



APPENDIX Q - Statutory Assessment

Queen Street Wastewater Diversion Project – Part 3

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The following provides an assessment of the project works in relation to the following matters from the Auckland Unitary Plan:

- Objectives and Policies of the Regional Policy Statement
- Non-RPS Objectives and Policies
- Standards
- Assessment Criteria

A summary of the assessment is provided within Section 12 of the AEE.

Regional Policy Statement

The following is an assessment of the project works against the relevant provisions of the Regional Policy Statement.

Regional Policy Statement - Auckland Unitary Plan Chapter B		
Provision		Response/ comment
B2.2 Urban Growth and Form		
B2.2.1 Objectives		
(1)	A quality compact urban form that enables all of the following: <ul style="list-style-type: none"> a) higher-quality urban environment; b) greater productivity and economic growth; c) better use of existing infrastructure and efficient provision of new infrastructure; d) improved and more effective public transport; e) greater social and cultural vitality; f) better maintenance of rural character and rural productivity; and g) reduced adverse environmental effects. 	<p>The installation of a new wastewater pipeline in the city centre will reduce adverse effects on the stormwater system which currently impacted by overflows of the wastewater network.</p> <p>At present, these wastewater overflows can disturb the City Centre with odour and exposure to contaminants. These works will resolve these potential harms and create a higher-quality urban environment.</p>
(5)	The development of land within the Rural Urban Boundary, towns, and rural and coastal towns and villages is integrated with the provision of appropriate infrastructure.	
B2.2.2 Policies		
(5)	Quality compact urban form Enable higher residential intensification: <ul style="list-style-type: none"> (a) in and around centres; (b) close to public transport, social facilities and employment opportunities 	Increasing wastewater capacity will provide the necessary infrastructure to support urban population growth. Located in the heart of Auckland's City Centre, this project will enable a greater population of people to live and work around Queen Street and adjacent areas.
B3.2 Infrastructure		
B3.2.1 Objectives		
(1)	Infrastructure is resilient, efficient and effective.	



(3)	Development, operation, maintenance, and upgrading of infrastructure is enabled, while managing adverse effects on: a. the quality of the environment and, in particular, natural and physical resources that have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character; b. the health and safety of communities and amenity values.	The purpose of this project is to improve the resilience of the wastewater network. In achieving this result, a carefully developed construction methodology has been selected to minimise adverse effects to the environment.
(4)	The functional and operational needs of infrastructure are recognised.	
(8)	The adverse effects of infrastructure are avoided, remedied or mitigated.	
B3.2.2 Policies		
(1) (3)	Provision of infrastructure Enable the efficient development, operation, maintenance and upgrading of infrastructure. Provide for the locational requirements of infrastructure by recognising that it can have a functional or operational need to be located in areas with natural and physical resources that have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character.	While the site location on Queen Street is recognised to be a busy central city location, construction works are required to occur here in order to improve the network of this particular locality. A trenchless construction methodology has been specifically chosen for its lesser impact on the streetscape compared to trenching methods.
(6) (7) (8)	Managing adverse effects Enable the development, operation, maintenance and upgrading of infrastructure in areas with natural and physical resources that have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character while ensuring that the adverse effects on the values of such areas are avoided where practicable or otherwise remedied or mitigated. Encourage the co-location of infrastructure and the shared use of existing infrastructure corridors where this is safe and satisfies operational and technical requirements. Avoid, remedy or mitigate the adverse effects from the construction, operation, maintenance or repair of infrastructure.	As detailed within the AEE, the project site includes the covered Horotiu Stream, scheduled as a site of significance for Mana Whenua under the AUP. Mana Whenua have been engaged with by Watercare and informed of the Project's limited impact on the underground stream. To date, Mana Whenua have not identified any cultural effects resulting from the project, due to its location in the road reserve of a highly urban area.

AUP Objectives and Policies (non-RPS)

The following provides an assessment of the project works against the relevant objectives and policies of the AUP. The relevant objectives and policies of the following chapters of the AUP have been considered

- D17 Historic Heritage
- E7 Taking, using, damming and diversion of water and drilling
- E12 Land Disturbance – District
- E14 Air Quality
- E26 Network Utilities
- E30 Contaminated Land



Provision		Response
D17 Historic Heritage		
Objectives		
(1)	The protection, maintenance, restoration and conservation of scheduled historic heritage places is supported and enabled.	<p>Earthworks required within the Historic Heritage overlay will be controlled to have a no more than minor effect on the scheduled historic heritage places of:</p> <ul style="list-style-type: none"> • Former John Courts Building, 210 Queen Street (ID 2037) • Civic Theatre, 269-285 Queen Street (ID 2040) • Civic House and Ferguson Building, 291-297 Queen Street (ID 2041) • Auckland Town Hall, 301-317 Queen Street (ID 2043) • Auckland Sunday School Union Building, 323-327 Queen Street (ID 2045)
(2)	Scheduled historic heritage places are protected from inappropriate subdivision, use and development, including inappropriate modification, relocation, demolition or destruction.	
(3)	Appropriate subdivision, use and development, including adaptation of scheduled historic heritage places, is enabled.	
Policies		
Infrastructure		
(24)	Enable the operation, maintenance, repair and upgrading of network utilities and small-scale electricity generation facilities, and connections to buildings for network utilities within scheduled historic heritage places in a manner that avoids, remedies or mitigates new adverse effects on the heritage values.	<p>Earthworks required within the scheduled historic heritage extent of place are required to enable the installation of a new wastewater diversion serving the city centre's population.</p> <p>Earthworks will take place in the footpath subject to the Historic Heritage Overlay in the AUP maps. These works will avoid the historic buildings to which the overlay relates and incur no effect on their heritage values.</p>
(25)	Enable the establishment of network utilities and small-scale electricity generation facilities within scheduled historic heritage places where all of the following apply: <ul style="list-style-type: none"> (a) there is a functional need or operational constraint that necessitates their location within a scheduled historic heritage place; (b) significant adverse effects on the heritage values of the place are avoided where practicable; and (c) other adverse effects are avoided, remedied or mitigated. 	
(26)	Avoid the relocation and total or substantial demolition or destruction of features within a scheduled historic heritage place to provide for network utilities and electricity generation facilities unless all of the following apply: <ul style="list-style-type: none"> (a) a functional need or operational constraint limits available alternatives; (b) there is no reasonable practicable alternative; (c) the infrastructure will provide a significant public benefit that could not otherwise be achieved; and (d) the adverse effects on the heritage values of a place are minimised to the extent practicable. 	



E1 Water quality and Integrated management		
<i>Note: Activities listed in Chapter E7 relate to the objectives and policies listed in Chapters E1 and E2. The objectives and policies relating to wastewater management have been included below.</i>		
E1.2 Objectives		
(3)	Stormwater and wastewater networks are managed to protect public health and safety and to prevent or minimise adverse effects of contaminants on freshwater and coastal water quality.	Installation of this wastewater pipeline will protect public health and safety by reducing the current occurrence of overflows into the stormwater network. Without this upgrade, current overflows may potentially harm freshwater and coastal water ecosystems.
E1.3 Policies		
(19)	Wastewater network overflow discharges Ensure wastewater networks are designed and operated to minimise wet weather overflows by: <ul style="list-style-type: none"> a) requiring wastewater networks to be designed and constructed in accordance with recognised industry standards, including being sized to cater for the maximum probable development level of the area to be serviced; b) requiring the management of connections to the wastewater network; c) requiring wastewater networks to be managed in accordance with a network operations plan including an overflow mitigation plan with clear requirements and timeframes; and d) designing and locating overflow points to minimise nuisance, damage, public health risk and adverse ecological effects. 	In upgrading the capacity of Auckland city centre's wastewater network, the Project's purpose is to minimise wastewater overflows into the stormwater network in wet weather events. As such, the existing nuisance, public health risk and ecological effects will be reduced.
E2 Water Allocation and Use (Activities in Chapter E7 refer to the policies of E2)		
E2.2 Objectives		
(1)	Water in surface rivers and groundwater aquifers is available for use provided the natural values of water are maintained and established limits are not exceeded.	This project involves the diversion of wastewater to increase overall capacity of the city centre's network. Hence this proposal is not contrary to the objectives and Policies of Chapter E2 relating to water allocation and use. As described in the AEE, dewatering will be required as part of shaft construction works. The method for construction is trenchless via pipejacking. This is a water efficient method of pipe laying as it requires less excavation and reduces the amount of water required for dewatering. As mentioned, the Horotiu Stream is scheduled as a site of significance for Mana Whenua under the AUP. Mana Whenua have been engaged with by Watercare and informed of the Project's limited impact on the underground stream. To date, Mana Whenua have not identified any cultural effects on the mauri of the water resulting from the project, due to its location in the road reserve of a highly urban area.
(2)	Water resources are managed within limits to meet current and future water needs for social, cultural and economic purposes.	
(3)	N/A	
(4)	Water resources are managed to maximise the efficient allocation and efficient use of available water.	
(5)	Mana Whenua values including the mauri of water, are acknowledged in the allocation and use of water.	
E2.3 Policies		
(7)	Require all proposals to take and use groundwater from any aquifer to demonstrate that: <ul style="list-style-type: none"> a) the taking is within the water availabilities and levels for the aquifer in Table 1 Aquifer water availabilities and Table 2 Interim 	An assessment of groundwater drawdown effects has been undertaken, which considers effects on surface water flows, freshwater ecosystems, saltwater intrusion and neighbouring bores. Overall, it is considered that the proposed take of groundwater during construction will have a negligible effects on the matters.

	<p>aquifer groundwater levels in Appendix 3 Aquifer water availabilities and levels, except in accordance with Policy E2.3(11), and meeting all of the following:</p> <ul style="list-style-type: none"> (i) recharge to other aquifers is maintained; and (ii) aquifer consolidation and surface subsidence is avoided. <p>b) the taking will avoid, remedy or mitigate adverse effects on surface water flows, including the following:</p> <ul style="list-style-type: none"> (i) base flow of rivers, streams and springs; and (ii) any river or stream flow requirements and in particular the minimum stream flow and availability in Appendix 2 River and stream minimum flow and availability. <p>c) the taking will avoid, remedy or mitigate adverse effects on terrestrial and freshwater ecosystem habitat;</p> <p>d) the taking will not cause saltwater intrusion or any other contamination;</p> <p>e) the taking will not cause adverse interference effects on neighbouring bores to the extent their owners are prevented from exercising their lawfully established water takes;</p> <p>f) Policy E2.3(7)(e) above will not apply in the following circumstances:</p> <ul style="list-style-type: none"> (i) where it is practicably possible to locate the pump intake at a greater depth within the affected bore; or (ii) where it can be demonstrated that the affected bore accesses, or could access, groundwater at a deeper level within the same aquifer, if drilled or cased to a greater depth. <p>g) the proposed bore is capable of extracting the quantity of groundwater applied for; and</p> <p>h) the proposal avoids, remedies or mitigates any ground settlement that may cause distress, including reducing the ability of an existing building or structure to meet the relevant requirements of the Building Act 2004 or the New Zealand Building Code, to any existing:</p> <ul style="list-style-type: none"> (i) buildings; (ii) structures; or (iii) services including roads, pavements, power, gas, electricity, water and wastewater networks and fibre-optic cables. 	<p>Settlement effects on neighbouring buildings and structures is also assessed as negligible, and monitoring during construction is proposed to ensure no unexpected effects occur.</p>
(23)	<p>Diversion of Groundwater</p> <p>Require proposals to divert groundwater, in addition to the matters addressed in Policy E2.3 (6) and (7) above, to ensure that:</p> <ul style="list-style-type: none"> (a) the proposal avoids, remedies or mitigates any adverse effects on: 	<p>As detailed in Appendix N, any adverse effect on cultural and built heritage have been appropriately mitigated against. These measures include:</p> <ul style="list-style-type: none"> • Consultation with HNZPT. • Pre and post condition surveys for identified properties • Groundwater and settlement monitoring



	<ul style="list-style-type: none"> (i) scheduled historic heritage places and scheduled sites and places of significance to Mana Whenua; and (ii) people and communities. (b) the groundwater diversion does not cause or exacerbate any flooding; (c) monitoring has been incorporated where appropriate, including: <ul style="list-style-type: none"> (i) measurement and recording of water levels and pressures; and (ii) measurement and recording of the movement of ground, buildings and other structures. (d) mitigation has been incorporated where appropriate including: <ul style="list-style-type: none"> (i) minimising the period where the excavation is open/unsealed; (ii) use of low permeability perimeter walls and floors; (iii) use of temporary and permanent systems to retain the excavation; or (iv) re-injection of water to maintain groundwater pressures. 	<p>Once constructed, the new wastewater pipeline will not interfere with existing floodplains as the installation will be entirely underground. See Section Error! Reference source not found. and 10.7.</p> <p>During construction, flooding effects from a significant rainfall event may be increased if unmitigated at the CSA sites, as assessed in in Appendix I.</p> <p>As part of the ESCP, hot mix bunds will be configured to divert flood flows through or around the CSA sites. In addition, silt socks will be placed along the northern boundary of the CSA site at Wellesley Street. This mitigation will prevent diverted wet weather flows from entering nearby buildings.</p>
E11 Land disturbance – regional (includes Policies and Objective of E12 Land disturbance- district)		
E11.2 Objectives		
(1)	Land disturbance is undertaken in a manner that protects the safety of people and avoids, remedies or mitigates adverse effects on the environment.	<p>The trenchless construction methodology has been selected for its minimised disturbance of activities at street level compared to open-cut alternatives.</p> <p>An ESCP has been prepared to ensure any adverse effects caused by land disturbance have been appropriately mitigated.</p>
(2)	Sediment generation from land disturbance is minimised.	
(3)	Land disturbance is controlled to achieve soil conservation.	
E11.3 Policies		
(1)	Avoid where practicable, and otherwise mitigate, or where appropriate, remedy adverse effects on areas where there are natural and physical resources that have been scheduled in the Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character.	<p>The project's Erosion and Sediment Control Plan has been developed in accord with Auckland Council's guideline <i>GD05 - Erosion and Sediment Control Guide for Land Disturbing Activities</i>.</p> <p>From this guidance, specific mitigation measures will be integrated into the project works to control land disturbance. These include:</p> <ul style="list-style-type: none"> • Clean water diversion • Dirty water diversion • Stabilised entrances • Construction discharge locations <p>As a result, earthworks associated with the proposal have been designed to avoid temporary adverse effects from the discharge of sediment via the above erosion and sediment control measures.</p> <p>All groundwater that is pumped from the shaft locations will be treated as required and discharge to the stormwater network.</p>
(2)	<p>Manage land disturbance to:</p> <ul style="list-style-type: none"> (a) retain soil and sediment on the land by the use of best practicable options for sediment and erosion control appropriate to the nature and scale of the activity; (b) manage the amount of land being disturbed at any one time, particularly where the soil type, topography and location is likely to result in increased sediment runoff or discharge; (c) avoid, remedy or mitigate adverse effects on accidentally discovered sensitive material; and (d) maintain the cultural and spiritual values of Mana Whenua in terms of land and water quality, preservation of wāhi tapu, and kaimoana gathering. 	
(3)	Manage the impact on Mana Whenua cultural heritage that is discovered undertaking land disturbance by:	

	<ul style="list-style-type: none"> (a) requiring a protocol for the accidental discovery of kōiwi, archaeology and artefacts of Māori origin; (b) undertaking appropriate actions in accordance with mātauranga and tikanga Māori; and (c) undertaking appropriate measures to avoid adverse effects. Where adverse effects cannot be avoided, effects are remedied or mitigated. 	
(4)	Enable land disturbance necessary for a range of activities undertaken to provide for people and communities social, economic and cultural well-being, and their health and safety.	
(5)	Design and implement earthworks with recognition of existing environmental site constraints and opportunities, specific engineering requirements, and implementation of integrated water principles.	
(6)	Require that earthworks are designed and undertaken in a manner that ensures the stability and safety of surrounding land, buildings and structures.	
(7)	<p>Require any land disturbance that will likely result in the discharge of sediment laden water to a surface water body or to coastal water to demonstrate that sediment discharge has been minimised to the extent practicable, having regard to the quality of the environment; with:</p> <ul style="list-style-type: none"> (a) any significant adverse effects avoided, and other effects avoided, remedied or mitigated, particularly in areas where there is: <ul style="list-style-type: none"> (i) high recreational use; (ii) relevant initiatives by Mana Whenua, established under regulations relating to the conservation or management of fisheries, including taiāpure, rāhui or whakatupu areas; (iii) the collection of fish and shellfish for consumption; (iv) maintenance dredging; or (v) a downstream receiving environment that is sensitive to sediment accumulation; 	

E14 Air Quality

E14.2 Objectives

(1)	Air quality is maintained in those parts of Auckland that have high air quality, and air quality is improved in those parts of Auckland that have low to medium air quality.	A diesel generator will be employed at the Greys Avenue CSA site to support construction works and a connection to electrical mains power is not feasible.
(2)	Human health, property and the environment are protected from significant adverse effects from the discharge of contaminants to air.	Temporary emissions resulting from the combustion of the diesel generator is not anticipated to alter air quality in any way that would jeopardise human health, property or the environment.
(3)	Incompatible uses and development are separated to manage adverse effects on air quality from discharges of contaminants into air and avoid or mitigate reverse sensitivity effects.	
(4)	The operational requirements of light and heavy industry, other location-specific industry, infrastructure, rural activities and mineral	



	extraction activities are recognised and provided for.		
E14.3 Policies			
(1)	Manage the discharge of contaminants to air, including by having regard to the Auckland Ambient Air Quality Targets in Table E14.3.1, so that significant adverse effects on human health, including cumulative adverse effects, are avoided, and all other adverse effects are remedied or mitigated.	<p>Use of a diesel generator is commonplace for a construction project of this nature and will result on a temporary discharge only.</p> <p>The generator will be located away from the boundary of any neighbouring properties to reduce potential effects on the air quality of neighbouring properties. The generator will be subject to a prestart check before it is commissioned on site, and will be serviced by the contractors as per the supplier's recommendations. Any malfunctions will be repaired within 24 hours of detection. Emissions from the generator will be visually monitored for particulate matter to ensure the fuel is combusting efficiently.</p> <p>If unexpected odour is detected during construction works then operation of the generator will cease and measures to address the odour will be investigated and implemented.</p>	
(2)	<p>In the coastal marine area and in urban and rural zones, except for those zones and precincts subject to policies E14.3(3) to (5):</p> <p>(b) avoid offensive or objectionable effects from dust and odour discharges and remedy or mitigate all other adverse effects of dust and odour discharges; or</p> <p>(c) require adequate separation distance between use and development which discharges dust and odour to air and activities that are sensitive to adverse effects of dust and odour discharges, or both of the above.</p>		
(3-7)	N/A		
(8)	<p>Avoid, remedy or mitigate the adverse effects on air quality from discharges of contaminants into air by:</p> <p>(a) using the best practicable option for emission control and management practices that are appropriate to the scale of the discharge and potential adverse effects; and</p> <p>(b) adopting a precautionary approach, where there is uncertainty and a risk of significant adverse effects or irreversible harm to the environment from air discharges.</p>		
(9)	<p>Avoid, remedy or mitigate the adverse effects on air quality beyond the boundary of the premises where the discharge of contaminants to air is occurring, in relation to:</p> <p>(a) noxious or dangerous effects on human health, property or the environment from hazardous air pollutants; or</p> <p>(b) overspray effects on human health, property or the environment.</p>		
(10)	N/A		
(11)	Enable the use of air quality offsets in achieving compliance with relevant standards and other provisions in the plan.		
E26 Infrastructure			
E26.2.1 Network Utilities and Electricity Generation Objectives			
(1)	The benefits of infrastructure are recognised.		<p>In achieving its purpose to upgrade the city centre's wastewater network, this project inherently enables access to vital infrastructure.</p> <p>This project will improve resilience of both the wastewater and stormwater networks by reducing the</p>
(2)	The value of investment in infrastructure is recognised.		
(3)	Safe, efficient and secure infrastructure is enabled, to service the needs of existing and authorised proposed subdivision, use and development.		



(4)	Development, operation, maintenance, repair, replacement, renewal, upgrading and removal of infrastructure is enabled.	frequency of wet weather overflows in the upper catchment of Auckland City Centre.
(5)	The resilience of infrastructure is improved and continuity of service is enabled.	
(6)	Infrastructure is appropriately protected from incompatible subdivision, use and development, and reverse sensitivity effects.	
(9)	The adverse effects of infrastructure are avoided, remedied or mitigated.	
E26.2.2 Network Utilities and Electricity Generation Policies		
(1)	<p>Recognise the social, economic, cultural and environmental benefits that infrastructure provides, including:</p> <ul style="list-style-type: none"> (a) enabling enhancement of the quality of life and standard of living for people and communities; (b) providing for public health and safety; (c) enabling the functioning of businesses; (d) enabling economic growth; (e) enabling growth and development; (f) protecting and enhancing the environment; (g) enabling the transportation of freight, goods, people; and (h) enabling interaction and communication. 	<p>Fundamentally, this project serves the community by providing urgently needed wastewater infrastructure in an already highly modified urban environment.</p> <p>This project will enhance the liveability of Queen Street and the surrounding precinct. Without these works, the wastewater network will incur increasing overflow incidents, jeopardising public health and safety.</p> <p>Installed fully underground, the new pipeline will have no permanent visual effects on the already highly modified urban landscape.</p> <p>While part of the project area will occur within a scheduled site of significance to mana whenua (Horotiu Stream), all works will occur within a previously disturbed road corridor, which will be restored to the previous condition.</p>
(2)	<p>Provide for the development, operation, maintenance, repair, upgrade and removal of infrastructure throughout Auckland by recognising:</p> <ul style="list-style-type: none"> (a) functional and operational needs; (b) location, route and design needs and constraints; (c) the complexity and interconnectedness of infrastructure services; (d) the benefits of infrastructure to communities within Auckland and beyond; (e) the need to quickly restore disrupted services; and (f) its role in servicing existing, consented and planned development. 	<p>Unavoidable adverse effects of this proposal have been adequately mitigated against, as summarised in Section 10 of the AEE.</p>
(4)	<p>Adverse effects of infrastructure</p> <p>Require the development, operation, maintenance, repair, upgrading and removal of infrastructure to avoid, remedy or mitigate adverse effects, including, on the:</p> <ul style="list-style-type: none"> (a) health, well-being and safety of people and communities, including nuisance from noise, vibration, dust and odour emissions and light spill; (b) safe and efficient operation of other infrastructure; (c) amenity values of the streetscape and adjoining properties; (d) environment from temporary and ongoing discharges; and (e) values for which a site has been scheduled or incorporated in an overlay. 	
(5)	Consider the following matters when assessing the effects of infrastructure:	

	<ul style="list-style-type: none"> (f) the degree to which the environment has already been modified; (g) the nature, duration, timing and frequency of the adverse effects; (h) the impact on the network and levels of service if the work is not undertaken; (i) the need for the infrastructure in the context of the wider network; and (j) the benefits provided by the infrastructure to the communities within Auckland and beyond. 	
(6)	<p>Consider the following matters where new infrastructure or major upgrades to infrastructure are proposed within areas that have been scheduled in the Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character:</p> <ul style="list-style-type: none"> (a) the economic, cultural and social benefits derived from infrastructure and the adverse effects of not providing the infrastructure; (b) whether the infrastructure has a functional or operational need to be located in or traverse the proposed location; (c) the need for utility connections across or through such areas to enable an effective and efficient network; (d) whether there are any practicable alternative locations, routes or designs, which would avoid, or reduce adverse effects on the values of those places, while having regard to E26.2.2(6)(a) - (c); (e) the extent of existing adverse effects and potential cumulative adverse effects; (f) how the proposed infrastructure contributes to the strategic form or function, or enables the planned growth and intensification, of Auckland; (g) the type, scale and extent of adverse effects on the identified values of the area or feature, taking into account: <ul style="list-style-type: none"> (i) scheduled sites and places of significance and value to Mana Whenua; (ii) significant public open space areas, including harbours; (iii) hilltops and high points that are publicly accessible scenic lookouts; (iv) high-use recreation areas; (v) natural ecosystems and habitats; and (vi) the extent to which the proposed infrastructure or upgrade can avoid adverse effects on the values of the area, and where these adverse effects cannot practicably be avoided, then the extent to which adverse effects on the values of the area can be appropriately remedied or mitigated. (vii) whether adverse effects on the identified values of the area or feature must be avoided pursuant to any 	

	national policy statement, national environmental standard, or regional policy statement.	
(7)	<p>Enable the following activities within natural heritage, natural resources, coastal environment, historic heritage, special character and Mana Whenua cultural heritage overlays:</p> <ul style="list-style-type: none"> (a) the use and operation of existing infrastructure; and (b) the minor upgrading, maintenance and repair of existing infrastructure, while ensuring that the adverse effects on the values of the area are avoided and where those effects cannot practicably be avoided, minimise any such effects and ensure they are appropriately remedied or mitigated. 	<p>The pipeline is to be installed underground within the road reserve.</p> <p>Part of this alignment crosses through a recognised site of significance for Mana Whenua, the covered Horotiu Stream. Watercare have engaged with Mana Whenua regularly throughout planning of these works to ensure they are aware of the infrastructure's positive impact.</p>
(8)	Encourage new linear infrastructure to be located in roads, and where practicable within the road reserve adjacent to the carriage way.	
E30 Contaminated Land		
E30.2 Objectives		
(1)	The discharge of contaminants from contaminated land into air, or into water, or onto or into land are managed to protect the environment and human health and to enable land to be used for suitable activities now and in the future.	<p>Extensive investigation has been carried out to ensure no discharge of contaminants harms human or environmental health as part of these works.</p> <p>Detailed in Section 10.4 of this report, a PSI and DSI have been completed to establish locations where soil containing contaminants may exist and application of NES CS and AUP requirements is necessary.</p> <p>An SMP will be developed as a condition of consent which will outline the procedures and processes to be undertaken to manage soil disturbance and disposal near BH22/01 and BH22/08, and any unexpected soil contamination.</p>
E30.3 Policies		
(1)	Identify and record the details of land containing elevated levels of contaminants in a public register.	Extensive investigation has been carried out to ensure no discharge of contaminants harms human or environmental health as part of these works.
(2)	<p>Require any use or development of land containing elevated levels of contaminants resulting in discharges to air, land or water to manage or remediate the contamination to a level that:</p> <ul style="list-style-type: none"> a) allows contaminants to remain in the ground/groundwater, where it can be demonstrated that the level of residual contamination is not reasonably likely to pose a significant adverse effect on human health or the environment; and b) avoids adverse effects on potable water supplies; and c) avoids, remedies or mitigates significant adverse effects on ecological values, water quality, human health and amenity values; while d) taking into account all of the following; e) the physical constraints of the site and operational practicalities; 	<p>As detailed in the AEE, a PSI and DSI have been completed to establish locations where soil containing contaminants may exist and application of NES CS and AUP requirements is necessary.</p> <p>An SMP will be developed as a condition of consent which will outline the procedures and processes to be undertaken to manage soil disturbance and disposal near BH22/01 and BH22/08, and any unexpected soil contamination.</p>



	<p>f) the financial implications of the investigation, remediation, management and monitoring options;</p> <p>g) the use of best practice contaminated land management, including the preparation and consideration of preliminary and detailed site investigations, remedial action plans, site validation reports and site management plans for the identification, monitoring and remediation of contaminated land; and</p> <p>h) whether adequate measures are in place for the transport, disposal and tracking of contaminated soil and other contaminated material removed from a site to prevent adverse effects on the environment.</p>	
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AUP Standards

The following table provides an assessment of the proposed works against the relevant standards of the AUP. For the avoidance of confusion, standards relating to the permitted activities have been detailed in Appendix E. Please note that not all activity rules have applicable standards for consideration against.

AUP Activity Standards		
Standards		Response
<p>Note: No standards apply to restricted discretionary activities under Activity Rule D17.4.1. Modifications to features of a scheduled historic heritage place. No standards apply for earthworks relating to network utilities under Chapter E12 or E26.</p>		
<p>Activity Rule E7.4.1 (A28): Restricted discretionary Diversion of groundwater caused by any excavation, (including trench) or tunnel that does not meet the permitted activity standard</p>		
<p>E7.6.3 Restricted Discretionary Standards E7.6.3.3. Take and use of groundwater</p>		
(1)	The water take must not be geothermal water.	The proposed works do not involve geothermal water nor the replacement of an existing consent.
(2)	<p>The replacement of an existing resource consent to take and use groundwater for municipal water supply purposes:</p> <p>(a) at the time of the application, the take is an authorised take;</p> <p>(b) a water management plan has been prepared;</p> <p>(c) the take will not result in the water availabilities and levels in Table 1 Aquifer water availabilities and Table 2 Aquifer groundwater levels, in Appendix 3 Aquifer water availabilities and levels being exceeded, except in accordance with E2 Water quantity, allocation and use Policy E2.3(11); and</p> <p>(d) the take must not be from an area in the Wetland Management Areas Overlay.</p>	
<p>Rule E14.4.1 (A52) Controlled Activity Medium combustion sources established from 1 May 2014 fuelled by diesel in an internal combustion engine/generator, with a total gross heat release of more than 500kW and not exceeding 10MW.</p>		



(1)	There must be no visible emissions resulting from the combustion process other than heat haze and clean steam.	The diesel generator employed on site to power dewatering equipment will be managed to produce no visible emissions other than heat haze. The emission of diesel will not be impeding by a rain excluder.
(2)	N/A	
(3)	Rain excluders must not impede the upward discharge of combustion gases.	
(4-6)	N/A	
Activity Rule E30.4.1 (A6): Controlled standards		
Discharge of contaminants into the air, water or land that does not meet the permitted activity standard		
E30.6.2.1. Discharges of contaminants into air, or into water, or onto or into land not meeting permitted activity standards E30.6.1.1; E30.6.1.2; E30.6.1.3; E30.6.1.4; or E30.6.1.5		
(1)	A detailed site investigation (contaminated land) must be prepared and submitted to Council for consideration.	A DSI has been carried out at site and summarised within the AEE.
(2)	A site management plan (contaminated land) must be prepared and submitted to Council for consideration.	
(3)	A remedial action plan (contaminated land), relevant to the site and the proposed disturbance or remediation must be prepared and submitted to Council for consideration.	
(4)	The report on the detailed site investigation (contaminated land) must state either that: <ul style="list-style-type: none"> a) the concentrations of soluble contaminants in any of the following: <ul style="list-style-type: none"> i. <i>overland stormwater at the site boundary,</i> ii. <i>surface water within the site, or</i> iii. <i>groundwater at the site boundary must not exceed the guideline values specified in Table 3.4.1 Trigger values for toxicants at alternative levels of protection in the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC 2000 Guidelines) for marine or freshwater, where relevant, at the level of protection for 80 per cent of species, except for benzene where 95 per cent of species shall apply; or</i> b) discharges from the land are highly unlikely to cause significant adverse effects on the environment; or c) the contamination associated with the land must be contained beneath a continuous impervious layer and must be located above the highest seasonal groundwater level beneath the site. 	

AUP Assessment Criteria

The following is an assessment of the applicable activities against the assessment criteria provided within the AUP.

AUP

Restricted Discretionary Activity Assessment Criteria

Rule D17.4.1 (A9): Restricted Discretionary

Modification to features of a scheduled historic heritage place

<p>(1)</p>	<p>For restricted discretionary activities in Table D17.4.1 Activity table – Activities affecting Category A, A* and B scheduled places, Table D17.4.2 Activity table -Activities subject to additional archaeological rules and Table D17.4.3 Activity table – Activities in Historic Heritage Areas:</p> <ul style="list-style-type: none"> (a) whether the proposed works will result in adverse effects (including cumulative adverse effects) on the heritage values of the place and the extent to which adverse effects are avoided, remedied or mitigated; (b) whether the proposed works will maintain or enhance the heritage values of the place, including by: <ul style="list-style-type: none"> (i) <i>avoiding or minimising the loss of fabric that contributes to the significance of the place;</i> (ii) <i>removing features that compromise the heritage values of the place;</i> (iii) <i>avoiding significant adverse effects on the place, having regard to the matters set out in B5 Historic heritage and special character;</i> (iv) <i>complementing the form and fabric which contributes to, or is associated with, the heritage values of the place; and</i> (v) <i>recovering or revealing the heritage values of the place.</i> (c) whether the proposed works will compromise the ability to interpret features within the place and the relationship of the place to other scheduled historic heritage places; (d) whether the proposed works, including the cumulative effects of proposed works, will result in adverse effects on the overall significance of the place such that it no longer meets the significance thresholds for which it was scheduled; (e) whether the proposed works will be undertaken in accordance with good practice conservation principles and methods appropriate to the heritage values of the place; (f) whether the proposal contributes to, or encourages, the long-term viability and/or ongoing functional use of the place; (g) whether modifications to buildings, structures, or features specifically for seismic strengthening: <ul style="list-style-type: none"> (i) <i>consider any practicable alternative methods available to achieve the necessary seismic standard that will reduce the extent of adverse effects on the significance of the place; and</i> 	<p>Earthworks required within the scheduled historic heritage extent of place are required to enable the installation of a new wastewater diversion serving the city centre’s population.</p> <p>Earthworks will take place in the footpath subject to the Historic Heritage Overlay in the AUP maps. These works will avoid the historic buildings to which the overlay relates and incur no effect on their heritage values.</p>
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	<ul style="list-style-type: none"> (ii) <i>take into account the circumstances relating to the ongoing use and retention of the place that affect the level of seismic resilience that is necessary to be achieved.</i> (h) whether the proposed relocation of features, within or beyond scheduled extents of place, in addition to the criteria above; (i) <i>is necessary in order to provide for significant public benefit that could not otherwise be achieved; and</i> (ii) <i>the significant public benefit outweighs the retention of the feature in its existing location within the extent of place.</i> 	
<p>Rule E7.4.1 (A20): Restricted Discretionary Dewatering or groundwater level control associated with a groundwater diversion authorised as a restricted discretionary activity under the Unitary Plan, not meeting permitted activity standards or is not otherwise listed.</p> <p>&</p> <p>Rule E7.4.1 (A28): Restricted Discretionary Diversion of groundwater caused by any excavation, (including trench) or tunnel that does not meet the permitted activity standards.</p>		
(1)	<p>all restricted discretionary activities:</p> <ul style="list-style-type: none"> (a) the extent to which any effects on Mana Whenua values are avoided, remedied or mitigated; (b) the extent to which the proposal will be consistent with the management of allocation of freshwater within the guidelines provided by Appendix 2 River and stream minimum flow and availability and Appendix 3 Aquifer water availabilities and levels, and give priority to making fresh water available for the following uses (in descending order of priority): <ul style="list-style-type: none"> i. <i>existing and reasonably foreseeable domestic and municipal water supply and animal drinking water requirements;</i> ii. <i>existing lawfully established water users;</i> iii. <i>uses of water for which alternative water sources are unavailable or unsuitable;</i> iv. <i>all other uses</i> 	<p>The proposed works do not involve the use of fresh or geothermal water from a lake, river, spring, stream or wetland.</p> <p>An assessment of effects is contained in Appendix F and considers that adverse effects will be less than minor.</p> <p>Monitoring of groundwater drawdown and settlement effects during construction is proposed to ensure that no unexpected effects occur.</p>
(2)	<p>Whether the proposal promotes the efficient use of freshwater and geothermal water by:</p> <ul style="list-style-type: none"> (a) ensuring the amount of water taken and used is reasonable and justifiable with regard to the intended use, and where appropriate: 	

	<ul style="list-style-type: none"> i. <i>municipal water supplies are supported by a water management plan</i> ii. <i>an industrial and irrigation supply implements best practice in respect of the efficient use of water for that particular activity or industry</i> iii. <i>all takes (other than for municipal water supply from dams) are limited to a maximum annual allocation based on estimated water requirements</i> <p>(b) considers water conservation and thermal efficiency methods</p> <p>(c) encourages the shared use and management of water within a water user groups or other arrangement where it will result in an increased efficiency in the use and allocation of water.</p>	
(4)	<p>Whether the proposal to take and use groundwater from any aquifer demonstrates that:</p> <p>(a) the take is within the water availabilities and levels for the aquifer in Table 1 Aquifer water availabilities and Table 2 Aquifer groundwater levels, in Appendix 3 Aquifer water availabilities and levels and:</p> <ul style="list-style-type: none"> i. <i>recharge to other aquifers is maintained;</i> ii. <i>aquifer consolidation and surface subsidence is avoided;</i> <p>(b) the taking will avoid, remedy or mitigate adverse effects on surface water flows, including:</p> <ul style="list-style-type: none"> i. <i>base flow of rivers, streams and springs;</i> ii. <i>any river or stream flow requirements;</i> <p>(c) the taking will avoid, remedy or mitigate adverse effects on terrestrial and freshwater ecosystem habitat;</p> <p>(d) the taking will not cause saltwater intrusion or any other contamination;</p> <p>(e) the taking will not cause adverse interference effects on neighbouring bores to the extent their owners are prevented from exercising their lawfully established water takes;</p> <p>(f) (f) E7.8.2(5)(e)above will not apply in the following circumstances:</p> <ul style="list-style-type: none"> i. <i>where it is practicably possible to locate the pump intake at a greater depth within the affected bore;</i> ii. <i>where it can be demonstrated that the affected bore accesses, or could access, groundwater at a deeper level within the same</i> 	<p>The dewatering assessment in Appendix F details how the necessary extraction of water from the construction site will be appropriately managed. This assessment considers effects on surface water flows, freshwater ecosystems, saltwater intrusion and neighbouring bores.</p> <p>Overall, it is considered that the proposed take of groundwater during construction will have a negligible effects on the matters. Settlement effects on neighbouring buildings and structures is also assessed as negligible, and monitoring during construction is proposed to ensure no unexpected effects occur.</p> <p>The groundwater take will only occur during construction works, ensuring there will be no long term effects on the aquifer.</p>

	<p><i>aquifer, if drilled or cased to a greater depth;</i></p> <p>(g) the proposed bore is capable of extracting the quantity of groundwater applied for;</p> <p>(h) the proposal avoids, remedies or mitigates any ground settlement that may cause distress, including reducing the ability of an existing building or structure to meet the relevant requirements of the Building Act 2004 or the New Zealand Building Code, to existing:</p> <ul style="list-style-type: none"> <i>i. buildings;</i> <i>ii. structures; and</i> <i>iii. services including roads, pavements, power, gas, electricity, water supply and wastewater networks and fibre optic cables.</i> 	
(5)	<p>Whether the proposal provides mitigation options where there are significant adverse effects on the matters identified in E7.8.2(3) and (4) above, including the following:</p> <ul style="list-style-type: none"> (a) consideration of alternative locations, rates and timing of takes for both surface water and groundwater; (b) use of alternative water supplies; (c) use of water conservation methods when water shortage conditions apply; (d) provision for fish passage in rivers and streams; (e) wetland creation or enhancement of existing wetlands; (f) riparian planting; and (g) consideration of alternative designs for groundwater dewatering proposals. 	
(6)	<p>Whether the proposal to take and use surface water and groundwater will monitor the effects of the take on the quality and quantity of the freshwater resource to:</p> <ul style="list-style-type: none"> (a) measure and record water use and rate of take; (b) measure and record water flows and levels; (c) sample and assess water quality and freshwater ecology; and (d) measure and record the movement of ground, buildings and other structures. 	
(7-9)	(a) N/A	
(10)	<p>Whether the proposal to divert groundwater will ensure that:</p> <ul style="list-style-type: none"> (a) the proposal avoids, remedies or mitigates any adverse effects on: <ul style="list-style-type: none"> <i>i. scheduled historic heritage places and scheduled sites; and</i> <i>ii. people and communities;</i> (b) the groundwater diversion does not cause or exacerbate any flooding; (c) monitoring has been incorporated where appropriate, including: 	<p>The diversion of groundwater has been assessed to have negligible settlement effects on scheduled heritage places and is not anticipated to cause or exacerbate flooding. Monitoring during construction works is proposed to ensure that no unexpected effects arise.</p>

	<ul style="list-style-type: none"> i. measurement and recording of water levels and pressures; and ii. measurement and recording of the movement of ground, buildings and other structures; <p>(d) mitigation has been incorporated where appropriate including:</p> <ul style="list-style-type: none"> i. minimising the period where the excavation is open/unsealed; ii. use of low permeability perimeter walls and floors; iii. use of temporary and permanent systems to retain the excavation; and iv. re-injection of water to maintain groundwater pressures; 	
<p>Rule E14.4.1 (A52) Controlled Activity Medium combustion sources established from 1 May 2014 fuelled by diesel in an internal combustion engine/generator, with a total gross heat release of more than 500kW and not exceeding 10MW.</p>		
(1)	<p>The extent to which the discharge of contaminants into air are minimised as far as practicable, and where appropriate through:</p> <ul style="list-style-type: none"> (a) use of clean burning fuels; (b) efficient use of energy; (c) use of best practicable option emissions control; and (d) minimisation of fugitive emissions. 	<p>The diesel generator employed on site to power dewatering equipment will be managed to produce no visible emissions. Location of the generator is in the most practicable location for the operation of dewatering equipment at the Greys Avenue CSA. The generator will operate for a temporary period while construction is underway.</p>
(2)	<p>The extent to which adverse effects on health, amenity, property and the environment are avoided, remedied or mitigated including appropriate emissions control technology and management practices.</p>	
(3)	<p>Whether there are practicable location, method and options that cause less adverse effects on health, amenity, property and the environment and can still achieve the applicant's objectives.</p>	
(4)	<p>Whether the duration of the consent should be limited to address:</p> <ul style="list-style-type: none"> (a) limitations in the existing technology and emission management systems; and (b) future changes in the use and amenity of the neighbourhood. 	
<p>Rule E26.6.3.1 (A117): Restricted Discretionary Earthworks from 10m² to 2500m² and from 5m³ to 2500m³ within the Historic Heritage Overlay (RD); Rule E26.10.3.1 (A150): Restricted Discretionary Network utilities and electricity generation facilities not otherwise provided for where the site is identified as a site exception (Horotiu Stream) Rule E26.6.3.1 (A117): Discretionary Earthworks from 10m² to 2500m² and from 5m³ to 2500m³ within the Sites and Places of Significance to Mana Whenua Overlay</p>		
(1)	<p>All restricted discretionary activities:</p> <ul style="list-style-type: none"> (a) function and operational needs of and the benefits derived from, infrastructure: 	<p>Fundamentally, this project serves the community by providing urgently needed wastewater infrastructure in an already highly modified urban environment.</p> <p>This project will enhance the liveability of Queen Street and the surrounding precinct. Without these</p>

	<ul style="list-style-type: none"> (i) <i>the extent to which the functional and operational requirements of the infrastructure affects or necessitates its location, form, height and size;</i> (ii) <i>the extent to which the infrastructure or upgrade will benefit and contribute to the social, economic and cultural and environmental wellbeing of businesses, people and communities; and</i> (iii) <i>the extent to which the infrastructure improves the resilience and security of the network or utility service provided.</i> <p>(b) Visual effects</p> <ul style="list-style-type: none"> (i) <i>the extent to which the cumulative adverse visual effects of additional infrastructure on the amenity values of the streetscape and adjoining properties, are avoided, remedied or mitigated;</i> (ii) <i>the extent to which any adverse effects of the design, scale and height of the infrastructure can be internalised, modified or mitigated without compromising the functional requirements of the infrastructure;</i> (iii) <i>the extent of any effects of any building envelope infringements on privacy, overshadowing or domination of adjacent properties or roads; and</i> (iv) <i>the extent to which the visual effects of the infrastructure can be softened by landscaping without compromising the functional requirements of the infrastructure.</i> <p>(c) where located within a road, the operation and function of road network activities and effects on the amenity values of the streetscape:</p> <ul style="list-style-type: none"> (i) <i>the extent to which the infrastructure impedes, restricts or compromises the safe and efficient movement and function of transport activities within a road (including access to and from adjoining properties); and</i> (ii) <i>the extent to which infrastructure in a road adversely effects the amenity values of the</i> 	<p>works, the wastewater network will incur increasing overflow incidents, jeopardising public health and safety.</p> <p>Installed fully underground, the new pipeline will have no permanent visual effects on the already highly modified urban landscape.</p> <p>While part of the project area will occur within a scheduled site of significance to mana whenua (Horotiu Stream), all works will occur within a previously disturbed road corridor, which will be restored to the previous condition.</p> <p>Unavoidable adverse effects of this proposal have been adequately mitigated against, as summarised in Section 10 of the AEE.</p>
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	<p><i>streetscape and the function of public amenities.</i></p> <p>(d) implications in terms of future planned urban development:</p> <p>(i) <i>the extent to which the proposed infrastructure provides for any planned urban development (for example approved structure plans); and</i></p> <p>(ii) <i>the extent to which the proposed infrastructure may constrain future urban development.</i></p> <p>(e) measures required to avoid, remedy or mitigate adverse effects:</p> <p>(i) <i>whether measures proposed to avoid, remedy or mitigate the adverse effects where relevant to the above criteria will be; effective.</i></p> <p>(f) noise and vibration:</p> <p>(i) <i>the extent to which noise or vibration generated by the infrastructure adversely affects adjacent properties.</i></p>	
<p>Rule E30.4.1: Controlled Discharge of contaminants into the air, water or land that does not meet the permitted activity standards</p>		
(1)	<p>whether the reports and information provided adequately address the effects of discharges into air, or into water, or onto or into water from contaminated land.</p>	<p>The DSI (Appendix H) addressed the effects of the contaminant discharge.</p>