

Proactive Release

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Some information has been withheld on the basis that it would not, if requested under the Official Information Act 1982 (OIA), be released. Where that is the case, the relevant section of the OIA has been noted and no public interest has been identified that would outweigh the reasons for withholding it.

Listed below are the most commonly used grounds from the OIA.

<u>Section</u>	<u>Description of ground</u>
6(a)	as release would be likely to prejudice the security or defence of New Zealand or the international relations of the New Zealand Government
6(b)	as release would be likely to prejudice the entrusting of information to the Government of New Zealand on a basis of confidence by <ul style="list-style-type: none"> (i) the Government of any other country or any agency of such a Government; or (ii) any international organisation
6(c)	prejudice the maintenance of the law, including the prevention, investigation, and detection of offences, and the right to a fair trial
9(2)(a)	to protect the privacy of natural persons
9(2)(b)(ii)	to protect information where the making available of the information would be likely unreasonably to prejudice the commercial position of the person who supplied or who is the subject of the information
9(2)(ba)(i)	to protect information which is subject to an obligation of confidence or which any person has been or could be compelled to provide under the authority of any enactment, where the making available of the information would be likely to prejudice the supply of similar information, or information from the same source, and it is in the public
9(2)(ba)(ii)	to protect information which is subject to an obligation of confidence or which any person has been or could be compelled to provide under the authority of any enactment, where the making available of the information would be likely otherwise to damage the public interest
9(2)(f)(ii)	to maintain the constitutional conventions for the time being which protect collective and individual ministerial responsibility
9(2)(f)(iv)	to maintain the constitutional conventions for the time being which protect the confidentiality of advice tendered by Ministers of the Crown and officials
9(2)(g)(i)	to maintain the effective conduct of public affairs through the free and frank expression of opinions by or between or to Ministers of the Crown or members of an organisation or officers and employees of any public service agency or organisation in the course of their duty
9(2)(h)	to maintain legal professional privilege
9(2)(i)	to enable a Minister of the Crown or any public service agency or organisation holding the information to carry out, without prejudice or disadvantage, commercial activities
9(2)(j)	to enable a Minister of the Crown or any public service agency or organisation holding the information to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations)

Shortlist Options Design Summary File Note: Appendix E-D to Economic Case

1. Introduction

The Economic Case has a series of appendices, one of which is listed as “Appendix E-D, Shortlist Options Design Summary (including Cost Estimate Report)”.

This appendix is the document or series of documents that describes the light rail system that has been costed in the business case.

There is currently a combination of documents that define the design that should be read together as this appendix.

2. Design Documents

2.1 Design and Construction Report

The Design and Constructability Report was prepared to support Notices of Requirement (NoR) to designate land for the purpose of Auckland Light Rail (ALR). This report provides a summary of the design of the Emerging Preferred Option (EPO) to demonstrate construction feasibility of ALR. This includes a description of the proposed infrastructure, including alignment, rail systems like electrification, stations and tunnel to enable an understanding of the effects of construction and operation sufficient to inform the NoR and supporting Assessment of Environmental Effects (AEE). The ALR design establishes engineering and architectural design parameters which were refined for the business case and would be further reviewed in future design phases.

The Design and Construction Report (including its associated drawings) was prepared in July 2023 and was not updated in line with the Value Engineered design that formed the basis of the cost estimate undertaken for the Business Case.

The report, nevertheless, is a good source of information to define the ALR system and may be read in conjunction with the various Value Engineering summaries to define the product that was costed in the business case. An example of where change has occurred between the NOR and business case is that platform lengths in the Design and Construction Report are noted as 100m whereas they were value engineered to be 51m (in future decades to be extended to 85m) which is described in the Basis Of Design. Other changes are noted in the VE summary in section 2.4, below.

s 9(2)(b)(ii)



2.2 Basis of Design Report

The Basis of Design Report was developed later than the Design and Construction report, noted as being reviewed in November 2023. It introduces the value engineered design and starts to define requirements and standards that would be used for the project in future phases.

Some elements that are described in the Design and Constructability Report are not covered by the Basis of Design Report hence including both in appendix E-D of the Economic case at this point in time.

s 9(2)(b)(ii)

2.3 Basis of Design Schedule

The spreadsheet appendix to the Basis of Design Report refers to specific technical requirements of the design and should be read in conjunction with the other documents to define the design.

s 9(2)(b)(ii)

2.4 Value Engineering Summary

The Alliance undertook a series of value engineering workshops in the second half of 2023 and applied value engineering initiatives to establish a minimum credible design which forms the Basis of Design costed for the Business Case.

These are noted below:

- Ventilation strategy – fire size assumed to be 5mW, relief paths, jet fans, combined over track exhaust and over platform exhaust, reduction in size of plant rooms
- Ungated stations – gate lines removed from all stations replaced by on train validation of tickets, removal of ticketing facilities and other staff facilities, reduction in concourse size, some stations accessed directly from overpasses
- Rollingstock size – reduced from 100m to 51m day 1 (to be extended to 85m in future)
- Staff and customer amenities – toilet numbers reduced to reflect the NZ building code requirements, bicycle parking removed (to be provided by others), staff numbers minimised
- Burton Street shaft removed
- Design of Te Wai Horotiu adjusted so does not pass under the CRL station
- Air conditioning to underground platforms not provided
- Escalator redundancy provisions and configuration optimised
- Platform shelters minimised
- Minimise numbers of lifts to bridges and surface stations
- Dominion Junction Station – one entrance only
- Road layout at Dominion Junction optimised
- Public realm finishes assumed to be provided by others other than basic elements by stations
- Front of house station circulation areas optimised
- Walls in back of house areas of stations reduced in quantity
- Plant rooms rationalised
- Façade maintenance reviewed
- Lagoon path scope optimised

- Platform screen doors at surface stations removed

2.5 Alignment Typology

A spreadsheet summary of the lengths of types of infrastructure required along the alignment was created to help inform the costing. A summary is shown below:

Mined Tunnel	20
TBM Tunnel	7568
Cut and Cover	322
Retaining Walls (Fill)	1690
Retaining Walls (Cut)	615
At Grade	6680
Viaduct (mainline only)	5775
MHX	600
Trench	2250
Total	25520

s 9(2)(b)(ii)

2.6 Cost estimate report

s 9(2)(b)(ii)

2.7 Intermediate comparator

The Intermediate Comparator (IC) was developed to fulfil the requirements of the Treasury Business Case process. It represents a lower cost option for Auckland Light Rail (ALR) that is used to compare against the Emerging Preferred (Separated) Option (EPO) through the Business Case. The role of the Intermediate Comparator is to test whether the project objectives set out in the Investment Logic Map (ILM) could instead be met (or mostly met) with a lower cost intervention.



s 9(2)(b)(ii)

3. Next steps

Should the project be reactivated in its current form, the Value Engineering elements that were applied to the NOR design and which form the basis of the product that was costed for the business case should be revisited with stakeholders such as Fire and Emergency, NZ and the rail Regulator. There was not adequate time at the close out of the project to complete this in advance of completing the draft business case.

The Design and Constructability Report and drawings should then be updated to reflect these agreed value engineering initiatives.

4. Key risks

There is a risk that not all value engineering initiatives assumed in the Basis of Design and Cost estimate will be able to be incorporated as the design progresses which could result in an increase in the cost estimate. It is not anticipated that these will exceed the risk provision in the estimate.

Further optimisation of the design may be feasible in future phases which may offset this risk.