Watercare Services Limited

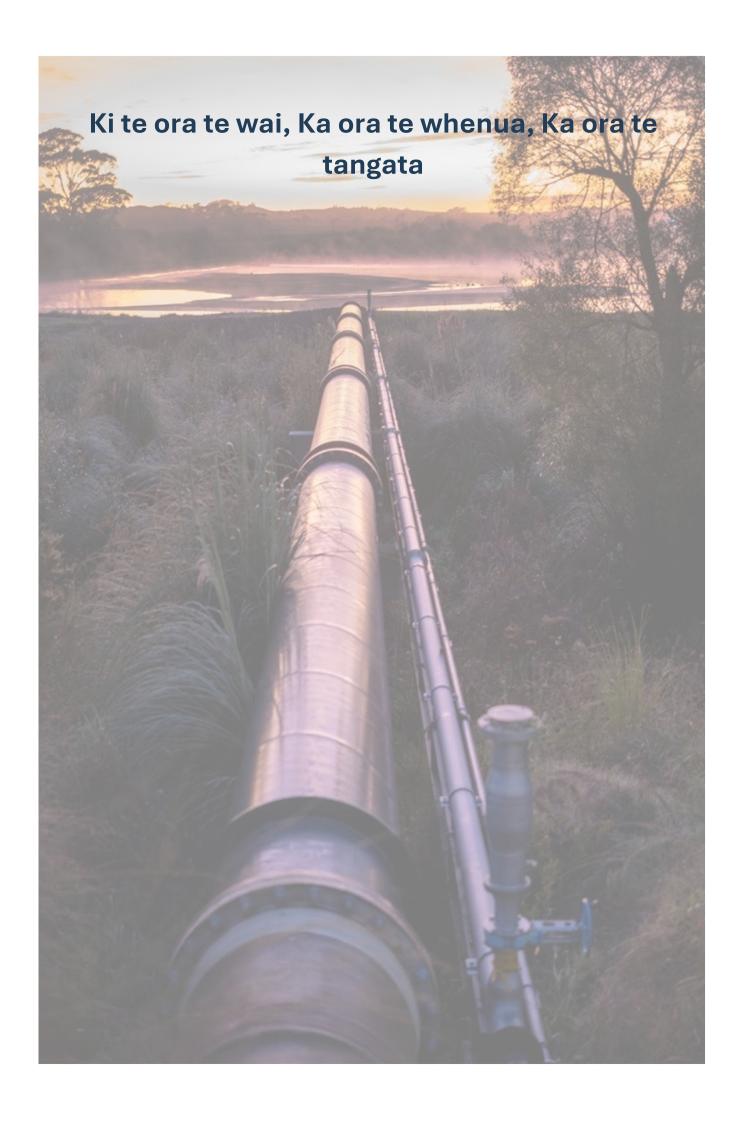
Motions Catchment Improvement

Landscape and Visual Effects Assessment











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Executive Summary

Watercare Services Limited (Watercare) is a lifeline utility providing water and wastewater services to 1.7 million Aucklanders every day and the future growth of 2.3 million people. Its services are vital for life, keeping people safe and helping communities to flourish. Watercare is responsible for municipal wastewater within Auckland, and the provider of bulk services to Pōkeno and Tuakau in the Waikato District.

Watercare's activities and programmes are funded through user charges and borrowings. Watercare is required by the Local Government (Auckland Council) Act 2009 to be a minimum-cost, cost-efficient service provider.

The Motions Catchment Improvements Project involves constructing a 3.2km collector sewer from Canada Street to Western Springs Park, with three branch connections, 16 Engineered Overflow Points, and 16 local network connections. This new infrastructure will connect to the Central Interceptor, reducing uncontrolled discharges and improving public health by enabling safer conveyance of combined wastewater and stormwater flows.

The Project will require works at 17 shaft locations. Landscape and visual effects are expected to be localised and low ("less than minor"), with no effects assessed as "minor" or greater. Mitigation planting will replace any removed vegetation, restore visual amenity, and maintain the area's landscape character.

Overall, the Project can be delivered without permanently compromising landscape or visual amenity, while providing significant environmental and public health benefits for Auckland's communities and waterways.

Table 1: Summary table of Landscape Character and Visual Effects before and after mitigation at each proposed shaft site.

Shaft # Site	Landscape Character Effects (before mitigation works after mitigation works)	Visual Effects (before mitigation works after mitigation works)
SH01	Very Low N/A	Very Low N/A
SH02	Very Low Neutral	Very Low Neutral
SH03	Neutral Neutral	Neutral Neutral
SH04	Very Low Neutral	Very Low Neutral
SH05	No change N/A	No change N/A
SH05A	No change N/A	No change N/A
SH06	Very Low N/A	Neutral N/A
SH07	Low ("less than minor") Neutral	Low ("less than minor") Very Low
SH07a	No change N/A	No change N/A
SH08	No change N/A	No change N/A
SH09	No change N/A	No change N/A
SH10	No change N/A	No change N/A
SH11	No change N/A	No change N/A



Shaft # Site	Landscape Character Effects (before mitigation works after mitigation works)	Visual Effects (before mitigation works after mitigation works)
SH12	Very Low Neutral	Very Low Neutral
SH12a	No change N/A	No change N/A
SH13	No change N/A	No change N/A
SH14	No change N/A	No change N/A
SH15	Very Low N/A	Very Low N/A



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1 Introduction

1.1 Watercare

Watercare Services Limited (Watercare) is a lifeline utility responsible for the planning, maintenance, and operation of wastewater services to communities in Auckland. Its activities and programmes are funded through user charges and borrowings. Watercare is required by the local authority by the Local Government (Auckland Council) Act 2009 to be a minimum-cost, cost-efficient service provider.

Watercare collects wastewater from 1.7 million people's homes including trade waste from industry, through approximately 8,700 Km of pipelines. It pumps through 534 pump stations, treats approximately 410 million litres of wastewater daily through 18 treatment plants and disposes in environmentally responsible ways to protect the public health, the local environment and coasts and harbours.

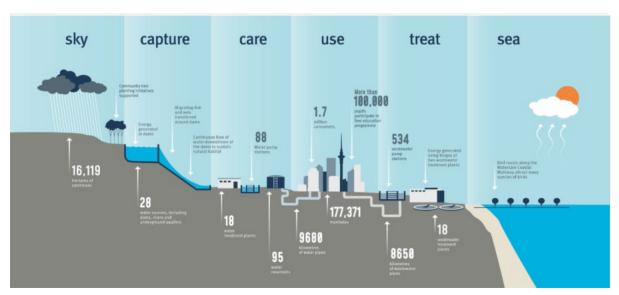


Figure 1: Overview of our assets and operations.

Watercare's activities are intrinsically linked to the health of people and the natural environment. Auckland's wastewater sources must be sufficient volume and reliability to improve the quality of beaches and waterways.

Watercare carries out significant work to upgrade and build infrastructure, to maintain levels of service and provide capacity for a fast-growing population. Watercare ensures Auckland and its people continue to enjoy dependable services by upgrading its assets, planning, building, and delivering new infrastructure in cost-efficient ways.

1.2 Project background and description

The Western Isthmus Water Quality Improvement Programme (WIWQIP) Motions Catchment Improvements Project (the Project) involves the construction of a new collector sewer approximately 3.2 kilometres in length from Canada Street in Auckland's Central Business District (CBD) to Western Springs Park in Western Springs. The collector sewer is proposed to be a diameter ranging from 2.4m up to 4.5m and will have three branch connections. Two branch connections will go under State Highway 16 connecting the Newton Catchment to Suffolk Reserve and connecting Arch Hill Scenic



Reserve and southern parts of Grey Lynn to Nixon Park. The third branch connection will connect Suffolk Reserve to Basque Park. There will also be 16 Engineered Overflow Points (EOPs) and 16 local network connections. The Project will tie into the Central Interceptor at Western Springs Park.

The Project is part of the WIWQIP which aims to significantly reduce wastewater overflows into the Waitematā Harbour in order to improve stream and beach water quality across the City's Central Western Isthmus. The aim of the Project is to build a new pipeline to collect combined wastewater and stormwater flows from the Motions Catchment and convey these to the Central Interceptor at Point Erin Park, where they can then be safely conveyed to the Māngere Wastewater Treatment Plant. The WIWQIP is a joint initiative between Watercare and Auckland Council's Healthy Waters that was established in 2017 and has been identified in Watercare's Asset Management Plan 2021 – 2041 as a key programme to further protect the environment and provide clean harbours and waterways. At a high level, the three main goals of the WIWQIP are:

- To reduce risks to public health by alleviating uncontrolled discharges into local catchments;
- To remove the permanent health warning status of both Meola Reef and Cox's Bay; and
- To reduce intermittent beach closures in the area over the next 10 years.

The Project is a critical component of the wider WIWQIP which will enable Watercare to bring about considerable environmental benefits, reduce risks to public health and improve the amenity of the Motions catchment. For further detail regarding the proposed works and the Project's objectives, please refer to Section 4 of the Assessment of Effects on the Environment.

1.3 Purpose of this report

The purpose of this report is to support the resource consent application for the construction of a new collector sewer approximately 3.2 kilometres in length from Canada Street in Auckland's Central Business District (CBD) to Western Springs Park in Western Springs where the Project ties into the Central Interceptor. The Project also involves the construction of three branch connections and 16 Engineered Overflow Points (EOPs). The following reasons for consent pertaining to landscape and visual impacts have been identified:

Resource consent is sought as a **restricted discretionary activity** for the following reasons:

- Rule E26.4.3.1 (A88): Works will occur within the protected root zone of open space zone and street trees where roots greater than 80mm will likely be encountered, although at this stage the exact number of trees where roots greater than 80mm cannot be confirmed. Consent is sought for this matter on a precautionary basis.
- Rule E26.4.3.1 (A92): Works will involve the removal of street trees and open space zone trees that are greater than 4m in height and 400mm in girth at the following locations:
 - Trees 4-8 for Shaft 2 at (Suffolk Reserve).
 - o Trees 10, 11, 15, 16 and 20 at Shaft 3 (Mostyn Street Reserve).
 - o Tree 29 at Shaft 4 (Fourth Avenue car park).
 - o Tree 42 at Shaft 6.
 - o Trees 53, 56, 57 and 58 at Shaft 7.
 - One olive tree from Group 95 at Shaft 12.

-

¹ Evidence of Stephen Webster for the Herne Bay Tunnell at [1.4].



 Trees 90, 92 and partial removal of Group 93 for Shafts 13-15 at Arch Hill Scenic Reserve.

For all resource consent triggers, please refer to the Assessment of Environmental Effects (AEE) for further details.

2 Assessment Process

This assessment follows the concepts and principles outlined in *Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines*. A full method is outlined in Appendix 1 of this report. In summary, this assessment provides ratings based upon a combination of quantitative information (where available) and qualitative professional judgements by the authors. The ratings are based upon a seven-point scale which includes very low, low, low-moderate, moderate, moderate-high, high and very high ratings. These ratings are used within this assessment to describe the level (and significance) of the potential landscape and visual amenity effects that would result from the Project.

A desktop study was completed to inform the assessment. This included a review of the relevant information relating to the landscape and visual aspects of the project. This information included:

- the statutory setting of the project area and surrounding context;
- base map data (such as contours and aerial photography); and
- project drawings.

Following this desktop study, a site visit was undertaken jointly Ollie May and Jo Soanes to ground truth findings and gain further understanding of the receiving environment. The primary author of this assessment visited the shaft sites on 25 June 2025, in fine weather conditions. The site visit included visiting the wider area around each shaft to understand the physical and sensory impact the Project would have on the site and the broader landscape, and to identify potential viewing audiences.

3 Existing Environment

3.1 Landscape Context

The Site is located along a linear branching path between the Auckland city centre suburbs of Western Springs and Auckland Central (refer to Figure 2 below). The location of the Project roughly aligns to the south of the State Highway 16 Northwestern Motorway (SH16).



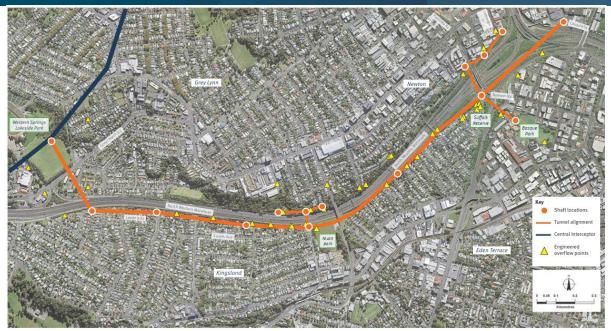


Figure 1: Motions Collector Sewer location Overall Plan

The proposed pipeline route traverses ten Auckland Unitary Plan (AUP) zones, however as the majority of the pipeline route is subterranian the potential landscape effects are only considered at the 17 shaft locations. The proposed shafts are located in six zones. A summary of the underlying zones along the proposed pipeline route and the zones located at each shaft in Table 2 below.

Table 2: Summary of the zones the Site traverses and the location of shaft locations.

Underlying Zone	Shaft No.	
Special Purpose - Major Recreation Facility Zone	SH08	
Residential - Mixed Housing Urban Zone	SH07a,	
Residential - Mixed Housing Suburban Zone	SH06, SH05, SH05a	
Residential - Single House Zone		
Residential - Terrace Housing and Apartment		
Building Zone		
Open Space - Sport and Active Recreation Zone	SH04, SH13, SH14,	
	SH15	
Open Space - Informal Recreation Zone	SH02, SH03, SH12,	
	SH12a	
Business - Mixed Use Zone		
Business - City Centre Zone	SH09, SH10, SH11	
Road	SH01, SH07	





Figure 2: Underlying Auckland Unitary Plan zones, Motions Collector Sewer location Overall Plan (Pipe Jacking Option)

The wider context of the Project is heavily influenced by the SH16 Northwestern Motorway corridor (including the North-western Cycleway (NWC) to the south of the motorway). The motorway corridor sits within a valley floor between the topographically elevated suburbs of Western Springs, Grey Lynn and Arch Hill to the north and Morningside, Kingsland and Eden Terrace to the south.

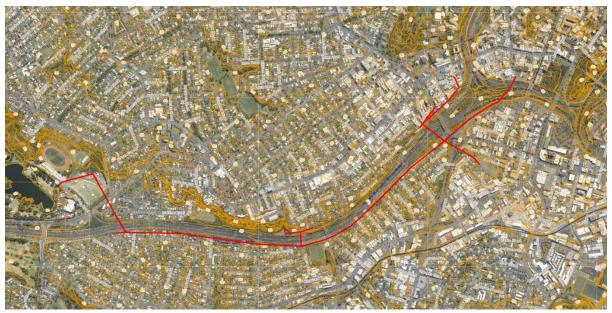


Figure 3: Contours , Motions Collector Sewer location Overall Plan (Pipe Jacking Option)

The proposed pipeline passes through Residential Isthmus A Special Character Area (SCA) and two Historic Heritage Areas (HHAs) (Cooper Street HHA and Karangahape Road HHA). An English Oak is a notable tree² and is located to the west of Mountain View Road within the 10m construction corridor for the pipeline.

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² Notable Trees Overlay - 839, English Oak





Photograph 1: English Oak notable tree 839

3.2 Visual Catchment and Viewing Audiences

As previously discussed, the construction of the proposed pipeline will primarily occur via directional drilling or bored tunnelling, meaning visible elements will be limited to the proposed shaft locations and short sections of pipeline installed via open trenching. Where construction activities and structures may be visible, their visibility will generally be constrained by the density of surrounding built forms, existing vegetation within private lots (forms part of the existing environment but not relied on for screening purposes), and vegetation within the motorway and cycle path corridor. While the potential viewing catchment will vary between shaft sites, it is typically expected to be limited to an area within approximately 20 to 30 m of the shafts.

Viewing audiences anticipated to be affected will vary for each proposed shaft, however it is anticipated that audiences will typically comprise:

- Residential audiences;
- Road and pedestrians in the road network; and
- Pedestrians and users of the NWC.



3.3 Assessment of Effects

Landscape and visual effects result from natural or induced changes in the components, character or quality of the landscape. Usually these are the result of landform or vegetation modification or the introduction of new structures, facilities or activities. All of these impacts are assessed to determine their effects on character, landscape quality, and amenity, as well as on public and private views.

This assessment of potential effects is based on a combination of the landscape's sensitivity and visibility together with the nature and scale of the project.

Particular effects considered relate to the following:

- Landscape effects due to the removal of mature vegetation;
- Visual amenity effects from public and private locations; and
- Effects in relation to statutory provisions.

The likely potential future works may include but are not limited to:

- introduction of the new access shafts for the pipeline;
- removal of vegetation used for screening; and;
- temporary construction activities.

A change in a landscape does not necessarily constitute an adverse landscape or visual effect. Landscapes are dynamic and constantly changing over time in both subtle and more dramatic transformational ways. These changes are both natural and human induced. What is important in managing landscape change that is substantial and / or inappropriate adverse effects are avoided or sufficiently mitigated to ameliorate the effects of the change in land use.

Due to the segmented nature of the project, this assessment will assess the potential landscape and visual effects for each shaft individually and any proposed mitigation measures required. The location of each of the shafts are detailed in Figure 5 below. Construction works within the road corridor and for water maintenance purposes are permitted under the AUP (Refer to AEE for list of Permitted Activities) As such the potential landscape and visual effects associated with the short term construction effects related to the presence of construction machinery have not been considered in this assessment.



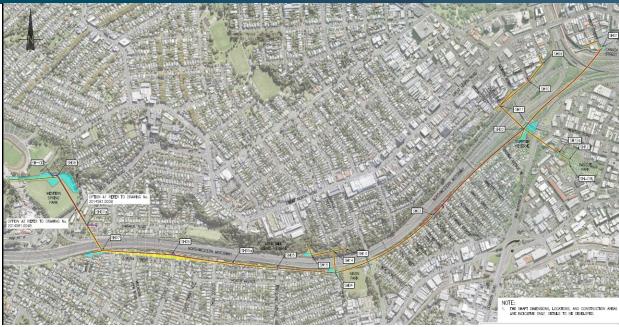


Figure 4: Motions Collector Sewer and shaft location Overall Plan (Pipe Jacking Option)

3.3.1 Shaft 01 - Corner of Canada/East Streets

This shaft will be partially occupying the corner of East and Canada streets in proximity to the southern end of the Pink Path's shared path. Existing infrastructure is a defining part of this environment, including the presence of the Central Motorway Junction. The arborist assessment proposes that minor pruning and uplifting of canopies will be required to a group of trees on South Street and Canada Street to enable access for machinery during construction.



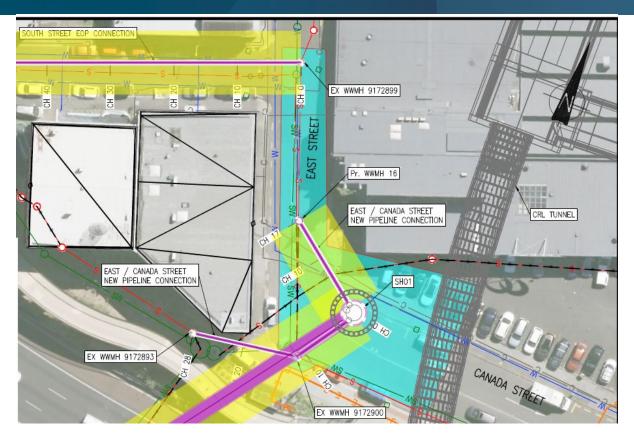


Figure 5: SH01 shaft location plan

3.3.1.1 Landscape Character Effects

The proposed shaft and construction area are located within the East Street and Canada Street road corridors. The proposed shaft access point is located within the road and there is no requirement for vegetation to be removed to accommodate the shaft. The proposed vegetation to be pruned on South Street and Canada Street is not protected under the AUP. It is anticipated that the proposed pruning of the two groups of vegetation will result in **Neutral** effects and no overall change to the character of vegetation within this urban context.

It is anticipated that a proposed ventilation stack within proximity to the SH01 shaft will be read as a piece of infrastructure in an urban environment which will not be overly prominent in this built context. It is anticipated a proposed ventilation shaft within proximity to SH01 will have up to **very low** effects on landscape character.

3.3.1.2 Visual Effects

Visual audiences within the visual catchment are limited to road users and pedestrians on East Street and Canada Street, pedestrians using the Pink Path and the Electric Bike Team shop at 29 East Street. The closest residential audiences to the proposed shaft the Cada 2 apartment building located at 23 Upper Queen Street approximately 150m to the east. The closest residential properties to the proposed vegetation pruning on South Street are 6A, 6 and 8 South Street which are approximately 12m to the north.

Following the construction of the proposed shaft it is anticipated that the proposed pruning of vegetation on South Street will result in a **Neutral** effect on residential properties on South Street. The proposed pruning of vegetation on Canada Street will result in and no change in views from residential audiences at 6A, 6 and 8 South Street.



It is anticipated that a proposed ventilation stack within proximity to the SH01 shaft will be seen as a tall piece of infrastructure within an urban streetscape environment. It is anticipated a proposed ventilation shaft within proximity to SH01 will likely result in up to **Very Low** visual effects on residential, pedestrian and road users.

3.3.2 Shaft 02 - Suffolk Reserve

Shaft 2 is located within the northern extent of Suffolk Reserve to the south of the Newton Road onramp (westbound SH16). Access to the site is from Ian McKinnon Drive to the east. The shaft's construction will require the excavation to a depth of approximately 24.4 m and with a diameter of 10 m.

The proposed shaft and construction area located in the Suffolk Steet Reserve will require:

- The removal of 80 m² trees and shrubs including Tī kōuka (*Cordyline australis*), kānuka (*Kunzea robusta*), karo (Pittosporum crassifolium), kapuka (*Griselinia littoralis*), and karamū (*Coprosma robusta*) in Tree Group 83.
- Pruning/trimming of approximately 535 m² of Trees 4, 5, 6, 7, and additional trees from Group 8 shrubs to facilitate the construction of the proposed access shaft.

The proposed vegetation removal includes trees over 4m in height, which triggers a requirement for resource consent under the AUP. Mitigation for this canopy loss is proposed through the replacement planting of 35 trees. Mitigation replacement planting for the Project is addressed below in 3.3.2.3.

It is understood that a ventilation stack with an approximate footprint of 2.0 m x 2.0 m and a height of 4.5 m above ground level for ventilation and odour control will likely be required in proximity to the shaft.

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³ As defined in the "Motions Catchment Improvement Arboricultural Assessment of Effects" by the Tree Consultancy Company.





Figure 6: SH02 shaft location plan

3.3.2.1 Landscape Character Effects

The existing vegetation in the Suffolk Reserve provides a partial buffer between the open space and Newton Road, including the Newton Road onramp and Ian McKinnon Drive. Additionally, this vegetation provides partial enclosure of the NWC. The linear form of the planting is located around the eastern, western and northern edges of the open space. The stand of vegetation is most substantial along the eastern edge of the open space adjacent to Ian McKinnon Drive. This vegetation provides the most enclosure around the eastern and western edges of the open space and less so to the north.

Vegetation will be removed is primarily to the north of the open space where Newton Road and the Newton Road onramp is most dominant. The vegetation removal will enable construction and reduce the sense of enclosure within the open space, however this will be within the context of where the elevated roadway, NWC and Ian McKinnon Drive cycleway converge. Overall, the sense of enclosure to the east and west will be kept and the remaining vegetation to the north of the NWC will retain some enclosure, although to a lesser extent. It is anticipated that the immediately following construction there will be **Low** (*"less than minor"*) adverse landscape effect, however following the establishment of mitigation planting (described below) it is anticipated that landscape effects will reduce to **Very Low** adverse and will eventually be **Neutral**.

It is anticipated that a ventilation stack will be located within proximity to the SH02 shaft will be within the northeastern corner of the Suffolk Reserve. In this location the vent stack will be adjacent to the Newton Road onramp and dominant motorway infrastructure. Within this context it is anticipated that a proposed ventilation stack within proximity to SH02 will have up to **Very Low** effects on landscape character.



3.3.2.2 Visual Effects

Due to the low lying enclosed nature of the shaft, audiences within the visual catchment are limited to users of the NWC and residential audiences on Suffolk Street that border the southern edge of the Suffolk Reserve. The closest residential audience is at 9 Suffolk Street approximately 70m to the south. Views from residential audiences are anticipated to be limited to the residential properties at 9, 14 and 16 Suffolk Street (refer to Photograph 2 below). Views from the residential properties comprise short to medium distance enclosed views towards Suffolk Reserve. Although the existing mature vegetation around the boundaries of the open space provides enclosure to the east and the west, the elevated Newton Road and the Newton Road onramp appear as dominant forms in the background of the view. Users of the NWC experience short lived transient views of the northern portion of the Suffolk Reserve within the context of the elevated roads and the enclosed cycleway.

Following the construction of the proposed shaft it is anticipated that the shaft access will be low lying and will not appear as a dominant element in the views. It is anticipated that the removal of vegetation to the north of the site will be noticeable from residential audiences on Suffolk Street however, the visual dominance of Newton Road and the Newton Road onramp will only be partially increased. It is anticipated that this will result in **Very Low** adverse visual effects experienced from residential audiences on Suffolk Street. Users of the NWC will experience a short lived expanded view for a limited portion of the cycleway. Following the establishment of mitigation vegetation it is anticipated that visual effects will reduce to **Neutral**.

Within the context of the transient views and confluence of dominant roading infrastructure it is anticipated that visual effects on this audience will be **Neutral**.

It is anticipated that a proposed ventilation stack within proximity to the shaft will be seen as a new piece of urban infrastructure within the context of the elevated and prominent Newton Road and Newton Road onramp to SH16. It is anticipated that for residential audiences to the south the proposed ventilation shaft will be observed as a small addition to views overall. Although the ventilation stack will be a noticeable new addition to views from this audience, views will be transient, and the stack will be seen within the context of more dominant elevated transport infrastructure. It is anticipated that visual effects related to a ventilation stack will be up to **Very Low** for residential audiences on Suffolk Street and users of the NWC.





Photograph 2: Representative view from outside 16 Suffolk Street, looking north east towards SH02.

3.3.2.3 Mitigation Measures

It is recommended that the vegetation removed is replaced on a like for like basis within the approximate footprint of the vegetation removed to be in keeping with the grouping of retained vegetation. It is noted that the northern extent of the reserve has the capacity to establish additional vegetation to meet the Urban Ngahere (Forest) Strategy and arborist reinstatement planting requirements.

3.3.3 Shaft 03 - Mostyn Street Reserve

This shaft will be located to the north of the end of the Mostyn Road turning head and to the south of the NWC. The proposed construction works within the vicinity of the site include:

- Shaft excavation measuring 6 m in diameter and 17 m deep;
- Engineered Overflow Point (EOP) to be installed via open-trench adjacent to the shaft.
- A new waste-water manhole and new connection opposite Buchanan Street, linking to the existing network.
- Access/egress along the existing concrete path parallel to the NWC.

The proposed vegetation removal includes trees over 4m in height, which triggers a requirement for resource consent under the AUP. Mitigation for this canopy loss is proposed through the replacement planting of nine trees. Mitigation replacement planting for the Project is addressed below in 3.4.3.3.



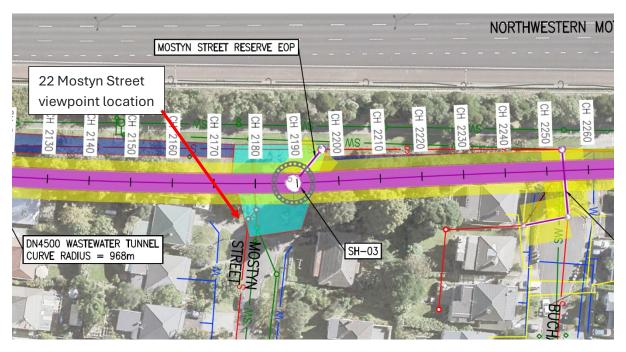


Figure 7: SH03 shaft and Buchanan Street wastewater connection location plan

3.3.3.1 Landscape Character Effects

The existing established vegetation in proximity to the SH03 location includes a linear stand of mature trees adjacent to SH16, with grass and flax species adjacent to the NWC. To the south of the cycleway the amenity grass area includes area of amenity grass planted with seven specimen trees in proximity to SH03 including ti kouka, tōtara, English oak and she-oak trees (refer to Photograph 3 and Photograph 4Photograph 3 below). The size of the individual specimen trees varies considerably, however collectively they provide vegetation screening to the north for the residential properties.

The proposed totara tree to be removed in proximity to SH03 is of a lesser stature and does not significantly contribute to screening of the road from residential properties or change the overall character of the surrounding vegetation. It is anticipated that immediately following construction and removal of the totara tree will have **Neutral** effects. However, it is advised that the tree is replaced with a similar tree species and location to ensure that resilient and continued screening is provided.





Photograph 3: Existing totara to be removed. Photograph 4: Vegetation to the east of the proposed SH03 location.

At the northern end of Buchanan Street it is anticipated that three indigenous trees will be removed to accommodate an EOP (refer to Photograph 5 below). These trees are part of an isolated stand of trees close to the NWC. The stand of trees provides limited contribution to the amenity of the street and integration with the linear vegetation along the NWC. It is anticipated that the proposed removal of this vegetation will result in **Very Low** adverse effects on the character of the landscape. It is proposed that replacement specimen trees are planted to mitigate the loss of this vegetation. It is anticipated that after the establishment of replacement specimen trees in this location that landscape character effects will reduce to **Neutral**.



Photograph 5: Three existing tees (tōtara, cabbage tree and tītoki) to be removed within the tree group at the northern end of Buchanan Street.



3.3.3.2 Visual Effects

Due to the low-lying enclosed nature of the shaft, audiences within the visual catchment are limited to users of the NWC, residential audiences and road users on lower Mostyn Street. Views from the NWC are generally screened by the established linear belts of vegetation on either side. This type of planting generally thins out as it matures and generally short lived. It is anticipated that regarding the proposed removal of the totara within the cycleway corridor, although noticeable, will not change the character or overall quality of views. It is anticipated that visual effects on the NWC audience will be **Neutral**.

Residential properties on Mostyn Street are primarily orientated in a northeast to southwest orientation parallel to the proposed works. 22 and 25 Mostyn Street have additional views to the northwest towards the proposed shaft. These views are screened and heavily filtered by existing vegetation along the eastern edge of the NWC. Following the completion of the Project it is anticipated that the proposed removal of the Tōtara will not change the overall character of views from residential audiences or reduce screening of SH16. As a result it is anticipated that visual effects will be **Neutral.**



Photograph 6: Representative view from outside 22 Mostyn Street, looking northeast towards SH03.

Residential properties on Buchanan Street are primarily orientated in a northeast to southwest orientation parallel to the proposed works. While 30 and 31 Buchanan Street have additional views northwest towards SH16, the vegetation that will be removal does not provide screening of SH16. Following the completion of the project it is anticipated that the proposed removal of the three trees will partially open views toward the residential properties on the other side of Buchanan Street. It is anticipated that the overall character of views will remain for these residential audiences, as a result visual effects will be **Neutral**.

3.3.3.3 Mitigation

It is recommended that the removed totara is replaced with a similar or the same species in proximity to the tree's original location. The proposed replacement tree is requested to safeguard long term planting and continued screening in the future as succession planting for older larger trees along the cycleway.



It is recommended that replacement indigenous specimen trees are planted within proximity to the vegetation removed at the northern end of Buchanan Street to restore the landscape character.

3.3.4 Shaft 04 – Fourth Avenue Car Park (adjacent to Nixon Park)

This shaft is located within the southeastern corner of the Fourth Avenue Car Park adjacent to Nixon Park and the intersection with Central Road. The proposed construction of Shaft 04 will require:

- excavation of the shaft, with a diameter of 9 m and a depth of 21 m
- construction of an engineering overflow point via open trenching.

The proposed vegetation removal will require the removal of a mature silk tree within the eastern portion of the car park (refer to Photograph 7 below). Additional pruning and minor uplift of trees within the car park are likely to enable construction access and manoeuvring. The proposed vegetation removal includes trees over 4m in height, which triggers a requirement for resource consent under the AUP.



Figure 8: SH04 shaft location within the Fourth Avenue car park

3.3.4.1 Landscape Character Effects

The character of the car park is defined by eight specimen trees within the car park and most prominently the large silk tree (refer to Photograph 7 below) in the east of the site and two large macrocarpas adjacent to the property boundary with 9 Fourth Avenue (refer to Photograph 8 below).





Photograph 7: Existing Silk tree and ground cover planting to be removed.



Photograph 8: Existing trees along the western boundary of the car park adjacent to 9 Fourth Avenue.

A planted low margin of flax, hedges and grasses is located along the northern edge of the carpark, however there are no specimen trees or large shrubs providing enclosure to the north. The NWC is open in this location affording open views into the SH16 highway corridor.

It is anticipated that the proposed removal of the Silk tree will have a localised impact within the car park. It is considered that the proposed tree makes a lesser contribution to the wider balance of vegetation along the NWC corridor and within Nixon Park to the east. However, the removal of this tree will result in an increased "gap" of approximately 45m within the contiguous planting along the cycleway. It is anticipated that the removal of this tree will result in **Low** ("less than minor") adverse landscape character effects. It is recommended that a replacement specimen tree is provided in the car park outside of the construction footprint. Following the inclusion of mitigation planting it is anticipated that landscape effects will reduce to **Very Low** adverse and in time, **Neutral** after the specimen tree matures.



3.3.4.2 Visual Effects

Due to the relatively open nature of the car park ,the visual catchment of the site extends to the SH16 highway corridor to the north. Considering the transient nature and high speeds of road users on SH16 it is anticipated visual changes will imperceptible. Similarly, road users and pedestrians along Fourth Avenue and Central Road will experience transient views across the site, which include open views across the SH16 corridor, the proposed removal of the tree will further open views, however it is anticipated that this will result in **Very Low** adverse to **Neutral** visual effects for these audiences.

Residential audience with existing views over the SH04 Site are limited to 24 Central Road (refer to Photograph 9 below). There is the potential for easterly views from the property at 9 Fourth Avenue, however the retained macrocarpa trees along the eastern boundaries of the car park provide a dense evergreen screen of the car park and SH16 corridor.



Photograph 9: View of the northern façade of the 24 Central Road.

It is anticipated that the elevated north facing views from the residential property at 24 Central Road comprise predominantly open views of the SH16 corridor backdropped by the heavily vegetated embankment of planting at Arch Hill. It is anticipated that the proposed removal of the silk tree will further open views from this residential property to a degree. However, the overall open character of the view over SH16 will remain primarily identical. It is anticipated that this will result in **Very Low** adverse visual effects from this property. The adverse visual effects on this property will be reduced to **Neutral** following the provision of a replacement specimen tree within the car park. It is anticipated that there will be no change in views for the residential audience at 9 Fourth Avenue.

3.3.4.3 Mitigation

It is recommended that a suitable proposed specimen tree is replaced within the car park to restore continuity in the pattern of vegetation along to the NWC and replace the limited screening value of the removed tree.

It is recommended that there is limited to no pruning on the existing macrocarpa trees along the boundary with 9 Fourth Avenue. This planting not only provides visual screening but will dampen effects of headlight of westbound vehicles travelling on SH16. There is the potential that overpruning of these trees may result in additional adverse visual effects on this property due to vehicular lights from SH16.



3.3.5 Shaft 05 - Kingsland Avenue

Located at the end of Kingsland Avenue adjacent to entrance to 52 Kingsland Avenue. It is proposed that WSL will acquire the property at 52 Kingsland Avenue and it will be used as the construction area for SH05.

The arborist assessment considers that all existing vegetation is available to be retained without any pruning required, as an adequate setback from existing trees is able to be established throughout construction.

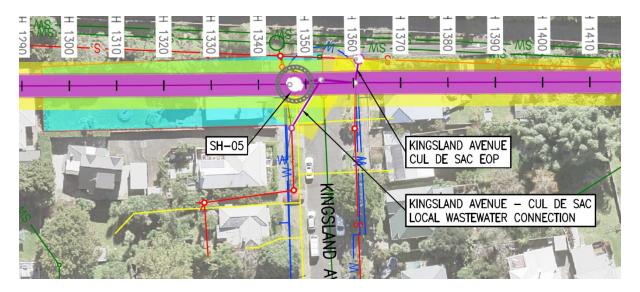
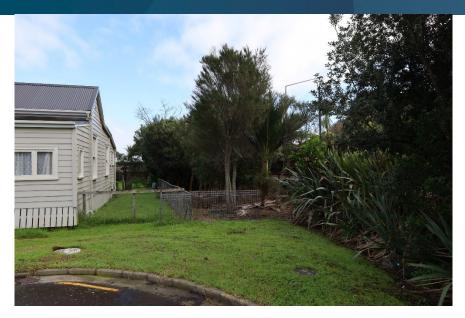


Figure 9: SH05 shaft location adjacent to the entrance to 52 Kingsland Avenue

3.3.5.1 Landscape Character Effects

The character of the planting along to the north of 52 Kingsland Avenue is broadly similar to the established pattern of indigenous vegetation along the NWC with pōhutukawa (Metrosideros excelsa), kanuka (Kunzea robusta), karo (Pittosporum crassifolium), Kapuka 'littoralis' (Griselinia littoralis) and Australian brush cherry (Syzygium australe) (refer to Photograph 10 below). The retention of this planting will result in no change to the landscape character.





Photograph 10: Existing kānuka, karo and nīkau planting adjacent to the property boundary with 52 Kingsland Avenue.

3.3.5.2 Visual Effects

Due to the relatively enclosed nature of the site, viewing audiences are limited to the residential properties at the northern extent of Kingsland Avenue⁴ (39, 41 and 50 Kingsland Avenue), users of the NWC and road users on Kingsland Avenue (refer to Photograph 11 below).

As no vegetation removal is proposed, it is anticipated that there will be no adverse visual effects after construction is complete.

3.3.6 Shaft 05 Local Connection – Kingsland Avenue and Fourth Avenue

Additional local connection works on Kingsland Avenue and Fourth Avenue is located within the road reserve. As no vegetation removal is proposed, it is anticipated that here will be no adverse visual or landscape effects after construction is complete and therefore assessed as **Neutral**.



Figure 11: SH05 shaft location adjacent to the entrance to 52 Kingsland Avenue

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⁴ Not including 52 Kingsland Avenue as it is proposed to be removed.





Photograph 11: View north along Kingsland Avenue towards the proposed SH05 shaft location.

3.3.7 Shaft 06 - Finch Street

This shaft is located at the northern end of Finch Street between the properties at 1 Levonia Street and 69 Finch Street, within the road reserve to the east of 1 Levonia Street. The proposed construction of Shaft 04 will be approximately 6 m in diameter and 22.2 m deep.

The arborist assessment considers that construction process will require:

the removal of a she-oak in located to the east of the accessway for the NWC.

The proposed vegetation removal includes a tree over 4m in height, which triggers a requirement for resource consent as a under the AUP.



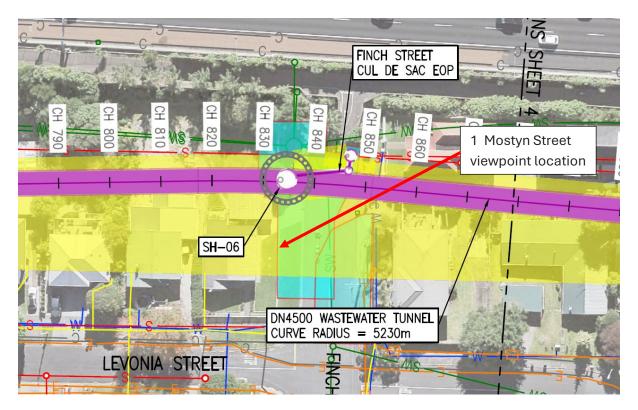


Figure 12: SH06 shaft location at the northern end of Finch Street

3.3.7.1 Landscape Character Effects

The character of the planting within the vicinity of SH06 is typical of the species planted along the length of the NWC. However, this section of the cycle path has a particularly high number of sheoaks. Given the relatively constrained area and the size and density of the trees, this results in the trees being a dominant landscape feature. The existing tree privet adjacent to the rear yard of 1 Levonia Street predates the establishment of the NWC and is a self-established species and is not part of the cycle path's vegetation strategy.

Although the she-oak proposed to be removed is a substantially large tree, it is part of a larger group of approximately 10 she-oaks and its removal is anticipated to not compromise the integrity or overall character of planting. The existing tree privet is a pest species, and its removal is a permitted activity under the AUP. It is anticipated that the removal of the she oak tree for SH06 will have **Very Low** adverse effects.





Photograph 12: Existing tree privet adjacent to 1 Levonia Street and she-oaks either side of the accessway to the NWC.

3.3.7.2 Visual Effects

Due to the density of residential development and the dense vegetation along the NWC, the visual catchment of the site is limited to users of the NWC and residential audiences at 1 Levonia Street, 67 and 69 Finch Street. Oblique views are available of the Site from the properties accessed from Finch Street, however a more direct view is available from the elevated deck and yard on the northern side of 1 Levonia Street (refer to Photograph 13 below).



Photograph 13: Side access to 1 Levonia Street and elevated deck

The removal of the tree privet and she-oak are anticipated to result in relatively small change in the short distance oblique views from 67 and 69 Finch Street, whilst the overall integrity and character of the views will be retained. As a result it is anticipated that visual effects on views from these audiences will be Neutral. Views from the rear of the property at 1 Levonia Street (including elevated views) are limited to a short distance by the approximately 12-18m tall she-oak trees and the large tree privet which extends into the eastern boundary of the property (refer to Photograph



14 below). It is anticipated that the removal of the she-oak will result in a negligible change in the view due to the tree's location in the view's periphery. It is anticipated that the proposed removal of the tree privet will open views from the yard to the west. However, as discussed above, as this is a pest species the removal of this tree is permitted under the AUP. The removal of the tree privet will reduce the encroachment of the tree into the yard and is anticipated to result in **Neutral** or Positive visual effects. Overall, after construction it is anticipated that the residential audience at 1 Levonia Road will be Neutral.



Photograph 14:Representative view north from the 1 Levonia Street.

The proposed vegetation to be removed is setback from the NWC and it is anticipated that there will be no change in views for users of the cycleway.

3.3.8 Shaft 07 - Myrtle Street

This shaft is located to the east of 30 Myrtle Steet in a triangular piece of land between the NWC and Myrtle Street. The proposed project will require:

- excavation for the shaft to a diameter of 9 m and a depth of 19 m
- construction of an EOP to the south of the NWC (either HDD or open trench)

The arborist assessment considers that the proposed works will require:

- the removal of two karaka (Corynocarpus laevigatus) trees
- a hedge comprising kohuhu (Pittosporum tenuifolium), tree privet (Ligustrum lucidum) and karamu (Coprosma robusta)



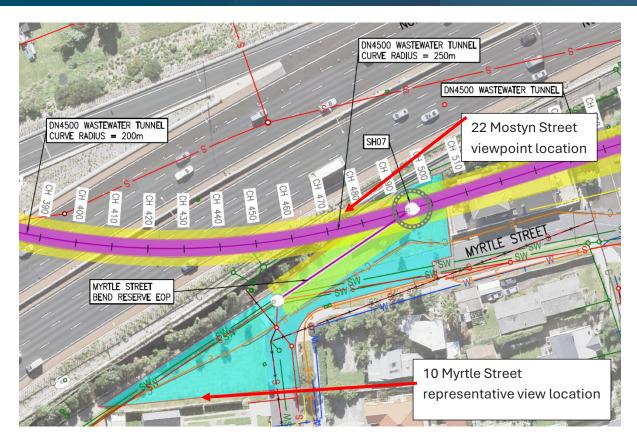


Figure 13: SH07 shaft location within the amenity grass area to the west of 30 Myrtle Street

3.3.8.1 Landscape Character Effects

The character of the planting in proximity to SH07 comprises a thin linear band of vegetation adjacent to the SH16 highways corridor and to the south of the NWC (refer to Photograph 15 below). Stand-alone specimen trees are also located to the west to the south of the NWC in amenity grass.



Photograph 15: Existing vegetation to be removed comprising kohuhu, tree privet and karamu hedge and two small karaka, located to the south of a timber noise attenuation fence between Myrtle Street and the NWC.

Although planting within the proximity of the proposed works includes indigenous species this planting has a primary purpose to soften and screen views of SH16 and noise attenuation fencing. From reviewing historic photos between 2009 and 2022 (via Google Street View), it is apparent that



the planting changed slightly over time and was extended to align with an extension to the noise attenuation fencing. The vegetation removal, as described above, will expose the more of the noise attenuation fence and is anticipated to have a Low ("less than minor") adverse effect. It is recommended that mitigation planting (of a similar species mix to the vegetation removed) is undertaken to replace the screening vegetation. Following the establishment of this planting it is anticipated that once this vegetation has established to a height of approximately 1.5m (after approximately 2 years) that the adverse effects will reduce to **Neutral**.

3.3.8.2 Visual Effects

Due to the density of the building form, the NWC and the SH16 to the north of the shaft, the visual catchment is limited to road users of Myrtle Street, the NWC and residential audiences at 10, 10A, 17 and 30 Myrtle Street.

Due to transient nature of users of the NWC and Myrtle Street, it is anticipated that visual effect related to the removal of vegetation will be noticeable but remain overall **Neutral**. Residential audiences at 10 and 10A Myrtle Street are anticipated to be limited to oblique views of the vegetation (refer to Photograph 16 below). The vegetation removed represents a small proportion of that view and as a result, its removal will result in **Very Low to Neutral** visual effects.



Photograph 16: Representative view from 10 Myrtle Street.

Views from the residential audiences at 17 (refer to Photograph 15 above) and 30 Myrtle Street are afforded short distance views over the Site shaft and vegetation to be removed. As discussed previously, it is considered that the purpose of this vegetation is to soften and screen views of the noise attenuation. Following the removal of this vegetation, a short distance open view of the attenuation fence will be available from these audiences, but it is anticipated that Low ("less than minor") adverse visual effects will be experienced as result. Following the establishment of replacement mitigation to a height of approximately 1.5m (after approximately 2 years) it is anticipated that adverse effects will reduce to **Very Low** and eventually to **Neutral**.

3.3.8.3 Mitigation

It is recommended that indigenous screen planting comprising a hedge and specimen trees, including species similar to those removed (kohuhu (*Pittosporum tenuifolium*), karamu hedge and



karaka), are planted to the south of the noise attenuation fence. The purpose of this planting is to restore the amenity, character and screening values of the vegetation removed.

3.3.9 Shaft 07a - Ivanhoe Road Cul de Sac

This shaft is located to the east of the Ivanhoe Road cul-de-sac within an area of grassed road corridor (refer to Photograph 17 below). The shaft will require:

- an excavation 3m in diameter and a depth of 19.9m to establish the SH07a shaft
- installation of EOP and a new local wastewater connection within the road reserve.

The arborist assessment considers that the proposed works can be undertaken without the removal of any vegetation. However, it is indicated that tree protection measures should be included to protect mature pine and cedar trees to the north and south of the works location.

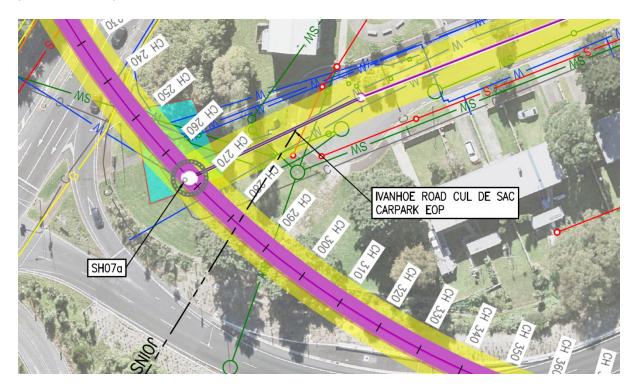


Figure 14: SH07a shaft location within the amenity grass area to the west of the Ivanhoe Road Cul de Sac

3.3.9.1 Landscape Character Effects

The character of the planting is informed primarily by the mature pine and cedar trees, approximately 15 m in height, located near the proposed shaft site and the area of grassed road reserve. The SH16 eastbound onramp also has a significant influence on this area.





Photograph 17: Proposed SH07a site location in amenity grass in proximity to mature cedar and pine trees.

3.3.9.2 Visual Effects

The proposed shaft site location is overlooked by road users of Ivanhoe Road, Great North Road and oblique views from residents of the 744 Great North Road apartment buildings. It is anticipated that there will be no adverse visual effects related to vegetation removal following the completion of the works.

3.3.10 Shaft 08 – Western Springs Park

This shaft will be located in the playing fields of Western Springs Park to the south of existing indigenous vegetation. SH08 will require an excavation with a diameter of 9 m and a depth of 25.4m. At the time of visiting the site, a shaft for the Central Interceptor was under construction within an established site compound (refer to photograph 18 below), it was not possible to visit the location for SH08.

The arborist assessment considers that the proposed works will not require the removal of any trees or significant vegetation.





Figure 15: SH08 and SH-CRL connection shaft location in Western Springs Park

3.3.10.1 Landscape Character Effects

The works site and surrounding area is characterised by the open parkland and a heavily vegetated slope to the north of the open space. It is anticipated that there will be no adverse landscape character effects following the completion of the works.



Photograph 18: Established site compound for SH08 in Western Springs Park.

3.3.10.2 Visual Effects

The proposed shaft site has a wide ranging visual catchment including users of Western Springs Park, and road users of Great North Road and Stadium Road. It is anticipated that there will be no adverse visual effects related to vegetation removal following the completion of the works.



3.3.11 Shaft 09, 10 and 11 - Newton Gully Branch Connection

These proposed shafts are located at the southern extents of Edinburgh Street (SH09), Gundry Street (SH10) and Burgoyne Street (SH11). The proposed shafts will involve:

- a 2m x 4m pit to a depth of 9m for SH09;
- a 2m x 4m pit to a depth of 5.9m for SH10; and;
 a 4m x 4m pit to a depth of 18.5 m for SH11.

The arborist assessment considers that no vegetation will be required to be removed to complete the works.

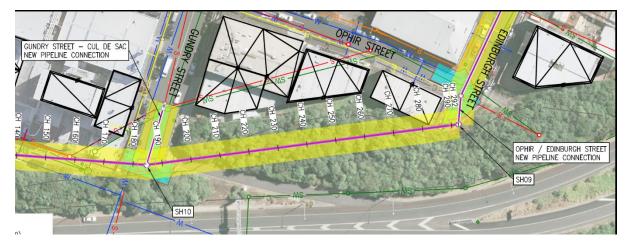


Figure 16: SH09 shaft location to the south of Edinburgh Street and SH10 to the south of Gundry Street

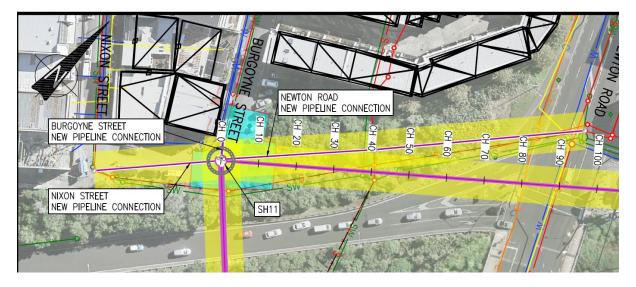


Figure 17: SH11 shaft location to the south of Burgoyne Street

3.3.11.1 Landscape Character Effects

The character of the areas surrounding the proposed shafts is dense urban, including a mixture of multi-storey residential and industrial developments. It is anticipated that there will be no adverse landscape character effects following the completion of the works.



3.3.11.2 Visual Effects

The shaft site locations each have highly constrained visual catchments due to the dense grain urban development and the planting to the south. The visual audiences will be limited to road users, local residents and businesses at the southern end on Burgoyne Street, Edinburgh Street and Gundry Street respectively.

It is anticipated that there will be no adverse visual effects related to vegetation removal following the completion of the works.

3.3.12 Shaft 12 and 12a - Basque Park Branch Connection

These proposed shafts are located within Basque Park adjacent to the end of the Fleet Street cul-desac and towards the centre of the open space. The proposed works will require:

- a 6 m diameter pit with a depth of 16.6 m for SH12 and SH12a; and
- a new 600mm diameter pipe will be constructed using a 2m by 4m pit, extending to a depth
 of 7.7 m

The arborist assessment considers that the proposed works will require the removal of an olive tree (which is part of a olive tree grove) to accommodate the construction of the 600mm pipe connection to SH12. The proposed olive tree to be removed is over 4m in height, which requires consent under the AUP.

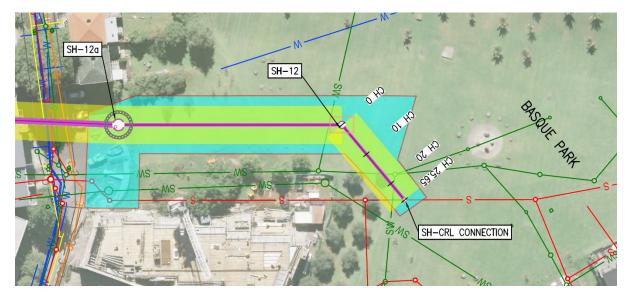


Figure 18: SH12 and SH12a shaft locations in Basque Park

3.3.12.1 Landscape Character Effects

The character of the landscape in Basque Park is defined by a large open grassland, footpath network, sculptures and stands of the specimen tree groups including olive trees, cypress trees and nikau. It is anticipated that the proposed removal of an olive tree will result in **Very Low** to **Neutral** adverse effects following the completion due to the relatively small contribution the single tree makes to the character of the park as a whole. It is recommended that the tree is replaced to reestablish the intended landscape design.





Photograph 19: Stand of olive trees within Basque Park.

3.3.12.2 Visual Effects

The proposed site has an extensive visual catchment due to the number of elevated roads and residential properties which overlook the site and open space. However, within the wider context of the view it is anticipated that the audience most impacted will be users of Basque Park.

Within the context of the panoramic views into the park from surrounding elevated viewpoints with expansive views into and over the shaft site. It is anticipated that the proposed removal of the single olive tree will result in **Neutral** effects for road users and elevated commercial and residential properties surrounding Basque Park due to relatively small change.

For people within Basque Park it is anticipated that the removal of the olive tree will result in **Very Low** adverse to **Neutral** effects. It is recommended that the tree is replaced to restore the park's intended original landscape design.

3.3.12.3 Mitigation

As discussed above it is recommended that the olive tree is replaced with a specimen tree of the same species at with a 2 m minimum height.

3.3.13 Shaft 13, 14 and 15 – Arch Hill Scenic Reserve Connection

The proposed shafts are located within the Arch Hill Scenic Reserve to the west of Cooper Street and will require:

- a 2m x 4m pit to a depth of 8.2m for SH13;
- a 4m x 4m pit to a depth of 14.7 m for SH14;
- a 2m x 4m pit to a depth of 8.6m for SH15; and;
- new 600mm diameter pipe connections to shafts SH13 and SH15.



The arborist assessment considers that:

- an area of approximately 136m2 of vegetation comprising (a mix of cabbage trees, tree privet, karo and kānuka etc.) will be required to be removed to enable the connection of the 600mm pipe to SH15
- pruning and trimming of existing trees in the Arch Hill Reserve to enable access to the shaft site.



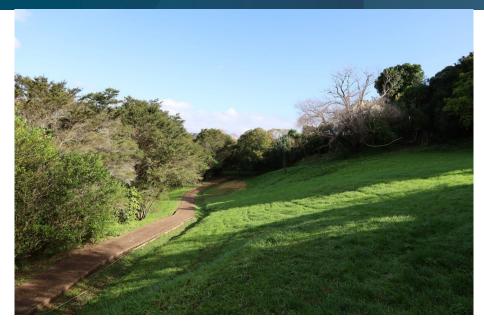
Figure 19: SH13 to the south of Cooper Street, SH14 and SH15 located in the Arch Hill Reserve

3.3.13.1 Landscape Character Effects

The landscape surrounding the shaft sites is defined by the sloping amenity grassland bordered by extensive mixed indigenous vegetation to the north and a linear belt of trees to the south along the edge of SH16 corridor. The area around SH13 and SH14 are quite enclosed (refer to Photograph 20 below), however to the south of SH15 the boundary vegetation with the SH16 corridor is sparse allowing for an open view into the highway corridor.

The proposed area of vegetation removal is located within a large contiguous area of indigenous forest planting. Within the context of the wider established planting, the area where vegetation will be removed is limited and the area of pruning will be relatively inconspicuous. As a result, it is anticipated that landscape character effects will be **Very Low** adverse to **Neutral**.





Photograph 19: Existing kānuka, karo and nīkau planting adjacent to the property boundary with 52 Kingsland Avenue.

3.3.13.2 Visual Effects

Due to the enclosed and heavily vegetated nature of the Arch Hill Reserve it is anticipated that viewing audiences will be limited to people within the reserve. Views within the reserve vary from short to medium distance views that are constrained to the north and south by established mature vegetation. However, views within proximity of the SH15 shaft are more open and are strongly influenced by open views to the south over the SH16 corridor.

Although a substantial area of vegetation is proposed to be removed to the north of the SH15 shaft, the area will be relatively inconspicuous within views and will not compromise the scale and character of the large area of indigenous vegetation. As a result, it is anticipated that adverse visual effects for people in Arch Hill Reserve will be **Very Low** adverse.

4 Statutory Assessment

The planning provisions relevant to the assessment of the landscape and visual effects are summarised as:

- Rule E26.4.3.1 (A92): Tree alteration or removal of any tree greater than 4m in height and/or greater than 400mm in girth Restricted Discretionary activity
 - Trees which meet the criteria are required within proximity SH2, SH3, SH4, SH6, SH7, SH12 and SH15. An assessment of potential adverse landscape character and visual effects and proposed mitigation (if required) is provided in the above assessment. The assessment concludes that following the implementation of mitigation planting there will be no adverse landscape or visual effects which are "minor" or "more than minor"
- E26.4.5.3. Notable trees tree trimming or alteration
 - It is anticipated that the project will result in no trimming or alteration of the notable tree 839, English Oak located within 23 Levonia Street.



5 Recommendations and Conclusion

5.1 Recommendations

It is recommended that detailed landscape planting and maintenance plans for each shaft site of the proposed mitigation planting are developed by a suitably qualified and experienced landscape architect. The landscape plans should provide details on:

- Implementation procedures, depicting the layout of the planting, providing an overall summary of the planting principles, identifying proposed species mixes, their proposed densities / approximate areas and detailing of the timing of planting.
 - Planting preparation
 - Proposed species
 - o Plant Supply
 - Size of plants
 - Location of plants
 - Staking and mulching requirements
 - Planting schedule
 - Watering schedule
- Implementation, Maintenance and Monitoring providing the following management information:
 - Timeline and Staging
 - o Site Preparation
 - o Vegetation Maintenance
 - Monitoring
 - Reporting

It is recommended that the proposed mitigation plans are undertaken in collaboration with the arborist, construction and design engineering specialists on the Project to ensure that there are no potential clashes between services or structures.

It is not currently known where the proposed ventilation shafts will be located in proximity to SH01 and SH02. However, it is recommended that these proposed structures are designed to have an external colour scheme that is recessive (preferably dark brown or green) to assist in integrating the structures into the receiving environment.



5.2 Conclusion

The proposed Project includes a large scale coordinated programme of works over a long distance and will result in intermittent landscape and visual effects primarily around the 17 proposed shaft locations.

It is anticipated that the Project will result in landscape character and visual effects that are localised to physical landscape and residential audiences within proximity to the proposed shaft and trenching works. It is anticipated that adverse landscape character and visual amenity effects experienced as a result of the works will range from Low ("less than minor") to No change across the Project. It is anticipated that there will be no adverse landscape or visual effects that are considered to be "minor" or "more than minor".

Mitigation planting is advised in locations of tree clearance where vegetation is removed, and replacement planting is required to:

- Reduce visual effects and restore visual amenity;
- Replace succession planting as part of a long-standing planting strategy; and/or;
- Restore an existing landscape character following the removal of vegetation.

It is understood that replacement planting is also required to mitigate the loss of canopy cover, this is addressed in the arborist assessment and AEE.

Overall, it is considered that the Project can be delivered without permanently compromising the landscape and visual amenity characteristics and qualities.



Appendix 1: Method Statement

This assessment method statement is consistent with the methodology (high-level system of concepts, principles, and approaches) of 'Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines', Tuia Pito Ora New Zealand Institute of Landscape Architects, July 2022. The assessment provides separate chapters to discuss landscape, visual and natural character effects where relevant, but is referred to throughout as a Landscape Effects Assessment in accordance with these Guidelines. Specifically, the assessment of effects has examined the following:

- The existing landscape;
- The nature of effect;
- The level of effect; and
- The significance of effect.

The Existing Landscape

The first step of assessment involves examining the existing landscape in which potential effects may occur. This aspect of the assessment describes and interprets the specific landscape character and values which may be impacted by the project alongside its natural character where relevant as set out below. The existing landscape is assessed at a scale(s) commensurate with the potential nature of effects. It includes an understanding of the visual catchment and viewing audience relating to the project including key representative public views. This aspect of the assessment involves both desktop review (including drawing upon area-based landscape assessments where available) and field work/site surveys to examine and describe the specific factors and interplay of relevant attributes or dimensions, as follows:

Physical –relevant natural and human features and processes;

Perceptual – direct human sensory experience and its broader interpretation; and

Associative – intangible meanings and associations that influence how places are perceived.

Statutory and Non-Statutory Provisions

The relevant provisions facilitating change also influence the consequent nature and level of effects. Relevant provisions encompass objectives and policies drawn from a broader analysis of the statutory context and which may anticipate change and certain outcomes for identified landscape values.

The Nature of Effect

The nature of effect assesses the outcome of the project within the landscape. The nature of effect is considered in terms of whether effects are positive (beneficial) or negative (adverse) in the context where they occur. Neutral effects may also occur where the landscape or visual change is benign.



A change in a landscape (or view of a landscape) does not, of itself, necessarily constitute an adverse landscape effect. Landscapes are dynamic and are constantly changing in both subtle and more dramatic transformational ways; these changes are both natural and human induced. What is important when assessing and managing landscape change is that adverse effects are avoided or sufficiently mitigated to ameliorate adverse effects. The aim is to maintain or enhance the environment through appropriate design outcomes, recognising that both the nature and level of effects may change over time.

The Level of Effect

Where the nature of effect is assessed as 'adverse', the assessment quantifies the level (degree or magnitude) of adverse effect. The level of effect has not been quantified where the nature of effect is neutral or beneficial. Assessing the level of effect entails professional judgement based on expertise and experience provided with explanations and reasons. The identified level of adverse natural character, landscape and visual effects adopts a universal seven-point scale from very low to very high consistent with Te Tangi a te Manu Guidelines and reproduced below.

VERY LOW	LOW	LOW-MOD	MODERATE	MOD-HIGH	HIGH	VERY HIGH
ii	ii	ii	1	ii	ii	ii

Landscape Effects

A landscape effect relates to the change on a landscape's character and its inherent values in the context of what change can be anticipated in that landscape in relation to relevant zoning provisions. The level of effect is influenced by the size or spatial scale, geographical extent, duration and reversibility of the landscape change on the characteristics and values within the specific context in which they occur.

Visual Effects

Visual effects are a subset of landscape effects. They are the consequence of changes to landscape values as experienced in views. To assess where visual effects from the project may occur requires identification of areas where the project may be visible from, and the specific viewing audience(s) affected. Visual effects are assessed with respect to landscape character and values. This can be influenced by several factors such as distance, orientation of the view, duration, extent of view occupied, screening and backdrop, as well as the potential change that could be anticipated in the view as a result of zone provisions of relevant statutory plans.

The Significance of Effects

Decision makers assessing resource consent applications must evaluate if the effect on individuals or the environment is less than minor⁵ or if an adverse effect on the environment is no more than minor⁶. For noncomplying activities, consent can only be granted if the s104D 'gateway test' is satisfied, ensuring adverse effects are minor or align with planning objectives. In these situations, the assessment may be required to translate the level of effect in terms of RMA terminology.

⁵ RMA, Section 95E

⁶ RMA, Section 95E



This assessment has adopted the following scale applied to relevant RMA circumstances⁷ (refer to diagram below), acknowledging low and very low adverse effects generally equate to 'less than minor' and high / very high effects generally equate to significant⁸.

		SIGNIFICANT				
LESS THAN M	INOR	MINOR	MORE THAN MINOR			
VERY LOW	LOW	LOW-MOD	MODERATE	MOD-HIGH	HIGH	VERY HIGH

⁷ Seven-point level of effect scale. Source: Te tangi a te Manu, Pg. 15

⁸ The term 'significant adverse effects' applies to specific RMA situations, including the consideration of alternatives for Notices of Requirement and AEEs, as well as assessing natural character effects under the NZ Coastal Policy Statement.