19 April 2023

Māpua Boat Ramp Trust c/o Davis Ogilvie & Partners Ltd PO Box 589 CHRISTCHURCH 8140

For the attention of: Gary Stevenson

via email: [gary@do.nz]

Gary

## Proposed Boat Ramp, Māpua Transportation Assessment

### Background

A proposal has been developed for a new boat ramp facility in Māpua.

The construction and operation of the boat ramp will generate potential effects, primarily in terms of vehicular activity, parking and pedestrian / cycle safety.

This document presents an assessment of these potential effects, together with a review of the proposal against the relevant requirements of the Tasman Resource Management Plan (**TRMP**).

This document forms part of an Assessment of Environmental Effects (**AEE**), in support of an application to the Tasman District Council (**TDC**) for the necessary consents.

### **Existing Situation**

### Location

The location of the application site is shown by Figure 1.

This is adjacent to the Māpua wharf area and approximately 570m south-east of the Māpua village centre.

### Road Characteristics

Photographs at **Annexure A** show the existing road environment in this area.

Tahi Street is a cul-de-sac, running for 500m from a roundabout with Aranui Road at its northern end to the Grossi Point recreational area. The alignment of Tahi Street is both straight and level, providing for good sightlines. Between the application site and Grossi Point, the road has residential frontages to both sides.

In the vicinity of the application site, Tahi Street has a legal width of 21.9m. This includes a 6.3m wide sealed carriageway (with no centre-line markings) and wide grassed berms to both sides with no kerb / channel. On the western side of the road, unrestricted parking spaces (approximately 44) are provided at right-angles to the carriageway with a gravelled footpath between these spaces and the fenceline.

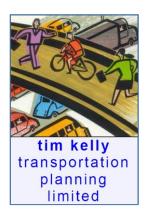




Figure 1: Site Location Plan (Source: Top of the South Mapping)

An off-road parking area is located on the eastern side of the road, with separate points of access and egress (each 5.8m wide). This provides unrestricted parking for 38 vehicles.

The Tahi Street / Aranui Road roundabout has single lane entries with a diameter of around 15m and a drive-over central island 7m in diameter. To either side of this roundabout further areas of parking are provided at right-angles to the road.

## Speed Environment

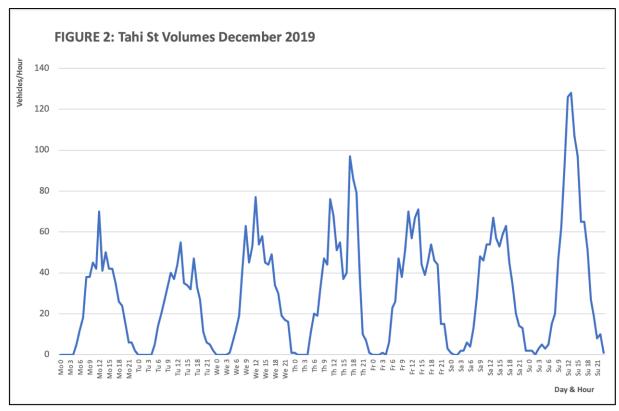
The applicable speed limit on this section of Tahi Street is 50 km/hr. The short length of the road means that actual speeds are generally low.

## Traffic Volumes – Tahi Street

TDC has supplied count information for the northern section of Tahi Street (approximately 50m from the Aranui Road intersection), for a week beginning 10 December 2019. This count is summarised by **Figure 2**.

Daily volumes average 711 vehicles/day but with significant variation and up to 960 vehicles/day on Sunday. Maximum hourly activity also occurs on Sunday, with nearly 130 vehicles/hour in the early afternoon period.

With Grossi Point being a popular recreational destination, the associated traffic activity can be expected to be higher during a summer period and at weekends. Levels of traffic activity



at other times of year are likely to be significantly lower. This count preceded the Covid-19 pandemic and so would not be affected by lock-downs, changes in tourist activity etc.

Even the highest recorded volumes are well within the capacity of a road of this type and congestion is not an issue in this area.

## Crash History

The crash history for this area has been obtained from the database maintained by Waka Kotahi – NZ Transport Agency for the period since January 2017.

There are no recorded incidents for this area.

By law, only those crashes involving personal injuries are required to be reported. Accordingly, it is possible that a number of other non-injury crashes may have occurred which have not been included in these records.

## Pedestrian & Cycle Activity

The close proximity of the site to the Māpua wharf, Grossi Point and Māpua village means that there is a reasonable level of pedestrian and cycle activity in this area. Aranui Road provides a continuous footpath on its northern side, while Tahi Street has no footpath to the south of the application site. Cyclists share the roadspace with vehicle movements.

## Proposal

The proposal is for:

- the construction and operation of a boat-ramp on the eastern side of Tahi Street;
- the construction and operation of a building for use by the Tamaha Sea Scouts (TSS) and the community;
- the removal of the existing public parking area on the eastern side of Tahi Street;
- the construction and operation of a new public parking area on the western side of

Tahi Street; and

• the construction of an access to the existing boat-trailer parking area on the western side of Tahi Street.

## Boat-Ramp

Vehicular access to the boat-ramp will be on the eastern side of Tahi Street, 115m from the Aranui Road intersection. The boat-ramp access will accommodate two-way vehicle movement with a width of 7.2m and will have a simple priority intersection with Tahi Street. The boat-ramp will be 144m in length with a width of 7.2m – 11.0m. This will include a turnaround area enabling vehicles with trailers to enter forwards, turn and then reverse towards the water. The ramp itself will enable two vehicles with boat-trailers at a time to access the water.

A barrier arm will control access to and prevent congestion within the turn-around area – this will be set well back (approximately 20m) from the Tahi Street road frontage to avoid any possibility of a vehicle with a trailer extending back into the road while waiting for the barrier to raise. At this stage, it is anticipated that the barrier will be operated by a card reader which will take payment for the use of the ramp facility (the detailed logistics of the payment process will be refined through the post-consent detailed design process). Such control mechanisms are in use at other boat-ramps (for example, Motueka).

An access into the parking area adjacent to the proposed building (described below) will be located adjacent to the security barrier. This will enable any drivers who have inadvertently entered the boat-ramp access and/or do not have the ability to gain access to the ramp to circulate through the parking area, avoiding any need to reverse back to the Tahi Street frontage.

## Tamaha Sea Scout / Community Building

The existing parking area on the eastern side of Tahi Street will be removed and replaced with a building having a floor area of approximately 800m<sup>2</sup> and with an expected capacity of approximately 60 persons.

This building will be leased to the TSS by the Māpua Boat Ramp Trust (**MBRT**). The TSS usage will be primarily for training, boat storage and occasional social events. A room within the building will be available for use by the wider community for meetings and other events.

Parking adjacent to the building will be provided for 11 vehicles (one of these spaces will be a reserved mobility space). These spaces are expected to be for short-term use and will be restricted to visitors associated with the building and/or boat-ramp. A two-way vehicle crossing providing access and egress for the parking area will be located on the northern side of the parking area, at the same location as the existing car-park access.

Cycle parking will be provided adjacent to the building.

## Parking

The proposal involves the removal of the existing public parking area on the eastern side of Tahi Street.

Two new areas of parking will be established on the western side of Tahi Street.

To the north, a parking area for cars will provide 45 spaces, of which three will be reserved for mobility vehicles. This will be accessed by means of a new two-way crossing 7.2m wide and

located 57m to the south of the Aranui Road roundabout. This will have an unsealed gravel surface.

Parking for boat-trailers and vehicles will be provided on a grassed area further to the south and accessed directly opposite the boat-ramp with a vehicle crossing 7.2m wide. This will provide parking for up to 78 vehicles with trailers. As above, this will be unsealed.

The formation of each of the parking area accesses described above will necessitate the removal of three existing parallel parking spaces adjacent to Tahi Street (six spaces in total).

As described above, 11 spaces will also be provided adjacent to the TSS / community building. This parking area will be sealed.

## Pedestrian Movements

The existing footpath located behind parked vehicles on the western side of Tahi Street will be retained (but will be crossed by two new vehicle crossings serving the parking areas described above).

A new section of footpath will be constructed adjacent to the boat-ramp turning area which will connect with the existing boardwalk in this area. A pedestrian crossing point will also be established across the boat-ramp at a point 85m from Tahi Street – this will encourage pedestrians associated with vehicles and boats and those walking along the foreshore to cross at a specific location.

## **Potential Effects**

## Scope

The potential transportation-related effects which may be associated with the proposal include:

- additional traffic activity both within the immediate area and through the wider Māpua village area;
- vehicular access points capacity and safety;
- parking provision adequacy, safety and convenience of use;
- pedestrian & cycle activity safety and convenience;
- servicing of the TSS/MBC building; and
- disability facilities parking and accessibility.

## Traffic Activity

Usage of the proposed boat-ramp facility will be highly variable by season, day of week and time of day. Further variability will arise as a result of weather, tide, sea and fishing conditions.

Estimates supplied by the MBRT suggest that during the fishing season (October – April), up to 60 boats would be expected to be launched on any day during a period between 6am and 1pm (a 'typical maximum'). Exceptionally, up to 100 boats may be launched associated with a specific event (an 'extreme maximum').

Many of these boats are currently being launched and retrieved at Grossi Point and so the associated vehicular activity is already occurring in this area (with a potential adverse effect upon the Tahi Street residents). The MBRT anticipates that, while the boat-ramp will result in some diversion from other facilities (most significantly Motueka), the scale of this diversion will be small (and a number of these users diverted to Motueka when the ramp facility at

Māpua was removed). This means that the net increase in overall vehicular activity expected to arise from the use of the boat-ramp will be modest.

A reduction in traffic activity on the southern section of Tahi Street (between the proposed boat-ramp location and Grossi Point) can be expected as a result of fewer boats being launched at Grossi Point. This will be beneficial for residents on this part of the street.

Access to the boat-ramp facility will be subject to the payment of a fee (while the payment logistics will be part of the detailed design, payment may be at the security barrier and/or in the form of pre-payment and an access card).

The requirement for payment is expected to avoid the possibility of congestion in the vicinity of the boat-ramp and this will be further assisted by the ability to enable two boat trailers to be loaded or unloaded at any one time. To some extent, it is expected that ramp users will naturally spread their arrival times in order to avoid anticipated delays. If necessary, arriving vehicles with boats could be directed to the parking area and allowed entry to the boat-ramp only when space is available.

The operation of the TSS/community building will not involve any significant level of traffic activity, particularly as many attendees are based within the village and will walk or cycle rather than use a vehicle. TSS evening training events typically involve up to 24 youths, some of whom will be dropped off and collected by parents. The size of community events will be necessarily constrained by the size of the available room but will not exceed 60 people – this means the associated traffic activity will be modest in volume.

Specific TSS or community events are unlikely to coincide with those periods of peak tourist activity at the Māpua wharf area.

## Vehicular Access Points

The proposal will result in changes to the number, location and usage of vehicle crossings on the northern section of Tahi Street.

The straight and level nature of Tahi Street means that the sightlines available to all turning movements will be sufficient to ensure safety. The low levels of background traffic activity on this road will mean that the effects of turning traffic activity upon other movements will be minor.

The vehicle crossings serving the boat-ramp and the trailer parking area have been intentionally aligned to enable vehicles to move efficiently between these areas (for example, avoiding a staggered arrangement which would have resulted in multiple turning movements on/off Tahi Street). This will ensure safety and will minimise effects upon other users of Tahi Street.

As noted above, the location of the boat-ramp security barrier approximately 20m from the road frontage will enable a vehicle with a boat trailer to move clear of the road while waiting for the barrier to raise.

## Parking Provision

The proposal will result in the removal of the existing parking area on the eastern side of Tahi Street with the loss of 38 spaces. This will replaced by the parking area on the western side of Tahi Street providing 45 spaces, but the provision of vehicle access to this and the trailer parking area will involve the loss of six spaces. Parking adjacent to the TSS/community building will provide 11 spaces.

The overall effect of the proposal upon the supply and demand for parking in this area is expected to be reasonably neutral.

All of the new parking will be appropriately sized to ensure convenience and safety of use (compliance with geometric requirements is addressed below).

## Pedestrian & Cycle Activity

The relocation of the public car-park to the opposite side of Tahi Street will result in a slightly longer walk between this facility and the wharf area with a crossing of Tahi Street. Any associated inconvenience experienced by pedestrians will be minor. A footpath will be provided between the corner of the parking area and the existing Tahi Street footpath.

The existing footpath on the western side of Tahi Street will be crossed by two new vehicle accesses. Again, while this will result in a degree of inconvenience for users, this will be slight. Safety at these crossing points will be ensured with good intervisibility between vehicle drivers and pedestrians and the use of a speed-control device at the access to the public parking area.

Convenient pedestrian routes will be provided between the wharf area and the TSS/community building and the boat-ramp.

The proposals will not have any significant effects upon cycling activity in this area. The provision of cycle parking adjacent to the TSS / community building will encourage this as a mode of transport for attendees.

## Servicing

The servicing requirements of the TSS/community building will be minimal and will be able to be undertaken by light vehicles. The building will not include a commercial kitchen or dining facilities.

## Disability Access

The relocated public parking area will provide three permanently reserved and appropriately sized spaces for mobility users. These will be located on the Tahi Street side of the parking area, minimising the distance to the wharf area (mobility parking is also provided at the wharf).

A single mobility space will also be provided within the reserved parking adjacent to the TSS/community building. This will be conveniently located adjacent to the building entrance.

## Construction

Development of the boat-ramp, the TSS/community building and parking areas will necessitate a number of truck and other vehicle movements.

At this stage, the construction logistics have not been developed but it is expected that truck activity will be well spread out over an extended period of time, meaning that the number of truck movements within any day will be low.

It is anticipated that the grassed area on the western side of Tahi Street will be used for the parking of contractors vehicles, minimising impacts on parking availability for the wharf area.

It is proposed that consent be subject to a requirement for the preparation of a Construction Traffic Management Plan (**CTMP**) which will provide details as to how construction-related traffic effects will be managed. The CTMP will be subject to agreement with Council.

## **District Plan Requirements**

## Relevant Plan & Status

The relevant plan is the Tasman Resource Management Plan (**TRMP**). The application site is split between the Residential, Commercial, Recreation and Open Space zones.

Aranui Road is classified as a 'Collector' road and Tahi Street a 'Local' road in the roading hierarchy defined by the TRMP.

## Transport (Access, Parking and Traffic) Requirements

Section 16.2.2.1 of the TRMP defines district-wide transport requirements. This identifies a requirement for compliance with the relevant provisions of the Nelson Tasman Land Development Manual (**NTLDM**). Section 4.10 of the NTLDM defines the specific requirements for private accesses and crossings. Although the proposed crossings will not be 'private' (they will access public facilities), these are addressed below.

4.10.2.1(a) Private access must be designed in accordance with the minimum specifications in Table 4-13. Within this table, the most appropriate 'zone' is 'Commercial, Central Businesses, Tourist Services etc'. The associated requirement is for a minimum carriageway width of 4.5m, footpath 1.5m, sealed and with a crossing width at the road edge of 5 – 7m.

Response: these requirements will not be fully met. The crossings will not provide adjacent footpaths as pedestrians will either use separate footpaths or share the roadspace with vehicle movements (as currently occurs for the existing public parking area). The boat-ramp access will be slightly wider than 7m to facilitate vehicle turning, but there is no footpath on this side of Tahi Street. All vehicle crossings will be sealed. These non-compliances are minor and will be inconsequential in terms of effects.

## 4.10.2.1(b) Private access must only serve up to six residential units or dwellings, commercial or industrial units.

Response: while the proposed activities are not well described by these criteria, overall levels of traffic activity are expected to be modest and within the intent of the requirement. The proposed access arrangements will be easily capable of accommodating expected levels of vehicular activity.

## 4.10.2.1(e) Private access must intersect with the carriageway at an angle of 90 degrees on classified roads.

Response: Tahi Street is not classified but regardless the angle of intersection will be 90 degrees.

## 4.10.2.1(f) Private access must be located at least 1.0m from any side boundary to allow the placement of telecom and power distribution pillars and boxes.

Response: location will be >1m from side boundaries.

## 4.10.2.3 Not more than one crossing per site

Response: in this context, the definition of a 'site' is unclear. Regardless, the number of crossings will not be excessive and will not result in any significant level of adverse effects upon background activity in this area.

4.10.2.4 Where a crossing from a Classified Road gives access to a car parking area containing more than 20 spaces, a queuing area at least 15m long will be provided for vehicles entering and leaving the site. The queuing area length is measured from

## the road boundary of the site to the first point at which a vehicle can turn into a parking space or aisle.

Response: Tahi Street is not a 'classified' road for the purposes of this requirement. The access to the public parking area will provide a distance of around 35m between the road frontage and the first parking space (the parking area will operate internally one-way in a clock-wise direction). Accordingly, the likelihood of any queuing back to the Tahi Street frontage is very low. The TSS/community building parking will provide less than 20 spaces.

# 4.10.2.5 Vehicle Gates – any gate or door will be hung to open into the site and set back sufficiently to ensure that the largest class of vehicle likely to need access to the site on a regular basis can be stopped off the road carriageway while the gate is being opening or shut.

Response: the parking areas will have no access controls. The boat-ramp access will have a security barrier located 20m from the road frontage. This will enable a vehicle with boat trailer to stop clear of the road frontage.

## 4.10.4.1 Vehicle Access Sight Distances – for a 60km/hr speed environment (posted speed limit + 10 km/hr) the minimum sight distance is 73m.

Response: speeds at this level are extremely unlikely due to the distance from the Aranui Road roundabout and the general environment. The achievement of this sight distance will not be possible to the north for the public parking or TSS/community accesses, but only because of proximity to the Aranui Road intersection, which itself constrains the speeds at which vehicles are able to approach. The straight and level nature of Tahi Street means that the available sight distances at all of the proposed vehicle crossings are sufficient to ensure the safety of turning movements.

# 4.10.5 Visibility Splays – a minimum visibility splay (providing visibility to 2m either side of the access from a point 1.5m back from the property boundary) must be provided. For 'high volume' accesses (in excess of 50 vehicle movements/day) the requirement is for visibility to 2m either side from a point 5.0m back from the property boundary.

Response: the TSS/community and boat-ramp accesses on the eastern side of Tahi Street have no footpath on the road frontage but nonetheless will achieve the lower requirement. The boat trailer parking area will also achieve this requirement. The public parking area may have in excess of 50 vehicle movements/day and would not meet the requirement if a vehicle was parked in the mobility space closest to the access. To mitigate the associated risk, it is proposed a install a speed control device across the full width of the access behind the footpath.

## 4.10.6 Tracking Paths – the site will provide manoeuvring space for the largest class of vehicle likely to need access to the site on a regular basis, so that a vehicle does not need to reverse to or from the road.

Response: the largest vehicles required to visit the site will be vehicles towing boat trailers and these will be easily able to turn to/from the boat-ramp and parking area accesses and without any necessity to reverse to or from the road frontage.

4.10.7.1 No part of a vehicle crossing to be closer to a road intersection than 24m (unclassified frontage road intersecting with Collector road, speed limit up to 50km/hr).

Response: distance from the Aranui Road intersection exceeds 24m.

Section 16.2.2.3 of the TRMP defines a number of additional requirements. These are addressed below:

## 16.2.2.3(a) Considered a permitted activity if the activity is NOT car parking in the (ii) Māpua public car parks or (iii) Māpua Commercial Zone ... where more than five parking spaces are provided.

Response: parts of the proposal include parking and are within the commercial zone. This means a consent requirement is triggered as a Controlled Activity. Rule 16.2.2.4 defines the controlled activity conditions relating to tree planting, stormwater treatment. Council also reserves its control over car-park location, layout and design and landscaping. These matters are addressed above/below and within other parts of the application material.

## 16.2.2.3(e) Size of parking spaces and manoeuvring areas

Response: parking proposed within the public and TSS/community building parking areas will meet or exceed the relevant requirements. There are no specific requirements for boat-trailer parking areas but the available space will provide for both manoeuvring and parking.

## 16.2.2.3(g,h,i) Provision for Loading

Response: there is no necessity to provide a specific loading space for the TSS/community building as this will not include catering / dining facilities. Any deliveries will be able to be undertaken by light vehicles such as courier vans.

## 16.2.2.3(j) Cycle Parking

Response: proposed cycle parking (for the TSS/community building) will meet the 1.8m stall depth and 1m aisle width requirements.

## 16.2.2.3(k,l) Disability Parking

Response: as described above, mobility parking will be provided in both the public parking area and the parking associated with the TSS/community building. This will meet the dimensional requirements and will be located to close as practicable to access points.

### 16.2.2.3(m) Surface of Parking Areas

Response: the parking area adjacent to the TSS/community building will be sealed. The two areas of parking located on the western side of Tahi Street will not be sealed (this triggers requirement as a discretionary activity). In this regard, it is noted that the proposed northern parking area will have a surface similar to that of the existing public parking area on the eastern side of Tahi Street (which has operated without problems for a number of years). The parking area for boat trailers will remain a grassed surface. All entry/exits will be sealed.

## 16.2.2.3(o,p,q) Stormwater for Parking, Manoeuvring and Loading Areas

Response: a stormwater discharge consent is being sought.

## **Conclusions & Recommendations**

## Conclusions

This assessment concludes that:

- the proposed boat-ramp, associated boat-trailer parking, the adjoining TSS/community building and public parking area will operate both safely and with only minimal effects upon background road users in this area;
- many of the associated vehicle movements already take place in this area and the volume of additional traffic activity is expected to be minor;
- good sightlines available at the additional vehicular crossings on the Tahi Street frontage will ensure the safety of vehicle turning movements;
- effects upon the wider Māpua village environment and road network will be minor; and
- the proposals will be generally compliant with the relevant district plan requirements, with areas of non-compliance being minor in nature and not associated with adverse effects.

## Recommendations

It is recommended that:

- consent be subject to a condition requiring the development of a Construction Traffic Management Plan and its approval by Council; and
- the public parking area should include a speed-control device across the full width of the entry/exit to ensure the safety of pedestrians using the footpath at the site boundary.

Yours sincerely,

T. m. Kelly

**Tim Kelly** Tim Kelly Transportation Planning Limited (*Phone: 027-284-0332, E-mail:* tim@tktpl.co.nz)

#### ANNEXURE A: EXISTING ROAD ENVIRONMENT - PHOTOGRAPHS





#### Image 1

View to N along Tahi Street, proposed boatramp location on right (September 2022)

## Image 2

View to N along Tahi Street, proposed boatramp location on right (September 2022)



## Image 3

View to S along Tahi Street, showing existing car park access (September 2022)