



## STAFF REPORT

**TO:** Environment & Planning Subcommittee

**FROM:** Gary Rae, Incite Ltd

**REFERENCE:** RM050281, RM050282, RM050283, RM050284, RM050285, RM050286, RM050538, and RM050544

**SUBJECT:** **CARTER HOLT SUBDIVISION AND DEVELOPMENT APPLICATION – REPORT EP05/09/22** - Report Prepared for 12 and 13 September 2005 Hearing

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### 1. APPLICATION BRIEF

#### 1.1 Reporting Officer

My name is Gary Rae. I am a Director of Incite, an environmental and resource management consulting firm, based in Nelson. I have a BSc Degree (Geography) and a Diploma in Town Planning, and I am a Member of the New Zealand Planning Institute. I have 22 years experience in resource management, including 4 years in assessing applications for subdivision and land use in rural areas of Tasman District.

I have been engaged by Tasman District Council to prepare the Council officer report on the resource consent applications made by Carter Holt Harvey Limited, pursuant to Section 42A of the Resource Management Act 1991.

Council officers have assisted me by providing specific comments on technical matters relevant to my report, and I have inserted those comments in the appropriate parts of the report. The officers have also assisted me with compiling the recommended conditions of consent. Officers will be available for questions at appropriate times during the course of the hearing, as may be requested by the Committee.

#### 1.2 Proposal

The application is to create and establish a 61-lot low density residential and rural lifestyle subdivision and development on a 201 hectare area of land on Harley Road, Tasman. Various aspects of the development require consent and these were grouped into eight applications for notification. The applications provide for a comprehensive and integrated development, including a range of lot sizes, accesses and services.

The application for land use consent is for dwellings on each of the Lots 1-61 to be located within a 900 m<sup>2</sup> building area shown on the application plans. A total of 51 of these allotments are for low density residential use. They range in size from 1,690 m<sup>2</sup> to 2.66 hectares, and are contained within six 'clusters' of development. The 10 remaining allotments also have house sites and are larger 'rural lifestyle lots'. The application is also for farm utility buildings of up to 64 m<sup>2</sup> in area to be constructed on Lots 14, 25, 32, 34, 40 and 61.

Three lots (34, 60 and 61) are intended to be made available for rural productive activities.

Five lots will be developed as open space and recreation, with riparian plantings. Lots 800, 801, and 802 are the valley floor walkways. Lots 803 and 804 are for neighbourhood parks. A large balance lot of 132 hectares (Lot 900) will include a 20 hectare area for the disposal of domestic effluent.

Two internal roads are proposed, to access the development from Harley Road (lots 501 and 502). Walkways and cycleways are also proposed. The Schedule of Easements identifies right of ways E, F and G within Lots 802, 900 and 61 respectively in favour of the Council. The purpose of these is to provide public access to the wetland from the public roads. The balance of the walkway network is for the residents to enjoy. Two recreation reserves are proposed, on lots 701 and 702.

Earthworks will be required for the construction of new roads, rights-of-way, building sites and to enable site access on individual lots. It is expected there will be up to 40,000 m<sup>3</sup> of earthworks in total.

Three detention dams are proposed, of up to 5 metres crest height. The dams will supply water for irrigation and non-potable use, with a treatment and pump station proposed to be site adjacent to Lot 45 near the eastern part of the site. Culverts are also proposed to be installed in the bed of a stream located within the site.

Water will be diverted and discharged to the stream from a stormwater drainage system. Domestic wastewater is proposed to be treated to a tertiary standard and discharged to land by trickle irrigation. The wastewater treatment plant and the wastewater disposal area are located in the forested areas to the west of the main development. Two pump stations are also required.

In terms of land tenure, the 61 residential and rural residential allotments will be in private individual titles. A Residents Society (Incorporated) will be established to manage and maintain communal assets (dams, ponds, wastewater disposal system, water reticulation, landscape and riparian enhancement works) in accordance with management plans to be developed. The roads, recreation reserves, walkways and cycleways are all proposed to be vested in the Council as part of the overall subdivision.

**Attachment 1** of my report contains a Concept Plan, showing the general layout of the development. This plan also shows the staging of the clusters of the subdivision, which is to proceed in 6 stages. No timing indications are given for the stages.

The buildings on the house allotments will be subject to design and appearance covenants. Restoration planting is proposed within the riparian corridors. Amenity plantings are also proposed along Harley Road, and backdrop planting is proposed in the plantation forest at the head of this valley.

### 1.3 Zoning

The land is zoned Rural 3 under the proposed Tasman Resource Management Plan (the Proposed Plan). This zoning was introduced by Variation 32, which was publicly notified in December 2003. This Variation is still being processed, however it has effect from the date that it was notified. The period for submissions and further submissions has closed, and an interim decision has been released on parts of the variation (see discussion in section 4.2 below).

The land is zoned Rural B under the transitional District Plan (Waimea Section). As the lots are less than 15ha in area, the subdivision (ordinance 406.1), is considered a non-complying activity. The dwellings would be permitted activities if subdivision consent was granted.

### 1.4 Consents Sought

Consents pertaining to the proposal include:

- **Subdivision consent** to create 61 low density residential and rural lifestyle residential lots, and allotments for productive uses, reserves and roads, and land use consent to create access places with less than seven users: RM050281
- **Land use consent** to construct dwellings on each of the proposed building location areas and to allow the construction of farm utility buildings on proposed lots 14, 24, 25, 32, 40 and 61: RM050538.
- **Land use consent** to undertake 40,000 cubic metres of earthworks for the purpose of constructing the subdivision, including roads, dams and building sites: RM050282.
- **Land use consent** to construct three dams with a maximum crest height of 5 metres, and culverts on the bed of an unnamed stream: RM050544.
- **Water permit** to dam water at three locations on an unnamed stream: RM050283.
- **Water permit** to take water from water stored behind three dam structures for irrigation and non-potable purposes: RM050284.
- **Water Permit** to divert stormwater and **Discharge permit** to discharge stormwater to an unnamed stream from impervious surfaces during construction phases and from the operation of a stormwater drainage system servicing the development: RM050285.

- **Discharge permit** to discharge up to 60,000 litres per day of tertiary treated domestic wastewater to land by trickle irrigation at a rate not exceeding 2 millilitres per day: RM050286.

## 2. INTRODUCTION

### 2.1 Further Information

In the course of assessing the applications as lodged, Council officers made requests for further information. This resulted in a range of additional information being supplied, and it was incorporated into the (final) assessment of effects, and was made available for viewing as part of the notification process.

Following the lodgement of submissions, Council officers requested further information on the long-term management and maintenance of the wastewater system.

The Council also commissioned an independent assessment of landscape issues from Mr Frank Boffa. Mr Boffa's report is appended as **Attachment 2** of my report. The submitters were notified that this information had been received and the information was made available for viewing.

### 2.2 Site Description

The application site comprises approximately 201 hectares of rural land. The shape of the site can be described as roughly rectangular.

The site is gently sloping to rolling land which historically has been used for exotic forestry purposes by the applicant Carter Holt Harvey Ltd. Over recent years the site has been logged, de-stumped and re-grassed in preparation for development.

The topography of the site is characterised by areas of 'rolling' and 'steep' hill country. Approximately 12 hectares is Class B land (considered marginal for intensive horticulture), the balance is assessed as Class E (suitable only for pasture).

The land contains two stream valleys. The streams are unnamed. The stream on the western side has the larger catchment area, and it includes an extensive wetland area which has significant conservation value.

### 2.3 Locality and Legal Description

The site is on the eastern side of Harley Road, north of its intersection with Old Coach Road. The site is approximately 2 km inland by road, to the south-west, from the Tasman settlement.

It has an area of 200.7241 hectares, and is held in Certificate of Title NL 32/260 in three allotments, Section 60, Section 85a and Section 95a.

Land on the opposite side of Harley Road has been subdivided by Carter Holt Harvey into 20 rural residential allotments, and is yet to be developed with housing. That land is also in the Rural 3 zone. Land to the south and east of the proposed subdivision is mainly in plantation forestry. The land to the north, and below, the site is in orchard with amenity plantings. Other land uses in the general area include forestry, orchards, small farm holdings and rural-residential activity.

### **3. NOTIFICATION AND SUBMISSIONS**

#### **3.1 Processing**

The application was received by Council on 6 April 2005. Further information and additional consent applications were sought by way of letters on 3 May 2005 and 26 May 2005, and additional consent applications and further information was received on 13 June 2005. A decision was made under Sections 93 and 94 of the Resource Management Act 1991 (RMA) to publicly notify the application. The application was notified in July 2005 and submissions closed on 3 August 2005.

#### **3.2 Submissions**

Twelve submissions were received. Six are in opposition. Three are in conditional support, with conditions requested to be placed on any consent. The three remaining submissions are either neutral, or not specific as to opposition or support.

The submissions in support include the following reasons:

- The subdivision of ex-forestry land will control weed infestations
- Silt control measures will be incorporated
- The plans take account of the natural catchment and landscape
- The development includes restoration of gullies, streams and wetlands
- Walkways and cycle tracks supported
- Will result in more residents in the Tasman community
- Appropriate use of the non-productive parts of the land

Submissions in opposition include the following concerns.

- Notification procedures inadequate
- Adverse effects from on site disposal of effluent and stormwater
- Scale of development too large
- Lack of provision for protecting and increasing native birdlife, and amphibians (frogs, skinks)
- Restrict public access to wetlands and gullies, provide bridges
- Extra traffic on Harley Road
- Site clearance practices, sediment run-off
- Unclear on future management responsibilities for wastewater and sewage disposal
- Contrary to District Plan zoning
- This and other subdivisions will undermine the District Plan
- Lack of demand for sections in the area
- Adverse effects on rural character
- Lack of consultation

- Downstream effects on water supply and from sewage and stormwater runoff
- Rainwater supply of drinking water inadequate
- No details on the sewage treatment system have been provided, and further measures are required
- Lighting required (*note*: another submission opposes street lighting)
- Intersection of Harley Road/SH60 needs to be upgraded
- Sedimentation and silting of the stream, causing downstream flooding

I have compiled a summary of the submissions in **Attachment 3**.

## 4. STATUTORY CONSIDERATIONS

### 4.1 Status and Decision Criteria

#### Proposed Plan

In terms of the Proposed Plan, the activities have the following status:

- **Subdivision consent RM050281**- Restricted discretionary activity in terms of Rule 16.3.9C, as the lots are less than 50 hectares in area. Land use consent for access places – Discretionary activity in terms of Rule 18.10.4 as the Access Places serve less than 7 lots (Figure 18.10AA).
- **Land use consent for dwellings and farm utility buildings RM050538** - Controlled activity under Rule 17.5A.4 of the Plan, however without subdivision consent, the dwellings would be a discretionary activity due to the effect of Rule 17.5A.6(a). Therefore, as the two activities are being considered together, technically the land use consent for the proposed dwellings is to be assessed as a discretionary activity.
- **Land use consent for earthworks RM050282** – Discretionary activity, under Rule 18.6.6, as the earthworks in Land Disturbance Area 1 (any cut batter, excavation, or infilling associated with re-contouring of land) is required under Rule 18.6.2 (l) to be no more than one metre in height or depth, and is to be no more than one hectare within any 12 month period.
- **Land use consent for dams RM050544** - Discretionary activity, pursuant to Section 13(1) RMA and Section 77C(1)(a) RMA, as the proposed dams and the various culverts in the stream bed will exceed the standards in the Transitional Regional Plan, and there are no relevant rules in the Proposed Plan (until Council notifies Part IV TRMP, which will replace the existing Dam Bylaw and address the various other Section 13 matters).
- **Water permit to dam water RM050283** - Restricted discretionary activity, under Rule 31.2.3, as the standards in Rule 31.2.1 are exceeded (catchment is greater than 20 hectares).
- **Water permit to take water M050284** – Controlled activity, under Rule 31.1.5, as the standard rates of taking under Rule 31.1.2 are exceeded.

- **Water permit to divert stormwater and a discharge permit to discharge stormwater RM050285** - Discretionary activity, under Rule 36.4.4, as the Rural 3 Zone is excluded from the permitted activity rules for the discharge or diversion of stormwater or drainage water into water, or onto land.
- **Discharge permit for domestic wastewater RM050286** - Discretionary activity under Rule 36.1.16 as the Rural 3 zone is specifically excluded from the permitted activity rules (36.1.4 and 36.1.5), which authorise discharges of domestic wastewater in other zones.

### **Transitional Plan**

In terms of the transitional District Plan, the proposed subdivision is a non-complying activity, and the proposed dwellings are a discretionary activity.

### **Non-Complying Activity**

In situations like this, where the various activities have differing classes of activity status under both the Proposed Plan, and the Transitional Plan, it is my understanding that the 'worst case scenario' should be taken. Therefore the overall activity should be considered to be a non-complying activity.

As a non-complying activity, sections 104 and 104D of the Resource Management Act (RMA) must be taken into account. Primacy is given to Part II of the Act; the purpose and principles of sustainable management of natural and physical resources. As a non-complying activity, the subdivision application must be able to pass through one of the "gates" of section 104D – that either the effects are no more than minor or that the application is not contrary to the objectives and policies of the relevant Plan.

If the application meets one or other of these preconditions, a decision must have regard to:

- (i) Any actual and potential effects of the activity;
- (ii) Any relevant provisions of national or regional policy statements;
- (iii) Relevant provisions of a plan or proposed plan;
- (iv) Any other matters the Committee considers relevant and reasonably necessary to determine the application.

The "permitted baseline", or what can be done as of right on the land, may also be taken into account. Matters raised in submissions, and any potential 'precedent', should also be taken into account.

## 4.2 Variation 32 Context

### Rural 3 Zone

The application is the third major development to be considered in the Rural 3 zone in terms of Variation 32. The first development was by Carter Holt Harvey, for a 57-lot subdivision and development on a 70 hectare site located east of Old Coach Road, Mahana. The Council granted consent for that application. Very recently the Council issued a decision to grant consent to an application by CBH Limited for a subdivision to create 56 rural-residential allotments, on a site mainly within the Rural 3 zone near the intersection of Greenacres Road and State Highway 60.

Variation 32 was developed over a period of several years, in response to the pressures facing the Coastal Tasman area between the Moutere Estuary and the edge of the Waimea Plain. The Rural 3 and 3A Zone provide for residential and rural residential development within a rural context, and subject to a comprehensive policy framework, a Design Guide and programmed servicing, which include reticulated water supply and wastewater and upgraded roading. (*Note: Rural 3A zone has subsequently been withdrawn, see 'Interim Decisions' below.*)

### Interim Decisions

It is important to note that Council has recently released an interim decision and subsequent draft variation abandoning the proposal to provide reticulated wastewater servicing.

Although the Proposed Plan has not yet been changed to reflect this decision, it is important to consider the implications of this imminent Plan change when assessing this application.

The Council has also advised its interim decision to:

- Replace the Rural 3A zone with the Rural 3 zone, and
- Continue with the intention to support a reticulated community water supply.

### Further Variations

Variation 32 has been subject to a number of further variations of a minor nature. One of the variations which removed the specific financial contributions required in the area. These have been replaced with development contributions under the LTCCP.

### Previous Rural 2 Zoning

The proposed Plan was publicly notified in May 1996. In this, the land which is the subject of this application was zoned Rural 2. The rural provisions had reached the stage of largely being concluded, with few outstanding matters under reference to the Environment Court, when Variation 32 was notified in December 2003.



The Variation fully replaced the Rural 2 provisions, (and where relevant the Rural provisions) in terms of the area it applies to, meaning that only the transitional Plan, unchanged policy and rules in the proposed Plan, and the Variation have any status in considering the application. The rules relating to the Rural 2 Zone which have hitherto applied to the land are no longer relevant.<sup>3</sup>

### **Weighting of Variation v Transitional Plan**

Given the relatively early stage of consideration of the Variation, a question arises as to which Plan has the greatest weight.

On one hand, where there has been a significant shift in Council policy leading to a new plan provision (as in the Rural 3 zoning situation), considerable weight may be given to the new provisions. On the other hand, plan provisions which are subject to outstanding and unheard submissions must be treated with caution, as they may change.

The Tasman District Council, in its consideration of the earlier CHH subdivision proposal east of Old Coach Road, determined that greater weight should be placed on the Proposed Plan, and the decision records that there was agreement between the parties on that. I have been told that no appeals were lodged against the Council's decision.

The Council, in granting consent in July 2005 to the CBH subdivision at Greenacres Road, came to the following conclusion:

*“The Committee considered that it was appropriate to place greater weight on the Proposed Plan provisions compared to those of the Transitional Plan, given the extent of community consultation undertaken by the Council prior to the notification of Variation 32, which introduced Rural 3 and that the work was done within the framework of the Resource Management Act 1991. The Committee was clear that reference could not be made to the previous zoning provisions of the land under the Proposed Plan”.*

Given these two determinations by Council, it would seem reasonable to also assess this current development for Harley Road in the same manner, i.e. the Proposed Plan has more weight than the transitional district plan.

### **4.3 Resource Management Act 1991**

In considering an application for resource consent, decision makers must ensure that if granted, the activity will be consistent with the purpose and principles set out in Part II of the Act.

The purpose and principles of the RMA are to promote the sustainable management of natural and physical resources. “Sustainable management” means:

“Managing the use, development and protection of natural and physical resources in a way, or a rate, which enables people, and communities to

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<sup>3</sup> The key case law arises from *Awly Developments vs Christchurch City Council (C103/2002)*.

provided for their social, economic and cultural well-being and for their health and safety while:

- Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations;
- Safeguarding the life-supporting capacity of air, water, soil and ecosystems; and
- Avoiding, remedying or mitigating any adverse effects of activities on the environment.”

If granted, the proposed subdivision and subsequent development must be determined to represent a sustainable use and development of the land and associated resources.

The principles of the RMA underpin all relevant Plans and Policies, which provide more specific guidance in assessing the applications.

Matters of national importance are listed in section 6 of the RMA, and must be shown regard during the decision-making process. The matters relevant to this application are as follows:

- The preservation of the natural character of the coastal environment and wetlands and their protection from inappropriate subdivision, use and development;
- The protection of areas of significant habitat of indigenous fauna.

The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga may be of only limited relevance in this case. The applicant has consulted with the Motueka Iwi Liaison Komiti, and the further information in Annexure 1 of the AEE records that the Komiti were receptive to the proposal and expressed an interest in the wetland values and riparian enhancement works. The Komiti advised there was no known historical connection to the site. Neither the Komiti, nor its constituent runanga, has lodged a submission to these applications.

Under section 7 of the RMA decision-makers are also required to have particular regard to (relevant to this application):

- The efficient use and development of natural and physical resources;
- The maintenance and enhancement of amenity values;
- Intrinsic values of ecosystems;
- Maintenance and enhancement of the quality of the environment; and
- Any finite characteristics of natural and physical resources.

These aspects are addressed later in this report.

In light of the above discussion I do not anticipate that there are any relevant issues in terms of Kaitiakitanga and the ethic of stewardship, or to any Treaty of Waitangi principles (section 8 of the RMA).

Section 9 (3)(a) of the RMA provides that no person may use any land in a manner that contravenes a rule in a regional plan or a proposed regional plan unless that activity is allowed by a resource consent or allowed by section 20.

Section 13(1)(a) provides that no person may erect, reconstruct, place, alter, extend, remove, or demolish any structure in, on, under, or over the bed of any lake or river, or excavate, drill, tunnel, or otherwise disturb the bed unless expressly allowed by a rule [in a regional plan and in any relevant proposed regional plan] or a resource consent.

Section 14(1) provides that no person may take, use, dam, or divert any water unless it is expressly allowed by a rule [in a regional plan and in any relevant proposed regional plan] or a resource consent.

Section 15 (1) provides that no person may discharge any contaminant or water into water, unless the discharge is expressly allowed by a rule [in a regional plan and in any relevant proposed regional plan], a resource consent, or regulations.

Section 15 (2) of the RMA prohibits any person from discharging contaminants into or onto land from any place in a manner that contravenes a rule in a regional plan or proposed regional plan unless that discharge is expressly allowed by resource consent or allowed by Section 20 (certain existing lawful activities).

Section 107 of the RMA requires that, other than in exceptional circumstances or for a temporary discharge, any discharge of a contaminant onto or into land in circumstances which may result in that contaminant entering water, should after reasonable mixing with the receiving waters meet the following standards:

- (a) no conspicuous oil or grease films, scums, foams or floatable or suspended materials;
- (b) no conspicuous change in colour or visual clarity;
- (c) no objectionable odour from the discharge;
- (d) no significant adverse effects on aquatic life.

#### **4.4 Tasman Regional Policy Statement**

The Tasman Regional Policy Statement specifies the overriding policies of the Tasman District Council when preparing other resource management plans and must be taken into account when considering any application for any resource consent.

The Regional Policy Statement seeks to achieve the sustainable management of land and other resources. Objectives and policies of the Policy Statement clearly articulate the importance of protecting land resources from inappropriate landuse, subdivision and development as part of a group of provisions relating to land fragmentation. Contaminant discharges, land and freshwater resources are all identified as significant issues to this region within the Policy Statement.

Because the proposed Tasman Resource Management Plan was developed to be consistent with the Regional Policy Statement, it is considered that an assessment under the TRMP will satisfy an assessment against the Policy Statement.

## **4.5 Transitional District Plan – Waimea Section**

There are a number of general objectives and policies set out in the Transitional District Plan. These aim:

- To preserve and enhance the existing character and development of the lowland hills.
- To encourage better land use and utilisation of existing properties.
- To recognise and provide for existing forestry.
- To provide a wide range of cultural and social opportunity which will maintain and strengthen the existing character of the zone.

Although this policy framework is modelled using wording from previous legislation, the policy is relatively consistent with the provision for rural land in both the Regional Policy Statement and the proposed TRMP, in general terms. It is not entirely consistent with Variation 32, which makes specific provision for a greater level of residential development than the Rural 3 zoning anticipates.

## **4.6 Proposed Tasman Resource Management Plan**

While the activity is being considered as a non-complying activity under transitional Plan rules, the Plan that is most relevant in the assessment of this application is the TRMP, as discussed in Section 4.2 of my report.

The most relevant objectives and policies are contained in Chapter 7 “Rural Environment Effects”. These chapters articulate key objectives:

- to protect rural land from inappropriate subdivision and development; and
- to ensure rural character and amenity values are maintained or enhanced.

Other chapters are also relevant, as itemised in section 5.9 of this report.

Variation 32 includes a new Rural 3 Zone along with rules, policy, explanations and other provisions that indicate an approach that is different in some ways from other rural areas, but consistent with the general thrust of the Plan for the District’s rural areas.

The assessment of the proposed development in terms of these matters is set out in the following sections.

## **5. ASSESSMENT**

### **5.1 Assessment of Environmental Effects**

Potential effects, whether adverse or otherwise, have been identified in the applications and submissions. The policy and explanation in the Plan also assists in identifying effects of the proposed subdivision and development

The following effects assessment has been set out. For the sake of brevity, both the applications for subdivision and land use for dwellings, will be considered together within the following assessment.

Separate assessments are also provided for the other (associated) applications. I would also remind the Committee that specialist Council officers have assisted me in preparing those parts of my report, and in developing conditions for the specific consents being sought.

### **Permitted Baseline**

Section 104(2) gives a consent authority the ability to disregard adverse effects on the environment of activities that the Plan permits, if it so wishes. This is the “permitted baseline” and can provide a yardstick for the effects that otherwise might arise.

There is no permitted activity subdivision in the zone, and dwellings are controlled or discretionary activities. Therefore strictly speaking there is no ‘permitted baseline’ for the main part of this development, however some of the associated activities (discharges, water permits, and earthworks) could potentially be conducted up to certain thresholds as permitted activities.

For all intents and purposes, the 50ha minimum controlled subdivision standard in the proposed Plan (Variation 32) effectively provides a permitted baseline for development on this site. Because the application area is just over 200 hectares, a controlled subdivision is possible to create 4 titles of 50 hectares. Without subdivision, only one dwelling could be placed on the site as a controlled activity, along with up to 2,000 m<sup>2</sup> of permitted rural buildings and an unlimited area of greenhouses. With a controlled activity subdivision, up to four dwellings could be expected on the four allotments that may be created by way of a controlled activity subdivision, together with up to 8,000 m<sup>2</sup> of permitted rural buildings in total, and an unlimited area of greenhouses.

## **5.2 Subdivision: RM050281, and Land use consent (dwellings): RM050538**

The following effects are assessed, and include comment on the main matters for assessment of discretionary subdivision and dwellings in the Rural 3 zone (in Rules 16.3.9D and 17.5A.6 of the Proposed Plan):

### **Amenity Values and Rural Character**

#### **Local Character**

There is presently a predominantly rural character in this area. However, the land on the opposite side of Harley Road will in time be developed for 20 rural residential properties, and so the character of the area can be expected to change somewhat.

## Landscape Fit

In my assessment, the development proposed has been designed to fit reasonably well within the current and anticipated rural character of this area. The application includes a number of measures to minimise the changes to the existing character of the area, and to minimise adverse visual effects. These are set out in the application document, and the attached Tasman Carter report (Annexure 3 of the AEE). These measures include the clustering of dwellings, location of larger lots and recreation reserves, building design controls, and landscape plantings.

Of the 61 allotments, 51 are contained within six appropriately located clusters of development with the 10 remaining lots being larger and providing a more rural buffer between the residential clusters. Within each of the 61 new allotments a 30 x 30 metre "building location area" has been identified (nominated house sites). These will be subject to design controls, including the height of dwellings, and reflectivity controls, as volunteered and nominated for each site.

The development includes two recreation areas, along with a lineal and central open space corridor following a major water course within the development. These areas are to be enhanced with appropriate riparian plantings, and will assist to 'break' or offset any overall sense of built development arising from the concentrated clusters of dwellings. I will discuss later in this report how the density of development proposed here is considerably less than might be expected in the Rural 3 zone, by reference to the TRMP.

Frank Boffa's report (**Attachment 3** of my report) addresses these aspects in more detail, and concludes that:

*"The Tasman Carter landscape assessment report ... and the more specific design development of the proposed subdivision within that wider site context, is appropriate and has sensitively considered and addressed the important landscape issues ... is appropriate in terms of its cluster layout, lot size and overall density. The development as outlined ... is a sensitive and appropriate response to the site and the outcomes sought for the Rural 3 zone".*

## Covenants on Further Subdivision

Mr Boffa's report does, however, caution that without adequate definition and long term protection of the site's background open space setting, the proposed development could be compromised by further subdivision within the 132 hectare balance area. He therefore recommends that covenants should be put in place to prevent further subdivision of the proposed rural residential lots and the balance lot (lot 900) to ensure the density of development and the rural character of the area is maintained and protected.

The applicant has been asked to comment on Mr Boffa's suggestion, however at the time of writing I have not seen a response. I can comment that there would be no problem should the applicant volunteer such a condition at the hearing. Unless that condition is volunteered, an imposition of restrictive covenants on further subdivision of the balance lot could have difficulties. The Proposed Plan currently entitles the landowner to re-subdivide Lot 900 into two parcels (i.e. minimum of 50ha as a controlled activity) and it would appear inappropriate or even *ultra vires* to remove

that entitlement by way of a condition on the consent. I note that any further subdivision of that 132ha lot into small residential or rural residential allotments, would require a resource consent for a discretionary activity (non-complying in terms of the Transitional District Plan) in any event, and the wider effects on the rural character and landscape values could be assessed at the time.

It would however be possible I believe to place restrictive covenants on the much smaller residential, rural-residential and rural lifestyle lots, in order to prevent their future subdivision into even smaller allotments. A condition to this effect was placed on the CBH Limited consent, and is also appropriate here I believe.

### **Planting and Landscaping**

Mr Boffa's report also requests further clarification with respect to responsibilities for planting, maintenance and landscape management matters. This is believed necessary because the Tasman Carter report makes recommendations for vegetation framework planting throughout the development to be implemented and managed for up to 10 to 20 years, and it makes reference to a "number of different approaches and management regimes."

Mr Boffa's report says that:

*"While consent conditions requiring detail planting plans and management specifications can and would be imposed, there needs to be clarification as to who will be responsible for what and when. For example; the backdrop planting, which is proposed on part of the balance lot (in the 16 hectare block at the head of the main valley), could be disposed of with no ongoing commitment to the planting that is proposed and its ongoing management".*

I expect that the applicant will be able to clarify this at the hearing. In the interim, I have included a recommended condition of consent to require that a Landscape Management Plan is prepared and lodged with Council, and this will include details of:

- Replacement planting including backdrop planting
- Ongoing maintenance of planted areas (developer and future owners)
- Landscaping areas to be subject to land covenants to ensure their ongoing existence.

### **Other Effects on Rural Character**

There can be expected to be a general increase in effects such as the number of vehicle trips, noise, traffic safety, lighting and other effects associated with an increase in the number and intensity of housing in the area.

The effects produced from residential use are quite different from those generated from the current rural use in the area. However, the Rural 3 zoning does anticipate such effects. I would also note that rural residential and lifestyle development is a phenomenon that has been occurring in recent years throughout these rural areas, outside of the Rural 3 zones. A significant amount of subdivision has been approved by Council in rural areas outside the areas of intended Rural 3 zoning in this general area. For example, consent was granted for the Old Coach Road Developments subdivision at Nuttall Road in the Rural 2 zone, and this was for a subdivision to allow 21 house sites on a 42 ha site.

Such development may be expected to continue to occur, however the clear intention is that it be confined more to the Rural 3 zone rather than to continue to occur throughout the Rural 1 and 2 zones. This development by CHH Limited has the advantage of at least being located in an area determined by the proposed Rural 3 zoning as being generally suitable for this type of development, and it is the type of development that can be reasonably anticipated for this site.

### **Lighting**

The applicant is proposing 'flag lighting' at the road intersections, and no other street lighting, so as to keep night time illumination in this area to a minimum. Given the essentially rural character of the surrounding area, it is in my view imperative that lighting is kept to a minimum. (I note however that two of the submitters have expressed differing views on this).

Dugald Ley, the Council's Development Engineer, has recommended to me that street lighting should be provided in accordance with the Council's Engineering Standards. I can understand his perspective, particularly from the point of view of asset management and safety for road users and pedestrians. That would result in essentially an urban standard of lighting. However the Access Lots, (or rights of way as being recommended later in this report), would not need to have lighting if they are not legal roads vested in Council, and this would reduce the overall lighting in the subdivision.

The Council's decision in July 2005 on the CBH development was to require 'low impact lighting' to ensure pedestrian safety at night should be provided and as a result it would provide some road lighting benefit. It required full street lighting to be provided at the intersections in accordance with Transit New Zealand Standards. Other street lighting was required to be shielded and downward focused and is to be no more than 5 metres in height.

In my view, a similar condition on lighting would be appropriate for this development, were it be approved.

### **Effects on Productive Land Values**

An effect to be considered is the extent to which the proposed subdivision retains and protects land with actual and potential productive values. The applicant has provided an evaluation of the productive land values of the application area (Agfirst report in Annexure 4 of the AEE) and has identified that approximately 12 hectares is Class B land (considered marginal for intensive horticulture), the balance is assessed as Class E (suitable only for pasture).



The subdivision layout in the proposed development has taken account of this by setting aside three potentially productive allotments (Lots 34, 60 and 61) to protect their productive potential. The development of the balance of the (poorer quality) land in the manner proposed is not considered to have any significant effect on its productive potential.

Andrew Burton, the Council's Resource Scientist – Land, has reviewed the application and has provided me with some comments, which I have summarised as follows:

- The soils are Mapua sandy loams, this soil type has been used for pipfruit orchards, and increasingly now for boutique vineyards and olive groves.
- The physical nature of the soil limits the versatility of the application area (top soil is shallow with a weak structure, underlying clays are very firm, and are also subject to erosion when exposed or cultivated). The structure can lead to impeded drainage hence impeded rooting depth.
- However the soils have a high water holding capacity which can reduce irrigation demand for those horticultural crops that are suited to these clays.
- Intensive cultivation would only be possible, with management practices to minimise soil erosion, on the gentle sloping areas of the site.
- The natural fertility of the soils is very low, but fertilisers can be applied.
- Wetland areas in the main gully system, and at the Dickers road area, have no productive potential.
- Cropping and horticultural activities are not practical at the southern part of the site due to steep slopes.
- At the other end of the block gentle slopes would permit horticultural use. This Class B area indicates that although there are some versatility limitations the land has a potential for semi intensive horticulture.
- Over most of the remaining areas the predominant slope would enable some semi intensive horticulture, however numerous small steep gullies would limit intensive use.
- There is a possibility that this limitation could be overcome in some areas by re-contouring, to enable the establishment of some production systems.
- The Agfirst report indicates that re-contouring may not be economic, and would require resource consent, however the profitability of potential crops cannot be accurately assessed, and consent issues should not be onerous.

In reflecting on Mr Burton's comments, it is my view that in general the site is not high quality land on which intensive horticulture would be suitable. Steep areas would be only suitable for pastoral or forest production, unless semi intensive horticulture on parts of the application area is made possible by re-contouring land.

Given the site's limitations for productive use, I consider that the proposed development, with its clustering of dwellings, productive lots to be set aside, and retention of large balance areas, is a reasonable response to the productivity considerations in the context of the Rural 3 zone.

### **Roading and Traffic Effects**

Mr Ray Firth, of MWH Limited, was asked by Councils Engineering Section to appraise the roading impacts of this development. His report is appended to my report as **Attachment 4**.

Mr Firth's report describes Harley Road as a collector road with curvilinear alignment, and narrow formation and seal width. These factors increase the likelihood of loss of control crashes.

He notes that improvements are planned to Harley Road in terms of the development of the Rural 3 zone. Realignment of Old Coach Road is required as part of the future upgrading, and a preliminary layout plan is attached to his report. His view is that the future alignment of Old Coach Road, the intersection with Harley Road, and the conflict with the proposed internal access road, should be resolved as part of this development. He recommends that land is required for road along the Harley Road and Old Coach Road frontage of the site to regularise the existing formation occupation, and to allow for road upgrading.

Mr Firth's report estimates that traffic generation for this development will be greater than that given in the Traffic Design Group report (Annexure 6), and it will result in a level of traffic which justifies the upgrading of Harley Road.

He notes also that the existing formation of Old Coach Road is outside the existing legal road reserve and will conflict with the access road that serves the southern-most lots. His recommendation is to delete the northern part of the proposed access road, and require direct access onto an upgraded section of Old Coach Road.

There is a need to improve sightlines at the proposed road intersections, and to require localised widening.

The report notes that turning movements into Harley Road from State Highway 60 will significantly increase, and improvements are required at the intersection. This point was also made in the submission of Transit New Zealand. The Council CTA proposals do not provide for upgrading of the Harley Road/SH60 intersection as the indications were that the Ruby Bay By-Pass would have been completed prior to the programmed upgrade of Harley Road. The required upgrading is for a 3.0m wide, 150m length (including taper) deceleration lane for left turn in (as per Austroads Intersections at Grade, Table 5.6), and widening for a right turn refuge in accordance with Diagram D of TNZ's Manual.

The report notes that an area of approximately 30m<sup>2</sup> is required to be vested for a future water reservoir site, in accordance with the Rural 3 zone provisions, and so an amendment to the Application Plan will be required.

**Mr Firth's report discusses the contributions for roading, and comes to the view that additional mitigation measures are required to address localised intersection improvements and curve improvements for safe sight distance, and these works should be undertaken by the developer.**

His report says that the likely development of Harley Road is estimated to start in 2017/18 (i.e. not in the LTCCP), and that no provision has been made in the estimates for Rural 3 development to fund these works earlier than programmed.

In conclusion, it is considered that the roading impacts of the proposed subdivision are able to be accommodated, subject to the vesting of adequate road reserve for Harley and Old Coach Road, and the necessary upgrading of roads and intersections to meet the required Engineering Standards.

### **Servicing Effects**

There are effects relating to the key services: roading, water supply, stormwater, and wastewater.

The effects on the roading network have been addressed above, and several conditions have been recommended to address the effects which need to be mitigated, including the applicant being responsible for the upgrade of Harley Road and the Harley Road/State Highway 60 intersection, and the formation of appropriate intersections onto Harley Road to Council standards, as well as the normal roading development contributions which will arise.

A particular aspect of the development that requires consent is the proposal for Access Places serving less than 7 lots (a discretionary activity in terms of Rule 18.10.4). This is related to the proposal being for the entire street network, including the cul-de-sac heads, to be vested in Council. Council officers have recommended to me that the cul-de-sac heads should not be Access Places (i.e. they would be more appropriate as private rights-of-way) as they are serving only a few properties and should not be the responsibility of Council to maintain.

The water supply provisions for this subdivision will be essentially self sufficient, but will provide reticulation to Council standards so that in the future it can connect to the Council bulk water supply scheme.

Fire fighting capacity standards are proposed to be met. It is volunteered in the application that each house will have two 23,000 litre rainwater storage tanks for (interim) potable supply. A series of dams will be constructed in the main gully to collect surface water runoff, and will supply non-potable water to the development.

There are some concerns relating to the proposed water storage dams, in particular effects on downstream users, and these are addressed in sections 5.4 - 5.6 of this report below.

The stormwater management system involves:

- runoff from road surfaces to be discharged to grass swales,
- mitigation measures such as rock check dams to limit erosion,
- each separate lot will incorporate its own filter strips and swales,
- two of the three ponds will be constructed to deal with peak downstream flows, and
- secondary flow paths designed for overland flows, via swales into the existing gullies.

The effects of stormwater discharge are assessed as no more than minor, provided the details in the Connell Wagner report (Annexure 5), and the recommended conditions are complied with.

Potential effects identified from consideration of the proposed discharge of domestic wastewater include;

- Potential bacterial and nutrient contamination of water resources (groundwater and surface water) as a result of proposed discharge; and
- Potential odour emissions from treatment and disposal system; and
- Potential slumping or seepage from application of wastewater to clay soils present at the site; and
- Runoff and overland flow of wastewater or contaminants emanating from the wastewater discharge; and
- Siltation of watercourses downstream during installation of wastewater treatment and disposal system; and
- Clogging and degradation of soil structure from applications of wastewater.

Some discussion of such effects and proposed mitigating measures was provided in both the Kingett Mitchell and Connell Wagner reports submitted with the application for resource consent RM050286 and associated further information. No new discharges of domestic wastewater are permitted at this site so the permitted baseline can only be assessed from other activities (primarily of a rural nature), which may be undertaken at the site and may have similar effects.

The applicant intends to construct and operate a single communal on-site wastewater treatment plant that is capable of treating wastewater to a tertiary standard prior to disposal by pressure compensating drip lines to land. Detailed, careful design, installation, operation and maintenance of the proposed wastewater treatment and disposal system would be required to minimise potential adverse effects. Methods to avoid, remedy and mitigate potential adverse effects from the discharge of domestic wastewater have been proposed and further measures recommended through conditions of consent. These are discussed in more detail in Section 5.8 of this report. Robust and enforceable conditions are required to ensure the long term viability of the proposal and to minimise potential adverse effects.

## **Important Natural Features and Ecological effects**

The most significant natural feature of value within the application area is the existing Harley Road wetland, and associated streams.

Effects on the wetland are addressed in detail in the report of Kingett Mitchell (Annexure 7 of the AEE). The Kingett Mitchell report also addresses effects on stream habitat, wetland vegetation, and macroinvertebrates, freshwater fish, and fauna. The assessment focuses on management of effects of wastewater disposal, water for irrigation, stormwater contaminants, riparian environments, management of weeds, and the Harley Road wetland and public access.

Council's Resource Scientist Water Quality (Trevor James) identified initial concerns with the proposal with respect to the effect of the in-stream ponds on fish passage, removal of part of the wetland and the increase in water temperature. Further information mentioned above, provided by Kingett Mitchell has provided some further detail on these matters, however, conditions (such as riparian plantings) are recommended to provide appropriate controls to limit such potential effects. In a letter provided to the applicant from the Department of Conservation (dated 9 August 2005) the Department identified initial concerns regarding wastewater management, protection of native fish, wetland habitats and vegetation, in this letter the wetland areas were classified as "significant". No formal submission was received from the Department, although in their letter to the applicant they stated that "as a result of reviewing all the information the concerns of the Department were satisfactorily addressed".

The Royal Forest and Bird Protection Society submission requests that this be made a cat-free development. I have discussed this with Council staff, and whilst the objective is supported, there seem to be practical difficulties in imposing such restrictions, particularly from an enforcement point of view. The submitter may be able to address this further at the hearing. I note that the Forest and Bird has subsequently sent a letter to Council advising that it has met with Tom Carter (landscape adviser for CHH) and it is now satisfied its concerns have been met, however the letter says that they still wish to make this a cat free environment.

## **Site Contamination**

No information is provided on this potential aspect of development in the Rural 3 Zone. It is anticipated that the previous forest use of the land will have avoided any such potential effects and any effect will be minor or less.

## **Cross Boundary and Reverse Sensitivity Effects**

Section 3.8.2 of the AEE states the following:

*"The layout of the proposed subdivision, including the setback of building location areas from the Rural 1 land to the north and setback from the existing plantation forest, is considered to provide an appropriate means to avoid cross boundary effects. A covenant will also be imposed on the allotments to ensure the future residents are made aware of the rural environment within which the site is located".*

I agree that in general terms there should be no significant reverse sensitivity issues for adjacent farming practices.

However, some of the allotments appear to be in close proximity to the extensive areas of plantation forest at the southern end of the site, and there is some potential for reverse sensitivity effects. Houses on Lots 27, 28, and 30 in particular may not be able to meet the minimum 30 metre setback from existing forests, and effects relating to fire hazard, pollen, and effects during forest harvesting may be significant for those lots, and for others nearby.

I am not sure that the covenant referred to above provides sufficient protection for the future residents from the adverse effects from logging and other forestry activities. For some other applications that I have been involved in, 'rural emanations easements' have been volunteered by applicants. I believe this mechanism was also used in the previous CHH development east of Old Coach Road, near Mahana.

Such provisions may provide some level of mitigation for reverse sensitivity effects, but have never been tested in practice. It would be of benefit if this could be further addressed by the applicant at the hearing, based on their experience in other situations. However in the interim I will recommend a condition requiring rural emanations easements.

### **Archaeological Effects**

The application indicates that there are no known archaeological effects. Effects on any unidentified sites that are discovered during construction can be mitigated by a standard note referring to the requirements of the Historic Places Act, and the interests of local iwi.

### **Social Effects - Recreation and Open Space Opportunities**

The development has positive effects in that it enhances passive recreational opportunities.

Lots 803 and 804 are for neighbourhood parks, to be owned and managed by an Incorporated Society.

Two local purpose reserves will be vested in Council (proposed lots 700 and 701), in order to provide for present and future open space and recreation needs of the residents.

The Parks and Reserves staff have agreed that the proposed provision of open space and reserves within this development is appropriate. The vesting of proposed lots 700 and 701 in Council, and the creation of access easements over proposed lots 803 and 804 (neighbourhood parks) is supported.

A pedestrian walkway will provide public access, via rights of way, from the public road at the northern end down to the wetland. These rights of way will be vested in the Council. The walkways have also been located so that they can be extended at a later date to connect to other walkway systems that may be developed when or if the adjoining properties are subdivided.

Another walkway is proposed in the valley floors (Lots 800, 801 and 802), and this is proposed to be owned and managed by the Harley Road Residents Association. The application states that this walkway system is for the benefit of the residents of the subdivision, however the Land Use Plan in the Tasman Carter report (Annexure 3 of the AEE) appears to show the valley floor walkway and the wetlands walkway as part of the same overall walkway system, without any distinction between public and private usage.

The Council's Parks and Reserves staff have expressed a desire for the valley walkway to be available for general public use, and I would support that, especially if it is to connect to other public walkway systems in the future.

The applicant has been informally asked to clarify the position with the valley floor walkway. I have not at this time seen a response, and so in the interim I have included a recommended condition of consent for this to be a public walkway protected by an easement in favour of Tasman District Council.

It would be appropriate for the costs of the public walkway formation on the rights of way and easements in favour of the Council to be credited against the reserve fund contributions applicable to this subdivision. I have included a condition for this.

### **Cumulative Effects**

In my assessment the effects associated with this development can be managed appropriately, in accordance with detailed management plans and with conditions to be placed on any consent that is granted. The development is at a scale consistent with the Rural 3 zoning of the land, and will not in my view give rise to adverse cumulative effects on the environment.

### **Summary of Effects**

Whilst this is for a relatively large development, a considerable amount of effort appears to have gone into the design, and in consultation with Council officers and key stakeholders, a range of mitigation measures have been developed.

It is therefore considered that the adverse effects on the environment are considered to be no more than minor, and are able to be mitigated both through the design and layout of the subdivision, measures contained in the AEE and supporting technical reports, and by detailed recommended conditions of consent.

## **5.3 Land Use Consent (Earthworks): RM050282**

### **Proposed Earthworks**

The application contains details and assessments of the proposed earthworks in the report by Connell Wagner in Annexure 5. The further information, dated 13 June 2005, addresses the proposed earthworks in more detail.

The earthworks are for the construction of roads, three dams and for building platforms where necessary, and collectively add up to total of approximately 40,000 cubic metres of cut and fill.

Approximately 2.8 kilometres of road will be constructed to service the proposed 61 lots, with some private accessways. Cut batters will be at slopes of 1H:1V and fill batters 3H:1V. On some of the lots excavation for building platforms will be necessary, where a suitable flat site is unavailable due to topography.

It is proposed that the three dams will be constructed early on in the subdivision development. The dams will serve two main functions:

- to detain stormwater peak flows and prevent flooding downstream, and
- to provide a non-potable water supply to the subdivision.

The dams will be designed to a 50 yr flood event return period, and an overflow spillway will be included to cope with greater flooding events (up to 100 year events). Specific details of the dam characteristics are contained in the engineering report by Connell Wagner (Annexure 5 of the AEE).

### **Erosion and Sediment Control Plan (ESCP)**

All earthworks will be undertaken in accordance with engineering standards and practices. A condition of consent will require that an Erosion and Sediment Control Plan (ESCP) be prepared by a suitably qualified person and submitted to Council for approval prior to any earthworks commencing.

### **Submitters Concerns**

Several submitters raised concerns with the earthworks that have already been carried out on the subject site. No resource consents exist for the logging and de-stumping that has been undertaken on the site so it is assumed that this work would have been carried out under the permitted activity rules of the proposed Plan.

Council's Consent Planner, Natural Resources (Donna Hills) reports that most major forest managers such as Carter Holt Harvey have excellent environmental standards, which are generally stricter than existing Council standards, and therefore it is unfortunate that downstream sedimentation effects appear to have been experienced in this case. Re-vegetation of the site and specific sedimentation control measures (required by the ESCP) should reduce any further adverse effects on downstream watercourses from the proposed earthworks. Particular care will be required given the characteristics of soils at the site, as outlined in previous comments of Council's Resource Scientist (Andrew Burton) discussed earlier in this report.

### **Assessment Criteria**

Rule 18.6.6 of the Proposed Plan contains the relevant assessment matters for which The Council has restricted its discretion.

I have reviewed those matters in conjunction with Donna Hills, the Council's Consent Planner, Natural Resources. For the sake of brevity the assessment matters are not repeated in this report. The applicant addressed these information requirements in response to Council's request for further information 26 May 2005. Actual and potential effects identified in the applicant's assessment included; soil erosion during construction, visual effects and increased runoff.



The applicant proposed to address sedimentation concerns through an Erosion and Sediment Control Plan (see below) and creation of stormwater detention dams. The applicant proposed that the site would be revegetated with grass on the completion of each stage of earthworks to further minimise sedimentation and cut and fill gradients would be managed to ensure slope stability is maintained.

Should consent be granted to this application, consent conditions are recommended such as the preparation and approval of an Erosion and Sedimentation Control Plan, along with qualified supervision and monitoring to ensure that any potential adverse effects will be no more than minor.

### **Recommended Conditions**

The recommended conditions of consent for earthworks include such matters as:

- Restrictions to daylight hours for earthworks to take place
- No spoil shall be placed in any watercourse where it may move or wash into a watercourse
- All practicable measures to avoid the discharge of sediment from earthworks undertaken at this site (Auckland Regional Council's Technical Publication No.90 Erosion and Sediment Control - Guidelines for Land Disturbance Activities)
- Stormwater runoff shall have restrictions on suspended sediment concentration measured at the site boundary
- No earthworks shall commence until an Erosion and Sediment Control Plan (E&SCP) has been approved by Council
- Controls on generation of dust
- Exposed ground to be reinstated to minimise erosion
- Controls measures to be supervised
- Condition of the subdivision (section 224(c) certification) that all the earthworks conditions of this consent have been met.

In my view, the measures contained in the Connell Wagner report, and the recommended conditions of consent, will ensure that the effects from earthworks on the site are no more than minor.

## **5.4 Land Use Consent (Dams and Culverts): RM050544**

### **Proposal**

It is proposed to construct a series of dams and ponds to provide aesthetic value, and to address stormwater and water supply issues.

The proposed site of the dams will result in the loss of some existing wetland and some stream habitat, to be replaced by dam storage (pond habitat). Various proposed culverts will also potentially adversely affect floodwater bypass and fish passage.

The applicant has advised (by letter from Duncan Cotterill dated 30 June 2005) that Pond 3 is to be reduced in size and will no longer have a storm water detention function. The purpose of the change is to improve in-stream habitat, as consistent with the Kingett Mitchell report recommendation (in Annexure 7 of the AEE).

This information was requested by Neil Tyson, the Council's Consent Planner – Water. However, at the time of writing this report, Mr Tyson was unable to confirm the details of this revision and the assessment is based on the original application. It is expected that this matter will be clarified at the hearing.

### **Construction of dams**

Under the TRP and the Dam Bylaw, dam construction, and alteration requires landuse consent if the dam has any of the following:

- Crest height > 2m high OR dam storage > 5000m<sup>3</sup>, OR
- has a catchment area of > 20 ha.

The application states that (in the report of Connell Wagner, Table 4.3) the proposed dams will have crests with a maximum height of five metres. Each dam has a catchment area greater than 20 hectares and pond storage at the proposed normal pond volume varies between 4,400 to a maximum of 7,700 cubic metres. The application does not include detailed dam design, rather it advises that the dam embankments will be designed in general accordance with the plan (see plan CO21) and data provided by Connell Wagner. The plan shows relatively flat 3H:1V batters for the dam embankment and a 3 metres crest width except where the dam (pond 2) also serves as a road crossing. It is stated that there will need to be a detailed dam design phase including a geotechnical report. This should be from an appropriately qualified engineer, with engineer's supervision of construction and producer statements provided upon dam completion.

I would note at this point that the applicant correctly identifies that the dam structures do not require separate Building Consent, as the individual storage volumes are less than the threshold of 20,000 cubic metres under the Building Act.

Under the Proposed Plan, the three dams fall within the definition of a *building* and the TRMP setback of 5 metres to an internal property boundary applies, and no dam shall be closer than 20 metres from a road without approval of the TDC Asset Engineers. The actual distance to individual boundaries is unclear in the application but two of the dams are proposed adjacent to road reserve to be vested in Council, and the secondary flow path (for flows greater than the Q50) is across this road reserve. Further detail with respect to ownership and management responsibilities of these structures is asked to be produced at the hearing. It is assumed that each dam will comply with the 5 metre setback to any internal property boundary.

Mr Tyson advises that he is confident, from a structural viewpoint, that dams can be built at the proposed sites, that would fully comply with the Council's requirements for dam construction and those of the New Zealand Society of Large Dams (NZSOLD). The applicant has volunteered to produce a Sediment and Erosion Control Plan and this is included as a condition of the earthworks consent RM050282. In addition, approval by Council of full dam design plans is required prior to any site works commencing.

## **Culverts**

Section 4.4 of the Connell Wagner report states that various culverts are required, the design for which is to be provided at the detailed design stage. The applicant's further information of 17 May 2005 confirms there is one culvert crossing immediately upstream of Pond 1 and the design of this will be in general accordance with the data in the Connell Wagner Table 4.6. Like the dams, a 1350mm culvert pipe is proposed under this road, although this may be upgraded to a box culvert in the further information (Connell Wagner 13 June 2005). The applicant acknowledges that the Council road to vest will be designed to carry flood flows, i.e. to operate as a secondary flow path in the event the culvert became blocked, and the roadway will dip to cater for the Probable Maximum Flood (PMF) (Connell Wagner 13 June 2005).

The further information is that there will be 15 road culverts (typically 375mm diameter), and in addition to the culverted crossing up to 61 culverts will be placed under driveways. Five culvert crossings are required for beneath the walkway.

I would note that whilst there is no existing permitted activity rule for new culverts at this time, and therefore consent is required in all cases, it would be possible to consider the culverts in terms of the effects being *de minimis*, certainly in the case of smaller culverts on dry flowpaths.

Culvert design is proposed to be in compliance with the Council's Engineering Standards and Transit's NZ Bridge Design Manual in the case of the culvert crossing. In addition, culvert design will be fish friendly although this is unnecessary for the dry flow paths.

My recommendation is that the land use consent for dams and culverts can be granted subject to the draft conditions at the end of this report.

## **5.5 Water permit (to Dam Water): RM050283**

### **Proposal**

The purpose of the proposed dams is described above. Water from the dams, at least in the medium term, is to be used for non-potable supply for toilet flushing and also irrigation. Dam water is to be made available to each individual property until such time the Council's bulk water supply is available. Council water is expected then to be supplied to each property via the (cleaned "non-potable") supply pipelines proposed by the applicant. Thereafter, the dams will have an ongoing stormwater detention function, amenity value and be available for irrigation supply.

In assessing this matter I have received comments from Neil Tyson. Several submissions that have raised concerns have also been considered. It is noted that Department of Conservation did not submit and it has stated in the letter of 9 August 2005 that their concerns have been largely satisfied. The Department does however suggest riparian planting around the dam edges and a fish survey in two years to determine if there is a need for manual fish transfer. As this is not a matter contained in any submission the applicant may wish to advise whether they accept such a condition.

### **Assessment Criteria**

The applicant property is located in the Moutere Surface Zone, which includes both surface water and shallow groundwater and this zone overlies the deeper Moutere Eastern Groundwater Zone (MEGZ). Both are currently *fully-allocated* water zones and no new consents to *take and use* water from these sources are being granted. The exception is taking water in winter months from surface stream where new consents can be granted for water harvesting in storage dams. New consents are also able to be granted for damming and taking water to and from storage and this is proposed by the applicant.

Under the Proposed Plan rules, the proposed dams require consent (i.e. water permit) because the catchment area above each dam is greater than 20 hectares (Rule 31.2.1). New dams such as the applicant's fall to be considered as *restricted discretionary* activities under Rule 31.2.3 TRMP where Council has limited its discretion to a range of matters including the following:

- (1) *The rate, manner and timing of the discharge of water from the dam including provision of a residual flow or any steps necessary to maintain any flow specified in Schedule 31.1C.*
- (2) *Effects on aquatic and riparian ecosystems including of the impoundment, and upstream and downstream of the take. (Note: "take" should refer to "dam"... M Baker pers comm)*
- (2A) *Maintenance of aquatic habitat within the impoundment, including management of pest plant and animal species*
- (3) *Effects on other uses and values of the water body and those of connected water bodies such as groundwater, springs or wetlands, including those given in Schedule 30.1.*
- (4) *Effects on other water users, downstream landowners and landowners affected by the dam structure or impounded water.*
- (5) *Effects on fish habitat, including passage and entrainment in pipes.*
- (6) *Degree of compliance with the current New Zealand Society of Large Dams (NZSOLD) guidelines.*
- (7) *Information to be supplied....*
- (8) *Monitoring the effects of the damming.*

(9) *Structural stability of the dam.*

(10) *Duration of consent.....*

Schedule 30.1 of the Proposed Plan currently recognises the Moutere surface resource as having valued eel habitat and the aim is to maintain at least a minimum flow for eels and other in-stream values while maintaining minimum stock water supplies. This is a significant issue in the Moutere in dry summers when the natural surface water supply is very limited.

Other relevant aspects from Schedule 30.1 are:

<b>(13)Moutere Surface Water Resources</b>	<b>Instream Uses and Values</b>	
	<ul style="list-style-type: none"> <li>• Eel habitat.</li> </ul>	<ul style="list-style-type: none"> <li>• Maintenance of minimum flows to protect in-stream habitat, particularly for eels.</li> </ul>
	<b>Other Uses and Values</b>	
	<ul style="list-style-type: none"> <li>• Human consumption.</li> <li>• Irrigation supply.</li> <li>• Community water supply.</li> <li>• Stock and farm water supply.</li> </ul>	<ul style="list-style-type: none"> <li>• Maintenance and improvement of users' security of supply to acceptable levels.</li> <li>• Maintenance of minimum flows for stock and domestic water supplies.</li> </ul>

I note that effects on other water users, particularly downstream water users is a critical issue in the water short Moutere catchment. Consequently, no new consents to take surface water in the Moutere Surface Zone are envisaged, and any applications fall to a non-complying status in the Proposed Plan under Rule 31.1.6(d)(i).

The *damming* application falls to be assessed as a restricted discretionary activity, and such applications can be declined or granted by Council. In contrast, the proposed *take and use* consent from the constructed ponds, reservoirs or dams are *controlled* activities under Rule 31.1.5 TRMP and must be granted by Council. The applications for *take and use* are assessed in the next section. Under Rule 31.1.5(1)-(9), Council has reserved its control over a more restricted range of matters but include effects on other water users, uses and values.

In discussions with Mr Tyson, and based on the wording of the matters for each of these rules, it is apparent that the Proposed Plan envisages that the *damming* consent should include any conditions affecting ... *The rate, manner and timing of the discharge of water from the dam including provision of a residual flow.* This is confirmed because the *damming* application is the only application that can be declined, and the *take and use* application must be approved (with conditions as appropriate).

If the consents are granted as applied for then, under Council's Policy 30.2.1, the applicant's use of water in a drought would potentially have priority over an existing downstream irrigator. The proposed non-potable supply for toilet flushing etc is likely to fit the definition of *water for the maintenance of public health.* The policy is stated in full.

### *Policy 30.2.1*

*During times of low flow beyond the provisions of any rationing or rostering regime or when implementing a water shortage direction under Section 329 of the Act, Council will give priority to the following uses, whether they are authorised by a permit or through a rule in the Plan (in order of priority from highest to lowest) in requiring reduction or greater restrictions, including cessation for authorised takes:*

- (a) water for the maintenance of public health;*
  - (b) prevention of significant long term or irreversible damage to the water resource or related ecosystems or specified significant instream values;*
  - (c) water necessary for the maintenance of animal health;*
  - (d) uses for which water is essential for the continued operation of a business, such as irrigation of horticultural crops or water essential to industrial activities;*
- and the following uses will not be authorised during such a drought*
- (e) irrigation and other uses not associated with commercial production such as irrigation of amenity plantings;*
  - (f) non-essential uses such as recreational use, e.g. swimming pools and car washing.*

As can be seen above, *water for the maintenance of public health* has priority over stock water use, which in turn has priority over irrigation during any Council imposed water restrictions. However, if a condition of the *damming* consent required the release of a residual flow sufficient to satisfy downstream water use or users, then the above would not apply as Section 329 rationing would normally only apply to *take and use* consents.

### **Applicant's Assessment**

The report by Connell Wagner (pages 8-11) addresses the matters in Rule 31.2.3. The applicant's conclusion is that (mainly) because of the combination of short length of stream, naturally stream drying and poor quality fish habitat, no residual flow is proposed below their dams for downstream users and specific fish pass provisions are not proposed.

In discussions with Mr Tyson, there are concerns in the proposal does not provide for residual flow below the dam.

New gully dams in the Moutere are typically constructed over summer during dry conditions. The completed dam then fills the next winter from surface runoff and, in this case, total storage of around 20,000 cubic metres will easily fill given an average rainfall year.

If no abstraction occurred from the dams then, once full, the dams would overflow and bypass via their culvert pipes and spillways, the total catchment flow less a small amount of evaporation. The effects of three new properly engineered dams on the environment would then be limited to the loss of stream habitat (versus the creation of new pond habitat) and any effects on fish passage. Effects on other water users in this scenario would be minor. Over time, the dam structures would need monitoring of their structural stability, spillways etc as is required for all dams.

However, the applicant is proposing to take water from these dams, year round for non-potable use and for summer irrigation and they propose no residual flow below their most downstream dam. The effect on the existing flow regime will therefore be a reduction equivalent to the amount being taken (plus any evaporation loss). In early spring-summer, this may not be an issue if the natural stream flows are good. However, as surface flow reduces in a normal summer, the effect will be a reduction in available flow below the dams, and often zero flow. The Council's experience, has been that well constructed Moutere Gravel dams do not leak to any measurable extent.

The applicant states that the stream is ephemeral (i.e. intermittent) and that surface flow reduces to zero in summer at the site. When the officers inspected the site the flow wasn't nil but it was quite small perhaps less than 1 l/sec. Clearly, this is a situation where there is a (naturally) small summer stream flow, typical of Moutere Gravels. The experience is that surface flow may reduce to a trickle, but it would need to be a very dry summer indeed to be dry, as this stream is in a relatively large catchment (70 hectares). An adjacent catchment of 44 hectares had a measured flow of 0.3l/sec in the significant drought of 2000/01. The fact that a number of native fish were found by the applicant (*Kingett Mitchell* report) including banded kokopu suggests that the stream does not dry up completely. A reason for the lack of surface flow may well be siltation, soil, gravels and debris accumulation in the river bed and its porous nature causing the stream to go underground. The recent logging and other catchment activities may have contributed to this.

### **Downstream Users**

Effects on other water users, particularly downstream water users is a critical issue in the water short Moutere catchment, and this is one of the matters Council has reserved its control over.

One submitter (C and H Rush) is concerned about maintenance of adequate water flow and the effect on their downstream water use as they are reliant on the surface water supply for production purposes. The submitter takes water approximately 1 kilometre downstream of the site and from the mainstem, downstream of the confluence with the Dicker's Road Stream from Machine Gully. The submitter has a consent (Tasman Fruitpackers Ltd) that is restricted such that at no time shall their taking of water stop the stream flow, this under (Tasman Fruitpackers Ltd) consent NN970331. This consent aims to maintain a (permanent) flow in the stream for stock water use while allowing irrigation use at other times. There are other existing users and permit holders such as consent NN980165 held by Transit NZ for the ex-Johnson property. This has a similar condition.

The application does not mention these consents or assess any impact upon their use of water. The applicant identifies the downstream neighbour taking from the stream draining the "Valley Catchment" i.e. where the three dams are proposed. Council records show this landowner has no water permit or other consent to either dam or take water from the stream and, it follows, that they are restricted to a maximum of five cubic metres per day (even though they have an orchard).

Tasman Fruitpackers Ltd has a strong case to ensure that the summer flow they currently have the right to take is not reduced or otherwise adversely affected by the proposed damming and taking on CHH Limited's site. Chapter 30 of the Proposed Plan acknowledges that the Moutere Surface Water Zone is water short and over-allocated (see 30/9) and *impoundment can also deprive downstream permit holders (stream takes or other dam owners) of their previous security of supply, particularly where dams are constructed on ephemeral streams, rather than permanent ones* (see 30/23 TRMP). Cumulatively, the impacts of dams on summer flows in the lower catchment can be significant, and Policies 30.1.2 and 30.1.3 are particularly relevant.

In summary, it is considered that a residual flow is appropriate between each of the proposed three dams for amenity and instream habitat reasons. Furthermore, a residual flow is appropriate below the applicant's proposed dams to maintain any instream values, habitat and for equity and security of supply reasons for the existing landowners and consented users.

### **Low Flow Release Mechanism**

Recent consents for new dams require a residual flow with varying rates being adopted. The recommended approach in this case is to adopt a metered release mechanism whereby during the summer months (i.e. November to April), the permit holder is required to discharge to the downstream watercourse a minimum constant flow rate of 0.5 litre/second (ie 300 cubic metres/week) and, during the winter months a constant flow rate of 1.0 litres/second (i.e. a minimum discharge of 300 cubic metres/week or 15,811 cubic metres/winter).

A dam discharge valve is required to achieve this discharge, and a water meter will be required to monitor the discharge and confirm compliance. Weekly meter readings are appropriate at least in the short term.

It is acknowledged that dam storage is relatively small and the adopted flow release rate will be critical to the success of this regime. In recommending the above rates it is expected that some changes of conditions may be required but the aim is to maintain the natural low flow below the dams.

### **Existing Culverts**

It was identified in the application that there were already partial limitations to movement of fish through the presence of perched culverts on the applicant's property. It is assumed that these will be removed and Council staff will investigate blockages to fish passage on the downstream property.



## Effect of Water Temperature on Aquatic Life

Temperature change in waterways is recognised as a potential adverse effect in waterways and more investigations are required of existing dams in the Moutere to understand how fish species likely to be present in the waterway tolerate any high water temperatures.

Open water bodies such as ponds have the potential to absorb heat, resulting in downstream waters having raised temperature. This can be mitigated to some degree through riparian planting, however trees on dam embankments are not an option, for structural and stability reasons.

Residual flow release can be from either the surface (i.e. floating intakes) such as proposed from ponds 1 and 2, or from the lower part of the pond via the dam discharge valve. Apart from temperature, water quality tends to be better from a surface release. Early planting of the pond and the stream edges with fast growing native trees and shrubs is supported.

### 5.6 Water permit (to Take Water): RM050284

#### Proposal

The applicant proposes to *take and use* 61 m<sup>3</sup>/day of dam storage for non-potable supply to the 61 houses. Rainwater storage of 46 cubic metres is proposed for each house for potable uses. Taking water from storage will modify and potentially adversely affect downstream flows as assessed in RM050283.

As previously mentioned, the applicant has advised that Pond 3 is to be reduced in size, with no storm water detention. Whilst that has not been fully assessed, the proposed rate of *taking and use* appears reasonable and the only concern is that the available dam storage is now large enough given the potential loss of one pond and the recommended requirement for a residual flow.

Any pump intake is recommended to be screened to avoid entrainment of fish and eel. In relation to the Public Health submission, it is acknowledged that rainwater is not guaranteed to be safe for potable water and the proposed rainwater storage is also unlikely to be sufficient during a reasonable drought. With regard to the non-potable supply, this water will need to be clearly labelled as non-potable.

#### Permitted and Controlled Activities and Use

The assessment criteria in Rule 31.1.5 are very similar to those in Rule 31.2.3 outlined and discussed for the *damming* consent above. The application for take and use is however for a controlled activity, rather than for a restricted discretionary activity.

Some additional comments are provided in relation to this application for *take and use* of water from storage.

## Potential for Additional Takes

Under the “*permitted baseline*” approach, the applicant could have one house on each of their three existing titles, which is a maximum water demand of 15 m<sup>3</sup>/day excluding water for stock. If 60 houses are now built, this is potentially a total of 300 m<sup>3</sup>/day (60 x 5) which is 3.5 l/sec and it can be seen that the cumulative effect of subdivision on water demand in the rural zones is potentially significant.

New domestic bores commonly up to 200 metres deep are commonly being drilled in the Moutere and are *controlled* activities under the TRMP. These bores are being drilled for household supply and are granted consent provided their location can comply with a minimum bore spacing of 200 metres and provided Council’s *permitted* take and use rate in this zone (i.e. 5 m<sup>3</sup>/day/property) is complied with. Within the applicant’s subdivision, new bores may also be applied for unless the subdivision consent states otherwise.

Individuals can also potentially take water from any stream, pond or groundwater on their property, provided the *permitted* rate is not exceeded unless the subdivision consent states otherwise. In similar recent subdivisions, the applicant has volunteered that subsequent landowners will not seek to drill or take water, and a response from the applicant is requested on this at the hearing.

## Fish Passage

The Kingett Mitchell assessment is that eels are unlikely to be adversely affected. Dams on ephemeral streams in the Moutere are generally considered to have a positive effect by providing significantly greater eel habitat, particularly where permanent storage is proposed as is the case here. Eels detect and are attracted to dams and, importantly, Council is unaware of problems for eels accessing gully dams on Moutere Gravels. Even dams with no discernible watercourse are accessed by eels. Presumably, young eels are moving up the flowing streams in spring and they access dams regardless of the spillway type. Monitoring of the dams for eels once constructed should confirm this and it is recommended that a fish survey be conducted as suggested by Department of Conservation 2-3 years after dam construction.

## Suggested Planting

Grass is the preferred vegetation for dam embankments as it allows ease of access and maintenance and for inspection for leaks or slumps and the flatter the downstream batter the better for mowing etc. Trees should never be planted or allowed to establish on a dam wall due to the risk of their leading to structural failure. Planting natives such as flaxes around the lake at top water level is attractive and other native vegetation is likely to enhance the habitat potential of the dam, help reduce water temperatures and attract birds etc. The planting of appropriate native species is therefore recommended.

## **Exotic Fish and Plants**

Exotic fish and some plants introduced to dams have become significant pests in Tasman District e.g. mosquito fish (*Gambusia*). Dam owners are asked to avoid unwanted plants and fish and advise Department of Conservation and the Council if any are found.

## **Alternative Dam Sites**

Early in the application process, Council officers suggested to the applicant that they consider relocating one or more of their dams to avoid compromising the more valuable sections of stream habitat. The applicant property has various alternative sites where the gully streams are truly ephemeral but would provide for adequate storage of annual runoff for irrigation and non-potable.

## **Term of Consents**

An initial 10 year term for new water permits is envisaged under the TRMP in the notes for Rule 31.2.3 which state:

5. *Where appropriate, the duration of a consent to dam water will normally be granted for a period of 10 years. Consents to renew applications to dam water will generally be granted for a term of 20 years*

During this term, a review condition also allows for changes if there is an unexpected adverse effect. After the initial 10 year period, a significantly longer term (typically 20 years - but up to 35 years) is appropriate for dams that are well maintained and functioning without adverse environmental effects. Ten years is considered reasonable in this case.

## **Consent Holder Status**

Under the RMA, the consent holder is required to be a "Person" as defined by the RMA. Therefore, prior to granting any consent confirmation is required that there is an appropriate legal entity.

## **Conclusion for Water Permits (damming and take of water)**

One submitter is concerned about protecting water flow and the writer agrees that the absence of a volunteered residual flow or "bypass" of all summer low flow is unreasonable in this case. A more appropriate response would be reliance on storage alone and this would be consistent with the approach of other new dams where there is shown to be downstream users reliant on the summer low flow.

There are a number of positive aspects to the proposed development. However, the proposed operation of the dams and the loss or reduction in summer flow between and below the dams is not supported.

It is therefore recommended that consents RM050283 and RM050284 be granted but that for the damming consent (RM050283) a residual flow be required below the dams and conditions to this effect are included in the draft consent.

As noted previously, this recommendation is based on the original application and it is understood that the applicant has offered to vary the application in relation to Pond 3. This may well address some of the concerns expressed in this report.

## **5.7 Water Permit to Divert Stormwater and Discharge Permit to Discharge Stormwater: RM050285**

### **General**

The applicant has applied for consent to discharge and divert stormwater from the rural-residential development of this property. Separate consents were not sought to authorise the discharge of stormwater during constructions phases separately from the ongoing discharge of stormwater from the proposed residential development, although the differences in the two stages were noted in the application documentation.

The catchment drainage characteristics have changed markedly over the years from being forested, to de-forested, and parts of the property are now proposed to be developed with impervious surfaces for roading, accessways, driveways and roofs.

The discharge of stormwater from a rural-residential development may result in adverse effects on the environment, including flooding, sedimentation, and damage to stream habitat values, and it is important that these potential effects are avoided, remedied or mitigated.

Several submitters have expressed concerns at the downstream effects that have been experienced from the logging of this CHH land, and CCH land on the opposite side of Harley Road, subject to a previous subdivision. In additional submitters have also raised concerns about potential downstream flooding effects, management of the stormwater network by a residents association and potential ongoing siltation problems. The applicant proposed a number of mitigating measures in their application to reduce the potential effects of this proposal, these are summarised below.

### **Stormwater Control Measures**

The stormwater runoff from the proposed subdivision and development has been described and assessed in the Connell Wagner report (Annexure 5). The following is a summary of the methods intended to control stormwater runoff on the property, these methods provide alternatives to infiltration methods which were considered unsuitable for the site given the low permeability of the soils present.

#### **(a) Roof Water**

Roof water will be collected and stored in two 23,000 litre tanks per dwelling to be used for potable use until a reticulated water supply becomes available, and thereafter for non potable use for gardens and toilets.

(b) Road Runoff

Runoff from road surfaces will be discharged to grass swales adjacent to the roads. Mitigation measures such as rock check dams or other methods will be utilised where necessary to limit erosion.

(c) Paved Areas

Each separate lot will incorporate its own filter strips and swales.

(d) Detention Ponds

Three ponds will be constructed to deal with peak downstream flows and will provide detention, treatment and additional non-potable supply. The ponds will be designed to cope with a 50 - year flood return period and an overflow spillway will be included designed to take full peak flows in a 100 - year flood event.

(e) Secondary Flow Paths

It is expected that overland flows will result from hard surface runoff into the existing gullies on the property. These are to be controlled and channelled via swales within public walkways and across some private properties for which easements will be provided.

### **Assessment Matters**

Rule 36.4.4 of the Proposed Plan contains the matters for which The Council has restricted its discretion with regards to the proposed stormwater discharge. The assessment criteria for such discharges are contained in Schedule 36.1D of the proposed Plan.

I have reviewed those matters in conjunction with Donna Hills, the Council's Consent Planner. For the sake of brevity the assessment matters are not repeated in this report. The applicant proposed that where possible the stormwater system would utilise low impact methods to minimise adverse effects of discharges through appropriate design, construction and maintenance of stormwater systems and devices.

### **Recommended Conditions**

Should consent be granted to this application, consent conditions are recommended such as the preparation and approval of an Erosion and Sedimentation Control Plan, along with qualified supervision and monitoring to ensure that any potential adverse effects will be no more than minor.

The recommended conditions for discharge of stormwater include such matters as:

- The receiving waters to be free from any visible oil or grease films, scums or foams, or conspicuous floatable or suspended material, emission of objectionable odours, the rendering of freshwater unsuitable for consumption by farm animals, and any adverse effect on aquatic life.

- No scouring or sedimentation of any watercourse, adjoining properties or the coastal environment.
- Sediment controls.
- The discharge shall not result in or contribute to flooding on adjoining properties.
- Monitoring the effectiveness of stormwater sediment and erosion controls.
- A review clause to deal with any adverse effect on the environment which may arise.

In conclusion, once the development is complete the peak flows from the property are expected to be less than what they are currently. So in essence the development should result in a better situation than that existing, providing that the works are carried out in accordance with the details in the Connell Wagner report, and the detailed conditions of consent are observed.

## **5.8 Discharge permit (Domestic Wastewater): RM050286**

In accordance with Rule 36.1.16 Council have not limited the matters over which they have retained their discretion for such discharges of domestic wastewater. The assessment criteria contained in Schedule 36.1D of the proposed Plan detail specific aspects which need to be considered when assessing applications to discharge contaminants to land. The following provides an assessment of the matters of particular importance to the application to discharge domestic wastewater, the relevant criteria have not been regurgitated in full as they can be viewed in the Plan but key concepts have been summarised and discussed.

Natasha Lewis, Council's Consent Planner – Discharges, has assisted in this assessment.

### **Proposal**

As outlined previously, the applicant is to discharge up to 60, 000 litres of domestic wastewater to land by trickle irrigation. Wastewater is to be collected and delivered to a communal treatment plant by an internal sewerage network. At the treatment plant, wastewater is to be treated to a tertiary standard prior to being discharged at a rate not exceeding 2 millimetres per day to a designated and forested disposal area to the south eastern side of the site.

### **Receiving Environment**

The disposal area would be part of the 200 hectare site, 20 hectares is suggested to be available for such discharges. Potential effects include contamination of receiving groundwater and surface water resources, slumping, creeping and/or seepage of land as a result of the discharge of wastewater, odours and other nuisance effects from the operation of the collection, treatment and disposal systems, surface ponding and runoff of wastewater and sedimentation of watercourses during installation phases.

The application proposed that the activity was only an interim solution until Council reticulation was available at the site (as part of the CTA reticulation proposal). However, as noted earlier, since the notification of this application Council has withdrawn the proposal to provide wastewater reticulation to this area (which was programmed to reach the site by approximately 2010). With the withdrawal of this proposal the long term implications of the activity must be carefully considered.

The proposed disposal area is located at the top of a valley and is to be setback at least 100 metres from the unnamed stream between Harley Road and Dicker Road and 20 metres from any internal smaller watercourses. Existing *pinus radiata* covers the disposal area, these trees are 10-15 years old and may benefit from the application of wastewater. The proposed disposal area slopes in a south-east direction at approximately 11-17 degrees. Surrounding surface water courses have not yet been classified by Council although the nearest coastal waters of the Moutere Inlet have been classified for management for aquatic ecosystems, fisheries and fish spawning (See Schedule 36.1C of the Proposed Plan). Groundwater quality in the vicinity is yet to be formally classified. Existing land uses in the general vicinity are varied, however, forestry has occurred at the subject site for many years. Residential development is not yet common in the vicinity, although the adjacent block was recently subdivided and would be expected to be developed shortly. These sites are not serviced by a communal wastewater treatment plant so a number of individual on-site wastewater systems are likely to eventuate at this site in the near future. However, these are not yet in place so cannot be assessed as existing discharges.

The applicant's desktop site investigation identified that the subject site was located in an area of "Moutere Gravel, poorly to moderately well sorted clay-bound gravel dominated by quartzofeldspathic sandstone clasts". Council's Resource Scientist Land (Andrew Burton) identified Mapua sandy loam soils at the site as reported in Section 5.2 of this report. Andrew described the shallow weak structure of the top soil and the firm characteristics of the underlying clays at the site. The soils are subject to erosion when exposed or cultivated so considerable care would be required when in preparation of any disposal area. The poor drainage characteristics of soils at the site is well recognised in the area, as was evident from submissions received on this application. Both the Rush and Talley submissions raise specific concern with the suitability of these soils for on-site wastewater disposal. The site soil investigation provided in response to Council's initial request for further information reported a light brown, silty clay with gravels at the proposed disposal area. Three test pits were augured at the site, it appeared from soil profiles provided that findings were fairly consistent across these three pits.

A geotechnical report was not provided with the application. When questioned in Council's initial request for further information the applicant reported that it was proposed to assess stability of the site as the detailed design stage. The application reported that no instability had been identified during preliminary site investigations, and that given the 20 hectares of land available for disposal there was the ability to avoid certain areas if stability concerns were identified at a later stage. The application inferred that the low loading rates proposed further reduced any potential for land instability. If consent is to be granted, stringent conditions will be required to ensure wastewater disposal is carefully managed and disposed of in a manner which will enable continued, long term use of these poorly draining slopes without any adverse effects on the receiving environment and downstream landowners.

Reportedly no groundwater or any evidence of groundwater levels was found at any of the three test pits, the field work having been undertaken in May 2005. Concerns regarding downstream contamination of water resources raised in submissions appeared to focus on potential contamination of surface water resources, not groundwater resources. The applicant has proposed that wastewater disposal areas will be setback at least 100 metres from the unnamed stream which flows through the gully beneath the wastewater disposal area (and later passes through the Harley Road wetland) and 20 metres from any other internal waterways. Surface runoff of wastewater must be carefully considered given the poorly draining characteristics of soils at the site and potential surface runoff identified from water balance calculations of this proposal.

Specific concerns regarding potential impacts of wastewater disposal on downstream water resources were identified in the Talley, Gordon and Rush submissions. In addition, the Department of Conservation outlined initial concerns about wastewater management in correspondence provided by the applicant (no formal submission from the Department was received). However, as noted earlier, after reviewing the information contained in the application (including further information provided to Council) the Department reported that their concerns had been satisfactorily addressed. Tertiary treatment of wastewater and low wastewater loading rates to an appropriate part of the site should reduce potential impacts on surface water resources; the presence of a wetland environment beneath the proposed disposal area provides further potential renovation of contaminants. Monitoring of receiving water quality was required as part of the previous Carter Holt Harvey discharge consent for the Bronte Road development and is recommended with this proposal (but not offered by the applicant) to provide ongoing assessment of impacts on the receiving environment and in acknowledgement of concern raised by submitters.

### **Measures to Avoid, Remedy or Mitigate**

Measures to minimise contaminant levels of the discharge have been proposed in the application, although specific details of treatment methods were not provided. This omission was a point of concern raised in the Public Health submission, subsequently, a recommended condition of consent requires the applicant to submit a treatment plan for approval by Council prior to installation. This will require sufficient information to be submitted to provide reassurance that the proposed contaminant levels can be met. The applicant proposed that wastewater would be treated by secondary treatment system and then ultra violet radiation prior to disposal to land. Compliance with the following contaminant levels was proposed by the applicant prior to disposal to land, biochemical oxygen demand <20 milligrams per litre, total suspended solids <30 milligrams per litre, faecal coliforms <1000 coliform units per 100 millilitres, total nitrogen 25 milligrams per litre and phosphorus 10 milligrams per litre. These limits were reflected in monitoring recommendations proposed by the applicant and have been adopted in the recommendations attached to this report.



Assessment criteria refer to quantitative specifications contained in any relevant national or international standards or guidelines. ASNZS1547:2000 The New Zealand Standard for On-site Domestic Wastewater Management provides specifications for wastewater treatment and disposal system design and recommended flow allowance volumes. This standard is designed for use for household systems up to 14 people but is also of some use when assessing communal treatment and disposal systems. The loading rate and wastewater flow allowances utilised in the application arise from Technical Publication 58 produced by Auckland Regional Council, this is a widely utilised resource for providing guidance with wastewater management in this country, particularly with larger systems. It is notable that the wastewater flow allowance (200 litres per person per day) and the design loading rate proposed arise from TP58 not ASNZS1547:2000 and in this instance are the more conservative specifications.

Wastewater loading rates are critical in this instance given the poorly draining nature of soils in the area. Application rates have been minimised (2 millimetres per day has been proposed) to ensure wastewater is disposed of over a large area to reduce potential discharges to surface water. This is consistent with recommendations for poorly draining clay soils and recommendations contained within Council's draft amendments to Variation 32. However, the water balance equation provided with the application indicates the likelihood of surface runoff during the cooler months of the year. Proposed methods of remedying and treatment of the discharge have been outlined above but further detail is desired from the applicant.

The scale, location and potential effects of the activity have been outlined in earlier parts of this report. The proposal encompasses the wastewater from 61 proposed dwellings (calculated by the applicant to equate to not more than 60, 000 litres per day) so if granted would be one of the largest on-site wastewater treatment and disposal systems in this region. Consent has been sought to discharge 60, 000 litres despite the proposal for 61 dwellings, on the basis of flow estimates provided by the applicant (1000 litres per dwelling per day) this figure appears insufficient. This is a matter that should be clarified by the applicant at the hearing. Given proposed monitoring requirements (including flow metering) and the staged nature of this subdivision, any potential flow exceedances would be likely to be identified early on.

### **Operation, Management and Monitoring**

An Operation and Management plan for the wastewater treatment and disposal system had not been provided by the applicant at the time of writing. Given the advanced treatment processes required to meet the proposed wastewater quality limits considerable technology will be provided and consequently careful and appropriate maintenance and supervision will be required. If consent is to be granted it will be critical that robust conditions control the operation and management of the activity to ensure appropriate performance. Concern over management of the proposed wastewater treatment and disposal systems was raised by a number of submitters (namely Leith, Gordon and Public Health). The applicant proposed that the ownership of the wastewater treatment and disposal system (and consequently any associated resource consent) will ultimately lie with the "Residents Association" an incorporated society of whom each lot member will be a party to. The Society is intended to own and administer facilities such as the wastewater treatment system, although appropriate knowledgeable contractors will need to be employed to carry out most of the management requirements.

The writer expects the applicant to produce further detail at the hearing with respect to ownership and easement requirements relating to the wastewater reticulation, treatment and disposal systems (including pump stations). These must be detailed through the conditions of any subdivision consent that is granted.

This is similar to the management regime proposed for Carter Holt Harvey's previously authorised Bronte Road development. Although such management regimes have been utilised in other parts of the country for similar proposals, they are not common locally and are further complicated by the Council's 'Unitary' responsibilities. Legal advice provided to Council as a result of the Bronte Road decision and Council's decision to withdraw from wastewater servicing of the Coastal Tasman Area identified considerable risks and concerns with private entity ownership and operation of wastewater systems. A bond has been recommended by condition of consent to provide security to Council if problems were to be encountered in the future.

Further information was requested by Council, following the closing of submissions, on the proposed management regime. The application provided details of the structure and operational details of the proposed "Residents Association". Robust and enforceable conditions are required to reduce the risk to Council from this proposal, particular care will be required to ensure appropriate linkages are developed between the subdivision, land use and discharge consents, a concern raised by Council's legal Counsel with some previous decisions.

The proposed treatment system is intended to treat the wastewater to a tertiary treatment standard which is applied appropriately to areas suitable for wastewater disposal should not cause any notable adverse effects. Tertiary treatment ensures bacteria and viruses are reduced by UV disinfection to reduce potential effects of human contact with the wastewater or its receiving environments. The proposed collection system is intended to collect wastewater to a communal point for treatment prior to disposal, the reticulation network and pumping components were intended to be designed in accordance with Council's Engineering Standards to allow easy connection to Council's system should it become available. Disposal is to occur to a 3 hectare forested block by pressure compensating dripper lines, although a further 17 hectares is said to be available for future use if required. The topography of the site necessitates the need for pressure compensating dripper lines. Given existing vegetation on the proposed disposal area, the applicant has proposed that dripper lines will be laid along the surface to minimise the amount of earthworks required during construction, thus reducing risks of erosion and sediment discharges.

The applicant is required to consider mitigation measures and safeguards within their proposed wastewater collection treatment and disposal systems. Standby pumps have been proposed for each pumping station, but detail of proposed monitoring methods were not provided in the application. It is the writers view (this has been reflected in recommended conditions of consent) that telemetry should be required to ensure ongoing monitoring of all relevant components of the collection, treatment and disposal systems. Audio and visual alarms should also be required to alert landowners and appropriate members of the Residents Association to any issues. The applicant proposed that the treatment plant would have the capacity to store 4 hours average dry weather flows and would provide an additional two days in a grassed bunded area adjacent to the treatment plant.

This proposal is considered inappropriate as the risks associated with ponding wastewater in an emergency bund facility are too great given the residential nature of the development. Not less that 24 hours storage has been required by recommended conditions of consent, this is consistent with recommendations in the submission from Regional Public Health. Any temporary storage outside of sealed areas would not be authorised by this consent and would require a subsequent consent to be sought. Given the likely urgency of the situation this is not considered feasible and appropriate storage should be incorporated into the treatment plant design.

The applicant is required to consider alternative methods and locations in their application, however, it does appear that this assessment was somewhat limited by the desire to meet requirements of Council's proposed future reticulation network. The applicant assessed collection and disposal off site until Council reticulation was available but this option was eliminated for economic reasons. Individual on-site disposal on each lot was not considered appropriate (by the applicant) due to the small lot sizes. This is consistent with Council's policy recommendations for the draft changes of Variation 32. Little discussion was provided on consideration of the different treatment and disposal options available, although discharge to water was discounted by the applicant. With little detail provided to date regarding the proposed treatment method it is difficult to comment on whether this is the most practicable option. The topography of the disposal area indicates that the proposed disposal system although the best option for that particular part of the site may not be the best practicable option on the broader site.

It is considered that applicants should propose monitoring programmes to monitor the effects of the discharge where appropriate. In this instance the applicant proposed monitoring of the wastewater discharge on a fairly regular basis but monitoring of the receiving environment was not discussed. Weekly monitoring for the first month was proposed, then 2 times per week for the following two months and monthly for the first nine months. This would stretch out to every second month after 12 months of exercising the consent. This monitoring has been reflected in recommended conditions of consent, but requirements for monitoring of the receiving environment have also been included. The applicant is requested to provide a plan at the hearing locating suitable sites for monitoring of the receiving waters up and downstream of the proposed disposal areas.

## **Duration**

Consent was sought for 35 years, this is considered inappropriate given the lack of specific detail provided to date on the proposed treatment and disposal system, if granted this would be one of the largest on-site wastewater treatment systems in the region and subsequently careful monitoring will be necessary. 35 years is inconsistent with consent terms generally allocated for similar resource consents, a 10 year term has been recommended. This is consistent with recommendations for the water permits associated with this development. An annual review clause has been included to ensure any problems identified through monitoring or ongoing supervision of the activity can be incorporated into consent conditions at a later date if necessary.

## **Bonds, Covenants**

No performance bond was proposed by the applicant but is recommended by the writer to give Council some financial certainty to rectify issues which may arise at a later stage if problems with the proposed management structure were encountered. This is a tool suggested in recent legal advice provided to Council (and discussed above) to provide a financial incentive for the consent holder to ensure that the wastewater system is properly serviced and maintained.

## **Other Matters**

Wastewater treatment plants commonly discharge to air in the form of an odour and aerosols. The odour associated with fresh, aerobic domestic wastewater is often likened to kerosene or freshly turned earth, contrastingly, aged anaerobic wastewater is considerably more offensive with the characteristic rotten egg odour of hydrogen sulphide. The applicant has not sought consent to discharge contaminants (namely odour) to air associated with the wastewater treatment plant so they are must comply with the provisions of relevant permitted activity rules unless subsequently authorised by resource consent.

## **Recommended Conditions**

Should consent be granted to this application, comprehensive and robust consent conditions are recommended to make certain that the activity is undertaken in a manner that minimises potential impacts on the receiving environment to ensure any adverse effects are not more than minor.

The recommended conditions for discharge of wastewater include such matters as:

- Wastewater volume restrictions and contaminant limits prior to disposal to land; and
- Disposal restrictions from watercourses, steep slopes, boundaries etc; and
- Completion of treatment and disposal plans for Council approval prior to installation to enable assessment against consent restrictions (contaminant limits, setback distances etc);
- Completion of a comprehensive operation and management plan for Council approval prior to exercise of consent;
- Ongoing monitoring, maintenance and reporting requirements to enable ongoing assessment of potential effects;
- Annual review clause to enable Council to reassess conditions of consent if unforeseen matters arise at a later stage.
- The requirement for a bond to provide long term financial security to Council.

## 5.9 Relevant Plans and Policy Statements

The proposed activities must be assessed for consistency against relevant objectives and policies pursuant to section 104(1)(b) of the Act. As noted earlier, the most relevant Plan is considered to be the proposed Tasman Resource Management Plan. For the Coastal Tasman Area, there is a specific set of policies in Chapter 7.2A, but other objectives and policies also apply.

The following summaries the most relevant Plan matters and provides brief assessment commentary.

*Chapter 5 – Site Amenity Effects*                      The rural character and amenity values of the site and surrounding environment must be protected, and any actual or potential effects of the proposed subdivision must be avoided remedied or mitigated, including cross boundary effects.

*Objectives 5.1.0, 5.2.0, and 5.3.0*                      These aspects address rural amenity and character, as well as adverse effects of contamination and natural hazards risks. In the assessment of effects (Section 5.1 of this report), there will be no more than minor effects from the proposed activity on rural character and amenity values. This is because the design has sensitively considered and addressed the important landscape issues for this site, and it is appropriate in terms of its cluster layout, lot size and overall density. Mr Boffa's report supports this conclusion.

*Policies: 5.1.1, 5.1.2, 5.1.3, 5.1.3A, 5.1.4, 5.1.9A, 5.2.3, 5.2.6, 5.2.8, 5.3.2, 5.3.3,*

*Chapter 6 – Urban Environment Effects*  
*Objective 6.3.0*  
*Policy 6.3.3*                                      The objective and policy are concerned to ensure containment of urban subdivision so that it avoids cumulative adverse effects on the natural character of the coastal environment and avoids sprawling or sporadic subdivision, use and development. In my assessment the CHH proposal is not for urban development, and it does not represent sprawling subdivision, located as it is in a sensitive manner on a Rural 3 site.

*Chapter 7 – Rural Environment Effects*                      The issue is that productive potential of land resources, particularly those of high value, are to be protected. Rural character and amenity values must be maintained or enhanced.

*Objectives: 7.1.0, 7.2.0 and 7.3.0*                      Minimal productive rural land will be lost through this development. The design has taken account of the limited productive capability of a small part of the site, and this has been set aside for productive uses. As discussed previously, my opinion is that there will be no more than minor adverse effects on rural character and amenity.

*Policies: 7.1.2, 7.2.1, 7.2.2, 7.2.3, 7.3.1, 7.3.3, 7.3.6, 7.3.8, 7.3.9*

In terms of Objective 7.2.0, this development will provide for rural land to be used for activities other than soil-

based production (namely rural residential) in restricted locations, whilst avoiding the loss of land of high productive value (see further discussion on Rural 3 policies below).

Policy 7.2.1A sets out the situations where residential and rural-residential activities might be appropriate. This requires having regard to items such as outstanding natural features, cross-boundary effects, servicing availability, transport access and effects, potential for further fragmentation, variety of lot size, efficient use of the rural land resource and cultural effects. Those matters have been addressed in the assessment parts of my report, and in my view the Policy is achieved for this particular development.

Policy 7.3.6 is to ensure that adequate buffers are applied when allowing new residential allotments in rural areas so that productive opportunities are not compromised. This may have relevance particularly to the continued availability of water for downstream orchards, and also to the potential cross boundary effects arising from dwellings sited close to areas of plantation forestry. These matters have been addressed earlier in the assessment.

Policy 7.3.8 is to enable subdivision of land for protection of features or resources that contribute to rural character. This development includes plans to enhance the Harley Road wetland and riparian margins of the streams. Policy 7.3.9 requires consideration of the servicing effects of rural subdivision and development, including road access, water availability and wastewater disposal. These matters have also been addressed in my report.

*Issue 7.2A  
Policies 7.2.A.1, 7.2.A.3,  
7.2.A.4, 7.2.A.5, 7.2.A.8,  
7.2.A.9, 7.2.A.10,  
7.2.A.11, 7.2.A.12,  
7.2.A.13, 7.2.A.14,  
7.2.A.15, 7.2.A.16*

Issue 7.2A and its supporting policies are particularly relevant, as they were introduced by Variation 32 for the purposes of assessing developments such as this. The overall intention is to zone areas of Coastal Tasman as appropriate for rural residential and residential development while avoiding, remedying and mitigating adverse effects, and to at the same time to protect other areas of more productive land, and where the rural and coastal character, landscape and productive land values, are valued for such protection. The Rural 3 zone has been assessed as providing that opportunity, and the application site is within that area. (See discussion below).

*Chapter 8 – Margins of Lakes and Rivers, Wetlands and the Coast*  
*Objective 8.1.0 and 8.2.0*  
*Policies 8.1.1, 8.1.4, 8.1.5, 8.1.7. Policies 8.2.1- 8.2.6, 8.2.10, 8.2.15.*

Objective 8.1.0 and its policies are to maintain and enhance public access to and along the margins of rivers and wetlands. This will be achieved through the valley floor walkways and the vesting of reserves for public access within the site and connecting to the legal road.

Objective 8.2.0 and its policies are concerned with maintaining and enhancing the natural character of rivers and wetlands, and their protection from the adverse effects of development.

The enhancement proposed for the Harley Road wetlands, including riparian plantings and weed control, are considered to be consistent with this objective and the policies.

*Chapter 9 – Landscape*  
*Objective 9.1.0 and 9.2.0*  
*Policies 9.1.7, 9.1.7A, Policies 9.2.1, 9.2.2, 9.2.3, 9.2.5*

These are concerned with protecting rural landscape and amenity values. The Tasman Carter report, supported by Mr Boffa's report, show that the effects of the development on landscape values have been carefully considered and addressed by design and layout, and by planting proposals. An assessment has been carried out against the relevant design guides, and these are relevant to landscape consideration.

*Chapter 10 – Significant Natural Values and Cultural Heritage*

Ecosystems and habitats must be protected for their integrity and diversity.

*Objectives 10.1A.0, 10.2.0*  
*Policies 10.1A.2, 10.2.2*

The life-supporting capacity of the District's indigenous ecosystems must be protected from the adverse effects of subdivision, use and development. Community responsibility for the protection of indigenous habitat values of the District is emphasised. The applicant's response is positive and has resulted in a range of enhancement measures for the wetland and streams on the site.

*Chapter 11 – Land Transport Effects*

The potential effects of the proposed subdivision and development on traffic safety and efficiency must be avoided, remedied or mitigated.

*Objectives 11.1.0, 11.2.0*  
*Policies 11.1.2, 11.1.2A, 11.1.2B, 11.1.4A*

The main issues raised in submissions in this area are to do with the capacity of Harley Road to handle additional traffic, and the standard of the Harley Road/SH60 intersection. A related issue is the connection to the future Ruby Bay Bypass route which lies adjacent to the site.

*Chapter 12 Land Disturbance Effects*

*Objective 12.1.0*  
*Policies 12.1.2 – 12.2.3*

These relate to avoidance, remedying or mitigation of adverse effects of land disturbance. Relevant considerations include damage to soil, acceleration of loss of soil, sediment contamination of water and deposition of debris waterways, damage to river beds, land, fisheries, or wildlife habitats, or structures through deposition, erosion or inundation.

Issues of land disturbance are addressed in the assessment of the Earthworks consent above.

*Chapter 16.2 – Transport*

Permitted activity performance conditions that manage vehicle access, parking and road standards are contained in this rule. Where standards are not met, the activity is a restricted discretionary activity. A wide range of considerations can be taken into account.

*Chapter 16.3 – Subdivision*

Requires Restricted Discretionary Activity resource consent for Rural 3 Zone subdivision, namely the creation of allotments that are less than 50 hectares. A wide range of matters can be taken into account, including consistency with the Design Guide for the area.

*Chapter 17.5A – Rural 3 Zone Rules*

Any activity on the proposed lots is subject to permitted activity performance standards and conditions set out in Rule 17.5A, Rural 3 Zone rules.

*Objective 30.1.0*

*Policy 30.1.2*  
*Policy 30.1.3*  
*Policy 30.1.17*

The proposed new dwellings and residential activity are a discretionary activity in the Rural 3 Zone, as consent is being sought at the same time as subdivision.

Objective 30.1.0 is concerned with the adverse effects of water damming, including effects on the flows or water levels in rivers, lakes and wetlands, passage of fish and eel, other water users, aquatic ecosystems and riparian habitat, water quality, groundwater recharge.

*Objective 30.2.0*  
*Policy 30.2.1*

Objective 30.2.0 is concerned with equitable water allocation, efficient use, and security of supply for users. The evaluation in Section 5.5 addresses these matters.

*Chapter 33 - Discharges to Land and Fresh Water*

*Objective 33.1.0*  
*Policy 33.1.5, 33.1.6*

Objective 33.1.0 seeks to ensure that discharges of contaminants occur in such a way that avoids, remedies or mitigates adverse effects while maintaining existing water quality and enhances water quality where existing water quality is degraded for natural and human uses or values.

*Objective 33.3.0*  
*Policies 33.3.1 – 33.3.3*

Objective 33.4.0, and the policies relating to on-site discharges of domestic wastewater currently still relate to the provision of interim solutions until Council reticulation is provided. However, as noted, Council has released an interim decision to abandon the proposed wastewater

*Objective 33.4.0*  
*Policy 33.4.1, 33.4.2,*



#### 33.4.4

servicing of the Coastal Tasman Area. The subsequent variation has not yet been formally notified, but the existing and proposed policies advocate for discharges to land where possible as opposed to direct discharges to water. In this application site specific design has been proposed with low application rates and advanced treatment of wastewater to compensate for site limitations in accordance with the policy direction.

Objective 33.3.0 is to ensure there is no increase in risk of damage caused by flooding or associated channel damage arising from increased stormwater flows from urban or rural-residential development.

It is also concerned with the contamination effects of stormwater flows in receiving water bodies with significant natural character or habitat value, and the need to develop stormwater collection and disposal systems to service urban or rural-residential development.

The policies relate to the need to avoid, remedy or mitigate adverse effects of stormwater discharges (including flooding and erosion effects), to advocate works to restore and protect stream or coastal habitats, and improve and protect water quality affected by stormwater and drainage water discharges.

These issues are addressed in the assessment of the stormwater discharges consent above.

### **Rural 3 Objectives and Policies**

Chapter 7 deals with rural environment effects. Within a wider policy context that seeks to retain productive potential of the land resource (Objective 7.1.0) and to retain rural character and amenity values (Objective 7.3.0). The policy direction that relates specifically to Rural 3 zoned land is set out under Objective 7.2.0.

Objective 7.2.0 is:

*“Provision of opportunities to use rural land for activities other than soil-based production, including papakainga, tourist services, rural residential and rural industrial activities in restricted locations, while avoiding the loss of land of high productive value”.*

The Rural 3 Zone is such an opportunity created by the Council through Variation 32. It applies to part of the Coastal Tasman Area, and is an area where the Plan provides for closely-managed integrated development to meet the pressure for residential activities in a coastal and rural context and close to the regions main urban areas. Development rights are not unfettered, and rely on careful landscape and land analysis, planning and design, expressed through policies and a Design Guide. Infrastructure is a key element of the Rural 3 Zone.

Policy 7.2A.3 is:

*“To ensure that the valued qualities of the Coastal Tasman Area, in particular rural and coastal character, rural and coastal landscape, productive land values, and the coastal edge and margins of rivers and streams are identified and protected from inappropriate development”.*

The proposed development is considered to achieve the various aspects of this policy – in particular it takes account of the landscape and rural character in the subdivision layout and design and it will protect and enhance the wetland and the riparian margins.

Policy 7.2A.5 is to *“protect land of higher productive values within the Coastal Tasman Area”*. This policy applies to the distinction between Rural 3 and 3A zoning, but can also apply on a site-by-site basis. The application respects this policy.

Policy 7.2A.8 is *“to enable residential and rural residential development to occur over a 20-year period to the following sustainable limits across the total zone area:*

*Rural 3: 25% developed area; 75% open and undeveloped area;  
Rural 3A: 10% developed area; 90% open and undeveloped area; and*

*to achieve from December 2003, a target total of 1,330 new dwellings within the Rural 3 and Rural 3A, Mapua and Waimea Inlet Rural Residential Zones”.*

This is a target which applies to the whole of the area. It is a deliberately loose target so as to allow for a range of responses, depending on the characteristics of the land and the landscape and the activity of development to be absorbed within it and achieve other policies. Notwithstanding that, the proposed CHH development at Harley Road has a density in the order of 3% developed and 97% undeveloped, assuming that each building area of 900 m<sup>2</sup> (including a curtilage area) is considered totally ‘developed’. If the developed area was determined to be the total area of the low density residential sites (i.e. the total area of those sites between 1,690 m<sup>2</sup> and 2.66 hectares), the ratio would be approximately 10% of developed to 90% undeveloped land on this site. Whichever interpretation is used, the proposed development is well within the overall anticipated level of development in the Rural 3 zone, and it is more akin to the density of other developments approved in the Rural 2 zone in recent years.

Having said that, Mr Boffa’s report says the success of the design of this subdivision is dependent in no small way on the careful location of clusters of dwellings, against an edge of plantation forestry and open space, and these open and forested areas achieve the lower density. His view is that any further subdivision and development of this land may jeopardise this landscape setting and affect the overall successful integration of this development.

Policy 7.2A.9 is to *“avoid, remedy or mitigate adverse effects of development on land, surface and groundwater resources”*. The application generally pays attention to this policy in its stormwater, wastewater and water supply design, and provides for the protection and enhancement of the wetland on an ongoing basis. However several conditions of consent have been recommended to address areas of potential concern.

Policies 7.2A.10 and 7.2A.11 relate to connecting to wastewater and water supply provided by the Council and avoiding adverse effects in the meantime. The Council has announced that the Rural 3 zone is not intended to be serviced by reticulated sewerage application, and therefore there must be very careful consideration of the long term sustainability and effects of the proposed effluent disposal system.

Policies 7.2A.12 and 7.2A.13 relate to the planned provision of services by the Council, and the need to relate development to them in an orderly way. These two policies make the link to the LTCCP and the servicing policies and programme therein. The land which is the subject of the application is to be self-contained in terms of disposal of sewerage (as the Council does not now intend to service this zone). It is also self-sufficient in terms of water supply, however connection to Council bulk water supply will be required when it is available.

The Council has programmed the upgrading of Harley Road to cater for increases in traffic that developments like this will bring. However, the upgrading of Harley Road, and the formation of the Ruby Bay Bypass, are still some years away. Specific intersections will need to be provided by this development.

Policy 7.2A.14 relates to the progressive development of pedestrian, cycle and equestrian ways and reserves within the area. The application recognises and contributes to this policy and is thus consistent with it.

Policy 7.2A.15 is *“to mitigate adverse effects on rural landscape and character by evaluating subdivision and development proposals together, when providing for further residential and rural residential development in the Coastal Tasman Area”*.

The applications for subdivision, land use, water takes and discharges have all been prepared and lodged together, to allow them to be assessed in a comprehensive way. Whilst the precise designs of dwellings, and precise planting/landscape plans, have not yet been developed, my view and that of officers is that sufficient conceptual details have been provided to enable the assessments required in the TRMP to take place. I note however, Mr Boffa’s comment that for planting proposals there needs to be clarification as to who will be responsible for what and when.

The layout shows the location of building sites, and the height and reflectivity of dwellings has also been pre-determined for each site. The landscaping and planting concepts are specified in the AEE, and detailed plans can be checked against those when lodged. It is also noted that management plans will be required for the discharge of effluent and stormwater, however these can be submitted for scrutiny following the grant of any consents, as per normal practice. House plans will also be checked against the design guide and the conditions of any consent.

Policy 7.2A.16 is *“to take into account, and avoid or mitigate potential cumulative adverse effects on rural character, rural landscapes and amenity values, when assessing the effects of subdivision and development in the Coastal Tasman Area”*.

The development of this site in the manner proposed, even when considered in conjunction with the development of land on the opposite side of Harley Road, will maintain a level of development well within the threshold of density anticipated for the Rural 3 zone. My impression is that, even within the context of the previous Rural 2 zoning of the land, and the Rural 1 zone to the north, this proposal will not have an adverse cumulative effect on the rural character and landscape values.

The Landscape Policy Chapter in the Plan was also modified through Variation 32.

Objective 9.2.0 sets out one objective requiring:

*“Recognition of the contribution of rural landscapes to the amenity values and environmental qualities of the District, and protection of those values”.*

In particular, Policy 9.2.2 seeks:

*“Where relevant, to require proposals in rural areas for more intensive development than the Plan permits, to demonstrate consistency with design guides”.*

The overall Objectives of the Design Guide are:

*“To provide a direction and set of parameters for new and innovative rural subdivision and development in the coastal Tasman Area.*

*For landowners, developers, planners and designers, to explain the nature and context of the environmental outcomes being sought.*

*For neighbours and the community, to increase the probability that the coastal Tasman landscape will be sustainably managed and enhanced.*

*To plan the location of buildings and structures in an integrated and coherent manner, and in a way that complements other development and the rural amenity and character of the coastal Tasman area.*

*To ensure that the external form and appearance of buildings and structures respect their site and character and amenity values of the general area”.*

The application incorporates an assessment of the Design Guide for the Coastal Tasman Area. That assessment has been peer reviewed by Mr Boffa, and he is in substantial agreement with it, subject to the comments he has made regarding protection of the balance lot from further subdivision. This essentially identifies landscape character and features, acknowledges the policy in the Plan relating to rural character, landscape and amenity values (along with productive values which are recognised in the layout), and “builds” a design concept on the basis of the analysis.

Some more detailed comment is made below.

## Subdivision Design Guidelines

The objectives for subdivision in the Rural 3 Zone are:

- *To protect the distinctive landscape character of the coastal Tasman area through its sustainable management.*
- *To avoid inappropriate subdivision, use and development.*
- *To provide a framework which encourages innovative and low impact subdivision and development.*

<b>Guideline</b>	<b>Comment</b>
9.1 – Protect important and significant land and cultural features from the adverse effects of subdivision and development.	The more productive land (Class B), which is considered marginal for intensive horticulture, has been recognised and protected. The dwelling sites are on the balance land assessed as Class E (suitable only for pasture).
9.2 – Ensure the pattern and appearance of subdivision is not visually obtrusive or dominant in the landscape. The landscape should not appear to be overdeveloped or cluttered with development.	The overall layout involves carefully located 'clusters' of dwelling sites which take account of the varied topography of the site, and incorporates larger buffer lots and large open and (currently) forested balance areas, for which succession planting and new areas of planting are proposed. The overall density is very low for a Rural 3 development, and is not dissimilar to other developments in the Rural 2 zone. The subsequent development will be visually unobtrusive.
9.3 – Encourage cluster subdivision that incorporates the principles of sustainable subdivision design.	The low density residential part of the development will be staged in 6 clusters.
9.4 – Utilise existing natural and cultural features in order to create character and to achieve a sense of local identity within developments.	The subdivision design is considered to fit well with the topography, natural features and landscape. This is described in the application as being more characteristic of the mosaic of land uses typical of the coastal Tasman environment.
9.5 – Maintain the general appearance and character of natural landforms.	The landforms will not be extensively modified, with earthworks required mainly for the roading layout which is considered to minimise the extent of earthworks) and for building sites and construction of dams. The natural gullies and wetlands will be largely protected from built development.
9.6 – Identify potential dwelling sites relative to the protection of	The evidence in the application is that dwelling sites have been identified as a result of prior

Guideline	Comment
conservation and production values and prior to establishing lot size, shape, boundary definition and number.	identification natural values and productive values.
9.7 – Be mindful and considerate of the opportunities for integrated development and any potential adverse effects on adjacent properties. Discuss aspirations and plans with adjoining landowners.	The statement is made at 4.1.12 of the application that the applicant has given thought to how this development would relate to any future development of their adjacent land. However, there is no evidence that the proposed development provides for any future integration with adjacent properties (other than perhaps the connection of walkways). It is acknowledged that this development has been designed to fit the catchment it is located in, which appears largely confined to this site. I would have reservations, as does Mr Boffa, if the balance of the site was to be developed for residential uses, and so I am not concerned that the roads (in the form of cul-de-sac) do not extend into the lower parts of the site. There appears to have been little consultation with some of the adjoining landowners, as noted in submissions.
9.8 – Provide larger lots where the protection and management of landscape features and productive land is being sought.	This has been achieved through a range of lot sizes from residential through to lifestyle rural and open space lots, related to the landscape and productive values of the site.
9.9 – Avoid uniformity in lot size and shape.	The allotments are varied in shape and size, relative to their intended function, as discussed above.
9.11 – Maximise the efficient and economic provision and use of services and infrastructure. Cluster development tend to facilitate efficiencies and cost savings.	Clusters of housing have been provided as discussed, and this provides opportunities for efficiencies in provision of roading and reticulated services.

### Site Development Guidelines

The objectives for site development in the Rural 3 Zone are:

- To plan the location of buildings and structures in an integrated and coherent manner, and in a way that complements other development and the rural amenity and character of the coastal Tasman area, and

- To ensure that the external form and appearance of buildings and structures respect their site and the character and amenity values of the general area.

Guideline – Site Development	Comment
10.1 Buildings and structures should be seen to sit comfortably “within” the landscape rather than appearing to be placed “on top” of the landscape.	The building locations chosen do not sit comfortably “within” the landscape. They will be perceived as strung out and dominating the landscape.
10.2 Avoid skyline development particularly where there are no background features.	Skyline development is not avoided in the proposal. It is likely that buildings will be seen as skyline and ridgeline from both within and beyond the development, and thus will be visually dominant and obstructive.
10.5 Buildings and structures should not be sited in prominent locations where they can become visually obtrusive and dominant in the landscape.	As for 10.2 above.

There are numerous matters of design detail in terms of many of the Guidelines which could be further detailed. However, from an examination of the thirteen Guidelines commented on above, and from Mr Boffa’s peer review of the Tasman Carter report, my opinion is that the proposed development is consistent with the Design Guide and is therefore consistent with the policy matters outlined above.

### 5.10 Summary in Terms of Policy

It is considered that the proposed subdivision is not contrary to the key policies and objectives in the Proposed Plan.

However, as for the assessment of effects, this is dependent to a large degree on the adoption of detailed measures in the technical reports and the recommended conditions of consent being observed and monitored.

### 5.11 Section 104D Assessment

As a non-complying activity the subdivision application is to be considered in terms of Section 104D, which requires the consent authority to be satisfied that:

- (i) The adverse effects of the activity on the environment will be minor; or
- (ii) The application is for an activity that will not be contrary to the objectives and policies of the plan or proposed plan.

Preceding sections of the report have discussed the potential adverse effects of the proposal. In this case, the application has been found to have no more than minor effects on the environment, provided a very wide range of conditions are placed on the consents issued by Council.

The report has also discussed and determined that the activity will not be contrary to the relevant objectives and policies of the Proposed Plan, including in particular, those objectives and policies relating specifically to the Rural 3 zone.

Therefore the overall conclusion is that the applications meet both of the threshold tests outlined in section 104(D), and consent can be granted.

## **5.12 Part II Matters**

Part II of the RMA is overarching, and includes consideration of section 5 and several parts of section 7. These matters are discussed in section 4.3 above. As noted earlier, there are two and possibly three section 6 matters relevant to the application. As far is known, there are no section 8 matters of concern.

In terms of section 5, the following comments are made:

The Rural 3 Zone represents a particular planning effort and approach to allow for the simultaneous “use, development and protection” of a specified part of the Coastal Tasman Area for the benefit of the wider community as well as future residents. Underpinning the zone approach is a reliance on good subdivision design in response to landscape and other natural and cultural features, and integration with services to be provided by the Council. Subdivision and development is intended to be integrated and designed together, as the transformation from a wholly or largely “greenfields” situation (as in the current application) to an attractive and sustainable rural area within which residential development is integrated is best achieved at the time of initial subdivision.

The present proposal is based on a subdivision design and layout that in my assessment responds to the intentions of the Rural 3 Zone, and in my view it represents sustainable management of the natural and physical resources.

Relevant section 6 matters applicable to the application relate to natural character, and the preservation of wetlands, and significant habitats of indigenous fauna. These matters are not compromised in my assessment. I note in particular the careful attention to the landscape and natural character of the site, including the protection and enhancement of a regionally significant wetland, being a habitat of indigenous flora and fauna. This is recognised and provided for in the application.

In terms of section 7(b), I consider that the proposal is an ‘efficient use and development’, particularly given the Rural 3 context. The density of development is low, relative to the expectations outlined in the Proposed Plan for the Rural 3 zone. The development is considered ‘efficient’ in the sense that it provides for a range of residential opportunities, it provides extensive open space and reserves for wider public use, and a large balance area (132 ha) and other allotments are retained for future productive use of the land.



The roading impacts need to also be considered in terms of efficient development, and in that sense Mr Firth's report and recommendations are relevant. As discussed above, the site contains a wetland, which has identified values (section 7(d)) and which is protected in the development.

Matters in section 7(c) and (f) have been addressed in the discussion of effects earlier in this report, and it is considered that amenity values will be maintained and enhanced, and the landscape quality and the character of the rural environment will similarly be maintained if consent is granted.

An examination of Part II matters indicates that consent should be granted.

### **Other Matters**

Section 104(l)(c) allows the Council to consider "any other matter the consent authority considers relevant and reasonably necessary to determine the application". There are three matters to note for this application.

### **Key Documents**

The first is the relevance of several key documents referred to in the application and directly or indirectly in this report. Some are also directly referred to in the Plan although they are not part of the Plan. These include the LTCCP, the Design Guide for the Coastal Tasman Area, landscape advisory notes and a document entitled "*Statement of Infrastructure Services Planning and Developer Funding – Coastal Tasman Area*".

The Rural 3 Zone has been developed by the Council in an integrated manner over several years, including considerable research and consultation. The supporting documents provide information to assist developers and Council alike in identifying concepts and proposals which will achieve the outcomes sought for the zone. Thus it is considered they are able to be taken into account in evaluating proposals which are expected to have been developed (and in the case of the present application are acknowledged to have been referred to) in their light.

Design Guides and non-statutory policy instruments are increasingly used to guide decisions where Plan policy indicates and discretionary provisions allow. The provisions that enables financial or development contributions to be assessed and taken under either the RMA or the Local Government Act through the LTCCP is another indicator of this trend.

### **Precedent**

Precedent from giving consent to the application is a matter which the Courts have determined not to be an effect *per se* but a matter that should be taken into account under section 104(1)(c). It could be expected that if this consent is granted, it will encourage similar intensity and design of development throughout the Rural 3 Zone.

Submissions have also expressed some concern at a precedent being set.

My assessment of the application (in association with key Council officers) is that this application meets the relevant objectives and policies for the rural area and the Rural 3 zone in particular, and the adverse effects can be mitigated so that they are no more than minor. This is the type of development that is anticipated and expected by the Proposed Plan to occur in the Rural 3 zone. In that sense, precedent is not an issue of concern.

I would acknowledge a point made in several of the submissions, that the processing of Variation 32 (and the Rural 3 zone) has not yet concluded, and there is a possibility that these provisions may not survive, at least in their current form, given that there has been considerable opposition as well as support.

As stated earlier, the Rural 3 zone provisions are nevertheless the dominant provisions, as assessed for previous applications. I would also note that the proposed development by CHH, as well as achieving the purposes of the Rural 3 zone, is also in my view a sustainable development in the wider rural environment. The density of development (10% developed/90% undeveloped) is much lower than what is anticipated to occur throughout the Rural 3 zone, and is at a level not dissimilar to other comprehensive developments elsewhere in the Rural 1 and 2 zones of Tasman District. The embodiment of the design principles for the Rural 3 zone are a positive feature of the development, and observance of matters of good and sensitive design, whilst respecting the natural and landscape characteristics of a site, should be encouraged throughout the rural areas of those areas of the district where residential development is considered appropriate.

## **6. CONCLUSION**

The application for subdivision is a discretionary activity under the proposed Resource Management Plan (Variation 32) and a non-complying activity under the transitional District Plan. The other applications are either discretionary or controlled. Throughout this report I have treated the suite of consents as a comprehensive package, as they are all interrelated. Whilst I have made this assessment for an overall non-complying activity, this is considered to be a conservative approach.

A very extensive and detailed set of conditions has been recommended should Council decide to grant the consents. These have been developed from matters raised in the application, concerns expressed in submissions, and in many cases are based upon the conditions used by Council in recent developments of this type in the Rural 3 zone.

Given the scale of this proposed development, the range of consents required, and the detailed nature of the proposals for development, it is very likely that these draft conditions will generate considerable discussion, and they may yet be further refined at the hearing. The relevant Council officers will be in attendance to discuss any technical aspects that may arise.

I have discussed the applications at some length with specialist Council officers, and I have made my own assessments in terms of the relevant matters for consideration outlined throughout this report. My overall conclusion is that this is the type of development that is appropriate on this site, with reference to the key policy matters in the Proposed Plan, and the potential adverse effects can be appropriately mitigated.

My assessment is that the applications can meet the statutory tests for a non-complying activity, and consent should be granted.

## **7. RECOMMENDATION**

Pursuant to Section 104(D) of the Resource Management Act 1991, I recommend that all of the applications by Carter Holt Harvey Ltd, described in section 1.4 of this report, in relation to the property at Harley Road, held in Certificate of Title NL 32/260 in three allotments, Section 60, Section 85a and Section 95a, comprising 200.7241 hectares, be **GRANTED**, subject to the conditions listed below.

Gary Rae  
**Director**  
**Incite Limited**

## **SUBDIVISION CONSENT AND LAND USE CONSENT (ACCESS PLACES) (RM050281):**

### **CONDITIONS**

#### **General**

1. The subdivision and development shall be carried out generally in accordance with the Application Plan by Connell Wagner Project No. 161D 40 CC, Drawing No, C024 Revision 02, dated 17 March 2005, except that:
  - a) The roads to be vested in Council be amended to include only the following sections:
    1. Access from the south access to the "T" at Lots 28 and 29 – i.e. road "C"
    2. the southern access from Harley Road to Lots 40 and 30 – road "B"
    3. the access from the southern access to Lots 12 – 20 – road "D"
    4. the northern access to lot 60 from Harley Road – road "A".

The remaining accessways shall be rights-of-way or access lots.
  - b) That the access serving the 10 lots (22-27) be realigned to access onto a section of the existing Old Coach Road (to be upgraded), as per the attached plan [insert Plan from Ray Firth's report].
  - c) Any other conditions listed below.

#### **Staging**

2. The subdivision shall be completed in the 6 stages as proposed within the application. The proposed stages are identified on the revised 'Concept Plan With Stages', by Connell Wagner Project No. 161D 40 CC, Drawing No, C009 Revision 03, dated 16 March 2005, as attached.
3. Financial Contributions attributable to each stage shall be payable upon application for Section 224(c) certificate for each stage, unless as otherwise provided for in this consent.
4. Land covenants/consent notices in accordance with conditions of this consent are to be placed on the lots as they are created, not on balance areas yet to be developed.

#### **Advice Note – Earthworks and Dam Construction**

These matters are controlled under RM050282 and RM050544.

5. A suitably qualified person required under Condition 11 of the earthworks consent RM050282 shall confirm in writing prior to the section 224(c) certification of the subdivision that all the earthworks conditions of this consent have been met.

## Roads, Footpaths and Walkways

6. The two main access roads to the subdivision as shown on the Application Plan (attached) shall each have a minimum legal width of 18 metres but shall include all cuts and batters. The formation surface shall be a sealed carriageway width of at least 6.0 metres, concrete edge restraints, 600 millimetre wide metalled shoulders with grassed swale drains, a maximum grade of 1 in 7 and a design speed of 50kph and where there is no walkway within the road reserve, a 1.4 metre wide sealed footpath.
7. The cul-de-sacs (rights of way) shall have, for 5 to 6 users, a minimum legal width of 18 metres but shall include all cuts and batters, a sealed width of 5 metres, 600 millimetre grassed shoulders, with grass swale drains, a maximum grade of 1 in 6 and a design speed of 30 kph. The cul-de-sacs (Access Places) shall have for 2 to 4 users a minimum legal width of 18 metres but shall include all cuts and batters, a sealed width of 3.5 metres, 600 millimetre grassed shoulders, with grass swale drains, a maximum grade of 1 in 5 and a design speed of 30 kph. The seal width shall extend to the back of the edge of road seal.

**Advice Note:** The minimum requirement for a permanent surface is a Grade 4 chip first coat, followed by a Grade 6 void fill second coat.

No footpaths are required to be constructed for the cul-de-sacs (Access Places).

Where a site has frontage to both an access road and an access place, the vehicle crossing shall be located on the access place, ensuring that the crossing is located as far from the intersection as possible.

8. All roads shall be constructed to meet the Tasman District Engineering Standards and Policies 2004, unless otherwise stated. Appropriate measures shall be incorporated in the road design to control scour of any swale drains.
9. Street names shall be submitted and approved by Council for the three roads to vest with Council prior to the approval of the Section 223 certificate for Stage 1. Cost of name plates shall be met by the consent holder.
10. Walkways shall be constructed as shown on the 'Land Use Plan' by Tasman Carter Landscape Architects Revision 02 dated 4 April 2005 June 2003.

Public walkways shall have a legal easement width of at least 6 metres (except where the walkway is part of road reserve). The footpaths (as part of road reserve) shall be formed with a chip sealed (minimum) surface, and the bridal path/public walkway shall be formed to an all weather metal surface, 1.4 metres wide, prior to the application for the Section 224(c) certificate for each stage.

Walkway gradient shall not exceed 1 in 5.5 unless approved by Council's Community Services Manager.

Any public footpaths traversing drains or streams shall be designed to 2% AEP storm criteria and protected from erosion.

**Advice Note:** The costs of formation of a public walkway will be credited against the reserve fund contributions (subject to a quote acceptable to Council).

### **Roading and Intersections**

11. That land on the frontage of the site be vested in Council for Old Coach Road and Harley Road to allow for the regularising of the existing road formation and the proposed improvements as per the plan attached as **Attachment 4** [insert plan derived from Ray Firth's Plan] of this consent. This piece of land shall vest with Council and shall be shown on the title plan. Harley Road from Old Coach Road to State Highway 60 shall be upgraded to Council's requirements i.e. 6.5 metre seal width together with curve improvements.
12. That the intersection of Harley Road with SH60 be upgraded by the provision of a 3.0 metre wide, 150 metre length ( including taper ) deceleration lane for left turn in (as per Austroads Intersections at Grade, Table 5.6). Widening is also to be provided for a right turn refuge, in accordance with the diagram attached to this consent [Insert Diagram D from TNZ Manual No. SP/M001].

**Advice Note:** The intersection of Harley Road and State Highway 60 does not form part of this subdivision but it is considered appropriate that the intersection is upgraded to cater for the additional turning traffic as a direct result of this development. The consent holder must obtain the approval for the design and the construction from Transit New Zealand as the controlling authority for the State Highway.

13. That the two access road intersections with Harley Road be constructed in accordance with [Insert Diagram 3 of Section 16.2 of the PTRMP].
14. That improvements are undertaken to the total length and to the vertical and horizontal curves on Harley Road in the vicinity of the two access intersections as specified in the report of Traffic Design Group (Annexure 6), subject to detailed design.

**Advice Note:** A plan will need to be produced to attach to the consent showing the specific design of the realignment work, and this will need to be checked and approved by the Council's Engineering Department.

### **Water Reservoir**

15. That approximately 30m<sup>2</sup> of land adjacent to the road boundary at the northern end of the site be vested for the purposes of future water reservoir, as per the plan attached as **Appendix 1** of this consent.

### **Lighting**

16. Full street lighting will be provided for the intersections with Harley Road in accordance with Tasman District Council Engineering Standards. Other street lighting shall be shielded and downward focused and shall be no more than 5 metres in height. The placement of lights shall be to enable safe pedestrian use of the footpaths and will as a result provide some road lighting benefit.

**Advice Note:** Street lighting is not required to be provided along the Access Places (rights of way).

### **Building Site Stability**

17. The consent holder shall ensure that each building location area is subject to an investigation, evaluation and report by a chartered professional engineer to ensure the site is suitable for residential building, particularly in relation to any cuts, fills, or batters. If the engineer identifies any need for special design (especially foundation design) then that shall be recorded on the relevant title by way of consent notice.
- i) The certification of building platforms constructed for residential development shall be in accordance with NZS 4404:2004 Schedule 2A.
  - ii) Where fill material has been placed on any of the residential sites, a certificate shall be provided by a suitably qualified and experienced engineer certifying that the filling has been placed and compacted in accordance with NZS 4431: 1989.
  - iii) The engineering report shall also cover stormwater run-off from each building site, with any recommended conditions to ensure that the run-off does not adversely affect stability or cause adverse effects off-site.

Council will issue a **consent notice** pursuant to section 221 of the Resource Management Act 1991 recording the soil condition and foundation recommendations on the certificates of title.

### **Water Supply**

18. The subdivision shall be reticulated for water supply for domestic use, non-potable supply, and fire fighting purposes, in accordance with the Connell Wagner Water Supply Concept Plan 161D 40 CC Revision 02 dated 16/03/05. The water supply system and fire fighting storage tanks shall be in accordance with Tasman District Engineering Standards 2004 or to the satisfaction of Tasman District Engineering Manager.

Council will issue a **consent notice** pursuant to section 221 of the Resource Management Act 1991 recording this requirement for water supply on the certificates of title.

### **Power and Telephone**

19. Each residential lot shall be serviced with underground power and telephone connections to the boundary of the lots. Written confirmation of servicing shall be provided to Council by the relevant utility provision prior to application for 224(c) certificate for each stage. All power and telephone reticulation in the subdivision shall be underground.
20. Electricity sub-stations shall be shown as road to vest on the land transfer survey plan if they are located adjacent to a road or road to vest.

## Wastewater

21. The subdivision shall be reticulated for wastewater treatment and disposal, in accordance with the Connell Wagner Wastewater Drainage Concept Plan 161D 40 CC Drawing CO20 Revision 02 dated 16/03/05 and Resource Consent RM050286. The wastewater reticulation network shall be designed and installed in accordance with Tasman District Engineering Standards 2004 or to the satisfaction of Tasman District Engineering Manager.

Any discharge of domestic wastewater from dwellings located on Lots 1-61 shall occur to the communal disposal area in accordance with the requirements of Resource Consent RM050286.

22. Council will issue a **consent notice** pursuant to section 221 of the Resource Management Act 1991 requiring that any discharge of domestic wastewater from Lots 1-61 shall comply with the requirements of Resource consent RM050286 and that no on-site disposal of domestic wastewater shall occur on Lots 1-61.

## Easements

23. Easements are required over any right-of-way, public and communal services (including the wastewater reticulation network, collection, treatment and disposal systems and all associated devices such as pump stations) where these pass through the lots in the subdivision, as shown on the Schedule of Proposed easements on the Application Plan. Easements shall be shown on the Land Transfer title plan and any documents shall be prepared by solicitors at the consent holder's expense.
24. An easement shall be granted over proposed Lot 900 to make provision for the wastewater treatment system and disposal fields (including reserve areas).
25. An easement for an access strip shall be granted over proposed Lots 801, 800 and 900, for the purpose of allowing public walking access from the legal road at Lot 501 to the southern end of the site, and connecting to right of way D shown on the Application Plan.
26. A rural emanations easement shall be registered against all residential allotments in favour of productive land use activities and their associated effects on those rural allotments (Lots 27, 28, 29, 30 and 31) within the subdivision.

**Advice Note – Wastewater** Other issues of wastewater management arising from the subdivision are controlled under RM050286.

**Advice Note - Stormwater:** Other issues of stormwater management arising from the subdivision are controlled under RM050285.

## Covenants

27. A covenant shall be registered on all residential, rural-residential and rural lifestyle allotments to ensure the future residents are made aware of the rural environment within which the site is located, as volunteered by the applicant.



### **Building Location Restrictions:**

28. The building sites identified on the Tasman Carter Concept Plan (attached) shall be shown on the land transfer title plan and the corners of the sites fixed by coordinates.
29. No dwelling or residential building shall be located on Lot 900 (balance lot production forestry).
30. All buildings on all lots shall be erected within the 900 square metre building curtilage area for each dwelling site. All other farm buildings on Lots 14, 25, 32, 34, 40 and 61 shall be located within the identified area shown on the Tasman Carter Concept Plan.

**Advice Note:** This condition does not apply to any buildings associated with utilities within the subdivision.

31. The maximum height of the buildings shall be no greater than 6 metres above natural ground level on allotments numbered 2, 8,9,14-18, 25-27, 34, 35, 41, 48-52, 55 and 61. For all other allotments, buildings shall be no higher than 7.5 metres above natural ground level.
32. Council will issue a consent notice pursuant to section 221 of the Resource Management Act 1991 noting the requirements of conditions 28 -32 on the subsequent certificates of title.

### **Landscaping and Planting**

33. A Landscape Management Plan shall be prepared by a qualified Landscape Architect at the cost of the consent holder for the approval of the Council's Environment and Planning Manager and shall be submitted prior to the issue of the section 223 certificate for stage 1. The landscape management plan shall detail the following information:
  - i) Planting plan specifying the type, number, and size of the plants for all the plantings shown on the Tasman Carter layout and landscape concept plan entitled 'Land Use Plan' 161DTCL7 Revision 02, dated 4 April 2005.
  - ii) Establishment works required to implement the planting plan.
  - iii) Staging of planting in accordance with the subdivision staging.
  - iv) The plantings shall be in accordance with the Subdivision Landscape Report dated 4 April 2005 and the species in accordance with the "Riparian early planting, Riparian Later Planting, and Amenity Tree Planting" list set out on pages 16 and 17 of that report for vegetation framework planting.
  - v) Pest plant and animal controls and ongoing maintenance schedules.
  - vi) Replacement planting including backdrop planting
  - vii) Ongoing maintenance of planted areas (developer and future owners)

- viii) Landscaping areas to be subject to land covenants to ensure their ongoing existence.
34. The framework planting and amenity plantings for each stage shall be completed for each stage prior to the approval of the Section 224 (c) certificate. A written statement shall be provided from a suitably qualified landscaping professional that the plantings have been fully completed in accordance with the above landscaping plan.
35. The consent holder shall be responsible for maintenance, pest control, replacement and management of the planting within the development for a minimum of three years following the signing of the Section 224(c) certificate for each stage. The responsibilities thereafter devolving to the owners of the lots.
36. Land covenants shall be imposed on all lots detailing the ongoing preservation and management requirements of the Landscape Management Plan. The consent holder shall provide a written undertaking from a solicitor that land covenants will be imposed on each lot of each stage following the issue of the Section 224(c) certificate.
37. Council will issue a consent notice pursuant to Section 221 of the Resource Management Act 1991 recording the requirements of conditions 30 and 31 on each certificate of title.

#### **Future Subdivision - Consent Notice**

38. No further subdivision of any of the low density residential and rural lifestyle lots in the subdivision will be permitted, unless such subdivision constitutes a boundary adjustment where it does not result in the creation of additional lots (for a dwelling) or is for the provision of a utility site. Council will issue a consent notice pursuant to section 221 of the Resource Management Act recording the requirements of this condition on the certificates of title.

#### **Engineering Works, Services, Supervision and Plans**

39. Prior to undertaking any engineering works including earthworks, road works, water, wastewater, stormwater, other utilities and storage dams as outlined in this consent, engineering plans are to be prepared in accordance with Council's Engineering Standards and Policies 2004 and submitted to the Council's Engineering Manager for approval. All construction is to be in accordance with the approved plans. Private services laid in the road to vest shall be to a standard approved by Council's Engineering Manager. The Consent holder shall entered into a lease arrangement with Council regarding the provision of private services within road reserve.
40. "As-built" plans of services will be required at the completion of the works and approved by the Council's Engineering Manager prior to the issue of section 224(c) certificate for each Stage except Stage 1.

41. The consent holder shall engage a chartered professional engineer to observe and test the construction of the works. The certificate pursuant to section 224(c) of the Act will not be released by Council until a "Certificate of Supervision" signed by the engineer is provided and all necessary fees and levies attributable to the stages of the development have been paid.

### **Maintenance Performance Bond**

42. The consent holder shall provide Council with a bond to cover maintenance of any roads or services that will vest in Council. The amount of the bond shall be \$1,000 per residential lot to a maximum of \$20,000 or a lesser figure agreed by the Engineering Manager and shall run for a period of two years from the date of issue of the section 224(c) certificate of each stage.
43. The bond shall cover maintenance attributable to defects and the remedy of defects arising from defective workmanship or materials.

### **Financial Contributions**

44. Payment of the financial contributions in accordance with 16.5.2AA and 16.5.5 of the Proposed Tasman Resource Management Plan, assessed as follows:

#### **Reserves and Community Services**

5.5% of the assessed market value of 61 residential and rural lifestyle allotments inclusive. The valuation shall be based on the area of the allotment or a notional building site on each allotment of 2,500 square metres whichever is the lesser.

The costs of the entire public walkway formation on the rights of way shown as E, F and G on the Application Plan (access to the wetlands), and for the public walkway along the valley floors and connecting to right of way D, will be credited against the reserve fund contributions (subject to a quote acceptable to Council).

### **Duration of Subdivision Consent**

45. A five year extension is given to stages 1 - 6 of the consent, meaning that the Section 223 certificate for each of these stages will need to be submitted for approval within 10 years of the issue of consent.

### **Advice Notes**

- i) Council will not issue the Section 224(c) certificate in relation to the stages in this subdivision until all development contributions payable for each stage have been paid in accordance with Council's Development Contribution Policy under the Local Government Act 2002 for roading and water supply.

- ii) The Development Contributions Policy is found in the Long Term Council Community Plan (LTCCP) and the amount to be paid will be in accordance with the requirements that are current at the time the relevant development contribution is paid for each stage.
- iii) All consent notices shall be prepared by a solicitor and the cost met by the consent holder.

## **LAND USE CONSENT- DWELLINGS (RM050538):**

### **CONDITIONS**

#### **General**

1. All proposed new buildings shall be within the building site area set down in condition 25 of the subdivision consent.

#### **Landscaping Plan**

2. Prior to the issue of a building consent for any dwelling on each lot, the owner of that lot shall submit to and have approved by the Council's Environment and Planning Manager, a landscape plan for that particular lot and building curtilage area. The landscape plan shall be prepared by a qualified Landscape Architect and shall include:
  - i) How the proposed building will integrate with the site, natural landforms and riparian and landscape plantings on the site.
  - ii) Proposed planting to build on the planting established as part of the development and the management regime for it.
  - iii) The identification of views from adjacent properties and the features designed to preserve those views as part of the site development.
  - iv) The identification of the proposed building in relation to the centre and extent of the building curtilage area.
  - v) An earthworks plan showing the extent of earthworks required to implement the building on site, and mitigation measures proposed to avoid any adverse visual impacts.
  - vi) A planting implementation plan, including establishment, maintenance and management proposal for the first 5 years following the construction of the dwelling. The plan shall specify regular monitoring and reporting responsibilities of the owner to Council's Environment and Planning Manager to ensure compliance.
3. The landscape plan required under condition 2 shall be fully implemented within two years of the building consent for the dwelling being issued. The completion of the work shall be confirmed in writing by a suitably qualified landscape architect.
4. The building consent for the dwelling shall be accompanied with a statement from a suitably qualified design professional showing compliance of the building design with the Building Design guidelines in Section 11 of the Design Guide for Subdivision and Development in the Coastal Tasman Area, Tasman District (December 2003)

## **Commencement of Consent**

5. The commencement date for this consent is the issue of certificate of title for the respective allotment.

## **Height of Dwellings**

6. The maximum height of the buildings shall be no greater than 6 metres above natural ground level on allotments numbered 2, 8,9,14-18, 25-27, 34, 35, 41, 48-52, 55 and 61. For all other allotments, buildings shall be no higher than 7.5 metres above natural ground level.

## **Water Storage**

7. A minimum of 23,000 litres of rain water storage shall be provided with each dwelling. The water storage tanks shall be either incorporated into the structure of each dwelling building or partially buried and screened within the site so as to be not visible from any other lot or road outside of the said allotment.

## **Domestic Wastewater**

8. The dwellings shall be connected to a communal wastewater treatment and disposal system installed in accordance with RM050286, and Council will issue a consent notice pursuant to Section 221 of the Resource Management Act 1991 recording this requirement on each certificate of title.

## **Colours**

9. The exterior of all buildings shall be finished in colours that are recessive and which blend in with the immediate environment. The Consent Holder shall submit to the Council for approval the following details of the colours proposed to be used on the walls and roof of the building:
  - (i) The material to be used (e.g. paint, colour steel);
  - (ii) The name and manufacturer of the product or paint;
  - (iii) The reflectance value of the colour;
  - (iv) The proposed finish (e.g. matt, low-gloss, gloss); and
  - (v) Either the BS5252:1976 (British Standard Framework for Colour Coordination for Building Purposes) descriptor code, or if this is not available, a sample colour chip.

The building shall be finished in colours that have been approved by the Council.

**Advice Note:**

As a guide, the Council will generally approve colours that meet the following criteria:

<b>Colour Group*</b>	<b>Walls</b>	<b>Roofs</b>
Group A	A05 to A14 and reflectance value $\leq 50\%$	A09 to A14 and reflectance value $\leq 25\%$
Group B	B19 to B29 and reflectance value $\leq 50\%$	B23 to B29 and reflectance value $\leq 25\%$
Group C	C35 to C40, reflectance value $\leq 50\%$ , and hue range 06-16	C39 to C40, reflectance value $\leq 25\%$ , and hue range 06-16
Group D	D43 to D45, reflectance value $\leq 50\%$ , and hue range 06-12.	Excluded
Group E	Excluded	Excluded
<b>Finish</b>	Matt or Low-gloss	Matt or Low-gloss

\* Based on BS5252:1976 (British Standard Framework for Colour Coordination for Building Purposes). Where a BS5252 descriptor code is not available, the Council will compare the sample colour chip provided with known BS5252 colours to assess appropriateness.

**Setbacks**

10. The dwellings shall be setback at least 6.5 metres from any road reserve boundary.
11. The dwellings shall be set back at least 30 metres from any plantation forest.

## LAND USE CONSENT - EARTHWORKS (RM050282):

### CONDITIONS

1. The earthworks shall be undertaken in general accordance with the details presented in the application, particularly the report entitled "Preliminary Engineering design Report" by Connell Wagner dated 2 March 2005, and further information submitted dated 13 June 2005.
2. Earthworks shall only be undertaken between 7.00 am and 6.00 pm Monday to Saturday.
3. Earthworks shall be undertaken to, as far as is practicable, minimise disturbance of the existing contours, and to minimise the transportation of sediment in water, particularly on the steeper slopes or close to watercourses.
4. No spoil shall be placed in a position where it may enter any watercourse (whether intermittent or continuously flowing).
5. The consent holder shall adopt all practicable measures to avoid the discharge of sediment from earthworks undertaken at this site. For the avoidance of doubt "all practicable measures" includes measures specified in Auckland Regional Council Technical Publication No.90 Erosion and Sediment Control - Guidelines for Land Disturbance Activities.
7. No earthworks shall commence until an Erosion and Sediment Control Plan (E&SCP), prepared by a suitably qualified and experienced person, has been forwarded to and approved by the Council's Environment and Planning Manager. The E&SCP shall, amongst other things, detail how conditions 5 and 6 will be complied with. All earthworks shall be undertaken in accordance with the approved E&SCP.
8. All sedimentation mitigation or control measures shall be maintained by the consent holder for as long as there is a potential for sediment movement (resulting from earthworks) to occur and until the site is adequately reinstated/vegetated.

**Advice Note:** The generation of dust should be adequately controlled, such as by watering exposed areas and stockpiles as necessary, so that it does not create a nuisance to adjoining properties or the general public.

9. All exposed ground shall be reinstated, including the slopes of the dam, so that erosion is minimised by the following spring or autumn (whichever occurs first) and in no circumstances later than 12 months after the earthworks are completed. If a vegetative cover (such as standard rye grass/clover mix) is to be used to achieve this, compliance with this condition is considered to be when 100% vegetative cover has been established. If stormwater control measures are to be utilised they must be maintained and kept in operational order at all times.



10. All earthworks and stormwater control measures shall be planned and supervised under the direction of a person experienced in large-scale earthworks and soils engineering and the Council shall be advised of who this person is, in writing, when lodging the engineering plans for the subdivision.
11. The consent holder shall advise, in writing, the Council's Coordinator Compliance Monitoring and provide a copy of the approved engineering plans (earthworks) at least 72 hours prior to the commencement of any earthworks on site. All costs of monitoring and any subsequent remedial works required as a result shall be paid by the consent holder.
12. Should waahi tapu or other cultural sites be unearthed during earthworks the operator and/or consent holder shall:-
  - a) cease operations;
  - b) inform local iwi;
  - c) inform the NZ Historic Places Trust (NZHPT) and apply for an appropriate authority if required;
  - d) take appropriate action, after discussion with the NZHPT, Council and iwi to remedy damage and/or restore the site.

**Advice Note:** In accordance with the Historic Places Act 1993, where an archaeological site is present (or uncovered), an authority from the NZ Historic Places Trust is required if the site is to be modified in any way.

13. The suitably qualified person required under Condition 11 shall provide, in writing prior to the completion certificate issued pursuant to Section 224(c) of the Resource Management Act 1991, sufficient information to enable the Council to determine compliance with Conditions 3,4,5 and 8.
14. Council may, for the duration of this consent and within three months following the anniversary of its granting each year, review the conditions of the consent pursuant to Section 128 of the Resource Management Act 1991, to:
  - a) deal with any unexpected adverse effect on the environment which may arise from the exercise of the consent; or
  - b) to require compliance with operative rules in the Tasman Resource Management Plan or its successor plan; or
  - c) when relevant national environmental standards have been made under Section 43 of the RMA.

**Advice Notes:**

1. The applicant shall meet the requirements of Council with respect to all Building Bylaws, Regulations and Acts.
2. Access by the Council's Officers or its Agents to the property is reserved pursuant to Section 332 of the Resource Management Act 1991.

3. Monitoring of this resource consent is required under Section 35 and 36 of the Resource Management Act 1991, and a deposit fee is payable at this time. Should monitoring costs exceed this initial fee, the Council will recover the additional amount from the resource consent holder. Monitoring costs are able to be minimised by consistently complying with the resource consent conditions.
4. Pursuant to Section 127 of the Resource Management Act 1991, the Consent Holder may apply to the Consent Authority for the change or cancellation of any condition of this consent.
5. Council draws your attention to the provisions of the Historic Places Act 1993. In the event of discovering an archaeological find during the earthworks (e.g. shell, midden, hangi or ovens, garden soils, pit depressions, occupation evidence, burials, taonga, etc.) you are required under the Historic Places Act, 1993 to cease the works immediately until, or unless, authority is obtained from the New Zealand Historic Places Trust under Section 14 of the Historic Places Act 1993.

### **Duration of Consent**

If consent is granted it should be for a period of five years.

## **DISCHARGE AND WATER PERMIT - TO DISCHARGE AND DIVERT STORMWATER (RM050285):**

### **CONDITIONS**

1. The discharge and/or diversion of stormwater shall not cause in the receiving water beyond the boundary of the property on which the discharge and diversion occurs any of the following:
  - a) the production of any visible oil or grease films, scums or foams, or conspicuous floatable or suspended material;
  - b) any emission of objectionable odour;
  - c) the rendering of freshwater unsuitable for bathing;
  - d) the rendering of freshwater unsuitable for consumption by farm animals; and
  - e) any adverse effect on aquatic life.
2. The stormwater detention dams will be required to detain flows to their pre-developed runoff state and to a 1% AEP (Q100), together with a 500 millimetre freeboard.
3. Secondary flow paths over roads shall be protected from erosion in the form of a concrete surface and erosion control upstream and downstream.
4. The discharge and/or diversion of stormwater shall not result in adverse scouring or sedimentation of any watercourse, adjoining properties or the coastal environment.
5. The consent holder shall adopt all practicable measures to avoid the discharge of sediment the discharge and diversion of stormwater at the site. For the avoidance of doubt "all practicable measures" includes measures specified in Auckland Regional Council Technical Publication No.90 Erosion and Sediment Control - Guidelines for Land Disturbance Activities.
6. The discharge shall not result in or contribute to flooding on adjoining properties.
7. The Consent Holder shall contact Council's Co-ordinator, Compliance Monitoring when construction of roading, access, and building platforms commences to enable monitoring of the effectiveness of stormwater sediment and erosion controls to be carried out. The cost of monitoring and any subsequent remedial actions shall be borne by the Consent Holder.
8. Council may, for the duration of this consent and within three months following the anniversary of its granting each year, review the conditions of the consent pursuant to Section 128 of the Resource Management Act 1991, to:
  - (a) deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or
  - (b) to require compliance with operative rules in the Tasman Resource Management Plan or its successor; or

- (c) when relevant national environmental standards have been made under Section 43 of the RMA.

**Advice Notes:**

1. The applicant shall meet the requirements of Council with respect to all Building Bylaws, Regulations and Acts.
2. Access by the Council's Officers or its Agents to the property is reserved pursuant to Section 332 of the Resource Management Act 1991.
3. Monitoring of this resource consent is required under Section 35 and 36 of the Resource Management Act 1991, and a deposit fee is payable at this time. Should monitoring costs exceed this initial fee, the Council will recover the additional amount from the resource consent holder. Monitoring costs are able to be minimised by consistently complying with the resource consent conditions.
4. Pursuant to Section 127 of the Resource Management Act 1991, the Consent Holder may apply to the Consent Authority for the change or cancellation of any condition of this consent.
5. Council draws your attention to the provisions of the Historic Places Act 1993. In the event of discovering an archaeological find during the earthworks (e.g. shell, midden, hangi or ovens, garden soils, pit depressions, occupation evidence, burials, taonga, etc.) you are required under the Historic Places Act, 1993 to cease the works immediately until, or unless, authority is obtained from the New Zealand Historic Places Trust under Section 14 of the Historic Places Act 1993.

**Duration of Consent**

If consent is granted it should be for a 35 year period, being the maximum allowable under the RMA.

## LAND USE CONSENT – DAMS (RM050544):

### CONDITIONS

1. Site and Dam Details:

Location:	Harley Road
Legal Description of Land:	Subdivision of
River or Stream Being Dammed:	Unnamed Stream
Zone, Catchment:	Moutere Surface Water Zone, Moutere
Maximum Catchment Area (ha):	70
Dam Heights (m):	5
Total Storage (m <sup>3</sup> ):	20,000
Dam Locations: Dam ID Numbers	Location
Pond 3	To come
	Easting:2512812 Northing:6001118
Pond 2	Easting:2512732 Northing:6000934
Pond 1	Easting:2512617 Northing:6000586

- Prior to the commencement of construction or related earthworks, the consent holder shall supply to Council's Consent Planner (Water) two copies of the dam and culvert design and specifications and a site management plan that has been prepared by an appropriately experienced chartered civil engineer and the dam design shall comply with the NZSOLD New Zealand Dam Safety Guidelines (November 2000) and the culverts with TDC's Engineering Standards and Transit NZ Bridge Design Manual, whichever is most applicable. Dam design and specifications shall include a dam discharge pipe through the dam with an adjustable valve.
- The consent holder shall employ an appropriately qualified and experienced chartered civil engineer to supervise dam construction and producer statements shall be provided by both the contractor for the dam and from the civil engineer supervising dam construction as soon as possible but no later than 12 months following completion of the dam. Written report(s) shall also be provided confirming all inspections specified in the engineering specifications have been completed.
- A copy of this consent shall remain on site at all times during construction of the dam and the consent holder shall provide a copy of this consent and any other relevant consents to the contractor and the supervising civil engineer.
- The consent holder shall advise the Council's Consent Planner (Water) 72 hours prior to when site works are to commence.
- The consent holder shall not plant, or allow to grow, any trees or shrubs on the dam embankment and shall ensure that the dam embankment and any unplanted land is grassed down as soon as practical after dam completion.
- The consent holder shall regularly inspect the dams and culvert crossings and maintain all embankment, rock protection, low flow systems and spillways in good condition. In particular, culvert and pipes shall not be obstructed and any damage shall be repaired promptly and fish passage shall not be prevented.

8. The consent holder shall employ an appropriately qualified and experienced chartered civil engineer to inspect and report on the structural stability of the dams no later than 12 months following completion of the dam and thereafter every five years. A copy of the written report(s) shall also be provided to Council.
9. Should any slumping or significant seepage from the dam embankments be observed, the consent holder shall immediately inform the Tasman District Council's Environment and Planning Manager or his agent and shall employ a suitably experienced chartered civil engineer to advise on appropriate remediation measures.
10. Appropriate rock protection (or similar) shall be provided sufficient to avoid or remedy any adverse erosion of the waterway as a result of the spillway or culvert discharge.
11. There shall be no cutting of in situ Moutere Gravels below the dam full water level closer than 3 metres from the lake full water edge and, furthermore, no cutting shall extend closer than 25 metres from the head of the proposed dam – the intention being to provide shallow water habitat and feeding areas for ducks and other birds.
12. **Dam Construction Period and Sediment Control:**

Dam construction earthworks shall only occur during the (summer) period 1 October to 30 April inclusive and appropriate coffer dams, sediment traps and such other practical measures shall be undertaken so as to avoid introducing silt and other contaminants to the stream below the dam provided that the discharge of silt is authorised to the extent that it does not decrease the visual clarity of any stream by more than 40% as measured by the black disc method 50 metres downstream of the discharge point.
13. Council may within three months following the anniversary each year of the granting of consent review its conditions pursuant to Section 128 of the Resource Management Act, for any of the purposes stated in the Act, and for the purposes of implementing a dam safety monitoring programme or such other conditions required pursuant to any new statutory requirements that may come into effect.
14. This consent is valid for a period of three years from the date of issue and shall expire after that period unless the holder of this consent has substantially exercised the consent.

**Advice Notes:**

- i) The consent holder will need to meet the reasonable costs associated with the monitoring of this consent.
- ii) Unless appropriately authorised by Council, no part of the dam shall be closer than 20 metres from a Council road boundary and no part of the dam or any dammed water shall be closer than 5 metres from any internal boundary.

- iii) Council draws attention to the provisions of the Historic Places Act 1993. In the event of discovering an archaeological find during the earthworks (e.g. shell, midden, hangi or ovens, garden soils, pit depressions, occupation evidence, burials, taonga, etc.) you are required under the Historic Places Act, 1993 to cease the works immediately until, or unless, authority is obtained from the New Zealand Historic Places Trust under Section 14 of the Historic Places Act 1993.

## WATER PERMIT TO DAM OF WATER: RM050283

### CONDITIONS

#### 1. Site and Dam Details:

Location:	Harley Road
Legal Description of Land:	Subdivision of
River or Stream Being Dammed:	Unnamed Stream
Zone, Catchment:	Moutere Surface Water Zone, Moutere
Catchment Area (ha):	70
Dam Height (m):	5
Storage (m <sup>3</sup> ):	20,000
Dam Locations: Dam ID Numbers	Location
Pond 3	To come
	Easting:2512812 Northing:6001118
Pond 2	Easting:2512732 Northing:6000934
Pond 1	Easting:2512617 Northing:6000586

2. The Council may within three months of the first anniversary of the granting of the consent and within three months following each annual anniversary thereafter of the granting of this consent review any or all of the conditions of the consent pursuant to Section 128 of the Resource Management Act 1991 for all or any of the following purposes:
- to deal with any unexpected adverse effect on the environment which arises from the exercise of the consent including adverse effects on downstream landowners, on downstream water use, on any wetland and on instream values, and to require a residual flow downstream of the dam; or
  - to require compliance with operative rules in the Proposed Tasman Resource Management Plan (PTRMP) including requirements and rules relating to the operation and maintenance of dams and rules relating to minimum standards of water quality, maximum or minimum water levels of water retention; or
  - to make provision for fish passage including to require changes to the spillway system if there is shown to be a barrier to fish or eels accessing the dam; or
  - to require changes to the spillway to ensure that the dam is adequately protected during storm events.
  - for the purposes of implementing a dam safety monitoring programme or such other conditions required pursuant to any new statutory requirements that may come into effect.
3. This permit may not be exercised to the extent that there is any significant adverse effect on resident eels within the dam and a minimum of 400 cubic metres of storage shall be retained within the dam at all times to provide for their survival and all pipe intakes shall be screened to avoid the entrainment of fish and eels.



4A. The consent holder shall ensure that the summer low flow when present in the stream above the dam is available below the dam and that, at all other times, a residual flow is maintained between their dams and downstream of the dams. The consent holder shall confirm with the Environment & Planning Manager the definition of “summer low flow” and the “residual flow” between and below the dams and how this will be achieved and will provide appropriate plans to the Manager’s satisfaction prior to construction of the dams commencing, or

In place of Condition 4A,

4B(i) During the months December to May inclusive, the permit holder shall discharge to the downstream watercourse a minimum constant flow rate of 0.5 litre/second (i.e. a minimum discharge of 7,862 cubic metres) and, during the months of June to November inclusive, shall discharge a minimum constant flow rate of 1.0 litres/second (i.e. a minimum discharge of 15,811 cubic metres).

4B(ii) The permit holder shall install and maintain a water meter that complies with Council’s Water Meter Specifications and shall record a minimum of weekly water meter readings of the volume of water released from the dam (see Condition 4B(i) of this permit). The permit holder shall supply these weekly meter readings monthly to Council for the first two years following dam commissioning and thereafter, provided there has been full compliance with this condition (4), then the meter readings may be monthly and supplied annually to Council no later than the 31st of May each year.

5. This consent to dam shall lapse after a period of three years from the date of issue unless the holder of this consent has substantially exercised the consent.

6. The consent holder shall regularly inspect the dam and maintain the embankment, rock protection, low flow system and spillway in good condition. In particular, the spillway and any low flow pipe shall not be obstructed and any damage to the spillways shall be repaired promptly and fish passage shall not be prevented.

7. The consent holder shall employ an appropriately qualified and experienced chartered civil engineer to inspect and report on the structural stability of the dams no later than 12 months following completion of the dam and thereafter every five years. A copy of the written report(s) shall also be provided to Council.

8. Should any slumping or significant seepage from the dam embankments be observed, the consent holder shall immediately inform the Tasman District Council’s Environment and Planning Manager or his agent and shall employ a suitably experienced registered civil engineer to advise on appropriate remediation measures.

10. Appropriate rock protection (or similar) shall be provided sufficient to avoid or remedy any adverse erosion of the waterway as a result of the spillway or culvert discharge.

#### **Advice Notes:**

1. Nothing in this consent authorises the trespass of any part of a dam, including any associated structure or any ponded water, onto any land without the consent of the owner of that land

2. Pursuant to section 36 of the RMA Act, the permit holder may be required to pay the reasonable costs associated with the monitoring of this permit.
3. Section 125 of the Resource Management Act 1991 states that a consent shall lapse where it is not given effect to within five years of its granting.

## WATER PERMIT TO TAKE WATER: RM050284

### CONDITIONS

#### 1. Site and Take Details:

Location:	Trafalgar Road
Legal Description of Land:	Subdivision of
River or Stream Being Dammed:	Trafalgar Road Stream
Zone, Catchment:	Moutere Surface Water Zone, Moutere
Storage (m <sup>3</sup> ):	20,000
Dam Locations: Dam ID Numbers	Location
Pond 3	To come
	Easting:2512812 Northing:6001118
Pond 2	Easting:2512732 Northing:6000934
Pond 1	Easting:2512617 Northing:6000586
Water Source:	Storage
Area Irrigated:	20.00 hectares
Maximum rates of take authorised:	
<u>Non-potable</u>	<u>Irrigation</u>
<i>4 cubic metres per hour</i>	<i>10 cubic metres per hour</i>
<i>61 cubic metres per day</i>	<i>200 cubic metres per day</i>
<i>427 cubic metres per week</i>	<i>1400 cubic metres per week</i>

2. The Council may within three months of the first anniversary of the granting of the consent and within three months following each annual anniversary thereafter of the granting of this consent review any or all of the conditions of the consent pursuant to Section 128 of the Resource Management Act 1991 for all or any of the following purposes:
  - a) to deal with any unexpected adverse effect on the environment which arises from the exercise of the consent including adverse effects on downstream landowners, on downstream water use, on any wetland and on instream values, and to require a reduction in the rate of taking from the dam; or
  - b) to require compliance with operative rules in the Proposed Tasman Resource Management Plan (PTRMP) including requirements and rules relating to the operation and maintenance of dams and rules relating to minimum standards of water quality, maximum or minimum water levels of water retention; or
  - c) to make changes to any screens required to avoid the entrainment of fish and eels; or
3. This permit may not be exercised to the extent that there is any significant adverse effect on resident eels within the dam and a minimum of 400 cubic metres of storage shall be retained within the dam at all times to provide for their survival and all pipe intakes shall be screened to avoid the entrainment of fish and eels.
4. This consent shall lapse after a period of five years from the date of issue unless the holder of this consent has substantially exercised the consent.

5. The permit holder shall keep such records as may be reasonably required by the Council and shall, if so requested, supply this information to the Council. If it is necessary to install measuring devices to enable satisfactory records to be kept, the permit holder shall, at his or her own expense, install, operate and maintain suitable devices.
6. The permit holder shall install and maintain a screen on all intake pipes including their pump intake such that the screening prevents the entrainment or entry of fish and the screen shall, as a minimum, achieve an intake velocity at the outer screen surface of less than 0.7 metres/second - with a screen mesh-size not greater than 5 millimetres.
7. The application of water to any land shall not exceed the rate of 190 cubic metres per hectare per week.

**Advice Notes:**

1. Pursuant to section 36 of the RMA, the permit holder may be required to pay the reasonable costs associated with the monitoring of this permit.
2. Section 125 of the Resource Management Act 1991 states that a consent shall lapse where it is not given effect to within five years of its granting.
3. Access by the Council or its officers or agents to the land subject to this water permit is reserved pursuant to Section 332 of the Resource Management Act.

## DISCHARGE PERMIT (RM050286) – DISCHARGE DOMESTIC WASTEWATER

### CONDITIONS

#### Site and Discharge Details

1. Physical Address:	<i>Harley Road, Kina-Upper Moutere</i>
Legal Description:	<i>Sec 95A Moutere Hills DISTRICT</i>
Valuation Number:	<i>1926010700</i>
Map Reference of Property:	<i>East 2513053 North 6000343</i>
Receiving Environment:	<i>Land</i>
Maximum Discharge Volume:	<i>60, 000 litres per day</i>
Maximum Discharge Rate:	<i>2 millimetres per day</i>
Discharge Characteristics:	<i>Tertiary treated domestic wastewater</i>

#### Discharge Restrictions

2. The maximum daily discharge volume shall not exceed 60, 000 litres.
3. The discharge shall only contain treated domestic wastewater from dwellings, no industrial or tradewaste shall be included.
4. The maximum loading rate at which the wastewater is applied to land shall not exceed 2 millimetres per day (2 litres per square metre per day) and 15 millimetres per week (15 litres per square metre per day).

**Advice Note:** *For a daily discharge volume of 60, 000 litres per day the primary disposal area will need to be at least 3 hectares, with an additional 3 hectare suitable reserve area.*

5. The treated wastewater entering the disposal field, as measured at the sampling point required to be installed by Condition 30, shall comply at all times with the following limits:
  - i) Carbonaceous biochemical oxygen demand (cBOD<sub>5</sub>) 20 grams per cubic metre;
  - ii) Total suspended solids 30 grams per cubic metre;
  - iii) Faecal coliforms 1,000 faecal coliforms per 100 millilitres;
  - iv) Total nitrogen 25 grams per cubic metre;
6. The discharge shall not cause any of the following effects on the receiving waters (ground or surface waters) beyond the boundary of Lot 900 on which the discharge occurs:
  - i) The production of any conspicuous oil or grease film, scums or foams, or floatable or suspended material; or
  - ii) Any conspicuous change in the colour or visual clarity; or

- iii) Any emission of objectionable odour; or
- iv) Any significant adverse effects on aquatic life.

### **Collection, Reticulation and Treatment Systems**

7. The Consent Holder shall submit a detailed “Wastewater Treatment and Disposal Design Report”, prepared by a person who is suitably experienced in designing wastewater treatment and disposal systems, to the Council’s Manager, Environment and Planning for written approval prior to the construction of the collection, treatment or disposal systems. This report shall provide evidence of how design requirements imposed by this consent of the treatment and disposal systems of this consent shall be met and shall include, but not be limited to, the following information:

- (i) certification that the selected disposal areas are of suitable topography and soil type and are suitable for the loading rates proposed and sufficiently stable for wastewater disposal; and
- (ii) the location and dimensions of disposal areas (including reserve areas), including setbacks from neighbouring properties, watercourses and domestic bores, depth of unsaturated soils beneath dripper lines and avoidance of slopes greater than 15 degrees; and
- (iii) details of how the disposal system will be operated and criteria to be used to determine the timing, period and rate of application. The criteria shall be based on, amongst other things, climatic data, soil moisture status, and groundwater levels within the disposal areas.
- (iv) details regarding management of vegetation at the disposal area for the duration of consent; and
- (v) the measures proposed to minimise stormwater infiltration and inflow into the disposal field; and
- (vi) the proposed method of wastewater treatment including specific design details and evidence of how the contaminant limits required by Condition 5 will be complied with on a consistent basis; and
- (vii) the location of the wastewater treatment plant.

8. The construction and installation of the wastewater treatment plant and disposal system shall be carried out in accordance with information submitted with the application for resource consent RM050286 and under the supervision of a person who is suitably qualified and experienced in wastewater treatment and disposal systems.

The person supervising the construction and installation of the system shall provide a written certificate or producer statement to the Council’s Co-ordinator, Compliance Monitoring prior to the exercise of this resource consent. This certificate or statement shall include sufficient information to enable the Council to determine compliance with Conditions 10-16 (inclusive) and shall also confirm the following:

- (i) that the wastewater system (including the collection system, treatment plant and the disposal area) is capable of treating the design flows and that it has been designed in accordance with standard engineering practice, AS/NZ Standard 1547:2000 for On-Site Domestic Wastewater Management; and
  - (ii) that all components of the wastewater system (including the treatment plant and the disposal area) have been inspected and installed in accordance with standard engineering practice, the manufacturer's specifications; and
  - (iii) that the components used in the facility are in sound condition for continued use for the term of this resource consent.
9. The consent holder shall submit a set of final "as-built" plans to the Council's Co-ordinator, Compliance Monitoring which show the siting of all components of the wastewater treatment and disposal system. For the purpose of this condition, the consent holder shall ensure that the "as-built" plans are drawn to scale and provide sufficient detail for a Council monitoring officer to locate all structures identified on the plans.
10. All wastewater shall be treated prior to disposal using a primary treatment process, followed by a secondary treatment process, and ultra-violet tertiary treatment process to ensure the wastewater meets the standards specified in Condition 5.

**Advice Note:** The treatment plant shall be designed such that it is able to be configured for nitrogen removal should it be required to meet conditions of conditions of consent.

All wastewater shall be treated to achieve at least a four orders of magnitude (i.e. four logarithm) reduction in the concentration of F-specific bacteriophage through the treatment process. An alternative viral indicator may be used provided the prior written approval of the Council's Manager, Environment and Planning has been obtained.

**Advice Note:** The Consent Holder has proposed that an ultra violet light disinfection system will be used to provide tertiary treatment of wastewater. The specific design of the disinfection system has yet to be determined, but it is expected that the Consent Holder will provide sufficient technical information to the Council for it to be confident that the required viral reduction can be consistently achieved. For clarification, if monitoring of the treatment system shows that the minimum ultraviolet dose or reduction in F-specific bacteriophage concentrations have not been met, then the Council may undertake additional sampling to verify compliance with Condition 5 (iii).

11. The Consent Holder shall, prior to the exercise of this consent, forward to the Council for approval, two copies of a monitoring methodology that is proposed to be used to continuously measure the effectiveness of the disinfection system required to be installed in accordance with Condition 10. This monitoring methodology shall be designed to provide sufficient data to allow the Council to confirm that the wastewater has always received the prescribed minimum level of disinfection. The approved monitoring methodology shall be incorporated into the "Operation and Management Plan" required by Condition 22.

## Disposal / Land Application System

12. The disposal areas shall be located generally in accordance with the conditions of this consent and as specified in the application for discharge consent RM050286. Where specifications differ, the conditions of this consent shall be adopted.
13. All wastewater shall be discharged to ground by way of pressure compensating dripper lines (s). The consent holder shall, at all times, ensure that the dripper lines used for the disposal of wastewater have no less than a 50 mm cover of soil, bark or an appropriate alternative.
14. There shall be not less than a 600 millimeters separation maintained between the dripper lines and the seasonal water table at all times.
15. The disposal areas (including reserve areas) shall not be located on slopes greater than 15 degrees and shall not be located within:
  - i) 20 metres of any surface water body;
  - ii) 20 metres of any bore for domestic water supply;
  - iii) 10 metres of any adjoining property.
16. Subsurface cut-off trenches shall be constructed up slope of the disposal areas to divert, as far as is practicable, stormwater away from the disposal areas.
17. The *pinus radiata* present at the disposal area shall remain in place for the exercise of this consent. The wastewater disposal area shall be fenced to prevent access by stock or unauthorised persons and shall be clearly labelled in at least two clearly visible places with clearly visible warning signs which read "Wastewater Disposal Area – Avoid Contact" or equivalent. The details of such signage shall be discussed with the local Medical Officer of Health and submitted for approval by the Council's Co-ordinator, Compliance Monitoring, prior to the exercising of this consent.
18. A suitable wastewater disposal reserve area equivalent to not less than 100 % the size of the primary disposal area (3 hectares) shall be kept available for future use for wastewater disposal. This reserve area shall remain undeveloped and shall be located within the boundaries of Lot 900.

**Advice Note:** It is important that the reserve is located in an area that can be used if required in the future should be protected from development.

## Wastewater System Operation and Maintenance

19. The Consent Holder shall ensure that the wastewater treatment and disposal system is maintained by a suitably qualified person(s) who has proven experience in maintaining such systems. The Consent Holder shall, prior to the exercise of this consent, provide to Council, in writing, the name and contact details (mailing address and telephone number) of the suitably qualified and experienced person(s) who is responsible for the maintenance of the wastewater treatment and disposal system.



As a minimum, the maintenance shall be in accordance with the "Operations and Management Plan" required by Condition 22. In the event that this responsibility is transferred to a new person(s), the Consent Holder shall immediately advise the Council of the name and contact details of this new person.

In addition, the Consent Holder shall ensure that the suitably qualified and experienced person(s) who is responsible for the maintenance of the wastewater treatment and disposal system forwards to the Council every three months a copy of a written report that details the maintenance that has been undertaken on the wastewater treatment and disposal system during the previous three month period.

**Advice Note:** For compliance purposes, a "suitably qualified person who has proven experience in maintaining such systems" would be either a person employed or trained by the manufacturer of the treatment and disposal system, or someone who can provide evidence of satisfactory experience in maintaining such wastewater treatment and disposal systems.

20. The Consent Holder shall install and operate a remote monitoring system whereby all tanks and pumps of the wastewater collection, reticulation, treatment and disposal system are monitored on a continuous basis. The alarm systems shall be installed to operate in the event of any pump failure or any other form of mechanical failure within each interceptor tank and within the central treatment plant (including the tertiary treatment system required by Condition 5). These alarms shall be configured to be remotely monitored by the wastewater treatment plant operator for all systems and to activate an audible and visual alarm system located adjacent to the treatment plant or other prominent place on the site for the central treatment plant. The details of the alarm and monitoring systems shall be included in the "Operations and Management Plan" required by Condition 22.
21. The consent holder shall enter into, and maintain in force, a written maintenance contract with an experienced wastewater treatment plant operator trained in wastewater treatment plant operation by the system designer, approved by the Council's Manager, Environment and Planning for the ongoing maintenance of the treatment and disposal systems and control of the remote monitoring system as required by Condition 27. This contract shall require the operator to perform maintenance functions and duties specified in the Management Plan and required by conditions of this consent. A signed copy of this contract including full contact details for the service provider shall be forwarded to the Consent Authority, prior to the exercising of this consent. Any changes to this maintenance contract must be in accordance with the conditions of this consent and approved in writing by the Council's Co-ordinator, Compliance Monitoring prior to them taking effect
22. A Chartered Professional engineer or suitably qualified consultant experienced in wastewater engineering shall prepare an "Operations Management Plan" for the wastewater treatment and disposal system. This plan shall be prepared in accordance with the conditions of this resource consent and shall contain, but not be limited to, the following:
  - i) An inspection programme to verify the correct functioning of the wastewater and disposal systems.

- ii) A schedule for the daily, weekly, monthly and annual operational requirements including monitoring requirements of consent conditions;
  - iii) A schedule of maintenance requirements for the pumps, septic tanks, recirculation tanks, treated effluent holding tank, flow meters and stormwater control drains.
  - iv) A schedule of maintenance requirements for the management of vegetation on the wastewater ground disposal area.
  - v) A contingency plan specifying the actions to be taken in the event of failure of any component of the system and any non-compliance with the conditions of this resource consent
  - vi) Details of how the ground disposal system will be managed.
  - vii) Emergency contact details (24 hour availability) for Service Provider and Manager of the Body Corporate shall be provided.
23. A copy of the management plan required by Condition 22 shall be submitted to the Council's Manager, Environment & Planning for approval prior to the exercising of this consent. Any changes to this plan shall be in accordance with the conditions of this consent and approved in writing by the Council's Manager Environment & Planning, prior to them taking effect.
24. The collection and treatment tanks shall be inspected not less than once every six months. All tanks shall be cleaned out once the combined depth of the sludge and scum in any tank occupies half of the tank's volume. Material collected from the desludging of tanks shall be removed from site for disposal at a facility authorised to receive such material.
25. The Consent Holder shall submit an "Asset Management Plan" for the wastewater collection, treatment and disposal system for approval by Council's Manager, Environment and Planning prior to the exercise of this consent. This plan shall be prepared by a suitably experienced person and shall detail financial asset management requirements (including depreciation considerations) of the wastewater collection, reticulation, treatment and disposal systems for the duration of the consent. Any changes to this plan shall be in accordance with the conditions of this consent and approved in writing by the Council's Manager, Environment & Planning, prior to them taking effect.
26. The Consent Holder shall Council with a bond prior to the exercise of this consent to cover the full replacement cost of the wastewater collection, treatment and disposal system. The full replacement cost of the wastewater collection, treatment and disposal system shall be determined by Council once sufficient design detail is available and prior to the exercise of this consent.

### **Contingency Measures:**

27. A telemetered 24 hour remote advance warning system shall be installed and operated that is capable of warning of any system failure (i.e. pump failure, mechanical blockage or UV disinfection system failure). The remote monitor and management system shall be operated to achieve the following:

- (i) Notify operators of any alarm; and
- (ii) Monitor and record daily flow readings from all water meters (or pump station pump hours); and
- (iii) Store and transmit daily reports to the operator of the discharge volume meter reading and system status from each site; and
- (iv) In the event of any alarm activating, the remote monitor and management system shall immediately notify the maintenance operator and shall continue notifying the operator until the condition has been remedied and cleared by the operator.

The Consent Holder shall maintain signage adjacent to all external alarm panels at the plant to provide a 24 hour contact number in the event of an alarm being activated.

- 28. The Consent Holder shall ensure that the system is designed and maintained so that wastewater can be retained within the treatment system above the alarm level without overflow for a period of at least 24 hours wet weather flow and in accordance with the provisions in the "Operations Management Plan".
- 29. Should power disruption result in the 24 hour storage capacity at the treatment plant being utilized to 80% capacity, the consent holder shall ensure that the wastewater is removed from the storage tank at that time for the purpose of maintaining capacity. Wastewater shall be disposed of to a facility that is authorised to accept such wastes. The relevant details of how this will be achieved shall be incorporated in the "Operations Management Plan" required to be prepared in accordance with Condition 22.

## **Monitoring**

- 30. A sampling point to allow collection of the treated wastewater, shall be provided at a point located directly after the final pump-out chamber and before the point where the wastewater discharges to the disposal field. Details of the location of this sampling point shall be forwarded to the Council's Co-ordinator, Compliance Monitoring prior to the exercise of this consent.
- 31. A sample of the treated wastewater shall be collected from the sampling point required to be installed in accordance with Condition 30. Samples shall be analysed for the parameters set out in the table below. The frequency of sampling shall be as follows:
  - (i) For the first three months of plant start up, samples shall be collected weekly for first month and then two weekly for two months;
  - (ii) For the following nine months samples shall be collected monthly;
  - (iii) Following the first 12 months samples shall be collected at least every two months (a total of at least six samples a year).

## Final treated wastewater discharge monitoring requirements.

Parameter	Detection Limits	Units
pH	NA <sup>2</sup>	-
Dissolved Oxygen	NA	g/m <sup>3</sup>
Temperature	NA	°C
Conductivity	NA	mS/m
Carbonaceous biochemical oxygen demand	2	gO/m <sup>3</sup>
Total Suspended Solids	3	g/m <sup>3</sup>
Escherichia coli (E coli)	10	MPN or cfu/100
Total faecal coliforms	10	MPN or cfu/100
Total Kjeldahl Nitrogen	0.02	gN/m <sup>3</sup>
Total ammoniacal-N	0.1	gN/m <sup>3</sup>
Nitrate-nitrogen	0.01	gN/m <sup>3</sup>
Nitrite-nitrogen	0.01	gN/m <sup>3</sup>
Total Phosphorus	0.01	gP/m <sup>3</sup>
Dissolved Reactive Phosphorus	0.01	gP/m <sup>3</sup>

### Notes:

1. These detection limits apply unless other limits are approved in writing by the Manager.
2. NA = Not applicable.

Compliance with contaminant limits specified in Condition 5 is required at all times.

32. The consent holder shall collect a water sample from the stream traversing Lot 900 [marked on Appendix 1 attached to this consent] at a site above and below the irrigation disposal area four times per year when wastewater is being discharged to the disposal fields and there is flow in the stream. Samples shall be collected at no closer interval of one month between sampling. The location shall be fixed by Global Positioning System (GPS) and submitted to the Council's Co-ordinator, Compliance Monitoring for approval prior to the exercise of this consent. This sample shall be tested to determine the presence and concentration of the following determinands:

- Faecal coliforms
- E coli
- Total Kjeldahl Nitrogen
- Total ammoniacal – N (total ammonia)
- Nitrate/nitrogen
- Nitrite/nitrogen
- Total phosphorous
- Dissolved reactive phosphorous

33. All sampling referred to in this consent shall be carried out by a suitably qualified person approved by the Council's Co-Ordinator Compliance Monitoring, using standard sampling methodologies and equipment and shall be transported to the laboratory under chain of custody. The samples shall be analysed using standard methodology by an IANZ accredited laboratory. The analytical results shall be forwarded to the Council's Co-ordinator, Compliance Monitoring within 10 working days of the results being received from the laboratory.

## Reporting

34. The Consent Holder shall measure the wastewater exiting the wastewater treatment plant determined by an appropriately installed and calibrated flow meter capable of measuring to an accuracy of plus or minus 5%. The meter should be installed in accordance with the manufacturer's specifications and shall be operated and maintained so that it is able to be used to record the discharge volume.
35. The flow meter required to be installed in accordance with Condition 34 shall be read manually or electronically at the same time daily whenever the system is discharging to the disposal area. Copies of these records along with the lot number of each lot discharging to the treatment plant shall be forwarded to the Council's Co-ordinator, Compliance Monitoring quarterly in the Quarterly Monitoring Report required by Condition 40, within one month following the end of the three month period ending 31 March, 30 June, 30 September and 31 December each year.
36. Any exceedance of the permitted discharge volume shall be reported to the Council's Compliance Co-ordinator in writing within one week of the reading. This report must include any explanation for the non-compliance and an assessment of the likely effects of the functioning of the system and the receiving environment. This data shall be securely stored electronically for at least 2 years.
37. The consent holder shall log all complaints received relating to the exercise of this consent and shall maintain a register of complaints including the following information; Date and time of the complaint; nature of the complaint; name address and telephone number of the complainant if available; details of discharge at time of alleged problem; and any remedial action taken to rectify problem or mitigation proposed to prevent future complaints.
38. The consent holder shall report all complaints to the Council's Co-ordinator, Compliance Monitoring in writing within 48 hours of receipt and the log shall be made available to the Council upon request.
39. The Consent Holder or their authorised agent shall notify Council's Co-ordinator, Compliance Monitoring of any wastewater discharge to ground or water from the treatment plant or sewage reticulation system which is not authorised by this consent in writing as soon as practicable (but no more than 24 hours) after the discharge commenced.
40. The Consent Holder shall present a Quarterly Monitoring Report (every 3 months for the duration of the consent) to the Council's Co-ordinator Compliance Monitoring, reviewing the performance of the treatment and disposal system and shall include the following:

- Actual monitoring results for monitoring undertaken in accordance with Conditions 31 and 32 above, for the past quarter and compliance with discharge limits specified in Condition 5;
- An interpretation of monitoring results and an outline of any trends in changes in discharge volume, wastewater discharge quality and quality of the receiving waters. It shall also identify any actual and potential effects on the receiving environment identified since the previous report to the Council;
- A summary of any difficulties that have arisen with the plant operation and/or public complaints received and any remedial actions taken as a result during the previous period.

### **General Conditions**

41. The wastewater treatment system shall be located, and the surrounding area maintained, so that vehicular access for maintenance is readily available at all times
42. The Council may, in the period 31 May to 31 August each year, review any or all of the conditions of the consent pursuant to Section 128 of the Resource Management Act 1991 for all or any of the following purposes:
  - i) to deal with any adverse effect on the environment which may arise from the exercise of the consent that was not foreseen at the time of granting of the consent, and which is therefore more appropriate to deal with at a later stage; and/or
  - ii) to require the consent holder to adopt the best practical option to remove or reduce any adverse effects on the environment resulting from the discharge; and/or
  - iii) reviewing the contaminant limits, loading rates and/or discharge volumes and flow rates of this consent if it is appropriate to do so; and/or
  - iv) reviewing the frequency of sampling, flow monitoring and/or number of determinants analysed if the results indicate that this is required and/or appropriate.
43. Pursuant to Sections 35 and 36 of the Resource Management Act, 1991, the permit holder shall meet the reasonable costs associated with the monitoring and administration of this permit. Costs can be minimised by consistently complying with the conditions of this consent and thereby reducing the frequency of Council visits. This will include auditing of the Consent Holders monitoring programme and monitoring results presented to Council as required by conditions 31, 32, 34 and 40.

### **Advice Notes:**

1. Any matters not referred to in this application for resource consent or are otherwise covered in the consent conditions must comply with the proposed Tasman Resource Management Plan and/or the Resource Management Act, 1991.

2. The Consent Holder is reminded with regards to Advice Note 1, the discharge may not create an offensive or objectionable odour beyond the property boundary and all associated excavation work must comply with the permitted activity requirements of the Tasman Resource Management Plan unless authorised by resource consent.
3. The Consent Holder shall meet the requirements of Council with regard to all Building and Health Bylaws, Regulations and Acts. Building Consent will be required for the installation of any part of the wastewater treatment and disposal system.
4. Access by the Council or its officers or agents to the property is reserved pursuant to Section 332 of the Resource Management Act.
5. All reporting required by Council shall be made in the first instance to the Council's Co-ordinator Compliance Monitoring.
6. The Consent Holder is advised that compliance with operating guidelines provided by the wastewater system manufacturer and system designer is recommended to reduce the likelihood of malfunction of the treatment or disposal system and a possible breach of consent conditions.
7. The Consent Holder is recommended to prohibit the installation of garbage grinders to all dwellings within the development as it is well recognised that such fixtures are likely to affect the level of contaminants in the wastewater and create problems in complying with the wastewater quality limits imposed by this consent.
8. The Consent Holder shall administer the responsibilities and obligations of all its members who own lots connected to the wastewater treatment and disposal system, to comply with the conditions of this consent. The Consent Holder shall ultimately hold responsibility for ensuring that the owners of properties within the development:
  - i) Are connected and discharge to the reticulation and central treatment system whenever the respective dwellings first become occupied, and
  - ii) Are aware of and comply with the rules associated with the connection, including restrictions on the discharge of toxic substances.
9. If the site is located within the urban drainage area identified by Council when future reticulation is available, the consent holder will be required to provide connection from the dwelling or on-site treatment system to the sewer line.
10. Council draws your attention to the provisions of the Historic Places Act 1993 that require you in the event of discovering an archaeological find (e.g. shell, midden, hangi or ovens, garden soils, pit, depressions, occupation evidence, burials, taonga) to cease works immediately, and tangata whenua, the Tasman District Council and the New Zealand Historic Places Trust shall be notified within 24 hours. Works may recommence with the written approval of the Council's Environment and Planning Manager, and the New Zealand Historic Places Trust.

### **Duration of Consent**

If consent is granted it should be for a period of 10 years.

**ANNEX1:**  
Subdivision Concept Plan



**ANNEX 2:**  
Summary of Submissions

**CARTER HOLT HARVEY LTD**

Submitter	Summary	Support, Oppose, neutral or conditional	Wish to be Heard
Royal Forest & Bird Protection Society	<p>Support moves to address weed infestation on ex-forestry block.</p> <p>Support provisions for containing siltation and debris after heavy rain.</p> <p>Plans take account of natural catchment and landscape.</p> <p>Support wetlands and restoration of gullies and streams</p> <p>Support walkways/cycleways.</p> <p>Need to educate residents on weed control.</p> <p>Need provisions for protecting wild life (amphibians, frogs, skinks, native birds) from public access into gullies/wetlands.</p> <p>A lookout/viewing area could be provided.</p> <p>Need to make this subdivision cat free, and controls on dogs.</p> <p>We are assuming all services will be underground.</p>	Support with conditions	Yes
MA & LM Talley & Majac Trust	<p>Notification is defective in describing the land as Rural 3, and not describing transitional plan provisions.</p> <p>Council has not notified submitters to proposed Rural 3 of decisions.</p> <p>On-site disposal of effluent and stormwater methods unsuitable, given nature of soils, and will lead to seepage into watercourses downstream.</p> <p>Development should be integrated with Council's servicing plans.</p> <p>Non-complying activity 'gateway' test cannot be met.</p>	Oppose	Yes
P & J Leith	<p>North-western part of land is of limited farming potential, and is appropriately developed for rural-residential.</p> <p>Much of the remainder of the site does have potential for alternative farming uses.</p> <p>Concerns at Harley Road's ability to handle extra traffic from this and adjacent block, which has been approved for 20 lots.</p> <p>Consideration required for upgrading Old Coach Road between Harley Rd and Seaton Valley.</p> <p>Concerns at access to SH60, particularly when new bypass is in place, and increased traffic along Harley Rd.</p> <p>Standard of work following logging of CHH land is of concern.</p> <p>Provision of water for housing and development of productive soils.</p> <p>Wastewater and sewage disposal – concern at future management responsibilities.</p> <p>Protection and enhancement of existing wetlands.</p>	Support with conditions	Yes
W & N Wooff	<p>Contrary to the rural zoning of the District Plan, will destroy the rural character, and fragment land, and increase traffic.</p> <p>Need to develop Old Coach Road.</p> <p>Will undermine the District Plan by allowing departures.</p> <p>Plans will not be realised due to a lack of demand for this type of development, land will revert to scrub.</p> <p>Concerns at track record of applicant in preparing the land for sale, in baring the land and causing sedimentation.</p>	Oppose	Yes

Nola Tait	Concerns at increased traffic on Harley Road. Traffic should be required to go to new bypass when built, or o Old Coach Road. Retain land as pine forest.	Oppose	Not stated
B & M Gordon	Lack of consultation. Concerns at downstream effects of sewage, and residents association being responsible for sewage disposal. Effects on wetlands and run-off. Effects from large development in rural area, use of roads, additional population.	Oppose	Yes
Nelson Marlborough District Health Board	Supports community sewage treatment and disposal, and water recycling. Rainwater not guaranteed to be safe for potable water, suggests providing centrally treated and reticulated supply to a potable standard. Water filters not recommended as bacteria can multiply in the filters, a UV system would solve this problem. Non-potable water needs to be treated and labelled as non- potable. Need management plan for all activities associated with the communal water supply. No details provided on the effluent treatment system. Treatment options are based on minimum performance levels. UV treatment for final effluent is supported. Additional effluent storage may be required, bunded area may be suitable. Disposal area needs to be fenced off and signed. Long term acceptance rate needs consideration if Council services will not be available in future. Retention of trees in this area is questioned. Condition requiring connection to future Council services. Term of consnet for 35 years may be too long, need review clause. Cut off drains required around effluent disposal field. Supports Kingett Mitchell monitoring and compliance conditions. Management plan required for sewage collection, treatment and disposal. Refer to standards documents as a base for compliance.	Support with Conditions	Yes
P & S Malcolm	Remove stumps from land and sow in grass. Needs some form of lighting to be installed. Maintain land till the blocks are sold. TDC should control the sewage.	Support with conditions	Yes
Transit Zealand	New This type of development is anticipated to occur in the Rural 3 zone, however this has the potential to adversely affect State Highway 60. Effects on Harley Rd/SH60, the intersection is not of a suitable standard for the additional vehicle movements. Traffic generation has been understated. Transit's estimate is 451 vehicle movements per day from this subdivision, and the traffic at the SH intersection will double as a result. Application does not take account of future generation from CHH subdivision on Old Coach Road. Requests a condition requiring the applicant to upgrade the	Oppose	Yes

	intersection of Harley Rd/SH60.		
JR & MM Johnstone	Refers to the W and N Wooff submission. Lack of consultation, clearance of land, flooding effects. questions /concerns at Residents Association being responsible for downstream effects of flooding. Level of traffic generation and effects on Harley Road residents and traffic on the Coastal Highway.	Oppose	Yes
C, S and H Rush	Development is outside the Rural 3 zone, and sets a precedent. Stormwater – effects from removal of forestry, need accountability in the development plans to ensure problems addressed. Concerns at maintaining adequate water flow for downstream users. Water supply – will be a burden on water supply downstream, and what if Motueka water supply does not eventuate. Sewage – questions what will happen when the forest is harvested, and who will clean up waterways. Soils not suitable for large scale effluent disposal in wet conditions. Accountability and monitoring responsibilities not defined. Lighting – doesn't support street lighting, will affect the rural landscape.	Opposing	Yes
Tasman Area Community Association	Supports the development resulting in potential new members of the community. Concerns at stormwater drainage causing flooding in the Tasman village area. CHH development on other side of Harley Road caused siltation in the stream and dam at the bottom of that site, with further problems downstream. In considering applications for construction phase stormwater discharge and for culverts and dam structures, due attention given to prevention of silting of stream and general flooding in the village and Domain.	Neutral, with conditions	No

**ANNEX 3**

**Peer Review and Policy Assessment On Landscape Matters Carter Holt Harvey  
Subdivision, Harley Road (RM050281-050286, RM050538)**

**Prepared by Frank Boffa for the Tasman District Council**

### **Background**

Tasman District Council have requested a review of the proposed subdivision at Harley Road in terms of the following matters –

- Review of Landscape Assessment report provided in the AEE
- Assessment of the landscape component of the application in terms of the Rural 3 Zone provisions.
- Assessment of the effect of the subdivision in terms of the relevant landscape objectives and policies of the PTRMP

I have been involved in a number of meetings with the applicants advisors during the site assessment and design development phase of the proposed subdivision and have made comment on aspects of the site assessment and design development relative to the intent and outcomes sought for the Rural 3 Zone and the principles outlined in the Design Guide for the zone.

I have visited the site on several occasions and I am familiar with the area in general. I have also reviewed the Landscape Assessment Report prepared by Tasman Carter Ltd (attachment 3 in the AEE) and the application relative to PTRMP landscape provisions.

### **The Proposed Development**

The application seeks consent to subdivide the 200 hectare rural site into 61 rural residential lots varying in size between 1690 square metres on 6.6 hectares in area. The development, which has been planned in a comprehensive cluster type arrangement, will occupy approximately 68 hectares of the site with the 132 hectare balance being retained in separate ownership. Within this area approximately 20 hectares will be utilized for the disposal of domestic effluent.

Within each of the 61 new allotments a 30 x 30 metre "building location area" has been identified (nominated house sites). Of the 61 allotments 51 are contained within six clusters of development with the 10 remaining lots being larger and providing a more rural buffer between the residential clusters.

The proposed development also includes two recreation areas to vest along with a lineal and central open space corridor following a major water course within the development. This area is to be enhanced with appropriate riparian plants and held in common ownership.

## Tasman Carter Landscape Assessment Report

The Tasman Carter report has carefully and sensitively considered the landscape context of the site and its particular features and constraints. It is also clear the landscape assessment has made a positive and proactive contribution to the planning and design of the applicant's proposal. The siting of the clusters of development and the lot arrangements, size and number are appropriate in the context of the overall site. The nominated building sites also appear to have been sensitively located as has the central communal open space spine which is to be enhanced and will become a major landscape feature within the development.

There are however, several matters that require further clarification.

### 3.1.1.1.1 Definition of Site

In landscape terms clarification is required as to what actually constitutes the site. While the application refers to the site as being a 200 hectare lot, the subdivision appears to focus on 68 hectares with the 132 hectare balance lot being presumably retained by Carter Holt Harvey. In landscape terms the 132 hectare undeveloped balance lot is integral to the 68 hectare developed section of the block. The acceptance and layout of the cluster subdivision development is reliant upon this area for its landscape setting and rural context and cannot be separated from this application.

In this regard the landscape report at times makes reference directly, or by implication, to the larger site including the adjacent forest areas within the 200 hectares as well as the Dicker's Road Swamp area. The landscape importance and significance of these areas to the proposed development is clearly acknowledged in the landscape report. Indeed, the 68 hectare development area is reliant upon the balance area to provide the overall landscape setting and rural context to the proposed development.

Notwithstanding this, the landscape report also states (on page 5) that the site does not include the Dicker's Road Swamp or the 16 hectares of 15 year old pine forest at the head of the main valley. However, the 16 hectare block of pines is also acknowledged (on page 10) as being an important backdrop to the site and recommends that when these trees are removed new plantings should take place. It is not made clear who will re-plant this area or be responsible for its ongoing management and maintenance.

Clearly the landscape assessment and subdivision design has been carried out in the context that the 16 hectare pine block and the adjacent plantings to the south (the area within which the effluent will be disposed) are the background framework and landscape setting for the development and more significantly the overall rural setting for the 68 hectare development block. The landscape context for the subdivision is not confined to the edge of the existing forest. While the 68 hectare development appears to stop at this edge, the landscapes natural and visual characteristics extend beyond this. The Tasman Carter Report acknowledges this in the landscape assessment and it is evident this land is integral to the development of the site in its Rural 3 setting.

The extent to which these adjacent parcels of land will remain as rural open space (with or without trees) is an issue that needs to be clarified. From a landscape perspective, it is essential that the 16 hectare block at the head of the main valley, which is the landscape backdrop to the development, be retained as rural open space and if necessary be protected by some form of covenant or incorporated within the communal land holding.

The Dicker's Road Swamp and the land identified for effluent disposal are also important landscape edges and are an integral part of the proposed development's landscape setting. The retention and protection of these areas as open space needs to be more clearly defined and established as part of this particular consent application.

The status and future of the 132 hectare balance lot needs to be determined. The support for the subdivision layout as proposed is contingent upon the bulk of lot 900 being permanently retained as open space. While part of this block may have potential for future subdivision as part of a related development, it is particularly important that an appropriate and permanent rural buffer to the current development is established and protected as part of this consent application.

In meetings held with the applicants advisors during the site assessment and design development phase of the project, and referred to in the landscape report, the point has been made on several occasions that the land beyond the developed area of the site is integral to it and must be considered and treated as part of the application, particularly in terms of its definition and how it would be managed both initially and in the longer term.

#### 3.1.1.1.2 Planting and Maintenance

The Tasman Carter report makes recommendations for vegetation framework planting throughout the development to be implemented and managed for up to 10 to 20 years. The report also makes reference to a "number of different approaches and management regimes." While consent conditions requiring detail planting plans and management specifications can and would be imposed, there needs to be clarification as to who will be responsible for what and when. For example; the backdrop planting, which is proposed on part of the balance lot (in the 16 hectare block at the head of the main valley), could be disposed of with no ongoing commitment to the planting that is proposed and its ongoing management.

### **Rural 3 Zone Provisions**

The assessment of Rural 3 subdivision applications requires applicants to demonstrate consistency with design guides. The applicant has demonstrated this in their overall approach to the development process they have adopted, the site assessments and the development of the site layout proposed. The low impact subdivision design approach advocated and outlined in the design guide has been followed and is evident in the applicant's documentation.

While the 10 larger rural residential lots outside the clusters provide an element of rural open space between the more intensive clusters of development, the balance lot is also integral to maintaining the rural character and context to the development.

No further subdivision covenants should be placed on all of the rural residential lots as well as the parcels of land that make up the balance lot. Further subdivision and development on the 200 hectare application site beyond that proposed in the current application would compromise the Rural 3 zone provisions.

## **Landscape Provisions of the PTRMP**

With the introduction of Variation 32, notified in December 2003, a new Landscape Objective and Policies, which apply generally to the Districts rural landscape, was introduced. Objective 9.2.0 seeks –

“Recognition of the contribution of rural landscapes to the amenity values and environmental qualities of the District, and protection of those values.”

Relevant Policies include the following –

- 9.2.1 *To integrate consideration of rural landscape values into any evaluation of proposals for more intensive subdivision and development than the plan permits.*
- 9.2.2 *Where relevant, to require proposals in rural areas for more intensive subdivision and development than the Plan permits, to demonstrate consistency with design guides.*
- 9.2.3 *To retain the rural characteristics of the landscape within rural areas.*
- 9.2.4 *To encourage landscape enhancement and mitigation of changes through landscape analysis, subdivision design, planting proposals, careful siting of structures and other methods throughout rural areas.*
- 9.2.5 *To evaluate, and to avoid, remedy or mitigate cumulative adverse effects of development on landscape values within rural areas.*

The proposed subdivision meets the relevant policies listed above and has been carefully considered and developed to ensure that it meets the relevant landscape and rural provisions of the PTRMP and in particular the outcomes sought within the Rural 3 zone. In landscape terms, the most significant matter that needs to be clarified further is the status of lot 900 particularly as it relates to this application for subdivision of the 61 residential sites. Should lot 900 be developed in a similar manner it would compromise the rural character and setting of the 68 hectare application site and would be in conflict with the Rural 3 objectives and the landscape provisions of the PTRMP and in particular policies 9.2.1, 9.2.3 and 9.2.5. While there is no subdivision currently proposed within lot 900, the retention of this area as open space is integral to the current application.

## **Conclusions**

The Tasman Carter landscape assessment report relative to the 200 hectare application site and the more specific design development of the proposed subdivision within that wider site context, is appropriate and has sensitively considered and addressed the important landscape issues.

The subdivision in its wider site context is appropriate in terms of its cluster layout, lot size and overall density. The development as outlined for the 200 hectare site is a sensitive and appropriate response to the site and the outcomes sought for the Rural 3 zone.

Covenants prohibiting further subdivision of the proposed rural residential lots and the balance lot (lot 900) should be put in place to ensure the density of development and the rural character of the area is maintained and protected.

The matter of the sites definition, particularly with regard to the identification and protection of its edges, which form the basis for the development's overall setting, must be more clearly defined and secured. Without adequate definition and long term protection of the sites background open space setting, the proposed development could be compromised by further subdivision within the 132 hectare balance area.

Further clarification should be provided with respect to responsibilities for planting, maintenance and landscape management matters.

Frank Boffa  
19 August 2005



## MWH: CHH Rural Residential Subdivision Rooding Impact Report

**Carter Holt Harvey Rural Residential Subdivision, Harley Road  
RM050281****1. INTRODUCTION**

Carter Holt Harvey propose a subdivision on Harley Road, Moutere Valley to create 61 residential lots with access via two new roads onto Harley Road.

The purpose of this report is to appraise the roading impacts, in particular for Harley Road and Old Coach Road.

To enable this assessment we have referred to the background material for the CTA development, Traffic Design Groups, Traffic Impact Assessment report dated 24 March 2005 and our site inspections and observations.

**2. LOCATION**

The proposed subdivision has frontages directly onto Harley Road and Old Coach Road.

Harley Road is designated a rural Collector and runs westerly from SH60 through to the Moutere Highway. SH60 and the Moutere Highway are designated Arterials in the Tasman Resource Management Plan (TRMP). Old Coach Road is designated a Distributor road but functions as a rural Access road.

Access from the proposed subdivision is to be provided by two new intersections onto Harley Road – referred to by Traffic Design Group (TDG) as the ‘northern’ and ‘southern’ intersections respectively and shown on Carter Holt Harvey (CHH) Rooding Concept Plan (drawing number C011, Revision 3)

**3. EXISTING ROAD ENVIRONMENT****3.1 Old Coach Road**

Old Coach Road runs generally in a north south direction along the ridgeline.

In the vicinity of the proposed subdivision it has a narrow unsealed carriageway. It has a slow speed curvilinear vertical and horizontal alignment with a relatively steep approach to the intersection with Harley Road. It has a low operating speed and caters for mainly forestry related vehicles at this stage.

**3.2 Harley Road**

Harley Road acts as a collector between Moutere Highway and SH60.

It generally follows a local ridge from SH60 to the intersection with Old Coach Road. The alignment is more curvilinear vertically and horizontally in the vicinity of the subdivision.

The seal width varies from 5.8m to 6.5m, the wider sections generally relating to some localised curve widening.

The formation is narrow with little or no formed shoulder and along the frontage of the subdivision this falls more steeply directly from the edge of the seal.

We agree with TDG that the operating speed through the S-bend at the southern end of the site is in range 50 to 55km / hr. However, we estimate that for the balance of the frontage the operating speed is 70 – 80km / hr and increasing to 85 – 90km / hr at the northern end of the site. These are a little lower than the TDG assessment. The operating design speed for a rural collector under Council's Engineering standards is 70km / hr.

### **3.3 Safety**

The LTNZ database for the last five years, 1999 to 2003 shows there were two reported injury and one non-injury crash in the vicinity of the proposed subdivision.

As TDG have reported, one was loss of control at the Harley Road, Old Coach Road intersection involving a motorcycle and the other injury on the Harley Road was hitting a stray animal. The non-injury was on Old Coach Road well away from the site.

The Tasman district however is above average for the number of loss of control crashes in the rural area.

The lack of shoulder or steep shoulder combined with the curvilinear alignment and some mismatch of vertical and horizontal curves increases the likelihood of the loss of control crashes.

Under the upgrading proposed for Harley Road within the Rural 3, Coastal Tasman Area, CTA, it is proposed that provision would be made for seal widening and adequate shoulders (600mm) on a preferred maximum gradient of 4:1.

The existing Harley Road between SH60 and Old Coach Road does not meet the criteria set under Council's Engineering Standards for a rural collector. None of the section fronting the subdivision site meets these standards.

## **4. TRAFFIC**

### **4.1 Old Coach Road**

The section of Old Coach Road in the vicinity of the proposed subdivision has low traffic volumes. These are at present largely related to forestry. The likelihood is for further development off Old Coach Road in the future, which will impact on Old Coach Road. This current subdivision is not considered to have a significant direct input on Old Coach Road. However, realignment of Old Coach Road will be required for the future upgrading.

Preliminary concept plans have been drawn for this length of Old Coach Road. These have not been adopted by Tasman District at this stage and no discussions have been held with CHH. The proposed alignment for Old Coach Road affects the full frontage of the existing CHH block. This preliminary layout is shown on the plan appended.

At present, the proposed alignment is based on a minimum 70km / hr horizontal alignment generally following the existing formation.

No intersection details have been considered. The existing formation and possible alignment is north of the current legal road reserve and affects the proposed access road serving lots 22 to 31.

While existing and future traffic from the proposed subdivision is unlikely to use Old Coach Road, the future alignment of Old Coach Road, the intersection with Harley Road and the conflict with the proposed internal access road should be resolved as part of this development.

## **4.2 Harley Road**

The existing hourly traffic on Harley Road is described in the TDG report. Based on traffic counts by Council. The Annual Average Daily Traffic (AADT) is 245vpd.

The proposal is to create 61 lots. In addition there are 8 lots currently undeveloped on the opposite side of Harley Road.

The Transfund Research Report No 209 (2001) "Trips and Parking Related to Land Use" states "The Surveys Database shows that lower trip generation rates have typically been found in more rural subdivisions. Surveys near Queenstown and Christchurch indicate that daily rates of between 6 and 9vpd (in and out) per household better reflect the increased trip linking which occurs when the primary trip is longer e.g. greater than 20 minutes, as with rural lifestyle properties located on the outskirts of an urban area".

It is considered that the average traffic generation rate for this subdivision is likely to be 8vpd per occupied lot.

When fully developed the subdivision could potentially develop a total of 488vpd. From the additional 8 lots opposite a further 64 vpd are generated giving a cumulative total of 552 vpd. Even allowing for the split of 65/35 between the east (SH6) and the west (Moutere Highway) as proposed by TDG, the traffic on Harley Road is expected to reach 65 to x 552 plus the existing 245 = 604vpd. This is within the Rural Collector expected volumes of <500vpd and justifies the upgrading of Harley Road.

Based on the Council Engineering Standards possible typical cross sections for the upgrading to comply with the Engineering Standards are appended.

The only difference in the three options is the location of the 1.4m cycle/walkway facility.

If the internal walkways are preferred then it is likely the cycle/walkway facility would be deleted from the final upgrading. At the cross roads – Old Coach Road/Harley Road additional widening should however be allowed for provision of a cycle/walkway.

## **5. PROPOSED ACCESS AND NEW INTERSECTIONS**

Two new intersections are proposed to provide all vehicle access to the prepared subdivision. The balance lot that remains at present in forest will be served via existing forestry tracks onto Old Coach Road.

As described above and shown on the appendixed plan, the existing formation of Old Coach Road is outside the existing legal road reserve and will conflict with the access road that serves the southern most lots. Part of this access road also runs parallel to Harley Road.

It is considered more efficient to serve these lots by direct access onto an upgraded section of Old Coach Road and delete the northern part of the proposed access road. This and the regularising of the likely proposed formation of Old Coach Road will require negotiations with Council's Transportation Manager during the detailed design phase.

### **5.1 Northern Intersection**

This intersection is close to the northern boundary of the site, some 1.15km north of Old Coach Road. This location is acceptable subject to improving the sightlines to around 250m, and locally widening Harley Road in accordance with Diagram 3 of Section 16.2 of the PTPMP. Harley Road is required to be reconstructed to meet the Engineering Standards for a collector road.

### **5.2 Southern Intersection**

This proposed intersection is located some 230m north of the actual Old Coach Road / Harley Road intersection as this intersection is currently some 15 – 20m north of the legal road reserve.

The 900m separation from the northern intersection is adequate.

Assuming the southern 10 lots are serviced onto an upgraded section of Old Coach Road, 18 lots would access off Harley Road at this new intersection. With the proximity of the Old Coach Road intersection the vertical alignment improvements are required to address the localised "crest" looking south towards Old Coach Road.

The two horizontal curves to the north also require improvements, as well as the localised widening in accordance with Diagram 3 of Section 16.2 of the PTRMP.

### **5.3 SH60 Intersection**

At present there is good visibility at this intersection to the east and west. SH60 has AADT volumes round 5500 vpd. Turning movements into Harley Road will significantly increase with this and future subdivisions off Harley and Old Coach Road.

The dominant movements will be right turn out and left turn into Harley Road.

It is unlikely right turning movements would meet the warrant for a right turn bay to be required. However localised widening is required to give a vehicle turning right into Harley Road an increased area to refuge and to give straight through vehicles increased manoeuvre space. Also a deceleration lane for left turning vehicles from SH60 is considered justified. Sufficient traffic will be left turning from SH60 to require a full deceleration lane in accordance with Table 5.6 of Austroads Intersection at Grade. However no widening (other than to meet diagram D of the TNZ Manual SP/M001) is recommended on the downstream side for left turning traffic. The deceleration lane should be of 3.0m width and 150m in length, including the taper.

The Ruby Bay By-Pass proposal allows for relocation of this intersection east along the new alignment, together with a minor access intersection some 60m west of the present Harley Road/SH6 intersection. The new primary intersection is shown to have a deceleration lane and a right turn bay.

The Council CTA proposals did not allow for upgrading of the Harley Road/SH60 intersection as the indications were that the Ruby Bay By-Pass would have been completed prior to the programmed upgrade of Harley Road.

#### **5.4 Intersection Lighting**

Failure to give way is an issue at rural intersections in Tasman and it is strongly recommended that flag lighting at the new access road intersections be required

### **6. LAND REQUIREMENTS**

#### **6.1 Road Requirements**

Land for road will be required along the Harley Road and Old Coach Road frontage of the site to regularise the existing formation occupation, and allow for the upgrading of Harley Road for the curve improvements and shoulder widening. The actual quantities will need to be identified as part of the detailed design.

#### **6.2 Water Reservoirs for Rural 3 Development**

The design for the water supply for the Rural 3 allows for break tank(s) reservoir to be located towards the northern boundary of the site. An area of approximately 30m<sup>2</sup> is required to be vested for a reservoir site. The actual location and area will need to be discussed with the applicant.

## **7. IMPACT ON CTA DEVELOPMENT PROPOSALS AND PROGRAMME**

### **7.1 Development Proposal**

The contributions for roading have been estimated to cover the necessary seal widening, shoulder widening and some intersection improvement. The development contributions do not cover the direct impacts of the subdivision access road intersections with Harley Road. The mitigation measures to address these such as localised intersection improvements and the localised vertical and horizontal curve improvements for safe sight distance should be undertaken by the developer.

The shoulder widening and seal widening and some costs of the Old Coach Road/Harley Road intersection would be met from the development contributions together with any approved LTNZ subsidy.

### **7.2 Development Programme**

The likely development of Harley Road was estimated to start in 2017/18. Should this subdivision be approved then the upgrading work to be met by Council may need to be brought forward. No provision has been made in the estimates for Rural 3 development to fund these works earlier than programmed.

### **7.3 Increase in Roading Asset**

It is noted that it is proposed to bring the access roads serving less than 7 lots up to the Access Place standard and that these roads would then vest in Council. As these roads will be only serving less than 7 lots it is considered uneconomic for a Council to be required to accept the long term maintenance of these roads. The provision for a Rural Right of Way (ROW) for less than seven lots serves as threshold for both a reasonable maximum number of lots that should be accessed by a ROW, and as a minimum trigger for effective and economic management of the access as a publicly owned road. These accesses are recommended to remain as ROWs. The applicant may still wish to develop these roads to a higher standard than that required for the Rural ROW.

## **8. CONCLUSION AND RECOMMENDATIONS**

### **8.1 The roading impacts of the proposed subdivision are able to be accommodated within the guidelines for Rural 3, subject to the vesting of adequate road reserve for Harley and Old Coach Road and the necessary upgrading of these roads to meet the required Engineering Standards.**

### **8.2 Recommendations**

That should Council approve the application then the following conditions should apply.

8.2.1 The internal access roads intersect with Harley Road generally in accordance with the proposal i.e. at approx 230m and 1150m from the Old Coach Road intersection.

- 8.2.2 That the access serving the 10 lots (22-27) be realigned to access onto an upgraded section of the existing Old Coach Road.
- 8.2.3 That the access road/Harley Road intersections be constructed in accordance with Diagram 3 of Section 16.2 of the PTRMP.
- 8.2.4 The flag lighting be provided at the new intersections in accordance with the Council Engineering Standards.
- 8.2.5 That the improvements to the vertical and horizontal curves in the vicinity of these intersections are undertaken. The specific lengths of work are likely to be similar to that identified by Traffic Design Group but should be subject to confirmation on detailed design
- 8.2.6 That the intersection of Harley Road with SH60 be upgraded by the provision of a 3.0m wide, 150m long deceleration lane for left turn in and widening for a right turn refuge in accordance with Diagram D of TNZ Manual No. SP/M001.
- 8.2.7 That land on the frontage of the site be vested in Council for Old Coach Road and Harley Road to allow for the regularising of the existing road formation and the proposed improvements.
- 8.2.8 That approximately 30m<sup>2</sup> of land adjacent to the road boundary at the northern end of the site be vested for the purposes of future water reservoir.
- 8.2.9 That the applicant meet the financial costs of advancing the widening and realignment work on the Harley Road and Old Coach Road frontages and that was programmed to be undertaken in 2017/18.
- 8.2.10 That the accesses serving less than 7 lots be required to remain as Rights of Way and be developed to at least the minimum Council Engineering Standards for Rural ROWs.

**Appendix A Typical Connection for Upgrading of Harley Road**



**Appendix B Preliminary Alignments for Harley Road and Old Coach Road**

