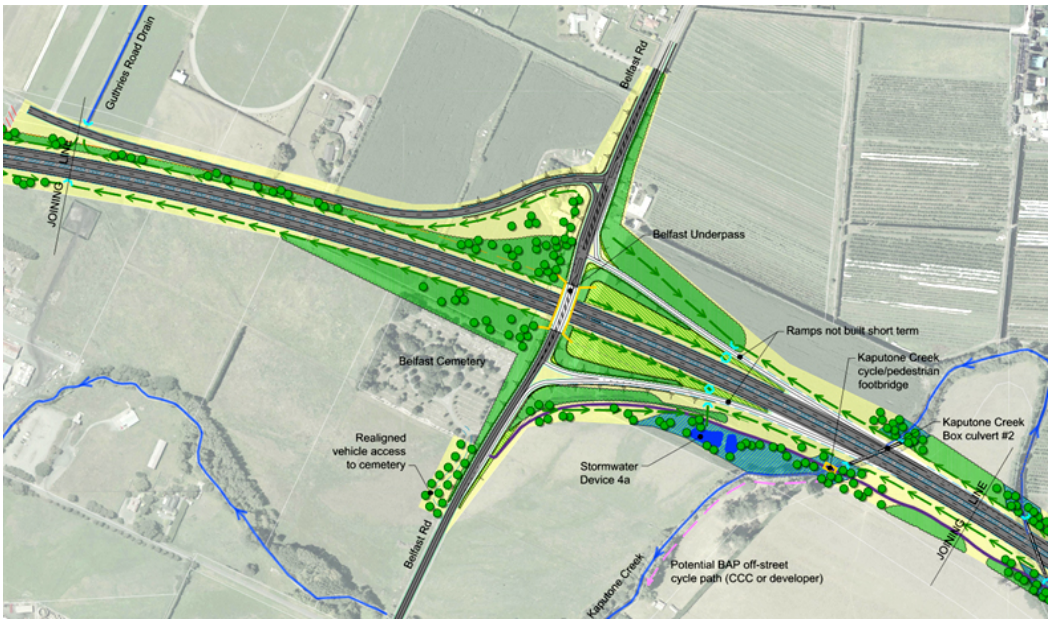
Commissioners' Recommendation and Decision

CHRISTCHURCH CITY COUNCIL &
CANTERBURY REGIONAL COUNCIL

PROPOSED NOTICE OF REQUIREMENTS AND RESOURCE CONSENT APPLICATIONS
BY
NEW ZEALAND TRANSPORT AGENCY &
CHRISTCHURCH CITY COUNCIL;



Joint Report and Decision/Recommendation of the Independent Hearings Commissioners Acting As Appointed by the Christchurch City Council and Canterbury Regional Council Pursuant to Section 34 of the Resource Management Act 1991

24 July 2015

IN THE MATTER OF The Resource Management Act 1991

AND

IN THE MATTER OF Application **RMA92020038** for a Notice of Requirement under section 181 and section 168 to alter an existing designation for the Christchurch Northern Arterial and QEII Drive for state highway purposes by New Zealand Transport Agency;

Application **RMA92024074** for a Notice of Requirement under section 168A for a new designation to construct and operate the Northern Arterial Extension and Cranford Street Upgrade for roading purposes by Christchurch City Council;

Application **RMA92024073** for a Notice of Requirement under section 168A for a new designation of the Cranford Basin for stormwater purposes by Christchurch City Council;

Applications for resource consents **CRC150789, CRC150790, CRC150791, CRC150792, CRC150793** and **CRC150794** by New Zealand Transport Agency for the Northern Arterial/QEII Drive Project; and

Applications for resource consents **CRC1511942, CRC151943, CRC151944, CRC156177** and **CRC156178** by Christchurch City Council for the Northern Arterial Extension/Cranford Street Upgrade Project and the Cranford Basin Stormwater Management Area Project

BETWEEN **NEW ZEALAND TRANSPORT AGENCY**
CHRISTCHURCH CITY COUNCIL
Applicants

AND **CANTERBURY REGIONAL COUNCIL**
CHRISTCHURCH CITY COUNCIL
Respondents

JOINT REPORT AND RECOMMENDATION/DECISION OF THE INDEPENDENT HEARINGS COMMISSIONERS MS SHARON MCGARRY, MR DAVID MCMAHON AND MR DAVID MITCHELL DATED 24 JULY 2015

Hearing Held in Christchurch 21-24 April, 28 April – 1 May and 8 June 2015

APPEARANCES

Applicants:
Mr K. Smith, Counsel for New Zealand Transport Agency and Christchurch City Council
Ms C. Olds, Assisting Counsel
Mr M. Blyleven, Transport Planning Manager for New Zealand Transport Agency
Mr M. Taylor, Project Manager and Design Manager with Opus International Consultants Ltd
Mr A. Taylor, Senior Transportation Planner for Christchurch City Council
Ms S. Perfect, Principal Transport Engineer with Opus International Consultants Ltd
Mr J. Row, Senior Transport Planner with Beca Ltd
Mr J. Farren, Acoustic Consultant and Principal of Marshall Day Acoustics
Mr D. McKenzie, Technical Principal – Landscape with Opus International Consultants Ltd
Mr S. Bensberg, Civil Engineer with LG Consulting Ltd
Mr K. Couling, Civil Engineer with Christchurch City Council
Dr A. Shadbolt, Landscape Architect with Christchurch City Council
Ms K. Purton, Civil Engineer with Beca Ltd
Mr R. MacGibbon, Principal Ecologist with Opus International Consultants Ltd
Mr M. Thorley for Christchurch City Council and New Zealand Transport Agency
Ms A. McLeod, Technical Director – Planning with Beca Ltd
Ms S. Brown, Principal Planner with Opus International Consultants Ltd
Mr P. Whyte, Senior Planner and Associate of Beca Ltd
Dr C. N. Taylor, Principal and Director of Taylor Baines and Associates

Applicants' witnesses not in attendance:
Ms C. Needham, Environmental Engineer with Beca Ltd
Mr P. Ware, Senior Associate with Beca Ltd

Submitters:
Dr A. Stevenson for Canterbury District Health Board
Ms J. Murray for herself and on behalf of Ms Deborah Miller
Mr H. Wheelans for GW Cranford
- Mr A. Penny, Director of Traffic Design Group Ltd

Mr J. Allen
Mr D. De Lu for Spokes Canterbury
Dr A. Raizis
- Mr I. McKenzie

Ms F. Bills
Mr N. Hermanspahn for himself
Mr A. Hughes-Johnson, Counsel for Mr A. Hayward and Ms S. Murphy
- Mr A. Hayward
- Dr J. Trevathan, Acoustic Engineer and Director with Acoustic Engineering Services Ltd

Mr A. Roberts
Mr A. Boa

Mr M. Meehan
Ms A. McNab
Mr N. and Mrs N. Leith

- Mr J. Stafford

Mr G. Cleary, Counsel for Mr I. H. and Mrs L. C. Hsu
Ms E. Twaddell, Co-Chair of the St Albans Residents' Association Incorporated

Reports tabled by submitters not in attendance:
Mr A. Penny, Director with Traffic Design Group Ltd for Fletcher Distribution Ltd (t/a Placemakers) and Crane Distribution NZ Ltd (t/a Mico)
Mr S. Flewellen, Senior Planner with Planz Consultants Ltd for Fletcher Distribution Ltd (t/a Placemakers) and Crane Distribution NZ Ltd (t/a Mico)
Mrs L. Bozinhoff
Mr S. Anderson for Foodstuffs South Island Limited

Section 42A Reporting Officers:

Christchurch City Council – NoR Applications
Ms R. Markham-Short, Planner with Christchurch City Council

- Mr A. Craig, Landscape Architect
- Mr R. Malthus, Senior Environmental Consultant with Novo Group Ltd
- Mr P. Roberts, Transport Planner and Director of Quality Transport Planning Ltd

Canterbury Regional Council – Resource Consent Applications
Mr D. Murray, Principal with AECOM Consulting Service (NZ) Ltd

- Mr A. Tisch, Principal Engineer and Director of E2 Environmental Ltd
- Ms M. Stevenson, Senior Ecology Scientist with Canterbury Regional Council

RECOMMENDATION

NOTICE OF REQUIREMENT

RMA92020038

Under delegated authority, the Notice of Requirement to alter an existing designation for the Christchurch Northern Arterial and QEII Drive for state highway purposes by New Zealand Transport Agency is **RECCOMENDED** to be **CONFIRMED** subject to conditions set out in Appendix 1.

DETERMINATION

NOTICE OF REQUIREMENT

RMA92024074

Under delegated authority, the Notice of Requirement for a new designation for the Northern Arterial Extension and Cranford Street Upgrade for roading purposes by Christchurch City Council is **CONFIRMED** subject to conditions set out in Appendix 1.

NOTICE OF REQUIREMENT

RMA92024073

Under delegated authority, the Notice of Requirement for a new designation of the Cranford Basin for stormwater purposes by Christchurch City Council is **CONFIRMED** subject to conditions set out in Appendix 1.

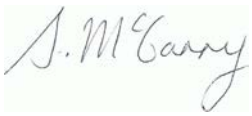
APPLICATIONS FOR RESOURCE CONSENT

CRC150789, CRC150790, CRC150791, CRC150792, CRC150793 and CRC150794 by New Zealand Transport Agency

CRC1511942, CRC151943, CRC151944, CRC156177 and CRC156178 by Christchurch City Council

Under delegated authority, the resource consent applications are **GRANTED** subject to conditions set out in Appendix 2.

Dated this 24th day of July 2015



Sharon McGarry (Chair)
Independent Hearings Commissioner

David Mitchell
Independent Hearings Commissioner

David McMahon
Independent Hearings Commissioner

CONTENTS

List of Abbreviations and Acronyms

BOI – Board of Inquiry
BPO – Best Practicable Option
CCC - Christchurch City Council
CDHB – Canterbury District Health Board
CEMP – Construction Environment Management Plan
CIA – Cultural Impact Assessment
CNATI - Christchurch Northern Access Transport Investigation
CNVMP - Construction Noise and Vibration Management Plan
CRC – Canterbury Regional Council
CSU – Cranford Street Upgrade
CTSP - Christchurch Transport Strategic Plan
ECan – Canterbury Regional Council
GCTS – Greater Christchurch Transport Strategy (December 2012)
GPS - Government Policy Statement
ha – hectares
km - kilometres
LTMA - Land Transport Management Act 2003
LURP – Land Use Recovery Plan
m - metres
m^3 – cubic metres
mm – millimetres
MIMP – Mahaanui Iwi Management Plan
MfE – Ministry for the Environment
NoR – Notice of Requirement
NA – Northern Arterial
NAE – Northern Arterial Extension
NES – National Environmental Standard
NROSS - Christchurch Northern Roading Options Scoping Study 1998-2002
NZTA - New Zealand Transport Agency
NZTS - New Zealand Transport Strategy 2008
PT – public transport
RMA – Resource Management Act 1991
RoNS – Road of National Significance
SARA - St Albans Residents' Association Incorporated
SIA - Social Impact Assessment
Styx SMP - Integrated Catchment Management Plan for the Styx River/Purākānui Area
TSS – Total Suspended Solids
UDCD – Upper Dudley Creek Diversion
UDS – Greater Christchurch Urban Development Strategy

PART A – THE APPLICATIONS

1.0 INTRODUCTION

Context

1.1 This is the joint report and decision/recommendation of independent Hearings Commissioners Ms Sharon McGarry (Chair), Mr David McMahon and Mr David Mitchell. We were appointed by the Christchurch City Council (**CCC**) and the Canterbury Regional Council ('**CRC**' or '**ECan**') to jointly hear submissions to, and to consider and make a decisions on, two Notice of Requirements (**NoR**) applications from the CCC and eleven resource consent applications by the CCC and the New Zealand Transport Agency (**NZTA**), collectively referred to as 'the Applicants'. We were also appointed by the CCC to hear submissions to, and to consider and make a *recommendation* on a third NoR application from NZTA.

1.2 The NoR application from NZTA seeks to alter an existing designation in the Christchurch City District Plan (the '**City Plan**') to allow for minor realignment, widening and extension of the designation for the construction of a four lane median divided arterial road linking Christchurch's Northern Arterial (**NA**) motorway (SH1) with QEII Drive (SH74) and Winters Road; and the widening of QEII Drive to four lanes between Main North Road and Innes Road (the '**NA/QEII Drive Project**').

1.3 The NoR applications from CCC seek new designations in the City Plan to:

(a) construct and operate a new four lane, median-divided arterial road known as the Northern Arterial Extension (**NAE**) linking the NA and QEII Drive with Cranford Street, and the Cranford Street upgrade (**CSU**) to four lanes from the NAE to Innes Road (the '**NAE/CSU Project**'); and

(b) construct, operate, maintain and upgrade stormwater detention and treatment facilities within the Cranford Basin, between Winters Road and Cranford Street (the '**Cranford Basin Stormwater Management Area**').

1.4 The eleven resource consent applications seek authorisation for activities and discharges associated with the construction and operation of the three NoR Projects.

1.5 The background to these applications, which we will canvas in due course, has been the subject of Council reporting, and of course the public notification and a hearing to which this decision and recommendation is a culmination of.

1.6 Before discussing the detail of the applications and the submissions to them, there are some minor administrative and procedural issues that we need to address, beginning with our role as Commissioners.

Appointment and Role of Commissioners

1.7 Our appointment under Section (s) 34A of the Resource Management Act, 1991 ('**the RMA**' or '**the Act**') to hear submissions to, and to consider and decide/recommend the NoR applications on behalf of CCC, was made because of CCC policy to appoint independent commissioners for decisions on City Plan matters and resource consent applications where there is potential for conflict of interest – either real or perceived. To this end, it is critical that the CCC's operational functions (as a Requiring Authority) and their decision-making functions (as a Territorial Authority) regarding the same matter are kept separate, and in this case the *potential* for conflict arises due to the following:

(a) the CCC is both the Territorial Authority and the Applicant (Requiring Authority) on two of the NoR applications;

(b) the CCC and NZTA are both signatories to the Greater Christchurch Transport Strategy 2012 (**GCTS**), which commits those parties to a comprehensive plan for repair and replacement of the transport network through central and local government collaboration; and

(c) the NZTA NoR application for the NA/QEII Drive Project has been identified as a road of national significance (**RoNS**), and the CCC and NZTA are signatories to a Memorandum of Understanding (December 2013) with respect to RoNS committing to a 'One Network Approach' to the operation, maintenance and improvement of the transport system and its integration with land use development in the surrounds.

1.8 On the above basis, we were appointed by the CCC under delegation dated 10 June 2015. The terms of that delegation were approved as follows:

That Sharon McGarry, David McMahon and David Mitchell be appointed as Commissioners to:

- *consider the publicly notified Notice of Requirement application by New Zealand Transport Agency to alter an existing designation, an if appropriate, to hear the matter and to then make a **recommendation to New Zealand Transport Agency** as to whether to notice of requirement should be confirmed, modified, subject to conditions or withdrawn under Part 8 of the Resource Management Act 1991; and*

- *consider the publicly notified Notice of Requirement applications by Christchurch City Council for a new designation for a new designation, and if appropriate, to hear the matter and to then make a **decision** as to whether the notice of*

requirement should be confirmed, modified, subject to conditions or withdrawn under Part 8 of the Resource Management Act 1991.[1]

1.9 Unlike a District Plan Change or Resource Consent, the role of decision-maker for a NoR generally rests with the relevant Requiring Authority responsible for the application, not with the Territorial Authority (CCC). The situation is reversed when the NoR is issued by a territorial authority on itself. The territorial authority issues a decision rather than a recommendation. The application of this to the suite of NoRs before us is set our below:

1.10 For the NoR application from NZTA for the NA/QEII Drive Project, the Requiring Authority is NZTA. The role of CCC, as the Territorial Authority, is to consider the requirement and the submissions received (in addition to other statutory matters, which we will address subsequently) and make a **recommendation** to the Requiring Authority (NZTA). Section 171 of the RMA sets out that the Territorial Authority (CCC) may recommend to the Requiring Authority (NZTA) that the proposal is:

(a) confirmed;
(b) modified;
(c) subject to conditions; or
(d) withdrawn.

1.11 For the NoR application for the NA/QEII Drive Project, the CCC as the Territorial Authority, has delegated its authority to us to make a **recommendation** to the Requiring Authority (NZTA).

1.12 For the NoR applications for both the NAE/CSU Project and the Cranford Basin Stormwater Management Area, the Requiring Authority is CCC. The role of CCC as the Territorial Authority, is to consider the requirements and the submissions received, and to make a **decision** pursuant to s168A(4) of the RMA. Section 168A(4) of the RMA repeats the options as for s171, as set out above.

1.13 For the NoR applications for the NAE/CSU Project and the Cranford Basin Stormwater Management Area, the CCC as the Territorial Authority, has delegated us its authority to make a **decision** to the Requiring Authority

1.14 Our appointment by the Canterbury Regional Council to hear and decide the resource consent applications was approved by the CRC Hearings Regulation Committee on 4 December 2014, as follows:

- *Appoints Sharon McGarry as Chairman of the Hearing Panel to consider, hear and decide resource applications CRC150789, CRC150790, CRC150791, CRC150792,*

[1] It was noted during that hearing that the wording of an earlier delegation dated 3 February 2015 incorrectly stated 'recommendation' instead of 'decision' in relation to the CCC NoR applications. This delegation was corrected by CCC's Resource Management Hearings Panel on 10 June 2015.

CRC150793, CRC150794 - New Zealand Transport Agency; and CRC151942, CRC151943, CC151944 -Christchurch City Council;

- *Appoints David McMahon and David Mitchell as a member of the Hearing Panel to consider, hear and decide resource applications CRC150789, CRC150790, CRC150791, CRC150792, CRC150793, CRC150794 - New Zealand Transport Agency; and CRC151942, CRC151943, CC151944 -Christchurch City Council; and*

- *Delegates to Sharon McGarry, David McMahon and David Mitchell pursuant to s34A(1) Resource Management Act 1991, to deal with any preliminary matters associated with considering, hearing and deciding the applications.*[2]

Report Outline

1.15 In terms of the above, having familiarised ourselves with the NoR applications, resource consent applications and the background material, read all the submissions, conducted the hearing, heard from the submitters/the appointed advisors, and requested, received and considered additional information from the Applicants and submitters, as well as having visited the relevant sites/surrounds on two separate occasions, we hereby record our findings and decision/recommendation.

1.16 This report is separated into the following three parts:

Part A – The Applications
This part of the report includes an outline of the factual background of the NoR and resource consent applications, and the sequence of events leading to our recommendation/decisions. Section 2 outlines the main components of the requirement including an overview of the route and works involved, as well as submissions received to the applications and the matters addressed in these. Section 3 outlines the hearing process, and post hearing information exchanges that have led to this decision/recommendation.

Part B – Evaluation of the Notice of Requirement Applications
This part of the report sets out the relevant statutory considerations for each of the three NoR applications on which our evaluations are based. Each NoR application is evaluated in terms of the requisite assessment of environmental effects, overarching statutory and policy framework relevant to the designation, the consideration of alternatives, the consideration of objectives, and in the context of Part 2 of the Act.

Part C – Evaluation of the Resource Consent Applications
This part of our report sets out the relevant statutory considerations for the resource consent applications on which our evaluations are based.

[2] Since this delegation was made, the Applicant requested division of the project activities into construction and operational activities. This resulted in the generation of two additional resource consents CRC156177 and CRC156178, making a total of eleven resource consents sought – See ECan s42A report pg.3, para 19.

1.17 Before moving onto the background of the applications and the hearing process, we would like to make two preliminary comments.

Preliminary Comments

1.18 Firstly, we record our appreciation at the manner in which the hearing was conducted by all the parties taking part. In this respect, we would like to acknowledge the following:

- The s42A reports and on-going assistance from the Reporting Officers, Ms Ruth Markham-Short (CCC) and Mr Daniel Murray (CRC). Their input into the process both prior to and during the hearing and subsequent information exchanges has been invaluable.

- The willingness of the Applicants, various submitters and advisors to accommodate a certain amount of dialogue before, during and after the hearing via the approach we adopted.

- The assistance of the Hearings Administrator, Ms Alison Cooper, prior to, during and after the hearing process.

1.19 The above actions promoted a smooth process that has greatly assisted us when assessing and determining the issues.

1.20 Secondly, we stress that the findings we have made and the decisions/recommendation we have arrived at are based squarely on the evidence presented and our consideration of that material.

2.0 BACKGROUND

Overview of the NoR for the Northern Arterial/QEII Drive Project

2.1 The NoR application for the NA/QEII Drive Project was bought about by NZTA, as the Requiring Authority. The stated purpose[3] of the NoR is to:

> '*…allow for the minor realignment, widening and extension of the existing designation for the Northern Arterial to facilitate the construction of a new 4-lane median divided arterial road, to be known as SH74, linking the Christchurch Northern Motorway (SH1) with QEII Drive and Winters Road; and the widening of QEII Drive to four lanes between Main North Road and Innes Road, Christchurch…'.*

2.2 The designation is to provide for road construction activities as well as the continuing operation of the new roading infrastructure itself.

2.3 Included within the altered designations will be traffic lanes, medians, shoulders, interchanges, intersections, underpasses, overpasses, cycle/pedestrian connections, stormwater infrastructure, landscaping, ancillary motorway infrastructure and road construction.

2.4 The application for the NA/QEII Drive Project [4] identified the following objectives of the NoR:

(a) Improving travel times and predictability of travel time from the north to the Port of Lyttelton and Christchurch CBD, thus enhancing national economic growth and productivity;

(b) Improving opportunities on the existing roading network for a more sustainable land use and transport integration, for example public transport improvements and walking and cycling;

(c) Improving local access on the existing road network and social amenity thereby giving effect to the broader urban development strategy outcomes;

(d) Improving safety through the development of new infrastructure to current standards and reducing exposure at existing points of potential conflict;

(e) Ensuring integration with elements of the Christchurch Northern Access Transport Investigation (**CNATI**); and

[3] Pg. (x), NZTA. Christchurch Northern Arterial & QEII Drive 4-Laning. Notice of requirement for Alterations to Existing Designations May 2012.
[4] Ibid. Section 1.1, pg. 3-4.

(f) Comply with the objectives of the New Zealand Transport Strategy 2008 (**NZTS**) and the Land Transport Management Act 2003 (**LTMA**) and the RMA.

2.5 As noted in the application[5], and amplified by Ms Markham-Short[6], a small portion of the land within the NoR is required solely for construction purposes (9.2 hectares (**ha**)). The Applicant has signalled that the designation would be uplifted over this area once it has fulfilled its temporary purpose. In addition, the Applicant advised that the existing designation would be uplifted from a further 11.68 ha of land that would no longer be needed for state highway purposes.

2.6 We note that this uplifting would be subject to a subsequent (and largely administrative) process[7] to this current exercise. We note the final conditions agreed between the CCC and the Applicant, presented to us in Mr Smith's closing submissions, would ensure that this process is completed within specified timeframes. This being the case, our evaluation of the actual and potential effects of the proposal must acknowledge that the spatial area of the designation dedicated solely to construction activities, and the activities enabled within that area, are temporary only. We discuss this in further detail later in this report.

2.7 The NA/QEII Drive Project has been detailed in the application documentation and the CCC s42A report prepared by Ms Markham-Short. We adopt[8] those descriptions for the purposes of this report.

2.8 Having appraised ourselves of those descriptions, our understanding of the project is that the NA/QEII Drive Project will consist of (in summary) a four lane, limited access motorway with medians, shoulders, barriers and lighting including:

- Interchanges and intersections;
- Realignment (Prestons Road and Guthries Road) and stopping of existing roads (Ford Road and Factory Road);
- Rail and road overpasses;
- Road, pedestrian and cycle underpasses;
- Cycle and pedestrian connections;
- Bridges and culverts;
- Stormwater control including swales and retention basins; and
- Landscaping including earth bunding/planting of trees, shrubs and ground cover.

2.9 The Northern Arterial designation is currently and will remain approximately 6.9 kilometres (**km**). The existing section of QEII Drive which is the subject of the requirement, is approximately 3.2 km in length. It is proposed QEII Drive will be widened on the north side.

[5] Pg. (x), *ibid.*
[6] CCC Section 42A Report, pg.7, para 16
[7] Section 182, RMA
[8] Under Section 113(3)(b), RMA

2.10 With the proposed alteration to the existing designations, 58.6 ha of additional land will be designated for road purposes and 9.2 ha for construction purposes. The requirement will apply to 97 parcels of land, which includes Crown Land, land owned by CCC, reserves and watercourses, existing road reserve and land in private ownership. A 'Land Requirement Schedule' listing the properties directly affected by the designation alterations and the land areas on each of these properties required for the road was included in the application documents and shown in the Designation Plans in Volume 'C'.

2.11 A 10 year lapse period is sought under s184 of the Act.

2.12 Notable features of the local environment include:

- the Ōtukaikino Reserve and wetland;
- the Ōuruhia Reserve;
- established residential areas, including Belfast, Redwood and Mairehau;
- land re-zoned from 'Rural' to 'Living G' (East Belfast and Highfield Park)
- St Bede's High School;
- Belfast Cemetery;
- Owen Mitchell Reserve;
- Styx River;
- Kaputone Creek;
- stormwater drains including Prestons Drain, Kruse's Drain and Horners Drain;
- a number of freshwater springs; and
- the South Island main trunk railway.

2.13 The application also included descriptions of the following associated projects:

- CCC's proposed NAE Project (including the Cranford Street Upgrade);
- NZTA's Western Belfast Bypass; and
- NZTA's Waimakariri River Bridge Widening.

Overview of the NoR for the Northern Arterial Extension/Cranford Street Upgrade

2.14 The NoR application for the NAE/CSU Project stated the designation is for roading purposes including, but not limited to:

> '*…the construction, operation, maintenance and upgrading of roading and associated facilities including associate stormwater facilities, and pedestrian and cycling facilities, including shared pedestrian and cycle ways and an overbridge, and ancillary activities such as earthworks, planting, lighting, signs and road safety structures'.*[9]

[9] Form 20 – CCC. Notice of Requirement for Designation – Northern Arterial Extension and Cranford Street Upgrade October 2013. Volume 1 of 2.

2.15 The designation of land between Winters Road and Cranford Street is to provide for the construction and operation of the NAE linking the Northern Arterial motorway with Cranford Street. The designation of land at the intersection of Cranford Street and Innes Road is to provide for the upgrade of Cranford Street to four lanes from the NAE to Innes Road.

2.16 The application for the NAE/CSU Project stated the primary objective of the project is '*Provision of a high quality transport route into Christchurch City as a continuation of the Northern Arterial'.* [10] NZTA also identified the following sub-objectives:

(a) To incorporate public transport (**PT**) priority treatment to deliver enhanced PT services for the region;

(b) To provide urban design and environmental management integration opportunities with CCC's integrated catchment management plans;

(c) Improve walking and on and off road cycling provision (by way of parallel cycle/walkway and linkages);

(d) Recognise objectives of the Christchurch Transport Strategic Plan (**CTSP**);

(e) Improve access and choice (public transport and active transport inclusive);

(f) Create safe, healthy and liveable communities;

(g) Support economic viability;

(h) Create opportunities for environmental enhancements;

(i) Provision of the optimal network solution to reflect the CTSP Strategic Network Guiding Principles, the Greater Christchurch Transport Statement and the Draft Christchurch Central Recovery Plan; and

(j) Provision of a safe transport solution based on the Safer Journeys Strategy.

2.17 The NAE/CSU Project has been detailed in the application documentation and the s42A report prepared by Ms Markham-Short. We adopt[11] those descriptions for the purposes of this report.

2.18 CCC seeks a 10 year lapse period to give effect to the new designation under s184 of the Act.

[10] Section 1.2, pg. 6, *ibid.*
[11] Under Section 113(3)(b), RMA

2.19 Having appraised ourselves of those descriptions, our understanding is that the NAE/CSU Project will consist of (in summary):

- A new four lane, median divided arterial road (NAE);
- The upgrade of Cranford Street to a four lane, median divided road, within the existing roading corridor; and
- Widening and upgrade of the Cranford Street and Innes Road intersection (together with the CSU).

2.20 The proposed NAE designation is approximately 1.16 km in length (Winters Road to Cranford Street) and will apply to 5.861 ha over nine parcels of land[12]. Land proposed for designation is owned by the Crown, CCC and privately. Two existing sections of road will be used for construction of the NAE.

2.21 The length of the CSU is approximately 700 metres (**m**), from the NAE to Innes Road. The CSU designation will apply to 0.9035 ha of land over 19 parcels of land[13]. All but one parcel of land is in private ownership and one existing road (Cranford Street) will be utilised in the CSU.

2.22 Notable features of the local environment include:

- established residential areas (Redwood, Papanui, St Albans and Mairehau);
- a natural stormwater ponding area known as the Cranford Basin;
- Cranford Street Fire Station;
- a mature English Oak tree protected by the City Plan (a notable tree);
- a number of freshwater springs; and
- rural, residential, lifestyle and commercial/business properties.

2.23 The application also included descriptions of the following associated projects:

- CCC's proposed Cranford Basin Stormwater Management Area; and
- NZTA's NA/QEII Drive Project.

2.24 This reflects the inter-relationship of the three Projects – a matter we return to later in our evaluation.

Overview of the NoR for the Cranford Basin Stormwater Management Area

2.25 The NoR application for the Cranford Basin Stormwater Management Area was bought about by CCC, as the Requiring Authority. The application stated the designation is for stormwater purposes including, but not limited to

[12] Section 6.2.1, pg. 39 – CCC. Notice of Requirement for Designation – Northern Arterial Extension and Cranford Street Upgrade. October 2013. Volume 1 of 2.
[13] Section 6.2.2, pg. 39, *ibid.*

'*…the construction, operation, maintenance and upgrading of stormwater detention and treatment facilities including the ancillary activities such as earthworks, planting and the provision of access'.*[14]

2.26 The designation of approximately 60 ha of land located between Winters Road and Cranford Street, and to the west of Cranford Street (referred to as the '**Cranford Basin Stormwater Management Area**') is to provide for the long term sustainable management of this part of the wider low-lying Cranford Basin (approximately 340 ha).

2.27 The application for the Cranford Basin Stormwater Management Area stated the following objective of the Project:

'To provide a long term sustainable solution to the management of the Cranford Basin area, in a manner that:

- *Identifies the existing ponding areas in the Cranford Basin areas;*
- *Integrates a multi-value approach to the provision and management of the stormwater network serving the Cranford Basin area;*
- *Manages water and land as an integrated resource;*
- *Preserves to the extent practicable existing topographic and natural features in the Cranford Basin including watercourses and wetlands; and*
- *Manages stormwater in an efficient, cost effective and affordable manner'.*[15]

2.28 In addition, the application stated –

'*The proposed stormwater works will assist to implement the strategies of key Council documents such as the SMP and the associated resource consents. Accordingly the project is reasonably necessary to achieve the Council's objectives in respect of stormwater management in the Styx catchment in particular and Christchurch as a whole given the proposed stormwater works will:*

- *Provide for the ongoing detention of stormwater;*
- *Provide for stormwater quality treatment;*
- *Provide for the 37,000m^3 compensatory storage lost as a result of the proposed NAE;*
- *Provide as far as practicable a natural solution in a cost effective manner;*
- *Give effect to key strategic documents and resource consents; and*
- *Enable the enhancement of ecosystem, iwi and recreation values.*

2.29 The Cranford Basin Stormwater Management Area has been detailed in the application documentation and the s42A report prepared by Ms Markham-Short. We adopt[16] those descriptions for the purposes of this report.

[14] Form 20 - CCC Notice of Requirement for Designation – Stormwater Purposes, Cranford Basin October 2013. Volume 1 of 2.
[15] Section 4.1, pg.11 – CCC. Notice of Requirement for Designation – Stormwater Purposes, Cranford Basin October 2013. Volume 1 of 2.
[16] Under Section 113(3)(b), RMA

2.30 CCC seeks a 10 year lapse period to give effect to the new designation under s184 of the Act.

2.31 Having appraised ourselves of those descriptions, our understanding of the proposal is that the Cranford Basin Stormwater Management Area will consist of (in summary):

- the creation of stormwater detention basins and treatment areas through 'skimming' of approximately 100-200 millimetres (**mm**) of the ground surface; and
- extensive landscaping within and around the basins, after construction is completed; and
- potential enhancement of ecosystem, iwi and recreation values.

2.32 The Cranford Basin Stormwater Management Area is generally bounded by Winters Road, Philpotts Road, the Upper Dudley Creek Diversion (**UDCD**), Grassmere Road and the rural/residential boundary north and south of Cranford Street. The area will consist of the 'Cranford East Basin' (east of Cranford Street) compromising 36 ha, 'Cranford West Basin' (west of Cranford Street) comprising 16 ha, and 'Cranford North Basin' (north of the proposed NAE) comprising 7 ha. The area to be skimmed for compensatory storage is within the Cranford East Basin.

2.33 Notable features of the local environment include:

- existing natural low lying stormwater ponding area;
- shallow groundwater;
- the UDCD;
- rural land;
- established residential areas and light industrial development;
- a number of freshwater springs; and
- a number of stormwater drains.

Lodgement of the Notices of Requirement

2.34 The NoR application for the **NA/QEII Drive Project** was lodged on 16 May 2012. Two information requests pursuant to s92 of the Act were made by CCC on 11 June 2012 and February 2013. The main features of the Project are described in the application documents, the Applicant's evidence, the CCC s42A report, and (briefly) above.

2.35 The application documentation[17] was extensive and comprised:

- a covering letter and Notice of Requirement;
- a description of the proposal and the existing environment;

[17] NZTA. Christchurch Northern Arterial & QEII Drive 4-Laning. Notice of requirement for Alterations to Existing Designations May 2012.

- an assessment of environmental effects;
- a statutory assessment;
- Technical Appendices 1-15[18]; and
- A document titled 'Further Information Request' (undated).

2.36 At the Applicant's request, the application spent periods of time on hold while further consultation and negotiation took place, and to allow for the associated CCC NoR applications to lodged. The application was eventually notified in accordance with s95C of the Act on 15 November 2014.

2.37 The NoR applications for the **NAE/CSU Project** and the **Cranford Basin Stormwater Management Area** were lodged on 6 November 2013. An information request pursuant to s92 of the Act was subsequently made by CCC on 20 December 2013. The main features of the Projects are described in the application documents, the Applicant's evidence, the CCC s42A report, and above.

2.38 The application documentation for both NoR was extensive and comprised:

<u>NAE/CSU Project</u>[19]

- a covering letter and Notice of Requirement;
- a description of the proposal and the existing environment;
- an assessment of environmental effects;
- a statutory assessment;
- Technical Appendices 1-8[20]; and
- a document titled 'Further Information Request' dated 16 October 2014.

<u>Cranford Basin Stormwater Management Area</u>[21]

- a covering letter and Notice of Requirement;
- a description of the proposal and the existing environment;
- an assessment of environmental effects;
- a statutory assessment;
- Technical Appendices 1-10[22]; and
- a document titled 'Further Information Request' dated 16 October 2014.

[18] Technical Appendices include reports related to ecology, consultation, cultural impacts, geotechnical, landscape and urban design, noise and vibration, stormwater, social impacts, air quality and bridges.
[19] CCC. Notice of Requirement for Designation – Northern Arterial Extension and Cranford Street Upgrade Volume 1 and 2. October 2013. Prepared by Beca.
[20] Technical Appendices include designation plans, a Final Scheme Assessment Report, proposed conditions and reports related to the Mahaanui Iwi Management Plan, freshwater springs and downstream traffic impacts.
[21] CCC. Notice of Requirement for Designation – Stormwater Purposes, Cranford Basin October 2013. Volume 1 and 2.
[22] Technical Appendices include designation plans, Integrated Catchment Management Plan for the Styx River/Puruakanui Area (SMP) Consent and Styx SMP Stormwater Discharge Consent Application and Decision; and reports related landscape, ecology, landownership, spring identification, options for stormwater mitigation of the NAE, options for managing the Cranford Basin stormwater plain, consultation and the Mahaanui Iwi Management Plan.

2.39 The NoR applications were notified in accordance with s95C of the Act on 15 November 2014, in conjunction with the NoR application for the NA/QEII Drive Project.

Overview of Resource Consent Applications

2.40 The 11 resource consents sought for activities associated with the construction and operation of the NoR Projects are described in the application, the Applicants' evidence, the ECan s42A report, and are summarised in Part C of this report.

2.41 The application documentation was extensive and comprised:

NZTA applications[23]

- a covering letter and a completed Form 9;
- a description of the proposal and the existing environment;
- an assessment of environmental effects;
- a statutory assessment;
- Technical Appendices 1-7[24] relating to stormwater, groundwater, aquatic ecology, terrestrial and avian ecology, cultural impacts, consultation and air quality; and
- plans and drawings[25].

CCC applications[26]

- a covering letter and a completed Form 9;
- a description of the proposal and the existing environment;
- an assessment of environmental effects;
- a statutory assessment;
- Technical Appendices 1-14 including plans, existing consents and reports relating to contamination, the Integrated Catchment Management Plan for the Styx River/Purākānui Area (**Styx SMP**), stormwater, groundwater, aquatic ecology, terrestrial and avian ecology, cultural impacts, consultation and air quality; and
- plans and drawings[27].

2.42 The resource consent applications for the activities associated with the NoR application for the NA/QEII Drive Project were lodged by NZTA on 28 July 2014. Further information was requested under s92 of the Act on 22 August 2014 and a response was provided by the Applicant on 14 October 2014.

[23] NZTA. Christchurch Northern Arterial & QEII Drive 4-Laning Regional Council Resource Consents Application – Volume 'A' Application & AEE.
[24] NZTA. Christchurch Northern Arterial & QEII Drive 4-Laning Regional Council Resource Consents Application – Volume 'B' - Technical Appendices
[25] NZTA. Christchurch Northern Arterial & QEII Drive 4-Laning Regional Council Resource Consents Application – Volume 'C' – Plans and Drawings
[26] CCC. Northern Arterial Extension and Cranford Street Upgrade and Associated Stormwater Works – Resource Consent Application Volumes 1 and 2 dated September 2014. Prepared by Beca.
[27] NZTA. Christchurch Northern Arterial & QEII Drive 4-Laning Regional Council Resource Consents Application – Volume 'C' – Plans and Drawings

2.43 The resource consent applications for the activities associated with the NoR applications for the NAE/CSU Project and Cranford Basin Stormwater Management Area were lodged by CCC on 11 September 2014. Further information was requested under s92 of the Act on 29 September 2014 and a response was provided by the Applicant on 24 October 2014. The resource consent applications were all publicly notified on 15 November 2014, concurrently with the NoR applications.

2.44 Consent durations sought by the Applicants are 13 years for temporary construction related activities and 35 years for permanent operational activities.

2.45 In addition to the resource consents sought, consent from CCC for the disturbance of contaminated soil is also required for the Projects under the National Environmental Standard for Assessing and Managing the Contaminants in Soil to Protect Human Health (**NES Soil**). We were told at the adjournment of the hearing on 8 June 2015 that both NZTA and CCC had recently been granted these consents.

2.46 Ms Brown informed us that an application for an Archaeological Authority from Heritage New Zealand for works that modify, damage or destroy archaeological sites would be lodged when an archaeological assessment had been completed.

Consultation

2.47 The NoR applications and resource consent applications included summaries of the consultation undertaken by the Applicants prior to lodgement of the proposal.

2.48 The evidence of Ms McLeod addressed the Applicants' general approach to consultation, the phases of public engagement, consultation feedback and outcomes, post notification engagement with submitters, future engagement and comments on submissions. Ms McLeod detailed the consultation plans prepared for the Projects[28] and concluded that the consultation had been comprehensive and consistent with sound consultation practice.

2.49 In summary, public engagement and direct consultation with stakeholders included:

(a) High level engagement and consultation in relation to the Christchurch Northern Roading Options Scoping Study 1998-2002 (**NROSS** report);

[28] NZTA. Christchurch Norther Arterial & QEII Drive (SH74) 4-Laning: I & R Consultation Plan (August 2009, and updated in May 2010); CCC. Northern Arterial Extension (NAE), Cranford Street upgrade (CSU) and Cranford Basin Wetland Enhancement Consultation Plan for period March 2013 – March 2015 (March 2013 updated in September 2014 and March 2015); and NZTA. Christchurch Northern Arterial Specimen Design Consultation Plan (March 2013).

(b) Since 2010, multiple phases of public engagement including scoping[29], scheme development[30] and scheme refinement by NZTA and initial public engagement by CCC in November 2010[31];

(c) Identification of the preferred solution by NZTA in September 2011[32] and the project update in June 2013[33];

(d) Identification of the preferred option by CCC in June 2013[34];

(e) pre-notification NZTA and CCC project update in November 2014[35];

(f) ongoing dialogue with local parties and key stakeholders, including face-to-face meetings, a Project Advisory Group and Community Boards; and

(g) post-notification dialogue with submitters.

2.50 Prior to the hearing, and in accordance with our Minute issued on 4 March 2015, the Applicants undertook a comprehensive programme of ongoing discussions with submitters to resolve issues and have kept us updated weekly on progress. We appreciated those efforts.

2.51 Notwithstanding the above, we note that the matter of consultation was of particular concern for a number of submitters, including Dr Anna Stevenson, Ms Deborah Miller and Ms Jane Murray. We discuss this in further detail under our evaluation of key effects below in Section 5.

Notification and Submissions

2.52 The NOR applications were publicly notified on 15 November 2014 with the submission period closing on 19 December 2014[36]. A total of 108 submissions were lodged. A summary of the numbers of submissions to each NoR application was included in the CCC s42A report as follows:

[29] Distribution of a newsletter and freepost feedback form (85 received, formally acknowledged and database created), media release and meeting with Ministry of Education, CCC, Belfast Park Ltd, Waimakariri District Council, New Zealand Historic Places Trust and Mahaanui Kurataiao Limited.
[30] Newsletter and feedback form delivered to households. Meetings with stakeholders and directly affected property owners.
[31] Open Days and meetings with stakeholders, residents' groups and individuals.
[32] Newsletter delivered to 6000 households and mailed to contacts database (including stakeholders) informing of Best Practicable Option (BPO), noise assessment and proposed northern connection layout.
[33] Project update delivered to 6000 households and mailed to contacts database
[34] 'Have your say' newsletter delivered to 4000 recipients including households, directly affected parties and stakeholders and two public open days. Meeting with St Albans Residents Association (March 2013).
[35] Combined project update to over 10,000 households and stakeholders on details of the projects and notification of the applications lodged.
[36] The submission period was extended under s37 of the Act to 25 working days.

Application	**#**	**Application**	**#**	**Application**	**#**	**Application**	**Total**
Northern Arterial RMA92020038	**33**	**NAE/CSU RMA92024074**	**52**	**CBSMA RMA92024073**	**23**	**All applications**	**108**
Support	**5**	Support	**4**	Support	**3**	Support	**12**
Support in part	**5**	Support in part	**1**	Support in part	**-**	Support in part	**6**
Oppose	**15**	Oppose	**33**	Oppose	**14**	Oppose	**62**
Oppose in part	**4**	Oppose in part	**8**	Oppose in part	**3**	Oppose in part	**15**
Neutral	**2**	Neutral	**2**	Neutral	**2**	Neutral	**6**
Support in part/ Oppose in part	**2**	Support in part/ Oppose in part	**4**	Support in part/ Oppose in part	**1**	Support in part/ Oppose in part	**7**

2.53 The CCC s42A report noted that the submission form allowed submitters to comment on all three NoR applications by selecting all of the application reference numbers. It noted that while some submitters had selected two or three application reference numbers, the substance of the submission only relates to only one NoR application.

2.54 The submission topics ranged from general support, to full opposition, with the majority of parties raising specific issues to be managed, including noise, air pollution, visual and landscape effects, amenity and safety effects, roading design, downstream traffic effects, social impacts, cultural impacts and inadequate consultation. A summary of submissions to the NoR applications is attached to this report as **Appendix 3**.

2.55 The resource consent applications were notified on 15 November 2015, concurrently with the NoR applications.

2.56 The submission breakdown from the ECan s42A report was as follows:

- Thirteen submissions were received in total;
- Ten submissions related to both suites of applications, with five submissions in support and five in opposition to the application;
- One submission related to the NZTA applications only, with conditional support of the application; and
- Two submissions related to the CCC applications only, with both in opposition to the application.

2.57 The submission topics included construction effects, ecological effects, social impacts, property access and parking effects, traffic effects, landscaping and visual

effect, cultural impacts, climate change, noise mitigation, economic costs and viability, positive effects on flooding, effects on flood protection infrastructure and the need for land acquisition.

2.58 A summary of submissions to the resource consent applications is attached to this report as **Appendix 4.**

3.0 HEARING PROCESS

Pre-Hearing Process

3.1 Prior to the hearing, we familiarised ourselves with the NoR applications and the resource consent applications, and the submissions received. We recognised at this stage that the hearing process could benefit from pre-hearing dialogue between the Applicants and submitters. We were also in discussion with Council Officers at this time to make formal arrangements for the hearing, including a timetable for delivery of the s42A reports, pre-circulation of evidence, and the dates for the formal hearing proceedings.

3.2 To affect some progress on these matters, we circulated **Minute #1** to all the parties on 4 March 2015.

3.3 In addition to addressing the timeframe for circulation of the s42A reports, the hearing process and requesting submitters to indicate their attendance or otherwise at the hearing, this minute stated our preference for pre-hearing meetings and conferencing to be undertaken between parties. Our preliminary review of the submissions indicated that conferencing may be beneficial to address the following issues:

- access and operational arrangements (including traffic safety);
- amenity (noise, vibration and glare) and property effects;
- iwi/cultural matters; and
- drainage and stormwater effects.

3.4 In the Minute, we noted that the pre-hearing conferencing would not predetermine our view on the applications, but would help focus us on the key issues in contention. Specifically, we sought a clear picture of the matters where submitters and the Applicants were in agreement and in disagreement. We noted that an outcome of conferencing may be joint statements from the parties or indications of the specific conditions that should be applied to manage effects in the event the applications are confirmed and/or granted.

3.5 In response to concerns raised regarding the timeframe for the pre-circulation of evidence, we issued **Minute #2** on the 9 March 2015 which:

(a) made amendments to the timetable for both the s42A officers and submitter experts; and

(b) encouraged the parties to use the additional time constructively for concerted consultation over those issues in contention.

3.6 We requested the Applicants provide us with weekly updates on the pre-hearing discussions and conferencing.

Outcome of Pre-Hearing Discussions

3.7 As a preamble to this section, we wish to record our gratitude to all parties for responding positively to the directions in Minutes #1 and #2. The Applicants have demonstrated good practice in engaging and co-ordinating responses in conjunction with the other parties, and in relaying feedback to us in a timely manner. From what we gather, all submitters also engaged in good faith and we were pleased to see some issues resolved prior to the hearing commencing. It is not always the case with matters such as this that parties are willing to conduct such dialogue, and all parties are to be commended for their efforts.

3.8 With that said, we note that the ongoing consultation between the Applicants and submitters following notification resulted in the following resolutions:

Withdrawal of submission

- Mr Robert Sherlock; and
- Belfast Business Park Ltd.

Withdrawal of right to be heard at the hearing

- Department of Conservation and Lamb & Hayward Funeral Directors
- St Albans School;
- Small World Pre-school
- Canterbury Regional Council's Regional Engineer; and
- Mr Clinton Minchington (ECan resource consents only)

3.9 On the above basis, we have not assessed the concerns raised in those submissions which have been withdrawn (e.g. Mr Sherlock and the Belfast Business Park). We note also those submissions generally supporting the applications and take these into account.

3.10 For those submitters that did not appear in support of their respective submission, we record we have still had regard to the submissions in reaching an overall view on the applications and the various issues in contention.

Section 42A Reports

3.11 The CCC s42A report was prepared by **Ms Ruth Markham-Short**, a Planner with the CCC. Her report provided an analysis of the matters requiring our consideration for each NoR application, including proposed conditions to mitigate against actual and potential adverse effects, and a summary of submissions.

3.12 Ms Markham-Short recommended that the NoR applications for the NA/QEII Drive Project and the Cranford Basin Stormwater Management Area should be confirmed subject to conditions. In relation to the NAE/CSU Project, she stated she could not recommend it should confirmed until potential adverse effects on downstream traffic flows and safety issue related to the cross-section of Cranford Street were adequately mitigated.

3.13 The following documents were also appended to the CCC s42A report:

- An 'Environmental Health Assessment' by Mr Russell Malthus;
- A Statement of Evidence in relation to traffic and transport planning by Mr Paul Roberts; and
- A 'S42A Landscape Report' by Mr Andrew Craig.

3.14 The ECan s42A report was prepared by **Mr Daniel Murray**, a Principal with AECOM Consulting Services (NZ) Ltd. His report provided an analysis of the matters requiring consideration for both the NZTA and CCC resource consent applications, including proposed conditions to mitigate against actual and potential adverse effects and a summary of submissions.

3.15 He recommended that the resource consent applications could be granted subject to conditions. Appended to the report were technical reviews of the application by Mr Andrew Tisch (stormwater), Ms Michelle Stevenson and Dr Duncan Gray (surface water quality and ecology), and Mr Matt Dodson (groundwater).

3.16 We were advised that both s42A reports were circulated to all parties on 1 April 2015, thereby meeting the statutory requirement to be circulated no less than five working days prior to the start of the hearing.

Pre-circulation of Evidence

3.17 On 8 April 2015, eight working days prior to the start of the hearing, the Applicants provided advance copies of evidence to be presented by its representatives and advisors. On 15 April 2015, three working days prior to the start of the hearing, submitters calling expert witnesses provided advance copies of their evidence.

3.18 This pre-circulation allowed for much of the evidence to be taken as read at the hearing, which made for a more focussed, effective and efficient hearing process.

Site Visits

3.19 We conducted a preliminary site visit on 20 April 2015, the day before the hearing commenced. We were accompanied by Mr Richard Shaw, a Project Manager for NZTA, and Mr John Denney of Opus Consultants; neither of whom were directly involved in the proceedings. We gained an overview of all the NoR Projects starting from the Waimakariri Bridge through to the Cranford Street/Innes Road intersection. We visited individual properties, as requested by some submitters, and walked Cranford Street from Winters Road to Innes Road. This preliminary site visit was a most useful exercise to provide some 'on the ground' context of the proposal and the respective issues raised by submitters.

3.20 We undertook a second site visit early in the morning on 1 May 2015. We returned to observe peak hour traffic volumes along Cranford Street, Innes Road, Main North Road, Marshlands Road, QEII Drive and the Northern Arterial motorway. We also viewed part of Fendalton Road and Curletts Road.

Hearing

3.21 The hearing was initially conducted in the conference room of the Christchurch YMCA in Cashel Street on from 21 April to 1 May 2015. The hearing was re-convened for one day on 8 June 2015 in the Great Hall at the Chateau on the Park in Kilmarnock Street. The full list of appearances made at the hearing is outlined at the beginning of this report.

3.22 The following is a brief précis of the hearing sequence and presentations. We draw on this information in our evaluations in Parts B and C of this report.

Applicants' Case

3.23 **Mr Kerry Smith**, Counsel with Buddle Finlay, conducted the case for the Applicants and was assisted by **Ms Celia Olds,** Counsel. Mr Smith presented an opening address and legal submissions in relation to all of the applications lodged. He outlined the key features and statutory context of each of the NoR Projects, the statutory framework of the designations, the assessment of effects, conditions, Part 2 of the Act, the resource consents, the s42A reports and submissions. He concluded that the NoR applications are robust, fit for purpose, and satisfy Part 8 and Part 2 of the Act; and therefore should be confirmed, without modification, subject to conditions. He also concluded that the resource consents sought should be granted.

3.24 Mr Smith tabled two joint statements in relation to potential downstream effects and the cross-section of the CSU[37]; and a memorandum (dated 20 April 2015) from Mr Tisch and Ms Stevenson (on behalf of ECan) outlining areas of agreement and outstanding issues in relation to the resource consent applications and stormwater matters.

3.25 Mr Smith closed his submissions with an introduction of the experts to present statements of evidence on behalf of the Applicants. He noted that some witnesses appeared for both the NZTA and CCC, while others appeared for either NZTA or CCC.

3.26 A brief summary of what we heard from these witnesses is provided immediately below.

3.27 **Mr Michael Blyleven,** the Transport Planner Manager for NZTA in the Canterbury and West Coast Regions, appeared for NZTA. His evidence focussed on strategic transportation planning matters, and in particular how the NA/QEII Drive Project fits within, and is an important part of, the wider Northern access package to provide transport and urban amenity improvements through the northern area of Christchurch, including public transport routes, cycle route improvements and other roading improvement by NZTA, CCC or ECan. Overall, he considered the proposal would meet the Project objectives for:

- improving travel time and predictability;
- improving opportunities on the existing network for more sustainable land use and transport integration[38];
- improving local access on the existing network and social amenity[39];
- improving safety[40]; and
- ensuring integration with the Christchurch Northern Access Transport Investigation 2009 (**CNATI**) and protection the long term function of the State Highway.

3.28 Mr Blyleven gave an overview of the strategic transport and planning policy context, including consideration of how the proposal 'fits' with major strategic instruments; namely the Government Policy Statement for Land Transport Funding, the Canterbury Regional Land Transport Strategy, the Greater Christchurch Urban Development Strategy (**UDS**), Land Use Recovery Plan (**LURP**), Christchurch Transport Strategic Plan (**CTSP**) and the Greater Christchurch Transport Statement (**GCTS**). He

[37] 'Joint statement by Mr Adam Taylor and Mr Paul Roberts as to an agreed downstream effects and property amenity traffic management plan for CCC' (dated 17 April 2015) and 'Joint statement by Mr Adam Taylor, Mr Paul Roberts and Ms Shelley Perfect on cross-section alternative for CCC' (dated 20 April 2015).

[38] By reducing traffic flows on Main North Road in Belfast to enable improved public transport and cycling options.

[39] By reducing traffic flows on Main North Road and Marshlands Road thereby improving local access and reducing social severance.

[40] By providing new infrastructure with controlled access and safe system design features, a separate cycling facility and reduced traffic and conflicts in urban areas.

concluded the Project was consistent with land use growth and transport policy framework within which it would operate.[41]

3.29 **Mr Matthew Taylor**, a Project Manager and Design Manager for Opus International Consultants ('Opus'), gave evidence for NZTA. His evidence focussed on Project design, Project objectives, design philosophy and standards, and assessment of alternatives. He concluded a robust approach had been adopted to develop and assess the Project for consistency with the Project objectives of NZTA, and to respond appropriately to environmental factors. He confirmed that development and design had involved technical input on environmental, social and cultural matters.

3.30 Supplementary evidence from Mr M. Taylor was tabled at the reconvened hearing (8 June 2015) addressing the cost of noise mitigation along the boundary of the designation with the Grimseys Road properties.

3.31 **Mr Adam Taylor**, a Senior Transportation Planner with CCC, presented evidence for CCC. His evidence outlined the background and history of the NAE/CSU Project, current and likely future performance of the transport network, statutory and non-statutory polices and strategies, alternatives, traffic and transportation implications, downstream effects and submissions. He concluded NAE/CSU Project in combination with the NA/QEII Drive Project would address transport problems in the north of Christchurch and provide substantial benefits for the transport network.

3.32 Further evidence in reply by Mr A. Taylor to the evidence of Mr Penny (dated 17 April 2015) was provided in relation to the proposed roundabout at the NAE and Cranford Street intersection. Appended to his evidence was a copy of the NROSS report.

3.33 A further statement of evidence by Mr A. Taylor (dated 22 May 2015) was presented at the reconvened hearing on 8 June 2015. This evidence replied to the statement of evidence by Mr Roberts and addressed the proposed design standard of the CSU.

3.34 **Ms Shelley Perfect**, a Principal Transportation Engineer with Opus, presented evidence for CCC. Her evidence described the NAE/CSU Project and addressed alternatives, achievement of objectives, geometric design, property access effects, road safety, construction effects, and submissions. She concluded the preferred route, alignment, cross-section, cycling and pedestrian facilities, and intersection form, best achieves the Project objectives when taking into account network performance, engineering advantages, social, environmental, and economic effects.

3.35 Further evidence in reply by Ms Perfect to the evidence of Mr Penny and Dr Trevathan was provided in relation to turning restrictions in the CSU and noise effects at 128 Winters Road (Hayward and Murphy), respectively.

[41] There was no evidence contesting Mr Blyleven's strategic presentation and in fact Ms Markham-Short's s42A report confirmed his analysis of strategic fit.

3.36 A further statement of evidence by Ms Perfect (dated 18 May 2015) was presented at the reconvened hearing on 8 June 2015. This evidence addressed specific design related matters in the CSU, and provided information on the recent Curletts Road improvements and options for mitigating property access at 209A Innes Road (Leith property).

3.37 **Mr John Row**, a Senior Transport Planner with Beca, presented a statement of evidence for NZTA and CCC. His evidence summarised the Project details, the methodology used in the 'Integrated Transport Assessment', conclusions reached by the assessments and submissions. He concluded that with the mitigation designed into the Projects and conditions, downstream effects would be mitigated and offset by the wider regional and city wide transportation benefits.

3.38 **Mr Jon Farren,** an Acoustic Consultant and Principal of Marshall Day Acoustics, presented evidence for NZTA and CCC. His evidence focussed on potential traffic noise effects associated with the operation of the NA, NAE, QEII Drive and CSU after construction; and noise and vibration through the construction phase of the Projects. He outlined his methodology and approach to traffic noise assessment, predicted noise level changes, traffic noise from the existing designation, construction noise and vibration, and conditions.

3.39 A supplementary statement of evidence presented by Mr Farren (dated 20 April 2015) addressed the evidence of Dr Trevathan in relation 128 Winters Road and New Zealand Standard (NZS) 6806 application of 'Best Practicable Option' (BPO), reasonable noise levels, and adverse effects. A second supplementary statement of evidence by Mr Farren (dated 10 April 2015) responded to questions from us in relation to traffic noise from the existing designation and updated noise category plots for Category B and C[42] assessment locations along the Projects.

3.40 **Mr David McKenzie**, a Technical Principal – Landscape Architecture with Opus, gave evidence for NZTA and CCC. His evidence outlined the 'Landscape Assessment' prepared as part of the 'Scheme Assessment Report' (SAR), including potential landscape and visual effects, the produced visualisations, urban design aspects, submissions and the CCC s42A report. He concluded that with the mitigation proposed the landscape, visual and urban design effects of the Projects would be acceptable, and he agreed with the CCC s42A report conclusions. Appended to his evidence were a number of figures and photos, and photo visualisations. Mr McKenzie also usefully provided further information in response to our request in relation to examples of the structures and planting with other roading projects in Christchurch that would be akin to the elements associated with these Projects.

3.41 **Mr Stephen Bensberg**, a Civil Engineer with LG Consulting Ltd, presented evidence for CCC. His evidence described the Cranford Basin Stormwater Management Area project, the existing environment, the stormwater network, options for stormwater

[42] NZS 6806 noise assessment categories

management and mitigation, an analysis and selection of options, benefits of the preferred option, and the NAE and compensatory storage. His evidence included 3D images of the Cranford Basin, photographs of historical flooding, plans of the existing drain network and maps showing computer modelled flood extent.

3.42 **Mr Ken Couling**, a Civil Engineer with CCC, presented evidence for CCC. His evidence focussed on the designation of the Cranford Basin, and stormwater treatment and disposal for the NAE/CSU Project. He described the history of the site, the Styx SMP and the CCC's catchment wide Discharge Permit[43], consideration of scheme options and why the designation is needed. His evidence included 3D images of the Cranford Basin and photographs of historical and recent flooding in the Basin.

3.43 **Dr Antony Shadbolt**, a Landscape Architect with the CCC, gave evidence for CCC in relation to the NAE/CSU and Cranford Basin NoRs. He focussed was in relation to existing landscape and terrestrial ecology values, potential effects, the role of the Cranford Basin in city-wide wildlife management, the incorporation of iwi values, submissions and the s42A reports. He concluded that strategic location of the Cranford Basin as a 'hub' for bush birds and a restored natural environment would provide a broad range of public benefits and natural resources (including mahinga kai) for many hundreds of years. He emphasised these significant and measurable ecological benefits would only occur if the Projects were to go ahead.

3.44 **Ms Katherine Purton**, a Civil Engineer with Beca, presented evidence for both NZTA and CCC. Her evidence addressed stormwater management (including conveyance, treatment, attenuation and disposal), conveyance of waterways across the arterial/road alignments, and floodplain management for operation, maintenance and construction. She explained the different approaches to proposed stormwater management by NZTA and CCC, mitigation of stormwater effects, compensatory storage to offset flood plain storage, management of construction stormwater to provide erosion and sediment control, operation and maintenance of the stormwater system, and recommended conditions. Appended to her evidence were maps of waterways and concept design plans and tables.

3.45 A supplementary statement of evidence was provided by Ms Purton (dated 30 April 2015) addressing discussions with Mr Tisch in relation to the BPO for operational stormwater discharges from the NA, and the difference in performance (i.e. the water quality discharged) between the NA approach and the Styx SMP approach. She also helpfully set out areas of agreement and the outstanding issue of the water quality effect of not providing for wetland polishing of operational stormwater discharges from the NA.

3.46 **Mr Roger MacGibbon**, a Principal Ecologist with Opus, presented evidence for both NZTA and CCC in relation to assessment of ecological effects, significant ecological values and recommended mitigation for all the Projects. He outlined the

[43] Discharge Permit CRC131249 is held by CCC for stormwater discharges from the area covered by the Styx SMP.

methodology of the ecological assessment (terrestrial and avian, and aquatic) and described the existing ecology of the site (including the Ōtukaikino wetland and drains, Kaputone Creek, Styx River, QEII Drive and drains, and Cranford Basin). He considered the greatest potential adverse ecological effect of the Projects could be the release of elevated suspended sediment loads, potentially contaminated with heavy metals during construction works. To mitigate any potential effects he recommended development and implementation of an 'Erosion and Sediment Management Plan', and fish capture and relocation if stream diversion or dewatering occurs.

3.47 **Mr Michael Thorley**, a Hydrogeologist with Beca, gave evidence for both NZTA and CCC. His evidence characterised the existing hydrogeology, springs, groundwater levels and groundwater soakage conditions at the Project sites, assessed potential effects on groundwater, and proposed conditions. He noted one man-made spring 'Trough Spring' potentially affected by the NA works, 2-3 springs in the NAE alignment that would be covered up, and enhancement of springs in the Cranford Basin. Appended to his evidence was a copy of a document titled 'CCC Northern Arterial Extension Consent Application – Dewatering, accidental artesian aquifer interception, and spring framework' prepared for CCC by Mr Thorley.

3.48 **Ms Ainsley McLeod**, a Technical Director – Planning with Beca, presented evidence for NZTA and CCC in relation to consultation undertaken for the Projects. Her evidence outlined the general approach to consultation, an overview of the phases of public engagement, consultation feedback and outcomes, post notification engagement with submitters, future engagement and comment on submissions. She concluded a range of engagement methods had been used on numerous occasions and that ongoing consultation had occurred with directly affected parties, iwi and key stakeholders. She noted that feedback from consultation had informed the development of the Projects and ultimately the proposed design.

3.49 A supplementary statement of evidence by Ms McLeod (dated 20 April 2015), responded to the evidence by submitters Dr Stevenson and Ms Murray in relation the adequacy of the consultation, sufficiency of information and opportunities for future consultation.

3.50 **Ms Stephanie Brown**, a Principal Planner for Opus, presented planning evidence on behalf of NZTA in relation to NA/QEII Drive Project. Her evidence addressed the statutory framework, other statutory approvals required, assessment of environmental effects, assessment against policy and planning documents, a RMA Part 2 analysis, submissions, the s42A reports and proposed conditions. She concluded that the Project would promote the sustainable management of natural and physical resources because it would contribute positively to the sustainable management of the transport network; and would enable wider Christchurch and local communities to provide for their social and economic well-being. Appended to her evidence was proposed NoR conditions and resource consent conditions for the NA/QEII Drive Project.

3.51 **Mr Paul Whyte**, a Senior Planner and Associate of Beca, gave evidence for CCC in relation to the NAE/CSU Project and the Cranford Basin Stormwater Management Area. His evidence described the Projects and their relationship, and outlined the statutory framework, actual and potential effects, relevant provisions of the statutory and non-statutory documents, alternative sites, routes and methods, the necessity for the works in achieving the objective of the Projects, Part 2 of the Act, submissions and proposed conditions. He concluded the Projects would enable an integrated approach to the development of strategic sites and that this was anticipated in a number of policy documents; result in positive effects on the transport infrastructure and secure an area for stormwater treatment and storage, and ecological restoration; and adequately mitigate localised adverse effects. He considered the Projects would achieve sustainable management in terms of Part 2 of the Act. Appended to his evidence was proposed NoR conditions and resource consent conditions for the CCC's two Projects.

3.52 **Dr (Charles) Nicholas Taylor**, a Principal and Director of Taylor Baines and Associates, gave evidence for CCC in relation to social effects and mitigation at the reconvened hearing on 8 June 2015[44]. His evidence drew on the 'Social Impact Assessment 2013' (SIA) included in the application documentation. He commented on the existing environment, wider benefits (wider urban area and regional economy), social severance, amenity values, active and public transport, safety effects, property access effects, effects on local roads and the s42A report. He concluded the Projects would provide net social benefits to the social and economic well-being of the wider community.

3.53 Although not required at the hearing, **Ms Camilla Needham**, a Senior Associate in Environmental Engineering with Beca, provided a statement of evidence for NZTA and CCC addressing potential air quality effects.[45] Her evidence outlined the assessment undertaken in accordance with the relevant Ministry for the Environment (**MfE**) guidance, including atmospheric dispersion modelling of vehicle emissions. She concluded that operation of the Projects would result in exposure levels that comply with MfE standards and guidelines for carbon monoxide, nitrogen dioxide and benzene, and a minor effect on fine particles[46]. She noted people living close to the southern end of Cranford Street and QEII Drive corridors would have slightly increased exposure to vehicle related contaminants, but that there would be some wider network related improvements in air quality due to decreases in traffic on parallel routes.

[44] We noted during the hearing that this evidence was not pre-circulated before the hearing and questioned Mr Smith as to whether this should be considered as 'new' evidence, allowing for further comment from the parties. Mr Smith was of the view the evidence was not new material and was drawn from the application documentation and SIA. Having considered the matters addressed by Dr Taylor we are satisfied the information was included in the application documentation.

[45] Ms Needham did not appear at the hearing, as we indicated we had no questions in relation to her evidence.

[46] PM_{10} and $PM_{2.5}$

3.54 **Mr Phillip Ware**, a Senior Associate of Beca, also did not attend the hearing, but provided a statement of evidence for CCC in relation to contaminated land issues in the Cranford Basin.[47] His evidence assessed contamination from horticultural and agricultural land use activities, and previously known spills of fuel and herbicide. He noted soil sampling and testing showed no contamination existed at concentrations likely to lead to a human health risk, but that some contaminants present could pose a risk to surface waterways if released. He concluded that with the mitigation proposed any adverse effect on human health and the environment would be no more than minor.

Submitters

3.55 **Dr Anna Stevenson** spoke on behalf of the **Canterbury District Health Board's** (**CDHB**) submission in relation to all the Projects. She tabled a written brief of evidence outlining key issues and recommendations, including provision of infrastructure for all modes of transport, the need for simultaneous investment in infrastructure for all modes of transport, and safety and well-being concerns with the CSU. She emphasised that the community's health and well-being is primarily determined by social, cultural, economic and environmental factors which lie outside and beyond the control of the health sector; and the consequential need for organisations to work together to improve health and well-being outcomes.

3.56 **Ms Jane Murray** spoke to her submission and the submission of **Ms Deborah Miller** in relation to the NA/QEII Drive and NAE/CSU Projects. Her written statement addressed safety and well-being concerns with limiting access to Knowles Street, Weston Road and McFaddens Road, and the safety of the cross-section of the CSU. She outlined concerns relating to downstream traffic effects of the Projects on residential streets in St Albans and the need for traffic calming measures from the onset. She considered the consultation undertaken was inadequate, the application documentation was inaccessible for lay people, and the timing of the notification (prior to Christmas) was poor.

3.57 **Mr Hamish Wheelans**, a Director of **GW Cranford Ltd**, spoke to the company's submission in relation to the NAE/CSU Project. The company owns properties at 77-79 McFaddens Road, and 291, 293 and 297 Cranford Street, which are affected by the proposed turning restrictions in the CSU. He outlined discussions with CCC regarding the provision of a right hand turn and U-turn facility to provide access to their properties.

3.58 **Mr Anthony Penny**, a Director of Traffic Design Group Ltd, presented a statement of evidence for GW Cranford in relation to property access effects. His evidence outlined support for the potential relocation of a southbound-northbound U-turn facility outside 293 Cranford Street and a northbound-southbound U-turn north of the Placemakers' drive. He expressed concern regarding the speed of southbound

[47] Mr Ware did not appear at the hearing, as we indicated we had no questions in relation to his evidence.

traffic on the slip lanes from the NAE into the CSU and the ability to manage speed, and the choice of a roundabout at the intersection with his preference being a signalised intersection[48].

3.59 **Mr John Allen**, a resident living on Cranford Street, close to the Cranford Street/Innes Road intersection, gave an oral presentation in opposition to the Projects. He outlined concerns with the voluminous nature of the application documentation, inadequate consultation, the poor timing of notification (prior to the busy Christmas period) and the insufficient notification period (four weeks). He expressed frustration at the Projects given the lifting of the designation (south of Innes Road) in 1996 and the adverse effect it would have on plans to revitalise the area. He presented photographs showing ongoing illegal parking and stopping outside his property and noted the Projects would make access to his property from the north difficult.

3.60 **Mr Dirk De Lu** spoke to the submission in opposition to the Projects by **Spokes Canterbury.** He stated the Projects were NOT a solution to a problem, but rather a problem itself. He considered the Projects would encourage more one passenger journeys and would come at the sacrifice of the St Albans community. He questioned whether the public transport and cycling benefits would occur simultaneously and emphasised the need move the focus from vehicles.

3.61 **Dr Anthony Raizis** spoke to his submission in opposition to all the Projects and gave a Powerpoint presentation on the effects of climate change[49]. He emphasised the need to reduce emissions, and to consider sea level rise and flooding when planning new infrastructure.

3.62 **Mr Ian McKenzie,** a long-term St Albans resident, appeared as witness for Dr Raizis. He expressed concern that all the options considered were roadways and that other options needed to be considered. He noted concerns regarding community severance, the unsafe CSU cross-section and stormwater management.

3.63 **Ms Francine Bills**, a long-term Mersey Street resident, presented a written statement titled 'What Price Community Cohesion?' in support of her submission in opposition to all of the NoR and resource consent application from a social and community point of view. She raised concern that if successful, the Projects would make it harder to stop 'Stage 2' of the CSU (south of Innes Road). She highlighted the features of the community that create unity, a sense of community cohesion and pride, safety concerns, air quality effects and rat-running. She questioned the need for a route to the CBD since the earthquakes had change commuter destinations.

[48] We note these concerns were outside of the scope of the submission by GW Cranford and therefore disregard these additional concerns raised by Mr Penny.

[49] We note that section 7(h) of the RMA requires us to consider the effects **of** climate change in relation to the applications. We informed Dr Raizis at the hearing that we are prevented from considering the effects of the proposal **on** climates change.

3.64 **Mr Nicholaus Hermanspahn**, a Warrington Street resident, spoke to his submission in opposition to the NAE/CSU Project. He noted concerns regarding insufficient consultation, the 'incomplete' nature of the proposal, questions asked in the traffic modelling (and whether changes since the earthquakes had been taken into account), community cohesion, consideration of public transport and cycling, and downstream effects.

3.65 **Mr Anthony Hughes-Johnson**, Counsel for **Mr Hayward and Ms Murphy**, presented legal submissions in opposition to the CCC NoR applications and the resource consent applications. His submissions covered insufficient and ineffective consultation, noise effects at 128 Winters Road, the treatment of NZS 6806 and its relationship with the provisions of the RMA, the Waterview Connection Proposal, the Transmission Gully Proposal, the Peka Peka Expressway Project[50], the s42A reports, the permitted baseline, the taking of land for stormwater treatment and detention, and section 171 of the RMA. In response to questions regarding our jurisdiction over matters of land acquisition, Mr Hughes-Johnson sought leave to file a memorandum.

3.66 Mr Hughes-Johnson presented additional legal submissions at the reconvened hearing. He outlined discussion with CCC regarding noise mitigation options and lack of agreement. He tabled additional information from Dr Trevathan in relation to the cost of various noise mitigation measures and sought leave to comment further on estimated costs.

3.67 **Mr Andrew Hayward**, gave evidence on behalf of himself and his wife **Ms Siobhan Murphy,** owners of the property at 128 Winters Road. His evidence outlined the engagement of legal counsel and a noise expert, background to purchase of the property and raised concerns with inadequate consultation regarding road alignment, lack of justification for the stormwater designation, noise effects and noise mitigation options.

3.68 **Dr Jeremy Trevathan**, an Acoustic Engineer and Director of Acoustic Engineering Services, presented a statement of evidence for Mr Hayward and Ms Murphy. His evidence addressed the role of NZS 6806, assessment of traffic noise effects, unreasonable noise, consideration of individual circumstances, comparison of the expected noise with the existing ambient noise environment, other guidance and mitigation options. He concluded that there would be a significant adverse noise effect at 128 Winters Road, which should be considered to be unreasonable and must be mitigated.

3.69 Dr Trevathan provided a supplementary statement of evidence (dated 24 April 2015) addressing the supplementary evidence of Mr Farren and Ms Prefect, and outlining additional ambient noise measurements undertaken at 128 Winter Road.

[50] Copies of the Final Report and Decision of the Board of Inquiry for Waterview, Transmission Gully and Peka Peka were appended to the legal submissions.

3.70 **Mr Alan Roberts**, a Cranford Street property owner and business owner, provided a written statement in support of his submission in opposition to the NAE/CSU Project. He considered the Project didn't make sense and was short-sighted. He noted concerns in relation to the downstream effects on Bealey Avenue, increased traffic flows on Cranford Street, and the loss of land with good soil to stormwater management. He suggested another bridge over the Waimakariri River should be investigated to split the traffic flows from the north and dispersion of traffic along parallel streets such as Philpotts Road and Rutland Street. He supported the CSU operating as 4 lanes and clearways, without the NAE.

3.71 **Mr Al Boa**, a resident and business operator on Cranford Street near the Innes Road intersection, spoke to his submission in opposition to the NAE/CSU Project. He highlighted the findings of the Beca report in relation to localised adverse effects and considered these had failed to be addressed. He considered there was no evidence of any positive benefits for Cranford Street or local businesses and residents. He emphasised concern regarding the safety of his property access, given the loss of the bus stop as a space to move into out of a traffic lane and with cyclists coming around the corner. He considered the CSU design was below standard, risky, short-sighted and inconsistent with CCC policy. He noted any increase in fatalities was unacceptable and questioned the wider benefits of the Projects without an upgrade through to Bealey Avenue.

3.72 **Mr Martin Meehan**, a resident of Cranford Street, spoke to his submission in opposition to the NAE/CSU Project and related resource consents. His concerns related to downstream effects, increased traffic noise, access from the Fire Station and lack of plans for Cranford Street south of Innes Road.

3.73 **Ms Aynsley McNab**, a Warrington Street resident, spoke to her submission in opposition to the NAE/CSU Project. She emphasised that the benefits of the Project were questionable and would further encourage single passenger car trips. She considered the Project was contrary to concept plans for the city, in provision for alternative modes of transport, and ignored future parking problems in the CBD.

3.74 **Mr Nick Leith**, a resident of Innes Road (very close to the Cranford Street/Innes Road intersection) spoke to the submission in opposition to the NAE/CSU Project on behalf of himself, his wife **Mrs Natasha Leith** and their two children. They were also supported by their brother/brother in law, **Mr Joe Stafford**. Following the upgrade of the intersection, their property will be the closest Innes Road property on the west side of the intersection and they will lose a small but significant portion of the frontage of their property, including off-street parking and manoeuvring space.

3.75 The Leiths expressed extreme concern about the loss of land (given the small size of their section), loss of off-street parking and safety for their children when getting in and out of the car. They were frustrated at the lack of consultation and options put forward by CCC to mitigate the loss of land. They noted other concerns with the

safety of the CSU cross-section, ground movement during construction, and increased air pollution.

3.76 **Mr Gerard Cleary**, Counsel for **Mr and Mrs Hsu**, presented legal submissions in relation to their submission in opposition to the Cranford Basin Stormwater Management Area NoR and the associated resource consents. He outlined that the key issues were the lack of consideration of alternatives to the designation of their land, the necessity of the designation, and lack of analysis regarding the impact of the designation on Mr and Mrs Hsu. He submitted it was unclear why the majority (up to 70%) of their property was required, as it is not required for the NAE. He noted the property would be the last to flood, and that the level and frequency of flooding hadn't been established by CCC. He submitted that if deemed necessary, Mr and Mrs Hsu would prefer an easement over their property.

3.77 **Ms Emma Twaddell**, the Co-Chair of the St Albans Residents' Association Incorporated (**SARA**)[51], gave an extensive verbal submission in opposition to the all the NoR Projects. She described the features of the St Albans community, the history of SARA, and the results of a 2012 survey. She outlined concerns regarding social impacts (community severance and cohesion), pedestrian and cyclist safety, downstream effects (rat-running), lack of integrated planning for high density living areas, lack of engagement and consultation with the affected community, credibility of the data, the need to address other modes of transport, and the weighting of social objectives to transport objectives in the Projects.

Section 42A Reporting Officers

3.78 As noted above, Ms Markham-Short prepared the **CCC s42A report**, and provided advice on planning matters (including conditions) at the hearing. Her report included input from the experts identified in paragraph 3.12 above. We have summarised their presentations below.

3.79 **Mr Andrew Craig**, a self-employed Landscape Architect, prepared a 'S42A Landscape Report', which formed part of the CCC s42A report. Overall, his report concluded that landscape matters had been comprehensively addressed through both Landscape Concept Plans and proposed conditions. He highlighted the importance of ensuring the extent, location and type of landscaping shown in the application is implemented and maintained.

3.80 **Mr Russell Malthus**, a Senior Environmental Consultant with Novo Group Ltd, prepared an 'Environmental Health Assessment', which formed part of the CCC s42A report. His report addressed construction effects (noise and vibration, management of contaminated soils, hazardous substances storage and use, and temporary

[51] We were told SARA was formed in 1966 and had approximately 74 volunteers and 250 members. A copy of the group's mission statement/constitution was provided by Ms Twaddell following her appearance at the hearing.

lighting) and operational effects (traffic noise and vibration, and roading and amenity lighting).

3.81 In relation to the construction effects of all the Projects, Mr Malthus concluded that any potential effects could be adequately addressed by conditions requiring implementation of the following specific management plans:

- Erosion Sediment and Dust Control Plan[52];
- Construction Noise and Vibration Management Plan;
- Hazardous Substances/Spill Contingency Plan; and
- Contaminated Land Management Plan[53].

3.82 In relation to the operational effects of the NA/QEII Drive Project, Mr Malthus concluded that the imposition of conditions would adequately address potential vibration and lighting effects. However, he recommended additional conditions to require investigation of internal noise effects at Category B PPFs[54] that would experience a significant increase in ambient noise level (i.e. 10-15 dBA) and could receive internal noise greater than 40 dB LA_{eq}(24 hours) following installation of the preferred mitigation. He noted the condition would require NZTA to offer other acoustic improvements to the affected dwellings, where necessary to reduce traffic noise intrusion to that level.

3.83 In relation to the operational effects of the NAE/CSU Project, Mr Malthus concluded that the imposition of conditions would adequately address potential vibration and lighting effects. He noted that any increase in noise level resulting from the CSU would be 'less than minor at 103 PPFs' and 'minor at 3 PPFs'. He considered predicted change in ambient noise level at 128 Winters Road (5-7 dB) could result in internal noise greater than 40 dB LA_{eq}(24 hours) on the first floor, and again, recommended imposition of an similar additional condition to require investigation of internal noise effects following installation of the preferred mitigation. He also noted that this condition should be included in relation to 116 McFaddens Road (the Oak Motel).

3.84 In relation to the operation of the Cranford Basin Stormwater Management Area, Mr Malthus concluded any potential effects would be addressed by implementation specific management plans.

3.85 Mr Malthus also presented a supplementary statement of evidence (dated 30 April 2015) addressing the evidence of Mr Farren and Dr Trevathan in relation to 128

[52] This would include a requirement for complaint recording, response and reporting procedures.
[53] Mr Malthus acknowledged this plan would be consistent with and complementary to the consents granted under the NES Soil.
[54] Protected Premises and Facilities, including existing residential premises, as defined in sections 1.3.1 and 1.4 of NZS 6806.

Winters Road. Appended to his supplementary evidence were copies of the relevant CCC critical standards (2.4.7 and 7.6.6) and the Styles Report[55].

3.86 Mr Malthus also attended the reconvened hearing on 8 June 2015 and responded to questions. He reconfirmed his view that Category B PPFs were unlikely to meet an internal noise level of 40 dB LA_{eq}(24 hours) with the windows open and that this level would provide for a reasonable level of sleep protection. He maintained his recommendation that additional conditions be imposed to address this.

3.87 **Mr Paul Roberts**, a Transport Planner and Director of Quality Transport Planning, prepared a statement of evidence which was included in the CCC s42A report. His original report concluded that overall the Projects would have significant transport benefits, but that localised increases in traffic are likely to impact on the operational performance. He noted that the wider benefits may have been somewhat overstated and would be offset to some extent by localised effects. Overall, he considered all the Projects minimised effects as far as practicable, but noted concern with the safety of the CSU cross-section design and the need to address downstream traffic effects[56].

3.88 Due to those reservations, his initial report questioned the appropriateness of CSU component of the NAE/CSU Project and formed the basis for Ms Markham-Short's recommendation that the NoR for that Project be modified or withdrawn. At the initial hearing, and in response to questions, Mr Roberts confirmed that his concerns had been adequately addressed by the revised cross-section options presented and the requirement for a 'Downstream Effects and Property Amenity Traffic Management Plan'.

3.89 Supplementary evidence (dated 28 May 2015) by Mr Roberts was presented at the reconvened hearing on 8 June 2015. This evidence confirmed his commitment to the joint statements provided and commented on the further evidence of Mr A. Taylor.

3.90 Having heard from the expert witnesses, Ms Markham-Short presented an Addendum to the CCC s42A report. In summary, she supported the recommendation of Mr Malthus in relation to the imposition of additional noise effect conditions and considered all significant potential adverse effects had been adequately mitigated. In light of the fact that concerns regarding safety of the CSU cross-section and downstream effects had been addressed to Mr Roberts' satisfaction, she recommended that all three of the NoR applications be confirmed, subject to the recommended conditions.

3.91 As noted above, Mr Murray prepared the **ECan s42A report**, and provided advice on planning matters (including conditions) at the hearing. His report included input from the experts identified in paragraph 3.13 above. Most of this evidence was

[55] 'Report to assist the Board of Inquiry: New Zealand Standard *NZS 6806:2010 Acoustics – Road traffic noise – New and altered roads*' by Christian Vossart of the Styles Group.

[56] As noted earlier Mr Roberts was a signatory to the two joint statements provided by Mr Smith at the opening of the hearing to address these matters.

uncontested and therefore not all experts appeared at the hearing. We have summarised the presentations of those experts who appeared below.

3.92 **Mr Andrew Tisch**, a Principal Engineer and Director of E2 Environmental Ltd and **Ms Michelle Stevenson**, a Senior Ecology Scientist with ECan, spoke to their reports at the hearing. Mr Tisch referred to his earlier joint memorandum prepared with Ms Stevenson (tabled by Mr Smith in his opening) and provided an updated memorandum (dated 23 April 2015). He highlighted the areas of disagreement in relation to the NZTA's resource consent application for the NA operational stormwater discharges and provided further information on contaminant release processes and performance. His concerns related to uncertainty about the scale of effect in the receiving waters (the Styx SMP catchment) and the need to provide further empirical evidence. Ms Stevenson noted one additional area of disagreement related to appropriate total suspended solid (**TSS**) limits for dewatering discharges.

3.93 Mr Murray presented an addendum to his s42A report (dated 29 April 2015). He confirmed that ECan and the Applicants were largely in agreement and he accepted that the proposals represented the BPO given the land available for water treatment. He addressed s105 matters, the status of the activities, the relevance of the Styx SMP and CCC's catchment wide Discharge Permit CRC131249, and NZTA's stormwater treatment standards. Overall, he recommended that all the resource consent applications sought by NZTA and CCC should be granted for the durations sought, subject to the recommended conditions. He noted that resource consent application CRC150790 to dam floodwaters (in the event of a Waimakariri River stopbank failure) was not seen as necessary, but he confirmed there was no reason it could not be issued as applied for.

Hearing Adjournment, Right of Reply and Hearing Closure

3.94 Over the course of the hearing, we made a number of requests of the parties to provide us with additional information. While some of these information requests were fulfilled over the course of the proceedings, others required additional time to be actioned and were provided at the reconvened hearing on 8 June 2015. Mr Smith also provided the Applicants' right of reply at the reconvened hearing.

3.95 In response to last minute comments from two submitters that had not been provided to the Applicants prior to the re-convened hearing, we adjourned the hearing to allow the Applicants' opportunity to respond if necessary by way of a final written right of reply.

3.96 A final written right of reply was provided by Mr Smith on 10 June 2014. The hearing closed on 24 June 2015.

PART B – EVALUATION OF THE NOTICES OF REQUIREMENT

4.0 STATUTORY CONSIDERATIONS

The Law

Context

4.1 The Notices of Requirement for the three Projects were issued under Part 8 of the RMA dealing with *Designations and Heritage Orders* as follows*:*

(a) The NZTA NoR for the NA/QEII Drive was issued under section 181; and

(b) The CCC NoRs for the NAE/CSE and Cranford Basin were issued under section 168.

4.2 At the end of the day the criteria for assessing both the CCC and NZTA NoR applications are virtually the same. However, it is important that we record the statutory roadmap underlying this statement.

NZTA - Northern Arterial/QEII Drive

4.3 The **Northern Arterial/QEII Drive 4-Laning** NoR application is to alter an existing designation under section 181. As the change is not a '*minor change'* to the designation, under section 181(2), it needs to be assessed under sections 168-179 of the Act '*as if it were a requirement for a new designation'.* The 'requiring authority' NZTA requested that the notice of requirement application be publicly notified.

4.4 In terms of the above, Section 171(1) sets out the framework for the Council's recommendation to the requiring authority, which we have been delegated to determine. This clause states:

> *The territorial authority when considering a requirement and any submissions received, must subject to Part 2, consider the effects on the environment of allowing the requirement, having particular regard to:*
>
> *(a) any relevant provisions of:*
>
> *(i) a national policy statement:*
>
> *(ii) a New Zealand coastal policy statement:*
>
> *(iii) a regional policy statement or proposed regional policy statement:*
>
> *(iv) a plan or proposed plan; and*
>
> *(b) whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work if:*

(i) the requiring authority does not have an interest in the land sufficient for undertaking the work; or

(ii) it is likely that the work will have a significant adverse effect on the environment; and

(c) whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought; and

(d) any other matter the territorial authority considers reasonably necessary in order to make a decision on the requirement.

CCC NAE/CSU and Cranford Basin Stormwater Management Area

4.5 The applications by CCC for the two new designations for the **NAE/CSU and Cranford Basin Stormwater Management Area** were made pursuant to section 168A, as CCC is the territorial authority with financial responsibility for the works, located within its district. CCC also requested that the notice of requirement applications be publicly notified.

4.6 However, as per the consideration of a requirement that is lodged by a requiring authority that is not a territorial authority, under section 168A(3), the territorial authority, when considering the requirement and any submissions received, must also, subject to Part 2, consider the effects on the environment of allowing the requirement, have particular regard to the same matters listed in section 171(1), although they are listed in section 168A(3).

Our Approach

4.7 In considering the statutory framework set out above, we have recorded our findings as follows:

- **Section 5** of this report (below) includes our **assessment of the effects on the environment** of allowing the requirement. This is a s171(1) for the NA/QEII Drive NoR and a s168(A)(3) requirement for the NA/CSU and Cranford Basin NoRs. Our evaluation of the effects in this section has been informed by the NoR documentation, the submissions, the s42A report, the hearing proceedings and the information exchanged subsequent to adjournment of the hearing up to and including the hearing closure on 24th June 2015.

- **Section 6** outlines the regard we have had to the **relevant statutory and non-statutory policy matters**. This is a s171(1)(a) matter for the NA/QEII Drive NoR and a s168(A)(3)(a) requirement for the NA/CSU and Cranford Basin NoRs. In addition to considering the RMA instruments under clause (a), our assessment in section 6 also concerns non RMA instruments under the tag of 'other' relevant matters for the purposes of clause '(d)' of s171(1) and s 168)A)(3) .

- **Section 7** outlines the regard we have had to the **consideration of alternatives** - clause (b) of sections 171(1) and s168(3) respectively for the NA/QEII Drive NoR and NAE/CSU and Cranford Basin NoRs.

- **Section 8** outlines the regard we have had to the **necessity of the works and designation** (clause (c) of the above sections).

- **Section 9** of the report includes the required consideration of the purpose and principles of **Part 2 of the RMA**.

4.8 This concludes the factual component of our recommendation/decisions. We now turn to the assessment of environmental effects, with a primary focus on the key issues in contention.

5.0 SECTION 171(1) AND SECTION 168(A)(3) ACTUAL AND POTENTIAL EFFECTS ON THE ENVIRONMENT

Scope and Organisation of Evaluation

5.1 The NoR applications identified and assessed a thorough range of actual and potential effects that the proposed designation works/projects will or may have on the environment as follows:

- NA/QEII Drive - Sections 8 and 10 (pages 66-67 and 79-89);
- NAE/CSU - Section 9 (pages 57-66); and
- Cranford Basin Stormwater Management Area - Section 9 (pages 33-37).

5.2 Those assessments were supplemented by a wide range of technical assessments in the appendices to the applications. We note that where the technical assessments identified and recommended appropriate mitigation measures, those measures were listed in Section 9 of that application. Whilst this identification of conditions was not replicated to the same extent for the other two NoRs, such conditions were formulated and revised (as was the case for the NA/QEII Drive NoR) during the course of the hearing and by the close of hearing we had received a final set of largely agreed conditions for all three NoRs.

5.3 In relation to the various environmental effects of all three NoRs, the AEE concluded the impact of the proposal on the environment would in most instances be minimal or could be adequately mitigated through design and conditions. We generally adopt that finding and focus our attention those maters which were either directly in contention and /or where the effects have the potential to be more than minor.

5.4 As noted in the CCC s42A report[57], there were several effects categories which were either in the first instance not contested by submissions or, in the second instance, are an integral part of the evaluation of the resource consent applications required from ECan.

5.5 In terms of the first category (non-contested effects) many of these areas have not been challenged by CCC or submitters and we find the expert evidence presented to be comprehensive and compelling. These effect categories are:

- Geotechnical (discussed through Mr Blyleven but no expert evidence presented);
- Contaminated land;
- Groundwater and springs;
- Landscape and visual amenity; and
- Air quality.

[57] Para 90

5.6 As Ms Markham-Short did, we accept and adopt[58] the analysis included in the application and will not comment further in this recommendation/decisions on those matters.

5.7 The second category of effects (part of the ECan resource consents), cover the following three topics:

- Effects on ecology;
- Effects on ground water; and
- Effects on surface water.

5.8 For completeness, and in the interests of avoiding duplicated assessment and regulation via conditions, we note that these matters are considered in Part C of this report. In this respect, it is also appropriate to note that the NoRs sit alongside the CRC resource consents that we have considered in Part C, and the resource consents granted under the NES Soil relating to assessing and managing contaminants in soil to protect human health. These 'approvals' form a package which together set in place the full regulatory framework within which the three Projects sit.

5.9 To this same end, we agree with Ms Markham-Short's broad categorisation of the 'live' effects topics that warrant substantive attention, being:

- Environmental health impacts from construction and operation (including potential effect of noise, vibration and light spill);
- Transportation related effects;
- Management of stormwater;
- Cultural impacts;
- Social impacts; and
- Safety issues associated with the Grimseys, Hills and Winters Road underpasses.

5.10 We have also generally adopted this categorisation as it also reflects the residual issues of those submitters who had elected not to attend the hearing but did not actually withdraw their submissions.

5.11 Though no submissions particularly distinguished construction effects from operational effects within the above list, it is appropriate to consider these effects separately. Accordingly, the consideration of **construction phase effects** is the matter we turn to first under the assessment below. We consider this in relation to all three NOR applications rather than splitting the discussion each specific NoR application, which we have done for the operational phase effects.

5.12 We have also given primacy in our assessment to those **operations phase effects** which received the most consideration over the course of the hearing. This is not to

[58] Under s113(3)(b), RMA

downplay the other matters raised in submissions (which we also address in due course), but simply to reflect that the main operational phase issues were limited to:

- Transportation effects; and
- Environmental health / noise factors.

5.13 Though we have the option of evaluating the submissions on a submitter-by-submitter basis, we prefer the approach adopted in the CCC s42A report, being an issue-by-issue focus. This approach is not to afford less importance on the input from submitters, as this input has been invaluable in shaping our views. We consider it will be to everyone's benefit for our recommendation/decisions to be as tightly focussed on the key issues as possible.

Permitted Baseline/Existing Environment

General Principles

5.14 Before we provide our assessment of the effects on the environment for each of the proposals under s171(1) and s168A(3) respectively, we must first consider the existing planning environment under which the NoR applications have been lodged.

5.15 In particular, as the both NA/QEII Drive NoR and the CSU component of the NAE/CSU NoR seek to alter an existing designation and work within an existing roading corridor respectively, both the Applicants and the Council have considered it prudent to reflect upon the application of the permitted baseline.

5.16 In terms of the above Mr Smith's comments provided a useful context. He said '…*the permitted baseline is an assessment by comparison between a proposed activity and activities that can be undertaken as of right under relevant planning instruments*'[59]. Whilst he accepted that the use of the permitted baseline is typically applied when considering resource consents, he informed us that this comparison can be extended to a NoR in the absence of contested submissions. He advised that this extension to a NoR was accepted by the Environment Court in *Beadle v Minister of Corrections*[60].

5.17 Ms Markham-Short also presented her understanding of the relevant case law in her s42A report as an assessment of any actual and potential effects arising on the existing 'environment', which included:

- The environment which currently exists (which may include unimplemented resource consents, and existing use rights); and

- The environment that would exist if the site were developed in accordance with the relevant City Plan rules (i.e. the permitted baseline).

[59] *Barrett v Wellington City Council* [2000] NZRMA 481 (High Court)
[60] AO74/02

5.18 She concluded that the concepts of permitted baseline and the existing environment had relevance to aspects of two of the NoR applications before us; namely the NA/QEII Drive and the CSU component of the NAE/CSU, but not to the Cranford Basin Project. We largely agree and adopt this conclusion. Below, we briefly amplify on the application of these concepts in relation to the NA/QEII Drive and CSU, as a basis for the consideration of effects that follows.

Northern Arterial/QEII Drive

5.19 Based on the above general principles, we accept that it is logical and relevant to compare the environmental effects of the NA/QEII Drive Project with that which is provided for under the existing designation in the City Plan. In this regard, Ms Markham-Short noted that the NoR application documentation did not fully adopt the above interpretation of the 'existing environment', as the objectives of the NoR application could not be fully met under the existing designation. She noted that this was largely because the existing corridor was not wide enough to accommodate a four lane a road and all attendant components required (including stormwater treatment swales etc.).

5.20 The key implication of this is that whilst there is a permitted baseline of sorts to apply, it does not equate exactly to the proposal before us for a full four lane motorway and associated stormwater systems. On the other hand, we heard that there are no conditions on the existing designation, meaning that, amongst other things, there is no requirement for visual or acoustic mitigation for a permitted motorway under the current designation. Put differently, NZTA could under the existing designation build a two lane motorway, which may carry fewer vehicles, but may give rise to greater effects on the environment in respect to visual impact and noise effects on adjoining residential properties.

5.21 We note the above is of particular relevance to our subsequent consideration of:

(a) Construction effects of the NA/QEII Drive Project; and
(b) Operational noise effects of the NA/QEII Drive project.

We will pick up on this theme at those points in our assessment of effects.

5.22 The above aside, we consider that the existing designation also provides a basis for the wider planning context assessment. In this respect, we acknowledge the consensus between the relevant legal and planning experts that the existing designation has provided a 'long-term signal' to the community of an intention to develop this arterial route, and accept this should be balanced when considering any assessment of environmental effects of the new proposal.

Northern Arterial Extension/Cranford Street Upgrade

5.23 The permitted baseline was also applied by Mr Whyte when considering the NAE/CSU NoR, and more specifically to the CSU component of this NoR.

5.24 The basis for Mr Whyte's position was that a section of the NAE/CSU could be constructed within the existing Special Purpose (Road) Zone, and that construction/reconstruction within this zone would not require resource consent, provided City Plan standards are complied with. He suggested that given that these standards do not restrict environmental effects arising from existing and predicted future traffic flows on Cranford Street, and a solid median strip could be provided under the relevant City Plan standards, and therefore these effects could be disregarded. Mr Smith reiterated this position in his closing submissions.

5.25 We accept the above position advanced by Mr Whyte and Mr Smith.

5.26 Mr Smith considered that it was relevant in the assessment of effects associated with noise and property access for the CSU. We agree and again this is reflected in our assessment of these matters below.

Construction Phase Effects - All Three NoR Applications

5.27 The following list identifies the construction phase effects raised. These are generally common across all three NoR Projects, with more emphasis on particular issues in different areas. We were advised that the NZTA had completed the specimen design for the NA/QEII Drive Project and had therefore considered construction effects in more detail than the CCC had for its Projects, which were only completed to scheme design stage.

5.28 The potential construction phase issues identified included:

- Noise;
- Vibration;
- Lighting;
- Dust;
- Soil and erosion control;
- Traffic;
- Hazardous substances / Contaminations (NES Soil); and
- Historical /Archaeological.

5.29 Broadly speaking, these issues can be categorised in to the following areas:

- Nuisance effects (dust, noise, lighting);
- Sediment control;
- Traffic control (very limited on Cranford Basin); and

- Miscellaneous (archaeological, hazardous/contamination (NES Soil consents approved for Cranford Basin and NA/QEII Drive Projects and not required for the NAE/CSU Project)

5.30 On the basis of the evidence before us, we accept that the construction phase effects throughout the NA/QEII Drive and NAE will be minimal on the day to day transport network, as the sites are largely 'greenfield' (with the exception of the local road crossings). The potential environmental impacts of these sections of road are potentially more significant. The CSU component of the Project will have considerable impact on the surrounding environment, but no more so than any other roading project and these are temporary effects.

5.31 Similarly, the Cranford Basin Stormwater Management Area, in terms of its immediate construction effects only includes the skimming works to provide the offset compensatory storage for the NAE and subsequent landscape planting. We note that other stormwater works are within the NAE designation. We accept that the potential construction phase effects in the Cranford Basin area are therefore limited.

5.32 It is proposed that construction phase effects will be primarily managed through an overarching Construction Environmental Management Plan (CEMP). The CEMP is an umbrella management plan under which all of the sub-management plans associated with the regional resource consents will be produced and considered. We were advised it is the key management plan associated with the construction phase to ensure the construction and operation activities avoid, remedy or mitigate adverse effects on the environment.

5.33 Mr Malthus considered the environmental impact of these construction phase effects and was satisfied that, subject to conditions, these effects could be appropriately managed. His key conclusion was that the Applicants would be in a position to manage the day to day construction effects through the development and implementation of proposed management plans.

5.34 Ms Markham-Short also noted that reliance on management plans is common for large projects to deal with potential adverse effects during construction and that this approach has been used in Christchurch on projects such as the upgrade of Russley Road and Johns Road, and for the Western Belfast bypass.

5.35 Ms Markham-Short explained that a number of issues that would need to be addressed through the CEMP and sub-management plans, with reference to relevant National Standards, regional planning documents or other legislation. She noted that CCC also had broad enforcement functions under the RMA to address nuisance issues that may arise during the construction phase. Mr Malthus noted the similarity of the proposed NoR conditions for construction effects, given the similarity of the Projects from a construction perspective.

5.36 Overall, Ms Markham-Short and Mr Malthus were satisfied that the management plan process was appropriate to address any potential adverse effects that may be generated during construction phase.

Evaluation

5.37 Notwithstanding the general concurrence of the experts regarding construction phase effects, we are still required to consider the appropriateness of the mitigation package being promoted and the basis under which the adaptive management process is to be undertaken.

5.38 In this respect our following discussion is centred around two key issues:

1. The appropriateness of the management plan/condition approach to construction effects; and
2. How the process would operate in practice.

Management Plan Approach

5.39 Although the construction and operational phases share common environmental effect themes, the actual and potential effects anticipated within these themes are in many cases distinct to each phase. One notable difference between the effects experienced, as noted by Mr Malthus, is that **construction phase effects are transitory**, being present only for the limited duration of the construction period. This is in contrast to the **operational phase effects, which are anticipated over the life of the road's use.** This 'temporary versus enduring' distinction is a matter we have had particular regard to in determining the significance of the Projects likely effects.

5.40 The Applicants have proposed to address the majority of effects arising from construction activities by a series of management plans, including those for noise, vibration, traffic management, and erosion, sediment and dust control. As noted above, Ms Markham-Short advised that management plans are a commonly used technique to deal with construction phase effects related to large projects, such as these three public works. We accept this approach is appropriate.

5.41 From an environmental health perspective, this was an opinion shared by Mr Malthus, who added that the management plans are a useful way to show how compliance with more specific controls or parameters set out by other conditions will be met. Again, we concur.

5.42 In terms of the above, and by way of example, we note that with respect to stormwater management, Mr Tisch's contribution to the CCC s42A report signalled this approach was appropriate for that particular effect category; in this respect he endorsed the preference that ECan's erosion and sediment control guidelines be

adopted for stormwater management in conjunction with (or as part of) the management plans.

5.43 No party – either by way of submission or in evidence – expressed that the management plan approach was inappropriate or insufficient for the purposes of managing construction phase effects. To this end, we accept the evidence before us that the approach should be adopted and codified by way of conditions.

Adoption of, and modifications to, the Management Plans

5.44 Despite our general acceptance of the management plan approach, we also determined a need to satisfy ourselves around matters concerning the contents of, and process related to, the sub-management plans. Specifically, this discussion centred around:

- whether or not there should be a certification process for the CEMP and associated management plans;

- whether the proposed measures/conditions to manage construction noise were (in of themselves) sufficient, or whether further measures should be adopted; and

- appropriate measures to manage vibration effects at construction (and operational) stages.

5.45 Addressing these three matters in turn, we note that the proposed conditions in the notified NoR did include a process for the CEMP and associated sub-management plans to be certified. We consider this to be appropriate. We also note that the CEMP shall be certified by appropriately experienced and qualified practitioners. In particular, we note the certification from the certifier shall confirm that:

- the CEMP adopts the mitigation measures identified in the NoR documentation and/or otherwise required under the conditions of the designation; and

- the implementation of the CEMP will appropriately mitigate the anticipated adverse effects of the public work.

5.46 These conditions require that the management plans are prepared by suitably qualified and experienced practitioners and submitted for certification prior to commencing works on site. However, whilst the proposed conditions confirms that these plans are to be certified by experienced practitioners, they do not state that these certifiers need be independent of the body preparing them. In other words, the conditions in theory permit self-certification of the various management plans.

5.47 Ms Markham-Short addressed this and considered it was appropriate that requiring authorities self-manage this process given their experience with large projects, their

public interest obligations and their commitment to working co-operatively toward delivering good transport and stormwater solutions.

5.48 We have no evidence to dispute Ms Markham-Short's views on this matter of self-certification. Moreover, we have no reason to doubt CCC/NZTA's commitment to following good construction practice and to abiding by the conditions volunteered. We also consider that a certification process by professional practitioners (regardless of whom they are engaged by) will provide an overall enhancement to the successful implementation of the conditions (and outcomes anticipated through that implementation) relating to the CEMP and the various sub-management plans. Given that this is also accepted by the Applicants and Council, we see no reason why the proposed certification process should not be adopted as proposed.

5.49 In relation to the second matter, being the need (or otherwise) for additional noise controls for construction activities, the two matters that were specifically explored at the hearing included whether:

- specific reference should be made to the 'long-term' provisions of the relevant New Zealand standard for construction noise;[61] and/or

- Sundays and public holidays should be subject to additional restrictions on works.

5.50 In Mr Farren's view, the additional controls did not need to be expressly stated as they are already live considerations (albeit implicitly so) within the conditions proposed. This view was affirmed in the Applicants' reply, where it was expressed that, in particular, the relevant construction noise conditions were adequate.

5.51 While Mr Malthus signalled that he would not object to a direct reference to the long-term provisions of NZS 6803, he agreed this was not necessary.

5.52 Given the general agreement between Mr Malthus and Mr Farren that the 'existing' measures codified in the conditions are appropriate, we consider that no further modifications are required to manage potential construction noise effects.

5.53 The third matter relates to appropriate measures to manage vibration effects. Although the ongoing use of both the NA/QEII Drive and NAE/CSU have the potential to generate adverse vibration effects, this effect category is primarily a matter for our consideration of construction phase activities. Mr Farren and Mr Malthus were generally in agreement that the proposal (including conditions/management plans) is appropriate to manage vibration effects at both the construction and operational phases.

5.54 In summary, Mr Farren outlined that:

[61] *New Zealand Standard NZS 6803: 1999 'Acoustics – Construction Noise'*

- In the absence of a New Zealand vibration standard, reference is often made to the British Standard BS 5228-26 and German Standard DIN 4150-37, which address human and building response to vibration respectively, and the Applicants have promoted a set of consolidated construction vibration criteria that are based on these Standards;

- The consolidated vibration criteria are provided in a proposed designation condition relating to vibration, and are considered to be appropriate for these Projects; and

- One of the most significant sources of vibration during road construction – in his view - is a vibratory roller, which is not anticipated to generate any significant building damage given the recommended buffer distances for the roller's use.

5.55 On the above basis, it was Mr Farren's conclusion that construction vibration associated with both roading Projects would be effectively managed through the development of a Construction Noise and Vibration Management Plan, which would contain recommended limits for construction vibration, in addition to appropriate management practices.

5.56 Mr Malthus agreed with the approach set out by Mr Farren, and he generally endorsed that the proposed conditions encapsulate the recommendations contained in the original noise assessment accompanying the NoR applications.

5.57 Overall, we accept the uncontested joint view of Messrs Farren and Malthus that the proposal will not result in significant adverse construction or operational vibration effects, with the imposition of the proposed conditions.

5.58 In addition to the above, we have considered construction phase effects more broadly, including the specific input provided on these matters by the CCC and Applicant in their various reports and evidence. Overall, we are satisfied that the proposed conditions will manage construction phase effects, as:

- the CEMP is wide-ranging, managing the effects of a number of construction activities;

- additional sub-management plans will sufficiently manage:
  - Hazardous substances, spills and emergencies;
  - Contaminated material;
  - Erosion, sediment and dust;
  - Noise and vibration;
  - Construction traffic;
  - Landscape and visual effects;
  - Effects on terrestrial and aquatic ecology; and
  - Flood hazard.

- the Temporary Traffic Management Plan is to be in accordance with an accepted Code of Practice, and this is fully supported by CCC's transportation planner, Mr Roberts; and

- an accidental discovery protocol is to be adhered to by way of conditions on the three NoRs, which will ensure that unanticipated impacts on cultural and/or historic heritage values will be sufficiently avoided, remedied or mitigated.

Overall View on Construction Phase Effects

5.59 In light of our findings above that the management plan approach is generally appropriate, that the content of the management plans and related conditions are sufficiently robust, and that the effects of construction phase activities are (in the main) only temporary, we consider that the proposal will adequately avoid, remedy or mitigate construction phase effects to the extent that they will be no more than minor.

Operational Phase Effects - NA/QEII Drive

Transportation

5.60 The NA/QEII Drive Project is a longstanding alternation to the existing designation. The existing design itself would largely provide for the physical space required for a four lane road, but would not provide adequate space for stormwater management within its current limits. Mr Blyleven outlined that the Project forms part of a wider northern access package including cycle and public transport improvements undertaken progressively by NZTA, CCC and ECan under the wider 'one network' approach.

5.61 The 'one network' approach being adopted across the country by NZTA and the respective local authority has resulted in an inescapable linkage between the NA/QEII Drive and NAE/CSU Projects. This approach is reflected in the Christchurch Transport Strategic Plan 2012-2042 (CTSP)[62] and the Applicants demonstrated that both roading NoR applications are consistent with the approach.

5.62 The NoR application for the Cranford Basin Stormwater Management Area is also linked to the roading Projects, despite submissions that the hearing of the NoR applications at the same time was more of a 'convenience' issue. The Cranford Basin NoR application provides compensatory storage for the NAE Project and improved stormwater treatment and management. We note that no evidence was presented to suggest any stormwater management or treatment would be completed without the NAE designation and therefore accept that all three NoR Projects are inextricably linked.

[62] Para 2 NZTA & CCC Closing submissions

5.63 In terms of the wider transportation demand, traffic flows have increased following the Christchurch earthquakes as development patterns have pushed towards the north and west. This has required acceleration of certain projects in Christchurch to respond to the dynamic nature of changes in residential population and commercial redistribution and the resulting traffic congestion. Clearly the NA Project has been identified for many years, but the changing demographics and demands around north and west Christchurch post-earthquakes, from a transportation perspective, have focussed NZTA and CCC on this section of road.

5.64 We note that the goals of the two Requiring Authorities are understandably not aligned, with each having a different focus and objectives. NZTA's overall objective[63] in broad terms is to increase capacity and reliability on the route between the port and to the north, via QEII Drive, with no specific objectives regarding the connection between the north and Christchurch's CBD.

5.65 CCC's objective is to create a high quality route linking the NA to the city streets, ultimately improving the connection between the northern suburbs and the CBD. The NAE/CSU Project is seen as the first stage in this wider project, and increases overall capacity through the wider northern corridor including Main North Road, the NA and Marshlands Road.

5.66 There was much debate about the extent of the NAE/CSU Project and whether it should extend further to the south. While we present a more detailed discussion on this issue later, we accept that progressively staging a wider transport strategy is an appropriate and acceptable method to achieve the wider transportation goals of an authority. Staging projects has been widely used throughout the country for many years and we acknowledge that budgets can only extend so far at any one time. We also note from the evidence that CCC is well aware of the need to investigate works on Cranford Street south of Innes Road, and we heard evidence that steps are being taken to initiate this process.

5.67 We are also mindful that the NA/QEII Drive Project is a Road of National Significance (RoNS) identified in the Government Policy Statement (GPS) under the wider 'Christchurch Motorways' heading and that these road improvement packages are aimed at providing travel time and safety benefits on nationally strategic, high volume roads.

5.68 Mr Blyleven discussed the alternatives considered for the NA Project route itself[64]. He outlined that assessment of these alternatives had concluded that the alignment could not go any further west, as this would impact on Belfast and the Upper Styx land use areas. He noted the location proposed provided a clear eastern boundary for these areas and would allow improvements to be made through the Main North

[63] Mr Blyleven Para 15 EIC
[64] Mr Blyleven Para 42-43

Road corridor in the future to improve social amenity, land use integration and sustainable public transportation options. He also discussed the possible upgrade of Marshlands Road, but concluded that ground conditions and the multiple property accessways would prevent the creation of a safe and efficient route into Christchurch's CBD. When we discussed the geotechnical issues with Mr Blyleven, he noted there was a considerable change in ground conditions between Marshlands Road and the proposed NA site.

Status quo

5.69 Currently Main North Road is one of the two main north-south routes into Christchurch, along with Marshlands Road. It is acknowledged that the overall existing north-south capacity is not sufficient to provide for the existing traffic volumes or the expected increase in traffic, especially from north of the Waimakariri River and beyond.

5.70 The NoR applications outline limitations on the existing routes to and from the north via Main North Road and Marshlands Road. It was noted that traffic volumes and congestion are increasing and that a significant capacity upgrade is required through the wider northern corridor to address this. We note that this issue is not new and evidence was presented demonstrating identification of the NA route to the CBD via Cranford Street and Barbados Street through the designation in the early 1970's and through a number of evolving transportation projects[65] including the NROSS report (in 2002) and CNATI report (in 2009). It is clear from the evidence that the route has continued to be identified as an important strategic route to the CBD.

5.71 We accept that the Christchurch earthquakes have changed both commercial and residential development patterns around the city, and that both NZTA and CCC have invested significantly in the northern transport network in recent years as a response to this changing demand.

5.72 It is therefore important to consider that the NA/QEII Project responds to, in no small way, the current and future changes in residential and industrial development patterns around the city and the longer term expectation of increased demand to the Christchurch CBD area. This change in demand brings with it increased demands on infrastructure with potentially limited width and connectivity, and creates a situation where CCC, in particular, needed to consider the most appropriate way to develop the road network to make the most efficient use of the existing transport network. This concept is discussed further throughout this section.

Positive effects

5.73 Mr Row provided a summary of the project traffic modelling history. This included an outline of the modelling methodology, the need for the Project, changes to the traffic

[65] Mr A. Taylor EIC Para 11-18.

volumes and the effects of these changes. Mr Row's evidence was not contested by any party and we therefore accept it.

5.74 Mr Row outlined changes in traffic volumes projected in the 2031 model used for the Project. As a summary, and to indicate the scale of the changes, he presented the following information:

- Daily traffic volumes across the Waimakariri Bridge are expected to increase from 49,200 in 2014 to 62,400 in 2031 without the Projects, and 67,000 with the Projects.
- Main North Road north of QEII Drive is expected to increase from 33,000 in 2014 to 38,600 in 2031 without the Projects, and then reduce to 22,500 with the Projects.
- Marshlands Road is expected to increase from 15,400 in 2014 to 22,500 in 2031 without the Projects, but then reduce to 10,200 with the Projects.
- Cranford Street (through the Cranford Basin area) is expected to increase from 21,700 in 2014 to 27,200 in 2031 without the Projects, and to 47,400 with the Projects.

5.75 We note that it is this last figure in relation to traffic increases on Cranford Street that is most significant when comparing the projected traffic volumes to the existing situation and we discuss this issue later in the report.

5.76 On the basis of Mr Row's evidence, we accept the Project will not only improve travel times south of the Waimakariri River, they also provide opportunities to realise contingent benefits on other roads, which we discuss later. We note that in the morning peak traffic, southbound vehicles using the NA (measured from Woodend to the Christchurch CBD) could expect travel time savings of up to nine minutes, or a 29% improvement over the 'Do Minimum' option; and even those drivers continuing to use the Main North Road would enjoy a benefit of three minutes or a 9% improvement to travel times.

5.77 During the inter-peak, both directions of travel will benefit, with an improvement of around five minutes or 22-24% improvement to travel times. During the evening peak period, northbound vehicles are expected to save around 12 minutes of travel time, or 32% improvement to travel time; and those remaining on Main North Road would enjoy a saving of six minutes, or 15% improvement to travel time.

5.78 Mr Row also discussed the downstream effects of traffic (referred to as 'rat-running'). He noted that until the design is confirmed, it is not possible to identify the most effective and appropriate traffic calming treatment to mitigate any potential adverse effects of the Project. He therefore supported the use of a 'Downstream Effects and Property Amenity Traffic Management Plan' (as provided for by proposed conditions) to provide reassurance to potentially affected residents and provide more certainty

that appropriate mitigation of adverse downstream effects would be implemented as required.

5.79 Mr A. Taylor identified safety benefits from the Project by reducing traffic volumes on less safe local roads and transferring traffic to a higher standard modern motorway design. This was supported by Ms Perfect through the corridor to the NAE and ultimately with CSU.

Contingent / Indirect Benefits (other modes)

5.80 The wider Project outcome of increasing the overall north-south transport corridor capacity, provides opportunities to realise contingent, or indirect benefits beyond the extent of the Project designation itself.

5.81 Main North Road has been identified as a possible route for public transport improvements following completion of the NA/QEII Drive and NAE/CSU Projects. The reduction in flows on Main North Road through Belfast will enable CCC and ECan to implement bus lanes and provide significant public transport improvements, but we recognise that any associated improvements on alternative routes are outside of the scope of these NoR applications.

5.82 In terms of the wider cycling network, we were advised that elements of the Project support other projects such as the Papanui-Parallel cycle route, by reducing traffic flows on Rutland Street.

5.83 The expert technical evidence presented by Mr Row with respect to direct and indirect traffic benefits of the NA/QEII Drive Project was uncontested. We therefore adopt this evidence and the respective benefits as presented to us.

5.84 Several submitters identified that despite there being an additional southbound lane on the Waimakariri Bridge, no improvement to cycling facilities was proposed across the bridge. This was confirmed by NZTA, but it was also noted that the separated walking and cycling paths to be created as part of the NA alignment and would extend to Belfast Road. We were told that development of the cycle network beyond this point would be part of a longer-term consideration for the network.

5.85 We accept that Projects must, by funding limits and practical necessity, be developed in stages. We consider the cycle network as proposed is comprehensive and designed to modern standards, and although it would ultimately be desirable to continue the link over the Waimakariri Bridge, we accept the current proposal is not deficient without this link.

Operational Noise

5.86 A number of submitters have raised potential operational noise effects, both through the NA/QEII Drive and NAE/CSU Projects.

5.87 Ms Markham-Short highlighted the disagreement between Mr Farren and Mr Malthus regarding the levels of internal noise considered to be reasonable for properties identified as Category B adjacent to the NA route, and specifically at 128 Winters Road in relation to the NAE. We address 128 Winters Road later in this report.

5.88 The guidance on the acceptable noise limits for road noise in respect of new and altered roads in NZS 6806 on adjoining PPFs adopts a best practicable option (BPO) approach to the management of noise. Mr Farren stated that NZS 6806 represented industry best practice[66]. He considered that by meeting Category B external noise limits, this would result in acceptable internal noise limits.

5.89 Mr Malthus did not disagree with the results of the noise modelling undertaken by Mr Farren and the estimation of noise levels resulting from the NA (with mitigation) was not challenged by any party.

5.90 Mr Farren outlined the NZS 6806 noise levels as follows[67]:

Category	**Altered Roads** **dB $L_{Aeq\ (24h)}$**	**New Roads with a predicted traffic volume of 2,000 to 75,000 AADT at the design year** **dB $L_{Aeq\ (24h)}$**
A (primary external noise criterion)	64	57
B (secondary external noise criterion)	67	64
C (internal noise criterion)	40	40

5.91 Mr Farren also summarised the number of properties affected by dividing the NA into three sections and identifying how many would fall into which category[68].

		No. of positions achieving NZS 6806 categories		
Northern Arterial	NZS 6806 road type	Category A	Category B	Category C
Section 1 QEII to Owen Mitchell Pk	New	32	3	0
Section 2 Owen	New	84	37	0

[66] Mr Farren, para 3.1.
[67] Ibid, para 3.5
[68] Ibid, para 3.16

Mitchell Pk to Willowview Dr				
Section 3 Belfast Rd to Main North Rd	New	6	0	0
Section 4 QEII Drive west	Altered	36	1	0
Section 5 QEII Drive east		Not an 'Altered Road' under NZS 6806 – no significant change in traffic noise levels at dwellings		

5.92 Where the disagreement between Mr Malthus and Mr Farren lies is in relation to the need for further investigation of Category B properties where further mitigation may be required to achieve an internal noise level of 40 decibels (dB).

5.93 Mr Malthus' concerns were set out in para 54 of his original report where he stated:

> *'However, I recommend that those conditions should be amended and reinstated to investigate internal noise effects at Category B PPFs in Stage 1 and 2 that would experience significant increase in ambient noise level (i.e. 10-15 dBA$_{Leq}$ (24hr) following the installation of the preferred mitigation. The conditions should also provide for NZTA to offer acoustic improvements to the affected dwellings where necessary to reduce road traffic noise intrusion to that level.'*

5.94 Mr Malthus[69] also noted that the '*…Boards of Enquiry decisions indicate that those PPFs* [referring to Category B] *should be protected to a greater extent than NZS 6806 provides for.'*

5.95 Mr Farren also acknowledged that the NZS identified reasonable noise standards '*…taking into account health issues associated with noise, the effects of relative changes in noise levels on people and communities, and the potential benefits of new and altered roads to people and communities.'*[70]

5.96 Mr Farren considered that the application of the BPO noise mitigation would result in reasonable noise levels. He also concluded that he would expect the residents adjacent to the existing NA designation would have greater expectation of traffic noise compared to locations where a designation did not exist.[71] This is effectively a permitted baseline approach which we discuss below.

Evaluation

5.97 This issue of operational noise is not new. Several other projects were quoted to us – Waterview Board of Inquiry (**BOI**), Transmission Gully BOI, McKays to Peka Peka BOI and CSM 2 (Styles Report). We note that the common issue with these previous

[69] Para 57 of Environmental Health Assessment 21 April 2015
[70] Section 1.1.4 of NZS 6806, as set out in Para 3.4 of Mr Farren's EIC
[71] Para 3.23 of Mr Farren's EIC

decisions was that when considering a RMA effect of a roading project, is it sufficient to rely solely on the NZ standard? Particularly given that the standard is not mandatory and it is considered to be for guidance purposes. Having considered these previous decisions, we are of the view they clearly indicate there is a planning precedent for conditions to extend beyond the NZ standard.

5.98 Our question is whether or not reliance on meeting an external noise level (i.e. the NZ standard) is ultimately the only appropriate measure and whether this provides for a reasonable level of sleep protection. To address this question, a consideration of the permitted baseline and its applicability is necessary.

5.99 In relation to the permitted baseline, NZTA noted that the existing two lane designation would not meet their objectives. While it was noted that technically we could consider it, it was acknowledged that the existing designation is 40 years old and is no longer 'fit for purpose'. It was further acknowledged that while the purchasers of the affected properties could well have expected noise from the NA, application of a permitted baseline was of little assistance given the age of the designation and changes in construction methods. We agree. Accordingly, given that the existing NA designation is being altered to meet the current objectives, we put very little weight on the application of a permitted baseline in this regard.

5.100 Our next question is whether we should impose a condition requiring further investigation of actual noise levels in Category B properties, therefore potentially imposing additional cost on NZTA to mitigate noise levels to meet the standards. Mr Malthus recommended that this was appropriate based on there being a 'significant' change to the ambient noise levels and the need to ensure these changes are reasonable for sleep protection. In contrast, Mr Farren considered it was not necessary to go beyond the BPO process outlined in NZS 6806 and require an internal noise level of 40 dB LAeq(24h) for Category B dwellings.

5.101 There is no indication in Mr Malthus' evidence that the mitigation required to achieve internal noise levels of 40 dBA would require the kind of mitigation measures costed through Mr Farren's evidence and Mr M. Taylor's supplementary evidence. In fact, Mr Malthus did not recommend specific mitigation with a direct cost, instead he outlined a process to check actual internal noise levels and if required, modify the building envelope or boundary fences to ensure adequate sleep protection. NZTA noted[72] that Mr Malthus' recommended condition was overly cautious given the likely costs to be incurred could be in the range of $640,000 - $11.5 million for a 6 m high noise wall along the NA boundary. We consider that the relevance of these costs is debatable considering Mr Malthus did not recommend specific mitigation measures and other less expensive onsite mitigation options may be possible. We accept that the condition recommended by Mr Malthus is a 'process condition' requiring measurement and mitigation if required, and as agreed to be the property owner.

[72] Closing Para 19 and Mr M. Taylor evidence

5.102 We do acknowledge that the mitigation proposed by Mr Malthus is generally with respect to higher volume roads[73], but note that the lower modelled noise levels should make the internal noise levels easier to meet. In fact, Mr Farren provided a map showing that Category B noise levels only occur at the first floor of identified properties. This gives us confidence that the number of properties affected is likely to be relatively low.

5.103 The difference between Mr Malthus and Mr Farren's perspectives in relation to sleep disturbance seems to us to be as a consequence of whether the noise assessment is undertaken assuming the windows are open or closed. Mr Malthus confirmed that the standard offered no guidance in this regard, but that it is reasonable to assume people need to either have open windows or alternative ventilation to sleep in hot temperature conditions. Under questioning, Mr Malthus confirmed that assessment with windows open would result in a reduction of 15 dBA, while windows closed result in a reduction of 20-25 dBA difference between outside and inside a house. Dr Trevathan also confirmed this was appropriate, but in relation to discussions regarding 128 Winters Road only.

5.104 To us, the windows opened/closed assumption, seems at the heart of the issue. Mr Malthus noted this in paragraph 102 of his initial review where he considered noise levels of 57 – 64 dBA, with windows open, would not meet the internal noise level of 40 dBA. He was of the view these levels were at the upper limits to allow for undisrupted sleep patterns. He noted that with windows closed however, this upper limit could be achieved, but could be exceeded by between 4 and 9 dBA. Mr Farren concluded that it is not necessary to go beyond Category B standard and require an internal noise level of 40 dBA[74].

5.105 Ultimately, we consider that providing an internal noise level to maintain and protect peoples' sleep is our primary goal and one we consider must be achieved. We are not convinced that achieving Category B external noise levels will necessarily achieve this. We are satisfied that an acceptable level of sleep protection can be achieved with an internal noise level of 40 dBA. We accept that the process condition outlined by Mr Malthus will identify properties where 40 dBA cannot be achieved internally, with windows open for ventilation, and situations where additional mitigation is required, if desired by the property owner. The form of this mitigation is not for us to decide, but could be as simple as having widows closed and a forced ventilation system installed, improved onsite fencing, or additional noise barriers on the NA designation.

[73] NZTA closing, para 14
[74] Mr Farren, para 7.15 EIC

Operational Phase Effects - NAE/CSU

Transportation

5.106 The NAE provides a link from the NA to the local network and the CSU provides an upgrade of the local network to cope with increased traffic flows. Together, the package of Projects are part of a wider solution to north south connection to Christchurch, despite the fact that they are being considered separately. We accept the NAE and CSU parts of the Project are integral to the wider NA route delivering its full benefits.

5.107 This was confirmed by Mr Blyleven who outlined that the benefit cost ratio (BCR) of the Projects was 2.0 based on the NZTA Economic Evaluation Manual, and 4.6 when wider economic benefits for the RoNS were considered. When we questioned what was included from a 'project' perspective in this calculation, he confirmed this included the NAE/CSU Project. On the basis of this, we accept the NAE part of the Project is essentially an enabling part for the NA route to realise its full benefits, whereas the CSU part of the Project delivers the wider benefits and has positive and potentially negative impacts in its own right.

5.108 We were advised the CSU would provide increased capacity to safely and efficiently manage the increased flows to and from the north, including reclassifying it from 'Minor Arterial' to 'Major Arterial'. We note that all of the CSU, excluding the Innes Road intersection upgrade, could be undertaken within the existing road designation and that a widened designation is only required around Innes Road to allow the intersection capacity to be increased to provide for the additional traffic flows. We accept that without the upgrade, the existing intersection would continue to experience high congestion and delays as traffic volumes increase over time.

5.109 We were told by Mr Blyleven and Mr Row that traffic volumes through Cranford Street would continue to increase regardless of the NA/QEII Drive or NAE/CSU Projects. While the level of increase would be lower than if the NA and NAE portions of the Projects were completed, we were told that the increased volumes would also result in increased rat-running through local streets, as the decreasing capacity of Cranford Street would encourage traffic to use surrounding residential streets. On the basis of the evidence, we accept that run-running would occur and increase from existing levels, under either scenario.

5.110 Local rat-running was a significant issue from the outset and was one of the main contributing factors that led Mr Roberts, and ultimately Ms Markham-Short, to recommend that the NoR application for the NAE/CSU Project be modified or withdrawn in the initial CCC s42A report.

5.111 This issue was addressed in part on the first day of the hearing when Mr Smith presented us with a joint statement from Mr A. Taylor and Mr Roberts outlining a 'Downstream Effects and Property Amenity Traffic Management Plan'. We were

advised that the purpose of this Management Plan was to provide a management tool to identify local rat-running issues, implement measures to avoid, remedy or mitigate such effects, and monitor the efficacy of the measures for an appropriate period.

5.112 We note that several amendments were made to the original Management Plan throughout the hearing in response to public submissions and additional evidence from Mr A. Taylor, Mr Roberts and later, Dr C. Taylor (in respect of social issues). The resulting condition requiring development and implementation of such a Management Plan represents the culmination of these discussions and refinement of the condition to give more certainty to what is required. This Management Plan has ultimately been one of the reasons (in conjunction with the joint statement on the Cranford Street cross-section) that has resulted in Ms Markham-Short changing her recommendation on the NAE/CSU Project to one of confirmation of the NoR application.

5.113 We were told that cycling would be improved compared to the existing environment throughout the length of the Projects. Throughout the NA there will be separated cycle lanes included that run parallel to the NA road alignment and connect to the existing local network. The NAE extends these separated cycle lanes to the Cranford Street intersection and will provide an overpass to allow connection to be made to the local road network. We note that south of the proposed NAE/CSU intersection roundabout, the cycle provisions are less certain, but are nevertheless provided for.

5.114 We were presented with a joint statement from Mr A. Taylor, Mr Roberts and Ms Perfect regarding the cross-section of the CSU in the 20 m wide road corridor section, which is south of McFaddens Road. Three options were presented in the joint statement to demonstrate how different combinations of pedestrian, cycle and lane widths could be used to safely provide for all users on this section of road. No specific recommendation on a preferred cross-section option was provided, but we were advised that all options were acceptable from a safety perspective. We note that the only confirmed outcome from the joint statement was the recommendation that the solid central median will be at least 1.8 m wide, to improve pedestrian safety.

5.115 In terms of specific cycle provisions, the joint statement does not assist us. What it does do however, is demonstrate that there are options available to provide for cyclists and pedestrians, and that flexibility in design exists within the existing corridor width. The essence of design flexibility is critical in our thinking of the overall design of this section of road. While it is unclear if there will ultimately be separated or shared cycle facilities along Cranford Street, we except this is not a concern for us. Our concern is that there are acceptable options to accommodate pedestrians and cyclists, and that the options are both safe and appropriate for the conditions. The joint statement confirms that this will be the case and we accept that.

Operational Noise

5.116 We now turn again to noise issues. A number of submitters identified noise effects in their submissions as a concern. Only Mr Hayward and Ms Murphy of 128 Winters Road provided supporting technical expert evidence, presented by Dr Trevathan.

5.117 Mr Farren has assessed the operational noise at 128 Winters Road through the computer model prepared for the overall NA/NAE Project. Following mitigation as proposed by CCC, the noise levels at the building façade are predicted to be 55 dBA on the ground level and 57 dBA at first floor level. These are within the Category A[75] noise levels for new roads, according to NZS6806. We note the Mr Farren's modelled noise levels are not disputed.

5.118 Mr Farren noted[76] that allowing for a 'rule of thumb' that noise will reduce across an open window by 15 dBA, resulting in internal noise levels of approximately 42 dBA were predicted at 128 Winters Road. He noted that the reduction in noise level could be as high as 17 dBA, but he accepted a conservative 15 dBA reduction for his assessment. As discussed earlier, the 15 dBA figure was accepted by all noise experts.

5.119 Mr Farren disagreed with Mr Malthus that further mitigation was required. He considered there was no applicable recommended internal noise level of 40 dBA. He considered that if Mr Malthus was referring to the 40 dBA in the reverse sensitivity guide, this was not appropriate as the dwellings were existing. He also noted that the 42 dBA was only 2 dBA above the 'recommended' criterion and this was an imperceptible difference.

5.120 Dr Trevathan carried out noise measurements at the rear living area on three separate occasions on 8 March (in the afternoon), 9 March (in the morning) and 23 April 2015. These measurements showed existing ambient noise levels of 45 dBA and 46 dBA respectively, on each of the days recorded. We note that these were the only actual noise measurements taken at 128 Winters Road.

5.121 Mr Farren's assessment of noise effects at 128 Winters Road was based on predicted ambient noise levels of 50 dBA. Mr Farren did not take any actual noise measurements at 128 Winters Road. We note Mr Farren considered Dr Trevathan's measurements were not accurate because they were initially conducted during a school holiday period, and that on that basis he preferred his own prediction as an appropriate basis for assessment.

[75] Para 7.19 Farren EIC
[76] Para 7.19 Farren EIC

Evaluation

5.122 The implication of the difference between predicted ambient noise levels versus the measured ambient noise levels relates to the magnitude of change. At the lower 45-46 dBA levels recorded by Dr Trevathan, the change in noise levels with the NAE (including proposed mitigation) is +9-10 dBA at the ground floor. In contrast, using Mr Farren's predicted existing noise level, this would reduce to +5 dBA.

5.123 We note that the relative potential increase in noise level at the rear of 128 Winters Road (affecting their outdoor living area) was the main concern for Mr Hayward and Ms Murphy. We have considered the magnitude of this change in ambient noise levels based on the level of effect as set out in Table 5 of Mr Farren's evidence. This table was agreed by Dr Trevathan and Mr Malthus. We note that adopting Mr Farren's ambient noise levels results in a 'moderate change' in noise levels; whereas adopting Dr Trevathan's measure ambient noise levels, results in a 'severe effect'.

5.124 Dr Trevathan provided us with advice on how we could consider the noise modelling results as part of an overall assessment. In paragraph 3.14 of his supplementary statement of 24 April 2015 he stated:

> *'With regard to reliance only on the criteria outlined in NZS6806 – I note that it is my view not even the Standard itself anticipates such a narrow approach. As per 6.3 of the standard (which Mr Farren has attached to his supplementary statement), the extent to which compliance with the relevant noise criteria is achieved is only one of 14 matters to be considered before arriving at a final solution. And even then, as I explained in paragraph 3.3 of my evidence in chief, the Standard states that as a whole it is only intended to be 'a relevant mater to be taken into account' when making a recommendation on a designation. Any suggestion that the Standard already embodies all relevant matters is therefore not supported by the standard itself.'*

5.125 The point made by Mr Farren, and Mr Malthus on behalf of CCC, was that even at 55 dBA, the outside noise level is still an acceptable level of noise at the façade of a property. Additionally, they noted that this noise level would meet Category A of NZS 6806 for new roads.

5.126 A further consideration for us, is the permitted noise levels within the current zone. In this regard, we note the City Plan allows a maximum daytime noise limit of 50 dBA and a maximum night time limit of 45 dBA. We consider this is also relevant in our assessment.

5.127 Ultimately, we consider that an ambient noise level of 50 dBA could readily be expected at the rear of 128 Winters Road within the context of the existing environment and zoning. The change in ambient noise level to 55 dBA, with the mitigation proposed by CCC, would result in a moderate increase in noise levels. This consideration goes beyond simply considering the noise levels themselves and takes into account the other aspects of the overall noise assessment as outlined by Dr Trevathan.

5.128 Overall, we find that the magnitude of change or level of effect on the outdoor living area at 128 Winters Road is not unreasonable, based on noise mitigation proposed by CCC. We are satisfied on the basis of the evidence that the mitigation proposed is likely to result in noise levels of 55 dBA at ground level and 57 dBA on the first floor. We accept that these levels are consistent with Category A levels for a new roads.

5.129 We acknowledge that with windows open, the noise levels upstairs at 128 Winters Road could be 42 dBA, but agree with Mr Farren that this is a minor and probably imperceptible difference. If the difference with windows open is 17 dBA, we accept it will likely meet the standard for sleep protection. If the windows are closed, it will clearly also meet that desired standard.

5.130 For the NA, we recommended maintaining Mr Malthus' conditions because of the potentially moderate to severe effects of additional noise in relation to sleep disturbance. The same cannot be said in this situation. On the basis evidence presented, we accept that if there is an effect, the level of that effect is likely to be barely noticeable. We therefore accept that as long as the noise levels are maintained to Category A levels, no further noise mitigation at 128 Winters Road should be required.

5.131 However, to address the submissions made and the obvious concern that Mr Hayward and Ms Murphy have with respect to noise at their property, we consider it is not unreasonable to ensure the internal noise levels are protected for uninterrupted sleep, as with other properties in the NA (noting that the NA properties are Category B). This aligns with Mr Malthus' and Ms Markham Short's recommendations. We do not consider this to be too onerous on the Applicant.

NAE/CSU Alternatives

5.132 Ms Perfect outlined that four alternatives were considered for the local road extension of the NA beyond QEII Drive. These were:

a) Philpotts Road;
b) East Ellington Connection;
c) Innes Road upgrade; and
d) Marshland Road.

5.133 We were advised that these connections were not preferred as they were either not capable of providing a viable connection from the NA to the City, were substandard (in comparison to the NAE/CSU) in terms of network performance, or were unsafe. Ms Perfect concluded on the basis of the assessments undertaken that the NAE/CSU link was therefore the preferred option.

5.134 We heard from SARA that a combination of the possible routes had not been analysed, but we find that does seem to be the case. SARA's preferred solution was to split the additional traffic across several alternative routes. However, no specific

details or analysis of combinations of these alternative routes was presented in evidence. We note that the statutory test required is that alternatives are considered and not that the best alternative is ultimately preferred. In this sense, we accept that alternatives have been considered and find that the assessment undertaken meets the requirements of the Act.

CSU Cross-section

5.135 The increase in delays on Cranford Street was clearly established by Mr Row, with or without the CSU portion of the Project. His evidence established that the upgrade of this section of road, to increase capacity, is required now, or at some time in the future and the sooner the better.

5.136 We discussed the need for an infrastructural solution rather than a traffic management (i.e. clearway) approach with various witnesses. We were told it was the NAE and additional traffic from the NA that drove the need for an infrastructural change and that a traffic management approach could have been considered if the NA/NAE Projects weren't happening, but accept this is the Applicant's preferred option. We were advised a traffic management approach could be considered on Cranford Street south of Innes Road, but that this assessment has yet to be made.

5.137 Before we considered the effects of the CSU proposed, we asked a question relating to the permitted baseline for Cranford Street in Minute No.3. Mr Smith addressed this in his closing submissions at paragraphs 113 – 129. Mr Smith outlined the background to the concept of permitted baseline before answering the specific question as it related to Cranford Street.

5.138 Mr Smith referred to Mr Whyte's evidence[77] that Cranford Street is a 'Special Purpose Road Zone' in the City Plan. He submitted that road construction and reconstruction generally would not require a resource consent provided standards relating to roadway widths, medians and the like are complied with. Mr Whyte also noted[78] that the widening at Innes Road did not require any alteration to the existing designation and that in his view the CSU potion of the NoR was more transparent method of implementing the total upgrade.

5.139 Mr Whyte's supplementary evidence[79] highlighted that within the existing 20.1 m road reserve (one chain width) from McFaddens Road to Innes Road, the standards in Appendix 2 - Roading Hierarchy Standards could not be met. Mr Whyte confirmed[80] that the CCC could build the four lane road in the wider section north of McFaddens Road to these standards, but not in the narrower 20.1 m section. The purpose of the designation is therefore to provide CCC with an exemption to the existing rules.

[77] Para 173 of EIC
[78] Para 173 of EIC
[79] Para 7-11 of Supplementary Statement
[80] Closing at para 129

5.140 Mr A. Taylor outlined that the individual components of the cross-section proposed met the Christchurch Infrastructure Design Standards. He noted that essentially, the proposed cross-section did not include the on-street parking and amenity strips required under Appendix 2, but met or exceeded the minimum standards for the remainder of the elements. In addition, he advised that Cranford Street did not currently meet the Appendix 2 standards because of existing traffic flows. He stated that the current standard for a 'Major Arterial' is a 30 m wide road reserve, and that this was likely to change to 25 m under the amendments currently identified in the proposed Replacement District Plan.

5.141 This came to the heart of the debate regarding a 'high quality route'. Mr Roberts on behalf of CCC was of the opinion that the route was not high quality, largely because it did not provide all the elements prescribed in Appendix 2. Ms Perfect and Mr A. Taylor disagreed, and considered the route was high quality in the way the design responded to both the LURP and CTSP direction. While there were discussions on what constitutes a high quality route, there was ultimately no agreement on a definition and Mr Roberts conceded that the proposed cross-section was 'an acceptable solution'.

5.142 The notion of a high quality route was ultimately most clearly outlined by Mr A. Taylor in his further statement of evidence dated 22 May 2015. His paragraphs 20 and 21, which are provided below, guided our thinking on this matter.

> *'20. Any retro-fitting carried out needs to recognise the modal priority assigned to both the NAE/CSU in the CTSP. The CTSP recognises, at Objective 1.2, that it is neither possible nor practical to provide the highest level of service for cycling, walking and vehicle traffic on each road every time. The CTSP takes the approach of satisfying the need to provide for different modes of travel by optimising individual routes to provide for a mode of transport rather than require each road to provide for all modes of transport. A copy of Objective 1.2 of the CTSP is exhibit ALT2.*
>
> *21. Cranford Street is not identified by the Council as providing for walking, cycling and vehicle movements. The CTSP describes the function of the NAE/CSU as a District Arterial Route focusing on providing for medium and long distance traffic routes (i.e. primarily for cars and trucks). However, the Grassmere/Rutland Street Cycleway (or Papanui Parallel) will provide the main route for cyclists and Main North Road will provide for public transport. This approach in the CTSP deals with potentially competing interests for limited road space, while still providing a high quality transport route for each mode of transport. In practice this means Cranford Street is one part of an overall roading network, concentrating on vehicle movements and freeing up other routes to provide other modes of transport. This approach is pragmatic but I consider it is sensible and consistent with my experience of modern design. This transport route is intended to complement the Northern Arterial so I consider the outcome to be good quality design.'*

5.143 We note that this 'CTSP approach' has already been adopted in other projects around Christchurch, including Curletts Road, parts of Blenheim Road and Fendalton Road.

5.144 We were told that the 'CTSP approach' did not do away with meeting standards that required to provide for safe and efficient traffic movement. Mr A. Taylor went to some length to reinforce this very point. It does however, recognise that certain elements in a wider transportation network should have priority on different routes

and that in this instance, on Cranford Street, vehicle movement is the priority. In evidence, CCC highlighted other roads which provide more priority for other modes. Overall, we accept this approach and find it encourages efficient use of the existing road space and in a wider transportation network context provides a high quality design.

5.145 This does not however, mean that other modes of transport are sacrificed to the priority element. This is evidenced by the joint statement of Mr Roberts, Mr A. Taylor and Ms Perfect, which addresses critical elements including the central median width, cycle facilities and footpath widths. The joint statement provides us with some confidence that although not all of these elements may be prioritised on Cranford Street, the provisions for non-vehicular modes will be at least as safe, if not safer than that which currently exists, even with the substantial increase in traffic volumes.

5.146 The result of the joint statement was that a central solid median of at least 1.8 m would be provided on Cranford Street to provide a safe refuge point for informal pedestrian crossing manoeuvres and also to provide for additional landscaping features. The proposed condition relating to median width is supported. The need for the median itself was also discussed, but given the permitted baseline of what CCC could do in terms of altering Cranford Street within its existing mandate, as Road Controlling Authority, there was no technical argument presented that a median, in its totality, was required.

5.147 We note however, that the 'CTSP approach' does not create a *carte blanche* acknowledgement that a 20.1 m road reserve is sufficient for all 'Major Arterial' roads (which this section of Cranford Street will become following the Project). As the CTSP outlines, the wider objective is to make the most efficient use of the available road network for the 'dominant' function. We acknowledge that in other situations 20.1m may not provide for the dominant function and a wider road reserve may be required in some situations.

5.148 While we accept the 'CTSP approach' as a pragmatic way to minimise road reserve widths required, in terms of CCC's Appendix 2 standards, it is clearly not ideal. The result of this approach will ultimately be different standards for different roads throughout the city depending on their strategic focus, and possibly without sufficient room to respond to future changes in the network. However, we accept in this particular situation, it is a reasonable approach.

Downstream Effects

5.149 The issue of downstream effects from the additional traffic wanting to use the wider Cranford Street/NAE/NA link was raised by a number of submitters and CCC's traffic reviewer, Mr Roberts. These effects were acknowledged by CCC through all relevant witnesses including Mr Row, Ms Perfect, Mr A. Taylor and Dr C. Taylor. All witnesses

acknowledged that rat-running was a consequence of having a priority route and that this was also the case Cranford Street.

5.150 The Management Plan approach proposed reflects a general acceptance that rat-running already occurs and that it is likely to increase following the works, until the capacity is increased on Cranford Street south of Innes Road. It also responds to the difficulty of identifying specific locations and mitigation measures required to reduce the effect to an acceptable level before the Projects are completed. Like many construction aspects of Projects, we agree that a management plan approach provides a framework to monitor and implement measures to address downstream traffic effects, as necessary. This was seen as an appropriate approach and was supported as it gives more certainty to the community that they will be involved and measures will be implemented.

5.151 At the start of the hearing, we were presented with the Downstream Effects and Property Traffic Management Plan, agreed between Mr A. Taylor and Mr Roberts. This document provided an identification process, and equally as important, action points to provide for implementation of suitable devices necessary to reduce any increased rat-running.

5.152 Throughout the hearing and even on the final day when we heard from Mr A. Taylor that the fundamental ideals of the proposed Management Plan had not changed. We were advised that what had been added was increased community (SARA), CDHB, local schools, cyclists (Spokes) and local community board involvement. This additional consultation base was included for several reasons, not least of which was the local knowledge and identification of potential traffic issues as they develop. It was accepted that this would benefit the Management Plan with early identification and therefore more engaged assessment and construction of measures.

5.153 The Management Plan is to ensure that downstream effects are appropriately managed to:

a) Assess the existence, nature and extent of any increased traffic on streets adjacent to, or adjoining Cranford Street attributable to the NAE/CSU that might cause or contribute to a loss of service to any of these streets for up to 10 years after the opening date of the NAE/CSU;

b) Implement measures to avoid, remedy or mitigate such effects, where these are more than minor, in a timely and cost effective manner and where appropriate and practicable; and

c) Monitor the efficacy of the measures for an appropriate period and implement further remedial action, if this is necessary and appropriate.

5.154 While it is usual to underlie management plans with measureable and enforceable bottom lines (or reference to other plans and rules with these), we accept that the dynamic and potentially unpredictable nature of this issue does not lend itself to this approach. Rat-running routes can be caused by localised traffic management during

construction and may be short term. The overriding desire however, is that all representative parties are involved in the discussions and mitigation, and is implemented as and when required.

5.155 We also note that downstream effects will be greater until Cranford Street is upgraded south of Innes Road. We were advised that investigation of any changes to Cranford Street through that section have yet to be completed. However, from a financial and local impact perspective, the sooner that capacity south of Innes Road is increased and vehicles are less likely to look for faster alternative routes, the less likely it will be that traffic calming measures will need to be installed through the St Albans residential streets.

Social Impacts

5.156 A number of local residents, resident groups (SARA) and the CBHB raised concerns in relation to potential negative social impacts on the local community, such as loss of community cohesion and severance of the St Albans community, which would result from the NAE/CSU Project.

5.157 Several submitters raised concerns with the loss of bus stops (resulting in increased distance for users) and pedestrian safety.

5.158 Ms Twaddell, on behalf of SARA provided an extensive submission on the potential social impacts of the Projects. She raised issues of pedestrian and community connectivity and localised changes to traffic movements required as a result of the proposed introduction of the solid median. She noted that this would create additional traffic movements (i.e. McFaddens Road east to the north) for local residents, increasing the length and time of travel and affecting safety due to the need for additional right hand turns. She considered that access to schools, parks, local business and community facilities would be adversely affected.

5.159 Spokes, amongst others, commented on the cycle facilities on Cranford Street and requested that more priority should be given to cyclists in any upgrade.

5.160 The questions we have to answer with respect to these social impacts is whether the implementation of the NAE/CSU Project (and to some extent the NA/QEII Project) creates additional adverse effects, over and above the existing environment; and if so, whether those effects can be sufficiently avoid and mitigated.

5.161 In relation to the existing environment, it is acknowledged that Cranford Street is already and busy road that experiences congestion during peak hours and that this creates existing community severance issues for the surrounding community. The ability to cross Cranford Street at the moment is only formally provided at the Innes Road intersection and there are currently no cycle facilities, on or off road. Cyclists currently have to share a 'normal' traffic lane and contend with adjacent park vehicles, including the risk of car doors opening into the lane.

5.162 We were told that under the permitted baseline (i.e. without altering the designation or needing resource consent), CCC could undertake all the works proposed on Cranford Street, with the exception of the Innes Road intersection upgrade. We were advised that such works could include the installation of a solid median, clearways, cycle improvements, road widening and the installation of traffic signals at McFadden Road. We consider this is significant, given that most of the adverse effects identified by submitters in relation to social impacts could result under the works undertaken by the CCC without altering the designation.

5.163 Dr C. Taylor presented evidence on behalf of CCC in relation to the possible social impacts of the CSU portion of the Project. This included a review of the Northern Arterial and Cranford Street Upgrade Social Impact Assessment (SIA), prepared by Opus International Consultants in 2013.

5.164 Both Dr C. Taylor and the SIA concluded that the Projects could provide net social benefits for social and economic well-being, as long as the design makes sufficient provision for active transport and local traffic movements.

5.165 One of the issues consider in relation to community severance is the ability to be connected to public transport. There are currently four bus stops along this section of Cranford Street and two will be removed as part of the project. The removal of the two bus stops means separation distances between bus stops will be in the order of 500m, which slightly beyond the 400m recommended separation distance for bus stops. However, the evidence presented to us indicated that this is not expected to impact on public transport use or efficiency and we accept this.

5.166 We acknowledge that there are some localised negative effects as well as wider positive ones. However, on a local level, pedestrian movement is improved with the McFaddens signals and solid median and cyclist facilities will ultimately be improved by the creation of either a separated on-road cycle lane or wide shared kerbside lane. While access to public transport will be reduced by increased distances between bus stops, we accept the evidence it will not reduce use or the efficiency. We note that both Dr C. Taylor and several submitters (including Dr Stevenson on behalf of the CDHB) support the McFaddens signals as they will '*…enable local residents to access schools, pre-schools and parks in the area*.[81]'

5.167 We note that Dr C. Taylor also acknowledged the importance of the Downstream Effects Management Plan in providing a mechanism for the local community to have input into identifying and managing the effects of rat-running or diverted traffic. He considered such a proactive approach to consultation is important to provide the community with a clear voice in the design and implementation of any mitigating features. We agree.

[81] Dr Stevenson for CDHB, Para 35.

5.168 Overall, Dr C. Taylor acknowledged the potential for localised effects, but considered the proposed design, both in terms of local connectivity and wider community benefits, could provide overall net social benefits. We agree.

5.169 We also acknowledge that the NAE/CSU Project as a whole will facilitate wider social benefits and the contingent benefits we have discussed earlier, including the ability to improve access to the Papanui parallel cycleway and Main North Road bus priority improvements.

5.170 The 'Do Nothing' option, as described to us, would only see traffic volumes and this level of congestion increase, regardless of the proposed works. In this regard, we consider the proposed upgrade will be an improvement on the existing situation. Overall, we accept that any adverse social impacts can be adequately mitigated.

Individual Property Issues

5.171 We have outlined below some of the individual property issues discussed with us during the hearing. While we have not addressed every submission, aspects of the issues are common throughout and we identify these where possible. Issues raised by Mr and Mrs Hsu and by Mr Hayward and Ms Murphy have been addressed elsewhere in this report.

Residential Properties

5.172 **Mr Boa** described potential safety issues turning into his property at 249 Cranford Street. Currently he is able to slow down and move out of the lane of traffic to turn into his driveway, which is a relatively easy manoeuvre. He considered that creating two northbound lanes close to the kerb (and the removal of the bus stop and parking) would force him to turn into his property from the active traffic lane and that this would increase the risk of a rear end collision. He confirmed that with his existing driveway he can manoeuvre on-site and drive out in a forward direction, although he noted it was challenging.

5.173 Ms Perfect discussed property access for various submitters[82] including Mr Boa. She acknowledged that turning into these properties would require a tighter turn, as the edge of the lane would be closer to the edge of the main carriageway. However, she was of the view this would be mitigated by using wide drop kerbs and widening the gateways, if required.

5.174 Ms Perfect acknowledged that reversing out of properties along Cranford Street could be more difficult after the upgrade, but that this would be mitigated, at least in part, by the upgraded Innes Road traffic signals and proposed McFaddens Road

[82] Para 52 EIC

signals that would create gaps in the through traffic stream and provide reversing opportunities.

5.175 We consider that the situation for many submitters is no different to other driveways in four lane sections of road throughout the country and there are no special conditions that exist here. We acknowledge Mr Boa will need to indicate his intention to turn early and slow the traffic in the outside lane to enter his property. However, we consider Ms Perfect's proposed mitigation is appropriate and accept that safe property access can be provided.

5.176 **Mr Allen** lives at 253 Cranford Street on the western side of the road. He was concerned about the wider issues of the Project, including his assertion that the Projects would simply move the bottleneck from the Waimakariri Bridge to outside of his house. He also commented regarding lack of consultation with the community and that the CSU part of the Project would split the community.

5.177 With respect to the first issue, Mr Allen is essentially correct when he noted that the bottleneck will move with the roading Projects, and this is acknowledge by the Applicant in the short term at least. As we have discussed earlier in the report, the evidence shows that until works are undertaken to increase capacity of Cranford Street south of Innes Road that will be the case. However, from a wider regional perspective not providing the additional capacity proposed would not change the existing congestion points, which will still worsen over time, and would not be in line with the direction of the CTSP or LURP.

5.178 In relation to Mr Allen's property, we also note that the morning peak, where queuing on this section of Cranford Street would be most significant, occurs in the southbound direction and would not affect his property access. However, we acknowledge that the solid median and the inability to turn right to and from his property at any time will be the primary restriction. The afternoon commuter peak period, as modelled, will not result in queuing past his property.

5.179 Consultation and community severance issues are discussed elsewhere in this report. To summarise that discussion, we accept that the consultation process was adequate and appropriate, and provided the community with sufficient opportunities to provide comment on the Project.

5.180 **Mr and Mrs Leith** presented us with a discussion on issues relating to their property at 209A Innes Road. They stated that the designation would cut through the front of their property that they currently use for off-street parking and manoeuvring. The reduction of this area creates a loss of parking, and potential on-site safety issues.

5.181 The impact on the Leith property was acknowledged by CCC in Ms Perfect's evidence[83] and again in her further statement of evidence. CCC have prepared four

[83] Para 56 EIC

mitigation options to address these concerns and to ensure that there are at least two alternative parking spaces on-site and sufficient manoeuvring space to enable safe exit from the property in a forward facing direction. We consider that CCC's approach is the appropriate and we have imposed a condition to this effect.

5.182 **Mr Bastin** is the owner of a Pharmacy on Innes Road, which is located east of Cranford Street. His pharmacy is relocating further east to 219 Innes Road. His submission requested that the ability to right turn into his property is maintained. Ms Perfect confirmed that this manoeuvre was allowed as indicated in the scheme drawings[84] and was expected to be carried forward into the specimen design stage.

5.183 We are satisfied that this submission has been addressed by CCC in the scheme drawings submitted with the application.

5.184 **Mr De Lu** presented on behalf of the cycling group, **Spokes Canterbury**, and spoke to their submission. He contended that the CSU Project would not provide sufficient pedestrian and cyclist benefits.

5.185 He noted that the Project needed to provide cycle and TDM (Travel Demand Management) measures to reduce single person occupancy cars and to provide more certainly regarding the benefits to cyclists.

5.186 While we agree that providing improved measures for all modes of transport on every road would be a desirable outcome, we have accepted the CTSP approach to prioritisation of certain modes for certain roads and that Cranford Street is prioritised for vehicle movement. Furthermore, we consider it is outside the scope of our decision to address specific issues such as average vehicle occupancy.

5.187 We accept that cyclist provisions along the NA and NAE will be directly improved by the creation of separated shared paths and features such as the overbridge proposed at the NAE/Cranford Street roundabout. The NA and NAE will also provide indirect benefits by reducing traffic volumes on other local streets which will make cycling safer and easier.

5.188 We consider that cyclist provisions along Cranford Street will also be improved when compared to the existing situation. In a wider assessment, the Papanui-Parallel cycle route was identified to us by a number of submitters and witnesses as being the arterial cycle connection to the city centre. We acknowledge that this is the case.

5.189 Overall, we consider that the Project offers significant improvements for cyclists in most, but not necessarily all situations. The proposed network changes have considered cycling and while improvements can always be made, in this situation we find the proposed cycle facilities are extensive and have been through an appropriate safety design assessment.

[84] Para 57 EIC

5.190 **Dr Raizis** presented to us and called **Mr McKenzie** as a witness. The presentation focused on the proposition that the Project perpetuates car usage and does nothing to make Christchurch a more accessible city. He also commented on the social severance and cycle issues that are discussed elsewhere in this report.

5.191 While we accept there are many ways to develop a city and the relativity of commercial, industrial and residential locations, we consider this is not something for us to comment on here. The case presented by NZTA and CCC reflects the current and future planning scenarios for the region and these were not contested on a technical basis. The drive to focus more on bus and rapid transit activities to link main centres is one for organisations such as NZTA, CCC and ECan to consider from a strategic perspective, with appropriate government guidance. We can only consider the case presented to us, which was ultimately compelling.

5.192 **Ms Bills** was opposed to the four laning of Cranford Street, but accepted the need for the NA Project. She considered that the four laning would simply encourage more traffic to use this route, increased rat-running and faster traffic moving through the residential streets. She was doubtful of the CCC's ability to manage downstream effects and outlined a number of traffic management devices (as she called them), on Mersey Street that she considered were ineffective in slowing traffic.

5.193 In response, Mr A. Taylor commented that the features identified by Ms Bills were signs and intersection treatments used in everyday traffic management and in his opinion did not constitute traffic calming measures, as discussed through the Downstream Effects Management Plan.

5.194 We acknowledge that the technical nature of the applications can on occasion result in misinterpretation of measures proposed. This is particularly so for lay people or those not familiar with specific technical terms. We agree that Mr A. Taylor that the existing traffic management devices referred to Ms Bills on Mersey Street, are not specific traffic calming measures. Overall we accept that traffic calming measures can be progressively implemented to address rat-running through the Management Plan, as necessary.

Commercial/Business Properties

5.195 Several submitters including Small World pre-school, Crane Distribution, Fletcher Distribution, Cranford Oak Motel and GW Cranford requested consideration of U-turn facilities at various locations along Cranford Street. The request was a response to the CCC proposal to introduce a solid median that will prevent convenient turns into and out of the properties along the CSU.

5.196 The **New Zealand Fire Service** also requested a break in the median to allow for unrestricted emergency service access.

5.197 In dealing with the Fire Service submission, CCC confirmed that provision of a break in the median, removal of the raised island, or having an island flush with the adjacent road surface was part of the application. We were advised that these options would provide unrestricted turns for emergency vehicles. We accept that any of the options outlined would provide for unrestricted access, with the same level of access they currently enjoy.

5.198 The plans provided showed a number of potential right turn and U-turn positions along Cranford Street[85]. Starting at the southern end of the CSU there was a U-turn at 293/291 Cranford Street, a U-turn opposite the Small World pre-school, a right turn bay at Placemakers and a U-turn approximately 100m north of the Placemakers entrance.

5.199 We were advised that the agreed U-turn facilities opposite the childcare facility and one north of Placemakers entrance were subject to safety audits. We note that not all these facilities were included in the NoR application, and that only the facility at 291/293 Cranford Street and the right turn into Placemakers entrance form part of the application under consideration.

5.200 Mr Flewellen prepared planning evidence on behalf of **Fletcher Distribution Limited (trading as 'Placemakers')** and also for **Crane Distribution New Zealand Limited (trading as 'Mico')**. Mr Penny also prepared expert traffic evidence on behalf of these submitters. However, this evidence was not tested by us during the hearing, as Placemakers and Mico did not appear at the hearing due to ongoing negotiations with CCC. We were not made aware of the outcome of these negotiations.

5.201 However, in his written evidence Mr Flewellen noted that there was no firm commitment or certainly within the NoR with regard to access or U-turn facilities sought by the submitters. He noted that the specific locations or provisions agreed to outside of the hearing would be left to the detailed design stage and would be subject to a safety audit process before inclusion. Both Mr Flewellen and Mr Penny submitted that there was no certainly that any proposed turning provisions would 'pass' a safety audit.

5.202 Mr Penny's evidence identified that it was not possible to 'pass' such an audit as there would always be safety issues associated with any design. We agree that the term 'safety auditing' relates more to having undertaken a process, but that ultimately it is up to the road controlling authority to accept if the residual risks of any particular project are acceptable.

5.203 Mr Flewellen's submission also discussed the potential business impacts in terms of the LURP, RSGC, operative City Plan and Part 2 of the Act, and concluded that:

[85] Ms Perfect EIC Figure SAP 6

- The design could not be considered as supporting the business protection for Placemakers or Mico with respect to Objective 6.2.4 and Policy 6.3.4 of the LURP;
- The proposed NoR would not achieve the RSGC goals, as set out in Section 4 of that document in relation to Placemakers and Mico;
- The proposed design does not achieve consistency with Objective 7.1 – A sustainable transport system, of the operative City Plan; and
- With respect to Section 5 of the act, he concluded that although the strategic importance of the Project could not necessarily prevent the proposed NoR from being broadly in keeping with Part 2 of the Act, the access redesign proposal could achieve better alignment with Part 2 without significantly compromising the benefits of the scheme.

5.204 Overall, Mr Flewellen considered the proposed NoR could have significant adverse effects on the site.

5.205 We consider that Mr Flewellen's approach to the LURP, RSCG and operative City Plan is too narrow in its scope. The objectives and policies identified relate to a wider, more strategic consideration and in this sense, should be considered for the wider Project and not necessarily each individual site. The assessment presented to us also lacked discussion around the potentially positive effects of more than doubling traffic flows in front of the site and the focus placed on this route for vehicular traffic, which was clearly important for these businesses.

5.206 When we considered the objectives in a wider sense, we have concluded the NoR is consistent with the overall objectives and policies listed above. We do not consider that the discussion relating to each individual site is well rounded or particularly relevant to our deliberations.

5.207 Mr Penny raised issues relating to U-turns and specific site access and the NAE roundabout. The roundabout issues are discussed later in this report. Mr Penny confirmed that his clients supported having breaks in the median to provide for property access and possibly general U-turns.

5.208 Specifically in relation to Mico, he supported the provision of a median break at 291 Cranford Street, opposite the driveway to GJ Gardner Ltd, to allow southbound to northbound U-turns to be made.

5.209 Mr Penny then discussed the 'need' to have a U-turn at, or north of the Placemakers entrance, as there are no practical alternatives to a U-turn due to there being no other side roads on the western side of Cranford Street north of McFaddens Road. In his opinion, the median break proposed at Placemakers entrance should be expanded to allow U-turns at that location and right hand turns both in and out. We note this was not supported by Mr A. Taylor or Ms Perfect.

5.210 Mr Penny also considered it could be possible to install another U-turn facility around 100m north of the Placemakers driveway[86]. However, he stated he would not support such a facility further than 100m north of the Placemakers entrance, due to interaction with the NAE roundabout and safety issues.

5.211 We find that the case for providing U-turns at the Placemakers entrance or 100m north of Placemakers entrance seems not to have sufficiently considered use of the roundabout 400m to the north. While we acknowledge that use of the roundabout to make U-turns would be an inconvenience in terms of travel times, we consider it would be safer than making uncontrolled U-turns through a median.

5.212 We note that the NoR, as submitted, includes a right turn bay into Placemakers and U-turn facility near 293 Cranford Street. Clearly, CCC have accepted that it is possible to have turn (and even U-turn) provisions safely provided for with the median. It does not however logically follow that they should be provided, particularly given the side road alternatives and NAE roundabout, even if they are less convenient.

5.213 With respect to the facilities south of Placemakers, we favour the evidence of Ms Perfect and Mr A. Taylor that while these may be appropriate, it should be left to the detailed design and safety audit processes to confirm their acceptability.

5.214 In relation to the Placemakers entrance, we also support Ms Perfect and Mr A. Taylor's submission that they consider full turns at this location to be unsafe and unnecessary. The right turn into Placemakers (and NOT out) should in our view be retained as proposed in the NoR. Again we consider the NAE roundabout, while less convenient, can safely provide for U-turns to be made.

5.215 CCC has not asked for authorisation of the additional U-turns and we accept that are not are not part of the application before us. However, we do not consider that this should unnecessarily restrict further discussions between submitters and CCC with respect to other possible turn or U-turn facilities during the final design. We consider we cannot prejudge the road safety audit process and we are not prepared to prioritise convenience over safety.

NAE/CSU Roundabout

5.216 Submissions by Crane Distributors Ltd and Fletcher Distribution Ltd expressed concern regarding the proposed roundabout at the NAE and CSU intersection. These concerns were expressed by Mr Penny, who presented written evidence for each party separately, although he did not ultimately present at the hearing in relation to Fletcher Distribution's submission.

5.217 Mr Penny considered that a signalised intersection should be preferred at this location, despite his company's previous recommendation to have a roundabout as

[86] Mr Penny Evidence for Fletcher Distribution, Para 14

part of their input to the NROSS report. We did not delve into the detail of why his recommendation had changed, as it was not material to our consideration of the submission.

5.218 Mr Row addressed the options for this intersection and concluded that a roundabout was preferred to a signalised junction. No technical evaluation was presented to contradict this assessment. However, we note that the both realistic alternatives were assessed and accept that the option that has been preferred by CCC has been done so on a sound technical basis.

5.219 Ms Perfect addressed the geometry of the roundabout and the need to have the layout as proposed, including the slip lanes. She outlined in particular the need for the slip lane for southbound traffic from the NAE to the CSU, which if not included would reduce the benefits of the NAE/CSU Project by introducing significant delays.

5.220 While some geometric issues were raised by Mr Penny, Ms Perfect addressed these under questioning. Overall, she was satisfied that an appropriate geometry could be provided to provide for the safe movement of vehicles. She also noted that a safety audit would be undertaken as part of the normal detailed design of the Project and that any residual issues would be considered in some detail through that process.

5.221 For us, the question is whether CCC has presented a sound technical argument to support the designation sought for the intersection they have proposed. We find that although some questions were raised in terms of intersection geometry, there is a process to address these matters, which is part of the normal design process. We accept the need for the roundabout has been established and that the area required to be designated for its construction is appropriate.

McFaddens Road/Cranford Street Intersection Signalisation

5.222 A number of submitters raised the issue relating to the proposed pedestrian traffic signals at McFaddens Road. While there was support for these signals, most submitter requested that the full signalisation of the McFaddens Road/Cranford Street intersection be undertaken.

5.223 Ms Perfect opposed the full signalisation of this intersection due to adverse effects on residents along McFadden Road, the Papanui Parallel cycleway, and the safety and efficiency of the CSU. Essentially, Ms Perfect considered that the Innes Road traffic signals was the appropriate place to distribute traffic to the wider road network. She stated that allowing all turns at McFaddens Road would lead to a significant increase in traffic on McFaddens Road, produce a less safe outcome and increase delays on Cranford Street. She also noted that this would also result in more rat-running through the adjacent residential streets.

5.224 Specifically, in relation to the Papanui Parallel cycle route, Ms Perfect noted that traffic entering McFaddens Road would cross over or enter Rutland Street, which is

classified as a priority route for cyclists. She considered that this scenario was undesirable and as discussed later, would be inconsistent with the changing view on Christchurch transportation proposed through the CTSP.

5.225 Mr A. Taylor also addressed the full signalisation in his further statement of evidence. He noted that to fully signalise the intersection, additional land would be required, which could impact on the protected Oak tree within the adjacent motel land. He concurred with Ms Perfect that full signalisation would reduce the benefits of the Projects, increase rat-running through the adjacent local road network and adversely affect the Papanui Parallel cycleway project.

5.226 There is no doubt that full signalisation of the McFaddens Road/Cranford Street intersection would provide more convenient access to local residents to and from the north. In the same vein, there is no doubt that it would reduce the efficiency of the NAE/CSU Project in terms of its primary objective and increase rat-running (which is a particular community concern). When we consider the overall effects of the Project, the additional travel time that will result from local residents having to use alternative routes to access Cranford Street or Innes Road, we consider this does not offset the wider benefits gained from not fully signalising the intersection. We therefore agree with CCC that only pedestrian signals should be installed at McFaddens Road.

5.227 In addition, we note that if four lanes further south of Innes Road are constructed in the future, it becomes even more imperative that the through vehicle capacity is not unduly limited at McFaddens Road. With that in mind, Mr A. Taylor noted that providing a staggered intersection[87] would reduce the impact of the proposed pedestrian crossing to a minimum, and we agree.

[87] Para 95 Further Statement of Evidence

Operational Phase Effects - Cranford Basin Stormwater Management Area

5.228 The Cranford Basin Stormwater Management Area project addresses several stormwater management and flooding issues, including historic flooding. The history of the Basin was well set out in evidence by Mr Bensberg and Mr Couling on behalf of CCC, including photographs showing the extent of flooding at various times in the past.

5.229 Mr Bensberg outlined the existing drainage infrastructure in the area and noted in particular pumping station 219, which is located in the Cranford Basin to lift water out of the low-lying Basin and into the CCC drainage network. Mr Bensberg noted that without this pump station, the Cranford Basin would experience permanent surface flooding and ponding.

5.230 Mr Bensberg confirmed that he considered the 1:50 year flood level (2% Annual Exceedance Probability (AEP) event) was the appropriate design event, as it was consistent with the Styx SMP.

5.231 Mr Couling explained[88] that the Cranford Basin is the natural low point in the wider area and therefore provided the natural collection point for floodwaters. This was reflected the objectives to provide a long term sustainable solution in a manner that:

- Identifies the existing ponding areas in the Cranford Basin area;
- Integrates multi-values approach to the provision and management of the stormwater network servicing the Cranford Basin area;
- Manages water and land as an integrated resource;
- Preserves to the extent practicable existing topography and natural features in the Cranford Basin including water courses and wetland; and
- Manages stormwater in an efficient, cost effective and affordable manner.

5.232 We also heard that the Cranford Basin would provide for treatment of existing road stormwater, as there was a currently a lack of treatment, and to provide compensatory storage for the NAE. We understand this is a key driver for undertaking the Project now.

5.233 The solution proposed to address stormwater quantity and quality issues is the designation of the lowest lying land in the Cranford Basin area to allow CCC to restrict land use activities and control stormwater management in the area inundated in a 2% AEP rainfall event.

5.234 Several options for the Cranford Basin were assessed by CCC. This included:

- Option 1: Acquire the natural floodplain on both Cranford West and East

[88] Para 17 EIC

- Option 2: Acquire Cranford East and transfer Cranford west storage
- Option 3: Upgrade of Pump Station 219
- Option 4: Horners Drain upgrade

5.235 Mr Bensberg discussed that it was best to use natural processes rather than installing complex hard engineering solutions. He identified Option 1 as being the preferred[89] option. He noted Option 1 would mimic the natural extent of the flooding area, and was consistent with the proposed option for mitigation of the stormwater displaced by the NAE, and also the SMP and SMP Blueprint.

Positive effects

5.236 The NZTA/CCC[90] opening submissions list the positive effects of the Cranford Basin Project, identifying that the proposed stormwater works would:

- Provide for ongoing detention of stormwater;
- Provide for stormwater quality treatment;
- Provide 37,000m^3 compensatory storage lost as a result of the proposed Northern Arterial Extension;
- Provide as far as practicable a natural solution in a cost-effective manner;
- Give effect to key strategic documents and resource consents; and
- Enable the enhancement of ecosystem, iwi and recreation values.

5.237 These positive effects were uncontested and we accept the evidence supports the Cranford Basin Project will have significant positive effects.

Storage and detention

5.238 The modelling work undertaken by Mr Bensberg and Mr Couling identified the extent of the 2% AEP event within the existing landform and highlighted the fact that the stormwater designation area broadly reflected the flooding area. We note the extent and frequency of flooding within the Cranford Basin was not disputed by any party. While designation itself will not see any immediate effect on landowners, we can see that over the longer term, the designation will enable the CCC to manage the flooding area and provide improved certainty to both landowners and CCC moving forward. We are satisfied that the designation is an appropriate method to achieve the CCC's strategic goals for the management of the Cranford Basin.

5.239 The protection of people and property from flooding is ultimately one of the objectives of the proposed designation and we are confident the positive effects of the designation will be evident over time, well beyond the physical extents of the proposed stormwater management area.

[89] Para 86-89 EIC
[90] Para 33

Cranford Basin Extent of Designation

5.240 Two submitters raised concerns regarding the land identified for the Cranford Basin Stormwater Management Area required to be designated under the NoR. These were Mr Hayward and Ms Murphy at 128 Winters Road, and Mr and Mrs Hsu at 142 Winters Road. Both parties were represented by Counsel at the hearing.

5.241 Neither Mr Hayward and Ms Murphy, or Mr and Mrs Hsu presented technical evidence to dispute the extent of the 2% AEP (1 in 50 year) storm flooding extent or frequency of flooding. The evidence on this matter was presented by Mr Bensberg and Mr Couling. The evidence presented clearly showed portions of both properties (up to approximately 70% of the Hsu property) would be inundated in a 2% AEP storm event, and that the proposed designation boundary closely aligns with the modelled and observed extent of this surface flooding. The evidence was uncontested and we accept it. While Mr Couling acknowledged that both properties were at the edge of the affected area and would likely be the last properties to be affected, he maintained the proposed designation boundary was appropriate given the modelling undertaken, historical information and the natural landform.

5.242 Mr Hayward and Ms Murphy did not want their land to be purchased, preferring instead to have an easement over the area of land affected by the designation. They indicated that they would ultimately accept land use restrictions, as long as they retained control over the land.

5.243 We consider however that the mechanism of how the designation is ultimately executed, in terms of land purchase or easement, is not a matter for us to decide on. In our view, the need for and extent of the designation has been clearly proven, from a technical perspective.

5.244 Mr and Mrs Hsu were also concerned about the extent of land acquisition for the designation. Their legal Counsel, Mr Cleary, questioned if this was the appropriate method to achieve stormwater management and whether adequate consideration had been given to alternative methods[91]. He submitted that either way the outcome was significant for them in terms of restriction of use, or ultimately loss of land.

5.245 Mr Cleary also questioned whether inclusion of the Hsu land was necessary to achieve the objectives of the CCC.

5.246 We consider that Council has established the appropriateness of the extent of the designation, both on an overall scale and as it relates to each individual property. Further, we consider that restrictions on land uses is an appropriate management tool through the NoR. In essence, the regulatory environment the designation is now

[91] Mr Cleary Statement Para 2.1 (a)

going to reflect the nature of the existing environment. How these restrictions are imposed is not a matter for us to decide on.

Conditions and Overall Conclusions on Operational Effects

5.247 For the two roading NoRs, and with exception of the operational noise conditions, the Applicant and CCC have agreed upon conditions required to avoid, manage and mitigate the actual and potential effects of the NoR. There was full agreement between the applicant and CCC on the condition pertaining to the Cranford Basin NoR.

5.248 We have since reviewed all the sets of conditions, having regard to the submissions received, the NoRs and associated technical reports, and the s42A report (and appendices). In this respect, we have adopted all the agreed condition for all three NoRs and for the reasons outlined earlier in this section on operational effects, we have adopted the CCC preferred conditions in relation to operational noise effects for the NA and NAE/CSU NoRs.

5.249 As mentioned earlier in this section of our report, we are supportive of the management plan approach adopted in the conditions for all three NoRs and consider it will provide for a robust yet flexible framework for the Projects to operate within. Overall, we consider the conditions are measurable, clear, and relate to the works to which they are to be applied. We also consider that they are comprehensive in their scope and content. In our view, the conditions will ensure that the actual and potential effects of the proposal will be successfully managed to the extent that they will be no more than minor.

5.250 Before leaving the subject of conditions we wish to record our appreciation to the Council reporting officers and the Agency/CCC for working in a collaborative manner on these conditions and for (largely) making the changes we requested in relation to matters such as the management plans. As part of this, we wish to briefly make two points:

(a) Firstly, we wish to record that the conditions imposed reflect the proposal before us as represented in the plans and documents received by the CCC and referenced in Condition 1 for each NoR. The works by the two Requiring Authorities must proceed in *'general accordance'* with those documents. In addition, other conditions that the designations will be subject to is a requirement for further certified plans to be submitted prior to the commencement of works. We also note that depending on further investigations during the detailed design process for all three NoRs (and depending on the outcomes of such investigations) further authorisation under the Act may be required. Section 176A of the Act (dealing with Outline Plans and Outline Plan waivers) anticipates this and may be required for any such works.

(b) Secondly, we wish to briefly acknowledge the agreement of the parties in respect to the potential downstream effects of the CSU component of the NAE/CSU Project. We appreciate the efforts of the Applicant and the CCC in resolving this matter and agreeing on the condition that requires a Downstream Effects Management Plan to be prepared and adhered to. This was a major consideration for us and we expect that CCC (as Territorial Authority) to commit to the funding of any works required on local roads downstream of Innes Road under this Management Plan. In particular, we would expect to see adequate provision for such works in the CCC's Long Term Plan over the period to which the management plan regime applies.

5.251 For completeness, we also record our understanding that not all conditions will be enduring. Those conditions relating to the ongoing operation of the three Projects will be included in the City Plan. Those conditions include matters such as controls on operational noise and landscaping. Conversely, those conditions pertaining to construction activity management will not be included in the City Plan, but will attach to the designation for the duration of the construction works. The reason for this is that there is no need for them to be enduring in the City Plan following completion of works. As we understand it, these latter conditions will be no less enforceable if they remain outside the City Plan.

6.0 SECTION 171(1)(a) and (d) AND SECTION 168(A)(3)(a) and (d) CONSIDERATION OF KEY STATUTORY INSTRUMENTS

Context

The Relevant Instruments

6.1 As mentioned earlier, under 171(1) when considering a NoR and any submissions received, the decision maker must, subject to Part 2, consider the effects on the environment of allowing the requirement, *having particular regard to-*

> *(a) any relevant provisions of-*
> *(i) a national policy statement:*
> *(ii) a New Zealand coastal policy statement:*
> *(iii) a regional policy statement or proposed regional policy statement:*
> *(iv) a plan or proposed plan; and*
> *…….*
>
> *(d) any other matter the territorial authority considers reasonably necessary in order to make a recommendation on the requirement*

6.2 In respect to the above statute, we are required to consider a range of statutory and non-statutory instruments that apply to the NoR for each of the three Projects before us. We note that these instruments, as well as being a mixture of statutory or non-statutory documents can be further divided into either RMA or non RMA documents. The former are relevant considerations under **clause (a)** of s171(1) (i.e. RMA 'plans and policies') whereas the latter fall to be considered under **clause (d)** (i.e. 'other matters'). Although s171(1) lists these as separate categories of matters we must *have regard to*, we propose to consider them contemporaneously. The principal reasons for this are twofold:

(a) Firstly, it is clear to us that there is a strong relationship between the RMA plans/policies and the non RMA documents in respect to transportation planning issues affecting both the NA/QEII Drive, the NAE/CSU and (to a lesser extent) the Cranford Basin Project. In some instances the non-statutory documents are informed by and implement the relevant RMA instruments (and sometimes this applies in reverse). In this respect, it is difficult and unnecessary to artificially divide the consideration of these documents; and

(b) Secondly, in some instances, it is difficult to determine whether a document is an RMA or non RMA document. For example, both the Recovery Strategy for Greater Christchurch (2012) and the LURP deal with RMA matters, but were not specifically produced under the RMA statute; being 'earthquake recovery' documents produced under the Christchurch Earthquake Recovery

Act 2011. Furthermore, the planners for both the Councils and the Applicants did not attempt to classify these documents as being in either camp; we haven't either.

6.3 Accordingly, our consideration of RMA 'plans and policies' and 'other matters' - sections 171(1) (a) and (d) - is undertaken concurrently in respect to all three NoR applications.

6.4 Subsequently, we discuss each of the NoR applications in relation to the relevant provisions, beginning with the NA/QEII Drive Project. In terms of the particular regard we have to each, we have addressed the overarching provisions as a whole under our discussion of the NA/QEII Drive NoR, before providing our evaluation of provisions which are specific to each of the remaining NoR applications.

6.5 The section 171(1)(a) RMA instruments relevant to all three NoR applications can be divided into the national, regional and local as follows:

(a) National: the NPS Freshwater Management
(b) Regional: the RPS and various operative regional plans
(c) Local: the City Plan (both operative and proposed replacement district plan)

6.6 In addition to the above RMA instruments, the principal specific **section 171(1)(d) matters** that are considered of particular relevance to each project include, but are not limited to:

<u>NA/QEII Drive</u>

- Land Transport Management Act (2003)
- Government Policy Statement on Land Transport Roads of National Significance programme (2015/16 – 2024/25)
- Waimakariri River Regional Plan (operative date 11 June 2011)

<u>NAE/Cranford Street Upgrade</u>

- Greater Christchurch Transport Statement (2012)
- Christchurch Transport Strategic Plan (2012 – 2042)

<u>Cranford Basin</u>

- Ngai Tahu Freshwater Policy Statement (2013)
- Mahaanui Iwi Management Plan (2013)
- Styx Stormwater Management Plan (2012)

<u>Relevance of the Identified Instruments</u>

6.7 The evidence presented to us by the various transportation and planning experts has directed our attention to the particular statutory and non-statutory provisions and documents listed above that are of relevance to each of the Projects.

6.8 In the absence of any challenge by any submitter, we adopt the evidence of the transportation and planning experts in respect to these instruments. The evidence presented by both the Applicants and the Councils' (both the CCC and ECan) reporting officers was in full accord on the identified provisions, relevance and nature of fit of the Projects with these documents.

6.9 All planning and transportation witnesses concurred that there is a high degree of strategic fit between the Projects and the policy frameworks under consideration. In particular, there was consensus amongst the key witnesses that:

(a) there were no 'red flags' at the national, regional and local policy levels to prevent the projects being approved; and

(b) there were a number of 'green flags' from a policy perspective that encourage the authorisation and implementation of each of the projects.

6.10 We briefly comment on the details of the above presently.

6.11 Before doing so, we wish to record that this is a very significant finding. It means that two of the four statutory matters[92] we are to have particular regard to when considering the effects on the environment of allowing the requirement, indicate a strong and direct alignment between the Projects and the statutory environment responsible for guiding and controlling land use in the greater Christchurch area. While this doesn't obviate the need for us to consider the degree to which effects are avoided, remedied or mitigated, it does nevertheless provide a high level of comfort that the Projects are very appropriate from a strategic policy perspective. This in turn provides a framework for an overall consideration of the effects the project that we have considered earlier in Part B of this recommendation/decision report.

6.12 Whilst we could leave the discussion on policy here, we have decided to set out for the record the relevant provisions and degree to which we have had regard to them under each of the three NoRs. We do this below.

6.13 For completeness, we note here that all three Projects have also been subject to applications under the NES Soil. Applications were required as there are specific locations along the alignment where consent will be required to disturb potentially contaminated soil. The details are as follows:

(a) RMA92029249 was granted by the CCC on 18 May 2015 to NZTA and applies to soil disturbance works associated with the construction of the NA/QEII Drive Project; and

[92] The other two matters being: a consideration of alternatives and the Requiring Authority Objectives for the work under clauses ((b) and (c) respectively of s171(1).

(b) RMA92026989 was granted on 2 April 2015 and applies to the disturbance of contaminated soil for the construction for the NAE and Cranford Stormwater Basin Projects.

6.14 Both consents were processed on a non-notified basis and are subject to conditions. As the applications under the NES Soil have been granted, we have not given any further consideration to the requirements of the NES Soil.

Northern Arterial (NA)

Context

6.15 As summarised in the application documents, the s42 report and the various evidence of the Applicants' planners, the relevant statutory instruments that are required to be given particular regard under s171(1) of the Act are the:

(a) National Policy Statement for Freshwater Management 2014 (NPS Freswater);
(b) Recovery Strategy for Greater Christchurch 2012;
(c) Land Use Recovery Plan 2013 (LURP);
(d) Canterbury Regional Land Transport Strategy 2012-2042;
(e) Greater Christchurch Transport Statement 2012 (GCTS);
(f) Government's Roads of National Significance programme 2015-25 (RoNS);
(g) Canterbury Regional Policy Statement 2013 (RPS);
(h) National Resources Regional Plan operative 27 October 2009 (NRRP);
(i) Waimakariri River Regional Plan operative 11 June 2011 (WRRP);
(j) Proposed Land and Water Regional Plan notified 18 January 2014 (pLWRP);
(k) Christchurch City Plan operative 21 November 2005 (City Plan);
(l) Christchurch Replacement District Plan notified 27 August 2014 (CDRP); and
(m) Mahaanui Iwi Management Plan 2013 (MIMP).

6.16 These provisions were fully analysed in Section 11 of the AEE accompanying the NoR application and also in the appendices for the NA/QEII Drive NoR, with the exception of the:

(a) Recovery Strategy for Greater Christchurch;
(b) LURP;
(c) RPS; and
(d) CRDP.

6.17 We note these four documents did not exist at the time of lodgement of the NoR and the objectives and policies they contain have since been identified, canvased and tested in the s42 reports and the planning evidence of Ms Brown[93] and Mr Whyte[94]

[93] Evidence of Ms Brown, Addendum SLRB2 – Statutory Assessment
[94] Evidence of Mr Whyte, pg. 20 para 103 – 106, page 22 para 114 – 117,page 29 para 152 - 156 and Addendum PSW 3 and PSW4: Land Use Recovery Plan

6.18 In terms of the above, all the planning experts have noted that NA/QEII Drive NoR was identified as an important strategic route across national, regional and local government statements, plans and strategies.

National Level

6.19 At the national level, Ms Markham-Short provided a succinct overview of the central government provisions in support of the NoR as follows:

> *'… the Government Policy Statement on Land Transport Findings, prepared under the Land Transport Management Act 2003 and revised in 2009 and 2012, seeks to progress seven roads of national significance. The RoNS cover three state highway corridors around Christchurch (north, west and south) and the Northern Arterial/QEII Drive 4-Laning fits within the Northern Corridor group of projects*.'[95].

6.20 In his statement of evidence Mr Blyleven provided further background to the government provisions in his reference to the overall transport objective contained in Connecting New Zealand, which is the delivery of 'an effective, efficient, safe, secure, accessible and resilient transport system that supports economic growth of our country's economy, in order to deliver greater prosperity, security and opportunities for all New Zealanders.' [96] He stated that the GPS is a response to this objective, and sets out the land transport stagey to guide investment over the next 10 years. Mr Blyleven informed us that the key objectives of the GPS were:

- economic growth and productivity;
- safety; and
- improved freight supply chains.

6.21 Mr Blyleven also noted that the GPS identifies seven RoNS, including the Christchurch Motorways – of which the NA/QEII Drive Project is an integral component.

6.22 With regard to NA/QEII Drive Project, Ms Markham-Short stated that the importance of this route as a part of the RoNS programme lay in the strategic link it provides between Lyttelton Port, the Christchurch transport System and the State Highway network. She also stated that the route was recognised in the RPS, RLTS and the LURP.

6.23 We adopt these conclusions about the strategic fit of the NA/QEII Drive Project at the national policy level and now turn to comment on the regional level documents identified by Ms Markham-Short

[95] CCC s42A report, pg. 15, para 46
[96] Connecting New Zealand, Ministry of Transport 2011, pg. 3 in Statement of evidence of Mr Blyleven, pg. 6, para 24

Regional Level

6.24 At the regional level, we were advised by Ms Markham-Short that the NA/QEII Drive Project was identified as a vital link in the Christchurch transport system and State Highway network as a part of the RoNS programme[97] in the following documents:

(a) Regional Policy Statement 2013 (RPS); and
(b) Regional Land Transport Strategy 2012-2042 (RLTS).

6.25 Ms Brown provided an assessment of the relevant objective and policies of the RPS in attachment SLRB2 to her statement of evidence. She advised us that the RPS was a broad policy document, which set out the regional resource management issues and provided objectives, policies and methods to manage these issues. Ms Brown considered that Chapter 6 of the RPS was of particular relevant to the NA/QEII Drive Project, as this chapter provides the policy framework under which the UDS guides future growth of Christchurch. She concluded that the NoR promotes the relevant objectives and policies contained in the RPS[98].

6.26 Following on from this, Mr Blyleven referred to the Regional Land Transport Strategy (RLTS) as providing the strategic direction for land transport within the region over the next 30 years. He summarised that document recognised the Christchurch International Airport, Lyttelton Port and the State Highway network as key strategic infrastructure within the region, which play a vital role in the operation of the region's transport system. He noted in particular that the RoNS projects are identified as a part of the strategic transport network, and that the NA/QEII Drive Project specifically provides the key northern access improvement to central Christchurch and to the Port of Lyttelton via QEII Drive, Travis Road and Anzac Drive[99].

6.27 Resultantly, we must have particular regard to these provisions when considering the proposed NA/QEII Drive NoR, and as such we concur that there is a good strategic fit of the Project with these regional provisions.

6.28 Other strategic documents identified by the planning experts as requiring our *particular regard* include the **Canterbury Earthquake Recovery Act (CER Act**), which became operative on 1 June 2012. We note that the CER Act states that any person exercising powers under the RMA must not make a decision that is inconsistent with a Recovery Plan in respect of resource consents or a NoR.

6.29 Under the CER Act, a strong directive is given in support of the Northern Arterial and also the Northern Arterial Extension and Cranford Street Upgrade Project through both the **Recovery Strategy for Greater Christchurch** and the **Land Use Recovery Plan**

[97] CCC s42A report, pg. 15, para 47
[98] Statement of evidence of Ms Brown, pg. 14, para78
[99] Statement of evidence of Mr Blyleven, pg. 7, para 25

(**LURP**). We note that both the Recovery Strategy and the LURP have been developed under the direction of the CER Act.

6.30 Ms Markham-Short identified Section 4 of the **Recovery Strategy** as relevant to the NoR and drew our attention to the following relevant goals contained in that section:

> *Economic – Revitalise greater Christchurch by:*
> - *Restoring the confidence of the business sector to enable economic recovery and growth*
>
> *Built Environment – Develop resilient, cost effective, accessible and integrated infrastructure, building, housing and transport networks by:*
> - *Prioritising infrastructure investment that contributes during recovery and into the future*
> - *Develop a transport system that meets the changed needs of people and businesses.*[100]

6.31 She also identified the priorities set out in Section 5 of the Recovery Strategy, which seeks the repair or rebuild of infrastructure in areas of development to address and promote social, economic, cultural and environmental wellbeing.

6.32 Key provisions contained within the **LURP**, identified by Ms Markham-Short[101] and Ms Brown[102] were:

(a) Clause 4.4: Delivering infrastructure and services – which requires that 'strategic freight transport networks are supported to function effectively'; and

(b) Clause 4.4.3: Support strategic transport networks and freight, which identifies key regional transport infrastructure requirements in Figure 5103 including both the Northern Arterial and NAE/CSU.

6.33 Given the above, and the evidence of the planning experts, we are of the view that the NA/QEII Drive Project is consistent with the provisions of the CER Act, the Recovery Strategy and the LURP.

6.34 At the regional level, we are also required to consider the provisions of any plan or proposed plan. Before we do provide our consideration of the provisions of the National Resources Regional Plan (NRRP) and the Proposed Land and Water Regional Plan (pLWRP) we must first address the status of these respective plans.

6.35 We have heard that there is a full agreement between the relevant planning experts that the pLWRP should be given the majority of weight over the NRRP. We adopt this

[100] CCC s42A Report, page 15 para 49
[101] CCC s42A Report, page 16 para 51
[102] Statement of evidence of Ms Brown, 8 April 2015, Attachment SLRB – Statutory Assessment, page 28, para 2
[103] Land Use Recovery Plan, Figure 5: Key regional infrastructure requirements through to 2028, page 33

position in having particular regard to each of these plans, and consider the proposal consistent with relevant objectives and policies of each.

6.36 With regard to the provisions of the NRRP, we refer to the ECan s42A report, which stated that the relevant provisions were contained within Chapters 3 and 4. Mr Murray surmised that the proposal was 'consistent with Chapter 3 provisions'[104], which relate to air quality from dust nuisance. Mr Murray also provided an assessment of Chapter 4, which sets the overall director for river water quality and impacts from point source discharge, and considered that the proposal was not inconsistent with the provisions of this Chapter.

6.37 In his assessment of the provisions of the pLWRP, Mr Murray also considered the objectives of Chapters 3 and policies contained in Chapter 4 as the relevant provisions. Ms Brown also referred to the pLWRP and noted that the key matters in relation to the NA/QEII Drive Project as being water quality, and specifically refers to Objective 3.8 and Policies 4.1, 4.7 and 4.13 of that document.

6.38 Mr Murray concluded in his assessment of the pLWRP that overall he considered 'the proposal to be consistent with relevant objectives and policies'[105]. We concur with that assessment.

6.39 The WRRP, as a component of the relevant regional plans, also requires particular regard in our consideration of the NA/QEII Drive NoR. In doing this, we draw from the s42A report of Mr Murray, who stated that '*…the WRRP is only relevant to elements of the NZTA project*'[106] in that only the NA/QEII Drive Project transverses the area to which the provision of the WRRP applies, and not the other NoRs subject to this recommendation/decision. Following his evaluation of the relevant objectives and policies of the WRRP, Mr Murray expressed that the proposal was consistent with these. These interpretations were shared by the other planning experts, and we also adopt that position.

Local Level

6.40 Ms Brown and Ms Markham-Short also assessed the project against, and found it to be consistent with, the provisions of the following **local** level documents:

(a) Operative City Plan;
(b) Christchurch Replacement District Plan; and
(c) Mahaanui Iwi Management Plan (2013).

6.41 Having regard to the provisions of the operative **City Plan**, we refer to our previous consideration of the permitted baseline in Section 5 of this report. In this previous section, we have drawn on the submissions of Mr Smith, which referred to the

[104] ECan s42A report, page 38, para 231
[105] ECan s42A report, page 40, para 245
[106] ECan s42A report, page 37, para 225

Northern Arterial route as '*not just a response to the GPS*' and that there has been '*a long history of planning for better access to Christchurch from the north starting in the early 1960s*'[107].

6.42 In their respective legal submissions and planning report, Mr Smith and Ms Markham-Short noted that the NA/QEII Drive NoR is an alteration of an existing designation recognised in the City Plan, which is shown in the Plan as a two lane Northern Arterial motorway[108]. Ms Markham-Short also referred to a number of Outline Development Plans in 'greenfield' subdivisions in the north of the City, which specifically reference this designation. She considered that such provisions implicitly deem the existing designations a part of the relevant planning environment, and as such the proposed alteration can be considered to be consisted with the City Plan. Ms Brown also considered the proposed designation alteration in her statement of evidence and concurred that it was consistent with the relevant objectives and policies of the operative City Plan.

6.43 As we are required to have particular regard to any plan and any proposed plan, we note that the planning experts have considered the proposed Christchurch Replacement District Plan (CRDP), which was notified (in part) on 27 August 2014.

6.44 In her consideration of the CRDP, Ms Brown stated that the proposed CRDP also showed the existing designation, and considered that the NA alteration was consistent with the matters identified in the objectives and policies, which included:

> *3.3.12 Objective - Infrastructure (Strategic Directions Chapter)*[109]*:*
>
> *a) The social, economic, environmental and cultural benefits of infrastructure, including infrastructure, are recognised and provided for, and its safe, efficient and effective development, upgrade and maintenance and operation is enabled;*
> *…*
>
> *c) The adverse effects of infrastructure on the surrounding environment are managed, having regard to the economic benefits and technical and operational needs of infrastructure.*
>
> *7.1.1 Objective 1- Integrated transport system (Transport Chapter)*
>
> *a) An integrated transport system:*
>
> *i. that is accessible, affordable, resilient, safe, sustainable and efficient for people using all transport modes;*

[107] Opening address and legal submissions for NZ Transport Agency and Christchurch City Council, Mr Smith, 21 April 2015, page 5, para 7
[108] Appendix 2 to Part 12, Volume 3 of the City Plan.
[109] Decisions released 27 February 2015

ii. that is responsive to the current recovery needs, future needs, and economic development;
iii. that supports safe, healthy and liveable communities by maximising integration with land use;
iv. that reduces dependency on private motor vehicles and promotes the use of public and active transport;
v. that recognises Ngāi Tahu/ Manawhenua values; and
vi. that is managed using the one network approach.

6.45 The **Operative City Plan** and the **CRDP** are the key relevant statutory instruments requiring our consideration at a local level, and we concur with the planning experts that the NA/QEII Drive Project is consistent with these.

6.46 Under s171(1)(d) we are also required to consider 'other matters' which in this case includes the Mahaanui Iwi Management Plan (MIMP) 2013. According to Ms Brown, the MIMP provides a policy framework for the protection for Ngai Tahu values, and for achieving outcomes that provide for the relationship of those who hold manawhenua over the land and natural resources in the area. Ms Brown, Mr Whyte and Mr Murray concurred that following consultation with Mahaanui Kurataiao Ltd, it could be concluded that the NA/QEII Project was not inconsistent with the MIMP.

6.47 No other matters are considered to require particular regard under s171(1) of the RMA.

6.48 Overall, having had particular regard to the matters we are required to under s171(1) (a) and (d) of the RMA, we adopt the position regarding the NA/QEII Project as summarised by Ms Brown that:

> *'…the positive effects of the Project are consistent with and will promote statutory and non-statutory plans, particularly transportation plans and the documents giving effect to the Government's RoNS programme. … overall the Northern Arterial proposal is not contrary to the objectives and policies of the regional plans.'*[110]

Northern Arterial Extension/Cranford Street Upgrade

6.49 Many of those matters which we are required to have regard to when considering the NAE/CSU NoR have been previously canvased under our above assessment of the NA/QEII Drive NoR. Accordingly, and as a starting point for this our policy assessment of the NAE/CSU NoR, we can accept that there is also a good strategic fit between that project and the prevailing national, regional and local policy framework.

[110] Statement of Evidence of Ms Brown, page 16, para 92

6.50 Notwithstanding this starting point, there are also specific regional and local provisions that we must have particular regard to that are of specific relevance to the NAE/CSU NoR; namely the:

(a) Greater Christchurch Transport Statement (2012); and
(b) Christchurch Transport Strategic Plan.

6.51 These transport documents are amongst those documents referred to by witnesses such as Mr Blyleven, Mr A. Taylor and Ms Perfect, who concluded that the NAE/CSU Project is in accordance with the outcomes sought. Mr Whyte, Ms Markham-Short and the other planning experts all agreed with this stated position and we draw on these to present our consideration these matters below.

6.52 For us, the starting point is the relationship between these documents. In this respect , Ms Markham-Short usefully provided an overview of the directive of each of these, which we include here:

> *Greater Christchurch Transport Statement (**GCTS**)…commits the signatories to a comprehensive plan for repair and replacement of the transport network post-earthquakes through the collaboration of central and local government and key strategic transport organisations.*
>
> *The Christchurch Transport Strategic Plan (**CTSP**) informs the Council's transportation programmes, and includes a vision to keep Christchurch moving forward by providing transport choices to connect people and places. Recognising that competing interests for limited road space exist, routes/corridors will be managed to prioritise differing transport movements (e.g. freight, public transport, general vehicles or active transport) and where priority is given to one mode, good alternative routes will be identified for others.*

6.53 We were informed by Mr A. Taylor that the **GCTS** is a **regional** level non-statutory document created in 2012 as a partnership statement[111] which sets out common goals for transport. Mr A. Taylor referred to the GCTS as focusing '*on strategic links, responding to the need to develop and transport system that meets the needs of people and businesses to support the UDS, LURP and Christchurch Recovery Strategy*'[112]. More directly, Mr A. Taylor referenced the GCTS Action Plan, which recommended the developments of Northern and Southern access and future growth areas. He also referred to the supporting documentation provided in the GCTS which required local connections to RoNS.

6.54 We agree with Mr A. Taylor's conclusion that '*the proposals for the NAE and CSU clearly accord with this element of the GCTS*'[113].

[111] Developed though collaboration with Central Government, UDS partners, technical experts and public consultation.
[112] Statement of Evidence of Mr A. Taylor, page 11 para 58
[113] Statement of Evidence of Mr A. Taylor, page 11 para 61

6.55 At the **local** level, Mr A. Taylor considered that the **Christchurch Transport Strategic Plan (CTSP)** played an important role in setting out a 30 year vision for transport within the city. We note that the CTSP is a non-statutory document produced by CCC in 2012.

6.56 The objectives of the CTSP were extensively canvased by Ms Perfect in her further statement[114]. Specifically, Ms Perfect referenced Objective 1.2 of the CTSP, which seeks to 'Use the Existing Road Network more efficiently'. She stated that this objective introduced a new road classification which identified priority corridors for each mode (strategic, freight, public transport, cycling and walking) and assigns a clear priority to one type of movement with good alternatives to be identified for other modes.

6.57 This was recognised by Ms Perfect as a significant change in how CCC is now treating road upgrades in the parts, and recognises that there are opportunities to make more use of existing road space by changing the way the road and transport network is managed. In particular, she noted that Cranford Street had been considered as a strategic vehicle traffic route, with good alternatives identified for other modes, including the Papanui Parallel as an alternative for cycling, and Main North Road/Papanui Road as a good public transport alternative.

6.58 In his evidence, Mr A. Taylor provided us Figure 5.3 of the CTSP, which clearly identified the NAE and Cranford Street as 'District Arterial Routes'. He noted that these routes are referenced in the CTSP as those that accommodate general traffic, rather than public transport or alternative modes.

6.59 He surmised that *'…the construction of the NA/NAE/CSU corridor facilitates the promotion of improved mode choice, assists in the provision of a balanced transport network and will also encourage people to use a wide range of transport options.'*[115] and concluded that this outcome would be in accordance with Goal 2.2 and Goal 3.3 of the CTSP, which respectively seek to create safe, healthy and liveable communities and support economic vitality.

6.60 Under questioning, both Ms Perfect and Mr A. Taylor agreed that the CTSP represented a significant paradigm/policy shift in transportation planning; one that allows roading authorities at the regional and local levels to make strategic decisions on how to prioritise the delivery of different modes of transportation. In other words, the days of arterial routes delivering across all transportation nodes are largely numbered and now there is a clear policy expectation that key routes will be selected for the provision of selected modes of traffic.

[114] Further Statement by Ms Perfect, 18 May 2015, page 1
[115] Statement of evidence of Mr A. Taylor, page 14 para 70

6.61 In the NAE/CSU context, this paradigm shift means that the Roading Authority (CCC) has decided, in conjunction with the NZTA that the priority for this route clearly rests with its arterial role in strategic vehicle flow. By necessity, this means that local traffic and other nodes such as cycling and public transport are delivered via other mode specific strategic routes; in this case public transport through a freed up Main North Road and cycling via the Papanui Parallel and its planned enhancements.

6.62 What we take from the above, is that the NAE/CSU delivers on this paradigm shift that has occurred in the local/region policy framework. Significantly, this paradigm shift and how the NAE/CSU has been proposed to operate (in tandem with the NA) is also manifest in:

(a) the objectives of the proposed works (and helps explain the necessity of the work and designation); and

(b) the considerations of alternatives.

6.63 These are statutory matters which are relevant under clauses (b) and (c) of s171(1) and to which we have regard to later in Part B of this report.

6.64 For completeness, we note that Mr Whyte[116] adopted the conclusions of Ms Perfect and Mr A. Taylor and provided his own conclusion that the NAE/CSU is *'…a critical component of the planned transport network for north Christchurch and are in accordance with a number of strategic documents including the Urban Development Strategy (UDS), Greater Christchurch Transport Statement Strategy (GCTS) and Christchurch Transport Strategic Plan (CTSP) and the Land Use Recovery Plan (LURP)'*

6.65 This view is one shared by all the relevant planning experts, and as such we consider that the NAE/CSU NoR is of a good strategic fit with the provisions of the statutory and non-statutory documents to which we are required to have particular regard in determining our decision.

Cranford Basin Stormwater Management Area

6.66 The Cranford Basin Stormwater Management Area supports the delivery of both the NA/QEII Drive and the NAE/CSU Projects, and as such the aforementioned transport framework provisions addressed in relation to both the previous NoRs are considered relevant to the Cranford Basin.

6.67 We have had particular regard to these provisions in our deliberations, and consider that they have been traversed in sufficient detail in each of the previous sections. We therefore do not repeat them here, although we do reiterate that we adopt the consensus reached by the planning experts with regard to these matters.

[116] Statement of evident of Mr Whyte, page 5, para 21

6.68 In making our decision, we have had particular regard to the provisions of those statutory and non-statutory documents that we consider are of specific relevance to the Cranford Basin NoR, and have not been canvased under the previous NoRs. These include the:

(a) NPS Freshwater;
(b) NRRP;
(c) LWRP;
(d) Styx SMP; and
(e) MIMP.

6.69 In our evaluation of these national, regional and local provisions, we draw on the evidence of the relevant planning experts.

National Level

6.70 As highlighted by Mr Murray in his s42A report, regional councils are directed by the objectives and policies of the NPS Freshwater to include water quality objectives and limits within their plans, and to ensure targets set are met within defined timeframes. Therefore Mr Murray considered that the NPS Freshwater has been implemented through the provisions of the WRRP, NRRP and LWRP, and as the Cranford Basin Project was not inconsistent with these plans, it follows that the Project was also not inconsistent with the NPS Freshwater. We have heard no evidence to the contrary and therefore adopt the position that the proposal is consistent with the objectives and policies of the NPS, the NRRP, the WRRP and the LWRP.

Regional Level

6.71 Ms Markham-Short provided a list of strategic documents and a regional council resource consent that specifically inform the role of the proposed Cranford Basin in the integrated management of stormwater in the wider Styx River catchment, Wilsons Drain and Cranford Basin catchment. The Styx SMP and global Discharge Permit (CRC131249), granted by ECan in 2013 are considered of relevance to the NoR by both the Applicant and the Councils' planners.

6.72 We note that the geographical extent of the Styx SMP extends across the NZTA and CCC Project areas; although the consent itself only applies to CCC stormwater discharges. We understand the intention is to manage surface water quality within and from the CCC's stormwater network.

6.73 Overall, Mr Murray and Ms Markham-Short have concluded that the proposal is not contrary to the matters contained in these regional level documents. We agree.

Local Level

6.74 In addition, Ms Markham-Short considered the following documents were relevant to the approach the CCC has adopted to the management of stormwater in the last two decades:

(a) Waterways and Wetlands Natural Asset Management Strategy 1999;
(b) Surface Water Management Strategy 2009;
(c) Stormwater Management Protocol 2010; and
(d) Public Open Spaces Strategy 2010.

6.75 Ms Markham-Short advised that through these strategies and protocols documents, stormwater management is no longer considered by the CCC to be an engineered drainage solution, but rather that a catchment-based approach to be adopted which incorporates multiple purposes and values. In adopting the planning experts position that the NoR is consistent with the Styx SMP Stormwater and global Discharge Permit, we conclude that the Project is consistent with this catchment-based approach.

6.76 Other matters requiring our particular regard include the Canterbury Iwi Management Plans, being the Ngai Tahu Freshwater Policy Statement (NTFPS) and the MIMP.

6.77 In relation to the NTFP, Mr Murray concluded that the Project was not inconsistent with the objectives and policies of the NPS Freshwater.

6.78 With regard to the MIMP, we are advised that this document has been prepared by the six Papatipu Rūnanga of the takiwā that extends from the from the Hurunui River in the north, to the Hakatere/Ashburton River in the south, inland to Kā Tiritiri o Te Moana (the Southern Alps), and including Te Pātaka o Rākaihautū (Banks Peninsula), and the coast. This area includes Ngāi Tuāhūriri Rūnanga.

6.79 The MIMP contains policies dealing with land transport, water quality in relation to discharges, and the restoration of indigenous biodiversity for the Canterbury area. Mr Murray considered that the Applicants had addressed the land transport matters and had adopted the BPO for stormwater design to mitigate the effects on water quality. He also shared the view that the Projects would not impact on existing indigenous biodiversity, nor would they greatly enhance or restore it.

6.80 Given that all the planning experts concurred that the NoR is not contrary with the overall provisions of all relevant matters and that we heard no evidence to dispute these views, we adopt that position.

6.81 Having considered the above, we conclude that the Cranford Basin NoR is consistent with the statutory and non-statutory matters to which we are required to have particular regard.

7.0 SECTION 171(1)(b) AND SECTION 168(A)(3)(b) CONSIDERATION OF ALTERNATIVES

Context

7.1 This section of our decision addresses the additional statutory considerations required under s171 and s168A of the Act, being the consideration of alternative sites, routes or methods for undertaking the works being proposed by a requiring authority, and by a territorial authority respectively.

7.2 Sections s171(1)(b) and s168A(3)(b) require particular regard to be had as to whether adequate consideration has been given to alternative sites, routes or methods. We are required to determine:

> *whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work if—*
>
> *(i) the requiring authority does not have an interest in the land sufficient for undertaking the work; or*
>
> *(ii) it is likely that the work will have a significant adverse effect on the environment; …*

7.3 Although we have already concluded that it is unlikely that the works associated with the proposed NoRs will have significant adverse effects, it was accepted by both requiring authorities that they did not have *an interest in the land sufficient for undertaking the proposed works*. Accordingly, it is therefore still necessary for us to determine whether or not the requiring authority had given adequate consideration to alternatives.

7.4 In providing our determination under s171(1)(b) and s168A(3)(b), we again refer to each of the NoR applications in turn.

Northern Arterial

7.5 In our findings on this matter, we particularly refer to legal submissions of Mr Smith and the s42A report of Ms Markham-Short, and note that both parties referenced the general alignment of the existing NZTA designation when presenting their views on the consideration of alternatives. They both advised us that this designation has been in place for some 40 years.

7.6 Given the existence of the current NA designation, both Mr Smith and Ms Markham-Short noted that NTZA had not investigated any alternative strategic route to bypass Main North Road and connect to Lyttelton Port in this instance. Rather, NZTA has been (and with good reason) reliant on the overall policy framework which

demonstrates that the issue of alternative routes has been appropriately assessed at various times in the past, and that all national, regional and local strategic frameworks have adopted the Northern Arterial State Highway route as the strategic link to commit to. Mr Smith and Ms Markham-Short therefore considered that the issue of alternative routes had been adequately considered in various strategic consultative processes previously, before the commitment to this option was agreed by the relevant strategic partners. We accept this.

7.7 Both Ms Markham-Short and Mr Smith also referred us to the initial scoping exercise in mid-2010, which was combined with a public consultation process and scheme development in conjunction with stakeholders, undertaken up to lodgement in May 2012. The key aspects of the Project for which options were assessed included:

- Northern Arterial alignment;
- Median design/Number of lanes on the Northern Arterial;
- Connectivity between local roads, the Northern Arterial and QEII Drive 4-laning;
- Connection of the Northern Arterial to the Northern Motorway;
- Design of the Southern Interchange;
- Pedestrian/Cycle Ways;
- Structures;
- Stormwater management; and
- Traffic noise mitigation

7.8 These options are discussed in Section 6 of the application document[117]. Ms Markham-Short referred to Table 6-1 of the application, which provided documentation around the consideration of the methods employed for the various aspects of the NA/QEII Drive Project above. Having considered the documentation provided in this section of the application she concluded that adequate consideration had been given to the alternative routes and methods available, particularly in the context of the post-earthquake environment.

7.9 Similarly, Mr Smith provided legal submissions which assisted us in framing our evaluation of the assessment of alternatives further. In particular, he referred us to a High Court case on the matter as follows:

> *Taking into account the context in which the NoR is proposed is supported by Takamore Trustees v Kapiti Coast District Council,[118] where the High Court considered the practical realities of a NoR where there was an existing designation for work.*
>
> *In Takamore the trustees were concerned a proposed link road would disturb wāhi tapu areas. When it came to considering alternative routes, the issue was whether it would be unreasonable to expect the requiring authority to*

[117] CCC s42A report, page 42 para 170 and Mr Smith, Opening legal submissions, page 15, para 70
[118] W059/06

> *use an alternative route to avoid these areas. The High Court decided the RMA requires an analysis of the nature of the project, to see if there is anything about it which means it would be unreasonable to use an alternative route. The High Court held it was unreasonable to expect a part of the highway project not to proceed or to require it to be re-routed.*[119]

7.10 On this point, we accept that the alternatives assessment is of less importance given the existing designation is in place. Notwithstanding this, and to the extent that they need to be assessed, we record that we are satisfied that alternatives have been adequately considered with regard to the NA/QEII Drive NoR.

Northern Arterial Extension/Cranford Street Upgrade

7.11 Alternatives for the NAE/CSU NoR were investigated by CCC in Section 7 of the application documents and were presented to us at the hearing by Mr Whyte.

7.12 Mr Whyte referred to the evidence by Mr A. Taylor[120] which stated that the five alternative routes and methods to the NAE/CSU were assessed. These were:

- Philpotts Road;
- East Ellington Connection;
- Innes Road upgrade;
- Marshland Road upgrade; and
- Rail transport.

7.13 Mr A. Taylor and Mr Whyte both considered that given the thorough assessment of the alternatives, adequate consideration had been given to these as follows:

(a) Mr A. Taylor noted that the Cranford Street is zoned 'Special Purpose (Road) Zone' in the City Plan and that further construction or reconstruction of a roadway within the zone generally does not require resource consent provided the appropriate City Plan standards are complied with. However, he noted that authorisation is required for the widening at the Cranford Street/Innes Road intersection and in this respect he considered the NoR a more transparent method of implementing the total upgrade.

(b) Mr Whyte stated that the NoR process is the appropriate method to advance the project particularly as it provides scope for a detailed design to be submitted at a later stage and also provides a basis for subsequent acquisition of land.

7.14 Notwithstanding this, Ms Markham-Short (on advice from Mr Roberts) came to the conclusion in her original s42A report that the effects of the CSU component of the NAE/CSU route were such that they were not minor. As such she considered that

[119] Opening and legal submissions of Mr Smith, page 14, para 65-66
[120] Statement of evidence of Mr A. Taylor, page 19, para 85

there was a need for a more robust consideration of alternatives than was the case with the process undertaken by the CCC.

7.15 Consequently, Ms Markham-Short expressed an alternative view to Mr Whyte, and concluded that there had not been adequate consideration of the alternative methods available to achieve the CSU component of the NAE/CSU route. Specifically she referred us to Mr Roberts' concerns with:

(a) Cranford Street between McFaddens Road and Innes Road where Mr Roberts raised concern over the safety of the cross-section proposed by the requiring authority. In the opinion of Ms Markham-Short (and Mr Roberts), there had not been sufficient assessment of alternative cross-section design or width presented in the application, with only a 'preferred option' presented[121].

(b) The downstream effects of the CSU on local traffic flows. In the opinion of Ms Markham-Short, there had not been sufficient assessment of alternatives to address those downstream issues such as rat-running on local streets.

7.16 For these reasons, Ms Markham-Short stated that it was *'…not possible [for her] to conclude at this stage that section 168A(3)(b) has been satisfied.'* [122]

7.17 Prior to the hearing commencing and throughout the course of the hearing, we heard further evidence from Mr A. Taylor, Ms Perfect and Mr Roberts around the above aspects of the proposed NAE/CSU route. In particular, and as described in some detail in our assessment of effects section (Section 5) of this recommendation/decision report, we received two joint statements from the Applicant and Council traffic experts in response to the potential cross-section and downstream effects identified by Mr Roberts and relied on by Ms Markham-Short in her initial recommendation.

7.18 The upshot of the above joint statements was that all traffic and planning experts agreed that that the previously outstanding concerns regarding cross-section effects and downstream traffic effects would be adequately addressed by the protocols set out in the joint statements and which would in turn be reinforced by conditions on the designation. On this basis, Ms Markham-Short was able to conclude not only that the effects would be mitigated to an acceptable level, but that further alternatives for the CSU – particularly the alternative of road widening on Cranford Street – was not necessary in the circumstances.

7.19 We accept the above rationale and also, for the reasons ultimately adopted by Mr Roberts and Ms Markham-Short in their supplementary reports, we accept that the assessment of alternatives by the CCC for the CSU was acceptable in the

[121] Ms Markham-Short, s42A report, page 45, para 180
[122] Ms Markham-Short, s42A report, page 45, para 180

circumstances and was fit for purpose. For completeness, however we feel compelled to comment briefly on the alternative of road widening for the CSU.

7.20 In this respect, we note that in his initial report Mr Roberts considered that the option of widening Cranford Street to provide for a 25 or 30 metre corridor might have been subject to further consideration given his preliminary concerns with the cross-section. In response, the further evidence of Mr A. Taylor and Ms Perfect illustrated that the potential for road widening was assessed, and subsequently dismissed, at an early stage in the process. While road widening was acknowledged by both those traffic experts as being the ideal situation, the implications for property acquisition and disruption associated with this were considered to be neither reasonable nor necessary.[123]

7.21 Having heard this evidence, we understand the rationale behind this decision by the Requiring Authority, and furthermore comprehend that this was not a cursory consideration of alternatives. Given the level of property acquisition and disruption required to achieve the road widening, we understand that the Council had neither the budget, nor the desire to disrupt property owners to the extent that would occur both during the construction and operation of a wider corridor. We further comment as follows:

(a) On the issue of property acquisition, we note the recent political decision by the CCC regarding funding of this project under the Long Term Plan and merely note observe that the LTP decision seems to bear out the claim by Mr A. Taylor about the budgetary limitations for this Project;

(b) On the issue of property acquisition and disruption to property owners, we also acknowledge that many submitters (including the SARA), whilst having concerns with the Project (and particularly the cross-section), were also reluctant to see road widening, notwithstanding that it would address many of the cross-section concerns.

7.22 On the above basis, we understand the financial and practical limitations of road widening alternatives.

7.23 We also take some confidence that this decision to dismiss road widening as an alternative was not made solely on the basis of finance and convenience, but also derived some impetus from transportation policy discussed previously, in particular the CTSP. We refer back to our discussion in Section 6 around the paradigm shift in the approach taken to mode prioritisation under the CTSP, and note the example given of the current Curletts Road upgrade, which has successfully adopted this approach. In addition to this, our assessment of the effects under s168A(3)(a) has determined that a non-road widening alternative (i.e. working within the 20m corridor) is acceptable based on the resolution of the cross-section issues.

[123] Further Statement of evidence of Mr A. Taylor, 22 May 2015, page 16-17

7.24 It was significant to us that both Mr Roberts and Ms Markham-Short revised their advice having heard the further evidence also, and we note that both these CCC witnesses ultimately accepted that adequate consideration had been given to alternative methods.[124]

7.25 Given the further evidence, and the change in position of Ms Markham-Short in light of this evidence, we agree that the investigation of alternatives was reasonable and therefore in accordance with the spirit of the legislation.

Cranford Basin Stormwater Management Area

7.26 The issues of alternatives was not significantly challenged for this NoR. However, Mr Cleary made submissions on behalf of Mr and Mrs Hsu that alternative methods to designation had not be adequately considered by CCC.

7.27 However Ms Markham-Short stated in her s42A report, the NoR application had set out CCC's consideration of alternatives for the Cranford Basin in section 7.

7.28 Mr Whyte referenced the evidence of Mr Bensberg and Ms Purton in respect of the consideration of alternative stormwater management methods and discharge options respectively and was satisfied that the chosen option has advantages over other alternatives, as well as being in accordance with the Styx SMP. Other options are limited given the proximity of groundwater.

7.29 Ms Markham-Short also deferred to the assessment of Mr Tisch in respect of this NoR, and stated that he considered the land area proposed was necessary for the Project, and that the stormwater management has been designed in accordance with best practice.

7.30 On the basis of the evidence of both planning experts and the reporting officer, we conclude that alternatives to the Cranford Basin Project have been adequately considered. We are satisfied that alternative methods to designation were also considered and that the CCC has selected its preferred option for reasons of certainty and long-term management.

[124] Ms Markham-Short , Addendum report at para 25, 26 and 34

8.0 SECTION 171(1)(c) AND SECTION 168(A)(3)(c) NECESSITY OF THE WORKS AND DESIGNATION

Context

8.1 Under section 171(1)(c) we are required to determine *'whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought'*. This is also a requirement under section 168A(3)(c).

8.2 We note that there are twin tests here; namely the necessity of the works and the necessity of the designation (as a planning tool) – both for achieving the objectives of the requiring authorities.

Northern Arterial/QEII Drive

8.3 In her evidence, Ms Brown set out that the designation alterations for the NA/QEII Drive Project are considered both reasonably necessary and to be the preferred planning mechanism for the Project.

8.4 In terms of the **works,** she referred to Mr Blyleven's evidence, which set out the need for, objectives of, and benefits of the Project. In short, he:

- identified the existing problems for the State Highway network; and
- stated that the Northern Arterial would alleviate these problems improve safety, improve opportunities on the existing network for more sustainable land-use and transport integration and improve travel time.

8.5 Ms Markham-Short also provided her assessment under s171(1)(c) and considered that the objectives and reasoning for the designation were sound. She therefore concluded that the additional land proposed to be designated is necessary to enable the NZTA to achieve the high quality roading outcomes sought with this Project.

8.6 In terms of the technique of **designation,** Ms Brown also considered that designation tool provided greater certainty for the long-term operation and maintenance of State Highways than can be provided by a resource consent. She said that this was important given NZTA traditionally investigated highway improvements extensively and made a long-term commitment to any particular project chosen to improve the safety, efficiency and sustainability of the State Highway network. In her opinion, designation was also considered the most appropriate way to signal the intentions of NZTA to the public via the City Plan. We agree.

8.7 Ms Markham-Short concurred with this assessment, and based on the application and evidence, we also consider that both the **works** and **designation** are reasonably

necessary for achieving the objectives of the Requiring Authority for which the designation is sought.

Northern Arterial Extension/Cranford Street Upgrade

8.8 Ms Markham-Short reiterated that in respect of the NAE/CSU, the NoR application described the primary objective of the Project as the *'…provision of a high quality transport route into Christchurch City as a continuation of the Northern Arterial*[125]*.'*

8.9 She noted in particular that the assessment under section 168A(3)(c) does not require a determination on whether the objectives will be achieved by the work and designation, rather that the work and designation are reasonably necessary for achieving the stated objectives. She identified the issues that support the need for the Project, and hence guided the objectives, as follows:

- increasing growth, traffic volumes and network capacity;
- travel time reliability;
- public transport deficiencies;
- crashes/safety; and
- stormwater management.

8.10 In terms of the above, Ms Markham-Short stated that the Project's objectives could not be considered in isolation from the NA/QEII Drive NoR, as both designations were necessary to achieve some of the stated objectives (in particular to enhance public transport services and provide the optimal network solution). She concluded that the land proposed to be designated was necessary to enable CCC to achieve the high quality roading outcomes and wider network benefits they seek with this Project.

8.11 Likewise, Ms Markham-Short considered designation to be the preferred planning mechanism for the same reasons stated in relation to the NA/QEII Drive NoR above.

8.12 Mr Whyte also considered the necessity of the works and the designation in achieving the objectives of the CCC, as required under section 168A(3)(c) and expressed the opinion that the NAE/CSU would provide a critical new traffic route into the City's CBD for the increasing volumes of traffic from the north. He concluded that without this link the City's roading network would not operate as efficiently as it otherwise would in terms of meeting the needs identified above (and as such, the objectives of the NoR). Mr Whyte shared the conclusion reached by Ms Markham-Short with regard to this test.

8.13 As we have heard, no evidence from any party was presented to dispute this assessment, we therefore consider that the NAE/CSU meets the twin tests regarding the necessity of the works and designation under section 168A(3)(c) of the RMA.

[125] CCC, NAE/CSU NoR, page 6.

Cranford Basin Stormwater Management Area

8.14 In her s42A report, Ms Markham-Short identified the objective of the Cranford Stormwater Basin Project as '*…to provide a long term sustainable solution to the management of the Cranford Basin area*'. She identified five objectives that needed to be taken into account when meeting this overarching objective, which included:

- managing water and land as an integrated resource; and
- managing stormwater in an efficient, cost effective and affordable manner;[126]
- providing for stormwater quality treatment;
- 37,000m³ of compensatory storage lost as a result of the proposed NAE; and
- enabling enhancement of ecosystem, iwi and recreation values[127].

8.15 In their consideration under s168A(3)(c), both Ms Markham-Short and Mr Smith addressed the submission of Mr Cleary on behalf of Mr and Mrs Hsu that the designation applying to their land wasn't reasonably necessary to achieve the objectives of the Project.

8.16 In addressing this submission, Ms Markham-Short and Mr Smith referred to the evidence of Mr Tisch, Mr Bensberg and Mr Couling. Those experts did not agree with the submitter in regards to the physical requirements of the stormwater basin, and in their respective evidence they demonstrated the necessity of the NoR in achieving the objectives of the CCC.

8.17 In responding to the legal submission of Mr Cleary on behalf of Mr and Mr Hsu, Mr Smith reiterated the evidence of Mr Bensberg and Mr Couling in relation to the historic flooding issues in the catchment area, and why the Basin NoR was required for stormwater detention and stormwater quality treatment. Mr Smith concluded that the argument put forward by Mr Cleary on behalf of Mr and Mrs Hsu did not form a basis to decline to confirm the NoR, nor a recommendation that it be modified.

8.18 Ms Markham-Short also provided a summary of Mr Tisch's evidence, and provided further reasons for the land to be designated,[128] namely that the designation would:

- provide long term land protection and certainty for a significant asset;
- identify and protect the land in the City Plan removing any doubt as to its purpose;
- protect the land from uses that may be incompatible with the designated purpose; and
- provide a basis for the subsequent acquisition of land - noting that no other RMA mechanism provides the above outcomes.

[126] CCC Cranford Basin Stormwater Management Area NoR, page 11.
[127] CCC s42A report, page 48, para 196
[128] Ibid. page 48, para 197

8.19 Ms Markham-Short confirmed she concurred that the reasons listed above clearly established the need for the designation, as opposed to another mechanism to secure the land for stormwater purposes. Specifically, she concluded that given the long term and ongoing nature of stormwater management requirements, and the positive effects the proposed Cranford Basin would have on the wider area, its protection through a secure mechanism in the City Plan was indeed necessary.

8.20 Having regard to the above, and in consideration of the evidence heard on this matter during the course of the hearing (including the absence of technical evidence to challenge the spatial extent of the designation), we consider that both the **works** and **designation** are reasonably necessary for achieving the objectives of the Requiring Authority for which the designation is sought.

9.0 PART 2 OF THE RESOURCE MANAGEMENT ACT / OVERALL EVALUATION

Context

9.1 The final consideration for this report is to evaluate the proposal against the purpose and principles set out in Part 2 of the Act. This includes an evaluation as to whether or not the proposal has sufficiently recognised and provided for all matters of national importance (s6), and whether or not it has given sufficient regard to the other matters outlined in s7 and the principles of the Treaty of Waitangi (s8).

Section 6 – Matters of National Importance

9.2 Section 6 sets out the matters of national importance which are to be *recognised and provided* for in relation to all decisions under the Act, including this NoR. Of particular relevance to this decision is:

> *Section 6 (a) - the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:*

9.3 The only potential resources within the section 6(a) ambit are:

- Styx River/Purākānui;
- The Waimakariri River;
- Ōtukaikino Wetland; and
- Kaputone Creek.

9.4 In this respect, we accept and agree with the evaluation in the AEE accompanying the NoRs that the adoption of the measures contained in the proposed conditions will ensure that the natural character values of these waterbodies will be successfully maintained.

9.5 In respect of all other matters of national importance, we consider that to the extent that any of them may be relevant, these have been successfully recognised and provided for by the three Projects.

Section 7 – Other Matters

9.6 Section 7 includes matters that we are required to have *particular regard* to. In this case the relevant section 7 matters are as follows:

> *Section 7(b) – The efficient use and development of natural and physical resources;*
> *Section 7(c) – The maintenance and enhancement of amenity values;*

Section 7(f) – Maintenance and enhancement of the quality of the environment.

9.7 We note that *'amenity value'* is defined under section 2 of the Act as:

'Those natural or physical qualities or characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes'.

9.8 In terms of the above, we find that:

- the proposal provides for more efficient use and development of the transport network and stormwater management/flooding;
- the mitigation measures proposed, including landscaping (for example), will maintain amenity values and the quality of the environment; and
- the Project are consistent with the relevant section 7 matters.

Section 8 - Treaty of Waitangi

9.9 Section 8 directs all persons exercising functions and powers under the Act, in relation to managing the use, development, and protection of natural and physical resources, to take into account the principles of the Treaty of Waitangi/Te Tiriti o Waitangi.

9.10 As noted above, although a Cultural Impact Assessment was not undertaken as part of the preparation of the NoRs, there has been regular dialogue between the applicant and iwi since the proposal was lodged. We accept that matters of cultural significance and importance to iwi have been recognised and provided for, and will continue to do so through the Cultural Advisory Group.

9.11 We consider that the proposal has taken into account the principles of the Treaty and is therefore in keeping with Section 8.

Section 5 and Overall Summary

9.12 In relation to the NoR applications, consideration under Part 2 of the Act (and specifically Sections 5 and 7) requires balancing of the needs and well-being of the wider community. In this respect, we adopt the overall conclusions of Ms Markham-Short in respect to the three NoR applications as follows:

For the NA/QEII Drive Project:

*233. After considering the effects on the environment of allowing the requirements for the **Northern Arterial and QEII Drive 4-Laning**, it is my conclusion that*

there are significant positive effects associated with this project. When assessed in detail, any negative impacts of the project are not significant when compared with what could be constructed under the existing designation as of right, and in the context of the significant positive aspects of the works.

234. I note that NZTA have negotiated with submitters to address their concerns and committed to specific changes in detail in plans in relation to several individual properties. They have explained some of their design choices such that others have chosen not to pursue their initial concerns at Hearing. I am satisfied that any outstanding concerns are not of sufficient concern that they require mitigation measures, in the context of the wider planning framework. Overall, I am satisfied that the conditions proposed below (whilst not all agreed to by NZTA) will deal adequately with any mitigation measures which are reasonably tied to this designation.

235. In my opinion, the Northern Arterial requirement is consistent with the broad planning framework that is applicable to this proposed designation.

236. Finally, I consider that the proposal is consistent with Part 2 of the Resource Management Act 1991, and that it is consistent with the Recovery Strategy for Greater Christchurch.

For the Cranford Basin Project:

*237. I also conclude that, in respect of the requirement for the **Cranford Basin Stormwater Management Area**, there will be significant positive effects associated with the project that outweigh any negative impacts. Whilst there were few submitters expressing concerns with the proposal, I consider that those raised are not of sufficient concern that they require mitigation, in the context of the wider planning framework. In my view, the proposed conditions will deal adequately with any mitigation measures which are required.*

238. I also consider the Cranford Basin Stormwater Management Area to be consistent with the broad planning framework, and that the proposal is consistent with Part 2 of the Act and with the Recovery Strategy for Greater Christchurch.

For the NAE/CSU Project:

21. On the basis of the revised cross-section agreed in the joint statement, I amend my conclusion at paragraph 152 of the s42A report to state that the adverse effects on community cohesion have been mitigated such that they are considered minor at most.

22. I am now satisfied the localised adverse effects arising from the cross-section and downstream effects have been or can be sufficiently mitigated, so that on balance, the effects of the project can be considered acceptable.
….

239. I had previously raised concerns over the extent to which the NAE/CSU would achieve the purpose of the RMA in section 5, having regard to the matters in section 713. This was particularly in relation to the development of the physical roading resource, being Cranford Street as a major arterial, as enabling people

> *and communities in the vicinity to provide for their on-going social well-being and for their health and safety. I reached this view based on the safety concerns of the proposed cross-section in the 20 metre wide corridor between McFaddens Road and Innes Road. In addition, no firm provision had been made to deal with the downstream effects of dispersing large volumes of traffic into the area where a four-lane arterial will merge to the current two-lane configuration. In my view, the proposal had not shown that the unavoidable adverse effects on the Cranford Street and wider St Albans / Mairehau / Papanui communities would be remedied or mitigated.*
>
> *240. In addition, it was unclear how far the increase in traffic on local roads would impact on the amenity of these neighbourhoods, and I considered there was a risk that it would be reduced rather than maintained or enhanced.*
>
> *241. In light of the mitigation measures proposed in the joint statements, I am now comfortable concluding that the proposal can achieve the purpose of the RMA, as the concerns regarding significant safety impacts and downstream effects have been resolved.*

Concluding Comments

9.13 We find the evidence before us to be comprehensive, compelling and largely uncontested. While the NoR applications were presented to us as three discrete packages, we consider them to be inextricably linked, particularly in relation to direct and contingent benefits to the wider transportation network. In this regard, we find the sum of the Projects as a whole to be greater that the individual parts.

9.14 The need to provide a strategic link from Christchurch (CDB and Port) to and from the north has been signalled since the 1960's. Over the following decades, the form this link could take has been altered by several transportation planning exercises, but it has consistently been part of the longer term transportation planning framework since that time.

9.15 The Christchurch earthquakes have changed the layout of the city and their legacy will continue to affect the longer term planning for the rebuild and revitalisation of the city and region. The need for a comprehensive, integrated and well planned link to the north remains as strong now, if not stronger than it has ever been. The 'One Network' approach by all agencies involved in planning the arterial and strategic network improvements is critical to the recovery and needs to continue. Fractionalising infrastructure development of a scale such as the NA/NAE/CSU Projects will not deliver the potential full social and economic benefits to Christchurch and the region.

9.16 While we agree with the sentiments of many of the submitters that efforts should be made to address other more sustainable modes of transport, we accept this is not the focus of these Projects. We heard evidence that other public transportation projects are being developed and implemented, in conjunction with these roading Projects. We acknowledge that these roading Projects will enable significant public transport and cycling improvements from a city and region wide perspective.

9.17 We have listened to the concerns of submitters from the St Albans community regarding potential adverse effects of the CSU and have carefully considered all issues raised. We are conscious that Cranford Street currently experiences high traffic volumes and congestion, and that this will continue to increase under the status quo. We accept that rat-running through residential streets is occurring now and will only increase as congestion increases over time. We heard the phrase 'build it and more cars will come', but accept that the evidence shows more cars will come even if the road is not upgraded. In our view, Cranford Street is and will continue to be a main arterial route into the CBD from the north and west. It must therefore be maintained and improved to ensure it is fit for purpose.

Overall Determination of NoR Applications

9.18 Having regard to the above, and for all the reasons set out in sections 5 to 8 of this report concerning effects, the provisions in the relevant statutory documents, necessity of the Projects and alternatives, we find and determine that the sustainable management of resources can be achieved by confirming the three NoR applications, subject to conditions that avoid, remedy or mitigate any adverse effects of the project on the environment.

9.19 Accordingly, as the independent Hearing Commissioners, acting under delegated authority from the Council, pursuant to Part 8 of the Resource Management Act 1991, and under the provisions of the Christchurch City Plan, we:

(a) **Recommend** to the requiring authority, NZTA, that its notice of requirement for the **NA/QEII Drive Project** be **confirmed** subject to the conditions set out in Appendix 1 of this report.

(b) **Decide** the notices of requirement by the CCC for the **NAE/CSU Project** and **Cranford Basin Stormwater Management Area** are **confirmed** subject to the conditions set out in Appendix 1 of this report.

PART C – EVALUATION OF THE RESOURCE CONSENTS

10.0 STATUTORY CONSIDERATIONS

Resource Consents Sought

10.1 The resource consents sought by the Applicants were detailed in the ECan s42A report as follows:

Consent	NZTA	CCC
Overview	The NZ Transport Agency has applied to Environment Canterbury for resource consents for a variety of activities associated with the construction and operation of: a) A new 4-lane motorway to connect QEII Drive and the Northern Motorway at Chaneys, and the upgrade of the Northern Motorway northbound as far as Tram Road, including an additional lane on the Waimakariri River bridge (the '**Northern Arterial'**); and b) The upgrade of part of QEII Drive to 4-lane median-divided road from Main North Road to east of the Innes Road roundabout (the '**QEII Drive 4-Laning**').	The Christchurch City Council has applied to Environment Canterbury for resource consents for a variety of activities associated with: a) The construction and operation of a new 4- lane median-divided road to connect the NZTA Northern Arterial project to Cranford Street (the '**Northern Arterial Extension**'); and b) The upgrade of Cranford Street from the Northern Arterial Extension to Innes Road to a 4-lane median-divided road including widening of the Cranford Street / Innes Road intersection (the '**Cranford Street Upgrade**'); and c) Earthworks to provide for compensatory stormwater storage as a result of the Northern Arterial Extension (the '**Cranford Stormwater Area**').
Land use consent s.9(2) of the RMA	**CRC150793:** A land use consent to use land for excavation, installation of piles and bores, and to clear vegetation adjacent to waterways. This will include excavation for the construction of foundations, river crossings, and underpasses. These excavations may intercept groundwater. Bores will be installed so that dewatering can be undertaken. The duration requested for these activities is 13 years.	**CRC151942:** A land use consent to excavate and disturb land over a confined aquifer and adjacent to surface waterways (including the Upper Dudley Creek Diversion, Tysons Drain, Winters Road Drain, Croziers Drain, Cranford Street West Drain, Cranford Street East Drain, and private farm drains), for the purposes of constructing stormwater and land drainage features and systems for the Northern Arterial Extension and Cranford Street Upgrade, and earthworks to provide for stormwater storage in the Cranford Stormwater Area. The activities may intercept groundwater. A 35-year duration has been requested.

Consent	NZTA	CCC
Land use consent s.13 of the RMA	**CRC150794:** A land use consent to install structures in or over the beds of rivers, including permanent stormwater outfalls, temporary and permanent culverts, a permanent bridge over the Styx River, permanent new road lane platform over the existing structures of the Northern Motorway Waimakariri Bridge, and temporary gravel accessway causeways in the Waimakariri River. Also to remove vegetation from the beds of rivers, and disturb the beds of rivers. Vegetation removal and disturbance of rivers will be minimised where possible, and vegetation will be re-planted. Fish passage will be retained where possible. The duration requested for these activities is 13 years.	*n/a – Beds of rivers not affected.*
Water permit s.14 of the RMA	**CRC150789:** A water permit to temporarily and permanently divert surface waterways, to take groundwater for the purpose of site dewatering, and permanently divert water via land-drainage. The diversions of surface waterways will include temporary and intermittent partial diversions of the Waimakariri River due to the installation of gravel access causeways to allow bridge widening to be undertaken. The Waimakariri River diversions are expected to occur over a two year period. Best practice measures will be used to minimise sediment discharge and effects on fish during the works. Land-drainage will be installed to protect structures from high groundwater. The consent duration requested for temporary diversions of waterways, and take of groundwater for dewatering is 13 years. The consent duration requested for permanent diversion of groundwater via land-drainage is 35 years. **CRC150790:** A water permit to dam and divert floodwaters impounded against the Northern Arterial embankment, in the event of a flood in the Waimakariri River resulting in a breach of its stopbanks. The duration requested is 35 years.	**CRC156178:** A water permit to temporarily take, dam and divert surface water and groundwater for the purposes of facilitating construction of the Northern Arterial Extension and Cranford Street Upgrade, and undertaking earthworks in the Cranford Stormwater Area,. A 13-year duration has been requested. **CRC151944:** A water permit to permanently dam and divert surface water during flooding as a result of establishment of the Northern Arterial Extension. A 35-year duration has been requested.

Consent	NZTA	CCC
Discharge permit – to land and water s. 15 of the RMA	**CRC150791:** A discharge permit to discharge construction phase stormwater, dewatering water, and sediment onto land and into water during the construction of the Northern Arterial and QEII Drive 4-Laning. Sediment laden water and dewatering water generated will be minimised where possible and treated using best practice methods. The duration requested for these activities is 13 years. **CRC150792:** A discharge permit to discharge stormwater into land and water on an ongoing basis from the developed Northern Arterial and QEII Drive 4-Laning. Stormwater from the completed road may contain metals, hydrocarbons and sediment. Stormwater will be treated in first flush basins or swales, and will not increase flooding for rainfall events up to a 1 in 50 year rainfall event. Stormwater from the additional lane across the Waimakariri Bridge will be discharged without treatment as currently occurs for the existing four lanes. The duration requested is 35 years.	**CRC156177:** A discharge permit to discharge water and contaminants (principally stormwater and sediment) to water, and to land in circumstances where it may enter surface water and groundwater, during the construction phase of the Northern Arterial Extension and Cranford Street Upgrade, and during earthworks in the Cranford Stormwater Area. A 13-year duration has been requested. **CRC151943:** A discharge permit to discharge water and contaminants (principally stormwater and sediment) to water, and to land in circumstances where it may enter surface water and groundwater, during the operational phase of the Northern Arterial Extension and Cranford Street Upgrade, and during earthworks in the Cranford Stormwater Area. A 35-year duration has been requested.

10.2 The resource consent applications have been generally been divided into construction phase activities and operational phase activities in relation to the NoR Projects, with the consent durations sought aligned to the temporary (13 years) and permanent (35 years) nature of the proposed activities.

The Law

10.3 The starting point for our assessment of the resource consent applications under the Act is to determine the status of the proposed activities. There was agreement between the parties that a 'bundling approach' was appropriate and that the NZTA applications should be considered as a non-complying activity; and CCC applications should considered as a discretionary activity. We agree.

10.4 In terms of our responsibilities for giving consideration to the **CCC resource consent applications**, we are required to have regard to the matters listed in sections 104, 104B, 105 and 107 of the Act.

10.5 Under section 104(1), and subject to Part 2 of the Act, which contains the Act's purpose and principles, we must to have regard to-

(a) Any actual and potential effects on the environment of allowing the activity;
(b) Any relevant provisions of a national environmental standard, other regulations, a national policy statement, a New Zealand coastal policy statement, a regional policy statement or a proposed regional policy statement, a plan or proposed plan; and

(c) Any other matters the consent authority considers relevant and reasonably necessary to determine the application.

10.6 In terms of section 104(2), when forming our opinion for the purposes of section 104(1)(a) regarding actual and potential effects on the environment, we may disregard an adverse effect of the activity on the environment if a national environmental standard or the plan permits an activity with that effect. This is referred to as consideration of the 'permitted baseline'.

10.7 Under **section 104(3)**, in considering the applications, we must not have regard to any effect on any person who has given written approval to the application.

10.8 In accordance with **section 104B**, we may grant or refuse the applications, and if granted, may impose conditions under **section 108**.

10.9 In terms of **section 105**, when considering section 15 (discharge) matters, we must, in addition to **section 104(1)**, have regard to-

(a) The nature of the discharge and the sensitivity of the receiving environment to adverse effects; and
(b) The applicant's reason for the proposed choice; and
(c) Any possible alternative methods of discharge, including discharge to any other receiving environment.

10.10 Under **section 107(1**), we are prevented from granting consent allowing any discharge into a receiving environment which would, after reasonable mixing, give rise to all or any of the following effects-

(a) The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended material:
(b) Any conspicuous change in the colour or visual clarity:
(c) Any emission of objectionable odour:
(d) The rendering of fresh water unsuitable for consumption by farm animals:
(e) Any significant adverse effects on aquatic life.

10.11 In terms of our responsibilities for giving consideration to the **NZTA resource consent applications** as a non-complying activity, we are required to have regard to the matters listed in all of the sections relevant to the CCC applications above and section 104D of the Act.

10.12 Under **section 104D(1)**, we may only grant consent under section 104B, if either-

(a) The adverse effects of the activity on the environment will be minor; or
(b) The application is for an activity that will not be contrary to the objectives and policies of the relevant plans.

Our Approach

10.13 In assessing the resource consent applications, we record we have considered the application documentation and assessment of environmental effects (AEE), the ECan s42A report and technical reviews, all submissions received and any relevant evidence provided during and after the hearing.

10.14 We have summarised all the evidence presented at the hearing in Part A of this report. This approach enables us to focus on the principal issues in contention without addressing every point made. However, we record we have considered all of the matters raised in making our determination. Where concerns have been met by the imposition of conditions, we do not address the matter any further in our assessment. An example of this is CRC Regional Engineer's submission relating to the need for sufficient protection of Waimakariri River infrastructure.

10.15 We note that some of the submissions received were lodged in relation to all the NoR applications and resource consent applications, but that some of the issues raised are relevant to our consideration of the NoR applications and not the resource consent applications. In terms of our consideration of the resource consents, we confirm the following matters are outside our jurisdiction:

- noise effects;
- transport effects (including road design, property access, and traffic related air emissions);
- social impacts of the roading projects;
- effects on climate change;
- economic cost of the roading projects; and
- land acquisition matters.

10.16 We are therefore prevented from considering these matters in relation to the resource consent applications.

10.17 Given the inter-related nature of the NoR Projects and the receiving environments, we have taken the same approach as the ECan s42A report in assessing the resource consent applications and have considered the three Projects as one proposal with a construction phase and an operational phase.

10.18 In considering the statutory framework set out above, we have recorded our findings as follows:

- **Section 11** of this report (below) includes our **assessment of the effects on the environment** of allowing the requirement. This is a requirement under section 104(1)(a) . Our evaluation of the effects in this section has been informed by the application, the submissions, the s42A report, the hearing proceedings and the information exchanged subsequent to adjournment of the hearing up to and including the hearing closure on 24th June 2015.

- **Section 12** outlines the regard we have had to the **relevant statutory policy matters**. This is a requirement under section 104 (1)(b). In addition to considering the RMA instruments under clause (b) our assessment in this section also includes consideration of non RMA instruments under the tag of 'other matters' for the purposes of clause '(c)' of s104(1) .

10.19 Before considering the effects on the environment, we briefly turn our attention to the prevailing existing environment.

Existing environment

10.20 The s42A reports included detailed and accurate descriptions of the existing environment, which we adopt and will not repeat here.

10.21 In making our assessment, we are required to consider the actual and potential effects of the applications on the existing environment, which includes lawful existing activities, permitted activities and activities authorised by existing resource consents.

10.22 Mr Murray noted relevant existing consented activities[129] included:

(a) NZTA - resource consents for geotechnical investigations in the Project area (CRC102660 and CRC135768);
(b) NZTA - resource consent for stormwater discharges from the existing State Highway network and for minor improvements to that network (CRC111005);
(c) CCC - resource consent to discharge stormwater to land in the Styx SMP area (CRC131249);
(d) CCC – resource consent to discharge stormwater from roads and some development in Central and Southern Christchurch (CRC090292); and
(e) CCC – resource consent to undertake works in the beds of waterways within the Christchurch City boundary (CRC100750.1)

10.23 Mr Murray considered the discharge permits sought by NZTA for the NA could be implemented concurrently with the existing consents.

10.24 In relation to the CCC's discharge permits listed above, Mr Murray agreed with the Applicant that these could be utilised for the operational discharge from the Project area. In addition, he noted CCC had lodged separate applications for drilling bores within the Project areas.

10.25 We accept the existing resource consents (listed above) form part of the existing environment and have considered these in making our assessment of effects on the environment below.

[129] ECan s42A report pg. 9

11.0 ACTUAL AND POTENTIAL EFFECTS ON THE ENVIRONMENT

11.1. The actual and potential effects on the environment were assessed in the ECan s42A report in relation to the following matters:

- groundwater quantity and quality;
- surface water quality and ecology – construction activities;
- surface water quality and ecology – operational phase;
- surface water quantity (flooding);
- terrestrial and avian ecology;
- cultural values;
- archaeology and heritage;
- landscape and natural character;
- amenity and recreational values;
- Waimakariri River infrastructure (NZTA only); and
- positive effects.

11.2. We record we have considered all of these actual and potential effects on the environment and in general, we adopt the conclusions of Mr Murray and his technical experts. We note there are very few matters in contention and none of the submitters who appeared at the hearing raised specific concerns with any aspect of the resource consents, except for Mr and Mrs Hsu (as represented by Mr Cleary) in relation to the extent and frequency of flooding in the Cranford Basin. Any relevant submissions to the resource consent applications raised concerns of a general nature.

11.3. Our assessment therefore focusses solely on the effects on:

- surface water quantity (flooding);
- surface water quality and aquatic ecology;
- groundwater quality, and
- cultural values.

11.4. Overall, we are satisfied that any adverse effects on the other matters listed above were adequately considered in the ECan s42A report, and agree these are either minor or can be adequately avoided, remedied or mitigated by the imposition of conditions.

Effects on surface water quantity (flooding)

11.5. Both sets of application documentation detailed the propensity for flooding and ponding within the relevant Project areas and provided comprehensive stormwater assessments. In addition to this, the evidence of Mr Bensberg and Mr Couling demonstrated the extent and frequency of existing flooding in the Cranford Basin.

Mr Bensberg provided us with additional maps indicating the extent of flooding in 1 in 50 year and 1 in 200 year storm events in the Cranford Basin.

11.6. Mr Murray agreed with the flooding descriptions provided by the Applicants and noted the following summary of the existing environment, which we adopt:

(a) The low lying nature of the area coupled with the close proximity of groundwater means the land is prone to ponding and/or flooding;

(b) An extensive drain network has been developed to assist in alleviating the flooding issue;

(c) The 2010 and 2011 earthquake events have subsequently increased the propensity for ponding and/or flooding; and

(d) The Cranford Basin is a naturally occurring ponding area.[130]

11.7. Mr Tisch agreed with the Applicants that localised flooding as a result of the applications was unlikely to cause concern. He noted that in the event of a breakout of the Waimakariri River stopbanks[131], modelling indicated that flows would be dissipated across the rural section of the NA north of the Styx River, and would have minimal effect on the NA and NAE.[132]

11.8. Mr Smith confirmed NZTA's wish to be granted Water Permit CRC150790 to dam and divert floodwaters impounded by the NA embankment, in the event of a breach in the stopbanks during a flood of the Waimakariri River, as a precautionary measure. While he acknowledged ECan's view that this consent was not necessary, he agreed with Mr Murray there was nothing preventing it being granted under the conditions suggested, as sought by NZTA.

Evaluation

11.9. Overall, on the basis of the evidence presented, we are satisfied that the applications will have less than minor effects on water quantity (flooding) throughout the Project areas. The evidence supports the view that:

(a) The applications will not increase the extent or frequency of flooding in the wider existing receiving environment; and

(b) The provision of compensatory storage (associated with NAE embankment) within the Cranford East Basin will avoid any increase in the existing extent or

[130] ECan s42A report, para 120, pg.23
[131] Mr Tisch noted the existing stopbanks provide protection for up to a 450 year event and the proposed stopbanks (complete within 10 to 15 years) for up to a 10,000 year event.
[132] Memorandum from Mr and Tisch and Ms Stevenson (dated 20 April 2015), pg.1

frequency of flooding and ponding in the wider Cranford Basin Stormwater Management Area.

11.10. Although we accept NZTA's application for Water Permit CRC150790 may not be deemed to be necessary by ECan, we see no barrier to granting the consent as sought.

Effects on surface water quality and aquatic ecology

11.11. Surface water quality and ecology is discussed in detail in both sets of application documentation and aquatic ecology assessments were also included in the technical appendices. The evidence of Ms Purton specifically addressed water quality matters and the evidence of Mr MacGibbon addressed aquatic ecology values.

11.12. Mr Murray agreed with the description of the affected environment provided by the Applicants and noted the following summary of the existing environment, which we adopt:

(a) The ultimate receiving environment for the majority of the project area is the Styx River/Purākānui, which as a spring-fed river maintains good water quality and high ecological values relative to other urbanised stream environments in the greater Christchurch area;

(b) The Waimakariri River, which is potentially affected by the additional bridge lane for the Northern Arterial, is known as being highly distinctive in the region due to low periphyton and macrophyte biomass, high abundance of pollution sensitive invertebrate taxa, and habitat for 19 native fish and 8 introduced fish species;

(c) The Northern Arterial is adjacent to the Ōtukaikino Wetland (13 ha), which is one of the few original wetland areas remaining in Christchurch and has a range of wetland biota including native birds, fish, invertebrates and plant;

(d) Kaputone Creek is spring fed but in a degraded state due to inflows from an urban areas and (in places) modified riparian margins; and

(e) Artificial drains in the area are characterised by their use for stormwater conveyance, and as such are generally of degraded water quality and little aquatic value; under the Styx SMP several drains are 'Class 3' (open waterways with low or unclassified ecological values)[133].

11.13. Mr Murray noted that whilst the NZTA approach to the NA operational stormwater discharges were consistent with their own internal standards, they were not entirely consistent with the Styx SMP. He stated that the Styx SMP reflected 'the community's expectations for water quality outcomes' and that Discharge Permit

[133] ECan s42A report, pg.22-23, para 118

CRC1312249 required that CCC use 'reasonable endeavours' to achieve the future water quality outcomes. He was therefore concerned the proposed operational discharges from the NA may compromise anticipated future water quality outcomes in the Styx catchment. He noted that the receiving waters often did not meet ANZECC trigger values and the proposed Land and Water Resource Plan (p**LWRP**)[134] standards during wet weather events, without the effect of the proposed discharge.

11.14. Ms Stevenson and Dr Gray helpfully summarised the water quality and aquatic environments in Table 1 of their technical review of the applications.[135] Overall, there was agreement that the imposition of conditions and the implementation of a CEMP and sub-management plans would avoid or mitigate any adverse effects from the constructions phase works and operational phase discharges.

11.15. However, a specific concern was raised by Mr Tisch about the level of treatment proposed by NZTA for the NA operational stormwater discharges and uncertainty regarding the scale of effect on the receiving waters (i.e. Styx SMP catchment). He requested more empirical evidence '*…to provide long term confidence the NA stormwater discharge would not significantly compromise the ability for Styx SMP objectives to be met in the future'*[136].

11.16. Ms Stevenson was also concerned that the Applicant's proposed total suspended sediment (TSS) limit for dewatering discharges of 100 milligrams per litre (**mg/l**) would not ensure adverse effects on aquatic ecology remain at an acceptable level, given the sensitivity of the receiving environment[137].

11.17. In his addendum report (dated 29 April 2015), Mr Murray confirmed he was satisfied that the NZTA stormwater approach for the NA operational discharges was the BPO and that any difference in opinion related to the relative magnitude of the adverse effect (i.e. less than minor, minor, significant etc.).

11.18. In relation to the appropriate TSS limit for dewatering discharges, Mr Murray noted that the provisions of the Natural Resource Regional Plan (NRRP) permitted activity standard of 25 mg/l[138], a discretionary activity standard of 100 mg/l, and non-complying activity classification for anything higher; and that the pLWRP permitted activity standard of 100 mg/l.

11.19. Ms Purton responded to the need to provide more empirical evidence on the performance of the proposed treatment, stating that she *'…cannot provide a meaningful or robust quantitative assessment of the minor difference in treatment performance for dissolved metals that would be achieved by wetland polishing'.*[139]

[134] Mr Murray noted provisions of the LWRP should be given considerable weight given the late stage of the planning process.
[135] ECan s42A report, Attachment B, pg.3
[136] Memorandum to the Hearing Commissioners (dated 20 April 2051) by Mr Tisch and Ms Stevenson, pg.2
[137] ECan s42A report – Addendum (dated 29 April 2015), para 33, pg. 9
[138] Rule WQL2, Condition 4(a)
[139] Addendum to EIC (dated 30 April 2015), para 23, pg.6

She concluded the difference in treatment was *'minor and is unable to be reliably quantified in a meaningful way using industry standard, [and] recognised analytical tools currently available in New Zealand'*[140].

Evaluation

11.20. We are satisfied that any adverse effects of construction activities associated with the Projects on surface water quality and aquatic ecology can be adequately addressed by the imposition of consent conditions requiring the production, certification and implementation of the CEMP and sub-management plans. We particularly note the need for careful management in the disturbance of potentially contaminated sediment to prevent sediment discharge into waterways, and the need for appropriately designed temporary diversion channels and permanent culverts.

11.21. We note the recommendation of Ms Stevenson that a TSS limit of 50 mg/l for dewatering discharges is more appropriate than the 100 mg/l proposed by the Applicant. However, we consider it would be inappropriate to impose a TSS limit that is higher than the standard for a permitted activity under the provisions of the LWRP, given the conditions proposed and the temporary nature of the activity.

11.22. In relation to the NZTA's proposed stormwater treatment standards for the NA operational discharges, we accept that the proposed treatment methods and processes represent the BPO given the limited land available and ground conditions, and that the approach is consistent with NTZA's standards for stormwater treatment for State Highways. While we note there is no provision for 'wetland polishing' (i.e. extended detention for further contaminant removal), we are satisfied on the basis of Ms Purton's evidence that that water quality of the operational discharges from the NA will not be significantly different to the discharges from the Styx SMP.

11.23. While we acknowledge the concerns of Mr Tisch and Ms Stevenson, regarding future cumulative effects on the water quality standards of the receiving waters, we do not consider further empirical evidence will assist in quantifying the scale or magnitude of the effect of not providing for extended detention, given the very nature of modelling and its limitations. We accept that conditions (suggested by Ms Purton) requiring swales and basins to be wetland planted will assist in achieving the best levels of contaminant removal and will provide for some of the advantages of wetland treatment.

11.24. We note Mr Tisch and Ms Stevenson's concerns primarily relate to the relative effect of the operational discharges on the future achievement of the water quality standards (outcomes) set for the Styx SMP under the conditions of Discharge Permit CRC131249. While we understand the basis of these concerns, we agree with Mr Smith that these water quality standards are somewhat 'aspirational' and that we

[140] Ibid, para 27, pg.6

must limit our consideration to the actual and potential effects of the activity on the *existing water quality of the receiving waters*. In this regard, we accept the operational stormwater discharges are likely to have a minor (immeasurable) effect on water quality in the receiving waters for the foreseeable future.

11.25. As we noted at the hearing, if in the future the operational discharge are demonstrated to be having a measurable cumulative effect on water quality in the receiving waters, the Applicant will be required to provide for a higher level of treatment. We consider this is a matter for the future in the renewal of consent, or if necessary by review of the consent under sections 128 of the Act. Furthermore, we note the evidence of Mr Couling that the CCC accepts NZTA's proposed treatment standard, and presumably any future risk of significant cumulative effects on water quality in the Styx SMP catchment.

11.26. Overall, on the basis of the evidence before us, we are satisfied that with the imposition of conditions, any adverse effect on surface water quality and aquatic ecology as a result of the project will be minor.

Groundwater Quality

11.27. The application documentation discussed in detail the potential adverse effects of the proposals on groundwater quality. The evidence of Mr Thorley addressed permanent natural springs and protection of groundwater quality from dewatering activities and accidental artesian aquifer inception effects. He noted the importance the imposition appropriate consent conditions and implementation of a 'Dewatering Management Plan'.

11.28. Mr Murray agreed with the description of the affected environment provided by the Applicants and noted the following summary of the existing environment, which we adopt:

(a) Regional groundwater flows from west to east with local variations;

(b) Groundwater levels follow seasonal fluctuations, but are generally very close to the surface (and well within the range of expected excavation depths for both projects);

(c) There are a number of artesian springs mapped throughout the project area, and many of which are not yet mapped;

(d) There are a large number of active wells along the project alignment which are used for a range of purposes, including domestic, commercial and stockwater; most wells are greater than 20m depth; and

(e) Groundwater quality in the shallow parts of unconfined or semi confined aquifers is variable; the coastal confined system has very high quality[141].

11.29. Mr Murray noted the reports by Mr Matt Dodson (groundwater) and Mr Gregory Beck (contaminated land), and concluded that subject to the imposition of conditions the adverse effects on groundwater quality would be more than minor.

Evaluation

11.30. Overall, on the basis of the evidence before us, we are satisfied that with the imposition of conditions requiring the production, certification and the implementation of a Dewatering Management Plan will adequately avoid and mitigate any adverse effects on groundwater quality.

Cultural Values

11.31. The application documents discussed in detail potential effects on cultural values and the NZTA applications included a 'Cultural Impact Assessment' (**CIA**) prepared by Mahaanui Kurataiao Ltd (**MKT**). Mr Whyte told us that an agreement had been reached with MKT that a CIA was not required for the CCC applications at this this point, but would be completed if requested through the Cultural Advisory Group.

11.32. Mr Murray agreed with the description of the affected environment provided by the Applicants and noted the following summary of the existing environment:

(a) The project sites do not fall within a statutory acknowledgment area;

(b) There is a silent file area (SF015) within the Northern Arterial alignment generally between Radcliffe Road and Chaneys Road; the presence of a silent file indicates the presence of a significant wāhi tapu or wāhi taonga site; however, the absence of a silent file area on available databases is not confirmation that there are no wāhi tapu or wāhi taonga sites in other parts of the project area;

(c) The Ōtukaikino Reserve is an area which could pose a significant archaeological risk to the Northern Arterial project;

(d) There are five known archaeological sites located within 1 km of the proposed Northern Arterial footprint; these are all prehistoric Maori midden sites and found in the vicinity of the Styx River/Pūrākaunui;

(e) There are no silent files or known archaeological sites of interest to tangata whenua within the CCC project area; and

[141] ECan s42A report, pg.22, para 113

(f) Many of the waterways in the project area, in terms of their mauri and mahinga kai and taonga species value, are degraded; but opportunity to enhance them exists[142].

11.33. The submission by MKT stated that Rūnunga expect the proposals would recognise and provide for tangata whenua values, including kaitiakitanga and mahinga kai, and would address the protection and restoration of natural feature and sites of cultural significance to tangata whenua. It noted the relevance of the Mahaanui Iwi Management Plan 2013 (MIMP) and the importance of waipuna/springs as taonga.

11.34. Mr Murray noted that MKT no longer wished to be heard in relation to their submission to the NZTA applications and concluded that potential adverse effects on cultural values had been mitigated to the extent they would be no more than minor.

11.35. Mr Murray noted that while MKT had initially been unhappy that no CIA had been prepared for CCC, he was satisfied that the established Cultural Advisory Group would determine if a CIA was required. He noted some relevance of the CIA prepared for the NZTA to the CCC applications and concluded any adverse effects on cultural values are capable of being avoided, remedied or mitigated.

Evaluation

11.36. There no evidence of any specific concerns to Tangata Whenua. We are mindful that the protection and enhancement of water quality (springs and waterways) and aquatic ecosystems is of critical importance to protection of cultural values.

11.37. Overall, on the basis of the evidence presented, we are satisfied that with the imposition of consent conditions any adverse effects on cultural values can be avoided, remedied or mitigated. We consider the CCC applications have the potential to positively impact on cultural values by enhancing the natural environment of the Cranford Basin and enabling improved stormwater treatment.

[142] ECan s42A report, pg.24, para 125

12.0 POLICY CONSIDERATIONS AND OTHER RELEVANT MATTERS

Relevant Planning Provisions

12.1. An analysis of the objectives and policies of the relevant statutory documents was provided in Section 9 of NZTA's application documents and in the evidence of Ms Brown. Ms Brown concluded that overall the resource consent applications were consistent with the relevant planning provisions.

12.2. An analysis of the objectives and policies of the relevant statutory documents was provided in Section 9 of CCC's application documents and in the evidence of Mr Whyte. Mr Whyte concluded that with the implementation of appropriate mitigation measures the applications were consistent with the relevant provisions.

12.3. In the ECan s42A report, Mr Murray identified the following relevant documents:

(a) National Policy Statement for Freshwater Management (NPS Freshwater);
(b) National Environmental Standards (NES);
(c) Canterbury Regional Policy Statement (RPS);
(d) Natural Resources Regional Plan (NRRP);
(e) Waimakariri River Regional Plan (WRRP);
(f) Proposed Land and Water Regional Plan (pLWRP); and
(g) Proposed Canterbury Air Regional Plan (pCARP).

12.4. Overall, Mr Murray agreed with the assessments of Ms Brown and Mr Whyte, and concluded that the resource consent applications were consistent with the relevant objectives and policies of the planning provisions.

Evaluation

12.5. Given the high level of agreement between the planning experts and the lack of any specific submissions in relation to the relevant planning provisions, we consider it unnecessary to list all the relevant objectives and policies. These are provided in detail in the application documents and in evidence, and we have considered them.

12.6. On the basis of the evidence presented, were are satisfied that with the imposition of consent conditions, the proposed activities are likely to be consistent with the key objectives and policies of the NPS Freshwater, relevant NES, RPS, NRRP, WRRP, pLWRP and pCARP. We consider there is sufficient evidence to conclude that any significant adverse effects on the environment can be adequately avoided, mitigated and remedied.

12.7. We therefore agree with the analyses of the planning experts that the proposed activities are consistent with the objectives and policies of the relevant statutory documents.

Other Matters

12.8. A number of 'other matters' were brought to our attention in the application documentation and in evidence during the hearing.

12.9. Ms Brown, Mr Whyte and Mr Murray all noted the relevance of the Ngāi Tahu Freshwater Policy Statement and the MIMP, as non-statutory documents. Ms Brown and Mr Whyte concluded that with the impositions of conditions to protect springs and water quality and address accidental discovery protocols, and further consultation during design, the applications are consistent with the objectives of these documents.

12.10. Mr Murray stated in his s42A report that because tangata whenua had advised that the proposal would have adverse effects on mauri, water quality and mahinga kai, he could not consider it to be consistent with the Ngāi Tahu Freshwater Policy Statement. However, in relation to the MIMP, he accepted the Applicants had adopted the BPO for stormwater design.

12.11. We have had regard to these non-statutory documents, and are satisfied that cultural values such as kaitiakitanga, mauri, mahinga kai and protection of waipuna/springs have been adequately provided for.

12.12. Ms Brown and Mr Whyte noted the resource consents would enable implementation of significant roading projects, which are consistent with the land-use growth and transport policy framework. We acknowledge that the proposed activities will enable implementation of regionally and locally significant roading and stormwater projects.

12.13. In making our assessment we have also considered the Styx SMP and the conditions of Discharge Permit CRC131249. In particular we note Mr Murray's addendum to the ECan s42A report in relation to these matters and agree it is a relevant consideration to our assessment of effects on the receiving waters in the Styx catchment.

Statutory Considerations

Section 104D

12.14. In terms of our assessment of the **NZTA applications as a non-complying activity**, we conclude on the basis of the above assessment that the adverse effects of the proposed activities will be minor and are consistent with the relevant objectives and policies of the planning provisions. We therefore find that the applications pass both threshold tests of section 104D(1)(a) and (b), and the consents can be granted.

Sections 105 and 107

12.15. In terms of section 105, we have had regard to the nature of the discharges and the sensitivity of the receiving waters; the Applicants' reasons for the proposed choice; and any possible alternative methods of discharge, including discharges into any other receiving environment.

12.16. On the basis of the evidence, we accept the receiving waters are 'moderately' sensitive to the proposed discharges in terms of protecting water quality and ecological values; and highly sensitive to the proposed discharges in terms of water quantity (flooding effects).

12.17. During the **construction phase**, we consider careful management is needed in working around and in waterways, and over shallow groundwater systems, to avoid and mitigate any potential adverse effects on water quality and impacts of aquatic ecology. We note the necessary consents granted to the Applicants under the NES Soil will ensure appropriate identification and management of contaminated, assisting in minimising the risk of contaminated sediment entering surface water. We accept that development and implementation of the CEMP and sub-management plans is an appropriate method to mitigate potential adverse effects.

12.18. During the **operational phase**, we are satisfied that with the stormwater treatment proposed any adverse effects on water quality in the receiving waters will be minor.

12.19. We accept that any adverse effect on water quantity (flooding effects) in the receiving water will be less than minor given the Project's objective of no increase in peak discharge or the extent and frequency of existing flooding/ponding.

12.20. We accept the Applicants' proposed choice of receiving environment given the nature of roading Projects and consider the method of discharge is appropriate given the designation limitations and ground conditions.

12.21. In terms of section 107 matters, we are satisfied that the mitigation measures proposed are likely to avoid any significant adverse effects on aquatic life and the life supporting capacity of the receiving waters.

12.22. Overall, we are satisfied that the proposed activities are unlikely to result in any of the effects in the receiving waters set out in section 107(1)(c)-(g) of the RMA, and that discharge permits sought can be granted.

Part 2 of the Act

12.23. All the considerations we have described are subject to Part 2 of the Act. In accordance with Part 2, we consider that subject to the imposition of appropriate consent conditions, the proposed activities are consistent with the purpose of the Act and the principles of the sustainable management of natural and physical resources, as defined in section 5. We acknowledge the applications enable implementation of roading and stormwater Projects that are regionally and locally significant both economically and socially.

12.24. We are satisfied that sections 6 (a), (c), (d), (e) and (f) matters of national importance have been recognised and provided for in determining appropriate conditions of consent.

12.25. We have had particular regard to sections 7 (a), (b), (c), (d), (f) and (h) and (i) and conditions have been imposed to address these matters where appropriate.

12.26. In achieving the purpose of the Act, we have taken into account the principles of the Treaty of Waitangi/Te Tiriti o Waitangi. We have no evidence to suggest the proposal is inconsistent with these principles.

Conclusion

12.27. On the basis of the evidence before us, we consider that the purpose of the Act can best be achieved by granting the resource consents sought with the imposition of consent conditions.

Conditions

12.28. There was a high level of agreement at the conclusion of the hearing between Mr Murray and Mr Smith regarding conditions of consent. The only area of disagreement was in relation to the appropriate TSS limit for the dewatering discharges. We have discussed this in relation to our assessment of water quality and ecology effects above and find the appropriate TSS limit to be 100 mg/l, given the permitted activity standard in the pLWMP.

12.29. In general, we consider the proffered and agreed conditions are reasonably necessary to address any actual and potential adverse effects of the proposed activities, and that they are practicable, reasonable and enforceable.

Consent Duration

12.30. On the basis of the evidence presented, we consider the appropriate duration for the consents sought is 13 years for the construction phase activities; and 35 years for the operational phase discharges and permanent dam/divert consents.

Decision

12.31. It is our decision, under the authority delegated to us by the Canterbury Regional Council, pursuant to sections 104, 104B, 104D, 105, 107 and 108, and subject to Part 2 of the Resource Management Act 1991, to **GRANT** the following resource consents, subject to the consent conditions set out in Appendix 2:

(a) Water Permit CRC150789, Water Permit CRC150790, Discharge Permit CRC150791, Discharge Permit CRC150792, Land Use Consent CRC150793 and Land Use Consent CRC150794 by New Zealand Transport Agency; and

(b) Land Use Consent CRC1511942, Discharge Permit CRC151943, Water Permit CRC151944, Discharge Permit CRC156177 and Water Permit CRC156178 by Christchurch City Council.