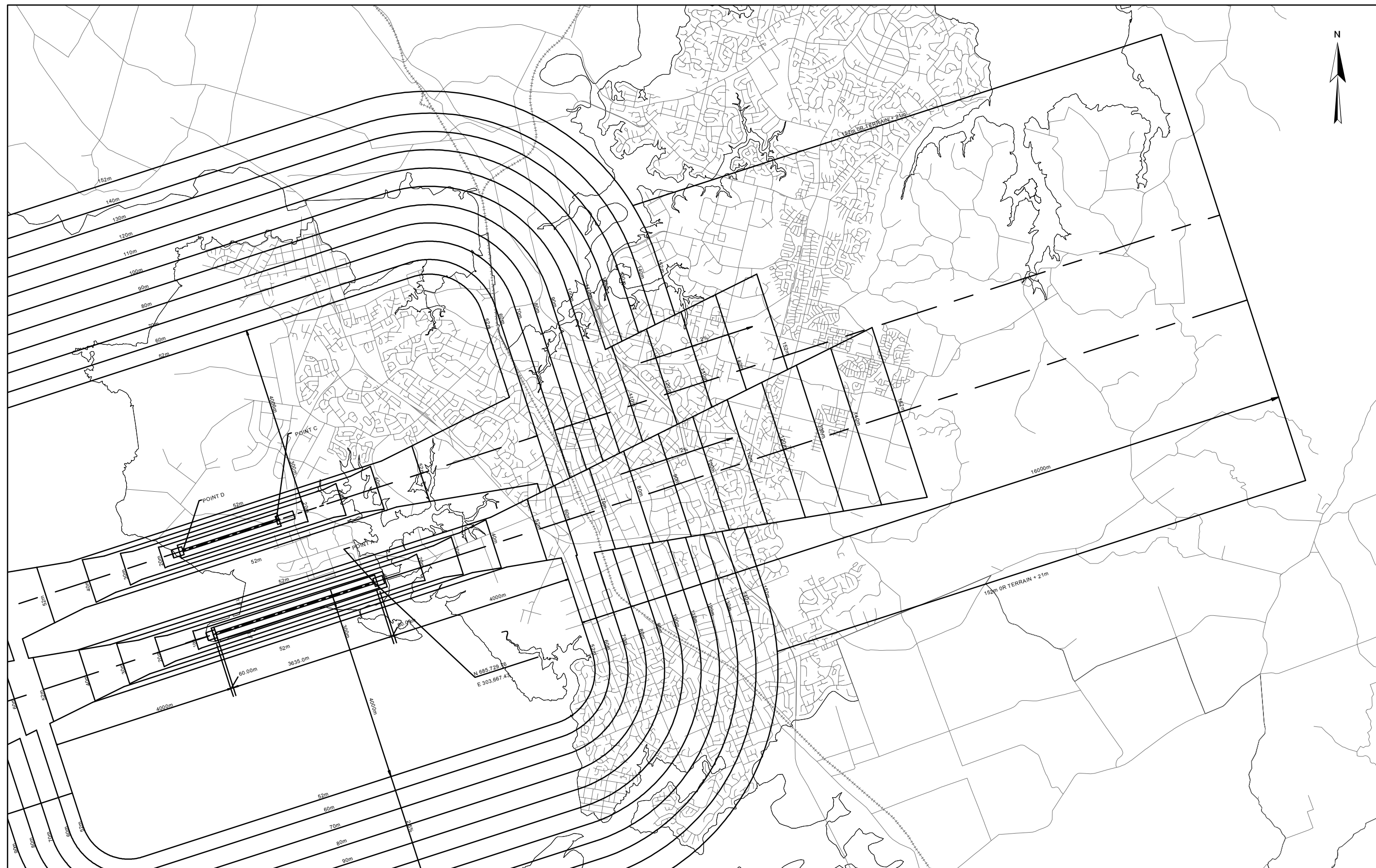


NOTE: All heights are measured in metres above Mean Sea Level

Scale 1:125,000

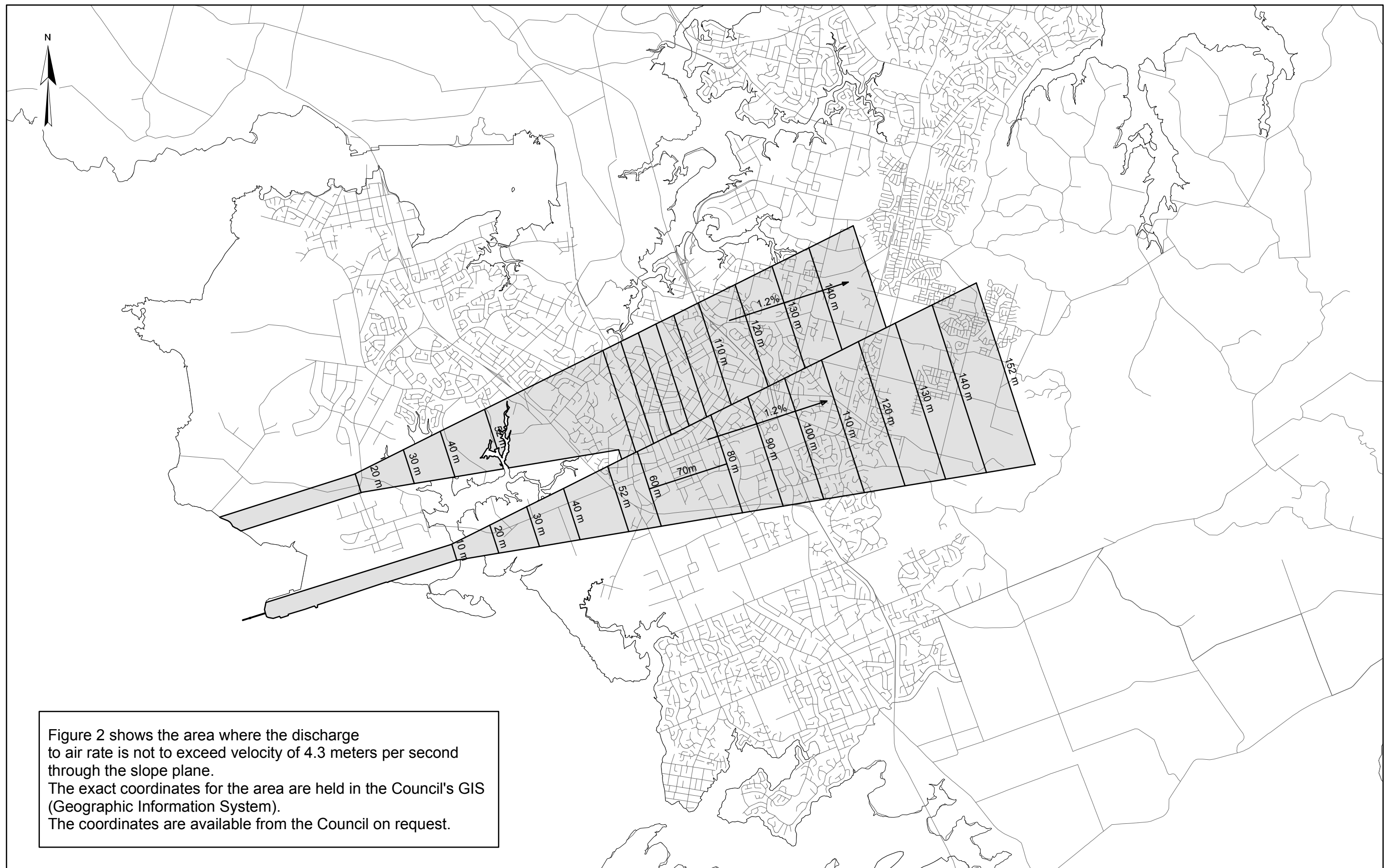
**Figure 1 - SPECIFICATION FOR OBSTACLE LIMITATION SURFACES
(Full View)**



NOTE: All heights are measured in metres above Mean Sea Level

Scale 1:80,000

Figure 1 - SPECIFICATION FOR OBSTACLE LIMITATION SURFACES



NOTE: All heights are measured in metres above Mean Sea Level

Figure 2 - SPECIFICATION FOR DISCHARGE TO AIR RATES THROUGH OBSTACLE LIMITATION SURFACES

Appendix 2B - Auckland International Airport: Specification for Obstacle Limitation Surfaces.

1. Figure 1 in Appendix 2B.0 and 2B.1 to this designation together with this specification comprises the Auckland International Airport Specification for Obstacle Limitation Surfaces.

The Civil Aviation Act 1990 requires that hazards to aviation safety be controlled.

Obstacle Limitation Surfaces of an aerodrome are defined surfaces in the airspace above and adjacent to the aerodrome. These Obstacle Limitation Surfaces are necessary to enable aircraft to maintain a satisfactory level of safety while manoeuvring at low altitude in the vicinity of the aerodrome.

No obstacle shall penetrate the Obstacle Limitation Surfaces. An obstacle is defined as any object which is connected directly or indirectly to the ground or water and includes trees. In addition, no chimney shall discharge effluent through the Approach Slopes shown on figure 2 in Appendix 2B.2 to this designation at a velocity in excess of 4.3 metres per second.

2. Runway Centreline

2a. Existing Runway

Point A: This is a position located at the eastern end of the centreline of the existing runway. The position of Point A is shown on the Department of Survey and Land Information plan number SO 44954.

In metric terms, the co-ordinate value of Point A is:

685,729.76m N

303,667.43m E

Co-ordinate values and bearings are in terms of the Geodetic Datum 1949 and origin of co-ordinates is Mt Eden, 700,000mN 300,000mE.

The western end of the existing runway centreline is 3635 metres west on a bearing of 251 o 00'01" from Point A on Figure 1 in Appendix 1 to this designation.

2b. Proposed Second Runway

The eastern end centreline of the proposed second runway is defined as Point C on Figure 1 in Appendix 2B.1 to this designation with geodetic co-ordinates of:

687,048.03m N

301,506.40m E

The western end centreline proposed second runway is defined as Point D on Figure 1 in Appendix 2B.1 to this designation with geodetic co-ordinates of:

686,348.07m N

299,473.53m E

3. Runway Strips

The runway strips are areas at ground level 300 metres wide symmetrical about the runway centreline. The ends of the runway strips are 60 metres beyond the eastern and western ends of the defined runway centrelines.

4. Approach Slopes – General

The surfaces known as Approach Slope Surfaces meet requirements for both approach and takeoff. The Approach Slopes (inner edge) start at the points as specified in clauses 4a and 4b below and are symmetrical about the extension of the runway centreline. The Approach Slopes rise at a gradient of 1.2% and terminate at a point 152 metres above mean sea level (AMSL). The sides of the approach slope diverge from the runway centreline at a rate of 15%.

4a. Approach Slopes - Existing Runway

Eastern Approach Slope

Starting point - end of the eastern clearway, ie 213.36 metres east of Point A.

Width of inner edge - 346 metres.

Starting Level - 9.66 metres above mean sea level.

Western Approach Slope

Starting point - western end of the runway strip.

Width of inner edge - 342 metres.

Starting level - 6.83 metres above mean sea level.

4b. Approach Slopes - Proposed Second Runway

Eastern Approach Slope

Starting point - end of the eastern clearway, i.e. 400.00 metres east of Point C. Width of inner edge - 402 metres.

Starting Level - 17.00 metres above mean sea level.

Western Approach Slope

Starting point - end of the western clearway, i.e. 235.5 metres west of point D. Width of inner edge – 353 metres.

Starting level - 17.00 metres above mean sea level.

5. Inner Horizontal Surface

The Inner Horizontal Surface is a flat planar surface at an altitude of 52 metres above mean sea level. The outer limits are located 4000 metres from and parallel to the outer sides and ends of the runway strips as depicted on Figure 1 in Appendix 2B.1 to this designation. The corners of the rectangle are formed by a radius of 1500 metres.

6. Transitional Surfaces

The Transitional Side Surface slopes upwards and outwards from the sides of the runway strips at a gradient of 1:7 extending until they meet the Inner Horizontal Surface and Approach Slopes.

7. Conical Surface

The Conical Surface slopes upward and outwards from the periphery of the Inner Horizontal Surface at a gradient of 1:40 until reaching an elevation of 152 metres above mean sea level.

8. Procedure Turning Area Surfaces

There are two Procedure Turning Areas located to the east and west and bounded by the Conical Surfaces. The surfaces for the Procedure Turning Areas are at 152 metres above mean sea level or 21 metres above terrain whichever is the higher. The northern limit of both Procedure Turning Areas is 4000 metres north of the northern side of the proposed second runway strip. The southern limit of both Procedure Turning Areas is 4000 metres south of the southern side of the existing runway strip. The western limit of the western Procedure Turning Area is 14,000 metres west of the Inner Horizontal Turning Surface. The eastern Procedure Turning Area extends 16,000 metres east of the Inner Horizontal Surface.

9. Controlling Surface

At any point where any two surfaces overlap and are at differing elevations, the lower of the two surfaces shall apply.