

**IN THE MATTER** of the Resource Management Act 1991

**AND**

**IN THE MATTER** of a submission in respect of the **PROPOSED WAIKATO DISTRICT PLAN** by **AMBURY PROPERTIES LIMITED** pursuant to Clause 6 of Schedule 1 of the Act seeking the rezoning of land at Ohinewai

### **SUMMARY STATEMENT OF BENJAMIN THOMAS FRASER PAIN**

1. My name is Benjamin Thomas Fraser Pain. I am an associate engineer at Wood & Partners Consultants Limited. I prepared a statement of evidence dated 9 July 2020. The purpose of this document is to summarise that statement.
2. I outlined my qualifications, experience and commitment to comply with the Environment Court Expert Witness Code of Conduct in my evidence in chief ("EIC").
3. Development of the Sleepyhead Estate as enabled by the Ohinewai Structure Plan (OSP) will require approximately 2,500,000m<sup>3</sup> of earthworks over an expected 10-year construction period. As part of this, approximately 2,000,000m<sup>3</sup> of imported fill will be required in order to transform the landform from low lying areas within the existing flood plain to developable land.
4. The existing topography of the site is relatively flat with the land rising in the south adjacent to Tahuna Road and in the centre of the site. This topography results in less erosion compared to steeper sites. The existing soil types are generally sand and peat, with some silts and clay present.
5. The site discharges to a sensitive downstream environment of Lake Rotokawau, Lake Waikare and ultimately the Whangamarino wetland. To account for this sensitivity, it is proposed that the erosion and sediment control protection devices and measures to be implemented on site will meet or exceed the requirements outlined in the WRC TR0902 standards.

6. For this site, a four-step erosion and sediment control ("ESC") methodology is proposed, using both structural and non-structural control measures to provide appropriate protection measures in accordance with the WRC standards:
  - (a) Team Approach – it is proposed that the stakeholders involved in this project meet regularly and prior to anticipated storm events to dynamically manage the ESCs for the site;
  - (b) ESC Devices and Measures Toolbox – it is proposed that a toolbox of ESC devices and measures that meet or exceed the requirements of the WRC TR0902 are approved specifically for this site;
  - (c) Last Line of Defence – in addition to other ESC devices and measures, a back-up measure shall be put in place to further protect waterways and the receiving environment; and
  - (d) Monitoring – a monitoring programme is proposed to ensure the installed measures are working correctly or whether further measures should be put in place to improve the system.
7. The detail of specific ESC measures to be implemented on the site for each development stage can be appropriately assessed and managed via the WRC resource consent process that ensures compliance with TR2009/02.
8. In my opinion, the proposed ESC methodology will be sufficient to ensure that erosion is minimised, and sediment run off is adequately controlled prior to discharge into the receiving environment.

**Benjamin Thomas Fraser Pain**  
**9 September 2020**