Decision following the hearing of an application for resource consent under the Resource Management Act 1991



Proposal

Land use consent and water and discharge permits associated with the provision of 1.5km long, 2.1m internal diameter trunk sewer and associated access shafts and pipe connections in Herne Bay, Auckland.

This resource consent GRANTED. The reasons are set out below:

Application number:	BUN60420393		
Site address:	94 Shelly Beach Road, Ponsonby		
	94A and 94B Shelly Beach Road, Ponsonby		
	12 Argyle Street, Herne Bay		
	19 Salisbury Street, Herne Bay		
	Road reserve in Sarsfield Street, Hamilton Road, Sentinel Road, Wallace Street, Argyle Street, Herne Bay Road, Upton Street, Marine Parade, and Bella Vista Road		
Applicant:	Watercare Services Limited		
Hearing commenced:	Tuesday 20 February 2024 and Wednesday 21 February 2024, 9.30am		
Hearing panel:	Karyn Sinclair (Chairperson) Hilke Giles Kim Hardy		
Appearances:	 For the Applicant: Simon Pilkinton, Legal Alana Wouters, Legal Stephen Webster, Corporate Andrew Deutschle, Corporate Jeremy Elley-Brown, Consultation and Engagement William Hung, Consultation and Engagement Rory Bishop, Construction Methodology Mark Thomas, Geotechnical Sharon Yung, Noise and Vibration Andrew Clarke, Structural Engineering Colin Shields, Traffic Sean McBride, Arboricultural Julia Wick, Landscape and Visual Maree Drury, Planning For the Submitters: Malcolm Legget Josephine Yelavich 		

	 Alastair McLaren Brady Nixon and Kitt Littlejohn (For and on behalf of Simon and Paula Herbert) Madeleine Wright (On behalf of Tom Phillips, Jane Dent, and Dougal Paterson) Dougal Paterson Jane Dent Tom Phillips David Abbott (The St Mary's Bay Association Inc) Dirk Hudig and Dr Ian Wallis (For and on behalf of the Herne Bay Residents Association) Ministry of Education (tabled letter)
	 For Council: Colin Hopkins, Principal Project Lead Mark Ross, Planner Chayla Walker, Hearings Advisor
Hearing adjourned	21 February 2024
Commissioners' site visit	19 February 2024
Hearing Closed:	6 March 2024

Introduction

- 1. This decision is made on behalf of the Auckland Council ("the Council") by Independent Hearing Commissioners Karyn Sinclair (Chairperson), Hilke Giles and Kim Hardy appointed and acting under delegated authority under sections 34 and 34A of the Resource Management Act 1991 ("the RMA").
- This decision contains the findings from our deliberations on the application for resource consent and has been prepared in accordance with section 113 of the RMA.
- 3. The applications were publicly notified on 5 September 2023. A total of 22¹ submissions were received, with 3 in support, 4 were neutral and 15 in opposition.

Summary of proposal and activity status

- 4. The project has been clearly described by the applicant in materials submitted to the hearing panel, the s42A report and in evidence throughout the hearing. We do not propose to repeat that here and rely on the material in front of us to set out the project and the environment within which the project is proposed.
- 5. The applicant seeks land use consent and water and discharge permits associated with the provision of 1.5km long, 2.1m internal diameter trunk sewer and associated access shafts and pipe connections. The proposal requires resource consent for the following reasons.

¹ Including two late submissions, refer para 6

Land use consents (s9) - LUC60420246

District

Auckland Unitary Plan (Operative in Part) (AUP(OP))

E25 - Noise and Vibration

• The undertaking of construction works that will not comply with the construction noise and vibration limits set out in Standards E25.6.27.(1) and E25.6.30.(1), is a **restricted discretionary activity** under Rule E25.4.1(A2).

E26 - Infrastructure

- The pruning and trimming of trees located within an open space zone and roads that will not comply with Standard E26.4.5.1, is a restricted discretionary activity under Rule E26.4.3.1(A84).
- Works within the protected root zone of trees located within an open space zone and roads that are not otherwise provided for, is a restricted discretionary activity under Rule E26.4.3.1(A88).
- The removal of trees located within an open space zone and roads that exceed 4m in height, is a restricted discretionary activity under Rule E26.4.3.1(A92).
- The undertaking of earthworks within residential, strategic transport corridor, and open space zoned environments and roads associated with the installation of wastewater infrastructure that exceed 2,500m² in area and 2500m³ in volume, is a **restricted discretionary activity** under Rules E26.5.3.1(A97 and A97A).
- The undertaking of earthworks associated with the installation of wastewater infrastructure that will occur within a 1% annual exceedance probability floodplain for more than 28 days, which does not comply with Standard E26.5.5.2.(20), is a **restricted discretionary activity** under Rule C1.9.(2).

E31 - Hazardous Substances

The storage of up to 2,000l of diesel, being a sub-class 6.1C and 6.3-6.9 substance, within the Open Space – Informal Recreation Zone, is a discretionary activity under Rule E31.4.3(A101).

National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 (NES:CS)

The undertaking of earthworks on land that is contaminated and where a
detailed site investigation has not been undertaken, is a discretionary
activity under Regulation 11(2).

Regional

E26 - Infrastructure

• The undertaking of earthworks within residential, strategic transport corridor,

and open space zoned environments and roads associated with the installation of the proposed wastewater infrastructure that exceed 2,500m² in area and located on land that has a slope equal to or greater than 10 degrees, is a **restricted discretionary activity** under Rule E26.5.3.2(A106).

 The undertaking of earthworks within residential, strategic transport corridor, and open space zoned environments and roads associated with the installation of the proposed wastewater infrastructure that exceed 2,500m² in area and are located within a sediment control protection area, is a restricted discretionary activity under Rule E26.5.3.2(A107).

Water permit (s14) - WAT60420394

AUP(OP)

E7 - Taking, Using, Damming and Diversion of Water and Drilling

- The diversion of groundwater associated with the tunnelling and excavation works to allow for the construction of proposed trunk sewer, branch and engineering connections, and shafts that exceed the permitted activity standards set out in Standard E7.6.1.10, is a restricted discretionary activity under Rule E7.4.1(A28).
- Dewatering associated with a groundwater diversion that does not meet the associated permitted activity standards, is a restricted discretionary activity under Rule E7.4.1(A20).

Discharge permit (s15) - DIS60422394

AUP(OP)

E30 - Contaminated Land

 The discharge of contaminants into air or water, or onto or into land not meeting Standard E30.6.2.1, is a discretionary activity under Rule E30.4.1(A7).

Discharge permit (s15) - DIS60428329

AUP (OP)

Industrial or Trade Activities

- The discharge of contaminants from an industrial or trade activity area not listed in Table E33.4.3, being the proposed construction yards, where the permitted discharge standards are not met, is a controlled activity under Rule E33.4.2(A12).
- 6. Overall the proposal has been considered as a discretionary activity.

Procedural matters

7. Two late submissions were received. Mr Pilkington on behalf of Watercare set out the reasons that Watercare did not support the accepting of these submissions,

including the fact that the application was publicly notified, the period of time that had passed between close of submissions and receipt of these, and the extensive engagement undertaken by Watercare. This engagement includes an appearance in front of the Watercare Board. The Commissioners have considered these points in their determination. The reporting officer recommended accepting the submissions as both submitter parties claimed they were not directly notified despite being identified as such and that they made submissions promptly on becoming aware.

- 8. Under sections 37 and 37A of the RMA, the time limit for the receipt of submissions is waived to accept the late submission(s) of Mr T Phillips and Mr T Phillips, Mr J Gibson and Ms J Lawless for the following reasons.
 - The issues raised are aligned with issues raised in other submissions and therefore there is no delay in the process.
 - Acceptance of the late submissions resolves any ambiguity over the receipt of notification.

Relevant statutory provisions considered

- 9. In accordance with section 104 of the RMA, we have had regard to the relevant statutory provisions including the relevant sections of Part 2 and section(s) 104, 104B, 105 and 107.
- 10. With respect to section 104 and in consideration of the decision of the Court of Appeal in RJ Davidson², the relevant objectives and policies in the relevant statutory documents were prepared having regard to Part 2 of the RMA, they capture all relevant planning considerations and contain a coherent set of policies designed to achieve clear environmental outcomes. They also provide a clear framework for assessing all relevant potential effects such that there is no need to go beyond these provisions and look to Part 2 in making this decision as an assessment against Part 2 would not add anything to the evaluative exercise.

Relevant standards, policy statements and plan provisions considered

- 11. In accordance with section 104(1)(b)(i)-(vi) of the RMA, we have had regard to the relevant policy statements and plan provisions of the following documents.
 - National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health,
 - National Policy Statement on Urban Development,
 - National Policy Statement for Freshwater Management,
 - New Zealand Coastal Policy Statement

² RJ Davidson Family Trust v Marlborough District Council [2018] NZCA 316

 Auckland Unitary Plan (OP) and specifically Chapters B Regional Policy Statement, E1 Water Quality and Integrated Management, E2 Water Quantity, Allocation and Use, E11 Land Disturbance – Regional, E12 Land Disturbance – District, E25 Noise and Vibration, E26 Infrastructure, E30 Contaminated Land, E31 Hazardous Substances, E36 Natural Hazards and Flooding and E40 Temporary Activities

Local Board comments

12. No comments have been received by the Waitemata Local Board. However, the Commissioners note that they are engaged through the landowner approval process independent of this resource consent application.

Summary of evidence heard

- 13. The Council planning officer's recommendation report was circulated prior to the hearing and taken as read.
- 14. All evidence was circulated prior to and entered into the record of the hearing. The evidence presented at the hearing responded to the issues and concerns identified in the Council planning officer's recommendation report, the application itself and the submissions made on the application.
- 15. The evidence presented by the applicant at the hearing is summarised below.

Applicant

Legal submissions from Simon Pilkington

Mr Pilkington provided his legal submissions in writing and spoke to them. He noted that this project was part of a much bigger whole for the wider Auckland environment. He submitted that, once completed, there were only positive benefits. He noted that there was no basis on which the Commissioners could decline part of the application, as suggested by submitters, with respect to the use of Salisbury Reserve. He also noted that Watercare was not relying on the permitted baseline offered in the AUP(OP) with respect to temporary activities.

Mr Pilkington considered that all the effects had been assessed, including the impact of the reduction in the area of occupation at Salisbury Reserve, on the scale of those effects.

Stephen Webster

Mr Webster provided corporate evidence on behalf of Watercare. He noted that the project was not a 'stand alone' project, but an integral component of the Western Isthmus Water Quality Improvement Programme (WIWQIP), aimed at reducing wastewater overflows and improving water quality in the western Isthmus. He noted that Salisbury Reserve was not a construction site, but a laydown area and site office and that this use was no different to other projects across the city. He further noted that if Salisbury Reserve was not able to be used as a Construction

Support Area (CSA) there would be financial and programme implications. He also stated that not using Salisbury Reserve would impact more people as the consequentially required increased use of road corridors would result in people losing access to their properties by car.

Andrew Deutschle

Mr Deutschle set out the current servicing of the western isthmus and addressed some of the broader programme changes that have resulted in this project, noting that the previous wastewater separation project would have achieved the same outcomes as the Herne Bay sewerage tunnel.

He noted that the CSAs are essential to the overall construction programme and ensure that the occupation of the road corridor is limited. CSAs located further afield from the construction area would result in more occupation of the road reserve for longer periods and be more costly.

Mr Deutschle noted that he did not agree with the proposition from Dr Wallis for the submitters that there was a need to provide monitoring of the tunnel. In his opinion the network discharge consent managed the effects of overflows. There were no discharges associated with the operation of this tunnel that would necessitate monitoring.

Jeremy Elley-Brown and William Hung

Mr Elley-Brown and Mr Hung set out the engagement that Watercare had undertaken in the lead up to the hearing of the resource consent application. This included undertaking a survey of the town houses on the corner of Sarsfield and Wallace Streets, facilitating a presentation from residents to the Watercare Board and hosting drop in sessions to engage with local residents. They noted that they regularly updated a broad section of the population using electronic means and had a data base of upwards of 5000 people.

Rory Bishop

Mr Bishop provided evidence on the construction methodology and mitigation measures that would be adopted during construction to manage potential effects. He talked through the location and purposes of the shafts and illustrated the area of occupation comparative to other similar projects in St Marys Bay and Henderson. He confirmed that the relocation of shaft sites was not practical, as suggested by submitters, as these sites are selected to enable the project to remain within the road reserve and to enable existing services to be connected to the tunnel.

In his view, if Salisbury Reserve was unable to be used as a CSA, there would be greater disruption to local traffic through more occupation of the road reserve and

longer travel distances for construction traffic (such as looping over the Harbour Bridge to get access to some sites³).

Mr Bishop set out his understanding of the CSAs, including being secured overnight and with regular security. Following evidence from submitters he provided a supplementary statement which confirmed there would be a solid hoarding fence around the boundary of the CSA at Salisbury Reserve and advised us that this hoarding was taken into account in the supporting technical expert assessments of effects and their recommended conditions. He set out in para 2.2 of that supplementary statement the activities that would be undertaken at the site. He noted that there would be no storage of excavated spoil, wet or loose materials on the CSA site.⁴

Mark Thomas

Mr Thomas provided geotechnical evidence relating to ground movement from construction and operation of the project. Mr Thomas confirmed that the expected ground movement was within appropriate tolerances and would result in minor cosmetic damage and negligible effects on groundwater or the watercourse 400 m away.

He assessed the potential impact on service connections to private properties and confirmed to the Commissioners that any ground movement would be within acceptable tolerances of buried pipes.

With respect to Mr McClaren's request to require post construction surveys 12 months after works, Mr Thomas confirmed that the sought period of 6 months was consistent with other similar projects (Central Interceptor and Commercial Bay cited). He considered the assessment to be very conservative (it was assessed as if the construction was with an 'open' mode whereas it will be in 'closed' mode at all times). He also explained that the time (season) of the survey only has a very small influence on the survey results.

Mr Thomas addressed the request that there be eight rather than four building settlement pins to monitor the potential for ground movement. He considered that four was appropriate, as eight would result in the pins being located too close together which may distort the indication of differential settlement as a result of the project.

Sharon Yung

Ms Yung undertook a noise and vibration assessment of the project. Ms Yung confirmed that she reassessed the potential noise effects from the CSA at Salisbury Reserve following the revision of the site layout and that the noise limits for construction can be achieved. She considered her assessment conservative as

³ Mr Bishop in presentation to Hearing Panel Day one

⁴ Mr Bishop supplementary evidence para 2.3

⁵ As explained in para 6.3 of Mr Thomas's evidence in chief

it was based on all vehicles being trucks and described noise monitoring to be conducted at the beginning of the project.

Ms Yung identified three properties that may experience construction vibration levels which may result in more than cosmetic damage. In her opinion the conditions as proposed would be sufficient to manage and remedy any damage as a result of construction activity.

Andrew Clarke

Mr Clarke provided structural engineering evidence in relation to 92 – 98 Sarsfield Street and 51 Wallace Street, a terrace of 1920's masonry town houses. Having undertaken a site visit and in reliance on Ms Yung's vibration assessment, he confirmed that the project would not affect the structural stability of the town houses. He noted that the building was in good condition with a 'few' cosmetic cracks, and that it should be able to resist the horizontal and vertical movement expected from construction. He noted there was potential for existing cosmetic cracks to widen and/or new cosmetic cracks to form as a result of predicted settlement. In his opinion any cosmetic damage could be 'easily remedied'⁶.

Colin Shields

Mr Shields prepared an Integrated Traffic Assessment for the project. He confirmed that the road network was generally congestion free, apart from peak queuing for the State Highway 1 ramp at Curran Street. He noted there were no inherent safety issues, and that the vehicles generated by the construction activity would have a "minimal" or "less than minor" impact on traffic in the area during usual construction hours and minimal impact outside of usual construction hours.

Mr Shields noted the submission from Ministry of Education and agreed that the amended condition as per his evidence (now proposed condition 46(p)) would specifically address the Ministry's concern about traffic speed during construction of Shaft One.

Mr Shields noted that his assessment of the potential effects of construction traffic assumed Salisbury Reserve being used as a CSA. Mr Shields did not assess any transport or traffic effects in the event that Salisbury Reserve was not used as a CSA.

Sean McBride

Mr McBride, an arborist, confirmed that the effect of the removal of the 14 trees⁷ to facilitate the project could be adequately mitigated by the replacement planting of 46 exotic or 51 native trees. He clarified subsequent to Ms Wick's evidence that this replacement planting could be a combination of native and exotic species. In Mr McBride's opinion, selection of the most mature specimens to replace removed

⁶ Mr Clarke evidence in chief Para 7.1

⁷ Not including those that can be removed as a permitted activity or those being translocated

trees would not necessarily result in the overall mitigation being achieved any faster, given that there are other factors to consider (such as tree pit size, width of berm), and that there is only a 4 to 5 - year difference in achieving the same ecosystem value between a 45L and a 160L tree. Mr McBride confirmed that the standard maintenance period for trees planted in the road berm was 3 years, and then the trees are handed to the Urban Tree team at Auckland Council for ongoing maintenance.

Julia Wick

Ms Wike gave visual and landscape evidence in relation to the proposal, and specifically in relation to the CSAs. Ms Wike set out a high-level sit analysis report on Salisbury Reserve. While she acknowledged there was a diverse range of users and activities, the overall numbers of users in her analysis, was low⁸. She calculated that the CSA would occupy approximate 25% of the reserve.

In Ms Wick's opinion, there will be moderate – high adverse effects from the occupation of the reserve to loss of part of the Salisbury Reserve area. In her opinion these effects are not long term, and the reinstatement would result in permanent long term positive effects⁹.

Maree Drury

Ms Drury provided planning evidence in relation to the proposal. She confirmed the consents required for the construction and operation of the project. She did not agree with the Council's technical stormwater assessment that CSAs constituted an industrial or trade activity requiring consent for discharge.

Ms Drury confirmed her opinion that the proposal had considered all the relevant effects, and that with appropriate conditions, effects could be appropriately avoided, remedied or mitigated.

Ms Drury summarised the measures in conditions that had changed as a consequence of discussions with submitters or from issues raised in submissions. She noted that a winter works approval was anticipated to keep the project on programme and there is provision to enable this in condition 18. She noted that the 10-year lapse date was to accommodate budgets.

16. The Commissioners note the submitters who attended the hearing did not object to the proposal but retained concerns primarily relating to construction. The evidence presented by the submitters is summarised as follows.

Malcom Legget

Mr Legget raised his outstanding concerns relating to protection of property owners, and specifically whether the conditions as provided were sufficient to adequately address damage to buildings as a result of construction activities. He

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⁸ Ms Wikes evidence in chief para 2.13

⁹ Ibid 2.18

also sought greater clarity on the liability of Watercare to remedy damage. With respect to traffic management, Mr Legget sought greater certainty as to when and for how long specific disruptions were to occur and suggested a minimum one month' notice of likely disruption to access. He sought regular and formal updates from Watercare on how the programme was progressing.

Josephine Yelavich

Ms Yelavich stated that she wanted all damages compensated for. In her opinion, six months post completion of activity was too short to identify damage from construction and thought it should be longer. She was concerned about the major disruption and maintaining traffic access.

Alistair McLaren

Mr McLaren is the owner of one of the masonry constructed town houses in Sarsfield Street. He addressed discussions the owners had had with Watercare, but still considered that the six-month period post construction to identify damage was too short and that the post construction monitoring for damage should cover a 12-month period. He wanted assurance that all defects would be remedied and clarification of the process for remediation.

Kitt Littlejohn and Brady Nixon for S & P Herbert

The Herbert's own 15 Cremorne St. The original application as notified identified works relating to EOP1019 but did not identify its location correctly. The works associated with EOP1019 were subsequently withdrawn from the application. Mr Littlejohn, legal counsel, submitted that the withdrawal of the works to EOP1019 meant that the Watercare application was "only 90%" complete and that without clarity as to how works to connect EOP1019 to the Herne Bay sewer tunnel would be undertaken, the effects on the environment from the project have not been adequately covered. He later accepted that the works associated with EOP1019 was probably less than 10% (his assessment without qualification as to how he came to that figure). Mr Littlejohn submitted that "incomplete" compared to 'staged' was a question of degree.

Mr Nixon set out the implications of the works on the property at 15 Cremorne Street, including the likely removal of significant trees and other vegetation that provide privacy and the disruption to the property's guest house.

Madeleine Wright, representing the collective of landowners, calling D Paterson J Dent, and T Phillips

Ms Wright, legal counsel for a collective¹⁰ of Herne Bay residents, provided legal submissions relating to the use of Salisbury Reserve as a CSA. She noted that the collective did not oppose the project generally. She submitted that the CSA

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¹⁰ Gary Lane, James Gibson, Joanna Lawless, Dougal Paterson, Jane Dent, Peter Hallwright, Tom Phillips, Annabel Phillips

required resource consent as it would be used for longer than 24 months, that Watercare had not specified the actual duration of use, and that the exclusion of the community to that part of the reserve would result in significant effects on them. Further, she submitted that, as a consequence of these significant effects, an assessment of alternative CSA sites must be undertaken and that this had not been carried out. Any work undertaken by Watercare on alternatives since lodgement in her opinion was not adequate.

Ms Wright submitted that the proposal needed consent under the Open Space zone rules.

Ms Wright submitted that the significant impact on the use of the reserve by the community was a matter that should be supported by the lay evidence of members of that community, as it is the community that experience the loss and that curtailing the use of the reserve would have significant effects on the health of that community. She submitted that section 5 RMA needs to be satisfied that the "sacrifice" is necessary.

Mr Paterson explained that the area of proposed occupation is the only flat area, and it was the only area without bush, wasn't steep, was not a pathway and that the reserve is used for sports, picnics, football and dog walking. He described that the loss of space of Salisbury Reserve is much greater than the 25% stated by Watercare and that the usable open space, defined by him as areas that are not steep, access ways or vegetated, lost is approximately 59%. He noted that the analysis undertaken by Ms Wick was not representative in his view, and that December and January are not representative periods for surveying use of the reserved. In his opinion it is used from dawn to dusk. He considered the assessment of alternatives to be poor.

Ms Dent noted that the CSA is proposed to use the most popular part of the reserve and that with the CSA there would be little useful land left.

Mr Phillips addressed the loss of amenity, dust and noise levels to the upper floor of his house that overlooks the reserve. He noted that the reserve was used for a wide range of activities and that there were "obvious alternatives" for Watercare. He noted that the local children would not be able to walk to Pt Erin or Cox's Creek. He considered that the application for the remainder of the proposal could be approved, but this aspect declined.

St Mary's Bay Association Inc, represented by David Abbott

Mr Abbott expressed the need to measure the performance of the tunnel in reducing overflows and pollution into the harbour. He noted that Watercare has the telemetry, and that the Saint Mary's Bay tunnel has the flows monitored.

Herne Bay Residents Association represented by Dirk Hudig, D Mattheson, R Scoles and Dr Ian Wallis

Mr Hudig sought to ensure that all the matters that had been agreed with Watercare should be in conditions. He noted that Salisbury Reserve was a well-used reserve. The HBRA supported the use of the area owned by Eke Panuku at Point Erin instead of Salisbury Reserve. He considered the berms in Argyle and Salisbury Streets could also be utilised. The HBRA was concerned about the drainage of Salisbury Reserve, which is quite wet in winter. Mr Hudig noted that the project was needed to assist to achieve the outcomes sought in the Network Discharge consent. He raised the issue that Mr Deutschle from Watercare suggested that this project would remove 80% of the overflows and he considered this was an issue that needed monitoring to ensure that the project achieves its intended objectives. He noted that a Watercare community liaison person should be available during all hours the works take place.

Dr Wallis set out his experience in relation to the St Marys Bay tunnel and how its operated and where overflows occurred. He noted, given the performance, that it was not perfect, with overflows into the harbour 20 times a year. He recommended that the Herne Bay tunnel be similarly monitored for two years after construction. The nine overflows should be fitted with weirs and measuring devices with data sent by telemetry to the relevant authority. He considers monitoring is essential to identify issues and informs decisions to resolve those issues.

17. There was a large degree of agreement between Council officers and the applicant, and the Council's response was accordingly brief.

Dr Hanna in questions from Commissioners regarding the need or otherwise for an industrial or trade activity (ITA) discharge permit confirmed her opinion that the CSAs would fall to the definition of an ITA. Dr Hanna relied on definitions in the AUP(OP) and RMA and considered the activity as an "unlisted" activity. She noted that the applicant will install a swale to capture potential contaminants. In the administration of the rule, Dr Hanna suggested if the activity was for "a few months" it would not need consent, but she noted that if the activity was for more than a year, specifically, Auckland Council would require the applicant seek discharge consents as an ITA because of cumulative effects.

Mr Ross confirmed that there was no discharge consent needed for the tunnel, and that the discharges from the network were governed by the existing Network Discharge Consent.

Mr Ross disagreed with the proposition put by Mr Littlejohn that the granting of this application means that inevitably there would be disruption for 15 Cremorne Street. He noted he did not rely on the permitted baseline for the CSAs but that E40 of the AUP(OP) was clearly definitive. He did not support the idea that the objectives and policies of the Open Space zone should be preferred, relying instead on those within E40, which he considered applied specifically, irrespective of the zoning.

Mr Ross disagreed with the submissions from Ms Wright that the application could be unbundled. He concluded by providing some commentary on the conditions, noting where he agreed with proposed amendments. Notably the point of difference relates to ground settlement monitoring pins and the number required to be installed at the masonry building on the corner of Sarsfield and Wallace Streets.

18. The applicant's right of reply was given by Mr Pilkington and addressed the following matters.

Mr Pilkington in reply submissions noted as a matter of law, the Commissioners were not to take "residents' group" as representing the community other than those specifically specified in the submission.

He addressed the use of Salisbury Reserve, what the two years would entail and confirmed the assessment of effects was sufficient to address the changes made to the footprint. He reaffirmed that the use of any land for temporary construction purposes is anticipated in the AUP(OP). He clarified that the Public Works Act process was to enable the area to be leased for the duration. As a result of the speculative evidence of submitters regarding a "hard" 24-month period of use, Mr Pilkington offered up a condition to confirm this.

Mr Pilkington submitted that it was not necessary to allow for a deferral in the process to enable submitters to consider conditions.

Mr Pilkington confirmed the legal requirements for an "alternatives assessment" and the proposition that the Commissioners did not have sufficient information on which to make a decision. He submitted that neither position (an inadequate assessment of alternatives or insufficient information) applied to this application and that the Commissioners were in a position to determine the application.

Mr Pilkington addressed issues raised by the submitters in evidence at the hearing, and set out where these issues had been addressed in a subsequent edition of the proposed conditions, which were appended to his submissions.

With respect to the issues raised by Mr and Mrs Herbert, relating to the withdrawal of part of the application relating to the connection of EOP1019 (being engineering overflow point 119 located within 15 Cremorne Street) to the Herne Bay trunk sewer due to the errors of its exact location not being adequately addressed in the application, Mr Pilkington submitted that the project was not dependent on this aspect of the activity and that, should Watercare choose to in the future, a subsequent application could be made to enable that diversion to occur. In the meantime, the issues relating to EOP1019 sit with the Network Discharge Consent held by Watercare.

Principal issues in contention and findings on these

19. After analysis of the application and evidence (including proposed mitigation measures), undertaking a site visit, reviewing the Council planning officer's recommendation report, reviewing the submissions, and concluding the hearing

process, the proposed activity raises a number of issues for consideration. The principal issues in contention are.

- a. The use of Salisbury Reserve as a CSA, including the types of activities to be undertaken, the duration of the activity, whether there is a need to assess alternative locations (and if so is that sufficient) and the effects on adjacent landowners and park users.
- b. Potential for damage to buildings during construction through ground settlement and/or vibration.
- c. The need for monitoring of tunnel overflows.
- d. Whether there is sufficient information on which to make a decision.
- e. Whether other consents are necessary.
- 20. The use of Salisbury Reserve as a CSA, including the types of activities to be undertaken, the duration of the activity and the effects on adjacent landowners and park users is clearly one of the key issues of difference between the applicant and the submitters, several who presented evidence at the hearing. The range of issues are addressed below.

The use of Salisbury Reserve as a CSA

- 21. Watercare has been clear from the beginning that the application as lodged and notified includes the use of Salisbury Reserve as a CSA. The area of occupation has been modified within the scope of the application as lodged. Any ambiguity around the activities that will be undertaken was clarified by Mr Bishop in a supplementary statement prior to the reply by Mr Pilkington. We accept that evidence and it forms part of the scope of the consent.
- 22. The Commissioners are not particularly swayed by the percentage claims of loss of reserve and associated loss of amenity through the use of the old bowling green. We accept that the CSA will be located on the old bowling green area and close one of the three access points into the reserve. We accept the evidence of the applicant that other areas of the reserve remain accessible and useable, albeit a smaller area with lesser convenience than the old bowling green presents. It does not render the wider accessible reserve area as unusable for dog walking, picnics and or informal sports. We accept that young children may have the availability of open space curtailed as they cannot walk to other parks as suggested in evidence. However, these are all issues that need to be balanced with the temporary activity. In closing Mr Pilkington offered condition 111 to ensure that the use of the reserve (and the other CSA) is limited in time to 24 months. This provides certainty to the community that the occupation of part of the reserve will be limited. Ms Wright submitted that the use of the CSAs did not align with the programme for construction. We note that point but find that the condition as offered will necessitate Watercare to work with that timeframe and adapt its programme to suit if and where necessary.

23. The use of Salisbury Reserve as a CSA is provided for in the AUP(OP), and the effects of its use have been assessed and found acceptable from a noise and traffic perspective. No expert evidence was provided to the contrary. The loss of some of the useable area does not render the wider reserve unusable for the duration and it is still accessible. With the conditions of consent regarding the overall management of the CSAs, the clear limits on the activities that will be undertaken on the CSAs and the limited time period as offered by Watercare and a clear timeframe for reinstatement, the Commissioners find that the effects of the use of Salisbury Reserve as a CSA can be adequately managed and mitigated.

Potential for damage to buildings during construction through ground settlement and/or vibration.

- 24. Several submitters raised the risk of damage to buildings through ground settlement and/or vibration from the construction activity, given the proximity of some shafts especially, to private property, and given the construction of some buildings (notably the masonry town houses on the corner of Sarsfield and Wallace Streets. There was no other expert evidence except that given on behalf of Watercare, from Mr Thomas, Ms Yung and Mr Clarke. The local residents raised valid concerns about the functionality of the conditions, noting that in some instances the pathways to remediation were not clear, nor the liability. The condition set provided by Mr Pilkington has recommended some modifications to ensure that the requirements are clear to potentially affected landowners. He noted in the condition set (by way of comment) that the amendments reflect those required of consents relating to the Central Interceptor project.
- 25. The Commissioners accept that there is a potential risk to buildings and other property. These risks are part of many construction projects but that the risk can be appropriately managed through the conditions as proposed by the applicant. We find that the potential for damage may exist but with the amendments as proposed the effects will be appropriately monitored and mitigated in the event they are realised.

The need for monitoring of the tunnel overflows.

26. Dr Wallis for the Herne Bay Resident's Association recommended the imposition of monitoring conditions, to ensure that the project achieved its objectives of reducing overflow frequency into the Waitematā Harbour. Mr Webster and Mr Deutschle emphasised the Western Isthmus Water Quality Improvement Programme (WIWQIP) and the role this project would play in achieving the objectives of that programme.

Watercare set out the context of this project within the WIWQIP. There are several projects within the programme, including the existing Network Discharge Consent that governs the EOPs and limits the allowable discharges to the harbour from the wastewater network. The AEE states at 4.1

"The primary purpose of the Project is to reduce engineered overflow spill frequencies to ensure ongoing compliance with Watercare's NDC conditions."

27. The Commissioners acknowledge the expertise and experience of Dr Wallis, appearing the Herne Bay Resident's Association, including in relation to the St Mary's Bay tunnel operation. The Commissioners are cognisant of the scope of the suite of consents in front of us for decision. The consents sought and required for the tunnelling project relate almost entirely to its construction. Watercare do not need consents to operate a wastewater piped network within the road reserve. We accept Mr Pilkington's submission in his closing statement at 5.2 that we do not have jurisdiction to impose conditions to monitoring overflows.

Whether there is sufficient information on which to make a decision.

28. Both Ms Wright and Mr Littlejohn submitted that there was not sufficient evidence in front of the Commissioners to make a decision. Mr Littlejohn submitted that with the removal of EOP1019 from the scope of the applications, there were effects associated with the works proposed in relation to EOP1019 that needed to be evaluated stating at para 2.6:

"The work that would be involved with connecting the proposed interceptor pipe to EOP1019 in 15 Cremorne Street is significant. According to the AEE, it will involve a combination of open trenching and trenchless methods, as well as construction of a 3.5m diameter interception shaft for access around the manhole. Substantial earthworks and disruption will be required for this work, which in turn will impact hard and soft landscaping at 15 Cremorne Street, and highly valued established trees."

- 29. He further submitted that the granting of the consent, without the above evaluation, would essentially lock in the location of where the trunk sewer would be located and therefore, how and where EOP1019 would connect to, and effects associated with that connection have not been adequately assessed.
- 30. Ms Wright submitted that a land use consent is required to undertake the CSA in Salisbury Reserve as the activity will operate for longer than 24 months. She further submitted that the effects were significant and that an alternatives assessment must be undertaken.
- 31. Dr Hanna, for the Council, has requested that Watercare obtain consent for the use of the two CSAs as industrial and trade activities under E33, and notably as an "unlisted" activity (Table E33.4.1 (A3)). The applicant disputed that the CSAs constituted an "industrial and trade process" under the RMA¹¹, but in the event offered conditions to ensure that contaminants are appropriately managed within these sites.
- 32. We will address our findings in relation to these three points below.

Herne Bay Trunk Sewer BUN60420393

¹¹ The AUP defines "industrial or trade activity" as having "the same meaning as industrial or trade process under section 2 of the Resource Management Act 1991 but does not include a production land activity".

Consents relating to EOP 1019

33. Mr Littleiohn asserted that the granting of the consents would predetermine how EOP 1010 would be connected to the Herne Bay tunnel and therefore the likely effects in the event a connection to EOP 1019 was sought in the future. In his view, the effects of that connection need to be assessed now. Mr Pilkington in his reply noted that Watercare does not "necessarily need to make a connection to EOP 1019 in the future"12. He noted that the potential connection depends on a range of issues including compliance with the Network Discharge Consent, costs, and landowner engagement. The means by which the connection would be made can be decided if and when the time comes that the connection is needed. Commissioners cannot see that an understanding of how, if and when the connection of EOP 1019 should be made is fundamental to the application in front of us. There is no evidence in front of the Commissioners that would suggest that the previously promoted option (that was subsequently withdrawn) was the only option available. Mr Pilkington confirmed in reply that Watercare did not need to connect EOP 1019 to implement the consents sought, and nor did the consents sought rely on that connection for any reason. There is no evidence in front of us that the connection of EOP 1019 is necessary now, or in the future, and this has lead us to conclude that the connection of EOP 1019 is not determinative for this application. We find that the resource consent in front of us can be decided. without any clear pathway for the connection of EOP 1019.

Consents and significant effects due to use of Salisbury Reserve

- 34. Ms Wright's submission relating to the consent necessary for the use of Salisbury Reserve was premised on the use of that reserve for greater than 24 months. The applicant, in the reply submissions, has addressed the time period by offering a condition that limits the activity to 24 months. This is does not restrict the site set up nor decommissioning and the Commissioners note that this is consistent with Note 2 associated with the E40.4 Activity Table. To ensure greater certainty for the local residents around the timing of reinstatement of reserve access, the Commissioners have addressed conditions to ensure that access is restored to the community.
- 35. Ms Wright submitted that an alternatives assessment was needed given the significant effects on the community from the loss of the area to be occupied by the CSA at Salisbury Reserve. The Commissioners accept the proposition that the lay evidence of witnesses can inform effects assessment relating to amenity. The submitters who live in the vicinity of the reserve state that the effects on them will be significant¹³ including on the wellbeing of the community. There is no dispute that the use of the reserve will change the relationship of the reserve users with that reserve for the duration of the CSA activity. While currently the old bowling green is a convenient place to exercise dogs, meet, play cricket and such like, the CSA does not remove all useable land nor compromise access to the reserve

¹² Mr Pilkington Closing Legal Submissions para 4.2

¹³ Joint lay evidence of J Dent, P Hallwright, J Gibson, J Lawless, T Phillips & A Phillips for Collective of local residents para 1.7

(maintaining two accesses out of three) including the grass area accessed from Salisbury Road (adjacent to the playground), and the grassed area to the south of the pétangue club land. The Commissioners do not find any need to quantify by percentage the area that will be occupied by the CSA as this is clearly defined on plan Construction Support Area Land Requirement Plan – Salisbury Reserve 20 February 2024 as provided by the applicant. It is not the size of the area that is a defining feature of the evaluation, but it is acknowledged that the value assigned to that area that is important and preferred. The fact that the local community has a preference for the old bowling green does not render the effect of it being unavailable for the short to medium term a significant amenity effect. The CSA is a temporary use and the effects other than passive recreational effects that also influence the amenity of the area have been assessed with respect to noise and traffic. Noise levels at the CSA are not expected to exceed appropriate noise levels with hoardings around the site to mitigate noise levels to ground floors of adjacent residential properties. Traffic within the CSA will be separated from public use of the reserve preserving reserve user safety. Noise and safety to users contribute to amenity values, along with availability of space for various users. The Commissioners find that the CSA does have an effect on the amenity of users of the reserve but do not find that this effect is significant given the duration of the activity, the availability of other useable spaces within the wider reserve are, the definitive timeframe being limited to 24 months, and the requirement to reinstate the reserve and remedy any damage. We note the applicant did not rely on the permitted baseline to authorise the works at Salisbury Reserve. We find that the effects of the CSA have been adequately assessed and found to be acceptable and not significant.

Industrial or Trade activity

36. Dr Hanna advised that the applicant required a discharge consent associated with ITA. The applicant did not agree. Ms Drury in evidence drew our attention to both the definition of "Industrial or trade process" in the RMA and in her view "process" relates to the "manufacture of goods from raw materials" 14. She also drew our attention to Auckland Council's own guidance (by way of a web page link) on the ITAs15, and noted

"Council defines an ITA in more plain terms on their own website as "any commercial business that produces, uses or stores hazardous substances" 16

37. Commissioners asked Dr Hanna what industrial process she was relying on to come to her conclusion that an ITA discharge permit was required, and she referred us E33.4.2(3)(A11). When asked whether all construction yards in the Auckland region needed consent for an ITA, Dr Hanna responded, "it depends" and that if it was only for "a few months" no consent was sought, but that if the

¹⁴ Ms Drury Evidence in Chief para 7.13(a)

¹⁵ Ms Drury ibid footnote number 16

¹⁶ Ms Drury ibid para 7.13(d)

activity occurred over "a year" consents were required, and that this is based on the experience of Auckland Council and determined on a case by case basis. Dr Hanna could not direct us to the appropriate rules and or performance standards that allowed Council to apply those timeframes as part of a determination as to whether consent was needed as an ITA or for the discharge from an ITA.

- 38. The Commissioners prefer the evidence of Ms Drury, finding it provided us with a plain and ordinary reading of the provisions (and associated guidance) and therefore a clear statutory pathway for interpreting what an ITA might be reasonable construed to be and whether it is relevant to this application. We rely on her view that an ITA involves industrial processing and that it has its basis as a commercial business. Dr Hanna's response was more generic, appeared to rely on a more subjective determination that was not able to be clearly referenced in the AUP(OP) relating to time frames, and relied on an "unlisted" activity, which is not limitless in its application, but needs to be able to fall somewhere within the bounds of an industrial process and a business activity.
- 39. The invitation from both planners for the Commissioners to make a decision on this point was taken up. We find the CSA does not fall to the definition of ITA, and accordingly the discharge permit is not required. We note that as part of the discussions relating to the difference of interpretation, Watercare has agreed that in any event the CSAs will have swales to appropriately manage any discharges from the site.

Decision

In exercising our delegation under sections 34 and 34A of the RMA and having regard to the foregoing matters, sections 104 and 104B and Part 2 of the RMA, we determine that resource consent for Land use consent and water and discharge permits associated with the provision of 1.5km long, 2.1m internal diameter trunk sewer and associated access shafts and pipe connections in Herne Bay, Auckland is granted for the reasons and subject to the conditions set out below.

Reasons for the decision

- In accordance with an assessment under s104(1)(a) of the RMA, the actual and potential effects from the proposal will be of an acceptable nature and scale in this environment. Any adverse effects generated by the project, especially traffic disruption, noise and vibration, ground settlement and the amenity of Salisbury Reserve can be appropriately managed and mitigated by the conditions of consent set out below.
- 2. There are positive effects that will result from the project including:
 - providing network capacity for existing development and future growth; and
 - reducing overflows to stream and coastal environments in the catchments it

serves.

- 3. The proposal is generally consistent with the National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health, the National Policy Statement on Urban Development, the National Policy Statement for Freshwater Management, the New Zealand Coastal Policy Statement, and the relevant objectives and policies of the Auckland Unitary Plan (Operative in Part).
- 4. The provisions of s105 of the RMA will be met, as the proposed discharge of contaminants represent the best practicable option, the receiving environment will not be adversely affected in an unacceptable manner and discharges into an alternative receiving environment is neither practical nor necessary.
- 5. The provisions of s107 of the RMA will be met, as after reasonable mixing, proposed discharge of contaminants will not give rise to any of the following effects on receiving waters:
 - a. The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials.
 - 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.

A. General Conditions

All Consents (Conditions 1 to 3)

- Except as modified by the Conditions below and subject to final design, the works must be undertaken in accordance with the plans and all information submitted with the application, detailed below, and all referenced by the Council as consent numbers LUC60420246, WAT60420394, DIS60422394, of BUN60420393:
 - Application form and Assessment of Environmental Effects, prepared by WSP, Project Number W-SL007.01, Revision 03, dated 7 August 2023 except as amended by the Minor Methodology and AEE Update Letter, prepared by Watercare Services Limited, dated 8 August 2023.

Reports Lodged with AEE

- Preliminary Site Investigation, prepared by Tonkin & Taylor Limited, Job Number 1090120.2000 v5. Version 5. dated June 2023.
- Ground Contamination Site Management Plan, prepared by Tonkin & Taylor Limited, Job Number 1090120 v2, Version 2, dated June 2023.
- Integrated Transport Assessment, prepared by Tonkin & Taylor Limited, Job Number 1090120.0000 v6, Version 6.0, dated 30 June 2023.
- Arboricultural Assessment of Effects, prepared by The Tree Consultancy Company, Job Ref: 2590, dated 9 June 2023.
- Archaeological Assessment, prepared by Clough & Associates Limited, dated March 2023.
- Construction Methodology Memorandum, prepared by WSP, dated 8 August 2023.
- Options Assessment Memorandum, prepared by WSP, dated 20 June 2023.

Further Information Response Documents

- Section 92 further information response letter, prepared by Harrison Fernandes-Burnard, WSP, dated 25 August 2023.
- Section 92 further information response letter, prepared by William Hung, Watercare Services Limited, dated 5 October 2023.
- Groundwater and Settlement Assessment Report, prepared by Tonkin & Taylor Limited, Job Number 1090120.0000 v4, Version 4.0, dated 27 September 2023.
- Groundwater and Settlement Monitoring & Contingency Plan (Draft), prepared by Tonkin & Taylor Limited, Job Number 1090120 v2, Version 2.0, dated 23 October 2023.
- Draft Erosion and Sediment Control Plan, prepared by WSP, Project Number W-SL007.01, Revision 2, dated 22 September 2023.
- Construction Noise and Vibration Technical Assessment, prepared by Tonkin & Taylor Limited, Job Number 1090120.3000 v1, Version 1, dated 3 August 2023.
- Construction Noise and Vibration Management Plan, prepared by Tonkin & Taylor Limited, Job Number 1090120.3000 v1.0, Version 1.1, dated 8 September 2023.
- Draft Construction Traffic Management Plan, prepared by Tonkin & Taylor Limited, Job Number 1090120.7000P v1, Version 1, dated 24 October 2023.
- Mitigation Planting Plan Memorandum, prepared by The Tree Consultancy Company, dated 7 September 2023.
- Proposed Salisbury Reserve Reinstatement Concept Sketch (Draft), prepared by WSP, reference W-SL007.00, dated 7 September 2023.

- St Marys Bay and Masefield Beach Water Quality Improvement Project Pt Erin Park, St Marys Road Park and Curran Street Planting Landscape Architecture Detail Design Plans, prepared by WSP, Project No: 3-AL343.00, dated 23 March 2021.
- Amendments to Application letter, prepared by William Hung, Watercare Services Limited, dated 13 October 2023.
- Section 92 further information response letter, prepared by William Hung, Watercare Services Limited, dated 6 November 2023, including Permitted Activity Assessment (Appendix A).
- Section 92 further information response email on temporary activity matters from William Hung, Watercare Services Limited, dated 17 November 2023.
- Section 92 further information response email on industrial and trade activity matters from William Hung, Watercare Services Limited, dated 30 November 2023.
- Section 92 further information response email on outstanding traffic and groundwater matters from William Hung, Watercare Services Limited, dated 15 December 2023.
- Section 92 further information response email on outstanding traffic matters from William Hung, Watercare Services Limited, dated 19 December 2023, including attached comments and imagery.

Drawing title and reference	Issue	Date
Prepared by Watercare Services Limited		
Herne Bay Trunk Sewer Upgrade Marine Parade to Pt Eri Project Overview – Plan W-SL007001	n 3	17 October 2023
Herne Bay Trunk Sewer Upgrade Marine Parade to Pt Eri Longitudinal Section – Trunk Sewer W-SL007002	n 3	17 October 2023
Herne Bay Trunk Sewer Upgrade Marine Parade to Pt Eri Longitudinal Sections – Local Network Sheet 1 W- SL007003	n 3	17 October 2023
Herne Bay Trunk Sewer Upgrade Marine Parade to Pt Eri Longitudinal Sections – Local Network Sheet 2 W- SL007004	n 3	17 October 2023
Herne Bay Trunk Sewer Upgrade Marine Parade to Pt Eri Longitudinal Sections – Local Network Sheet 3 W- SL007005	n 2	20 June 2023
Herne Bay Trunk Sewer Upgrade Marine Parade to Pt Eri Longitudinal Sections – Local Network Sheet 4 W- SL007006	n 2	20 June 2023
Herne Bay Trunk Sewer Upgrade Marine Parade to Pt Eri Construction Plan – Tunnel Shaft Locations W-SL007007	n 3	17 October 2023
Herne Bay Trunk Sewer Upgrade Marine Parade to Pt Eri Construction Plan – Interception Shaft Locations W- SL007008	n 2	20 June 2023
Herne Bay Trunk Sewer Upgrade Hamilton Road, Herne Bay Erosion Sediment Control Plan – Site Plan 2014132.700	2	September 2023
Herne Bay Trunk Sewer Upgrade Hamilton Road, Herne Bay Erosion Sediment Control Plan – Sheet 1 2014132.70	2 01	September 2023
Herne Bay Trunk Sewer Upgrade Hamilton Road, Herne	2	September 2023

	Bay Erosion Sediment Control Plan – Sheet 2 2014132.702		
	Herne Bay Trunk Sewer Upgrade Hamilton Road, Herne Bay Erosion Sediment Control Plan – Sheet 3 2014132.703	2	September 2023
	Herne Bay Trunk Sewer Upgrade Hamilton Road, Herne Bay Erosion Sediment Control Plan – Sheet 4 2014132.704	2	September 2023
	Herne Bay Trunk Sewer Upgrade Hamilton Road, Herne Bay Erosion Sediment Control Plan – Sheet 5 2014132.705	2	September 2023
	Herne Bay Trunk Sewer Upgrade Hamilton Road, Herne Bay Erosion Sediment Control Plan – Sheet 6 2014132.706	2	September 2023
	Construction Support Area Land Requirement Plan – Salisbury Reserve		20 February 2024
	Construction Support Area Land Requirement Plan 94a – b Shelly Beach Road		5 October 2023
2	Consents LUC60420246, WAT60420394, and DIS60422394 lapse 10 years after the date on which the last of any appeals on the consent are determined or withdrawn, or if no appeals are lodged, the date on which the consents are granted in accordance with Section 104 of the RMA.		
	Advice Note:		
	An extension to the lapse date specified above is subject to the 125 (1A) of the RMA.	e pro	ovisions of Section
3	The Consent Holder must pay the Council an initial consent cocharge of \$1,116 (inclusive of GST), plus any further monitoring recover the actual and reasonable costs that have been incurred compliance with the Conditions attached to this consent.	ıg ch	arge or charges to
	Advice Note:		
	The initial monitoring deposit is to cover the cost of inspecting tests, reviewing conditions, updating files etc., all being work t		, , ,
	with the resource consent. In order to recover actual and reas monitoring of conditions, in excess of those covered by the de at the relevant hourly rate applicable at the time. The Consent of the further monitoring charge. Only after all conditions of the have been met, will the Council issue a letter confirming compute Consent Holder.	sonal posit Hold e res	ole costs, , must be charged der will be advised ource consent
	monitoring of conditions, in excess of those covered by the de at the relevant hourly rate applicable at the time. The Consent of the further monitoring charge. Only after all conditions of the have been met, will the Council issue a letter confirming comp	sonal posit Hold e resulianc "the ease	ole costs, , must be charged der will be advised ource consent e on request of Council" refers to email

B. Construction and post-construction phase consent Conditions

Land Use Consent Conditions - LUC60420246 (Conditions 4 to 78)

At least 20 working days prior to commencement of works, the Consent Holder must submit detailed engineering design plans for the Project, or for that stage of the Project works, to Council.

Community Liaison and Communication

- A liaison person must be appointed by the Consent Holder 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 construction work. The liaison person's name and contact details must be advised to affected parties by the Consent Holder. 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 must 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.
- The Consent Holder must prepare a Communications Plan (**CP**) for the construction phase of the Project or for each Project stage. The CP must be submitted to the Council for certification no less than 20 working days prior to works commencing. The CP must comply with the requirements of Condition 7.

Advice Note:

"Project stage" means a separable part of the Project by activity, programme or location/geographic extent (e.g., tunnelling, shaft construction, trenching, tunnel boring machine (TBM) removal).

- The objective of the CP is to set out a framework to ensure appropriate communication is undertaken with key stakeholders (including owners/occupiers of neighbouring properties) during the construction phase of the Project. The CP must set out:
 - a. The methods of consultation and liaison with key stakeholders and the owners/occupiers of neighbouring properties regarding the likely timing, duration and effects of works. This must include but and is not limited to the methods to ensure affected properties are notified of works commencing, noisy activities, or and restrictions to property access, at least 20 working days prior to works commencing. The Consent Holder must consider of feedback received from condition 7c below, and inform the relevant stakeholders and owners/occupiers of neighbouring properties of the methods for minimising or mitigating the effects of noisy activities and access restrictions on stakeholders and property owners/occupiers; on the basis of feedback received;
 - b. How Ponsonby Primary School and the Ministry of Education will be engaged with, prior to and throughout construction, with regard to traffic management to maintain student safety near the school while works are underway.
 - c. Details of prior consultation or community liaison undertaken with the parties referred to in a. and b. above, including outlining any measures developed with such persons or groups to manage or to mitigate any adverse effects or inconvenience that may arise from any construction;
 - d. Details of the process to be followed to investigate and repair potential damage

- to buildings caused wholly, or in part, by the exercise of this consent relating to vibration and/or ground settlement/dewatering; and
- e. Full contact details for the liaison person appointed in accordance with Condition 5 to manage the public information system and be the point of contact for related enquiries.

Construction Management

- The Consent Holder must prepare a Construction Management Plan (**CMP**) for the Project or for all stages of the Project (e.g., tunnelling, shaft construction, trenching, TBM removal). One project wide or multiple CMPs may be submitted to reflect the project staging. The purpose of the CMPs 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 and to achieve compliance with the specific Conditions of this consent that relate to the matters referred to in Condition 9. a. to o. below. The CMP must be submitted to the Council for certification no less than 20 working days prior to works commencing on the Project or stage of the Project (as relevant). The CMP must confirm compliance with the requirements of Condition 9.
- The CMP required by Condition 8 above must include specific details relating to the management of all construction activities associated with the relevant Project stage, including:
 - a. details of the site or Project manager and the construction liaison person identified in Condition 5, including their contact details (phone, postal address, email address);
 - b. an outline construction programme;
 - c. the proposed hours of work;
 - 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;
 - e. location of site infrastructure including site offices, site amenities, contractor's yards site access, equipment unloading and storage areas, contractor car parking, and security. A minimum of 15 parking spaces must be provided within CSA-1, while a minimum of 4 parking spaces must be provided within CSA-2. The plans for each CSA must be in accordance with the Land Requirement Plans referenced in Condition 1;
 - f. procedures for controlling sediment run-off, dust and the removal of soil, debris, demolition and construction materials (if any) from public roads and / or other places adjacent to the work site:
 - g. Methods used to prevent identified contaminants within the CSAs contacting stormwater in accordance with GD01, and methods to manage environmental risks from site activities including storage of diesel;
 - An up-to-date and accurate site drainage plan for the CSAs showing the location of all site catchpits, treatment devices and the discharge point(s) of the site stormwater system;
 - i. procedures for ensuring that residents, road users and Salisbury Reserve users 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:

- j. means of providing for the health and safety of the general public and for pedestrian management as required by Conditions 45, 46 and 50;
- k. Procedures for the management of works which directly affect or are located in close proximity to existing network utility services (note: this requirement does not apply to the Consent Holder's infrastructure or where written approval has been obtained from the relevant network utility operator);
- A mechanism and nominated stakeholder manager responsible for receiving, addressing and monitoring queries and responding to complaints in relation to the construction works;
- m. Procedures for the refuelling of plant and equipment;
- n. Measures for the protection and management of trees as identified in Conditions 61 to 73; and
- o. Spill management procedures for the storage of hazardous substances.
- The CMP(s) must be implemented and maintained by the Consent Holder throughout the entire construction period for the Project or relevant Project stage to manage potential adverse effects arising from construction activities. The CMP(s) or any specific component of the CMP must be updated as necessary and provided to the Council for certification prior to the relevant construction works commencing.
- The Consent Holder must review the Ground Contamination Site Management Plan, prepared by Tonkin & Taylor Limited, Job Number 1090120 v2, Version 2, dated June 2023 (herein referred to as the CLSMP) and submit a revised or final CLSMP prior to any construction works commencing. The CLSMP must include mitigation measures to ensure that discharges from the contaminated portions of the works area to land or water are minimised, and to ensure that health of workers on the site and nearby sites is provided for. Where minor enabling works or isolated works are to be undertaken prior to commencement of the main works, a site specific CLSMP may be prepared, commensurate with the scale and effects of the proposed works. The CLSMP or plans must be submitted to the Council no less than 20 working days prior to works commencing on the Project or stage of the Project (as relevant) for certification that the CP complies with the requirements of this Condition.

The CLSMP must include, but not be limited to:

- a. Measures to be undertaken in the handling, storage and disposal of contaminated surficial soils excavated during the construction works.
- b. Soil validation testing and groundwater testing.
- c. A process for confirming potential for contamination and soil testing at the identified potentially contaminated sites to determine the nature of the excavated soil and potential reuse or disposal options.
- d. Measures to be undertaken in the event of unexpected contamination being identified during construction activities.
- e. Measures to be undertaken for the handling of asbestos containing material.
- The Consent Holder must engage a suitably qualified and experienced practitioner (SQEP) as defined in the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 to carry out any soil and water sampling work and observe the excavation and removal of contaminated soils from the Project.

- 13 Confirmatory soil sampling and testing must be undertaken at the construction yard sites at Salisbury Reserve and 94A and 94B Shelly Beach Road as well as at roads where soil disturbance is proposed prior to works commencing at these sites as described in the CLSMP and the Section 92 further information response letter, prepared by William Hung, Watercare Services Limited, dated 5 October 2023.
- Following the further soil testing required by Condition 13, at least 10 working days prior to the commencement of any earthworks within these areas, an updated CLSMP must be provided to the Council for certification. The updated CLSMP must include details on the additional soil sampling and testing undertaken, interpretations of the results in the context of the National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 and Chapter E30 of the Auckland Unitary Plan (Operative in Part), and any proposed additional mitigation / management controls based on the test results.

Construction hours

15 Construction hours must be limited as follows, except where work is necessary outside the specified days or hours for the purposes specified in Condition 16 below:

7am to 6pm, Monday to Friday

8am to 6pm, Saturday.

No work shall be undertaken on Sundays and/or public holidays.

- 16 Work may occur outside of the specified days or hours set out in Condition 15 for the following purposes:
 - a. Where work is specifically required to be planned to be carried out at certain times (e.g., to tie into the existing network during period of low flow or for commissioning sewer connections).
 - b. For delivery of large equipment or special deliveries required outside of normal hours due to traffic management requirements.
 - c. In cases of emergency, where there is a threat to public safety, or damage to property or the TBM.
 - d. For the securing of the site or the removal of a traffic hazard.
 - e. For or any other reason specified in the CMP or CTMP.
 - f. For site mobilisation and pack down, which may occur up to 30 minutes before and after the hours described in Condition 15.

Where any work is undertaken pursuant to a. to f. above, the Consent Holder must, within five working days of the commencement of such work, provide a report to the Council detailing how the work was authorised under those provisions in accordance with the relevant criterion or criteria.

Activities such as dewatering during excavation and concrete pours may be undertaken outside of the specified days or hours subject to meeting the noise limits specific in Condition 31 (or as otherwise provided for through an ASCNVMP required by Condition 41).

Earthworks

- 17 Regional earthworks consent LUC60420246 expires 10 years from the granting of the consent unless it has lapsed, been surrendered, or been cancelled at an earlier date pursuant to the RMA.
- No earthworks can be undertaken between 01 May and 30 September in any year, without the submission of a "Request for winter works" for approval by Council. All requests must be renewed prior to the approval expiring and no works must occur until written approval has been received from Council. All winter works will be reassessed monthly or as required to ensure that adverse effects are not occurring in the receiving environment and approval may be revoked by the Council upon written notice to the Consent Holder.
- Prior to the commencement of any earthworks, the Consent Holder must hold a prestart meeting that:
 - a. is located on the subject site;
 - b. is scheduled not less than five days before the anticipated commencement of earthworks:
 - c. includes the Council's Compliance Monitoring Officer;
 - d. includes representation from the contractors who will undertake the works.

The meeting must discuss the erosion and sediment control measures, the earthworks methodology and must ensure all relevant parties are aware of and familiar with the necessary conditions of this consent. All information required by the Council must be provided two days prior to the meeting.

The following information must be made available at the pre-start meeting:

- e. Timeframes for key stages of the works authorised under this consent.
- f. Contact details for contractors and key personnel.
- g. Resource consent conditions.
- h. The Finalised Erosion and Sediment Control Plan required by Condition 20.

Advice Note:

To arrange the pre-start meeting required by Condition 19, please contact the Council's Compliance Monitoring Officer on <u>monitoring@aucklandcouncilgovt.nz</u>, or 09 301 01 01.

At least 10 working days prior to the commencement of earthworks for the Project or for each stage of the Project, the Consent Holder must submit a final Erosion and Sediment Control Plan (ESCP) for certification by the Council. No earthworks activities can commence until the ESCP has been certified.

The final ESCP must be prepared in accordance with Auckland Council's 'Guideline Document 2016/005 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region, June 2016, Incorporating Amendment 3' (**GD05**) and must contain sufficient detail to address the following matters:

- a. Specific erosion and sediment control works (location, dimensions, capacity).
- b. Supporting calculations and design drawings.
- c. Catchment boundaries and contour information.

- d. Details of construction methods.
- e. Timing and duration of construction and operation of control works (in relation to the staging and sequencing of works).
- f. Details relating to the management of exposed areas (e.g., grassing, mulching).
- g. Monitoring and maintenance requirements.

Advice Note:

In the event that minor amendments to the final ESCP are required, any such amendments should be limited to the scope of this consent. Any amendments which affect the performance of the ESCP may require an application to be made in accordance with section 127 of the RMA. Any minor amendments should be provided to Council prior to implementation to confirm that they are within the scope of this consent.

- Prior to the commencement of any earthworks, all required erosion and sediment control measures on the subject site must be constructed and carried out in accordance with the final ESCP certified by Condition 20.
- Within ten days following the implementation and completion of the specific erosion and sediment control measures required by the final ESCP and prior to the commencement of the earthworks activities at the construction yard sites at Salisbury Reserve and 94A and 94B Shelly Beach Road, a suitably qualified and experienced person must provide written certification to the Council that the erosion and sediment control measures have been constructed in accordance with the certified ESCP and GD05. Written certification must be in the form of a report or any other form acceptable to Council.
- All water discharged from the site and associated sediment control devices during the earthworks operation must achieve a minimum 100mm depth of clarity prior to discharge in accordance with GD05.
- The operational effectiveness and efficiency of all erosion and sediment control measures must be maintained in accordance with GD05 throughout the duration of earthworks activity, or until the site is permanently stabilised against erosion.
- Erosion and sediment control measures must be constructed and maintained in general accordance with GD05 and any amendments to this document. Should a higher standard be detailed in the documents referred to in the Conditions above, the higher standard will apply and an updated ESCP including demonstrated compliance with the higher standard is to be provided to Council for certification.
- There must be no deposition of earth, mud, dirt or other debris on any road or footpath resulting from earthworks activity on the subject site. In the event that such deposition does occur, it must immediately be removed. In no instance may roads or footpaths be washed down with water without appropriate erosion and sediment control measures in place to prevent contamination of the stormwater drainage system, watercourses or receiving waters.

Advice Note:

In order to prevent sediment laden water entering waterways from the road, the following methods may be adopted to prevent or address discharges should they occur:

- Provision of a stabilised entry and exit(s) point for vehicles.
- Provision of wheel wash facilities.
- Ceasing of vehicle movement until materials are removed.
- Cleaning of road surfaces using street-sweepers.
- Silt and sediment traps.
- Catchpits or enviropods.

In no circumstances should the washing of deposited materials into drains be advised or otherwise condoned.

It is recommended that any potential measures are discussed with Council who may be able to provide further guidance on the most appropriate approach to take. Please contact the Council's Compliance Monitoring Officer on monitoring@aucklandcouncil.govt.nz for more details. Alternatively, please refer to GD05

- Beyond the boundary of the site, there must be no dust caused by by works authorised by this consent from the site, which in the opinion of the Council, is noxious, offensive, or objectionable.
- The earthworked areas must be progressively stabilised against erosion throughout the earthworks phase of the Project and must be sequenced to minimise the discharge of contaminants to surface water in accordance with the final ESCP.

Advice Note:

Stabilisation measures may include:

- The use of waterproof covers, geotextiles, or mulching;
- Top-soiling and grassing of otherwise bare areas of earth; and
- Aggregate or vegetative cover that has obtained a density of more than 80% of a normal pasture sward.

It is recommended that any potential measures are discussed with Council who may be able to provide further guidance on the most appropriate approach to take. Please contact Council on monitoring@aucklandcouncil.govt.nz for more details. Alternatively, please refer to GD05

Immediately upon completion or abandonment of earthworks on the subject site, all areas of bare earth must be permanently stabilised against erosion.

Contamination

- The procedures in the CLSMP, including as amended by Condition 11, must be implemented during earthworks on actual or potentially contaminated soil (i.e., excludes work associated with natural uncontaminated ground for works including underground tunnelling and shaft construction.
- In the event of accidental discovery of contamination during earthworks which has not been previously identified, including asbestos material, the Consent Holder must implement the first response procedures in the CLSMP.
- 32 Any contaminated soils identified for off-site disposal must be managed in

- accordance with the CLSMP and disposed at a facility which holds a consent to accept the relevant level of contamination.
- The Consent Holder must ensure that the contamination status of any soil/fill imported to the site complies with the definition of 'Cleanfill material', as set out in the Auckland Unitary Plan (Operative in Part).
- Any perched groundwater, or surface water encountered within an excavation area, where contaminants are recorded over the health or the environmental discharge criteria, requiring removal, for the protection of the human health and the environment, the impacted water must either be:
 - a. disposed of by a licenced liquid waste contractor; or
 - b. pumped to sewer, providing the relevant permits are obtained; or
 - c. discharged to the site's stormwater system or surface waters provided that testing demonstrates compliance with the Australian and New Zealand Environment Conservation Council (ANZECC) Guidelines for Fresh and Marine Water Quality (2000) for protection of 95 percent of freshwater species and the water is free from petroleum hydrocarbons.

All testing and analysis must be undertaken in a laboratory with suitable experience and ability to carry out the analysis. For more details on how to confirm the suitability of the laboratory, please refer to Part 4: Laboratory Analysis, of *Contaminated Land Management Guidelines No.5 (MfE, 2011)*.

- Within three months of the completion of earthworks within the contaminated portions of the works area, a Site Validation Report (**SVR**) must be submitted to Council. The SVR must be prepared by a SQEP in accordance with the Contaminated Land Management Guidelines No. 1: Reporting on Contaminated Sites in New Zealand (Ministry for the Environment, revised 2021) and contain sufficient detail to address the following matters:
 - a. Summary of all earthworks undertaken including the removal and relocation of the excavated material.
 - b. Site plans showing the extent of land disturbance works.
 - c. Site plans showing the location of any remaining soil contamination.
 - d. Details and results of all testing undertaken and interpretation of the results in the context of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health, and the contamination rules of the Auckland Unitary Plan (Operative in Part).
 - e. Confirmation as to whether there is any contamination remaining onsite requiring ongoing management.
 - f. Sufficient validation of soils (as required) and demonstration that they are suitable for the proposed land use.
 - g. Evidence that all imported fill material complies with the definition of 'Cleanfill material', as per Chapter J1 of the Auckland Unitary Plan (Operative in Part).
 - h. Records of any unexpected contamination encountered during the works, if applicable.
 - i. The volume/weight of soil excavated and removed from site with copies of disposal documentation for all soil taken off site.

j. Reports of any complaints, health and safety incidents related to contamination, and/or contingency events during the earthworks.

Construction Lighting

Construction lighting must be minimised to the extent practicable and must meet the relevant permitted standards in Chapter E24 of the Auckland Unitary Plan (Operative in Part).

Construction Noise and Vibration

The Consent Holder must prepare a final Construction Noise and Vibration Management Plan (**CNVMP**) for certification by Council for the Project, or each stage of the Project, that addresses the management of construction noise and vibration from the works. The CNVMP must be consistent with the - Construction Noise and Vibration Management Plan, prepared by Tonkin & Taylor Limited, Job Number 1090120.3000 v1.0, Version 1.1, dated 8 September 2023, as referenced in Condition 1

The CNVMP must be submitted to the Council for certification no less than 20 working days prior to works on that stage of the Project commencing. The CNVMP must comply with the requirements of Conditions 38 to 44, as applicable.

The objectives of the CNVMP are to:

- identify the Best Practicable Option (BPO) for the management, mitigation and monitoring of construction noise and vibration effects;
- b. identify how Project noise and vibration limits will be met and set out the methods for scheduling and undertaking works to manage disruption; and
- c. ensure engagement with affected receivers and timely management of complaints.
- The CNVMP must be prepared by a suitably qualified and experienced practitioner and must include, as a minimum:
 - The relevant construction noise and vibration criteria / limits set out in these conditions.
 - A description of the works, the duration of the works, predicted construction noise and vibration levels, anticipated equipment and hours of operation (including specific times and days when construction activities causing noise/vibration would occur).
 - c. The identification of activities (piling, open trenching, HDD), associated predicted exceedances and locations that will require specific noise mitigation measures (including scheduling of works, location and orientation of works and/or the use of temporary acoustic barriers), consultation undertaken with affected stakeholders and property owners/occupiers to develop the proposed noise management measures, any feedback received from those stakeholders and owners/occupiers along with the noise management measures that will be adopted based on this consultation;
 - d. The processes to be undertaken, including the general acoustic management and mitigation measures proposed to be implemented throughout the course of the Project and confirmation that they will be consistent with best practice and the triggers or thresholds for implementation.
 - e. Physical noise and vibration mitigation measures, including prohibiting the use

of tonal reverse alarms, maintenance of access roads (to ensure they are smooth), plant selection and maintenance procedures, orientation of plant and machinery, and site layout. Physical noise mitigation measures must also include the following, as required to ensure a BPO approach to the management of noise: setting minimum setback distances from sensitive receivers (dwellings); and acoustic screening of the construction yards, shaft site construction areas, and areas of open trenching;

- f. The need for building condition surveys for affected sites predicted to exceed guideline limits in DIN 4150-3 (1999) and mitigation measures to address any resulting adverse effects.
- g. Details of noise and vibration monitoring to be undertaken and reporting requirements.
- h. Communication requirements with stakeholders including notice to owners and occupiers of adjacent buildings prior to construction activities commencing on the site.
- A complaint management system with contact numbers for key construction staff responsible for the implementation of the CNVMP and complaint investigation.
- j. The process for changing, updating, and certifying any changes to the CNVMP.
- k. Training procedures for construction personnel.

The CNVMP must be implemented and maintained by the Consent Holder throughout the construction period for the Project or relevant Project stage to manage potential adverse noise and vibration effects arising from construction activities. The CNVMP or any specific component of the CNVMP must be updated as necessary and provided to the Council for certification prior to implementation.

- Construction noise must be measured and assessed in accordance with NZS6803:1999 *Acoustics Construction Noise*.
- Subject to the application of a 5 dB decrease in accordance with Standard E25.6.27(4) of the Auckland Unitary Plan (Operative in Part), construction noise in the construction yard sites at Salisbury Reserve and 94A and 94B Shelly Beach Road must comply with the following noise limits, except where authorised by an Activity Specific Construction Noise and Vibration Management Plan (ASCNVMP).

Time of	Time Period	Maximum noise level (dBA)	
week Time Period		L _{eq}	L _{max}
Weekdays	6:30am - 7:30am	60	75
	7:30am - 6:00pm	75	90
	6:00pm - 8:00pm	70	85
	8:00pm - 6:30am	45	75
Saturdays	6:30am - 7:30am	45	75
	7:30am - 6:00pm	75	90
	6:00pm - 8:00pm	45	75
	8:00pm - 6:30am	45	75
Sundays	6:30am - 7:30am	45	75
	7:30am - 6:00pm	55	85
and public holidays	6:00pm - 8:00pm	45	75
, .	8:00pm - 6:30am	45	75

Advice Note: Project construction hours are subject to Condition 15. An Activity Specific Construction Noise and Vibration Management Plan (ASCNVMP) must be prepared for temporary works predicted to exceed the Project construction noise or vibration limits, and submitted to Council for certification. For the avoidance of doubt, an ASCNVMP may be a separate management plan or may be included as a section in the CNVMP or otherwise appended to the CNVMP.

In preparing an ASCNVMP, the Consent Holder must consult with those parties likely to be exposed to noise levels exceeding the relevant noise limit(s) and must submit the results of this consultation to the Council, including any response by the Consent Holder to a matter raised in consultation.

Works subject to an ASCNVMP must not commence until approval certification is received from the Council. If monitoring shows that levels specified in an ASCNVMP are being exceeded, work generating the exceedance must stop and not recommence until further mitigation is implemented in accordance with an amended ASCNVMP approved certified by the Council.

An ASCNVMP must:

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- a. describe the activity (including duration), plant and machinery that is expected not to comply with the noise limits in Condition 40;
- describe the mitigation measures proposed to reduce the noise levels as far as practicable, including any options that have been discounted due to cost or any other reason;
- provide predicted noise levels for all receivers where the noise levels will not be compliant with the limits in Condition 40, including the effect of mitigation specified in b. above;
- d. provide a set of noise limits that are activity-specific;
- describe the noise monitoring that will be undertaken to determine compliance with the activity-specific noise limits; and
- f. describe any additional noise mitigation measures that may be implemented to maintain compliance with activity-specific noise limits.

Advice Note:

It is accepted that the noise limits in Condition 40 will not be met at all times but that the Consent Holder will adopt the BPO to achieve compliance.

- An ASCNVMP must be submitted to the Council no less than 7 working days prior to works on that stage commencing for certification that the ASCNVMP complies with the requirements of Conditions 41 and 42, as applicable.
- Construction activities including tunnelling works must comply with the guideline vibration limits set out in the German Industrial Standard DIN 4150-3 (1999)
 Structural Vibration Part 3 Effects of Vibration on Structures (DIN 4150) (included below), except for sites identified below where exceedances are predicted, unless written approval has been obtained from the affected property owner.

Address	Building Classification	Predicted vibration level, PPV
1 Marine Parade	Residential	> 10 mm/s

34 Herne Bay Road	Historical / Sensitive	4 – 5 mm/s
72 Argyle Street	Historical / Sensitive	3 – 4 mm/s

Construction Traffic

The Consent Holder must submit for certification by the Council a Construction Traffic Management Plan (**CTMP**) for the Project, or each stage of the Project, that addresses the management of construction traffic effects from the works. The CTMP must be consistent with the Draft Construction Traffic Management Plan, prepared by Tonkin & Taylor Limited, Job Number 1090120.7000P v1, Version 1, dated 24 October 2023, as referenced in Condition 1. Construction activity cannot commence until certification is provided from the Council that the CTMP satisfactorily gives effect to the objectives set out below, and complies with the requirements set out in Condition 46.

The objectives of the CTMP are to:

- ensure construction traffic movements on the transport network, including construction vehicles travelling to and from the construction yard sites at Salisbury Reserve and 94A and 94B Shelly Beach Road, are appropriately managed;
- b. provide for the safety of everyone at all times;
- set out the measures for minimising disruption and maintaining pedestrian and vehicle access to / from surrounding residential properties and Salisbury Reserve;
- set out the measures for minimising disruption from construction traffic on local residents, the travelling public and road users along the identified sections of the construction routes;
- e. seek to set out the measures for avoiding full road closures and minimising any partial or managed closures; and
- f. set out the measures for managing where relevant integration with other construction Projects and Auckland Transport Projects.
- The CTMP must be prepared by a suitably qualified and experienced traffic expert in accordance with the requirements of Condition 45 and the Council's requirements for traffic management plans or CTMPs (as applicable) and New Zealand Transport Authority's Code of Practice for Temporary Traffic Management (COPTTM) and must set out, as a minimum, the following:
 - a. The traffic management measures to be implemented.
 - b. A finalised construction programme and details of any cumulative traffic volume effects along with appropriate mitigation, if required.
 - c. Any essential 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 the corresponding signage requirements.
 - d. Construction traffic routing.
 - e. The design of the access roads and vehicle crossings.

- f. Methods to manage the effects of the delivery of construction material, plant and machinery. This must include, but not be limited to:
 - ensuring heavy vehicles access the construction yard at Salisbury Reserve and 94A and 94B Shelly Beach Road via Argyle Street and Curran Street respectively.
 - traffic management measures, including a site Traffic Management Supervisor:
 - to ensure safe ingress and egress to and from Argyle Street to the construction yard at Salisbury Reserve;
 - to ensure construction vehicles can negotiate access and egress to avoid any additional queueing on the adjacent road network during congested peak periods and to ensure a suitable truck layover area is provided if required.
- g. Measures to maintain existing vehicle access to property where practicable, or to provide alternative access arrangements.
- h. Measures to maintain pedestrian and cyclist movements adjacent to and through Salisbury Reserve and measures to reduce the impact on mobility impaired users on roads and footpaths adjacent to the construction works. Where the works impact on existing pedestrian or cycle ways, alternative temporary accessways must be provided where practicable in accordance with Condition 45. Such access must be safe, clearly identifiable and seek to minimise significant detours.
- i. Provision for construction staff and visitor parking on site as far as practicable.
- j. Proposed traffic volumes and movements associated with works outside the usual construction hours specified in Condition 15 and associated management and mitigation measures to be implemented.
- k. Measures to communicate traffic management measures throughout construction activities (note: these measures may form part of the CP required by Condition 6), particularly to residents on Emmett Street during the closure of Sarsfield Street.
- I. All construction vehicles departing the construction yard at 94A and 94B Shelley Beach Road must travel north from the Curran Street on ramp, turning around at the Onewa Road interchange if they need to travel south.
- m. Reduction in the ramp metering cycle time on the Curran Street northbound motorway on-ramp and other measures, as necessary, so as to maintain current flow rates on the on-ramp.
- n. Details of how it is proposed that site access, egress and operation on Curran Street does not reduce the traffic capacity of the Curran Street motorway on-ramp during peak traffic periods.
- Establishment of a congestion monitoring programme on Curran Street northbound, including the Curran Street motorway onramp, and a process to identify and require the implementation of additional mitigation measures, should they be required.
- p. Implementation of a temporary 30 Km/h speed limit on Emmett Street and Curran Street (between the intersections with Emmett Street and Sarsfield Street) during the duration of Shaft One construction works.
- q. Provisions for restricting movements of construction traffic on Curran Street during peak school drop-off and pick-up times (between 8.05 - 8.50am and 3.00 and 3.30pm) during the closure of Sarsfield Street. This restriction does not

apply on Saturdays and during school holiday periods.

- r. Details on how active mode safety will be maintained with a minimum of one footpath or temporary footpath open at any road at any time for pedestrian or cycling use. For sections of footpath where cycling is inappropriate, it must be communicated that cycles are to be wheeled only or alternative cycling routes must be indicated. The required cycling wheeling or alternative routes must be indicated through the use of appropriate signage.
- s. Any additional measures required to achieve the objectives listed in condition 45
- t. Any further 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.

Advice Notes:

It will be the responsibility of the Consent Holder to determine the presence of any underground services that may be affected by the applicants work in the road reserve. Should any services exist, the applicant must contact the owners of those and agree on the service owners' future access for maintenance and upgrades. Services information may be obtained from https://www.beforeudig.co.nz/.

All work in the road reserve must be carried out in accordance with the general requirements of The National Code of Practice for Utility Operators' Access to Transport Corridors http://nzuag.org.nz/national-

code/ApprovedNationalCodeFeb13.pdf and Auckland Transport Design Manual https://at.govt.nz/about-us/manuals-guidelines/transport-design-manual/

Prior to carrying out any work in the road corridor, the Consent Holder is advised that they need to submit to Auckland Transport a Corridor Access Request (CAR) and temporary traffic management plan (TMP), the latter prepared by an NZ Transport Agency qualified person and work must not commence until such time as the applicant has approval in the form of a Works Access Permit (WAP). The application may be made at https://at.govt.nz/about-us/working-on-the-road/corridor-access-requests/apply-for-a-car/ and 15 working days should be allowed for approval.

In addition to the above advice, the Corridor Access Request application must also be prepared in general accordance with the required CTMP.

- Access for all vehicles to the construction yard at 94A and 94B Shelly Beach Road must be via a one-way system entering and exiting from the Curran Street access. The design of the access and vehicle crossings on Curran Street must ensure it does not affect the effective, efficient and safe operation of the Curran Street SH1 onramp. Construction vehicles must not egress onto Curran Street between 7am and 9am, and between 4pm and 6pm on weekdays.
- The temporary and permanent vehicle crossings from the construction yard at 94A and 94B Shelly Beach Road onto Curran Street must be designed to meet minimum sight distance requirements of the Safe Intersection Sight Distance (SISD) requirements set out in 'Austroad (2009) Guide to Road Design Part 4A:
 Unsignalised and Signalised Intersections. Sydney'. In this respect, a 90m minimum sight distance is required, which could be achieved through tree trimming or managed through temporary traffic management measures.
- The Consent Holder must ensure the construction yards at Salisbury Reserve and 94A and 94B Shelly Beach Road are cordoned off / fenced to ensure public safety.

50 The Consent Holder must install construction site fencing to prevent pedestrians using the section of footpath on Argyle Street adjacent to the construction yard at Salisbury Reserve. Furthermore, prior to the temporary closure of the existing footpath on Argyle Street, the Consent Holder must undertake temporary improvements on the southern side of Argyle Street for pedestrians to cross the street. This must include the provision of a dropped kerb and tactile paving and a temporary parking restriction in the immediate area. These measures must be maintained for the duration of the construction works. Once construction works are completed, the closed footpath on Argyle Street must be reinstated. Advice Note: These requirements are subject to landowner and asset manager approvals. 51 Vehicle tracking of the construction vehicles must be carried out and any temporary physical works improvements at the Emmett Street intersections with Shelly Beach Road and Curran Street must be identified and implemented prior to the temporary closure taking effect. This could include temporary removal of on street parking on Curran Street and Shelly Beach Road to assist vehicles turning at the intersections and to provide improved sight lines. 52 All pedestrians footpaths and shared paths must be kept clear from access chambers and manholes to mitigate safety risks. 53 Raised intersections must be re-instated adjacent to shafts SE01 and SE02 within three months of their completion, unless otherwise agreed by the Council's Monitoring Officer in consultation with Auckland Transport. 54 All construction traffic must be managed at all times in accordance with the certified CTMP. 55 Unless specifically provided for by this consent approval, there must be no damage to public roads, footpaths, berms, kerbs, drains, reserves or other public asset as a result of the earthworks and construction activity. In the event that such damage does occur, the Council must be notified within one working day of its discovery. The costs of rectifying such damage and restoring the asset to its original Condition must be met by the Consent Holder. 56 All vehicle crossings affected by the works must be reinstated and designed to Auckland Transport's Standard (VX0203 Rev A for commercial crossings and VX0103 Rev D for residential crossings where applicable). This must be undertaken at the Consent Holder's expense and undertaken in a timely manner after completion of the consented works. Cultural 57 Prior to the commencement of earthworks, the Consent Holder must invite representatives of Te Ākitai Waiohua to provide cultural inductions to the workers involved in earthworks associated with this application, including the workers involved in the establishment of earthworks controls. A register of the cultural inductions undertaken must be collated by the Consent Holder and provided to the Council and Te Ākitai Waiohua upon request. The Consent Holder must provide a minimum of 10 days notice to representatives of 58

Te Åkitai Waiohua of the dates for any cultural inductions as required by Condition

57. Advice Note: "Earthworks" includes both topsoil stripping and/or bulk earthworks 59 Provision must be made by the Consent Holder for Te Ākitai Waiohua representatives to undertake cultural monitoring associated with the following milestones if they wish: Pre-start meeting. Prior to construction of earthworks control measures. b. Prior to commencement of earthworks. C. d. Immediately prior to completion of earthworks across the Project area. At other times as agreed between the Consent Holder and Te Ākitai Waiohua e. representatives. 60 The Consent Holder must provide a minimum of 10 working days notice to representatives of Te Ākitai Waiohua of the anticipated dates for the above milestones. **Tree Management** 61 The Consent Holder must engage the services of a suitably qualified and experienced on-site supervisory arborist (the 'supervising arborist'), who must supervise and coordinate all pruning and works and activities within the root zone of protected trees. All works must be undertaken in accordance with the Arboricultural Assessment of Effects, prepared by The Tree Consultancy Company, Job Ref: 2590, dated 9 June 2023, as referenced in Condition 1. 62 Prior to any works commencing on site, the Consent Holder must arrange a site meeting with the supervising arborist, Council's monitoring officer, Council's urban forest specialist, and the contractor who has overall responsibility for the works. The purpose of this meeting is to discuss conditions of consent. At the meeting, the responsible contractor must confirm the following to the satisfaction of the supervising arborist and the Council: a. Programming of works. b. Site access and transportation of materials. C. Temporary storage areas for materials. d. Silt and sediment controls. Excavations in the root zones of trees. f. Tree protection methodology When the supervising arborist is required to be present. g. 63 Tree protection must form a part of any site-specific hazard management and is to be included in daily toolbox meetings and all site inductions. 64 No work can take place within the root zone of protected trees without prior approval

from the supervising arborist. Any amendments to the tree protection methodology

will require prior written approval from the supervising arborist.

65	No material can be stored, emptied, or disposed of in or around the root zone of any of the trees unless otherwise authorized by the supervising arborist. Any material that is to be stored or temporarily placed in or around the root zone of any of the trees must be stored carefully on an existing or temporary hard surface such as asphalt or plywood sheets, respectively.
66	If machinery or vehicle access/manoeuvring is required in or around the permeable/exposed root zone of any trees, those areas must be covered with a protective overlay sufficient to prevent ground disturbance. This may include 'Track Mats,' a layer of mulch, or sand/SAP7 overlaid with wired planks, plywood, or similar (refer to detail TP-04 of the Arboricultural Assessment of Effects referenced in Condition 61).
67	If machinery/vehicles are to be operated or stored within the root zone area on an existing or temporary load-bearing surface, then the machinery/vehicle must not cause any detrimental effect to the tree(s) through compaction, physical damage, spillage of lubricants and fuels, or discharge of waste emissions.
68	All excavations that are to take place in or around the root zone of any of the trees must be done in conjunction with the supervising arborist, through a careful combination of hand digging and machine excavation. Where the supervising arborist deems it likely that roots will be encountered in the areas, then these areas must first be explored using hand tools only to check for the presence of such roots.
69	Where concrete is to be poured into excavations containing exposed roots, then all exposed roots must first be covered in a layer of polythene to prevent the concrete from contacting the exposed root (refer to detail TP-06 of the Arboricultural Assessment of Effects referenced in Condition 61).
70	All tree pruning must be confirmed to the satisfaction of the works arborist after liaison with the contractors represented around the extent of clearance required and practical options that may be available to retain large limbs. All pruning must be undertaken by a suitably experienced arboricultural contractor, with the work conforming to best industry practice, such as Arb Australia and NZ Arb Minimum Industry Standard MIS308.
71	Every effort must be made to avoid root severance from all trees by exploring on-site alternatives to construction/engineering, i.e., adjusting finished levels and basecourse depths, etc. Where root severance is unavoidable, the severance of any root must be carried out by the supervising arborist, who must select the most appropriate implement for the task. Roots must be cut cleanly to ensure that the traumatic cambium is able to initiate new root growth as effectively as possible, and the exposed cut faces should be covered over immediately with moist soil.
72	Where roots to be retained are encountered, and there is a need for these roots to remain exposed in order that works are not impeded, then those roots must be covered with a suitable protective material (such as moist Hessian or a wool mulch) to protect them from desiccation and/or mechanical damage until such a time as the area around the root can be backfilled with the original material.
73	At the completion of works, the supervising arborist, at their discretion, must 'sign off' the work of the contractor and, if requested, provide a brief account of the Project to Council (with photos, if necessary). The account of works must include, but not be limited to:

- a. The effects of the works on the subject trees.
- b. Any remedial work that may be necessary.

Advice Note:

Notwithstanding any Conditions to the contrary, all works pertaining to any street and/or reserve tree within the work site area, covered by this consent, must be executed in accordance with the TAOA (Tree Asset Owner Approval form) which must be obtained prior to works commencing. Should you require, pleased email the following address for a copy treemanager @aucklandcouncil.govt.nz

Archaeology

The earthworks at shaft sites and areas of open trenching at the intersections of Sarsfield Street with Hamilton Rd, Sentinel Road, Lawrence Street, Argyle Street and Clifton Road and along Argyle Street and along Marine Parade and at the intersection of Bella Vista Road and Marine Parade, must be monitored by a suitably qualified and experienced archaeologist (the 'Project archaeologist') due to the likely presence of subsurface early 20th century public drainage systems. The name and qualifications of this Project archaeologist must be provided to the Council prior to earthworks commencing.

Any evidence of the historic public works drainage system must be recorded in accordance with "Level III" Heritage New Zealand Pouhere Taonga guidelines for the Investigation and Recording of Buildings and Standing Structures. A report on any features exposed must be provided by the Project archaeologist to Auckland Council's Heritage Unit for inclusion in the Auckland Council Cultural Heritage Inventory.

Should the consented works result in the identification of any previously unknown sensitive materials (i.e., archaeological sites or artifacts) other than the early 20th century historic public works drainage system referred to in Condition 74, the requirements of land disturbance – Regional and District Accidental Discovery rules set out in the Auckland Unitary Plan (Operative in Part) must be complied with.

Condition 74 and 75 shall no longer apply if an Archaeological Authority is granted for the Project by Heritage New Zealand.

Built Heritage

- All sections of blue stone kerbing that are removed during the works period must be carefully uplifted and stored off-site by the Consent Holder for reinstatement. The stone kerbs must be reinstated in their current locations to maintain the historical context of the place. Reinstatement of bluestone kerbing must occur within three months of the completion of the Project, unless otherwise agreed by the Council's Monitoring Officer.
- At least 20 working days prior to the commencement of works, a suitably qualified and experienced building surveyor must be engaged by the Consent Holder to undertake a building condition survey to establish a pre-construction baseline and determine the sensitivity to vibration of the properties at 58 Wallace Street, 85 Sarsfield Street, 72 Argyle Street and 34 Herne Bay Road in terms of the classifications detailed in DIN 4150-3 (1999): Structural Vibration Effects of Vibration on Structures criteria. The pre-works building condition survey must include photography, specifically of the subject buildings' elevations. This will be used in conjunction with a post-construction condition survey to assist in determination of any damage attributable to the works. Any damage attributable to the works must be

remedied by the Consent Holder and their cost. A copy of any pre and post condition survey findings must be provided to the landowner on request.

Advice Note:

If the pre-construction survey determines that the subject buildings are not of the expected vibration classification, then upgrades may be required to the buildings before the construction works can commence. Any building upgrade works are outside the scope of this consent application and may require a separate resource consent.

Water Permit Conditions – WAT60420394 (Conditions 78 to 109)

- This consent expires 10 years from the granting of the consent unless it has lapsed, been surrendered, or been cancelled at an earlier date pursuant to the RMA.
- The Consent Holder must ensure that all excavation, dewatering systems, retaining structures and associated works for the construction of the shafts, tunnels, underground structures and associated works, including all temporary and permanent works, must be designed, constructed and maintained so as to avoid, subject to Conditions 89 to 94, any damage to land, buildings, structures and services (including road infrastructure assets such as footpaths, kerbs, catch-pits, pavements and street furniture).
- The Consent Holder must ensure that all backfilling of temporary shafts is designed and constructed to the required engineering standard, so as to avoid any damage to buildings, structures and services
- The Consent Holder must, at least 10 working days prior to the Commencement of Dewatering, advise the Council, in writing, of the date of the proposed commencement of this work.
- The Consent Holder must, at least 10 working days following Completion of Dewatering and excavation, advise the Council, in writing, of the date of completion
- Under section 128 of the RMA the Conditions of this consent may be reviewed by the Council at the Consent Holder's cost within six months after Completion of Dewatering in order to:
 - a. deal with any adverse effects on the environment which may arise or potentially arise from the exercise of this consent and which it is appropriate to deal with at a later stage; and / or
 - vary the monitoring and reporting requirements, and performance standards, in order to take account of information, including the results of previous monitoring and changed environmental knowledge on:
 - ground Conditions:
 - aquifer parameters;
 - groundwater levels; and
 - ground surface movement.

Groundwater and Settlement Monitoring and Contingency Plan

The Consent Holder must, before Commencement of Dewatering, prepare a Groundwater and Settlement Monitoring and Contingency Plan (**GSMCP**) for certification by Council addressing groundwater and settlement monitoring for each of the relevant Project stages. This includes a draft and final GSMCP as required by Condition 85.

The GSMCP must demonstrate how the conditions of this consent will be implemented and must include the following:

- a. Details of the groundwater monitoring programme
- b. Details of the ground surface settlement and building movement monitoring required
- c. Details of the building risk assessment process and building Condition Survey process
- A location plan of settlement and building deformation marks, retaining wall deflection markers and the location of existing and proposed groundwater monitoring bore
- e. Details of the shaft retaining wall monitoring programme
- f. The groundwater, deformation and settlement Alert and Alarm Levels (Trigger Levels) to be utilised for early warning of settlement with the potential to cause damage to buildings and services and details of the processes used to establish, and if necessary, to review these triggers
- g. Details on the procedures for notification of the Council in the event that Trigger Levels are exceeded
- h. Options for additional investigations and analyses to determine the potential for groundwater effects or settlement and for damage to structures, including additional groundwater or settlement monitoring and building Condition Surveys
- Details of the contingency measures to be implemented in the event of Trigger Levels being exceeded, including details on the practicable methodologies to avoid, remedy, or mitigate surface settlements with the potential to cause damage to buildings

Advice Note:

'Commencement of Dewatering' means commencement of bulk excavation and/or commencing taking any groundwater from a chamber/shaft or tunnel excavation.

- The Consent Holder must submit to the Council for certification:
 - a. A draft GSMCP including aspects dealing with pre-construction monitoring and locations of monitoring marks, including the pre-construction monitoring required under the Conditions of this consent. This must be provided at least six months prior to the Commencement of Dewatering for chamber excavations/shaft sinking or tunnelling of any Project stage.
 - The final GSMCP. This must be provided at least 20 working days prior to Commencement of Dewatering for chamber excavations/shaft sinking or tunnelling of any Project stage.
- The Consent Holder must comply with the GSMCP at all times. The Consent Holder

may amend the GSMCP from time to time, as necessary for the Project or any Project stage. Any amendments to the GSMCP must be certified by the Council prior to any such amendment being implemented.

Risk Assessment

- The Consent Holder must undertake a risk assessment to identify existing buildings and structures at risk of damage due to settlement caused by shaft sinking and chamber excavations, or tunnelling activities. The risk assessment process must be set out in the GSMCP required by Condition 85 and must be based upon the final tunnel alignment and construction methodology of the tunnel and chamber/shaft excavations, the groundwater and settlement monitoring required under this consent, and groundwater and settlement modelling completed using this data. The risk assessment must include:
 - a. identification of the zone of influence where differential settlements of greater (steeper) than 1:1,000 are predicted due to chamber excavations/shaft sinking or tunnelling activities;
 - b. identification of the building types in this zone, and their susceptibility to settlement induced damage; and
 - c. identification of the buildings and structures at risk of damage due to chamber excavations/shaft sinking or tunnelling activities.
- A schedule of the addresses of existing buildings and structures identified as being potentially at risk of damage through the risk assessment process defined in Condition 87 must be included in the GSMCP required by Condition 84.

Advice Note:

This requirement does not apply to the Consent Holder's infrastructure or where written approval has been obtained from the relevant network utility operator.

Pre-Construction Condition Survey

89 The Consent Holder must consult with owners of existing buildings and structures identified through the building risk assessment process defined in Condition 88 and as a minimum, those buildings listed in Table 4.1 of the report titled " Herne Bay Connector Project – Groundwater and Settlement Monitoring & Contingency Plan", prepared by Tonkin & Taylor, dated October 2023, Job No. 1090120v2, referenced in Condition 1; and all retaining walls at the block of five units at 92, 94, 96 & 98 Sarsfield Street and 51 Wallace Street, together with the swimming pool and adjacent area at 99 Sarsfield Street, the garage, retaining walls, swimming pool and adjacent area at 2 Stack Street, and subject to the owner's approval on terms acceptable to the Consent Holder, undertake a detailed pre-construction Condition Survey of these structures to confirm their existing condition and enable the sensitivity of the existing buildings and structures to any groundwater and ground settlement changes to be accurately determined. The survey must be completed at least three months prior to the Commencement of Dewatering of any Project stage involving shaft sinking and chamber excavation, or tunnelling. The intent of the survey is to assist in enabling the magnitude of allowable effects from changes in groundwater pressure and ground settlement movements to be reasonably determined. The survey must be undertaken by a SQEP or SQBS.

The survey must include but not necessarily be limited to the following:

Major features of the buildings and site developments, including location, type,

construction, age, and existing Condition.

- b. Type and capacity of foundations.
- c. Existing levels of aesthetic damage.
- d. Existing level of structural distress or damage.
- e. Assessment of structural ductility.
- f. Susceptibility of structure to movement of foundations, including consideration of the local geological Conditions.

Advice Note:

'Commencement of Dewatering' means commencement of bulk excavation and/or commencing taking any groundwater from a shaft or tunnel excavation (after construction of the pile walls (if required) and/or dewatering prior to bulk excavation).

Post-Construction Condition Surveys

Unless otherwise agreed in writing with the building owner that such survey is not required, the Consent Holder must (subject to the owner(s) approval), within six months of the Completion of Dewatering of any Project stage involving shaft sinking, chamber excavation or tunnelling, undertake a post construction survey of buildings identified in accordance with Condition 89, and as a minimum, those buildings listed in Table 4.1 of the report titled "Herne Bay Connector Project – Groundwater and Settlement Monitoring & Contingency Plan", prepared by Tonkin & Taylor, dated October 2023, Job No. 1090120v2, referenced in Condition 1; and all retaining walls at the block of five units at 92, 94,96 & 98 Sarsfield Street and 51 Wallace Street, together with the swimming pool and adjacent area at 99 Sarsfield Street, the garage, retaining walls, swimming pool and adjacent area at 2 Stack Street.

If any building damage is identified by the SQEP or SQBS and is determined to be due to the Project activities the Consent Holder must, subject to the agreement of the landowner, repair the damage in full in accordance with Condition 94.

The Consent Holder may, if they are able to provide evidence (of a suitably qualified and experienced independent expert) show the deformation was not caused by activities related to this consent, seek written approval from the Council to waive this Condition. If any building damage is identified following completion of the preconstruction survey, the survey must determine the likely cause of damage.

Advice Note:

'Completion of Dewatering' means when all the permanent chamber and shaft lining, base slab and walls are complete and the tunnel lining is complete, and effectively no further groundwater is being taken for the construction of the chamber/shaft/tunnel, in accordance with the design.

Additional Condition Surveys

- The Consent Holder must, at the direction of the Council, and subject to the owner's approval, undertake an additional survey on any existing building or structure surveyed in accordance with Condition 90, for the purpose of checking for damage and for following up on a report of damage to that building. The requirement for any such survey will cease six months after the Completion of Dewatering of any Project stage involving shaft sinking, chamber excavation or tunnelling
- The Consent Holder must ensure that a copy of the pre, post-construction and any additional building survey reports are provided to the respective property owner(s). A

copy is also to be made available to Auckland Council upon request (unless the property owner(s) has instructed the Consent Holder not to do so).

The building Condition Surveys required by the conditions of this consent must be undertaken by an independent and SQEP or SQBS. When requested in writing by the Council, the Consent Holder must provide the contact details and qualifications of this person within five workings days

Repair of Damage

- 94 If the consent holder becomes aware of any Damage to buildings, structures or services, identified through the process of conditions 90 or 91, or in part, by the exercise of this consent, the consent holder must:
 - a) Notify Council Compliance Monitoring Officer and the asset owner within 5 working days of the consent holder becoming aware of the Damage;
 - b) Engage an appropriately qualified engineering professional to prepare an interim report that: describes the Damage; identifies the cause of the Damage; identifies methods to remedy and/or mitigate the Damage that has been caused; identifies the potential for further Damage to occur; and describes actions that will be taken to avoid further Damage.
 - c) Provide a copy of the interim report, prepared under (b) above, to Council Compliance Monitoring Officer and the asset owner within 10 working days of notification under (a) above.
 - d) Undertake such repairs in accordance with the approved methodology, set out in the report prepared under (b) above, at its (or its insurance providers) cost; subject to the approval of the asset owner; unless written approval for this damage is provided to the Council from the owners.

Groundwater Monitoring

- The Consent Holder must install and maintain groundwater monitoring boreholes at the locations described in the GSMCP and as shown on the draft monitoring plans Figures 1 to 17, rev 0, dated September 2023 provided as Appendix A to the Herne Bay Connector Project Groundwater and Settlement Monitoring & Contingency Plan", prepared by Tonkin & Taylor, dated October 2023, Job No. 1090120v2, for the period required by Conditions 98, 100 and 102 or as otherwise set out in the GSCMP. Should any of the monitoring bores be damaged and become in-operable or unsuitable for monitoring, then the Consent Holder must contact the Council within three working days and a new monitoring bore must be installed at a nearby location in consultation with, and to the satisfaction of, the Council.
- The Consent Holder must monitor groundwater levels in the groundwater monitoring boreholes within telemetry instrumentation which allows for near-continuous remote monitoring to be undertaken (at 15-minute intervals) and keep records of the water level measurement and corresponding date. All water level data must be recorded to an accuracy of at least ± 5mm. These records must be compiled and submitted in an appropriate format, to the Council at six monthly intervals.
- The Consent Holder must monitor groundwater levels monthly in boreholes identified in the GSMCP and keep records for a period of at least six months before the Commencement of Dewatering of any Project stage involving shaft sinking or tunnelling. The variability in groundwater levels over this period will be utilised to establish the seasonal groundwater level variability. The Consent Holder must monitor groundwater levels at regular intervals in all proposed monitoring boreholes during the monitored period (three readings indicating steady state) before the

Commencement of Dewatering of any Project stage involving shaft sinking or dewatering. 98 Prior to the Commencement of Dewatering of any Project stage involving shaft sinking or tunnelling, the Consent Holder must assess the potential groundwater effects resulting from the exercise of this consent. The output of this assessment must be used to define the expected groundwater level at each borehole and to establish groundwater Trigger Levels for each borehole that minimise the potential for damage to existing buildings or structures. The process for establishing groundwater Trigger Levels must be set out in the GSMCP and must be based upon the final tunnel alignment and construction methodology, and any groundwater monitoring required under this consent, and must be based upon groundwater modelling completed using this data. A factor of natural seasonal variability must be allowed for in this review based on the survey completed under Condition 97 99 From Commencement of Dewatering of any Project stage involving shaft sinking or tunnelling, the Consent Holder must monitor groundwater levels in each borehole at a minimum of monthly intervals and records must be kept of each monitoring date. the corresponding water level in each borehole and the corresponding depth of all excavations or as otherwise set out in the GSCMP. In addition to the above, all boreholes located within 100 metres of the shaft construction site or within 100 metres of the tunnel excavation face must be monitored for groundwater level at least once in any period of seven consecutive days or as otherwise set out in the GSCMP. These records must be compiled and submitted to the Council at six monthly intervals. 100 All monitoring data obtained pursuant to Condition 99 must be compared to the predicted groundwater levels for each borehole pursuant to Condition 98. Where Trigger Levels are exceeded the actions as set out in the GSMCP must be undertaken and the Council must be notified within three working days, advising of the trigger exceedance, the risk of settlement causing damage to buildings and details of the actions taken. 101 The Consent Holder must continue to monitor groundwater levels in each borehole at monthly intervals for a period of 12 months following Completion of Dewatering of any Project stage involving shaft sinking or tunnelling, or for a lesser period if groundwater levels in any particular borehole show either: recovery of the groundwater level to within 2m of the pre-construction groundwater level and is above trigger levels; or b. a trend of increasing groundwater level in at least three consecutive monthly measurements and is above trigger levels, in which case monitoring at that borehole may cease. After 12 months following the Completion of Dewatering of any Project stage involving shaft sinking or tunnelling, monitoring of groundwater levels must continue at the direction of the Council if groundwater levels are not recovering from construction effects and there is a risk of adverse effects on neighbouring buildings or properties. The Consent Holder must request termination of groundwater level monitoring from Council, supported with a letter of justification for the termination, prepared by a SQEP.

Settlement and Deflection Monitoring

The Consent Holder must establish and maintain a Settlement Monitoring Network of ground and building settlement monitoring marks to detect any deformation (vertical

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and/or horizontal movements) at the locations described in the GSMCP and for the period required by the conditions of this consent.

- a. The locations of the monitoring marks must be identified on a plan within the GSMCP, as required under Condition 84 (note: this must reflect the draft monitoring plans Figures 1 to 17, rev 0, dated September 2023 provided as Appendix A to the Herne Bay Connector Project Groundwater and Settlement Monitoring & Contingency Plan", prepared by Tonkin & Taylor, dated October 2023, Job No. 1090120v2, referenced in Condition 1); in addition four building settlement pins are required on the block of five units at 92, 94,96 & 98 Sarsfield Street and 51 Wallace Street.
- b. The locations and number of monitoring marks must be sufficient to provide a reliable basis for assessing, monitoring and responding to settlement risk during chamber/shaft and tunnel construction work, and for confirming compliance with the limits set out in the GSMCP.
- In the event of any of the monitoring marks required under Condition 102 being destroyed or becoming inoperable, the Consent Holder must, unless otherwise agreed in writing by the Council, replace the monitoring marks with new monitoring marks.
- The Consent Holder must survey and record the elevation of each monitoring mark and record the corresponding date. Monitoring marks must be surveyed at least three times over a 12-month period prior to commencement of any Project stage involving shaft sinking or tunnelling to establish seasonal variability, and twice within 1 month prior to commencement of excavation to establish the pre-construction reference ground level. Alternatively, the Consent Holder may utilise Auckland Council approved INSAR data to undertake this 12-month monitoring.

During excavation /dewatering monitoring marks are to be surveyed as follows:

Weekly for:

- a. All monitoring markers within 50 m of TBM tunnel/trench excavations.
- b. All monitoring markers within 20 m of a TBM shaft

Fortnightly where:

- c. All monitoring markers within 100 m of TBM tunnel/trench excavations
- d. All monitoring markers within 50 m of a TBM shaft

Every two months for:

e. All monitoring markers following establishment of baseline readings (to monitor seasonal fluctuations)

After excavation /dewatering monitoring marks are to be surveyed as follows:

f. Monthly for six months or until such time following the completion of excavation and dewatering that stable measurements are demonstrated. The Consent Holder must request termination of groundwater level monitoring from the Council, supported with a letter of justification for the termination, prepared by a SQEP.

All surveys are to be completed to an accuracy of at least ± 2mm for level and ± 5mm for plan position, or as otherwise achieved by best practice precise levelling.

These records must be compiled and submitted to the Council at six monthly intervals.

Prior to the Commencement of Dewatering of any Project stage involving chamber/shaft sinking or tunnelling, the Consent Holder must assess the potential settlement effects resulting from the exercise of this consent. The output of this assessment must be used to define the expected settlement levels and to establish settlement Trigger Levels (Alert Levels and Alarm Levels) that minimise the potential for damage to existing buildings or structures. The process for establishing settlement Trigger Levels must be set out in the GSMCP and must be based upon the final tunnel alignment and construction methodology, any groundwater, deformation or settlement monitoring required under this consent, and groundwater and settlement modelling completed using this data. A factor of natural seasonal variability must be allowed for in this review.

Advice Note:

'Alert Level' is the Differential and Total Settlement Limit set at a threshold less than the Alarm Level, at which the Consent Holder must implement further investigations and analyses as described in the GSMCP to determine the cause of settlement and the likelihood of further settlement.

'Alarm Level' is the Differential and Total Settlement Limit set in Condition 108, or which has the potential to cause damage to buildings, structures and services, at which the Consent Holder must immediately stop dewatering the site and cease any activity which has the potential to cause deformation to any building or structure or adopt the alternative contingency measures approved by the Council.

- The Consent Holder must compare all settlement monitoring data obtained during shaft sinking and tunnelling construction work to the pre-construction minimum levels in accordance with the GSMCP. Where Trigger Levels are exceeded, the appropriate actions as set out in the GSMCP must be undertaken and the Council must be notified within three working days, advising of the trigger exceedance, the risk of settlement causing damage to buildings, and details of the actions taken.
- The Consent Holder must ensure that the exercise of this consent does not cause building or ground settlement greater than the Alarm Level thresholds specified below or as otherwise identified in accordance with Condition 106 and set out in the approved GSMCP.
 - Greater (i.e., steeper) than 1:1,000 differential settlement (the Differential Settlement Alarm Level) between any two adjacent settlement monitoring marks required under this consent; or
 - Greater than 10 mm total settlement (the Total Settlement Alarm Level) at any settlement monitoring mark required under this consent.
- The Consent Holder must continue to monitor the Monitoring Stations at monthly intervals for a total period of 12 months after Completion of Dewatering of any Project stage involving shaft sinking or tunnelling, or for a shorter period if certified by the Council. At 12 months following the Completion of Dewatering of any Project stage involving shaft sinking or tunnelling, monitoring of ground and settlement marks must continue at the direction of the Council if monitoring marks have breached trigger levels and there is risk of adverse effects. The Consent Holder must request termination of groundwater level monitoring from the Council, supported with a letter of justification for the termination, prepared by a SQEP.
- The Council must be notified in writing within 10 working days of when excavation and dewatering has been completed.

Advice Note:

The Consent Holder is advised that the discharge of pumped groundwater to a stormwater system or waterbody will need to comply with any other regulations, bylaws or discharge rules that may apply.

C. Definitions

Alarm Level – specific levels at which actions are required as described in the relevant Conditions.

Alert Level – Specific levels at which actions are required as described in the relevant Conditions.

Bulk Excavation – includes all excavation that affects groundwater excluding minor enabling works and piling less than 1.5m in diameter.

Commencement of Dewatering – Means commencement of bulk excavation and/or commencing taking any groundwater from a shaft or tunnel excavation (after construction of the pile walls (if required) and/or dewatering prior to bulk excavation).

Completion of Dewatering – Means when all the permanent shaft lining, base slab and walls are complete and the tunnel lining is complete and effectively no further groundwater is being taken for the construction of the shaft/tunnel, in accordance with the design.

Commencement of excavation – means commencement of Bulk Excavation for shafts, trenches and tunnels

Condition Survey – Means an external visual inspection or a detailed Condition survey (as defined in the relevant Conditions).

Damage – Includes Aesthetic, Serviceability, Stability, but does not include Negligible Damage. Damage as described in the Building Damage Classification reference table below.

GSMCP – Means Groundwater and Settlement Monitoring and Contingency Plan

Monitoring Station – Means any monitoring instrument including a ground or building settlement monitoring mark, groundwater monitoring bore, retaining wall deflection station, or other monitoring device required by this consent.

SQEP – Means a Suitably Qualified Engineering Professional

SQBS - Means Suitably Qualified Building Surveyor

Categor y of damage	Normal Degree of Severity	Description of Typical Damage (Building Damage Classification after Burland (1995), and Mair et al (1996))	General Category (after Burland – 1995)
0	Negligible	Hairline cracks	Aesthetic Damage
1	Very Slight	Fine cracks easily treated during normal redecoration. Perhaps isolated slight fracture in building. Cracks in exterior visible upon close inspection. Typical crack widths up to 1mm.	
2	Slight	Cracks easily filled. Redecoration probably required. Several slight fractures inside building. Exterior cracks visible, some repainting may be required for weather-tightness. Doors and windows may stick slightly. Typical crack widths up to 5 mm.	

3	Moderate	Cracks may require cutting out and patching. Recurrent cracks can be masked by suitable linings. Brick pointing and possible replacement of a small amount of exterior brickwork may be required. Doors and windows sticking. Utility services may be interrupted. Weather tightness often impaired. Typical crack widths are 5 to 15 mm or several greater than 3 mm	Serviceability Damage
4	Severe	Extensive repair involving removal and replacement of walls especially over door and windows required. Window and door frames distorted. Floor slopes noticeably. Walls lean or bulge noticeably. Some loss of bearing in beams. Utility services disrupted. Typical crack widths are 15 to 25 mm but also depend on the number of cracks.	
5	Very Severe	Major repair required involving partial or complete reconstruction. Beams lose bearing walls lean badly and required shoring. Windows broken by distortion. Danger of instability. Typical crack widths are greater than 25 mm but depend on the number of cracks	Stability Damage

Discharge of Contaminants Conditions – DIS60422394 (Condition 110) and LUC60420246 Conditions 30 to 35

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This consent expires 10 years from the granting of the consent unless it has lapsed, been surrendered, or been cancelled at an earlier date pursuant to the RMA.

D. Park Use and Reinstatement Requirements

Land Use Consent Conditions - LUC60415109 (Conditions 111 to 116)

Use of Park for CSA activities

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The Consent Holder may use Salisbury Reserve and 94a – b Shelly Beach Road for construction support activities as outlined in the land requirement plans for CSA1 and CSA2 dated 20 February 2024 and October 2023 respectively, for a maximum duration of 24 months from the commencement of construction support activities. The Consent Holder must notify the Council at least 20 working days in advance of the date of commencement of construction support works, and at this time inform the owners/occupiers of neighbouring properties through the methods outlined in the Communication Plan in accordance with Condition 7. This 24 month duration excludes the reinstatement of each reserve once construction support activities works have been completed as required to be undertaken by the Consent Holder under Condition 117.

Reinstatement of the reserve must commence no later than immediately upon cessation of the 24-month period provided for construction activities.

Public access to the part of Salisbury Reserve used for CSA activities must be restored within 2 months of the expiry of the 24 month period provided for construction activities. This includes completion of the requirements set out in condition 116.

Mitigation Planting

The Consent Holder must provide planting to replace and mitigate the removal of street trees and trees within Salisbury Reserve. This must comprise the planting of a minimum of 46 exotic trees or 51 native trees (native trees must be preferentially used wherever practicable), or a combination thereof, as agreed with Auckland Council - Parks and Community Facilities. 160l-grade trees must be used to mitigate the removal of four Magnolia and three Queen Palm trees within the Upton Street road reserve.

Advice Note:

Where these trees are to be planted within Auckland Council Parks, then the location and species to be planted must be subject to the agreement of Council as landowner (Parks and Community Facilities).

Soil remediation works, including de-compactions, must be undertaken upon completion of construction activities within the road reserve of Upton Street.

Park Restoration and Landscape Plan

- The Consent Holder must prepare a photographic record of the pre-construction Condition of construction yard sites at Salisbury Reserve and 94A and 94B Shelly Beach Road within their footprint and immediate vicinity. This record must be provided to the Council at least 1 month prior to works within these construction yards commencing.
- At least three months prior to the 24 month period of use of Salisbury Reserve as a CSA, the Consent Holder must prepare and submit to Auckland Council for certification a Park Restoration and Landscape Plan (**PRLP**) for the construction yard sites at Salisbury Reserve and 94A and 94B Shelly Beach Road. The objective of the PRLP is to provide details on the reinstatement works to restore and enhance landscape, amenity, and recreational values as applicable.
- The PRLP is to be prepared by a suitably qualified and experienced landscape architect in consultation with the landowner and must include the following:
 - Removal of construction yards, equipment, fence, temporary retaining walls, stored construction materials, and construction access unless required to be maintained for reserve operation and maintenance access.
 - Details of the restoration of the open space to at least the same standard as that recorded as per Condition 114.
 - Replacement or reinstatement of any park assets that were affected by the Project, or any new proposed assets, including, but not limited to:
 - grassed areas;
 - footpaths; and
 - park furniture

- Details of proposed contouring, landscaping and planting. This is to include:
 - finished contours / levels;
 - details on the replacement of trees removed as per the mitigation planting required by Condition 111;
 - any additional planting (including proposed species, location and planting timetable). This must include details of replacement planting in the park to mitigate tree and shrub removal; and
 - implementation and maintenance programmes (including a landscape planting management and maintenance plan)
- Any details of proposed way finding and interpretation signage within and adjacent to the park.
- Record of consultation with the landowner.
 - In preparing the PRLP, consideration must be given to opportunities to enhance existing recreation, landscape and amenity values (e.g., additional or alternative walkways, seating, appropriate recognition of cultural values, etc), and planting.

The Consent Holder must implement the final PRLP in accordance with Condition 115. The PRLP must set out a timeframe for implementation, which must be agreed with the Council, in consultation with the Parks Planning Team Leader. This must be as soon as reasonably practicable, and unless otherwise confirmed through the PLRP, must be within 12 months of practical completion of construction works. The Consent Holder must carry out a five-year maintenance programme following implementation of the PRLP, unless a shorter time period is agreed with the Council, in consultation with Parks Planning Team Leader.

Karyn Sinclair

Chairperson

27 March 2024