



Oamaru Town Centre to Harbour Connect Experience

Technical Report

Waitaki District Council

Developed with support from:

**LAND
LAB**



Oamaru Town Centre to Harbour Connect Experience

Technical Report

Waitaki District Council

Quality Assurance Information

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Executive Summary

Context and objectives

The development of the harbour area presents an opportunity to enhance Oamaru's attractiveness as a place to spend time and money for locals and tourists. This report considers how transport connectivity and the allocation of road space between the town centre and harbour area can support a thriving Oamaru as a whole.

The following objectives have been developed to guide the outputs of this report:



Visitors and passers-by are aware of the town centre and harbour, are attracted to it and spend time there.



Connecting the town centre and harbour, ensuring the benefits are distributed.



Locals like to visit because it's interesting, accessible and functional.



People are proud of the unique and authentic experience that's memorable.

There are many different users of the study area. Each of the user groups have different needs from the transport environment. It is important that we recognise these different perspectives in considering the recommendations in this report. User types range from local residents of all ages, to business owners and commuters through to tourists and Alps to Ocean users.

Issues and opportunities

There are a number of issues and opportunities relevant to the study area including:

- **Development of the harbour** has the potential to support or compete with the success of the town centre, it is important travel between the two areas is clear and easy, and visitors are attracted to do so.
- **Oamaru's ageing population** means further emphasis should be placed on designing and providing for mobility and vision impaired road users, in particular: providing footpaths that can accommodate mobility scooters, ensuring surfaces do not create trip hazards, providing seating in public spaces and designing safe crossings and crossing distances. These emphases will also benefit a wider group of people with higher accessibility needs including parents with prams and young children, and tourists with luggage.
- **Increasing tourism numbers** in Oamaru are putting pressure on parking facilities both in terms of capacity during peaks and parking types (e.g. requirements for larger spaces for campervans and cycle parking).
- **Wayfinding** is not well defined for both pedestrians and drivers. The gateway to the Town Centre from the south is not emphasised and existing pedestrian wayfinding signage generally does not use internationally recognisable symbols to assist tourists with orienting themselves.
- **The Alps to Ocean (A2O) cycle trail** is increasing in popularity, however wayfinding at the end of this route and end of trip facilities need improvement. Oamaru also has minimal cycle facilities leading to some cyclists riding on the footpath.
- **Peaks in demand** for visiting and parking in Oamaru mean parking demand can exceed supply at certain times of year. However, on a normal day parking capacity is more than sufficient for demand based on the 2011 Oamaru parking study, and supported by observations in 2019.
- **Temporary closure of Harbour Street** currently occurring during market days and other peaks/events demonstrates flexible use of road space. This type of network operation could be extended to other activities and/or areas, creating pedestrian centric spaces.
- **Overcrowding of footpaths**, especially on Itchen Street between Thames and Tyne, can occur during busy periods. Wide road reserves and no congestion issues provide an opportunity to reallocate road space on high pedestrian routes to provide a safer and more comfortable experience.

This report considers the following elements:

- Connections from the State Highway to the harbour area
- Town centre to harbour connections
- Interim infrastructure/ tactical urbanism opportunities
- Wayfinding
- Parking
- Action plan

Connections from the State Highway to the harbour area

Clear and efficient direction signs and cues are an essential part of the transport network. Road users depend on these signs for information and guidance.

Within the study area, directional signage and cues are limited to a gateway treatment at the Lower Thames/State Highway intersection, aged brown tourist signs on State Highway 1, and occasional yellow fingerboards or private signs, see Figure E.1. Current signage directs people to the '*Historic Area and Penguin Colony*' and to the i-Site. No signage currently refers to the location of the town centre or the harbour area more generally. This lack of clear wayfinding/directions has the potential to reduce the visitor experience for less frequent visitors, and means opportunities are missed to attract people passing through Oamaru on their way elsewhere.



Figure E.1 Examples of directional signage and cues to the harbour and town centre

It is recommended that Lower Thames Street and Itchen Street remain the key signposted routes for visitors to the harbour. These routes both pass through the town centre and therefore provide an opportunity to attract additional customers and disperse the benefits of the success of the harbour. Key routes, threshold and signage locations are shown in Figure E.2. It is recommended that the wording for tourist signs is also reconsidered in the context of the recent and proposed development of the harbour area.

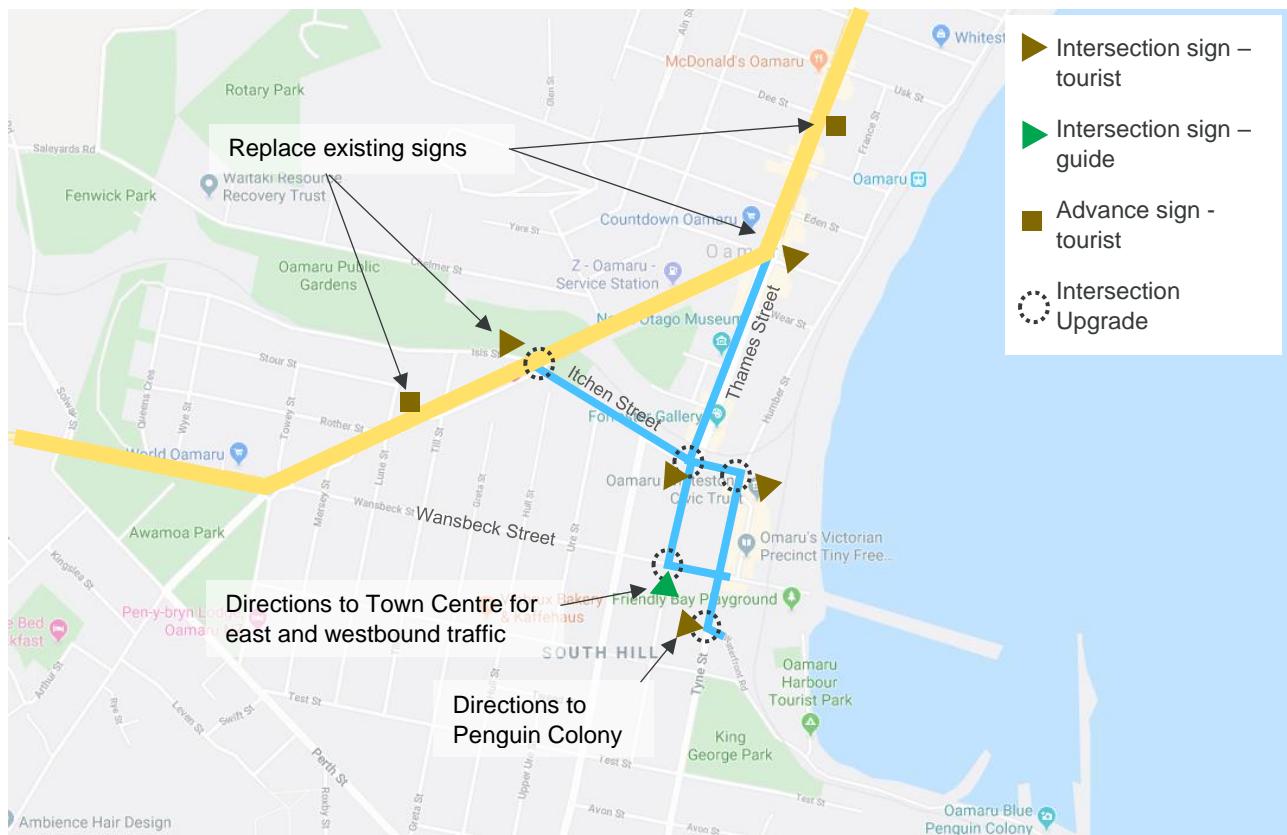


Figure E.2 Recommended key routes between SH1 and harbour and directional signage locations

Town centre to harbour connections

Existing connections by road, open spaces and pathways between the town centre and harbour area are compromised by poor amenity, a lack of legibility and safety/CPTED issues. There are opportunities within the road reserve to improve functionality for all modes, address the issues and attract visitors to the harbour area to also spend time in the town centre. The southern end of the town centre is roughly a 5 minute walk from the proposed harbour plaza at the end of Harbour Street. Therefore it is realistic to expect visitors to the harbour to walk to the town centre and vice versa, particularly tourists.

An 'episodic spatial sequence' between the harbour and the town centre is proposed, see Figure E.3. This sequence is aimed at creating a series of interconnected spaces that connect the waterfront and town centre via the proposed Thames Street plaza, waterfront park, upgraded Itchen Street, Harbour Street and proposed Harbour Plaza.

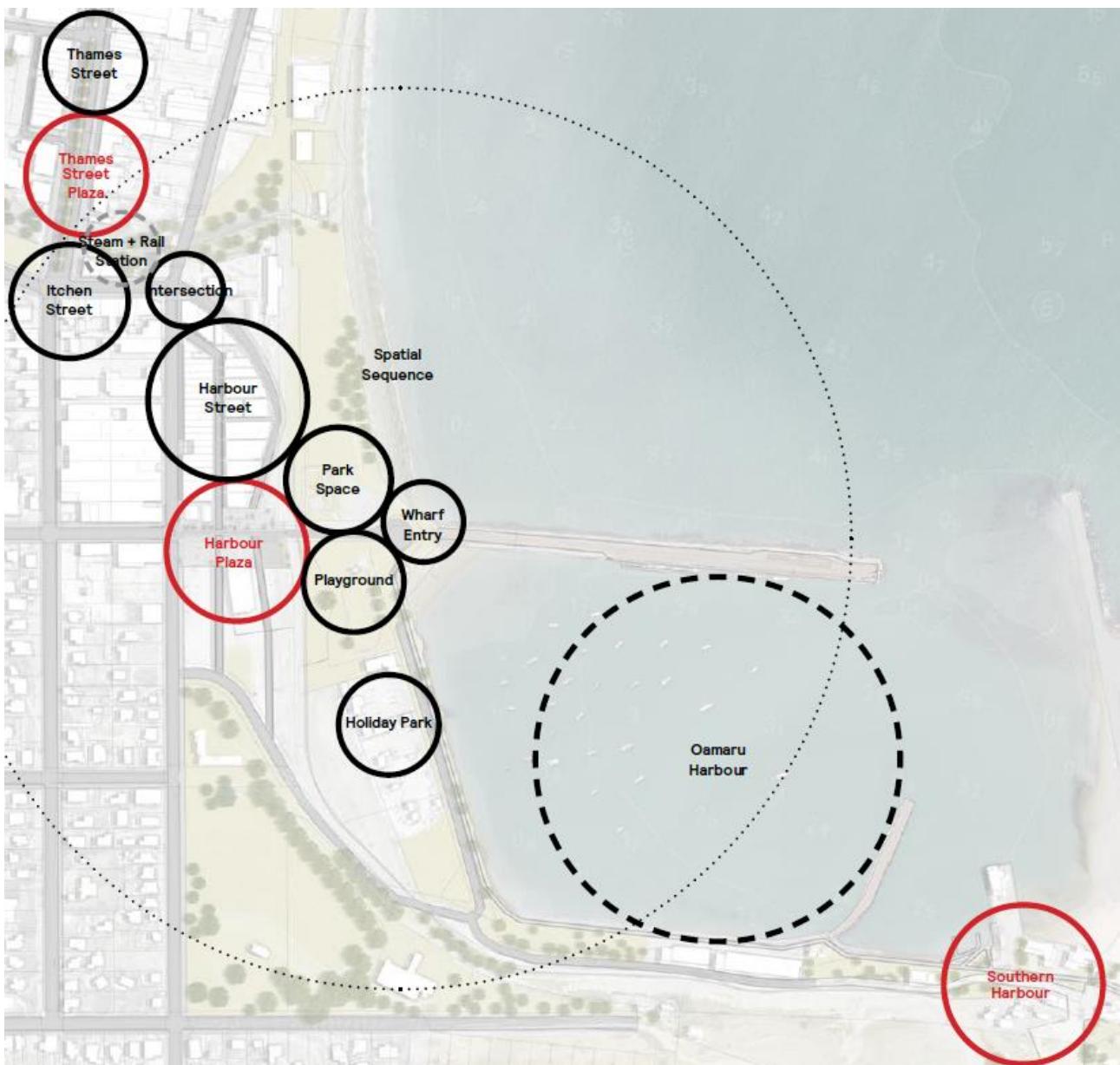


Figure E.3 Episodic spatial sequence

Along the connection between the harbour and the town centre this episodic sequence follows Thames Street, Itchen Street and Tyne Street, see Figure E.4. These road sections will require improvements that are consistent with the envisaged environment along this key route. In developing the recommendations the balance of the movement and place function for each street has been considered:

- The **movement** function of a street represents its function as part of the network for the through movement of people, vehicles and goods. For example State Highway 1 has a high movement function, it is a nationally significant route for moving people and goods between towns and regions. A residential cul-de-sac on the otherhand would have a low movement function, instead this type of street is about providing access for residents to their homes. The streets in the Oamaru town centre have varying levels of movement function.
- The **place** function of a street is related to the activities on the street and may change from block to block. Place function is about providing access to destinations and spaces that enable people to meet, help businesses grow and allow children to play, among other things. Harbour Street is an example of a high place function, where the street design and use is centred on supporting the businesses that front it and the street is closed on occasion to traffic.

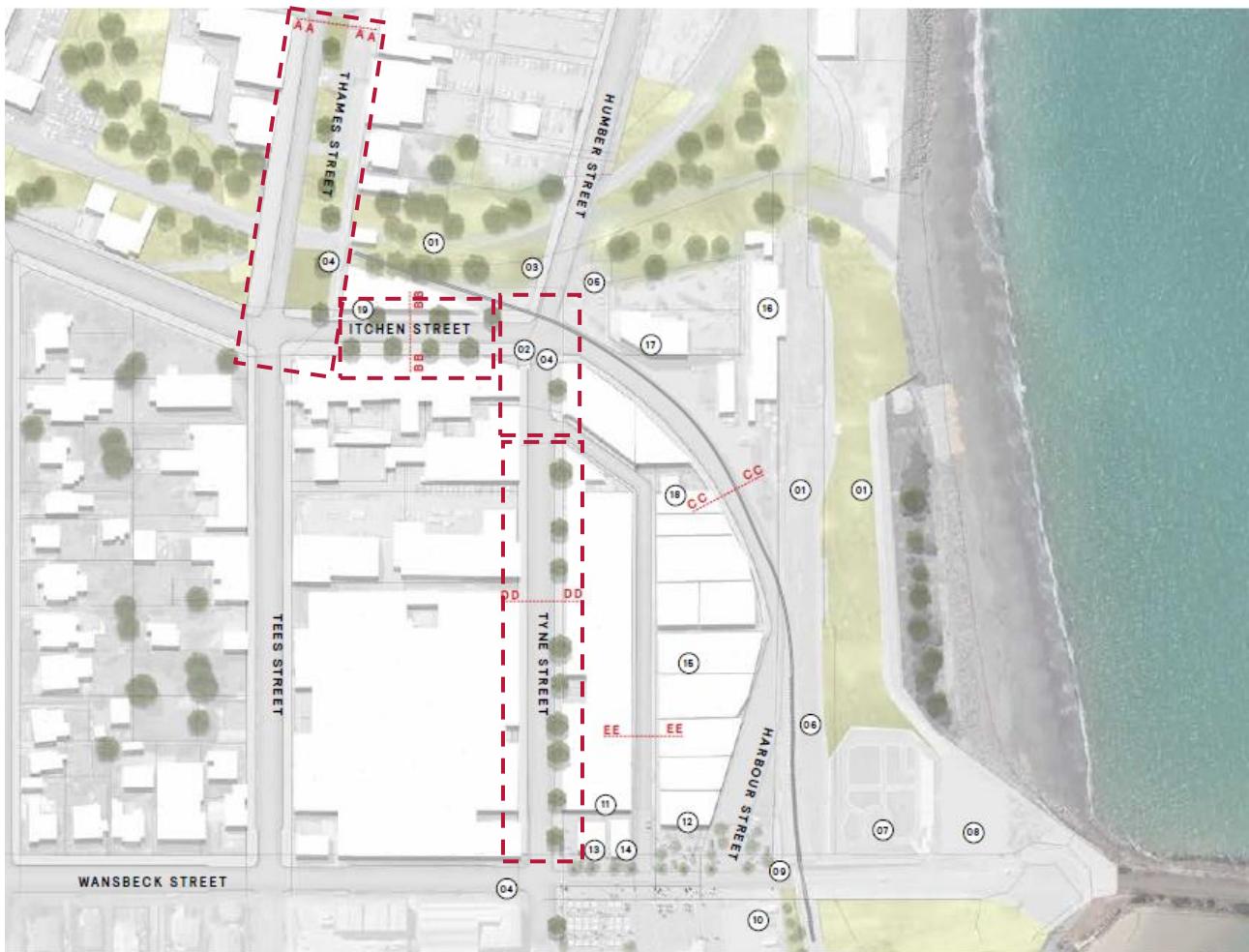


Figure E.4 Key road corridor route between town centre and harbour

Proposed cross sections for each street are shown in Figure E.5 to Figure E.7. Proposed cross sections balance the movement and place functions of each street, enable intersection upgrades to improve safety and functionality and create additional public space for locals and visitors to enjoy. Key features of each link include:

- Lower Thames Street at the southern end is proposed to be reduced to one lane in each direction on the western side. This assists with better alignment of the Thames/Itchen/Tyne intersection, see Figure E.8, and creates an opportunity to develop a new public space in the vicinity of the Council building. The intention of this space is to improve the amenity and function of the town centre as a place for people, creating a focal point for community activities, gathering and celebration. Cycle lanes are proposed on Lower Thames Street to improve safety and comfort for cyclists and improve legibility of the Alps to Ocean cycle trail.
- Itchen Street is a key link between the town centre and the harbour and is currently very wide and difficult to cross. It is proposed to re-allocate space on Itchen Street to pedestrians and retain existing parking and traffic lanes in each direction. The intent of this cross-section is to maintain access for vehicles, however the speed at which vehicles can travel will be balanced against the needs of pedestrians crossing the street and generally enjoying the space. The slower speeds will allow cyclists to share the narrowed traffic lanes. It is anticipated that some vehicles will choose to re-route along Tees and Wansbeck Street.
- Tyne Street between Itchen Street and Harbour Street is currently a key pedestrian connection and will remain as such. Further south along Tyne Street the presence of the harbour and retail businesses is not reflected in the street design. The proposed cross section for Tyne Street maintains the carriageway width currently provided at the northern end of Tyne Street but reallocates footpath space to enable a wider footpath on the eastern side of Tyne Street, adjacent to the harbour. Street trees and lighting are proposed to increase the amenity of the space and provide visual narrowing, reducing the speed environment. Overall, the movement function of the road is slightly reduced to increase the place function as part of the wider harbour area, however this link will still function as a key local route.

Thames Street is developed to include more green space and new planting to make a destination space and encourage space and street occupation. New lighting added.

Cross Section_

- Access
- Place
- Destination
- Civic

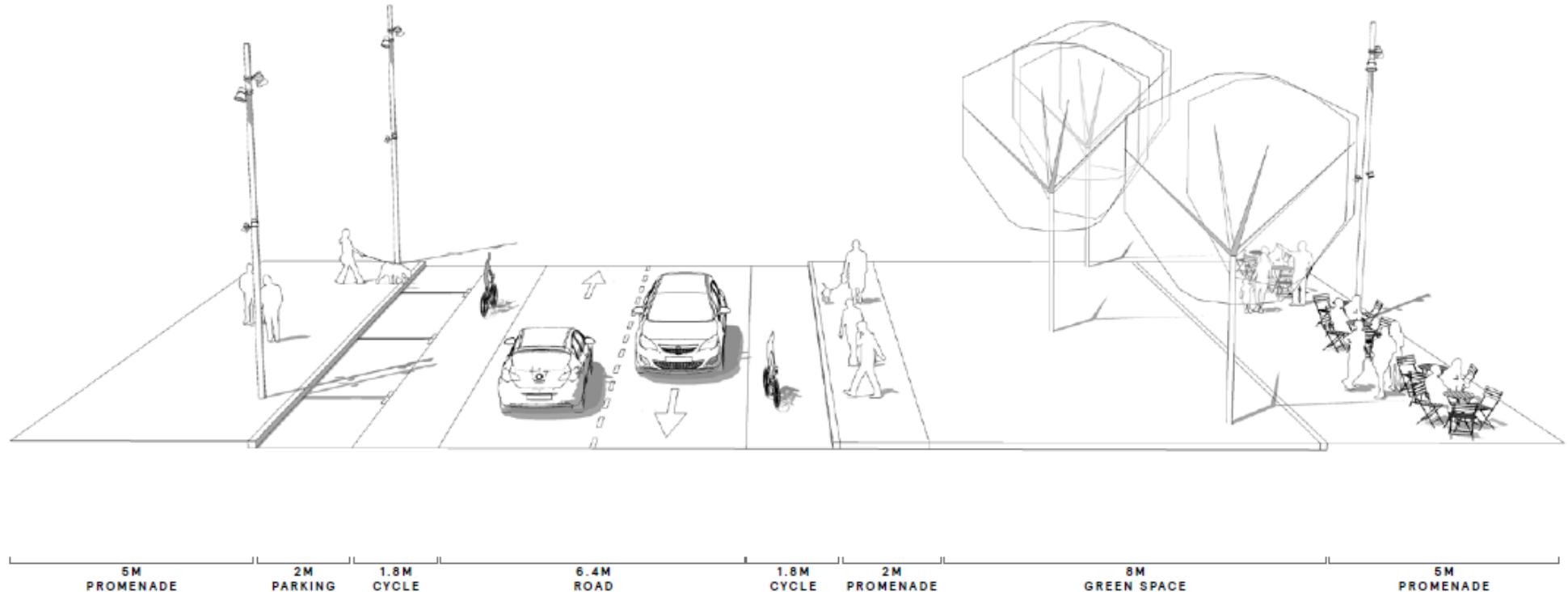


Figure E.5 Proposed Lower Thames Street cross section – southern end only

Itchen Street is upgraded with wider promenades, new planting, new street furniture and new lighting. The Southern side of Itchen street now has more opportunity for pedestrian occupation to maximise its South facing location and sunlight.

Cross Section_

- Arrival
- Behaviour Change
- Connectivity
- Place

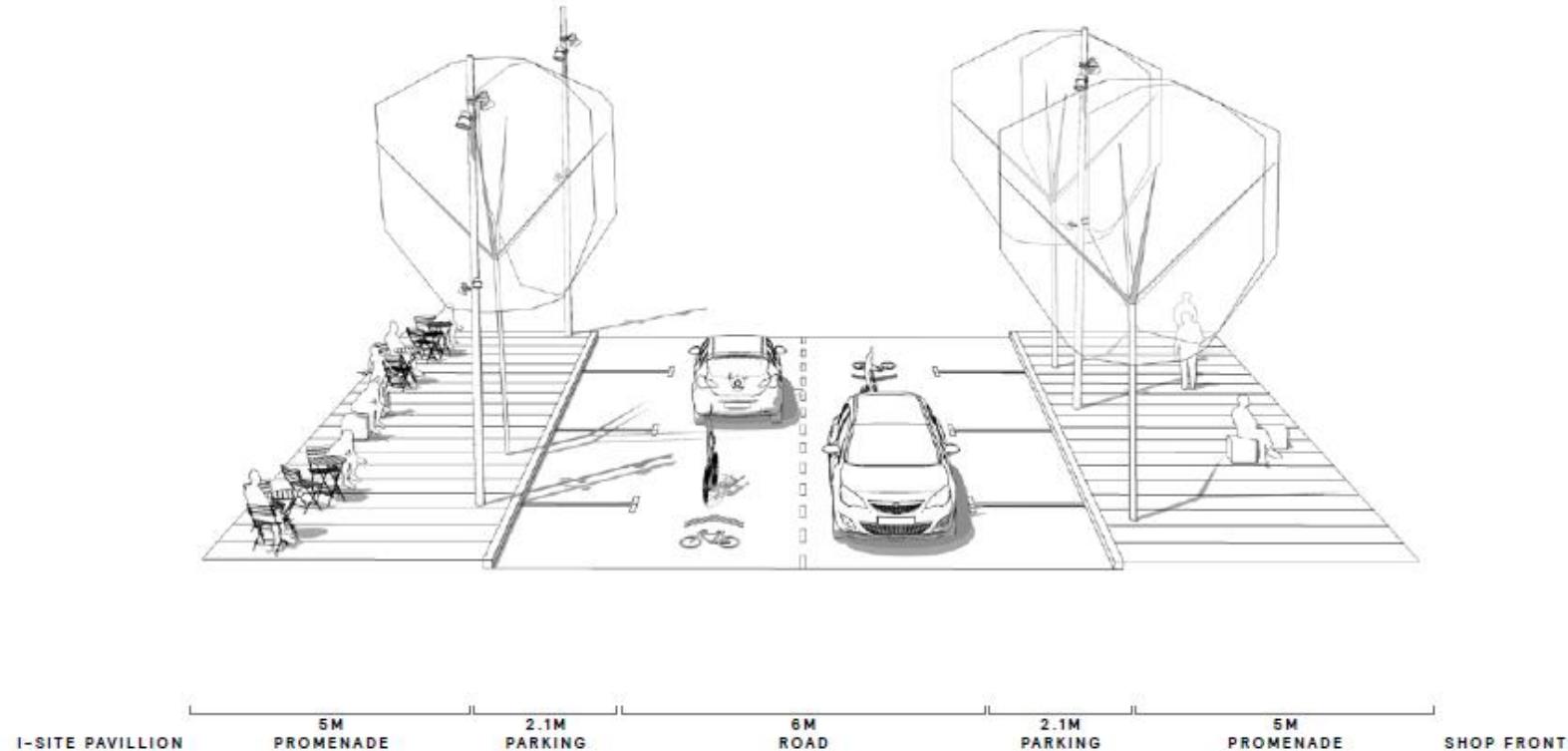


Figure E.6 Proposed Itchen Street cross section

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Tyne street is upgraded with a wider promenade on the west side to allow for more occupation on both sides and priority of pedestrian movement. New planting, new street furniture and new lighting are also added.

Cross Section_

- Arrival
- Catalyst
- Connectivity

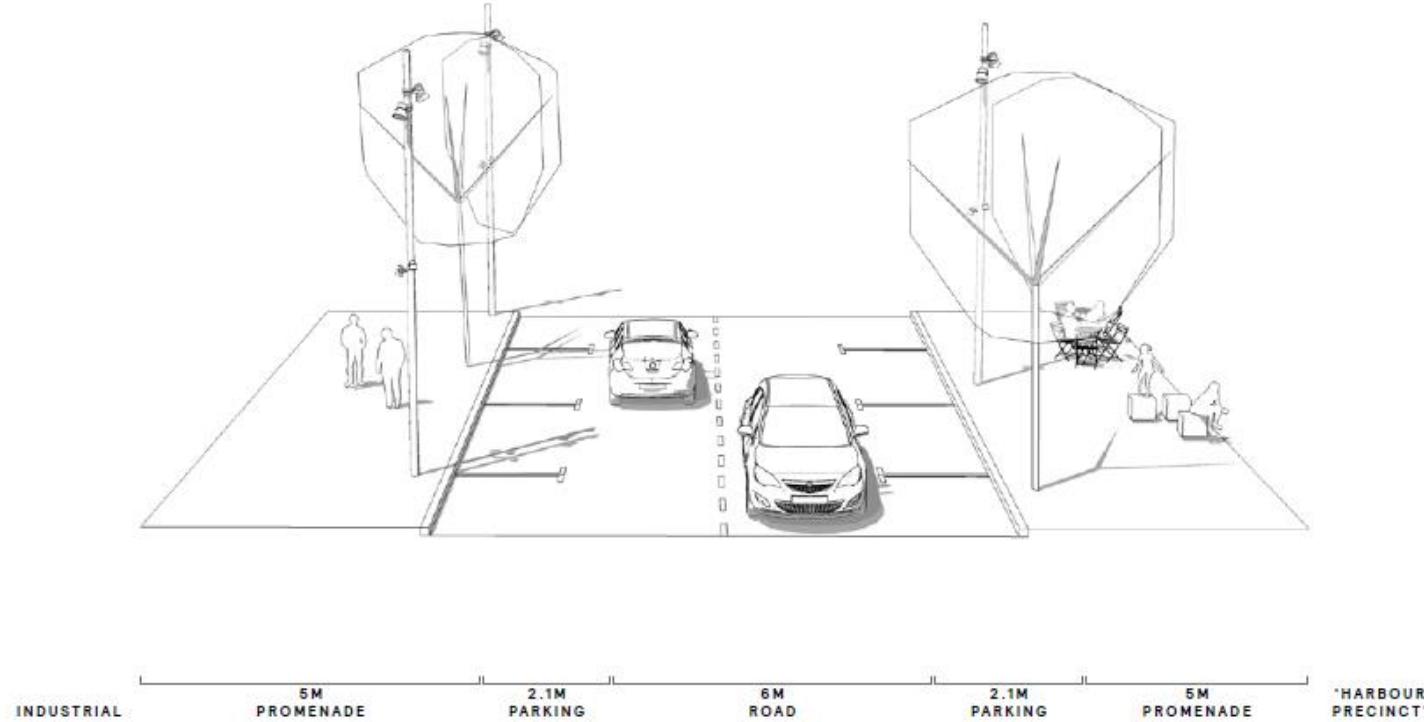


Figure E.7 Proposed Tyne Street cross section

Proposed cross section changes on Lower Thames Street provide an opportunity for simplification of the intersection with Tees and Itchen Streets and better connectivity between Tees Street and Thames Street. At a concept level Figure E.8 illustrates how changes to Lower Thames Street could enable a simplified intersection.

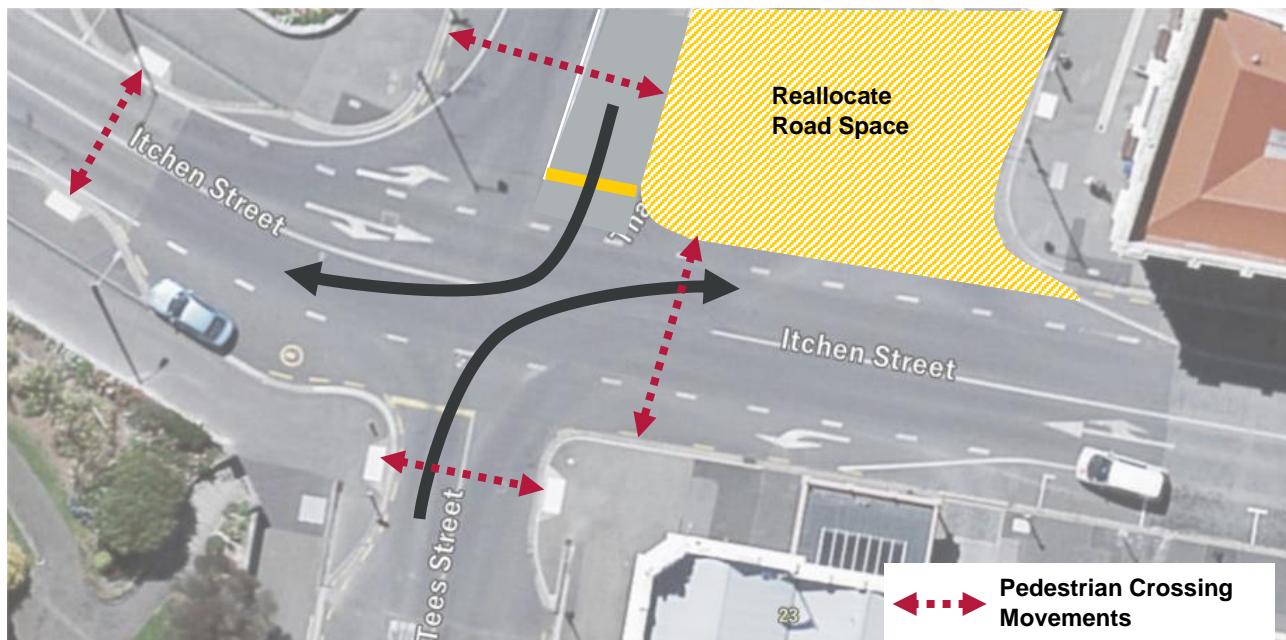


Figure E.8 Proposed Thames/Itchen/Tees intersection layout

The preferred option for the Itchen/Humber/Tyne intersection is a raised intersection. A raised intersection would reduce vehicle speeds and improve pedestrian crossing facilities at the intersection. Kerb extensions are proposed on Itchen Street to reduce crossing distances. Ultimately kerbs will need to tie into the proposed cross sections on Itchen and Tyne Street. Options to implement a raised crossing are shown in Figure E.9. This includes an option with (left hand figure) and without the railway level crossing (right hand figure).

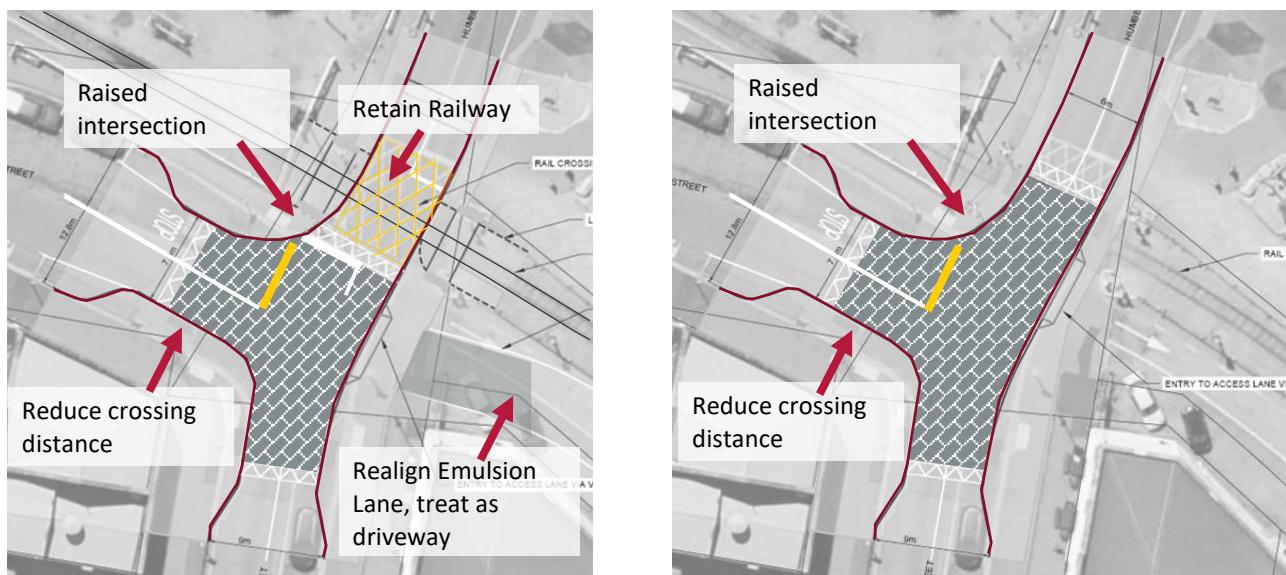


Figure E.9 Proposed Itchen/Humber/Tyne intersection layout options

Interim infrastructure/ tactical urbanism opportunities

In order to trial more significant infrastructure changes, or make iterative improvements, a category of interventions termed ‘tactical urbanism’ are becoming more popular in New Zealand and globally. These temporary interventions can deliver change to an area quickly and at low cost. They are also a good way to test improvements, gather feedback from users, and make adjustments before taking a decision on whether to make the changes permanent or not.

Figure E.10 shows examples of tactical urbanism in New Zealand. On the left is oversized street furniture implemented in central Christchurch following the earthquakes to create interest and attract people back to the city centre. On the right is an example of a semi-permanent footpath widening on High Street in Auckland.



Figure E.10 New Zealand tactical urbanism examples

Three locations have been identified as prime sites for testing the recommended infrastructure changes in Oamaru:

- Lower Thames Street, incorporating a plaza at the southern end and enabling the trial of a new layout for Thames/Itchen/Tees intersection
- Itchen Street, testing a slow street/shared space design and Itchen/ Humber/ Tyne intersection layout
- Harbour plaza, testing the shared space proposal in this location

Trialling the proposed changes to road space in this way will allow Council to gather feedback from the community and visitors on the functioning of the spaces and feed this into permanent designs for these areas.

Pedestrian Wayfinding

Wayfinding is how people find their way around an area, it is generally targeted at people who are unfamiliar with a place or specific location. A wayfinding system is proposed in this report to identify and connect places in and around the town centre and harbour area.

Figure E.11 shows the proposed pedestrian wayfinding suite for the town centre. The signage suite is based on metallic elements, reflecting the steampunk culture and working heritage of Oamaru and its harbour.

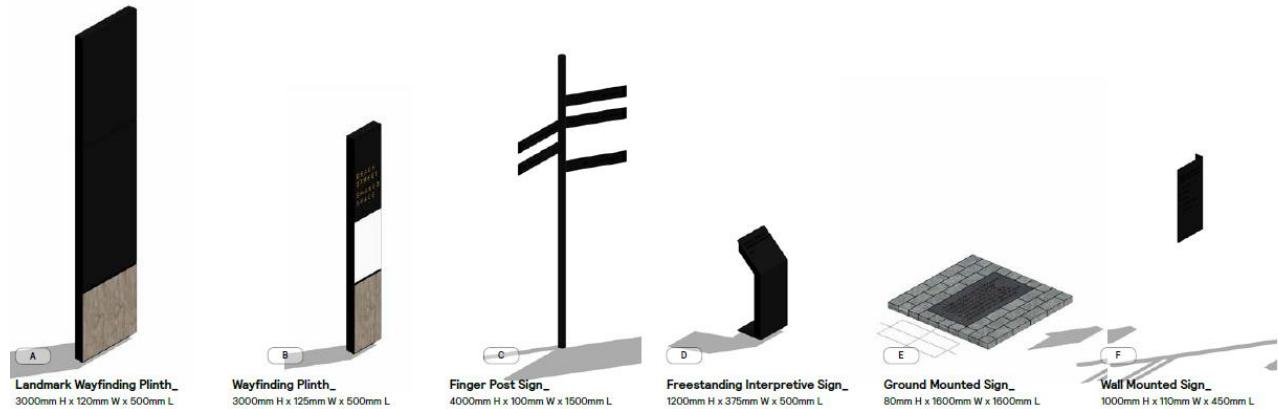


Figure E.11 Proposed town centre pedestrian wayfinding suite

Parking

Appropriate parking supply and parking restrictions have a key role to play in ensuring the town centre and harbour are connected and accessible. Factors such as the types of users and their specific needs, the optimal use of public land at different times of the day and year, and ensuring the right parking types in the right locations are key to getting parking right for Oamaru. The harbour is only a 5 minute walk from the southern end of the town centre. This presents an opportunity to share parking facilities across the two areas and support the four key objectives, particularly the distribution of benefits across the two areas.

In determining parking needs for the study area it is important to consider the breadth of user types and the differences in their needs. An overview of broad parking user type categories and prioritisation for proximity to their destination, based on parking duration is shown in Figure E.12.



Figure E.12 Parking user types overview

The following points summarise parking management principles that are important to inform the quantity, location, restrictions and pricing of parking for Oamaru:

- Adequate accessible parking
- Parking facilities should be shared across multiple destinations
- Parking spaces close to key destinations should be prioritised for shorter stay user types
- A combination of time restrictions and parking pricing is appropriate
- On a normal day parking spaces should be 80-85% occupied during the peak
- Identify temporary overflow sites for events rather than permanently converting valuable space to underutilised car parks

The balance between parking supply and demand was measured in 2011 through a parking occupancy survey. Against the optimum of 85% occupancy level, the 2011 parking occupancy results show that parking provision in the study area is sufficient on a normal day. During events and the peak of the tourist season it is understood that parking in the town centre and historic area can be over demanded. To accommodate these peaks it is recommended that temporary overflow sites are identified and utilised. Temporary overflow sites are likely to be existing grassed areas that can be used for parking, particularly during the summer period. Overall it is recommended that parking occupancy is monitored as the harbour develops. Additional car parks should only be developed if surveys demonstrate they are required. Underutilised car parks are an inefficient user of valuable land in central Oamaru.

Parking restrictions and pricing are useful mechanisms to manage demand, turnover and parking location. Restrictions provide an opportunity to prioritise e.g. short term users running short errands who need to park outside their destination over commuters or long-stay tourists who can walk a short distance to their destination. Currently the town centre has a lot of time limited or pay and display parking while the harbour area parking is free and predominantly unrestricted. This imbalance in parking restrictions between the harbour and town centre areas means visitors may be incentivised to park away from the town centre and only visit the harbour area.

It is recommended that parking restrictions are rebalanced to encourage the desired parking and visiting behaviours. Proposed parking restrictions and changes are shown in Figure E.13.

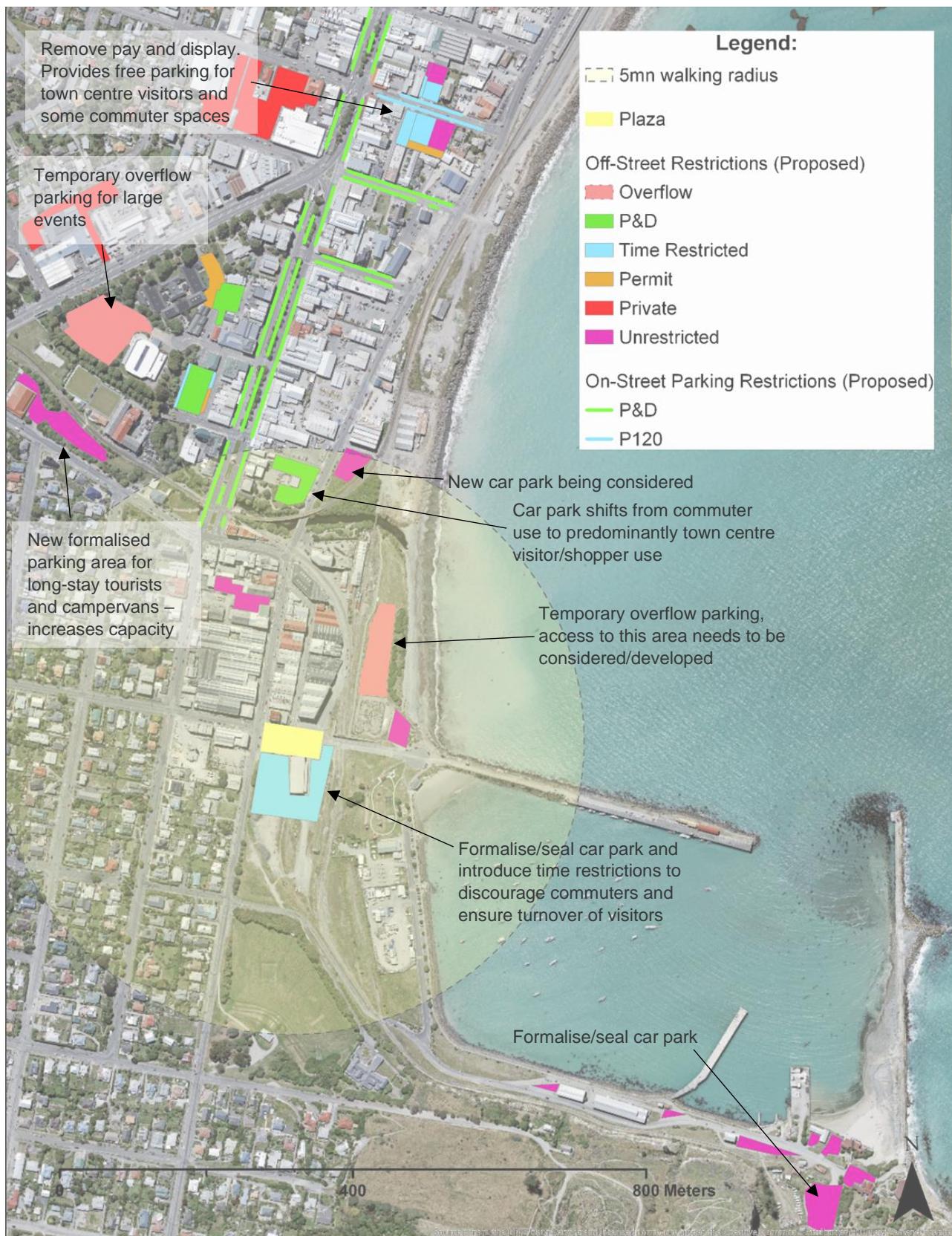


Figure E.13 Proposed changes to parking restrictions and supply

Action plan

Actions from each of the transport elements are summarised in Figure E.14. Many of the actions are interrelated, this is shown using arrows. Actions are prioritised by implementation timing, broadly categorised as short, medium and long term.

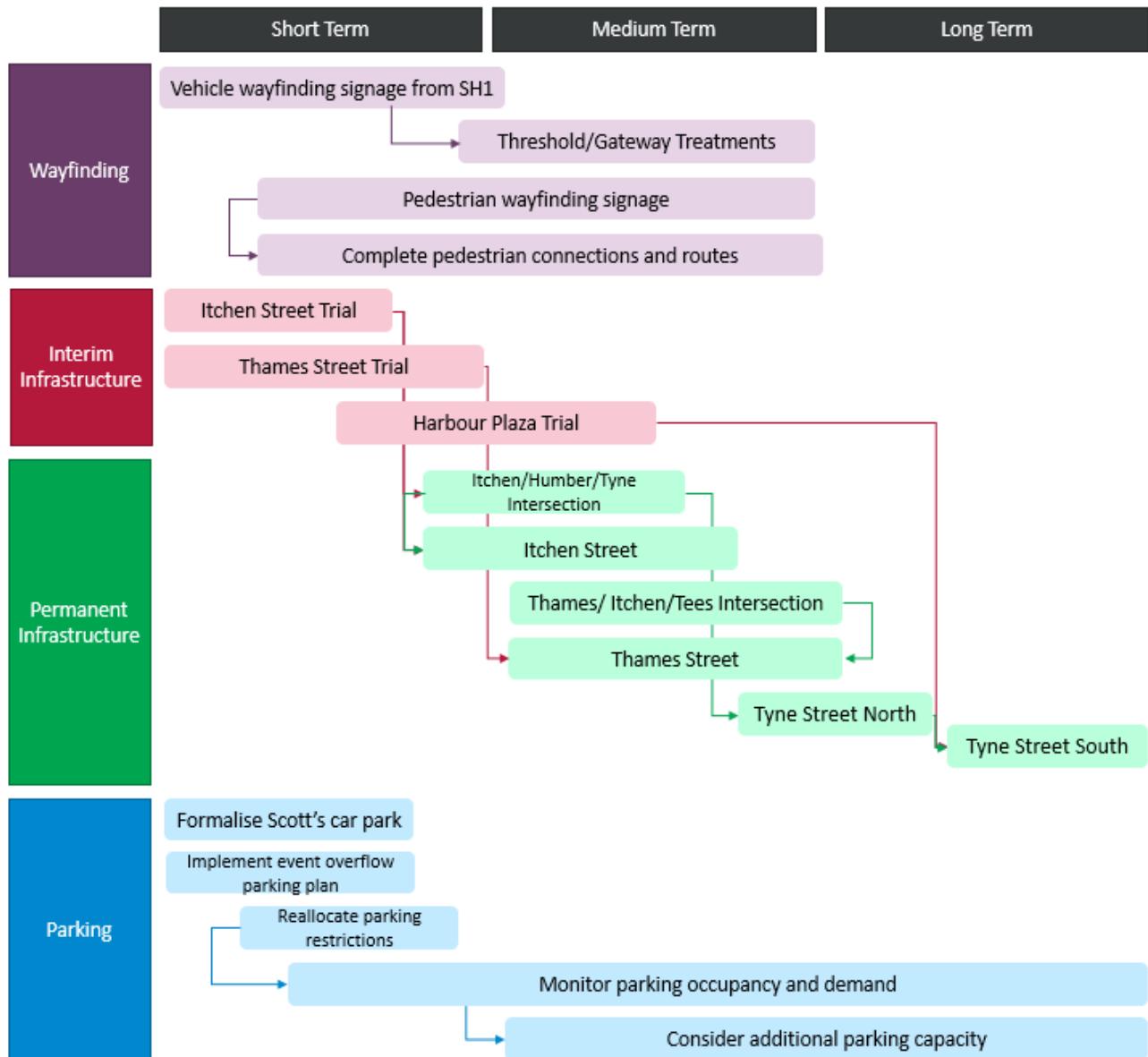


Figure E.14 Proposed action plan and delivery timing

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1. Introduction

1.1 Report purpose

The development of the harbour area presents an opportunity to enhance Oamaru's attractiveness as a place to spend time and money for locals and tourists. This report considers how transport connectivity and the allocation of road space can support a thriving Oamaru as a whole. This report supports the ongoing Oamaru Harbour master planning. A key focus of the report is on the transport connections between the town centre and the harbour, ensuring that these are optimised to share the benefits of investment in the harbour area.

This report identifies investment required in transport connections, road space allocation, wayfinding and parking to support the success of the town centre and harbour areas.

This report has been developed by Abley with support from LandLAB. Excerpts from LandLAB's work are included within this report, their full report is available as a standalone document.

1.2 Study area

The study area for this report is shown in **Figure 1.1**.



Figure 1.1 Study area – Town centre and harbour

1.3 Objectives

The following objectives have been developed to guide the outputs of this report:



Visitors and passers-by are aware of the town centre and harbour, are attracted to it and spend time there.



Locals like to visit because it's interesting, accessible and functional.



Connecting the town centre and harbour, ensuring the benefits are distributed.



People are proud of the unique and authentic experience that's memorable.

1.4 Key user groups

There are many different users of the study area. Each of the user groups have different needs from the transport network, as summarised below:



Young Families

Safe and interesting spaces and activities.



Tourists

Information about where to go. A pleasant experience that they will recommend to others.



Commuters

Convenient transport options to get to work and places to park



Alps to Ocean Users

Clarity on A2O route, safe cycle infrastructure and end of trip facilities e.g. cycle parking.



Residents

Functional and enjoyable town centre and harbour area that allows errands to be run efficiently.



People with accessibility needs

Includes the elderly and parents with prams and young children etc.
Safe, well designed facilities and crossings, especially pedestrian facilities.



Business owners

Maximise footfall past their businesses and space outside businesses for signage and outdoor dining etc.



Local visitors

Enjoyable public realm that provides a high quality visitor experience.

1.5 Issues and opportunities

There are a number of issues and opportunities relevant to the study area including:

- **Development of the harbour** has the potential to support or compete with the success of the town centre, it is important travel between the two areas is clear and easy, and visitors are attracted to do so.
- **Oamaru's ageing population** means further emphasis should be placed on designing and providing for mobility and vision impaired road users, in particular: providing footpaths that can accommodate mobility scooters, ensuring surfaces do not create trip hazards, providing seating in public spaces and designing safe crossings and crossing distances. These emphases will also benefit a wider group of people with higher accessibility needs including parents with prams and young children, and tourists with luggage.
- **Increasing tourism numbers** in Oamaru are putting pressure on parking facilities both in terms of capacity during peaks and parking types (e.g. requirements for larger spaces for campervans and cycle parking).
- **Wayfinding** is not well defined for both pedestrians and drivers. The gateway to the Town Centre from the south is not emphasised and existing pedestrian wayfinding signage generally does not use internationally recognisable symbols to assist tourists with orienting themselves.
- **The Alps to Ocean (A2O) cycle trail** is increasing in popularity, however wayfinding at the end of this route and end of trip facilities need improvement. Oamaru also has minimal cycle facilities leading to some cyclists riding on the footpath.
- **Peaks in demand** for visiting and parking in Oamaru mean parking demand can exceed supply at certain times of year. However, on a normal day parking capacity is more than sufficient for demand based on the 2011 Oamaru parking study, and supported by observations in 2019.
- **Temporary closure of Harbour Street** currently occurring during market days and other peaks/events demonstrates flexible use of road space. This type of network operation could be extended to other activities and/or areas, creating pedestrian centric spaces.
- **Overcrowding of footpaths**, especially on Itchen Street between Thames and Tyne, can occur during busy periods. Wide road reserves and no congestion issues provide an opportunity to reallocate road space on high pedestrian routes to provide a safer and more comfortable experience.

This report considers opportunities related to movement, access/connection and experience in the study area:

- **Improved Access:** Improved wayfinding will support better access between the town centre and waterfront, and from the State Highway. Currently the most legible route from the State Highway is via Thames Street. However, access via Wansbeck and Itchen provide significant benefits in terms of legibility, directness and experience of the town centre. Providing additional options in terms of how people navigate themselves to the town centre is also important.
- **Enhanced Movement:** Enhanced movement between the town centre and waterfront for vehicles, cyclists and pedestrians.
- **Memorable Experiences:** The creation of both a Town Square and Harbour Square creates the opportunity to establish new synergies and greater connectivity between the town and harbour. These proposals should be considered as complimentary rather than competing.

1.6 Report structure

The remainder of the report is structured in the following sections:

- Connections from the State Highway to the harbour area
- Town centre to harbour connections
- Tactical urbanism opportunities
- Pedestrian Wayfinding
 - Signage
 - Walking routes
- Parking
- Action plan

2. Connections from State Highway 1 to the Harbour area

Clear and efficient direction signs and cues are an essential part of road and traffic engineering. Road users depend on these signs for information and guidance. Within the study area, existing signage and cues to direct visitors to the town centre and harbour area are limited, meaning opportunities are missed to attract people passing through Oamaru on their way elsewhere. This lack of clear wayfinding/directions also has the potential to reduce the visitor experience for less frequent visitors.

Note that this section is targeted at visitors who are not familiar with Oamaru. Locals and frequent visitors will continue to utilise the routes that are most convenient for them and do not require additional signage.

2.1 Directional signage principles

Signage informs road users about directions and distances to destinations. Directional signs must therefore give road users their message clearly and at the correct time. The NZ Transport Agency's Traffic Control Devices Manual – Part 2¹ sets out the following principles for the provision of directional signage for drivers:

- Signs should attract the attention of road users through the relevance of the message as well as sign design.
- Signs should not include advertising or, except for some tourist signs, other commercial information.
- Directional and navigational information should be displayed in a consistent manner providing continuity along a route.
- Signs giving basic directional information should not be compromised by other signs that have a lower importance or can be placed elsewhere.
- Route and guide signs should not detract from essential safety signs or information.
- Signs should be provided in response to a demonstrated need.
- Destination names should relate to those locations likely to be known to many drivers or shown prominently on most road maps.

Directional signage in study area

Existing directional signage for the harbour area is aged and requires maintenance or replacement. Current signage directs people to '*Historic Area and Penguin Colony*' and to the i-Site and often goes unnoticed by visitors. Signage is located on the state highway only, once visitors have entered the local road network the format of directional signage changes from brown tourist signs to occasional yellow fingerboards or private signs (see example in **Figure 2.1**), which are not consistently provided at key decision points. No signage currently refers to the location of the town centre or the harbour area more generally.

The development of the harbour area to date, as well as future plans, necessitate a change to wording on existing signage. The new wording should be agreed, including whether the town centre location should be incorporated into the signs or potentially included in the 'historic area'. Messaging for signage at the locations identified in this section needs to be agreed.

In order to agree signage locations, key routes to the study area need to be confirmed. Key routes will be those promoted to visitors. Key routes are considered in more detail in the remainder of this section, along with the details of existing directional signage.

Directional signage can be supplemented with physical features to highlight the importance of a gateway/key route to the town centre/harbour area. A combination of signage and physical features is recommended within the study area.

¹ <https://www.nzta.govt.nz/assets/resources/traffic-control-devices-manual/docs/part-2-draft-direction-service-and-general.pdf>



Figure 2.1 Example fingerboard and private signs - Tyne/Waterfront intersection

2.2 Key routes

State Highway 1 (SH1) travels north-south through Oamaru and is the principal route for visitors arriving from outside the town. There are three routes that provide access to the harbour area from SH1, see **Figure 2.2**:

- Wansbeck Street
- Itchen Street
- Lower Thames Street

Wansbeck Street and Itchen Street provide access for visitors arriving from the south, Lower Thames Street is the predominant route from the north.



Figure 2.2 SH1-harbour key route options

Thames Street

For harbour visitors approaching from the north Thames Street provides the most direct route to the harbour area and directs visitors through the Oamaru Town Centre. This increases the exposure of businesses along the route to potential customers. The Lower Thames Street/SH1 intersection already includes features such as a raised intersection and large monument (Boer War Memorial) that act as a threshold to provide a sense of arrival. Lower Thames Street is classified as a 'primary collector' in the NZ Transport Agency's One Network Road Classification (ONRC), reflecting its nature as a locally important street linking a significant economic area.

The Lower Thames Street access route currently includes some wayfinding signage for vehicles accessing the harbour area, see [Figure 2.3](#). Signage specifies the route to the 'Historic Area and Penguin Colony' and a separate adjacent sign points to the i-Site. Advance signage to the 'Historic Area and Penguin Colony' is provided on SH1 near Dee Street and is partially obstructed by a parking sign, see [Figure 2.4](#). Advance signage to the i-Site is also provided in a separate location.



[Figure 2.3](#) Lower Thames Street threshold



[Figure 2.4](#) Advance signage on SH1 (Thames Street) for visitors from the north

Itchen Street

Itchen Street is currently signposted as the turn off to the '*Historic Area and Penguin Colony*' and the i-Site for visitors approaching from the south. Itchen Street takes visitors past the southern end of the town centre, assisting with raising awareness of destinations outside the harbour area. Unlike the Lower Thames Street/ SH1 intersection, the Itchen Street/SH1 intersection does not stand out through its design as an obvious route to the town centre, see [Figure 2.5](#). Advance signage to the '*Historic Area and Penguin Colony*' and i-Site is also provided on SH1 after Lune Street, see [Figure 2.6](#).

Itchen Street is classified as a 'secondary collector' in the ONRC, denoting it has a local importance for linking to economic areas, but is of lesser significance than Oamaru's primary collectors.



[Figure 2.5](#) Itchen Street / SH1 intersection



[Figure 2.6](#) Advance signage on SH1 (Severn Street) for visitors from the south

In the vicinity of the town centre, the approach along Itchen Street provides a view of the breadth of historic buildings in the town centre and through to the Steam Punk HQ building. This provides a sense of arrival in central Oamaru.



Figure 2.7 View of historic buildings in lower town centre/historic area from Itchen Street

Wansbeck Street

Wansbeck Street is not currently signposted as a key route from SH1 to the harbour. However, for many destinations within the harbour area, Wansbeck Street is the recommended route from the south by GPS mapping applications, see **Figure 2.8**.

The design of Wansbeck Street does not currently provide any physical cues that you are entering a place of significance until you are within the harbour area. A gateway treatment at the eastern end of Wansbeck Street (e.g. at the intersection with Tees Street) would assist in providing a sense of arrival for visitors.

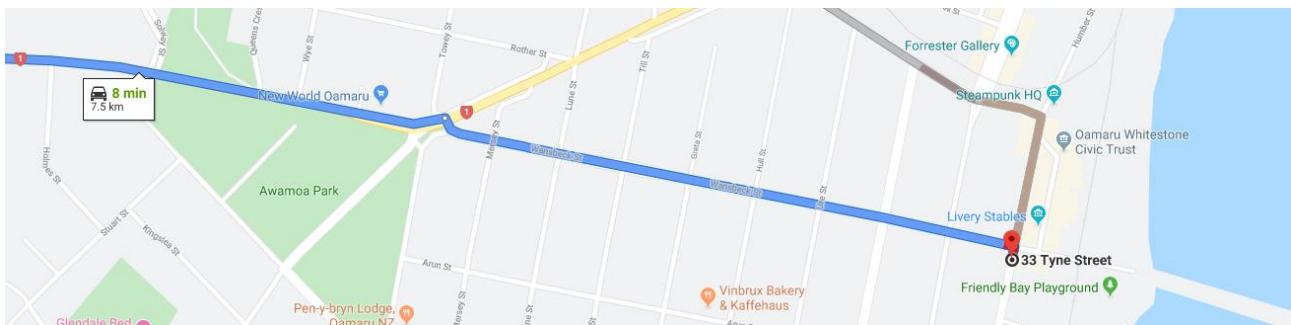


Figure 2.8 Recommended route by Google Maps from south to Scott's Brewery

Wansbeck Street provides a spectacular vista of the Harbour, see **Figure 2.9**, however it does not travel through the town centre and therefore directs visitors to the harbour area only. Wansbeck Street is a residential street and is not designed for high volumes of through traffic. Wansbeck Street is classified as an 'access road' in the ONRC, the lowest order of road aimed at providing access to homes etc along its length, rather than being a key connection in the wider network.



Figure 2.9 Wansbeck Street harbour vista

The Wansbeck/SH1 intersection features a right turn bay but has not been designed for high traffic volumes, see **Figure 2.10**. The intersection design may need further consideration and investment if the intent is to encourage more right turns into and out of Wansbeck Street from/to SH1 through promotion of the route to the harbour.



Figure 2.10 Wansbeck Street/SH1 intersection

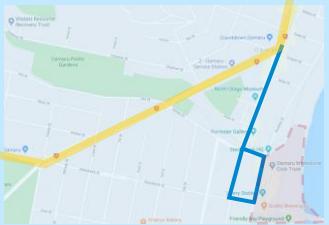
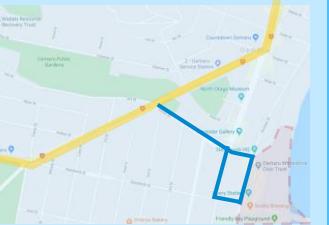
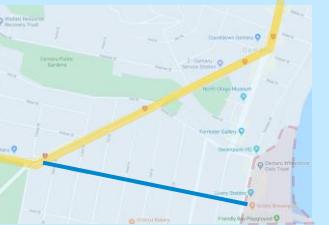
Waterfront Road

Waterfront Road is a key connection for visitors to the Penguin colony within the harbour area and represents the arrival point to the harbour area from residential areas in the south of Oamaru. While Waterfront Road does not provide a direct connection from State Highway 1, it is recommended that a gateway treatment at the Waterfront Road/Tyne Street intersection is implemented to assist visitors to find their way to the penguin colony.

2.3 Summary of route options

Overall it is recommended that Lower Thames Street remains the key promoted route to the harbour for visitors from the north and Itchen Street remains the key route for visitors from the south. However, it is recommended that the route via Wansbeck Street is not precluded and a threshold treatment is implemented at the eastern end of Wansbeck Street to provide a sense of arrival to the harbour area. Advantages and disadvantages of the routes considered are summarised in **Table 2.1**.

Table 2.1 SH1 to harbour key route options

	Lower Thames Street	Itchen Street	Wansbeck Street
Route			
Supports distribution of benefits to town centre	Requires visitors to travel through town centre	Routes visitors past the southern end of the town centre, raising awareness of other Oamaru destinations and businesses.	 Does not travel past town centre.
Memorable experience and sense of arrival	Existing memorial forms obvious gateway at intersection with SH1	Sense of arrival when entering lower end of town centre with view of historic buildings.  No specific threshold at SH1/Itchen intersection.	Spectacular vista of the harbour.  No specific threshold at SH1/Wansbeck intersection.
Road safety			 Sight distance and design concerns at Wansbeck/SH1 intersection, further investigation and investment likely required if volumes encouraged to increase.
Network fit	Primary collector, appropriate as access route	Secondary collector, appropriate as access route	 Access, through route not consistent with intended function – ONRC category may need to be changed
Other	Most direct route for visitors from the north	Aligns with currently promoted routes through existing signage	Currently the route google maps recommends visitors to take if they have destinations south of Wansbeck Street.
Recommendation	Sign post as key route from the north	Sign post as key route from the south	Do not sign post from SH1 but include threshold treatment eastern end of Wansbeck St to provide sense of arrival for those following GPS app directions.

2.4 Signage recommendations

This section sets out recommended signage locations based on the recommended key routes in section 2.3. Direction signs are recommended at key decision points, see **Figure 2.11**. Further detailed considerations are required to consider exact locations and sign details. Note that both tourist and guide sign types are recommended; tourist signs are used to direct travellers to tourist facilities; guide signs are used to direct travellers to important geographic locations.

Existing tourist signage to the harbour area states '*Historic Area and Penguin Colony*'. It is recommended that this wording is reviewed in the context of recent and proposed development of the harbour area and agreed before installing new signs, see example text in **Figure 2.12**. Wording on signage may change as signs get closer to the harbour area, for example it is recommended that the sign at Tyne/Waterfront Rd states '*Penguin Colony*'. Details and quantity of signage in each location will need to be considered further prior to implementation.

In addition to signage the following intersection upgrades/threshold treatments are recommended:

- 1) Threshold treatment at Itchen/SH1 intersection to emphasise presence of destinations of interest.
- 2) Threshold treatment at the eastern end of Wansbeck Street to provide a sense of arrival at the harbour.
- 3) Threshold treatment at Waterfront Road/Tyne Street intersection to assist with wayfinding to penguin colony and denote the southern end of the harbour on Tyne Street.
- 4) Upgrades at Thames/Itchen/Tees and Humber/Itchen/Tyne as discussed in later sections of this document

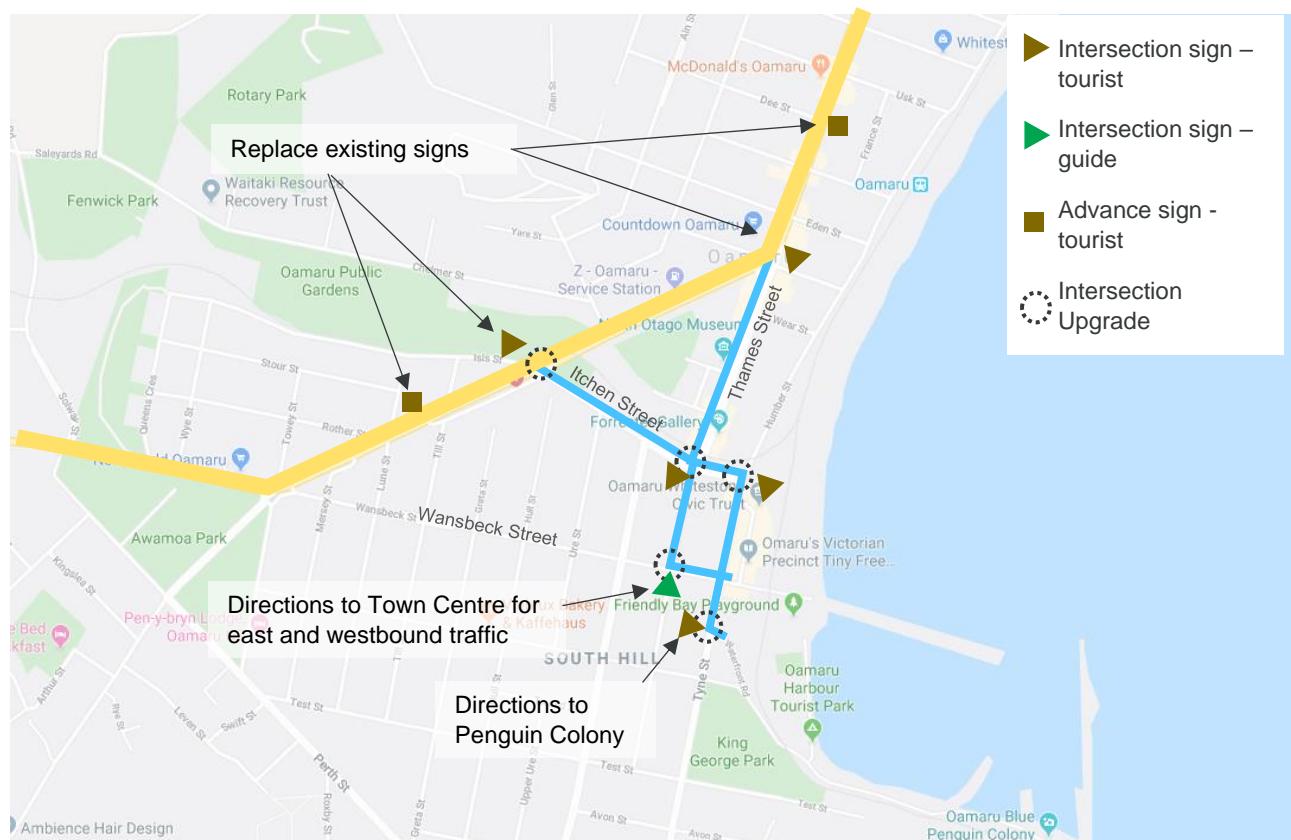


Figure 2.11 Recommended tourist and guide signage locations and types



Figure 2.12 Example sign text

New signage should follow guidance set out in the NZ Transport Agency's traffic control devices manual, in particular parts 1 and 2, see: <https://www.nzta.govt.nz/resources/traffic-control-devices-manual/>. Sign colours and shapes specified by the traffic control devices manual are shown in **Figure 2.13**. Note that updating signage on SH1 will require liaison with the NZ Transport Agency as the SH1 Road Controlling Authority.

Type of sign	Common sign shape					
Regulatory signs						
Warning signs						
Guide signs						
Tourist signs						
Service signs						

Figure 2.13 Common shapes and colour by traffic sign type

3. Town centre to harbour connections

Existing connections by road, open spaces and pathways between the town centre and Harbour area are compromised by poor amenity, a lack of legibility and safety/CPTED issues. There is a desire to enhance the amenity, function and safety of these links to enable walking and cycling and improved synergies and movement between the town centre and harbour.

An ‘episodic spatial sequence’ between the harbour and the town centre is proposed in **Figure 3.1**. This sequence is aimed at creating a series of interconnected spaces that connect the waterfront and town centre via the proposed Thames Street plaza, waterfront park, upgraded Itchen Street, Harbour Street and proposed Harbour Plaza. These spaces and experiences would provide a highly connected, legible and walkable town centre environment and stitch together the town centre and harbour.

The design outcomes sought from this sequence are:

- Improved legibility between town centre and waterfront encourages walking and cycling rather than vehicle trips
- Visitor experience enhanced through clarity and legibility contributing to visitation
- Enhanced footfall on key city centre and waterfront streets
- Increase viability of main street (Thames Street) and Harbour Street businesses

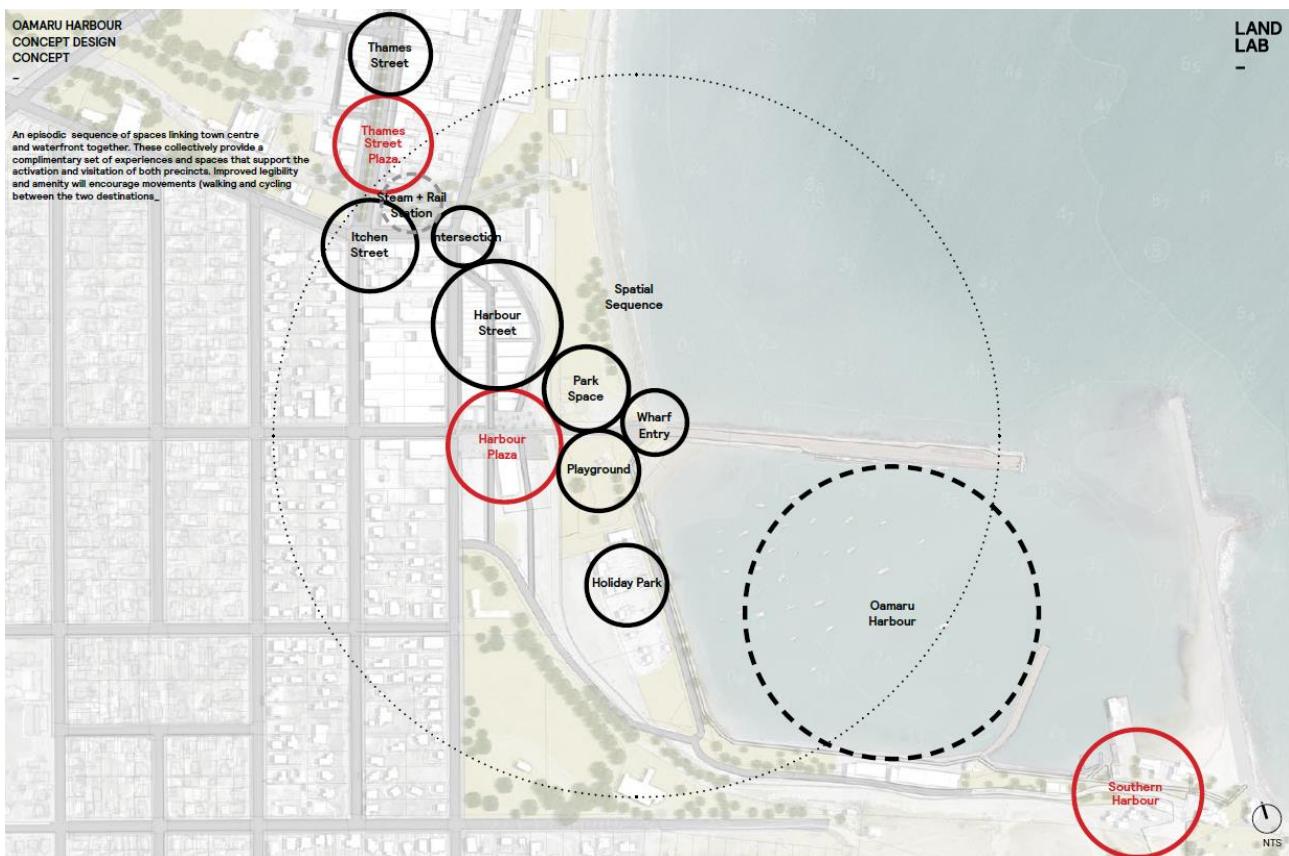


Figure 3.1 Proposed episodic sequence

Key road corridor connections between the town centre and harbour area are shown in **Figure 3.2**. Currently the most intuitive route between the town centre and the harbour is along Thames Street, left into Itchen Street, then right on to Tyne Street (and possibly left into Harbour Street). Tees St may be of higher importance for those seeking a car park in the vicinity. There is also potential for Emulsion Lane to develop into a more important route, particularly for walking and cycling access, in the future.

Within this report, the route highlighted in yellow in **Figure 3.2** is considered the critical road connection between the harbour and the town centre to support the distribution of the benefits of investing in the harbour area. This highlighted route also aligns with the episodic sequence in **Figure 3.1**. The southern end of the town centre is roughly a 5 minute walk from the proposed harbour plaza at the end of Harbour Street. Therefore it is realistic to expect visitors to the harbour to walk to the town centre and vice versa, particularly tourists. This reinforces the need to ensure the town centre and harbour area work together, and investment supports attracting visitors between the two areas.

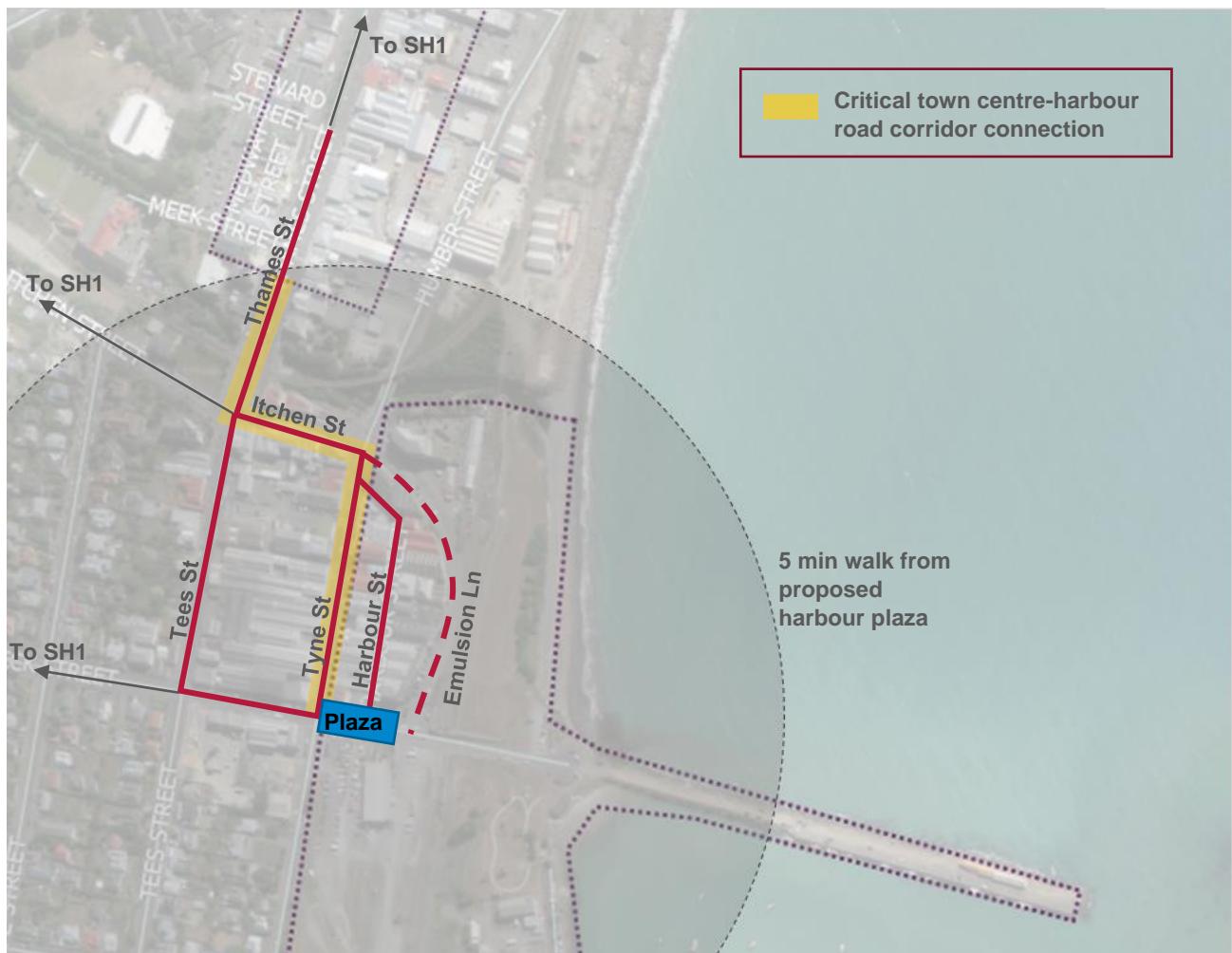


Figure 3.2 Harbour-town centre road corridor connections

Figure 3.3 shows key attractors and points of interest along the identified critical town centre-harbour connection. **Figure 3.4** shows issues, opportunities and constraints on the transport network associated with this critical route.

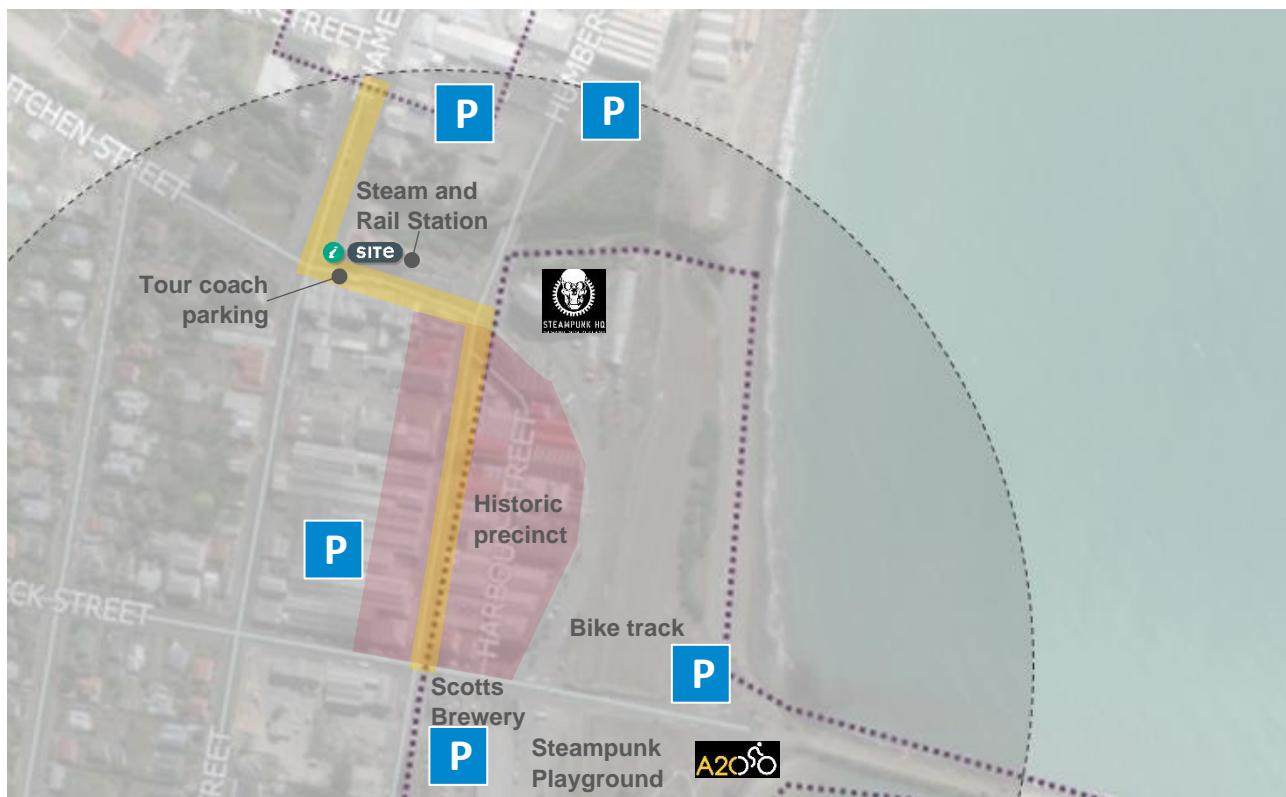


Figure 3.3 Key attractors along critical town centre-harbour route

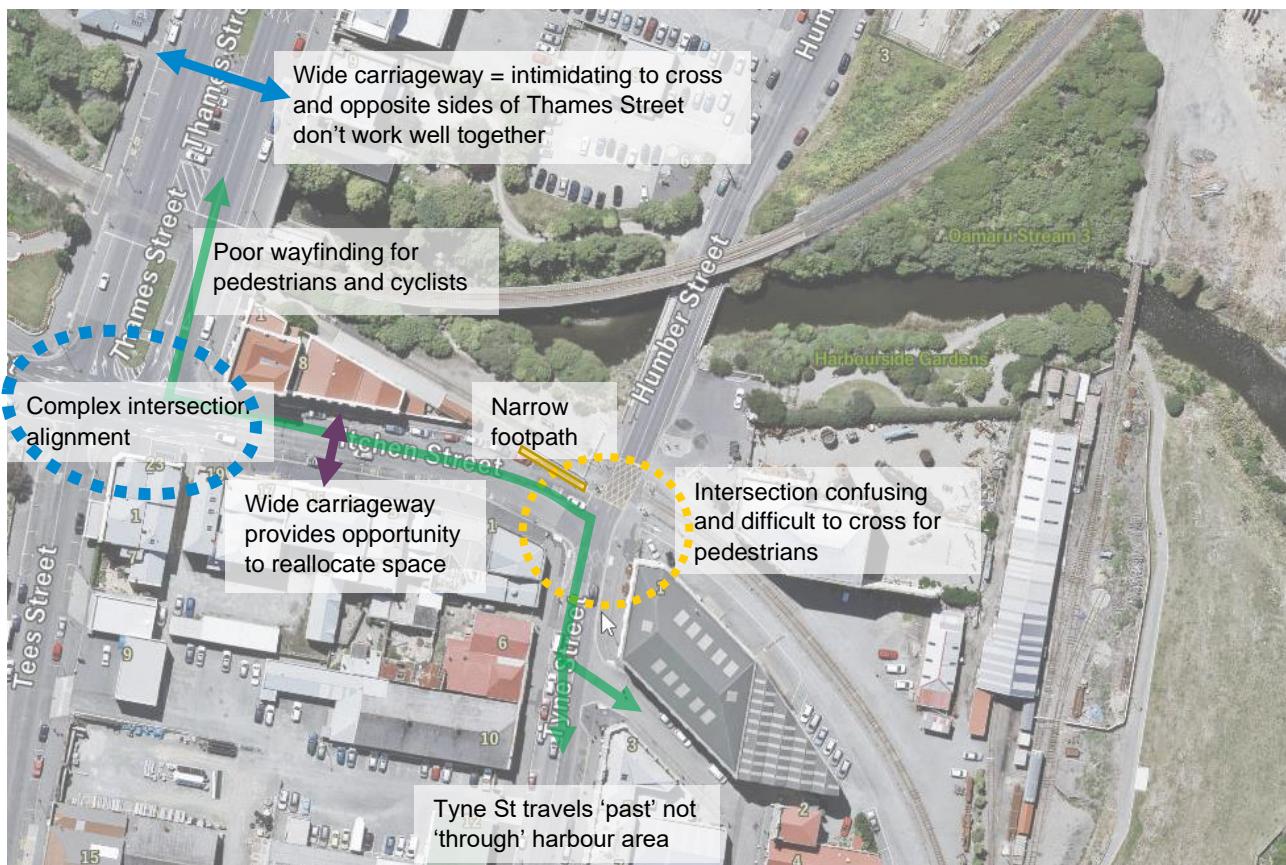


Figure 3.4 Issues and opportunities along critical town centre-harbour route

This critical connection is broken down into links and intersections in the following sub-sections. Each sub-section provides recommendations for investment in the road corridor.

3.1 Movement and place

In developing the recommendations in this section the balance of the movement and place function for each street has been considered:

- The **movement** function of a street represents its function as part of the network for the through movement of people, vehicles and goods. For example State Highway 1 has a high movement function, it is a nationally significant route for moving people and goods between towns and regions. A residential cul-de-sac would have a low movement function, instead this type of street is about providing access for residents to their homes. The streets in the Oamaru town centre have varying levels of movement function.
- The **place** function of a street is related to the activities on the street and may change from block to block. Place function is about providing access to destinations and spaces that enable people to meet, help businesses grow and allow children to play, among other things. Harbour Street is an example of a high place function, where the street design and use is centred on supporting the businesses that front it and the street is closed on occasion to traffic.

Within the following sub-sections the balance of movement and place is recommended for each street and a cross-section that reflects this balance proposed.

3.2 Lower Thames Street

Lower Thames Street is currently very wide, and incorporates four traffic lanes. The allocation of space on Thames Street to two traffic lanes in each direction emphasises movement, rather than place. Lower Thames Street does not form part of the State Highway network and has an important role in providing access to the businesses along its road frontages. The existing layout of Thames Street does not capitalise on the available space to support businesses e.g. through developing public spaces to attract people and provide for additional outdoor dining. In addition to placing a disproportionate emphasis on movement, the width of the carriageway, and two lanes in each direction, makes Thames Street intimidating to cross. The current layout with two lanes of traffic either side of parking also makes the alignment at the Thames/Itchen/Tees intersection complex, see Section 3.3. A lot of space on Thames Street is also currently allocated to parking, providing access to local businesses, see [Figure 3.7](#).

In order to support local businesses and make Lower Thames Street an enjoyable destination for locals and visitors it is proposed that some of the road space is reallocated to support its 'place' function. The volumes on Lower Thames Street are sufficiently low that removing one lane in each direction would not impact the efficiency of the road or create congestion.

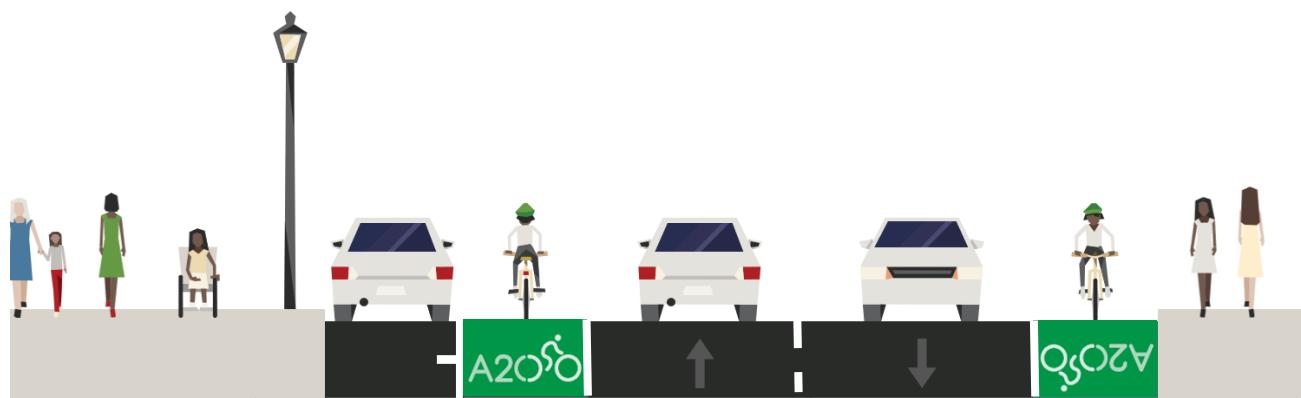


Figure 3.5 Lower Thames Street view looking north

A town square and public realm improvements are proposed at the southern end of Lower Thames Street adjacent to the Waitaki District Council Building. The intention of this space is to improve the amenity and function of the town centre as a place for people, creating a focal point for community activities, gathering and celebration, see [Figure 3.8](#). A town square on Thames Street would support the prominence and landmark qualities of the Town Hall as a key civic building, improve connectivity with Itchen Street for pedestrians, reduce the visual impact of cars and car parking, provide connectivity with adjacent open spaces and contribute to the creation of a sequence of episodic experiences and spaces between the town centre and waterfront. Details of how this space could be used will be developed in later stages and through trials as discussed further in Section 4. Note that the South Island Main Trunk Railway line runs through Lower Thames Street, the interface between any town square and the railway will need to be design carefully to ensure safety for all users.

It is proposed that Lower Thames Street is designed to be a 30km/h speed environment, including raised platforms at zebra crossings. When hit by a vehicle travelling at 30km/h pedestrians have a 90% chance of survival, compared to only a 20% chance at 50km/h. On Lower Thames Street where businesses and parking attract a lot of pedestrian movements it is therefore necessary to reduce speeds. Lower speeds will also reduce the difficulty of crossing this currently carriageway.

Within the carriageway it is recommended cycle lanes are provided, particularly due to use of Lower Thames Street by of large vehicles, including campervans, tour coaches and service vehicles. Cycle lanes will increase comfort and safety for cyclists using this link, including those completing the Alps to Ocean trail terminating in the harbour. Cycle lanes will assist with improving the legibility of the Alps to Ocean cycle route as it passes through central Oamaru. A2O stencilled markings could also be incorporated into cycle lanes to assist with this, along with the markings that legally define the space as a cycle lane, see example in [Figure 3.6](#). The plaza space also provides an opportunity to provide cycle parking to support cyclists spending time and money in the town centre.



[Figure 3.6](#) Proposed use of A2O symbol to increase route legibility

The proposed cross section is likely to result in some reduction in parking supply at the southern end of Lower Thames Street. However there may be opportunities to incorporate additional parking into the eastern side of Lower Thames Street adjacent to the town square. Any loss of on-street parking would be further mitigated by the proposed increase in off-street short term parking supply recommended in Section 6.

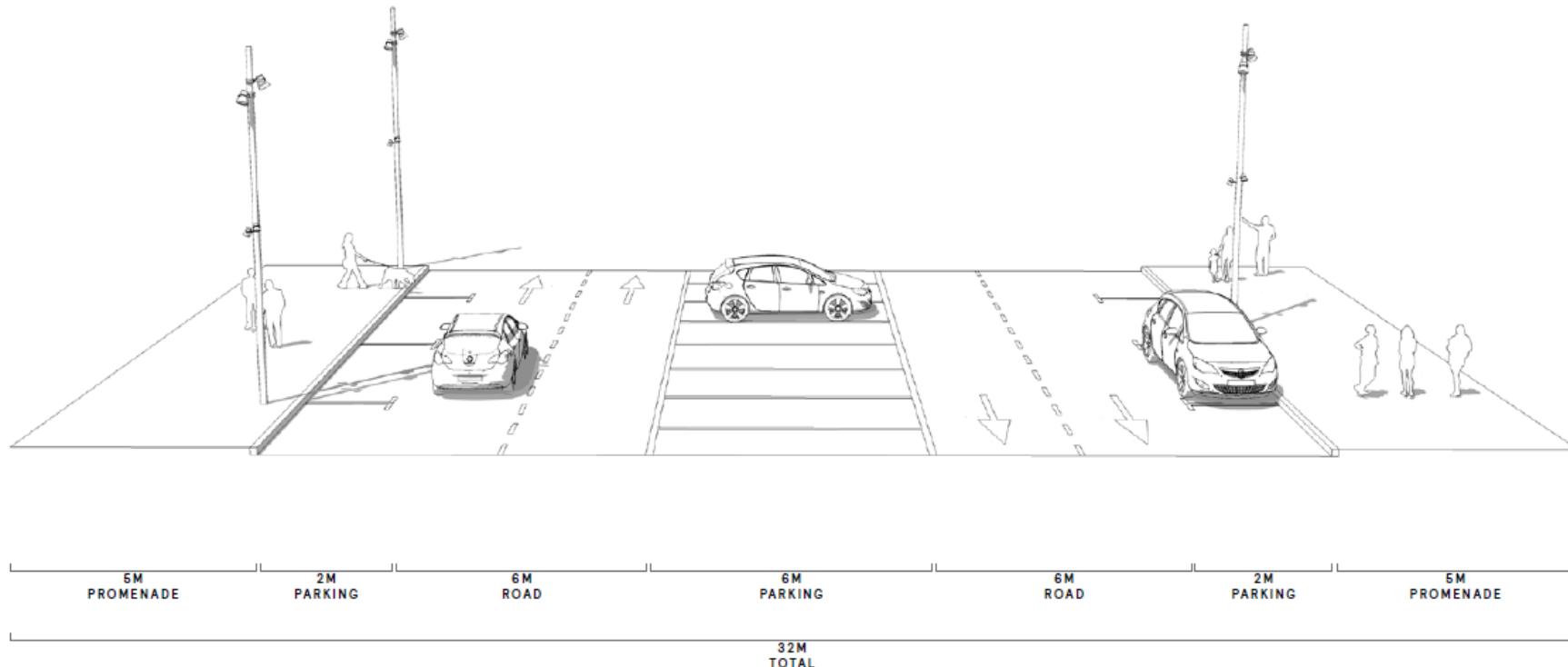


Figure 3.7 Lower Thames Street - Existing Cross Section (LandLAB)

Thames Street is developed to include more green space and new planting to make a destination space and encourage space and street occupation. New lighting added.

Cross Section_

- Access
- Place
- Destination
- Civic

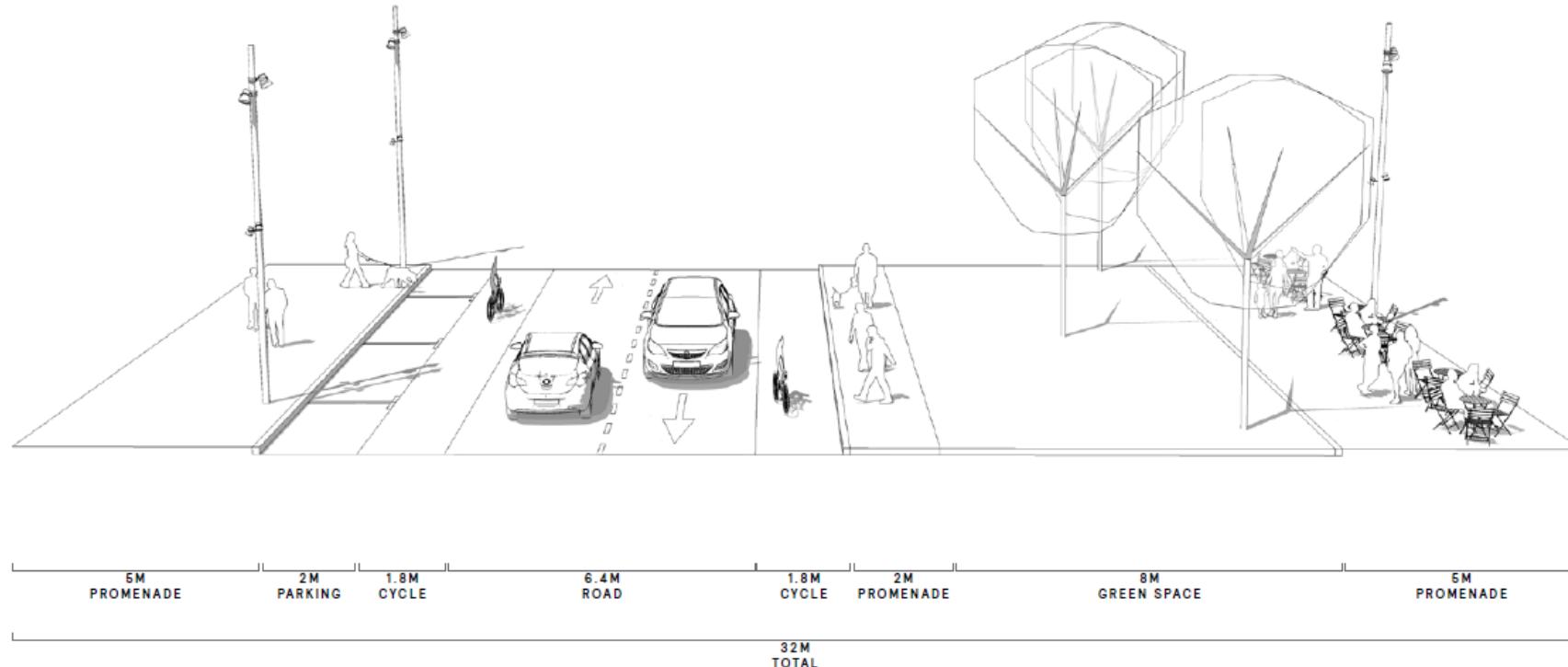


Figure 3.8 Lower Thames Street - Proposed Cross Section Option 1 (LandLAB)

3.3 Thames/ Itchen/ Tees intersection

The current alignment at the Thames/ Itchen/Tees intersection is complex due to the width of Thames Street relative to Tees Street. This alignment means that right-turning and southbound vehicles are in conflict with each other, making some movements difficult and reducing the safety of travel through this intersection, see **Figure 3.9**. This alignment also makes it difficult for crossing pedestrians to understand the route a vehicle is taking and whether it is safe to cross.

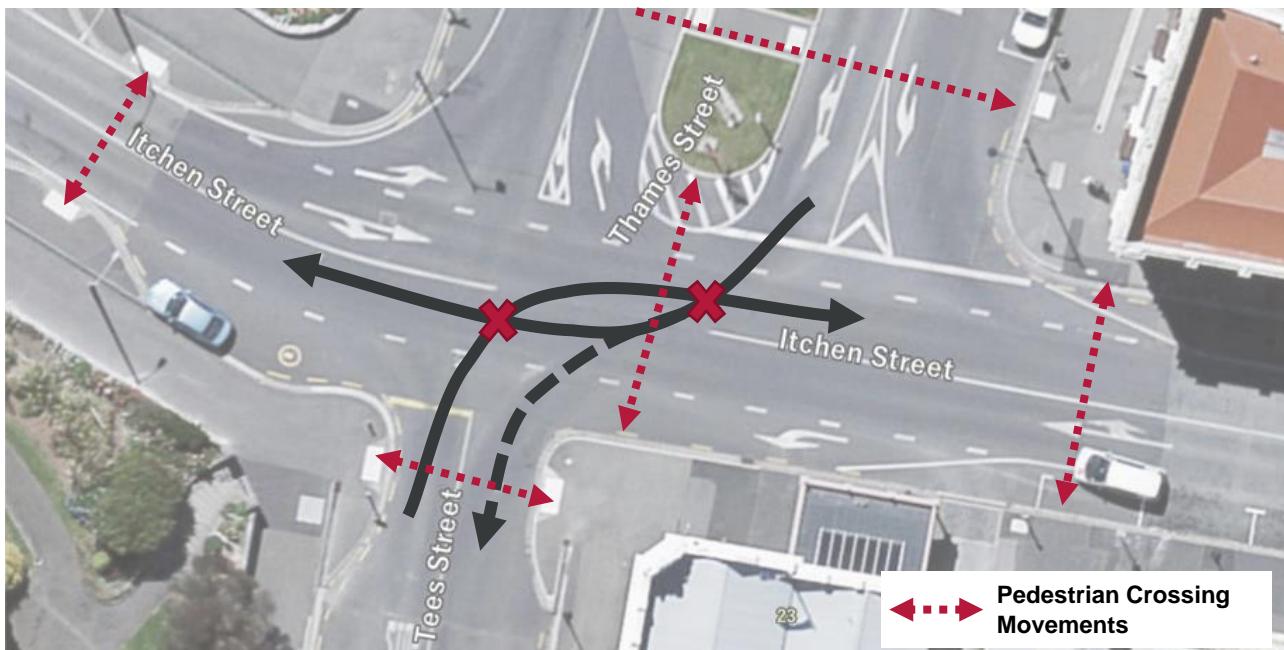


Figure 3.9 Thames/Itchen/Tees - Existing Intersection

Proposed cross section changes on Lower Thames Street, as set out in Section 3.2, provide an opportunity for simplification of this intersection and better connectivity between Tees Street and Thames Street. This would also further support development currently occurring on Tees Street. At a concept level, **Figure 3.10** illustrates how changes to Lower Thames Street could enable a simplified intersection.

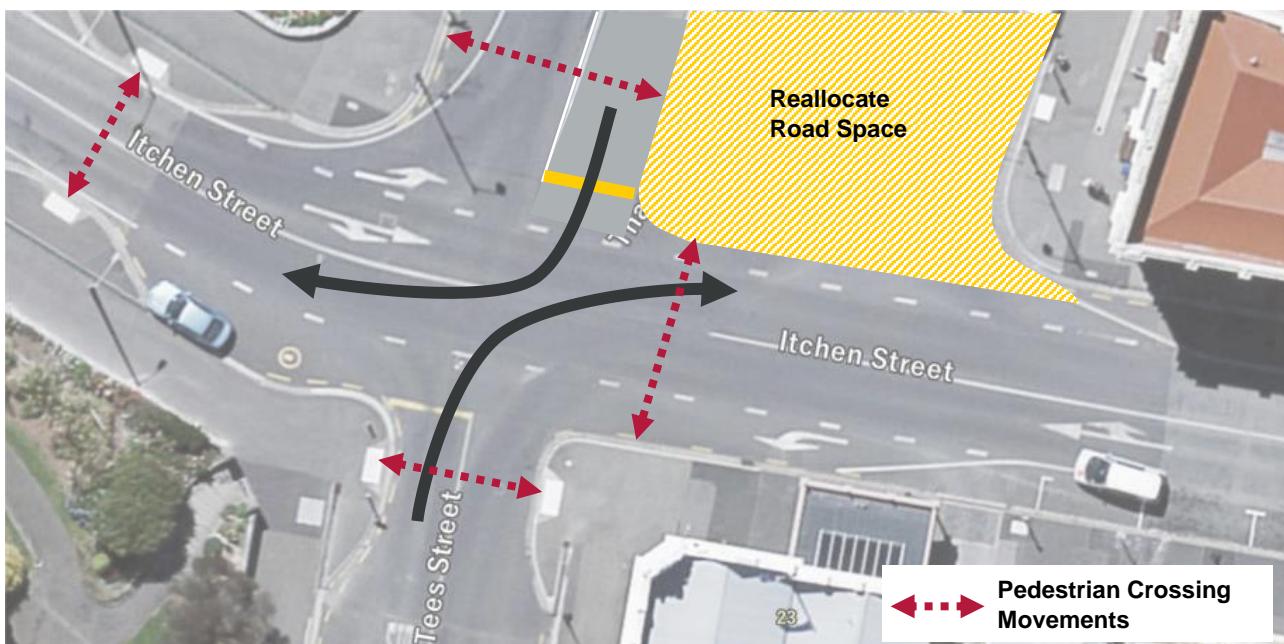


Figure 3.10 Thames/Itchen/Tees - Suggested Intersection Layout

Further design consideration of this intersection is required once the vision for Lower Thames Street and Itchen Street is agreed. This intersection could also be designed as a 'gateway' to the town centre and harbour area.

3.4 Itchen Street

Itchen Street bridges the gap between the town centre and the harbour area and presents a significant opportunity to encourage visitors to travel between the two destinations. Itchen Street is also part of the Alps to Ocean cycle trail, however the route is not obvious along this section. Currently the carriageway on Itchen Street is very wide, making the street difficult to cross and resulting in narrow footpaths in some areas.



Figure 3.11 Itchen Street view looking east

There is an opportunity to re-allocate space on Itchen Street to pedestrians and retain existing parking and traffic lanes in each direction, see **Figure 3.13**. The additional space could be used to provide seating space, introduce street trees/landscaping and potentially provide space for outdoor dining. More space for pedestrians will increase the attractiveness of Itchen Street as a place to walk, encouraging this as a route to the town centre and a place for people to enjoy the heritage buildings and viewshafts.

The re-allocation of space on Itchen Street shifts the focus of the environment back to a more even balance between place and movement. The intent of this cross-section is to maintain access for vehicles, however the speed at which vehicles can travel will be balanced against the needs of pedestrians crossing the street and generally enjoying the space. It is anticipated that some vehicles will choose to re-route along Tees and Wansbeck Street, reducing traffic volumes on Itchen Street, which are currently only c.300 per hour in the peak.

In addition to the narrowed cross section a mid-block raised platform crossing facility is also recommended near the Steam and Rail station. This crossing facility would encourage pedestrians to cross in a less complex location, away from the intersections at Thames Street and Humber Street.

In order to support the Alps to Ocean route and cycling more generally it is recommended the sharrows markings are used in the traffic lanes on Itchen Street. Sharrows indicate that cyclists should share the lane and warn vehicles of their presence. It is considered appropriate to facilitate cycling in the lane on Itchen Street due to the proposed low speed environment, lower traffic volumes and relatively short length of this segment. In order to aid legibility of the Alps to Ocean route the A2O symbol could also be interspersed with sharrows markings on the carriageway.

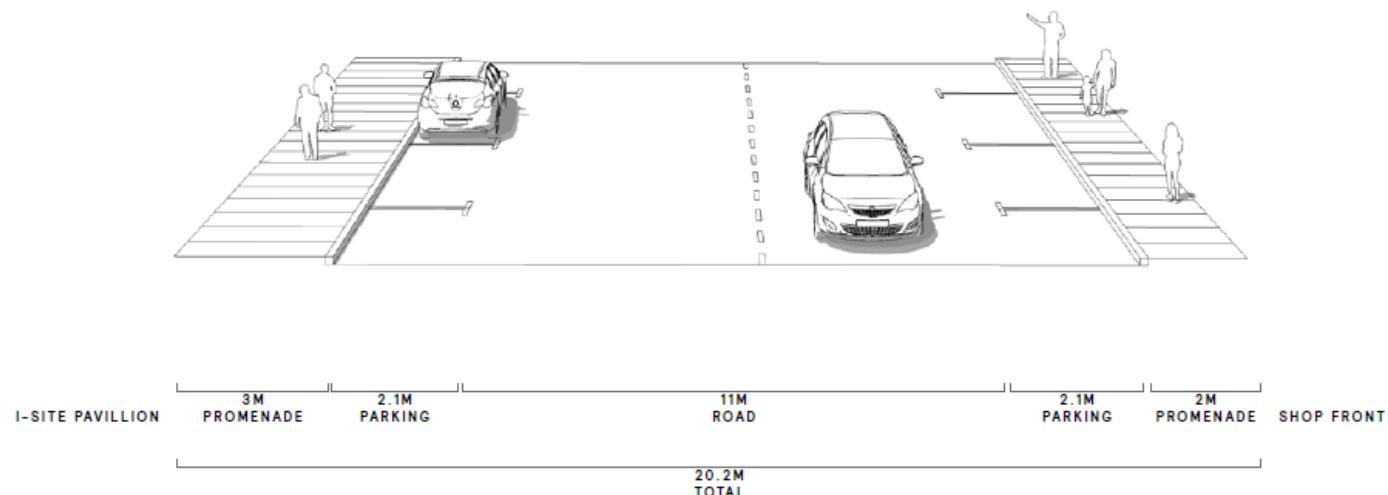


Figure 3.12 Itchen Street - Existing Cross Section

Our Ref:
Oamaru Town Centre to
Harbour Connect
Experience v2.0

Issue Date:
19 November 2019

OAMARU HARBOUR
CONCEPT DESIGN
TYPICAL SECTION BB - ITCHEN STREET

Proposed

50% 50%

Movement / Place

LAND
LAB

Itchen Street is upgraded with wider promenades, new planting, new street furniture and new lighting. The Southern side of Itchen street now has more opportunity for pedestrian occupation to maximise its South facing location and sunlight.

Cross Section -

- Arrival
- Behaviour Change
- Connectivity
- Place

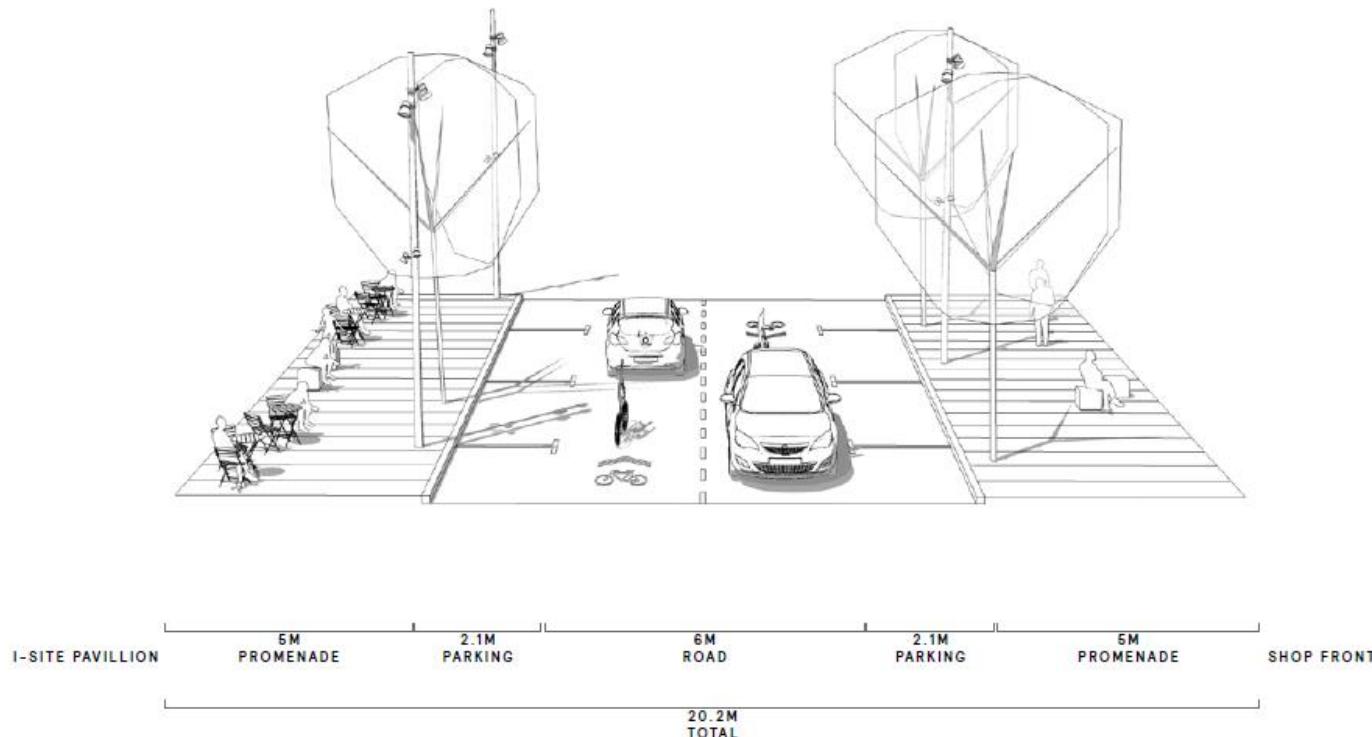


Figure 3.13 Itchen Street - Proposed Cross Section

Our Ref:
Oamaru Town Centre to
Harbour Connect
Experience v2.0

Issue Date:
19 November 2019

LAND
LAB

3.5 Itchen/ Tyne/ Humber intersection

The Itchen/ Humber/ Tyne intersection is currently a complex environment and is difficult to cross for pedestrians. The current layout includes the following features:

- Itchen Street approach very wide and therefore difficult to cross
- No crossing facilities on Humber Street approach due to space constraints adjacent to railway level crossing
- Level crossing on Humber Street approach introduces complexity, however railway is used infrequently - only on Sundays by Oamaru Steam and Rail
- Vertical alignment on Humber Street approach reduces sight distance
- Emulsion Lane arm is in-only from intersection and is a low volume street
- Tyne Street approach has existing raised platform for pedestrians
- Humber and Tyne Street through the intersection are relatively narrow (6m)
- Humber and Tyne Street serve an important movement function for local trips, balanced against the importance of Tyne Street as the harbour area frontage road.

The existing Itchen/ Humber/ Tyne intersection layout is shown in **Figure 3.14**.

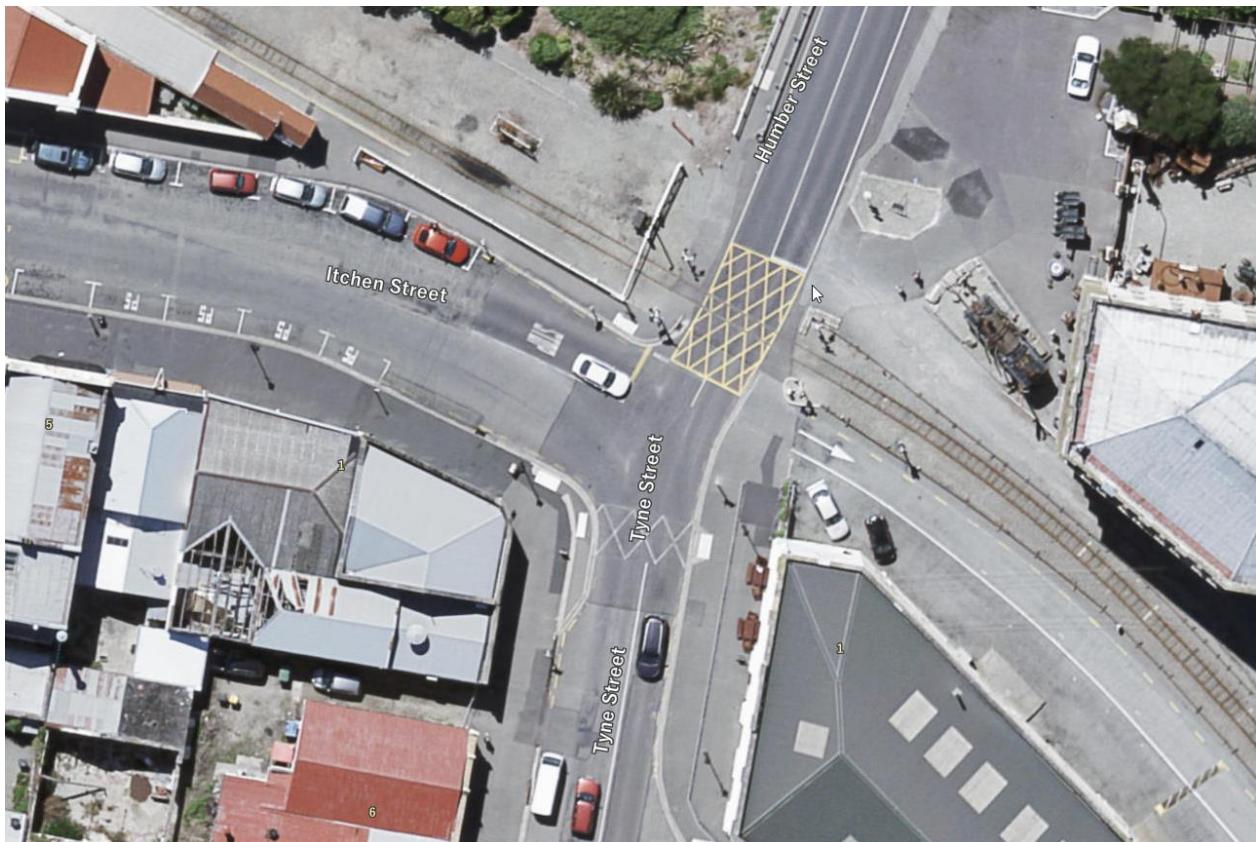


Figure 3.14 Itchen/Tyne/Humber Existing Intersection

Many options to enhance the Itchen/ Humber/ Tyne intersection were considered at a workshop in September 2019, see **Table 3.1** and Appendix A for further detail.

Table 3.1 Itchen/Tyne/Humber Intersection options considered

Option		Comments
1	Flush paving of intersection	<p>Retains existing intersection layout but incorporating different materials/paving to highlight gateway function of intersection and create sense of cars needing to behave differently and be aware of pedestrians. Textured paving recommended on Humber and Itchen approaches to reduce vehicle speeds.</p> <p>No recommended kerb realignment, therefore issues with current layout remain. Lowest impact upgrade, therefore minimal improvement to intersection operation anticipated.</p>
2	Raised intersection	<p>Proposal to raise entire intersection to reinforce gateway function and slow vehicle speeds. Requires realignment of Emulsion Lane if railway level crossing is retained. Option also includes narrowing Itchen Street approach to reduce crossing distance and further reduce vehicle speeds. Also provides opportunity to incorporate different materials/paving.</p> <p>Existing raised platform on Tyne Street leg means many vehicles through this intersection are subject to vertical deflection in the current situation.</p>
3	Mini Roundabout	<p>Due to the coach turning movements out of Itchen Street a roundabout at this intersection would need to be fully mountable. A fully mountable, mini roundabout in this location would not achieve the desired speed reduction for traffic along Humber/Tyne Street and therefore would have minimal impact of the function of the intersection. Due to the layout of the approaches it is difficult to achieve any significant deflection with a roundabout in this location.</p> <p>A roundabout in this location would require the removal of the railway level crossing.</p>
4	Restricted Turning Movements	<p>Restricting turning movements was considered as a mechanism for reducing flows on Itchen Street and therefore reducing the complexity of the intersection. However restricting turning movements in this location would restrict the functioning of Itchen Street as a key route to the Harbour and may impact on sharing benefits and visitors between the harbour and the town centre.</p>

Preferred intersection design

The preferred option is a raised intersection (Option 2) as set out in the following images and text. A raised intersection is also used in Oamaru as a gateway treatment at the Thames/Coquet Street intersection, where vehicles exit SH1 into lower Thames Street. Intersection options including and excluding the current railway level crossing are presented in this report (Option 2A and Option 2B).

Both Option 2A and Option 2B narrow the carriageway on the Itchen Street and Tyne Street approaches to the intersection, and include ramps on all approaches. A raised intersection would reduce vehicle speeds and improve pedestrian crossing facilities at the intersection. Emulsion Lane, to the east of the intersection, would be formed as a vehicle crossing to simplify the intersection to a T-intersection. Kerb extensions are proposed on Itchen Street to reduce crossing distances, Ultimately kerbs will need to tie into the agreed cross sections on Itchen and Tyne Street. The intersection is designed to ensure that 13.5m tourist coaches can turn left and right on to Humber and Tyne Street respectively. Coaches would be required to use the entire carriageway width when turning left out on to Humber Street, but this is considered acceptable as this is likely occurring in the existing layout. Option 2A assumes the railway line will remain at its current location, see **Figure 3.15**.

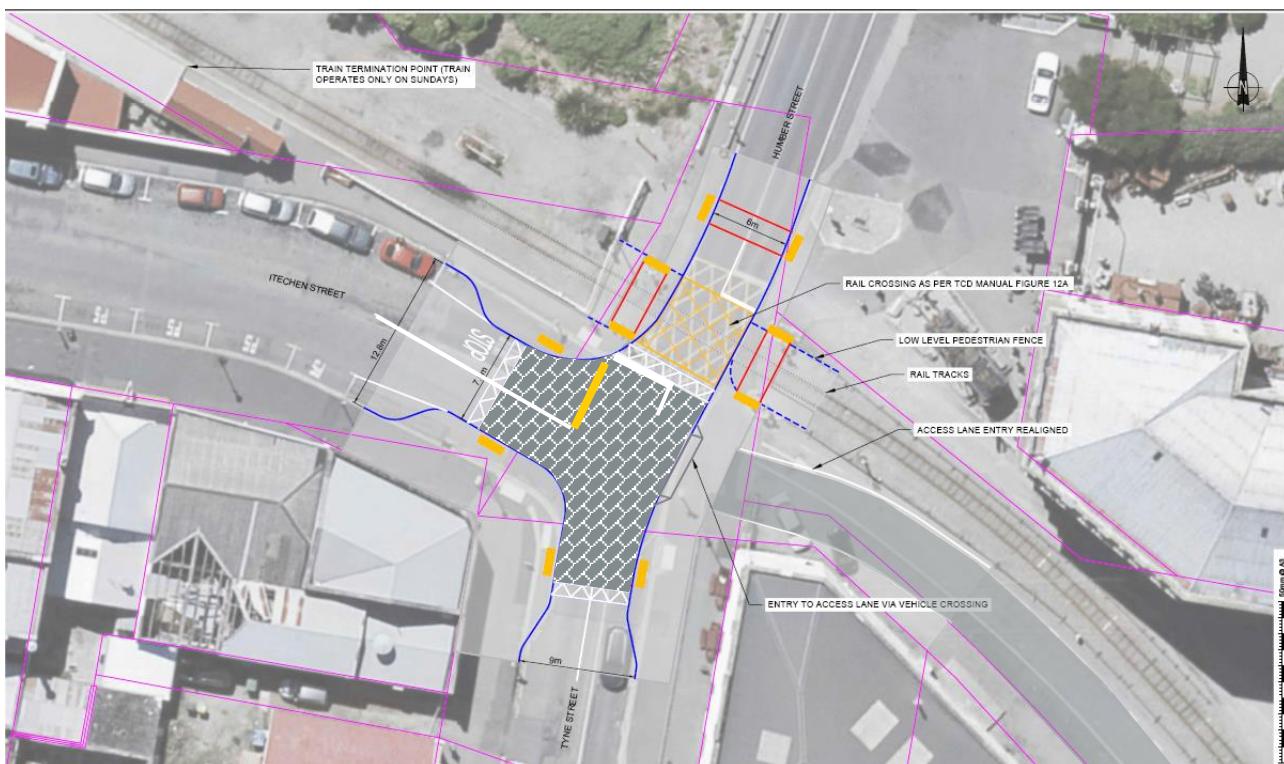


Figure 3.15 Itchen/Tyne/Humber - Raised Intersection Design (Option 2A)

Option 2B requires the relocation of the railway station to the east side of the intersection in order to remove the railway level crossing in Humber Street, see **Figure 3.16**. The level crossing is discussed further at the end of this section.



Figure 3.16 Itchen/Tyne/Humber - Railway Removed (Option 2B)

Overall, both options free up space outside of the carriageway for footpath and landscaping to further reinforce this intersection as a safe and legible location for pedestrians to cross. Further investigation and consultation is required before a final decision on whether or not to retain the railway level crossing is made.

Railway level crossing

The location of the level crossing on Humber Street increases the complexity of the intersection, however this activity only operates on Sundays. The preferred intersection layout, incorporating a raised intersection is achievable in both scenarios, with and without the railway in its current location. The main disbenefit of retaining the level crossing is the location of the pedestrian crossing point on Humber Street, further from the intersection in Option 2A than Option 2B. The developed design should consider surfacing for mobility and vision impaired pedestrians across the level crossing. Note that the proposed changes in Itchen Street and the intersection are designed to encourage more pedestrians to cross to the south side of Itchen Street away from the level crossing, this may further improve the pedestrian experience in this area.

It is understood that when the railway is in operation, delays are imposed to traffic on Humber Street and at the Itchen/Humber/Tyne intersection. It is also understood that part of this delay is due to trains stopping across the road and may be able to be reduced through working with Steam and Rail on this practice. It is anticipated that delays to traffic can be managed to a satisfactory level, particularly due to the operation of the railway on a single day per week. While there are some disbenefits associated with the level crossing, it is noted that the transport benefits of relocating Steam and Rail's Harbourside Station and removing the level crossing may not be sufficient to justify the cost of doing so.

It is understood that should the level crossing be removed, Harbourside Station would be relocated to the east of Humber Street on Emulsion Lane. It should be noted that this relocation would remove a point of interest and congregation from Itchen Street, further separating the harbour activities from the town centre. This could result in outcomes that are inconsistent with the objectives of this study, in particular: *Connecting the town centre and harbour, ensuring the benefits are distributed.*

Note that the operation of the railway has not been observed in developing this report, conclusions in this section are drawn from information provided by Waitaki District Council officers.

3.6 Tyne Street

Tyne Street provides the last link in the connection between the town centre and the harbour area. Tyne Street between Itchen Street and Harbour Street is currently a key pedestrian connection and will remain as such. Further south along Tyne Street the presence of the harbour and presence of retail businesses is not reflected in the street design. There is an opportunity to develop this section of Tyne Street into part of the harbour area, to give visitors and locals a sense of travelling through the harbour area, rather than past.

Tyne Street, running north into Humber Street has a movement function as an important local through route, providing access to the light industrial activities on Humber Street. It is important that any investment in Tyne Street allows the functioning of this local through route to be maintained and balanced against the place function in the immediate harbour area.



Figure 3.17 Tyne Street view looking south

The proposed cross section for Tyne Street maintains the carriageway width currently provided at the northern end of Tyne Street but reallocates footpath space to enable a wider footpath on the eastern side of Tyne Street, adjacent to the harbour. Street trees and lighting are proposed to increase the amenity of the space and provide visual narrowing, reducing the speed environment. Overall, the movement function of the road is slightly reduced to increase the place function as part of the wider harbour area, however this link will still function as a key local route.

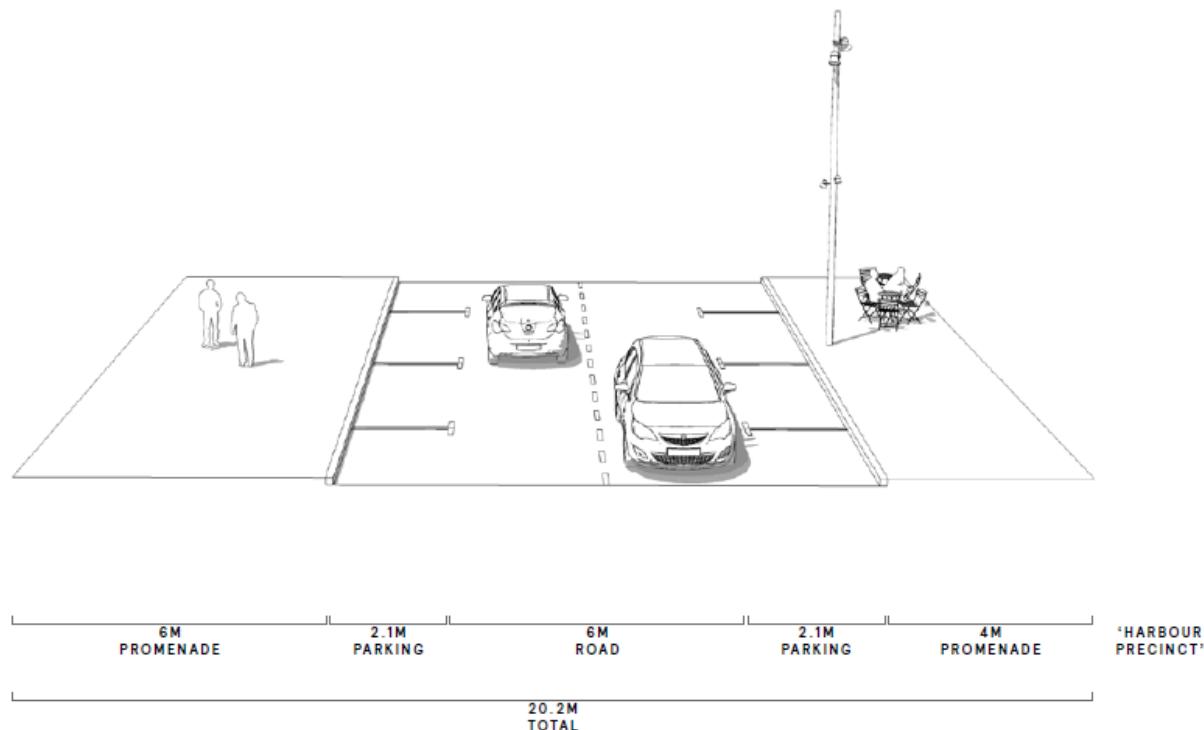


Figure 3.18 Tyne Street - Existing Cross-Section

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Tyne street is upgraded with a wider promenade on the west side to allow for more occupation on both sides and priority of pedestrian movement. New planting, new street furniture and new lighting are also added.

Cross Section

- Arrival
- Catalyst
- Connectivity

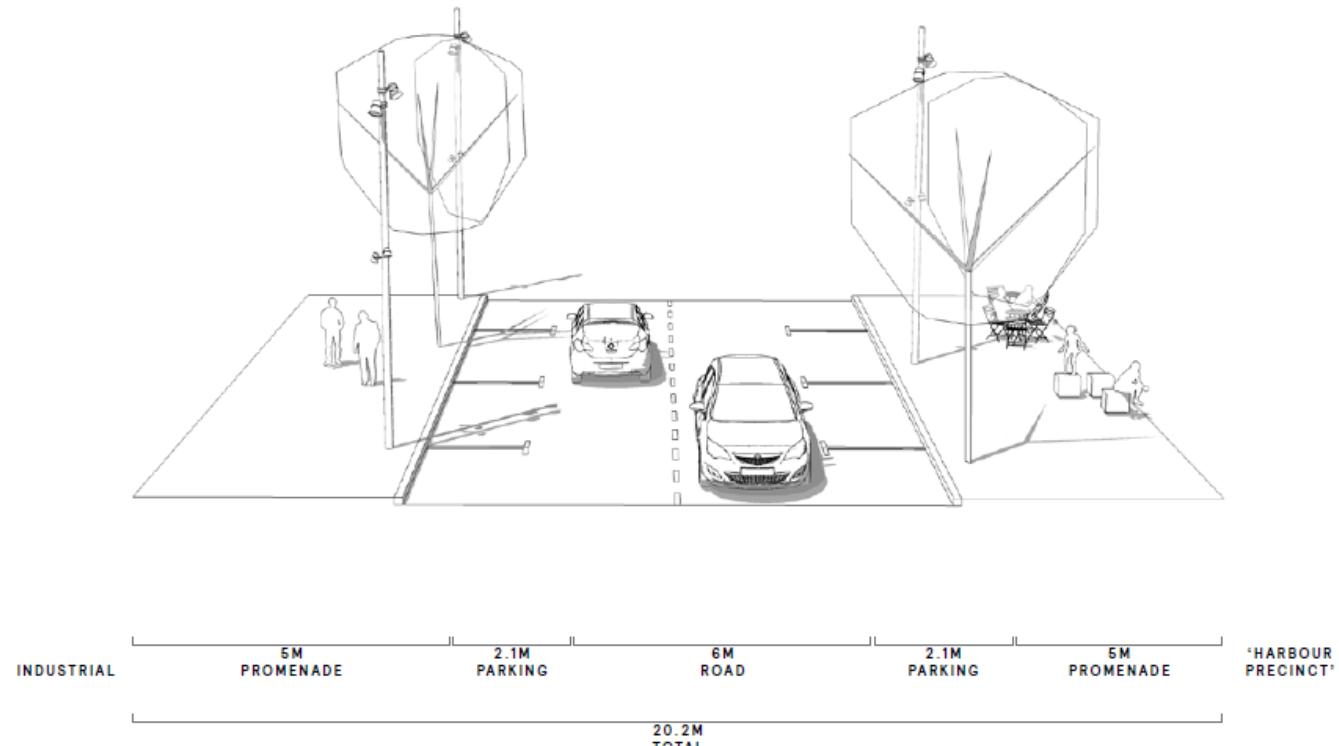


Figure 3.19 Tyne Street - Proposed Cross-Section

3.7 Priorities for street and intersection upgrades

This section suggests a priority order for investment in the streets and intersections that provide a connection between the town centre and harbour area. Investment in Emulsion Lane and the Harbour Street Extension have also been considered as part of the wider study, these are not currently part of the key movement network between the town centre and harbour area, and therefore have not been prioritised in this section.



Figure 3.20 Harbour-town centre road corridor connection upgrade areas

Table 3.2 sets out the proposed priority order for these upgrades based on considerations against the objectives in section 1. Wider considerations such as the existing renewals programme are not considered in this prioritisation and may impact the order of implementation where there are opportunities to 'dig once' etc.

As discussed in Section 2, gateway/threshold treatments are also recommended at the Itchen/SH1 intersection, eastern end of Wansbeck Street and Waterfront Road/Tyne Street intersection to assist with vehicle wayfinding between SH1 and the town centre and harbour area. These upgrades are not considered in detail in this report.

Table 3.2 Intersection and street investment prioritisation

Priority	Location	Town centre/ harbour awareness and attractiveness	Distribution of benefits between town centre and harbour	Local accessibility and functionality	Unique, memorable, authentic experience	Further comments
1	Itchen/ Humber/ Tyne intersection and Tyne Street between Itchen and Harbour Street	Ensuring an attractive pedestrian environment will assist with encouraging visitors to spend more time in Oamaru	This intersection is a key point in the network for travel between the town centre and harbour. An upgrade that makes travel through this intersection easier for pedestrians will assist with attracting trips between the two destinations.	This intersection is often raised as an issue by locals. Improved functionality here will have wider benefits than supporting the harbour masterplan.	Improvement of this intersection provides an opportunity to improve the visitor experience in the area.	Overall this upgrade is the first priority due to the prominence of the intersection as an arrival point to the harbour area and its importance in the network functionality for local trips.
2	Itchen Street	The key link between the town centre and harbour areas, this section provides a significant opportunity to raise awareness of the town centre for harbour visitors	The key link between the town centre and harbour areas, this section provides the greatest opportunity to create interest and attract pedestrians between the two areas	Current proposals reduce the movement function of this link and therefore may result on locals re-routing across the network for their day-to-day trips	The width of Itchen Street and the viewshafts provide an opportunity to create a memorable and enjoyable experience in this location	Upgrading Itchen Street has real potential to encourage harbour visitors to visit the town centre through creating interest that will attract visitors to this area. This will assist with distributing benefits across the two areas.
3	Thames Street and Thames/ Tees/ Itchen intersection	Creating interest at this end of Thames Street is likely to attract more visitors to the town centre and assists with creating a gateway	This section provides an opportunity to create interest and attract pedestrians into Thames Street and the town centre. Creating a gateway at this location will provide a sense of arrival.	Will simplify complex intersection, increasing ease of use for locals and visitors. Removal of traffic lanes on Thames Street may have a perception of some impact on through movement, however low traffic volumes mean functionality impact will be minimal	Width of Thames Street creates an opportunity to do something unique in this location that adds real value to the town centre.	Upgrading Thames Street provides an opportunity to increase footfall and encourage people to dwell on Thames Street. This could be very beneficial to local businesses. Alterations to the lane configuration on Thames Street are required to enable the simplification of the intersection.
4	Tyne Street	Upgrading Tyne Street will increase awareness of the harbour for passers-by on this street.	Tyne Street is slightly further from the town centre. However, upgrades on this street will likely benefit retail business in this area	Current proposals reduce the movement function of this link and therefore may require locals to travel more slowly through this section	Upgrading Tyne Street would allow the harbour experience to be extended into this street extending the visitor experience	Upgrading Tyne Street has been prioritised as a longer term investment due to being slightly further from the town centre. However an upgrade in this location should consider the timing of the wider harbour development and may need to be accelerated to match this.

Key	High impact	Medium Impact	Low impact	No/Negative impact
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4. Interim opportunities – tactical urbanism

In order to trial more significant infrastructure changes, or make iterative improvements, a category of interventions termed ‘tactical urbanism’ are becoming more popular in New Zealand and globally. The NZ Transport agency is supporting tactical urbanism through their recently released ‘Innovating Streets for People’ guidance, see: <https://www.nzta.govt.nz/roads-and-rail/innovating-streets>. These temporary interventions can allow delivering change to an area quickly and at low cost. They are also a good way to test improvements, gather feedback from users, and make adjustments before taking a decision on whether to make the changes permanent or not.

In Oamaru, the key harbour-town centre connections are prime candidates to trial reallocation of road space and temporary landscaping. Examples of tactical urbanism are provided on the following pages to demonstrate the types of interventions that could be considered for Oamaru.



Transitional City, Christchurch

Following the Canterbury earthquakes many businesses moved out of the Christchurch city centre and very few people were visiting. In order to attract more people back into the city centre ahead of the rebuild, Christchurch City Council invested in interim measures to create interest.



Top: Traffic sheep (plastic water-filled ‘barriers’) used to stop cars parking inappropriately across pedestrian areas.

Left: Painted treatment along Colombo Street incorporates planting and narrows road to slow cars.

Right: Oversized furniture introduces a point of interest and encourages people to stop and enjoy this quirky feature.



High Street, Auckland

High Street is a busy shopping street and pedestrian route that previously did not provide sufficient footpath width for pedestrians. An interim change, implemented in October 2019, provides a semi-permanent footpath widening on one side and includes cycle parking and street planting.

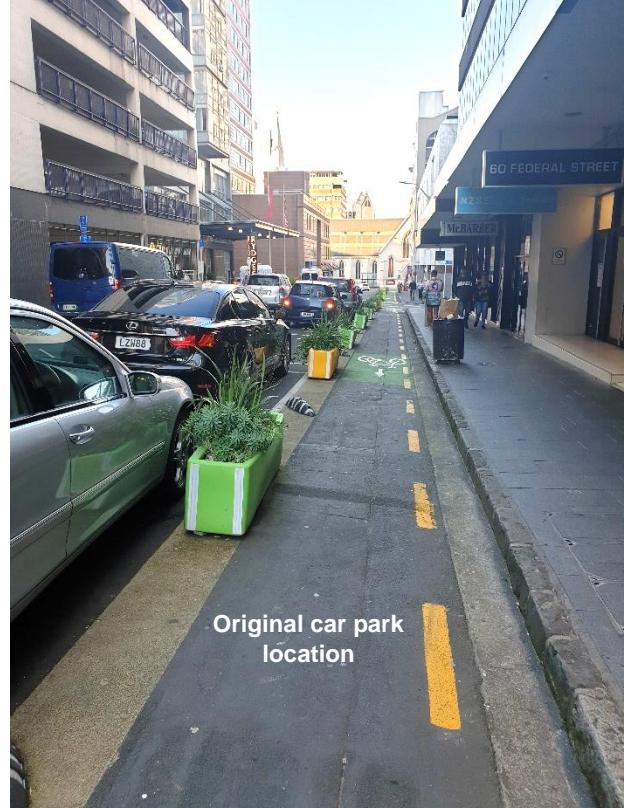


Above: widened footpath creates more space for pedestrians.

Left: Painted dot treatment at a confusing, difficult to cross intersection.

Centre: Temporary cycle parking and planting.

Other examples



Top: Plastic planter boxes used to create contra-flow cycle lane on Federal St, Auckland. Second example of the use of painted dots at difficult intersection

Left: Painted treatment and flexi-posts to reduce kerb radii and crossing distances applied in the US.

Right: Car parking relocated further out from kerb to create space for contra-flow cycleway on Federal St, Auckland.

Oamaru interim infrastructure opportunities

Three locations have been identified as prime sites for testing the recommended infrastructure changes in Oamaru, see **Figure 4.1**:

- Lower Thames Street, incorporating a plaza at the southern end and enabling the trial of a new layout for Thames/Itchen/Tees intersection
- Itchen Street, testing a slow street/shared space design and Itchen/ Humber/ Tyne intersection layout
- Harbour plaza, testing the shared space proposal in this location

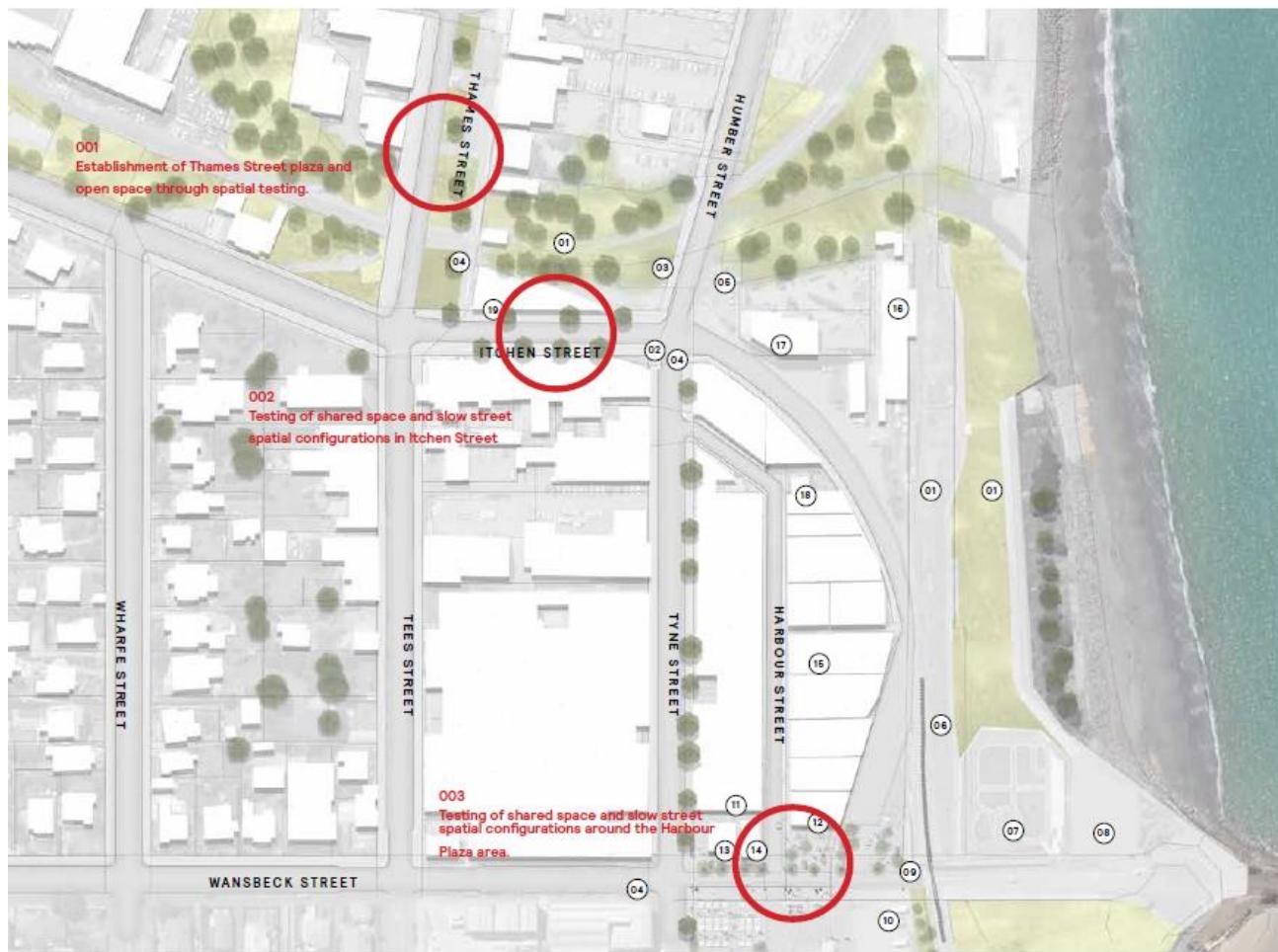


Figure 4.1 Tactical urbanism opportunities

These locations could incorporate materials and features similar to those examples set out earlier in this section and trial the proposed space reallocation/ cross-section for each area.

Trialling the proposed changes to road space in this way will also allow Council to gather feedback from the community and visitors on the functioning of the spaces and feed this into permanent designs for these areas.

5. Wayfinding

Wayfinding is how people find their way around an area, it is generally targeted at people who are unfamiliar with a place or specific location. A wayfinding system is proposed in this section to identify and connect places in and around the town centre and harbour area. It is understood that a form of wayfinding system for the Waitaki Whitestone Geopark is also being developed. Wayfinding systems can stimulate economic growth by drawing visitors to locations where local businesses are based. Wayfinding in this section is targeted at pedestrians, vehicle wayfinding should also be considered, building off the initial considerations in Section 2.

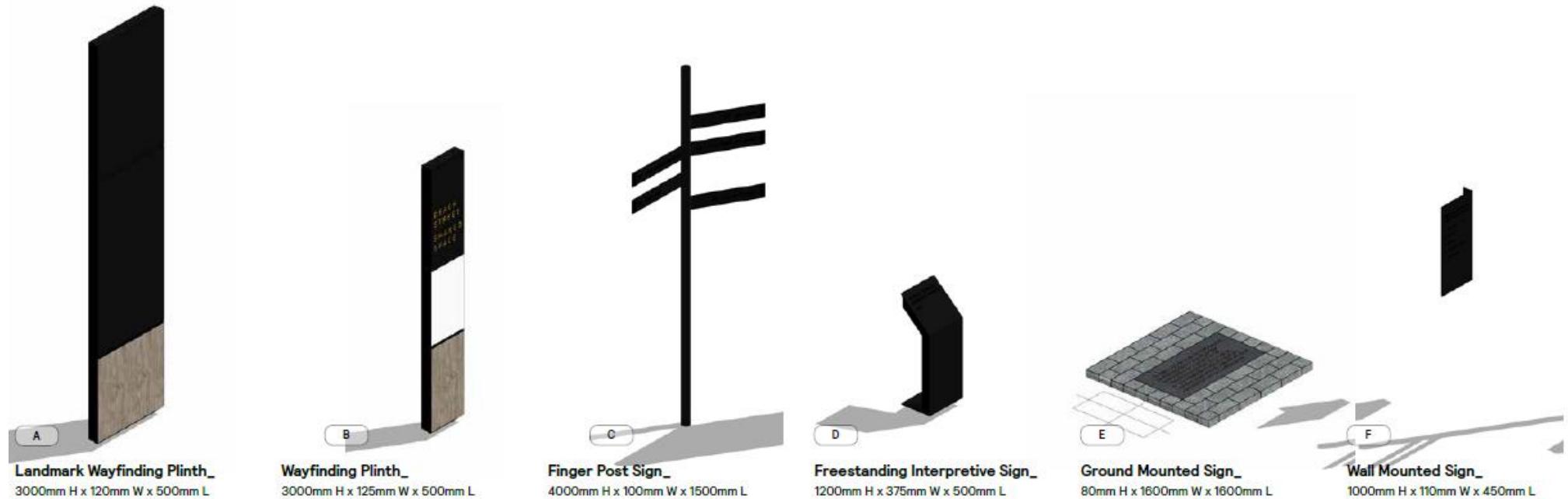
A good wayfinding system²:

- Is recognisable and consistent
- Is backed by plentiful on-the-ground research
- Is functional, accessible, seamless and interesting to a wide and varied audience
- Breaks complexity down into a series of connected stages and well-defined routes that are easy to navigate
- Has good placement. Signs stand out and can be seen from any angle or distance
- Enables anyone to reach their destination easily and quickly, by providing the cues and information on:
 - Where they are (position and context)
 - What transport modes and routes they can use to reach their destination
 - When they have reached their destination
- Declutters the urban landscape. It is simple and concise, providing just the right amount of information
- Provides maps and directories in public places to give a bird's eye view of the environment, for people to study in advance of their journey.

² Auckland Transport Design Manual <https://at.govt.nz/media/1979223/1-tdm-introduction-19-12-2018.pdf>

5.1 Signage

Signage information on the following pages sets out the suite of signs proposed for the town centre and connection between the town centre and harbour area and the look and feel of the area once these are implemented. The signage suite for both the town centre and harbour areas is based on metallic elements, reflecting the steampunk culture and working heritage of Oamaru and its harbour.



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LAND¹⁹
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OAMARU HARBOUR
CONCEPT DESIGN
TOWN CENTRE LOOK + FEEL

-

The following key precedents inform the wayfinding and interpretive signage elements for Oamaru town centre.

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-



The following key precedents inform the wayfinding and interpretive signage elements for Oamaru town centre.



5.2 Walking routes and possible wayfinding signage locations



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6. Parking

Appropriate parking supply and parking restrictions have a key role to play in ensuring the town centre and harbour are connected and accessible. Factors such as the types of users and their specific needs, the optimal use of public land at different times of the day and year, and ensuring the right parking types in the right locations are key to getting parking right for Oamaru. As set out in Section 3, the harbour is only a 5 minute walk from the southern end of the town centre. This presents an opportunity to share parking facilities across the two areas and support the objectives set out in Section 1, particularly the distribution of benefits across the two areas.

This section reviews current parking restrictions and occupancy, and proposes several changes to cater for the development of the harbour area.

6.1 Parking user types

In determining parking needs for the study area it is important to consider the breadth of user types and the differences in their needs. **Figure 6.1** sets out broad parking user type categories and provides an element of prioritisation for proximity to their destination, based on parking duration.



Figure 6.1 Types of parking users

The types of parking users identified in **Figure 6.1** are key to understanding appropriate parking supply and restrictions in different areas and at different times. Locals running errands know the area well and seek to complete their tasks quickly and hassle-free. At the opposite end of the spectrum, visitors with campervans are not in a hurry and have a different mindset: they are likely happy to park on the outskirts of the town centre and to walk to their local destinations. Managing parking restrictions and pricing is a simple way to prioritise between different user groups.

6.2 Parking Management Principles

Parking management seeks to establish an appropriate supply of parking for an area and then balance the demands for that parking through the application of management mechanisms in order to support a broad range of objectives. The following principles are important to inform the quantity, location, restrictions and pricing of parking for Oamaru.

Prioritisation and user needs

The most desirable parking spaces should be managed to favour high priority user. For example, accessible spaces for elderly and mobility impaired users should be located closest to key destinations. Then, parking uses should be prioritised according to the hierarchy presented in [Figure 6.1](#).

Target occupancy

On a normal day parking spaces should be 80-85% occupied during the peak. This means that it is still relatively easy to find a space, but land is not unnecessarily allocated to parking when it could be used for other activities. Peak demands e.g. for special events should be planned for separately. This may include permitting parking on grassed areas or directing visitors to park in the wider town centre car parks and walk or be shuttled to the harbour.

The optimal parking occupancy level of 80-85% avoids:

- drivers generating extra traffic when looking for a parking space;
- diverting public land away from other uses such as green space or economic activities.

Sharing of facilities

Parking facilities should serve multiple users and destinations. For example, people attending evening events can use car parks used by commuters during the day, recognising different activities have different peak times for parking demand.

In the context of the harbour masterplan it will also be a more efficient use of space if parking to serve future commercial development in the study area is grouped and shared across all activities in the harbour.

Facility quality and design

This includes convenience, comfort, aesthetics and security. In the harbour there is a lot of night time activity from the penguin colony, restaurants and bars. Adequate lighting of parking areas is important for security, as well as design that enables passive surveillance and avoids hidden areas.

Visitor types should also be considered as part of facility design: local visitors have different needs to tourists, including different vehicle types. In the context of Oamaru, it is important to consider campervan parking in the design of any new facilities.

Pricing

Oamaru town centre already uses pricing to manage parking. In ensuring parking in the harbour area is available to the highest priority users there may be a need to implement parking pricing in the harbour area. This should be considered in the context of all public parking in Oamaru to ensure management strategies are complementary and people are not attracted away from the town centre.

Time restrictions

A mix of time restrictions are appropriate in the study area to cater for all the user types described in [Figure 6.1](#) and to ensure that the longer term users do not prevent short term users from accessing their destination.

6.3 Parking occupancy

The balance between parking supply and demand was measured in 2011 through a parking occupancy survey. While significant time has passed since this survey, no major changes in the town centre have occurred that are anticipated to have significantly impacted parking behaviour. Recent and emerging developments including Mitre 10 Mega, Whitestone Cheese, Placemakers have managed their parking demand within District Plan rules and are not considered to have impacted overall availability of parking spaces. Therefore, the 2011 parking occupancy survey is considered a reasonable proxy for current parking occupancy levels. Town centre parking occupancy results are shown in [Figure 6.2](#).



Figure 6.2 Peak Hour Parking Occupancy (2011)

Against the optimum of 85% occupancy level, the 2011 parking occupancy results show that parking provision in the study area is sufficient on a normal day. The survey did not extend to the harbour area, however based on casual observations and discussions with Oamaru Blue Penguin Colony Ltd, it is understood that there are no issues accommodating current parking demand in the harbour area on a normal day. The only suggested improvement in the vicinity of the Penguin Colony is to formalise coach parking and possibly car parking in order to ensure that the space is used efficiently, and vehicle manoeuvring is appropriately accommodated.

During events and the peak of the tourist season it is understood that parking in the town centre and historic area can be over demanded. To accommodate these peaks it is recommended that temporary overflow sites are identified and utilised. Temporary overflow sites are likely to be existing grassed areas that can be used for parking, particularly during the summer period. This approach avoids the inefficient allocation of space to permanent parking that is unlikely to be well utilised.

With development of the harbour in the future parking demand may increase. Given relatively low parking occupancy in parts of the wider study area it is considered that current supply will be sufficient to accommodate the increase in demand. However, if the land around Scotts brewery, currently used for parking, is developed, further parking capacity may be required. Waitaki District Council are currently considering developing a new car park on Humber Street, an additional parking opportunity on Itchen Street has also been identified, see maps later in this section.

Overall it is recommended that parking occupancy is monitored as the harbour develops. Additional car parks should only be developed if surveys demonstrate they are required. Underutilised car parks are an inefficient user of valuable land in central Oamaru.

6.4 Parking restrictions

Existing restrictions

As set out in Section 6.2, parking restrictions and pricing are useful mechanisms to manage demand, turnover and parking location. Restrictions provide an opportunity to prioritise e.g. short term users running short errands who need to park outside their destination over commuters or long-stay tourists who can walk a short distance to their destination. Existing parking restrictions in the town centre and harbour area are shown in [Figure 6.3](#). Note that on-street parking, except pay and display, is excluded from [Figure 6.3](#). The map highlights that:

- All off street parking in and around the harbour is unrestricted
- Pay and display parking is currently allocated in the town centre only
- Car parks at the southern end of the town centre are accessible within a five minute walk from the harbour. This indicates that parking across the two areas should be considered together, particularly for visitors and longer stay parking.

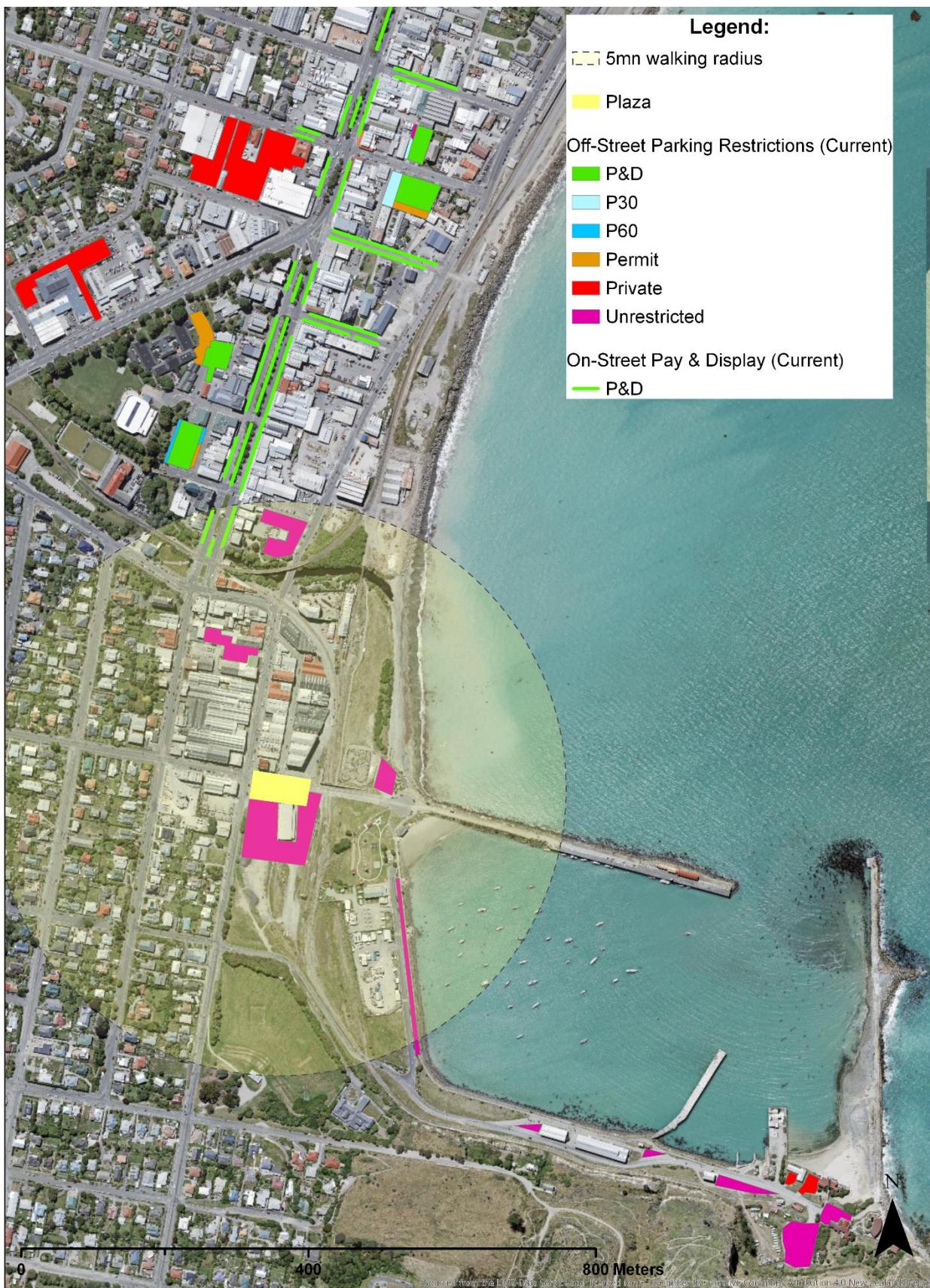


Figure 6.3 Existing Parking Restrictions

The imbalance in parking restrictions between the harbour and town centre areas (predominantly pay and display vs unrestricted) means visitors may be incentivised to park away from the town centre and only visit the harbour area. This is inconsistent with the objectives in Section 1 and presents a risk that new development or activities in the harbour area could impede the success of the town centre.

Proposed restrictions

This section considers how parking restrictions can be re-allocated to balance parking types and attractiveness across the town centre and harbour areas. Proposed restrictions are shown in **Figure 6.4**. Proposed restrictions are based on discussions at a workshop in September 2019. The key proposed changes include:

- Replacing some of the Pay & Display parking at the northern end of the study area (mainly off-street either side of Eden Street but also some on-street) with unrestricted or time restricted car parking. This is intended to facilitate unpaid access to Thames street for shoppers and commuters. The majority of parking on Thames Street is proposed to remain Pay & Display to ensure higher parking turnover, therefore ensuring spaces are available for higher priority, shorter term visitors. Based on the 2011 parking survey, pay and display parking on Thames Street is well utilised at peak times and therefore is working as a parking management mechanism.
- Introducing time restrictions to some off-street car parks within five minutes' walk of the plaza (one to become P&D and the one adjacent to the brewery to become time restricted) in order to encourage higher turnover and allow more people to use these areas, compared to the current situation where vehicles can be left all day.
- Designating temporary overflow car parks to cater for extra demand on special events for example. Two potential locations are suggested in this report.

Furthermore, it is understood that campervans are causing an issue for trees on Thames Street due to their large size. It is recommended that the potential to restrict this vehicle type from Thames Street is considered further and recommended campervan parking locations promoted.

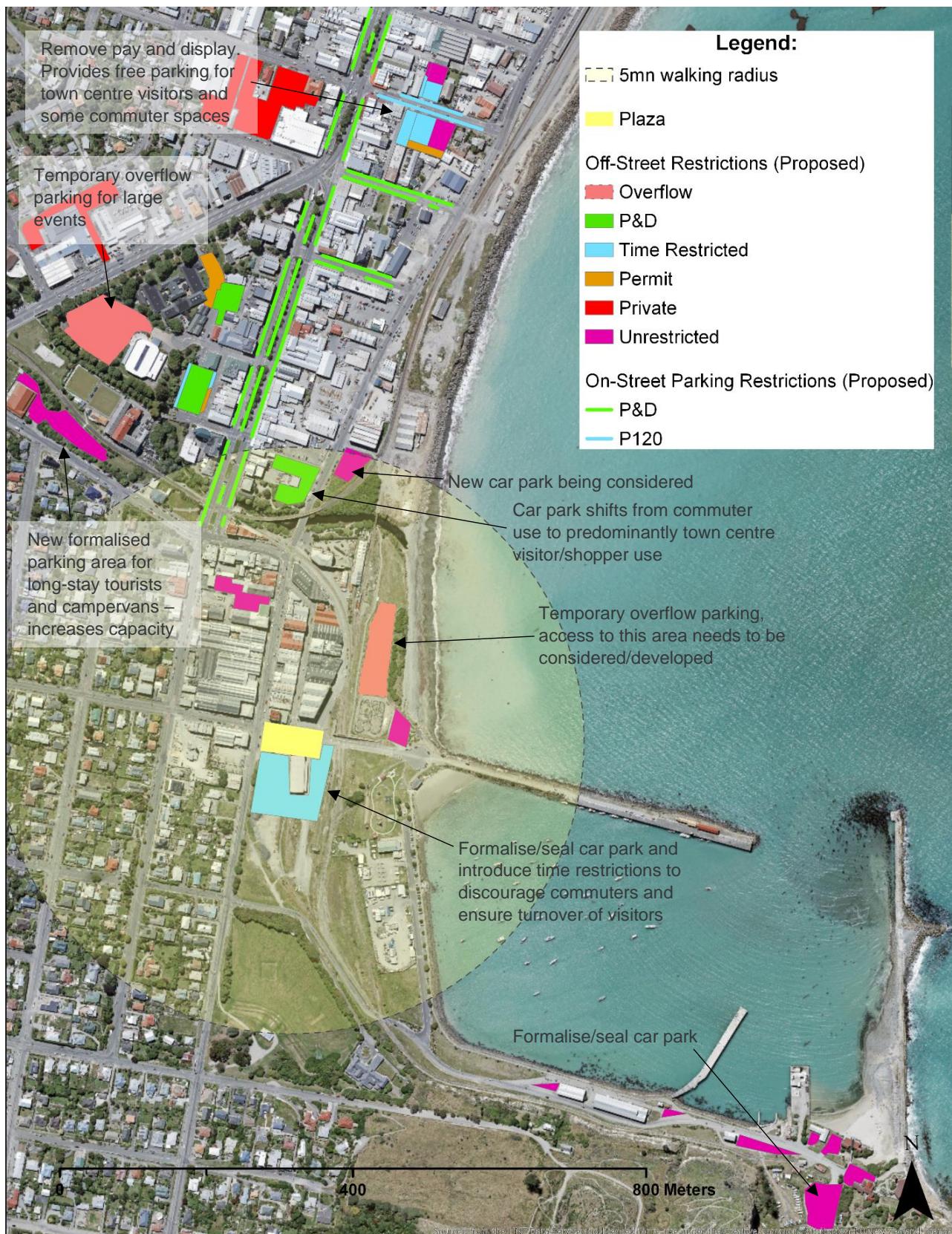


Figure 6.4 Proposed parking changes

Note that restrictions not shown on **Figure 6.4** are proposed to remain unchanged.

6.5 Cycle Parking

The harbour regeneration is an opportunity to look at cycle parking provision throughout the study area. Enhanced legibility of the Alps to Ocean cycle trail as suggested in [Figure 3.6](#) can go hand in hand with attractive cycle stands that encourage cyclists to stop and enjoy the town centre and harbour area.

Additionally, cycle stand design can help reinforce the character of the local area. [Figure 6.5](#) illustrates Victorian style cycle parking as an example, this could increase the sense of place and announce the Victorian precinct from as far as Lower Thames Street.



Figure 6.5 Penny Farthing Cycle Stands

For practical purposes the stands need to be distributed at locations in the study area where they will be most used (i.e. close to key destinations), not impede pedestrian movement, and benefit from the passive surveillance of pedestrian footfall.

7. Action plan

An overview of actions to implement the recommendations in this report is shown in **Figure 7.1**, many of the actions are interrelated, this is shown by the arrows. Actions are prioritised by implementation timing, broadly categorised as short, medium and long term. Further detail on the actions within each category is provided in the following sections.

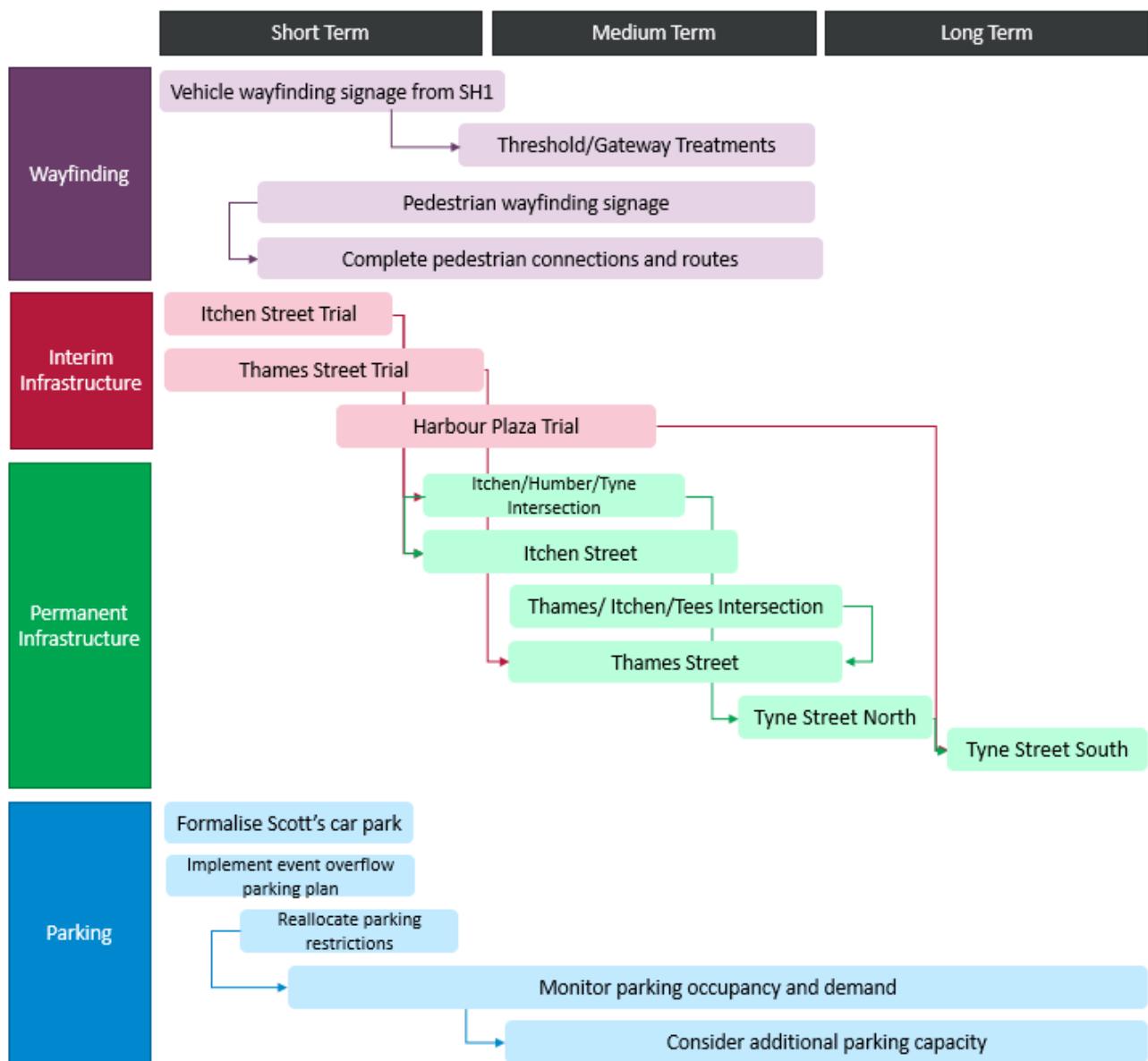


Figure 7.1 Proposed action plan overview

7.1 Wayfinding

Wayfinding is discussed in Section 2 and Section 5 in terms of vehicle routing from SH1 and pedestrian routes between the harbour and town centre respectively. There are four key implementation recommendations for wayfinding in order of priority are:

- 1) Upgrade tourist direction signs on SH1 and implement further vehicle direction signage between SH1 and the harbour and town centre.
- 2) Implement pedestrian wayfinding signage across the study area. This may be a staged implementation, e.g. key directional plinths could be implemented ahead of interpretive signs. However a comprehensive plan for wayfinding across the study area as a whole should be agreed before implementing any wayfinding.
- 3) Complete off-road pedestrian connections along waterfront, to parking areas and between town centre and harbour area. These should be completed in parallel with implementing wayfinding signage and will create interesting loops for visitors to the study area to explore and enjoy.
- 4) Threshold/gateway treatments at key intersections to create a sense of arrival and provide further cues to drivers on the route they should take and appropriate driving behaviour. Recommended gateway locations are: the Itchen/SH1 intersection, eastern end of Wansbeck Street and Waterfront Road/Tyne Street intersection in addition to other intersections considered in the 'permanent infrastructure' category.

7.2 Interim and permanent infrastructure

Interim and permanent infrastructure focuses solely on the road corridor connection between the town centre and harbour area, as discussed in Section 3 and Section 4. Permanent infrastructure upgrades are prioritised in **Table 3.2** in the following order:

- 1) Itchen/ Humber/ Tyne intersection and Tyne Street between Itchen and Harbour Street. Overall this upgrade is the first priority due to the prominence of the intersection as an arrival point to the harbour area and its importance in the network functionality for local trips.
- 2) Itchen Street. Upgrading Itchen Street has real potential to encourage harbour visitors to visit the town centre through creating interest that will attract visitors to this area. This will assist with distributing benefits across the two areas.
- 3) Lower Thames Street and Thames/ Tees/ Itchen intersection. Upgrading Lower Thames Street provides an opportunity to increase footfall and encourage people to dwell on Thames Street. This could be very beneficial to local businesses. Alterations to the lane configuration on Lower Thames Street are required to enable the simplification of the intersection.
- 4) Tyne Street. Upgrading Tyne Street has been prioritised as a longer term investment due to being slightly further from the town centre. However an upgrade in this location should consider the timing of the wider harbour development and may need to be accelerated to match this. The northern section of Tyne Street forms a key link between Harbour Street and Itchen Street and is therefore prioritised for consideration slightly before the southern part of Tyne Street.

Trials of proposed road space reallocation and intersection layouts are proposed to precede the implementation of permanent infrastructure. Trialling the proposed changes to road space in this way will also allow Council to gather feedback from the community and visitors on the functioning of the spaces and feed this into permanent designs for these areas.

7.3 Parking

Based on the information in Section 6 the recommended actions associated with parking, in order of priority are:

- 1) Seal and mark car park at Scott's brewery and penguin colony. The car park at Scott's brewery, along with the trial of the harbour plaza once implemented, will also assist with accommodating market activities.
- 2) Formally designate temporary overflow car park sites and clarify which special events would trigger the activation of overflow sites. Note that appropriate traffic management will be in place to direct users to the overflow car parks and ensure they operate smoothly.

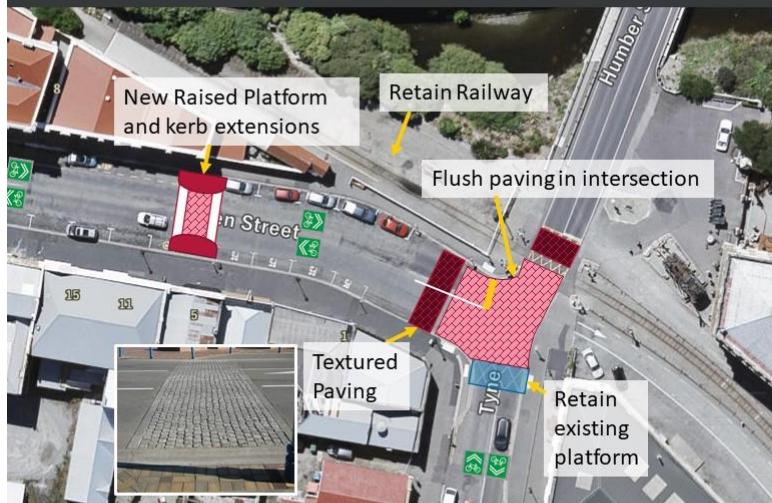
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- 3) Reallocate parking restrictions towards the proposed plaza and harbour area in order to rebalance restrictions across the study area, as per map of proposed parking restrictions ([Figure 6.4](#)).
 - 4) Restrict campervan/caravan parking on Lower Thames Street and promote appropriate large vehicle parking locations (included as part of reallocating parking restrictions in action plan).
 - 5) Monitor parking occupancy in the study area as the harbour develops and activities evolve, especially around the proposed plaza and the brewery.
 - 6) If justified by ongoing parking occupancy monitoring, supply replacement car parking to make up for the lost capacity at the plaza and brewery site as a result of masterplan implementation. A site has been identified on Itchen Street for this purpose.

Appendix A

Itchen/ Humber/ Tyne Intersection Concepts



Option 1 – Flush paving



Design Objective	Assessment
Improved Town Centre – Harbour connection	+ No restriction of vehicle movements + Sharrows delineate cycle route
Pedestrian focused environment	+ Encourages crossing Itchen Street further west + Improved crossing on Itchen Street - Narrow footpath remains - No improvement to crossing on north side of intersection
Safe operation for all modes	+ Slower environment in Itchen Street + Flush intersection paving highlights different environment for vehicles
In keeping with local character	+ Paving etc can reflect local character

abley

Option 2 – Raised intersection



Design Objective	Assessment
Improved Town Centre – Harbour connection	+ No restriction of vehicle movements + Sharrows delineate cycle route
Pedestrian focused environment	+ Crossing facilities on north side of intersection + Improved crossing on Itchen Street + North Itchen footpath widened
Safe operation for all modes	+ Slower environment on Itchen Street + Slows vehicles through intersection + May reduce traffic volumes through Itchen St
In keeping with local character	+ Paving etc can reflect local character

abley

Option 3 – Roundabout



Design Objective	Assessment
Improved Town Centre – Harbour connection	+ No restriction of vehicle movements + Sharrows delineate cycle route
Pedestrian focused environment	+ Crossing facilities on north side of intersection + Improved crossing on Itchen Street - Introduces new crossing for pedestrians over bitumen lane - Roundabouts can be difficult to navigate for pedestrians
Safe operation for all modes	+ Slower environment + Creates obvious gateway to area - Humber-Tyne movement likely to dominate, hard to align approaches to ensure deflection for southbound movement - Central roundabout island will need to be flush
In keeping with local character	+ Paving etc can reflect local character - Roundabout may be unsupported by Heritage NZ

Option 4 – Restricted Movements (left in/left out)



Design Objective	Assessment
Improved Town Centre – Harbour connection	- Left in/left out means Itchen Street cannot be key route between TC and harbour for vehicles or cyclists
Pedestrian focused environment	+ Improved crossing on Itchen Street (midblock platform and refuge at intersection) + North Itchen footpath widened
Safe operation for all modes	+ Slower environment on Itchen Street + May slow vehicles through intersection + May reduce traffic volumes through Itchen St
In keeping with local character	+ Paving etc can reflect local character

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