

Transitional Parking Plan

02-September-2025

FINAL



Transitional Parking Plan

Prepared by

AECOM New Zealand Limited

8 Mahuhu Crescent, Tāmaki Makaurau/Auckland 1010, PO Box 4241, Tāmaki Makaurau/Auckland 1140, New Zealand
T +64 0800 003 903 www.aecom.com

02-September-2025

Job No.: 60732098

AECOM in Australia and New Zealand is certified to ISO9001, ISO14001 and ISO45001.

© AECOM New Zealand Limited (AECOM). All rights reserved.

AECOM has prepared this document for the sole use of the Client and for a specific purpose, each as expressly stated in the document. No other party should rely on this document without the prior written consent of AECOM. AECOM undertakes no duty, nor accepts any responsibility, to any third party who may rely upon or use this document. This document has been prepared based on the Client's description of its requirements and AECOM's experience, having regard to assumptions that AECOM can reasonably be expected to make in accordance with sound professional principles. AECOM may also have relied upon information provided by the Client and other third parties to prepare this document, some of which may not have been verified. Subject to the above conditions, this document may be transmitted, reproduced or disseminated only in its entirety.

Quality Information

Document Transitional Parking Plan
Ref 60732098
Date 02-09-2025
Originator Deborah Keary / Tamara Simunic / Pablo Montes De Oca Walker
Checker/s David Huang / Kate Symington / Andrew Hammond
Verifier/s Kim Hardy

Revision History

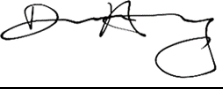
Rev	Revision Date	Details	Approved	
			Name	Signature
1	30-May-2025	DRAFT	David Huang Lead Technical Reviewer	
		DRAFT	Kim Hardy Project Lead	
2	23-June-2025	REVISED	David Huang Lead Technical Reviewer	
	23 June 2025	REVISED	Kim Hardy Project Lead	
3	31 July 2025	REVISED	David Huang Lead Technical Reviewer	
4	2 September 2025	FINAL	Andrew Hammond Lead Technical Reviewer	

Table of Contents

1.0	Introduction	1
1.1	Transitional Parking Plan Overview	1
1.2	Te Awa Kairangi Programme	1
1.3	Relevant Conditions	2
1.3.1	Condition 35	2
1.4	Project Scope Overview	4
1.5	Report Overview	4
2.0	Assessment of Existing Parking Conditions	5
2.1	Existing Public Parking Conditions	5
2.1.1	Existing Public Parking Provision	5
2.2	Parking Surveys	7
2.2.1	Context	7
2.2.2	Parking Demand Changes	8
2.2.3	Parking Uplift Methodology	10
2.3	Existing Parking Demand	11
2.3.1	Overview	11
2.3.2	Occupancy	12
2.3.3	Length of Stay	14
2.3.4	Parking Turnover Ratio	15
2.3.5	Non-Residential Parking Activity on Residential Streets	16
2.3.6	Recreational Parking Activity for River Corridor	16
2.4	Parking Requirements	17
2.4.1	Peak Parking Requirements	17
2.4.2	Parking Availability	19
2.5	Stakeholder Insights	20
2.5.1	Area-Specific Insights	20
2.5.2	Key Themes	21
3.0	Construction Phase Parking Management	23
3.1	Overview	23
3.2	Construction Staging	23
3.2.1	Construction Zones	23
3.2.2	Land Acquisition	26
3.3	Construction Phase Parking Demand	26
3.3.1	Removed Demand	27
3.3.2	Relocated Demand	28
3.3.3	Reduced Demand	28
3.3.4	Displaced Parking Demand	28
3.4	Mobility Parking	33
4.0	Provision of Key Parking Needs	36
4.1	Methodology for Identification of Temporary Parking Options	36
4.2	Options within Programme Footprint	36
4.3	Options to Redistribute to Other Public Parking	38
4.4	Options to Redistribute to Off-Street Private Parking	40
4.5	Options to Redistribute to Recreational and Other Public Land	42
4.6	Implementation Recommendations	43
4.6.1	Site Availability within Programme Footprint	43
4.6.2	Redistribution to On-Street Public Parking	43
4.6.3	Redistribution to Off-Street Private Parking	44
4.6.4	Redistribution to Recreational and Other Public Land	44
4.6.5	Parking Restrictions	45
4.6.6	Mobility Parking	45
4.6.7	Stakeholder Engagement	46

	4.6.8	Strategic Approach to Managing Concurrent Works	47
5.0		Transition to Sustainable Transport Options	48
	5.1	Overview	48
	5.2	Active and Public Transport Enhancements	48
	5.2.1	Implementation of the Construction Traffic Management Plan	48
	5.2.2	Temporary Pedestrian Crossings and Footpaths	49
	5.2.3	Pop-up Cycle Lanes	50
	5.2.4	Additional Bike Parking and End-of-Trip Facilities	52
	5.2.5	Public Transport Service Adjustments	53
	5.3	Travel Demand Management Measures	54
	5.3.1	Discounted Public Transport Fares	54
	5.3.2	Workplace Travel Planning	54
	5.3.3	Carpooling Initiatives	54
	5.4	Complimentary Mobility Solutions	55
	5.4.1	Localised Park and Ride Strategy	55
	5.4.2	Micro-mobility Integration	55
	5.5	Intervention Toolbox	55
6.0		Monitoring and Evaluation Framework	57
	6.1	Overview	57
	6.2	Stakeholder and Community Feedback Indicators	57
	6.2.1	Travel Behaviour Change	57
	6.2.2	Community and Stakeholder Feedback	57
	6.3	Quantitative Methods	57
	6.3.1	Resident Travel Surveys	57
	6.3.2	Parking Surveys	58
	6.3.3	Workplace Travel Audits	58
	6.3.4	Bus Patronage	58
	6.3.5	Pedestrian and Cycle Counts	58
	6.4	Qualitative Methods	59
	6.4.1	Intercept Interviews	59
	6.4.2	Targeted Feedback Sessions	59
	6.4.3	Feedback Channels	59
	6.4.4	Social Media Monitoring	59
	6.5	Summary of Monitoring Methodology	60
7.0		Summary and Conclusion	61
	7.1	Summary	61
	7.2	Conclusion	61
	7.3	Next Steps	61

1.0 Introduction

1.1 Transitional Parking Plan Overview

AECOM has been commissioned by Hutt City Council (HCC) to prepare the Transitional Parking Plan (TPP) as part of Te Wai Takamori o Awa Kairangi Programme (Te Awa Kairangi) partnership. The TPP responds to the consent compliance requirements set out in conditions 35 and 36, and forms part of the broader suite of management plans being developed by the Partners for their individual projects that form part of Te Awa Kairangi programme.

This TPP has been developed for, and has been informed by inputs from Greater Wellington Regional Council (GWRC) and NZ Transport Agency Waka Kotahi (NZTA). In addition to meeting consent obligations, the TPP will inform ongoing communications and engagement, and includes recommendations on next steps to support implementation.

It should be noted that this stage represents ‘phase 1’ of the TPP which provides the information necessary to meet consent requirements. Following the submission and approval of this report, ‘phase 2’ will be developed, which will include exploring the implementation of recommendations contained within this report.

The TPP has been developed to meet the requirements of the RiverLink Environment Court Decision designation and resource consent conditions dated 3 November 2022. It includes an analysis of existing parking provision and demand, a review of the construction staging and locations and proposed recommendations to accommodate local parking needs. It also details measures to encourage a transition to sustainable transport options, as well as a monitoring and evaluation plan which will monitor mode shift and travel behaviour change during the construction works.

1.2 Te Awa Kairangi Programme

The Programme area extends from the Ewen Bridge in the south to Kennedy Good Bridge in the north, and from SH2 in the west across Te Awa Kairangi / Hutt River to the interface with Lower Hutt city centre in the east.

Key components of the Programme are as follows:

- Upgrade and raising of existing and construction of new stopbanks on both sides of Te Awa Kairangi / Hutt River between Ewen Bridge and Mills Street.
- Instream works between the Kennedy Good and Ewen Bridges to re-align, deepen and widen the active river channel.
- The replacement of the two signalised at-grade intersections of SH2/Harbour View Road/Melling Link and SH2/Tirohanga Road with a new grade separated interchange.
- Construction of an approximately 215 m long and up to 7 span road bridge with a direct connection across Te Awa Kairangi / Hutt River from the new interchange to Queens Drive.
- Removal of the existing Melling Bridge.
- Changes to local roads.
- Changes to the Melling Line rail network and supporting infrastructure, including relocation or reconstruction of the Melling Station.
- Construction of an approximately 177 m long and 4 span pedestrian/cycle bridge over Te Awa Kairangi / Hutt River.
- Construction of a promenade located along the stopbank connecting with future development, running between Margaret Street and High Street. This includes new steps and ramps to facilitate access between the city centre and the promenade.

- Integration of infrastructure works with existing or future mixed-use development.
- Associated works including construction and installation of culverts, stormwater management systems, signage (including signage for health and safety, recognition of cultural sites, interpretation and wayfinding), lighting, network utility relocations, landscape and street furniture, pedestrian/cycle connections and landscaping.

By mitigating the impacts of the construction of these infrastructure improvements through the implementation of the TPP, the project supports a smoother transition for the community, by providing for key parking needs, as well as encouraging the use of public transport and other sustainable travel options.

1.3 Relevant Conditions

The TPP has been developed to meet the requirements of the RiverLink Environment Court Decision designation and resource consent conditions dated 3 November 2022. The relevant conditions and how they will be met through the TPP report are detailed below.

1.3.1 Condition 35

Condition 35 states the following:

“Prior to Construction Works commencing, the Consent Holder must undertake a review of public parking within and immediately adjacent to the Project area to collect and analyse data and understand user characteristics of the off and on street parking in the Project area. The purpose of the parking review is to provide direction and information for the Transitional Parking Plan and to support decisions about the appropriate management and spatial distribution of public carparks required to:

- support the commercial and retail business in the Lower Hutt city centre during construction and post construction of the Project with an appropriate mix of short and long-term parking, loading bays and accessible parking spaces; and*
- facilitate and support a shift to multi modal transport to and from the Lower Hutt city centre.*

The review must be completed by a Suitably Qualified Person, and it must:

- include consultation with businesses and residents in the Lower Hutt central area to understand parking user characteristics;*
- consider existing and potential parking time (duration) limits;*
- consider parking pricing strategy options;*
- have regard to existing and future Park & Ride opportunities;*
- consider signage for parking areas;*
- outline potential parking enforcement strategies during and following construction of RiverLink; and*
- include a parking survey to support consideration of matters in (c) to (h). The parking survey will be used to inform the Transitional Parking Plan required by condition 36 and it must meet the following requirements:*
 - be undertaken for a minimum period of 24 days between 7:00am to 8:00pm;*
 - identify the length of stay of groups/patrons;*
 - identify the average occupancy and peak occupancy, length of stay, parking turnover ratio;*
 - Identify the location(s) of the most frequented and used on and off-street parking in the Lower Hutt city centre;*
 - identify where the on and off carparks are in authorised time zone limits;*
 - identify the existing parking pricing strategy for each area;*

- VII. *where apparent, identify non-residential parking activity in nearby residential streets; and*
- VIII. *identify the demand and location(s) used for parking to access the river corridor for recreational use.*
- j. *The parking survey methodology must be developed in consultation with Hutt City Council's Head of Transport."*

Further information on the parking surveys conducted can be found in Section 2.2.

Condition 36

Condition 36 states the following:

"The Consent Holder must prepare a Transitional Parking Plan. The purpose of the Transitional Parking Plan is to:

- a. *To minimise the loss of public parking during construction; and*
- b. *To support a transition to non-car transport options to enable access during and post construction.*

The Transitional Parking Plan must be prepared by a Suitably Qualified Person and it must include, but not be limited to:

- c. *Methods to manage the loss of public parking as a result of construction of RiverLink, including identifying and providing temporary parking facilities and undertaking construction in a way that delays disruption to public parking where practicable;*
- d. *Provision for appropriate short-stay recreation parking, on street areas adjacent to suitable river corridor access points;*
- e. *Provision for disabled parking, including at Melling Station;*
- f. *Options to enable a transition from parking dependency to more sustainable and active transport modes;*
- g. *Methods to monitor mode shift and travel behaviour change during and upon completion of the Project works.*

The Transitional Parking Plan must be completed ahead of the Construction Traffic Management Plan (CTMP) required by conditions 37 and 38, and with adequate time to allow for implementation of any relevant mitigation methods ahead of construction works commencing."

A separate report to address the requirements of condition 35 was prepared in December 2023. This TPP includes a review of and an uplift of the data acquired through the parking review carried out in 2023 and focuses on the requirements of condition 36.

The TPP addresses the specific requirements of these conditions, as such, it focuses on identifying methods and options for managing parking-related matters during the transitional phases of the project. This report should be used for information purposes to inform the implementation of transitional parking management.

A number of related matters fall outside the scope of the TPP and will be addressed separately by the programme partners. These matters include:

- Harvey Norman parking (including conditions 19B and 37.d);
- The relocation of the Riverbank Market (condition 124);
- Disruption Response Plans; and
- Construction Traffic Management Plans (CTMP) and Site Traffic Management Plans (Site TMPs), which address the operational traffic management requirements of construction activities (conditions 37 and 39). While the CTMP must be prepared prior to overall construction starting, STMPs will be done on a site-specific basis as construction progresses.

1.4 Project Scope Overview

The geographical scope of the TPP is split into three areas:

- Area 1: Melling Car Park, Block Road, Pharazyn Street and associated on-street car parking areas.
- Area 2: Riverbank Car Park.
- Areas 3 & 4: Lower Hutt CBD area (originally two areas but combined during the survey stage).

The extent of these areas is shown in Figure 1 below.

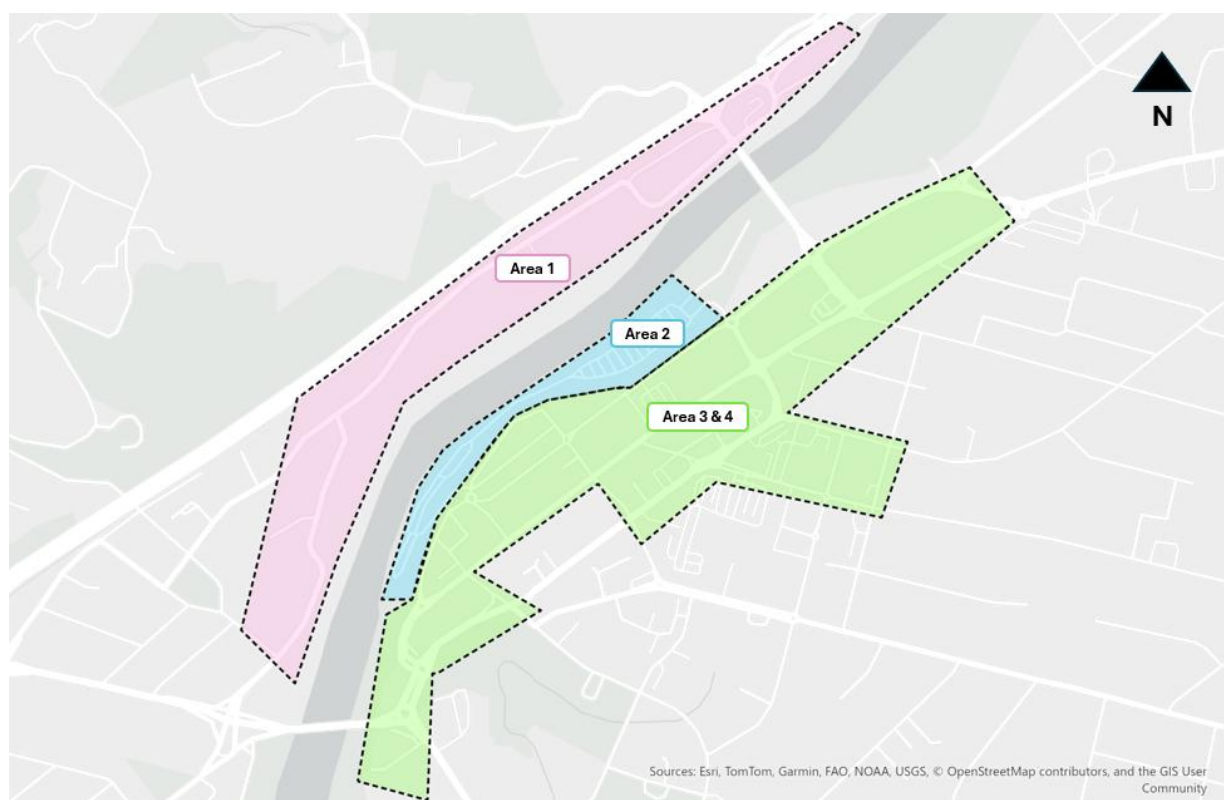


Figure 1 Transitional Parking Plan Scope and Extent

This geographical scope refers to the area in which traffic surveys have been conducted in 2023. The programme area remains largely consistent with this geographical area and the area was considered suitable for the construction phase parking impact assessment.

Where options for providing alternative parking, interventions to transition to sustainable transport modes, and monitoring and evaluation have been identified (see Sections 4.0 and 5.0) these may go beyond the direct geographical scope for the programme to support the broader programme objectives.

1.5 Report Overview

This baseline report will be split into seven key sections, as detailed below:

- **Section 1:** Introduction
- **Section 2:** Assessment of Existing Parking Conditions
- **Section 3:** Construction Phase Parking Management
- **Section 4:** Provision of Key Parking Needs
- **Section 5:** Transition to Sustainable Transport Options
- **Section 6:** Monitoring and Evaluation Plan
- **Section 7:** Summary and Conclusion

2.0 Assessment of Existing Parking Conditions

2.1 Existing Public Parking Conditions

2.1.1 Existing Public Parking Provision

2.1.1.1 Public Parking Type

Parking type varies between on- and off-street parking in the geographical scope of the TPP Figure 2 below shows the location of the parking types across the study area (Melling and Lower Hutt City Centre).

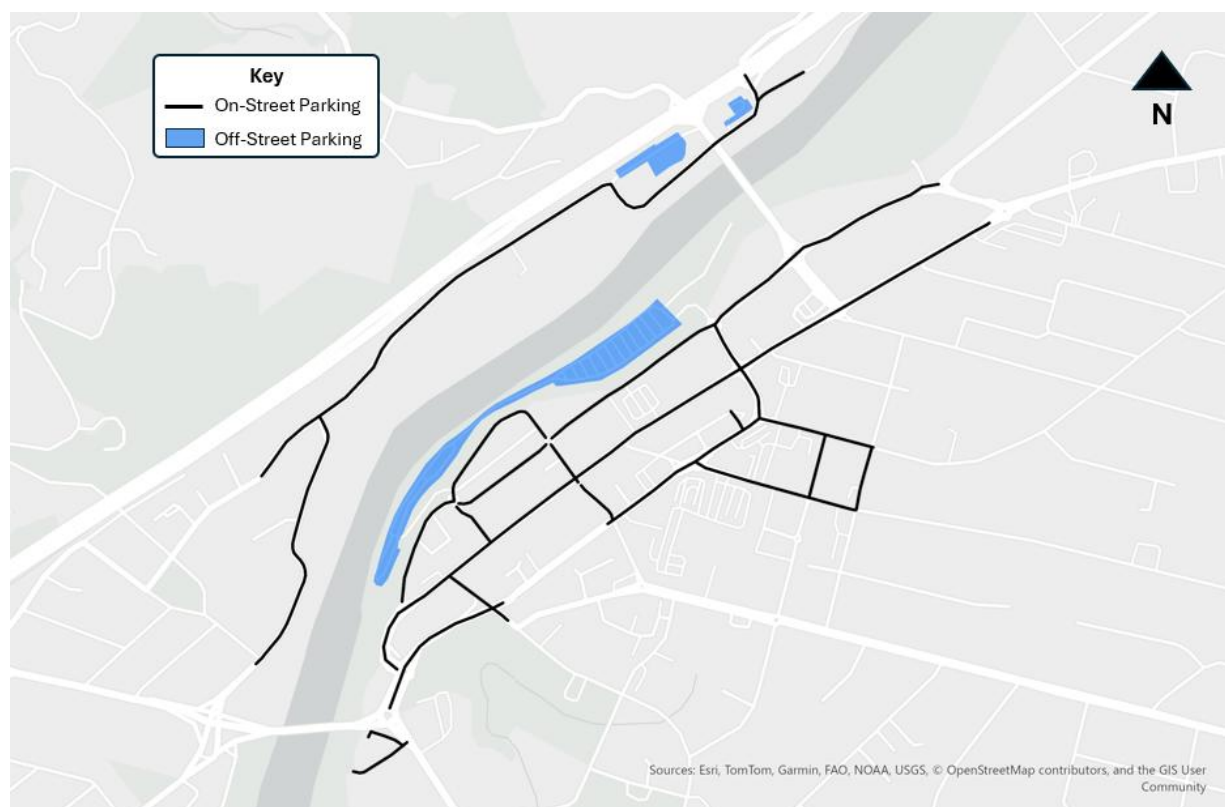


Figure 2 Parking Type

2.1.1.2 Public Parking Provision

Of the areas surveyed, the total existing car parking supply is 1,983 car parking spaces. This is made up of:

- Area 1 (Melling): 422
- Area 2 (Riverbank Car Park): 836
- Area 3 & 4 (Lower Hutt CBD): 725

48% of parking spaces (955) are located on-street and 52% of parking spaces (1,028) are located off-street. The off-street parking includes the Riverbank Car Park (836), Melling Station carpark (144), and Block Road Park n Ride (48).

The total parking provision within Areas 1-4 is illustrated in Figure 3.

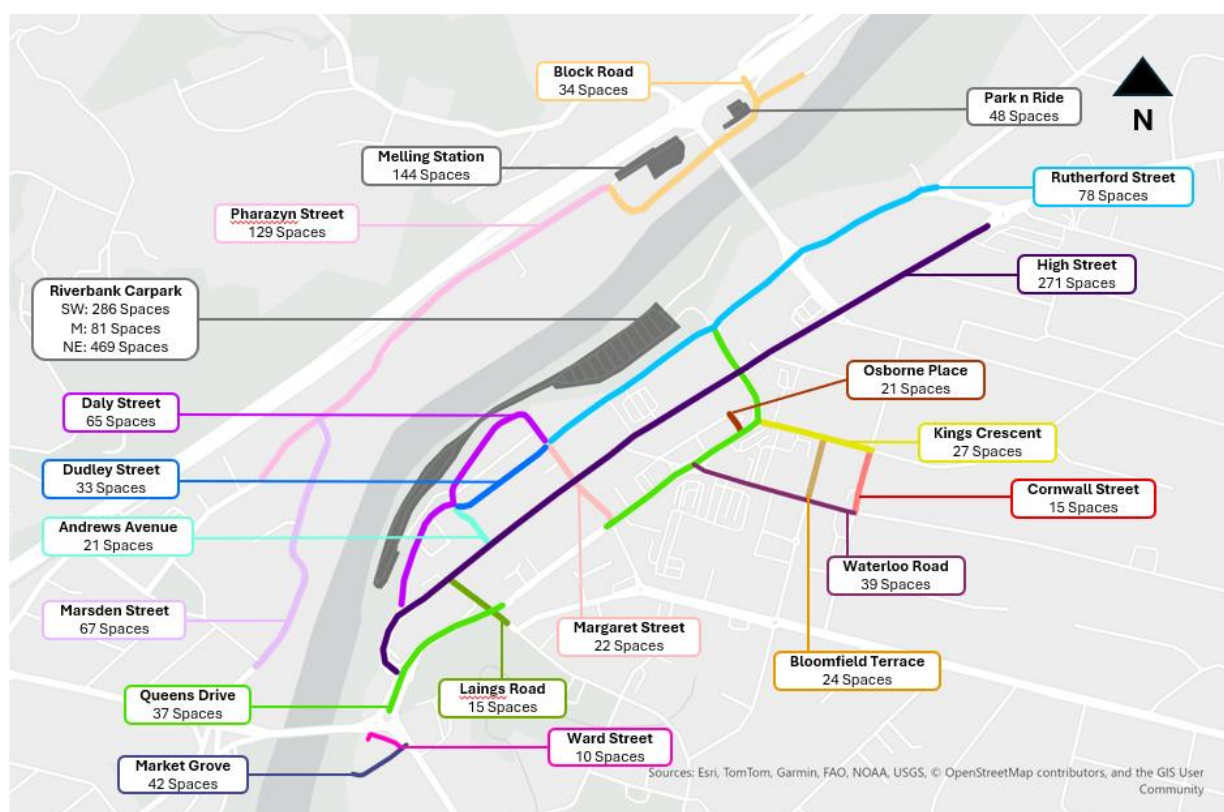


Figure 3 Overall Public Parking Provision

2.1.1.3 Parking Restrictions

There are various operational hour differences across Melling and Lower Hutt city centre. The majority of paid parking within Areas 1-4 falls into three main categories:

- **HC2:** P120 parking, \$3 per hour, 9am-5pm Mon-Sun - *located across Lower Hutt city centre*;
- **HC3:** Hourly with a max daily charge and no restrictions on daily length of stay. \$3 per hour or \$10 for all day, 9am-5pm Mon-Sun – *located across Lower Hutt city centre*; and
- **Riverbank:** Priced per hour or through a monthly coupon with no restrictions on daily length of stay. \$3 per hour or \$10 for all day or \$150 for monthly coupon, 9am-5pm Mon-Sun – *located in Riverbank Car Park*.

Area 1 has no paid parking and majority of spaces on the road are unrestricted. There are some limits along Pharazyn Street that include P60 and P15.

The locations of these parking restrictions are shown in Figure 4 below.

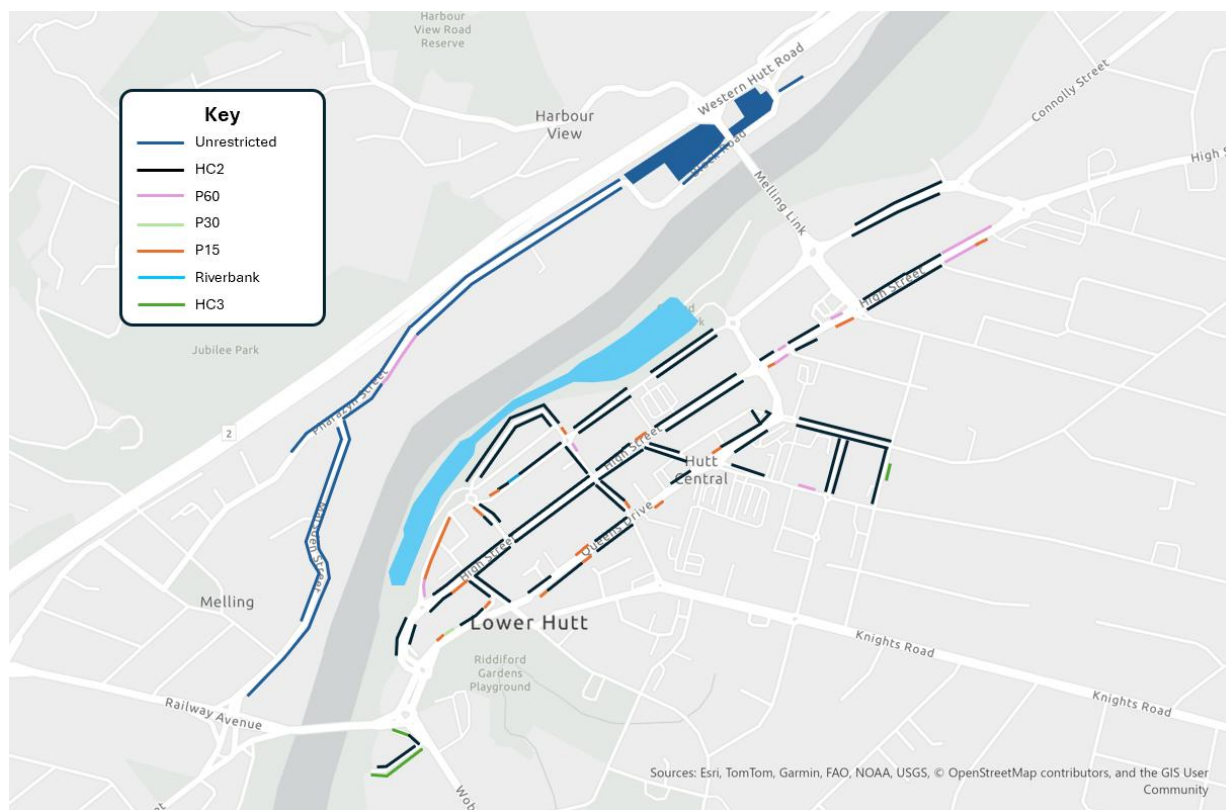


Figure 4 Parking Restrictions

2.2 Parking Surveys

2.2.1 Context

Condition 35 requires the consent holder to undertake a review of public parking within and immediately adjacent to the programme area to collect and analyse data to understand user characteristics of the off- and on-street parking in the programme area.

The purpose of the parking review is to provide direction and information for the TPP and to support decisions about the appropriate management and spatial distribution of public car parking throughout the construction phase of Te Awa Kairangi.

Condition 35 i) states that surveys *are 'to be undertaken for a minimum period of 24 days between 7.00am to 8.00pm'*. However, a decision to use an alternative approach was agreed with the Regulator, in consultation with the head of Transport at HCC, in 2023. It was agreed that the survey would be undertaken over 6 days rather than a 24-day period. It was agreed that undertaking the survey for a continuous 24 days due to the saturation of data that would be acquired for marginal gains in understanding the parking trends within the area.

This condition has been met and surveys were undertaken across 4 weeks in June 2023. Survey days were limited to Tuesdays, Wednesdays and Thursdays as it was concluded through observations of travel data collected by various road controlling authorities that travel patterns are skewed during the week. This is mainly due to working from home patterns, part-time workers, and the people's leave patterns of potential commuters. This influences the travel patterns of office workers and other employees that can work remotely. Reported data using public transport patronage information showed that Wellington region commuters had an average approximate 20% decline in patronage on a Monday and a Friday.

Weekends were excluded from the survey, as commuters are largely absent during the weekend. Many weekend trips to Lower Hutt have the primary purpose of accessing the Riverbank Market. During the

construction phase, the market will be relocated, which will redistribute parking demand to the new location. This will be analysed separately by Hutt City Council.

Table 1 below provides additional details of the survey.

Table 1 Parking Survey Details

Date	Areas Surveyed
Wednesday, 7 June 2023	Area 1, Area 3 & 4
Thursday, 8 June 2023	Area 1, Area 3 & 4
Tuesday, 13 June 2023	Area 1, Area 2, Area 3 & 4
Wednesday, 14 June 2023	Area 1, Area 2, Area 3 & 4
Tuesday, 20 June 2023	Area 1, Area 2, Area 3 & 4
Wednesday, 22 June 2023	Area 1, Area 2, Area 3 & 4
Wednesday, 28 June 2023	Area 2
Thursday, 29 June 2023	Area 2

Prior to finalising this report, a spot check review of existing parking provisions was undertaken against Hutt City Council's latest Road Assessment and Maintenance Management (RAMM) data for assurance purposes. This review identified a small number of differences reflecting minor on-street parking restriction changes since the 2023 survey. Specifically, 10 additional spaces (out of more than 900) were identified. This minor variance was not considered significant enough to affect the analysis, conclusions, or recommendations of this report. It is also noted that parking provision numbers may change in the future as the Council continues to review its traffic restrictions.

2.2.2 Parking Demand Changes

As discussed above, the programme partners commissioned a parking survey in June 2023. No additional surveys were agreed as part of the scope for preparing the TPP. The 2023 survey results would be reviewed and where appropriate used to complete the TPP. However, since June 2023, there has been two price increases to both on-street and off-street parking and a notable change in demand based on HCC's own parking transaction data.

To understand the impact of these changes on parking demand, and the overall parking demand change since 2023, a parking uplift methodology was developed and subsequently applied. This is further discussed in Section 2.2.3.

Details of the parking pricing changes across different parking categories is shown in Table 2 below.

Table 2 Parking Price Changes

Parking Type	Short Stay (price per hour)			Long Stay (price per day)		
	June 2023	Aug 2023	July 2024	June 2023	Aug 2023	July 2024
HC2	\$1.50	\$2	\$3	N/A - 2hrs max	N/A - 2hrs max	N/A - 2hrs max
HC3	\$1	\$2	\$3	\$6	\$7	\$10
Riverbank	\$0.70	\$2	\$3	\$4	\$7	\$10
Riverbank (Monthly Coupon)	N/A	N/A	N/A	\$62 per month	\$100 per month	\$150 per month

The 2023 surveys were undertaken in June 2023, prior to the subsequent price increases. The first increase came into effect on 1 August 2023. Further increases were then implemented on 1 July 2024.

Table 3 below details the proportion of price increase across different parking types in Lower Hutt from June 2023 (survey period) to present (since July 2024 increase).

Table 3 Parking Price Increases

Category	Type	Price Increase
HC2	Short Stay	+ 100% (\$1.50 to \$3.00)
	Long Stay	N / A – 2 hours max
HC3	Short Stay	+ 200% (\$1.00 to \$3.00)
	Long Stay	+ 66.67% (\$6.00 to \$10.00)
Riverbank	Short Stay	+ 328.57% (\$0.70 to \$3.00)
	Long Stay	+ 150% (\$4.00 to \$10.00)
	Monthly	+ 141.94% (\$62.00 to \$150.00)

Therefore, the parking demand has been uplifted using detailed transaction data from HCC (January 2023-March 2025) to reflect current conditions. Transactions have been provided from two sources, MasterMachine and PayMyPark.

Investigations of this data show that despite the parking price increase, overall demand for parking (total number of transactions) has increased. However, the average length of stay has decreased. The change in total transactions and average stay across the main parking areas in Lower Hutt city centre (July 2023 vs July 2024) is shown in Table 4 below.

Table 4 Change in Transactions and Average Length of Stay

Road	Monthly Transactions			Average Stay Length (Hours)		
	2023	2024	Change	2023	2024	Change
Andrews Avenue	893	1,271	Increase	1.37	1.06	Decrease
Bloomfield Terrace	1,888	2,459	Increase	1.35	0.94	Decrease
Cornwall Street	2,041	2,745	Increase	1.19	0.80	Decrease
Daly Street	866	1,182	Increase	1.54	1.10	Decrease
Dudley Street	759	1,069	Increase	1.38	1.00	Decrease
High Street	8,100	11,966	Increase	1.33	0.89	Decrease
Kings Crescent	504	614	Increase	1.56	1.13	Decrease
Laings Road	2,573	3,845	Increase	1.61	1.21	Decrease
Margaret Street	980	1,388	Increase	1.25	0.86	Decrease
Osborne Place	228	318	Increase	1.49	1.08	Decrease
Queens Drive	4,739	6,374	Increase	1.31	0.92	Decrease
Rutherford Street	361	504	Increase	1.47	0.90	Decrease
Ward Street	46	49	Increase	1.69	1.34	Decrease
Market Grove	210	204	Decrease	1.81	0.75	Decrease
Waterloo Road	1,915	2,457	Increase	1.16	0.31	Decrease
Riverbank Car Park	2,328	1,551	Decrease	6.59	6.72	Increase
HC3	2,778	4,568	Increase	6.23	6.29	Increase

2.2.3 Parking Uplift Methodology¹

This methodology estimates the changes in parking demand since the 2023 surveys using the transaction and revenue data provided by HCC. It identifies how demand has shifted over time by comparing July 2023 and July 2024.

July 2023 and 2024 were chosen as comparison dates as these are considered the most representational. July 2023 had the same parking prices as during the survey period (prior to price increases in August 2023), while July 2024 represents the impact of the latter price increase (which is the same as current pricing conditions). This produces an uplifted estimate of demand that reflects current usage patterns more accurately than the original 2023 survey results.

2.2.3.1 Location

The analysis concentrates on Riverbank, HC2 and HC3 parking areas.

2.2.3.2 Data Source

Master-Machine data is used for HC2 because it includes location-specific information, enabling uplift calculations to be applied at a street-by-street level. PayMyPark (PMP) data is excluded from this part of the analysis, as it lacks location detail and includes additional areas such as Petone. For HC3 and Riverbank, a similar process was used, combining Master-Machine and PMP data to calculate uplift. Where location detail is unavailable, which is the case for HC3, a blanket uplift has been applied.

As previously mentioned, July 2023 and 2024 has been chosen as the comparative months for calculating this uplift. This month has been chosen as it is the only month that has both the original survey prices and the new uplifted prices (prices went up on 1 August 2023 and 1 July 2024).

2.2.3.3 Data Provided

The HCC Parking Revenue Dataset provided by HCC Project Manager on 2 April 2025 includes the following information:

- Number of monthly transactions
- Total monthly revenue
- Parking locations (MasterMachine only)
- Parking prices.

The other key data source used as part of this methodology is the 2023 parking surveys. These include:

- Parking demand by hour between 7am and 7pm.

2.2.3.4 Uplift Calculation

The following steps detail the uplift methodology approach:

1. The methodology first determines the average transaction cost by dividing total monthly revenue by the number of monthly transactions.
2. This figure is then divided by the parking price (at the time) to estimate the average length of stay.
3. Multiplying the average stay by the total number of monthly transactions provides the total monthly parking hours.

The above process was completed for both July 2023 and July 2024, following this:

4. The percentage change in total parking hours between July 2023 and 2024 is calculated to determine the uplift modifier. This is done on a street-specific basis for HC2, while blanket uplifts are applied to HC3 parking. The Riverbank Car Park is uplifted on a carpark-wide basis as it has a unique ID within the MasterMachine data.

¹ An uplift methodology was developed and agreed between AECOM and HCC by HCC Project Manager on 11 April 2025.

5. This uplift modifier is then applied to the 2023 survey data to reflect more current demand conditions.

This approach enables the parking survey data to be adjusted to better reflect current conditions.

As there is no transaction data available for Area 1, the average uplift for all other parking categories has been identified and applied to this area. This uplift represents a likely increase of people seeking free parking in light of the parking increases across Lower Hutt and the Riverbank Car Park.

This approach is summarised and illustrated in Figure 5 below.

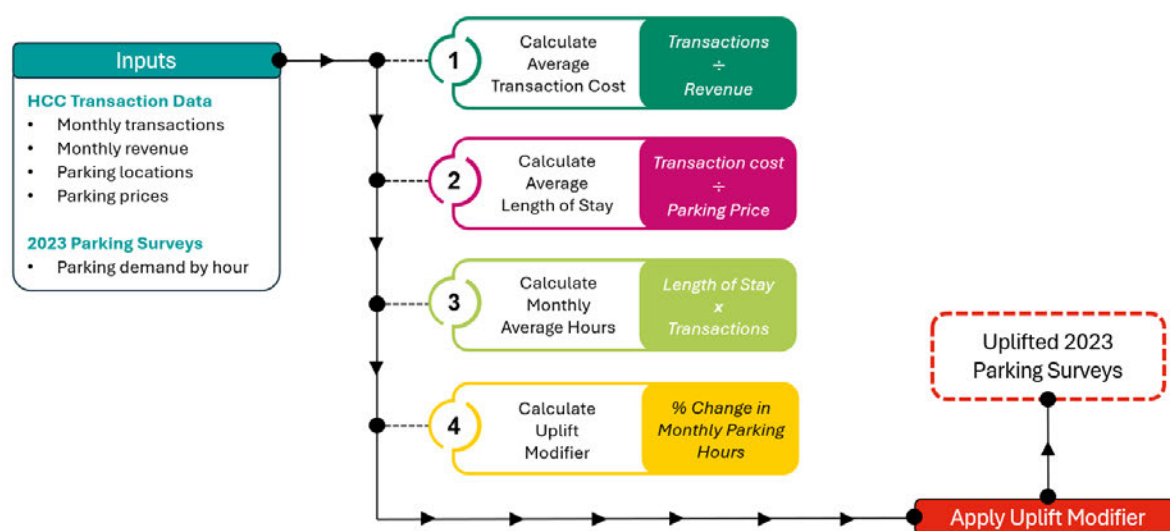


Figure 5 Parking Demand Uplift Methodology

2.3 Existing Parking Demand

2.3.1 Overview

Existing parking demand was investigated at a carpark and street-specific level initially through the survey set out in Section 2.2. The results in this section reflect 2025 conditions based on the uplift multiplier methodology described in 2.2.3. The geographical extent of each parking area is shown in Figure 6 below.

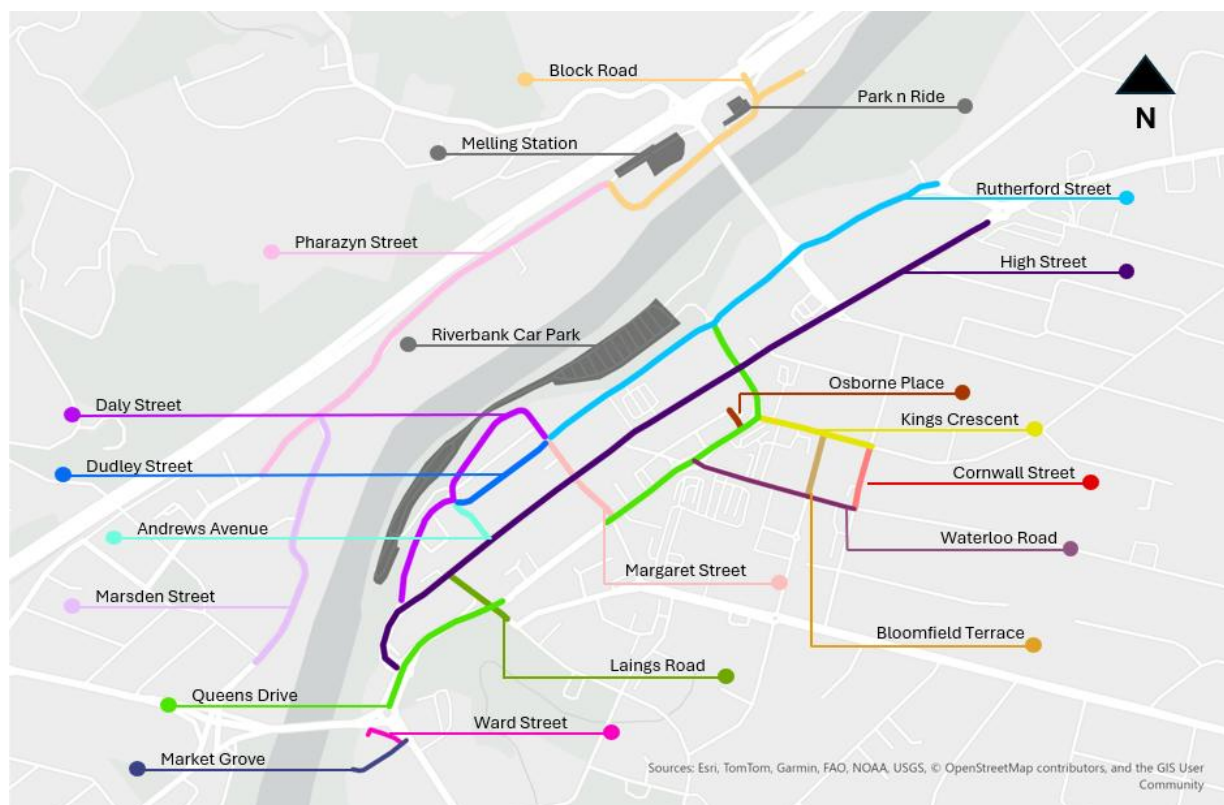


Figure 6 Parking Areas

2.3.2 Occupancy

Occupancy refers to the total proportion of spaces which are used over a specified period. This is calculated by dividing the total number of cars parked by the total number of spaces available. At this stage, the average and peak occupancy levels are investigated.

2.3.2.1 Average Occupancy

Average occupancy represents the mean daily utilisation of parking spaces, derived from the original data collected during the 2023 parking surveys over the survey period of 7am to 7pm (Tuesday to Thursday). The average occupancy has been identified and considered in accordance with condition 35(i).

The car parks and roads with the highest and lowest average occupancy rates have been identified as part of the analysis. Those with the highest average occupancy include Andrews Avenue (94%), Dudley Street (85%), and Margaret Street (83%), all situated within Area 3 and 4. Whereas, the roads and car parks with the lowest average occupancy are Riverbank Car Park (northeast) (17%), Block Road (16%), and Riverbank Car Park (middle) (22%), all located in Areas 1 and 2.

The average occupancy across the study area is shown in Figure 7 below.



Figure 7 Average Occupancy

2.3.2.2 Peak Occupancy

Peak occupancy represents the maximum occupancy level that is recorded across the study period. The peak occupancy has been determined to comply with condition 35(i), allowing the TPP to optimise parking utilisation during periods of maximum demand.

It should be noted that at the time of the 2023 surveys, some areas across Lower Hutt city centre recorded a peak occupancy level of 100% (the maximum possible). As a result of applying the uplift modifier discussed previously, a number of these areas recorded occupancy levels in excess of 100%. In order to ensure that this demand was recorded, instead of capping occupancy levels at 100%, any trips in excess of 100% were redistributed to nearby streets with available parking. This replicates a real-life situation where visitors will seek alternative parking nearby if there is no available on their target street.

Table 5 below details how the excess demand was reallocated.

Table 5 Excess Parking Demand Relocation Process

Street	Uplifted Occupancy	Demand in Excess	Relocated to	Rebalanced Occupancy
Laings Road	113%	2	High Street, Queens Drive, Rutherford Street	100%
Andrews Avenue	105%	1	Riverbank	100%

The carparks and roads with the highest and lowest peak occupancy rates have been identified as part of the analysis. Those with a peak occupancy of 100% included Andrews Avenue and Laings Road. Whereas the roads and carparks with the lowest peak occupancy included Riverbank Car Park (northeast) (28%), Riverbank Car Park (middle) (36%) and Block Road (29%).

The peak occupancy across the study area is shown in Figure 8 below.



Figure 8 Peak Occupancy

2.3.3 Length of Stay

The average length of stay in each area is shown in Figure 9 below.



Figure 9 Average Length of Stay

As shown above, short-stay parking (0-2 hours) is most common for on-street parking in the CBD. This is surrounding the main commercial centre where most of the restricted parking is located. It is likely these parks are used for shopping / dining / recreation given these are short stay generators that are present in this commercial area.

The average stay of trips for parking in this area has declined since 2023, which is likely due to the increased hourly parking prices in the area. More visitors are likely keeping their trips to under 1 hour to avoid paying an additional \$2-3 NZD.

Riverbank Car Park is used for longer stay parking, with cars parking for between 6 and 7 hours on average according to the 2023 parking surveys. This is reinforced by the data provided by the HCC Parking Services team. This data showed that over 85% of users paid the maximum daily charge of \$10, indicating stays of over three hours (at least).

Similarly, most parking along Pharazyn Street and Marsden Street is used for a longer stay (4-6 hours). There are a few industrial businesses, mechanics, early childhood centres and shops in the area. Employees could be using the on-street parking while at work, contributing to the trend in longer stay parking along these streets. Streets that have unrestricted parking typically have a longer length of stay including streets near Melling Station.

Parks within walking distance to Melling Station are generally used for a long length of stay, mirroring the workday patterns of commuters.

Block Road has an average length of stay of 2 hours, which is likely due to the mixture in trip purpose between commuters and those parking for shorter periods to access the Hutt River Trail for leisure purposes.

2.3.4 Parking Turnover Ratio

The parking turnover ratio is shown in Figure 10.



Figure 10 Parking Turnover Ratio

Parking turnover ratio measures how many different vehicles use a parking space over a set period, showing how frequently spaces are occupied and vacated. It's calculated by dividing the total number of vehicles by the number of spaces.

As shown above, the CBD has the highest turnover rate. The highest turnover rates are observed on Margaret Street, High Street, Queens Drive and Laings Road. This is likely due to the commercial / retail areas in the CBD that generate short trips as well as the majority of the parking provision falling into the HC2 category (P120).

As expected, off-street parking at the Riverbank Car Park, Melling Station and Block Road Park n Ride has low turnover. It can be assumed that Melling Station and Block Road Park and Ride are mostly used by commuters using the train station. Riverbank Car Park is likely used for commuters/workers due the location, low turnover rate and longer length of stay.

Streets with low parking turnover are mostly surrounded by residential areas including Pharazyn Street and Marsden Street.

2.3.5 Non-Residential Parking Activity on Residential Streets

The majority of the residential streets within the study area fall into Area 1, including Pharazyn Street and Marsden Street.

Demolition of the residential buildings along Pharazyn Street had begun prior to the parking survey being undertaken. Therefore, an assessment of residential parking activity was only undertaken for Marsden Street.

To assess if non-residential parking activity is occurring on Marsden Street, a number plate check of vehicles parked after 6pm was undertaken. It has been assumed that vehicles present on the street after 6pm belong to the residents. Occupied vehicles during the day were compared with the residential vehicles.

It is important to note that part of Marsden Street, closest to Ewen Bridge, is within the business zone. Businesses that front the street include automotive and electrical businesses. The assessment included only those parks within the residential area (43 out of 67 total parks on Marsden Street).

Of the vehicles parked in the residential area on Marsden Street, 30% likely belong to residents and the remaining 70% likely belong to non-residents. The average vehicle stay of non-residential parking during the day is 3 hours. Staff or customers of the nearby businesses could be using the on-street parking during this time in the residential area.

2.3.6 Recreational Parking Activity for River Corridor

Te Awa Kairangi / Hutt River is commonly used for recreational purposes. The location of parking that provides access to the river corridor is shown in Figure 11 below.

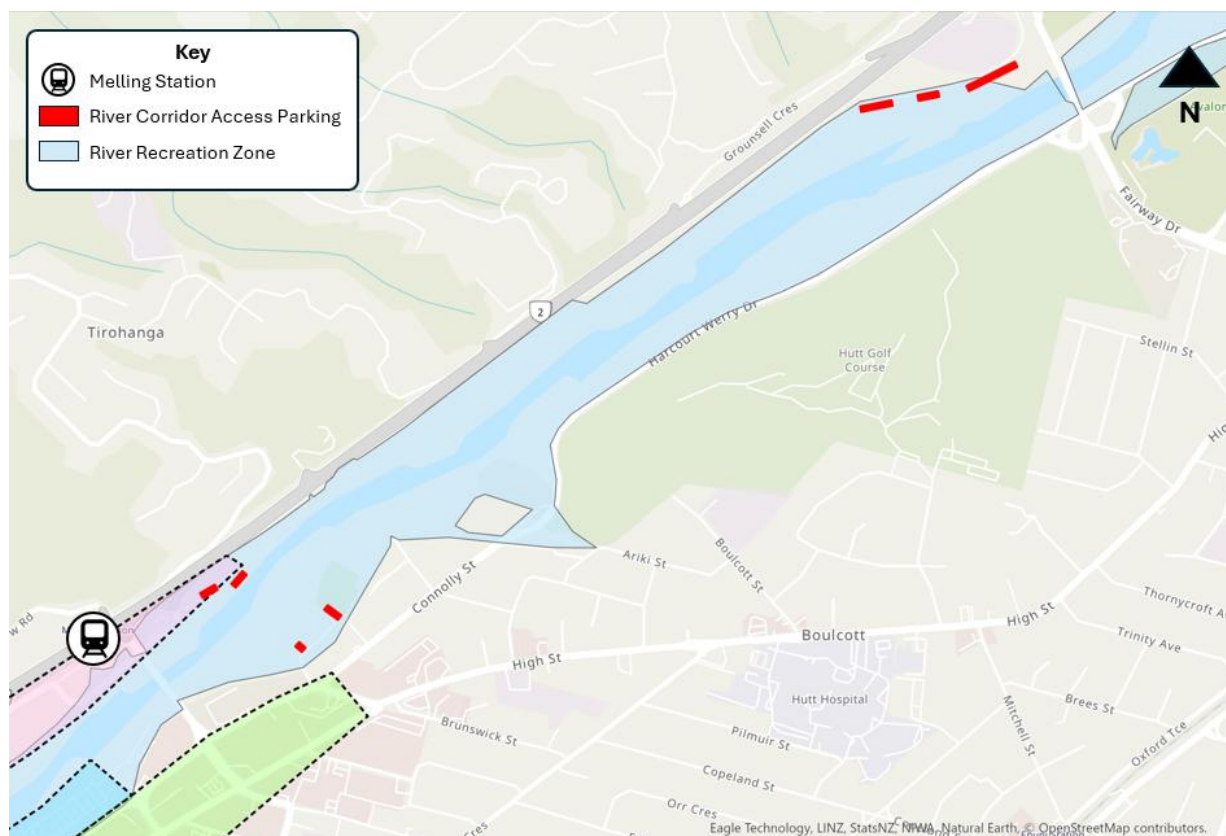


Figure 11 River Corridor Recreational Parking

Most of river corridor access parking is located outside of the parking survey extent. Sixteen parks on Block Road (located to the right of Melling Link Bridge) were included within the parking survey.

Key trends of the river corridor access parking on Block Road include:

- Short length of stay (between 0-2 hours);
- Average turnover rate of approximately two vehicles over the daily survey period;
- Average daily occupancy of 16%; and
- Occupancy is typically higher in the morning between 9:00 and 11:00 where the average occupancy increases to 51%.

Based on surveys, it can be assumed that the demand is similar for the other parking areas that provide access to the river corridor.

2.4 Parking Requirements

2.4.1 Peak Parking Requirements

Through the analysis of the existing parking conditions, a representative 'worst-case scenario' has been developed. Figure 12 below details the maximum number of people (peak demand over the 7am-7pm Tuesday-Thursday survey period) parking across the study area.

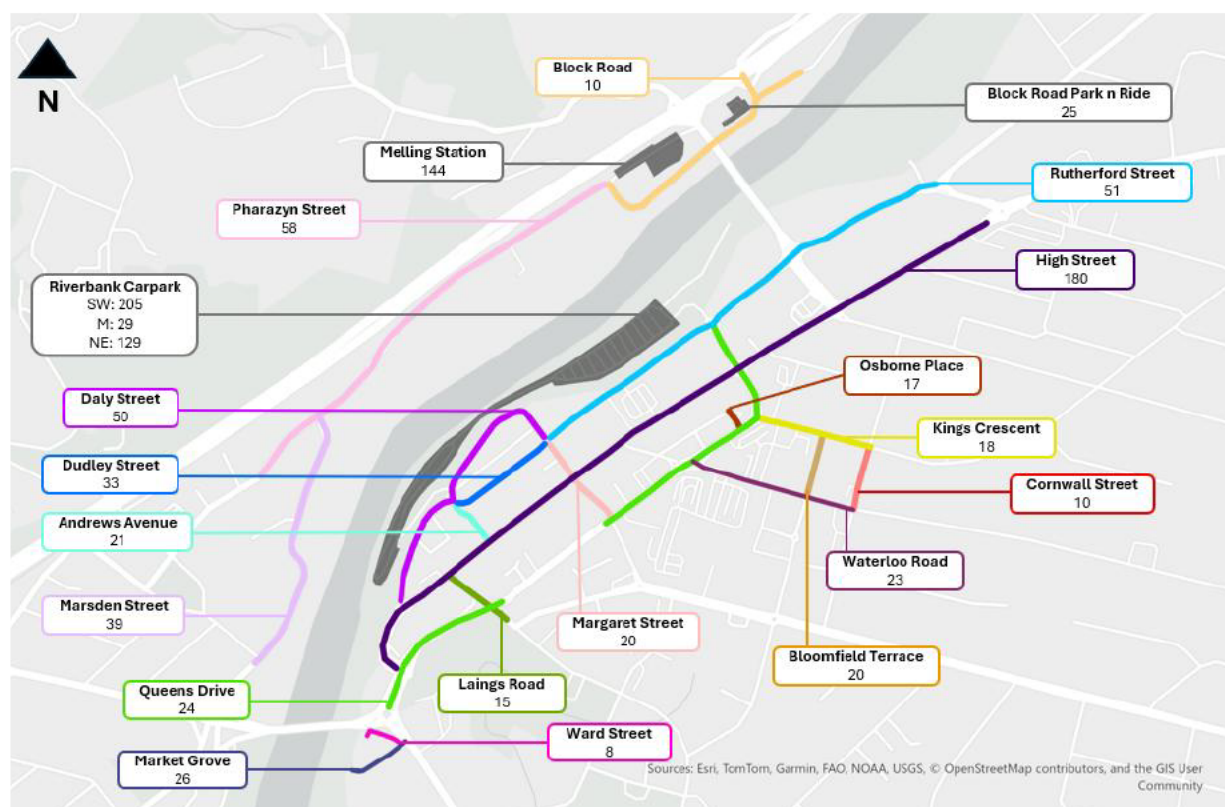


Figure 12 Peak Parking Demand

While parking conditions have been looked at from a street / parking area specific level, many of these peak demands occur at different hours of the day. As such, to understand the true peak parking requirements, parking demands by hour need to be understood.

Table 6 shows the parking demand broken down by hour across the survey period (7am-7pm) in each of the study areas.

Table 6 Hourly Parking Demand

Area	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00
1	86	240	268	267	266	256	252	246	237	216	118	48	32
2	48	156	305	352	347	351	349	337	302	249	147	77	54
3	217	288	425	462	460	468	464	446	403	395	389	403	377
Total	351	684	998	1081	1073	1075	1065	1029	942	860	654	528	463

As shown above, each of these areas has a different parking peak. This includes:

- **Area 1:** Peak between 09:00 and 10:00
- **Area 2:** Peak at 12:00
- **Area 3:** Peak at 13:00

This mirrors the nature of trip attractors in the area, with Area 1 being used largely by commuters, while areas 2 and 3 / 4 being used for both shopping and errand-orientated trips.

As such, when looking on an area-wide basis, the hourly peak occupancies are identified. These are detailed in Table 7 below.

Table 7 Hourly Peak Occupancy By Area

Area	Spaces Available	Peak Hour	Peak Demand	Peak Occupancy
Area 1	422	09:00 and 10:00	268	63%
Area 2	836	12:00	352	42%
Area 3 & 4	725	13:00	468	65%

Figure 13 below illustrates the overall parking demand trend by hour, highlighting that 10:00 represents the peak parking demand across the survey period.

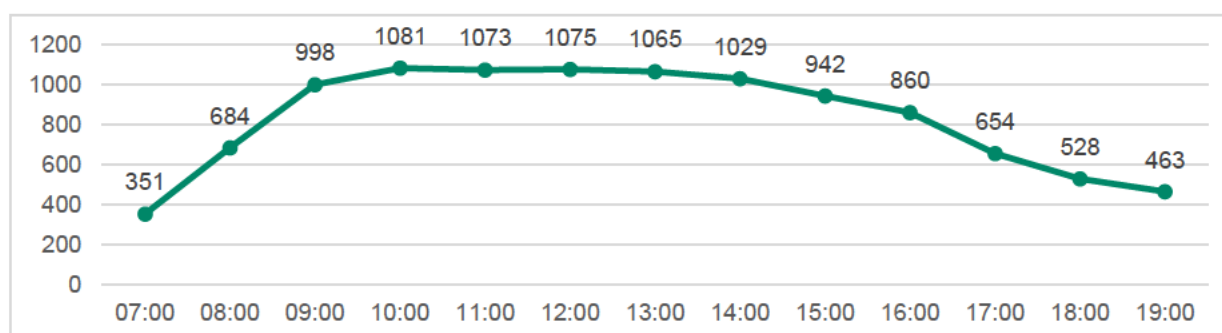


Figure 13 Hourly Parking Demand (Areas Combined)

Table 8 below shows the 3-hour rolling average for parking demand across the study area.

Table 8 3-Hour Rolling Average

7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00
-	-	678	921	1051	1076	1071	1056	1012	944	819	681	548

The 3-hour rolling average highlights the peak activity period across the day. The busiest 3-hour window occurs between 10:00 and 13:00, with an average of 1,076 people per hour. While this represents the highest sustained demand, the shoulder periods, particularly between 9:00 and 15:00, also experience relatively high activity levels, indicating consistently elevated usage across much of the day. This suggests a sustained high level of demand during the late morning, likely reflecting a mix of mid-morning travel and pre-lunch activity.

2.4.2 Parking Availability

Similar to Section 2.4.1, when looking at parking availability on a street / parking area specific level, much of this peak availability occurs at different hours of the day. As such, by looking at the minimum parking availability on an hourly level, we can understand more accurately where parking areas are under-utilised, at what times of day, and what the true opportunities for parking relocation are.

Table 9 shows the parking availability broken down by hour across the survey period (7am-7pm) in each of the study areas.

Table 9 Hourly Parking Availability

Area	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00
1	336	182	154	155	156	166	170	176	185	206	304	374	390
2	788	680	531	484	489	485	487	499	534	587	689	759	782
3	508	437	300	263	265	257	261	279	322	330	336	322	348
Total	1632	1299	985	902	910	908	918	954	1041	1123	1329	1455	1520

As expected, the maximum parking availability occurs at the start and end of the survey period, where commercial and commuting activities are at the lowest.

Figure 14 below illustrates the parking availability trend by hour.

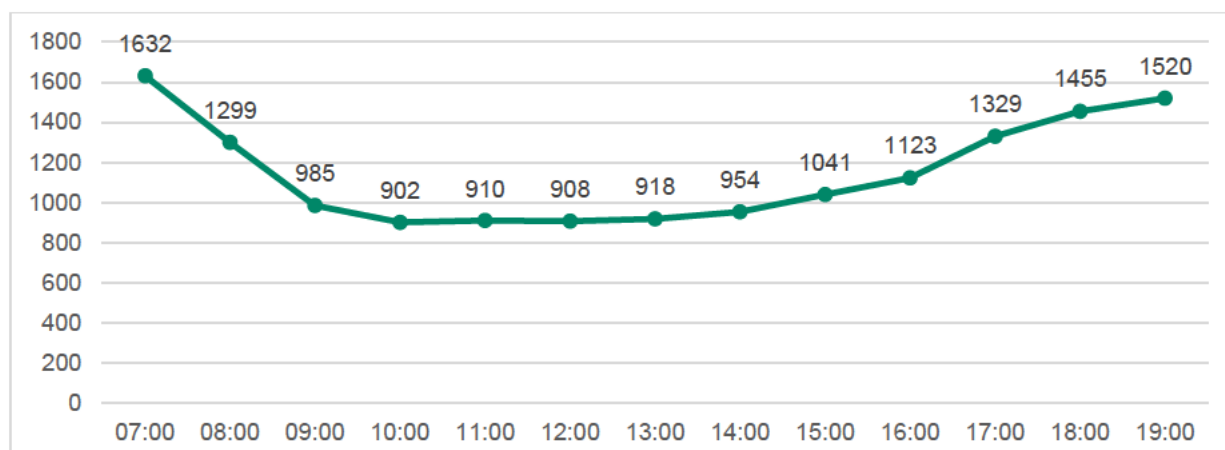


Figure 14 Hourly Parking Availability (Areas Combined)

The hourly parking demand and availability should inform decisions made regarding parking redistribution during the construction stage of the Programme. Particularly regarding the location and capacity of temporal parking sites.

2.5 Stakeholder Insights

First Retail Group prepared the '*City Centre Insights Report*' for HCC City Council in June 2023. The aim of this research was to identify businesses' needs and challenges, helping Te Awa Kairangi Alliance prioritise these within the planning and delivery of construction.

This provided essential baseline insights from stakeholders at a time when in-person engagement was restricted, pending the signing of the PAA. The feedback develops an understanding for the key parking requirements of business owners and stakeholders.

2.5.1 Area-Specific Insights

Feedback from commercial stakeholders included:

High Street

- Accessibility to the Riverbank Car Park and adjacent public parking an important aspect in its performance.
- Parking is especially important to destination businesses, such as Harvey Norman, Target, mechanics, and car sales, which are prevalent in this area, that customers travelled specifically for.
- Customers included people purchasing bulky items, individuals with limited mobility, those visiting appointment-based professional services or dining in hospitality businesses, and customers of takeaway businesses collecting orders.

Queens Drive and Bunny Street

- The Centre City complex offers more than 330 parking spaces for both visitors and workers in the area supporting accessibility and operational requirements of businesses.
- The carpark provides convenience for workers in the area relying on parking facilities specifically those who travel from Porirua, Kāpiti Coast, and the Wairarapa, which lack convenient public transport links.
- The carpark is advantageous for businesses on Queens Drive as users of the carpark contribute to trade and tend to be regular and reliable customers.

Margaret Street

- Margaret Street serves as a convenient and busy pedestrian thoroughfare, connecting the Riverbank Car Park and High Street to Queens Drive and Queensgate Shopping Centre.
- It is a well-used vehicle route between Rutherford Street and Queens Drive, with short-term parking that supports the needs of businesses in the area.

Dudley Street

- New buildings and redevelopment projects that have chosen not to activate their frontages along Dudley Street. Instead, these areas are used for car parking and residential purposes.

Rutherford Street

- This area has low foot traffic and businesses are largely reliant on customers driving to their premises, due to the bulky-goods nature of the product categories.
- Most retailers here are located in the Harvey Norman Centre where there are 204 carparks within the building and the Centre rents a further 107 spaces in the Riverbank Car Park. In total 311 carparks are available to customers and staff in the complex.
- One of Lower Hutt's two Woolworths supermarkets has dual entrances to High Street and Rutherford Street. The majority of customers drive to this supermarket and park within the dedicated carpark.
- Other retail businesses in the area include used car sales, which is reliant on vehicle accessibility.

2.5.2 Key Themes

The feedback detailed above has been compiled into overarching themes that have been considered when developing the implementation recommendations in the latter sections of this report (Section 4.6.7). These include:

- **Accessibility and Convenience:**

Lower Hutt city centre's high proportion of destination businesses and services places additional importance on private vehicle accessibility to the area. This includes the need for parking capacity and availability. Respondents emphasised the benefit accessibility has in attracting customers and maintaining competitiveness.

Lower Hutt city centre's central location and roading connectivity is valued for its ability to serve customers not only from the immediate area but also from Wellington, Porirua, Kāpiti Coast, and Wairarapa. Feedback from businesses with branches elsewhere within the region suggested performance from their Lower Hutt operations can be comparatively stronger because of accessibility and convenience.

- **Supporting the city centre workforce**

Lower Hutt's workforce come from across the region including areas such as Porirua and Kāpiti Coast that do not have convenient public transport connections with the city. Staff from these areas are reliant on affordable, available carparking in order to consider or remain working in the city.

- **Accessibility a competitive advantage**

A number of Lower Hutt businesses are also represented in Wellington. Some of these organisations shared the challenges their branches face with customers impacted by the Capital's inner-city roading and infrastructure construction, a continuing reduction in carparks and negative media commentary from businesses and consumers about the city's accessibility. This has led to an increase in the number of Wellington customers instead choosing to shop at their Lower Hutt sites for certainty and convenience of accessibility.

- **For those where accessibility a necessity**

Retailers of bulky goods, and those that have older or less-mobile customers shared their challenges with any changes in accessibility or the proximity of parking to their businesses. The city centre has and benefits from a number of stores that sell larger items with their decision to locate there, based on accessibility.

- **Servicing requirements**

With a geographically large catchment these services are typically performed by drivers of private vehicles who need to access the area and park for short periods to collect or deliver orders, such as 'Click and Collect' services.

- **Riverbank Car Park**

Businesses related the benefit of the Riverbank Car Park in terms of customer amenity, staff parking, and parking for those servicing premises, including tradespeople.

There was concern where customers, staff and visitors would park when construction started and eventually occupied the Riverbank Car Park during the construction phase.

3.0 Construction Phase Parking Management

3.1 Overview

Using the parking baseline data in Section 2.3 above and the partner's Coordinated Delivery Plan (CDP), to understand how parking will be displaced during the phases of construction we considered:

1. What level of demand will be displaced; and
2. What areas have parking availability to absorb some of this excess demand.

. Options identified include:

- Temporary parking sites using spare space during the construction phase;
- Parking capacity outside the study area;
- Opportunities to lease parking spaces from large private parking providers such as [REDACTED] and [REDACTED];
- Enhanced park and ride options provided outside of Lower Hutt CBD.

3.2 Construction Staging

As set out in the CDP construction is planned to commence in January 2026 and run until approximately October 2032. Construction will be staged. It should be noted, the CDP is a **living document** which will be continuously updated throughout the construction lifecycle. However, this analysis has been completed in alignment with the current CDP (Rev 1.9 dated March 2025).

3.2.1 Construction Zones

Figure 15 below details the construction zones that were identified as having an impact on parking availability. This is available in higher quality in Appendix A.

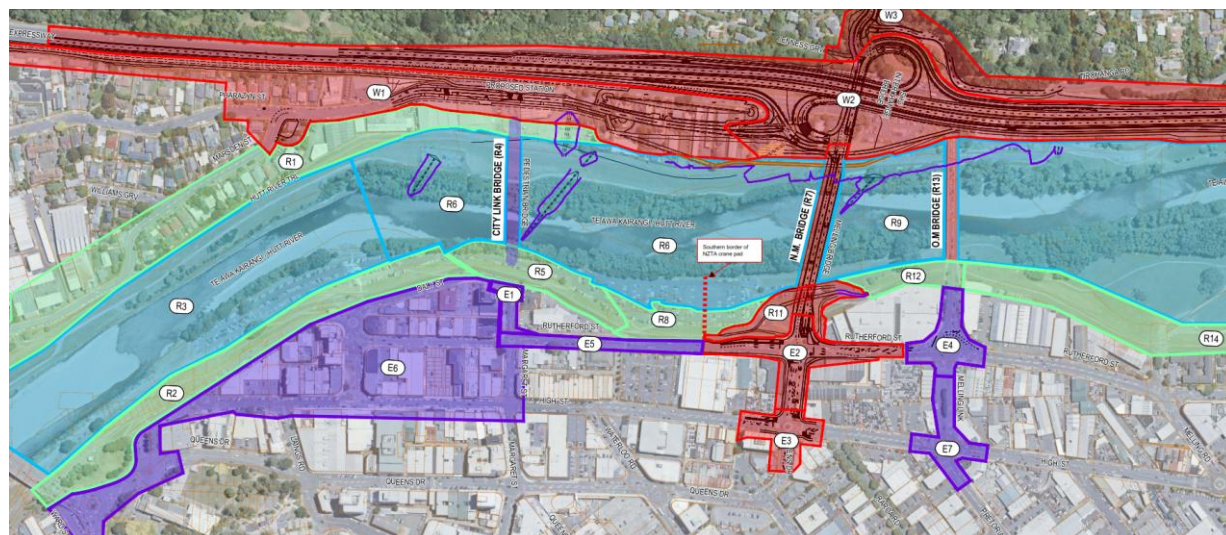


Figure 15 Te Awa Kairangi Programme Construction Zones

The zones that may impact on parking provision include:

- **W1:** Pharazyn Street and Rail Station
- **W2:** Block Road and Block Road Park n' Ride
- **R1:** Marsden Street
- **R2:** Daly Street
- **R3, R5, R6, R8, and R11:** Riverbank Car Park
- **E1:** Daly Street to Rutherford Street

- **E2:** Rutherford Street / Queens Drive intersection
- **E3:** Queens Drive / High Street intersection
- **E4:** Rutherford Street / Melling Link intersection
- **E5:** Rutherford Street
- **E6:** Lower Hutt CBD Area
- **E7:** High Street / Melling Link intersection

The parking areas that fall within the construction zone are shown in Figure 16 below. There is no anticipated parking removal on Rutherford Street, at the Rutherford Street / Melling link intersection, or the High Street / Melling Link intersection due to the limited work occurring. Similarly, although there is a realignment of Marsden Street occurring, it is anticipated that the new road will be constructed while the existing alignment remains open limiting any parking impact. On Pharazyn Street, there are no changes to the road design (in relation to parking) southwest of 71 Pharazyn Street.

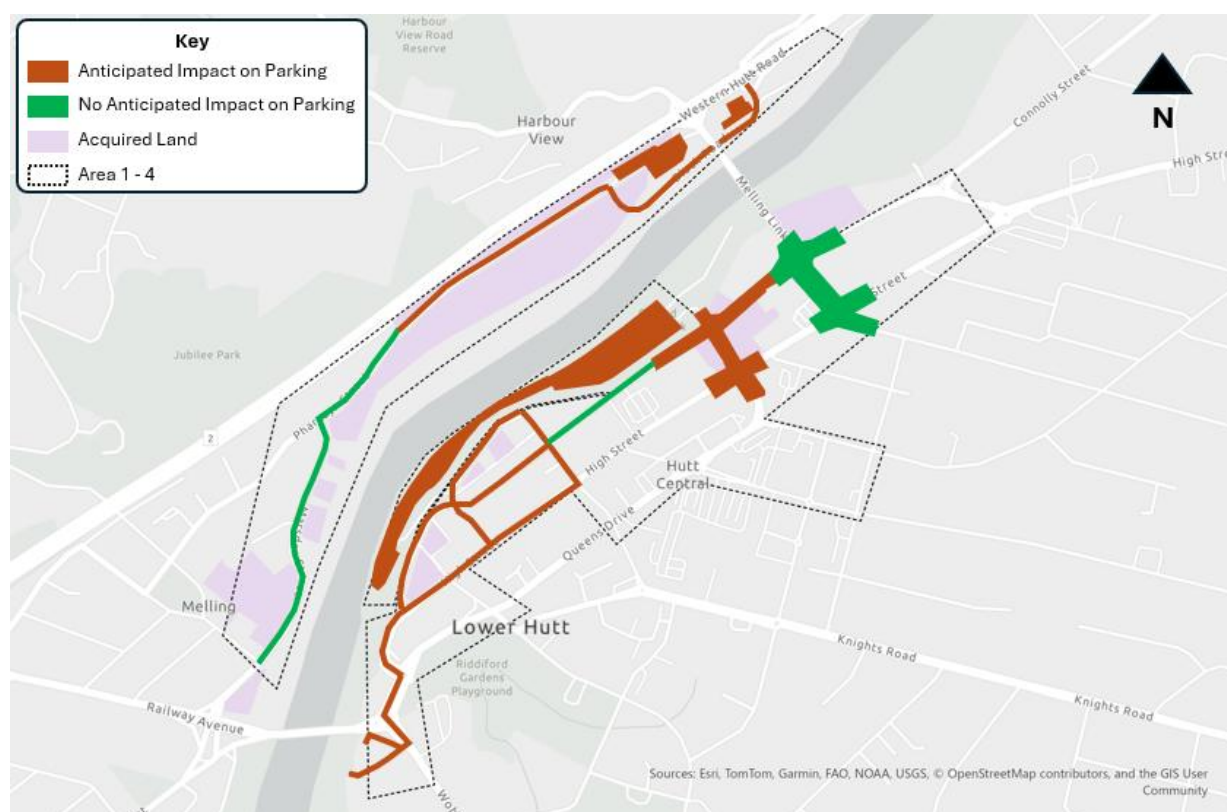


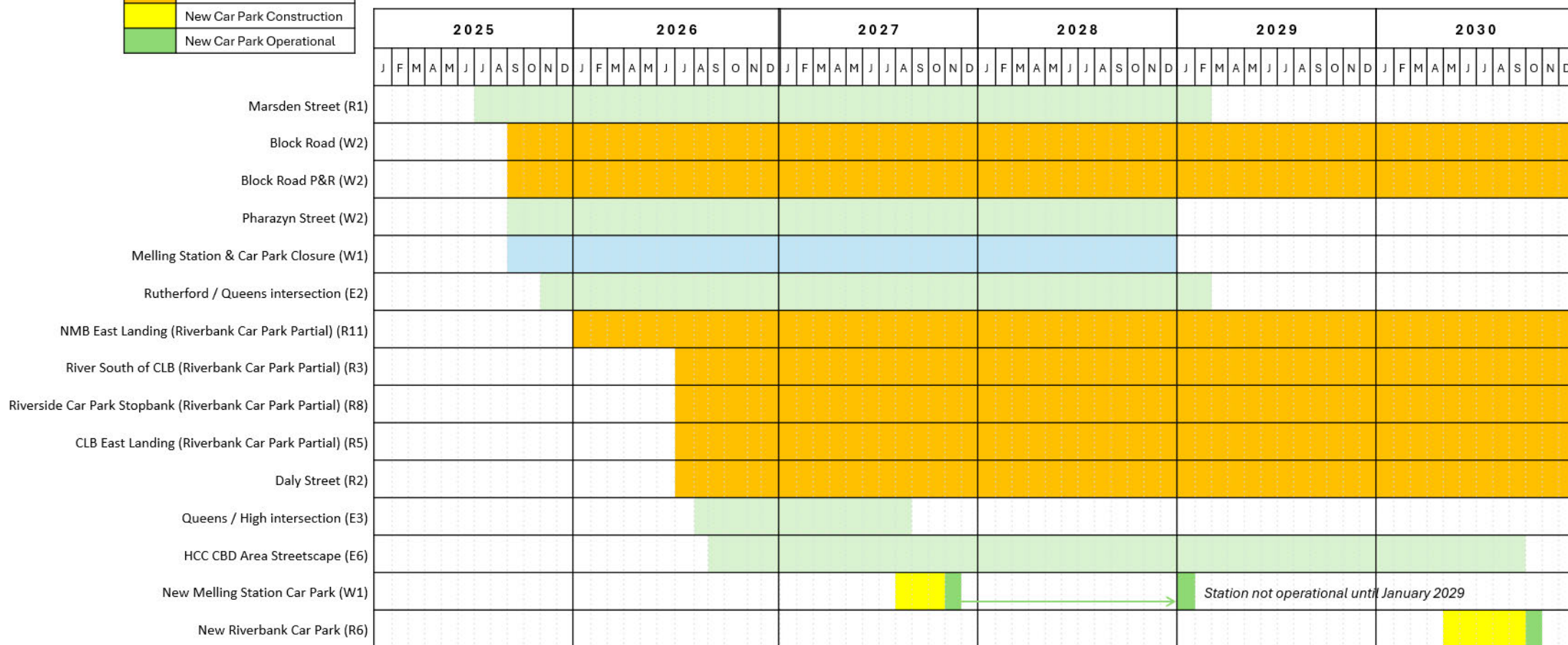
Figure 16 Impacted Parking Areas

Figure 17 below sets out when parking provision in each of the construction zones will be impacted². Where the final design is not known, assumptions have been made to understand the level of parking supply that will be removed, these are further explained in Section 3.3.

² Based on CDP revision 1.9 from March 2025

Figure 17 Sequenced Construction Works (As of March 2025)

	Construction Works
	Station Closure
	Permanent Closure
	New Car Park Construction
	New Car Park Operational



3.2.2 Land Acquisition

A large number of properties have been acquired for the construction of Te Awa Kairangi programme. These included residential, commercial and industrial properties. Figure 18 below shows the land areas that have been or will be acquired as part of the programme.

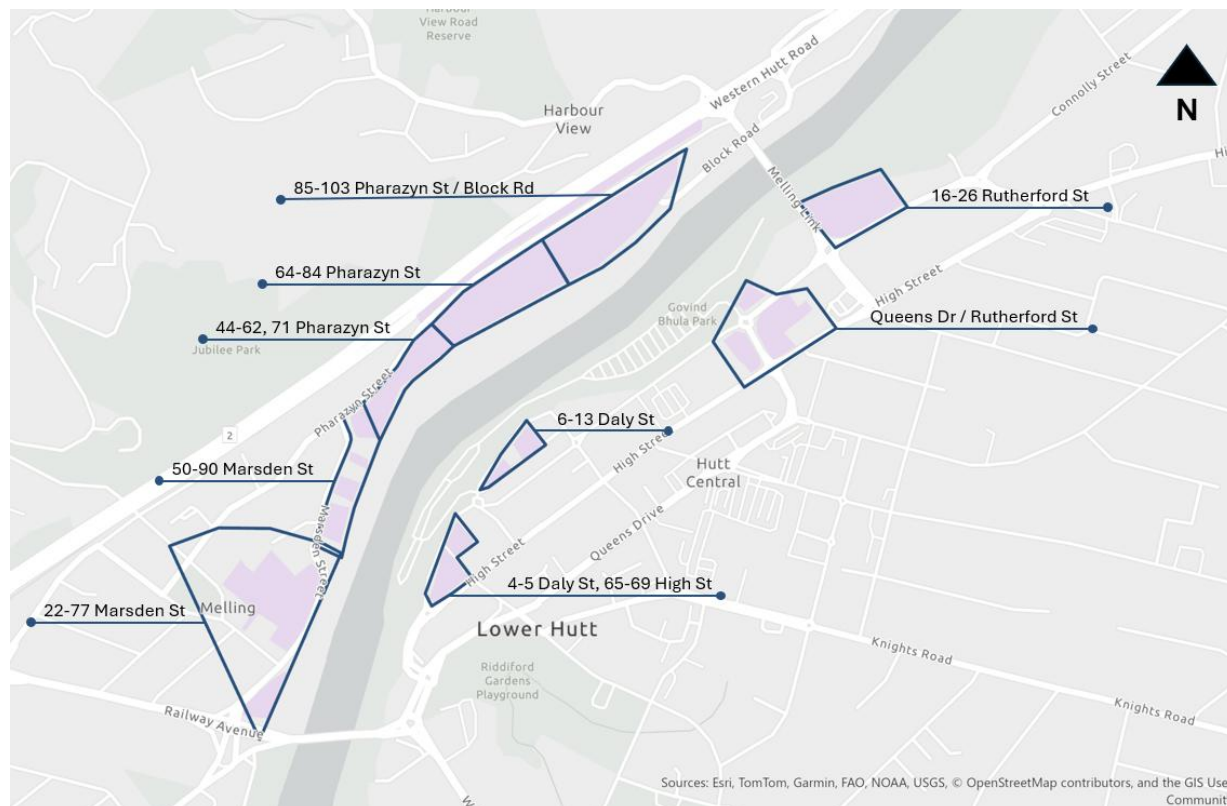


Figure 18 Land Acquisition Zones

A number of properties that have been acquired are considered ‘trip attractors’, such as Melling Train Station, which will result in a reduction in trips to these locations, and therefore a reduction in parking demand. This is particularly the case for Area 1 (Melling).

In order to understand how parking demand will be impacted, the existing land-use and parking patterns have been analysed. This analysis is contained in the following section.

3.3 Construction Phase Parking Demand

Peak parking occupancy across the programme area varies between 20% and 100% as shown in Figure 8. However, as a part of the Te Awa Kairangi works, a significant portion of this demand has been removed, reduced, or relocated. The primary trip purposes occurring in each of these areas is shown in Figure 19 below to support.

Several parking areas have been identified as having a mixed purpose. The CBD and Riverbank Car Park, have a combination of short and long-term parking options and are likely to attract both individuals completing short trips (leisure / retail) and long trips (commuting). Marsden and Pharazyn Streets were also identified as having a mixture of leisure / retail, residential, and commuting, due to the lack of parking restrictions, proximity to Melling Station, and mixed land use that surrounds them. The minimal parking that falls within the intersection footprints has been identified as being purely for retail and leisure due to the P120 restrictions that are in place. Block Road north of Melling Link is often used as a parking area for those accessing the Hutt River Trail, therefore the primary parking purpose has been designated as recreation.

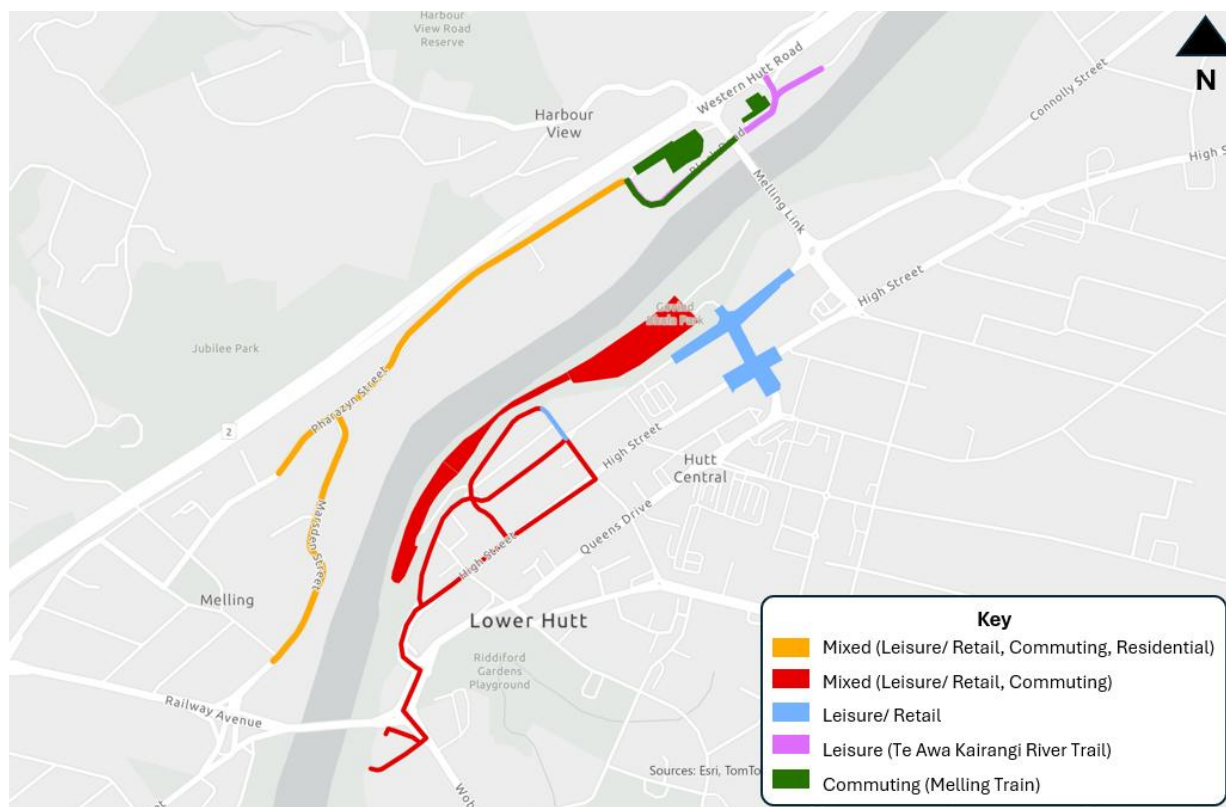


Figure 19 Primary Trip Purpose

Based on this information, the impact of the construction works on parking demand has been estimated. The key changes are detailed below:

3.3.1 Removed Demand

- Melling Station:** The 2023 parking surveys showed that the average length of stay at the Melling Station carpark was 8.5 hours indicating that this carpark is primarily used by individuals commuting via the Melling train service. As this service will be shut from September 2025 until January 2029, parking demand is anticipated to be removed during this period. It should be noted that while the demand for parking at Melling Station will be removed due to its closure, the demand for the train service will be temporarily *relocated*. It is anticipated that the majority of rail park and ride (P&R) demand will relocate to alternative, nearby stations such as Petone, Western Hutt and Ava. The P&R facilities at Petone Station are being upgraded to cater for this increased demand.
- Block Road (S of Melling Link):** Of the 34 parks available on Block Road, the 2023 surveys show that those located south of the Melling Link bridge (18 parks) are used by individuals commuting via the Melling train service, due to the proximity to the station. It is anticipated demand for these 18 parks is removed during the period in which the Melling train service is not operational. As mentioned above, it is anticipated that while the demand for parking will be removed, this demand will likely temporarily relocate to nearby stations.
- Pharazyn Street:** The average occupancy on Pharazyn Street is 32%, with the peak occupancy reaching 45%. Unrestricted parks located at the northern end of Pharazyn Street were identified as often used for long periods (8-13 hours), indicating use by individuals travelling via Melling Station. The remainder of these spaces are assumed to be used by both visitors, employees, and residents of the area surrounding Pharazyn Street. The area surrounding Pharazyn Street (the portion which will be closed during construction) and has been acquired. Therefore, parking demand in this area will be removed.

3.3.2 Relocated Demand

- **Block Road (N of Melling Link):** The 16 parks on Block Road are assumed to be used for river corridor access due to the key characteristics of short length of stay (0-2 hours), high turnover rates and higher occupancy in the morning. There are several other river corridor access parking areas (as shown in Figure 11), such as the large carpark next to Kennedy Good Bridge (on the true right bank). However, it should be noted that the Kennedy Good Bridge is also used for school pick-ups and drop-offs. Additionally, there are carparks located on Melling Road (north of Rutherford Street), however, these also fall within the programme footprint, and therefore may be impacted by construction works. It has been assumed that this demand will be relocated to these alternative carparks during the construction phase.

3.3.3 Reduced Demand

- **Block Road P&R:** The 2023 parking surveys showed that the average length of stay at the Block Road Park and Ride was 7.5 hours, with the majority of parking stays beginning within the morning peak, indicating that this carpark is primarily used by individuals commuting via the Melling train service. As this service will be shut from September 2026 until January 2029, this parking demand is anticipated to be removed during this period. However, there are a number of users who park in this area to access facilities across the Melling Link. Through analysis of the parking surveys, it was estimated that on average, 18% of users do not park for the purpose of using the Melling Station. Therefore, this portion of demand will be retained during the train station closure.
- **Marsden Street:** Marsden Street has an average occupancy of 44% and a peak occupancy of 59%. The average length of stay of such trips is between 6 and 8 hours, indicating that the majority of individuals parking here are for residential or employment purposes. As part of the construction works, the residential dwellings located south of Marsden Street, as well as the employment area between 22-77 Marsden Street have been acquired, a large portion of this parking demand is anticipated to be removed. Twenty four dwellings, a childcare centre and plumbing service are anticipated to remain. Access to these buildings will be provided via the southern Marsden Street access (from Railway Avenue and Bridge Street). The majority of homes have off-street parking provision, as well as the plumbing service, however, it is anticipated that some homes as well as the childcare centre will still have parking demand during the construction period. The portion of Marsden Street that will remain open is anticipated to retain the on-street parking provision to cater for this demand.
- **Daly Street:** Several properties along Daly Street, including 4-5 Daly Street and 6-13 Daly Street have been acquired. It has been assumed that the parking demand located directly outside these buildings is related to the business activities. This results in a removed demand of 7 parks outside 4-5 Daly Street, and 27 parks outside 6-13 Daly Street. This totals a removed demand for 34 parks. As redevelopment progresses, it is anticipated that on-street parking along Daly Street will be permanently removed, reflecting the changing land use and long-term reconfiguration of the street environment.

3.3.4 Displaced Parking Demand

The overarching goal of the TPP is to identify opportunities to provide adequate parking to meet demand during the construction phase of the programme. As a result of the above impacts from construction works, the baseline demand (the level of parking required to meet demand) has been rebased for each area.

3.3.4.1 Area 1

As shown above, the majority of parking demand within Area 1 will be removed or reduced as a result of the Melling Station closure, land acquisition, and reduced access to the Hutt River Trail.

Pharazyn Street

It is anticipated that the remaining 44 on-street parks will be adequate to accommodate the remaining demand. As such, there is not expected to be any excess demand on Pharazyn Street, and no temporary parking will be required.

Marsden Street

Marsden Street currently provides 67 spaces (within the scope area), with a peak demand of 39. It is anticipated that the remaining demand (approximately 23 homes, an early childhood centre, and a plumbers will be met through the retained on-street parking. As such, there is not expected to be any excess demand on Marsden Street, and no temporal parking will be required.

Block Road

Block Road currently provides 34 parking spaces (18 north of Melling Link and 16 east). As discussed previously, demand for the 16 parks located south of Melling Link will be removed during the station closure. The 18 parks located north of Melling Link will be relocated to alternative access carparks, such as the large carpark located near Kennedy Good Bridge (capacity for approx. 84 cars) and the carparks on Melling Road (north of Rutherford Street) with capacity for approx. 17 cars), shown previously in Figure 11. Therefore, due to the removal of demand for the station and the relocation of the recreational demand, no excess demand will occur and therefore no temporal parking is required.

Block Road Park and Ride

Analysis showed that approximately 82% of parking demand at Block Road P&R is related to commuters using Melling Train Station, who will likely commute to alternative stations during construction. It has been assumed that the remaining 18% of users are travelling across the Melling Link bridge to access Lower Hutt. Therefore, this demand will remain during the construction phase. As the Block Road P&R sees a maximum occupancy of 25 users, the remaining demand from this displacement is approximately 5 users (18% of 25).

Melling Train Station

All parking demand associated with Melling Station will be removed during the construction phase when the station is not operational.

Table 10 Construction Impact on Parking in Area 1

Location	Baseline Parking Provision	Baseline Peak Demand	Construction Phase Provision	Construction Phase Demand	Displaced Demand	Spare Capacity
Marsden Street	67	39	67	39	0	28
Pharazyn St	129	58	44	18*	0	26
Block Road	34	10	0	0	0	N/A - closed
Melling Station	144	144	0	0	0	N/A - closed
Block Rd P&R	48	25	0	5	5	N/A - closed
Total	422	270	111	62	5	54

**reduction in demand proportionate to parking removal of 69% due to associated land acquisition*

3.3.4.2 Area 2

As discussed previously, the entire Riverbank Car Park will be closed as part of the construction works. Data provided by the HCC Parking Services team shows that the Riverbank Car Park is predominantly used as a long-term carpark. In March 2025, data showed that over 85% of users paid the maximum daily charge of \$10, indicating stays over 3 hours (at least).

As the Riverbank Car park primarily serves individuals visiting or working in Lower Hutt, the demand for these 363 parking spaces is not expected to reduce, relocate, or disappear during the construction phase.

Accordingly, alternative parking provision is required to accommodate this full demand, consistent with the peak parking demand identified previously. This is detailed in Table 11 below.

Table 11 Construction Impact on Parking in Area 2

Location	Baseline Parking Provision	Baseline Peak Demand	Construction Phase Provision	Construction Phase Demand	Displaced Demand	Spare Capacity
Riverbank SW	286	205	0	205	205	N/A - closed
Riverbank M	81	29	0	29	29	N/A - closed
Riverbank NE	469	129	0	129	129	N/A - closed
Total	836	363	0	363	363	

As previously mentioned in Section 2.3.3, the Riverbank Car Park is predominantly used as a long-term car park, therefore, the majority of this displacement is anticipated to be for long-term users such as employees.

3.3.4.3 Area 3/4

Majority of the parking provision in Area 3/4 will not be affected as part of the construction works. The most significant impact will be observed on Daly Street, which will see 65 parks removed.

Due to the size of the new intersection footprints, there will also be 11 spaces removed on Rutherford Street (due to the western arm of the Rutherford Street / Queens Drive intersection), and 3 parks removed on High Street (due to the eastern arm of the High Street / Queens Drive intersection).

A number of roads within Area 3/4 fall within the scope of the Hutt City streetscape works. This includes Market Grove, Ward Street, Dudley Street, Andrews Ave, and portions of Queens Drive (10 parks), High Street (107 parks), and Margaret Street (9 parks). This area combined provides approximately 237 parks.

We have received confirmation from HCC³ via email on 1 May 2025 that the design of these works is not yet developed enough to understand the level of parking removal. Therefore, due to the need for parking in the area, and a likely staged approach to delivering these works, it has been assumed that over the construction period, no more than 25% of parking provision will be removed (~60 spaces, 25% of the 237 total). It is noted that this is quite a conservative figure, and there is an opportunity for HCC to stage this work in such a way that the parking removal in this area is minimised as much as possible. This number therefore represents a worst case scenario.

As shown in Table 12 above, the total anticipated displaced parking demand within Area 3/4 equates to 44 displaced parks.

³ Agreed with the HCC Project Manager

Table 12 Construction Impact on Parking in Area 3/4

Location	Baseline Parking Provision	Baseline Peak Demand	Construction Phase Provision	Construction Phase Demand	Displaced Demand	Spare Capacity
Rutherford Street	78	51	67	51	0	16
Laings Road	15	15	15	15	0	0
Cornwall Street	15	10	15	10	0	5
Kings Crescent	27	18	27	18	0	9
Bloomfield Terrace	24	20	24	20	0	4
Waterloo Road	39	23	39	23	0	16
Osborne Pl	21	17	21	17	0	4
High St	271	180	241*	180	0	61
Queens Dr	37	24	35*	24	0	11
Market Grove	42	26	32*	26	0	6
Ward Street	15	8	11*	8	0	3
Dudley Street	33	33	25*	33	8	0
Andrews Avenue	21	21	16*	21	5	0
Margaret Street	22	20	20*	20	0	0
Daly Street	65	50	0**	31**	31	0
Total	725	516	587	497	44	135

*based on the assumption that no more than 25% of parking provision will be removed at one point (237 parks total)

**demand reduced due to land acquisition on Daly Street

3.3.4.4 Total Displaced Parking Demand

The most significant portion of displaced parking demand occurs in Lower Hutt CBD, primarily as a result of the Riverbank Car Park closure. Table 13 details the total parking displacement.

Table 13 Total Displaced Parking Demand

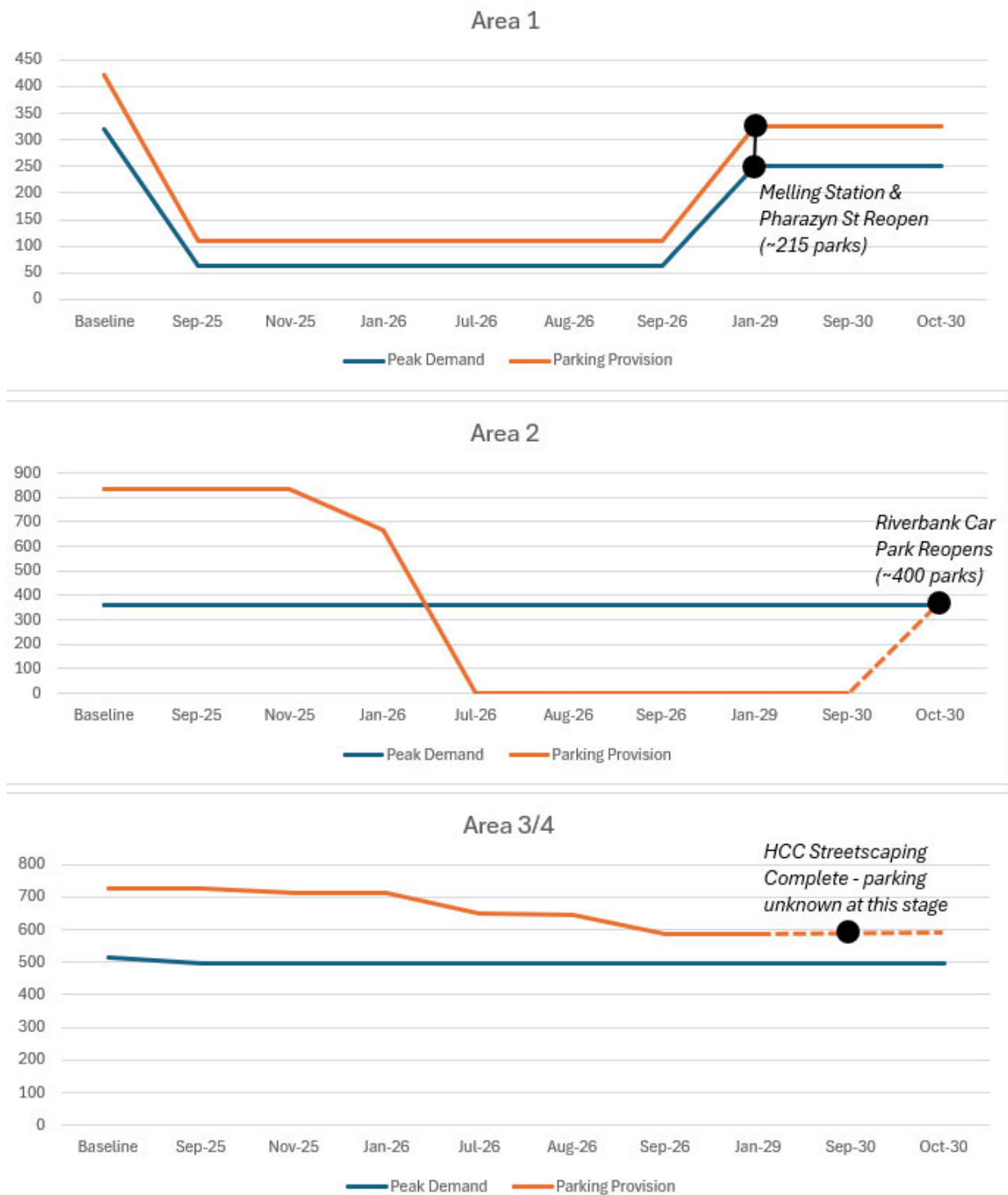
Location	Displaced Demand
Area 1	5 parks
Area 2	363 parks
Area 3/4	44 parks*
Total	412 parks

*based on the assumption that no more than 25% of parking provision will be removed at one point (237 parks total)

It is important to note this total parking displacement will be staged over the length of the construction works. The level of displacement over time has been visualised in Figure 20 below. The key period for parking displacement during the construction works is between July 2026 and October 2030⁴. During this period, parking displacement across the programme area will peak at 412 parks.

⁴ Based on current CDP dated March 2025

Figure 20 Timeline of Parking Displacement



3.4 Mobility Parking

In addition to overall parking demand displacement, the impact of construction works on disabled parking has also been investigated. There are a total of 37 mobility spaces provided within the study area, as shown in Table 14 below.

Table 14 Displaced Mobility Parking

Location	Total Provision
Area 1	0
Area 2	13
Area 3/4	24
Total	37

Figure 21 below illustrates the location of each of these mobility spaces, with a unique ID which corresponds to Table 15 below which provides additional information on the total hours occupied, the restriction in place and whether this space is likely to be displaced during construction.

Figure 21 Locations of Displaced Mobility Parking

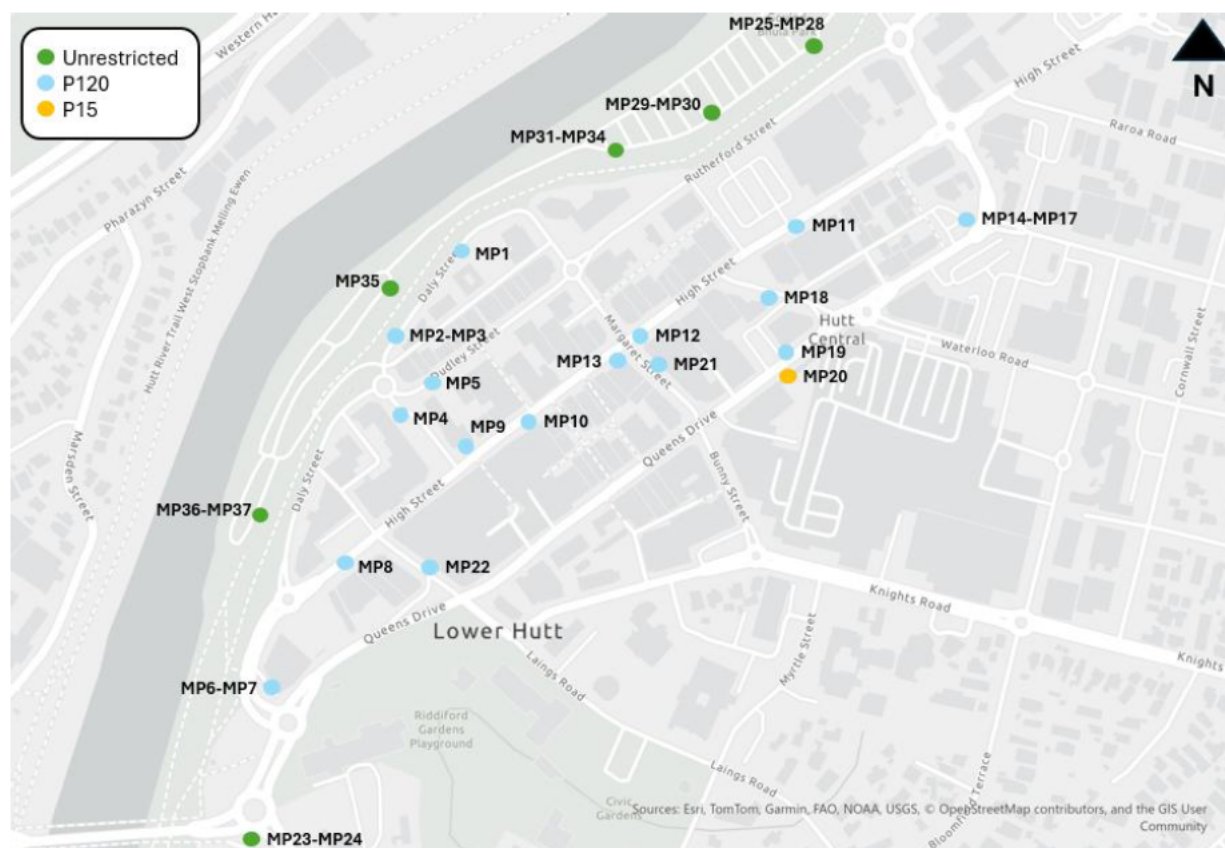


Table 15 Details of Displaced Mobility Parking

Location	ID	Avg. Hrs Occupied	Restriction	Displaced?
Daly Street	MP1	0	P120	Yes
Daly Street	MP2	1	P120	Yes
Daly Street	MP3	5	P120	Yes
Andrews Ave	MP4	6	P120	TBC - HCC streetscaping works
Dudley St	MP5	5	P120	TBC - HCC streetscaping works
High St	MP6	3	P120	TBC - HCC streetscaping works
High St	MP7	4	P120	TBC - HCC streetscaping works
High St	MP8	4	P120	TBC - HCC streetscaping works
High St	MP9	4	P120	TBC - HCC streetscaping works
High St	MP10	9	P120	TBC - HCC streetscaping works
High St	MP11	0	P120	No
High St	MP12	5	P120	No
High St	MP13	4	P120	No
Osborne Pl	MP14	6	P120	No
Osborne Pl	MP15	7	P120	No
Osborne Pl	MP16	7	P120	No
Osborne Pl	MP17	1	P120	No
Waterloo Rd	MP18	7	P120	No
Queens Dr	MP19	5	P120	No
Queens Dr	MP20	4	P15	No
Margret St	MP21	6	P120	No
Laings Road	MP22	2	P120	No
Market Gr	MP23	11	Unrestricted	TBC - HCC streetscaping works
Market Gr	MP24	9	Unrestricted	TBC - HCC streetscaping works
Riverbank	MP25	0	Unrestricted	Yes
Riverbank	MP26	0	Unrestricted	Yes
Riverbank	MP27	0	Unrestricted	Yes
Riverbank	MP28	0	Unrestricted	Yes
Riverbank	MP29	0	Unrestricted	Yes
Riverbank	MP30	0	Unrestricted	Yes
Riverbank	MP31	0	Unrestricted	Yes
Riverbank	MP32	7	Unrestricted	Yes
Riverbank	MP33	3	Unrestricted	Yes
Riverbank	MP34	0	Unrestricted	Yes
Riverbank	MP35	5	Unrestricted	Yes
Riverbank	MP36	1	Unrestricted	Yes
Riverbank	MP37	0	Unrestricted	Yes

As shown above, 16 mobility parks across the study area will be displaced as a result of construction works (however, this number may increase if the HCC Streetscaping project results in the loss of mobility parking). This is largely due to the closure of the Riverbank Car Park, which provides 13 mobility parks. In addition to this, nine mobility parks fall within the footprint of the HCC streetscaping works. All of these parks are used for a number of hours per day. The retention / relocation of mobility parking to minimise displacement will be a priority for HCC during construction.

It should be noted, that these displaced mobility parks, are part of the total parking demand of 412 that will be displaced during destruction.

Despite the large displacement of mobility parking within the Riverbank Car Park, the demand for these spaces is quite low, particularly in the northern portion of the carpark. Of the 13 parks provided, 9 showed minimal usage during the survey period, with an average stay of less than 1 hour.

Similarly, there are three mobility parks provided on Daly Street, however, two of these parks recorded very low usage.

The anticipated mobility displacement expected is summarised in Table 16 below.

Table 16 Summary of Displaced Mobility Parking

Location	Baseline Parking Provision	Baseline Peak Demand	Construction Phase Provision	Construction Phase Demand	Displaced Demand	Spare Capacity
Daly St	3	1	0	0	0	0
Andrews Ave	1	1	TBC	1	TBC	0
Dudley St	1	1	TBC	1	TBC	0
High St	8	6	TBC	6	TBC	0
Osbourne Pl	4	3	4	3	0	1
Waterloo Rd	1	1	1	1	0	0
Queens Dr	2	2	2	2	0	0
Margret St	1	1	1	1	0	0
Laings Rd	1	1	1	1	0	0
Market Gr	2	2	TBC	2	TBC	0
Riverbank	13	3	0	3	3	0
Total	37	22	9 + TBC	21	3 + TBC	1

As previously mentioned, the impact of the CBD Streetscaping works is not known at this time, therefore, the impact on mobility parking has been labelled at 'TBC'. When looking at overall parking demand, the assumption has been made that no more than 25% of parking will be removed; a total of 10 mobility spaces falls within the boundary of the streetscape work. Based on a similar assumption, it is anticipated that no more than 3 mobility spaces will be removed at any one time. Therefore, it is anticipated that a total of maximum 6 mobility spaces will be displaced during the construction period.

4.0 Provision of Key Parking Needs

This section details:

- The approach for identifying options for temporary parking
- The outcomes of the temporary parking options assessment
- Recommendations, set out in the implementation recommendations, for the programme partners in order to reduce parking displacement as much as possible.

It is important to note that while this TPP provides a set of recommendations for managing displaced parking, the identification of sites beyond the programme footprint is indicative only. Engagement and agreement with external landowners or operators and any additional consents or approvals fall outside the scope of this plan. Securing such arrangements will be the responsibility of the programme partners.

4.1 Methodology for Identification of Temporary Parking Options

Options for temporary parking provision during construction were identified using a sequential assessment of opportunities within:

1. The programme footprint;

The assessment identified any demolished or unoccupied land parcels within the programme footprint that could be repurposed for parking. Once these parcels were identified a workshop was held with the CDP Working Group⁵ to review and assess initial site options and remove those that were not considered viable due to access, safety, or operational constraints.

2. Surrounding areas with lower parking utilisation;

Where displaced demand could not be fully addressed within the immediate footprint, options to redistribution to areas with existing spare capacity were identified. Parking occupancy data provided by HCC's parking services team was used to identify underutilised streets or public car parks in proximity to the construction zone. This includes several surveys conducted by a mobile vehicle. The Parking Services team has cleaned this data and has advised that only areas with medium to high confidence in the validity of the information will be used.

3. Private parking facilities; and

If unmet demand remained, options within private parking facilities within the area, including [REDACTED] sites and the [REDACTED] were assessed in terms of availability, pricing structures, and access restrictions to determine their potential to absorb overflow demand.

4. Recreational / public areas that could potentially accommodate temporary parking solutions.

Where further capacity was required, recreational areas and other publicly-owned areas were considered. This included assessing both existing car parks that could be temporarily repurposed and nearby vacant land with potential for short-term use, subject to suitability and necessary approvals.

4.2 Options within Programme Footprint

Eight potential options were identified within the programme, the majority of which fell within the GWRC footprint. These options included:

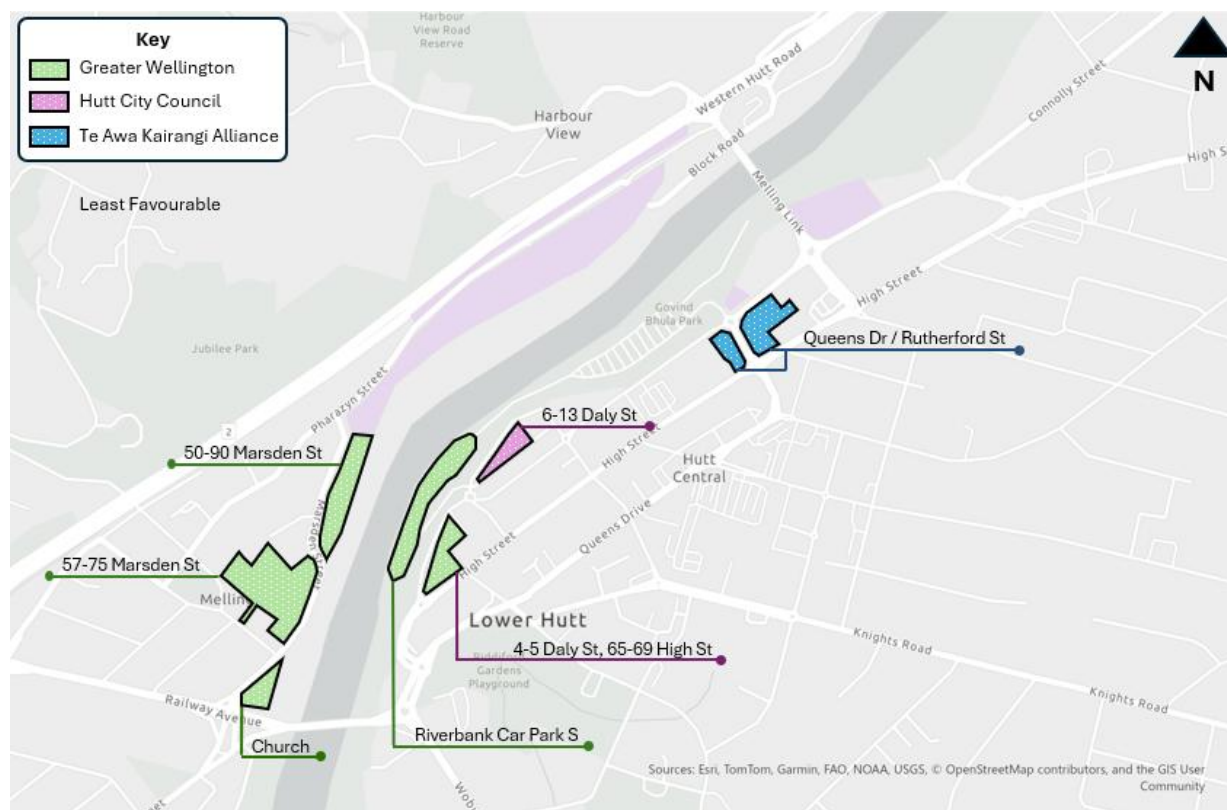
- Land acquisition zones between High Street and Rutherford Street (where the new intersections will be developed) – Alliance
- 6-13 Daly Street (land acquisition) – HCC
- 4-5 Daly St / 65-69 High Street – GWRC

⁵ comprising representatives from HCC, GWRC, NZTA, and the Alliance

- Hutt City Church carpark (land acquisition) - GWRC
- 22-77 Marsden Street (land acquisition) – GWRC
- 50-90 Marsden Street (land acquisition) – GWRC
- Riverbank Car Park South (potential to keep the southern end open for longer) - GWRC

The location of these potential sites is shown in Figure 22 below.

Figure 22 Potential Sites within Programme Footprint



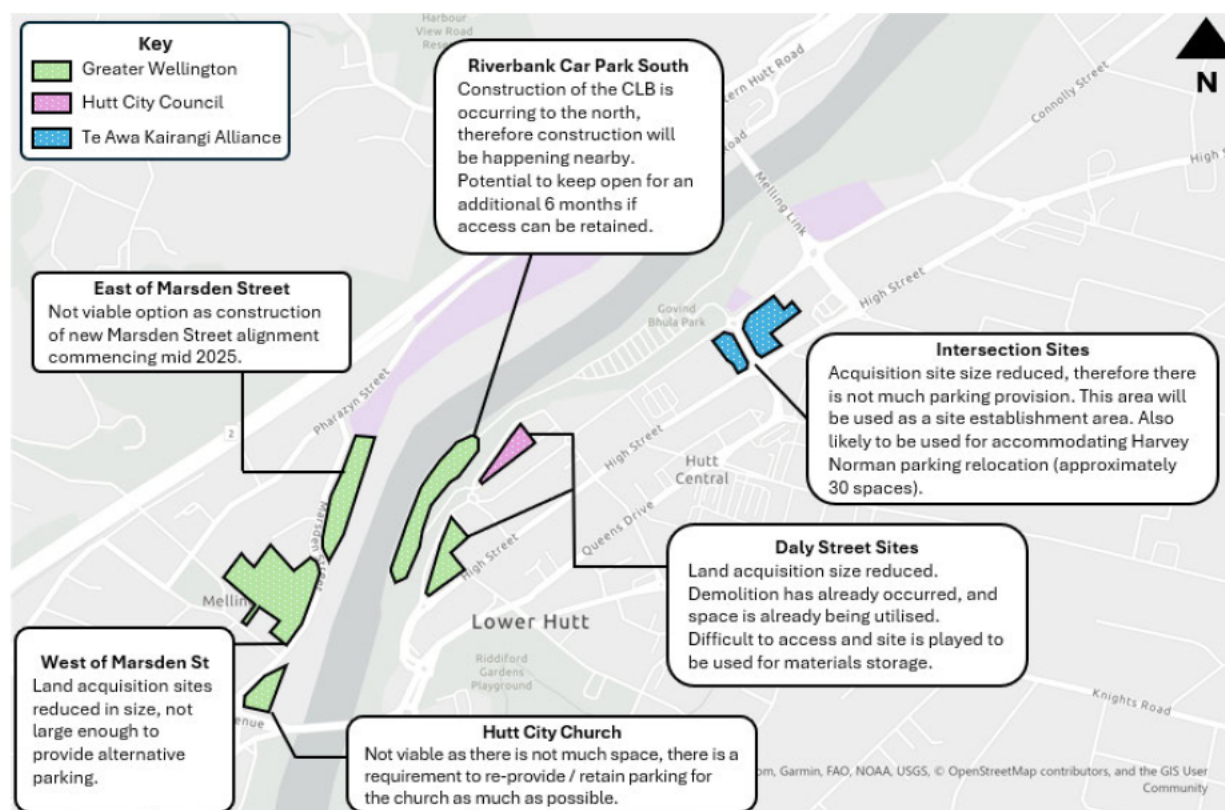
Based on the workshop held with the CDP Working Group on 7 May 2025 it was confirmed that there would be no space within the programme footprint to reallocate parking. This was for a range of reasons including:

- The reduction in size of the overall programme footprint;
- The reduction in the level of land acquisition occurring as part of the construction works;
- The need for material storage arrangements;
- Access issues; and
- The need for construction staff parking within the existing footprint.

While no sites could be taken forward for temporal parking from this assessment, the CDP working group identified an opportunity to delay the closure of the southern portion of the Riverbank Car Park for a further 6 months. This part of the carpark is the most utilised, and therefore by doing so, the majority of parking displacement may be delayed a further 6 months. The benefit of this is that it will give the programme partners additional time to arrange alternative parking provision and reduces the window in which the majority of displacement occurs. This option is influenced not only by the schedule of works relating to the construction of the City Link Bridge (CLB), but also by the GWRC construction programme, including the Daly Street road closure which impacts access to the Southern Carpark. This closure is driven by stopbank construction and potentially utilities relocations.

The site-specific feedback is summarised in Figure 23 below.

Figure 23 Site Specific Feedback



It should be noted that this analysis is based on the current CDP, which stages the Riverbank Car Park full closure for mid-2026. There is a risk that if this closure was to be brought forward, parking displacement will occur earlier than planned. This should be emphasised in all future conversations and raised as a significant risk if this is considered an option.

4.3 Options to Redistribute to Other Public Parking

There are several streets across Lower Hutt that have spare occupancy during construction. These streets are anticipated to absorb some of the displaced parking. This is shown in Table 17 below.

Table 17 Spare Capacity on Marsden Street and Pharazyn Street

Location	Construction Phase Parking Provision	Construction Phase Demand	Construction Phase Spare Capacity
Marsden Street	67	39	28
Pharazyn Street	44	18	26
Rutherford Street	67	51	16
Cornwall Street	15	10	5
Kings Crescent	27	18	9
Bloomfield Terrace	24	20	4
Waterloo Road	39	23	16
Osborne Pl	21	17	4
High St	241	180	61
Queens Dr	35	24	11
Market Grove	32	26	6
Ward Street	11	8	3
Total	623	434	189

Due to the relative proximity of Marsden Street and Pharazyn Street from Lower Hutt CBD, and the lack of time restriction, it is anticipated that some long-term users will relocate here, particularly for those who may have previously made use of the Riverbank Car Park couponing system.

The HCC Parking Service's data showed that while there were a number of streets that had low occupancy levels, and could therefore accommodate some displaced parking, a number of these were located far from Lower Hutt CBD and were therefore not deemed a viable option.

A review of streets which had an average occupancy of below 75% and located close enough to Lower Hutt CBD to be considered a viable alternative, five options were identified. These are detailed in Table 18 below. Approximately 54 spare parking spaces were identified in the streets listed below. The location of these streets detailed in

Table 18 is shown in Figure 24 below.

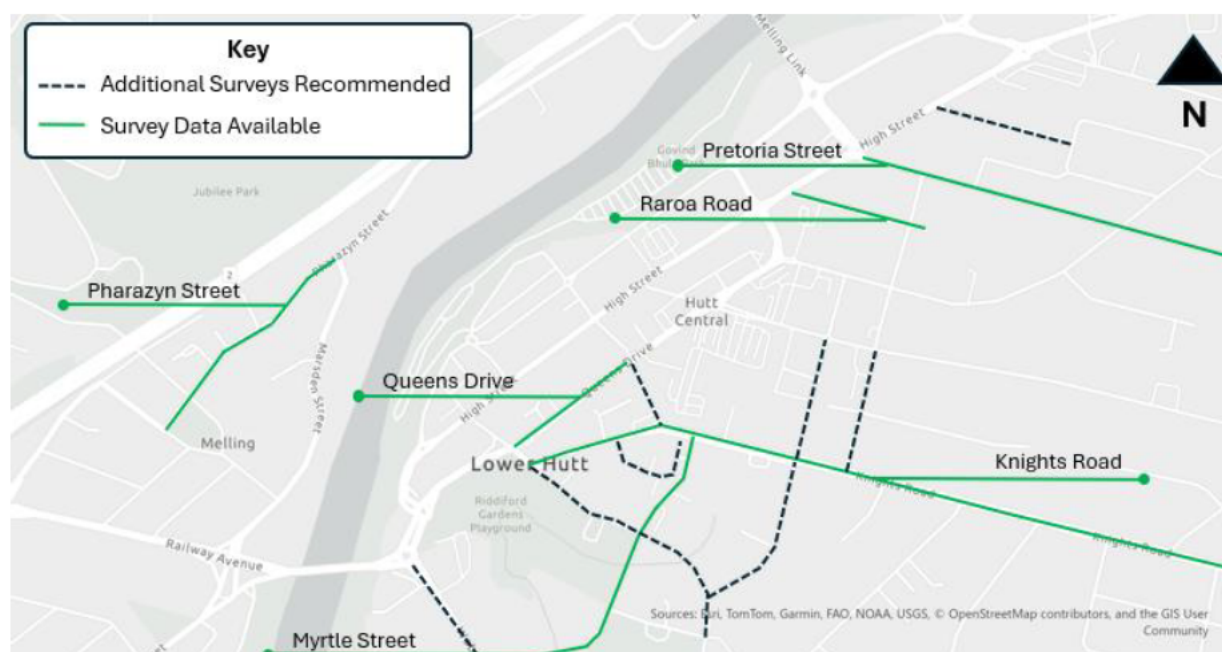
Table 18 Surrounding Streets with Occupancy Data

Location	Parking Provision	Average Demand	Spare Capacity
Knights Road	31	20	11
Raroa Road	18	12	6
Pretoria Street	21	11	10
Myrtle Street	47	20	27
Total	117	63	54

It should be noted that the surveys also contained a large number of alternative streets surrounding Lower Hutt CBD which showed spare capacity. However, due to the low number of surveys obtained on these streets they were not included as part of this analysis.

It is recommended that HCC undertake further occupancy surveys on the streets in close proximity to the city centre to identify any additional opportunities to redistribute parking. The potential survey areas are shown in Figure 24 below.

Figure 24 Location of Surrounding Streets with Data and Other Recommended Surveys



The outcome of this assessment was that demand for approximately 88 parks can be redistributed to surrounding streets, based on the total amount of spare capacity shown in the current available data. There may be additional opportunities for more parking to be redistributed following surveys to understand the full occupancy of surrounding streets.

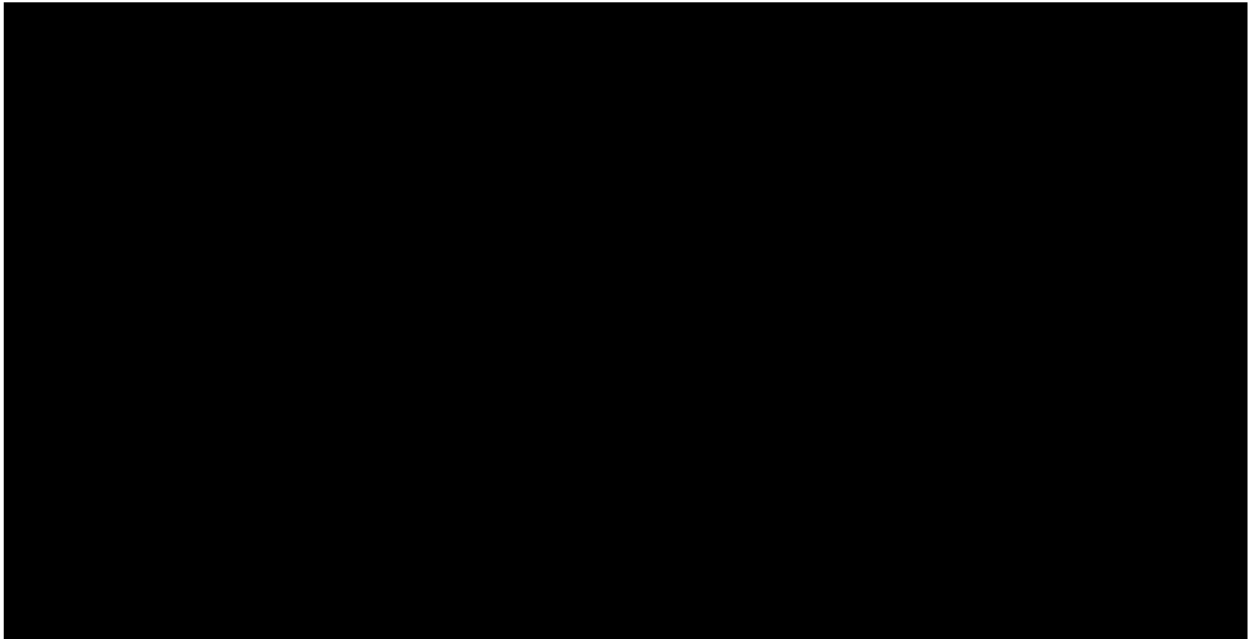
4.4 Options to Redistribute to Off-Street Private Parking

A number of private parking areas within or in proximity to the study area were identified as potentially having spare capacity to cater for displaced parking demand. These include:

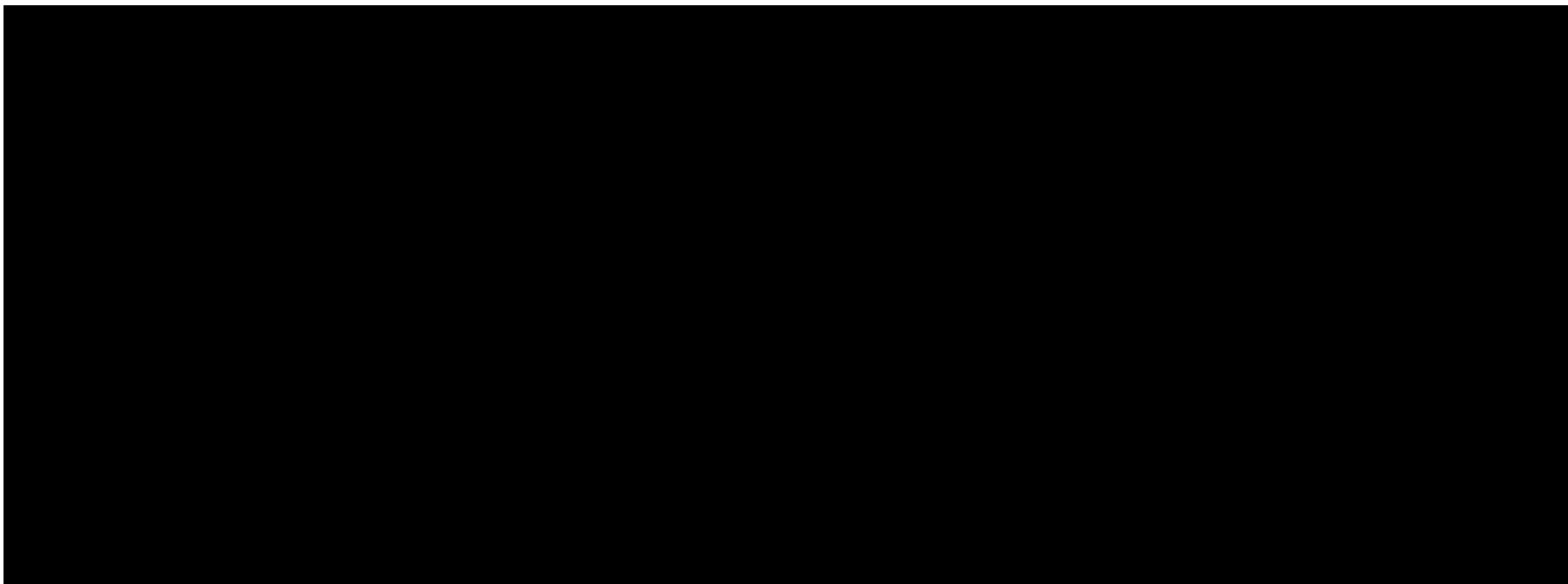


The location of each of these car parks is shown in Figure 25 below.

Figure 25 Private Car Park Options



Further details on each of these car parks is provided in Table 19 below.

Table 19 Summary of Private Parking Options

The options above provide a total provision of approximately 2,500 spaces. While it is acknowledged that there are likely high occupancy numbers in these areas, even with occupancy levels of 90%, there would be 250 parks available to cater to displaced parking demand.

How the spare capacity of these car parks may be harnessed to cater to displaced demand, as well as the associated actions to do so, will be further discussed within the implementation recommendations in Section 4.6.

It should be noted that these are only considered 'options' at this stage, and their viability will depend on later conversations between HCC / Programme partners and the relevant owners / operators.

4.5 Options to Redistribute to Recreational and Other Public Land

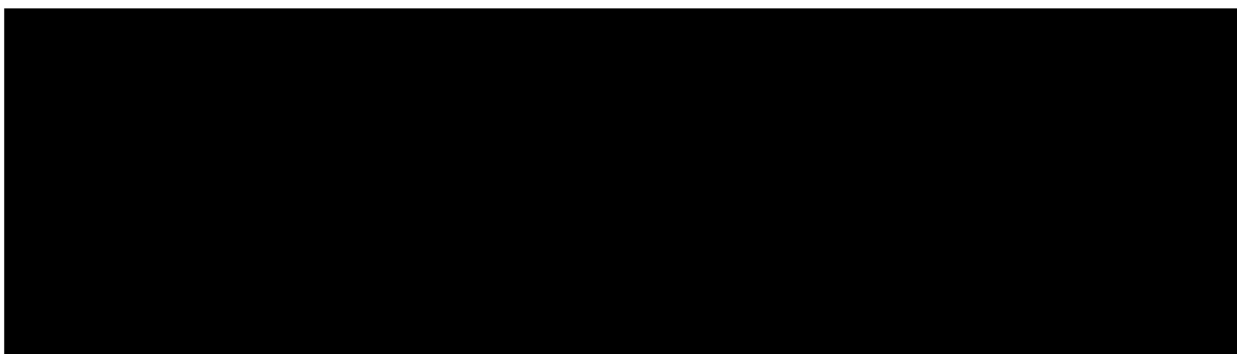
The following areas were identified on recreational and other public land parcels as options for temporary parking during the construction period:



The areas listed are all established parking areas with suitable vehicular access. Due to the proximity of these parking areas from Lower Hutt CBD, these areas would be best placed to support long-term parking displacement, particularly for those working within Lower Hutt.

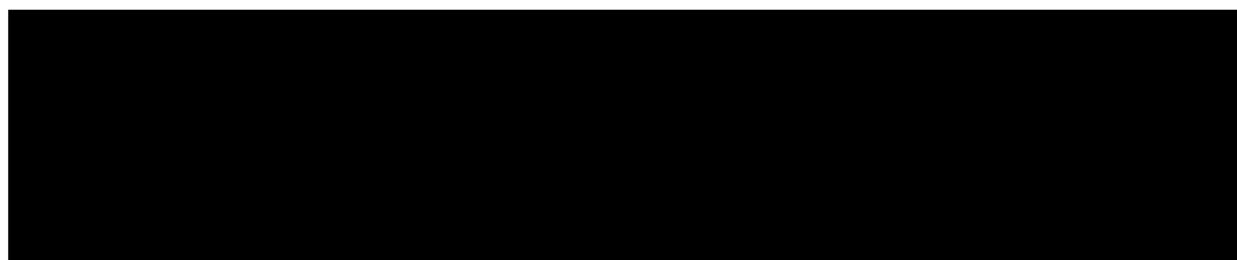
The respective locations of these areas are shown in Figure 26 below.

Figure 26 Location of Recreational / Public Car Parks



The parking provision at each of these areas is detailed in Table 20 below.

Table 20 Summary of Recreational / Public Car Parks



It is hard to predict the level of parking displacement these parking areas may be able to absorb, as parking occupancy data was not obtained in these areas as part of the TPP scope / original surveys. Actions to gain further information on the viability of these options is detailed in section 4.6.4

It should be noted that these are only considered 'options' at this stage, and their viability will depend on later conversations between HCC / programme partners and the relevant owners / occupiers.

4.6 Implementation Recommendations

This section provides a structured implementation approach for delivering transitional parking solutions during the construction period informed by the findings of the assessment in sections 4.2 – 4.5 above. These sections show that as it stands, there are limited existing opportunities for relocating parking demand, and therefore, this implementation plan details recommended actions to help HCC and the Programme partners create arrangements and opportunities to address the displaced demand for 412 parking spaces.

4.6.1 Site Availability within Programme Footprint

No viable options were identified at this stage within the programme footprint to provide temporary parking. This outcome reflects several constraints:

- Reduction in the overall size of the programme footprint;
- Reduced level of land acquisition during construction;
- Space requirements for material laydown and storage;
- Access and safety constraints; and
- The need to accommodate construction staff parking on-site.

An opportunity to retain access to the southern portion of the Riverbank Car Park for a further six months has been identified. This area represents the most utilised portion of the car park and, if retained, could significantly delay the onset of peak displacement. This would:

- Reduce the window of disruption from mid-2026 to early 2027; and
- Provide additional time for HCC and partners to finalise alternative parking arrangements.

Actions:

HCC should engage internally with the City Link Bridge (CLB) construction team to assess the feasibility of retaining the southern car park for this additional period

If confirmed, appropriate signage should be implemented along the Riverbank (particularly along previously operational access routes to the Riverbank Car Park), notifying users that the southern portion remains operational.

The CDP is a **living document** which will be continuously updated throughout the construction lifecycle. The approach and considerations within the TPP should be revisited regularly throughout the construction period to understand if there are any viable alternative parking locations available within the programme footprint.

4.6.2 Redistribution to On-Street Public Parking

Analysis of parking occupancy data has revealed limited spare capacity within Lower Hutt CBD. However, there is some underutilised on-street parking on Pharazyn Street, Marsden Street, and the local streets within the CBD. This results in approximately 189 parks available, even under peak conditions. The parking available on Marsden St and Pharazyn St (approximately 54 parks), will be best suited for long-stay or commuter parking, particularly for users previously relying on the Riverbank Car Park, given its relative distance to the CBD. The remaining 135 spaces available primarily fall into HC2 (P120) parking restriction, meaning there are limitations to absorbing the displacement occurring from Riverbank Car Park.

A further four locations for spare capacity for on-street parking were identified in close proximity to the CBD and collectively provide an estimated 54 spare on-street parks.

In total on-street parking provides an estimated 243 parking spaces for redistribution. This number could be higher with additional information on parking utilisation on other nearby streets. However, as previously

mentioned, parking user characteristics of the Riverbank Car Park show a need for long-stay parking, meaning parking restriction alternations need to be explored. This is further explained in Section 4.6.5.

Actions:

Prior to construction, it is recommended that HCC:

- Commission further occupancy surveys in nearby streets shown on Figure 26.
- Undertake further analysis to understand the number of spaces available and the occupancy of these areas to build a more accurate picture of spare capacity.

Upon commencement of construction it is recommended:

- Signage and information be shared at locations where parking provision has been removed informing users of the reasons for this removal, alternative parking options, and how to access them.

4.6.3 Redistribution to Off-Street Private Parking

As previously discussed in Section 4.3, the demand assessment of nearby streets showed that those with adequate occupancy information (Pretoria Street, Raroa Road, Knights Road, Myrtle Street) can absorb the demand for approximately 243 parking spaces. This leaves a displacement of approximately 169 parks when the Riverbank Car Park fully closes. As such several private parking facilities were identified within or near the study area, including:



It should be reiterated that the full closure is scheduled for July 2026, however the need for this parking may be pushed back until January 2027 if the southern portion of the carpark is remained open for a longer period, as discussed in Section 4.2 previously. Together, these private lots offer a theoretical supply of over 2,500 spaces. Although occupancy levels are not currently known for these locations, even with a 90% occupancy rate, approximately 250 spaces may be available at any given time. While there are uncertainties around pricing, access conditions, and private ownership, these sites offer capacity that may help meet demand, particularly for short-stay or shopper parking.

Actions:

HCC and partners should initiate early engagement with operators [REDACTED]

[REDACTED] to:

- Assess current and forecast occupancy levels;
- Explore temporary agreements or commercial arrangements; and
- Identify opportunities to offer discounted rates or promotions for displaced parkers.

4.6.4 Redistribution to Recreational and Other Public Land

Recreational and public land parcels may also offer additional scope for transitional parking, particularly for long-term or commuter users. The following sites were identified for potential use:



These sites have existing carpark with appropriate access and are located within reasonable walking distance to the CBD. As such, they may be suitable for reallocation of long-stay parking demand.

Actions:

HCC and partners should initiate early engagement with owners and operators to understand the current parking provision and occupancy levels. Conversations should also confirm existing and planned use of each site during the construction period (e.g. event scheduling, community use).

If there is a possibility to use any of these spaces, a suitability assessment should be completed to determine:

- The physical capacity and layout;
- The existing lighting and safety conditions; and
- Whether there are any required upgrades (e.g. signage, surface markings).

Once deemed appropriate, HCC should then coordinate with site operators to explore short-term shared use or exclusive access arrangements.

4.6.5 Parking Restrictions

There is a mix of parking restrictions across Lower Hutt CBD, including P120, P60, P30, and P15, shown on Figure 4 previously. The majority of the on-street parking displacement (occurring from Daly Street closure and the HCC Streetscape works), falls into the short-term category. The majority of these parking areas are categorised as P120 / HC2, while there are some pockets of P60, P30, and P15.

Of 412 displaced demand for parking spaces, approximately 89 will be short-term (P120 or less), and 323 will be long-term (pay and display).

This is based on the assumption that 85% of Riverbank Car Park users are parking long-term, as well as any HC3 users. Table 21 provides further detail on the breakdown of short- and long-term parking displacement.

Table 21 Short- and Long-term Parking Displacement

Location	Displaced Demand	Short-Term	Long-Term (P&D)
Area 1	5 parks	0	5
Area 2	363 parks	54	309
Area 3	44 parks	35	9
Total	460	89	323

Actions:

Upon selection of temporal parking sites, HCC should endeavour to ensure that there is an adequate proportion of short- and long-term parking options are provided. Carparks located in the closest proximity to the CBD should be prioritised for short-term parking, with further parking provision focused on long-term provision.

4.6.6 Mobility Parking

Mobility parking forms a critical part of accessible transport provision, and temporal parking provision must account for the needs of mobility users. As previously discussed in Section 3.4, across the study area, 37 mobility spaces have been identified. Of these, 16 are expected to be displaced by construction activities, including 13 spaces at the Riverbank Car Park (primarily in the northern portion) and three on Daly Street.

Survey data indicates that while some of these spaces record relatively low average occupancy (e.g. less than one hour of daily use), others serve areas with higher turnover and likely higher demand (e.g. High Street, Market Grove, and Osborne Place).

Actions:

To support mobility users during construction, it is recommended that HCC and partners develop a proactive strategy for the protection and reprovision of mobility parking. This strategy should:

- Identify nearby locations that meet mobility design standards, including adequate space, safe kerbside access, and proximity to destinations. Explore opportunities to implement new mobility parking provision (or upgrade standard parking provision), to minimise the displacement of mobility parking demand;
- Prioritise early relocation or reprovision of spaces prior to the onset of displacement;
- Engage with affected users and advocacy groups to confirm suitability and communicate changes; and
- Coordinate with the partners and wider construction programme to monitor occupancy and adjust provision over time, particularly in high-demand areas.

In parallel, as Riverbank carpark closure is confirmed, the programme partners should explore the opportunity to retain the southern portion of the carpark, which includes some mobility spaces, for a longer period. This would help reduce early disruption to accessible parking and provide more time to implement and embed the new arrangements.

4.6.7 Stakeholder Engagement

Stakeholder engagement relied on '*City Centre Insights Report*' provided by HCC Project Manager. Further engagement is required once temporal parking options are confirmed to understand how these cater to the needs of key stakeholders and businesses.

The majority of the on-street parking needs expressed by stakeholders falls into the footprint of the HCC Streetscaping works (High St, Queens Dr, Margaret St, Dudley St) as set out in Section 2.5.1. Therefore, HCC should engage with residents and businesses within the area to explore opportunities to minimise disruption and consider the options and needs of these key stakeholders when developing the approach.

Actions:

HCC should engage internally with the HCC Streetscaping works team on the key themes arising from these stakeholder insights, which include:

- Accessibility and Convenience;
- Supporting the city centre workforce,
- Accessibility as a competitive advantage;
- Accessibility is a necessity; and
- Servicing requirements.

The insights report also mentioned that businesses rely on the Riverbank Car Park as a customer amenity, staff parking, and parking for those servicing the premises. When confirming the implementation of off-street parking facilities on private or recreational land, these elements should be considered and prioritised for those areas in the closest proximity to Riverbank Car Park.

4.6.8 Strategic Approach to Managing Concurrent Works

There may be a number of other projects that will have an impact on local parking during the construction period for the Te Awa Kairangi programme of works. An example of this is the IAF Major Stormwater and Wastewater work in the southeast of the programme footprint.

While the impact of the IAF work on parking lies outside the scope of this TPP there is an opportunity to coordinate multiple projects within the HCC CBD to minimise disruption for residents and businesses. The information in this report, as well as any other Parking Management Plans (PMPs)⁶, can support this planning process. We understood from HCC that, at the time of preparing this TPP report, HCC had commissioned WSP to undertake a separate piece of work (namely “Disruption Response Plan”) to investigate potential options for managing disruption caused by various construction works, including Te Awa Kairangi and the IAF Major Stormwater and Wastewater work.

Separately, a Site-Specific Communications Plan for Harvey Norman has been prepared, including details on the timing and design of parking changes. This covers closures of the Riverbank Car Park, access impacts from Rutherford Street works, and the design and timing of the Melling Link stub road car park. The plan must allow the owner to provide feedback and discuss unresolved issues

Consideration also needs to be given to condition 124 regarding the relocation of the Riverbank Market. This states that “the Consent Holder must continue to consult with the Riverbank Market operators to determine and make available an appropriate temporary site during Construction Works”.

Actions:

As information becomes available on additional projects and the associated impact on parking, HCC should proactively refer to the findings of this report to understand the overarching parking impact, and ensure that both documents remain aligned in terms of construction impact and non-car transport measures. This includes the development of a programme for city-centre works which have an impact on parking, including IAF work.

The existing parking displacement and need for temporal parking sites can then be updated by HCC to reflect actual conditions.

⁶ Hutt City Council Te Awa Kairangi ki Tai Lower Hutt – Parking Strategy

5.0 Transition to Sustainable Transport Options

5.1 Overview

This section provides an overview of options to support a transition to sustainable transport options including; active and public transport enhancements, travel demand management (TDM) measures, and complementary mobility solutions, in line with condition 36 f) which states “options to enable a transition from parking dependency to more sustainable and active transport modes”.

These recommendations are conveyed visually via a high-level map, as well as an accompanying intervention toolbox which provides an indication of the level of cost and benefit associated with each intervention. While these recommendations have been identified to support a transition to sustainable transport options *during* construction, many of these measures span both during and post construction.

5.2 Active and Public Transport Enhancements

The active and public transport enhancements include implementation of a Construction Traffic Management Plan (CTMP), temporary pedestrian crossings and footpaths, pop-up cycle lanes, additional bike parking, public transport service adjustments and temporary bus shelters and stops. The purpose of these proposed enhancements is to encourage a shift to sustainable transport modes during and post construction.

5.2.1 Implementation of the Construction Traffic Management Plan

The CTMP manages traffic and transport effects during the construction of the projects to manage safety, maintain connectivity for pedestrians and cyclists and minimise disruptions to road users. The CTMP requires mitigation for public transport including:

- Advance notice of any closures;
- Planning to reduce duration of works / considering block of line works where these impact PT;
- Regular engagement with PT providers; and
- Explore additional shuttle services.

The CTMP also addresses impacts on active modes by outlining temporary measures to encourage mode shift during construction. These include:

- Hutt River Trail: Localised detours, signage related to closure and detours, and communication with the public in advance of closures;
- Haul roads, public access areas, walking/cycle trails, no-go zones to all be clearly identified on the zones VMP, and have the locations of points where haul roads and public trails cross highlighted;
- Public access areas (e.g. walking/cycling trails) are to be isolated from the work area at all times. This may be in the form of temporary site fencing, concrete barriers with hoardings/sight screens, pedestrian barriers, or semi-permanent fencing; and
- All public trails to be signed with the appropriate pedestrian and/or cyclist directional signage to ensure that the trail is clear and easy to follow. Similarly, access restriction signage is to be installed as required to identify areas where public access is not permitted.

The proactive implementation of these measures will play a role in retaining existing active mode and public transport users. In addition, by minimising disruption and continuing to provide high quality detours, individuals who would have previously driven / parked within Lower Hutt may be more inclined to adapt their mode to avoid parking disruption.

5.2.2 Temporary Pedestrian Crossings and Footpaths

The provision of temporary dedicated pedestrian crossings during construction will help promote a safe pedestrian environment in and surrounding Lower Hutt CBD. This will not only encourage those living within walkable distance to Lower Hutt to swap modes, but it will also create an improved first / last mile experience for those who may now be parking on quieter streets located further from their destination.

Dedicated crossings refer to zebra and signalised crossings with a dedicated pedestrian phase. These crossings assign priority to pedestrians and alert drivers to the presence of individuals crossing. Therefore, they are considered the safest and most attractive option for those using footpaths.

Analysis to understand where there is an absence of dedicated crossings within the primary access streets to the CBD has been conducted within buffers of 400m, 800m, and 1,200m. These distances have been chosen based on standard distances within research ⁷referring to how far individuals will walk to / from transit stops. These have been aligned with parking distances due to the following reasons:

- 400m: Ideal maximum distance an individual would travel on foot post-parking for a short-term trip;
- 800m: Ideal maximum distance an individual would travel on foot post-parking for a long-term trip; and
- 1,200m: Ideal maximum distance an individual would travel on foot for an origin to destination trip (individuals living close to Lower Hutt CBD).

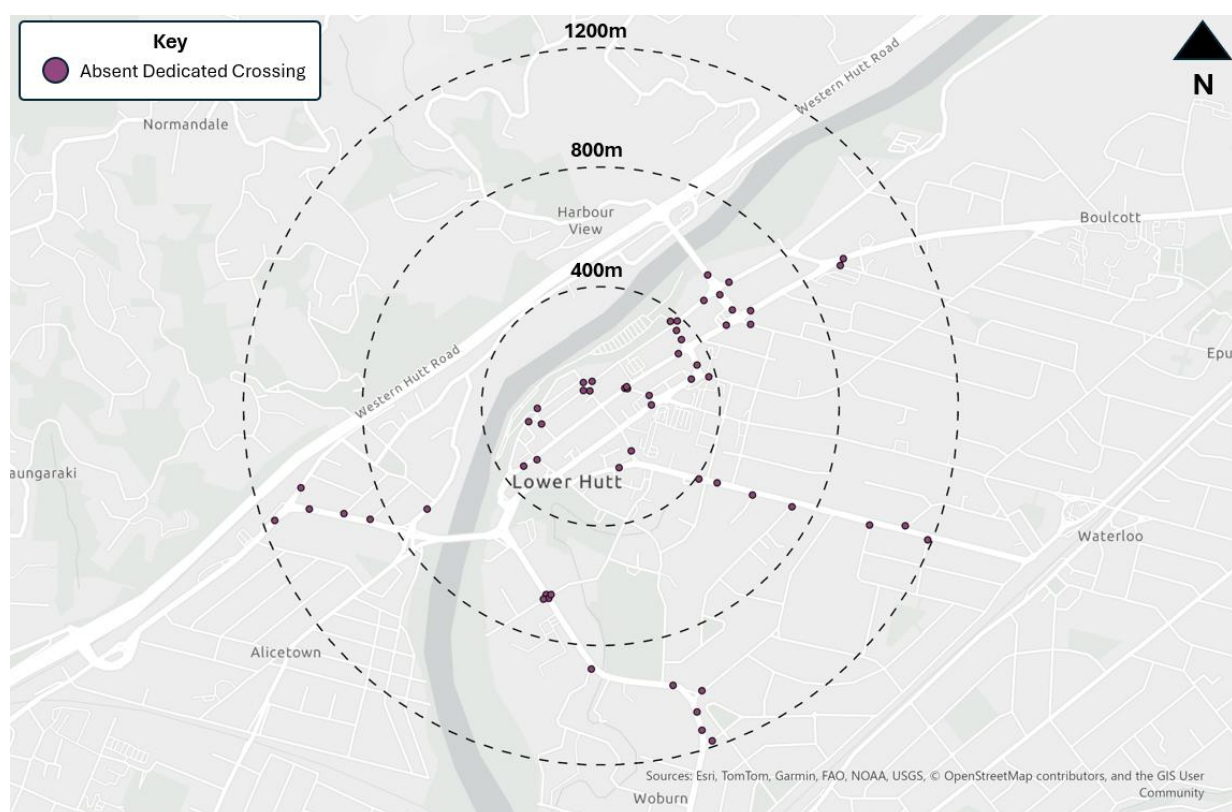
These distances extend outside of the TPP study area, however, as parking displacement is likely to result in individuals parking outside this area, options to improve connectivity to these areas have been considered.

It should be noted that these distances decrease in the absence of dedicated walking facilities, further emphasising the need for temporary crossings.

Figure 27 below details where there are pedestrian crossings absent on the main access roads surrounding Lower Hutt city centre area.

⁷ <https://www.scribd.com/document/377794484/How-Far-Should-Parkers-Walk>

Figure 27 Absent Dedicated Pedestrian Crossings



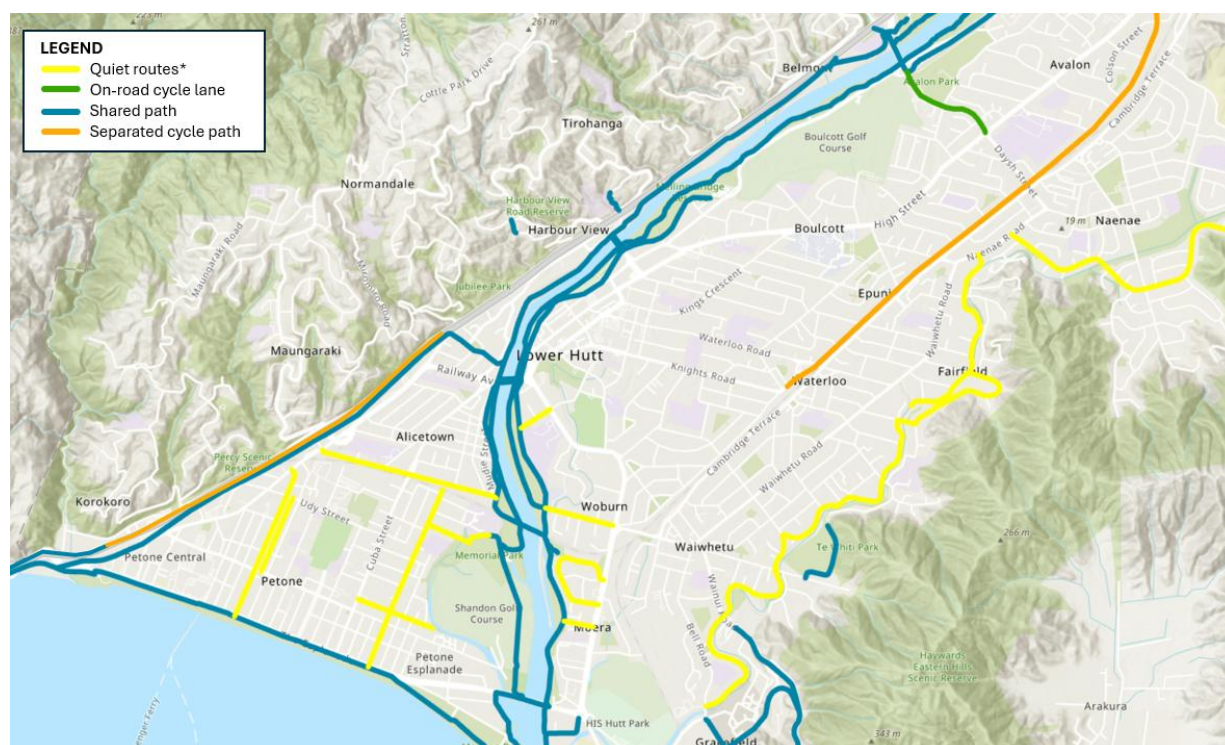
Depending on the anticipated location of temporary parking, as well as the key activity areas, opportunities to implement temporary (or permanent) pedestrian crossing facilities should be explored. These crossings will both improve the quality of pedestrian trips and first / last mile journeys and increase pedestrian safety, improving the experience for those walking and reducing the need to park in such proximity to key destinations.

5.2.3 Pop-up Cycle Lanes

Temporary cycle facilities will help encourage individuals to cycle for short trips to Lower Hutt. By providing more formal facilities, less experienced cyclists may be more enticed to use this as a mode of transport. If these pop-up facilities prove popular, opportunities to upgrade to permanent fixtures may be explored.

Figure 28 below shows the cycling provision across Lower Hutt.

Figure 28 Lower Hutt Cycling Provision



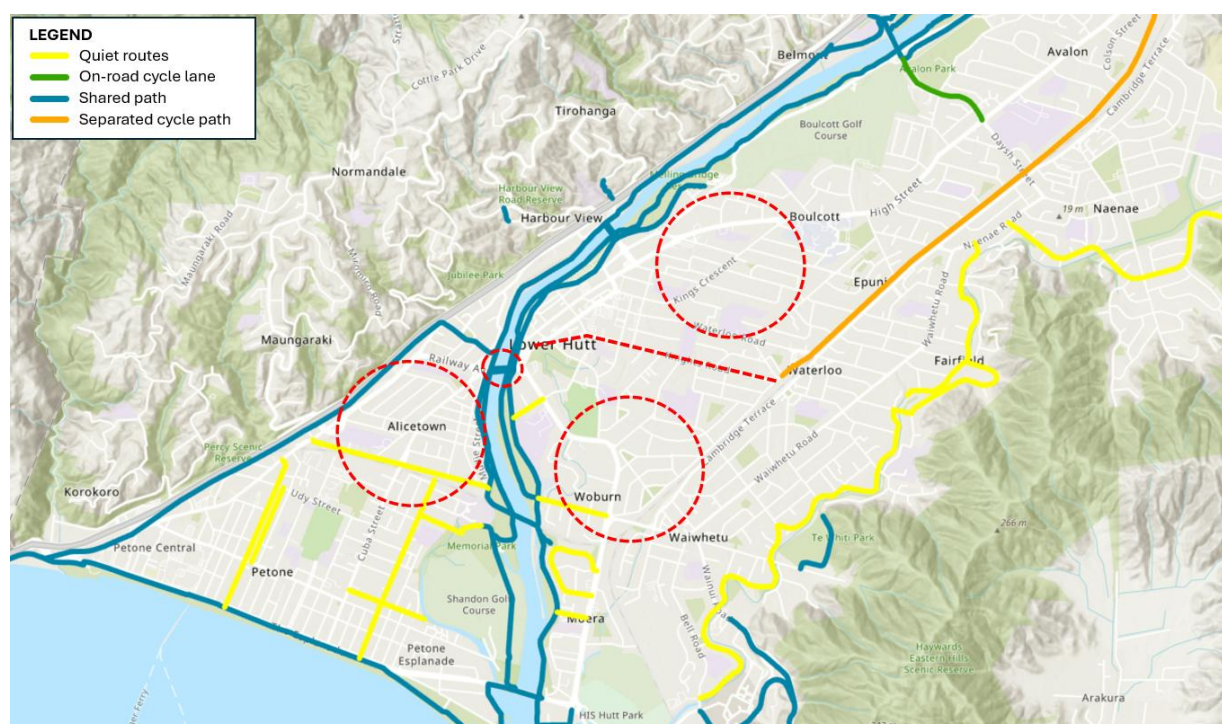
**Quiet routes are streets or paths that have low traffic volumes and low vehicle speeds, creating a safer and more comfortable environment for cyclists.*

Following a high-level investigation of existing road space and provision, areas which may benefit the most from cycle facilities were identified. This includes:

- **Ewen Bridge:** A pop-up cycle facility across Ewen Bridge would support cyclists travelling from Lower Hutt West to the Central suburbs throughout the construction period. This would create more of a direct connection between central Lower Hutt and Western Hutt station. There is a shoulder across the bridge on both sides of the carriageway which could be upgraded.
- **Knights Road:** A pop-up cycle facility connecting Lower Hutt to Waterloo Station would create another dedicated facility linking directly to a rail station, helping to encourage rail use during the construction period. In addition to this, it will also connect to the existing separated cycle path which runs north from Waterloo Station. This will increase the catchment of people able to connect directly to Lower Hutt via a dedicated cycle facility.
- **Quiet Routes:** Opportunities for the installation of speed calming measures should be explored to reduce through-traffic on quiet residential streets and create a safe low-traffic environment for cyclists. This would be particularly beneficial in areas such as Alicetown, Woburn and Boulcott. Woburn, in particular, presents a significant opportunity for connection via green spaces. Preparation of an online tool of these quiet routes which residents and workers could refer to when route planning would help promote the knowledge and use of these routes.
- **Lower Hutt CBD:** The carriageways on the main routes through Lower Hutt CBD (High Street, Queens Drive, Dudley Street, Rutherford Street) are quite constrained, and therefore there may be difficulty finding space without the further displacement of parking. During the HCC streetscape works, opportunities to implement temporary cycle facilities should be explored. As the edge of the programme footprint runs along the west of the CBD, opportunities to use the perimeter of the construction site as a dedicated cycle facility should be explored with the Coordinated Delivery Plan Working Group.

These potential options are shown at a high-level in red in Figure 29 below.

Figure 29 Potential Pop-up Cycle Infrastructure Locations



5.2.4 Additional Bike Parking and End-of-Trip Facilities

Additional bike parking would support the introduction of pop-up cycle lanes encouraging cycling during the construction period. Bike parks will be strategically placed near activity centres and public transport nodes (e.g. bus stops) to provide cyclists with convenient and secure places to park their bikes. Providing ample

bike parking helps integrate cycling with other forms of transport, making it easier for people to switch between cycling and public transport.

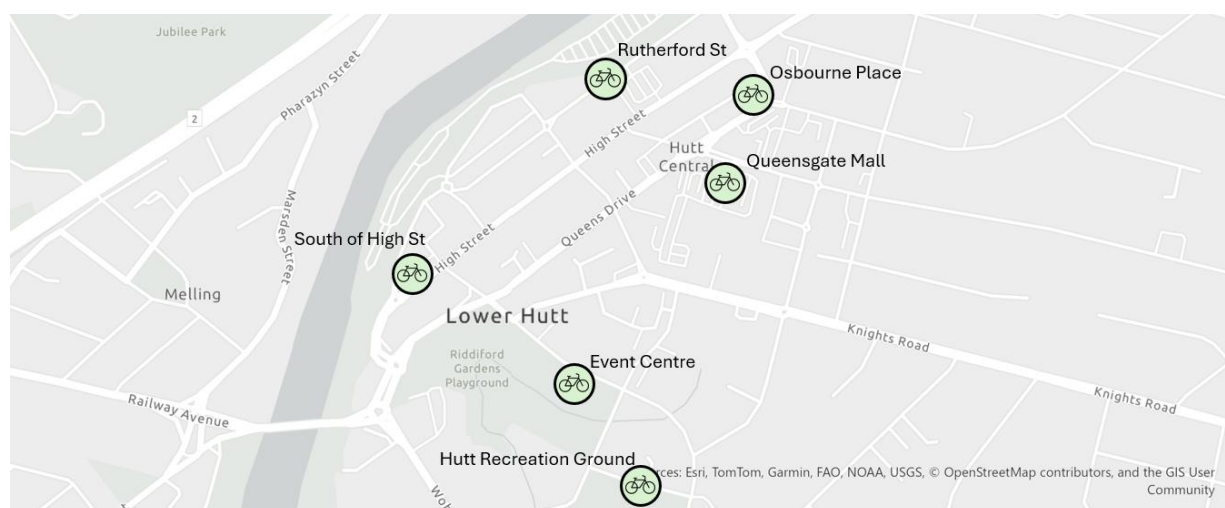
Possible locations for additional bike parking within the scope area include:

- **Queensgate Mall:** Trip attractor with existing off-street carpark;
- **Osbourne Place:** Existing off-street carpark in proximity to businesses;
- **Southern end of High Street:** A convenient location to have small bike racks on the footpath encouraging people to bike to local businesses;
- **Hutt Recreation Ground:** Trip attractor with existing off-street carpark;
- **Events Centre:** Trip attractor with existing off-street carpark; and

Rutherford Street: A convenient location to have small bike racks on the footpath encouraging people to bike to local businesses. It should be noted that Locky Docky is being introduced outside Queensgate Mall and along Laings Road, providing free and secure bike parking.

The location of these is shown in Figure 30 below.

Figure 30 Potential Location of New Bike Parks

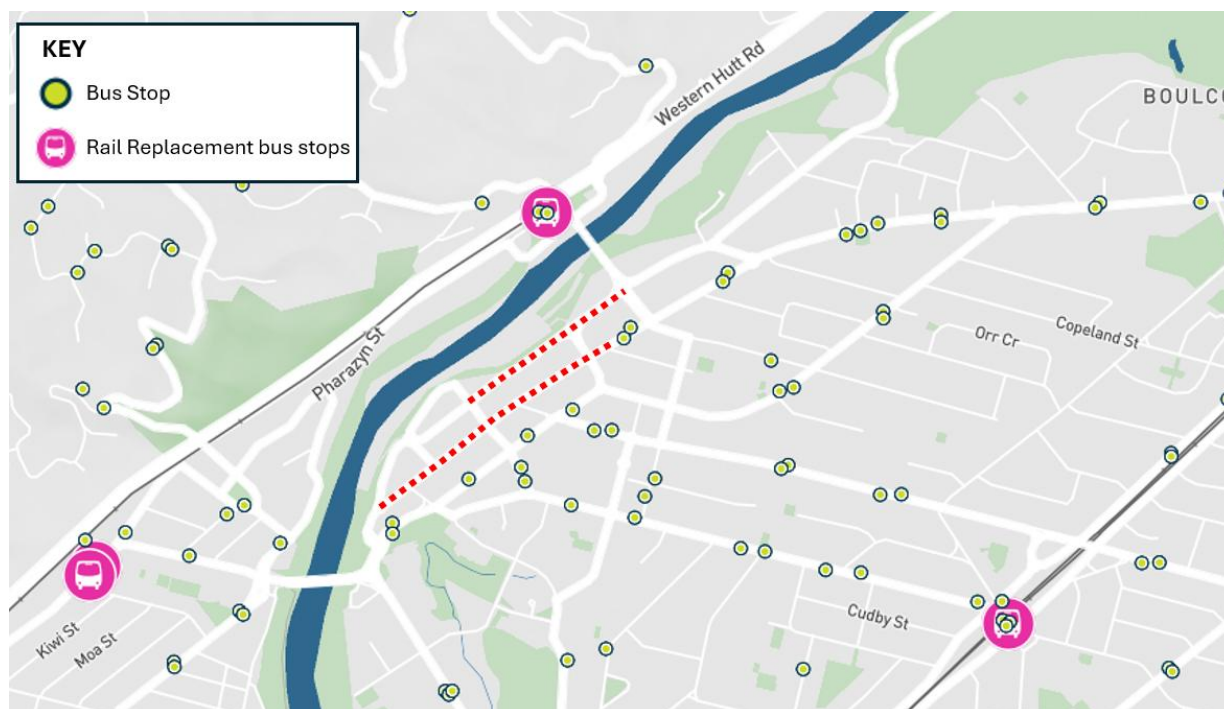


5.2.5 Public Transport Service Adjustments

There is a lack of bus services serving Rutherford Street and High Street within Lower Hutt CBD. By altering / extending bus services to cater to these streets, first and last mile journey length will be reduced, which will improve the level of service bus travel provides and help encourage mode shift.

The potential service adjustments, such as route alterations or extensions, are shown in **red** in Figure 31 below. It should be noted that the responsibility for public transport planning in the area lies with Metlink / GWRC. These changes should be considered in the context on current planning for service adjustments on the back of the Melling Station closure.

Figure 31 Potential Bus Service Adjustments



Additionally, increasing the existing bus service frequency and improving the quality of bus stop infrastructure should be explored. This is particularly important for Metlink/GWRC to consider while train services are disrupted, as it will be critical to retain existing public transport users and provide a viable alternative. By improving the overall bus service quality and experience during this period, the community will have more reliable access to work, education, and essential services.

5.3 Travel Demand Management Measures

TDM encompasses strategies designed to influence how, when, and why people travel. These measures aim to optimise transportation resources, alleviate congestion, and encourage sustainable travel behaviours. TDM strategies include offering discounted public transport fares, developing workplace travel planning initiatives, community carpooling initiatives and expanding car sharing services. The measures that are discussed in this section are incentivisation options that are designed to bring about real change without too much strain on local employers or HCC.

5.3.1 Discounted Public Transport Fares

Partnerships could be established with public transport providers like Metlink/GWRC to negotiate discounted fare schemes for specific user groups, such as employees of local businesses, students, or low-income residents. The fare reductions can incentivise the use of public transit, especially during peak congestion periods or in areas with limited parking availability. Collaboration with transport providers could also explore off-peak fare incentives and subsidised transit passes. These reduced fares will entice new individuals to explore using public transport as a mode of travel, reducing car mode share and thus reducing parking dependency.

5.3.2 Workplace Travel Planning

Local employers should be engaged to communicate the benefit of workplace travel plans aimed at reducing single-occupancy car journeys. This should focus on big retailers who have large workforces that may be using public parking facilities. Big retailers which this may benefit include:



The travel plan will include targets and initiatives to develop more sustainable travel patterns amongst the workforces. While the specific elements are subject to the employers priorities and preferences, common recommended actions arising from travel plans include:

- Promoting car sharing through internal systems or regional ride-matching services.
- Offering flexible working hours to help staff avoid peak travel times.
- Supporting remote or hybrid working arrangements, if employers deem it appropriate.
- Providing incentives for public transport use, such as subsidised fares or salary sacrifice schemes.

5.3.3 Carpooling Initiatives

Community groups such as those travelling in and around Central Lower Hutt could create carpooling initiatives such as members at [REDACTED]

This would benefit these communities and foster relationships within the community whilst reducing travel congestion and parking demand. This would also ensure these clubs and churches are minimally impacted by the construction period. The schools situated towards the edge of the scope and just outside of the scope area would be minimally impacted by the construction period if there were carpooling initiatives for pick up and drop offs. This includes Eastern Hutt School, Chilton Saint James School, BestStart Cornwall Street and St Peter & Paul School.

5.4 Complimentary Mobility Solutions

5.4.1 Localised Park and Ride Strategy

As previously mentioned, there are no opportunities to develop temporal parking sites within the programme footprint. Additionally, there is limited underutilised space in proximity to Lower Hutt CBD where new carparks could be developed.

However, as many individuals travel to Lower Hutt from the wider Hutt region, there are opportunities to develop Park and Ride services in these areas (such as Wainuiomata). Existing under-utilised carparks, as well as vacant, publicly owned land parcels should be explored. While this is outside the scope of the TPP, an approach for this work would include site investigations, stakeholder engagement, funding assessments, and detailed design.

Additionally, the expansion of the Park and Ride facility at Petone Station, providing approximately 200 additional spaces, is underway to help offset the loss of Park and Ride capacity resulting from the temporary closure of the Melling Line. This development should be acknowledged as part of the broader parking response in the TPP. Options for these facilities should be explored along existing routes in the first instance, which will allow individuals to make use of the existing bus services.

Additionally, if there are viable options outside of existing bus routes, there is the potential to develop a shuttle bus service to and from these satellite carparks, reducing congestion and the demand on parking. This option will need to be explored jointly by Metlink/GWRC and HCC.

5.4.2 Micro-mobility Integration

Micro-mobility services in Lower Hutt were provided by JOLT and Lime. However, micromobility services have been removed since 2024.

E-scooters and bike-share schemes offer convenient, low-emission alternatives for short-distance journeys and first-/last-mile connections. When effectively integrated into the wider transport network, these services can help reduce reliance on private cars, ease local congestion, and support more sustainable and active travel behaviours.

Parking hubs where there is low occupancy such as Alicetown, Waterloo and Woburn would benefit from e-micromobility parking docks. The parking docks would provide a connected transport network across the suburbs of Lower Hutt creating more alternative ways of travelling to busier hubs or transport connections

acting as feeder zones. This would encourage responsible parking whilst improving accessibility without cluttering higher-demand areas.

The reintroduction of e-micromobility devices and schemes would further enhance and expand micro-mobility uptake, the city could introduce improved wayfinding and signage to assist users in navigating between micro-mobility hubs and other transport modes. In addition, the implementation of temporary pedestrian crossings, enhanced footpaths, and pop-up cycle lanes would improve connectivity and create further opportunities for safe, convenient, and multi-modal travel.

HCC published the Integrated Transport Strategy in 2022, a document to guide the Council's decision making about changes to the transport system to address the challenges the community is facing. There is a focus in this document on driving mode shift and improving sustainable mode options. This document mentions micro-mobility at a high-level and should be consulted when determining the strategy for the reintegration of micro-mobility devices.

5.5 Intervention Toolbox

Table 22 below is a summary of the proposed interventions to enhance the transition to active and public transport modes within Lower Hutt. The interventions are categorised based on the intended outcome, implementation complexity and their dependency on external parties.

The interventions have been divided into three cost categories:

- Low - does not require capital expenditure;
- Moderate - requires minor capital expenditure; and
- High - requires capital expenditure for infrastructure upgrade).

The two benefit categories can be defined as:

- Moderate - likely to facilitate a small uplift in alternative travel (rather than driving a private vehicle); and
- High - likely to facilitate mode shifts that will reduce private vehicle travel.

While these enhancements are intended to be temporary measures supporting active modes during construction, they have the potential to become permanent if proven effective. For example, the pop-up cycle lanes serve as trial installations that could be formalised into permanent infrastructure if they demonstrate strong use and community support. Table 22 Intervention Toolbox

Intervention	Intended Outcome	Cost	Benefit	Owner
Active and Public Transport Enhancements				
Proactive Management of the Construction Traffic Management Plan	Proactively managing construction and general traffic during Construction Works to manage safety, maintain connectivity for pedestrians and cyclists and minimise disruptions to all road users.	Low	High	Respective Te Awa Kairangi CTMP Owners
Temporary Pedestrian Crossings	Ensure accessibility during the construction period whilst promoting active transport modes.	High	Moderate	Te Awa Kairangi Programme
Pop-up Cycle Lanes	Improve accessibility during the construction period whilst providing other active transport mode options.	High	High	Te Awa Kairangi Programme
Additional Bike Parking	Encourage the use of bikes supporting the pop-up cycle lanes during the construction and after. This will increase the uptake of cyclists.	Moderate	Moderate	Te Awa Kairangi Programme

Public Transport Service Adjustments	The replacement of personal vehicles with increased uptake of public transport services through additional routes and increased frequency of these routes throughout Central Lower Hutt.	Moderate	High	Metlink / GWRC
Travel Demand Management Measures				
Discounted Public Transport Fares	Encourage public transport ridership by making it affordable.	High	High	Metlink / GWRC
Workplace Travel Planning	Reduce the number of vehicles travelling in and around Central Lower Hutt minimising congestion and the effects of the construction period.	Low	Moderate	Te Awa Kairangi Programme
Carpooling Initiatives	Reduce the number of vehicles travelling in and around Central Lower Hutt minimising congestion and the effects of the construction period.	Low	High	Te Awa Kairangi Programme

6.0 Monitoring and Evaluation Framework

6.1 Overview

This Monitoring and Evaluation Framework has been developed to identify methods for HCC and the programme partners to assess mode shift and travel behaviour change during the construction period. This framework includes a combination of quantitative and qualitative monitoring methods, such as:

- Surveying and Data Collection;
- Transport Network Data Analysis; and

6.2 Stakeholder and Community Feedback Indicators

6.2.1 Travel Behaviour Change

The extent of mode shift away from private vehicle use toward public transport, cycling, and walking is central to evaluating the success of the transitional measures. This will help determine the effectiveness of the interventions in promoting more sustainable travel behaviours.

Key indicators include:

- Frequency and purpose of active and public transport use;
- Barriers to mode shift identified through surveys or interviews; and
- Mode share changes over time.

6.2.2 Community and Stakeholder Feedback

Engaging directly with the community and key stakeholders is a vital component of the monitoring process. Local businesses, residents, and transport service providers will offer context for the observed travel behaviour changes and help identify unintended consequences, practical challenges, or areas of confusion that may arise. It also provides an opportunity to build trust and foster collaboration by demonstrating that community voices are heard and valued.

Engagement activities may include public drop-in sessions, focus groups, online surveys, interviews, feedback forms, and collaboration with local business associations or community boards. This should be completed within 6 months of construction commencement and then annually until the end of construction.

Key indicators include:

- Perceived accessibility and convenience of transport options
- Feedback on the adequacy of parking provision
- Community satisfaction.

6.3 Quantitative Methods

Quantitative methods will provide measurable indicators of change in travel behaviour, network performance, and parking demand for HCC and the programme partners.

6.3.1 Resident Travel Surveys

Resident surveys will provide valuable insight into how and why Lower Hutt residents travel to the CBD and surrounding areas. The following parameters are recommended:

- **Audience:** Residents of Lower Hutt and surrounding areas
- **Timeline:** Prior to commencement of construction, 6 months post commencement, then annually until the end of the construction period. Opportunities for additional post-construction surveys (e.g. 1 year after) should be explored.
- **Method:** Questionnaire
- **Outputs:** Residential mode share and trip purpose

Pre-construction surveys establish a baseline, early-construction surveys detect emerging trends, and further annual surveys assess how patterns are changing as a result of behaviour change initiatives and construction impacts.

6.3.2 Parking Surveys

Parking surveys are recommended for both on-street and off-street locations using sensor technology, mobile survey vehicles or manual surveys to determine demand patterns and identify stress points. The following parameters are recommended:

- **Audience:** Individuals parking in Lower Hutt
- **Timeline:** 6 months post commencement of construction, then annually until the end of the construction period
- **Method:** Survey company
- **Outputs:** Parking occupancy, turnover, capacity, and hotspots.

Patterns of occupancy and turnover will help pinpoint areas under pressure, as well as those that are underutilised. This will support targeted changes such as pricing, time restrictions, or reallocating parking space for other users.

6.3.3 Workplace Travel Audits

There is an opportunity for HCC and the programme partners to engage with large employers in proximity to the construction zone to track staff commuting habits and parking use. These audits would help assess broader trends in mode shift and inform employer-focused initiatives. The following parameters are recommended:

- **Audience:** Individuals working in Lower Hutt
- **Timeline:** Prior to commencement of construction, 6 months post commencement, then annually until the end of the construction period
- **Method:** Questionnaire
- **Outputs:** Employee mode share and parking patterns

These audits would highlight shifts in employee commuting behaviour and workplace parking patterns to understand how long-stay parking needs have changed.

6.3.4 Bus Patronage

Liaise with Metlink/GWRC to understand bus patronage numbers to determine if there has been an increase in uptake from temporary measures, incentives, or as a result of parking removal.

- **Audience:** Bus users
- **Timeline:** As available
- **Method:** Boarding / alighting data obtained from service providers
- **Outputs:** Bus patronage numbers (by hour).

Trends in patronage will indicate whether temporary measures are encouraging mode shift. This will help evaluate the effectiveness of interventions and adjust them if needed.

6.3.5 Pedestrian and Cycle Counts

By collecting pedestrian and cycle counts at key areas across Lower Hutt (Melling Link Bridge, Ewen Bridge, High Street, Queens Drive, Rutherford Street), changes in active modes as a mode of transport can be quantified.

- **Audience:** Active mode users
- **Timeline:** Prior to commencement of construction, 6 months post commencement, then annually until the end of the construction period
- **Method:** Cycle and pedestrian counters at key areas
- **Outputs:** Active mode counts (by hour).

Changes in cycle and pedestrian counts will provide a clear picture of how construction and supporting infrastructure are influencing active mode use.

6.4 Qualitative Methods

6.4.1 Intercept Interviews

Short, informal interviews with people in and around the construction zone to understand current parking experience.

- **Audience:** Residents, workers, visitors
- **Timeline:** Every 6 months throughout the construction period
- **Method:** Face-to-face interviews at key parking locations
- **Outputs:** Observed sentiment, behavioural feedback, and emerging issues.

These quick conversations will provide on-the-ground experiences and frustrations that may not be captured through formal channels. This will enable more agile responses to emerging issues.

6.4.2 Targeted Feedback Sessions

Facilitated discussions with local residents, business owners, and institutions to gather location-specific insights and concerns.

- **Audience:** Residents, businesses, stakeholders, community groups
- **Timeline:** Annually throughout the construction period
- **Method:** In-person or virtual workshops
- **Outputs:** Community priorities, constructive suggestions, and perceptions of change.

These sessions will provide concerns and aspirations. This will support more nuanced decisions and build stronger community buy-in.

6.4.3 Feedback Channels

An online portal, helpdesk, and mobile tools will be available for the public to provide feedback, suggestions, or report issues throughout construction.

- **Audience:** General public
- **Timeline:** Open continuously throughout construction
- **Method:** Online portal, email, and mobile feedback forms
- **Outputs:** Logged issues, queries, and suggestions.

Direct feedback will highlight recurring pain points and perceptions, enabling responsive communication and timely fixes to minor issues where possible.

6.4.4 Social Media Monitoring

Passive collection of public sentiment via social platforms to identify trends, concerns, and recurring issues.

- **Audience:** General public
- **Timeline:** Ongoing throughout construction
- **Method:** Passive monitoring using sentiment analysis and keyword tracking tools
- **Outputs:** Public sentiment trends and thematic concerns.

Monitoring sentiment and themes across platforms will help identify emerging trends or concerns early, allowing the Council to adjust messaging or address misunderstandings proactively.

6.5 Summary of Monitoring Methodology

Table 23 below summarises the monitoring methods to be considered by HCC and the programme partners as well as identifying the associated benefit and cost at a high-level. It is acknowledged that consistent monitoring and evaluation may be compromised during construction due to every-changing temporary traffic management conditions.

Table 23 Summary of Monitoring and Evaluation Framework

Method	Category	Timeline	Benefit	Cost
Resident Travel Surveys	Behaviour Change & Parking Utilisation	Pre & during construction (annually)	Moderate	High
Parking Surveys	Behaviour Change & Parking Utilisation	During construction (annually)	High	High
Workplace Travel Audits	Behaviour Change & Parking Utilisation	Pre & during construction (annually)	Moderate	Moderate
Bus Patronage	Behaviour Change	As available	Low	Low
Pedestrian / Cycle Counts	Behaviour Change	Pre & during construction (annually)	Low	Moderate
Intercept Interviews	Community Feedback	During construction (bi-annually)	Moderate	Low
Targeted Feedback Sessions	Community Feedback	During construction (annually)	High	Moderate
Feedback Channels	Community Feedback	Throughout construction	High	Moderate
Social Media Monitoring	Community Feedback	Throughout construction	Moderate	Moderate

7.0 Summary and Conclusion

7.1 Summary

AECOM has been commissioned by Hutt City Council (HCC) to prepare the Transitional Parking Plan (TPP) as part of the Te Wai Takamori o Awa Kairangi Programme (Te Awa Kairangi) partnership. This report addresses the management of parking impacts during significant infrastructure upgrades along the Te Awa Kairangi River corridor. This TPP has been developed to meet the requirements of the RiverLink Environment Court Decision designation and resource consent conditions 35 and 36, dated 3 November 2022.

The plan is informed by a comprehensive 2023 parking review (with an uplift methodology applied) that analysed existing conditions across Melling, Lower Hutt CBD, and the Riverbank Car Park. Construction works will result in parking loss in these three areas, with peak displacement expected to affect demand for up to 412 parking spaces. While no temporary parking sites have been identified currently within the immediate programme footprint, alternative solutions leveraging on-street spaces nearby, private off-street car parks, and recreational lands were identified. Strategic management of parking demand through spatial redistribution and temporal staging will be essential.

In parallel, the TPP details a suite of sustainable transport initiatives, including active travel enhancements, public transport adjustments, travel demand management measures, and complementary mobility options. These interventions aim to maintain accessibility, reduce congestion, and encourage a modal shift away from private vehicles.

Underpinning this, a monitoring and evaluation framework has been developed, combining quantitative and qualitative monitoring methods to track parking utilisation, travel behaviour changes, and public sentiment throughout construction.

7.2 Conclusion

This TPP provides a structured approach to managing parking disruption and supporting sustainable transport during the construction of the Te Awa Kairangi programme works. It includes a review of public parking, analysed to understand the characteristics of parking in the Programme area. It also details recommendations to minimise the displacement of public parking and options to support a transition to non-car transport options. This TPP considers on-street parking, off-street parking, disabled parking, recreational parking, and methods to monitor mode shift and travel behaviour change.

This report contains the necessary information, analysis, and recommendations to meet the requirements of both condition 35 and condition 36.

Effective collaboration amongst the programme partners and with key stakeholders will be critical to maximising alternative parking capacity and enabling clear communication. The monitoring and evaluation framework will facilitate evidence-based decision-making and agile responses to evolving challenges, helping to minimise disruption and improve travel outcomes.

7.3 Next Steps

The next steps involve Phase 2 of the TPP that will further explore the options for providing temporary parking options to absorb parking displacement. While this report addressed the parking displacement and identified options to manage this displacement, due to the lack of availability within the project footprint, additional steps need to be taken. A summary of these next steps is set out in Table 24. Details on the recommended options are outlined in Section 4.6 “Implementation Recommendations”.

Table 24 Summary of Priorities

	Frequency / Timing	Priority	Who is Responsible	Likely Impact
The Programme Footprint	Throughout construction / as CDP is updated	High	Te Awa Kairangi Programme Partners / CDP Working Group	While there are no opportunities for parking provision currently, as construction proceeds, new opportunities may arise – this should be regularly checked / discussed.
Surrounding Areas with Lower Parking Utilisation	As soon as possible	High	HCC	This is considered a low-cost option to have confidence that alternative streets have capacity to absorb parking displacement.
Private Parking Facilities	As soon as possible	Moderate	Te Awa Kairangi Programme Partners	Discussions should be had with private parking owners to understand spare capacity and opportunities to lease spaces for temporary parking.
Recreational / Public Areas	As soon as possible	Moderate	Te Awa Kairangi Programme Partners	Discussions should be had with the operators of recreational and public facilities to understand spare capacity and opportunities to lease spaces for temporary parking.