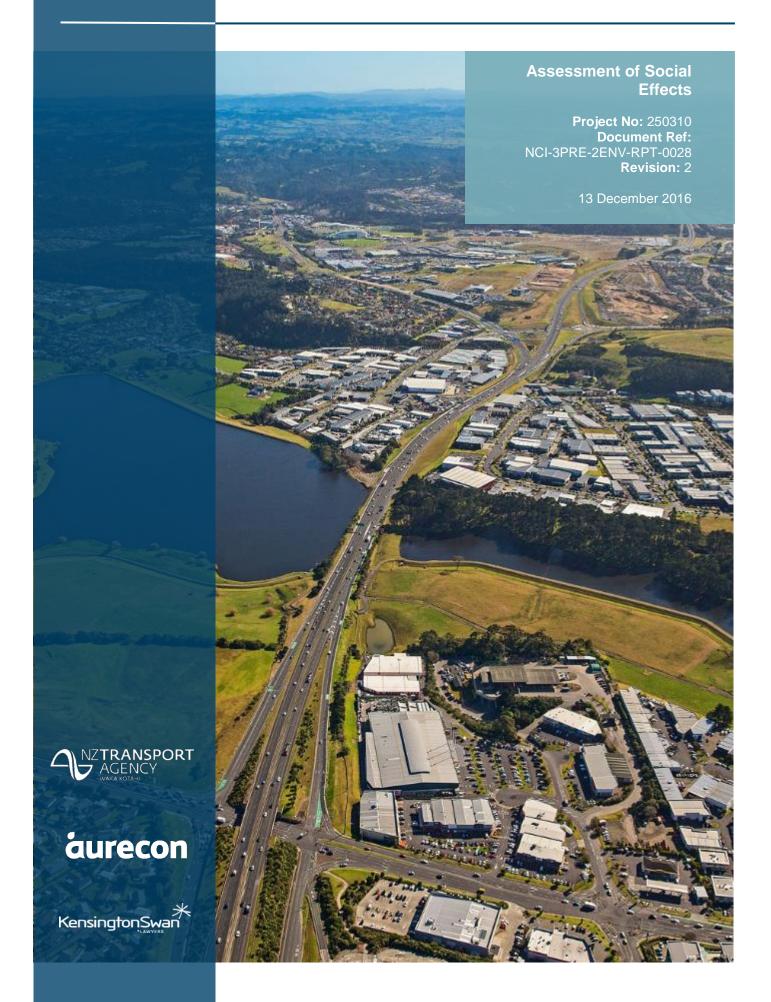
Northern Corridor Improvements





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Quality Assurance Statement		
Prepared by:	Michelle Burns, Mikayla Woods, Louise Strogen (Aurecon NZ Ltd)	
Reviewed by:	Duncan Whyte (Aurecon NZ Ltd)	
NZTA Reviewer:	Deepak Rama	
Approved for issue by Aurecon:	Jon Hind	
Approved for use by NZTA:	Kenny See	









Executive summary

Purpose of Report

This Assessment of Social Effects (Assessment) identifies and assesses the social impacts that may arise as a result of the Northern Corridor Improvements Project (the Project) during both the construction and operational phases in order to inform the Notices of Requirement (NoR) and Assessment of Environmental Effects (AEE).

The assessment has been prepared by:

- Identifying a social study area and development of a demographic profile as well as site visits and observations to provide an understanding of the existing social characteristics and conditions of the study area (social baseline);
- Review of conclusions drawn from other specialist technical assessments, through a 'social lens';
- Reviewing feedback from the consultation and engagement process as well as from targeted social impact specific interviews to identify social issues and community concerns;
- Identifying and assessing the social effects of the Project against an assessment framework at both a regional and local level; and
- Identifying appropriate mitigation, avoidance or remedial strategies.

Methodology

For the purposes of this study, potential effects of the Project have been assessed against a social framework. This framework is informed by a literature review of international and New Zealand best practice; the New Zealand Transport Agency's (NZ Transport Agency) Z19 State highway environmental and social responsibility standard and its Guide to assessing Social Impacts for State Highway projects and the International Association of Impact Assessment (IAIA) framework, which has been adapted to fit the Project.

Summary of effects

The Project passes through an industrial area, and does not directly impact on community facilities other than stormwater treatment proposed for either Bluebird Reserve or Rook Reserve, and the North Harbour Hockey Stadium. Schools and other sensitive activities are outside the Project area. A mitigation strategy is being considered for the North Harbour Hockey Stadium with a range of options for relocating those facilities.

Social effects of the Project during the planning phase are considered to encompass minor positive, neutral and minor to moderate negative impacts, mainly in relation to uncertainty about potential effects and as a consequence of the accelerated nature of the Project.

Social impacts in the construction phase are considered to range from minor positive to minor to potentially significant negative social impacts, varying across the Study area according to proximity to construction areas and the types of construction activities being undertaken. The most significant social impacts will be experienced by those living and working directly adjacent to construction areas. It is anticipated, however, that most adverse impacts will be able to be reduced and/ or mitigated









through the implementation of the CEMP and additional mitigation measures set out in Section 6 of this report. In most cases, those impacts will be temporary.

A broad range of social impacts are associated with the operational Project, ranging from moderately to significantly positive benefits to potentially minor negative impacts for households and the community. Improved accessibility, increased mobility choice and enhanced acoustic attenuation will generate the greatest benefits for the community within and immediately adjacent the Project area.









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Glossary of Abbreviations

Item	Description	
AEE	Assessment of Environmental Effects	
AUP	Auckland Unitary Plan (Operative in Part, 15 November 2016)	
CAU	Census Area Units	
CSA	Construction Support Areas	
CEMP	Construction Environmental Management Plan	
EPA	Environmental Protection Authority	
LTP	Auckland Long-Term Plan 2012-2022	
LTMA	Land Transport Management Act 2003	
NHBID	North Harbour Business Improvement District	
NHHS	North Harbour Hockey Stadium	
ICT	Information and communications technology	
IAIA	International Association of Impact Assessment	
NoR	Notices of Requirement	
NZ Transport Agency	New Zealand Transport Agency	
PWA	Public Works Act 1981	
RLTS	Auckland Regional Land Transport Strategy 2010-2040	
RPS	Auckland Council Regional Policy Statement	
RPTP	Regional Public Transport Plan	
RMA	Resource Management Act 1991	
RTN	Regional Transit Network	
RWWTP	Rosedale Wastewater Treatment Plant	
SH x	State Highway (number)	
SIA	Social Impact Assessment	
SME	Small Medium Enterprises	
SUP	Shared Use Path	
UDLF	Urban Design and Landscape Framework	
UHH	Upper Harbour Highway	
WRR	Western Ring Route	









Terms and Definitions

Item	Description		
Amenity	As defined in section 2 of the RMA, amenity values means those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes		
Auckland Council	The unitary authority in terms of the Local Government (Auckland Council) Act 2009 and the Local Government (Auckland Transitional Provisions) Act 2010 which replaced the eight existing councils in the Auckland Region as of October 2010.		
Best Practicable Option	Defined in section 2 of the RMA. In relation to a discharge of a contaminant or an emission or noise, this means the best method for preventing or minimising the adverse effects on the environment.		
Designation	Defined in section 2 and section 166 of the RMA as provision made in a district plan to give effect to a requirement made by a requiring authority under section 168 or section 168A or clause 4 of Schedule 1.		
Do Minimum Term used in the context of a comparison between the effects of a project and the effects that would occur if the project was not under (i.e. for the comparative evaluation of the effects 'with and without' Project).			
Project area The area within the proposed designation(s) corridor of the Northern Corridor Improvements Project and that area abutting this corridor			
Project	Refers to the Northern Corridor Improvements Project including the extension to the Northern Busway and the proposed Shared Use Paths.		
Western Ring Route (WRR)	A strategic State highway route which provides an alternative to SH1 as a regional route for traffic traversing Greater Auckland. The WWR requires the completion of links and new lanes to combine the Southwestern (SH20), northwestern (SH16) and Upper Harbour (SH18) highways into a continuous 48km motorway. The WWR will link the North Shore, West and South Auckland.		









1 Introduction

1.1 Purpose of this Report

This Assessment of Social Effects (Assessment) has been prepared to support the Notices of Requirement (NoR) and resource consent applications for the Project. It is one of a suite of technical reports that has been prepared to inform the AEE for the Project.

The Land Transport Management Act 2003 (LTMA) provides the legal framework for managing and funding land transport activities. The purpose of the LTMA is to contribute to an effective, efficient, and safe land transport system in the public interest.

Section 96(1)(a) of the LTMA requires that the NZ Transport Agency exhibits a sense of social and environmental responsibility in its activities. This Assessment is in accordance with those responsibilities.

The Resource Management Act 1991 (RMA) defines environment as including

- a) ecosystems and their constituent parts, including people and communities, and
- b) all natural and physical resources, and
- c) amenity values, and
- d) the social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) or which are affected by those matters.

This Assessment forms part of the wider assessment of environmental effects (including people and communities) prepared for the Project. As such, it has been prepared with reference to Part 2 of the RMA.

Section 5 of the RMA sets out its purpose and principles, which are to promote sustainable management by managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing; and for their health and safety while sustaining resources, safeguarding the life-supporting capacity of air, water, soil and ecosystems and avoiding, remedying, or mitigating any adverse effects.

Also, in achieving the purpose of the RMA, all persons exercising functions and powers under it are required to have particular regard to:

- Section 7(b): the efficient use and development of natural and physical resources;
- Section 7(c): the maintenance and enhancement of amenity values; and
- Section 7(f): maintenance and enhancement of the quality of the environment.

Consideration of social effects is also required under the fourth schedule of the RMA (assessment of effects on the environment) which sets out matters that should be considered when preparing an assessment of effects on the environment including:

 Schedule 4, clause 7(1): Requires the effects on neighbourhoods and communities to be considered when preparing an assessment of environmental effects.

Having regard to the LTMA and the RMA, the purpose of this Assessment is to provide an assessment of the likely social consequences (benefits and dis-benefits) that may arise as a result of the Project. The Assessment has been developed by:









- Undertaking a literature review and development of an assessment framework based on the NZ
 Transport Agency's Guide to Assessing Social Impacts for State Highway Projects as well as
 national and international best practice to identify the social impacts (benefits and dis-benefits) of
 the Project;
- Assessing the relevant statutory and non-statutory documents to provide the regulatory and policy context for the Project;
- Reviewing feedback from the general community and stakeholder consultation process as well as from targeted social impact specific interviews to ensure that social concerns of the community have been considered;
- Identifying a social study area and reviewing its demographic and social profile as an assessment baseline to evaluate the existing social environment for the area influenced by the Project as a whole;
- Identifying social facilities and infrastructure within the Study Area and how these may be affected by the Project;
- Using the developed assessment framework and the baseline and environmental assessment undertaken by the Project team, to identify and assess the likely social impacts of the Project for the planning, construction and operational phases; and
- Identifying appropriate mitigation, avoidance or remedial measures for the planning, construction and operational phases of the Project, where necessary.

1.2 Assumptions and Exclusions in this Assessment

The following specific exclusions and assumptions apply to this Assessment:

- The Assessment is based on the details of the Project as available at the time of writing, namely the drawings provided in Volume 5 of the lodgement package and the Project description contained in Section 5 of the AEE and the details within the Design and Construction Report (see Volume 3 – Technical Assessment 15);
- The Assessment has been informed by a number of relevant technical environmental assessments provided in **Volume 3**. Assessment of effects in these specialist areas (e.g. Air Quality, Landscape and Visual, Noise and Vibration, Transport¹) has been carried out by the relevant technical expert and has been reported in this document where relevant to potential social impacts, thereby providing a 'social lens' on many of these other technical elements. Reference is also made to the draft Urban Design and Landscape Framework (UDLF) which is being developed for the Project and provided at **Volume 4**;
- The Assessment is informed by consultation that has been carried out to date in relation to the Project and it is recognised that information sharing and engagement will be on-going;
- Economic impacts are examined solely from a social impact perspective in terms of whether the Project has effects on local businesses and communities. No economic impact assessment has been undertaken;
- Alternatives to the proposed Project design have been considered as part of an assessment as detailed at Section 7 of the AEE and are only briefly considered, where appropriate, in this assessment from a social impact perspective;
- Social impacts on individual properties have been identified but the effects on property value have not been addressed as these are part of a separate process under the Public Works Act 1981 (PWA); and
- Impacts affecting Mana Whenua values have been addressed separately through consultation with those Mana Whenua who have declared an interest in the Project and reported at Section 8 of the AEE. Cultural Values Assessments have been prepared and are provided at Appendix F of the AEE.

¹ Technical Assessments 1,3,8,9 and 14









1.3 Project Overview

The Northern Corridor Improvements Project (the Project) is an accelerated project. The Project area consists of State Highway 18 (SH18) between Albany Highway and Constellation Drive, and State Highway 1 (SH1) between Upper Harbour Highway (UHH) interchange to just beyond the Oteha Valley Road Interchange as indicated on **Figure 1** below and confirmed in the suite of plans provided in **Volume 5**.

Figure 1 Extent of Project Area

Source: Base Map from LINZ

The issues identified within the Project area in terms of the operation of SH1 and SH18 and the movement of other transport modes are discussed in the Assessment of Environmental Effects (AEE) at Section 2 and in the Assessment of Transport Effects (**Volume 3 – Technical Assessment 14**) which provide the justification for the Project. In addition, the Project outcomes (objectives) are presented at Section 1 of the AEE.

1.3.1 Key Project Elements

A more detailed description of the Project, including its components and an indicative construction approach is contained in Section 5 of the AEE. The key elements of the Project are shown in **Figure 2** and summarised below to provide context to the potential social effects.









1.3.1.1 State Highway 1 (Oteha Valley to UHH Interchanges)

The proposed changes to SH1 can be generally described as:

- Widening of the carriageway to include extra general traffic lanes in each direction between Oteha Valley Road and Constellation Drive;
- Upgrade to the northbound off-ramp of the SH1/Oteha Valley Road interchange;
- Upgrade to both the northbound and southbound off-ramps and northbound on-ramp of the SH1
 /Greville Road interchange;
- Provision of a new dual direction busway (Northern Busway Extension) adjacent the southbound carriageway shoulder of SH1 between the Albany and Constellation Bus Stations; and
- Provision of a new off-road Shared Use Path (SUP) (approximately 4km) adjacent to the southbound carriageway of the Northern Busway Extension.

Connections from the SUP adjacent to SH1 to the local roading network are proposed at the following locations:

- Lavender Garden Lane;
- McClymonts Road;
- Spencer Road;
- Greville Road;
- Rosedale Road;
- Arrenway Drive; and
- Constellation Drive.

Changes to local roads along the SH1 route will include:

- Offline replacement (to immediate south) of McClymonts Road overbridge with the inclusion of a cycle lane and footpaths on either side; and
- Widening of the Rosedale Road in both directions (east/west bound) including the inclusion of footpaths on either side.

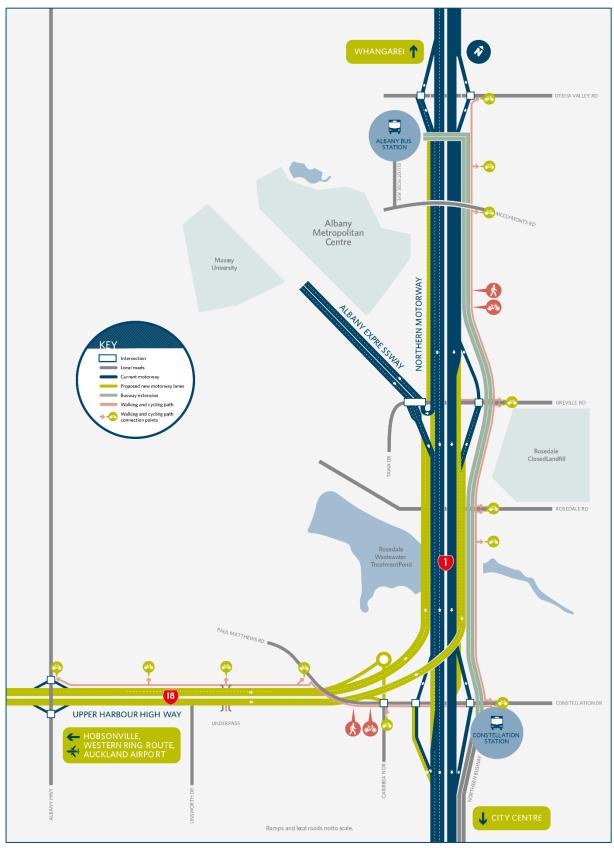








Figure 2 Schematic Diagram of Project



Source: NZ Transport Agency









1.3.1.2 State Highway 18 (Albany to UHH Interchanges)

SH18 will be upgraded to full motorway standard from the Albany Highway interchange to SH1. The proposal for SH18 can be generally described as:

- Offline realignment to the north of the existing SH18 section between the Albany Highway interchange and SH1 providing two lanes in either direction;
- Improvement of the existing substandard westbound off-ramp sight distance to the Albany Highway interchange;
- Upgrade to the Caribbean Drive T-junction intersection with the UHH to accommodate additional lanes:
- Provision of a new Paul Matthews Road interchange with a westbound on-ramp and eastbound offramp only;
- Closure of the existing UHH off-ramp to the Z petrol station;
- Closure of the existing UHH off-ramp to Unsworth Drive; and
- Provision of a new off-road SUP (approximately 2.3km) from Albany Highway interchange to Constellation Drive.

Access points to the SUP from the local roading network are proposed at Caribbean Drive, Paul Matthews Road and William Pickering Drive. A connection will also be provided to the existing pedestrian / cycleway network at Alexandra Stream (Rook Reserve) as well as improvements to the Alexandra Stream underpass.

1.3.1.3 Bus Station Improvements

The Northern Busway Extension will require the following works to Albany and Constellation Bus Stations:

- Reconfiguration of the car park to provide for the busway link into the Albany Bus Station;
- Minor reconfiguration of the Albany Bus interchange and adjacent signalised intersection of Cornerstone Drive and Elliot Rose Avenue;
- Upgrades to Constellation Bus Station to provide:
 - A new Platform for northbound movements;
 - An extension to existing Platform 2 for southbound movements;
 - A new station building adjacent northbound platform;
 - A new pedestrian overpass linking the northbound and southbound platforms; and
 - A cycle / pedestrian connection to the SH1 SUP.

1.3.1.4 Stormwater Management

In order to treat stormwater runoff from the new section of SH18 motorway, a stormwater management device is required and the most appropriate treatment device is a wetland. Due to the proximity of residential and commercial properties, there are limited locations for a wetland of sufficient size capable of treating the estimated volumes of stormwater. The only feasible options are located in areas of open space to the south of and immediately adjoining SH18, which are reserves managed by Auckland Council Parks (AC Parks). The preferred location for this wetland is within the northern section of Rook Reserve with an alternative option within Bluebird Reserve.

At the time of writing, a decision from the Local Board (as manager of the Reserves) was unable to be made before the NoR and resource consent applications are lodged with the Environmental Protection Authority (EPA). The NoR and resource consent applications, therefore, includes both the Rook and Bluebird Reserve options.









1.3.2 Project Construction Summary

Construction activities are of relevance to this Assessment as they have the potential to cause disturbance and concern to adjacent properties' owners and occupiers, the wider community and road users as construction advances through the Project area.

It is anticipated that the Project will take up to 3.5 years to construct with completion by September 2021. The Project will be constructed by way of a number of stages such that many elements of the Project will be constructed concurrently. The phasing of these construction stages will be based on traffic management techniques in the main. The staging of the Project will seek to minimise not just disruption to motorists but to adjoining neighbours along the Project corridor. Section 5.8 of the AEE and the Design and Constructability Report (**Volume 3 – Technical Assessment 15**) provide an outline of the indicative construction staging and construction zones.

There are six construction support areas (CSA) identified along the Project corridor for the works, as identified on the General Arrangement Plans attached at **Volume 5** and illustrated on **Figure 3** below.



Figure 3 Location of Proposed CSAs

Source: Aerial photography sourced from the LINZ Data Service and licensed by LINZ for re-use under the Creative Commons Attribution 3.0 New Zealand licence.

The main CSA will be a combination of CSA1 and CSA2. It is expected that the ancillary CSAs will have a staged use providing the contractor with localised marshalling areas within the Project corridor for specific work elements. While a staged approach to CSA usage is most likely, for the purposes of assessment it is assumed that they will need to be available to the contractor throughout the whole Project build.

In general the CSAs will operate between 6am to 7pm Monday to Saturday with Sunday hours of between 8am to 1pm envisaged to allow for material and equipment deliveries as well as plant maintenance. However, as acknowledged in the AEE and in the Assessment of Construction Noise and Vibration (Volume 3 – Technical Assessment 3) night works will be required, as may Sunday working.

1.3.3 Property Requirements

A large proportion of the land necessary for the Project lies within the NZ Transport Agency's existing designations for SH1 (Designations 6750 and 6751), SH18 (Designations 6753 and 6756) and Constellation Bus Station (Designation 6758). The Project will, however, require the permanent occupation of land as well as the temporary use of land for construction purposes outside these









designations. This land requirement has been identified on the NoR Plans and associated schedules provided at **Volume 5**.

The Project requires for the purposes of designation 131 separate land parcels either in full or in part. The landowners range from the Crown and local government agencies (Auckland Council, Auckland Transport and Watercare Services Ltd) to private companies, families or individuals. When existing NZ Transport Agency land and local road parcels are excluded, the requirement reduces to 67 land parcels. **Appendix A** contains a table summarising the Project designation requirement, outlining the current activities / uses undertaken at the properties which all form part of and contribute to the social environment.

To date, the NZ Transport Agency has purchased two properties, being 94 - 96 Bluebird Crescent.

1.4 Community Engagement

Community consultation carried out for the Project has spanned three distinct phases. The formal notification process associated with the lodgement of the NoRs and applications for resource consents will mark the commencement of a fourth phase of consultation. The consultation phases undertaken to date are:

- Phase 1 (Indicative Business Case 2014) to raise awareness of the Project and to inform the development of the preliminary design;
- Phase 2 (Detailed Business Case 2015) to inform the scheme design and Project extent; and
- Phase 3 (Pre-Implementation 2016) to inform further design refinement and the preparation of the AEE.

A range of consultation has been undertaken on the Project throughout these phases. Section 8 of the AEE and the Consultation Summary Report (**Volume 2 - Appendix E**) provide a detailed overview of the consultation undertaken in respect of the Project and associated responses. This documentation also outlines the range of consultation tools used in an effort to reach a wider audience and generate feedback based on individuals' preference. A summary table is provided in this Assessment at **Appendix B** for reference.









2 Regulatory Framework

2.1 Statutory and Non-statutory Document Review

There are a number of statutory and non-statutory plans and policies prepared that provide a high-level context for the Project. Strategies, plans and policies prepared by the community (or with input from the local community) can provide a good indication of the social matters of importance to them and of any key community aspirations.

National strategy and policy documents are outlined in the AEE and are therefore not included in this Assessment. Various strategic documents and decisions have informed and driven the development of transport solutions within the Project area and beyond over the last decade that have contributed to the current form of the Project.

The plans and policies relevant to this Assessment are:

- Auckland Plan;
- Auckland Council Regional Policy Statement (RPS);
- Auckland Long-Term Plan 2012-2022 (LTP);
- Auckland Regional Land Transport Strategy 2010-2040 (RLTS);
- Regional Public Transport Plan (RPTP); and
- Local Board Plans (Upper Harbour, Hibiscus and Bays).

2.2 Auckland Region

2.2.1 Auckland Regional Growth Strategy (ARGS)

The ARGS was adopted by the legacy Auckland Councils in 1999. It set a vision for the way the region would accommodate population growth by fostering the benefits of growth as well as managing its adverse impacts on the environment, infrastructure and communities over the next 50 years. It signalled a change in direction by shifting the emphasis from low density urban expansion and a reliance on private vehicles, to focusing the majority of future growth in compact integrated communities within the metropolitan areas linked by passenger transport. While the ARGS remains relevant in terms of the longer term direction of growth and transport usage, the more immediate direction is set out in the documents discussed below which seek to implement the ARGS.

2.2.2 Auckland Plan

Foremost among the plans and policies is the Auckland Plan (March 2012), an overarching document intended to guide Auckland towards the goal of becoming the world's most liveable city². It is the spatial plan for the region, providing a comprehensive long term strategy (20-30 years) for Auckland's growth and development.

 $^{^2\} http://theplan.theaucklandplan.govt.nz/a-plan-for-all-aucklanders/$



aurecon





Figure 4 Auckland Vision



Source: Auckland Council

The Plan identifies a number of priorities to reach this goal and deliver the outcomes sought as presented in **Figure 4**. These priorities include improvements in transport to allow for the free and efficient movement of people and goods. Infrastructure is acknowledged as being critical to the economic, social, environmental and cultural wellbeing of Aucklanders. Improvements to the road network are identified as a key component of addressing congestion, accommodating business and population growth, and moving towards a single transport system incorporating roads, public transport and cycle-ways and footpaths.

In addition to these priorities, the Plan seeks to protect and improve Auckland's natural environment by a number of initiatives including the use of greenways and green corridors; stormwater treatment and control; and reduction in air pollution. With respect to the urban environment, the priorities centre on realising quality environments through good design and achieving a sense of place and community within neighbourhoods. Connectivity is highlighted as a contributing factor to the latter.

Having regard to Chapter 12 and its associated maps, the Project area is identified as containing a social infrastructure cluster at Albany supporting regional events facilities, tertiary education and District Court facilities, and the SH1/18 corridors providing important linkages. Chapter 13 and its associated maps confirm the SH1/18 corridors as part of the Strategic Road Network and Rapid Transit Network. With respect to the former, the State highway improvements to the SH1/18 corridor are given priority status.

2.2.3 Regional Policy Statement for the Auckland Region (RPS)

The Regional Policy Statement for Auckland is contained in Chapter B of the Auckland Unitary Plan (AUP). The significant resource management issues for the Auckland region are noted to include amongst other matters urban growth, infrastructure and transport. It acknowledges that the quality of the environment and the well-being of people and communities, including Auckland's crucial role in New Zealand's economy, are affected by choices about the management of and investment in infrastructure. As a consequence, the objectives and policies of the RPS have desired social outcomes which can be summarised as

- A higher-quality urban environment;
- Better use of existing infrastructure and efficient provision of new infrastructure;
- Facilitating transport choices;
- Improved and more effective public transport;
- Greater social vitality; and
- Management of the quality of the environment and amenity values and the health and safety of people and communities.









The AUP is the mechanism by which the RPS will be given effect to through the regional and district plan provisions. A detailed assessment of the Project against the provisions of the AUP is provided in the AEE and not repeated here.

2.2.4 Long Term Plan 2012 - 2022 (LTP)

Understanding Auckland Council's LTP community outcomes is important in considering the Project's likely social impacts on a regional scale. The LTP focus is achieving the seven community outcomes set out in the Auckland Plan and presented in **Figure 3**.

The LTP recognises that while roads will continue to be a cornerstone of the Auckland transport network, a multi-modal shift to public transport, and walking and cycling as transport solutions is required. Underlying the economic and growth aspirations is the recognition that improving connectivity and travel efficiency will have a positive economic effect in that the workforce and goods/produce can reach their destinations efficiently, effectively and reliably.

The LTP states that it is the projects and services delivered locally within communities that have the most significant effect on daily lives. As such, the social focus is to create a strong, inclusive and equitable society that ensures opportunities for all Aucklanders.

2.2.5 Regional Land Transport Strategy (RLTS) 2010-2040

The overriding vision for the RLTS is a transport network that supports vibrant, well designed, attractive and environmentally sustainable urban centres, business and economic activity, and access to social, cultural and recreational activities. It seeks to ensure that travel to and between key destinations such as the regional growth centres and Auckland International Airport is quick, easy, and reliable. The seven objectives of the strategy are listed below and their interrelation is important in achieving the associated social outcomes for Aucklanders;

- 1. Assisting economic development;
- 2. Assisting safety and personal security;
- 3. Improving access and mobility;
- 4. Protecting and promoting public health;
- 5. Ensuring environmental sustainability;
- 6. Integrate transport and land use supportive of the ARGS and RPS; and
- 7. Achieving economic efficiency.

2.2.6 Regional Public Transport Plan 2015 (RPTP)

The purpose of the RPTP is to facilitate the Auckland Plan's goal (and in turn the outcomes of the RPS and LTP) of improved and more effective public transport thereby achieving a modal shift. It outlines the public transport services that Auckland Transport proposes for the region over the next 10 years. The social outcome sought is a city-wide connected and interlinked network of frequent and reliable services that supports economic growth and the lives of residents. In support of this aim, a high standard of public transport infrastructure is sought which is convenient and reliable. An extension to the Northern Busway is a component of the RPTP.

2.3 Local Community Planning

No local area plan covers the Project area, neither are there any conservation plans specific to the Project area.









The Project area covers two local board jurisdictions, the Hibiscus and Bays Local Board at the northern end with the remainder (majority) within the Upper Harbour Local Board area. Both Local Boards have produced Local Board Plans covering the period 2014 - 2017.

The Upper Harbour Local Board Plan is cognisant that the area is one of the fastest growing within Auckland both in terms of its residential population but also new businesses. The plan sets a framework to guide decision-making and actions to 2017 based on community feedback and as such is representative of the aspirations of the local population. The outcomes sought are:

- An attractive built environment;
- A healthy, active community that values its sport and recreation facilities;
- An expansive business environment;
- A protected natural environment; and
- A well-connected and accessible Upper Harbour.

The Hibiscus and Bays Local Board Plan places an emphasis on planning for growth, facilitating a strong local economy as well as excellent transport choices (public transport, cycleways and efficient roads) to provide for connected communities and easy access to community facilities that in turn support a sense of well-being, safety and connection to others. Protecting and enhancing the environment is also an important focus of the plan.

2.4 Summary

In reviewing the above documents, the key social themes for consideration for the Project and its likely impact on the social environment are:

- The importance of the quality of the environment and therefore peoples' experience and appreciation of it, and their sense and pride of place;
- The importance of air, soil and water quality to peoples' health, well-being, livelihoods and recreational aspirations;
- The importance of infrastructure for providing connections to employment, education, access to essential services and recreation, and also for contributing to economic growth;
- The importance of walking and cycling as modes of transport that are accessible, safe, enjoyable, and contribute positively to public health;
- Improved public transport; and
- Facilitating a modal shift from private motor vehicles to public transport.









3 Assessment Methodology

3.1 Introduction

The purpose of this report is to provide an assessment of the nature and significance of the positive and/or adverse effects on people likely to result from the construction and operation of the Project. The effect (impact) is the difference between what would happen with the Project constructed and what would happen if the Project was not constructed. An assessment framework has been established, as described below, to achieve this purpose.

A social impact assessment is defined by the International Association of Impact Assessment³ (IAIA) as:

"the process of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions."

The IAIA notes that social impact assessment can be undertaken in different contexts and for different purposes, but that the following principle is important across all types of social impact assessment:

"The improvement of social wellbeing of the wider community should be explicitly recognised as an objective of planned interventions, and as such should be an indicator considered by any form of assessment. However, awareness of the differential distribution of impacts among different groups in society, and particularly the impact burden experienced by vulnerable groups in the community should always be a prime concern."

3.2 Process and Framework

To inform the development of an appropriate social impact assessment framework, a literature review of international and local best practice focusing on the social impacts of road development on people and communities has been carried out. This review has confirmed that a social impact assessment/ assessment of social effects is recognised as a supporting tool for decision-making and that common assessment methods are used, in particular for infrastructure projects.

IAIA has established criteria concerning social impact assessment (SIA) and these are widely adopted as a method to identify and assess social impact. The IAIA sets out a number of potential areas for consideration when undertaking a SIA, in particular, resultant changes arising from a project. These areas as indicated in **Table 1** include:

Table 1 IAIA Areas for Consideration in SIA

Area	Consideration
Way of life	How people live, work, play and interact with one another on a day-to-day basis.
Culture	People's shared beliefs, customs, values and language or dialect.
Community	The cohesion, stability, character, services and facilities of an area.
Political systems	The extent to which people are able to participate in decisions that affect their lives, the level of democratisation that is taking place, and the resources provided for this purpose.

³ Social Impact Assessment - International Principles, International Association of Impact Assessment, 2003, www.iaia.org



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Area	Consideration
Environment	The quality of the environment in which people live, work and socialise (e.g. the air and water people use; the availability and quality of the food they eat; the level of hazard or risk, dust and noise they are exposed to; the adequacy of sanitation, their physical safety, and their access to and control over resources).
Health and wellbeing	People's state of physical, mental, social and spiritual wellbeing
Personal and property rights	The extent to which people are economically affected, or experience personal disadvantage which may include a violation of their civil liberties.
Fears and aspirations	People's perceptions about their safety, their fears about the future of their community, and their aspirations for their future and the future of their children.

The literature review informed the decision to apply the IAIA process and criteria and this was further adapted to fit the Project by incorporating key aspects of the NZ Transport Agency's Z19 State Highway Environmental and Social Responsibility Standard and Guide to Assessing Social Impacts for State Highway Projects. Other elements which informed inclusions in the framework for assessment included international experience, social and environmental impact assessments prepared for other roading projects in New Zealand and the wider policy environment within which the Project exists.

3.3 Sources and Methods to support Assessment

A range of information sources and methods have assisted in the preparation of this Assessment and are outlined below.

3.3.1 Literature Review

The following information was reviewed as part of this Assessment:

- Council policies, strategies and plans described in Section 2 above;
- 2013 census data to undertake profiling of the communities to establish the baseline conditions (refer to Section 4);
- Media (printed and online) coverage of the Project;
- Review of existing project documentation, including:
 - Indicative Business Case (August 2015);
 - Detailed Business Case (January 2016);
 - Project consultation records for 2014-2016;
 - Project property engagement records for 2014 2016; and
 - Technical Assessments carried out by the Project Team.
- Social impact assessment for other roading projects undertaken in New Zealand.

3.3.2 Site Visits

Site visits to the Project area and its surroundings were undertaken between March 2016 and June 2016. These visits included:

 A familiarisation drive through the Project area and adjacent areas to view locations of community facilities in relation to the proposed works;









- Visits to Oteha Valley Road, McClymonts Road, Rosedale Road, Constellation Drive, Caribbean Drive and Paul Matthews Road where local community links are proposed;
- Visits to the reserves proposed for use by the Project;
- Visits to the two off ramps on SH18 which will be closed as part of the Project;
- Observation of the surrounding communities by walking around and viewing local community facilities, roads, schools and business areas; and
- Other visits to attend consultation events.

The key purpose of these site visits was to gain an understanding of the existing social environment and how residents may be affected by the Project and to inform input to the community consultation.

Community and Stakeholder Consultation 3.3.3

Community and stakeholder consultation has been carried out in relation to the Project and is reported in a separate Consultation Summary Report. This is an important information source for this Assessment as it summarises all consultation undertaken on the Project to date. The methods employed have been wide ranging and a particular effort has been taken to ensure engagement with the Chinese and Korean community resident in the Project area as well as the business community.

Members of the assessment team have attended a number of the 2016 consultation sessions including the Project open day and business drop in sessions to hear and better understand the community views and to build an understanding of the existing social environment. Where attendance was not possible, notes from all sessions have been reviewed. Historic feedback data from the 2014 and 2015 consultation phases have also been reviewed.

Results from newsletters and feedback forms have been used to inform this Assessment. These are from NZ Transport Agency's consultation on the concept design and preliminary detailed design (2014 - 2015) and the more recent consultation on the Project (June - July 2016) to inform the design for lodgement with the Environmental Protection Authority (EPA). This recent consultation has consisted

- E-news distributed to over 500 subscribers:
- Individually addressed letters to approximately 160 actual or possibly directly affected property owners and occupiers of land required for the Project with follow up meetings held;
- Individually addressed letters to approximately 1,190 neighbouring property owners to the Project
- Project newsletter and associated feedback forms distributed to over 46,500 residential and business properties in the wider community area, as well as copies provided to community facilities; and
- Specific Unsworth Heights letter and project newsletter distributed to approximately 1,788 properties.

In addition to the above consultation, a series of targeted social impact specific interviews have been carried out to provide additional context for this Assessment. Offers were also made to the Paul Matthews Road Business Forum; Greenhithe Residents Association Inc and the Kaipatiki Project. Parties engaged with are:

- The residents adjoining the alternative stormwater ponds locations of Rook Reserve and Bluebird Reserve:
- Representatives of the Greenwich Way Business Group; Bunnings and HomeZone;
- Metlifecare Greenwich Village residents; and
- Meadowood Crèche and Community House representatives.









Part of the existing North Harbour Hockey Stadium (NHHS) located at 60 Paul Matthews Road, Rosedale is required for the construction of the Project. A collaborative approach has been undertaken with Auckland Council as landowner, the lessee Harbour Hockey Charitable Trust, tenant North Harbour Hockey (also the facility operator) and strategic partner Hockey New Zealand to find the optimal solution.

A working group has been formed that includes the Project team, the three hockey organisations (Hockey) and Auckland Council representatives from Watercare and the Parks and Property teams. Regular meetings have been held from 2014 to the time of preparing this report, and the NZ Transport Agency is committed to working with Hockey to maintain its ability to service the hockey community both during the construction works and into the future.

Harbour Hockey Charitable Trust had intended to upgrade the NHHS in order to accommodate ongoing community growth, to host international events scheduled for 2017 and beyond, and to provide training facilities for the New Zealand men's and women's teams. The Project has meant the upgrade cannot proceed, but Hockey and the NZ Transport Agency have agreed to temporary upgrades of the existing NHHS, to ensure the training and international events can still occur. The construction timetable also allows Hockey to remain on the existing NHHS until after the events scheduled for November 2017 have concluded.

In addition, the working group has been investigating a number of options to either permanently reconfigure the existing site or relocate the facility to a different site, while ensuring minimum disruption to community games or major events.

After an in-depth options analysis, a site in the western corner of Rosedale Reserve has been identified as the preferred option for a relocation site. This option has the support of the joint working group including Hockey, Auckland Council and Watercare. It has also been supported by Upper Harbour Local Board, subject to details being worked through with the incumbent tenants located on the site that is the preferred option (Rosedale Pony Club and North Harbour BMX).

An indication of the relative sensitivities for a wide range of issues identified during the consultation process and extrapolated from the consultation feedback is presented below in **Table 2** which has informed the selected framework.









Table 2 Sensitivity of Issues from Consultation Feedback

Sensitivity			Local In	terests	
	High	Davianal		Other	
	Moderate	Regional Interests	Business I	Local	Interests
	Low		Community	Residents	
	Little/None				
Investn	nent in Road Infrastructure	A			A
Local to	raffic effects		A	A	<u> </u>
Proper	ty Impacts		A	A	
Impact	s to local businesses		A		
Maintaining access to local roads					A
Impacts on community facilities					
Impact	s on amenity once operational			A	
Construction Traffic (detours, restrictions)			A	A	
Construction Activities (noise, dust)			A	A	
Provide an Unsworth Heights Link as part of the Project			A	A	A
	Impact on North Harbour Hockey Stadium		A		A
Modal	Modal choice			A	A

The Project design has over its evolution responded to the community input where possible and outlined below are changes incorporated:

- Alignment changes while meeting safety standards for the SUP and Busway which have resulted in the avoidance of property (e.g. at 60 Masons Road, such that the demolition of 10 residential units is not required);
- Use of retaining wall methods as opposed to earth embankments while meeting safety standards for the SUP and Busway which have resulted in reduced land requirement (e.g. properties along Arrenway Drive);
- An off-line replacement of McClymonts Road overbridge, with public transport and walking and cycling benefits;
- The design of the Paul Matthews Road Interchange such that a cul-de-sac arrangement was not progressed; and
- Additional links to the proposed SUP along SH1. Note that a new pedestrian/ cycle bridge will be progressed as a separate project and will provide a link from Spencer Road across to Corinthian Drive as an advanced work programme to the Project.

However, the Project design has not been able to respond to all community requests. In particular, the provision of a new bridge over the SH18 motorway linking Unsworth Drive with Omega Place will not









be provided as a replacement for the existing westbound off-ramp from SH18 to Unsworth Drive that will be closed. As outlined in the Alternatives Assessment at Section 7 of the AEE, there were a number of issues associated with such a connection. Road safety on the bridge was one matter while traffic analysis also concluded that a bridge at this location would create a "rat run" travelling between Glenfield and North Harbour with capacity and safety issues at a number of intersections, as well as significant adverse increases in traffic volumes through a primarily residential neighbourhood (Unsworth Heights).

3.3.4 Review of relevant Project Technical Assessments

Social impact assessments consider the experience (actual or likely) of communities in response to changes introduced by a project and referred to as the 'human' experience as opposed to the environmental effect.

The Assessment authors attended Project Team briefings to gain an understanding of the Project drivers, its design, development and constraints which again informed the likely community of interest for the Project and potential associated effects.

Other technical assessments that have been prepared to support the Project have been reviewed where relevant to potential social impacts and concerns expressed in consultation, to provide a technical base and understanding of its actual and potential environmental effects and to avoid the 'double counting' of effects, where there are overlaps. Of particular relevance to this Assessment are findings of the following technical reports:

- Assessment Air Quality Effects (Volume 3 Technical Assessment 1);
- Assessment of Construction Noise and Vibration Effects(Volume 3 Technical Assessment 3);
- Assessment of Operational Noise and Vibration Effects; (Volume 3 Technical Assessment 9);
- Assessment of Landscape and Visual Effects(Volume 3 Technical Assessment 8); and
- Assessment of Transport Effects (Volume 3 Technical Assessment 14).

For the purposes of this Assessment the findings and conclusions of these other technical assessments are relied on. However in some cases this Assessment recommends further mitigation in order to address intangible or perceived effects from a social perspective. This is further explained in Section 5.

3.4 Adopted Framework for the Project

From identified best practice and in the scoping exercise carried out, a framework has been compiled which reflects the range of likely issues and impacts considered to be relevant to the Project, as well as some regional issues due to the Project's role within the wider Auckland roading network. This framework has been used to assess the likely social effects of the Project. The Project assessment framework is as follows:

Table 3 Assessment Framework

Issue	Effect parameter	
Regional		
Transport, accessibility and connectivity		
Economic growth and development		
Local		
\\/	Accessibility, connectivity and mobility	
Way of Life	Changes to patterns of day to day living	









	Changes to ways of walking & cyclingChanges to public transport
Well Being	 Changes to wellbeing (including stress/anxiety) Impacts on quality of life Health and safety
Amenity	 Impacts on the quality of the environment in which people live, work and socialise Impacts of noise, dust, visual changes on use of areas and sites
Community	 Impact on neighbourhoods and cohesion Impacts on community areas and sites Impacts on individual and community plans and aspirations Impacts on and accessibility to commercial areas
Personal and Property rights	 Uncertainty and timing Impacts due to the property acquisition process

3.5 Assessment Approach

Section 5 of this Assessment draws on the information from the above sources and presents an assessment of the social effects of the Project. This involved:

- An analysis of the data and information collected, to identify and describe the social effects (positive and adverse) in respect of the three stages where social and community effects can occur during a project. These are:
 - Planning (consultation/consenting);
 - Construction; and
 - Operation.
- Identification of mitigation options and methods for management and response, including requirements for on-going consultation with interested parties and the local community.

The definitions for "Affected Community" set out in **Table 4** below have been adopted for the purposes of undertaking the Assessment. They allow for an assessment of equity of distribution of an effect using an approximate proportion of local people likely to be affected by the Project.

Table 4 Affected Community Range

Party	Definition
Directly Affected Parties	Those properties with land required for inclusion within the Project's designations.
Neighbours	Those not directly affected but adjacent to the designations and affected by proximity.
Wider Community of Interest	All those with an interest in the Project either at a regional or national level (including advocacy groups and regulatory stakeholders).

The term "Wider Community of Interest" has been used broadly, recognising that given the regional importance of this route, the 'community of interest' in many cases will reach widely, including local









and regional users of both SH1 and SH18 and the Northern Busway, interest and advocacy groups (these groups are also to be referred to as 'key stakeholders').

However, given the focus on those areas of the Project where changes are proposed, the community of interest is in some cases much more limited to the directly affected and neighbouring properties around the change. This is particularly so where the key social effects of the change relate predominantly to changes in the local environment.

In order to direct the Project team as to the magnitude of the effect on the community and the degree of mitigation required, each effect has been given an overall rating based on the 7-point scale outlined in **Table 5**. In evaluating the actual or potential effects of the Project on the community, the matters of consideration include the following and are included in the rating scale:

- The magnitude and severity of the effect (number of local population affected);
- How long the effect will last (permanent or temporary);
- The voluntariness of exposure;
- Likelihood of the social effect occurring including ease of mitigation; and
- Cumulative nature of effects.

Table 5 Rating of Social Impacts

Positive or Negative	Severity	Magnitude	Permanence	Voluntary Exposure	Likelihood	Cumulative	Overall Score
Negative	Major	Many affected	Permanent	Involuntary	Almost certain	Yes	- Minor, Moderate or Major
	Moderate	Moderate number	Medium term		Likely	Unsure, but possible	Neutral
Positive	Minor	Few affected	Temporary	Voluntary	Unlikely	No	+ Minor, Moderate or Major









4 Existing Social Environment

4.1 Overview

The following Section provides a description of the existing social environment of the Project area providing a baseline context and understanding of this social environment including the demographic characteristics, key land uses, community facilities and travel patterns. The relative effects of the Project on the community and the potential for mitigation will be extrapolated from consideration of these Project area characteristics in conjunction with the information contained elsewhere in this Assessment.

The existing environment for this Assessment has been identified as the area of the existing Project corridor, the neighbouring properties (the directly affected and adjacent parties), as well as its surrounding areas and communities (wider community).

A local area of assessment (Study area) was identified, which is broadly defined by the communities adjacent to the Project area. To establish a profile of this community, reference has been given to Statistics New Zealand's Census Area Units (CAU), providing a social boundary and these CAUs are described further below. It is important to recognise that the boundaries chosen have been used for the express purpose of gaining a better understanding of the likely positive and negative social impacts of the Project and do not represent a fixed boundary in respect of social impact associated with the Project.

The definition of the localised CAUs is considered appropriate for this level of social assessment, representing a geographic-like area. As such, the boundary of the Project's social environment has been established which equates to the CAU included on the Statistics New Zealand website through which the Project traverses.

The relevant CAUs are listed below and are shown on **Figure 5** which illustrates how they are located within the context of the Study area:

- Albany
- Fairview
- Northcross
- Pinehill
- North Harbour East
- Windsor Park
- Unsworth Heights
- Sunnynook
- Target Road

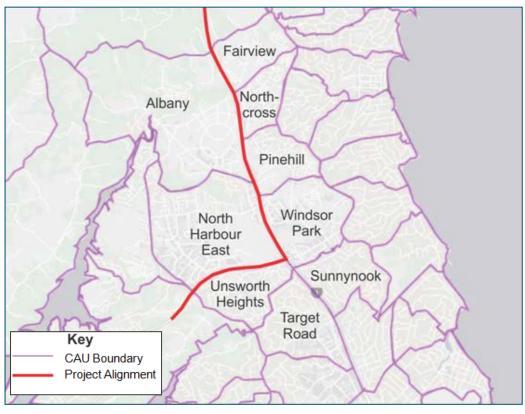








Figure 5 Study Area CAUs



Source: NZ Statistics

4.2 Demographic Profile

Understanding the demographic composition⁴ of an area provides context for the likely social impacts of the Project. A demographic profile has been prepared from Statistics New Zealand Census data for 2013 with the inclusion of some data from 2006 Census for comparison. This information is provided in **Appendix C**. The key demographic themes from the profile are summarised below.

- An area of population increase overall with more population growth noted in the north-eastern CAUs;
- The age structure of the Study area is predominantly mid 30's with a high proportion of families present;
- The private vehicle is the predominant means of transport but reflecting access to the Northern Busway, a higher percentage of public transport use is noted compared to Auckland overall;
- The Study area is predominantly made up of Professionals, being the most commonly recorded occupation in all the CAUs except for Pinehill which recorded Managers as being the most common occupation;
- Unemployment has risen within the CAUs between 2006 and 2013 with the highest unemployment rates noted in the southern CAUs; and
- The Study area is an affluent one with average to high median household incomes.







⁴ The demographic composition is represented statistically by data from the 2013 Census. The Census data is now 3.5 years out of date; however it remains the most comprehensive dataset available to develop a community demographic profile.



4.3 Land Use

Provided in **Figure 6** is an aerial overview of the Study area. It has a varied land use profile as summarised below.

Figure 6 Project Corridor in its Local Context



Source: Auckland Council GIS Viewer







Of note is the proportion of commercial / industrial land use within the Project area. The North Harbour Business Park is located to the north of the UHH between Paul Matthews Road and the Albany Highway. Another cluster is located along Constellation Drive/Apollo Way/Rosedale Road with a third block straddling Rosedale Road to the west of its intersection with SH1. These collectively are known as the North Harbour East area.

To the north, the Albany industrial estate is still under development. It forms part of a wider mixed use development area containing the Albany Mega Shopping Centre and a Westfield.

The Watercare Services Limited Rosedale Waste Water Treatment Plant (RWWTP) consists of the plant facility, treatment tanks and treatment ponds contained within a grassed buffer area. This is a significant land holding extending from Jack Hinton Drive in the west to Apollo Road in the east with the facility bisected by the SH1 causeway across the treatment ponds. There is no public access to the site

Another landholding of significance is the Rosedale Closed Landfill located on the eastern side of SH1 between Rosedale Road and Greville Road. The site stopped receiving waste in 2009 and is currently in its aftercare programme. There is no public access to the site.

A network of open space is interspersed throughout the study area with a number of key sporting facilities also present. These are discussed in more detail in Section 4.4.2 below.

A number of residential suburbs exist within the Project area including Albany Heights, Fairview Heights, Oteha Valley (Northcross), Pinehill, Fairview, Burnside and Fernhill (North Harbour East), Windsor Park, Unsworth Heights and Sunnynook. The residential areas within the southern section of the Study area are considered to be well-established suburban residential typically characterised by detached dwellings at low to medium densities. The newer residential areas to the north are generally medium to low densities. The housing typology is mixed with a number of town house developments present. The majority of the residential land use is set back from the Project area along SH1 but the recent subdivision occurring at the western edge of the Pinehill/Fairview area will result in the uses abutting. Residential development at Unsworth Heights follows the Upper Harbour Highway alignment.

4.4 Community Infrastructure

This Section describes key social and community facilities in the Study area. Direct consultation has not been undertaken with users of all community facilities, depending on the proximity to the Project and potential for effects. Community facilities identified include educational facilities, local shops, reserves and recreational facilities, religious centres and places of assembly, and medical and institutional facilities. Location plans are provided in **Appendix D**.

4.4.1 Educational Facilities

A number of schools are located within the Study area while others which are physically located outside the study boundary have catchment areas straddling the Study area boundary. In total, 18 schools have been identified, catering for all age groups as outlined in **Table 6** below.

Table 6 Schools in the Study Area

School	Year Group	Roll	Decile	Catchment
Albany Junior High School	7-10	1197	10	Redvale to Unsworth Heights and west
Albany Senior High School	11-15	743	10	Redvale to Unsworth Heights and west









School	Year Group	Roll	Decile	Catchment	
Albany School	1-6	615	9	Redvale to Unsworth Heights	
City Impact Church School	1-7	100	9	Private	
City Impact Church School Secondary	9 -15	27	10	Private	
Kristin School	1-3	1537	10	Private	
Oteha Valley School	1-6	334	9	Fairview Heights & Albany Heights	
Northcross Intermediate	11-13	1080	10	Okura to Rosedale	
Pinehill School	1-6	482	8	Northcross, Pinehill & Albany	
Pinehurst School	1-15	680	10	Private	
Rangitoto College	9-13	3000	10	Rosedale to Campbells Bay	
St John's School	1-6	312	10	Open	
Sunnynook Primary School	1-7	431	8	Sunnynook, Forest, Hill	
Target Road School	1-7	347	6	Totara Vale, Target Road	
Te Kura Kaupapa Maori O Te Raki Paewhenua	1-15	81	6	Open	
Vanguard Military School	9-13	-	9	Private	
Wairau Intermediate	9-13	262	7	Unsworth Heights, Totara Vale, Sunnynook, Forest, Hill, Caster Bay	
Westminster Christian School	1-7	200	9	Unsworth Heights & Totara Vale	

Source: http://nzschools.tki.org.nz/

There are no schools which directly about the Project area. Instead, most lie to the periphery of the Study area which reflects the intensive industrial zones adjacent to the Project area. Patterns of travel to schools within the Study area are wide ranging with many movements north-south from Unsworth Heights and east- west in the upper section of the Study area. The predominant form of transport to school is by car, although during the spring/summer months, there is a slight increase in pedestrian / cycle movements⁵.

Religious based education facilities are located at St John's School, Westminster Christian School and Pre-school and City Impact Church School. There is one Te Kura Kaupapa facility located at Ceres Court off Apollo Drive on the eastern side of the Project area.

⁵ Based on site visit observations and comments of Auckland Transport Walking, Cycling and Safety Team



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The main tertiary institution present in the Study area is that of Massey University located in Albany. The AUT Millennium facility (located in the Windsor Park CAU) is a tertiary sport research institute.

Unsurprisingly, considering the demographic profile of the Study area, there are a large number of facilities for children in early stages of life (approximately 40). The range of childcare facilities are comprised of pre-school education in the forms of paid Education and Care Services, Free Kindergartens, Play Centres and home based networks. There are a number of childcare facilities within close proximity to the Project area, Shore Kids Childcare (located on Barbados Drive), Top Kids Education and Childcare Centre site at Saturn Place and Little Steps Childcare off Omega Street. Due to the nature of these activities they are considered sensitive receivers particularly in terms of noise, dust and access.

4.4.2 Reserves and Recreational Facilities

The Study area contains a number of nationally significant, regional and local recreational facilities.

The QBE North Harbour Stadium (off Don McKinnon Drive) is nationally significant as it is a purpose built facility for many sporting codes as well as a popular venue for outdoor concerts and entertainment. The grounds also provide a large oval field and five sporting fields including two artificial turfs dedicated to community use.

AUT Millennium (Antares Place) is also a nationally significant venue for high performance sport and research. This facility contains the National Aquatic Centre and sports hall, gym, conference and lodging facilities. In addition to AUT Millennium, there are three other smaller swimming clubs / facilities within the Study area.

Another significant sporting facility is that of the Harbour Hockey Charitable Trust located in North Harbour East. The North Harbour Hockey Stadium – NHHS is situated to the west of Constellation Reserve as part of Rosedale Park. The facility consists of 3 hockey turfs, clubhouse and ancillary buildings, car parking and football field (**Figure 7**).

Upper Harbour Highway

Upper Harbour Highway

Figure 7 Aerial image of North Harbour Hockey Stadium

Source: Auckland Council GIS Viewer









The NHHS provides tournament and training facilities for national, regional and local representative teams.⁶ This facility is also a local community facility providing holiday programmes and several other community programmes including school hockey.

The Project will directly affect the southern-most hockey turf (turf 3) and the adjacent football field, which was anticipated to become a fourth hockey turf in 2018-19 as part of the proposed National Hockey Centre development.

Rosedale Park South is at the eastern end of Constellation Reserve. This land is not used for recreation purposes due to the unsuitable topography and access restrictions. It provides stock grazing and acts as a buffer between the Unsworth Heights residential area and the RWWTP. Auckland Council has long-term aspirations that the site be used for a future sports field development.

Rosedale Park North is home to the North Harbour Softball Association, the Albany United Football Club, a BMX facility, Rosedale Pony Club and a number of other recreational sports fields. This park also provides for informal recreation including walking and cycling.

From Rosedale Park North there is a corridor of reserves migrating south through the Study area each with different functions: Omega Reserve is a riparian esplanade reserve adjacent to Alexandra Creek, Rook Reserve (**Figure 8**) is a pocket park providing passive recreation while Unsworth Reserve consists of mainly native bush (conservation) in a gully-like setting which provides amenity and passive recreational value to the Unsworth Heights community. At the southern end of the Unsworth Reserve are sports fields.

The northern proportion of Rook Reserve may be used for a stormwater wetland as part of the Project.



Figure 8 Aerial image of Rook Reserve

Source: Auckland Council GIS Viewer

Also within the Unsworth Heights area are Barbados Reserve, Bluebird Reserve and Spoonbill Reserve (**Figure 9**). The former consists of a grassed area while a children's play area is provided

⁶ North Harbour Hockey Association (NHHA) comprises 11 clubs, 21 secondary schools and 67 primary and intermediate schools.









within a grassed area adjacent Bluebird Crescent at Bluebird Reserve with the remainder being bush that links into Spoonbill Reserve (another bush covered area). A number of informal paths are present in the bush area. A strip of land adjacent SH18 at Bluebird Reserve will be needed for sightline purposes while some of the grassed area may be used for a stormwater wetland.

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Figure 9 Aerial image of Bluebird and Spoonbill Reserves

Source: Auckland Council GIS Viewer

Other recreational areas include the gully system that makes up the Bushlands Park Reserve for passive recreation and other local community facilities/ parks such as Windsor Park and Sunnynook Park. The Study area is also served by a range of pocket parks and reserves providing local informal recreation and play space, such as Palm Hill and Bronzewig Reserve, some of which provide playgrounds for children.

4.4.3 Religious Centres and Places of Assembly

The LIFE North Church is located directly adjacent to the Project area on Arrenway Drive. Church services take place throughout Sunday but the church premises are also used for other religious gatherings and socials mid-week. Parishioners are both local community residents and those from the wider North Shore area.

There are a number of other religious centres within the Study area such as the North Harbour Seventh Day Adventist Church located in Unsworth Heights, Church of Jesus Christ of Latter Day Saints in Sunnynook, Shore Community Church, Albany Baptist Church and LifeChangers (Equippers) Church to name a few. Congregations serviced by these places of worship are predominantly from within the Study area but also the wider North Shore area.

Within the Study area there are three designated community centres. The most prominent to the Project is that of Meadowood Community House in Unsworth Heights which backs onto the UHH alignment. The facility caters for a range of community activities (e.g. playgroups, after school care, health and wellbeing, fitness classes) and is open daily Monday to Friday with regular evening activities. With room hire available, weekend use also occurs. Located within the grounds is a









children's play area as well as the Meadowood Crèche mentioned previously. The upgrade works to Caribbean Drive require part of the vegetated boundary of the Meadowood Reserve in which these facilities are located.

The two other community centres include Neighbourhood Support North Shore which is within the North Shore Policing Centre near Constellation Bus Station and the Sunnynook Community Centre on Sycamore Drive.

4.4.4 Medical and Institutional Facilities

There are no public hospitals located within the Study area. The nearest facility is the North Shore Hospital to the south of the Project area in Takapuna. However, there are a number of medical centres and general practitioners dispersed throughout the Study area which are located both to the east and west of the SH1. Of particular interest are the two facilities near the Project area, namely the Albany Basin Accident and Medical is located just off the alignment on Unsworth Road and Comprehensive Care located on Tawa Drive. The Project has no direct effect on the latter but a segment of the northern car park to Albany Basin Accident and Medical is needed. ⁷

Aged-persons care facilities are present within the Study area, the most prominent being Greenwich Gardens Metlifecare Retirement Village in Unsworth Heights located off Unsworth Drive. This village is being progressively developed with a final population of approximately 600 people intended. While it is desirable for elderly residents to remain within their community, it is noted that the resident population of these facilities may be from outside the Study area. As such, the visitor profile may be one of longer commutes from other parts of Auckland.

In addition, other medical facilities include a maternity facility located on Rosedale Road and two Mental Health services which are all located to the east of the Project area. There are also a number of appearance medicine facilities within the Study area.

With respect to emergency services, Albany Fire Station is located in close proximity to where the Project area begins on SH18, however, the road on which the station is located (William Pickering Drive) does not have direct access to the State highway. The North Shore Policing Centre is located near the proposed interchange on Parkway Drive, off Constellation Drive. The St John Ambulance and Training Centre is located on Apollo Drive.

The North Shore District Court is located at the corner of Don McKinnon Drive and Corinthian Drive.

4.4.5 Other Community Related Facilities

Within the Study area, Albany provides the major shopping centre with the Albany 'Mega Centre' and the Westfield Shopping Centre. This has a wide catchment and provides many community benefits such as retail (including high end), banks, cinemas, restaurants. Both a New World and Pak'nSave supermarket are located here serving the Study area catchment. Niche supermarkets such as Korea Mart and Naturally Organic are located in the North Ridge Plaza off Don McKinnon Drive while FarroFresh and Nosh Food are found within the Constellation Business area.

Also important to the local community are the smaller neighbourhood centres. Such concentrations are found at:

- North Harbour Business Park at Paul Matthews Road;
- Rosedale Road and Greville Road (west of the Project area);
- Constellation Drive; and
- Sunnynook Road.

⁷ Note this land area has been acquired by the NZ Transport Agency.









Superettes are scattered amongst the rest of the Study area to service the needs of local residents on a day to day basis. These are located on Unsworth Drive (Greenwich Shops providing a small cluster including café, takeaway and liquor store), with two on Rosedale Road. East of the Project area, is the Clevedon Superette located on Malin Place.

Chipmunks Playland located off Arrenway Drive is a popular family destination open daily. This franchise operation offers indoor play but does not offer school holiday programmes or afterschool care.

4.5 Business Profile

As noted in at Section 4.3 above, there is large Business community present in the Study area. A business profile has been compiled at **Appendix D**. The key themes are summarised as follows:

- The Study area has a diverse business community of over 3,800 business units ranging from small local shops to multinational ICT companies with an employee base of between 25,000 to 26,000;
- The main employment sectors within the Local Board area are reported as wholesale trade (16%), retail trade (12%) and professional, scientific and technical services (10%);
- The Study area is recognised as an area of business and employment growth; and
- Directly affected business are varied in type, consisting of retail trade, profession and technical services. Consequently, their customer portfolio ranges from the local community to wide regional base. In total, 46 business units will be directly affected, of which three at the time of writing are vacant.

4.6 Travel Patterns and Community Linkages

This Section presents an overview of the travel linkages and routes currently available within the Study area. Census returns for the Study area confirm that the use of motorised transport is the preferred method of travel, with a portion (approximately 10%) using public transport. This has been reinforced through the comments of the community and business owners and occupiers from the engagement and consultation process.

4.6.1 Motorised Transport

SH1 is an important transport link to other areas for residents within the Study area but also acts as a north-south feeder link within the Study area. SH18/UHH also acts as an important feeder to the west.

Albany Highway provides an alternative north-south route through the Study area while a number of local roads as indicated on **Figure 10** also cater for north-south movement. East-west movement is restricted to those roads which traverse the motorway, namely:

- Oteha Valley Road
- McClymonts Road
- Albany Expressway/Greville Road
- Rosedale Road
- UHH/Constellation Drive
- Sunset Road

These routes in conjunction with the local road network provide access to the range of community services and business activities within the Study area as described above.









LEGEND

Motorway

Major Road

Medium Road

Minor Road

North Rateous

Road ale

Cuniti

Figure 10 Roading Hierarchy within the Study Area

Source: Auckland Council GIS viewer.

4.6.2 Public Transport

4.6.2.1 Buses

The primary form of public transport in the Study area is the bus service which operates a number of routes within as well as to/ from the Study area. The termini are the 'park and ride' facilities located at Constellation Bus Station and Albany Bus Station as shown in **Figure 11** below. A description of the inter-Study area routes is provided in **Table 7**.

The Northern Busway currently terminates at Constellation Bus Station, located to the southeast of the UHH interchange. Buses then join the general traffic on Constellation Drive, before accessing the UHH interchange northbound on-ramp, where a bus priority lane is provided.

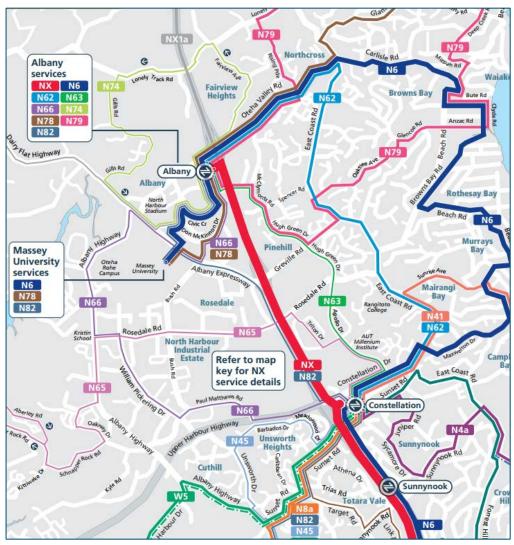








Figure 11 Bus Network within the Study Area



Source: Auckland Transport

Table 7 Bus Services in Study Area

Bus Service	Route
N45	The service loops through Unsworth Heights and then connects back to Constellation Bus Station before running the length of Wairau Road to Smales Farm Bus Station.
N63	The service gives a connection to the Northern Busway for the residential area along Hugh Green Drive as well as the industrial area on Apollo Drive and Constellation Drive.
N65	The service provides a loop from Constellation Bus Station to Rosedale Road via Triton Drive before crossing into the North Harbour Industrial Area and on to Schnappers Rock Road.
N66	This route provides a service through the North Harbour Industrial Estate west of the motorway then along Albany Highway north of Rosedale Road, connecting with Albany Mega Shopping Centre / Business area and Albany Station.
N74	In response to the residential development within the Fairview Heights and Gills Road area, this is a new service linking these residential areas to Albany Bus Station and the Albany Mega Shopping Centre / Business area.







4.6.3 Pedestrian and Cycle Use

As there is no pedestrian or cycleway route(s) along the motorway corridor, pedestrian and cycle movements are concentrated on the local road network. The UHH and Greville Road interchanges both form part of the existing or proposed Regional Cycle Network (see **Figure 12**). There are currently no dedicated facilities through the UHH interchange, resulting in a dangerous environment, discouraging active modes. While improvements at the Greville Road interchange have been incorporated into the Upper Harbour to Greville Widening project, facilities through the UHH interchange are limited.

Pedestrian footpaths are present on both sides of Rosedale Road but cycle lane provision is ad hoc. At McClymonts Road Overbridge, a footpath is only provided on the northern side which commences at the Elliot Rose Avenue junction and continues into Medallion Drive and extends down McClymonts Road.

Along SH18, there is a footpath on the southern side between Constellation Interchange and Caribbean Drive, but no facilities further west. Therefore, there is no walking/cycling connection between the Constellation Bus Station and either the NHHS or the North Harbour Business Park (via Paul Matthews Road). The majority of corridors in the Study area provide footpaths on both sides of the road, with a few exceptions.

Legend
Existing Cycle Infrastructure
Proposed Cycle Infrastructure
NCI Cycle Infrastructure
NCI Cycle Infrastructure
Regisedale Rd

Conseletation D

Conseletation D

Figure 12 Cycle Network within the Study Area

Source: Base Map from Auckland Transport

Contributing to the connectivity of the Study area is the shared use path that begins at Rosedale Park West and connects to the Unsworth Heights community through Omega Reserve, Rook Reserve and Unsworth Reserve terminating at Goldfinch Rise with links onto Barbados Drive and Unsworth Drive. During site visits this was noted to be a busy thoroughfare for school students and adults.

Existing cycle facilities are provided along a few routes, or sections of routes, with several significant gaps present. The gaps prevent cyclists from having a continuous, well-connected route to their destination and often leave cyclists with no safe facility in the most challenging locations e.g. intersections and interchanges.









The Auckland Region Manual Cycle Monitor programme for the Albany Ward recorded cyclists travelling through the several key intersections relevant to this Project from 2007 to 2015. While year on year changes are variable, longitudinal trends are positive with increasing use of the facilities in place.

4.6.4 Summary of Study Area

As outlined above within this Section, the land use within the Study area comprises largely industrial land uses but also has a strong presence of residential, commercial and open space uses. The area immediately adjacent to the Project area is largely industrial with residential activity only directly abutting the corridor to the south of SH18/UHH and north east of the upper section of SH1. The northern end of the Project area is located next to the Albany shopping centre which is the main retail/commercial centre for the area.

Overall, it is considered that the Study area community is well served in terms of social infrastructure having access to a range of day to day and higher order facilities and services.

SH1 and SH18 in this section of the motorway network undertake a dual role not only completing the northernmost link of the Western Ring Route (WRR) but also functioning as a north-south route for the local community between retail and services. Use of vehicles is the predominant mode of travel within the Study Area. The bus service within the Study area is well used and there is demand for further service. An existing cycleway network is present but it is patchy with no defined north-south route.

There are a number of other transport projects which are in the pipeline and known to the Study area community. These projects include:

- The proposed SUP overbridge linking Spencer Road and Corinthian Drive providing an east west connection over SH18 which is being progressed by the NZ Transport Agency and will connect to the Project SUP;
- Works to improve Alexandra Stream Underpass being progressed by the NZ Transport Agency in conjunction with Auckland Transport and Auckland Council; and
- A new bus station between Albany and Constellation Bus Stations progressed by Auckland Transport and the NZ Transport Agency.

In addition, there are a number of upgrades planned to the local roading network. These are discussed in the Assessment of Transport Effects.









5 Social Impacts

5.1 Overview

This section contains an assessment of the potential social impacts of the Project identified in Section 3 of this report. Consideration has been given to regional (wider community of interest) social effects and then social effects which may arise at the local level (directly affected parties and neighbours). Rating of the effects of the matters listed below are provided in **Appendix F** of this Assessment.

5.2 Regional Social Impact

5.2.1 Transport, Accessibility and Connectivity

5.2.1.1 Network Strategic Benefits

The long-term strategy for the State highway network in Auckland has been developed over a number of years, aligned with the development of Auckland Council's strategic transport direction. A critical component of this strategy is the development of the WRR to provide an alternative route for traffic through Auckland. Once the Waterview project is completed in 2017, the Project area will be the only section of the WRR that is not constructed to motorway standard. The purpose of the Project is to complete the WRR by bringing the final section of this route up to motorway standard.

The Project also looks to address a number of critical transportation deficiencies and constraints within the Project area that affect both inter-regional and intra-urban traffic movement; these are largely attributable to the rapid on-going development of the Albany Centre and surrounding commercial areas, and the wider urban growth of the North Shore and beyond.

The Project is expected to increase daily flows on the Northern Motorway by up to 29,000 vehicles per day, two way, between the Greville interchange and the SH18 direct connections. Daily flows along the Upper Harbour Motorway, east of the Albany Highway interchange are expected to increase by 22,500 vehicles/day, two way. However, the additional capacity and new direct connections provided by the Project mean that travel times are predicted to improve, relative to the future scenario without the Project, even with these increases in flows⁸.

5.2.1.2 Network Resilience and Connectivity

Completion of the Project will provide a greater level of resilience to the inter-regional State highway network with the provision of an alternative north-south route (the WRR) through Auckland to motorway standard. This will additionally provide greater intra-regional travel flexibility and access to the Auckland International Airport from across the region and from Northland.

The resilience of an alternative route provides additional flexibility to journey planning for freight and general vehicle movements. This resilience will benefit all car owning members of the Auckland community in their travels across the region and from Northland.

The Project will also provide resilience by improving options for alternative modes (providing choices if the function of SH1 within the Project area is compromised).

5.2.1.3 Improved Journey Efficiency

Substantial improved journey times along and between the SH1 and SH18 corridors are forecast as a result of the Project. With the Project being the final link in the completion of the WRR to motorway

⁸ Modelling work (SATURN) has been undertaken to inform the Assessment of Transport Effects prepared by Flow Transportation to identify the predicted performance of the road network and the road user benefits of the Project



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standard, the benefits to the motorist of the completion of the Project will be even higher when combined with the travel time savings achieved by other WRR projects. Illustrated in **Figure 13** below are the predicted travel time savings with an overall reduction of travel time for SH1 Northbound traffic of 6.5 minutes and 6 minutes in the morning and evening peak while SH1 Southbound traffic will have 12.5 minutes and 10 minute reductions again in the morning and evening peak. Similarly, morning and evening peak gains are also predicted for traffic between SH1 Tristram Ave and SH18 and along the Albany Highway. These travel time savings will have a moderate to significant positive on the wider community.

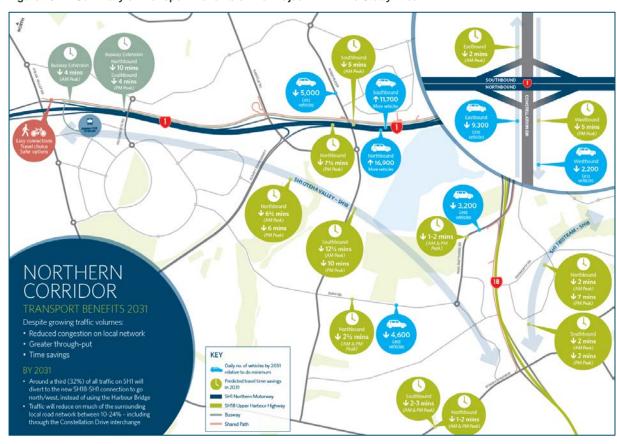


Figure 13 Summary of Transport Benefits of the Project within the Study Area

Source: NZ Transport Agency

By reducing motorway travel times on both SH1 and SH18 as outlined above, the Project is predicted to improve through-freight movements. The additional provision of a ramp signal bypass lane for trucks at SH18 to SH1 (north) will reduce travel times compared to general traffic too. Benefits will also be gained by freight movements on arterial roads that are predicted to experience reductions in traffic as a result of the Project. This includes Bush Road, Rosedale Road, Apollo Drive and William Pickering Drive. Consequently, the transfer of goods and materials across the region and from Northland will improve.

The implementation of the dedicated Northern Busway extension to Albany Bus Station, will improve reliability of journey times for public transport users who complete or initiate their journey at the Albany Bus Station. It is predicted in 2031 that the Project will result in a reduction of travel time between Albany Bus Station and Constellation Bus Station of 10:40 minutes Northbound and 4:20 minutes Southbound during the evening peak period compared to if the Project was not constructed.

⁹ See Table 23 of the Assessment of Transport Effects based on the Auckland Regional Transport model



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Connectivity for pedestrians and cyclists will be significantly improved both north-south along the SH1 corridor and east-west parallel to SH18 through the provision of continuous, safe SUP along both corridors, bridging a significant gap in the existing walking and cycling network. It is also considered that by reducing traffic on existing arterial routes, this will indirectly benefit both pedestrians and cyclists.

5.2.1.4 Improved Efficiency and Reliability of Public Transport

The provision of a dedicated Northern Busway extension from Constellation Bus Station with direct access to Albany Bus Station will reduce average bus journey times and improve reliability of journey times, due to the separation from general traffic as noted above and at Section 7.5 of the Assessment of Transport Effects. In particular, northbound buses will no longer need to travel with general traffic at the UHH, as they leave the Constellation Bus Station. This will lead to benefits in terms of reduced travel times for buses and increased patronage. The increased patronage will in turn lead to less traffic congestion. In addition, the reduced traffic volumes on arterial routes will provide indirect benefits to public transport operators and users, by reducing congestion on these routes and improving bus travel times, where bus priorities are not already in place.

5.2.1.5 Stakeholder and Community Feedback

Feedback from stakeholders and the community (all types) has indicated a strong level of overall support for the Project, recognising it for its strategic importance. For some, the Project has arrived too late or has not been as far-reaching as they would have liked (southern SH18/SH1 ramps). The improved accessibility and connectivity will assist in meeting regional community expectations of travel time reliability and efficiency, modal choice and safety.

5.2.1.6 Construction Phase effects for Regional Transport

It is acknowledged that during the construction phase, some adverse effects on regional transport will occur as work takes place within the existing SH1 corridor. Although the number of existing traffic lanes is unlikely to be reduced during daytime, a range of traffic management measures (e.g. reduce speed limits and narrow lanes widths) will constrain traffic flow. As confirmed in Section 5 of the AEE and the Design and Constructability Report, it is intended that the Project will advance in stages and therefore, these adverse transport effects will be of a limited duration and contained to live work areas. The offline nature of the SH18 tie in and Paul Matthews Road Interchange should reduce potential construction impacts to users of both the UHH and SH18.

Overall, during the construction phase, delays are anticipated for drivers which will be exacerbated in the morning and evening peak due to traffic volumes. This will give rise to longer journey times and potential frustration over congestion.

During construction, the Assessment of Transport Effects (Section 8) predicts that bus services will be impacted by an increase in congestion on the wider road network as well as the temporary closure of the Rosedale Road overbridge and due to the elimination of right turns into Paul Matthews Road. It is anticipated that the construction of the busway link over the Northern Motorway to Albany Bus Station is likely to temporarily affect the capacity of the Park and Ride facility at Albany. Opportunities to provide temporary alternative carpark spaces have been identified and include utilising vacant Auckland Transport owned land at 125 McClymonts Road immediately adjacent to the Albany Bus Station and through the provision of additional parking at Silverdale Bus Station. Consequently, works within the Park and Ride facility will be managed to minimise commuter disruption.

Overall, it is considered that the construction impacts will be temporary and localised but result in minor to moderate negative impact on people's way of life with disruptions to connectivity, in particular during peak travel times.









5.2.2 Economic Growth and Development

5.2.2.1 Economic Benefits

Economic benefits will arise from the Project both from the construction phase and from the improvements outlined above with respect to accessibility and travel time surety for both people and freight across the region.

The importance of the Project for future growth and development has been acknowledged in various strategic documents, and investment decisions made accordingly. The Project is cited as supporting existing growth and expansion as well as facilitating future development in the growth areas to the North.

Accessibility improvements can generate growth, from travel time savings and associated productivity improvements. It is also expected that, with improved connectivity and mobility, opportunities for a wider range of employment and living opportunities will arise.

The Project will be a major development with a build budget of \$700 million. It will involve a significant full-time work force as well as subcontractors, professional services and supplies. Consequently, it will contribute in its own right to regional employment and revenue opportunities for the construction and infrastructure support industry.

In addition to this, the Project has the potential to generate indirect economic benefits for the North Shore area through the purchase of additional goods and services by the workforce as part of their day to day activities. The workforce on a project of this nature will be in the order of 300 construction employees as well as Project Office staff. On projects such as the Waterview Connection and Mackays to Peka Peka Expressway, members of the work force have been observed frequenting local shops and cafes for food and drinks, in addition to purchasing incidentals such as petrol in the local area. Over a 3.5 year period, this indirect contribution will make a positive contribution to the North Shore economy.

As noted at 5.1.2.6, the construction phase will result in temporary and localised traffic delays along SH1 in particular. These delays may have an adverse effect on businesses that freight goods or provide services via the SH1 corridor, resulting in a loss of revenue from delays or missed appointments. The Project will directly affect 44 business units, of which fewer than 50% provide Auckland wide or Regional services. It is acknowledged that loss of trade will occur should any of these businesses cease operations with negative financial impacts, but these are unlikely to have regional economic consequences due to scale and type of the business activities affected.

5.3 Local Social Impact

5.3.1 Way of Life

- Accessibility, connectivity and mobility
- Changes to patterns of day to day living
- Changes to ways of walking and cycling
- Changes to public transport

Generally, the commencement of construction is when most individual way of life impacts will begin to be felt. The Project represents a significant construction activity in terms of the period and scale of works involved. A three and half year construction programme is envisaged which requires Construction Support Area (CSA) set up, ground works and a large work force presence within the Study area. However, no one area will be exposed to construction activities for the whole construction period. The long term social impact of the Project will naturally relate to the post construction phase with the Project operational.









There is a degree of concern among some members of the community that the construction period could inhibit people's ability to go about their daily lives and reduce their sense of enjoyment at home and in their community. It is acknowledged that during the construction phase vehicle movements may be restricted by the physical works and associated traffic management but this will be short term and temporary in nature. However, people will continue to have access to all of their standard services within the Study area and beyond. The Project will support their living patterns as the closure of any community services or facilities is not required.

Traffic disruption is likely to impact on people's patterns of day to day living during the construction period. As lane widening and intersection upgrades take place there will be traffic impacts during the peak morning and afternoon periods along SH1. To mitigate these effects, the McClymonts Road upgrade, the Paul Matthews Road Interchange and SH1/SH18 Interchange will be advanced off line as far as practicable. Outside of peak travel periods, it is generally considered that the implementation of traffic management measures can satisfactorily manage traffic effects such that they would be no more than minor.

Construction works can be socially disruptive and present an annoyance to surrounding residents and road users, depending on how well they are managed. Particularly disruptive construction activities may impact on people's use of outdoor living areas or may disrupt sleeping habits. The actual effects of air quality and noise/vibration from the construction phase have been considered in the relevant technical assessments and mitigation measures are proposed. These effects will be managed through implementation of the Construction Environmental Management Plan (CEMP) which provides for a Dust Management Plan and the Construction Noise and Vibration Management Plan.

Once operational, the Project will have a neutral to significant positive social effect in respect of day to day living, with easier access to the range of social facilities in the Study area. A positive benefit for some in the morning and evening peak will be reduced queue lengths along the local roading network (for example Caribbean Drive) outside their homes or near to them or the reduced use of local roads by displaced motorway traffic. For these members of the community, their day to day patterns of living will be improved.

As noted in Section 4, there are existing severance issues in the local area with both SH1 and SH18 acting as a barrier to pedestrian and cycle movements. The Project provides for greater connectivity for pedestrians and cyclists through the provision of walking and cycling facilities along SH1 and SH18, together with connections to Albany and Constellation Bus Stations and to the existing local walking and cycling network. The proposed SUP is predicted to be used daily by between 100 cyclists (at the northern end) and approximately 300 daily cyclists (at the Constellation end) and an on average usage of 200 (both north-south and east-west SUPs). In total, the new SUPs are predicted to result in approximately 350 new daily cycle trips across the network in 2026¹⁰. These connections therefore have the potential to positively improve patterns of day to day living through greater access opportunities and safer journeys for employees and residents of the Study area.

The provision of the extensive SUP will provide greater travel choice for local trips with a forecast increase in the levels of active modes (walking and cycling). The separation of these active modes from general traffic has associated safety benefits for SUP users when compared to cycling along local roads. The Project is in general expected to result in reduced traffic on existing arterial routes. This will indirectly benefit both pedestrians and cyclists, particularly vulnerable road users such as school children. The most notable among improved routes (based on 2031 forecasts) include:

 Albany Highway, where predicted traffic reductions of up to 22% will benefit active mode users at Albany Primary School, Albany Junior High School, Kristin School, Albany Senior High School and Massey University;

¹⁰ Flow Transportation Specialists Ltd *pers.comm*.









- Bush Road and Rosedale Road, where predicted traffic reductions of up to 14% and 19% respectively will benefit active mode users at Pinehurst School; and
- East Coast Road where predicted traffic reductions of up to 8% will benefit active mode users at Rangitoto College.

The provision of a dedicated Northern Busway extension from Constellation Bus Station with direct access to Albany Bus Station will reduce average bus journey times and improve reliability of journey times, due to the separation from general traffic. Local services routed through Constellation Bus Station will benefit from the enhanced station arrangements while those services which previously used UHH as part of their route will benefit from the separation of State highway onto its own dedicated route freeing the local road network.

It is acknowledged that children's travel to and from school within the Study area may, due to traffic disruptions, take longer than currently experienced. Consequently, adjustment to travel patterns and schedules may be necessary. As noted at Section 4, the Project will impact on the NHHS which provides school and club training facilities for children in the local area. While the Project will affect this facility, the mitigation measures outlined at Section 3.3.3 will ensure the continued community use of the facility at the current site until all uses transfer to the intended new facility. During the transfer period, some children may find the change in commute unsettling as it departs from their current norm, however, this will soon reconcile. During part of the construction phase access to Rook Reserve (or Bluebird Reserve – see Section 1.3.1.4) may be off limits as the proposed stormwater pond is developed. Consequently, children's access to this facility will be curtailed for the surrounding properties, being the main users of the park area. While Barbados Reserve is within walking distance, access is via Barbados Drive and out of sight of children's homes, therefore necessitating parent/ elder child supervision. Therefore, it is considered that the impacts to children's way of life while temporary and localised will be minor to moderate negative over the course of the Construction Phase. Once operational, minor to moderate positive impacts will arise.

5.3.2 Wellbeing

- Changes to wellbeing (including stress/anxiety)
- Impacts on quality of life
- Health and safety

There is the potential for negative effects on local residents' wellbeing as a result of the Project. However, there does not appear to be an overriding level of stress or worry associated with the Project in the community as a whole based on the consultation feedback.

The accelerated nature of the Project has the potential to provide surety to many within the community that the Project will go ahead as opposed to being a drawn-out process which often leads to uncertainty and mixed messages. It is, however, recognised that the accelerated nature of the Project may disadvantage some who have yet to actively engage or consider how exactly the Project may affect them.

Anticipation of potential impacts associated with the construction and operation of the Project can, during a project's planning phase, lead to a degree of concern and anxiety for people. There is the potential for negative impact on the emotional wellbeing of individuals who wish to sell or carry out improvements to their properties in the near future. In order to minimise impact, proactive and early discussion with property owners is necessary to reduce uncertainty for individual households/properties. While concern and anxiety cannot be fully avoided or mitigated due to individuals having differing reactions, keeping the community informed about the Project's lifecycle and key milestones will provide some certainty, which will be of benefit to the community.









There is the potential for increased levels of stress and anxiety for some individuals and families adjacent the Project area where temporary occupation of rear yards during the construction phase is required. The property negotiation process will be for many an experience they are unfamiliar with and consequently, feelings of stress and anxiety may arise. Early discussion and clear advice regarding the options, administration and timelines should be made available to familiarise people with the procedures. In particular, this is a community where English is not the first language of many residents and every effort should be made to ensure where there is a need, literature and discussions are presented in a manner accessible to the individual being engaged with. This may require the use of translators (or other family members) at one-to-one meetings, or explanatory media in the first language, for example.

With respect to road safety, the Project will deliver a range of safety improvements which are discussed in further detail at Section 7.7 of the Assessment of Transport Effects and summarised below:

- Removing motorway to motorway traffic from the local road network, especially with regards to
 freight. With a reduction in traffic volume, especially heavy goods vehicles, the likelihood of vehicle
 crashes and collisions will be reduced, as will crashes involving pedestrians and cyclists;
- Removing right turn movements from SH18 at Paul Matthews Road and Caribbean Drive. Removal
 of this cross lane manoeuvre reduces the risk of collisions involving right turning vehicles;
- Reducing congestion and queuing on SH1, thereby reducing the incidence of rear-end type crashes;
- Improving street lighting throughout the Project extent;
- Providing increased shoulder widths in some locations;
- Improving existing crash barriers;
- Increased shoulder widths will allow forward visibility to be improved in certain locations; and
- Providing safe, separated pedestrian and cyclist facilities.

As a consequence of these improvements, a net reduction in annual injury crashes on the motorway network is expected, relative to 2031 predictions without the Project and on the local roading network. This will have a positive impact on the way of life and well-being of both the local and wider community.

5.3.3 Amenity

- Impacts on the quality of the environment in which people live, work and socialise
- Impacts of noise, dust, visual changes on use of areas and sites

The most likely amenity issues associated with the Project which have the potential to cause significant negative social impact are associated with the construction phase. The total construction period of this Project is approximately 3.5 years. For this Project, residential buildings are typically around 15 to 20 metres from the closest extent of the works. However, in some instances dwellings are located very close to the works, i.e. within less than 10 metres of a retaining wall, noise wall or potential earthworks operation.

It is important to bear in mind that the proposed 3.5 year construction period relates to the entire activity. This means that certain construction activities will occur over limited times and at varying distances from directly affected and adjacent parties. Therefore, social impact in terms of environment and amenity will vary throughout the construction phase and are likely to increase from minor negative to significant negative for individuals as the works advance towards their property. To remedy and mitigate potential social effects from key construction activities, it is proposed to use screening methods (such as hoardings) at CSAs as well as the management and monitoring of the potential social effects as part of the CEMP.









It is possible that negative social impacts will arise from vibration associated with the construction phase. Section 7.3 of the Assessment of Construction Noise and Vibration identifies that there is a medium to high level of risk that vibration guidelines will be exceeded for some residential and commercial buildings adjacent to the Project. This is because buildings are located within 20 m from the site works in some instances. Within such distances, careful vibration management will be required. The main areas where dwellings are located adjacent to areas of works is at the northern end of the Project (near McClymonts Road) and along SH18. At these locations, significant numbers of dwellings will be located within the high and medium risk zones. To manage the degree of impact, it is recommended that low vibration methods (e.g. screw piling methods and non-vibrating rollers) of construction are used wherever practicable when construction occurs close to residential and commercial properties. It is also recommended that where vibration intensive activities are required that these should generally be scheduled for the daytime wherever practicable and progressed using low vibration techniques and low vibration plant in addition to the timing of the activities. In the event that vibration generating works are necessitated at the above mentioned residential areas at night time, advanced engagement with property owners is required so they are aware of timings and duration such that arrangements can be made in advance to suit the owner.

The potential for perceived noise and vibration impacts can sometimes be greater than the actual impacts experienced, given the visibility or knowledge of potential noise and vibration generating activities taking place. In this case, regular communication with residents will be an important mitigation mechanism.

Amenity in relation to visual impacts for the Project pertains to the views of the construction including the main CSA between Paul Matthews Road and SH1. This will be a significant undertaking with works progressing through the area for a significant duration of the 3.5 year period. The topography in this area means that the construction site area will be overlooked by properties at higher elevations within Meadowood / Unsworth Heights neighbourhood. The extent and appreciation of the visual effect of the main construction site will vary between people. Some will find the view interesting while others will see it as visually unpleasing. Mitigation of these effects is difficult but temporary screening will be adopted as per the Project's Urban Design and Landscape Plan, while management and monitoring of CSAs will be undertaken as part of the CEMP and its implementation.

Construction access to individual properties is likely to result in removal of vegetation along boundaries (Omega Street and Bush Road) and a temporary change in the character of the visual environment. A property remediation strategy will be devised in consultation with property owners and in accordance with the guiding principles of the Project's UDLF.

Currently the motorway environment is not landscaped with the verges and berms predominantly grassed, leading to a sterile utilitarian corridor. With the Project in place, the environment of the motorway corridor will be enhanced with a palette of native plantings. It is considered that this will be a minor positive benefit to the local community in terms of buffering and increasing the number of green corridors within the Study area.









5.3.4 Community

- Impact on neighbourhoods and cohesion
- Impacts on community areas and sites
- Impacts on individual and community plans and aspirations
- Impacts on and accessibility to commercial areas

Residential acquisition can lead to a loss of community cohesion and stability. The Project will result in the acquisition of seven residential properties 11 of which a small residential grouping is located at Bluebird Crescent. The SH18 upgrade will encroach on these residential properties affecting the size of the existing outdoor living areas. Although two property owners have sold their homes in Bluebird Crescent to the NZ Transport Agency, the departure of these residents will not undermine community cohesion and stability within the Unsworth Heights area. Being a popular neighbourhood, the sale of homes and movement of residents is a common occurrence and it is considered that the impact of acquiring two properties for the Project is no different to the impact of a standard sale and purchase situation.

The impact in terms of neighbourhood identity is considered to be short term in nature and contained to properties where construction access may be required. People may choose to vacate their properties while these works are undertaken either at their own volition or in response to the recommendations of the Construction Noise and Vibration Management Plan. This social migration is expected to be short term and temporary. Therefore, it is not considered to present a risk to a neighbourhood or the Project area's community cohesion. While discussions with property owners are underway regarding this access, uncertainty will remain until the new and altered designations are in place and the exact details (extent and timing) of the required access are confirmed.

There is to be no access from SH18 onto Unsworth Drive with the closure of the westbound UHH offramp. The potential social implications of this are that residents will feel a high degree of annoyance having to use Caribbean Drive and Barbados Drive for their inbound journey to Unsworth Heights. This annoyance is anticipated to reduce over time as the route becomes part of their normal routine. This is reflective of the community feedback received. Improvements to the Caribbean Drive junction with UHH are being progressed to ensure easier access from the arterial route. An alternative route will be via Albany Highway and onto Unsworth Drive.

The owners and tenants of Z Service Station and the Greenwich Shops have raised concern that the ramp closures on UHH will result in their businesses collapsing, as there will no longer be passing trade. Representatives of this business community 12 have advised the assessment team that the majority of their trade is based on traffic exiting UHH. For Greenwich Shops, they consider this customer base to be people who live within Unsworth Heights on their way to/ from work as well as some trade from the North Harbour Business Area. The Z Service Station, is reported to have a more diverse customer profile with more reliance on passing trade from SH18 requiring the services of a petrol filling station. It is also noted from discussions with local residents that the ATM services located at the service station are used by the local community.

As a consequence, the business owners of the Greenwich Shops are concerned that they will be unable to keep their tenants, re-let the premises or on-sell the properties, and with a reduced income, an inability to up keep the properties which will lead to blight. Similarly, tenants are concerned that their businesses will falter and they will either need to relocate or close.

¹² Meeting on 28th September 2016







¹¹ Excludes vacant lots



There is clearly a trade-off between improving safety and traffic performance by the removal of the offramps to the Z Petrol Station and the Greenwich Shops from SH18, and the risk posed to the economic viability and community function of the service station and the eight retail/food out lets. While the Project has considered the potential for an Unsworth Drive link to North Harbour East or a replacement ramp to/from UHH further to the west, neither option is feasible from a road safety perspective. The PWA does not provide compensation for landowners or businesses where no land is being taken. Consequently, it is recommended that the NZ Transport Agency continue to engage with these parties with respect to signage and advertising.

Construction of the Project will impact on the appearance and character of neighbourhoods, particularly in relation to visual/amenity and noise impacts. The daily influx of temporary construction workers (based across work sites over the Project area) will increase the daytime population of the local community, and increase the associated sense of 'busy-ness' in the area. For some residents this will heighten the sense of impact/disruption to the community during construction. For others, this is accepted as a necessary part of construction and is not seen as a negative impact and may even be positive (e.g. the socio-economic activity associated with workers using local shops and services).

In the main, community services and infrastructure are unaffected by the Project in all phases as these are mainly located at a distance from the Project corridor. The only community facilities which will be directly affected by the Project works are recreational areas as discussed below.

Traffic disruptions during construction restricting people's accessibility to participate in cultural practices (church services, cultural sessions) and community services may cause minor impacts. However, the scale of potential restrictions is not considered to stop or adversely limit people's ability to participate in community activities or services and the impact through forward route planning reduced. Overall the impact of delays and minor diversions are considered to be minor negative effects which are short term and temporary and only associated with the Construction Phase. Once the Project is operational, the improved traffic flow and the derived accessibility enhancements will positively support people's ability to particulate in and utilise the extent of community infrastructure and services within the Study area and beyond.

Currently, there is limited pedestrian / cycle way access in the Study area as discussed at Section 4. Accessibility via cycle and pedestrian provision will be improved as a result of the Project, enhancing the connectedness within and between different neighbourhoods in the Study area where these improvements have occurred. This is seen as a positive social impact in respect of community cohesiveness and access to community area and sites. Some property owners (in particular those along SH18) adjacent the proposed SUP have raised security and privacy concerns with the proximity of the SUP to their boundary. The importance of a barrier of sufficient height to prevent illegal entry and design to confirm privacy between the SUP and these properties is sought.

There are direct effects where the Project intersects with the NHHS, the Meadowood Reserve which contains the Meadowood Community House and crèche; and the requirement for the installation of a stormwater management pond at either Rook Reserve or Bluebird Reserve.

The NZ Transport Agency is developing a specific mitigation package with Auckland Council and the Harbour Hockey Charitable Trust addressing the Project's effect on the NHHS. As reported on at Section 3 of this Assessment, the parties have agreed a solution that ensures minimum disruption to hockey games and events, including its community roles (schools use, summer programme etc.). A key matter for both the Auckland Council and Hockey is that the facility remains within the Constellation Reserve area and that relocation is progressive, so that limited services will be provided until such time that fully complimentary facility is in place. Without mitigation, the effect of the Project would be rated as major negative as the facility would cease to operate. The interim effect of a phased relocation would be moderate neutral representing a short term negative situation. Once the









replacement NHHS is open, the effect will be positive moderate to major reflecting a settling in period at the new location for staff and users.

The impact on Meadowood Reserve is one of construction disturbance. Upgrades to Caribbean Drive are required as part of the Project and result in the need for a minor encroachment of up to 3m along the western boundary of Meadowood Reserve for construction access, vegetation clearance and footpath realignment. The area of reserve subject to the proposed works is boundary planting and boundary fencing. These works will restrict the use of the outdoor area as vegetation is removed and, as a consequence, there will be potential annoyance to those using the Community House and Crèche. These effects will be short-term and localised and are therefore rated as minor negative. The Project proposes to provide compensatory vegetation planting for that removed which will be agreed by way of a Reserves Reinstatement Plan with Auckland Council, the land owner. Clear communication and liaison with the reserve users is required before and during the works to ensure they are cognisant of any traffic management and health and safety requirements. The Project team is working with Auckland Council and its tenants in this regard. Compliance with the CEMP in respect of dust, noise and rubbish disposal will be an important mitigation element at this location.

A permanent stormwater management device is necessary along the SH18 section of the Project and a wetland device is the best practicable option. The Project's preferred location is Rook Reserve, although Bluebird Reserve is identified as an alternative location for the reasons outlined at Section 1.3.1.4. The size of treatment necessitates a large wetland area at either location which will reduce the grassed area of reserve currently available for use by the surrounding residential properties for passive recreation purposes (dog walking, children's play). This will result in the increased use of adjacent parks within the neighbourhood (e.g. Barbados Reserve). Feedback from local residents confirms this. While the Project will reduce the overall availability of passive recreation space in the Project area this will be a localised minor effect.

There is concern from local residents that both sites would be lost, and they have requested that the NZ Transport Agency/Auckland Council keep them informed with respect to the final selected site. Discussion with the neighbours to both reserves indicates that the grassed areas are nominally used with the play area at Bluebird Reserve being the important community facility while the shared use path is the critical item at Rook Reserve. Therefore, depending on the chosen location, these items should be protected. Residents saw the wetland as an opportunity for a new amenity feature but raised concerns regarding children's health and safety seeking the design to accommodate appropriate safety measures as well as the increased presence of mosquitoes which should be managed.

It is acknowledged that the Project area contains a well-established business community providing services to the local and wider community. The Project is confirmed as having a direct impact on 44 business units, over 50% of which are noted to provide services (professional, trade or advisory) to the local and wider community. Employee numbers per business are less than 10 employees in the main but companies such as Waste Management Ltd and FiveEight Distribution Ltd have well in excess, as do the larger retail ventures when part-time staff are considered. In addition to this, and noted above, is the potential impact on the Greenwich Shops and Z Service Station while the remaining units at 121 Rosedale Road may also experience some effects as there is a synergy between the business uses currently at the property (water based recreation; electrical servicing).

The potential social impact issues for businesses who have road frontage access that will be disrupted by the construction works (e.g. Paul Matthews Road, Rosedale Road, Constellation Drive) or by way of construction access through lots (e.g. Rosedale Road, Arrenway Drive, Cowley Place, Saturn Place, Bush Road) are:

Partial severance / restriction for access to operations;









- Potential loss of business vitality/ viability if disruption is for extended periods (e.g. reduced customer visibility, reduced customer access, reduced servicing area); and
- Potential loss of staff or viability of operations due to staff / employment pressures (e.g. loss of car parking, accessibility issues, annoyance and disruption from unmanaged construction effects).

While general Project communication will be of assistance to business owners, it is considered that a more prudent course of action is the development of business disruption management measures in consultation with the effected business community. It is important that this is agreed and in place prior to construction works commencing. Without this mitigation in place, the effect on the business community is considered to be potentially major negative.

5.3.5 Personal and Property rights

- Uncertainty and timing
- Impacts due to the property acquisition process

It is likely that some individuals within the Study area have placed their plans to upgrade or sell properties on hold due to uncertainty surrounding the Project design during the Planning Phase and timing of construction commencing. With the Project moving forward to the approvals process, greater clarity about the Project extent and timing of works is available. However, it is acknowledged that until such time that decisions on the new and altered designations are announced and a construction programme is put in place, property plans and aspirations will continue to be affected. Mitigation in the form of Project information and updates will be critical

Effects on private property as a result of the Project include the acquisition of land for the construction of various elements of the Project. At many locations, the requirement relates to outdoor boundary strips (boundary planting or yard), and does not impact on any buildings or the general existing site configuration.

At Arrenway Drive, however, the demolition of buildings will be necessary as part demolition may not be structurally feasible. The works will leave a balance of property sufficient in size to enable redevelopment, however, occupants will need to vacate and relocate elsewhere. At 121 Rosedale Road and 78 -80 Paul Matthews Road, a number of owners/ tenancies will be displaced as a consequence of the Project. The concern expressed is that suitable replacement premises will not be available or will be at a premium due to demand, requiring businesses to leave the area or close entirely.

The presence of the Project may cause reticence in investment and development or create uncertainty in terms of lease and tenancy arrangements. Also the potential lack of reinvestment may create an unattractive environment ('blighting') which in turn may impact lettings and sales.

There are a number of less tangible effects that people may experience if they are displaced or relocated as a result of property acquisition for the Project designations, irrespective of any compensation package. These effects (which include sense of displacement, loss of emotional attachment to places, feelings of uncertainty and anxiety) are difficult to quantify and will be experienced at different levels by different people.

Where possible the Project components have been designed in order to minimise the direct effect on residential and businesses properties. Avoidance of residential properties has been achieved in the main with only part of the outdoor areas of seven properties required for the purposes of retaining walls. Similarly, the design process attempted to avoided business premises, however, at pinch points on SH1 and due to the land necessary to construct the Paul Matthews Road/SH1/ SH18 tie in, this could not be achieved. A number of alternative options at Paul Matthews Road (described in Section 7 of the AEE) did not result in an option which could keep the businesses at 73-75 and 78-80 Paul Matthews Road and these buildings will have to be removed.









The NZ Transport Agency has implemented a Property Strategy and is working with these businesses and land owners in respect of specific contingency/ mitigation packages which suit them. Assistance with relocation forms part of the package. Acquisition of properties will allow the owners to be compensated and move on or relocate, and in that way mitigate the effects on affected landowners. However it is recognised that effects of displacement and relocation may remain. These effects are not able to be completely avoided. Methods to mitigate these effects include on-going and regular communications and liaison with those affected to provide (where possible) certainty about timing for project works, relocation and acquisition.

The effects of 'blighting' can be mitigated through the implementation of NZ Transport Agency Property Strategy which seeks to include the following:

- Agreements with owners who are wishing to stay until construction time;
- Purchase and lease back arrangements with current owner / occupiers who are wishing to stay until construction time;
- Leasing durations (including managing these to align with construction timing);and
- Property maintenance and upkeep on properties acquired.









6 Mitigation

6.1 Proposed Mitigation

A key element in addressing the actual and potential social effects will be liaison and interaction with the local community ensuring they are aware of the Project's construction programme and when works will commence in their area so they can plan and prepare in advance. Therefore, it is proposed that a communications strategy to keep the community and stakeholders informed about construction activities and the construction programme be development. This strategy would include:

- Stakeholder and Communications Plan which will provide for:
 - Establishment of a Community Liaison Group, with representation from neighbouring residents and business community;
 - The appointment of a Community Liaison Manager providing a key contact for the resident and business community within the Project area;
 - A communication strategy detailing how/when construction management information will be communicated to directly affected landowners, neighbours, stakeholders and the wider community;
 - Involvement in the construction works (e.g. community planting days).
- The Stakeholder and Communications Plan will also include measures to avoid, remedy or mitigate business disruption arising from construction activities, including:
 - Measures to maximise opportunities for customer and service access to businesses that will be maintained during construction;
 - Measures to mitigate potential severance and loss of business visibility issues by way-finding and supporting signage for pedestrian detours required during construction; and
 - Other measures to assist businesses to maintain client/customer accessibility, including but not limited to client/customer information on temporary parking or parking options for access and delivery.
- Management and monitoring of key environmental issues such as noise, vibration, dust and traffic effects as part of the CEMP; and
- Implementation of a formal complaints/feedback process as part of the CEMP and Stakeholder and Communications Plan.

6.1.1 Other Management and Response Measures

The design of the stormwater management wetland at either Bluebird Reserve or Rook Reserve will be progressed in agreement with Auckland Council and will provide an additional amenity area within the chosen reserve, subject to meeting public safety requirements.

The NZ Transport Agency continues to implement its Property Strategy, which includes business resettlement assistance that is already being implemented through the planning phase. This is particularly relevant to the NHHS and ensuring the agreed temporary upgrades to the existing NHHS are progressed and that a replacement facility is provided.

With respect to the Greenwich Shops and Z Service Station, it is recommended that the NZ Transport Agency work with these individuals in respect of signage and advertising.

6.1.2 Monitoring

Some mitigation measures proposed in this assessment – such as a feedback/complaints database – will require on-going monitoring. As these measures are to be implemented and managed through the









relevant plans as part of the CEMP suite, no specific monitoring is recommended here. Social impacts that relate to dust, noise, visual and vibration effects will be monitored through the implementation of conditions on the designation or resource consents which address these particular effects.









7 Conclusion

The Project is of national significance, delivering the final portion of the WRR RoNS, being the link between the WRR and SH1. As such it will provide an alternative north-south route for freight and commuters, and reduce travel times throughout this area. It provides significant transportation and safety benefits in particular to the Upper Harbour and North Shore communities and also to the wider Auckland region.

Effects of the Project during the planning phase are considered to encompass minor positive, neutral and minor to moderate negative impacts, reflective of the range of views and concerns held by the Study area community and likely social impact associated with an infrastructure project of the nature proposed.

Social impacts in the construction phase are considered to range from minor positive to minor to potentially significant negative social impacts, varying across the Study area according to proximity to construction areas and the types of construction activities being undertaken. The most significant social impacts will be experienced by those living and working directly adjacent to construction areas. It is anticipated, however, that most adverse impacts will be able to be reduced/mitigated by the CEMP and additional mitigation measures set out in Section 6 of this report.

A broad range of social impacts are associated with operation of the Project, ranging from moderately to significantly positive benefits to potentially minor negative impacts for households and the community. Improved accessibility, increased mobility choice and enhanced acoustic attenuation will generate the greatest benefits for the Project area community.

That the proposed mitigation measures should be adopted as conditions of the resource consents and designations, so that the social effects can be appropriately avoided, remedied or mitigated.









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