Before an Independent Hearing Panel Appointed by Wellington City Council

In the Matter of the Resource Management Act

1991

And

In the Matter of a Notice of Requirement to

designate land for Airport Purposes

known as the Main Site NOR.

And

In the Matter of a Notice of Requirement to

designate land for Airport Purposes known as the East Side Area NOR.

Statement of Evidence of John Lindsay Howarth for Wellington International Airport Ltd

Dated: 05 May 2021

Amanda Dewar | Barrister

PO Box 7 Christchurch 8140

Email: amanda@amandadewar.com

Phone: 0212429175

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INTRODUCTION

Qualifications and Experience

- My name is John Lindsay Howarth. I have been a Registered Engineering Associate since 1993 having obtained a NZ Certificate in Engineering (civil) in 1984. I have also undertaken specialist training through an Airport Design course at Cranfield University in the UK. In accordance with the Civil Aviation Act I have been assessed as having the necessary skills and experience, with respect to my role as General Manager Infrastructure and Development at Wellington International Airport Ltd (WIAL), and accordingly hold a Senior Person's post (No 54637) under the Civil Aviation Rules.
- I have been employed by WIAL on three separate occasions since 1996 filling various senior roles covering infrastructure, master planning and operations. Currently I am the General Manager Infrastructure and Development. In addition to the 20 years of employment at WIAL I have a further 5 years' aviation infrastructure experience including; a senior infrastructure role at a major Australian airport, a project management role with a major NZ airline and consulted to four NZ regional airports on projects, master planning and noise insulation schemes.
- 3. With respect to the sites subject to the Notices of Requirement (NOR) I have;
 - (a) Either led or been involved in every major infrastructure project at Wellington Airport for the past 25 years.
 - (b) Managed the long-term asset management plans for WIAL's civil and marine protection assets.
 - (c) Led the development of the 2030 Masterplan (released in January 2010) and had executive input into the 2040 Masterplan (released in October 2019)

Scope of Evidence

- 4. In preparing this evidence, I have reviewed the following (in so far as they are relevant to my area of expertise):
 - (a) The two NOR's and associated Assessment of Environmental Effects (AEE) documents;

- (b) All further information provided by WIAL in response to requests issued by Council for each NOR;
- (c) The reports and statements of evidence of all the other witnesses giving evidence on behalf of WIAL;
- (d) The section 42A report;
- (e) Submissions.
- 5. My evidence covers the following areas:
 - (a) The Airport Masterplan which has informed the NORs, the standards that guide its preparation and the need for the airport to take a longterm view to infrastructure and facilities planning.
 - (b) Likely staging of development to provide for future demand for facilities at Wellington Airport.
 - (c) Detail about my experience with implementing construction management plans at Wellington Airport. These are routinely employed to mitigate construction effects such as noise, earthworks, traffic and stormwater.
 - (d) Detail about the Services and Transport Master Planning process that occurs as a subset of the Masterplan. Through this process input is sought from and provides long-term guidance to utility and transport providers.
 - (e) Response to relevant submissions.

WELLINGTON AIRPORT MASTERPLAN

6. Airports develop master plans as a framework to ensure future development can occur in a logical, flexible and considered manner. They are not intended to, nor able to be, followed in a rigid way. The aviation industry can be volatile, and growth can occur either faster or slower than that forecast. It is important that infrastructure is safely and efficiently planned for and delivered to meet anticipated demand and regulatory requirements. This ensures that assets are not stranded, and that development of facilities is timed to ensure that they

- are available to best provide for airline and airport efficiency and on time performance as well as passenger amenity. It also ensures that the new developments are planned to be complaint with the governing rules.
- 7. Masterplans are also used to consult with WIAL's airline partners to ensure their long-term needs are considered and allowed for. This process is also a necessary precursor for the formal consultation and the setting of airline charges that occurs at least every 5 years, as required by The Airport Authorities Act 1966.
- 8. Airport Masterplans are also a useful tool for informing utility stakeholders of airport development plans to assist with their long-term planning and inform ours. My experience suggests that a good deal of collaboration occurs between airport designers and those charged with providing other supporting infrastructure such as transportation links and services so that development imperatives are aligned as far as can be achieved.
- Airport Masterplans are also essential for informing the local community of our long-term plans and ensuring that their feedback is considered in the process.

Wellington Airport Compliance Requirements

- 10. Wellington Airport operates off a very constrained site of 110 hectares. This requires master planning to be considered in more detail than at airports with large landholdings, to ensure staged growth is efficient and possible without impacting too severely on existing operations and the surrounding community. The constrained site at Wellington Airport and the original 1950s design have together also resulted in several non-compliance legacy issues with relevant aviation standards which need to be considered in WIAL's Master planning and long-term infrastructure planning.
- 11. New Zealand is a founding signatory to the Convention on International Civil Aviation 1944. It was signed in March 1947 and is otherwise known as the "Chicago Convention". The Convention is administered by the International Civil Aviation Organisation (ICAO), a specialist agency of the United Nations. ICAO creates regulations for aviation safety, security, efficiency and regularity, and environmental protection. Generally, these are administered via Standards and Recommended Practices (SARPS) contained in 19 ICAO Annexes and a number of guidance and advisory documents.

- Member states (such as New Zealand) are required to enshrine these SARPs into their State legislation to give effect to the Standards. The Ministry of Transport (MoT) is the umbrella government agency that represents New Zealand in this respect. The New Zealand Civil Aviation Authority (NZCAA) was established in 1992 as a Crown Entity under the Civil Aviation Act 1990 as a specialist aviation agency, responsible to the Minister of Transport to administer the main aspects of the SARPs. NZCAA is tasked, among other things with:
 - (a) Establishing and maintaining rules for the aviation sector (aligned with ICAO SARPs or as directed by the Government of the day).
 - (b) Establishing and monitoring a system to ensure that the rules are complied with.
- 13. WIAL is required under the Civil Aviation Rules to meet the standards as required by the NZCAA. WIAL has been issued an operating certificate that is renewed every five years after an in-depth audit and review of its ability to meet the applicable Civil Aviation Rules (CAR). As an international airport listed in the ICAO Asia Pacific Regional Air Navigation Plan, the NZCAA audits annually WIAL's compliance and conformance with its operating processes as agreed by the NZCAA; this is referred to as WIAL's "Exposition".
- 14. As a consequence of the legacy non-compliance issues, Wellington Airport operates with a number of dispensations issued by NZCAA. Of most significance to our Masterplan and long-term infrastructure plans, is the dispensation for the separation distance between the runway and the main taxiway. The current separation between the runway and taxiway is 107.5 metres. This is 65 metres less than that mandated by ICAO and 75 metres less than NZCAA CAR for a Code 4E instrument approach (CAT 1) runway, such as Wellington. I note it is anticipated that the CAR for runway taxiway separation will likely align with ICAO over time.
- 15. In the Masterplan and long-term infrastructure planning context, WIAL aims, where possible, to:
 - (a) Progressively remove or improve non-compliances over time.
 - (b) Design new infrastructure to comply with ICAO SARPs or NZCAA CAR, whichever is more onerous.

- (c) Design new infrastructure to consider climate change, specifically with reference to sustainability and sea level rise.
- 16. Attached as Appendix AA is a plan that denotes projects that WIAL has undertaken over time to either remove or reduce ICAO non-compliance legacy issues. By their nature, most of these projects take many years to plan, design, complete consultation with the airlines and other stakeholders, then fund, gain consent and finally execute. The Masterplan plays a role in this process by providing advance notice to stakeholders of upcoming but long-term projects, many of which may span more than a single Masterplan period.
- 17. It is also integral to the Masterplan process to ensure that design for future works complies with ICAO Standards and, wherever possible, meets ICAO Recommended Practices (as covered in the NOR and Mr Munro's evidence). An outcome of this is that the 2040 Masterplan requires new and larger aircraft stands to be moved further away from the runway to comply with separation and obstacle limitation surface (OLS) requirements. This results in the requirement for greater land area for aviation purposes.
- 18. This is clearly demonstrated in the 2040 Masterplan where on the Eastern Apron the new terminal extension is positioned further to the East to accommodate the new and larger aircraft stands, as it is not possible to move the aircraft stands or terminal further towards the runway and still comply with ICAO Standards.
- 19. Identical ICAO and NZCAA constraints apply to the design of the Western apron on the other side of the runway, where the 2040 Masterplan requires the new Airport Fire Station to be positioned away from the runway so that it does not breach the OLS. Similarly, past major developments on the Western Apron, including the Execujet Hangar (2011) and Air Traffic Control Tower (2017), have been positioned as far back on airport land as possible. The purpose of this was threefold: to ensure that the OLS was not compromised; that as much future apron space as possible is available to ensure efficient use of the constrained site; and to accommodate the progressive introduction of an ICAO compliant taxiway on the Western apron.
- 20. The Eastern apron's (terminal side) primary function is for regular passenger transport and freight. The Airport's constrained site has led to the progressive development of an efficient common user terminal that can accommodate

commuter, regional, trunk and international traffic, all under one roof. The differences between the domestic and international peaks allows the use of "swing" facilities which minimises the size of the terminal and apron.

Wellington Airport Efficiency

- 21. At peak times currently there is not enough aircraft stands for planes, resulting in delays. On high-wind days these delays are exacerbated by the number of stands being reduced to accommodate the airlines' high-wind operating model for turbo prop (regional) aircraft. That is, they change from a power-in and push-back mode in good conditions, to a power-in and power-out model in poor conditions. The latter requires more apron space as a larger manoeuvring area is required. Attached as Appendix BB is a gate schedule table that shows that stand demand is exceed by 2 Code C turbo prop stands at peak times on high wind days.
- 22. To ensure the continued efficient use of the Eastern Apron for the airport's primary aviation function, WIAL has been progressively rolling out a programme of relocating aviation support activities to other locations. Primarily this has been the Western Apron but will also now include the ex-Miramar South School site (now designated and known as the Miramar South Area) in the future. It is envisaged over time that these sites will be dedicated to aviation support functions as will, temporarily, a portion of the ESA.
- 23. Another consequence of WIAL's very constrained site is that, unlike most airports, WIAL cannot accommodate a secure airside road that connects the Eastern Apron and Western Apron. The resulting lack of efficient connectivity between the two aprons reinforces their two separate functions¹.
- 24. The 2040 Masterplan indicates that a dedicated north-south road open to the public can be accommodated in the expansion plans associated with the East Side Area NOR. However, it is not possible to guarantee the provision of this non-aviation function at all times and in perpetuity. As the Airport Authority with the enduring responsibility to provide for Airport Purposes, it is prudent and sound guardianship to retain flexibility and not fetter accommodating

¹ The 2030 Master Plan anticipated using the existing pedestrian tunnel under the runway for the use by aviation pedestrian and golf cart type vehicles. Primarily for maintenance and security functions. While this is still a possible outcome this would not improve the connectivity between the two aprons for regular passenger transport operations nor will it provide additional space as the Western Apron will be fully required for general aviation, the military, fixed based operators and other aviation support functions; as covered in Mr Munro's evidence

future aviation regulations and other such matters such as security incidences given WIALs' extremely constrained site and statutory obligations.

STAGING OF DEVELOPMENT

- 25. Due to the impacts of Covid-19, the timing of the 2040 Masterplan has been reviewed and aligned with the latest forecast. The evidence of Mr Vincent provides further detail about this. These revised projections were used to consult with airline and other stakeholders to determine capital works and airline pricing through until March 2024. As part of the consultation process, WIAL also provided the airlines with guidance on what is likely to occur in the next pricing period, through to March 2029.
- 26. **Attached** as **Appendix CC** are staging plans that provides a high-level concept for the Eastern Apron development and details:
 - (a) Works that WIAL plans to undertake by March 2029; subject to forecast and further consultation with the Airlines. These works largely comprise of developing the terminal and apron to accommodate 8 million passengers per annum. These development works will largely remain on the main Wellington Airport site although staging, construction laydown areas, utility relocation and displaced aviation support functions will require the use of the East Side Area. In this period detailed geotechnical testing (as referred to in Mr Robins' evidence) will be carried out on the East Side Area; this is a necessary step for advancing the design, method of work plans and costs, and consequently is also a pre cursor to further consultation with the airlines.
 - (b) Works that WIAL will progressively undertake over time after March 2029 to accommodate the 2040 Masterplan; that is, up to a 12 million passenger per annum operation. These works will almost exclusively be on the East Side Area. The timing and staging of these works will also be subject to regular demand forecast updates and further airline consultation.
- 27. To progress the above works, WIAL will continue to move aviation support facilities away from the Eastern Apron to either the Miramar South Area, the Western Apron sites or the ESA. Specifically, WIAL will look to relocate:

- (a) Rental car and flight catering operations to the Miramar South Area site.
- (b) The Airport Fire Station to the Western Apron.
- (c) Temporarily displaced ground service equipment storage and transport functions to the ESA.
- 28. The 2040 Masterplan remains as the framework to cater for 12 million passengers per annum. It will also be used for WIAL's long-term asset management strategy and to consult with aviation, utility, transportation, local community and other stakeholders to inform their long-term planning process. The Masterplan will continue to be reviewed regularly to inform whether planned capital works need to be advanced or slowed down to meet future forecast demand and acknowledging that it is a non-statutory document subject to any designation conditions and relevant District Plan provisions.

EARTHWORKS AND CONSTRUCTION MANAGEMENT AT WELLINGTON AIRPORT

- 29. The East Side Area NOR outlines proposed conditions for earthworks and construction management, in particular the requirement to prepare an Earthworks and Construction Management Plan
- 30. WIAL has a track record of successfully undertaking significant civil and building infrastructure projects. As indicated earlier, I have managed a good number of these. Inherent in that success is implementing comprehensive Construction Management Plans (CMP). Depending on the size, tasks, location, complexity, and timing of the project the CMP will generally include a;
 - (a) Method of Work Plan (**MOWP**)
 - (b) Traffic Management Plan (**TMP**)
 - (c) Earthworks Management Plan (**EMP**)
 - (d) Stormwater Management Plan (**SWMP**)
 - (e) Contaminated Land Management Plan (CLMP)

- (f) Construction Noise Management Plan (**NMP**)
- 31. If a project involves significant earthworks, then the CMP will include an EMP. An EMP is implemented prior to the commencement of any construction or earthworks on site.
- 32. The aim of the EMP is the avoidance, mitigation, or remediation of any adverse effects on the receiving environment.
- 33. Where earthworks may have an impact on stormwater (permanent or during construction), the EMP will also include a SWMP in accordance with any regional resource consent.
- 34. Where earthworks may potentially encounter contaminated land, then WIAL will use its site-wide Contaminated Land Management Plan as the basis for a project specific CLMP. Any plan will be made in accordance with any relevant resource consent under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES-CS).
- 35. **Attached** as **Appendix DD** is the most recent EMP for a major civil infrastructure project, The Taxiway Alfa Erosion and Sediment Plan. This project was successfully completed in 2018 with no complaints or issues recorded.
- 36. If a project has the potential to generate noise, then WIAL will use its site-wide Construction Noise Management Plan as the basis for a project specific Noise Management Plan (NMP). The proposed conditions for the ESA Earthworks and Construction Management specify how construction noise will be managed.
- 37. WIAL's extremely constrained site and its limited ability to undertake certain construction activities when the runway is operational poses significant challenges when undertaking noisy work, especially during the night. However, over time WIAL, its consultants and construction partners have developed several initiatives and systems that have allowed major infrastructure projects to progress with minimal impact on our residential neighbours.
- 38. **Attached** as **Appendix EE** is the most recent NMP for a major civil infrastructure project; The Construction Noise Management Plan for the

- Runway Resurfacing Project. This project was completed in 2021 with only a few complaints and, post construction, received strong endorsements from both the Air Noise Management Committee (ANMC) and WCC.
- 39. If a project is considered to be particularly demanding and has the potential to impact significantly on WIAL's neighbours, then the CMP can allow for a Construction Liaison Group (CLG). The last major infrastructure project that this occurred on was the South RESA construction in 2006, the CLG was considered necessary at that time due to its impact on the Moa Point Road residents.
- 40. While WIAL's future development plans and the timing of work to give effect to the 2040 Masterplan are still in their early stages it is reasonable to assume that the likely scope of works for some of the East Side Area NOR (towards the end of the Masterplan period and as development occurs closer to the adjoining residential area), will require a CLG to be included in the CMP with reference to noise management.

EXTENT OF EARTHWORKS

- 41. Civil construction projects with a significant earthworks component generally try to balance the "cut" and "fill" components to minimise cost and effects.
- 42. In terms of the East Side Area NOR, construction projects would need to consider the following technical matters;
 - (a) Existing levels for the terminal, apron and trunk services,
 - (b) Existing topography,
 - (c) ICAO Annex 14 SARPS,
 - (d) NZCAA CAR Part 139 and the associated Advisory Circular AC 139-6, Aerodrome Design Requirements for all Aeroplanes Conducting Air Transport Operations and all aeroplanes above 5,700kg Maximum Certified Take-off weight.
 - US National Fire Protection Association Standard 415 on Airport Terminal Buildings, Fuelling Ramp Drainage and Loading Walkways,

- 43. WIAL's consultants, Beca Limited, have completed a draft Master-Grading plan that encompasses the East Side Area that will be refined as the design develops. A Master Grading Plan considers the 3D geometric requirements for the airfield, including aircraft pavement geometries (limited by ICAO SARPS and CAA Rules), earthworks depths and volumes, and impact on utilities particularly airfield levels and stormwater drainage, and the ability to effectively manage stormwater, both in today's environment, and allowing for the future environment including projected sea level rise. Mr Robins evidence considers the geotechnical history of the ESA, hazards, engineering solutions and Earthworks and Construction Management.
- 44. The draft Master-Grading plan indicates that;
 - (a) the 2040 Masterplan layout of the ESA will largely be a "cut" exercise. The exact quantity of cut will be refined and minimised as geotechnical tests are completed, retaining options confirmed and the design developed.
 - (b) The vast majority of the "cut" will occur after 2029, when WIAL starts to expand onto the golf course portion of the East Side Area.
- 45. As the East Side Area grading plan is refined, it will also consider options for the disposal of fill, both on and off the Airport site. Some potential options that have been identified to date are;
 - (a) Seawall renewal project.
 - (b) Stockpile and treat on site on the area to the northern most portion (adjacent to the golf course) of the East Side Area. This area is currently forecast not to be required until after 2040.

UTILITY SERVICES AND TRANSPORTATION

- 46. As part of the 2040 Masterplan WIAL's consultants carried out a high-level review of trunk utility services. These included high voltage electricity, sanitary sewers, stormwater drainage, potable water and gas to;
 - (a) Consider if the trunk utility services are adequately sized to accommodate future growth,

- (b) Advise if the trunk utility services were required to be relocated, to avoid the future layout of buildings, aircraft parking and aircraft traffic routes,
- (c) Provide a high-level cost for financial planning purposes and to enable WIAL to consult with its airline partners on pricing (now complete).

47. The high-level review found that;

- (a) In the main, the trunk utility services were adequate for the duration of the 2040 Masterplan period. However additional stormwater capacity would be required sometime towards the end of the Masterplan period. As we are required to minimise stormwater (potentially achieve neutrality), runoff attenuation and ponding are options that will need to be considered as a solution. It is noted that the constrained site will make this challenging.
- (b) The trunk utility services, that ran adjacent to the late 1990's location of Stewart Duff Drive, to the south of the existing terminal will have to be relocated. This work is currently planned to be undertaken by March 2024.
- 48. Further work has recently been commissioned to consider the forecast demand for electric vehicles and battery powered aircraft. This work will not only inform the airport's future infrastructure requirements (including the potential for onsite generation) but will also provide input into the long-term asset management plans of the local lines company.
- 49. Wellington Water Ltd (WWL) has been in discussion with WIAL over WWL's planned expansion of Moa Point to provide a de-sludging facility. There are potential synergies between the Wellington Water's expansion and WIAL's 2040 Masterplan including the East Side Area NOR; these may minimise costs and have the potential to provide WIAL with a renewable energy source as a by-product of the de-sludging process.
- 50. Let's Get Wellington Moving (**LGMW**) and WIAL have been meeting regularly since mid-2020 to ensure co-ordination of each organisation's respective long-term plans. While LGMW will not be in a position to identify their preferred option until later this year it is anticipated that their requirements will be able

- to be accommodated by WIALs 2040 Master Plan. Mr Georgeson discusses this in more detail in his evidence.
- 51. The draft high-level review of trunk utility services and transportation requirements will continue to be refined as design develops and will be used as a basis to develop a utilities plan for continued consultation with utility providers.

RESPONSE TO SUBMISSIONS

- 52. Submissions by Guardians of the Bays, Tim Jones and the WCC Environmental Reference Group have expressed concern that WIAL has not provided detail about how it is going to deal with stormwater produced from the East Side Area. In response to this, I note that the designation will not negate the need for WIAL to apply for regional consents (and effectively manage and minimise stormwater discharge), and as such WIAL will be required to apply for a discharge resource consent under Rule 52 (Stormwater form a port or airport) of the Wellington Regional Council Proposed Natural Resources Plan. As I have stated above, it is usual practice for WIAL to include a Stormwater Management Plan as a part of its Earthworks and Construction Management Plan when earthworks or construction activities impact stormwater.
- 53. Submissions by Guardians of the Bays, Tim Jones and the WCC Environmental Reference Group have expressed concern that WIAL has not provided any information on volumes of earthworks and the effects related to construction (such as numbers of truck movements). In response to this, I note that the evidence of Mr Robins outlines the outcomes of the draft Master-Grading plan that I have referred to above. The draft Master-Grading plan takes into account the whole of the proposed ESA area, as well as part of the Main Site Area.
- 54. Moreover, the amount of earthworks required for the whole apron area will not occur all in one go, as WIAL will be progressing in stages (as referred above) and largely towards the end of the Masterplan period. Furthermore, the total volume of earthworks advised in Mr Robins evidence can be considered the maximum; that is, as design is refined this volume will reduce, possibly significantly. I believe the required Earthworks and Construction Management

Plan, which is required to detail the quantity of material excavated and transported will appropriately manage earthworks and construction related effects.

- 55. Submissions raised concerns about climate change with respect to sea level rise and the resilience of our infrastructure. As noted above, projected sea level rise and increases in storm surge events have both been considered when developing the draft Master-grading plan, which proposes apron elevations and stormwater catchments. WIAL has also commenced consultation with the airlines on the renewal of the Lyall Bay marine defences, with a programme of completing investigations, concept design and consent by March 2024; this will be followed by construction in the period between April 2024 and March 2034 (subject to consultation and consents). When considering criteria for sea level rise, future infrastructure will be designed in accordance with NZ Ministry for the Environment guidelines.
- A submission from Jeff Weir raised, correctly, that WIAL has approval to operate with its current dispensations by CAA. However, there is no guarantee of these dispensation not being withdrawn or modified in the future (and as has occurred in the past; for example, for the Runway End Safety Areas (RESAs)). I addressed in my evidence the rules that govern airport design, the need to reduce non-compliances over time and our track record of doing so. Furthermore, Mr Munro's evidence highlighted that even under the status quo there is potential for more restrictive operating criteria to apply to aircraft movement; this would result in aircraft operations becoming less efficient. Consequently, WIAL's consistent long-term strategy to align with ICAO and CAR rules is prudent guardianship and must remain a consideration in long-term planning for the Airport.

RESPONSE TO COUNCIL REPORT

- 57. The Council's Urban Designer has questioned the removal of a small hill and has recommended that the Rongotai Ridge area be excluded from the Main Site designation.
- 58. In response to the questioning of the removal of the small hill to extend the taxiway south, and the request to provide information and consideration of staging until "reasonable necessity" can be established: the removal of the

small hill is necessary to provide sufficient space to the south of the terminal precinct for the provision of the taxiways to access the East Side Area. WIAL staging plans anticipate that the hill will be removed by 2029 and that the space under it will be used for taxiway access as well as ground servicing equipment storage and an airside service road. This is a necessary step to allow growth by fully developing the Main Site and then expansion onto the ESA.

- 59. In response to the Urban Designer's comment that Rongotai Ridge as a significant gateway and the designation conditions not being an ideal mechanism. The Ridge is integral to the ongoing safety and efficiency of airport operations. Wellington Airport currently has an Instrument Landing System comprising of localisers (runway centre line guidance) located at both ends of the runway and glidepaths (vertical guidance) located on the west side of the airport adjacent to Moa Point Road and Bridge Street.
- 60. This technology will be phased out and replaced (likely in this Masterplan period) by a Ground Based Augmentation System (GBAS). When implemented, GBAS will augment the existing Global Positioning System (GPS) used in airspace navigation by providing corrections to aircraft in the vicinity of the airport to improve the accuracy and reliability of aircraft GPS navigational positioning. GBAS will require a significant sized area, close to the runway and with direct lines of site of the runway ends for it to be implemented. GBAS cannot be accommodated in the areas currently used for the Landing Systems and WIAL's Masterplans have identified that the Rongotai Ridge site is the only airport owned site suitable to accommodate this technology.
- 61. I also note that Rongotai Ridge itself is also highly constrained by the OLS and development of this site must be closely controlled to ensure ongoing regulatory compliance and efficiency of aircraft operations. Accordingly, and in my opinion the Rongotai Ridge gateway area is more appropriately included in the Main Site Airport Purposes designation.

CONCLUSION

62. In my opinion and supported by the evidence that I have provided in this statement:

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(a) WIAL has undertaken a thorough and robust long-term planning

approach to establish a logical, staged and flexible approach for

progressive airport expansion into the ESA area.

(b) The 2040 Airport Masterplan including as it relates to the ESA area

remains robust and relevant for its primary purpose of identifying and

protecting land requirements for accommodating long-term

aeronautical requirements;

(c) WIAL has a strong record of working closely with the local community

to ensure that the impact of our continued development and operation

of the airport is clearly communicated and well managed to mitigate

the impact on the Airport's neighbours.

(d) WIAL has considered and included within the NOR, conditions for an

Earthworks and Construction Management Plan, that will provide a

robust framework within which we will continue to deliver significant

infrastructure projects while minimising the impact on neighbours.

(e) WIAL will continue to consider and allow for climate change resilience

in the design and construction of infrastructure at the Airport.

John Howarth

5 May 2021



APPENDIX BB: GATING ANALYSIS

APPENDIX CC: STAGING PLANS

APPENDIX DD: TAXIWAY ALFA EROSION AND SEDIMENT PLAN

APPENDIX EE: CONSTRUCTION NOISE MANAGEMENT PLAN - RUNWAY RESURFACING PROJECT.