I hereby give notice that an ordinary meeting of the Transport and Infrastructure Committee will be held on:

Date:	**Thursday, 16 March 2023**
Time:	**10.00am**
Meeting Room:	**Reception Lounge**
Venue:	**Auckland Town Hall** **301-305 Queen Street** **Auckland**

Komiti mō ngā Tūnuku me ngā Rawa Tūāhanga / Transport and Infrastructure Committee

OPEN ADDENDUM AGENDA

MEMBERSHIP

Chairperson	Cr John Watson	
Deputy Chairperson	Cr Christine Fletcher, QSO	
Members	Cr Andrew Baker	Cr Mike Lee
	Cr Josephine Bartley	Cr Kerrin Leoni
	IMSB Member James Brown	Cr Daniel Newman, JP
	Mayor Wayne Brown	IMSB Member Pongarauhine Renata
	Cr Angela Dalton	Cr Greg Sayers
	Cr Chris Darby	Deputy Mayor Desley Simpson, JP
	Cr Julie Fairey	Cr Sharon Stewart, QSM
	Cr Alf Filipaina, MNZM	Cr Ken Turner
	Cr Lotu Fuli	Cr Wayne Walker
	Cr Shane Henderson	Cr Maurice Williamson
	Cr Richard Hills	

(Quorum 11 members)

Maea Petherick
Kaitohutohu Mana Whakahaere Matua / Senior Governance Advisor

15 March 2023

Contact Telephone: +64 9 890 8136
Email: Maea.Petherick@aucklandcouncil.govt.nz
Website: www.aucklandcouncil.govt.nz

This agenda has been re-issued in order to replace an incorrect version of the report at Item 14, which was attached by administrative error. This only relates to Item 14.

Great North Road Corridor

File No.: CP2023/02483

Te take mō te pūrongo
Purpose of the report

1. To brief the Transport and Infrastructure Committee on proposed changes to the layout of Great North Road and to seek feedback on these proposals ahead of final approval by the Auckland Transport (AT) Board.

Whakarāpopototanga matua
Executive summary

2. Proposed changes to the layout of Great North Road between Crummer Road and Ponsonby Road have been developed since 2016 under the Connected Communities and Urban Cycleway programmes. Attachment 1 shows the scheme location and local network.
3. Implementing road layout changes between existing kerb lines, the changes will improve bus journey times, make the bus stops safer and more visible, and create safer conditions for walking and cycling. The planned construction work will also deliver storm water separation and capacity upgrades to accommodate recent and planned development that is bringing more people and businesses into this area.
4. The project features dynamic bus lanes with peak direction bus travel and off-peak direction managed parking and loading which ensures that peak-time traffic flows freely. Bus stops will be rationalised and accessed via safe pedestrian crossings that also serve the local schools. The majority of the cycleway is delivered through low-cost separators on the existing road surface without the need to alter kerb lines.
5. The project was paused during the local body election period in October 2022. Following a financial review and recent endorsement of the project by the Waitematā Local Board, the AT Board is now considering approval of construction subject to review of capital funding and feedback by the Transport and Infrastructure Committee.
6. The Transport and Infrastructure Committee is invited to provide feedback ahead of further AT Board consideration and decision making in May 2023.

Ngā tūtohunga
Recommendation/s

That the Transport and Infrastructure Committee:

a) tuhi ā-taipitopito / note the information provided on proposed changes to the layout of Great North Road.

b) tuhi ā-taipitopito / note that a site visit and briefing is being arranged for committee members

c) tuhi ā-taipitopito / note that AT is seeking direct feedback from the Transport and Infrastructure Committee members by 14 April 2023 ahead of decision making by the AT Board.

Horopaki
Context

7. The Great North Road Corridor project helps support a number of key strategic objectives, in line with the Future Connect road network strategy that sets the strategic priority for roading corridors. It is a regional arterial providing regional connections for private vehicles, bus users, goods and courier deliveries along with strategic cycling network development opportunities.

8. Vision Zero sets out a 'safe systems' approach to road safety by designing roads in a way that will help prevent deaths and serious injuries.

9. This project seeks to implement measures that will make bus journey times faster, make deliveries safer and easier, provide safer places to walk and cycle, and keep all traffic moving efficiently at peak times through use of dynamic bus lanes. The dynamic bus lanes provide peak bus travel and off peak direction parking and loading. Through greater corridor productivity, better transport options, the project will help to contribute to the objectives of the Transport Emissions Reduction Plan.

Tātaritanga me ngā tohutohu
Analysis and advice

10. The project has evolved from an initial consultation in 2016 and further iterations in 2017 and 2019 to the present, during which several design options were considered. A Community Liaison Group drawn from all sections of the community was formed during the consultation process. They have worked closely with the design team since 2018 to come up with a preferred option. The project engagement was paused during the COVID-19 pandemic but was recommenced in 2022. A high level of public support was shown throughout the 6-year design development and consultation process. The recent pause in engagement triggered further correspondence urging delivery of the project.

11. Great North Road links to the existing cycle network at Karangahape Road, with longer term links planned at Bond St and Surrey Crescent as well as existing connections to the Northwestern Path from Newton Road and St Lukes Road. A greenway to Cox's Bay from Great North Road (via Grosvenor Street) was completed in 2018.

12. The road is also used by pedestrians for access to nearby schools, particularly Newton Central School but also Auckland Girls Grammar and Grey Lynn School. Other attractions within a 400m distance (5 min walk) include Ponsonby Road, Western Park, Arch Hill Reserve, Grey Lynn Park and Grey Lynn library as well as the many local businesses along the corridor.

13. This section of the road is used by 12 bus routes connecting the CBD, Ponsonby, Grey Lynn, Westmere, Point Chevalier and other western suburbs. Approximately 30 buses per hour serve the corridor at peak times, with half that number off-peak.

14. The layout minimises movement of kerbs to keep costs down. The existing footpaths will be retained, with cycle paths in the adjacent carriageway. A bus lane and a traffic lane in each direction will remain as at present (see cross-section in Attachment 3). Kerbside space will be retained for car parking and loading bays but parking spaces will be removed to improve safety immediately around the 23 side road junctions.

15. One of the main challenges for the project is getting the right functional balance of provision for the different modes of transport and meeting the many aspirations of the community.

16. The anticipated benefits from the project are faster buses - 60 second reduction in peak hour journey times, 300 per cent increase in cycling from 500 to 1,500 per day, more visible bus stops connected with pedestrian crossings nearby, a 20 per cent reduction in crashes, continuous bus lanes with camera enforcement, safer mid-block and side road crossings for pedestrians, and five dedicated loading bays as a safer alternative to the practice of stopping and unloading in the flush median.

17. Some loss of car parking adjacent to most side road entrances will occur because the existing sightlines are unsafe and there is a pattern of collisions associated with turning. The modified side roads will be safer for pedestrians and drivers, reducing injuries and delays. Maintaining parking capacity in the area is important. There are currently 819 on-street parking spaces available within the wider corridor which will be reduced to 694 a reduction of 125, noting that current peak occupancy of these spaces is 65 per cent (62 per cent on average across the day) with 285 vacant spaces on an average weekday providing sufficient overall future capacity. Dynamic lanes enable parking to be retained on Great North Road (alternating on one side of road during peak traffic and both sides during off peak). Mitigations have been discussed with the local community and local board through additional provision in side-roads and parking management to get the right balance of long-stay space for residents and employees and shorter stay customer parking. Space for loading and servicing business is also provided. Attachment 4 provides further information showing the availability of parking in peak times including the level of parking occupancy which can accommodate the changes in parking.

18. The overall Benefit:Cost ratio (BCR) for the project is 2.4 due to the combination of benefits for bus, walking and cycling journeys with very few disbenefits as no traffic lanes will be lost. There is a small disbenefit associated with a predicted delay of 30 seconds to peak time traffic.

19. A breakdown of estimated costs is shown below. The project improves bus, cycling and pedestrian transport choices, with road safety and lighting improvements along with road resurfacing renewals, utility and stormwater upgrades. The separated cycle lane construction is through on road separators with asphalt surfacing without engineering road space or kerb realignment costed at $3.6m for 1.65Km:

Deliverables	Cost estimate $ (M)	Comments
Service relocations, trenching and tree pits	3.9	All underground works associated with signal, lighting camera poles, relocation of existing services and new connections plus construction of tree pits
Separated cycle lanes	3.6	Cycle lane construction with separators and intersection treatments
Separated bus lanes, bus stops and enforcement cameras	3.9	New bus lanes, enhanced bus stops with cycle lanes facilities, enforcement cameras and intersection treatments
Pedestrian improvements	5.2	Raised pedestrian crossing facilities at 23 side road treatments to improve safety and to mitigate the removal of flush median Additional raised pedestrian signals across Great North Road to facilitate safety, bus passengers and walking school bus routes
Road resurfacing	3.5	To remove ghost marking and improve safety from existing road layout and to enhance finished look of corridor. Extending the life of the corridor asset - reducing maintenance
Planting and amenity upgrades	3.6	Planting to replace the removal of 20 trees at 3.1 ratio. Planting of additional trees and low level plants to provide a cohesive landscape plan as identified by community and local board. Street furniture and urban amenity improvements.
Lighting upgrade and replacement of sub standards	0.6	Replacing sub standard lighting and improving lighting particularly at new pedestrian crossings
Total (AT construction cost estimate)	24.3	
Contingency plus escalation	3.8	Contingency and escalation to accommodate 2022 cost increases
AT Grand Total construction	**28.1 plus 3.3 HW**	
Auckland Council Healthy Waters (HW) stormwater separation	3.3	Auckland Council sewer stormwater separation project

Table One: Great North Road Corridor – Project Costs Estimate

Tauākī whakaaweawe āhuarangi
Climate impact statement

20. Auckland Council declared a climate emergency and considers prioritisation of projects that help reduce carbon emissions for the Transport Emissions Reduction Plan (TERP). The proposed project will encourage walking, cycling and bus travel to reduce carbon emissions. 60 new street trees and low-level planting areas will add to the ambience, help to absorb storm water and carbon dioxide and provide shade to reduce surface temperatures.

21. The planned construction work will also deliver storm water separation and capacity upgrade via Healthy Waters in a 'dig-once' approach.

Ngā whakaaweawe me ngā tirohanga a te rōpū Kaunihera
Council group impacts and views

22. The project helps to deliver the Regional Land Transport Plan, Auckland Transport Alignment Plan and meet the aspirations of Vision Zero for Tamaki Makaurau, a Transport Safety Strategy and Action Plan to 2030.

23. The local communities have signalled their support for sustainable travel projects in the Inner West through representations to the Transport and Infrastructure Committee, Waitematā Local Board and the AT Board. Over sixty letters sent from individuals, businesses, organisations and local schools have urged completion of the projects over the last few months. The Members of Parliament for Mount Albert and Auckland Central have written to express support for the three Inner West cycling projects.

24. On 27 February 2023, nine councillors wrote to request that AT deliver the projects.

Ngā whakaaweawe ā-rohe me ngā tirohanga a te poari ā-rohe
Local impacts and local board views

25. The project team has worked with key stakeholders including Grey Lynn Residents Association, Grey Lynn Business Association, schools and individuals to understand their concerns and aspirations. As well as the design of the physical infrastructure, discussions have considered how the scheme might operate (such as the times when parking is available and the practicalities of loading bays) and other details such as the choice of planting.

26. The Waitematā Local Board was represented in the Community Liaison Group. Since October 2022, the designers have held three workshops with the Local Board members. On 21 February 2023, a majority of the Waitematā Local Board members supported a resolution to proceed to construction.

Tauākī whakaaweawe Māori
Māori impact statement

27. The project consultation included input from local mana whenua representatives through the Central hub hui including choice of native tree species.

28. Both AT and Auckland Council are committed to meeting their responsibilities under Te Tiriti o Waitangi and its broader legal obligations in being more responsible or effective to Māori. AT's Māori Responsiveness Plan outlines the commitment to 19 mana whenua tribes in delivering effective and well-designed transport policy and solutions for Auckland. We also recognise maata waka and their representative bodies and our desire to foster a relationship with them.

Ngā ritenga ā-pūtea
Financial implications

29. The P(50) budget for the transport elements of the project is $28.1m of which 51 per cent is funded by central government, the remainder ($13.8m) being the Auckland Council share. A further $3.3m will be provided by Healthy Waters for the stormwater elements of the project. The project was approved by the AT Board in 2021 and the enabling works contract for ground investigations and drainage work was started in September 2022.

Ngā raru tūpono me ngā whakamaurutanga
Risks and mitigations

30. Waka Kotahi New Zealand Transport Agency co-funding is contingent on delivery of the project in financial year 2024 to 2025.

Ngā koringa ā-muri
Next steps

31. Following the Transport and Infrastructure Committee meeting, AT officers will provide feedback to the AT Board at its meeting in May 2023.

32. Direct feedback is requested from Transport and Infrastructure Committee members to AT officers. A site visit and briefing is being arranged for committee members.

33. The AT Board will then consider the programme and make a decision on the programme. The final decision will be communicated to the Transport and Infrastructure Committee as part of the regular monthly update by AT in due course.

Ngā tāpirihanga
Attachments

No.	Title	Page
A	Local strategic cycling network and Inner West Corridor Projects	
B	Local strategic bus network and connections	
C	Cross section of proposed layout of Great North Road between Crummer Road and Ponsonby Road	
D	Proposed parking mitigation	

Ngā kaihaina
Signatories

Author	Adrian Lord – Head of Cycling
Authorisers	Murray Burt – Acting Executive General Manager Integrated Networks Barry Potter - Director Infrastructure and Environmental Services

Ferry Services - Improvement and Development Work Programmes

File No.: CP2023/02482

Te take mō te pūrongo
Purpose of the report

1. To whiwhi / receive an update from Auckland Transport (AT) on the Auckland ferry network and work programmes to improve the network.

Whakarāpopototanga matua
Executive summary

2. Ferry service patronage in Auckland is now exceeding 100% of pre-COVID-19 pandemic levels and seeing steady increasing demand. During the week-ending Sunday 5 March 2023, 67,754 ferry boardings occurred on AT contracted ferry services (excluding the Waiheke Island exempt services).
3. In conjunction with ferry operators, AT is implementing work programmes to improve and develop Auckland's ferry network.
4. The work programmes are focused on strategic ferry network development and actions to address short-term industry challenges including crew shortages and managing disruption from cancelled services.

Ngā tūtohunga
Recommendation/s

That the Transport and Infrastructure Committee:

a) tuhi ā-taipitopito / note the updates provided in this report.

Horopaki
Context

5. To provide an overview for the Committee on the Auckland ferry service network and investment, improvement and development work programmes underway.

Tātaritanga me ngā tohutohu
Analysis and advice

Ferry Overview

6. The Auckland passenger ferry network comprises:
    - nine passenger ferry services contracted by AT (Bayswater, Birkenhead / Te Onewa Northcote Point, Devonport, Gulf Harbour, Half Moon Bay, Hobsonville / Beach Haven, Pine Harbour, Rakino and West Harbour) of which six are contracted with Fullers360, Pine Harbour with SeaLink and Rakino and West Harbour with Belaire Ferries;
    - Waiheke Island passenger ferry operated as an exempt service (not under contract with AT) by Fullers360 (with a Quality Partnership Agreement in place with AT); and
    - car ferry services operated to Waiheke Island and Great Barrier Island by SeaLink as exempt services (not under contract with AT).

7. On AT contracted ferry services, the fare revenue is collected and transferred to AT to offset the gross operating cost of the contracts. The net operating cost balance is met 50:50 by Waka Kotahi New Zealand Transport Agency (Waka Kotahi) and Auckland Council.

8. The existing Auckland passenger ferry fleet operating on AT contracted services comprises 29 vessels, predominantly owned and operated by the above private operators. It consists of vessels which are of varying ages, designs and capacities.

9. Existing ferry passenger wharves are under the ownership and operation predominantly of AT (with full open access rights to all operators) with some private marinas (Pine Harbour, Hobsonville, West Harbour and Bayswater).

10. The AT Ferry Futures Strategy 2018 outlines a medium to long term investment plan to enhance utilisation and coverage of the Auckland passenger ferry network to:

    - develop initially existing contracted ferry route service standards – enhanced frequency, 7-day a week services and improved reliability; and
    - develop later new ferry routes.

11. Challenges identified within the AT Ferry Futures Strategy 2018 included:

    - Private sector partnerships through small, short-term contracts;
    - Ageing and non-standardised ferry fleet (average 19 years across 29 vessels);
    - Wharf capacity and ageing infrastructure; and
    - Integration with other public transport (PT) modes including timetables and fares.

Service Enhancements

12. Service enhancements to existing routes has recently included provision of weekend services to Pine Harbour in 2022/23.

13. On AT contracted services, AT HOP ticketing is available that is offered on an integrated basis with adjacent bus and train services through zone-based payment. Recent enhancements have seen provision of improved integrated ticket products for Waiheke Island.

Private Sector Operator Engagement

14. An approved ferry service procurement strategy is being implemented by AT to create greater certainty of ferry service operation and investment by private suppliers through two long-term ferry service contracts:

    - Devonport, Gulf Harbour, Hobson Ville / Beach Haven and Half Moon Bay, which included the transfer of the Devonport service from exempt to contracted status, signed with Fullers360 in July 2022; and
    - Bayswater, Birkenhead / Te Onewa Northcote Point, Pine Harbour, Rakino Island and West Harbour to be procured in 2024 - currently these are on short-term contracts with Fullers360, SeaLink and Belaire Ferries.

15. AT pays operators a gross contract price for delivery of these services and collects farebox direct through AT HOP or through the sale of tickets on-board by operators.

16. Through the contracts, AT sets service standards. There are contractual mechanisms for both parties to manage performance.

17. Operators are responsible for vessel maintenance, for providing suitable staffing levels to run the contracted level of timetable service, arranging alternative transport when ferries cannot operate and for staff management.

18. Customer experience is managed jointly between AT and the operator. AT takes the lead on all marketing, branding and longer term / network wide communications. The operator is the first point of contact for face-to-face communications and customer management.

Ageing Ferry Fleet

19. Of the current 29 vessels in the contracted fleet, 16 vessels are identified as being due for retirement in the immediate future and three vessels are identified as being due for retirement by 2027. The average fleet age is 19 years.

20. AT is implementing a funded (partial) fleet replacement and upgrade programme that will improve fleet reliability, through a change in business model where fleet ownership will progressively transfer to AT (Council Group):

    - Since March 2022, jointly with Crown Infrastructure Partners (CIP) and Waka Kotahi, AT is investing in the procurement of two battery electric 200-passenger vessels from EV Maritime / McMullen & Wing. The first of these new vessels is currently under construction and is expected to be delivered by October 2024;
    - Five new electric-hybrid ferries supported by funding enabled through the Climate Action Targeted Rate (CATR) and central government funding approved by Waka Kotahi in December 2022. The first electric-hybrid 300-passenger vessel is under construction and is expected to be completed in December 2024 and will be allocated to the Devonport service; and
    - AT acquired four existing diesel ferries from the Fullers360 fleet to undertake refurbishment and extend working life in 2022. The first have been refurbished and repowered and will resume passenger services from April 2023. The remaining three vessels will be refurbished over the next 12 months.

21. AT has commenced a low emission ferry wharf-side infrastructure upgrade to connect ferry wharves with high voltage connections and charging infrastructure, as well as upgrading wharves to improve vessel boarding. The first wharves upgraded will be Hobsonville, the Downtown Ferry Terminal and Half Moon Bay.

22. These capital investments are funded 51 per cent by government or higher in the case of the two new fully electric ferries.

23. Operators run an integrated network which means that different vessels run on different services at different times through the course of a day. This delivers an optimal model for vessel utilisation and crew efficiency, for when a full complement of crewing is available.

24. Other recent actions:

    - The two vessels that were removed from service following the Auckland flood event have now been repaired and returned to service.
    - A number of other vessels that suffered damage and mechanical failures from the flood event that resulted in cancellations have now been repaired.

Ferry industry staffing shortages

25. In the current operating environment, it is crew shortages that has the greatest impact on the service delivery.

26. Ability to recruit externally continues to be impacted for all operators and is industry-wide, in part, by the unavailability of suitably qualified personnel within the New Zealand market and immigration settings.

27. Operators continue to train and promote internally.

28. Actions underway to improve the current shortage:

    - Recruitment Plan and Talent Strategy from 2022.
    - Timetable optimisation to mitigate crew shortfall to improve reliability of those services that are operated. Further optimisation review is underway to enhance reliability and customer certainty.
    - Operators seeking to contract crew resource and vessels from wider industry suppliers.

- Operators have gained accredited employer status under the Accredited Employer Works Visa scheme, however, employing from overseas markets remains complex given the current immigration process and steps required to recognise overseas maritime qualifications.
- Operators are actively recruiting from overseas with a number of new employees to join the industry by April 2023.
- Operators continue to recruit New Zealand-based staff for both entry-level and qualified positions, where possible, noting the continued challenge in securing the appropriate skills in the industry and strong competition for scarce resource.
- AT has provided Waka Kotahi with the immigration barriers that need to be addressed when recruiting crew from overseas. A pathway to residency is also being discussed as a possible recruitment incentive.

Improvements in Ferry Communications

29. Public announcements (PA), where AT PA systems exist, have been increased.
30. A review of customer-centric information for disruption announcements is underway.
31. New functionality for the AT Mobile App including live vessel tracking and enhanced disruption notifications is being implemented to allow all ferry customers to utilise the AT Mobile App for service disruptions, advanced notification and real-time information.
32. AT has limited staff resources available at ferry facilities for queue management and ambassadorial support. This is being reviewed.

Tauākī whakaaweawe āhuarangi
Climate impact statement

33. PT is a significant focus area and objective to deliver on in Tāruke-ā-Tāwhiri: Auckland's Climate Plan.
34. The decarbonisation of PT assets is ongoing, with specific targets to convert the fleet to zero emissions by 2035.
35. The first two new electric and hybrid electric ferries will start operating in early 2025.

Ngā whakaaweawe me ngā tirohanga a te rōpū Kaunihera
Council group impacts and views

36. Auckland Council has advised that there is significant budgetary pressure in FY2023/24 and cost savings are being sought from AT to reduce this pressure.
37. This includes reviewing PT services priorities, considering network optimisation, and recovering pre-COVID-19 pandemic PT patronage levels.
38. Cost escalations due to high indexation put pressure on maintaining the same level of services across all services and AT is currently assessing options to optimise ferry operations and service levels in line with the available budget. Such service optimisation may mitigate current reliability issues while better utilising available resources.

Ngā whakaaweawe ā-rohe me ngā tirohanga a te poari ā-rohe
Local impacts and local board views

39. Specific briefings are made to local boards, particularly in respect of impacts on local PT services. Any potential changes to ferry services will be discussed with impacted local boards.

Tauākī whakaaweawe Māori
Māori impact statement

40. AT's programmes contribute to Māori outcomes in the Auckland Plan and to the transformation shifts of lifting Māori social and economic wellbeing, and identity.

41. For example, the use of Te Reo Māori for audio announcements within the PT fleet is an ongoing work in progress. As new vessels are introduced AT will work to add onboard audio announcements in Te Reo Māori on contracted ferry services.

Ngā ritenga ā-pūtea
Financial implications

42. The AT 2022/23 budget and Statement of Intent targets a 12-monthly rolling average of 59 million annual passenger boardings. Most recent forecasts project total trips in the 12 months to June 2023 will be 69 million which is 69 per cent of pre-COVID-19 pandemic levels. Ferry services are now achieving patronage above 100 percent of pre-COVID-19 pandemic levels.

43. AT net operating cost payments under service contracts after reduction of fare revenue require public subsidy support and is covered 50:50 by government via Waka Kotahi and Auckland Council. New capital investment in vessels and wharf upgrades is covered 51% by government via Waka Kotahi and higher for the CIP funded two new fully electric vessels.

44. The indexation rates in contracts are administered nationally by Waka Kotahi. Annual indexation for diesel ferries is currently running at 20%. This is placing pressure on budgets at a time that Council and AT is seeking to reduce costs. Service levels and budgets are currently being set as part of the annual budget process for next year.

Ngā raru tūpono me ngā whakamaurutanga
Risks and mitigations

45. Refer to the table below:

Key risk	Mitigation
Crew Shortage carry beyond 2023	
It takes longer to train and gain qualifications for overseas crew.	AT and operators are advocating to Maritime New Zealand to fast-track recognition of overseas deckhand and skipper qualifications.
Inability to operate all services reliably.	Optimising the ferry service network and aligning with resource availability.
Vessels becoming older	
More vessel breakdowns and longer repair times.	Vessels are being pro-actively maintained to preserve operations. Four existing vessels acquired by AT are being refurbished. A programme of investment and construction of new and refurbishment of existing vessels is underway to replace older vessels.
Low emission wharf infrastructure delayed preventing the use of new vessels	
New vessels are unable to operate.	The project team is accelerating programme of design and procurement to deliver at least one charging facility for battery electric vessels from EV Maritime. A hybrid electric ferry can operate using diesel generation in the short term.

Ngā koringa ā-muri
Next steps

46. The Transport and Infrastructure Committee will continue to be kept updated on the performance of the PT system including the ferry network.

Ngā tāpirihanga
Attachments

There are no attachments for this report.

Ngā kaihaina
Signatories

Author	Darek Koper – General Manager Metro Services, Auckland Transport
Authorisers	Murray Burt - EGM Integrated Networks, Auckland Transport Barry Potter - Director Infrastructure and Environmental Services

Flood Recovery Programme for Three Waters Operations

File No.: CP2023/01973

Te take mō te pūrongo
Purpose of the report

1. To seek approval to progress a Flood Recovery Programme for Three Waters Operations.

Whakarāpopototanga matua
Executive summary

2. The Auckland Anniversary weekend storm and Cyclone Gabrielle caused significant damage to Auckland's homes, businesses and infrastructure. Healthy Waters and Watercare actively prepared for and responded to the weather events as they occurred. Response is ongoing, with waterway clearing, asset repairs, and assessments of property and stream damage.
3. While critical water services were quickly restored, full recovery in some parts of the region is expected to take many years. This cost of recovery has not been forecast in current budgets, and this will need to be addressed in the Annual Budget 2023/2024, as well as in partnership with central government and the insurance sector.
4. Council's response to the weather events will be broad and wider than Three Waters. The council's recovery office and recovery plan are currently being developed and the programme scope proposed in this report will be integrated within the recovery office and recovery plan.
5. As part of Auckland Council's recovery function, Healthy Waters and Watercare have developed a Flood Recovery Programme for Three Waters Operations. This will identify, coordinate and prioritise three waters activities, including funding options, to recover from recent events and increase resilience in preparation for future flood events.
6. The scope of the proposed Flood Recovery Programme for Three Waters Operations (stormwater, drinking water and wastewater) includes:
    - current requests for service and engineering investigations responding to the extreme weather events
    - all of Healthy Waters and Watercare's operations as they have been affected by the floods and could be affected by future similar events
    - cooperation with other parties as needed.
7. The Flood Recovery Programme will incorporate actions that can be progressed immediately such as assessing and remediating streams and capturing flood data for analysis through to longer-term actions including projects that will build resilience to extreme weather events.
8. Council's response to the weather events will be broader than the proposed three waters operational plan. The council's recovery office and recovery plan are currently being developed and this work will integrate within those.
9. In parallel work is underway through the Planning Environment and Parks Committee to *'investigate the regional and localised impacts of flooding, and the implications for land use planning, regulatory, current plan changes to the Auckland Unitary Plan (including Plan Change 78), infrastructure and other policy settings'*. While this operational response plan may raise issues that require longer-term advocacy, planning and regulatory change these will be considered as part of the investigation and implications being managed out of the Planning Environment and Parks Committee.

10. Indicative budgets and projects for 2023/2024 will be prepared by April 2023 to enable decision making through the Annual Budget process. The final Flood Recovery Programme document is expected to be presented to the Transport and Infrastructure Committee by September 2023.

Ngā tūtohunga
Recommendations

That the Transport and Infrastructure Committee:

a) whakaae / approve the development of a Flood Recovery Programme for Three Waters Operations, based on the scope provided to the meeting

b) tono / request the Recovery Office to support the development and implementation of the Flood Recovery Programme for Three Waters Operations as part of the council's Recovery Programme

c) tuhi ā-taipitopito / note that the Flood Recovery Programme for Three Waters Operations will be coordinated and integrated through the Recovery Plan being prepared by the Recovery Office

d) tuhi ā-taipitopito / note that some of the work delivered through this Flood Recovery Programme will require additional funding and this will need to be considered by the Governing Body as part of the recovery discussions.

Horopaki
Context

Extreme weather events caused significant damage to Auckland

11. Auckland experienced two extreme and devastating weather events in quick succession: the Auckland Anniversary weekend storm (27 January – 1 February 2023) and Cyclone Gabrielle (12 – 14 February 2023).

12. The result of these events was significant flooding and slips across the Auckland region, with catastrophic impacts on people, homes, infrastructure, and the natural environment. A detailed description of the events and their impacts was provided to the Transport and Infrastructure Committee on 16 February (TICCC/22023/9) and Planning, Environment and Parks Committee on 2 March (PEPCC/2023/25).

13. Localised parts of the three waters networks were impacted by these events:

- water supply was impacted with reduced treatment capabilities (due to treatment plant damage, high turbidity and sedimentation) and damage to pipe networks
- contaminated waters flowed out to Auckland's harbours, leading to beach closures for more than a week
- built stormwater assets were blocked and damaged
- stream banks were extensively damaged by debris, trees, and erosion
- aquifers holding water below ground reached record high levels, meaning low-lying areas continued to experience minor flooding after the rain had stopped
- obstructions in overland flow paths exacerbated flooding.

Impacts were unevenly distributed

14. The effects of the Auckland Anniversary Storm and Cyclone Gabrielle were unevenly distributed. Heavy rainfall affected approximately 60 per cent of the region on 27 January. Attachment A shows the distribution of the habitation status of damaged buildings as a result of both events. These points are indicative and have been overlaid with floodplain information.

15. A project is planned to capture and analyse flood event data to update flood models. This will give good insight into the variables that led to flooding in different parts of the region. Some preliminary observations, that need to be validated through further analysis:

    - the location of flooding aligned with the flood risk areas identified in Healthy Waters' flood modeling
    - new developments, both greenfield and brownfield, built to current Auckland Unitary Plan, Stormwater Code of Practice and Building Code standards, generally fared well
    - flooding of houses and businesses was concentrated in parts of the city that were developed earlier
    - newly engineered stormwater solutions, such as Sunnynook Park, Te Auaunga (Oakley Creek), Te Awataha (Greenslade), and Drury South worked as designed to capture and detain stormwater, even though the volume was well above the expected rainfall for their design
    - reservoirs in the Waitākere Ranges were affected more than those in the Hunua Ranges, which had been remediated after the 2017 Tasman Tempest.

Healthy Waters' and Watercare's immediate response

16. Healthy Waters received 3,500 requests for service as a result of the Auckland Anniversary Weekend storm and Cyclone Gabrielle between 27 January and 19 February. This is equivalent to around 60 per cent of a normal year's number of requests. There will be additional requests for service from Watercare, Fire and Emergency New Zealand, and other incidents that were not reported.

17. There are now 1,100 ongoing stormwater engineering investigations which have identified a need for some form of asset repair or replacement. Refer to Attachment B for detail of the number, types, status, and distribution of requests for service received by Healthy Waters.

18. Healthy Waters' ongoing response work includes:

    - repairing council owned wastewater treatment and drinking water supplies
    - clearing blockages in catchpits, watercourses and pipes
    - investigation and repairing damage to roads and manholes
    - clearing or stabilising erosion, tomo and slips, pond maintenance
    - culvert repairs.

19. At the time of writing, some of the more significant land slips are continuing to move, so the full extent of the damage to waterways and properties cannot yet be fully assessed.

20. Watercare has restored all of its services. Muriwai and Pukekohe Water Treatment plants remain out of service with alternative water supply in place for these communities. On 28 January, 3,700 properties temporarily lost water supply due to a slip on Scenic Drive. Huia Water Treatment Plant continues to run at reduced capacity because of high turbidity in the source water. This is not impacting water supply to northern Auckland as this is being supplemented from southern supply sources.

21. Watercare is focusing assessments on whether damaged assets need to be fixed, replaced and/or significantly adapted.

Tātaritanga me ngā tohutohu
Analysis and advice

Capacity to manage extreme rainfall events

22. The Auckland Anniversary weekend floods and Cyclone Gabrielle have important consequences for Auckland's flood risk profile and how we respond with our three waters services. Two aspects are particularly important:

    - given the extreme volume of rainfall, engineered systems would not have been able to prevent the level of flooding and subsequent impact on three waters networks
    - the scale of recent events changes the assessment of future flood risk for Auckland. Work is underway to determine the effect of these events on flood risk calculations.

23. Healthy Waters will be undertaking detailed risk analysis of areas that suffered the most severe flooding to target interventions and enable conversations about acceptable risks and long-term land use.

24. Within these considerations, there are a range of options to manage the impacts of extreme rainfall events. For example, avoiding building in flood plains and overland flow paths, using open space for overflow and stormwater detention, improving the resilience of three waters infrastructure such as pump stations and treatment facilities, increasing the maintenance of existing overland flow paths including roads, and local (or property based) flood protection.

There is a need for a coordinated recovery programme

25. Auckland Council's broader response to recovery from the Auckland Anniversary Floods and Cyclone Gabrielle will be managed under its Recovery Office as established by the Recovery Manager. The Recovery Manager has statutory functions under s30A Civil Defence and Management Act and other associated plans. The Recovery Manager undertakes planning, and manages, directs and coordinates activities throughout the recovery.

26. The permanent Recovery Manager is yet to be appointed and this office is in the establishment phase. It will include an infrastructure workstream which will include three waters, transport and lifelines and this programme will integrate and be informed by that office and relevant workstreams.

27. The Flood Recovery Programme for Three Waters Operations will be coordinated and integrated through the Recovery Plan being prepared by the Recovery Office.

28. Healthy Waters and Watercare are working with the council family in a coordinated recovery programme to respond to asset damage. The programme will:

    - help organise and prioritise operational works (e.g. by location, risk, type of intervention needed)
    - provide a 'build back better' framework to assess and prioritise the range of potential recovery works
    - ensure that works are coordinated across departments and in partnership with other agencies
    - ensure funding is available and prioritised
    - explain the process and timing of recovery works to the community
    - produce a contained Three Waters programme of work to allow for a smooth transition
    - support ongoing delivery of requirements under the Network Discharge Consent.

29. Recovery includes the remediation of existing damage, but also ensuring preparedness for future flood events. The work programme will ensure that three waters projects are designed to avoid new risks, reduce existing risks, manage residual risk, and build public awareness.

30. Staff will provide monthly progress reporting to the Transport and Infrastructure Committee.

31. Examples of issues that will be addressed in the programme include: known flooding hotspots, overland flow path management, flood plains and ponding areas, stream erosion, location and design of hard infrastructure including pump stations and culverts, and maintenance of infrastructure, including street sweeping and catchpit cleaning.

Moving from response to recovery

32. The scope of the proposed Flood Recovery Programme for Three Waters Operations includes:

- current requests for service and engineering investigations responding to the extreme weather events
- all of Healthy Waters and Watercare's operations as they have been affected by the floods and could be affected by future similar events
- cooperation with other parties as needed.

33. Recovery will have immediate and far-reaching impacts on three waters work programmes and budgets. It will need to focus on the following actions, shown in Table 1.

Table 1. Flood Recovery Programme Actions

Timeframe	Actions
Immediate term	Completing engineering investigations Assessing and remediating streams, once it is safe to do so Capturing flood data for analysis Identifying projects that can be delivered quickly Re-prioritising current work Public communication
Short to medium term	Prioritising and progressing capital improvements identified through engineering investigations Development and implementation of stormwater management plans for vulnerable catchments Overland flow path monitoring and management Updating models to reflect new flood data Adaptation and rehabilitation of assets Coordination of planning and consenting Collaboration with other lifeline utilities
Long term	Projects that will build resilience to extreme weather events Identifying policy and regulatory changes needed to avoid similar events in the future

34. Projects will be prioritised in areas that have had repeated flooding events, are at particularly high risk, or where flooding will substantially impact lifeline utilities.

35. A wider investigation of flooding impacts and the implications for land use planning, regulatory, current plan changes to the Auckland Unitary Plan (including Plan Change 78) infrastructure and other policy, is being led by the Chief Planning Office (PEPCC/2023/25). Three waters operational expertise will be provided to inform this review as needed.

Integrating recovery into regular business processes

36. Compared to the urgent nature of emergency works, activities in the recovery phase will need to be carefully budgeted and programmed.

37. Under the Stormwater Network Discharge Consent, Healthy Waters has a key role in managing flooding and associated impacts. The Network Discharge Consent sets out requirements for Healthy Waters, including operational obligations and the need to work with other council teams and external stakeholders to collectively manage flood risk through physical works and regulatory advice.

38. Central government's Three Waters Reform process will also need to be considered. Any significant decisions will require approval from the Department of Internal Affairs, particularly those that are longer-term and may be transferred to the new entity. This programme supports council and Watercare's current obligations under transitional reform arrangements.

Tauākī whakaaweawe āhuarangi
Climate impact statement

39. Climate change is increasing the frequency, intensity and severity of flooding in Auckland. Both the Auckland Plan 2050 and Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan advocate for greater resilience to such events. In 2022, Healthy Waters and Watercare developed a shared Climate Change Action Plan which identified several necessary actions to manage and respond to flooding.

40. The Three Waters Flood Recovery Programme will incorporate nature-based solutions, such as restoring wetlands, developing water retention areas, clearing overland flow paths and naturalising channels, as part of a range of solutions to manage future flooding. These nature-based solutions have a lower carbon impact than the more carbon-intensive grey infrastructure. Some will also have the ability to sequester carbon.

41. The Three Waters Flood Recovery Programme will also promote the use of low carbon technologies and methodologies in the design, construction and renewal of the piped network in line with the targets set by Te-Tāruke-ā-Tāwhiri. Resilience of Watercare's current sources, treatment and conveyance assets will be reviewed to ensure that they are fit for purpose in a changing climate.

42. The social outcomes associated with the impacts of climate change on the community, cultural and natural ecosystems will be considered in the programme.

43. Development of the Three Waters Flood Recovery Programme itself will have no impact on emissions.

Ngā whakaaweawe me ngā tirohanga a te rōpū Kaunihera
Council group impacts and views

44. The Flood Recovery Programme for Three Waters Operations will be delivered by Healthy Waters and Watercare. Many projects will require collaboration with other parts of the council group, particularly Auckland Transport, Auckland Emergency Management, Parks and Community Facilities, Resilient Lands and Coasts, Chief Planning Office, and Licensing and Regulatory Compliance.

45. Importantly the flood recovery programme will be integrated with council Recovery Office and workstreams.

Ngā whakaaweawe ā-rohe me ngā tirohanga a te poari ā-rohe
Local impacts and local board views

46. All local board areas were impacted by these events. Local boards will be included as relevant to projects and issues in their area. The programme will support elected members to understand the work being undertaken by Healthy Waters and Watercare to respond to these events.

Tauākī whakaaweawe Māori
Māori impact statement

47. Māori groups, including hapū, iwi, marae and Māori wardens, provide a critical support role in the immediate response to emergencies, including flooding and cyclone impacts.

48. Marae across Tāmaki Makaurau were affected by the storms with slips, flooding, road closures, and other environmental hazards.

49. The Flood Recovery Work Programme will need to specifically consider how the council family can work with and support both mana whenua and mataawaka in future events. Regular engagement is undertaken with Mana Whenua at the monthly Infrastructure and Environmental Services Mana Whenua Kaitiaki Forum to inform specific projects within the programme.

Ngā ritenga ā-pūtea
Financial implications

50. The programme will be prepared within existing staff budgets. Some business-as-usual work may need to be deferred in order to deliver the programme in a timely manner.

51. Projects identified within the work programme will go through usual business case and budget prioritisation processes. Exact costs of responding to the recent flood events are still being developed, as part of the council-wide recovery process.

52. It is anticipated that Healthy Waters and Watercare will need additional funding to meet the flood recovery demands on three water services. The longer term flood response will be beyond the scope of council funding and will require partnership with central government and the insurance sector.

53. Funding requirements are still to be finalised and then moderated across the council group. Sources of funding such as insurance, grants, reprioritisation of existing programmes or additional council funding are also yet to be determined.

54. As part of the Annual Budget 2023/2024, the council is proposing to increase operating budgets for proactive and reactive storm response by around $20 million each year. Some of this funding will support immediate repair and maintenance costs.

Ngā raru tūpono me ngā whakamaurutanga
Risks and mitigations

55. There are significant risks if operational work is not delivered to respond to and build resilience to flooding events in Auckland. Climate projections and recent experience confirm these events will become more frequent soon, which will impact the long-term operations of three waters infrastructure.

56. Auckland Council currently faces significant funding shortfalls. As the consultation period for the Annual Budget 2023/2024 was released prior to this report, there will be some variation between what is consulted on and what is delivered in the next 12 months through the Plan. In addition to reprioritisation of existing Healthy Waters and Watercare budgets, funding assistance from the Crown will be sought. However, the expenditure required is likely to exceed what can be made available through those channels.

57. Healthy Waters and Watercare are expected to be part of the northern three waters entity from 1 July 2024. While some work will be completed before this transition occurs, there will be long-term projects that will need to be approved by the Department of Internal Affairs and transferred to the new entity. This may impact resourcing and budget expectations for both the new entity and the council. The programme will be shared with the northern three waters entity and included in budget projections to reduce the risk of projects being abandoned. This also presents an opportunity to work with Northland councils in their recovery.

58. Key risks and mitigations associated with the Flood Recovery Programme are shown in Table 2. A more detailed analysis of risks and mitigations will be included in project plans.

Table 2. Risks and mitigations associated with the Flood Recovery Programme

Risk	Mitigation	Residual risk
Impacts of more frequent extreme weather events	Programme will incorporate up to date modelling will be informed by up to date climate projections	Medium
Funding shortfall for flood preparation and response	The programme will help to organise and prioritise flood-related operational works The council is proposing to increase operating budgets for proactive and reactive storm response by around $20 million per year Funding assistance will be sought from the Crown	High
Three Waters Reform impacting long-term recovery programme	Healthy Waters and Watercare are collaborating closely on this programme to ensure alignment Programme will be shared with the northern three waters entity	Medium

Ngā koringa ā-muri
Next steps

59. A programme coordination team will be established and will provide regular updates to the Transport and Infrastructure Committee on the flood response and progress of the Programme.

60. The Recovery Office will support the development and implementation of the Flood Recovery Programme for Three Waters Operations as part of the council's Recovery Programme.

61. Indicative budgets and projects for 2023/2024 will be prepared by April 2023 to enable decision making through the Annual Budget process.

62. A more detailed work programme will be developed by June 2023. The final programme document is expected to be considered by the Transport and Infrastructure Committee in September 2023, following budget decisions.

Ngā tāpirihanga
Attachments

No.	Title	Page
A	Map of building assessments and flood plains	
B	Requests for service 27 January to 19 February 2023	

Ngā kaihaina
Signatories

Authors	Craig Mcilroy – General Manager, Healthy Waters Andrew Chin – Executive Director Special Projects, Watercare
Authoriser	Barry Potter - Director Infrastructure and Environmental Services

Transport and Infrastructure Committee Forward Work Programme

File No.: CP2023/02288

Te take mō te pūrongo
Purpose of the report

1. To whakaae / approve the Transport and Infrastructure Committee's forward work programme appended as Attachment A.

Whakarāpopototanga matua
Executive summary

2. This committee has the oversight of major transport and infrastructure matters that affect the Auckland region. It also has an oversight role for Auckland Transport.
3. Areas of work are briefly described as requiring either decision or direction. Where possible, likely timeframes for coming before the committee have also been identified.
4. Staff will keep the forward work programme updated and complete a review of the forward work programme every six months.
5. All committees have been requested to approve their forward work programme, by the end of March 2023.
6. Following approval, all committee forward work programmes will be reported to the Governing Body in April and October each year, for oversight as per the Terms of Reference.
7. Note that, unlike an agenda decision report, **staff will not be present to answer questions about these items referred to in the summary.** Committee members should direct any questions to the authors.

Ngā tūtohunga
Recommendation/s

That the Transport and Infrastructure Committee:

a) whakaae / approve the Transport and Infrastructure Committee's forward work programme (Attachment A of the report).

b) whakaae / agree that the Transport and Infrastructure Committee's forward work programme be reported for information on a monthly basis and reviewed on a six-monthly bases in March and September each year.

Ngā tāpirihanga
Attachments

No.	Title	Page
A	Forward Work Programme	

Ngā kaihaina
Signatories

Author	Maea Petherick - Kaitohutohu Mana Whakahaere Matua / Senior Governance Advisor
Authoriser	Barry Potter - Director Infrastructure and Environmental Services