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Blenheim, New Zealand

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Email smartassociates@xtra.co.nz

18 October 2001

Ms Vicki Rollo
Resource Management Officer
Marlborough District Council
PO Box 443
BLLENHEIM

Dear Ms Rollo

RESOURCE CONSENT APPLICATION
LOT 23 BLK VI, LINKWATER, OHINGAROA BAY, KENEPURU ROAD
Project Number: P2001-439H, Your Ref: U011119

Further to your letter dated 16 October 2001, requesting further information on the above application, we write in response as follows:

1. Our on-site wastewater report dated September 2001 recommends the use of an aerated wastewater treatment system. These systems are proven to treat waste to release a secondary treated effluent discharge ($20\text{g}/\text{m}^3$ BOD₅ and $30\text{g}/\text{m}^3$ SS), better than the release of primary treated effluent from a conventional septic tank and drainage field.

The discharge is to be released into an area of regenerating bush area, which will provide an improved design-loading rate greater than that allowed for, due to the encouragement of evapo-transpiration, the reduction of incident rainfall and a reduction in shallow subsurface seepage.

The existing area that is proposed for use as the drainage area is not considered to be unstable and the use of it as a drainage field for treated effluent is not expected to cause any instability problems.

2. We have recommended the use of the OASIS Clearwater, Aqua Blue or an equivalent approved AWTS system. These systems have a history of use in the Sounds, and with the correct usage and maintenance as recommended by the manufacturer should provide a long and serviceable life.

The proposed house is to be permanently occupied which favours the biological processes of an AWTS.

3. The total length of dripper line should be no less than 196 metres, with dripper lines spaced at 1m centres to provide a minimum drainage field area of 196m^2 .

3. The total length of dripper line should be no less than 196 metres, with dripper lines spaced at 1m centres to provide a minimum drainage field area of 196m².

The drainage field is situated on the southern side of the site as indicated in Appendix C of our report. The drainage area is close to the boundary but will not affect any adjoining land.

The slope of the land is approximately 20°, the dripper lines are to be laid to follow the horizontal contours of this slope for equal dosing along the line. Shallow subsurface seepage on the slope is restricted by the bush in this area as discussed in item 1.

4. The recommended depth at which dripper lines are to be buried is between 100 and 150mm below ground.

We trust the above information is sufficient for the resource consent to now proceed, however, should you require any additional information or have any queries please do not hesitate to contact the undersigned.

Yours sincerely



Matthew Harris
Design Engineer

c.c. Mr and Mrs Philips

File Ref: U011119

Ask For: Vicki Rollo

16 October 2001

J K & G A Phillips
648 Kenepuru Road
RD 2
PICTON

Dear John and Glenis

Resource Consent Application - Request for Further Information

I have received and made an assessment of your application to erect a dwelling and install an effluent disposal system in an area identified as being a natural hazard zone. In accordance with section 92 of the Resource Management Act 1991, I will require the following further information in order to fully assess the potential adverse effects of the proposal:

1. An assessment of the adverse effects of the discharge. In particular whether the discharge will initiate any instability or make any existing instability worse.
2. The type of occupancy of the dwelling (ie, intermittent/permanent) and, if possible, a nomination of the AWTS to be used at the site.
3. The total area (as opposed to length) of the wastewater application area, its proximity to property boundaries, and the slope of the land over which the dripper lines are to be laid.
4. The depth at which the dripper lines are to be buried.

I note that you have supplied a report from Smart Associates for the wastewater disposal system. As they have already visited your site the additional information requested above should be able to be supplied by them.

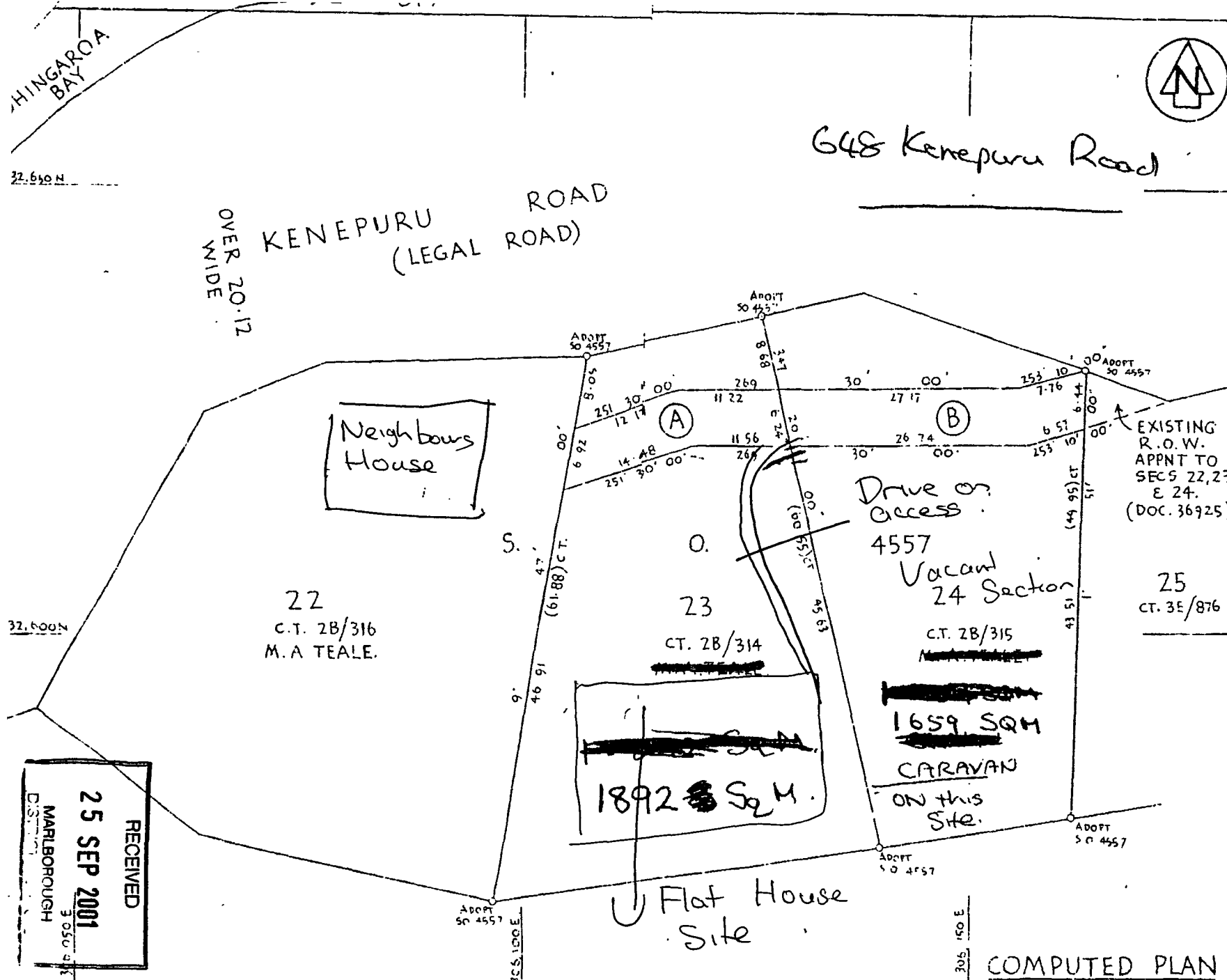
Your application will be placed "on hold" pending receipt of the above information.

If you consider that this request for further information is unreasonable, then you may exercise your right under section 357 of the Resource Management Act 1991 and lodge an objection to this request. Any notice of objection should be in writing and be made within 15 working days of the date of this letter.

If you have any questions regarding this request, please do not hesitate to contact me.

Yours faithfully

VICKI ROLLO
RESOURCE MANAGEMENT OFFICER



648 Kenepuru Road

KENEPUKU ROAD
(LEGAL ROAD)
OVER 20.12
WIDE

Neighbours House

Drive or Access
4557
Vacant
24 Section
C.T. 2B/315

1892 S₂M.

Flat House Site

EXISTING
R.O.W.
APPNT TO
SECS 22, 23
E 24.
(DOC. 36925)

25
CT. 3E/876

Approvals

APPROVED

DATUM : OLD CADASTRAL
MARLBOROUGH CIRCUIT
COORDINATES.

ORIGIN : GOULTER HILL
700,000 N.
300,000 E.

OPTIONAL EASEMENTS.

PURPOSE	LETTER	SERV.TEN	DOM.TEN
R.O.W	A	SEC. 23.	SEC. 22.
R.O.W.	B.	SEC. 24	SEC. 22 E 23.

FOR LOCAL AUTHORITY
CONSENT SEE DOC.

NOTE:- BEARINGS E DISTANCES OF
R.O.W. ADOPTED FROM S.O 4557.

Total Area

Comprised in PTS. C.T.S 2B/314, 2B/315
M.A. TEALE

JOHN MACMILLAN GILBERT OF BLENHEIM
Registered Surveyor and holder of an annual practicing certificate for who
may act as a registered surveyor pursuant to the proviso to section 33(2)
of the Surveyors Act 1966 hereby certify that this plan has been made
from surveys executed by me or under my direction, that both plan and
survey are correct and have been made in accordance with the Survey
Regulations 1972

Dated at BLENHEIM, this 28TH day
of JULY 1986 Signature *J. Gilbert*

Field Book Traverse Book

Reference Plans S.O. 4557

Examined Correct

Approved as to Survey

..... / Chief Surveyor

Deposited this day of 19

District Land Registrar

For
Received
Instructions

RECEIVED
25 SEP 2001
MARLBOROUGH
DISTRICT

AND DISTRICT MARLBOROUGH
KEY BLK. & DIST. VI. LINKWATER.
SHT 27 RECORD MAP No

PLAN OF RIGHTS OF WAY.

TERRITORIAL AUTHORITY MARLBOROUGH C.T.
Surveyed by GILBERT HAYMES E. ASSOC
Scale 1:300 Date JULY 1986

COMPUTED PLAN

**ENGINEERING REPORT
UPDATE
FOR
MARGARET TEALE AND J & G PHILLIPS
OHINGAROA
KENEPURU SOUND**

1.0 INTRODUCTION

- 1.1 An Engineering Site Report was made in June 1997 for house sites on Lots 23 and 24 Ohingaroa, Pelorus Sound.
An addendum was added in September 1997 for a variation to form the widening of the turning curve without retaining wall where the driveway meets the Right of Way.
- 1.2 The purpose of this report following re-inspection is to update observations and recommendations for the house sites and access.
- 1.3 The site was inspected on 6 January 2000.

2.0 INSPECTION NOTES

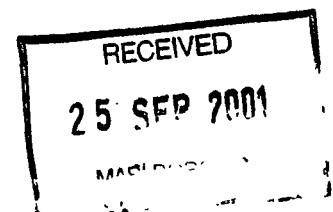
- 2.1 The driveway and Right of Way intersection was overgrown making it difficult to see the edges and outer edge batter slopes.
- 2.2 The driveway water table is non-existent having been filled with material washed off the cut bank.
- 2.3 The driveway culvert intake and outlet are partially blocked. The driveway water table has poor channelling into the driveway culvert.



- 2.4 The sharp curve up the driveway on Lot 24 has part of the outer edge poorly formed. The water table against the bank above the curve is also practically non-existent.
- 2.5 Both building sites are on stable ground. The building site on Lot 24 is much smaller than originally noted because of the final driveway route chosen. A small house on this site will need to be set back as close to the rear boundary as possible. The site envelope is about 16m wide by about 7 – 8m wide.
- 2.6 The sections have a clear grassed area behind them along which power lines run on poles providing ready access to electricity supply at the house sites.
- 2.7 The pine forest above this is nearing maturity. During and after harvesting storm surface water run-off is likely to increase.

3.0 RECOMMENDATIONS

- 3.1 The driveway will need to be cleared of vegetation, the crossfall re-established to a well formed water table channel and cut and fill batters tidied up. These batter slopes should be grassed where possible.
- 3.2 The upper section of water table channel is to cut across to the natural dry water course on Lot 24 boundary.
- 3.3 The lower section of water table is to drain to the culvert which is to have a well formed rock lined intake. The culvert is to be cleared. The ROW water table channel is in need of maintenance clearing.



HINGAROA BAY

32.650 N

OVER 20.12
WIDE
KENEPURU ROAD
(LEGAL ROAD)



APPROVED

APPROVED

DATUM: OLD CALASTRAL
MARLBOROUGH CIRCUIT
COORDINATES.

ORIGIN: GOULTER HILL
70,000 N.
300 700 E.

OPTIONAL EASTMENTS.

PURPOSE	LETTER	SERV.TEN	DOM.TEN
R.O.W	A	SEC. 23.	SEC. 22
R.O.W.	B.	SEC. 24	SEC. 22 & 23

EXISTING
R.O.W
APPNT TO
SECS 22,23
& 24.
(DOC. 36925)

25
CT. 3E/876

FOR LOCAL AUTHORITY
CONSENT SEE DOC.

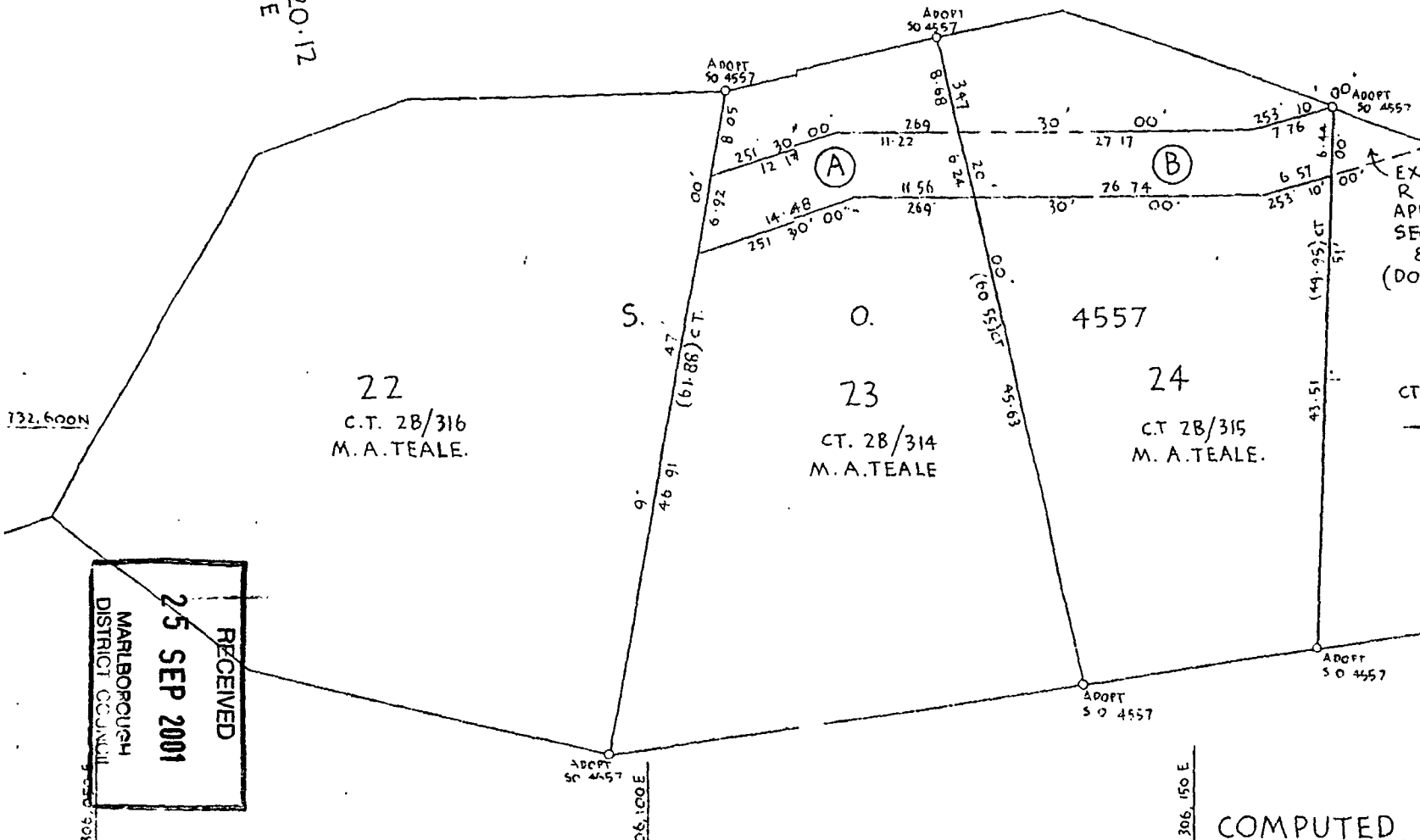
NOTE:- BEARINGS & DISTANCES OF
R.O.W. ADOPTED FROM S.O.4557

Total Area
Comprised in PTS. C.T.S. 2B/314, 2B/315
M.A. TEALE

JOHN MACMILLAN GILBERT OF BLENHEV
Registered Surveyor and holder of an annual practicing certificate for who
as a registered surveyor pursuant to the provisions section 33(2)
Surveyors Act (1968) hereby certify that this plan has been made
in surveys executed by me or under my directions, that both plan and
reference plans are correct and have been made in accordance with the Survey
Act 1972
at BLENHEM this 28TH day
of JULY 1986 Signature *Gilbert*

Examined Correct
Reference Plans S.O. 4557

Approved as to Survey
Deposited this ... day of 19...



732.600 N

22
C.T. 2B/316
M.A. TEALE.

23
C.T. 2B/314
M.A. TEALE

24
C.T. 2B/315
M.A. TEALE.

RECEIVED
25 SEP 2001
MARLBOROUGH
DISTRICT COUNCIL

COMPUTED PLAN

LAND DISTRICT ... MARLBOROUGH ...
SURVEY BLK. & DIST. VI LINKWATER.
NZMS 261 SHT. 27 RECORD MAP No

PLAN OF RIGHTS OF WAY.

TERRITORIAL AUTHORITY MARLBOROUGH CTY.
Surveyed by GILBERT, HAYMES & ASSOC.
Scale 1:300 Date JULY 1986

File Received Instructions

PO Box 57

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Blenheim, New Zealand

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ON-SITE WASTE DISPOSAL REPORT P2001 439H

For

Mr and Mrs Philips

At

**Lot 23 Blk VI Linkwater, Ohingaroa Bay
Kenepuru Road, Marlborough**

CONTENTS

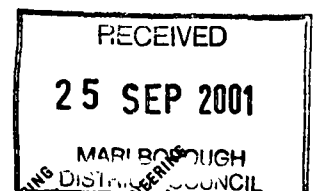
- 1.0 Introduction
- 2.0 Description
- 3.0 Waste Water Disposal
- 4.0 Conclusion
- 5.0 Limitations

Appendices

- A Site Plan
- B Site Photo
- C Proposed Irrigation Line Layout

John I Smart
Registered Engineer

September 2001



ARCHITECTURAL DESIGN

STRUCTURAL ENGINEERING

CIVIL ENGINEERING

HARBOUR ENGINEERING



1.0 INTRODUCTION

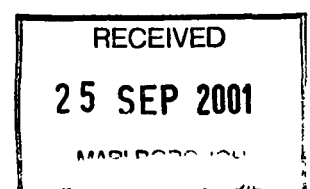
- 1.1** This report has been prepared solely for the Mr and Mrs Phillips, who wish to develop this property at Lot 23, Blk VI, Linkwater, Ohingaroa Bay, Kenepuru Road, Marlborough.
- 1.2** The purpose of the inspection and report was to assess the suitability and specify the size of an on-site wastewater management disposal system for the proposed development.
- 1.3** The total area of the property is 0.1892ha.
- 1.4** The property was inspected by Mr John Smart and Mr Matthew Harris of Smart Associates on 7 September 2001.


2.0 DESCRIPTION

- 2.1** The property is roughly square in shape, approximately 22m x 24m (see Site Plan, Appendix A). Access to the site is from a driveway to the east of the site.
- 2.2** The building site has been cleared and forms a flat base.
- 2.3** The land is surrounded by bush.

3.0 WASTE WATER DISPOSAL

- 3.1** In order to provide sewage treatment and ensure that the resultant liquid is treated to a satisfactory level before disposal on the property, an approved on-site waste water management system should be installed.
- 3.2** The lot has adequate area for a drainage field by utilising the area within the site boundaries which is still covered by native bush. (refer Site Photo, Appendix B).



3.3 The soil is a poor draining silty clay which lends itself to the use of an aerated wastewater treatment system such as the Oasis clearwater, Aqua Blue or similar approved system. 

The category 4 soil (weakly structured clayloam) with an indicative permeability (K_{sat}) of 0.12-0.5m/d in accordance (NZS 1547:2000, Table 4.2A4) has a design irrigation rate (DIR) of 25mm/week.

3.4 The tank water supply for normal occupation of up to 5 people (3 bedrooms) at 140 litres/day waste throughout will discharge up to 700 litres/day. The minimum length of dripper line required is therefore 196 metres.


4.0 CONCLUSION

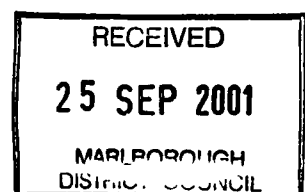
4.1 The proposed lot is considered suitable for an on-site waste water management system as specified in Section 3 of this report.

5.0 LIMITATIONS

5.1 This report has been prepared solely for the benefit of Mr and Mrs Philips for the purpose of assessing the suitability of an on-site waste management system and the report should not be relied upon for any other purpose.

5.2 Opinions and judgements expressed herein are based on our understanding and interpretation of current regulatory standards, and should not be construed as legal opinions. Where opinions or judgements are to be relied on they should be independently verified with appropriate legal advice.


JOHN SMART
REGISTERED ENGINEER



Date:	Eng:	Job No:	Sheet No:
Sept. 2001	MJH	B2001-427H	APPENDIX B

Project: Lot 23 Blk VI, Linkwater, Ohingaroa Bay, Kenepuru Road



VIEW ACROSS HOUSE PLOT LOOKING SOUTH



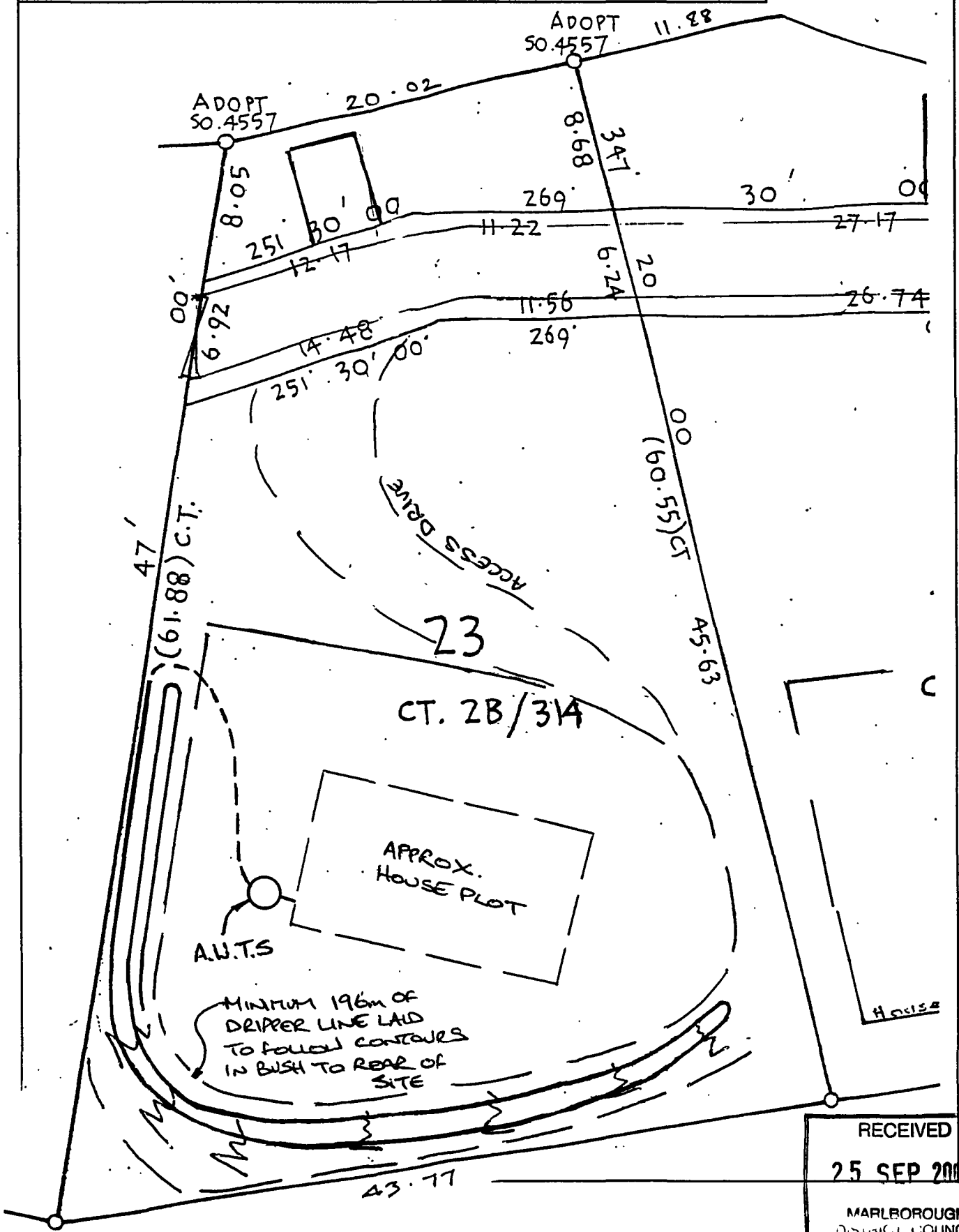
VIEW ACROSS HOUSE PLOT LOOKING WEST

RECEIVED

25 SEP 2001

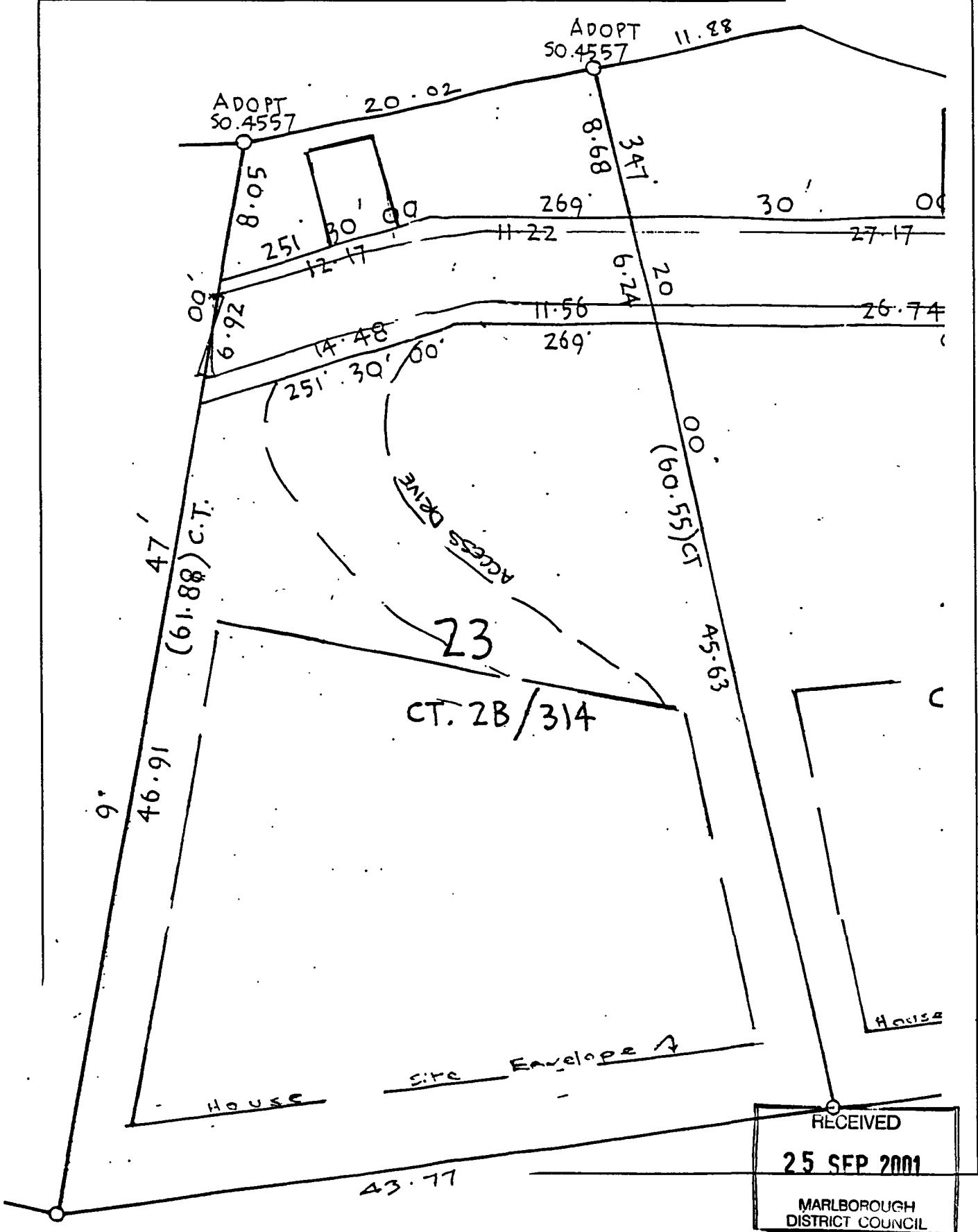
SMART ASSOCIATES LTD

Date: Sept. 2001	Eng: MJH	Job No: B2001-427H	Sheet No: APPENDIX C
Project: Lot 23 Blk VI, Linkwater, Ohingaroa Bay, Kenepuru Road			



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District Council

Date: Sept. 2001	Eng: MJH	Job No: B2001-427H	Sheet No: APPENDIX A
Project: Lot 23 Blk VI, Linkwater, Ohingaroa Bay, Kenepuru Road			



RECEIVED
25 SEP 2001
MARLBOROUGH
DISTRICT COUNCIL

Telephone: (03) 678 7526
Fax: (03) 678 7526

JOHN I. SMART
B.E. M.I.PENZ
CONSULTING ENGINEER

61 Seymour St.
P.O. Box 57,
Blenheim N.Z.

ENGINEERING REPORT

HOUSE SITES

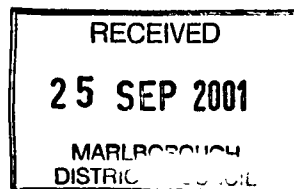
FOR

MARGARET TEALE

OHINGAROA, KENEPURU SOUND

- 1.0 Introduction
- 2.0 Slope Stability
- 3.0 Building Sites
- 4.0 Access
- 5.0 Conclusion
- 6.0 Limitations

June 1997



1.0 INTRODUCTION

1.1 Two vacant sections (Lots 23 and 24) on the hill above the Kenepuru Road have good building sites at the rear half with steep hillside front portions. Both sections face north. A driveway gives access to existing residences on each side of Mrs Teal's properties and cuts across the bottom of hers in a legal Right of Way.

The formed drive enters the far side neighbour's property (Lot 22 which is gated) and then swings back to climb up to give access to the good building sites. Unfortunately this section of drive through Lot 22 is not R.O.W. and cannot be used for access to Lots 23 and 24 building sites.

1.2 Reference is made to the Hadley and Lyall Valuation Report where various options are discussed.

1.3 The purpose of this report is to:

- a) Assess whether an alternative driveway can be constructed giving access to the building sites.
- b) Assess the possibility of building on the steeper lower slopes.
- c) Assess alternative access to building sites.

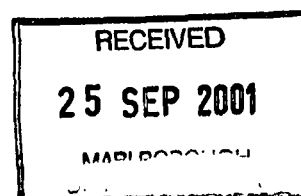
1.4 The two sections were inspected and abney slope measurements taken at both building sites on 3 June 1997. (See Fig 3 attached).

1.5 Legal Descriptions are:

Lot 23 Blk VI Linkwater SO4557 Area 0.1892ha

Lot 24 Blk VI Linkwater SO4557 Area 0.1659ha

1.6 The location of the Right of Way has been plotted on the enlarged title plans from DP 6923. The formed driveway is assumed to have been constructed within the legal R.O.W.



2.0 SITE STABILITY

2.1 The soil profile consists of a thin topsoil

- over 1-2m clay
- over weathered schist rock
- over chlorite schist base rock

The bedding planes of the schist approximately followed the steeper hillside slopes of about 30°

2.2 The sections are on the end slopes of a wide spur ridge. Cross sections attached to this report show that the ground slopes steeply below the R.O.W. A 5-6m wide benched area exists about 1m above the driveway over part of both sections with the steep slopes of about 30° continuing up for about 12m. Slopes then ease to between 3° and 15°.

2.3 This area is part of the zone classified by the Marlborough District Council's Resource Management Plan as "Natural Hazard" the land being unstable because of the weakly bonded schist layers that can give way with added weight of saturated soils and lubricating effect of water seeping into the weathered rock during heavy rain.

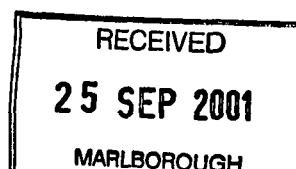
2.4 An earthquake fault line branches off the main Pelorus fault and crosses Ohingaroa very close to these sections.

2.5 The combination of steep striking schist subsoils and the fault line vicinity precludes the siting of buildings on steep slopes in this area.

2.6 On both sections where ground slopes are about 28° - 32° signs of soil surface creep are evident. On Lot 23 an old small slip site also indicates the instability of this ground at these steep slopes.

3.0 BUILDING SITES

3.1 The properties are zoned Residential C in the Marlborough District Council's Operative District Scheme.



For sections under 2000m² in this zone the following minimum yard requirements apply for dwellings:

- Side yard minimum - 3m
- Front yard and rear - 4.5m (adjoining Foreshore Road Reserve)
- Accessory buildings (e.g. garage) - no yard required
- Maximum height - dwellings - 8m
- garage - 4m

3.2 The Council is phasing in the Marlborough Sounds Resource Management Plan. Under the proposed plan the properties are zoned Sounds Residential. Yard requirements differ from those in Item 3.1 above but applicable in this case for sections under 4000m² are the Recession Plane controls which state:

"No part of any building shall exceed a height equal to the recession plane angle determined by the application of figures 2 & 3 of the Definition Section". A copy of this is attached.

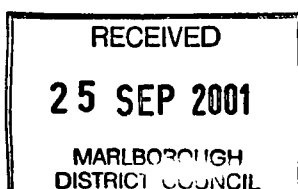
3.3 The boundary separation at present therefore must comply with the minimum given in Item 3.1 which will eventually be phased out and the recession plane control which depends on the height and compression point of the nearest boundary. This can only be determined when plans and siting of the buildings are finally drawn.

However it is possible to seek dispensation to yard and height provisions. Council's current policy is to obtain consent of adjoining landowners for any non-complying consent application.

3.4 Lot 23 has a large building site envelope under Residential C provisions of average 30m wide and average 25m deep within which to site a house.

On this site a flat platform can be created for concrete floor or standard piled floor with either continuous concrete or braced pile exterior foundations complying with NZS 3604.

3.5 Lot 24 has a smaller envelope but still a good site of about average 19m



wide by about 19m deep.

On this site a standard piled floor is recommended. Although an envelope showing 19m deep is allowable the further back the house sits the easier the construction of foundations leaving moderately terraced land in front.

- 3.6 Both sections and building sites have adequate space for sewerage disposal trenches from septic tank effluent. They would require double parallel trenches with a distribution box fitted to the outlet from the septic tank.
- 3.7 Stormwater control is important and must be adequately designed to ensure continued ground stability.
- 3.8 Water supply will probably have to rely on a roof collection and storage system.
- 3.9 Parking or garage location can be provided for each section off the north side of the ROW. A braced pole frame platform designed for vehicle loads, can be constructed say about 6m long by 4m width which can be garaged over if required.

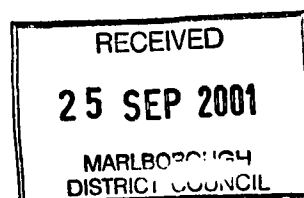
Alternatively a retained fill with tied piles could be designed.

The choice of design would depend on ground slope below the ROW at the location chosen for the vehicle park.

We can refer to carparking off the existing ROW as Option A.

- 3.10 If vehicle access is required to the building sites this can be achieved by forming a driveway as outlined in Section 4 of this report. We can refer to this proposal as Option B.

It limits the house site on Lot 24 but leaves sufficient for a smaller house with an envelope of about 17m by 9m. Building right up to the ROW boundary is allowable but in practice the house site would be better set

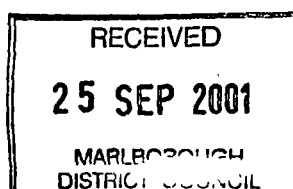


back as much as possible. Dispensation from the 4.5m rear yard requirement would probably be allowed in this case to give 3 - 4m set back from the proposed ROW.

4.0 ACCESS

- 4.1
- Option A even with the vehicle platform construction requirements off the existing ROW is the cheaper development cost. A building consent would be required for either the pole framing or retaining wall construction (see sketch Fig. 4)
 - A walking track can be constructed by hand or small digger.
 - No Resource Consent application for excavation is required.
- 4.2
- Option B would require a Resource Consent Application because of the amount of earthworks excavation involved. If neighbours will not agree this involves public advertising and Council deliberations.
 - However the driveway on to the sites would add value to the sections. This would have to be compared to the increased costs of Resource Consent Application, survey costs to establish and legalise new ROW and driveway construction costs.
 - Consideration was given to taking off the driveway from the ROW near the Lot 25 boundary and across to the join with the existing track from Lot 22. However the banks at each end are too steep requiring large cuts.
 - The turning point selected (see Fig. 2) makes use of a narrow bench above the ROW which tapers out into a high bank about 16m back from the gate to Lot 22. The new driveway would climb across a side slope of about 30° to the natural terrace on the east side of Lot 24 where a bend can be constructed to lead to the house site.
 - The driveway coming off the existing ROW would need sufficient turning space at the intersection which is limited at the hill side. A timber retaining wall can be constructed to widen the ROW at this

*This one has
occurred,*



turning area. It needs to provide about 3 - 4m extra width over 10m before angling back to the ROW over about 16 - 18m length of retained wall which varies in height up to about 2m. A tied back driven rail iron and half round timber construction is the most economical at this site.

- The driveway would have a formation width of 3.5m with water table and a culvert across the ROW above the turning area.
- Gradient would be about 1 in 7.

4.3 A possibility is that if an interested purchaser wanted to establish a permanent large home, both sections could be bought for one house site without the need for establishing legal ROWs.

5.0 CONCLUSION

5.1 This report has assessed that:

- It is not feasible to build immediately above the ROW because of the ground instability on the steep slopes.
- Good building sites on both sections exist at the rear of each Lot.
- A driveway requiring legal ROWs over both sections can be constructed as outlined.

5.2 Two options exist:

- Create parking areas (or garage space) by constructing platforms for turning on to north of the existing ROW
- Construct a driveway up to the building sites.

Advantages and disadvantages of each option are discussed in the report.

5.3 A decision can be made by the owner at this stage. However more detailed cost estimates could be made to assist in this decision and referred back to the Valuer for the final evaluation.



5.4 Survey pegs showing front, rear and ROW boundaries need to be established for either option.

6.0 LIMITATION

6.1 This report has been prepared solely for the benefit of Margaret Teale as our client with respect to the brief. The reliance by other parties on the information or opinions contained in the report shall, without our prior review and agreement in writing, be at such parties sole risk.

6.2 This report has been prepared solely for the purpose of assessing access to building sites and the report should not be relied upon for any other purpose.

Opinions and judgements expressed herein are based on our understanding and interpretation of current regulatory standards, and should not be construed as legal opinions. Where opinions or judgements are to be relied on they should be independently verified with appropriate legal advice.

JOHN SMART
Registered Engineer

