Watercare's Proposed Designation Conditions Reply Set - 13 August 2013

Appendix E to the evidence of Ms Petersen set out the changes Watercare was seeking to make to the conditions proposed in the Pre-hearing Report.

The **Hearing Set** used Ms Petersen's Appendix E as the base document, and showed only the additional changes proposed by Watercare at the commencement of the hearing.

The **Reply Set** includes all amendments shown in the Hearing Set, but then shows:

- In red and bold the further changes proposed as a result of material presented or questions asked at the hearing as at Wednesday 7 August and provided to the Council.
- In green and bold further changes proposed by the Council on 9 August and accepted by Watercare.
- In purple and bold further changes sought by Watercare in response to the Council's 9 August changes where Watercare considers other wording is more appropriate.

All numbering is consistent with the Pre-hearing Report and has not been updated to reflect the suggested additions and deletions, either in Ms Petersen's Appendix E or the Hearing Set. The numbering and cross-referencing will all need to be updated once the conditions are finalised, and the order of the documents (TR A to TR K) referred to in DC.1(d) should also be re-ordered into alphabetical order.

General Designation Conditions (DC)

- DC.1 Except as modified by the conditions below and subject to final design, the works shall be undertaken in general accordance with the information provided by the Requiring Authority in the Notices of Requirement dated August 2012 and supporting documents being:
 - (a) Part A: Assessment of Environmental Effects, titled "Central Interceptor Main Project Works Resource Consent Applications and Assessment of Effects on the Environment" prepared by Watercare/Central Interceptor Team, dated 10 August 2012, reference 60102004.
 - (b) Part B: Site Specific Assessments, titled "Central Interceptor Main Project Works Assessment of Effects on the Environment", prepared by Watercare/Central Interceptor Team and dated August 2012, excluding Mt Albert War Memorial Reserve (AS1).
 - (c) Part C Drawing Set, prepared by Watercare/Central Interceptor Team dated August 2012 (all drawings dated 26 July 2012), except as amended by the plans provided in the Hearing Drawing Set (provided on 12 July 2013) and the further plan SK_1500 Rev B provided to the Council on 23 July 2013 regarding the proposed access to the May Road site.
 - (d) Part D: Technical Reports (TR) as detailed below, and additional information:
 - TR E: Traffic Impact Assessment, prepared by Traffic Design Group, dated 24 July 2012;

- TR F: Noise Impact Assessment, prepared by Marshall Day Acoustics, dated 23 July 2012;
- TR G: Vibration Assessment, prepared by Tonkin & Taylor Limited, dated July 2012, reference 27993;
- TR I: Ground Contamination Assessment, prepared by Tonkin & Taylor Limited, dated July 2012, reference 26145.401;
- TR J: Groundwater and Surface Settlement Assessment, prepared by Tonkin & Taylor Limited, dated July 2012, reference 21645.32;
- TR D: Archaeological Assessment, prepared by Clough & Associates Ltd, dated July 2012;
- TR K: Erosion and Sediment Control Plans, prepared by Watercare Services Limited, dated 8 August 2012, and including plans CSO-ESCP-004-009;
- TR B: Arboricultural Assessment, prepared by Arborlab Consultancy Services Limited, dated 30 July 2012, reference 17967;
- TR A: Landscape and Visual Assessment, prepared by Boffa Miskell Limited, dated 26 July 2012;
- TR C: Assessment of Ecological Effects, prepared by Boffa Miskell Limited, dated 24 July 2012;
- TR H: Odour Assessment, prepared by Beca Infrastructure Ltd, dated 30 July 2012.
- (e) The Section 92 Response Report to Auckland Council, dated December 2012 and March 2013, including the following:
 - Part A: Introduction and Background
 - Part B: AEE Report Questions Response, and Specialist Reports and information as follows:
 - Property Instruments;
 - Draft Construction Discharge Management Plan;
 - Archaeological response (Clough & Associates), dated 26 November 2012;
 - Contamination response (Tonkin & Taylor), dated 12 December 2012;
 - Transportation response (Traffic Design Group), dated 12 December 2012;
 - Acoustic response (Marshall Day Acoustics), dated 29 November 2012;
 - Vibration response (Tonkin & Taylor), dated 12 December 2012; and
 - Trenching Drawings.
 - Groundwater and Surface Settlement Effects (Tonkin & Taylor), dated 1 March 2013.

- (f) Part 1 of the second Section 92 Response Report to Auckland Council dated May 2013, including the following:
 - Watercare response report (Parts A and B) dated 13 May 2013;
 - Mt Albert War Memorial Reserve Updated Drawings (AEE-Main-2.1A/2.2A, Issue D, dated 14 May 2013);
 - Traffic response (Traffic Design Group), dated 6 May 2013;
 - Vibration response (Tonkin & Taylor), dated 10 May 2013;
 - Noise response (Marshall Day), dated 13 May 2013;
 - Soil Conditioner Data Sheets;
 - Mt Albert War Memorial Reserve Car Park Erosion and Sediment Control Plan, dated 23 April 2013, Revision A;
 - Mt Albert War Memorial Reserve Car Park Contamination response (Tonkin & Taylor), dated 2 May 2013; and
 - Mt Albert War Memorial Reserve Car Park Groundwater and Settlement response (Tonkin & Taylor), dated 3 May 2013.
- (g) Part 2 of the second Section 92 Response Report to Auckland Council, being a letter from Watercare dated 27 May 2013 and including the following attachments:
 - Attachment 1 Amended Construction Discharges Condition;
 - Attachment 2 Updated Chemical Treatment Management Plan and Construction Discharges Management Plan;
 - Attachment 3 Watercare Incident Response Procedures;
 - Attachment 4 Roma Road Access Drawing;
 - Attachment 5 Alternative Sites Comparisons;
 - Attachment 6 Consultation Update;
 - Attachment 7 Lyon Avenue Updated Drawings;
 - Attachment 8 Mt Albert War Memorial Reserve Updated Drawing;
 - Attachment 9 Haverstock Road Updated Drawings;
 - Attachment 10 Updated Drawing Index;
 - Attachment 11 Information on Mangere WWTP and the Manukau Harbour.
- (h) Letter from Watercare dated 23 July 2013 and including the following attachment:
 - Central Interceptor General Proposed Access May Road (WS2) SK_1500 Rev
 B.
- DC.1A Except as modified by the conditions below and subject to final design, the works at the Mt Albert War Memorial Reserve Car Park Site shall be undertaken in general accordance with the information provided by the Requiring Authority in the Notice of Requirement *Mt Albert*

War Memorial Reserve – Car Park Site dated March 2013 and supporting documents set out below, and as amended by Section 92 responses set out at condition DC.1 above:

- (a) Part A: Assessment of Environmental Effects, titled "Central Interceptor Main Project Works Assessment of Effects on the Environment Mt Albert War Memorial Reserve Car Park Site" prepared by Watercare/Central Interceptor Team, dated 8 March 2013, reference 60102004;
- (b) Appendix A: Drawings:
 - (i) Mt Albert War Memorial Reserve Car Park (AS1) Permanent Works Plan AEE-MAIN-2.1A Rev D
 - (ii) Mt Albert War Memorial Reserve Car Park (AS1) Construction Works Plan AEE-MAIN-2.2A Rev E
- (c) Appendix D: Noise Impact Assessment prepared by Marshall Day Acoustics, dated 6 March 2013;
- (d) Appendix E: Traffic Impact Assessment prepared by Traffic Design Group, dated 8 March 2013; and
- (e) Appendix F: Vibration Assessment prepared by Tonkin & Taylor, dated 8 March 2013.
- DC.1B As soon as practicable following the Requiring Authority being satisfied that it can comply with condition TM.3B, the Requiring Authority shall confirm it will implement If the Car Park Site at the Mount Albert War Memorial Reserve, as described in the Notice of Requirement dated March 2013, is implemented, and the designation area as set out in the Notice of Requirement dated August 2012 shall be removed from the Mount Albert War Memorial Reserve in accordance with Section 182 of the RMA.
- DC.2 As soon as practicable following completion of commissioning of the Project, the Requiring Authority shall, in consultation with the Council:
 - (a) review the extent of the area designated for the Project;
 - (b) identify any areas of designated land that are no longer necessary for the ongoing operation, maintenance, renewal and protection of the wastewater interceptor and associated structures and activities:
 - (c) identify any areas of the designation within road reserve that are no longer necessary as the completed infrastructure is otherwise provided for and adequately protected by provisions of the Local Government (Auckland Council) Act 2009 and Utilities Access Act 2010;
 - (d) give notice to the Council in accordance with section 182 of the RMA for the removal of those parts of the designation identified in (b) and (c) above, which are not required for the long term operation and maintenance of the Project; and
 - (e) provide as-built plans to the Council's Team Leader, Compliance and Monitoring, Resource Consents.

- DC.3 A liaison person shall be appointed by the Requiring Authority for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by the designation and construction work. The liaison person's name and contact details shall be advised to affected parties by the Requiring Authority. This person must be reasonably available for on-going consultation on all matters of concern to affected persons arising from the Project. If a liaison person will not be available for any reason, an alternative contact person shall be nominated to ensure that a Project contact person is available by telephone 24 hours per day seven days per week during the construction phase.
- DC.4 The designation shall lapse on the expiry of a period of 15 years after the date <u>on which the last of any appeals on all consents and notices of requirement associated with the Central Interceptor main project works is withdrawn or determined, or, if no appeals are lodged, the date on which the notices of requirement are it is included in the District Plan(s) in accordance with section 184(1)(c) of the RMA, unless:</u>
 - (a) it has been given effect before the end of that period; or
 - (b) the Council determines, on an application made within 3 months before the expiry of that period, that substantial progress or effort has been made towards giving effect to the designation and is continuing to be made, and fixes a longer period for the purposes of this subsection.
- DC.5 Except as provided for in Condition DC.6 below, the Requiring Authority shall submit an Outline Plan of Works (OPW) for the Project or for each Project stage in accordance with section 176A of the RMA.
 - Note: "Project stage" means a separable part of the Project, e.g. by Contract area or by geographical extent and may include one or more designated sites enabling the preparation of site-specific plans where appropriate.
- DC.6 An OPW need not be submitted if the Council has waived the requirement for an OPW in accordance with section 176A(2)(c) of the RMA.
- DC.7 The OPW shall include the following Management Plans for the relevant stage(s) of the Project:
 - (a) Construction Management Plan (CMP);
 - (b) Site Specific Traffic Management Plan;
 - (c) Communications Plan; and
 - (d) Site Specific Construction Noise and Vibration Management Plan (CNVMP); and
 - (e) Cultural and Archaeological Management Plan (CAMP).
- DC.7A The Reinstatement Plan required under Condition SR.1 may be submitted as part of the above OPW or separately as part of a later OPW for the relevant stage(s).

DC.7AA The OPW shall include architectural plans for any proposed new permanent buildings (including air treatment facilities) at the following locations:

- (i) Western Springs Park
- (ii) Pump Station 25
- (iii) Pump Station 23
- (iv) Kiwi Esplanade

The architectural designs for the buildings shall take into account the following matters:

- (a) The extent to which the building is appropriate to its context and minimises potential adverse effects on the amenity of the surroundings (including neighbouring properties);
- (b) The use of building materials which are sufficiently robust and minimise the potential for graffiti and vandalism;
- (c) The extent to which the building is visually recessive through use of appropriate colours, textures and modulation;
- (d) The extent to which buildings are designed to achieve appropriate visual amenity and scale with their surroundings through such aspects as modulation of building form, articulation of building components, and use of architectural detail; and
- (e) The extent to which any planting visually anchors the building and enhances amenity and/or natural values of the surroundings.
- DC.7B The OPW shall include design plans for any <u>other</u> permanent <u>at grade and above ground</u> structures. The design of any permanent <u>at grade and above ground structures shall take into account the following matters:</u>
 - (a) design of the buildings in reference to their location, landscape setting and adjoining land uses;
 - (aa) the layout, architectural form and detail, and the use of a consistent and appropriate palette of materials, to ensure these elements are visually recessive;
 - (ab) the configuration of multiple surface elements to minimise their prominence and visual clutter;
 - (b) <u>the</u> use of <u>building</u> materials which are sufficiently robust and minimise the potential for graffiti and vandalism; <u>and</u>
 - (c) landscaping to integrate with the Site Reinstatement plans required in Condition SR.1;
 - (d) site configuration that maximises the use of Crime Prevention Through Environmental Design (CPTED) principles. to achieve site security, and to minimises the extent of additional security fencing; and
 - (e) standard urban design principles.

Construction Management Conditions (CM)

- CM.1 The Requiring Authority shall prepare a Construction Management Plan (CMP) or Plans for the Project overall or for each of the relevant Project stages. The purpose of the CMP(s) is to set out the detailed management procedures and construction methods to be undertaken in order to avoid, remedy or mitigate potential adverse effects arising from construction activities. The CMP(s) shall be provided to the Council with the relevant OPW for the stage to which they relate.
- CM.2 The CMP(s) required by CM.1 above shall include specific details relating to the management of all construction activities associated with the Project or relevant Project stage, including:
 - (a) Details of the site or project manager and the construction liaison person identified in Condition DC.3, including their contact details (phone, postal address, email address);
 - (b) An outline construction programme;
 - (c) The proposed hours of work;
 - (d) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal / storage of rubbish, storage and unloading of construction materials and similar construction activities;
 - Location of site infrastructure including site offices, site amenities, contractors yards site access, equipment unloading and storage areas, contractor car parking, and security;
 - (f) Procedures for controlling sediment run-off, dust and the removal of soil, debris, demolition and construction materials (if any) from public roads or places adjacent to the work site;
 - (g) Procedures for ensuring that residents, road users and businesses in the immediate vicinity of construction areas are given prior notice of the commencement of construction activities and are informed about the expected duration and effects of the works:
 - (h) Means of providing for the health and safety of the general public;
 - (i) Procedures for the management of works which directly affect or are located in close proximity to existing network utility services;
 - (j) Procedures for responding to complaints about construction activities;
 - (k) Procedures for the refuelling of plant and equipment;
 - (l) A Construction Noise and Vibration Management Plan(s) (CNVMP) for each site containing measures to address the management of noise and vibration as identified in Condition CNV.1;
 - (m) A Traffic Management Plan(s) (TMP) containing measures to address traffic management as identified in Conditions TM.1 to TM.3;
 - (n) Measures for the protection <u>and management</u> of trees as identified in Conditions T.1 and T.2;

- (o) Measures to be implemented to avoid, remedy or mitigate effects on and from the high voltage electricity transmission network, including:
 - procedures detailing how the proposed works will be carried out in accordance with NZECP 34:2001 New Zealand Electrical Code of Practice for Electrical Safe Distances;
 - procedures to manage the effects of dust and any other material potentially resulting from construction activities and able to cause material damage, beyond normal wear and tear, to the overhead transmission lines;
 - procedures to ensure that no activity is undertaken during construction that would result in ground vibrations or ground instability likely to cause damage to the overhead transmission lines, including supporting structures;

These procedures to be developed in consultation with Transpower NZ Limited.

- (p) Measures to address CPTED issues within and around the construction site.
- CM.3 The CMP shall be implemented and maintained throughout the entire construction period for the Project or relevant Project stage to manage potential adverse effects arising from construction activities to the greatest practicable extent.—and The CMP or any specific component of the CMP shall be updated as necessary and provided to the Council.

Construction Noise and Vibration Conditions (CNV)

- CNV.1 A Construction Noise and Vibration Management Plan (CNVMP) shall be prepared for <u>each</u> <u>site-the Project or relevant Project stage</u>, either as part of the CMP, or as a standalone plan, and shall be prepared by a suitably qualified person.
- CNV.2 The CNVMP shall include specific details relating to the control of noise and vibration associated with all Project works. The CNVMP shall be formulated and the works implemented to achieve, as far as practicable, compliance with the requirements of:
 - (a) NZS6803:1999 Acoustics Construction Noise, except as provided for in Condition CNV.5A below; and
 - (b) German Standard DIN 4150-3:1999 Structural Vibration Effects of Vibration on Structures, except as provided for in Conditions CNV.5B, 5C and 6 below.

Where compliance with the requirements of NZS6803:1999 or DIN 4150-3:1999 cannot be achieved, the CNVMP shall be prepared in consultation with affected stakeholders.

- CNV.3 Construction works which exceed a level of L_{Aeq} 45dB at the most exposed receiver(s) are restricted to between 0730 to 1800 on weekdays and Saturdays, with no noisy works permitted on Sundays and Public Holidays. The Each CNVMP shall define which activities will comply with a limit of L_{Aeq} 45dB and can therefore be undertaken outside of these hours in compliance with condition CH.1.
- CNV.4 The Each CNVMP shall, as a minimum, address the following aspects with regard to construction noise:
 - (a) a description of noise sources, including machinery, equipment and construction techniques to be used;
 - (b) predicted construction noise levels;

- (c) hours of operation, including times and days when noisy construction work and blasting would occur in compliance with condition CNV.3;
- (d) physical noise mitigation measures, including limiting the use of <u>tonal</u> reverse alarms during night-time works, maintenance of access roads (to ensure they are smooth), acoustic screening around the site, plant selection and maintenance procedures, and site layout;
- (e) construction noise criteria for any specific areas and sensitive receivers such as schools, child care centres, medical or aged care facilities;
- (f) the identification of activities and locations that will require the design of **specific** noise mitigation measures;
- the measures consultation that will be undertaken by the Requiring Authority with affected stakeholders to develop the proposed noise management measures and any feedback received from those stakeholders, along with the noise management measures that will be adopted based on this consultation to communicate and obtain feedback from affected stakeholders on noise management measures;
- (h) where full compliance with NZS6803:1999 cannot be achieved, the CNVMP shall set out the methodology for handling non-compliances (including drafting site specific CNVMPs) so that the Best Practicable Option is adopted, including setting out the consultation undertaken with affected stakeholders in developing the Best Practicable Option;
- (i) methods for monitoring and reporting on construction noise, including additional monitoring required for activities that cannot comply with the criteria in NZS6803:1999;
- (j) methods for receiving and responding to complaints about construction noise; and
- (k) construction operator training procedures.
- CNV.5 The Each CNVMP shall also describe measures adopted to meet the requirements of German Standard DIN4150-3:1999, and as a minimum shall address the following aspects with regard to construction vibration:
 - (a) vibration sources, including machinery, equipment and construction techniques to be used;
 - (b) preparation of building condition reports on 'at risk' buildings prior to, during and after completion of works, where for the purposes of this condition an 'at risk' building is one at which the levels in the German Standard DIN4150-3: 1999 are likely to be approached or exceeded;
 - (c) use of building condition surveys to determine the sensitivity of the building(s) on the adjacent sites to ground movement in terms of the Line 1-3 criteria of the DIN standard;
 - (d) provision for the determination of buildings that require post-condition surveys to be undertaken following the commencement of blasting;

- (e) identification of any particularly sensitive activities in the vicinity of the proposed works (e.g. commercial activity using sensitive equipment such as radiography or mass-spectrometry) including Plant and Food Research (at 118-120 Mt Albert Road, Mt Albert), the Institute of Environmental Science and Research (Hampstead Road, Sandringham) and Caltex Western Springs (at 778-802 Great North Road, Grey Lynn) along with the details of consultation with the land owners of the sites where the sensitive activities are located and any management measures that will be adopted based on this consultation;
- (f) alternative management and mitigation strategies where compliance with German Standard DIN4150-3:1999 cannot be achieved;
- the measures consultation that will be undertaken by the Requiring Authority with affected stakeholders to develop the proposed vibration management measures and any feedback received from those stakeholders, along with the vibration management measures that will be adopted based on this consultation to communicate and obtain feedback from affected stakeholders on vibration management measures;
- (h) methods for monitoring and reporting on construction vibration; and
- (i) methods for receiving and responding to complaints about construction vibration.
- CNV.5A<u>Air overpressure limits</u> <u>Blasting activities</u> may exceed the limits of NZS6803:1999
 Acoustics Construction Noise <u>but shall be</u> subject to the following <u>limits</u>, <u>measured and assessed in accordance with AS2187.2-2006 Explosives Storage and Use</u>, <u>Part 2: Use of Explosives</u>:
 - (a) For buildings that are not occupied for any blast **event**, the air overpressure limit shall be 133 dBZ Lpeak unless agreement is reached **in writing** with the owner(s) (in conjunction with a building pre-condition survey) that a higher limit may apply; and
 - (ab) For buildings that are occupied for any blast event, and where there is are less than 20 blast events to be undertaken on the site over the entire project, the air overpressure limit shall be Lpeak-128 dBZ Lpeak; and
 - (bc) For buildings that are occupied for any blast event, and where there is are more than 20 blast events to be undertaken on the site over the entire project, the air overpressure limit of Lpeak_122dBZ Lpeak shall not be exceeded more than 5% of the time, and no blast event shall exceed Lpeak 128dBZ Lpeak.

Note: A blast event may comprise the detonation of one or more charges in a period not exceeding three seconds any single event.

CNV.5B The Guideline vibration limits set out in DIN 4150-3:1999 may be exceeded for up to 5% of the blast **event**s as measured over any twenty blast **event**s on the foundation of any building outside the designation boundary. However, no blasting activities **event** shall exceed 10mm/s irrespective of the **frequency of the blast material transmitted vibration**, unless CNV.6 applies.

- CNV.5C Construction activities identified in the Central Interceptor Vibration Assessment, Tonkin & Taylor, July 2012 as being short-term vibration sources with at a "High Risk" of exceeding the DIN 4150-3:1999 shall be conducted so that not more than 5% of the activities undertaken (measured over at least 20 representative samples of the relevant activity on any residential building) exceed the relevant criterion in DIN 4150-3:1999 and no activity shall exceed 10mm/s irrespective of the frequency of the activity measured, unless CNV.6 applies.
 - CNV.6 The Guideline vibration limits set out in DIN4150-3:1999 must not be exceeded more than 5% of the time except where the Requiring Authority can demonstrate to the satisfaction of the Council:
 - (a) that the receiving building(s) are capable of withstanding higher levels of vibration and what the new vibration limit is. The investigation required to demonstrate this must include an assessment of the building(s) by a suitably experienced and qualified structural engineer and a full pre-condition survey; and
 - (b) that the Requiring Authority has agreed in writing with the building owner(s), that a higher limit may be applied.
 - CNV.7 The Each CNVMP shall be implemented and maintained throughout the entire construction period and shall be updated when necessary.

Operational Noise Conditions (ON)

ON.1 The noise arising from any operational activities undertaken on the designated land, shall not exceed the following noise limits when measured <u>at or</u> within the boundary of any site zoned as follows:

Residential	
Time	Noise Limit*
0700-2200 hours	50 dB L _{Aeq}
2200-0700 hours	40 dBL _{Aeq}
	$\begin{array}{c} 40 \text{ dBL}_{Aeq} \\ 75 \text{ dB L}_{Amax} \end{array}$
Business	
Time	Noise Limit
At all times	60 dB L _{Aeq}

^{*}Notes:

- (1) These noise limits relate to noise generated by the normal operation of permanent works associated with the Project and do not apply to short term maintenance activities.
- (2) Noise levels shall be measured and assessed in accordance with New Zealand Standards NZS6801:2008 Acoustics Measurement of Environmental Sound and NZS6801:2008 Acoustics Environmental Noise.

Traffic Management Conditions (TM)

TM.1 A detailed Traffic Management Plan (TMP) or plans shall be prepared for the Project or relevant Project stage, either as part of the CMP or as a standalone plan, and shall be prepared by a suitably qualified person.

- TM.2 The TMP(s) shall describe the measures that will be taken to avoid, remedy or mitigate the traffic effects associated with construction of the Project or Project stage. In particular, the TMP(s) shall describe:
 - (a) Traffic management measures to maintain <u>traffic capacity</u> or minimise <u>the</u> impact on traffic capacity <u>at peak hours</u> during weekdays and weekends;
 - (b) Any road closures that will be required and the nature and duration of any traffic management measures that will result, including any temporary restrictions, detours or diversions for general traffic and buses;
 - (c) Methods to manage the effects of the delivery of construction material, plant and machinery;
 - (d) Measures to maintain, where practicable, existing vehicle access to property where practicable, or to provide alternative access arrangements;
 - (e) Measures to maintain, where practicable, pedestrian and cyclist movements and reduce the impact on mobility impaired users access on roads and footpaths adjacent to the construction works. Such access shall be safe, clearly identifiable and seek to minimise significant detours;
 - (f) Measures to manage any potential effects on school children at / around education facilities; and
 - (g) Measures to manage any potential construction traffic related effects on pedestrians and/or traffic associated with large-scale events in parks, and reserves and Western Springs Stadium; and
 - (h) Any proposed monitoring to measure the impact of the works on traffic and the impact of the traffic management measures. If safety or operational issues are evident, measures to be implemented to address these issues;
 - (i) Measures to manage the proposed access to the site should the access be unable to cater for two-way traffic passing at the same time, and in particular to minimise reverse movements and blocking of the road; and
 - (j) The availability of on-street and off-street parking if the designated site provide is unable to accommodate all contractor parking. This will include an assessment of available parking (if any) for contractors on street and identify measures to meet and/or reduce contractor parking demand should it be found that there is insufficient on-street parking to meet this demand.
- TM.3 The TMP(s) shall be consistent with the New Zealand Transport Agency *Code of Practice for Temporary Traffic Management* which applies at the time of construction.
- TM.3A Any damage in the road corridor directly caused by heavy vehicles entering or exiting construction sites within the designated land shall be repaired as soon as practicable or within an alternative timeframe to be agreed with Auckland Transport.

Public carparking at Mt Albert War Memorial Reserve Car Park Site

- TM.3B In the event that construction activities reduce the number of carparks available to users of the Mt Albert War Memorial Reserve, tThe Requiring Authority shall, in consultation with Auckland Council Parks, Sports and Recreation and the Albert-Eden Local Board, identify and confirm the agreed location of suitable alternative carparking to be established and shall establish at its cost alternative carparks sufficient to address the parking lost during construction activities within the Reserve.
- TM.3C The Requiring Authority shall provide a plan of the layout of any alternative carparking and associated works established in condition TM.3B above to the Council as part of the OPW for the Mt Albert War Memorial Reserve site. The plan must demonstrate that the proposed carparking location and layout complies with relevant Council standards, and provides sufficient carparking to address parking lost during construction activities within the Reserve.

TM.3CA The alternative carparking referred to in Condition TM.3B shall be established by the Requiring Authority at its cost prior to the commencement of works at the site.

Mt Albert War Memorial Reserve

TM.3CB Heavy vehicles associated with construction at the Mount Albert War Memorial Reserve site must only turn left from Wairere Avenue onto New North Road when leaving the site.

May Road

TM.3D Access for heavy all vehicles to the proposed May Road site during construction shall be via a one way system utilising entering from the proposed Roma Road access and exiting from an additional access directly to from May Road via land at 105 and 105A – 109A May Road legally described as Lot 2 DP 116924 and Lot 1 DP 58697, subject to agreement with the owner of that land and to any other approvals required from Auckland Transport for works within the road corridor. The proposed direction for the one way system, and the design of the access roads and vehicle crossings, shall be set out in the Traffic Management Plan and Outline Plan of Works for the site submitted in accordance with Conditions DC.5, DC.7, TM.1 and TM.2.

Western Springs

TM.3E The Requiring Authority shall minimise the number of trucks entering the site from Bullock

Track during peak commuter periods and ensure that no more than five truck movements per
hour enter the site from Bullock Track during peak commuter periods (unless Bullock Track /
Great North Road is signalised). In addition, monitoring of the operation and safety of the

intersection of Great North Road/Bullock Track (if not signalised), including queue lengths, gap acceptance and crash records shall be monitored on a bi-monthly basis by the Requiring Authority and the results submitted to Auckland Transport. If the safety record worsens, then the Requiring Authority shall limit truck movements using Bullock Track during peak commuter periods.

Lyon Avenue

TM.3FAt the Lyon Avenue site:

- (a) Contractor parking associated with the construction works is not permitted on Morning Star Place nor within any of the private parking areas accessed from Morning Star Place.
- (b) Access for emergency vehicles (including fire trucks, ambulance) and service vehicles (including rubbish trucks) along Morning Star Place shall be maintained at all times.
- (c) The site specific Traffic Management Plan shall include a suitably qualified traffic controller being available during construction works to accompany pedestrians along the road to a footpath or their parked car along the section of Morning Star Place that does not have footpaths on both sides of the road, as appropriate (for example at times of peak truck movements or special delivery by large vehicles).
- (d) The site specific Traffic Management Plan shall address how access to the site will be managed to minimise effects on residents, including identifying that construction traffic entering and leaving the construction site will give way to vehicles already travelling on Morning Star Place.
- (e) Public access shall be maintained between Morning Star Place and the Roy Clements Treeway pedestrian walkway.
- (f) Any damage to Morning Star Place caused directly by heavy vehicles associated with the construction works shall be repaired as soon as practicable.

Pedestrian Management Condition (PM)

PM.1 Where works in parks or reserves impact on existing pedestrian or cycle ways, alternative temporary accessways shall be provided. Any temporary accessways shall be designed as far as practicable in accordance with CPTED (Crime Prevention Through Environmental Design) principles and provide appropriate lighting and signage where necessary.

Works Within Road Reserve Condition (W)

- W.1 The Requiring Authority shall not require Auckland Transport or network utility operators with existing infrastructure within the road reserve to seek written consent under Section 176 of the RMA for <u>on-going routine</u> access, <u>inspection to enable works associated with the routine construction</u>, operation and maintenance of existing assets.
- W.2 Works within transport corridors shall be undertaken in accordance with the National Code of Practice for Utility Operators' Access to Transport Corridors (November 2011), or any approved update of that code, unless otherwise agreed between the Requiring Authority and the Corridor Manager.

Construction Hours Conditions (CH)

- CH.1 Construction hours shall be **generally** as follows, except where work is necessary outside the specified days or hours for the purposes specified in Condition CH.2 below.
 - (a) Tunnelling activities 24 hours a day, 7 days a week operations for all tunnelling activities, including the main tunnel works and the link tunnels.
 - (b) General site activities 7am to 6pm, Monday to Friday, 8am to 6pm Saturday.
 - (c) Truck movements 7am to 6pm, Monday to Friday, 8am to 6pm Saturday.
- CH.2 Purposes for which work may occur outside of the specified days or hours are:
 - (a) where it is necessary to complete an activity that has commenced;
 - (b) where work is specifically required to be planned to be carried out at certain times e.g. to tie into the existing network during periods of low flow, or to tie into tidal cycles for works in the CMA;
 - (c) for delivery of large equipment or special deliveries required outside of normal hours due to traffic management requirements;
 - (d) in cases of emergency;
 - (e) for the securing of the site or the removal of a traffic hazard; and/or
 - (f) for any other reason specified in the CMP or TMP.

Community Information and Liaison Conditions (CIL)

- CIL.1 The Requiring Authority shall prepare a Communications Plan (CP) for the construction phase of the Project or for each Project stage. The CP shall set out:
 - (a) the method(s) of consultation and liaison with key stakeholders and the owners/occupiers of neighbouring properties regarding the likely timing, duration and effects of works;
 - (b) details of prior consultation or community liaison undertaken with the parties referred to in (a) above, including outlining any measures developed with such persons or groups to manage or to mitigate any adverse effects or inconvenience that may arise;
 - (c) full contact details for the person appointed in accordance with condition DC.3 to manage the public information system and be the point of contact for related enquiries; and
 - (d) the information required by conditions CNV.4(g) and (j) and CNV.5(g) and (i).

Tree Management Conditions (T)

- T.1 The Requiring Authority shall provide details in the CMP as to how the potential impacts of construction on trees and vegetation will be managed. The details shall provide for the:
 - (a) Identification of trees to be protected, pruned, removed, or transplanted and procedures for marking these out on site.

- (b) The proposed location for any transplanted trees, including those required for visual screening purposes, and detail of any required landowner agreements if these locations are outside of the designated area.
- (c) Procedures for identifying and protecting significant trees to be retained where works occur in the dripline of such trees as identified by a suitably qualified person.
- T.2 In the event that pohutukawa trees at the proposed Kiwi Esplanade site are not be able to be retained within the construction site, the CMP for this site shall include, where practicable, the transplanting of existing trees to a nearby part of the reserve provided that this can occur without unduly affecting bird roosting or obscuring sea views from residential properties.

Cultural and Archaeology and Heritage Conditions (AH)

- AH.0 A Cultural and Archaeological Management Plan ("CAMP") shall be prepared for the Project or relevant Project stage in consultation with tangata whenua (as listed in the report referenced in Condition DC.1(a)). The purpose of the CAMP is to identify areas of potential cultural and archaeological significance and to establish methods, such as further archaeological investigation prior to works or monitoring by tangata whenua during works, at sites having potential archaeological and cultural significance. The CAMP shall also include the Accidental Discovery Protocol required by Condition AH.1.
- AH.1 Detailed protocols for the management of archaeological and waahi tapu discoveries shall be developed by the Requiring Authority in consultation with tangata whenua and the New Zealand Historic Places Trust prior to construction. These detailed protocols shall confirm the names and contact details for both tangata whenua and the New Zealand Historic Places Trust and Auckland Council to be contacted in accordance with Condition AH.2 below.
- AH.2 Subject to Condition AH.3 below, if If any archaeological sites, including human remains are exposed during site works then the following procedures shall apply:
 - (a) Immediately after it becomes apparent that an archaeological or traditional site has been exposed, all site works in the immediate vicinity shall cease.
 - (b) The Requiring Authority shall immediately secure the area so that any artefacts or remains are untouched.
 - (c) The Requiring Authority shall notify tangata whenua, the New Zealand Historic Places Trust and the Council (and in the case of human remains, the New Zealand Police) as soon as practicable, and advise those parties that an archaeological site has been exposed so that appropriate action can be taken. Works shall not recommence in the immediate vicinity of the archaeological site until approval is obtained from the New Zealand Historic Places Trust.
- AH.3 Condition AH.2 above shall not apply where the Requiring Authority holds all relevant approvals under the Historic Places Act 1993, apart from the requirement to contact the New Zealand Police in the case of discovery of human remains.

AH.5 The Requiring Authority shall, at least one month prior to demolition, destruction, or removal of the existing pump station at Miranda Reserve (PS 25), contact the Council to advise of the impending demolition, destruction, or removal. The Requiring Authority shall provide access to the Council to enable photographic records to be taken of any heritage features using photogrammetry techniques, if the Council wishes to do so.

Roy Clements Treeway Vegetation Enhancement Plan

- RC.1 A Vegetation Enhancement Plan shall be prepared that sets out proposed works that the Requiring Authority will undertake within the Roy Clements Treeway or in another local area in the vicinity of Meola Creek to mitigate effects of vegetation removal at the Lyon Avenue construction site. The Plan shall be prepared by a suitably qualified person.
- RC.2 The Vegetation Enhancement Plan shall be prepared in consultation with the owners of land on which the mitigation works are to be carried out, the Council, the Albert Eden Local Board, Mana whenua, and established community groups or environmental organisations having an interest in restoration and enhancement works on the land. The objectives of the Plan shall be to enhance amenity and ecological values of either the Meola Creek riparian habitats and vegetation between Fergusson Reserve and Alberton Avenue, or other local areas in the vicinity of Meola Creek which would provide a similar area and level of vegetation enhancement to that which would be achieved between Fergusson Reserve and Alberton Avenue. The mitigation works to be set out in the Plan may include planting and weed control, and shall be integrated with any other works planned in this area by the Council. New planting shall use eco-sourced native plants, appropriate to the local habitats of the Meola Creek catchment.
- RC.3 The Vegetation Enhancement Plan shall be submitted to the Council for approval (such approval not to be unreasonably withheld) within 2 two years of the date on which this designation is included in the district plan.
- RC.4 The Requiring Authority shall use its best endeavours to obtain agreement for the proposed works from the owners of the land on which the work is to be undertaken.
- RC.5 The works described in the Vegetation Enhancement Plan (excluding those within the designated area at the Lyon Avenue construction site) shall be implemented within two years of the Plan being approved, subject to the agreement of the owners of land on which the work is to be undertaken and subject to the Requiring Authority obtaining all necessary approvals or consents required to undertake the works described.

Site Reinstatement Conditions (SR)

- SR.1 Prior to commencement of works at all surface construction sites, the Requiring Authority shall prepare a Reinstatement Plan for the site, in consultation with the landowner(s).
 - The plan shall include:
 - (a) Any existing structures or features on the site to be protected during works or reinstated on completion of works.
 - (b) The location and design of permanent wastewater infrastructure to remain at the site including the design of lid structures and chamber covers.

- (c) The location and design of permanent access to the wastewater infrastructure. As far as practicable, permanent all-weather access for heavy vehicles shall minimise areas of new impermeable surfaces and, in open space areas, the use of grass cell, or similar, shall be considered preferred.
- (d) Details of proposed landscaping and planting, including implementation and maintenance programmes.
 - For sites that are in proximity to transmission lines, the species used shall be suitable in terms of plant height at maturity to maintain appropriate separation distances from the transmission lines.
 - For sites that are adjacent to residential properties, and have above ground structures, specific mitigation planting shall be included to provide visual screening of the structures from residential properties.
 - For sites in parks and reserves, the Reinstatement Plan shall include, but not be limited to, the following:
 - Details of the restoration of the park or reserve infrastructure to at least the same standards and specifications as existing at the time of the works; and
 - Reinstatement of all pedestrian linkages and walkways affected by construction.
- SR.1A The Reinstatement Plan for construction sites in parks and reserves shall be designed to integrate as far as practicable with park development and management plans of Auckland Council, the Auckland Design Manual Parkland Design Guidelines (Draft 2013) or final approved or updated version of these guidelines, and designed in accordance with CPTED (Crime Prevention Through Environmental Design) principles.
- SR.1B The Reinstatement Plan for the Lyon Avenue construction site shall be designed to integrate with the Roy Clements Treeway Vegetation Enhancement Plan required by Condition RC.1 above, and designed in accordance with CPTED (Crime Prevention Through Environmental Design) principles.
- SR.13 When contractors' yards or other temporary works areas are no longer required for any construction or operational purpose, site works, including site offices, storage and equipment sheds, fencing and hard stand areas shall be removed and the area reinstated in accordance with condition SR.1 above.

END