

## APP10 – Te Kowhai Aerodrome

### 1. Introduction

This appendix is referred to in the ANOC – Airport noise and obstacle controls chapter. 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 surfaces such that aeroplanes taking off or landing have a clear obstacle free surface in which to 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 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. The Te Kowhai Airport Obstacle Limitation Surface and associated rules do not apply to infrastructure and energy activities, as noted in the EIT – Energy, infrastructure and energy section.

The runway is on the following land: Lot 1 DP 547712, Section 8 SO 495676 (Records of Title 8105283, 755892).

### 2. Runway and associated runway strip

The runway and associated runway strip is defined as follows:

- (1) Runway: the runway is 923.8 metres long and 18 metres wide.
- (2) Runway strip: the runway is contained within the runway strip. The strip is 983.8 metres long and 60 metres wide.
- (3) 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 (OLS) associated with this runway strip are defined as follows.

#### Approach and Take-off Surfaces

There is a combined approach and take-off surface at each end of the runway strip. Each approach and take-off surface is a truncated fan originating from a 60 metres wide base located 37.48 metres east of the western end of the runway strip and 39.6 metres west of the eastern end of the runway strip. The surfaces extend either side of the extended centre line of the runway strip for a horizontal distance of 2500 metres (2.5 kilometres). Each surface rises upwards at a gradient of 1 vertical to 40 horizontal (1:40) along the surface centreline from its base; the sides of the approach surfaces splay from their bases outwards at a rate of 1 lateral to 10 horizontal (1:10). The base of the western surface commences at a height of 25.2 metres above Moturiki Datum and the base of the eastern surface commences at a height of 26.4 metres above Moturiki Datum.

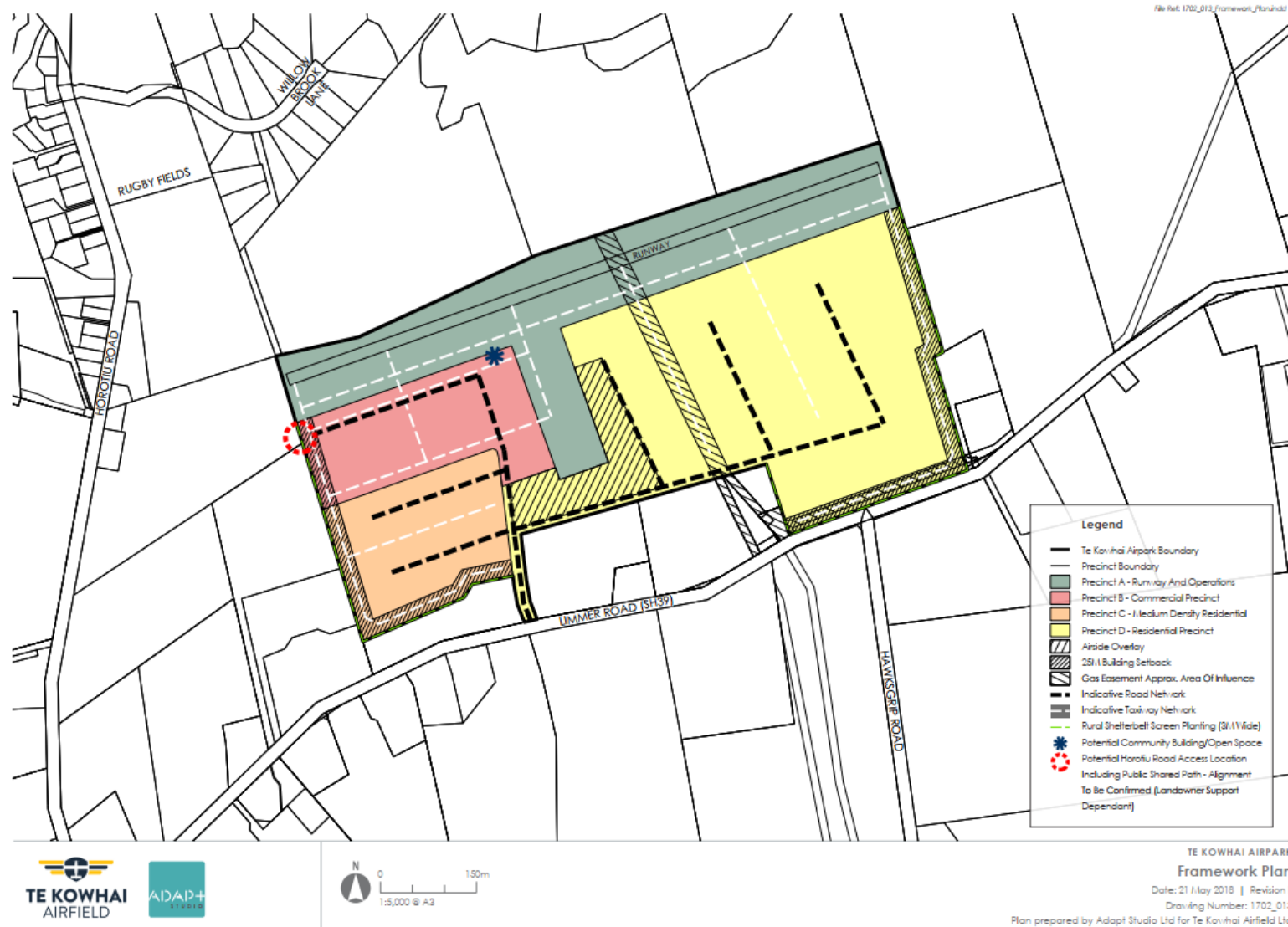
*Transitional Side Surfaces*

The transitional side surfaces rise upwards and outwards from the sides of the runway strip and each approach/take-off surface at a gradient of 1 vertical to 5 lateral (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 surface taper inwards from the transitional side surface to meet the corresponding height contours of the approach and take-off OLS.

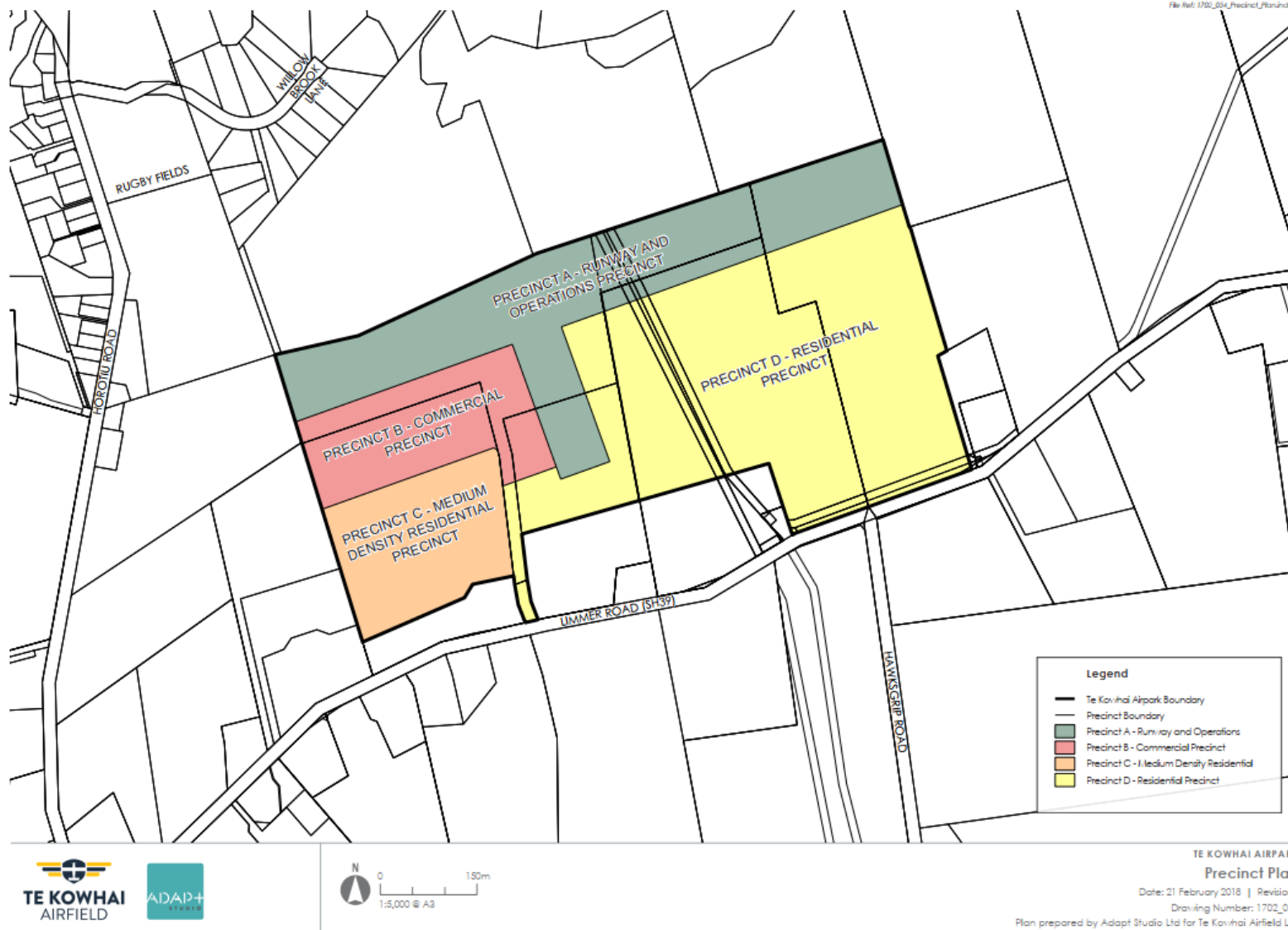
*Inner Horizontal Surface*

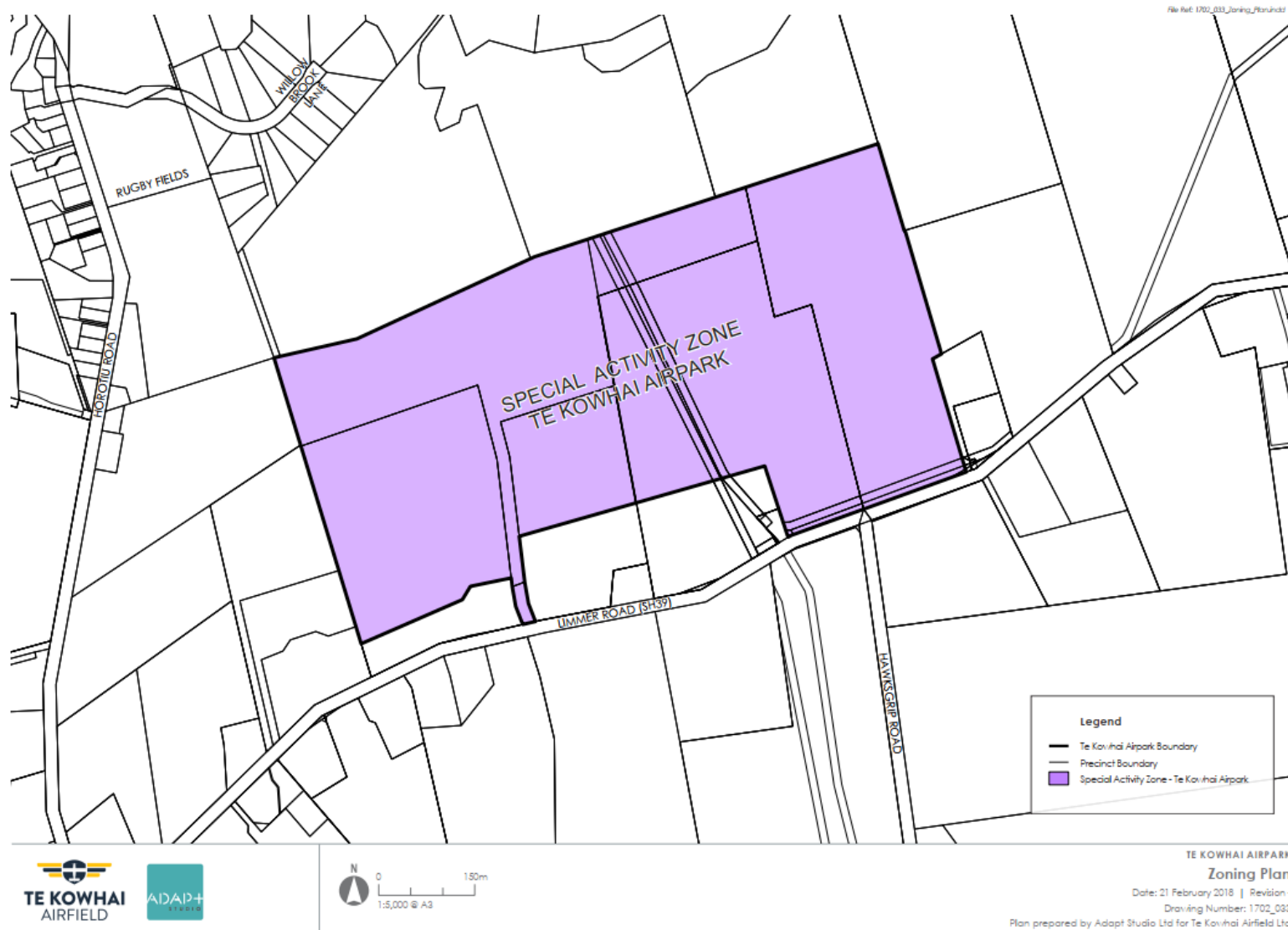
The 'inner horizontal' surface extends outwards from the runway centre line and ends of the runway strip out to a distance of 2500m at a height of 71.6 metres above the Moturiki Datum.

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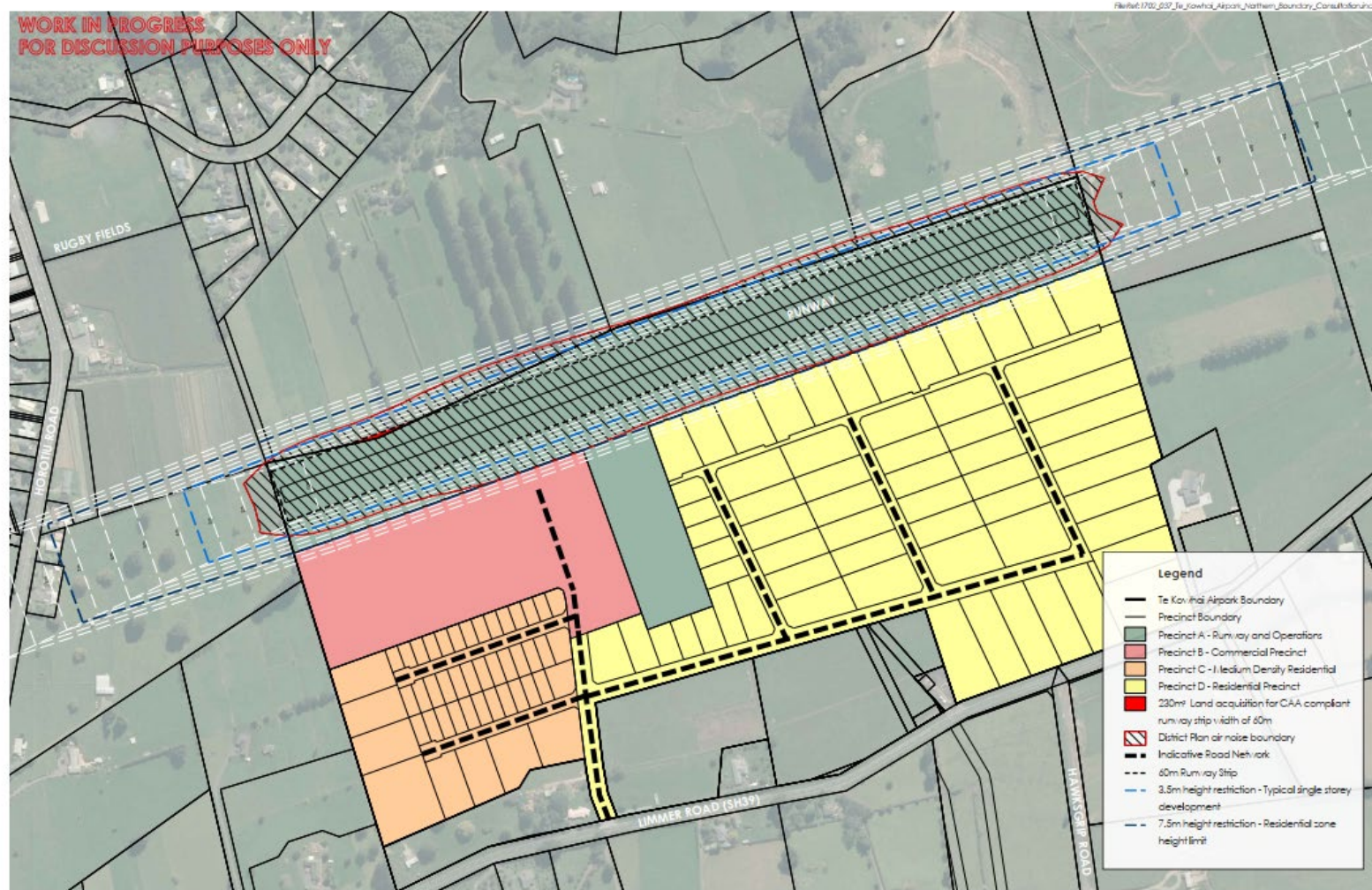


Part 4: Schedules and appendices / APP10 – Te Kowhai Aerodrome









TE KOWHAI  
AIRFIELD

ADAPT+  
STUDIO

N  
0 100m  
1:4,000 @ A3

TE KOWHAI AIRPARK  
CAA AC139-7 AERODROME STANDARDS & REQUIREMENTS - Overview Plan

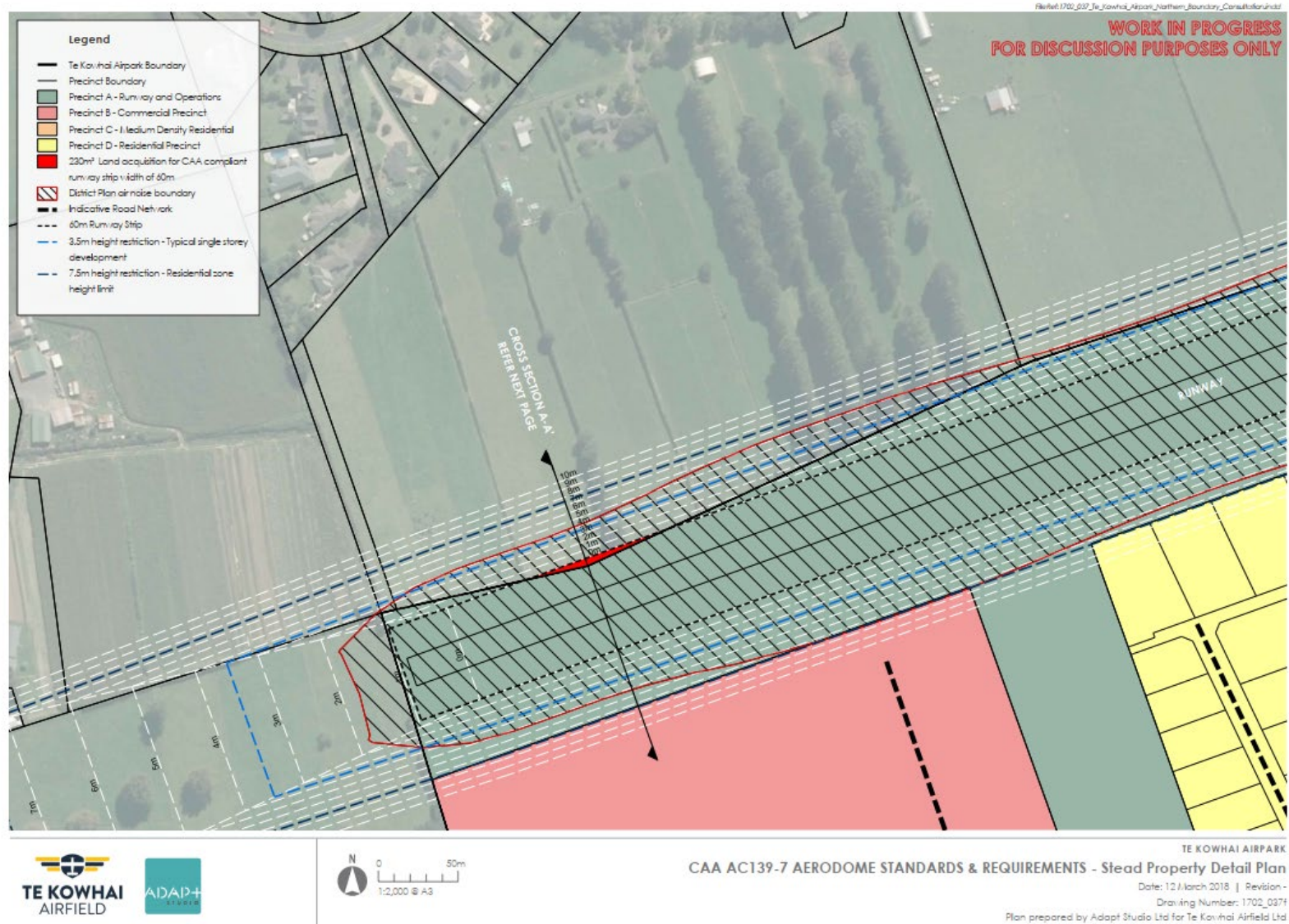
Date: 12 March 2018 | Revision -

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Plan prepared by Adapt Studio Ltd for Te Kowhai Airfield Ltd



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