Decision on an application to change conditions of resource consents under section 127 of the Resource Management Act 1991

Application number(s):	LUC60422975-A WAT60422976-A
Applicant:	Watercare Services Limited
Original consent number(s):	LUC60422975 (s9 land use consent) WAT60422976 (s14 water permit) DIS60423652 (s15 discharge permit) (of BUN60422974)
Site address:	Roads (Queen Street, Mayoral Drive, Wellesley Street and Victoria Street), Auckland Central 36-38 Greys Avenue, Auckland Central 329 Queen Street, Auckland Central
Legal description:	N/A – Roads (Queen Street, Mayoral Drive, Wellesley Street and Victoria Street) Part Lots 1 and 2 DP 81645 – 36-38 Greys Avenue Lot 1 DP 84867 – 329 Queen Street

Proposal:

Existing resource consents LUC60422975 and WAT60422976 authorise the Applicant to construct, and undertake associated site works, groundwater diversion and dewatering for, a new wastewater pipeline (via micro-tunnel boring machine (mTBM)) connecting to the Ōrākei Main Sewer (OMS), other associated connections underneath Queen Street, and new manholes at the intersections of Queen Street with Mayoral Drive, Wellesley Street East and Victoria Street East.

The Applicant proposes to change the consent conditions to enable:

- Changes to the dimensions, construction methodology and earthworks quantities for each construction shaft. This also requires associated changes to the groundwater settlement alert levels and groundwater level monitoring requirements under Conditions 54(f) (as less dewatering will be required for the Wellesley Street construction shaft) and 62 (to enable monitoring to coincide with separate maintenance / relining work for the OMS).
- Changes to the layout of the Greys Avenue Construction Support Area (CSA) to provide for a wheelchair accessible corridor and relocate the construction site offices to accommodate a temporary shaft that was approved under a separate Watercare resource consent.
- Updated plans, specialist reports and management plans under Condition 1.

Note: For the avoidance of doubt, any reference in this decision to 'vary' or 'variation application' shall be taken to mean an application to change or cancel consent conditions under s127 of the RMA.

This discretionary activity under s127 of the Resource Management Act 1991 (RMA) is for changes to conditions of consents LUC60422975 and WAT60422976 involving the following amendments (with strikethrough for deletion, underline for insertions):

Land use consent (s9) – LUC60422975 and Water permit (s14) – WAT60422976

Changes to Condition 1

1. These consents must be carried out in accordance with the documents and drawings and all supporting additional information submitted with the application, detailed below, and all referenced by the Council as resource consent numbers LUC60422975, WAT60422976, DIS60423652**, LUC60422975-A and WAT60422976-A**.

- Application form and report titled 'Assessment of Environmental Effects: Queen Street Wastewater Diversion: Part 3 Works' prepared by WSP New Zealand Limited and dated 8 August 2023.
- **Section 127 application form and report titled 'Assessment of Environmental Effects: Part 3 - Queen Street Wastewater Alignment Application to Change Conditions (S127 RMA)' prepared by WSP New Zealand Limited and dated 15 July 2024.**

Report title and reference	Author	Rev	Dated
~~Design and Construction Statement~~ **Construction Methodology**	~~WSP New Zealand Limited~~ **Fulton Hogan**	~~3~~ **4**	~~13 July 2023~~ **10 June 2024**
Assessment of Dewatering Effects Report	WSP New Zealand Limited	~~B~~ **R6**	~~10 April 2024~~ **3 July 2024**
Construction Noise and Vibration Impact Assessment Report	WSP New Zealand Limited	~~2~~ **3**	~~20 July 2023~~ **14 June 2024**
Framework Construction Noise and Vibration Management Plan	WSP New Zealand Limited	~~3~~ **4**	~~13 October 2023~~ **13 June 2024**
Detailed Site Investigation Report	WSP New Zealand Limited	3	22 June 2023
Stormwater and Flood Hazard Assessment	WSP New Zealand Limited	3	21 July 2023
Erosion and Sediment Control Plan	WSP New Zealand Limited	2	21 July 2023
Arboricultural Assessment Report	Peers Brown Miller Limited	-	15 June 2023
Archaeological Assessment Report	Clough & Associates Limited	-	June 2023
Traffic Impact Assessment Report	WSP New Zealand Limited	3	~~20 July 2023~~

			9 July 2024
Built Heritage Assessment Report	WSP New Zealand Limited	F4	04 July 2023
Built Heritage Addendum	**WSP New Zealand Limited**	**-**	**12 July 2024**
Geotechnical Interpretative Report	WSP New Zealand Limited	1	11 August 2023
Groundwater and Settlement Monitoring Contingency Plan	WSP New Zealand Limited	~~R3~~ R5	~~14 May 2024~~ 30 July 2024
Air Quality Assessment Letter	WSP New Zealand Limited	-	08 December 2023
Site Management Plan	WSP New Zealand Limited	-	05 October 2023

Drawing title and reference	Author	Rev	Dated
~~QUEEN STREET WASTEWATER DIVERSIONS PROPOSED PART 3 ALIGNMENT PRELIMINARY DESIGN – PROJECT OVERVIEW (R0021853.007)~~	~~Watercare Services Limited~~	~~2~~	~~11 July 2023~~
~~QUEEN STREET WASTEWATER DIVERSIONS PROPOSED PART 3 ALIGNMENT (R0021853.008)~~	~~Watercare Services Limited~~	~~2~~	~~12 July 2023~~
~~QUEEN STREET WASTEWATER DIVERSIONS PROPOSED PART 3 ALIGNMENT R0021853.009)~~	~~Watercare Services Limited~~	~~2~~	~~12 July 2023~~
~~QUEEN STREET WASTEWATER DIVERSIONS PROPOSED PART 3 ALIGNMENT (R0021853.010)~~	~~Watercare Services Limited~~	~~2~~	~~12 July 2023~~
~~QUEEN STREET WASTEWATER DIVERSIONS PROPOSED PART 3 ALIGNMENT – CONNECTION TO EXISTING NETWORK (R0021853.011)~~	~~Watercare Services Limited~~	~~2~~	~~12 July 2023~~
~~Queen Street Sewer Diversion Site Compound & Welfare Layout (QSSD_FH_001)~~	~~Fulton Hogan~~	~~D~~	~~20 June 2023~~
QUEEN STREET WASTEWATER DIVERSIONS PART 3 MAIN WORKS AND CROSS CONNECTIONS (2014250.101)	**Watercare Services Limited**	**A**	**30 May 2024**
QUEEN STREET WASTEWATER DIVERSIONS PART 3 MAIN WORKS AND CROSS CONNECTIONS (2014250.102)	**Watercare Services Limited**	**A**	**30 May 2024**
QUEEN STREET WASTEWATER DIVERSIONS PART 3 MAIN WORKS AND CROSS CONNECTIONS (2014250.103)	**Watercare Services Limited**	**A**	**30 May 2024**
QUEEN STREET WASTEWATER DIVERSIONS PART 3 MAIN WORKS AND CROSS CONNECTIONS (2014250.104)	**Watercare Services Limited**	**A**	**30 May 2024**
QUEEN STREET WASTEWATER DIVERSIONS PROPOSED PART 3 MAIN WORKS AND CROSS CONNECTIONS (2014250.105)	**Watercare Services Limited**	**A**	**30 May 2024**
QUEEN STREET WASTEWATER DIVERSIONS PROPOSED PART 3 MAIN WORKS AND CROSS CONNECTIONS (2014250.106)	**Watercare Services Limited**	**A**	**30 May 2024**
QUEEN STREET WASTEWATER DIVERSIONS OMS CONNECTION SHAFT 3 (2014250.111)	**Watercare Services Limited**	**A**	**30 May 2024**

Queen Street Sewer Diversion Site Compound & Welfare Layout (QSSD_FH_001)	**Fulton Hogan**	**K**	**26 June 2024**

Other additional information	Author	Rev	Dated
Section 92 Response Tracking Table	WSP New Zealand Limited	-	-
Section 92 Response Groundwater Tracking Table	WSP New Zealand Limited	-	-
Air Quality Assessment Letter	WSP New Zealand Limited	-	8 December 2023
Section 92 Response Letter	**WSL New Zealand Limited**	**-**	**8 August 2024**

Water permit (s14) – WAT60422976

Change to Condition 54

Alert and Alarm Levels

54. The activity must not cause any settlement or movement greater than the Alarm Level thresholds specified in Schedule A below. Alert and Alarm Levels are triggered when the following Alert and Alarm Trigger thresholds are exceeded:

Schedule A: Alarm and Alert Levels			
Movement		**Trigger Thresholds (+/-)**	
		Alarm	**Alert**
a)	Differential vertical settlement between any two Ground Surface Deformation Stations (the **Differential Ground Surface Settlement Alarm or Alert Level**)		
	• M-G1 to M-G6	1:700	1:1,000
	• W-G1 to W-G4	1:350	1:450
	• W-G5 to W-G9	1:700	1: 1,000
	• V-G1 to V-G7	1:700	1: 1,000
b)	Total vertical settlement from the pre-excavation baseline level at any Ground Surface Deformation Station (the **Total Ground Surface Settlement Alarm or Alert Level**):		
	• M-G1 to M-G6	10mm	7mm
	• W-G1 & W-G3	12mm	8mm
	• W-G2 & W-G4 to W-G9	10mm	7mm
	• V-G1 & V-G2	20mm	14mm
	• V-G3 to V-G5	17mm	12mm
	• V-G6 & V -G7	13mm	9mm
c)	Differential vertical settlement between any two adjacent Building Deformation Stations (the **Differential Building Settlement Alarm or Alert Level**)		
	• M-B1 to M-B9	1:700	1:1,000
		1:700	1,1000

	• W-B1 to W-B6 • V-B1 to V-B10	1:700	1:1,000
d)	Total vertical settlement from the pre-excavation baseline level at any Building Deformation Station (the **Total Building Settlement Alarm or Alert Level**) • M-B1 to M-B9 • W-B1 to W-B6 • V-B1 to V-B10	 10mm 10mm 10mm	 7mm 7mm 7mm
e)	Total lateral deflection from the pre-excavation baseline level at any retaining wall deflection station (the **Retaining Wall Deflection Alarm or Alert Level**): • M-RW1 to M-RW4 • W-RW1 to W-RW4 • V-RW-1 to V-RW4	 10mm 11mm 10mm	 7mm 8mm 7mm
f)	Distance below the pre-dewatering Seasonal Low Groundwater Level and any subsequent groundwater reading at any groundwater monitoring bore (the **Groundwater Alert Levels 1 & 2**): • M_PZ01 • PZ06_S • V_PZ02	N/A	**(1) ~~4.8m~~ 2.0mbgl** **(2) ~~5.3m~~ 2.5mbgl** **(1) ~~1.5m~~ 2mbgl** **(2) ~~2m~~ 2.5mbgl** **(1) ~~2m~~ 3mbgl** **(2) ~~2.5m~~ 3.5mbgl**

Note: The locations of the Monitoring Stations listed in Schedule A are shown on the plans titled "Victoria shaft – GSMCP monitoring locations and layout", "Wellesley shaft – GSMCP monitoring locations and layout", and "Mayoral shaft – GSMCP monitoring locations and layout" contained in Appendix A of the approved GSMCP referenced in Condition 1.

These levels may be amended subject to approval by the Council as part of the Groundwater Settlement Monitoring and Contingency Plan (GSMCP) approval process, and, after the receipt of pre-dewatering monitoring data, building condition surveys and recommendations from a suitably qualified engineering professional (SQEP), but only to the extent that avoidance of Damage to building, structures and Services can still be achieved.

There are conditions below that must be complied with when the Alert and Alarm Level triggers are exceeded. These include actions that must be taken immediately including seeking the advice of a SQEP.

Changes to Condition 62

Groundwater monitoring

62. Groundwater monitoring must be undertaken at the groundwater monitoring bore locations shown on the plans titled "Victoria shaft – GSMCP monitoring locations and layout", "Wellesley shaft – GSMCP monitoring locations and layout", and "Mayoral shaft – GSMCP monitoring locations and layout" contained in Appendix A of the approved GSMCP

referenced in Condition 1, or in the certified GSMCP. Monitoring frequency is proposed to be 15 minutes using automated pressure transducers with or without telemetry systems. Groundwater level monitoring is to be undertaken in accordance with Schedule C below:

Schedule C: Groundwater Monitoring Frequency					
Bore Name	**Location**		**Groundwater level reporting frequency (to an accuracy of 10mm)**		
			From bore construction until before Commencement of Dewatering	Commencement of Dewatering to Completion of Dewatering	From Completion of Dewatering until 3 months later
	Easting (mE)	Northing (mN)			
M_PZ01	tbc	tbc	~~**Monthly for at least 3 months**~~ **<u>At least 4 weeks prior to dewatering commencing</u>**	Twice Weekly	Weekly for the first month after dewatering has stopped and monthly thereafter
PZ06_S	tbc	Tbc			
V_PZ02	tbc	tbc			

The monitoring frequency may be changed if approved by the Council. Any change must be specified in the GSMCP. In addition, the 3-month monitoring period post Completion of Dewatering may be extended, by the Council, if measured groundwater levels are not consistent with inferred seasonal trends or predicted groundwater movement. 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.

<u>Advice Note:</u>

If groundwater level measurements show an inconsistent pattern immediately prior to the Commencement of Dewatering (for example varying more than +/-200mm during a month), then further readings may be required to ensure that an accurate groundwater level baseline is established before dewatering commences.

Decision

I have read the application, supporting documents, and the report and recommendations on the application for variation. I am satisfied that I have sufficient information to consider the matters required by the Resource Management Act 1991 (RMA) and make a decision under delegated authority on the application.

Under sections 127, 104, 104B, and Part 2 of the RMA, this application to change conditions of resource consents LUC60422975 and WAT60422976 is **GRANTED**.

Reasons

The reasons for this decision are:

1. The proposal is appropriately considered under s127 as the changes will not result in a fundamentally different activity or materially different effects.

2. In accordance with an assessment under s104(1)(a)-(ab) and s127(3) of the RMA, the actual and potential effects from the variation will be acceptable as:

    a. The Council's Specialist - Groundwater has reviewed the updated groundwater assessment and management plan. The Council's Specialist concludes that the adverse effects of the dewatering and groundwater diversion due to the changes are no greater than those previously consented for neighbouring buildings, structures and public services. The Council's Specialist concurs with the changes to the consent conditions and does not recommend any further changes or additional conditions.

    b. The Council's Specialist - Acoustics Engineering has reviewed the updated construction noise and vibration assessment and management plan. The Council's Specialist confirms that the changes to predicted noise levels from works in the road reserve are similar to that already consented and that works outside the road reserve (i.e., the Greys Avenue Support Area) will continue to be a permitted activity. The Council's Specialist concurs with the changes to the consent conditions and does not recommend any further changes or additional conditions.

    c. The Council's Specialist - Traffic Engineering has revised the updated traffic impact assessment. The Council's Specialist confirms that the changes are not expected to result in adverse safety or operational issues, the operation of the intersections and work site layout and access will continue to be acceptable, additional parking displacement due to the Greys Avenue CSA layout change can be reasonably managed with alternative public parking locations nearby, and the works are unlikely to exacerbate any pre-existing safety issues on the road network. The Council's Specialist concurs with the changes to the consent conditions and does not recommend any further changes or additional conditions.

    d. The Council's Specialists for Cultural Heritage and Built Heritage have reviewed the updated heritage assessments. The Council's Specialists are satisfied with the assessments and have not raised concerns, nor do they recommend any changes to the consent conditions or additional conditions.

    e. The Applicant has advised that no mana whenua groups that have expressed interest in the project have raised concerns over the changes and ongoing updates / engagement will occur as part of their standard iwi engagement process and during construction as required by consent conditions. Within the Sites and Places of Significance to Mana Whenua (SSMW) Overlay (Horotiu Stream, ID 84), the proposed changes and increase in earthworks are outside of this SSMW.

    f. Section 5.2 of the AEE identifies positive effects, which are concurred with:

        - The increase to the Victoria Street Construction Shaft dimensions will allow for a relining rig to enter the shaft and service the urgent maintenance requirements of the Ōrākei Main Sewer (OMS), an important wastewater transmission main, particularly in light of its recent collapse in 2023.

        - The re-arrangement of the Greys Avenue Construction Support Area layout will allow for greater flexibility in the landowner's (Eke Panuku Development Auckland) future use of the site once the construction site is no longer active, as well as

maintaining safe and accessible pedestrian access to the Myer's Park underpass from Aotea Square.

3. With reference to s104(1)(ab), there are no specific offsetting or environmental compensation measures proposed or agreed to by the applicant to ensure positive effects on the environment.

4. In accordance with an assessment under s104(1)(b) and s127(3) of the RMA, the variation is consistent with the relevant statutory documents. In particular, the following chapters of the Auckland Unitary Plan (Operative in Part) (AUP(OP)):

   a. The proposal is consistent with the relevant AUP(OP) provisions for infrastructure (Chapter E26) as:

      - The changes will allow for the coinciding repair and maintenance of the OMS which will also contribute to reducing contaminant flow into coastal waters and minimising potential adverse effects on human health and the environment (Objectives 1 and 4; Policies 1 and 2).

      - The proposal will continue to manage its adverse effects through its design and controls, particularly on the sites and places of significance to historic, cultural and mana whenua heritage that may be affected (Objective 5; Policies 4, 6 and 7).

   b. The proposal is consistent with the relevant AUP(OP) provisions for water quality and integrated management (Chapter E1) and water quantity, allocation and use (Chapter E2):

      - The changes will allow for the coinciding repair and maintenance of the OMS which will also contribute to reducing contaminant flow into coastal waters and minimising potential adverse effects on human health and the environment (Chapter E1 Objectives 2 and 3; Chapter E1 Policies 19 and 21; Chapter E2 Objective 5).

      - The adverse effects of the dewatering and groundwater diversion due to the changes are assessed to be no greater than those previously consented and the activities will continue to be managed by appropriate conditions, monitoring protocols and contingency protocols (Chapter E2 Policies 9 and 23).

   c. The proposal is consistent with the relevant AUP(OP) provisions for historic heritage (Chapter E17) as the additional earthworks due to the shaft design change do not represent inappropriate development, appropriate consent conditions will continue be in place, and the proposal will continue to appropriately manage adverse effects on historic heritage values (Objectives 1 and 2; Policy 24).

5. In accordance with an assessment under s104(1)(c) and s127(3) of the RMA, no other matters are considered relevant.

6. In the context of this variation application, where the objectives and policies of 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 and 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.

7. Overall, the proposal will have actual and potential effects on the environment that are acceptable, and it is consistent with the objectives and policies of the AUP(OP). For the same reasons, the proposal is consistent with Part 2 of the RMA. Therefore, these resource consents can be granted.

Conditions

Under sections 108 and 108AA of the RMA, this variation is not subject to any additional conditions or amendments to existing conditions.

Advice notes

1. *A copy of the consolidated set of conditions of consent as amended is included as attachment 1 to this section 127 decision.*
2. *The consent holder is reminded that the decision on this section 127 application does not affect the lapse period for the resource consent.*
3. *This decision is to be read in conjunction with any other relevant approved resource consent(s) and does not negate the consent holder's requirement to continue to comply with the conditions of any previously granted resource consent(s) that have been implemented.*

Amanda de Jong

Duty Commissioner

5 September 2024

Attachment 1: Consolidated consent conditions as amended

Conditions

Under sections 108 and 108AA of the RMA, these consents are subject to the following conditions:

These conditions apply to all resource consents.

1. These consents must be carried out in accordance with the documents and drawings and all supporting additional information submitted with the application, detailed below, and all referenced by the Council as resource consent numbers LUC60422975, WAT60422976, DIS60423652, LUC60422975-A and WAT60422976-A.

    - Application form and report titled 'Assessment of Environmental Effects: Queen Street Wastewater Diversion: Part 3 Works' prepared by WSP New Zealand Limited and dated 8 August 2023.
    - Section 127 application form and report titled 'Assessment of Environmental Effects: Part 3 - Queen Street Wastewater Alignment Application to Change Conditions (S127 RMA)' prepared by WSP New Zealand Limited and dated 15 July 2024.

Report title and reference	Author	Rev	Dated
Construction Methodology	Fulton Hogan	4	10 June 2024
Assessment of Dewatering Effects Report	WSP New Zealand Limited	R6	3 July 2024
Construction Noise and Vibration Impact Assessment Report	WSP New Zealand Limited	3	14 June 2024
Framework Construction Noise and Vibration Management Plan	WSP New Zealand Limited	4	13 June 2024
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Erosion and Sediment Control Plan	WSP New Zealand Limited	2	21 July 2023
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Built Heritage Assessment Report	WSP New Zealand Limited	F4	04 July 2023
Built Heritage Addendum	WSP New Zealand Limited	-	12 July 2024
Geotechnical Interpretative Report	WSP New Zealand Limited	1	11 August 2023
Groundwater and Settlement Monitoring Contingency Plan	WSP New Zealand Limited	R5	30 July 2024
Air Quality Assessment Letter	WSP New Zealand Limited	-	08 December 2023

Drawing title and reference	Author	Rev	Dated

QUEEN STREET WASTEWATER DIVERSIONS PART 3 MAIN WORKS AND CROSS CONNECTIONS (2014250.101)	Watercare Services Limited	A	30 May 2024
QUEEN STREET WASTEWATER DIVERSIONS PART 3 MAIN WORKS AND CROSS CONNECTIONS (2014250.102)	Watercare Services Limited	A	30 May 2024
QUEEN STREET WASTEWATER DIVERSIONS PART 3 MAIN WORKS AND CROSS CONNECTIONS (2014250.103)	Watercare Services Limited	A	30 May 2024
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QUEEN STREET WASTEWATER DIVERSIONS PROPOSED PART 3 MAIN WORKS AND CROSS CONNECTIONS (2014250.105)	Watercare Services Limited	A	30 May 2024
QUEEN STREET WASTEWATER DIVERSIONS PROPOSED PART 3 MAIN WORKS AND CROSS CONNECTIONS (2014250.106)	Watercare Services Limited	A	30 May 2024
QUEEN STREET WASTEWATER DIVERSIONS OMS CONNECTION SHAFT 3 (2014250.111)	Watercare Services Limited	A	30 May 2024
Queen Street Sewer Diversion Site Compound & Welfare Layout (QSSD_FH_001)	Fulton Hogan	K	26 June 2024

Other additional information	**Author**	**Rev**	**Dated**
Section 92 Response Tracking Table	WSP New Zealand Limited	-	-
Section 92 Response Groundwater Tracking Table	WSP New Zealand Limited	-	-
Air Quality Assessment Letter	WSP New Zealand Limited	-	8 December 2023
Section 92 Response Letter	WSL New Zealand Limited	-	8 August 2024

2. Under section 125 of the RMA, these consents lapse five years after the date they are granted unless:

   a. The consents are given effect to; or

   b. The council extends the period after which the consents lapse.

3. The consent holder shall pay the council an initial consent compliance monitoring charge of $1,026 (inclusive of GST), plus any further monitoring charge or charges to recover the actual and reasonable costs incurred to ensure compliance with the conditions attached to these consents.

   Advice note:

   The initial monitoring deposit is to cover the cost of inspecting the site, carrying out tests, reviewing conditions, updating files, etc., all being work to ensure compliance with the resource consent(s). In order to recover actual and reasonable costs, monitoring of conditions, in excess of those covered by the deposit, shall be charged at the relevant hourly rate applicable at the time. The consent holder will be advised of the further monitoring charge. Only after all conditions of the resource consent(s) have been met, will the council issue a letter confirming compliance on request of the consent holder.

Modifications approval

4. In the event that any modifications to the preliminary design are required, that will not result in an application under section 127 of the RMA, the following information must be provided:

   a. plans and drawings outlining the details of the modifications; and

   b. any necessary supporting information.

   All information must be submitted to, and certified by the Council, prior to implementation.

   Advice Note:

   All proposed changes must be discussed with the Council, prior to implementation.

Requirement for a pre-start meeting

5. Prior to the commencement of the construction and / or earthworks activity, the consent holder must hold a pre-start meeting that:

   a. is located on the subject sites;

   b. is scheduled not less than five (5) days before the anticipated commencement of construction and/or earthworks;

   c. includes the Council's Compliance Monitoring Team and Development Engineer;

   d. in regard to tree works, include the works principal, the contractor, Councils Urban Forest Specialist Arborist, and the consent holders appointed Works Arborist;

   e. in regard to works near and adjacent to historic buildings, include the works principal, the contractor, Council's built heritage specialist, and the consent holder's appointed heritage specialist; and

   f. includes representation from the contractors who will undertake the works.

   As part of the pre-start meeting, the consent holder must invite iwi (representatives from Ngāti Whātua Ōrākei, Ngāti Maru, Te Ākitai Waiohua, Ngaati Whanaunga, Te Rūnanga o Ngāti Whatua, Te Patukirikiri) to undertake a site blessing.

   The following matters must be discussed at the meeting:

   - The erosion and sediment control measures;
   - The earthworks methodology;
   - The heritage protection methodology;
   - Areas where the appointed arborist must be on site for monitoring works;
   - The proposed tree protection methodology; and
   - Onsite audit recording method and final report requirements.

   The consent holder must ensure all relevant parties are aware of, and are familiar with, the relevant conditions of this consent.

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

- Timeframes for key stages of the works authorised under this consent;
- Resource consent conditions;
- Erosion and Sediment Control Plan (Condition 13);
- Contaminated Site Management Plan (Condition 6);
- Construction Noise and Vibration Management Plan (Condition 7);
- Construction Management Plan (Condition 8); and
- Construction Traffic Management Plan (Condition 11).

Advice Note:

To arrange the pre-start meeting required by condition 5 please contact the Council to arrange this meeting or email monitoring@aucklandcouncil.govt.nz. The conditions of consent should be discussed at this meeting. All information required by the council and listed in that condition should be provided 2 days prior to the meeting.

Specific conditions – land use consent LUC60422975

Pre-development conditions

Contaminated Site Management Plan

6. Earthworks must be undertaken in accordance with the Site Management Plan: Queen Street Wastewater Diversion Part 3 Works, prepared by WSP New Zealand Limited and dated 5 October 2023 05/10/2023 (CSMP). Any variations to the CSMP must be submitted to the Council for certification that it appropriately manages actual and potential soil contamination effects and is within the scope of this consent, prior to implementation.

   Advice Note:

   The Council acknowledges that the CSMP is intended to provide flexibility of the management of the works. Accordingly, the CSMP may need to be updated. Any updates should be limited to the scope of this consent and be consistent with the conditions of this consent. If you would like to confirm that any proposed updates are within scope, please contact the Team Leader. The Council's certification of the CSMP relates only to those aspects of the plans that are relevant under the RMA. The certification does not amount to an approval or acceptance of suitability by the Council of any elements of the management plan that relate to other legislation, for example, the Building Act 2004 or the Health and Safety at Work Act 2015.

Construction Noise and Vibration Management Plan

7. The consent holder must prepare a Construction Noise and Vibration Management Plan (CNVMP) 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 in accordance with the requirements set out in the Construction Noise and Vibration Impact Assessment Report

and Framework Construction Noise and Vibration Management Plan referenced in Condition 1. The CNVMP must be submitted to the Council no less than 20 working days prior to works on that stage commencing for certification by the Council that the CNVMP complies with the requirements below, as applicable. Construction works must not commence until certification has been received in writing from the Council, unless no response is received within 20 working days.

The objectives of the CNVMP are to:

a. Identify the Best Practicable Option (BPO) for the management and mitigation 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.

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 set out, as a minimum:

a. The relevant construction noise and vibration criteria/limits set out in these conditions;

b. Description and duration of the works, predicted construction noise and vibration levels, anticipated equipment and hours of operation (including specific times, frequency and days when construction activities causing noise/vibration would occur);

c. The processes to be undertaken including general acoustic management and mitigation measures proposed to be implemented throughout the course of the project consistent with best practice and the triggers or thresholds for implementing them (if relevant);

d. Physical noise mitigation measures, including reducing the use of tonal reverse alarms where possible, 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); acoustic screening of the shaft site construction areas; and/or open trenching;

e. Identification of any buildings particularly sensitive to vibration and noise in the vicinity of the proposed works along with the details of consultation with the land owner(s) of the sites where the sensitive activities are located and any management measures that will be adopted, where practicable, based on this consultation;

f. Details of noise and vibration monitoring to be undertaken and reporting requirements;

g. Communication requirements with stakeholders including notice to owners and occupiers of adjacent buildings prior to construction activities commencing on the site;

h. A complaint management system with contact numbers and e-mails for key construction staff responsible for the implementation of the CNVMP and complaint investigation;

i. The process for changing, updating, and certifying any changes to the CNVMP;

j. 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 being implemented; and

k. Building conditions surveys if necessary.

Construction Management Plan

8. The consent holder must prepare a Construction Management Plan (CMP) for the project or for each stage of the project (e.g., tunnelling works, shaft construction). The purpose of the CMP 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 (m) below.

   The CMP 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 CMP complies with the requirements of Condition 8 as applicable.

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 including their contact details (phone, postal address, email address);

   b. An outline construction programme;

   c. The proposed hours of work;

   d. Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal / storage of rubbish, storage and unloading of construction materials and similar construction activities;

   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;

   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. Procedures for ensuring that residents in the immediate vicinity of construction areas are given prior notice of the commencement of construction activities and are informed about the expected duration and effects of the works;

h. Means of providing for the health and safety of the general public and for pedestrian management;

i. 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);

j. A mechanism and nominated stakeholder manager responsible for receiving, addressing and monitoring queries and responding to complaints in relation to the construction works;

k. Procedures for the refuelling of plant and equipment;

l. Spill management procedures for the storage of hazardous substances.

m. Monitoring requirements for protecting historic buildings from directly and indirectly being damaged through construction works.

10. The CMP 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 or any specific component of the CMP must be updated as necessary and provided to the Council for certification prior to being implemented.

Construction Traffic Management Plan

11. Prior to the commencement of any earthworks or construction activity on the site, the consent holder must submit to the Council, a Construction Traffic Management Plan (CTMP) for certification. The CTMP must be prepared in accordance with the Council's requirements for traffic management plans or CTMPs (as applicable) and must be consistent with the New Zealand Transport Agency's Code of Practice for Temporary Traffic Management (CoPTTM) and must also include:

a. Provide a parking management plan for construction traffic.

b. Address the transportation and parking of oversize vehicles (if any).

c. Provide appropriate loading / working areas to minimise disruption to traffic.

d. Provide cleaning facilities within the site to thoroughly clean all vehicles prior to exit to prevent mud or other excavated material from being dropped on the road. In the event that material is dropped on the road, resources should be on hand to clean-up as soon as possible.

e. Provide traffic management plans in compliance with the latest edition of the CoPTTM document.

f. Ensure the site access point(s) are clearly signposted.

g. Include measures that are to be adopted to ensure that pedestrian access on the public footpaths in the vicinity of the site is safe during construction works.

h. Detail how the works will be undertaken to maintain access to properties adjacent to the work site during construction and address the duration time frame for sites with no-vehicle access during the works.

i. Detail how the works will be undertaken to minimise the impact on public transport.

j. Identify proposed numbers and timing of heavy vehicle movements throughout the day.

k. Identify the location of vehicle and construction machinery access during the period of site works.

l. Identify the storage and loading areas for materials and vehicles.

m. For each construction phase, identify the location and duration of any road or lane closures, division of road closures into segments, duration of works in each closure, indication of detour routes for each closure, and assessment of the effects on the Auckland Transport Road network of any road closures and a plan to mitigate these effects.

n. Detail how communication with drivers that they should divert, be done and how it would be monitored to ensure that the expected level of diversion is achieved.

o. Identify the relevant Auckland Transport approvals required.

The certified CTMP must be implemented and maintained throughout the entire period of earthworks and construction activity on site. Where on site monitoring finds unanticipated environmental effects, the consent holder is required to take corrective action as required by the Council.

The consent applicant must submit to Auckland Transport, 40 days prior to the commencement of any earthworks or construction activity on the site, a CTMP for endorsement.

Advice Note:

Please include the CTMP in the application for a Corridor Access Request.

Construction Communications Plan

12. The consent holder must prepare a Construction Communications Plan (CCP) for the construction phase of the project, and submit the plan to the Council at least 20 working days prior to works commencing. The CCP must set out:

    a. The method(s) of consultation and liaison with key stakeholders including the Office of the Mayor, Elected Members (Local Board and Councillors), iwi (representatives from Ngāti Whātua Ōrākei, Ngāti Maru, Te Ākitai Waiohua, Ngaati Whanaunga, Te Rūnanga o Ngāti Whatua, Te Patukirikiri), and the owners/occupiers of neighbouring properties regarding the likely commencement, duration, and effects of works;

    b. Measures for identifying when and where road or lane closures will occur, and set out recommended alternative routes;

c. Details of prior consultation or community liaison undertaken with the parties referred to in (a) above, including outlining any measures developed with such persons or groups to manage or to mitigate any adverse effects or inconvenience that may arise;

d. The process(es) for undertaking kaitiakitanga responsibilities associated with the project, including ceremonial, assisting with discovery procedures, providing mātauranga Māori input in the relevant stages of the project and cultural inductions for all contractors who will undertake the works as agreed with Mana whenua;

e. Full contact details for a nominated liaison person who will manage the public information system and be the point of contact for related enquiries.

Sediment/erosion controls

13. At least 10 working days prior to the commencement of any earthworks at the site authorised by this consent, the consent holder must submit a final Erosion and Sediment Control Management Plan (ESCP) for certification by the Council. No earthworks activities must commence until the ESCP has been certified. The final ESCP must be in accordance with the approved Erosion and Sediment Control Plans referred to in Condition 1, and in accordance with the Council's 'Guidance Document 2016/005 Erosion and Sediment Control Guideline for Land Disturbing Activities (GD05)'.

14. Any subsequent amendments to the certified ESCP(s) and/or methodology must be provided to the Council at least 10 working days prior to the proposed amendment and certified prior to any such amendment being implemented.

Notice to neighbours

15. For buildings that are to receive noise or vibration levels greater than the criteria in Table E25.6.28.2 or E25.6.30.1 of the AUP(OP), the following procedure to notify these properties must be undertaken:

    a. Identification of buildings that would receive levels greater than the AUP(OP) noise and vibration criteria for the specific equipment being used.

    b. A minimum of 10 working days prior to any noise or vibration equipment being used that would lead to potential exceedances, communication be undertaken to the buildings identified in (a) to notify them of upcoming high noise and/or vibration works.

    c. Confirmation of the Best Practicable Option (BPO) mitigation that will be implemented to reduce the impacts of any potential exceedances.

    Any noise and/or vibration monitoring is to be undertaken during activities where practicable to confirm the received levels and to determine future mitigation for the equipment.

Temporary noise barriers

16. Noise barriers must be installed prior to works commencing and be maintained throughout periods of noisy construction at locations outlined in Figure 7 of the CNVMP referred to in Condition 1 and other localised noise screens identified in the CNVMP unless altered in the certified CNVMP. The noise barriers must be constructed according to the details described in certified CNVMP (Condition 7) and as follows:

a. a minimum height of 2 m, and higher if practicable to block line-of-sight;

b. a minimum surface mass of 10kg/m^2 or with material described in the certified CNVMP;

c. with no air gaps between palings or blankets and no gap between the ground and the bottom of the fence.

Cultural Induction

17. At least 15 working days prior to the commencement of the construction works, the consent holder must invite mana whenua to provide a cultural induction to the contractors/all employees to be involved with construction associated with this development.

Cultural & Archaeological Monitoring

18. The consent holder must invite iwi (representatives from Ngāti Whātua Ōrākei, Ngāti Maru, Te Ākitai Waiohua, Ngaati Whanaunga, Te Rūnanga o Ngāti Whatua, Te Patukirikiri) to appoint cultural monitor(s) to be on-site during the construction works, and on an "on-call" basis for the rest of the work, at the consent holder's expense. If appointed, the cultural monitor(s) must be appointed at least 10 working days prior to the commencement of the construction works, they must be present at the pre-start meeting (Condition 5) and their details must be provided to the Council in writing.

Development in progress conditions

Construction hours and noise

19. Construction noise must be measured and assessed in accordance with NZS6803:1999 Acoustics – Construction Noise.

20. Construction works must be restricted to between 7:30 am and 6:00 pm from Monday to Saturday where outlined in the certified CNVMP, or operationally required to occur outside of these hours (such as open cut work and network tie-in works). Tunnel boring works are permitted to occur between 7:30 am and 7:00 pm from Monday to Saturday. The restriction on hours of works must not apply to low noise generating activities, such as, but not limited to, site set up or staff meetings, which may occur outside of these hours.

Construction noise limits

21. Noise arising from the construction work activities within the Construction Support Area at 329 Queen Street and 34-38 Greys Avenue must not exceed limits of 75 dB LAeq and 90 dB LAFmax measured 1m from the façade of any occupied building when measured and assessed in accordance with NZS6803:1999 Acoustics – Construction Noise.

22. The works within roads must be carried out in accordance with the certified CNVMP.

Construction vibration - structural

23. All tunnelling and construction works must be designed and undertaken to ensure that vibration from the project does not exceed the guideline vibration limits as set out in the DIN 4150-3:1999 Standard: Structural vibration – Part 3 Effects of vibration.

24. Specific vibration management measures must be followed to reduce the likelihood of high vibration levels impacting heritage buildings as below:

a. Not operating vibratory rollers within 15 metres of any building within the sites specified in the table below:

210 Queen Street	307-319 Queen Street	222-228 Queen Street
233-237 Queen Street	301-317 Queen Street	265 Queen Street
256-260 Queen Street	2/304-328 Queen Street	319 Queen Street
269-287 Queen Street	323-327 Queen Street	330 Queen Street
291-297 Queen Street	380 Queen Street	263-267 Queen Street
253-261 Queen Street	381 Queen Street	321 Queen Street
307-319 Queen Street	404 Queen Street	

b. This requires plate compactors or static rollers only to be used at the Mayoral Drive and Victoria Street shaft construction sites;

c. Using low/no vibration rock fracturing methods to remove basalt from the Victoria Street shaft construction site;

d. Providing excavator operator training on specific measures to reduce vibration (such as slowly lowering the bucket onto the ground);

e. Undertaking vibration measurements during the first operation of each piece of high-vibration equipment to quantify the level of vibration generated on site; and

f. Undertaking continuous vibration monitoring within the 5 identified buildings in Section 9.4 of the Built Heritage Assessment Report referenced in Condition 1 (within 210, 307-319 Queen and 323-327 Queen Street), and any other buildings within the vibration setback distance.

25. Initial Seismic Assessments (ISAs) must be undertaken of the identified buildings in Section 9.4 of the Built Heritage Assessment (being the buildings within 210 Queen Street, 307-319 Queen Street and 327-327 Queen Street) prior to works commencing. Any additional recommended mitigation measures from the ISAs must be incorporated where practicable.

26. Photographs of all of the buildings as listed in the table below and identified within Sections 6.1 and 6.2 of the Built Heritage Assessment must be taken prior to works commencing and photographed at least once a month after construction begins to visually identify any potential damage to buildings. These buildings are:

210 Queen Street	307-319 Queen Street	222-228 Queen Street
233-237 Queen Street	301-317 Queen Street	265 Queen Street
256-260 Queen Street	2/304-328 Queen Street	319 Queen Street
269-287 Queen Street	323-327 Queen Street	330 Queen Street
291-297 Queen Street	380 Queen Street	263-267 Queen Street
253-261 Queen Street	381 Queen Street	321 Queen Street
307-319 Queen Street	404 Queen Street	

Noise and vibration monitoring

27. The consent holder must engage a suitably qualified and experienced acoustic expert to carry out noise and vibration monitoring:

    a. At the first commencement of vibratory piling, concrete cutting or breaking, compacting, fracturing of basalt rock, road reinstatement adjacent to buildings in the Historic Heritage overlay and any other activities with potential to infringe the noise or vibration limits; and

    b. When a complaint is received, or monitoring is requested by the Council; and

    c. In accordance with New Zealand Standard NZS6803:1999 Acoustics – Construction noise for noise monitoring and German Industrial Standard DIN 4150-3 (1999) Structural Vibration – Part 3 Effects of Vibration on Structures for vibration.

Supervision of geotechnical works

28. All excavations, cut and fills, and drainage works must be carried out under the supervision of a Chartered Professional Engineer experienced in geotechnical engineering and familiar with the Geotechnical Interpretive Report referenced in Condition 1.

General sediment control conditions

29. All earthworks must be managed to minimise any discharge of debris, soil, silt, sediment or sediment-laden water beyond the subject site to either land, stormwater drainage systems, watercourses or receiving waters. In the event that a discharge occurs, works must cease immediately and the discharge must be mitigated and/or rectified.

Ensure effectiveness of sediment and erosion controls

30. The operational effectiveness and efficiency of all erosion and sediment control measures specifically required by the certified ESCP referenced in Condition 13 must be maintained throughout each stage of earthworks activity, or until the site is permanently stabilised against erosion. A record of any maintenance work must be kept and be supplied to the Council on request.

Prevent sediment-laden water in stormwater/ waterways from roads

31. Earthworks must be managed to avoid deposition of earth, mud, dirt or other debris on any public road or footpath resulting from earthworks activity on the subject site. In the event that such deposition does occur, it must immediately be removed. Roads or footpaths must not 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*
    - *ceasing of vehicle movement until materials are removed*
    - *cleaning of road surfaces using street-sweepers*

- *silt and sediment traps*
- *catchpits or environpods*

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

It is recommended that you discuss any potential measures with Council who may be able to provide further guidance on the most appropriate approach to take. Please contact Council on email monitoring@aucklandcouncil.govt.nz for more details. Alternatively, please refer to " GD05 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland region".

Ensure the quality of fill used on the site is acceptable

32. All imported fill used must:

    a. comply with the definition for 'cleanfill material' in the Auckland Unitary Plan (Operative in Part) – (Chapter J1 Definitions).

    b. be solid material of a stable, inert nature and

    c. not contain hazardous substances or contaminants above recorded natural background levels of the receiving site.

Advice Note:

In addition to the characteristics for imported fill outlined in Condition 32, please refer to the relevant New Zealand Standard [e.g. NZS 4431:1989 'Code of Practice for Earth Fill for Residential Development'] to ensure that all fill used is of an acceptable engineering standard.

Background contamination levels for the site receiving clean fill referred to by above condition can be found in the Auckland Council, Technical Publication No. 153, Background concentrations of inorganic elements in soils from the Auckland Region (2001)

Ensure machinery does not discharge/spill hazardous substances during earthworks.

33. All machinery associated with the earthworks activity must be operated in a way, which ensures that spillages of hazardous substances such as fuel, oil, grout, concrete products, and any other contaminants are prevented.

Advice Note:

In accordance with the above condition refuelling and lubrication activities associated with earthworks machinery should use methods so that any spillage that does occur can be contained and does not enter the public stormwater network.

Avoid damaging assets

34. 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 24 hours of its discovery. The costs of rectifying such damage and restoring the asset to its original condition must be met by the consent holder.

Advice Notes:

- *Trench reinstatement review is only required if the cover / clearance between the underground service and finished surface is less than 1m. Generally, reinstatement of trenching to be done properly compacting a thin layer of hardfill materials up to 200mm each checking compaction and finally reinstating the road pavement top 400mm to 600mm matching to existing layers and finished surface.*
- *The consent holder / their designer should carry out a joint pre-construction inspection of the existing pavement/ footpath, vehicle crossings berms etc. with representative of asset management team and record the condition of the pavement prior to commencement of works on site. Post inspection will be carried out by asset acceptance team or nominated Council engineer with the Contractor before under asset hand-over / vesting process.*
- *The consent holder and their Contractor must protect and maintain all affected public roads, footpath and all other assets in the road corridor including any privately own assets at their own cost until the project is finished.*

Soil disposal

35. Any excess cut soils requiring offsite disposal must be disposed of to an appropriately licensed disposal facility that is consented to accept waste containing contaminants at the concentrations measured along the pipeline alignment, as recorded in the Detailed Site Investigation Report referenced in Condition 1. Evidence of the locations where excavated material has been disposed of must be retained by the consent holder during the works and made available to the Council on request.

Discovery of unexpected contamination

36. In the event of the accidental discovery of contamination during earthworks that has not been previously identified, including asbestos material, the consent holder must immediately cease the works in the vicinity of the contamination, notify the Council, and engage a Suitably Qualified and Experienced Contaminated Land Practitioner (SQEP) to assess the situation (including possible sampling) and decide on the best option for managing the material.

Traffic Management

37. A Traffic Management Plan (TMP) application must be submitted to the Auckland Transport Metro Service Disruption team at least 20 working days prior to works commencing.

38. All construction site access locations must achieve minimum sight distance standards. Where acceptable sight distances cannot be achieved, movements relating to the deficient sight distances must not permitted and / or temporary speed limit measures must be imposed in order to reduce traffic operating speeds.

39. The TMP(s) referenced in Condition 37 must be consistent with the New Zealand Transport Agency's CoPTTM applying at the time of construction, taking account of any temporary works.

Restrictions for open-cut construction

40. Open-cut network tie-in construction works on Wellesley Street must only be constructed over long weekends (i.e., public holiday weekends) or during the Christmas statutory shutdown period (i.e., starting no earlier than 27 December and finishing no later than the Sunday of the first week of January).

41. Wellesley Street must be re-instated to allow for two-way vehicle movement following each open-cut construction period.

42. A minimum of 20 working days' notice must be provided to Auckland Transport prior to open-cut construction works occurring on Wellesley Street. Evidence of this must be provided to the Council.

Post-development conditions

Certification of fill quality

43. Within 10 working days following the completion of earthworks, the suitably qualified engineering professional responsible for supervising the works must provide to the Council, written evidence that all fill used on the subject site has the characteristics set out in Condition 32. Written evidence must be in the form of a receipt, compaction certificate(s) or similar.

Certification of geotechnical works

44. Certification from a suitably qualified engineering professional responsible for supervising the works must be provided to the Council, confirming that the works have been completed in accordance with the Condition 28, within 10 working days following completion. Written certification must be in the form of a geotechnical completion report, or any other form acceptable to the council.

Specific conditions – water permit WAT60422976

Interpretations

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 the commencement of the taking or diversion of groundwater, other than for initial state monitoring purposes.
Completion of Dewatering	Means, in the case of tunnels and shafts, when the tunnel and shafts have been constructed and effectively no further groundwater is being taken/diverted for the construction of the tunnel and shafts in accordance with the design

Commencement of Excavation	Means commencement of Bulk Excavation or excavation to create shafts.
Completion of Construction **Completion of Excavation**	Means when the Code Compliance Certificate (CCC) is issued by the Council Means the stage when all Bulk Excavation has been completed and all foundation/footing excavations within 10 meters of the perimeter retaining wall have been completed.
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 table below.
External visual inspection	A condition survey undertaken for the purpose of detecting any new external Damage or deterioration of existing external Damage. Includes as a minimum a visual inspection of the exterior and a dated photographic record of all observable exterior Damage.
GSMCP	Means Groundwater and Settlement Monitoring and Contingency Plan
Monitoring Station	Means any monitoring instrument including a ground or building deformation station, groundwater monitoring bore, retaining wall deflection station, or other monitoring device required by this consent
RL	Means Reduced Level.
Season Low Groundwater Level	Means the annual lowest groundwater level – which typically occurs in summer
Services	Include fibre optic cables, sanitary drainage, stormwater drainage, gas and water mains, power and telephone installations and infrastructure, road infrastructure assets such as footpaths, kerbs, catch-pits, pavements and street furniture.
SQEP	Means Suitably Qualified Engineering Professional
SQBS	Means Suitably Qualified Building Surveyor

Building Damage Classification

Note: In the table below, the column headed "Description of Typical Damage" applies to masonry buildings only and the column headed "General Category" applies to all buildings.

Category 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. Typically crack widths up to 5mm.	
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 5mm to 15mm or several greater than 3mm.	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 15mm to 25mm but also depend on the	
5	Very Severe	Major repair required involving partial or complete reconstruction. Beams lose bearing, walls lean badly and require shoring. Windows broken by distortion. Danger of instability. Typical crack widths are greater than 25mm but depend on the number of cracks.	Stability Damage

Activity in accordance with plans

45. The take (dewatering) and diversion of groundwater associated with the construction of the proposed wastewater pipeline, the three shafts: "*The Victoria Shaft*" at the intersection of Queen Street and Victoria Street, "*The Wellesley Shaft*" at the intersection of Queen Street and Wellesley Street and "*The Mayoral Shaft*" at the intersection of Queen Street and Mayoral Drive and associated network connections must be carried out in accordance with the plans and all information submitted with the application, detailed below, and all referenced by the Council as water permit WAT60422976, as detailed in Condition 1 above.

Duration of the consent

46. This water permit WAT60422976 expires 5 years after the date it is issued unless it has lapsed, been surrendered or been cancelled at an earlier date pursuant to the RMA.

Review under section 128 of the RMA

47. Under section 128 of the RMA the conditions of this water permit WAT60422976 may be reviewed by the Manager Resource Consents (or the equivalent) at the consent holder's expense within 6 months after the Completion of Dewatering and subsequently at intervals of not less than five years thereafter in order:

    a. To 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

b. To 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:

(i) ground conditions

(ii) aquifer parameters

(iii) groundwater levels; and

(iv) ground surface movement.

Notice of Commencement of Dewatering

48. The Council must be advised in writing at least 10 working days prior to the date of the Commencement of Dewatering.

Design of dewatering and retention systems

49. The design and construction of the dewatering and retention systems for the three shafts must be undertaken in accordance with the specifications contained in the reports referenced in Condition 1.

Excavation limit

50. The Bulk Excavation must not extend below 2.5 m RL for the Victoria Shaft, 5.7 m RL for the Wellesley Shaft and 12.5 m RL for the Mayoral Shaft.

Groundwater and Settlement Monitoring and Contingency Plan (GSMCP)

51. At least 20 days prior to the Commencement of Dewatering, a Groundwater and Settlement Monitoring and Contingency Plan (GSMCP) prepared by a SQEP, must be submitted to the Council for certification. Any later proposed amendment of the GSMCP must also be submitted to the Council for certification.

The overall objective of the GSMCP must be to set out the practices and procedures to be adopted to ensure compliance with the consent conditions and must include, at a minimum, the following information:

a. A monitoring location plan, showing the location and type of all Monitoring Stations. The monitoring plan must be be based on the plans titled “Victoria shaft – GSMCP monitoring locations and layout”, “Wellesley shaft – GSMCP monitoring locations and layout”, and “Mayoral shaft – GSMCP monitoring locations and layout” contained in Appendix A of the approved GSMCP referenced in Condition 1. In any case where the location of a Monitoring Station differs substantively from that shown on the plans referenced above, a written explanation for the difference must be provided at the same time that the GSMCP is provided.

b. Final completed schedules B to E (as per the conditions below) for monitoring of groundwater, ground surface and building settlement and retaining wall deflection (including any proposed changes to the monitoring frequency) as required by conditions below.

c. All monitoring data, the identification of Services susceptible to Damage and all building/Service condition surveys undertaken to date and required by conditions below.

d. A bar chart or a schedule, showing the timing and frequency of condition surveys, visual inspections and all other monitoring required by this consent, and a sample report template for the required 2 monthly monitoring.

e. All Alert and Alarm Level Triggers (including reasons if changes to such are proposed).

f. Details of the contingency actions to be implemented if Alert or Alarm Levels are exceeded.

52. All construction, dewatering, monitoring and contingency actions must be carried out in accordance with the certified GSMCP. No Bulk Excavation (that may affect groundwater levels) or other dewatering activities must commence until the GSMCP is certified in writing by the Council.

Performance Standards

Damage avoidance

53. All excavation, dewatering systems, retention measures and works associated with the diversion or taking of groundwater, must be designed, constructed and maintained so as to avoid damage to buildings, structures and services on the site or adjacent properties.

Alert and Alarm Levels

54. The activity must not cause any settlement or movement greater than the Alarm Level thresholds specified in Schedule A below. Alert and Alarm Levels are triggered when the following Alert and Alarm Trigger thresholds are exceeded:

Schedule A: Alarm and Alert Levels			
Movement		**Trigger Thresholds (+/-)**	
		Alarm	**Alert**
a)	Differential vertical settlement between any two Ground Surface Deformation Stations (the **Differential Ground Surface Settlement Alarm or Alert Level**)		
	• M-G1 to M-G6	1:700	1:1,000
	• W-G1 to W-G4	1:350	1:450
	• W-G5 to W-G9	1:700	1: 1,000
	• V-G1 to V-G7	1:700	1: 1,000
b)	Total vertical settlement from the pre-excavation baseline level at any Ground Surface Deformation Station (the **Total Ground Surface Settlement Alarm or Alert Level**):		
	• M-G1 to M-G6	10mm	7mm
	• W-G1 & W-G3	12mm	8mm
	• W-G2 & W-G4 to W-G9	10mm	7mm
		20mm	14mm

	• V-G1 & V-G2 • V-G3 to V-G5 • V-G6 & V -G7	17mm 13mm	12mm 9mm
c)	Differential vertical settlement between any two adjacent Building Deformation Stations (the **Differential Building Settlement Alarm or Alert Level**) • M-B1 to M-B9 • W-B1 to W-B6 • V-B1 to V-B10	 1:700 1:700 1:700	 1:1,000 1,1000 1:1,000
d)	Total vertical settlement from the pre-excavation baseline level at any Building Deformation Station (the **Total Building Settlement Alarm or Alert Level**) • M-B1 to M-B9 • W-B1 to W-B6 • V-B1 to V-B10	 10mm 10mm 10mm	 7mm 7mm 7mm
e)	Total lateral deflection from the pre-excavation baseline level at any retaining wall deflection station (the **Retaining Wall Deflection Alarm or Alert Level**): • M-RW1 to M-RW4 • W-RW1 to W-RW4 • V-RW-1 to V-RW4	 10mm 11mm 10mm	 7mm 8mm 7mm
f)	Distance below the pre-dewatering Seasonal Low Groundwater Level and any subsequent groundwater reading at any groundwater monitoring bore (the **Groundwater Alert Levels 1 & 2**): • M_PZ01 • PZ06_S • V_PZ02	N/A	(1) 2.0mbgl (2) 2.5mbgl (1) 2mbgl (2) 2.5mbgl (1) 3mbgl (2) 3.5mbgl

Note: The locations of the Monitoring Stations listed in Schedule A are shown on the plans titled "Victoria shaft – GSMCP monitoring locations and layout", "Wellesley shaft – GSMCP monitoring locations and layout", and "Mayoral shaft – GSMCP monitoring locations and layout" contained in Appendix A of the approved GSMCP referenced in Condition 1.

These levels may be amended subject to approval by the Council as part of the Groundwater Settlement Monitoring and Contingency Plan (GSMCP) approval process, and, after the receipt of pre-dewatering monitoring data, building condition surveys and recommendations from a suitably qualified engineering professional (SQEP), but only to the extent that avoidance of Damage to building, structures and Services can still be achieved.

There are conditions below that must be complied with when the Alert and Alarm Level triggers are exceeded. These include actions that must be taken immediately including seeking the advice of a SQEP.

Alert Level Actions

55. In the event of any Alert Level being exceeded the consent holder must:

    a. Notify the Council within 24 hours of the exceedance.

    b. Re-measure all Monitoring Stations within 20 metres of the affected monitoring location(s) to confirm the extent of apparent movement

    c. Ensure the data is reviewed, and advice provided, by a SQEP on the need for mitigation measures or other actions necessary to avoid further deformation. Where mitigation measures or other actions are recommended those measures must be implemented.

    d. Submit a written report, prepared by the SQEP responsible for overviewing the monitoring, to the Council within 5 working days of Alert Level exceedance. The report must provide an analysis of all monitoring data (including wall deflection) relating to the exceedance, actions taken to date to address the issue, recommendations for additional monitoring (i.e., the need for increased frequency or repeat condition survey(s) of building or structures) and recommendations for future remedial actions necessary to prevent Alarm Levels being exceeded.

    e. Measure and record all Monitoring Stations within 20 metres of the location of any Alert Level exceedance every two days until such time the written report referred to above has been submitted to the Council.

Alarm Level Actions

56. In the event of any Alarm Level being exceeded at any ground deformation pin, building deformation pin, or retaining wall deflection pin Monitoring Station the consent holder must:

    a. Immediately halt construction activity, including excavation, dewatering or any other works that may result in increased deformation, unless halting the activity is considered by a SQEP to likely be more harmful (in terms of effects on the environment) than continuing to carry out the activity.

    b. Notify the Council within 24 hours of the Alarm Level exceedance being detected and provide details of the measurements taken.

    c. Undertake a condition survey (this could comprise either a detailed condition survey or an external visual inspection at the discretion of the SQEP responsible for overviewing the monitoring) by a SQEP or suitably qualified building surveyor (SQBS) of any building or structure located adjacent to any Monitoring Station where the Alarm Level has been exceeded.

    d. Take advice from the author of the Alert Level exceedance report (if there was one) on actions required to avoid, remedy or mitigate adverse effects on ground, buildings or structures that may occur as a result of the exceedance.

    e. Not resume construction activities (or any associated activities), halted in accordance with paragraph (a) above, until any mitigation measures (recommended in accordance with paragraphs (d) above) have been implemented to the satisfaction of a SQEP.

    f. Submit a written report, prepared by the SQEP responsible for overviewing the monitoring, to the Council, on the results of the condition survey(s), the mitigation

measures implemented and any remedial works and/or agreements with affected parties within 5 working days of recommencement of works.

Pre-dewatering building and structure survey

57. No more than 6 months prior to the Commencement of Dewatering, a detailed condition survey of buildings and structures as specified in Schedule B below must be undertaken by a SQEP or SQBS and a written report must be prepared and reviewed by the SQEP responsible for overviewing the monitoring. The report must be submitted for certification by the Council.

    This condition does not apply where written evidence is provided to the Council that the owner of a property has confirmed they do not require a detailed condition survey.

    The detailed condition survey must include:

    a. Confirmation of the installation of building deformation stations as required in Schedule B below in the locations shown on the plans titled “Victoria shaft – GSMCP monitoring locations and layout”, “Wellesley shaft – GSMCP monitoring locations and layout”, and “Mayoral shaft – GSMCP monitoring locations and layout” contained in Appendix A of the approved GSMCP referenced in Condition 1.

    b. A description of the type of foundations.

    c. A description of existing levels of Damage considered to be of an aesthetic or superficial nature.

    d. A description of existing levels of Damage considered to affect the serviceability of the building where visually apparent without recourse to intrusive or destructive investigation.

    e. An assessment as to whether existing Damage may or may not be associated with actual structural Damage and an assessment of the susceptibility of buildings/structures to further movement and Damage.

    f. Photographic evidence of existing observable Damage.

    g. A review of proposed Alarm and Alert Levels to confirm they are appropriately set and confirmation that any ground settlement less than the Alarm Level will not cause Damage.

    h. An assessment of whether the monitoring frequency is appropriate.

    i. An assessment of whether the locations and density of existing building deformation stations are adequate and appropriate for the effective detection of change to building and structure condition.

Schedule B: Buildings/Structures that Require Detailed Condition Survey and Installation of Deformation Stations			
Address	**Legal Description**	**Detailed Condition Survey**	**Number of building / structure deformation stations required**

327-329 Queen Street A.k.a Auckland Sunday School Union Building	PT Allot 6 Sec 29 Auckland City, PT Allot 7 Sec 29 Auckland City	Yes	6No. (M-B1 to M-B5 & M-B9)
329 Queen Street	Lot 1 DP 84867	Yes	3No. (M-B6 to M-B8)
269 -287 Queen Street A.k.a The Civic Theatre	Lot 1 DP199399	Yes	2No. (W-B5 & W-B6)
290 Queen Street A.k.a Whitcoulls	Lot 1 DP97298	Yes	4No. (W-B1 to W-B4)
210 Queen Street A.k.a John Court's Building (former)	Lot 2 DP 195649	Yes	6No. (V-B1 to V-B6)
205 Queen Street	Lot 1 DP109984	Yes	2No. (V-B7 & V-B8)
203a Queen Street	Lot 1 DP423418	Yes	2No. (V-B9 & V-B10)

Pre-dewatering services condition survey

58. Prior to the Commencement of Dewatering, a condition survey of potentially affected stormwater and wastewater services, that can be accessed, must be undertaken in consultation with the relevant service provider. This condition does not apply to any service where written evidence is provided to the Council that the owner of that service has confirmed they do not require a condition survey.

External Visual Inspections during Dewatering

59. External visual inspections of the surrounding ground within 20 m of excavations must be undertaken for the purpose of detecting any new external Damage or deterioration of existing external Damage. Inspections are to be carried out weekly from the Commencement to Completion of Dewatering. A photographic record is to be kept, including time and date, of each inspection and all observations made during the inspection, and must be of a quality that is fit for purpose.

    The results of the external visual inspections and an assessment of the results must be reviewed by the SQEP responsible for overviewing the monitoring and must be included in the bimonthly monitoring report for the relevant monitoring period.

This condition does not apply to any land, building or structure where written evidence is provided to the Council confirming that the owner of the land, building or structure does not require visual inspections to be carried out.

Completion of dewatering – building, structure and services condition surveys

60. Between 6 and 12 months after completion of dewatering a detailed condition survey of all previously surveyed buildings, structures, stormwater and wastewater services, must be undertaken by a SQEP or SQBS and a written report must be prepared. The report is to be reviewed by the SQEP responsible for overviewing the monitoring and then submitted to the Council, within 1 month of completion of the survey.

    The condition survey report must make specific comment on those matters identified in the pre-dewatering condition survey. It must also identify any new Damage that has occurred since the pre-dewatering condition survey was undertaken and provide an assessment of the likely cause of any such Damage.

    This condition does not apply to any building, structure or service where written evidence is provided to the Council confirming that the owner of that building, structure, or service does not require a condition survey to be undertaken.

Additional surveys

61. Additional condition surveys of any building, structure or service within the area defined by the extent of groundwater drawdown or ground movement (as defined in the WSP New Zealand Limited reports referenced in Condition 1), must be undertaken, if requested by the Council, for the purpose of investigating any Damage potentially caused by ground movement resulting from dewatering or retaining wall deflection. A written report of the results of the survey must be prepared and/or reviewed by the SQEP responsible for overviewing the monitoring. The report must be submitted to the Council.

    The requirement for any such additional condition survey will cease 6 months after the completion of dewatering unless ground settlement monitoring indicates movement is still occurring at a level that may result in Damage to buildings, structures, or Services. In such circumstances the period where additional condition surveys may be required will be extended until monitoring shows that movement has stabilised and the risk of Damage to buildings, structures and Services as a result of the dewatering is no longer present.

Groundwater monitoring

62. Groundwater monitoring must be undertaken at the groundwater monitoring bore locations shown on the plans titled “Victoria shaft – GSMCP monitoring locations and layout”, “Wellesley shaft – GSMCP monitoring locations and layout”, and “Mayoral shaft – GSMCP monitoring locations and layout” contained in Appendix A of the approved GSMCP referenced in Condition 1, or in the certified GSMCP. Monitoring frequency is proposed to be 15 minutes using automated pressure transducers with or without telemetry systems. Groundwater level monitoring is to be undertaken in accordance with Schedule C below:

Schedule C: Groundwater Monitoring Frequency					
Bore Name	**Location**		**Groundwater level reporting frequency (to an accuracy of 10mm)**		
			From bore construction until before Commencement of Dewatering	Commencement of Dewatering to Completion of Dewatering	From Completion of Dewatering until 3 months later
	Easting (mE)	Northing (mN)			
M_PZ01	tbc	tbc	At least 4 weeks prior to dewatering commencing	Twice Weekly	Weekly for the first month after dewatering has stopped and monthly thereafter
PZ06_S	tbc	Tbc			
V_PZ02	tbc	tbc			

The monitoring frequency may be changed if approved by the Council. Any change must be specified in the GSMCP. In addition, the 3-month monitoring period post Completion of Dewatering may be extended, by the Council, if measured groundwater levels are not consistent with inferred seasonal trends or predicted groundwater movement. 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.

Advice Note:

If groundwater level measurements show an inconsistent pattern immediately prior to the Commencement of Dewatering (for example varying more than +/-200mm during a month), then further readings may be required to ensure that an accurate groundwater level baseline is established before dewatering commences.

Ground surface and building deformation monitoring

63. Ground Surface and Building Deformation Monitoring Stations must be established and maintained at the locations shown on the plans titled “Victoria shaft – GSMCP monitoring locations and layout”, “Wellesley shaft – GSMCP monitoring locations and layout”, and “Mayoral shaft – GSMCP monitoring locations and layout” contained in Appendix A of the approved GSMCP referenced in Condition 1. The Monitoring Stations must be monitored at the frequency set out in Schedule D. The purpose of the Monitoring Stations is to record any vertical or horizontal movement. Benchmark positions must be established no less than 20 metres away from the excavated area.

Schedule D: Ground Surface and Building Monitoring			
Monitoring Station and type	**Frequency**		
	Pre-Commencement of Dewatering	**Commencement to Completion of Dewatering**	**Post- Completion of Dewatering**
Ground and Buildings	Three times to a horizontal and vertical accuracy of +/-2 mm	Weekly	Monthly for 6 months

	(achieved by precise levelling)		

The monitoring frequency may be changed, if approved by the Council. The consent holder must request termination of ground surface settlement and building settlement monitoring from Council, supported with a letter of justification for the termination, prepared by a SQEP.

Retaining wall monitoring

64. Twelve retaining wall deflection stations (M-RW1 to M-RW4, W-RW1 to W-RW4 and V-RW1 to V-RW4), for the measurement of lateral wall movement, must be installed along the top of the retaining walls, as shown on the plans titled "Victoria shaft – GSMCP monitoring locations and layout", "Wellesley shaft – GSMCP monitoring locations and layout", and "Mayoral shaft – GSMCP monitoring locations and layout" contained in Appendix A of the approved GSMCP referenced in Condition 1. Monitoring of the retaining wall deflection stations must be undertaken and recorded in accordance with Schedule E below and must be carried out using precise levelling.

Schedule E: Retaining Wall Monitoring		
Frequency		
Pre-Commencement of Construction Phase Dewatering	**Commencement of Construction Phase Dewatering to one month after Completion of Excavation**	**One month after Completion of Excavation to Completion of Construction Phase Dewatering**
Retaining Wall Deflection Stations	**Retaining Wall Deflection Stations**	**Retaining Wall Deflection Stations**
Twice to a horizontal and vertical accuracy of +/- 2mm	Once for every 2 metres depth (on average) of excavation, and, in any case, at a minimum of once weekly.	Fortnightly

The monitoring frequency may be changed, if approved by the Council, through the GSMCP. The consent holder must request termination of retaining wall monitoring from Council, supported with a letter of justification for the termination, prepared by a SQEP.

Access to third party property

65. Where any monitoring, inspection or condition survey in this consent requires access to property(ies) owned by a third party, and access is declined or subject to what the consent holder considers to be unreasonable terms, the consent holder must provide a report to the Council prepared by a SQEP identifying an alternative monitoring programme. The report must describe how the monitoring will provide sufficient early detection of deformation to enable measures to be implemented to prevent Damage to buildings, structures or Services. Written certification from the Council must be obtained before an alternative monitoring option is implemented.

Contingency actions

66. If the consent holder becomes aware of any Damage to buildings, structures or Services potentially caused wholly, or in part, by the exercise of this consent, the consent holder must:

    a. Notify the Council and the asset owner within 24 hours of the consent holder becoming aware of the Damage.

    b. Provide a report prepared by a SQEP (engaged by the consent holder at their cost) 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 must be taken to avoid further Damage.

    c. Provide a copy of the report prepared under (b) above, to the Council and the asset owner within 10 working days of notification under (a) above.

    Advice Note:

    It is anticipated the consent holder will seek the permission of the damaged asset owner to access the property and asset to enable the inspection/investigation. It is understood that if access is denied the report will be of limited extent.

Building, Structure, and Services Surveys and Inspections

67. A copy of all pre-dewatering building and structure condition surveys, and Service condition surveys and photographic records of external visual inspections required by this consent must be submitted to the Council with the GSMCP. All other condition surveys and photographic records required by this consent must be provided to the Council upon request.

Reporting of monitoring data

68. At 2 monthly intervals, a report containing all monitoring data required by conditions of this consent must be submitted to the Council. This report must include a construction progress timeline, the monitoring data (including the results of condition surveys) recorded in that period, and a comparison of that data with previously recorded data and with the Alert and Alarm Levels for each Monitoring Station.

    Upon Completion of Construction, one electronic data file (excel workbook) containing digital data for all groundwater monitoring bores must be provided to the Council. Data should include the monitoring bore name, type, location (NZTM easting / northing and elevation), screened depth for groundwater monitoring bores, absolute and relative readings (and their units of measure) and the date / time of each reading. The worksheets should contain data values only (no formulas, circular references or links to other sheets)

Requirement for close-out report

69. The final post-construction report must constitute a close-out report and present a summary of overall trends observed on the project and confirmation that monitored readings post-construction (ground movement) have reached steady state conditions (accounting for seasonal variation).

Notice of completion

70. The Council must be advised in writing within 10 working days of when excavation and dewatering has been completed.

Specific conditions – discharge permit DIS60423652

71. This discharge permit DIS60423652 expires 5 years after the date it is issued unless it has lapsed, been surrendered or been cancelled at an earlier date pursuant to the RMA.

72. Access to the relevant parts of the site must be maintained and be available at all reasonable times to enable the servants or agents of the Council to carry out inspections, surveys, investigations, tests, measurements or take samples whilst adhering to the consent holder's health and safety policy.

73. All processes on site (including operation of the diesel-powered generator) must be operated, maintained, supervised, monitored and controlled using the best practicable option to ensure that all air discharges authorised by this consent are maintained at the minimum practicable level.

74. Discharges of contaminants into air from the site must not cause:

    a. Odour or dust that cause a noxious, dangerous, offensive or objectionable effect beyond the boundary of the Site.

    b. Visible emissions (other than water vapour/steam or heat haze) that cause a dangerous, offensive or objectionable effect

    c. Concentrations of harmful air pollutants beyond the boundary of the site that cause, or are likely to cause, adverse effects to human health, ecosystems or property.

    Advice Note:

    Air discharge limits must be assessed by a suitably trained Council enforcement officers in accordance with the procedures outlined in the Good Practice Guides for Odour and Dust (Ministry for the Environment, 2016), including consideration of the FIDOL factors (frequency, intensity, duration, offensiveness and location) for amenity effects (dust, odour and visible emissions) and reference to the Auckland Ambient Air Quality Targets for harmful air pollutants.

75. The Council must be notified as soon as practicable in the event of any significant discharge to air, which results or has the potential to result in a breach of air quality conditions or adverse effects on the environment. The following information must be supplied:

    a. Details of the nature of the discharge;

    b. An explanation of the cause of the incident; and

    c. Details of remediation action taken.

76. All air quality complaints that are received must be recorded. The complaint details must include:

    a. The date, time, location and nature of the complaint;

    b. The name, phone number and address of the complainant, unless the complainant elects not to supply these details;

    c. Weather conditions, including approximate wind speed and direction, at time of the complaint;

d. Any remedial actions undertaken.

Details of any complaints received must be provided to the Council within 24 hours of receipt of the complaint.

77. The diesel-powered generators utilised within the Greys Avenue Construction Support Area must meet US EPA Nonroad Compression-Ignition Engine Exhaust Emission Standards, Tier 2 or Tier 3. The fuel usage rate must be no greater than 161 litres per hour.

78. Either of the following discharge mitigation measures must be implemented:

    a. A vertical stack enabling the unobstructed vertical discharge of exhaust emissions must be installed to a minimum height of 7.6 m above ground level; or

    b. A tailpipe emission control system that is certified to reduce NOx emissions by at least 80 %.

79. The generator must be inspected and maintained by suitably experienced technicians in accordance with the manufacturer's instructions and at least on a 3-monthly basis to maximise the efficiency of combustion, with details of the inspections and any maintenance recorded.

80. Visual inspections of the generator's exhaust emissions must be undertaken at least once per day when the generator is operating. The visual inspections must be recorded in a written log noting the time and date that the inspection was undertaken and a description of any visible exhaust emissions witnessed. The log must be made available to the Council on request.

81. The Council must be notified as soon as practicable in the event of any significant discharge to air, which results in or has the potential to result in a breach of air quality conditions listed in Condition 74 or cause significant adverse effects on the environment. The following information must be supplied:

    a. Details of the nature of the discharge;

    b. An explanation of the cause of the incident; and

    c. Details of any remediation action taken.

82. All air quality complaints that are received must be recorded and notified to the Council within one working day of the complaint. The recorded complaint details must include:

    a. The date, time, location and nature of the complaint;

    b. The name, phone number and address of the complainant, unless the complainant elects not to supply these details;

    c. The log entry of any visual inspections of the exhaust emissions that took place on the day of the complaint; and

    d. Any remedial actions undertaken.

Advice notes (from original consent BUN60422974)

1. *Any reference to number of days within this decision refers to working days as defined in s2 of the RMA.*

2. *For the purpose of compliance with the conditions of consent, "the Council" refers to the council's monitoring officer unless otherwise specified. Please email monitoring@aucklandcouncil.govt.nz to identify your allocated officer.*

3. *If you disagree with any of the above conditions, and/or disagree with the additional charges relating to the processing of the application(s), you have a right of objection pursuant to sections 357A and/or 357B of the Resource Management Act 1991. Any objection must be made in writing to the council within 15 working days of your receipt of this decision (for s357A) or receipt of the council invoice (for s357B).*

4. *The consent holder is advised that the Council Community Facilities Urban Forest Specialist has delegated authority to issue a tree owner approval for removal and works to trees growing in the Council Reserve and Road Reserve. A Tree Owner Approval (TOA) from the Community Facilities Senior Urban Forest Specialist will be required prior to works commencing to give effect to this consent. Notwithstanding any condition to the contrary, all works to Council trees allowed for in this consent must be undertaken in accordance with the requirements of the Community Facilities TOA (Tree Owner Approval).*

5. *Prior to all works commencing on the site, the consent holder should engage the services of a qualified and competent arborist experienced in site development activities in close proximity to mature trees to direct, supervise and monitor all pruning and excavation activity that occurs in the root zone of protected trees for the duration of the project in accordance with standards E26.4.5.1 and E26.4.5.2.*

6. *The consent holder should ensure that all contractors, sub-contractors, and workers engaged in all activities covered by this consent are advised of the tree protection measures in the conditions of consent and operate in accordance with them.*

7. *All tree work proposed should be undertaken in accordance with, but not limited to the recommendations within the arboricultural assessment by Matthew Paul of Peers Brown Miller Ltd, dated 15/06/23. A copy of this tree report should be kept on site at all times.*

8. *The consent holder is responsible for obtaining all other necessary consents, permits, and licences, including those under the Building Act 2004, and the Heritage New Zealand Pouhere Taonga Act 2014. This consent does not remove the need to comply with all other applicable Acts (including the Property Law Act 2007 and the Health and Safety at Work Act 2015), regulations, relevant Bylaws, and rules of law. This consent does not constitute building consent approval. Please check whether a building consent is required under the Building Act 2004.*

9. *Accidental Discovery*

   If, at any time during site works, sensitive materials (koiwi/human remains, an archaeology site, a maori cultural artefact, a protected NZ object, contamination or a lava cave greater than 1m in diameter) are discovered, then the protocol set out in

standards E11.6.1 and E12.6.1 of the Auckland Unitary Plan (Operative in Part) is required to be followed. In summary these are:

a) *All works must cease in the immediate vicinity (at least 20m from the site of the discovery) and the area of the discovery must be secured including a buffer to ensure all sensitive material remains undisturbed.*

b) *The consent holder must immediately advise Council, Heritage New Zealand Pouhere Taonga and Police (if human remains are found) and arrange a site inspection with these parties.*

c) *If the discovery contains koiwi, archaeology or artefacts of Maori origin, representatives from those Iwi groups with mana whenua interest in the area are to be provided information on the nature and location of the discovery.*

d) *The consent holder must not recommence works until the steps set out in the above-mentioned standards have been followed and commencement of works approved by Council.*

10. *Heritage New Zealand Pouhere Taonga Act 2014*

The Heritage New Zealand Pouhere Taonga Act 2014 (hereafter referred to as the Act) provides for the identification, protection, preservation, and conservation of the historical and cultural heritage of New Zealand. All archaeological sites are protected by the provisions of the Act (section 42). It is unlawful to modify, damage or destroy an archaeological site without prior authority from Heritage New Zealand Pouhere Taonga. An Authority is required whether or not the land on which an archaeological site may be present is designated, a resource or building consent has been granted, or the activity is permitted under Unitary, District or Regional Plans.

According to the Act (section 6), archaeological site means, subject to section 42(3) –

any place in New Zealand, including any building or structure (or part of a building or structure), that –

1) *was associated with human activity that occurred before 1900 or is the site of the wreck of any vessel where the wreck occurred before 1900; and*

2) *provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand; and*

3) *includes a site for which a declaration is made under section 43(1).*

It is the responsibility of the consent holder to consult with Heritage New Zealand Pouhere Taonga about the requirements of the Act and obtain the necessary Authorities under the Act should these become necessary because of any activity associated with the consented works. Contact Heritage New Zealand Pouhere Taonga – 09 307 0413 / archaeologistMN@historic.org.nz.

11. *Protected Objects Act 1975*

Māori artefacts such as carvings, stone adzes, and greenstone objects are considered to be tāonga (treasures). These are taonga tūturu within the meaning of the Protected Objects Act 1975 (hereafter referred to as the Act).

According to the Act (section 2), taonga tūturu means an object that –

(a) relates to Māori culture, history, or society; and

(b) was, or appears to have been –

(i) manufactured or modified in New Zealand by Māori; or

(ii) brought into New Zealand by Māori; or

(iii) used by Māori; and

(c) is more than 50 years old.

The Ministry of Culture and Heritage administers the Act. Tāonga may be discovered in isolated contexts but is generally found in archaeological sites. The provisions of the Heritage New Zealand Pouhere Taonga Act 2014 about modifying an archaeological site should be considered by the consent holder if tāonga are found within an archaeological site, as defined by the Heritage New Zealand Pouhere Taonga Act 2014.

It is the responsibility of the consent holder to notify either the chief executive of the Ministry of Culture and Heritage or the nearest public museum, which must notify the chief executive, of the finding of the taonga tūturu, within 28 days of finding the taonga tūturu; alternatively provided that in the case of any taonga tūturu found during an archaeological investigation authorised by Heritage New Zealand Pouhere Taonga under section 48 of the Heritage New Zealand Pouhere Taonga Act 2014, the notification must be made within 28 days of the completion of the fieldwork undertaken in connection with the investigation.

Under section 11 of the Act, newly found taonga tūturu are Crown-owned in the first instance until the Māori Land Court determines ownership. Contact the Ministry of Culture and Heritage – 04 499 4229 / protected-objects@mch.govt.nz.

12. *Including Unrecorded Archaeological Sites within the Cultural Heritage Inventory*

If any unrecorded archaeological sites are exposed because of the consented work, then these sites should be recorded by the consent holder for inclusion within the Councils' Cultural Heritage Inventory. The consent holder must prepare documentation suitable for inclusion in the Cultural Heritage Inventory and forward the information to the Council within 1 calendar month of the completion of work on the site.