



Hopper Developments Ltd

PO Box 110

Orewa Ref: B24203
Auckland 8 June 2025

Subject: Hobbs Bay Marina – Transportation Overview

Issued via:

Dear

We are pleased to provide the following high-level consideration of the anticipated transportation environment and potential effects arising from the proposed marina development at Hobbs Bay.

Proposed Development

Hopper Developments Limited (Hoppers) proposes to develop a marina, referred to as Hobbs Bay, at 5 Daisy Burrell Drive in Whangaparaoa, Auckland. An indicative layout of the marina is shown in Figure 1 below, and it is anticipated that the marina could have up to 380 berths. Figure 1 also shows the residential subdivision previously consented within the site.



Figure 1: Indicative Marina Layout



The Applicant intends to utilise the 'fast-track' process (Fast Track Approvals Act 2024) for the Project. If accepted, a formal Integrated Transportation Assessment report would accompany the "substantive application". This letter provides an overview of the transportation aspects of the marina to support an application for "referral".

Consented Developments

In November 2023, Hoppers was granted consent for an 88-lot residential subdivision (over five (5) stages) on the bulk of the site at 5 Daisy Burrell Drive. Figure 2 shows the layout and staging of the consented subdivision with north up the page.

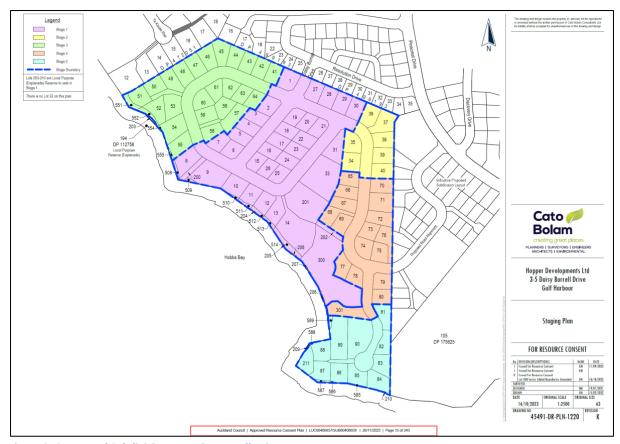


Figure 2: Consented Subdivision – 5 Daisy Burrell Drive

Consent has also been granted to a third party for a 39-lot subdivision at 202-252 Pinecrest Drive which is the neighbouring site to the east of 5 Daisy Burrell Drive. Note that north is to the left of the page.



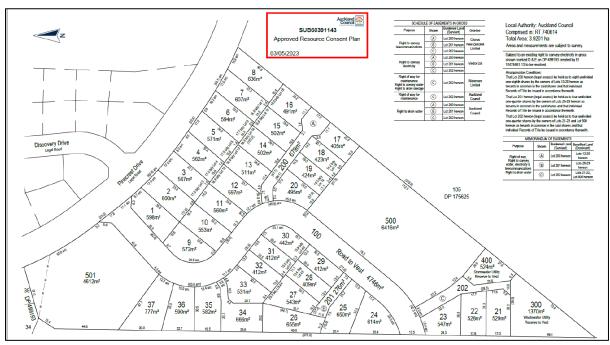


Figure 3: Consented Subdivision - 202-252 Pinecrest Drive

Consideration has been given to how the proposed marina would integrate from a transportation perspective with these subdivisions as described below.

Access

The primary access to the marina is proposed to be established towards the east within Stage 4 of the Hoppers subdivision. Access to this area is most likely to be the adjacent Pinecrest subdivision (by others) as this gives the most direct access from Gulf Harbour Road (however roading access is available via the Hoppers previous stages of subdivision).

To achieve the marina access, some changes to the consented road reserve within 5 Daisy Burrel Drive will be required. Minor variations may also be required in other locations, subject to a detailed review. As both the marina and residential subdivision are being undertaken by Hoppers these changes are able to be incorporated without affecting third party landowners for this part of the access route. However, it is acknowledged that this would require a concurrent change of conditions to the approved Hoopers subdivision to enable the connection. It is envisaged that this would occur as part of the overall 'fast track' consent. The changes themselves are not considered to be significant in nature and would primarily comprise a change in road alignment within Stage 4 of the subdivision. The exact alignment and cross section of the new road will be detailed as part of the substantive application design.

Within the adjacent 202-252 Pinecrest Drive subdivision, the legal width of the road reserve is 17m. The minimum legal width for a local road as per the Auckland Transport standards is 16m which is satisfied. It is considered that these roads can accommodate vehicles that are towing boats rather than just cars associated with residential dwellings. Regardless, vehicle tracking assessment has been undertaken of the two 90° corners of the consented Pinecrest subdivision to ensure that boat access via this route is feasible. The centreline radius of these corners should be at least 30m to enable to



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cars towing boats to be able to pass each other and it is considered that the corner near Lot 200 can accommodate towed trailers. The corner closer to the marina at Lot 202 is expected to need some widening in order to achieve this as shown in Figure 4 below. This is not a significant change and would only affect the one lot on the inside of the corner. Consultation with the neighbouring landowner would be required for this change and it is understood that consultation is already ongoing. These changes are likely to be accepted by Auckland Council as part of the consented detailed engineering plan approval process, however a formal change of conditions can be made as required.

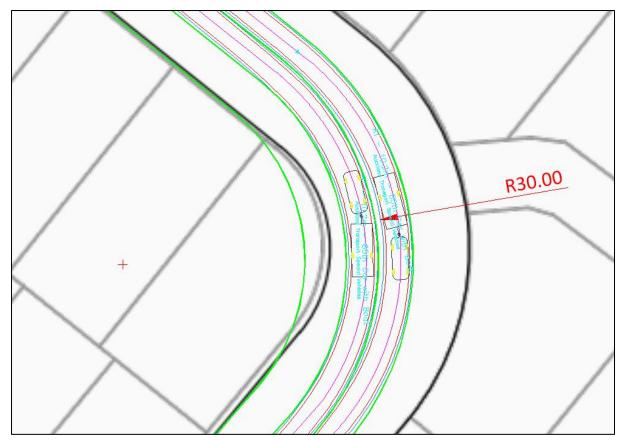


Figure 4: Boat Trailer Tracking

The access route via Pinecrest Drive is the most direct between the site and the wider road network. Hence this is most likely where marina related traffic would travel. There is also a possible route through the Hoppers subdivision via Resolution Drive. While less direct, the centrelines of curves on this route are greater than 30m and the carriageway is at least 6m wide throughout. Hence it is possible for vehicles to still navigate through the road network without getting stuck.

Gradient is a notable constraint for the site given the site's topography. The road within Stage 4 is estimated to be at approximately 15m above sea level while the marina would likely be approximately 5m above sea level. This results in the access road needing to drop approximately 10m. The length of the road between Stage 4 of the subdivision and the marina is likely to be in the order of 130m. This results in a gradient of 7.69% (1 in 13) which is less than the ideal maximum of 8% (1 in 12.5) and well below the absolute maximum gradient of 12.5% (1 in 8) as stipulated in the Auckland Transport standards. Therefore, it is assessed that appropriate gradients on the road are achievable. This gradient is also suitable for pedestrians.

There is also the potential for a secondary access option to the northwest of the proposed marina. This follows the existing route along the coast that provides access for petrol tankers to refuel the tanks that are used for refuelling boats within the neighbouring marina. This is a single-track unsealed road at present. The existing access is highlighted in red on Figure 5 below.

This access could provide an alternative means of access to the marina. If this option is pursued, this existing access would need to be widened and upgraded to a sealed surface to support marina traffic. Given the access already accommodate fuel tankers, it is considered that in an upgraded state, it should also be able to accommodate boat trailers.



Figure 5: Refuelling Tanks

The roads that make up the wider road network i.e. Pinecrest Drive and Gulf Harbour Drive typically have a cross-section that is at least 20m wide with carriageways that are also wider than 6m. There is also a roundabout intersection between Pinecrest Drive and Parkview Drive. This roundabout has circulating lanes that are 6.5m wide and the collar around the central island includes a 2m collar which provides additional space for larger vehicles to still circulate around the roundabout. Hence the wider road network is able to accommodate marina related traffic.

Overall, it is considered that appropriate means of access to the proposed marina suitable to accommodate expected vehicle types can be achieved via either of the options considered.

Trip Generation

The Institute of Transportation Engineers Trip Generation Manual (ITE Manual) has been used to determine the number of trips likely to be generated by the marina. The ITE Manual has a marina activity (Land Use 420) which has been used to assess the vehicles per hour (vph) and vehicles per day



(vpd) likely to be generated by the proposed marina as shown in Table 1 based on a marina with 380 berths.

Table 1: Trip Generation Summary

Time Period	Rate	Trips
Weekday Morning Peak Hour	0.12/berth	46vph
Weekday Evening Peak Hour	0.21/berth	80vph
Saturday Peak Hour	0.22/berth	84vph
Sunday Peak Hour	0.31/berth	118vph
Weekday	2.41/berth	916vpd
Saturday	2.61/berth	992vpd
Sunday	3.49/berth	1,326vpd

The proposal also includes a boat ramp. The ITE Manual does not include published rates for a boat ramp. A first principles assessment has been undertaken. An average time for a boat to be loaded or unloaded from a ramp has been taken as 5 minutes. This would mean that a single ramp could feasibly generate up to 24 vehicle movements per hour (12 arrivals and 12 departures). A ramp that is wide enough for two boats to load or unload simultaneously would therefore generate 48 movements per hour. While the width of the boat ramp is yet to be confirmed, this assessment will consider a ramp that allows for two boats to be loaded/unloaded simultaneously

Based on the above, the proposal could generate up to 166vph (118vph from the marina and 48 from the boat ramp) on a Sunday, which is the busiest day for the activity. Traffic to the marina would likely use Gulf Harbour Drive to access the wider road network.

Consideration has also been given to the consented subdivision consents that would yield some 127 lots combined. Based on the ITE peak hour trip generation rate of 0.99 trips/dwelling, the subdivisions would generate some 126 trips in the peak hour. The total expected traffic generation of both residential subdivision and marina is some 292vph. For simplicity at this high level, this assumes the peak hour for the two activities coincide, which is unlikely to be the case.

Existing traffic volumes on Pinecrest Drive are some 250vph. Existing traffic volumes on Gulf Harbour Drive are in the order of 800vph. The carrying capacity of a single lane of traffic is typically over 1,200vph and both Pinecrest Drive and Gulf Harbour Drive have a single lane in each direction. The addition of up to 292vph to the existing 250vph (Pinecrest Drive) and 800vph (Gulf Harbour Drive) would still be within the carrying capacity of both roads considered.

Consideration has also been given to the ability of the Pinecrest Drive / Gulf Harbour Drive intersection to accommodate the expected degree of traffic. Based on the 'Austroads Guide to Traffic Management Part 6 Intersections, Interchanges and Crossings, Management' Figure 3.25, the existing intersection layout already includes a right turn bay within the median. Hence this intersection layout is considered suitable to accommodate the assessed future traffic demands.



Alternative Travel Modes

In terms of multimodal access, the existing and proposed subdivision roads provided for walking access, with cyclists sharing the carriageway road with other users. It is considered that this is reasonable within the residential nature of the subdivisions, and on the existing road network including Pinecrest Drive and Gulf Harbour Drive, that the presence of cars towing boat trailers is unlikely to alter the predominant environment for these road users. The proposed marina also has the potential to enable additional facilities for pedestrians.

Road Safety

In terms of road safety, the consented subdivision roads will be designed and built to current Auckland Transport standards and will result in an appropriate road safety outcome. A review of the personal and collective road safety risk rating for Pinecrest Drive and Gulf Harbour Road identified both as being low risk. As such, it us considered that the proposed marina is likely to have negligible effects on road safety.

Construction Traffic

It is standard practice as part of the resource consent that a Construction Traffic Management Plan (CTMP) is developed to outline how deliveries (including construction equipment) and workers to and from the site will be managed and mitigated. Traffic volumes generated during construction are expected to be less than 166vph which is the anticipated volumes that would be generated once the site is completed.

Construction vehicles associated with the marina are expected to be similar to those that would also be used for construction of the residential dwellings within the adjacent subdivisions. It is possible that some vehicles may be delivered via the water which would not affect the road network. Given, that consent has been granted for construction of the neighbouring subdivisions, it is considered that construction activities can be managed to ensure any generated traffic effects are appropriately mitigated (including if construction occurs at the same time as any adjoining subdivision).

Conclusion

It is proposed to develop a marina at 5 Daisy Burrell Drive with approximately 380 berths. It is proposed for the marina to be consented under the fast-track process. This report has identified the key transportation constraints of the proposal, and the following conclusions have been reached:

- The marina is likely to generate up to 166 vehicles in the peak hour. The wider road network is expected to be able to accommodate these trips in conjunction with the 126vph assessed as likely to arise from the consented residential subdivisions.
- It is considered that the proposal is unlikely to have detrimental effects on road safety, which has been identified as being low risk.



- Primary access to the site is expected to be established to the east of the marina. Changes to
 the consented subdivision within 5 Daisy Burrell Drive are expected, with this being within the
 control of Hoppers.
- A minor change to one of the corners will be required within the consented subdivision at 202-252 Pinecrest Drive. This change would require consultation with the neighbouring developer however the change conserved to not be significant and would only affect one lot.
- While the site has some steep topography, the roads and accesses are expected to able to comply with relevant standards for gradients and width.
- A secondary access to the marina is possible via the existing accessway to the northwest to add extra resilience to the site access. This route would require some upgrading however is not necessary from a transportation perspective if there are constraints that prevent this route from being upgraded.
- No upgrades are expected on the wider road network to support marina related traffic.

Based on the above, there are no critical transportation matters that would prevent a marina from being developed at the site.

We trust this meets your requirements. Please do not hesitate to contact us if you have any questions or require any additional information.



Transportation Engineering Manger

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