# Variation I to the Proposed Waikato District Plan (Stage I)

## **Te Kowhai Airport Obstacle Limitation Surface**

## **District Plan Text**

#### Section D Appendices and Schedules Chapter 29: Appendices Appendix 9: Te Kowhai Airfield

Variation 1 proposes the following amendments to Section D Appendices and Schedules, Chapter 29: Appendices, Appendix 9: Te Kowhai Airfield (red underlined text is to be added and red struck-through text is to be deleted)

#### I Introduction

This appendix is referred to in the Residential, Village and Rural Zone building rules. The safe operation of aircraft using the Te Kowhai Aerodrome requires that each runway should be provided with take-off climb and approach, and transitional and inner horizontal surfaces such that aeroplanes taking off or landing have a clear obstacle free surface in which to carry out the initial part of the climb or final part of the approach take-off, land and circle for approach. The Civil Aviation Authority of New Zealand has adopted specifications defining these surfaces about and above an Aerodrome which, in the interests of safe flight, should not be penetrated by there must be no obstacles. These surfaces are known as obstacle limitation surfaces and are defined in terms of distances from the runway and heights relative to the runways for protection of aircraft in the vicinity of the aerodrome.

#### 2 Runway and Associated Runway Strip

The runway and associated runway strip is defined as follows:

- (a) Runway: the runway is 923.8 metres long and 18 metres wide.
- (b) Runway strip: the runway is contained within the runway strip. The strip is 983.8 metres long and 60 metres wide.
- (c) The coordinates and elevations of the four corners of the strip in terms of Mount Eden Circuit New Zealand Geodetic Datum 2000 and Moturiki datum are as follows:

mN	mE	Elevation
703839.64	434543.48	25.2
703783.55	434564.78	25.2
704132.77	435484.50	26.6
704188.86	435463.20	26.6

#### 3 Obstacle Limitation Surfaces

The obstacle limitation surfaces associated with this runway strip are defined as follows:

#### 3.1 Approach and Take-off Surfaces

There is an <u>combined</u> approach <u>and take-off</u> surface at <u>both each</u> ends of the runway strip. Each approach <u>and take-off</u> surface is a truncated fan originating from a 60 metres wide base centred <u>37.48m inwards from the western</u> at the end of the runway strip <u>and</u> <u>39.6m inwards from the eastern end of the runway strip.</u> The <u>approach</u> surfaces extend either side of the extended centre line of the runway strip for a horizontal distance of 2500 metres (2.5 kilometres). Each <u>approach</u> surface rises upwards and outwards at a gradient of I vertical to 40 horizontal (I:40); the sides of the <u>approach</u> surfaces splay <del>outwards</del> from their bases outwards</u> at a rate of I vertical to 10 horizontal (I:10). The base of the western <u>approach</u> surface commences at a height of 25.2 metres above Moturiki Datum and the base of the eastern <u>approach</u> surface commences at a height of 26.6 metres above Moturiki Datum.

#### 3.2 Transitional Side Surfaces

The transitional side surfaces rise upwards and sideways outwards from the sides of the runway strip and each approach/take-off surface at a gradient of 1 vertical to 5 horizontal (1:5) to a height of 36.6 metres above Moturiki Datum. The surfaces then rises vertically from 36.6 metres to 71.6 metres above Moturiki Datum. The height contours of the transitional surface bend inwards from the planes of the approach and take-off OLS bases to meet the corresponding height contours of the approach and take-off OLS.

#### 3.3 Inner Horizontal Surfaces

This <u>The</u> 'inner horizontal' surface at 71.6 metres is 45 metres above aerodrome level and extends <u>outwards</u> from the runway centre line and ends of the runway strip out to a distance of 2500m <u>at a height of 71.6 metres above the Moturiki Datum.</u>

## District Plan Map

Variation I proposes that the Proposed District Plan maps as notified showing the Te Kowhai Airport Obstacle Limitation Surface be removed and replaced with new District Plan maps showing an amended correct version of the Te Kowhai Airport Obstacle Limitation Surface.

The amended District Plan map is on the following page.

For the purposes of this variation, the correct Te Kowhai Airport Obstacle Limitation Surface has been shown as blue lines on the Planning Map on the following page to avoid confusion. Once Council decisions on the Proposed District Plan (Stage 1) and Variation 1 to the Proposed Waikato District Plan are released, the Airport Obstacle Limitation Surface at Te Kowhai will be shown as per the appropriate colour in the Proposed District Plan Map legend.

