centre in the other.

The neighbouring property to the north, Number: 149 Forest Way comprises a 1980's style grey brick house with skillion roof located on the front of the site. There is a brick paved driveway adjacent to the 2m high south boundary fence that leads to a granny flat that abuts the east boundary of the property.

A limited inspection of these neighbouring properties from within the site and public roadway reserve did not identify any signs of previous or impending landslip instability.

#### 6. Assessment:

Based on the above items and on Councils flow chart check list (Page: 2 of 2 in Section E10), i.e., does the present site or proposed development contain:

- |                                |  |
|--------------------------------|--|
| • History of Landslip          | No   |
| • Proposed Excavation/Fill >2m | No   |
| • Site developed               | Yes  |
| • Existing Fill >1m            | No   |
| • Site Steeper than 1V:4H      | No   |
| • Existing Excavation >2m      | No   |
| • Natural Cliffs >3m           | Yes (east boundary retained wall from below) |

It is considered that a detailed Landslip Risk Assessment is not required for this Development.

**7. Date of Assessment:** 26<sup>th</sup> February, 2019.

**8. Assessment by:**



Kieron Nicholson  
Senior Engineering Geologist

**9. References:**

Design by Newbuild Design & Drafting, Proposed Garage for Residence, Updated.

Survey by Total Surveying-Land, Project Number: 1429, Dated: April 2014

Survey by True North Surveys, Job Ref: 7149, DWG. No: 7149DU, Dated 10<sup>th</sup> May, 2013