Memo for:	Mike Mackiggan
From:	Graham Caradus
Date:	23 December 2011
Subject:	Preliminary report on RM100848: Adcock and Donaldson properties Ltd: Create and Operate a Motorsport Park at Stanley Brook.

### **Executive Summary**

This report records the details of noise assessments carried out on 22 December 2011. Limited interpretation of the data gathered is made in this report. It is intended that further comment interpreting the data gathered will be made after viewing the applicant's specialist noise report.

#### **Observations and noise measurements**

Observations were made by Environmental Health Officers at four separate locations whilst a drag car and two rally cars generated noise. The locations were as follows:

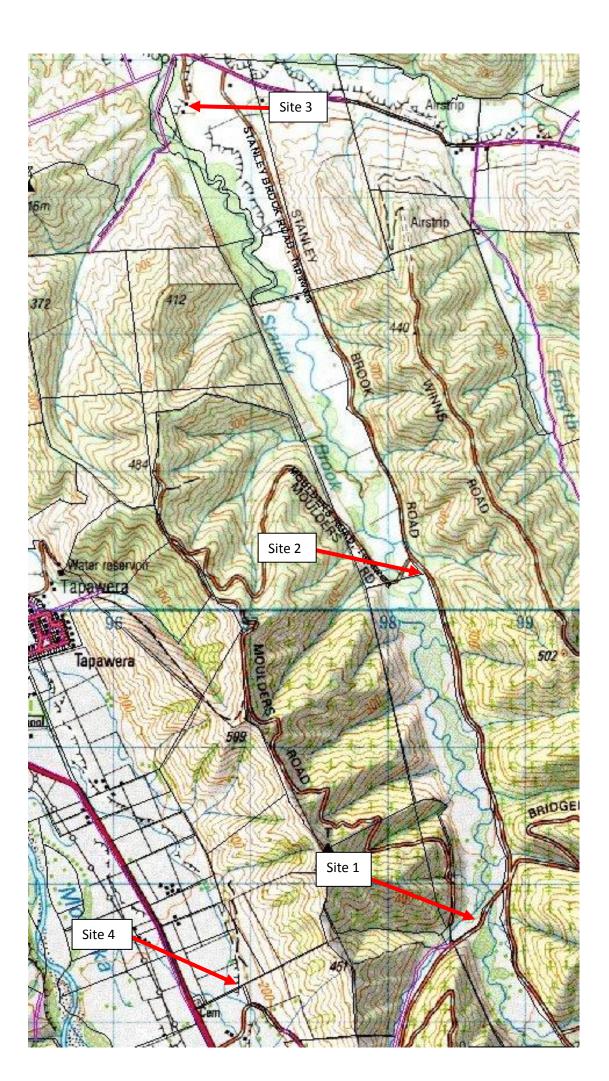
- Site 1: Situated 20 metres from the drag car which generated noise, and approximately at the location of the start of the proposed drag strip. NZ map grid reference: E2498646, N5977725
- Site 2: Situated at the north eastern boundary of the subject site on the forestry road. NZ map grid reference: E2498264, N5980258.
- Site 3: Situated at the southern notional boundary of the rural residence on Rowe property adjacent to the subject site and 6.2Kilometres from site 1. NZ map grid reference: E2496546, N5983655.
- Site 4: Situated in Cemetery Road, approximately 270m off the Motueka Valley Highway. NZ map grid reference: E2496824 and N5977200.

These locations are shown in the map on the following page.

Observations at Site 1 were undertaken by Pete Harcom, TDC Environmental Health Officer and are the subject of a separate report from him dated 22 December 2011.

Similarly, observations were made by Zoe Moulam, TDC Environmental Health Officer and are the subject of a separate report from her dated 23 December 2011.

Observations at sites 2 and 3 were undertaken by the writer and details are as follows:



## Site 2

The assessment was predominantly subjective as the noise generated by the dragster was significantly less than Leq of the background noise. The calibrated Sound Level Meter operated by consultant for the applicant Tony Quickfall was visible and observations of instantaneous sound levels made whilst listening to the background noise and the distinctive noise from the dragster motor. Weather conditions were: fine with about 4/10 cloud, and a northerly breeze that varied between very light, and dead calm during the measurement periods at 11.16am. It was noted that the background noise from the nearby river contributed an L<sub>A</sub> of about 31dB. All of the louder noises were contributed by birds, and generated an LA<sub>eq(period not defined)</sub> of 39dB and L<sub>Amax</sub> of 51dB. Instantaneous levels contributed by the revving dragster motor were noted to be in the range L<sub>A</sub>31 and L<sub>A</sub> 32 dB. Despite the level of the noise from the dragster being similar to the recorded L<sub>A</sub>90, the sound was sufficiently distinctive to pick from the "natural" background noise, but could not be heard as continuous noise even though the motor was revved up for a short continuous period.

An assessment of the Rally cars at this site was also undertaken. When they were driven close to site 1, they could not be heard at all from site 2. When the rally cars were positioned 400 metres from site 2 at about 11.50am, and raced away from the measurement site, instantaneous levels contributed by rally cars were noted to be in the range  $L_A33$  to  $L_A 37$  dB, but quickly became inaudible due to the background noise.

# Site 3

Assessment was made at 11.40am and the dragster motor revved at site 1. It was inaudible at site 3, and radio communication necessary to confirm that the noise had in fact been generated.

# **Preliminary Interpretation of Results**

As mentioned in the opening paragraph of this report, detailed interpretation is not intended until such time as the applicant's specialist noise report is viewed. However, on the basis of subjective observations made by the writer, along with the observations made by Environmental Health Officer Zoe Moulam and detailed in her report dated 23 December 2011, some preliminary and very general comment can be offered.

Based on observations made, it is my opinion that activities at the proposed motor sport park, will not have any noise based effects that are more than minor at the locations identified as site 3 and site 4 in this report.

Graham Caradus

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