

SCHEDULE 19.8A : HEIGHT RESTRICTIONS IN THE VICINITY OF THE ROXBURGH AERODROME

The following height restrictions apply to the Roxburgh Aerodrome. The objective of these restrictions is to limit the construction of any structure including any building, aerial, antenna or the placing or planting of any other object or tree which may inhibit the safe and efficient operation of Roxburgh Aerodrome.

The restrictions are based on combinations of various Civil Aviation (AC 139 – 06A) and ICAO Annex 14 obstacle limitation surfaces. In summary these are the Instrument Landing Surfaces for Category 1 approaches, Code 3 or 4 aerodromes and the take-off climb surfaces for Code 3 or 4 aerodromes.

All measurements in this Schedule are stated in metres above MSL (Mean Sea Level) unless otherwise stated. The Roxburgh Aerodrome runway is located at an elevation of RL 151.5 metres above MSL.

Runway Strip

- (a) This is a rectangular surface extending 60m beyond the northern and 160m beyond the southern ends of the runway and 75m on either side of the extended centreline (1393m x 150m Strip Dimension).
- (b) The height of this surface is defined by the lowest level of the formed runway strip which is 151.5 metres above MSL.

Take-off Surface

Explanation

This defines the area over which an aircraft in a situation involving loss of power in one engine on take-off would be expected to climb, and within which it may be necessary to restrict the creation of new obstructions or remove or mark objects which could affect the safety of aircraft taking off.

Definition

- (a) The Take-Off Surface rises from the ends of the runway strip.
- (b) The Take-Off Surface rises for 15000m at a gradient 1:62.5 (1.6%) with side splaying at 12.5% from the edge of the runway strip.

Approach Surface

Explanation

This surface defines the glidepath on which an aircraft making an instrument approach would be expected to descend.

Definition

- (a) The Approach Surface rises from the ends of the runway strip from points situated 75m either side of the runway centreline.
- (b) The Approach Surface rises for 3000m at a gradient of 1:40 (2.5%) with side splaying at 10% from the points identified in (a) above.

Transitional Surface (Beside Strip)

Explanation

The Transitional Surface provides for a situation where an approaching aircraft is either off centreline or where it has executed a missed approach and allows for an area free of obstacles to protect aircraft in the final phase of the approach-to-land, or during a missed approach manoeuvre.

Definition

The Transitional Surface rises at a gradient of 1 in 7 from the edge of the runway strip. This surface rises to a level of 45m above the airstrip, and extends to meet the approach surface.

Horizontal and Conical Surfaces

Explanation

The Horizontal and Conical Surfaces provide an area where aircraft can manoeuvre at low altitude in the vicinity of the aerodrome.

Definition

Horizontal Surface means that surface which extends from the edge of the transitional surface to a maximum distance of 4,000m measured from the runway strip.

Conical Surface means that surface which rises at a gradient of 1 in 20 from the outer edge of the horizontal surface to a level 150 metres above the aerodrome datum.

Restrictions:

Written consent of the Chief Executive of the Central Otago District Council is required for any resource consent application or building consent application or prior to carrying out of any works involving the construction of any structure including any building, aerial, antennae, or placing or planting any other object or tree which:

- (a) **in any way penetrates any of the surfaces described herein and illustrated in Figures 1 and 2; or**
- (b) **is located on that area covered by the “Airport Protection Zone.” as shown on the planning maps.**

<p><u>Note:</u> The Airport Protection Zone extends from the ends of the runway strip for a distance of 940 metres. At a gradient of 1:62.5 (1.6%) the Airport Protection Zone extends to a point where the take off surface is 15 metres above the level of the runway strip (see Rule 4.7.6A(i)). Beyond the Airport Protection Zone the maximum height of 15 metres is applied in the Rural Resource Area in terms of Rule 4.7.6A(f).</p>
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Figure 1
Take Off Fan, Horizontal
and Conical Surfaces

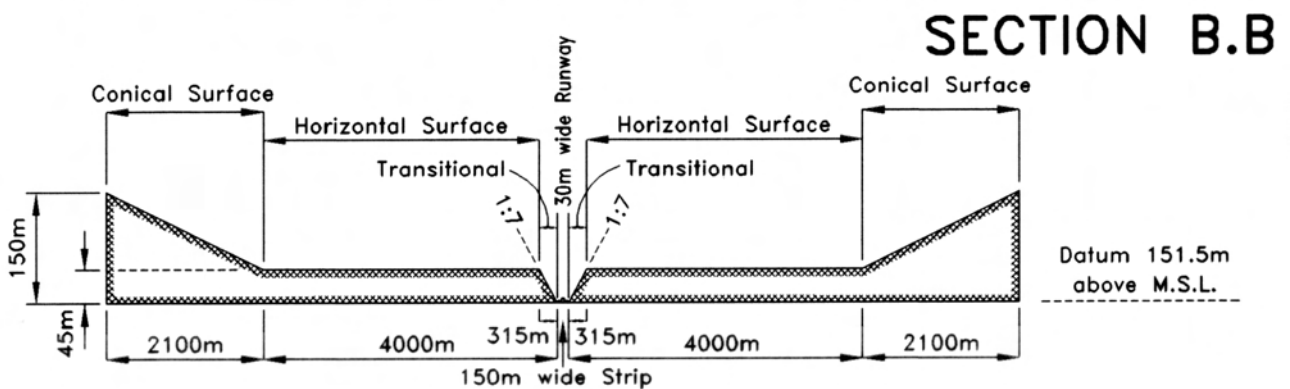
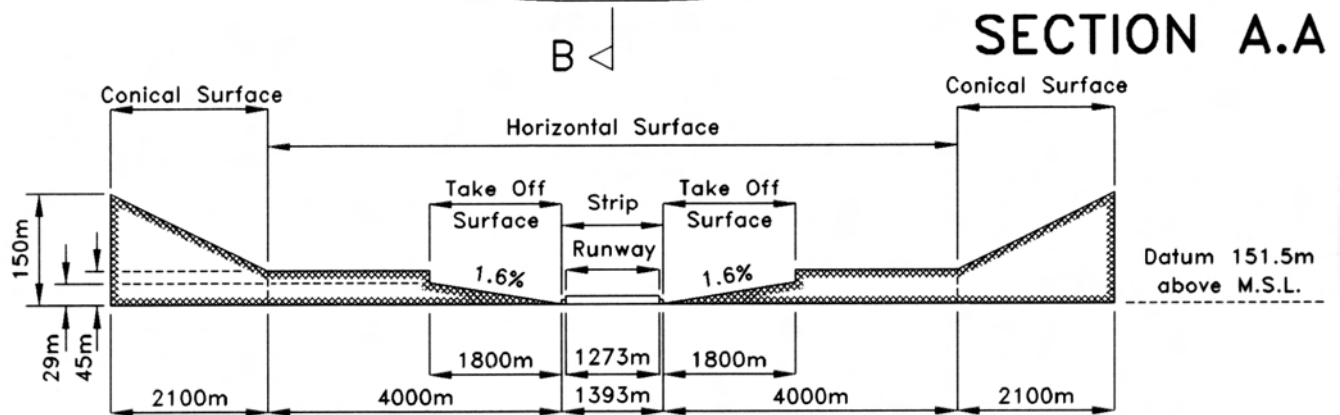
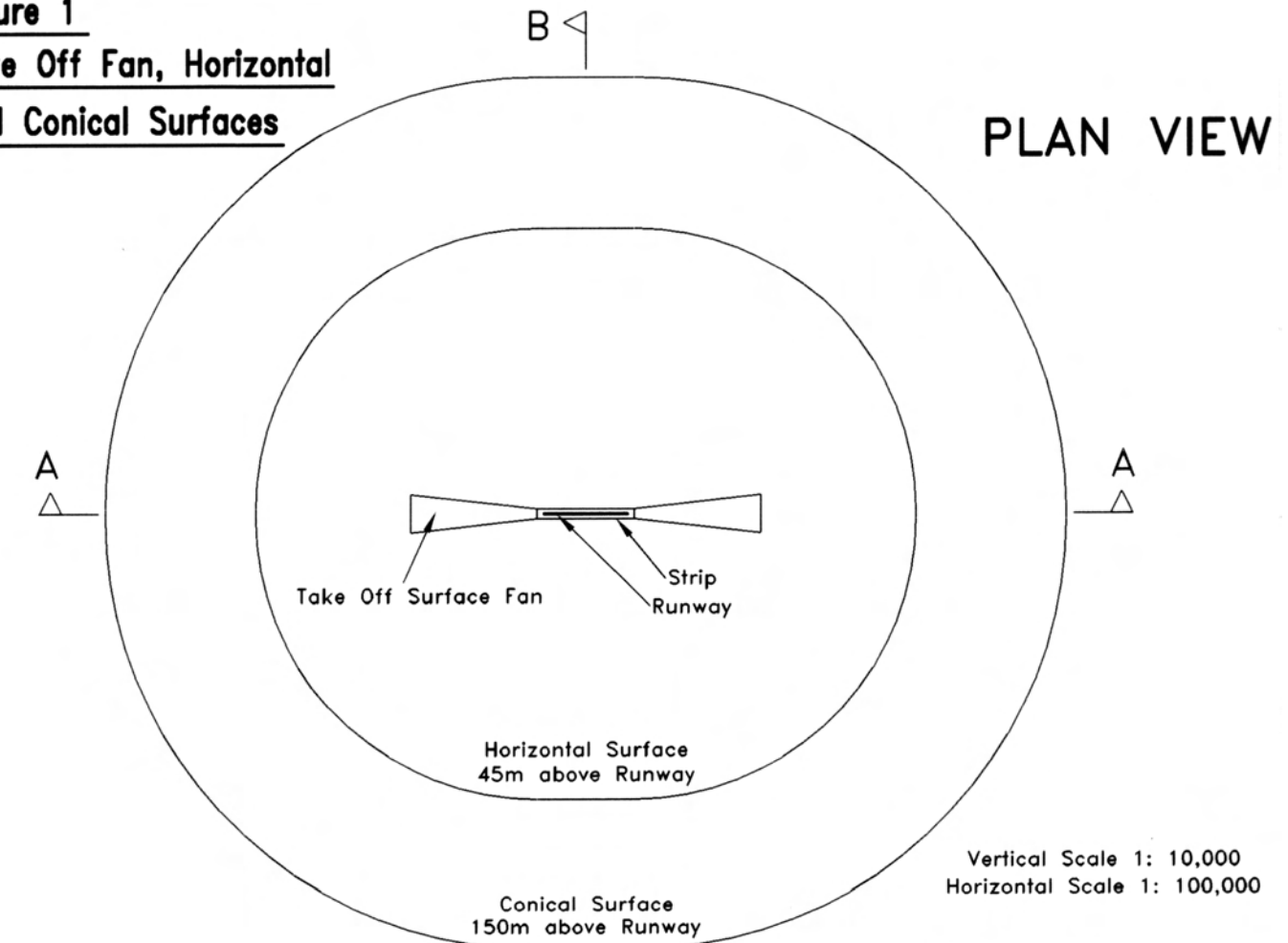


Figure 2
Approach Fan, Horizontal
and Conical Surfaces

