

# MINUTES

**TITLE:** Environment & Planning Subcommittee  
**DATE:** Monday, 16 June 2008  
**TIME:** 10.30 am  
**VENUE:** Golden Bay Service Centre, 78 Commercial Street, Takaka

**PRESENT:** Cr N Riley (Chairman), Crs S J Borlase and J L Edgar

**IN ATTENDANCE:** Principal Consents Planner (J Butler), Consents Planner (L Davidson), Coordinator Natural Resources Consents (M Durand), Administration Officer (B D Moore)

## 1. P FINLAYSON AND R J DAVIES, 37 CENTRAL TAKAKA ROAD, TAKAKA – APPLICATION RM051063 AND RM080155

### 1.1 Proposal

The applicant applied to establish and operate a camping ground, trading as Autumn Farm, which will cater for up to 15 people at any one time and hold five organised events between December and February (inclusive) that will cater for up to 50 people. A discharge consent was sought for up to 4.5 m<sup>2</sup> of primary domestic wastewater per day to land via subsurface trenches. The site of 4.25 hectares is held in Certificate of Title NL66/33.

The Committee proceeded to hear the application, presentation of submissions and staff reports as detailed in the following report and decision.

The Committee reserved its decision.

### RESOLUTION TO EXCLUDE THE PUBLIC

**Moved Crs Riley / Edgar**  
**EP08/06/01**

**THAT the public be excluded from the following parts of the proceedings of this meeting, namely:**

P Finlayson and R J Davies

**The general subject of the matter to be considered while the public is excluded, the reason for passing this resolution in relation to the matter, and the specific grounds under Section 48(1) of the Local Government Official Information and Meetings Act 1987 for passing this resolution are as follows:**

<b>General subject of each matter to be considered</b>	<b>Reason for passing this resolution in relation to each matter</b>	<b>Ground(s) under Section 48(1) for the passing of this resolution</b>
P Finlayson and R J Davies	Consideration of a planning application	A right of appeal lies to the Environment Court against the final decision of Council.

Moved Crs Edgar / Riley  
EP08/06/02

THAT the open meeting be resumed and the business transacted during the time the public was excluded be adopted.

CARRIED

2. P FINLAYSON AND R J DAVIES, 37 CENTRAL TAKAKA ROAD, TAKAKA – APPLICATION RM051063 AND RM080155

Moved Crs Riley / Borlase  
EP08/06/03

THAT pursuant to Section 104B of the Resource Management Act, the Committee GRANTS consent to P Finlayson and R J Davies as detailed in the following report and decision.

CARRIED

**Report and Decision of the Tasman District Council through its Hearings Committee**

**Meeting held in the Tasman Room, Richmond**

**on 16 June 2008, commencing at 10.30 am**

A Hearings Committee (“the Committee”) of the Tasman District Council (“the Council”) was convened to hear the application lodged by **P Finlayson and R Davies** (“the Applicants”), to operate a campground and to discharge treated wastewater to land. The application, made in accordance with the Resource Management Act 1991 (“the Act”), was lodged with the Council and referenced as RM051063 and RM080155.

**PRESENT:**

**Hearings Committee**

Cr N Riley, Chairperson

Cr S Borlase

Cr J Edgar

**APPLICANT:**

Mr R Davies

Mr P Finlayson

Mr P Banham

**CONSENT AUTHORITY:**

**The Council**

Mr Laurie Davidson

**SUBMITTERS:**

Mrs J Coleman

Mr W Heal (Counsel for Mrs Coleman)

Mr J Davies

**IN ATTENDANCE:**

Mr J Butler, Principal Resource Consents Adviser – Assisting the Committee

Mr B Moore – Committee Secretary

## 1. DESCRIPTION OF THE PROPOSED ACTIVITY

Autumn Farm has been operating an informal campground for approximately 12 years at Central Takaka in Golden Bay. Autumn Farm is widely recognised in Golden Bay as well as nationally and internationally. With the increase in popularity of the camping and events the Applicants have sought to legitimise the operation in line with the Council's rules and planning documents.

This application is to establish and operate a camping ground (trading as Autumn Farm) which will cater for up to 15 people at any one time and to hold five organised events between December and February (inclusive) that will cater for up to 50 people. The application is for a retrospective consent as the camping ground has been operating for the past 12 years as stated above.

The application also includes a proposal to discharge treated wastewater to land from the ablution facilities. This discharge will be principally greywater as the campground is served by composting toilets. However, any leachate from the toilets will also be directed to the wastewater treatment and disposal system.

## 2. PROPOSED TASMAN RESOURCE MANAGEMENT PLAN ("PTRMP") ZONING, AREAS AND RULE(S) AFFECTED

According to the PTRMP the following apply to the subject property:

Zoning: Rural 1

Area(s): nil

The proposed campground does not comply with Permitted Activity Rule 17.4.2 of the PTRMP and is deemed to be a discretionary activity in accordance with Rule 17.4.3 of the Plan.

The proposed discharge of wastewater does not comply with Permitted Activity Rule 36.1.4 of the PTRMP and is deemed to be a discretionary activity in accordance with Rule 17.1.6 of the Plan.

## 3. NOTIFICATION AND SUBMISSIONS RECEIVED

The application(s) was notified on 15 March 2008 pursuant to Section 93 of the Act. A total of eight submissions were received, with six in support, (one of which asked for conditions), one in opposition and one was neutral. The following is a summary of the written submissions received and the main issues raised:

### Submissions in Support of the Application

#### **D and J Richards, J Trevino, F Muter, S Hoogerwerf, J and S Davies, Nelson Marlborough Health Service (with conditions)**

The submissions in support have a common theme of supporting the operation of the campground at Autumn Farm and consider it provides a facility for the Golden Bay community. The only submitter in support of the application who wishes to be heard is the Nelson Marlborough Health Service. That submission raises three matters of concern: operation of the composting toilets, the capacity of the waste water system and the potability of the water supply.

## **Submission in Opposition**

### **J and T Coleman**

Mr and Mrs Coleman are residents of the property immediately to the west of the subject site. They have lodged a submission in opposition to the application and have asked that the application be declined. They have asked to be heard in support of their submission and have sought legal assistance in that regard.

The matters they have raised relate to the effects of the operation of the camping ground and the activities that take place on the property. These include the use of the composting toilet and disposal of waste material, shading from trees and obstruction of views, noise levels from activities and the operation of the camping ground, the use of fireworks, the use of Rameka Creek as a swimming pool, the definition of boundaries and access to the property.

### **Neutral Submission**

#### **New Zealand Fire Service Commission**

A submission on behalf of the New Zealand Fire Service Commission ("NZFS") was submitted by Beca Carter Hollings and Ferner Ltd ("Beca"). The NZFS's concern is the need for adequate provision of water for fire fighting purposes in a location such as this. The submission appears to be generic in respect of resource consent applications and the decision sought by the NZFS asks for a storage of 45,000 litres of water for fire fighting purposes. The NZFS wish to reserve the right to be heard in respect of their submission.

## **4. PROCEDURAL MATTERS**

Before the hearing an email was provided from the Nelson Marlborough Health Service indicating that their concerns had been adequately dealt with by the Council's reporting officer's report. It stated that no representatives would be attending the hearing.

A letter was also received on 13 June 2008 from Beca on behalf of the NZFS which stated that the NZFS was unavailable to attend the hearing and therefore requested that the letter be tabled for the Committee's consideration. This letter was accepted by the Chair and its contents are further discussed below.

A site visit was undertaken by the Committee before the hearing. However, after hearing the evidence, the Chair considered that it was necessary to undertake another site visit. This was done in the afternoon following an adjournment of the hearing.

## **5. EVIDENCE HEARD**

The Committee heard evidence from the Applicants, submitters, and the Council's reporting officer. The following is a summary of the evidence heard at the hearing.

## 5.1 Applicants' Evidence

### Mr R Davies

Mr Davies stated that he has owned Autumn Farm since 1981 and that it has been developed from what was a rundown rural property to a very attractive landscaped setting. It has now been operating as accommodation, in one form or another, for approximately 12 years, in partnership with Mr Finlayson. He considered the hearing to be a landmark occasion for the development of the property and the Autumn Farm business.

He stated that the business itself developed in a very gradual and organic way and has now become recognised nationally and internationally. As a result it became clear that the business needed to be legitimised through the resource consent process.

Mr Davies considered the application to be insignificant and does not consider the effects on neighbours to be any more than negligible. He believed that they have been good neighbours and that the planting and landscaping has been put in place to minimise any effect.

From a productive values perspective Mr Davies did not believe there is any adverse effect. He considered that the application is entirely consistent as the organic farming focus of the property combined agricultural uses with landscaping and tourism demand.

The campground fulfils a niche in the Golden Bay tourist market by providing a relaxing and/or entertaining rural country holiday that is in great demand.

Mr Davies has calculated the overall annual input to the Golden Bay economy to be around \$250,000.

Mr Davies then addressed the recommended conditions.

With regard to the provision of water for fire-fighting he said that there are two pools in the nearby Rameka Creek that never dry up and could be used. He said that the Central Takaka Primary School swimming pool could also be used. He considered that there is sufficient water available for this purpose. Mr Davies also considered that the nature of the camping is that there is plenty of distance between tents and that fire would, therefore, not spread from one to another.

With regard to the annual events that are run at Autumn Farm, Mr Davies seeks that the events be allowed for eight days each rather than the five as recommended by the Council's reporting officer. He stated that he does not know where the five day limit came from.

Mr Davies agreed with the imposition of a two stage approach in the recommended conditions of the wastewater discharge consent. He anticipated that the water use will be much less than that calculated and used in the design of the wastewater system.

Finally, Mr Davies preferred to install another composting toilet if more toilet facilities were required as he considers them more robust and that they have a lower water use and enable reuse of organic matter back into the garden.

### **Mr P Finlayson**

Mr Finlayson stated that low impact is the aim of Autumn Farm and that guests want simple facilities. He states that a maximum of 14 campsites are sought and that there will not be, and never has been, any parking outside the Autumn Farm property boundaries.

Currently Autumn Farm operates three annual events but would like to extend this to five as they are a valuable source of income which is needed to make the business, facilities and infrastructure sustainable.

The events are concentrated over the summer period when tourism is at its greatest and that they would need eight days per event as a minimum.

With regard to noise he says that there is some noise created by the activities but that it is not common and is restricted to events such as cabaret and firework evenings. It was stated by Mr Finlayson that the latest any bell would be rung would be 7.00 pm in the summertime.

Cr Borlase asked Mr Davies and Mr Finlayson to clarify how many people would be onsite as a maximum. It was stated that there would be a maximum of 50 campers and 10 in the house making a total of 60 people onsite. When asked if this number is achieved often Mr Finlayson said that they had 50 people at least once last summer.

When asked whether events such as the New Year's party were public it was stated that it was for paying guests only with no public access.

When asked by Cr Borlase whether they are planning to extend over Rameka Creek Mr Finlayson responded that the only plans for extension were the movement from three to five events per year.

Cr Edgar queried how good the guests are at using the composting toilets and whether any problems have been encountered. Mr Davies responded that they feel it is important for people to take responsibility for their own waste and that most people embrace new ways of doing things on their holidays. Many of the guests are ecologically aware and try to minimise their impact. He added that they do have a flush toilet which a few choose to use in preference to the composting toilets.

Cr Edgar then asked about vehicles and whether, as a rule, campers and guests have their own cars. Mr Davies responded that many came by local aeroplane, bus, carpool or hitchhiking. He estimated that with 50 people there would be about 20 cars and that they have never had a problem with parking.

Cr Riley queried the use of the water in the tank and whether this would diminish the fire-fighting supply. It was stated that the tank is always full as it is filled from a pumped bore supply.

Cr Riley then asked when it was recognised that a resource consent would be needed for the operation. Mr Davies responded that it was a gradual recognition between 2003 and 2005 and that a application was lodged soon after.

Finally, Cr Riley asked whether they had ever had any guests arrive with portable toilets in the vehicles and how would they deal with this eventuality. Mr Finlayson stated that this had never happened, that motor homes and campervans were very rare and that they would send them down to the nearby Takaka Information Centre where there is a facility for this purpose.

## **5.2 Submitters' Evidence**

### **Mr J Davies**

Mr J Davies introduced himself as an adjacent landowner and the son of Mr R Davies (one of the Applicants).

Mr Davies stated that he is in support of the application and that the Applicants are welcome to use the water in his 23,000 litre tank for fire-fighting purposes.

### **New Zealand Fire Service Commission (letter)**

The NZFS commented on Recommended Condition 10. It stated that it supports the inclusion of the condition but corrected the relevant standard to read "SNZ PAS 4509:2003" instead of "SNZ PAS 4501:2003" as was incorrectly stated in Mr Davidson's staff report.

### **Mr Heal**

Mr Heal stated that the Autumn Farm website states that up to 100 men stay on the site.

Mr Heal stated that while the homosexuality-focussed activities and entertainment on the site are not in themselves embarrassing, objectionable or unacceptable, there are effects on the Colemans who live immediately adjacent.

He stated that the Colemans have had little luck in trying to have meaningful dialogue with the Applicants.

Mr Heal stated that the Colemans previously enjoyed wide ranging views to the east and that the loss of this view is one of their concerns.

Mr Heal summarised the Colemans' concerns as: Shade and obstruction of views, fire, smell, noise, unpleasant sights and traffic and safety.

Mr Heal stated that the planting between the Colemans' and the Applicants' has grown very high and obstructs views, shades their property and, in the Autumn, drops leaves on their property and in their gutter.

The Colemans are concerned that any fire resulting from fireworks or camping activities on the Autumn Farm property would spread to their property due to the proximity of the trees.

Mr Heal stated that bad odours have come from the Autumn Farm property and that they believe it results from human waste. Mr Heal stated that they would like conditions imposed which ensure that no further obnoxious odours are discharged.

Mr Heal stated that the activities on Autumn Farm are on occasions very noisy and that this has upset the Colemans. Mr Heal describes the noise as resulting from cheering and crowd noises.

Part of the culture of Autumn farm is nudity and that this has impacted on the Colemans and their family at times. Mr Heal considered that appropriate screening is needed and that a fence should be erected.

Mr Heal then discussed the officers' reports. He stated that just because other legislation deals with issues such as shading and fencing it does not mean these same issues cannot be dealt with here as they concern adverse effects that are within the scope of the Act. Mr Heal considered the fact that nudity may be controlled by the Crimes Act does not mean the Council cannot deal with the effects of nudity under the Act.

Mr Heal also considered that obstruction of views could also be dealt with through the resource consent process.

Mr Heal stated that his clients request that conditions to be placed on any consent granted to ensure that the Colemans' concerns are addressed.

Cr Borlase asked how nudity can be considered an adverse effect. Mr Heal responded that it is the same as any other adverse visual effect such as non-recessive house colours or a mussel farm. He stated that conditions can be put in place to avoid, remedy or mitigate such an adverse effect.

### **Mrs J Coleman**

Mrs Coleman introduced herself and outlined her, and her husband's connection to the area and their property.

She stated that her view and ventilation on the eastern boundary of her property has been gradually eroded due to the planting of trees and shrubs. She stated that they have been increasingly shaded too as a result.

Also, Mrs Coleman stated that the large oak tree on Autumn Farm drops leaves on their lawn and clogs their gutters, which is a problem as they are dependant on rain water and it is a big job to clear them out.

Fireworks at new years are a concern from a fire safety point of view due to the presence of the trees and the dryness of the grass at that time of year.

Mrs Coleman considered that composting toilet waste was spread near their boundary and that the smell was objectionable.



Mrs Coleman stated that Autumn Farm uses a loudspeaker and that there are often games, music, drumming, clapping and “yahooing” each day over the holiday period. She considered that it is not fair that, at a time of year when they want to enjoy the summer with their family, there is so much noise from next door. Mrs Coleman considers that a wooden fence would help minimise noise.

Mrs Coleman stated that there had been an instance of naked swimmers in Rameka Creek which had scared her grandchildren. Naked sunbathers have also been seen from their property.

Mrs Coleman stated that they have not previously complained and would not do so, except for this application. She stated that instead they have tried to sort the problems out with Mr Finlayson.

Mrs Coleman then outlined the relief sought:

1. That the Applicants should comply with the noise limits at all times and that, to achieve this, a 1.8 metre high wooden fence should be constructed along the common boundary.
2. That the trees and bushes should be reduced to a height of 3 metres and overhanging branches were to be removed.
3. That a solid fence be erected along their northern boundary to prevent the sight of naked bodies in Rameka Creek.
4. That the sewage disposal system be upgraded and that no offensive or objectionable smells be emitted from Autumn Farm and that they should be connected to the sewerage system.
5. That there be either no fireworks displays on the property, or that they are at least 100 metres away from their property and under the control of a qualified and experienced operator.
6. That the camp ground regulations be complied with and the maximum number of 50 campers be monitored.

Cr Riley asked Mrs Coleman to indicate on an aerial photograph the length of boundary she would want fenced. Mrs Coleman drew a line along the length of her eastern boundary.

Mrs Coleman also provided as evidence a printout from the Autumn Farm website which describes “over 100 men from across the world gathering at Autumn Farm for the festive season.”

### **5.3 Council’s Reporting Officer’s Report and Evidence**

Mr Davidson stated that the matter of the vegetation which is one of the matters of contention is separate from that of the campground. He considers that it is, therefore, not very relevant to the application.

Mr Davidson considered that his recommended approach of requiring a management plan for Autumn Farm will allow measures to be taken that step beyond the PTRMP to address issues. He also considered that this approach would be more effective in preference to inflexible and prescriptive consent conditions.

Mr Davidson stated that there is some disagreement over the length of the special events. He understood that the application sought five special events each of a maximum five days duration and between 1 December and 28 February.

With regard to fire fighting, Mr Davidson stated that his understanding of the NZFS's submission was that they are comfortable with wherever fire-fighting water is available and do not seek any particular source.

Mr Davidson also stated that there is no daytime instantaneous noise maximum and that this provides certain freedoms to the Applicants for activities such as ringing a bell etc.

When asked by Cr Borlase whether an acoustic fence would be appropriate Mr Davidson responded that that it is a specialised field and that he did not have the necessary expertise to comment. However he did state that he had his doubts as to whether this would adequately mitigate all of the noise from Autumn Farm.

When asked why he would recommend that any additional toilet that may be needed should be restricted to a flush toilet Mr Davidson responded that it would be more "nuisance free" and would provide options.

#### **5.4 Applicant's Right of Reply**

Mr Finlayson drew a map of the relevant properties and described how the hedge between Autumn Farm and the Colemans was deep and how he was currently pruning out some plants to allow a successional progression to denser and longer living species such as rhododendrons. He stated that he does not believe there are any overhanging branches in the Colemans' property.

With regard to visual impact he believed that the pool in Rameka Creek that is on their western boundary is the only possible area where there may be adverse impacts on the Colemans.

Mr Davies stated that the fireworks are restricted to the amphitheatre and that he is happy for this to be written into a consent condition.

Mr Davies also questioned why flush toilets should be considered more nuisance free than composting. It was his consideration that the latter are more reliable.

Due to costs and physical disturbance of the grounds Mr Davies requested that upgrades required as conditions of consent be staggered.

Finally, he stated that the smell that Mrs Coleman described was from leaf mould which had fermented much like silage. He said that the composting toilets were emptied twice annually and the material was then recomposted for 18 months before being mixed into gardens or placed around trees.

## 6. PRINCIPAL ISSUES

The principal issues that were in contention were:

- a) Does landscaping and screening of Autumn Farm create adverse effects on the Colemans through:
  - i) the obstruction of views;
  - ii) casting of shade; and/or
  - iii) dropping of leaves from deciduous trees?
- b) Are sufficient fire-fighting provisions in place and is there an increased risk of fire to the Colemans' property?
- c) Is sewage and composting toilet material appropriately managed to avoid adverse odour or health risks? Is the proposed system to treat and discharge greywater and composting toilet drainage liquid suitable to avoid any adverse effects on the environment?
- d) Does the noise generated by the activities on Autumn Farm have a more than minor adverse effect on the Colemans?
- e) What adverse visual impacts and effects result from the camping and activities on Autumn Farm?

## 7. MAIN FINDINGS OF FACT

The Committee considers that the following are the main facts relating to this application:

- a) The problems and disagreements between the Colemans and Autumn Farm to do with trees and plantings, views, shading and leaves are not strictly relevant to this application. However, the Committee considers that it has an arbitrational role and power in this regard as the landscaping is indirectly linked to campground operations through the necessity for screening of Autumn Farm from the Colemans' property.
  - (i) With regard to the views of the eastern hills of Golden Bay by the Colemans, the Committee considers that Autumn Farm is under no obligation to maintain the views of any other party over their land. So long as planting, or indeed any other development, is permitted by the PTRMP the owners of the land are entitled to do so.
  - (ii) With regard to shade cast onto the Colemans property by the screening plantings along the boundary, the Committee considers that the level of shading is minor and will only occur for a short time during the morning during summer, and to a negligible extent during other seasons.
  - (iii) With regard to the annual fall of leaves from the sizable oak tree on Autumn Farm, the Committee considers that this is an effect that can justifiably be considered as a nuisance and that this effect should be addressed by the Applicants.

- b) The facilities and activities on the site do elevate the fire risk somewhat. The Committee considers that there is a need to ensure that adequate fire protection measures are in place.
- c) The proposed wastewater treatment and disposal system is appropriately designed to cater for the needs of Autumn Farm. In addition, the Committee is satisfied that the current management of the composting toilets and the resultant compost material, along with the conditions volunteered by the Applicants, is appropriate and sufficient to ensure that both objectionable odours and health concerns will be avoided.
- d) No quantifiable evidence was presented to the Committee on the level of noise emitted by activities on Autumn Farm. Based on the evidence that was presented from both the Colemans and the Applicants, the Committee considers that Autumn Farm activities certainly may have the potential to create more than minor adverse effects. However, as stated above, with the lack of any objective and quantifiable evidence the Committee considers that further consideration of noise levels is warranted. However, given that Autumn Farm has been operating for many years without any noise complaints it is best to proceed on a reactive basis and in the event that complaints are received, appropriate action can be taken. Such requirements are further discussed below.
- e) The Committee considers that there is only a minor adverse visual effect on the Colemans' property resulting from the camping and activities on Autumn Farm. These effects can be further lessened by the implementation of some minor precautions and measures by Autumn Farm staff.

## **8. RELEVANT STATUTORY PROVISIONS**

### **8.1 Policy Statements and Plan Provisions**

In considering this application, the Committee has had regard to the matters outlined in Section 104 of the Act. In particular, the Committee has had regard to the relevant provisions of the following planning documents:

- a) Tasman Regional Policy Statement (TRPS); and
- b) the Proposed Tasman Resource Management Plan (PTRMP).

The proposed activity contravenes Section 15 of the Act, and therefore the Council has also had regard to the matters outlined in Sections 105 and 107 of the Act.

### **8.2 Part II Matters**

In considering this application, the Committee has taken into account the relevant principles outlined in Sections 6, 7 and 8 of the Act, as well as the overall purpose of the Act as presented in Section 5.

## **9. DECISION**

Pursuant to Section 104B of the Act, the Committee **GRANTS** consent subject to conditions.

## 10. REASONS FOR THE DECISION

Autumn Farm has been operating in its current capacity for approximately 12 years on an informal basis. During that time there have been no recorded complaints. It is not considered that Autumn Farm has any effect outside its property boundaries that are more than minor or cannot be mitigated by good management of the subject property and some minor improvements off-site (such as the mitigation of the effects of falling leaves on the Colemans' property).

Concerns such as the risk of fire are evident. However, fire is a concern everywhere in Golden Bay when conditions become hot and dry during the summer. The Committee is satisfied that the risk of fire is not unreasonably increased as a result of the campground and activities (notably the annual fireworks display). Further, the Committee is satisfied that the water that is available for fire protection is satisfactory.

The Committee has not been presented with any evidence to clearly show that the campground activities at Autumn Farm have been causing more than minor adverse noise effects. It is considered that while there is the potential for such effects to be caused at times, the good track record gives comfort. It is considered that there are options available for mitigating noise effects in future if they become a problem and complaints are received. In the event that noise does cause a problem, noise levels would need to be quantified and consent conditions may need to be reviewed accordingly. Provision has been made for this to be done under Section 128 of the Act.

The only likely aspect of the campground's operation that may have a direct visual impact on a neighbour (the Colemans) is in Rameka Creek where there is a pool that is right on the boundary of Autumn Farm and can also be seen from the Colemans' property. The event described above where children had seen naked men swimming in this pool is not an acceptable situation and this particular visual effect needs to be avoided. Conditions placed on the consent for this purpose are discussed below.

Overall, the Committee is satisfied that the proposal is consistent with all the objectives as well as the relevant policies of Chapter 5 of the PTRMP.

The Committee considers that the use of composting toilets and the design of the wastewater system is appropriate and no adverse effects will result. Indeed, it is evident that the commendable gardens and landscaping of the property is, in part, thanks to the reuse of organic matter and nutrients from the composting toilet system.

The productive values of this Rural 1 land are considerable. However, the Committee does not consider that the proposed land use conflicts with these values. Firstly, the land use will do nothing to stop a return to productive farming in the future. Secondly, the organic gardening and fruit trees that are grown in addition to the camping activities are an entirely appropriate use of high quality Rural 1 soils. For these reasons the Committee is satisfied that the proposal is consistent with Objectives 7.1.0, 7.2.0 and 7.3.0 of the PTRMP as well as with their consequent policies.

## 11. COMMENTARY ON CONDITIONS OF CONSENT

Condition 4 of the land use consent sets limits on the scope of the proposed special events. The application as lodged stated that special events were to be a “week long” which is considered to be a seven day long event from start to finish. However, evidence presented by the applicants at the hearing stated that they wish to have eight day long special events. The Committee did not consider that it was appropriate to approve events that were longer than that publicly notified. However, it is allowable to have a “pack-up” day during which there should be no noise, activities or festivities.

There are some effects on the Colemans which can be appropriately dealt with through this consent process. Conditions 16 and 17 avoid, remedy or mitigate two such effects. Guttering mesh should solve the problem of deciduous leaves from a large oak on the Autumn Farm property blocking the Colemans’ guttering. A restriction on nude swimming in a pond which is observable from the Colemans’ property should avoid that effect.

Noise effects are, in many ways, unknown. No complaints have been received but there is anecdotal evidence from the Colemans which suggests that noise effects may occur. The Committee considers that the best way to address this is to signal to any potentially affected parties that complaints should be lodged with the Council if any action is to be taken in the future. A specific reference to this has been included in the review condition (Condition 18) for this purpose.

In the absence of any evidence quantifying the volumes of wastewater discharged the Council’s reporting officer was forced to use estimated figures which may over-estimate the volume of wastewater produced. Therefore, conditions of the discharge permit allow a staged implementation of soakage capacity based on need as evidenced by the results of a flow meter. This should avoid unnecessary cost and disruption but ensure that the system is sufficient to meet actual measured flows.

## 12. LAPSING OF CONSENT(S)

Pursuant to Section 125(1) of the Act, resource consents, by default, lapse in five years unless they are given effect to it before then.

Issued this 8<sup>th</sup> day of July 2008



Cr Noel Riley  
**Chair of Hearings Committee**

**RESOURCE CONSENT NUMBER:** RM051063

Pursuant to Section 104B of the Resource Management Act 1991 (“the Act”), the Tasman District Council (“the Council”) hereby grants resource consent to:

**Peter Finlayson and Richard Davies**  
(hereinafter referred to as “the Consent Holder”)

**ACTIVITY AUTHORISED BY THIS CONSENT:**

Operate a commercial activity (campground) and associated “special events” in the Rural 1 zone.

**LOCATION DETAILS:**

Address of property:	37 Central Takaka Road, Takaka
Legal description:	Lot 7 DP 2899
Certificate of title:	NL66/33
Valuation number:	1871041400
Easting and Northing:	2494968 6036385

Pursuant to Section 108 of the Act, this consent is issued subject to the following conditions:

**CONDITIONS**

**General**

1. The establishment of the proposed camping ground sited at 37 Central Takaka Road shall be generally in accordance with the application submitted and shown on the attached plan marked RM051063 dated 30 June 2008. Where there is any apparent conflict between the information provided with the application and any condition of consent, the conditions shall apply.

**Management and Occupancy**

2. The maximum number of campers shall be limited to 15 people at any one time, with the exception of specific occasions (hereinafter referred to as “special events”) that are authorised by Condition 4 below.
3. The areas used for camping shall be limited to the 14 sites identified in the application, as shown on Plan B dated 30 June 2008 (attached).
4. No more than five special events shall be held between the period of 1 December and the last day of February. The maximum number of campers during any special event may be increased to 50, while the total number of people on the subject site during any special event, including house guests and staff, shall not exceed 60. Each special event shall be restricted to seven days in duration. However, an eighth day shall be permitted as a “pack up” day. On the eighth day of each special event there shall be no organised activities, music or festivities. It shall primarily be used for packing up tents, checking out and leaving the premises.

5. A written schedule of the proposed summer programme shall be sent to the Council's Coordinator Compliance Monitoring before 1 December each year.
6. The Consent Holder shall prepare an Autumn Farm Management Plan ("the Plan") for the operation of the camping ground to be approved by the Manager, Environment and Planning before 1 November 2008. The Plan shall cover all operational functions of the camp and control all activities that can have the potential to produce adverse effects beyond the boundaries of the site. The Plan shall include but not be limited to; the types of outdoor activities held, the use of fireworks, noise, outdoor fires, parking, waste and rubbish disposal, management of composting toilet output, hours of operation, duration of events and use of equipment on the site. Once approved, the campground and all activities and special events shall be carried out in accordance with the Plan.
7. Composted material from the composting toilets shall not be applied to any land within 20 metres of the subject property boundary, 20 metres from Rameka Creek and 25 metres from the nearest bore.

### **Roading**

8. The two existing accesses to the property shall be upgraded to a two-coat chip seal and formed to meet Diagram 1 of Schedule 16.2C of the PTRMP before 1 December 2009.

#### **Advice Note:**

The Consent Holder should apply for a Vehicle Access Crossing permit so that this work can be carried out.

### **Landscaping**

9. The Consent Holder shall submit a landscape plan showing the proposed vegetation along the length of the western boundary where it abuts the lot described as Pt Sec 29 Takaka DIST. As part of the landscape plan the depth of the vegetation shall be maintained at not less than 3 metres. The planting shall extend from a point 5 metres from the road boundary for a distance of 45 metres and shall have the purpose of providing a visual screen for the neighbours to the west of the site when viewed from that property. The plan shall be submitted for certification by the Council's Coordinator Compliance Monitoring by 1 August 2008 and incorporate the species to be planted, height at maturity and the on-going maintenance programme.
10. The plan shall be implemented by 1 September 2008 and maintenance and development of the vegetation shall be ongoing.

### **Fire Protection**

11. No open fires are permitted within the areas to be used for camping, other than those in approved fire places.
12. Fireworks shall be restricted to the area on the attached Plan B as the "amphitheatre" and be limited to one event in a year.



**Advice Note**

The Consent Holder is advised that they should contact the Rural Fire Network and obtain any necessary permits for a public fireworks display.

13. The Consent Holder shall, by 1 November 2008, have available a minimum of 45,000 litres of water for fire fighting purposes in accordance with SNZ PAS 4509:2003. The sources of water shall be listed in the Plan required by Condition 6 of this consent. Any change or update of the source(s) of water available shall be reflected in a change to the Plan and the local Fire Department shall be advised in writing. Evidence of any such advice shall be kept by the Consent Holder.
14. In the event the Consent Holder seeks to include water from Rameka Creek or from a neighbour's so as to satisfy the fighting water requirements of Condition 13, written confirmation shall be provided by the New Zealand Fire Service that appropriate and adequate access to the creek or neighbour's water is available.

**Advice Note:**

Mr J Davies, a neighbour offered water from his tank as a component of the necessary fire fighting water supply. This supply will only be a valid source of water for the purposes of Condition 13 if it can be shown that it is a reliable supply and an access agreement is provided to guarantee supply if needed for fire-fighting purposes.

15. Notwithstanding Condition 14, the Consent Holder shall invite representatives of the local Fire Department to inspect the site between 1 December 2008 and 28 February to ensure and maintain their familiarity with the site. Evidence of this invitation shall be provided to the Council's Co-ordinator Compliance Monitoring as soon as is practicable.

**Advice Note:**

For clarity, this condition does not require that any approval of the Fire Department be obtained. The intention of the condition is simply to provide a opportunity for the local Fire Department to familiarise themselves with the site. No member of the Fire Department has any third party powers to require anything to be done unless otherwise required by these conditions or by law.

**Mitigation of Cross-Boundary Effects**

16. The Consent Holder shall offer to the owners of 35 Central Takaka Road (the Colemans) to organise and pay for the fitting of gutter mesh (or similar) to the guttering of the existing dwelling on that property to prevent deciduous leaves from blocking the guttering. The offer shall be in writing and a copy shall be retained by the Consent Holder and provided to the Council's Coordinator Compliance Monitoring if so requested. If the offer is accepted by the Colemans the Consent Holder shall organise to have this work carried out before 1 March 2009.
17. There shall be no nude swimming in the area of Rameka Creek shown on Plan C dated 30 June 2008 (attached). By 1 December 2009 the Consent Holder shall erect at least two signs and place them in the area advising campers that swimming in this area is discouraged and, in particular, nude swimming in this area is prohibited. Photographs of the signs and the management of prohibited nude swimming shall be included in the Plan required by Condition 6.

## Review

18. The conditions of the land use consent may be reviewed by the Council in accordance with Section 128 of the Resource Management Act 1991 during the month of July each year, for the purpose of;
  - a) dealing with any complaints about noise beyond the property boundaries that may arise from the exercise of this consent;
  - b) dealing with any adverse effect on the environment which may arise from the exercise of this consent;
  - c) requiring the applicant to adopt the best practicable option to remove or reduce any adverse effect on the environment;
  - d) to require compliance with operative rules in the Tasman Resource Management Plan or its successor plan; and/or
  - e) when relevant national environmental standards have been made under Section 43 of the RMA.

### Advice Note

This condition makes noise emanations a specific ground for review of the conditions of this consent. The Consent Holder's attention is drawn to the noise levels that are permitted for the Rural 1 Zone. See Rule 17.4.2 of the PTRMP.

## ADVICE NOTES

1. The Consent Holder is particularly reminded of their duty under Section 16 of the Act to avoid unreasonable noise.
2. This consent is issued pursuant to the Resource Management Act 1991 and the Proposed Tasman Resource Management Plan (PTRMP). It does not constitute consent under any other legislation and the Consent Holder has the duty to comply with any other requirements that may apply under any building, health or fire safety legislation. The applicant's attention is drawn to the provisions of the Camping Ground Regulations 1985 and the requirement to have the camping ground registered before it is used for any paying guests.
3. This consent is granted to the abovementioned Consent Holder but Section 134 of the Act states that such land use consents "attach to the land" and accordingly may be enjoyed by any subsequent owners and occupiers of the land. Therefore, any reference to "Consent Holder" in the conditions shall mean the current owners and occupiers of the subject land. Any new owners or occupiers should therefore familiarise themselves with the conditions of this consent, as there may be conditions that are required to be complied with on an ongoing basis.
4. This resource consent only authorises the activities described above. Any matters or activities not referred to in this consent or covered by the conditions must either:
  - a) comply with all the criteria of a relevant permitted activity rule in the PTRMP;
  - b) be allowed by the Act; or
  - c) be authorised by a separate consent.

5. 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 can be minimised by consistently complying with the resource consent conditions.
6. Access by the Council officers or agents to the property is reserved pursuant to Section 332 of the Resource Management Act 1991.

Issued this 8<sup>th</sup> day of July 2008

A handwritten signature in black ink, appearing to read 'Noel Riley', enclosed within a faint rectangular border.

Cr Noel Riley  
**Chair of Hearings Committee**

**RESOURCE CONSENT NUMBER:** RM080155

Pursuant to Section 104B of the Resource Management Act 1991 (“the Act”), the Tasman District Council (“the Council”) hereby grants resource consent to:

**Peter Finlayson and Richard Davies**  
(hereinafter referred to as “the Consent Holder”)

**ACTIVITY AUTHORISED BY THIS CONSENT:**

To discharge treated greywater and composting toilet leachate from a campground to land.

**LOCATION DETAILS:**

Address of property:	37 Central Takaka Road, Takaka
Legal description:	Lot 7 DP 2899
Certificate of title:	NL66/33
Valuation number:	1871041400
Easting and Northing:	2494968 6036385

Pursuant to Section 108 of the Act, this consent is issued subject to the following conditions:

**CONDITIONS**

**General conditions**

1. The design, construction and operation of the wastewater treatment and disposal system shall be in accordance with the report “Engineering Report for Onsite Wastewater Treatment and Disposal System for Autumn Farm at Central Takaka Road Golden Bay” prepared by Richard Walker and submitted with the application for resource consent RM080155. The recommendations and design plans from this report are attached to this consent. This design and construction includes the reticulation of all greywater, all urine from urinals and all leachate and urine from composting toilets to the septic tank.
2. The maximum daily discharge volume shall not exceed 4,500 litres per day.

**Trench installation and discharge rate**

3. The land application system shall be comprised of ‘Everglas’ trenches no less than 1 metre in width. Trenches shall be separated by no less than 1 metre of undisturbed soil. When this resource consent is first exercised, there shall be no less than 90 metres of trench installed and commissioned.

During subsequent years, there shall be no less than 140 metres of trench installed and commissioned should water flow volume entering the system, as measured by the water meter required to be installed by Condition 9, exceed a mean of 3,150 litres per day during any 7-day period.

4. The maximum loading rate at which the wastewater is applied to land shall not exceed 35 millimetres per day (35 litres per square metre per day).

## Monitoring facilities and regime

5. A sampling point to allow collection of a sample of the treated wastewater shall be provided at a point located after the final treatment chamber and before the point where the wastewater discharges to the disposal area.
6. A sample of the treated wastewater shall be collected from the sampling point required to be installed in accordance with Condition 5. Samples shall be analysed for five day carbonaceous biochemical oxygen demand (cBOD<sub>5</sub>) and total suspended solids. Samples shall be collected at least annually, with the samples being collected between 20 December and 20 January. Should the standards specified in Condition 7 not be met, the sampling frequency shall be increased to monthly sampling until full compliance with the contaminant limits of Condition 7 has been achieved on four consecutive monthly samples.
7. The treated wastewater entering the disposal field, as measured at the sampling point required to be installed in accordance with Condition 5, shall comply at all times with the following limits:
  - a) the five day carbonaceous biochemical oxygen demand (cBOD<sub>5</sub>) in any single sample shall not exceed 150 grams per cubic metre; and
  - b) the concentration of total suspended solids (TSS) in any single sample shall not exceed 150 grams per cubic metre.
8. 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 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. All such testing shall be at the cost of the Consent Holder.
9. The Consent Holder shall install and maintain at all times a calibrated flow meter, with an accuracy of  $\pm 5\%$ , on the outlet of the wastewater treatment system to measure the quantities of wastewater discharged to the land application areas.
10. The flow meter required to be installed in accordance with Condition 9 shall be read manually or electronically at the same time daily during the months of December, January and February each year. Copies of these records shall be forwarded to the Council's Co-ordinator Compliance Monitoring quarterly and also upon written request.
11. Any exceedence of the authorised discharge volume (refer Condition 2) shall be reported to the Council's Co-ordinator Compliance Monitoring in writing within three days 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.
12. The Consent Holder or its authorised agent shall notify the Council's Co-ordinator Compliance Monitoring of any wastewater discharge to land or water from the treatment plant that is not authorised by this consent in writing as soon as practicable (but no more than 24 hours) after the discharge commenced.

13. There shall be no ponding of wastewater on the ground surface, or any direct discharge or run-off of wastewater to surface water.

## **Construction**

14. The construction and installation of the wastewater treatment plant and disposal system shall be carried out 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 confirm the following:

- a) 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 and the manufacturer's specifications; and
  - b) that all components of the wastewater system are in sound condition for continued use for the term of this resource consent.
15. The Consent Holder shall submit a set of final "as-built" plans to the Council's Co-ordinator Compliance Monitoring that shows the location of all components of the wastewater treatment and disposal system. 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, with particular regard to the sampling point (referred to in Condition 5).

## **Maintenance**

16. The Consent Holder shall ensure that the effluent filter is cleaned no less than once every six months. The Consent Holder shall ensure that intermittent loading of the trenches is maintained using the distribution box, and that no trench be loaded for more than two months before loading is switched to another trench.
17. Notwithstanding Condition 16, the wastewater treatment and disposal system shall be inspected and serviced not less than every two years and a copy of the service provider's maintenance report shall be forwarded to the Council's Co-ordinator Compliance Monitoring within two weeks of each inspection. The inspection report shall include, but not be limited to, the following information:
  - a) the date the inspection was undertaken and the name of the service provider;
  - b) a list of all components of the treatment and disposal systems that were inspected and the state of those components;
  - c) any maintenance undertaken during the visit or still required, and a timetable for any such work to be carried out;
  - d) a description of the appearance of the filter/s and tanks;

- e) the location and source of any odour detected from the system during the inspection; and
- f) a description of the appearance of the disposal area (ponding, vegetation growth etc).

### **Signage**

18. The Consent Holder shall erect signage on the ablution block notifying the public that the dumping of chemical toilet waste or other campervan waste into the wastewater system is prohibited.

### **Review of Consent Conditions**

19. The Council may, during the month of July 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:
- a) 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;
  - b) 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;
  - c) to review the contaminant limits, loading rates and/or discharge volumes and flow rates of this consent if it is appropriate to do so;
  - d) to review the frequency of sampling and/or number of determinands analysed if the results indicate that this is required and/or appropriate; and/or
  - e) to require consistency with any relevant Regional Plan, District Plan, National Environmental Standard or Act of Parliament.

### **Expiry**

20. This resource consent expires on 1 July 2028.

### **Advice Notes**

1. Officers of the Council may also carry out site visits to monitor compliance with resource consent conditions.
2. It is strongly recommended that household water reduction fixtures be included in the ablution block design in order to ensure that the discharge volume limit is met. The measures and fixtures should be in accordance with AS/NZS 1547:2000 and Auckland Regional Council's Technical Publication 58.
4. This resource consent only authorises the activities described above. Any matters or activities not referred to in this consent or covered by the conditions must either:
  - a) comply with all the criteria of a relevant permitted activity rule in the Proposed Tasman Resource Management Plan (PTRMP);

- b) be allowed by the Act; or
  - c) be authorised by a separate consent.
4. All associated excavation work must comply with the permitted activity requirements of the Tasman Resource Management Plan unless either are otherwise authorised by a resource consent.
  5. The Consent Holder shall meet the requirements of the Council with regard to all Building and Health Bylaws, Regulations and Acts. Building consent will be required for these works.
  6. Access by the Council or its officers or agents to the property is reserved pursuant to Section 332 of the Resource Management Act.
  7. All reporting required by this consent shall be made in the first instance to the Council's Co-ordinator Compliance Monitoring.
  8. The 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 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 & Planning Manager, and the New Zealand Historic Places Trust.

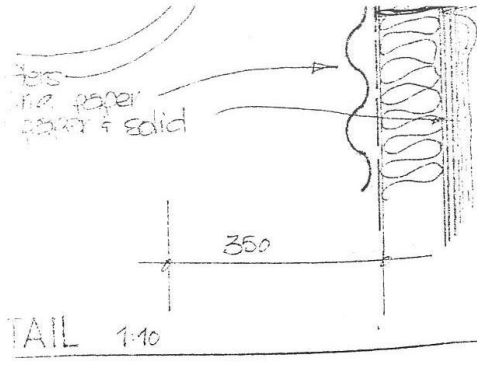
Issued this 8<sup>th</sup> day of July 2008



Cr Noel Riley  
**Chair of Hearings Committee**



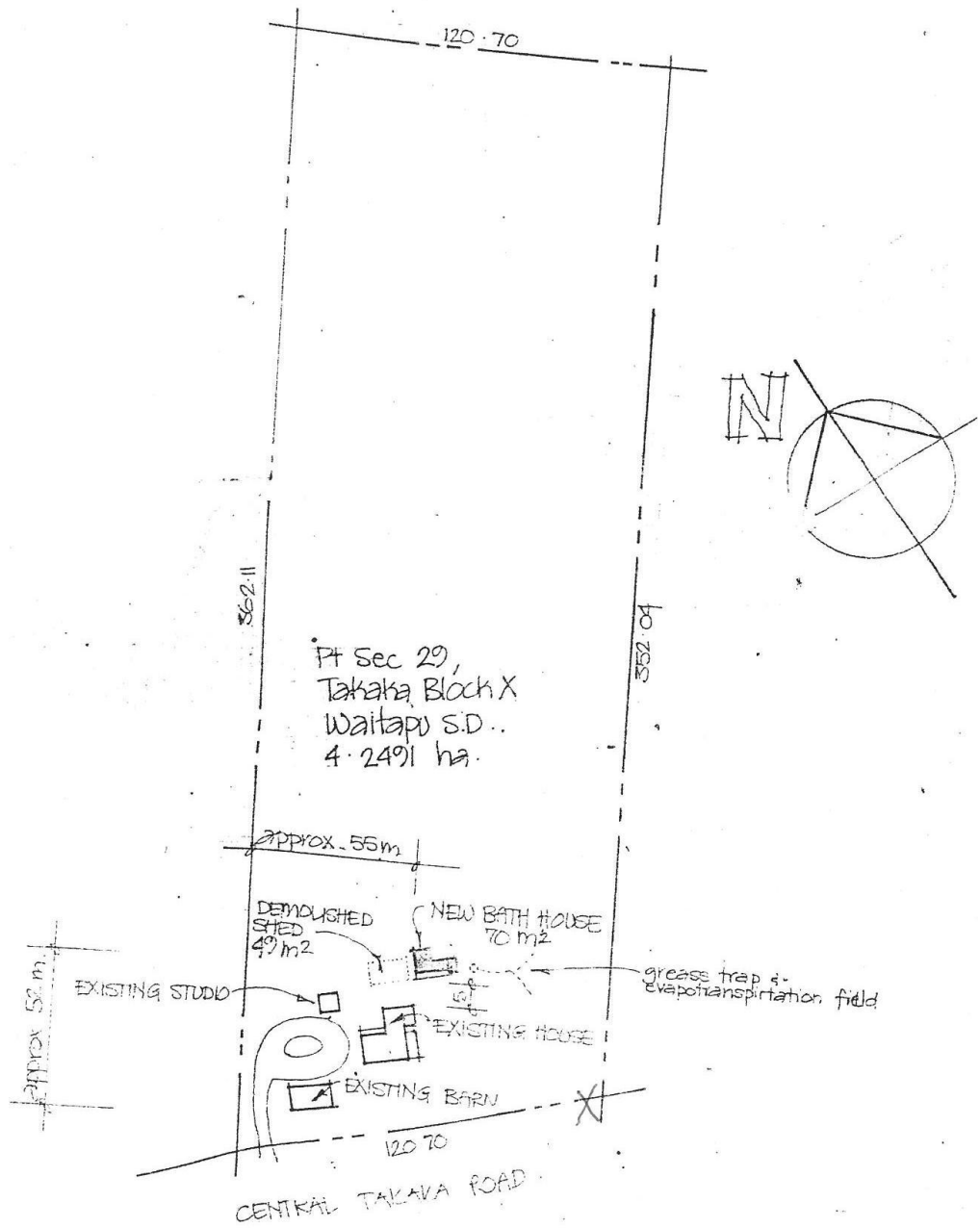
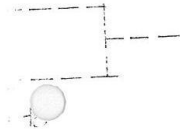
Plan A – Property plan – 30 June 2008  
 RM051063, RM080155

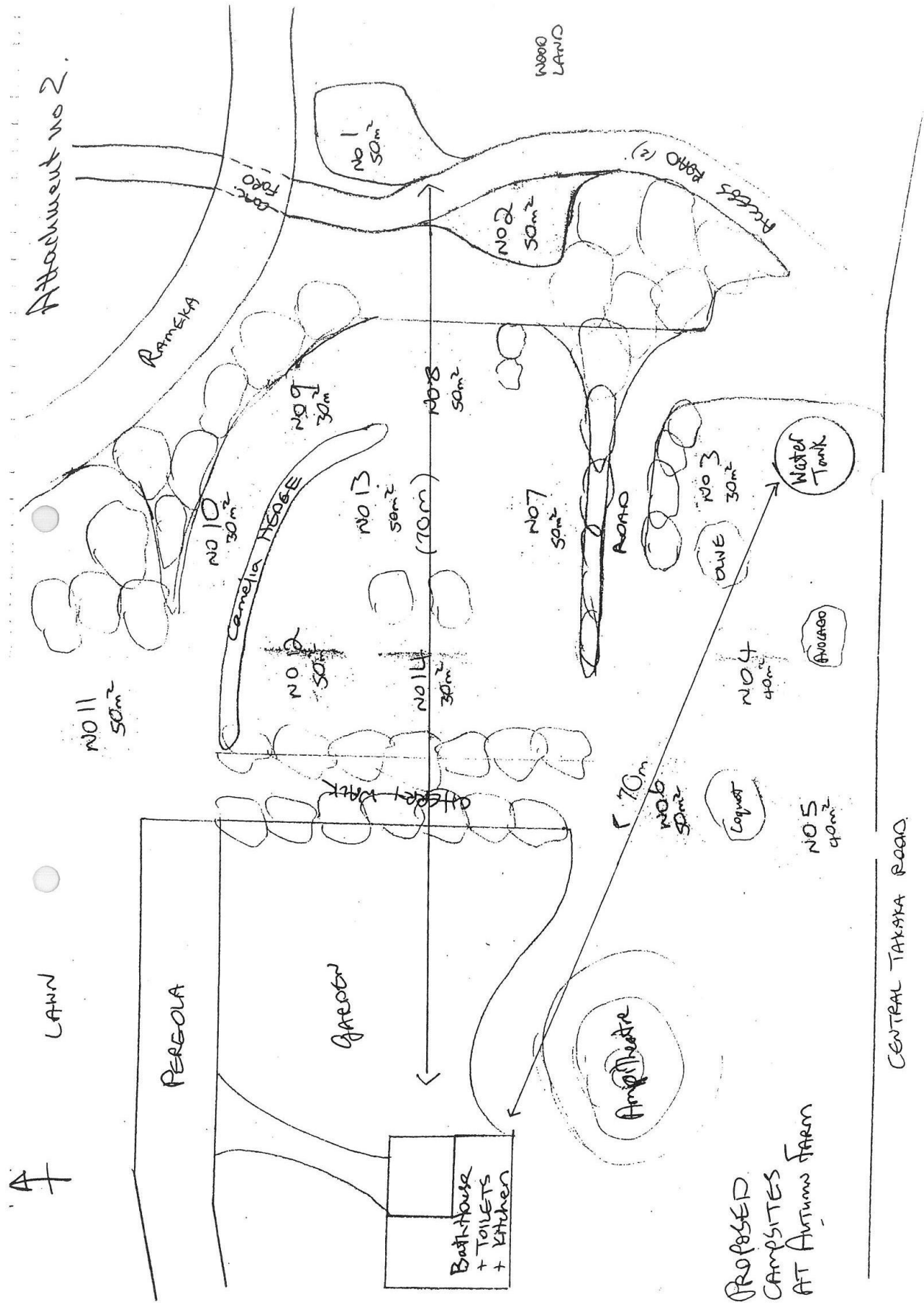


macrocarpa totiv or plywood  
 150x50 rafters @ 12 ctrs  
 2.7 m

Attachment no. 1

improving  
 ed to  
 irs instructions





Plan C – No Nude Swimming Area – 30 June 2008  
RM051063, RM080155



## 1. SUMMARY AND RECOMMENDATIONS

### 1.1 SCOPE

1.1.1 This report provides a summary of the investigation and design and recommendations for the greywater effluent treatment and disposal system for the proposed campground development at Autumn Farm at Central Takaka Road in Golden Bay.

### 1.2 PROPOSED DEVELOPMENT

1.2.1 The proposed campground will cater for upto a maximum of 50 visitors for the peak Christmas holiday period. The estimated number of visitors will be less than 25 for the remainder of the summer period and less than 10 for the remainder of the year. Waterless urinals and composting toilets will be used for human wastes. The new onsite wastewater system will be for the treatment and disposal of urine and greywater effluent from the cooking and washing facilities, showers and laundry.

### 1.3. RECOMMENDATIONS

1.3.1 It is recommended that the existing facilities at the bath house with one urinal and one composting toilet be upgraded so that there are a minimum of two waterless urinals and two composting toilets for the visitors to the campground. A liquid drain should be installed to drain from the composting toilets and waterless urinals to the septic tanks.

1.3.2 The recommended onsite wastewater system comprises the provision of an additional new septic tank at the outlet of an existing septic tank to provide a minimum total capacity of 5400 litres for the two tanks. The new tank should have a Zabel filter at the outlet. The effluent will drain to a pump chamber and be pumped via an automatic sequencing valve to a series of Everglas soakage trenches for the disposal of effluent. The location and layout of the onsite wastewater treatment system is shown on the Location Plan and Site Plan, Drawing Nos ESS1150/01 and 02 included with this report.

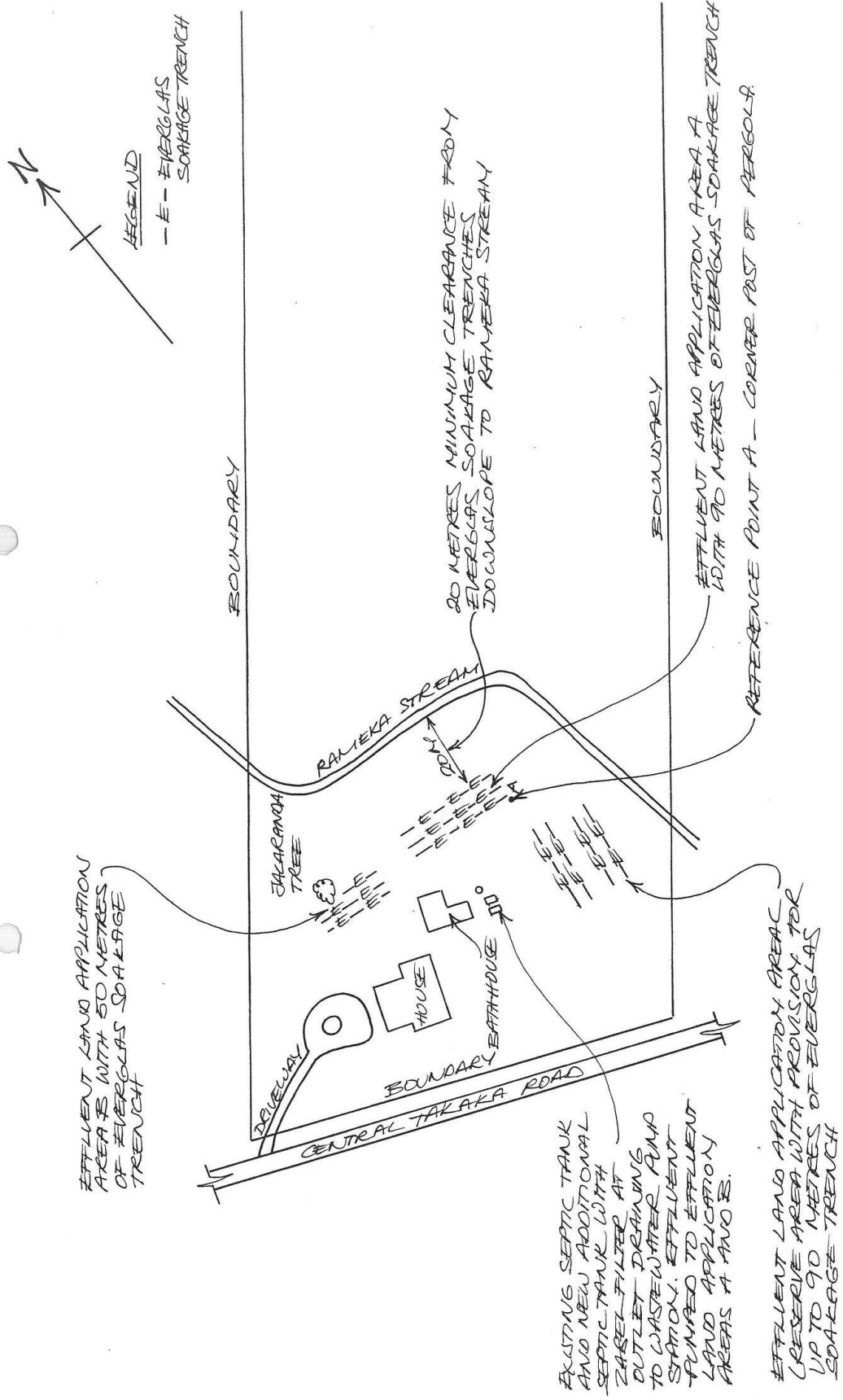
1.3.3 It is recommended that a water meter be installed at the pump chamber so that the actual water use can be measured and the performance of the system checked and the requirement for the installation of the soakage trenches in the future more accurately determined.

1.3.4 Design calculations show that the wastewater system should treat flows up to 4500 litres per day for the peak Christmas holiday period, assuming there is up to 50 people staying at the campground using 90 litres per day per person. The typical summer flow is estimated to be less than 2250 litres per day and the typical winter flow is estimated to be less than 900 litres per day. Based on the results of the site and soil investigation, it is recommended that a design loading rate (DLR) of 35mm per day be used for the disposal of effluent. The length of Everglas soakage trench for a design flow of 4500 litres per day and a design loading rate of 35 mm per day is 129 metres.

1.3.5 The recommended location of the effluent land application areas with the Everglas soakage trenches is shown on the Site Plan included with this report. There are two primary areas, A and B and a reserve area C. Area A has three 30 metre long soakage trenches totalling 90 metres in length. Area B has three soakage trenches totalling 50 metres in length. Area C can provide for a further 90 metres of soakage trench if required in the future. There would be a minimum clearance of 20 metres from the Everglas soakage trenches downslope to the Rameka Stream which runs through the property.

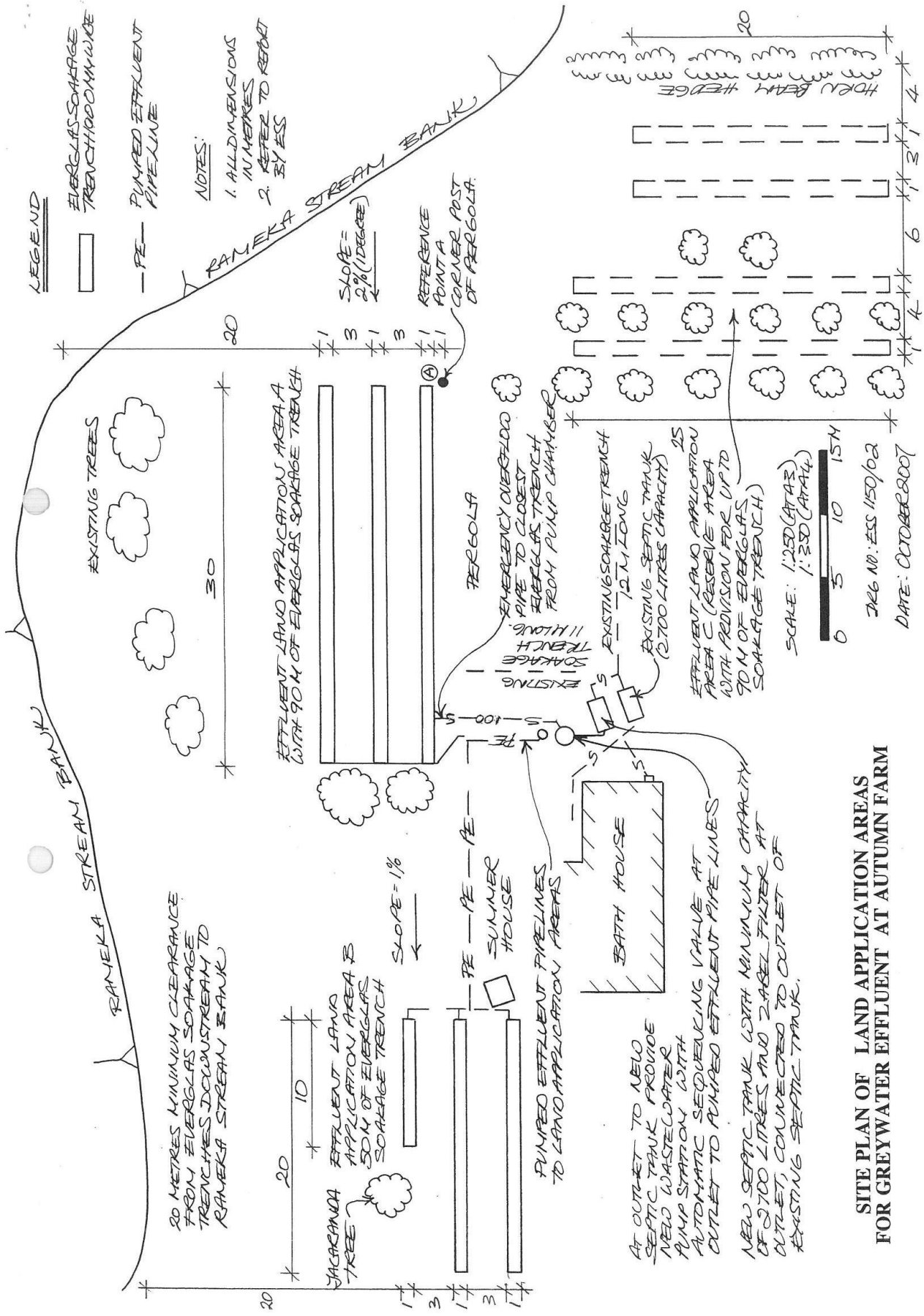
1.3.6 It is recommended that staged construction be implemented based on the measured water use during the peak Christmas holiday period. It is recommended that Area A with 90 metres of soakage trench be constructed initially. This length of soakage trench is sufficient for a design flow of 3150 litres per day. If water meter measurements show that the flow is greater than 3150 litres per day, averaged over one week, then Area B with 50 metres of soakage trench should be constructed. The combined length of Areas A and B with 140 metres of soakage trench is sufficient for a design flow of 4900 litres per day.

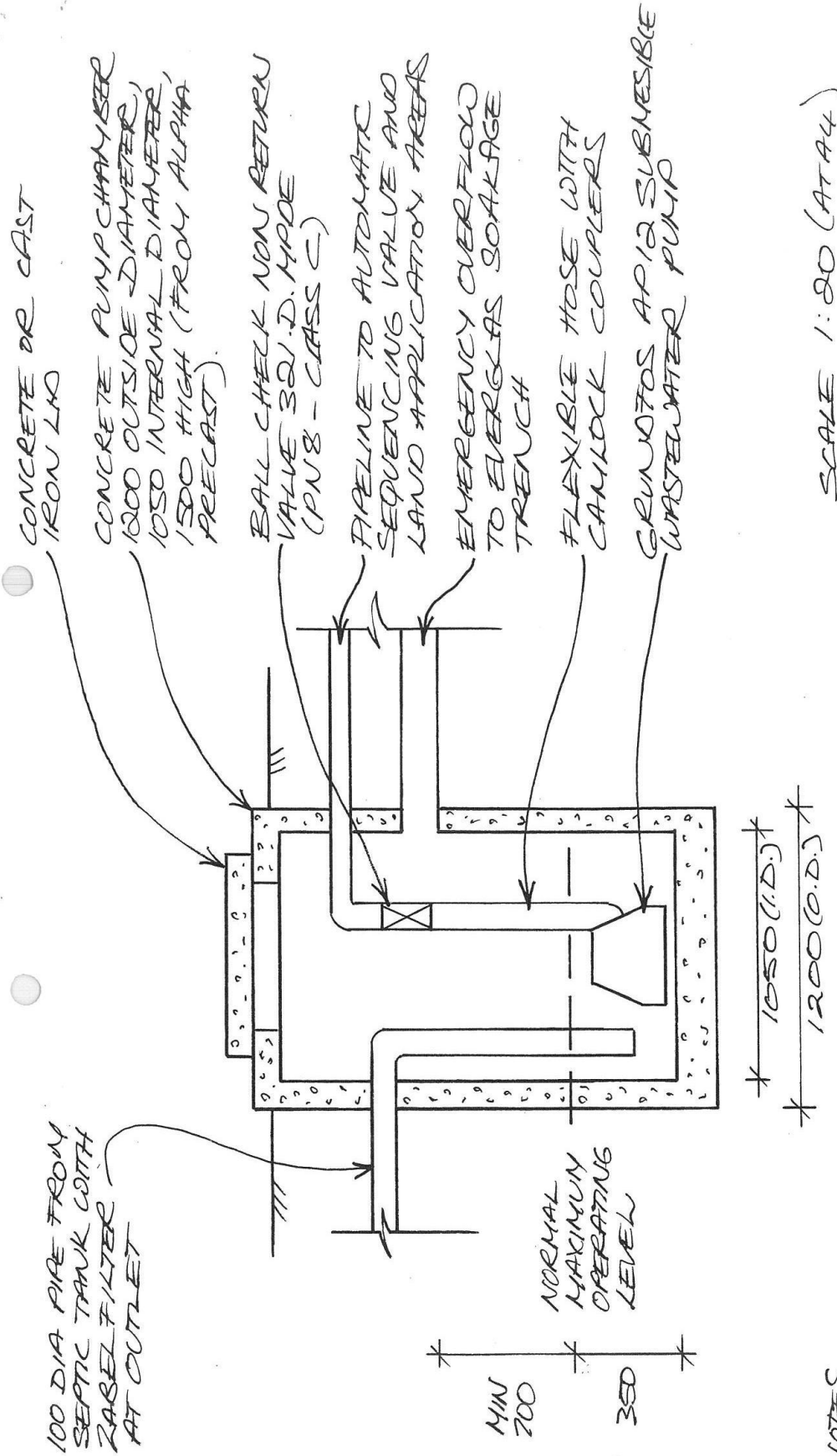
1.3.7 It is recommended that the large Everglas plastic trench be used. These have a storage volume of 140 litres per metre length of trench. Thus the system will be able to accommodate any short term high peak flows satisfactorily.



DATE: OCTOBER 2007  
 DRG No: ESS 1150/01

**LOCATION PLAN FOR ONSITE WASTEWATER SYSTEM FOR GREYWATER EFFLUENT AT AUTUMN FARM**



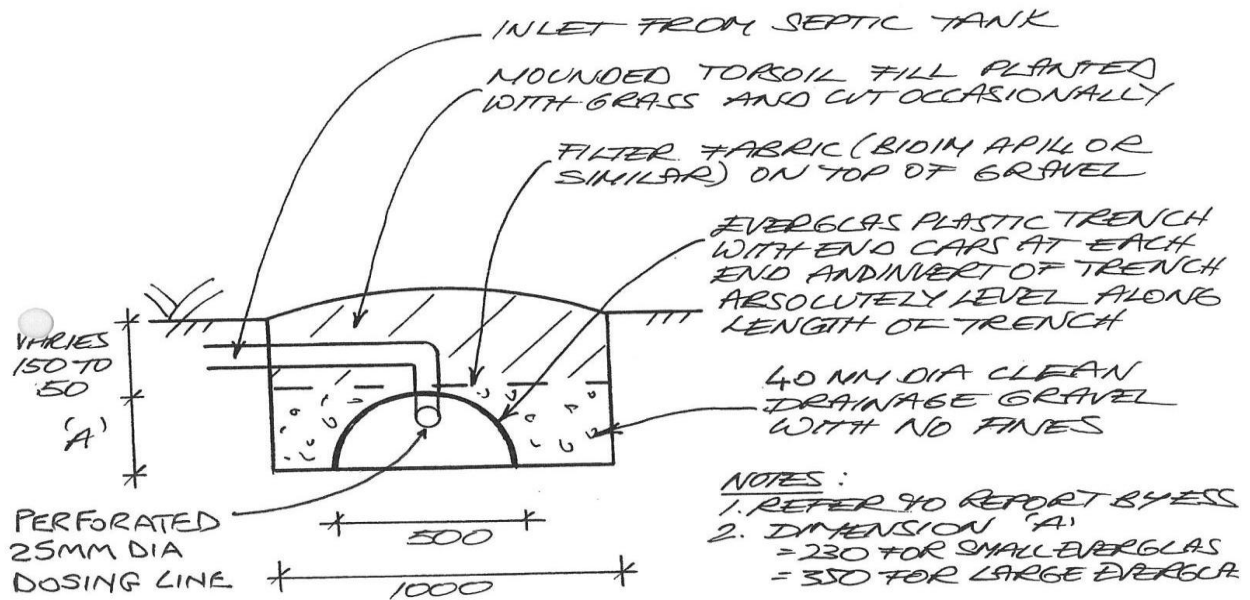
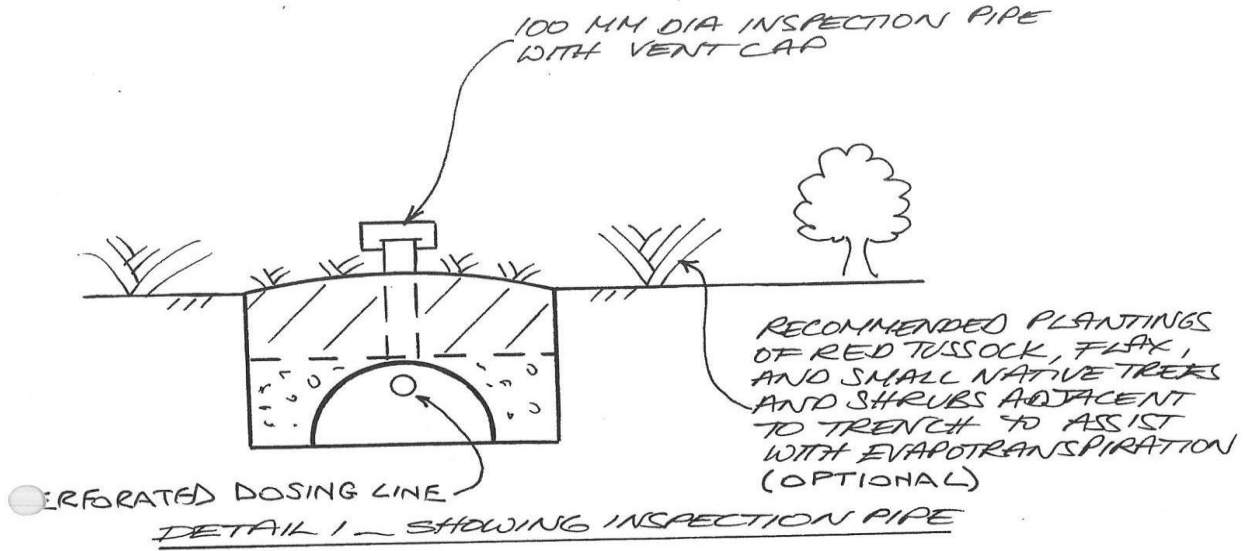


- NOTES
1. REFER TO REPORT BY ESS.
  2. PROVIDE ANTI FLOATION COLLARS FOR PUMP CHAMBER.

DATE: OCTOBER 2007

DEG No: ESS 1150/02

ONSITE WASTEWATER PUMP STATION AT AUTUMN FARM



DETAIL 2 - SHOWING TYPICAL CROSS SECTION

# EVERGLAS SOAKAGE TRENCH

SCALE 1:20 (ATA4)

0 500 1000 1500

DATE: OCTOBER 2007

DRG NO: ESS 1150/04

Date Confirmed: \_\_\_\_\_

Chair: \_\_\_\_\_