fl/docs/airportmem

TO: rmp file 5/9/1

FROM:

Frances Lane

DATE:

6 July 1992

SUBJECT:

AUCKLAND INTERNATIONAL AIRPORT LTD: APPLICATION TO BECOME REQUIRING AUTHORITY

I telephoned Mr G Smith (Planning Services Manager) regarding the progress of the application.

At a meeting in early May it was agreed that the Authority would extend the application to cover all the designations relating to the airport, not just the obstacle limitation surfaces. The airport company indicated they would send correspondence confirming this together with a map identifying the area to which the application applies. Since this meeting we have received no further correspondence from the airport company.

I enquired as to whether they still wanted to proceed with the application as we agreed in the meeting of May 11. He confirmed this was the case and that he would forward the extra information this week together with the \$500.00 application fee.

I further advised that there was some urgency with the application given the pending notification of the Auckland City Plan review.

I undertook to fax a copy of the application and our correspondence to him as he has lost his file!

SHE (B)

INF 1995

Auckland International Airport Limited

P.O. Box 73020, Auckland International Airport, Auckland, New Zealand. Telephone (09) 275 0789. Facsimile (09) 275 5835.

21 July 1992

The Minister
Ministry of the Environment
PO Box 10-362
WELLINGTON

Dear Sir

AUCKLAND INTERNATIONAL AIRPORT: DESIGNATIONS

Enclosed please find our revised application to become a Requiring Authority under Section 167 of the Resource Management Act 1991 with respect to the Auckland International Airport Obstacle Dimitation Surfaces.

Yours faithfully

J/G Smith)
ENGINEERING CONSULTANT

Engløgure:



FORM 10

APPLICATION TO BECOME A REQUIRING AUTHORITY UNDER SECTION 167 OF THE RESOURCE MANAGEMENT ACT 1991

To: The Minister for the Environment:

- 1. Auckland International Airport Limited applies for approval to become a requiring authority. The Company is an airport authority as defined by the Airport Authorities. Act 1966 for the purposes of operating an airport.
- 2. The description of the works to which this application relates is as follows:
 - (a) Auckland International Airport (Future Airport Operations Worse Protection and Transhipment Areas).
 - Auckland International Airport (Proposed Second Runway and Related Works).
 - (()) Aerodrome (International Airport)
 - (d) Airport Protection Zone
 - (e) Obstacle Limitation Surfaces

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3. The reasons for the application are:

(a) <u>Future Airport Operation Noise Protection and</u>

<u>Transhipment Area</u>

This designation is to protect land to the north of the proposed second runway to ensure that no noise sensitive development takes place and that sufficient land is available to allow for airport related functions such as aircraft maintenance, airfreight, warehousing and transhipment of goods.

(b) Proposed Second Runway and Related Works

This designation is to protect land for the proposed second runway.

Aerodrome International Airport

This designation relates to the existing runway taxiways, terminals and ancillary works and/or functions. It is to protect the vacant land between the existing aerodrome and the proposed second runway. It will allow for the orderly development of terminals aircraft parking roading and other ancillary works associated with aerodrome.

(d) Airport Protection Zones

These zones are at the immediate ends of each runway. There purpose are to control development that might endanger the safety of aircraft. They limit the height of structure and probabit processes which might interfere with a pilot's vision for example smoke and lights.

(e) Obstacle Limitation Surfaces

Is to protect the airspace in the vicinity of Auckland International Airport. The purpose is to limit the height of structures or trees that would present a hazard to aircraft safety.

4. The pesignations are in the public interest because:

Auckland International Airport play a vital role in the economy of New Zealand both in the faciliation of Tourism and for exports.

To meet the future growth in Tourism and Exports, Auckland International Airport will need to expand to meet these needs. If inappropriate development were to take place it would compromise this future development.

(b) The Protection Zones and Obstacle Limitation Surfaces protect the safety of the public.

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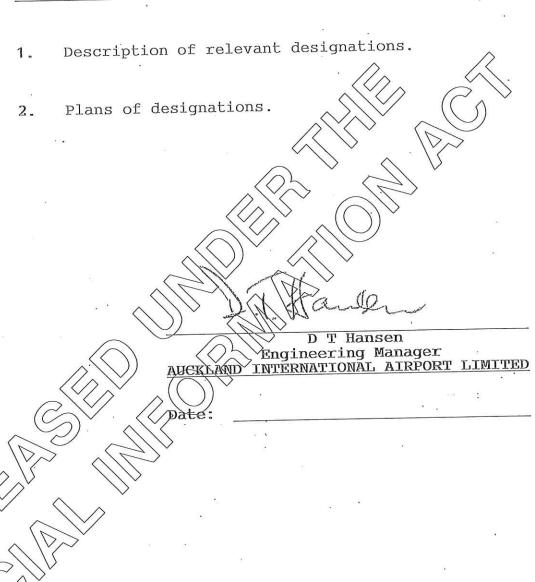
The controls cannot be imposed other than in accordance with the powers of designation contained in the Resource Management Act 1991.

- The Company will carry out all the responsibilities of a requiring authority and give proper regard to the interests of those affected and to the environment, in the following manner.
 - (a) Negotiate fairly with effected land owners and offer fair market values for their land.
 - (b) Negotiate with the Rangatawhenua to ensure that any development has minimal impact on the cultural values and as far as possible address their concerns with respect to any proposed development.

been restrictions on heights and other here have hazards to aircraft in the area surrounding Obstacle since 1965. Mernational Airport Mitation Surfaces are being amended to comply with the Aerodrome Standards Manual 1989. These changes the present operative restrictive than area of the height restrictions and reduce the restrictions. The heights are such that they will have little or no impact on residential properties.

Bearing in mind the importance of aircraft safety and New Zealand's obligation to the International Civil Aviation Organisation the Obstacle Limitations Surfaces are necessary.

Enclosures



Address for Service:

Auckland International Airport Limited PO Box 73-020 AUCKLAND INTERNATIONAL AIRPORT

Telephone

₩ 275-0789

Facsimile

275-5835

Contact Person

John McShane, Planning Manager

AIRPORT DESIGNATIONS

"Auckland International Airport
(Future Airport Operations, Noise Protection
and Transhipment Area)"

Explanatory Statement:

The land subject to this designation is reserved for the proper development of operational areas associated with the second parallel runway and associated with the second parallel runway and associated taxiways. These include the necessary aircraft manoeuvre and apron spaces bearing in mind the rapidly changing nature of aircraft technology and the likelihood of larger, more sophisticated aeroplanes in future. Additional rescue fire facilities and a possible land requirement for additional navigation aids are also a part of the operational requirements for which the land is reserved. In addition, customs bonded warehouses for cargo transhipment aircraft maintenance and servicing facilities, and a free trade zone are provided for in the land subject to this designation together with the roads and others services necessary to such uses. The efficient use of the proposed second runway and of the Airport generally will be enhanced by the availability of land for airport-related uses. Finally, land covered by this designation is adjacent to the second runway and is therefore subject to the greatest aircraft noise the designation protects the community by restricting the type of uses which may be located in the area.

"Auckland International Airport Proposed Second Runway and Related Works)"

Explanatory Statement:

The land designated "Auckland International Airport (Proposed Second Runway and Related Works)" on the Planning Maps has been reserved for future expansion of Auckland International Airport at Mangere. This anticipated expansion will necessitate construction of a second runway, additional taxiways and works alied to the operational functioning of a major airport. The existing investment in the present airport and its locational advantages are such that its relocation to, and expansion on, another site is not feasible.

Auckland International Airport is New Zealand's principal airport for international traffic. Airport planning analysis 2015 indicates that the present runway facilities are likely to become inadequate sometime between the years 2005 and 2010. A lead-in time for construction of a second runway would be around ten years.

Under existing legislation, the designation procedure to reserve land for essential public works is the most practical way by which land can be protected from unnecessary or unsuitable development which would constrain construction of the ultimate use.

Until such time as the designated land is required for the construction and use of a second runway and related works, uses such as those permitted by the underlying zonings may occur may occur with the consent of the designating authority. Given the type of soils and availability of water these would most Such uses will not prejudice future horticultural activities. airport expansion and development and will enable economic returns from the land.

"Aerodrome (International

Explanatory Statement:

The land designated "Aerodrome (International Airport)" comprises some 746 hectares of Yand upon part) of which stands the existing airport runway as well as ancillary facilities. Uses directly related to the overall operational functioning of the airport include the domestic and international terminals, runway, taxiways, a light aircraft park, bonded warehousing and cargo handling facilities, butk fuel storage, car rental firms and various service and retail operations. The airport is also the base for Air New Zealand's international operations, providing servicing and engineering facilities and flight training.

Future land north of the existing airport and south of the southern boundary of the proposed second runway has been designated in order to provide for anticipated future expansion of the existing airport and related activities. This expansion will include cargo and passenger handling facilities, radar and other fundament or a stimulation. other fundational operational activities.

Ultimately it is likely that some of these uses could serve both runways according to needs at the time.

"Rural (Airport Protection) Zone"

Introductory Statement:

Rural (Airport Protection) zone is located immediately off each end of the main and proposed parallel runway under part of Each zone takes the form of a trapezoid the approach slopes. extending some 1,829 metres from the threshold at the end of each runway and applies, therefore, only to Manukau City.

This special zone is required because:

- Aircraft pass over it on landing and take off at low altitudes, therefore special controls are required to avoid impairment of the safe operation of aircraft and to (a) ensure the full utilisation of the airport.
- The area is subject to high levels of aircraft noise (b) excess of 100 EPNdB).

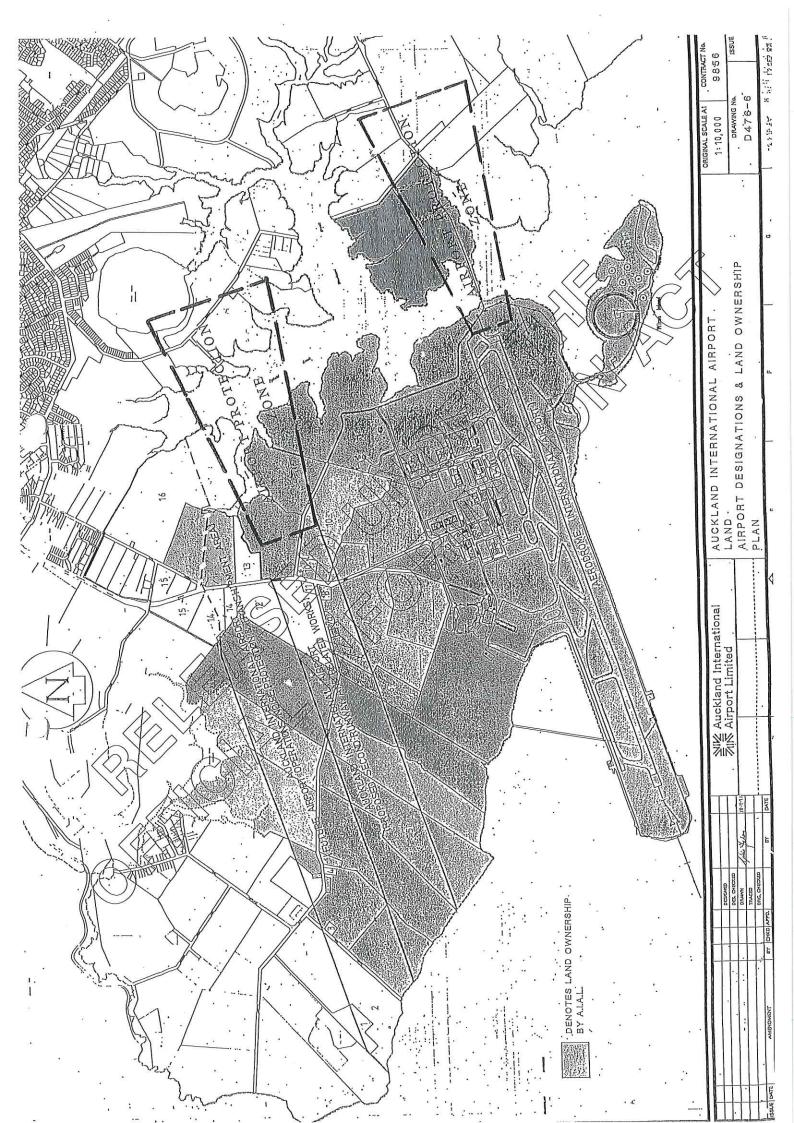
(c) There is relatively greater risk of aircraft accident in this area than elsewhere.

Uses will not be permitted to develop in this zone if:

- (a) They promote mass assembly of people.
- (b) They are labour intensive.
- (c) They release any substances which would impair visibility or otherwise interfere with the operation of aircraft including those creating smoke, dust and steam.
- (d) They concentrate dangerous substances
- (e) They produce direct light beams or reflective glare which would interfere with the vision of a pilot
- (f) They produce radio or electrical interference which would affect aircraft communications or pavigational equipment.
- (g) They attract birds.
- (h) They would require structures that penetrate the imaginary surfaces for height restrictions as defined in the Auckland International Airport: Specification for Approach Controls, dated 18 December 1981 (see Appendix G to the Planning Maps).

The permitted uses in this zone are limited to farming and open space uses together with ancillary uses.

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AUCKLAND INTERNATIONAL AIRPORT LIMITED SPECIFICATION FOR OBSTACLE LIMITATION SURFACES

1. AIAL D693-2 together with this specification comprise the Auckland International Airport Specification for Obstacle Limitation Surfaces.

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

Limitation Surfaces of an perodrome are defined Obstacle above and adjacent to the airspace surfaces in mese)) Obstacle >Limitation Surfaces aerodrome. necessary to enable aircraft to maintain a satisfactory of safety while manoeuvring at low altitude in the vicinity of the acrodrome. These surfaces shall be free of obstacles and subject to control. Where obstacles infringe these surfaces they may, at the discretion of the he required to be reduced in height, removed, or display daylight visual obstacle markings or obstacle ing or both, in accordance with prescribed standards.

Point A

The Airport's "Reference Point" Point "A" is located at the eastern end of the centreline of the existing runway and is shown on the Plan.

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Its Geodetic (datum circuit origin Mt Eden) co-ordinates are:

685729 metres north 303667 metres east

Runway Strip

Each runway will have a runway strip. The runway strip is 300m wide symmetrical to runway sentreline and extends to 60m from the two runway ends.

Approach slopes

The approach slope surfaces meet the combined provisions of approach and take off requirements. They commence from the end of the runway clearways and rise at a gradient of 1.60% to a level of 155m above mean sea level where they meet a Plat plane also 155m above mean sea level. The width of the approach fan at the end of the clearway is 300m and expands at 15% ie: 8° 31' 51".

Inner Horizontal Surface

The "Inner Horizontal Surface" is a flat surface at an altitude of 50m above mean sea level. The sides are located 4,000m from the edge or end of the runway strip to form a rectangle 10,250m by 11,720m and corners of 1,500m radius.

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Transition Surfaces

The "Transition Surfaces" are planes commencing at the edge of the runway strips and rising at a gradient of 1 to 7 to where they meet the "Inner Horizontal Surface" and the approach slopes.

Conical Surface

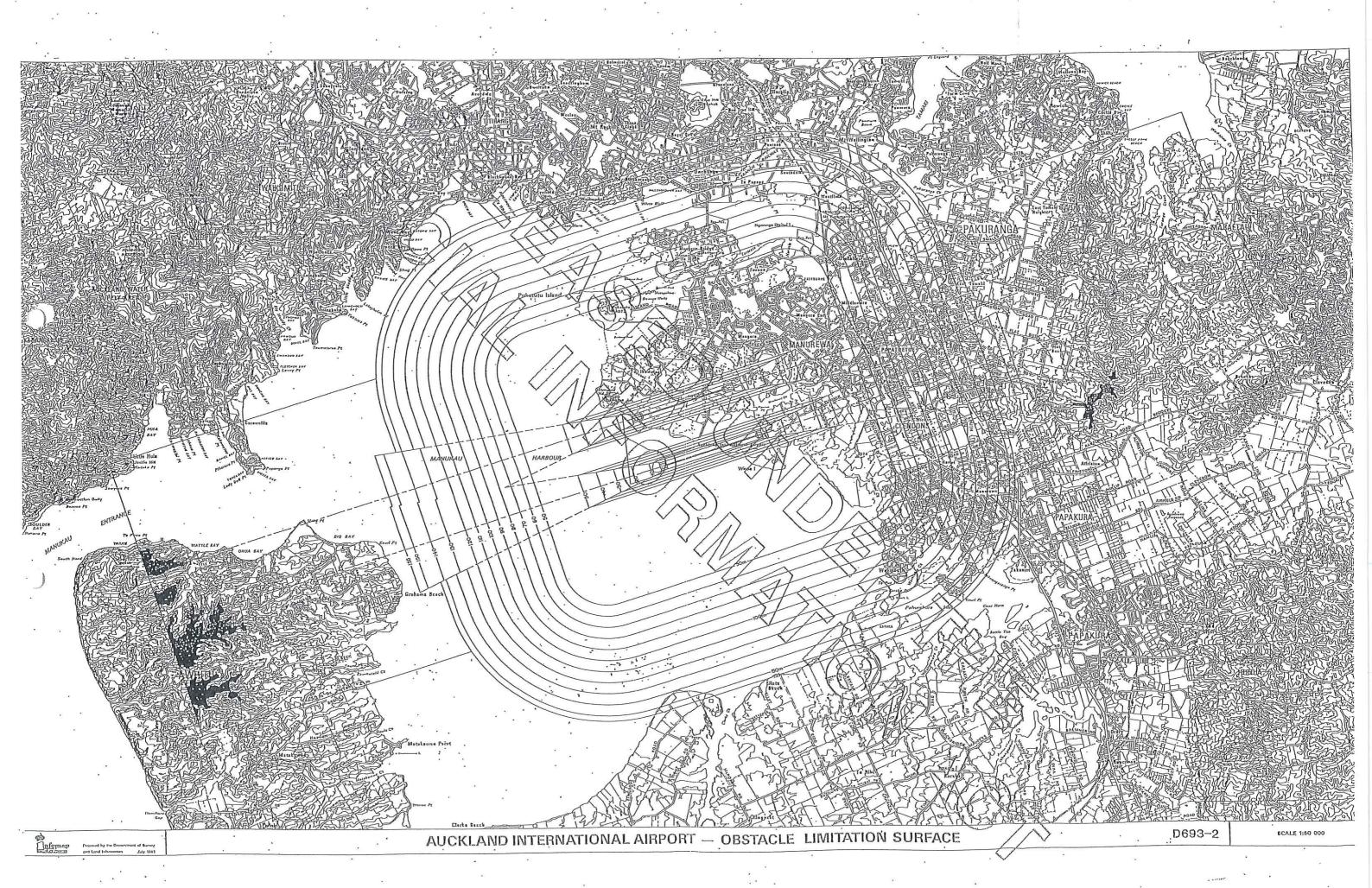
The conical surface alope upward from the outer edge of the inner horizontal surface at a slope of 1:40 to a height of 155m above mean sea level.

Controlling Surface

Where any two surfaces are not at the same level the lower surface shall govern. The plan shows diagrammatically the various surfaces described above.

David Hansen ENGINEERING MANAGER

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