IN THE MATTER OF	the Resource Management Act 1991
AND	
IN THE MATTER OF	Applications by **Pegasus Town Limited** for subdivision and land use consent Applications RC 055641 & RC 055642 to the Waimakariri District Council; **and** Applications CRC 061210, CRC 061211, CRC 061212, CRC 061213, CRC 061214, CRC 061215, CRC 061216, CRC 061217 & CRC 061218 for land use and discharge permits to the Canterbury Regional Council.

Decision of the Hearing Commissioners

Appearances

Applicant

- Ms Lauren Semple – Counsel – Anderson Lloyd Cauldwell
- Mr Robert Robertson – Infinity Investment Group Holdings Limited
- Mr Simon Fenwick, Boffa Miskell
- Mr David Gardiner, Beca Infrastructure Limited
- Mr Clive Anderson, URS
- Ms Tracy Freeman
- Dr Vaughan Keesing, Boffa Miskell
- Mr Te Marino Lenihan
- Dr Daniel Witter
- Mr Donald Miskell, Boffa Miskell
- Mr Marc Bretherton, Mitchell Partnerships

Submitters

- Mr Dave Molyneux
- Mr Brian and Mrs Anne Stokes
- Mr William Wilson on behalf of the Waikuku Water Users Group
- Mrs Jo Kane

Reporting Officers

- Mr Andrew Brough, Pattle Delamore Partners (Canterbury Regional Council reporting officer)
- Mr Garry Blay, Waimakariri District Council reporting officer

1 Introduction

1. This is the joint decision of a hearing committee comprising Mr Paul Rogers (chair) and Dr Brent Cowie appointed to hear and decide applications to the Waimakariri District Council (WDC) and the Canterbury Regional Council (CRC; commonly known as ECan) for a suite of consents to enable the construction of a golf course, and associated commercial and residential properties, on a property just north of Woodend. The property is to be known as Mapleham, and will form part of the development of Pegasus Town.

2. Mr Rogers, who is a partner specialising in resource management and environmental law in the law firm Anthony Harper, was appointed a joint hearing commissioner by both Councils. Dr Cowie, who is a resource management consultant, was appointed only by the CRC.

3. We had inspected the subject land associated with the applications on Wednesday 14 December. During that inspection we spoke with both Mr Scott, the present owner of the Mapleham property, and Mr Molyneux, who also lives within the block of land surrounded by the subject site.

4. We heard the application at the offices of the WDC in Rangiora on Friday 16 and Monday 19 December 2005. The hearing commenced at 0930h each day. We adjourned the hearing at approximately 1630h on Monday 19 December 2005 to allow the written right of reply from the applicant's legal counsel. The written right of reply was received on Thursday 22 December and was circulated to parties who submitted on the application. No further written comment was received.

5. We closed the hearing on Monday 16 January 2006.

2 Background to the Applications

2.1 The Applications

6. On 4 October 2005 Pegasus Town Limited applied to the WDC and the CRC for subdivision, land use and discharge permits related to the subdivision and subsequent development of the property known as Mapleham, Main North Road, Woodend. The subject site was fully described in the application by reference to its legal description. The application was accompanied by a very comprehensive Assessment of Environmental Effects prepared by a variety of consultants to the applicant.

7. The consent applications to the WDC were:

   - to subdivide and create 98 residential allotments, a golf course, driving range complex (including ancillary activities including pro-shop, changing rooms, gym and trundler storage), clubhouse (including café/restaurant and bar), golf maintenance area and road to vest.

   - land use consent was sought to establish a dwelling, associated infrastructure and accessory buildings on each of the newly created residential allotments. Land use consent is also sought to establish, operate and maintain a golf course and associated recreational activities, including the erection of two utility buildings for golf course maintenance. In addition, land use consent is sought to undertake earthworks associated with the development including limited vegetation clearance within 20m of the Taranaki Stream, and to store hazardous substances associated with the construction and operation of the golf course.

8. A 10 ten year lapse period was sought under the provisions of s125 of the Resource Management Act 1991 (the Act or the RMA).

9. The applications to the CRC were:

   - **CRC061210** – to install, use and maintain a sewerage network.
   - **CRC061211** – to undertake vegetation clearance and contouring works within riverbeds/margins adjacent to the Taranaki Stream and Taerutu Gully.
   - **CRC061212** – to undertake excavation work, to place structures and new planting within the bed or margin of Taranaki Stream and Taerutu Gully for the purpose of road construction.
   - **CRC061213** – to carry out work in areas that are deemed to be wetlands or streams for the new lakes in the golf course.
   - **CRC061214** – to restore an existing wetland within the Taerutu Gully.
   - **CRC061215** – to discharge water and contaminants to land and water, and to land in circumstances where it could enter water, during construction.
   - **CRC061216** – to discharge water and contaminants from the golf course, including any runoff from ongoing irrigation, to the ephemeral watercourse known as Taerutu Gully, and to Taranaki Stream.
   - **CRC061217** – to discharge water and contaminants from new lakes associated with the golf course to the ephemeral watercourse known as Taerutu Gully, and to Taranaki Stream.

- **CRC061218** – to discharge stormwater to land and water, and to land in circumstances where it may enter water in relation to the Mapleham Development.

10. A duration of 35 years was sought for all the applications to the CRC.

2.2 Description of the Proposed Activities

Present Land Use

11. The subject land is to the east of State Highway One (SH 1) about 1.5km north of Woodend township. It is presently owned by Mr Jonathon Scott. The land has long been farmed by the Scott family, who know it as Brockenhurst. The land comprises generally fertile silts, and has been heavily modified for farming, including frequent ploughing, cropping and raising of stock.

12. There are two watercourses on the property. The Taranaki Stream, which rises from springs near Rangiora, runs across the northern side of the property from the south west to the north east. It passes across the Mapleham land, through the land presently owned by Mr Scott and runs out under Preeces Road to the north. The stream has been extensively modified, having been diverted and straightened, and it is predominantly overgrown with exotic species such as willows and blackberry. Mr Scott has constructed a wetland on the stream on his property. Within the land owned by Mr Scott the bed of the stream is a reserve administered by the Department of Conservation.

13. The other watercourse is the Taerutu Gully, which is a former wetland towards the eastern boundary of the site. It is overgrown by exotic species under a canopy of old willows, and presently has no ecological value. It flows to the Taranaki Stream.

14. The total area of the Mapleham block is some 116ha. It is presently covered by two different zonings. The more northern block, covering approximately 72ha, is zoned Mapleham Rural 4B, while the southern block of some 44ha is currently zoned Pegasus Rural.

15. Importantly the current Mapleham 4B zoning allows the northern block to be subdivided into up to 35 separate lots, with a minimum section size of 1ha. That zoning resulted from a decision of the Environment Court when it considered the development proposals associated with Pegasus township.

16. The southern component of the site zoned Pegasus Rural is also overlaid with a further purpose. This portion of the site has the notation "Special Purpose Area" and according to Rule 30.22.11 of the District Plan is designed to be used for the construction of a sub-surface wetland for disposal of sewage from Pegasus Town. It is no longer needed for sewage disposal because it has been agreed that sewage from Pegasus town can be treated along with other sewage from Woodend, and then discharged to the sea via the marine outfall being constructed at Pines Beach.

17. There is an enclave of some 9.5ha within the Mapleham Rural 4B zoning that is owned by Mr Scott and Mr Dave Molyneux. Mr Scott has sought subdivision consent from the WDC to divide his part of this enclave into five separate lots. Mr Molyneux cannot presently further subdivide his property.

18. The proposed Pegasus township, which is already provided for in the Operative District Plan, will be immediately east of Mapleham. It covers some 280ha and is proposed to house some 5,000 people.

The Proposed Development

19. The applicant proposes to develop the subject land into a 18 hole public golf course, along with a main and arterial access roads, a "village green" including a clubhouse, gym, restaurant, café and service buildings, and 98 houses (with strict design controls) in eight separate enclaves.

20. Much was made of the fact that the applicant referred to this as a "master planned" development. We were told the concept plan allows seamless integration of the golf course and village green with the residential enclaves.

21. The "village green", which will be located at the centre of Mapleham and adjacent to the Pegasus main access road, is a central club house facility. This area will contain a cluster of buildings around a grassed square. Again the design and detailing of the buildings in this cluster are such that the applicant contends that they will reflect their North Canterbury location. Architectural features include gabled roofs, accent chimneys, the use of natural materials such as dark stain timber weatherboards, local stone detailing and profiled steel roofing material. The applicant proposed a comprehensive suite of building and landscape design controls which covered the above matters. We will return to discuss this issue when we consider the conditions of consent for the applications to the WDC.

22. The golf course which is central to the entire proposal will be sculptured along the lines of traditional inland courses and we are told within the application it has been carefully designed to preserve the dominant effects of open spaces, trees and water. The general contouring of playing surfaces, naturally grassed rough areas, pockets and wetland and extensive riparian enhancement and a combination of native and exotic plantings will, according to the applicant, all contribute to a pastoral outlook which reflects the rural North Canterbury character of the site and its surrounds.

23. The site is proposed to be traversed by several kilometres of walking and cycling trails. Timber posts and rail fences along the State Highway boundary and along the main access into Pegasus Town more define these areas and contribute to an appearance of a well managed North Canterbury landscape.

24. We are told by the applicant that residential dwellings will be set back from the open spaces of the golf course and carefully selected structural planting will ensure that the home sites merge with the rural parkland character of the overall landscape.

25. The subdivision provides the allotment framework within which a large portion of the land use activities will be undertaken.

26. The subdivision, which combines residential and recreational activities, utilises mechanisms that serve to maintain and enhance the rural landscape of the site. The home sites are arranged in clusters ranging from 2 lots to 28 lots in size. These lots and the associated roading and infrastructure are integrated into the golf course design and road network with the aim of allowing each allotment aspect over the open space of the golf course. No kerb and channel or street lighting has been proposed and the applicant considers this is an important component in maintaining rural amenity.

27. The eight clusters of residential home sites comprise a total of 98 sites. The average home site is 2,000 square metres (m^2) and the total area of the entire development proposed for residential activity is 20.6ha. The open total area of open space (golf course, driving range and recreational areas, lakes and wetlands is 87.2ha.

28. It is intended that the golf course at Mapleham will be a public recreational resource and we were given detailed information about the golf course itself.

29. In terms of access and roading the Mapleham development will be complementary to the Pegasus Town development. The Pegasus Town main access will provide sole access to Mapleham. It is proposed that a high standard intersection will be constructed on SH 1, approximately 600m north of the 70km/h speed limit boundary at the northern end of Woodend to provide access to Mapleham. This main roading connection will cater for all external traffic movements to and from Mapleham. The T intersection layout will include a Give Way controlled intersection. The intersection will include right and left turn bays for access from the State Highway with associated deceleration tapers in accordance with the appropriate Transit New Zealand Guidelines for rural intersection design. The application provided a detailed description in relation to the internal roading layout.

30. In relation to water supply three feasible options for servicing Mapleham with domestic (potable) water and water for irrigation purposes were raised. We were advised that the existing Woodend water supply has capacity to provide a restricted rural supply to Mapleham. It does not however have sufficient capacity to provide a full urban supply. The restricted rural supply would provide each residential lot with only 2 cubic metres (m^3) of water daily. This water is to be fed into a tank provided on each site providing some buffer storage on each lot. For the facilities in the village green area, notably the clubhouse and gym complex a larger daily supply would be required estimated to be somewhere between 5-6m^3 per day.

31. Irrigation demand for the golf course could not be met from the Woodend supply. The irrigation supply will therefore be sourced from the groundwater within the site. There is an existing resource consent from the CRC, held by the present landowner Mr Scott, to abstract groundwater to a depth of 22m on the Mapleham site. This consent (CRC971798) allows for up to 70m^3/day for community supply and up to 3,256m^3/day for irrigation of up to 71ha at Mapleham. The applicant provided us with a copy of an agreement signed by Mr Scott that the water take shall be shared proportionately between himself and the applicant. It is intended to only irrigate fairways, greens and tees which would have a total area of approximately 21ha. Wells to abstract in accordance with the provisions of consent were never drilled; therefore a further bore permit application would need to be made to CRC to activate this consent. This is the first option.

32. The second option involves developing a new deep groundwater source to provide Mapleham with all its water requirements. An investigation bore to 200m plus has been consented by CRC and is to be drilled as soon as possible to prove the source. If the water sourced requires a treatment plant and treated storage, a treated water storage reservoir will be located within Mapleham. Such a supply could also service the proposed Pegasus Town and perhaps Woodend. Irrigation water would be sourced from the deep well and drawn off before the treatment process commences.

33. The third option involved developed a new deep groundwater source near Kaiapoi. A resource consent is already held to take up to some 7,500m^3/day. This would provide a secure high quality water resource but water would need to be piped approximately 8km from Kaiapoi. This was not considered an effective use of resources for the Mapleham development.

34. The applicant advises that until exploratory bore drilling investigations on site are completed it is not known whether the deep groundwater is a practical option for servicing Mapleham. The application was presented on the basis that potable water be supplied as a restricted rural supply from Woodend. Irrigation for the golf course and roadways will be provided from a bore and be subject to a later application for resource consent.

35. In relation to wastewater disposal it is now proposed that Mapleham connect to the district wide scheme which involves the upgrading of the Woodend sewerage treatment plant and an ocean outfall.

36. Currently the Woodend sewage treatment plant is near capacity and the WDC has advised the applicant that further connections will only be approved when Stage 1 of the upgrade is constructed in early 2006. The upgrade will increase the capacity of the plant to a population equivalent of 4,600, which provides sufficient capacity for Mapleham.

37. A golf course maintenance area of approximately 8,000m^2 is proposed. This area is centrally located in order to achieve efficient access to the whole of the golf course. The area will contain two separate buildings, the first being an administration office and staff facilities, the second being machinery storage and mechanical workshop. The building will have a total floor area of approximately 600m^2. A second building will be used for the storage of hazardous substances associated with the operation of the golf course. This building will be divided into four separate storage areas for each of the irrigation materials, fertilisers, pesticides and chemical wash down. The building will have a floor area of approximately 70m^2.

38. A hard surfaced outdoor area for parking of staff vehicles, equipment and sufficient turning area for delivery vehicles will also be installed. A drive through wash down area for maintenance vehicles will be installed. It is proposed to install two above ground tanks of fuel for maintenance equipment. These tanks will each have a capacity of some 2,500-3,000 litres. They will be bunded with appropriate safety features.

39. Earthworks will be undertaken associated with a golf course, clubhouse cluster and residential home sites as well as the construction of infrastructure to service these. The proposed earthworks are necessary to create generally undulating roadways, slightly raise the proposed home sites to mitigate flood risk and facilitate drainage, and provide for their views across open spaces, to contour the golf course area and create a network of shallow lakes.

40. It is intended that the earthworks design will achieve a cut/fill balance so that no soil should need to be transported in and out of the site. Each of the areas subject to earthworks will be re-vegetated with grass as soon as possible following completion of the earthworks.

41. All sites will be served with telephone, electricity and gas connections. No street lighting is proposed except at intersections with the Pegasus Town main access road and around the club house car park. Low bollard street lights with direct lights screened and directed towards the ground will illuminate and indicate pedestrian pathways. All external lighting spill on residential lots should be contained within each property as much as possible. The driving range will not be illuminated.

42. It is proposed that open post and rail farm fencing will be constructed along the boundary with the State Highway 1. The main access way will also be framed by post and rail farm fencing interspersed with sections of low stone walling.

43. Two small span bridges will be built over the Taranaki Stream to provide access to the north of the subject land. These bridges replace the culverts proposed in the original applications.

44. As part of the overall Mapleham development the applicant proposes to restore the ecological values of both the Taranaki Stream and the Taerutu Gully within the subject property. In the Taranaki Stream existing exotic vegetation will be removed, and the stream banks will be replanted with native species such as the flaxes and sedges that may have been found naturally along the stream. There will be some considerable disturbance of the bed of the stream during this process, particularly as deep rooted willows are pulled out.

45. Similarly in the Taerutu Gully the existing exotic vegetation will be removed, and the wetland will be restored by planting in indigenous species. As the water in this old gully is more stagnant, and because the gully can be bunded, sediment releases should be able to be contained within the gully.

46. The applicant has proposed a comprehensive stormwater treatment and management system, through the use of ponds within the golf course with overflow to Taerutu Gully, and during heavy rain, Taranaki Stream. The system comprises:

- Grassed swales and pipes which collect stormwater and direct its flow.
- A series of artificial ponds and lakes which retain and treat stormwater.
- Vegetated strips and wetlands around the ponds, and along linking waterways to treat stormwater.
- A low bund at the lower end of Taerutu Gully to increase the runoff storage capacity of the site.
- An enhanced Taerutu Gully wetland to provide retention capacity and final treatment.
- Discharge to Taranaki Stream at times of higher rainfall through rock filter in the bund.

47. Water with the highest potential for contamination will receive treatment through multiple devices. All road and car park runoff will be directed through swales. Catch-pits will be used to trap large items of litter. Water from the swales will then pass through a small wetland/planted filter strip at the entry to the golf course ponds.

48. The areas of road near the two proposed bridged road crossings that drain towards Taranaki Stream will be treated using swales. Flows from the swales will be discharged through a small wetland/filter strip prior to discharging into the Taranaki Stream.

49. Roof runoff will be directed into roadside swales. Runoff from pervious areas, for example residential gardens and lawns, will run into swales or into the golf course ponds directly.

50. When the capacity of the golf course irrigation pond is exceeded flows will discharge into the new wetland that will be created in Taerutu Gully. It is expected that this will occur on an average of 15 times per year, mainly during the winter.

51. When flows from the golf course ponds enter the wetland system, water will pond up and eventually flow through the filter. Flows will be retained and slowed through the filter by the use of an orifice plate on the outlet. This discharge will be to the Taranaki Stream.

52. The stormwater management system has been designed to be in accordance with various design standards and guidelines. These are: Waimakariri District Council's Engineering Code of Practice; Christchurch City Council's Waterways, Wetlands and Drainage Guide; Auckland Regional Council's Technical Publication 10 (TP10) (Stormwater Management Devices Design Guidelines Manual); New Zealand Water Environment Research Foundation On-site Stormwater Management Guideline; ARC Technical Publication 10 – Stormwater Management Devices, Design Guidelines Manual; ARC Technical Publication 108 – Guidelines to Stormwater Modelling in the Auckland Region; and ANZECC Guidelines – Australian and New Zealand Guidelines for Fresh and Marine Water Quality.

2.3 Notification and Submissions Received

53. All the applications were publicly notified in the Press on Saturday, 22 October 2005. The applications to the CRC were notified as follows:

- *"**CRC061210** – to install, use and maintain a sewerage network at Mapleham Development, Main North Road, Woodend. It is proposed that Mapleham will be connected to the Waimakariri District Council district-wide sewage scheme.*
- ***CRC061211** – to undertake vegetation clearance and contouring works within riverbeds/margins adjacent to the Taranaki Stream and Taerutu Gully at Mapleham Development, Main North Road, Woodend. Vegetation clearance will involve clearance of willows along the Taranaki Stream and Taerutu Gully, in addition to the willow lined depression at the west side of the proposed Western Ridge Conservation Management Area. This activity has the potential to mobilise soil during rain events which could be deposited in the stream as sediment.*
- ***CRC061212** – to undertake excavation work, to place structures and new planting within the bed or margin of Taranaki Stream and Taerutu Gully for the purpose of road construction at Mapleham Development, Main North Road, Woodend. Culverts will be constructed in the Taranaki Stream in two locations where the proposed Mapleham internal road crosses the stream. A small timber bridge is to be constructed across the Taranaki Stream on the Sheppard property. The old stream channel along the northern boundary is to be retained and enhanced by selective clearing of existing vegetation and planting of new species. This work may result in sedimentation in the Taranaki Stream and Taerutu Gully.*
- ***CRC061213** – to carry out work in areas that are deemed to be wetlands or streams for the new lakes in the golf course at Mapleham Development, Main North Road, Woodend. There will be some limited earthworks in Taerutu Gully associated with the construction of the stormwater control bund just upstream from the confluence with the Taranaki Stream and minor golf course shaping.*
- ***CRC061214** – to restore an existing wetland within the Taerutu Gully at Mapleham Development, Main North Road, Woodend. Restoration will take place in all areas of willow wetland, primarily associated with the golf course. Restoration will involve the removal of willow and replanting with native species.*
- ***CRC061215** – to discharge water and contaminants to land and water, and to land in circumstances where it could enter water, during construction at Mapleham Development, Main North Road, Woodend. The water and contaminants will be discharged in the course of carrying out earthworks to create new artificial water bodies and the earthworks for land development, which may result in increased sediment in the Taranaki Stream.*
- ***CRC061216** – to discharge water and contaminants from the golf course, including any runoff from ongoing irrigation, to the ephemeral watercourse known as Taerutu Gully, to Taranaki Stream at Mapleham Development, Main North Road, Woodend. Irrigation runoff may contain fertiliser nutrients.*
- ***CRC061217** – to discharge water and contaminants from new lakes associated with the golf course to the ephemeral watercourse known as Taerutu Gully, to Taranaki Stream at Mapleham Development, Main North Road, Woodend. The*

stormwater management system will involve the use of artificial lakes prior to the eventual limited (treated) discharge to Taerutu Gully.

- ***CRC061218*** *– to discharge stormwater to land and water, and to land in circumstances where it may enter water in relation to the Mapleham Development, Main North Road, Woodend. The proposed stormwater treatment system comprises: grassed swales and pipes; artificial ponds and lakes for the retention and treatment of stormwater; vegetated strips and wetlands around the ponds; bunding around the Taerutu Gully; an enhanced Taerutu Gully wetland to provide retention capacity and final treatment and; discharge to Taranaki Stream at times of higher rainfall through a rock filter in bund. Potential contaminants in the discharge include suspended sediments, heavy metals, hydrocarbons, BODs, CODs, and fertiliser nutrients.*

  For all consents, a ten year lapse period and consent duration of 35 years is sought."

54. The applications to the WDC were notified as follows:

"Proposal:

To subdivide a total of 98 lots of approximately 1430m^2 to 2600m^2, with an average lot size of 2000m^2, in the Mapleham Rural 4B and Pegasus Rural Zones, and to erect dwellings on those lots, with reticulated sewer and potable water supply.

The subdivision standards for the Mapleham Rural 4B Zone are a minimum lot size of 1 hectare, an average lot size of 1.5ha and a maximum of 35 lots. The area of the Pegasus Rural Zone involved has a minimum subdivision standard of 4 ha and a specified special purpose of sewage disposal.

To utilise the area of the Pegasus Rural Zone, specified for sewage disposal, and the Mapleham Rural 4B Zone for dwelling lots and a golf course (including ancillary activities - driving range complex, pro-shop, changing rooms, gym and trundler storage), clubhouse (including café/restaurant and bar), course maintenance area, and roads to vest.

To transfer Lots 215 and 216 of the subdivision to Lot 1 DP76141, with one Certificate of Title to be issued.

To provide an easement over Pt RS 864 for the purposes of golf course access between Lots 207 and 208 of the subdivision.

To undertake earthworks within 20 metres of rivers and within 50 metres of wetlands. To undertake earthworks exceeding 1000m^2 per any one hectare and to stockpile in excess of 1000m^2 of soil over vegetation.

To store hazardous substances (petroleum products) exceeding 2000 litres at any one time for the purpose of golf course maintenance.

To extend the lapsing provision to 10 years.

The legal descriptions of the lots involved are:

Lot 1 DP 77303
Lot 2 DP 77303
Pt Lot 2 DP 1799
Lot 1 DP 80926
Lot 1 DP 327014
Lot 1 DP76141
Drain Reserve RED Map 58
Sec 1 SO20252
Pt RS 864

Being 1220, 1221, 1228, 1250, 1266, 1274 and 1276 Main North Road, Woodend.

The overall subdivision and land use proposal is a non-complying activity with regards to the Proposed District Plan."

55. There were 142 submissions received on the applications within the 20 working day submission period, of whom 29 wished be heard. Of the submissions 134 were on the applications to the WDC; 128 in support of and six opposing the applications. Similarly 71 parties submitted on one or more of the applications to the CRC, and five of these submitters opposed the applications. There were no late submitters.

56. Concerns raised by submitters included:

- The possibility of adverse effects on the Taranaki Stream, including those on surface hydrology and the aquatic community, and the possible effects of sediment disturbance and enrichment of the stream.
- Possible flood hazards on the subject site.
- Possible contamination by fertilisers and the stormwater discharge.
- Effects on values held by tangata whenua, including cultural and archaeological values, and the location of the activities near to a pa site of much significance.
- The loss of rural amenity as a result of the proposal.

57. Many submitters also commented on the positive aspects of the application. These included:

- The proposed development will greatly enhance the location providing many opportunities for sport, employment, housing and social opportunities that are much needed and to take the pressure off the greater city area.
- The development will enhance recreational opportunities by providing recreational facilities while preserving and extending wetlands and native plantings in the area.
- Mapleham will create a rural style development that fits with the existing rural environment.
- The application will enhance the natural values of the site.
- There will be no infrastructural concerns particularly traffic.

3 Summary of Evidence

3.1 The Case for the Applicant

58. The applicant's case was co-ordinated by Ms Lauren Semple, Barrister and Solicitor of the legal firm of Anderson Lloyd Cauldwell in Dunedin. She called 10 witnesses, and written evidence was presented by another two witnesses.

59. **Ms Semple** provided an overview of the applications and listed who would appear and their relationship to the applications. There are two minor amendments to the applications; these involved a change in alignment of the 12th hole of the golf course to overcome concerns raised by Transit, and replacing proposed culverts over the Taranaki Stream with bridges. Ms Semple submitted that these amendments are only minor and are within the scope of the applications submitted. We agree with her.

60. Ms Semple then went through the main statutory matters that we need to address when considering the applications. The main points covered included:

- The applications to the WDC are for non-complying activities; those to the CRC are discretionary or restricted discretionary activities (except CRC 061210 which is controlled).
- The permitted baseline on the northern part of the site (Mapleham 4B zoning) allows for subdivision into 35 lots of between 1 and 1.5 hectares.
- She submitted that any cumulative effects of stormwater discharges from the proposed Mapleham development with those of Pegasus town should be considered when consent applications for Pegasus town are lodged.
- She considered that in summary the effects of the applications sought are no more than minor and those to the WDC are consistent with the Objectives and Policies of the operative Waimakariri District Plan. The applications are, in her view, "an extremely well considered and thorough proposal" which meets the requirements of Part II and is a sustainable use of the land. Accordingly, she urged us to grant the applications.

61. **Mr Robert Robertson** is the Chief Executive and principal shareholder of the developers, Infinity Group Holdings Limited, of which Pegasus Town Limited is a wholly owned subsidiary. Infinity is a property investment and development company.

62. Pegasus Town Limited purchased the 338 hectare site provided for the town in the District Plan in 2004. Similarly in 2004 Infinity purchased Mapleham from the previous owner, Mr Jonathon Scott, to "create an appropriate ambience for the entrance to Pegasus town". This led to the decision to build a public golf course on the site.

63. Mr Robertson emphasised that Infinity are not traditionally golf course developers, and they are not trying to create a golf resort such as Clearwater or Millbrook. The course will be a public one, and will be funded in part by the proposed 98 houses on eight discrete clusters on the site. The intention is to "blend seamlessly" with the landscape and the future Pegasus town. There will be substantial ecological enhancement and restoration. The applicant has worked closely with the people of Ngai Tuahuriri Rununga, and the proposal has been designed to be sensitive to the historical uses of the site by tangata whenua. The development has been designed to maintain the

rural character of the site, and there will be opportunities to walk and cycle around the property.

64. **Mr Simon Fenwick**, a professionally qualified landscape architect with 10 years experience, works for Boffa Miskell Limited. His evidence primarily covered the "master planning" process for Mapleham. This has been an iterative process involving the developer, a wide range of consultants and stakeholders. Twenty major iterations of the master plan have taken place over the last 15 months. Visual "before and after" simulations were provided.

65. According to Mr Fenwick there has been a strong emphasis on maintaining the rural character of the site, particularly when viewed from State Highway 1. Similarly the golf fairways have been designed to appear as pastoral open space. A planting plan has been prepared. The residential properties are in clusters, and will be subject to strict design controls so they do not dominate the rural landscape. All properties will be accessed by narrow carriageways, and will have unfenced access to the golf course so they will merge with the rural parkland character of the landscape.

66. **Mr David Gardiner**, who is a professional engineer with some 15 years experience, is employed by Beca Infrastructure Limited. He gave evidence on sewage disposal, water supply and construction management.

67. Sewage disposal from Mapleham and Pegasus town will be to the Woodend reticulated system. The oxidation pond system where sewage is treated is being upgraded to take the additional loading from Mapleham and Pegasus. This will have the capacity to deal with the extra loading while the ocean outfall to service the eastern communities of the Waimakariri District is being constructed off Pines Beach.

68. In the interim at least water supply will be from the Woodend community supply. Supplementary water may be needed at some stage in the future, but any consent needed for that will be sought at a later date. A consent to take shallow groundwater already held by Mr Scott may be used for irrigation.

69. Earthworks will be needed for construction of the golf course, the village green area, access roads, the amenity lakes and to raise some building platforms above flood levels. We need not detail construction management here; suffice to say that the site is very flat and although some cut and fill is required, no major earthworks are necessary. Mr Gardiner said that the potential for erosion and sedimentation can be largely avoided through the imposition of suitable conditions on the consents.

70. Mr Gardiner also presented the evidence of **Mr Graham Levy**, also of Beca Infrastructure, who could not attend the hearing. Mr Levy's evidence covered the management of stormwater on the site, including the golf course ponds. Before we undertook this course of action we checked with all submitters present at the hearing that they had a copy of Mr Levy's evidence, and secondly that they had no objection to this course of action. No objection was received.

71. Mr Levy's evidence noted that soils on the site are relatively permeable, and so run-off is low. Stormwater will be collected from hard surfaces and directed to swales in accordance with WDC Code of Practice. The stormwater will then enter amenity ponds on the golf course, where it will subsequently be used for irrigation. The only

exception is from short lengths of access roads within the golf course, where stormwater will only be treated via swales prior to discharge to the Taranaki Stream. As a result of enhanced stormwater treatment, Mr Levy asserted that water quality in the Taranaki Stream will improve slightly.

72. During larger storms stormwater will spill to the Taerutu Gully, which is to be restored as a wetland. This is anticipated to occur several times a year. This stormwater will be retained behind a bund, from where it will drain slowly to the Taranaki Stream. This will reduce peak run-off to the Taranaki Stream (verses the existing situation) in storms up to a 2% Annual Probability of Exceedance event (i.e. a 1 in 50 year storm).

73. Building floor levels are proposed to be set above the 1 in 50 year flood event level (this was a matter that had been discussed further with CRC officers). Bridges over the Taranaki Stream will be sufficient for minor floods in the stream. Mr Levy concluded that the flood risk to buildings at Mapleham are able to meet WDC and Building Act requirements, and the effects of the proposed Mapleham development on flood risk are less than minor.

74. Some sediment will be generated during construction, but the flat nature of the site means that with industry best practice sediment run-off to watercourses can be minimised. We have provided for such practice in conditions on the consents granted.

75. **Mr Clive Anderson** is a principal geotechnical engineer with the consultancy firm URS, which he has worked for, for 10 years. He provided evidence on seismic hazards, and particularly the potential for liquefaction on the site.

76. Core samples had been collected to enable a geotechnical model of the site to be developed. The site is underlain by silt and sand from old riverbed deposits. On most of the site this loose material overlies gravels at a depth of 2-5 metres, with shallow groundwater at 3-5m. Mr Anderson said there was little possibility of liquefaction during a large earthquake in these areas, although building sites will have to be compacted where they are filled to be above projected flood heights. Similarly, lateral spreading is not expected to significantly affect the proposed building sites.

77. However, on the south west side of the site where the access road will be constructed off State Highway 1, uncompacted material is up to 9m deep, and some settlement is possible following a large earthquake. Additional care is needed here to ensure stability of the road; we have provided for this in the conditions of the consents granted.

78. We note here that WDC had commissioned an independent review of the applicant's geotechnical information by Mr Ian McCahon, a principal of Geotech Consulting Limited. Mr McCahon raised particular concerns about the possible effects of water in the proposed golf course ponds entering shallow groundwater and so increasing the risk of lateral spread. We have provided for these ponds to be sealed in the conditions of the consents granted.

79. **Ms Tracy Freeman** is a senior environmental engineer employed by Beca who has 13 years consulting in air quality management. She gave evidence on the submission from Brian and Anne Stokes, who own a large dairy farm on the opposite side of State Highway 1 from Mapleham. In their submission the Stokes had requested that their

dairying business should be affected in no way by the Mapleham development and they did not want "reverse sensitivity" to become an issue for them.

80. There is some potential for odour from the Stokes' property to be carried downwind towards Mapleham during either north west winds, or during katabatic flows on calm, still nights. Possible odour sources from the Stokes' farm include those from a silage pit, dairy shed and effluent spreading.

81. Ms Freeman compared the possible effects of the proposed Mapleham development with the "permitted baseline" which allows for 35 properties on the northern part of the site within the Mapleham 4b Rural Zone. Under this scenario, there could be five houses within about 45m of the Stokes' boundary, and eight within 250m. In comparison, under the proposed development the nearest house would be about 120m from the boundary, and there would be six houses within 250m. Accordingly, Ms Freeman concluded the potential for reverse sensitivity effects will be less for Mapleham than it is for the already consented subdivision of the site.

82. **Dr Vaughan Keesing** is a senior ecologist and principal of Boffa Miskell Limited. He has been practising as an ecologist for 10 years. Dr Keesing gave evidence on the existing ecological values of the subject land and its associated watercourses, and discussed the effects of the proposed development on those values.

83. The subject land would have originally comprised swamp forest and wetland. Forest was cleared, mainly by burning, by Polynesian settlers, so by the time of European settlement most of the forest was replaced by tussock grasslands. The land has subsequently been cultivated and ploughed for cropping and grazing.

84. Both Taranaki Stream and Taerutu Gully are dominated by introduced willows and various weed species. A few native species, such as sedges (*Carex spp.)*, remain in Taerutu Gully. Taranaki Stream occupies a channel highly modified by drainage works, and the pond created by the present landowner Mr Scott. Species such as trout, bullies, inanga and eels are present in the stream. Dr Keesing said the invertebrate community is representative of "a highly challenged system" and is highly tolerant of disturbance.

85. Dr Keesing said the existing ecological values of the subject property are low. There are no areas of significant vegetation or significant habitats of indigenous fauna on the site.

86. The potential effects of the proposed development on ecological values were tabulated. Given good management of the site, there should be no adverse effects on sediment levels in the Taranaki Stream, and the comprehensive stormwater treatment proposed should improve water quality. There will be positive effects from native ecosystem restoration along the Taranaki Stream and, particularly, Taerutu Gully. Dr Keesing concluded there will be net ecological gain for the property. In answer to a question, he said the applicant was liaising with the Department of Conservation to similarly restore the drainage reserve vested in the department on the Taranaki Stream.

87. **Mr Te Marino Lenihan** is the Cultural Advisor to Pegasus Town Limited. His role is to facilitate an effective working relationship between Pegasus Town Limited, Te Ngai Tuahuriri Rununga and Te Rununga o Ngai Tahu. Mr Lenihan is a member of the Reuben whanau of Tuahiwi, and a direct descendent of those buried at Kai-a-poi pa (which is about 100m north of the subject land). He gave evidence on the history of the site, key values of tangata whenua and the policies and recommendations of Ngai Tuahuriri and Ngai Tahu. The subject land is within the traditional boundaries of Ngai Tuahuriri who exercise kaitiakitanga on the site.

88. A number of the proposals before us are a result of consultation between the applicant and tangata whenua. These include the ecological restoration of Taerutu Gully wetland (which was originally proposed to be filled), recognition of an area used historically for kumara cultivation, and the provision of what is known as the "Western Conservation Management Area" in the land set aside for the associated development of Pegasus town.

89. Mr Lenihan discussed the statutory and policy matters we must have regard to in evaluating the applications before us. We need not describe those matters here as we cover them in our evaluation.

90. Recommendations were presented for maintaining the spiritual, cultural and natural heritage of the site. These included:

- Recognition of Ngai Tahu and Ngai Tuahuriri as mana whenua and as having kaitiaki status. The latter could be achieved by means such as providing for place names, interpretation of sites, and retention or enhancement of natural features.
- Restoring the mauri of mahinga kai and creation of new wetland areas.
- No direct discharge of stormwater to water, improving water quality and minimising the adverse effects of the use of fertiliser and herbicides on the golf course.
- Provision of a protocol for any discovery of wahi tapu or wahi taonga during development of the site.

Mr Lenihan concluded that provided an open and honest relationship between the parties continues, then matters important to iwi will be met adequately.

91. **Dr Daniel Witter** is a consultant archaeologist to Pegasus Town Limited, for whom he had prepared a Section 12 application to the Historic Places Trust (HPT). He provided evidence on the Maori history and archaeology of the site.

92. The site has been occupied for some 500-600 years. Kaiapoi Pa, which was built in about 1700, was destroyed by Te Raparaha in 1831 after a six month siege.

93. The subject land is what Dr Witter called the western agricultural mitigation zone, which he divided into four sub-zones (one for example being where kumara was historically cultivated). The site has long been ploughed and cultivated. Ploughing is very disruptive to archaeological sites. A proposed conservation area on the eastern boundary of Mapleham, but within the planned development for Pegasus town, will protect an area historically used for greenstone workings.

94. The applicant had proposed a number of measures to mitigate the effects of the proposed development on the archaeological values of the site. These have been included in the HPT consent, and are similarly included in the consents we have granted from the WDC. Dr Witter said that with these conditions in effect, he was satisfied that the effects of the proposed development on archaeological material are satisfactory.

95. **Mr Don Miskell** is a registered landscape architect with extensive experience. He is chairman of the directors of Boffa Miskell Limited. His evidence addressed the landscape effects issues of the proposed Mapleham development.

96. The Mapleham site is part of the original Brockenhurst farm, which was established late in the 19th century. The homestead, which is outside of the present proposal, is surrounded by shelter belts and amenity plantings. The dominant element in the present landscape is State Highway 1, from which the site will be most often viewed. To the east of the subject land is about 280 hectares zoned for Pegasus town, which will be developed for a population of about 5,000.

97. The site contains two planning zones. The northern part of the property, of about 66.9 hectares, is zoned as the Mapleham Rural 4B Zone in the District Plan. This zoning allows for the development of up to 35 residential allotments of not less than 1ha and not greater than 1.5ha.

98. The southern part of the site of some 44.7ha is zoned as Pegasus Rural. It was originally set aside for sub-surface treatment and disposal of wastewater from the proposed Pegasus Sewage Treatment Plant. With the decision of WDC to build an ocean outfall for sewage from eastern communities including Rangiora, Kaiapoi and Woodend, this land is no longer needed for wastewater disposal.

99. Mr Miskell noted that the site does not contain nor is it close to outstanding natural landscapes or features. He considered the natural character values of the sections of Taranaki Stream and Taeretu Gully within the proposed site are of low to moderate value, and that the site presently has a moderate level of rural amenity. Amenity and natural values of the site will be enhanced by the proposed development. Cultural values will be enhanced by the restoration of Taerutu Gully, and the historic kumara cultivation site will be recognised.

100. Mr Miskell described the permitted baseline on the site, and what it allowed for in terms of development of individual properties. Simulations were presented comparing the present view from State Highway 1 verses those of the completed development. In his view the clustering of houses and the location of the eight clusters will ensure the home sites will "sit comfortably within the broad rural landscape".

101. We asked Mr Miskell some questions about the "permitted baseline" for the two sites. He considered:

- there will be greater adverse effects on the land zoned Pegasus Rural due to the presence of houses and facilities;
- that the current zoning for Mapleham 4B Rural would have greater adverse effects than the current proposal, due to the piecemeal nature of development allowed for; and

- overall there will be a net gain under the current proposal.

This is a matter that we consider in some depth in our evaluation of the applications.

102. The final witness for the applicant was **Mr Marc Bretherton**, a senior consultant with Mitchell Partnerships. He gave a very broad overview of the application and its effects, and addressed planning issues.

103. We do not need to detail Mr Bretherton's evidence here as we cover the matters he raised in our evaluation of the applications. Suffice to say he concluded that the applications could be granted as the adverse effects of the proposed activities are no more than minor, and the proposal is not inconsistent with the Objectives and Policies of the District Plan. Mr Bretherton also listed comprehensive consent conditions for our consideration.

104. We should note for completeness that the applicant was also going to call another expert, Mr Anthony Penny, to address traffic management issues. Given however that CRC staff had withdrawn their submission after discussion with the applicant, the applicant decided there was no need to call Mr Penny. We have read his evidence to help with our deliberations. Also before taking this course of action we checked with all submitters present whether they had any objection to this course. None raised any issue.

3.2 The Submitters

105. Three submitters appeared at the hearing. A fourth submitter, Mrs Jo Kane, endeavoured to attend the hearing, but was otherwise delayed, and we received her evidence in writing.

106. Staff of the CRC had submitted on the applications to the WDC. Mr Laurie McCallum and Mr Richard Holmes of the CRC appeared on the first day of the hearing. They told us that the concerns raised in their submission had been resolved in relation to settlement and the built environment had been resolved through discussions with the applicant and they withdrew this part of their submission. They also said that in relation to flooding they had reached agreement with the applicant and that agreement was to be included in the consents granted, which we have done. They did not withdraw this part of their submission.

3.2.1 Mr Dave Molyneux

107. Mr Molyneux, who owns a property of some 2,000m^2 in the block of land on the property that will be surrounded by the golf course, spoke in support of the application. He told us he considered he was one of the persons most affected by the proposed development. He will be walking around the property, and using a road on the golf course for access to his property.

108. Mr Molyneux was adamant that a golf course with wide open spaces and houses tucked away in discrete blocks is far preferable to the presently consented 35 houses on the property (Mapleham Rural 4B zone). He said concerns about privacy have

been addressed by the applicant through the provision of screen plantings and the like.

3.2.2 Mr Brian and Mrs Anne Stokes

109. Mr Stokes gave evidence on behalf of himself and his wife. Mr Stokes, who holds a B.Ag.Com degree, has lived at 1333 Main North Road (which is directly across SH 1 from Mapleham) all his life.

110. The Stokes neither oppose nor support the concept of the proposed development. Their submission had raised concerns about the effects of development on the flows in the Taranaki Stream, and possible reverse sensitivity issues. In answer to questions Mr Stokes said both these matters have been addressed to their satisfaction by the applicant.

111. Mr Stokes has over time seen the large increases in traffic that pass along State Highway 1 in this area. He opposed the development in so far as it may limit the options for a future traffic bypass at Woodend. To support this Mr Stokes produced a map of current bypass options prepared by WDC. None of those options affect the proposed Mapleham development, but Mr Stokes favoured another option that would see a bypass constructed on the east of the proposed golf course between Mapleham and Pegasus town. He told us about discussions he had held with parties such as Mr Robertson of Infinity Investments Limited, representatives of WDC, and Transit NZ.

112. Mr Stokes asked that we record the following point:

> *"BJ and AL Stokes from 1333 Main North Road Waikuku submitted on the effect the Mapleham Development could have on a specific Woodend bypass alignment. While the commissioners have no power whatsoever to force designation of land, they accept this submission as part of this hearing"*

113. We responded to Mr Stokes that we did not see that there was a connection between the applications before us and the issue of realigning the State Highway in the vicinity of Woodend. In answer to questions it became apparent to us that there was some discussion afoot in relation to re-routing the State Highway and that discussion included a range of potential options. The matter had not advanced much further. We concluded and advised Mr Stokes of this, but we did inform him we were nevertheless comfortable with recording as we have done his specific concern within these applications.

3.3.3 Mr William Wilson

114. Mr Wilson spoke on behalf of the Waikuku Water Users Group (WWUG). The Group has 15 members who take water from the Waikuku and Taranaki Streams and their tributaries. The seven consents held by group members to take water from the Taranaki Stream system were granted in 1997 and expire in 2032. Three of those consent holders are downstream of Mapleham.

115. During times of low flow the WWUG ensures water is shared among consent holders. The Group has also carried out works to improve water quality and riparian management.

116. Mr Wilson told us the WWUG have concerns about effects on water quantity and water quality as a result of the proposed development. He asked us to include a condition preventing the development having effects on flows in the Taranaki Stream. The most concern is about water quality and sedimentation, and Mr Wilson asked that we impose a condition requiring a silt/sediment trap be constructed in the stream near the downstream boundary of the development. Apart from the two conditions sought, WWUG is generally comfortable with the Mapleham concept.

3.3.4 Mrs Jo Kane

117. Mrs Kane and her husband Murray have lived at Waikuku Beach for 11 years. They moved there because they saw it as a "special place" with high natural values. During that time they have seen several encroachments from well funded developments that have made use of experts to "persuade" the community of their merits.

118. The Kanes have been submitters to Pegasus and Mapleham and so understand their impacts and how "hard fought conditions" were won to protect existing communities from the impacts of the developments. Mrs Kane cited the example of the land zoned for sewage disposal (Pegasus Rural) being seen as a natural buffer between Pegasus Town and Woodend, and noted this was provided for in Policy 14.4.1.2 of the operative District Plan. She also asserted that the original Mapleham development was predicated on restoration, realignment and enhancement of the Taranaki Stream.

119. Now that Pegasus has become part of the Eastern Districts Sewage Scheme, the very productive land originally zoned for sewage disposal has become available. Mrs Kane asserted the Mapleham concept will form a "Clearwater resort type development" that will form the "million dollar selling card" for Pegasus Town. This comes at a time when Rangiora and Kaiapoi golf clubs are struggling with membership, and she said the golf course is a selling point to make as large a return on investment as possible. She was "insulted" by being asked to believe this will enhance the environment and improve amenity values.

120. Mrs Kane said that most of what she had read indicated Kaiapoi Pa and its surrounds are the most significant site to Ngai Tahu in the South Island. As a New Zealander she believed the proposed development will result in cultural heritage and archaeological values being lost forever. She saw the development as failing to avoid, remedy or mitigate adverse effects.

121. In her view the proposed development is rural residential whereas the 35 houses presently allowed for would be rural in its design. It "stretched the imagination" to see this development blending seamlessly with the North Canterbury landscape. Large clusters of houses will have a very unrural environmental quality.

122. The Kanes fully supported the submission of the WWUG, who have won an award for their work. All sediment generated, contaminated stormwater and fertiliser used on the golf course will eventually end up in the Taranaki Stream and the Ashley/Rakahuri river estuary.

3.3 *The Officer's Reports*

3.3.1 Mr Andrew Brough

123. Mr Brough spoke briefly to his Section 42A report. The main points made included:

- He supported the amended proposal to build bridges rather than culverts for the crossings of the Taranaki Stream.
- The mass loadings of contaminants presented in his Table 1 are very conservative and represent a worst case scenario after construction.
- He considered monitoring of the effects of the proposed development on water quality in the receiving environment needed to be carried out.
- Site construction works, and works in the stream, would be best carried out in March or April when flows are lowest. He emphasised that if works were done as per the proposals, there will not be any adverse effects on the Taranaki Stream.
- It would be appropriate to grant the consents necessary for construction for a shorter term of about 10 years verses the 35 years sought.

3.3.2 Mr Garry Blay

124. Mr Blay prepared a comprehensive report which we will deal with in greater detail in our evaluation. In speaking to his report Mr Blay noted that because the Waimakariri District Plan is now operative this was the only District Plan which we need to consider in relation to the WDC applications. He noted that the site under the District Plan the site contains the Mapleham Rural 4B Zone and also is partially within the Pegasus Rural Zone (Special Purpose Area).

125. He noted that in terms of the Mapleham Rural 4B Zone subdivision of allotments was provided for in terms of a concept plan identified as District Plan Map 147. He said that within the Pegasus Rural Zone (Special Purpose Area) subdivision of land for residential purposes was a non-complying activity and that subdivision and/or development not in general accordance with the outline development plan (District Plan Map 142) is a non-complying activity. Similarly he noted that because the proposal seeks subdivision of allotments and dimensions which do not generally comply with the concept plan shown on District Planning Map 147, this too is a non-complying activity.

126. Mr Blay then detailed chapters of the objectives and policies section of the District Plan that he considered appropriate. Before doing so he noted that the overall approach of the plan is to emphasise environmental outcomes as opposed to activities.

127. He covered Chapters 2, 3, 4, 8, 11, 12, 14 and 17. However we think it fair to say in his verbal presentation he concentrated on Chapters 12 and 14.

128. Chapter 12 concerns itself with health, safety and well being. Objective 12.1.1 seeks to maintain amenity values and the quality of the environment appropriate for the zone in question. Policy 12.1.1.3 focuses on maintaining amenity values and the quality of the environment in Rural Zones by ensuring that dwelling houses are not a dominating

feature of the landscape. This is achieved by controlling both the density and spacing of dwelling houses. It was Mr Blay's interpretation of this policy that it is the existing environment or permitted baseline which needs to be maintained by ensuring that dwellings do not dominate the land.

129. Mr Blay noted that the entire subject site is zoned Rural. However that rural zoning is split between Pegasus Rural Zone (Special Purpose Area) and the Mapleham Rural 4B Zone. He said that the Mapleham Rural 4B Zone has a specific subdivision standard. However in contrast subdivision and development within the Pegasus Rural Zone (Special Purpose Area) is controlled only by the requirement to be in general accordance with the outline development plan for Pegasus (Planning Map 142). This outline development plan provides that there should be only one lot but the other requirements such as boundary set-backs, site coverage and separation distances for vehicle entranceways do not apply. In detail the Mapleham Rural 4B Zone subdivision standards have been set by the Environment Court (C9/2002) being a minimum lot size of 1 ha and an average lot size requirement of not less than 1.5 ha and a maximum of 35 lots.

130. Mr Blay noted it was the Pegasus Rural Zone (Special Purpose Area) part of the application site that caused him the greatest difficulty in terms of Policy 12.1.1.3. He commented that the location of dwellings on this part of the application site had the potential to create adverse effects to rural amenity and environmental quality.

131. However in his verbal comments he said that this part of the application site is unique given its location in relation to the Woodend town boundary, the Mapleham Rural 4B Zone and the boundary of the Pegasus Residential 6 and 6A Zones. He contended that this location made the amenity and environmental quality of this part of the application site unique because it was a relatively narrow strip sandwiched between two areas of higher density development.

132. He also contended that the applicant's proposal itself was unique. The unique elements as he saw them were the applicant's intention to subdivide dwelling lots on the Pegasus Rural Zone (Special Purpose Area) of between approximately 1,400m^2 and 2,500m^2 and the clustering of those sites coupled with significant areas of open space within the golf course. This he said provided a measure of mitigation by retaining a perception of openness. The lack of subdivision constraints within the Pegasus Rural Zone was in his opinion a unique circumstance. He voiced the opinion that the amenity and character within the area where the dwellings were to be located would be distinctly residential and therefore possibly not appropriate for an area zoned rural. However on balance he considered that the retention of the large areas of open space, the discrete location of dwelling sites and the extensive amenity planting would avoid or mitigate potential adverse effects to rural amenity and the quality of environment by avoiding domination of the landscape by dwellings.

133. In relation to the Mapleham Rural 4B Zone he considered that because there was no specific guide in the District Plan as to the characteristics to be expected within the zone it was appropriate to consider instead the amenity values and environmental qualities provided for in the Plan for the Residential 4B Zone. He considered that the amenity and character of the Mapleham Rural 4B Zone, while called rural, was more akin to that found in the Residential 4B Zone than the Rural Zone. Therefore he considered it appropriate to review the objectives and policies relevant to the

Residential 4B Zone so as to provide a more appropriate basis for assessment of amenity and character effects. He did this on the basis that he was satisfied that several of the characteristics he had identified in relation to the Residential 4B Zone were met by this proposal.

134. In relation to Chapter 14 which deals with Rural Zones he noted that Objective 14.1.1 identified the characteristics and qualities of Rural Zones to be maintained and enhanced. In his verbal presentation the key characteristics he concentrated on to be maintained or enhanced were the dominant effects of paddocks, trees, natural features, agricultural, pastoral or horticultural activities. He also commented upon the separation between dwelling houses to maintain privacy and a sense of openness.

135. Policy 14.1.1.1 seeks to maintain or enhance the physical characteristics of the Rural Zone by avoiding subdivision and/or dwelling house development resulting in any loss of those physical characteristics or that may constrain lawfully established farming activities. Mr Blay's principal concern here expressed was that in relation to Policy 14.1.1.1 the proposed relatively dense residential development and clustered areas may not provide separation distances between dwelling houses such that privacy and a sense of openness would be retained.

136. Mr Blay advised that the Plan describes the Mapleham Rural 4B Zone as an area of "intensive rural development". The minimum subdivision standards and land use requirements within this zone do not, according to Mr Blay, sit comfortably with the criteria set out in Objective 14.1.1. However he acknowledged that the subdivision and land use standards set by the Environment Court within the Mapleham Rural 4B Zone were imposed with the intention of maintaining a characteristic level of separation between dwellings and an associated sense of openness. Mr Blay however expressed the view that the dwelling separation distances and sense of openness envisaged by the Court will be maintained by the proposal. He therefore concluded that the proposal was not contrary to Objective 14.1.1 and Policies 14.1.1.1 to 14.1.1.3 with regard to the Mapleham Rural 4B Zone.

137. He then noted that with regard to the Pegasus Rural Zone (Special Purpose Area) the lack of minimum lot sizes, or internal dimension requirements creates a unique situation which provides the opportunity for individual assessment against Objective 14.1.1 and Policies 14.1.1.1 to 14.1.1.3. He noted that the residential lots proposed are of a relatively large size being somewhere between 1,436m^2 and 2,610 m^2. They are located such that at most they have two direct neighbours and a street frontage. He noted that all lots have at least one boundary with the open space of the golf course. He concluded that the combination of large lot sizes, the reduced number of neighbours and the provision of at least one boundary with open space would provide adequate separation between dwelling houses to maintain privacy within the individual lots and provide a sense of openness for residents on those proposed lots.

138. Policies 14.1.1.2 and 14.1.1.3 in summary form according to Mr Blay require the maintenance of the domination of Rural Zones by agricultural, pastoral or horticultural activities and to maintain and ensure the environmental qualities of natural features, clean air and quietness and limited signage are achieved.

139. Essentially because the majority of land area will consist of the golf course with associated amenity planting and open spaces, factors which are common to agricultural, pastoral and horticultural activities, Mr Blay contended that the thrust of this policy would be met. He also noted that the proposal did not include any activities that would directly affect air quality and no commercial signage is envisaged.

140. In conclusion Mr Blay reached the opinion that the proposal was not contrary to the objectives and policies of the District Plan in relation to either the Pegasus Rural Zone (Special Purpose Area) or the Mapleham Rural 4B Zone.

141. Turning to effects Mr Blay identified a number of potential effects that the proposal may have, being traffic, rural character and amenity, water quality, water and soil contamination, cultural heritage, flooding and liquefaction.

142. In his verbal presentation he concentrated on the issue of rural character and amenity. While he acknowledged there would be an increase in the density of dwellings beyond that envisaged by the plan with regard to both the Pegasus Rural Zone (Special Purpose Area) and the Mapleham Rural 4B Zone and an increase in the presence of people and their related activities, he considered the proposal will generate adverse effects to the rural character that are no more than minor. This was due to a number of factors.

- The localised, discrete and grouped nature of the areas where the dwellings and commercial buildings are to be located.
- The retention of large areas of open space associated with the golf course.
- The association or connection of that open space with the residential lots.
- Extensive amenity planting.

In addition he identified the unique purpose of the Pegasus Rural Zone (Special Purpose Area) as no longer being required and the positioning of that zone in close proximity to both the Pegasus 6 and 6A Zones as being matters of considerable importance.

143. Following from these key points he concluded that the environmental effects from this proposal would be no more than minor as mechanisms had been put in place to avoid, remedy or mitigate adverse effects.

144. The balance of his verbal presentation considered precedent effects. He contended that a precedent effect would be avoided if the proposal can be assessed as being substantially different to other potential proposals and therefore to be unique.

145. Mr Blay contended that the proposal is substantially different to proposals likely to be received in the future. He based this opinion largely on the nearby location of the Pegasus 6 and 6A Zones and the unique Mapleham Rural 4B and Pegasus Rural (Special Purpose Area) Zones within the site. A further unique feature of the proposal was the integral approach to create a golf course with associated infrastructure and residential sites incorporated within the golf course.

146. He considered that allowing this proposal to proceed would not set a precedent with regard to dwelling density in any Rural Zones other than the Pegasus Rural and Mapleham Rural 4B Zones. Further he noted that while there is perhaps some

potential for a precedent effect in the balance of the Pegasus Rural Zone the portion of that zone involved in this proposal has a special purpose of effluent disposal attached which sets it aside from the general Pegasus Rural Zone. He said that there is no other Mapleham Rural 4B or Pegasus Rural Zone (Special Purpose Area) within the Waimakariri District Plan. He said that the balance of the Pegasus Rural Zone that does not have the notation "Special Purposes Area" is within the eastern conservation management area which has specific conservation requirements, and so in his opinion approval of the application would not result in inconsistent administration of the plan.

147. Mr Blay then went on to detail and discuss with us a range of suggested conditions which we will return to subsequently.

3.4 The Applicants' Right of Reply

148. It was determined in consultation with the applicant that the right of reply would be delivered in writing. In summary the reply noted that the evidence produced by parties to the hearing was unique because of its consistency. It was noted that planning evidence before us concluded that the granting of the subdivision and land use consents would be consistent with the objectives and policies of the WDC District Plan and further that the expert evidence produced by the application together with reports from the Council officers were consistent in that adverse effects on the environment of the proposed activity were considered to be not more than minor.

149. It was further contended that the legislative requirements of s105, 106 and 107 of the RMA were met and accordingly there was no legislative impediment to the granting of the consents.

150. It was further submitted that the application met the relevant parts of section 6 and section 7 matters and was in accordance with the purposes and principles of the Act contained in Part II.

151. The reply then sought to traverse the issue of conditions which we will return to subsequently.

4 Evaluation

4.1 Status of the Applications

152. As the applications were lodged in October 2005 our evaluation is based on the criteria in the Act as amended by the Resource Management Amendment Act 2005.

153. There was no disagreement between the applicant and the reporting officers as to the status of the applications before us. These are as follows:

- The two applications to the WDC are for **non-complying activities** under Rule 32.1.1.1 (in particular table 32.1) and Rule 32.1.1.15, which provides that subdivision will comply generally with the outline development plan for among other areas Pegasus Outline Development Plan as identified on District Plan Map 142 and Mapleham Rural 4B Zone identified in District Plan Map 147.
- Application CRC 061210 is for a **controlled activity** under the Proposed Natural Resources Regional Plan (PNRRP).
- Applications CRC 061211 and CRC 061212 are **restricted discretionary activities** under the PNRRP. The matters to which discretion is restricted are quite broad, and include the area, location and timing of the activity and measures to avoid, remedy or mitigate adverse effects.
- All other applications to the CRC are for **discretionary activities** under the provisions of the PNRRP and/or the Transitional Regional Plan.

4.2 Matters We Must Consider

154. We are required to have regard to the matters listed in s104, s104B and s104D of the RMA. Specifically under s104B and s104D where an applicant has sought consent for a non-complying activity, which is the case in relation only to the applications to WDC here. We may grant or refuse the consent and if granted may impose conditions under s108. However, we are limited in that we can only grant consent for a non-complying activity if we are satisfied that either:

(a) the adverse effects on the environment (other than any effect to which s104(3)(b) applies), will be minor; or

(b) the application is for an activity which will not be contrary to the objectives and policies of the WDC plan.

155. For non-complying activities, even where one of the threshold tests in s104D(1) is met, we still retain an overall discretion as to whether to grant the application. That discretion is to be exercised having regard to the criteria set out in s104. In that respect, and subject to Part II of the Act which contains the Act's purpose and principles we are able to have regard to:

- any actual and potential effects on the environment of allowing the activity;
- any relevant provision of a proposed plan; and
- any other matter the consent authority considers relevant and reasonably necessary to determine the application.

156. We also note that under s104(2) we may disregard effects permitted by the relevant regional and district plans.

157. Also where a person has given written approval to the application we shall not have regard to any actual or potential effects on that person as provided for in s104(3)(b) of the Act.

158. Mr P Sheppard, D & M Molyneux and J Scott being owners or occupiers of lots located within the golf course area have provided signed affected party consents. Accordingly, potential effects on these parties cannot be considered.

159. Our assessment of the application is based on the above statutory context. We begin with an appraisal of the effects, then focus on policy considerations and finally examine other matters that we consider relevant and reasonably necessary to determine the WDC application, including the issue of consistent administration and integrity of the plan.

160. There are no national policy statements relevant to the present application, nor do the provisions of the National Coastal Policy Statement apply.

161. We first intend to deal with the applications to the WDC as they are the only applications which require consideration under the threshold tests pursuant to s104D. We will then evaluate the applications to the CRC under the provisions of s104 of the Act and then finally we evaluate all applications under Part II of the Act.

4.3 The Applications to the Waimakariri District Council

162. In considering the effects of the proposed activity we need to consider those effects against the relevant planning documents, the submissions received to the application and by reference to the permitted baseline to determine whether any adverse effects identified will be more than minor.

163. It is important to establish the nature of the effects potentially arising from the proposed activities and the degree to which such effects are contemplated by the planning baseline. We need to have an understanding of the environmental effects in terms of their nature, scale and intensity.

164. In assessing the effects of the proposal on the environment, case law and the Act indicate that the environment which must be considered is that which currently exists plus that which would exist if the land were used in a manner permitted as of right, either by rules in a plan or by current resource consents. To do this we must understand both the physical and statutory environments relevant to the application. We therefore need consider the existing physical environment and the statutory environment in terms of permitted activities.

4.3.1 The Existing Environment

165. The subject environment was detailed in the evidence of Dr Keesing when he discussed the historical ecological value of the wider area surrounding Mapleham. He provided us with his view about the state of the wider area in pre-Polynesian times and following European settlement he then discussed the impact of the European farmers setting about converting the tussock land and wetlands into grazing and cropping land dominated by exotic species. He described the Taerutu Gully and the Taranaki Stream, noting the impact of willows and the spread of invasive weeds such as blackberry. He also noted massive inputs of organic material and subsequently nutrients in the autumn from leaf senescence. In the Taranaki Stream he considered that the aquatic fauna was more diverse than expected from the general agricultural setting. He then described the balance Mapleham farmland informing us that the balance areas are a highly developed farm and used for agricultural uses such as grazing, cropping and forestry. He commented that most of the paddocks within the property are periodically ploughed. He described the dominant tree species, of which very few were native, and pines, poplars, elder, broome and gorse dominated the farmland environment.

166. Mr Miskell described the existing environment and provided us with photographic representations of the same. He identified key features of the topography and soil, provided us with the general history of the development of Mapleham. He described the land uses in the general Woodend area as diverse. He listed existing and recent land uses as including pastoral farming, mixed cropping, turf farm, market gardening, forestry, orchards, township with suburban residential housing, rural residential clusters and isolated farm dwellings. He also noted that rail and road corridors dissect the landscape.

167. He considered that State Highway 1 is a dominant element of the landscape. The landscape character along State Highway 1 is predominantly rural and is typical of intensive farmland of the Canterbury Plains along the State Highway. Shelter belts, residences and commercial and farm buildings are frequent components of the views.

168. Mr Miskell described the intended Pegasus town being a town zoned for a population of approximately 5,000 people. The town will contain areas of residential and high density residential activities, business activities, conservation areas, a town square, a school as well as a Pegasus Rural Zone and a main access road which splits the application site into two. In his view the current landscape character of the Pegasus town site is dominated by forestry plantation over sand dunes with open areas of low grade pasture in the inter-dune areas.

169. The area surrounding the subject site is typical of the North Canterbury rural landscape. It is moderately open with shelter belt planting. He considered that Woodend could be classified as urban. He said that the site and its immediate vicinity are not within or near any outstanding natural features or landscapes and have not been specifically identified as such, either in landscape studies or relevant planning documents.

170. He concluded that the existing natural character values of the Taranaki Stream and the Taerutu Lagoon are low to moderate, except for short sections of the current alignment of the Taranaki Stream which are moderate.

171. Mr Miskell described the application site as having a moderate level of rural amenity. He identified the existing elements and characteristics which contribute to that moderate level of rural amenity. These include a moderate degree of openness with a typically flat North Canterbury rural landscape, simple and coherent rural vocabulary of paddocks, shelter belts and large scale trees. He noted that these elements are more apparent from within the site than from viewpoints along State Highway 1. Other elements he considered contributed to the amenity values of the area are the historical values associated with the Kaiapoi Pa site, the kumara cropping areas and the Taerutu Gully which historically provided waka access to the greenstone working area Hohoupoumamu in the Western Ridge Conservation Management Area of the Pegasus Town site.

172. To complete the assessment of the environment we note that Dr Dan Witter provided us with a detailed archaeological assessment of the subject site. Dr Witter is an archaeologist. He said that Mapleham lies within an area of outstanding archaeological and historical importance being immediately south of the Kaiapoi Pa which was the foremost Pa in the Canterbury region and is adjacent to the Hohoupoumamu site which was a major greenstone manufacturing site. He set out in detail some of the history related to Kaiapoi Pa and also described the underlying importance of Kaiapoi in the manufacturing trade in greenstone.

173. He referred us to his Historic Places Trust s12 application noting that the Mapleham area lies within an area identified within that application as the Western Agricultural Mitigation Zone. This zone consists of alluvial plains with a history of European ploughing and cultivation. He noted ploughing is particularly disruptive to archaeological sites because it breaks up various features in the earth such as fireplaces, pits and post holes.

174. He then identified for us four sub-zones within the Western Agricultural Mitigation Zone. The first was the western extraction area (Zone B1). This area is a plaggen soil horticultural area. This area he told us provides important information about Maori horticultural technology and is close to the southern most extremity of kumura cultivation. The central and north-west cut and fill area consists of alluvial plains and encompasses the majority of the Mapleham area. He said that this area has had plough cultivation and that the results of previous surveys in this area indicate that no archaeological deposits are present although there may be rare and isolated stone artefacts present.

175. Next he described the eastern settlement strip. He noted that burnt rock fragments and stone artefacts are found within this area. The burnt rock fragments are from oven stones belonging to the hangi that have subsequently been ploughed. He considered that the stone artefacts are flakes from stone tool production and flaked stone tools which have been discarded.

176. The final area he identified was the island area on the west side of the western ridge. He advised that previous testing had produced burnt hangi stones, stone and midden shell in this area. Artefacts had also been collected from this area. It is possible that

this area may be part of another settlement although it is noted that the internal area of the island has been ploughed and little archaeology has been found.

177. In terms of the surrounding area we noted the presence of Mr Stokes' farming activities to the west of the application site. To the north adjacent to Preeces Road are further blocks of land zoned Rural. We understood that farming activities similar to those carried out on the application site also took place on this land. To the north of Preeces Road is the historic and culturally important Kaiaipoi pa site. Off to the east is the site of the Pegasus new town. To the south of the proposed site is a further block of rural land. We noted that this land was divided into a range of differing allotment sizes on which general farming activity occurred. Even further to the south is the Woodend township.

Conclusion on Physical Environment

178. From these background matters we conclude that the environment we are here concerned with is predominantly rural and is typical of intensive farm land of the Canterbury Plains. In particular it is typical of the North Canterbury rural landscape. There is an archaeological and cultural element to the environment here under consideration.

Permitted Baseline Assessment

179. The issue here is how the application or proposed activity compares to the effects of any activity that could realistically be established on the application site under the WDC District Plan framework.

180. Mr Blay in his comprehensive report set out all of the relevant objectives and policies within the District Plan. His assessment was supported by Mr Bretherton and many of the other experts called by the applicant. Concentrating on the key policies and objectives, we saw these as being those contained in Chapter 12 which deals with health, safety and well being and Chapter 14 which deals with Rural Zones.

181. In Chapter 12 Objective 12.1.1 seeks to maintain amenity values and the quality of the environment appropriate for the zone in question. The objective identifies building structures, noise and hazardous substances as having the potential to create adverse effects to amenity values and the quality of the environment.

182. Policy 12.1.1.3 focuses on maintaining amenity values and the quality of the environment in Rural Zones by ensuring that dwelling houses are not a dominating feature of the landscape. This is achieved by controlling both the density and spacing of dwelling houses. Adverse effects on amenity values and the quality of the rural environment are created by dwellings through their physical presence and their association with the presence of people and corresponding activity or activities. We agree with Mr Blay in his interpretation of the policy in that its core thrust is that the existing environment needs to be protected from domination by dwellings.

183. Chapter 14 deals with Rural Zones. Objective 14.1.1 identifies the characteristics and quality of the Rural Zone that are to be maintained and enhanced. Mr Blay usefully

set out what he considered to be the key physical characteristics to be maintained and enhanced. We accept that list which is:

- dominant effect of paddocks, trees, natural features and agricultural, pastoral or horticultural activities;
- separation between dwellings to maintain privacy and a sense of openness;
- a dwelling house clustered with ancillary buildings and structures on the same site;
- a generally quiet area;
- clean air; and
- limited or no roadside advertising.

184. Mr Blay also identified Policies 14.1.1.1 through to 14.1.1.3 inclusive as being important. These policies seek to:

- Maintain or enhance the physical characteristics of the Rural Zones by avoiding subdivision and/or dwelling house development resulting in any loss of those physical characteristics or that may constrain lawfully established farming activity.

- Maintain the domination of the Rural Zone by agricultural, pastoral or horticultural activities.

- Maintain and enhance the environmental qualities of natural features, clean air, quietness and limited signage.

185. The policies and objectives in both Chapter 12 and Chapter 14 focus upon maintaining amenity values and the quality of the environment of the zone in question. Dwelling houses are not to be a dominating feature of the landscape. In addition the open characteristics of Rural Zones brought about by the presence of paddocks, trees, natural features and agricultural, pastoral or horticultural activities are to be maintained or enhanced. A sense of openness needs to be available around dwelling houses, and that there be a grouping of dwelling houses clustered with ancillary buildings on each particular site.

186. The policies are particularly directed at maintaining or enhancing the physical characteristics of the Rural Zone. These have been identified as the open space provided by paddocks, trees and natural features and agricultural, pastoral or horticultural activities by avoiding subdivision and/or dwelling house development resulting in any loss of those characteristics or any constraint upon lawfully established farming activities. The plan seeks a domination of Rural Zones by agricultural, pastoral or horticultural activities and the natural features, clean air, quietness and limited signage are to be maintained and enhanced.

187. The framework developed to this point is to enable us to consider the effects of any activity which could realistically be established and is a broad framework. A more particular framework is available when we consider the type of environment that the two separate zones which straddle the site would provide for. The Mapleham Rural 4B zone provides for allotments being of a minimum lot size of 1ha with an average lot size requirement of not less than 1.5ha and a maximum of 35 lots.

188. The Pegasus Rural Zone (Special Purpose Area) is controlled only by the requirement to be in general accordance with the outline development plan for Pegasus.

Accordingly to Mr Blay this means that there should be only one lot, but the other requirement such as boundary setbacks, site coverage and separation distances for vehicle entranceways do not apply.

189. Given these distinctions we agree with Mr Blay when he says there are quite different standards and projected uses which require individual assessment.

190. Because there is no specific guide in the District Plan as to the characteristics to expect in the Mapleham Rural 4B zone, Mr Blay referred us to the amenity and character provided for in the Residential 4B zone of the Plan. He considered that the outcomes sought for the Residential 4B zone were appropriate to and for the Mapleham Rural 4B Zone. He noted that these characteristics would result in an environment which included:

- a predominant activity of living;
- detached dwellings;
- limited number of lots located within a rural environment;
- rural style roads;
- rural outlook;
- few vehicle movements;
- access not from arterial road;
- community water and sewerage scheme; and
- limited kerb channelling and street lighting.

191. Returning to the Pegasus Rural Zone (Special Purpose Area) we consider given the sewage disposal use provided for the environment would have the following features:

- thick screen planting around the property boundaries, such that the view from SH 1 would appear as either forestry land or a shelter belt with planting several layers deep; and
- the site, which would not be visible from the boundaries, would comprise wetland plantings of species such as typha and raupo, along with a treatment plant of some form. The area would be permanently wet, and would provide habitat for species such as pukeko and waterfowl.

Conclusion on Permitted Baseline

192. In summary, in relation to the permitted baseline we consider that we must be guided by the outcomes provided for in Chapters 12 and 14, but that position need be tempered against the fact that there are specific zones that must be taken into account. The outcome provided for in these discrete zones, we think have the impact of lessening the thrusts of both of the key Chapters 12 and 14.

193. One issue that troubled us was the advice received from the applicant and others that it was no longer intended to utilise the Pegasus Rural Zone (Special Purpose Area) to receive effluent from the new Pegasus town. We considered regardless of that advice we must consider the Pegasus Rural Zone (Special Purposes Area) in accord with the permitted baseline provided for it within the plan. Sections of the Act, such as s104, require us to have regard to the policies and objectives in the plan as they relate to the subject sites. We can do no more or no less than that. What the applicant tells us may occur or may not now occur on the Pegasus Rural Zone (Special Purpose Area)

is not a matter that we can take into account in terms of establishing the permitted baseline for this zone.

4.3.2 Actual and Potential Effects

194. Having completed the exercise in relation to the permitted baseline which determines what we can and cannot consider when assessing the application before us, we now consider the actual and potential effects of the proposed activities.

195. Mr Blay identified for us the following effects that may arise if consent is granted:

- traffic;
- rural character and amenity;
- water quality and water and soil contamination;
- cultural heritage;
- flooding; and
- liquefaction.

196. While Mr Blay did not identify reverse sensitivity effects as an effect that may arise we have considered such effects. In short we accepted the evidence of Ms Freeman that the proposal will have reverse sensitivity effects but they will be less than provided for within the current Mapleham 4B Rural Zone. We were also told that general farming activities take place on land to the south of the application site, but we were not told of any activity that may give rise to a reverse sensitivity issue. We were made aware that several of the allotments to the south did not meet the current minimum lost size in that they were less than 4 hectares in area. This being the case the view was expressed that agricultural, horticultural or farming activity was unlikely to locate in these areas to the extent that reverse sensitivity may arise. We record that Mr Stokes raised reverse sensitivity as an issue in his written submission, but did not challenge Ms Freeman's evidence regarding reverse sensitivity effects on his property in any way. Rather he concentrated on other issues. As confirmed by questions, he was no longer concerned about the reverse sensitivity issue.

197. While we will and have considered the list of effects Mr Blay provided, we record that the key issue which emerged for us was to assess the level of effect this proposal would have on the rural character and amenity of the area.

198. We acknowledge that the proposal will provide significant tracts of open space and trees and that those areas of open space and trees and the various enhancements to the more natural areas of the proposal site would come to dominate the landscape of the proposed site. However our core concern was how the new elements which were to be introduced by the application, namely the residential clusters and structures around the village green, would impact upon the rural character and amenity of the subject environment.

199. The applicant, primarily through Mr Bretherton approached that issue in this way. He contended the whole theme or thrust of the application was not to run counter to the character and amenity values of the rural landscape but rather it consolidated the rural character and amenity. It did this through the master plan development process which has at its core a sensitivity to the rural situation in which the proposal was intended.

200. He relied heavily on matters such as having all of the buildings on the residential home sites subject to controls which would ensure their form, scale and appearance was appropriate to the North Canterbury rural landscape as a means of achieving that. He also relied on the fact that the development will retain large areas of open space, the comprehensive planting programme of both natives and exotics, and the extensive conservation works along watercourses, to support these views. It was his contention that these core features of the proposal would combine to maintain the inherently rural character of the site thus there would not be any adverse effects or effects which could be called more than minor in relation to the rural character and amenity of the subject site.

201. We were told by Mr Bretherton and Mr Miskell that the proposed structured planting of trees and vegetation and the gentle contouring and shaping of the landscape to emulate the wider locale, was central to preserving the landscape values of the area.

202. Mr Blay addressed for us the critical issue of how the intended dwellings proposed on the application site would impact on the rural character of the environs. He reached a conclusion that the environmental effects which would arise from this proposal would be no more than minor because as he said mechanisms have been put in place to avoid, remedy or mitigate adverse effects.

203. In reaching this view he did acknowledge that there would be an increase in the density of dwellings beyond that envisaged by the plan and there would be a consequent increase in the presence of people and their related activities. He however expressed the view that effects on rural character and amenity would be no more than minor because the areas where dwellings and commercial buildings are to be located will be localised, discrete and grouped to limited areas of the application site. The retention of large areas of open space associated with the golf course and the association of that open space with the residential lots and the extensive amenity planting led him to the conclusion that these effects could properly be said to be no more than minor.

204. On the same point Mr Miskell noted that the clustering of houses at least on that part of the subject site covered by the Mapleham Rural 4B zoning would amount to only 8.5% of the site, compared to a maximum of a 20% site coverage provided for in the Mapleham Rural 4B Zone. He had not prepared figures to set out the percentage of clustered housing on the balance part of the site namely the Pegasus Rural (Special Purpose Area). However he was able to say that open space made up of the golf course, waterways, planting areas, roading and parking areas totalled not less than 91.5% of the entire application site. Accordingly we could conclude that the "built up" areas of the site occupy a relatively small percentage of the entire site.

205. Mr Miskell identified other key elements of the design which supported the maintenance of the rural character. These where the minimum set-back distance of 80m for any building in the vicinity of the State Highway and minimum set-backs of 20m for any buildings in the vicinity of the Mapleham boundary with neighbouring property owners. He among other things listed the adoption of rural roading standards within the home site clusters, such as no kerb and channel and informal tree planting. He also noted that the location of the village green towards the centre

of the site away from existing neighbours and the State Highway also assisted in the maintenance of rural character.

206. In relation to amenity values it was Mr Miskell's key point that the proposal seeks to ensure that dwelling houses are not a dominating feature of the landscape as seen from neighbouring properties or the State Highway. To achieve this he referred to the set-back issue we have already discussed, the clustering of home sites and the 90% of open space achieved by way of the golf course, extensive areas of rural tree planting and ecological enhancement plantings.

207. In stark contrast to these views, we were presented by Mrs Jo Kane with a counter-veiling view. We note that she is not an expert in relation to planning matters or landscape issues in that she does not hold formal qualifications, nor does she have work or project related experience in the specialist areas. She does however have considerable experience as a hearing commissioner weighing and assessing evidence from experts, and reaching decisions based on that evidence.

208. In her forcibly expressed view the proposal is not rural in nature; rather it is more rural-residential and therefore different characteristics could be expected. By this we took this to mean that she considers that there will be adverse effects on the rural character and amenity which she contends should be supported and/or protected by the plan. In her view the mitigation measures proposed such as screening of the dwelling houses and the golf course are not sufficient as a mitigation measure for the protection of the rural character.

209. Mrs Kane contended that the design process is such that it had been aesthetically engineered and in her opinion would forever change the way the "ruralness" of the site is now and would be in the future. She contended that it was really stretching the imagination to think that this development would blend seamlessly with the rural North Canterbury landscape. She was also critical of Mr Blay's view that the proposal will maintain what is anticipated in Rural Zones because of the retention of large open space areas. Mrs Kane did not accept this view, suggesting Mr Blay missed the point that there will be large clusters of houses built with a platform of 6m and they will have a very unrural environmental quality about it.

210. Mrs Kane contended that this site will be more residential in its feel and outlook regardless of the golf course interspersed through the site and regardless of the fact that it will be mostly screened from the State Highway. She did not accept the applicant's view that the proposal would enhance or continue the ruralness of the site, this being an outcome which Mrs Kane contended was anticipated by the Rural Zone in the plan and by the original Mapleham concept. Rather she contended that the result will be a highly modified, densely planted, completely screened site with 98 houses built on a 6m platform and therefore the houses will dominate the site.

211. In completing our assessment as to effects on the key issue of rural character and amenity we must be mindful of the assessments we made earlier in relation to the permitted baseline.

212. We also observe the views expressed by various witnesses on this point. It was Mr Miskell's view that compared to the Mapleham Concept Plan which provided for the permitted baseline the proposal would have less adverse effects on rural character

and amenity values of the site. This was he said due to a greater perceived open space being retained particularly around the more public western side of the site, the clustering of proposed home sites within the site and the application of a comprehensive range of design controls.

213. Much was made by the applicant through the evidence of Mr Bretherton and Mr Miskell in relation to the intention to control the design of building within Mapleham. We record that by the time the applicant furnished its reply this position had changed from the applicant proposing design controls by way of conditions of consent through to it accepting Mr Blay's position that design controls were really a matter for the applicant alone. We agree with this approach. This is because the District Plan as we read it does not provide a basis for us to impose such design controls. The District Plan does not contain any policies and objectives that provide for design controls as a means by which character and amenity effects can be addressed. Rather as we see it, and here we agree with Mr Blay, the main thrust of the plan is to do with the placement of dwellings in relation to each other to ensure that there is an adequate separation distance and also the open space characteristic of the rural zones is retained.

214. Accordingly we have not included in our conditions of consent matters dealing with the design controls issues. For the sake of completeness we note that the applicant still intends to proceed with design controls and in its closing submission to us recorded that it will impose controls by way of covenants registered against the individual titles for the dwellings.

215. Given what we have said about the importance of separation distance and the open space characteristic we have determined that we should include a condition dealing with bulk and location of structures. We think this is needed to achieve these outcomes.

216. Mr Robert Robertson put it that the existing Mapleham Lane land could be effectively "carved up" into 35 rural residential lots of 1 to 1.5 ha each. This creates the strong possibility that each of the 35 lots would reflect the different aspirations of each lot owner resulting in a piecemeal and potentially unattractive entrance to Pegasus town. He noted the lots could vary from a horse paddock to an orchard or a gorse covered vacant lot.

217. Mr Bretherton for his part acknowledged while the permitted baseline for the site is exceeded in terms of the number of dwellings proposed, in his view the effect of the subject proposal is less than what could be established on the site as of right. He noted particularly in relation to the Mapleham Rural 4B Zone that other than District Plan controls over the bulk and location of structures the use and appearance of the 35 allotments could vary dramatically. He considered a hotchpotch of disparate uses, which are individually maintained or not would have the potential to create a jumbled mixture of incongruous activity. He contended that as component parts of the landscape these could detract from the rural character of the area. In contrast he considered the proposal offered an opportunity to make a positive contribution to the rural character of the area by preserving the dominant effect of trees, natural features and open spaces. Whilst the overall density of development is greater than as permitted on the site as of right the abiding effect in his opinion is of a coherent and functional rural landscape.

218. In respect of the balance zone, namely the Pegasus Rural Zone (Special Purposes Area), the permitted baseline as we apprehend it would provide for a large open space which would be heavily vegetated particularly on its boundaries. As we see it, apart from the clusters of houses which will in themselves be screened and have access to the large tracts of open space, the proposal would be in keeping with the permitted baseline for this Zone.

219. We have identified the key effects as being effects on the rural character and amenity. The proposal will increase the density of dwellings beyond that envisaged by the plan with regard to both the Pegasus Rural Zone (Special Purpose Area) and the Mapleham Rural 4B Zone. It will also increase the presence of people and their related activities. However we reached the conclusion that the adverse effects to rural character and amenity will be no more than minor.

220. We have largely accepted the views expressed by Mr Blay, Mr Bretherton and Mr Miskell in this regard. In particular we accept that the localised, discrete and grouped nature of the areas where dwellings and commercial buildings are to be located, the retention of large areas of open space associated with the golf course and the association of that open space with the residential lots and extensive amenity planting will essentially maintain the rural character of the site. We have also been informed in reaching this view by the permitted baseline provided for in the Plan in relation to both the Mapleham Rural 4B Zone and the Pegasus Rural Zone (Special Purposes Area). We do not agree with Mrs Kane that houses will dominate the site, and we note that the building platforms will be only very slightly raised above the levels presently existing on the site.

221. In relation to the balance effects we do not consider that there is any effect which could properly be described as being more than minor. We record the proposed connection point to State Highway 1 is located in a position set out in the District Plan. That access point is designed for Pegasus Town and has been designed to cater for larger volumes of traffic than that to be generated from this application.

222. The internal roads provided for in the application site have been assessed by the Council's engineering staff. In particular they have drawn our attention to the point that the shortfall in legal width in the internal roads will result in an adverse effect to traffic safety that is likely to be less than minor. We accept these views.

223. Parking is not a significant issue given that an independent peer review of the car parking assessment provided by the applicant has been completed. The review has concluded the figures utilised by the applicant in terms of car park numbers were very conservative. We accept this view.

224. In relation to water quality and water and soil contamination, sewage disposal is now to be via the reticulated system to the Eastern Districts Main located to the east of the proposed development. Initial treatment will be undertaken in the Woodend sewage treatment plant and the treated waste ultimately disposed via the ocean outfall. We were told that the sewage treatment plant and ocean outfall have the capacity to deal with the volumes from Mapleham.

225. In relation to water and soil contamination the applicant by way of a late amendment to the application will now install bridges at vehicle crossings of the Taranaki Stream rather than utilise culverts as originally proposed. This measure will reduce potential sedimentation in the stream from the works needed to establish culverts.

226. Earthworks will be required for the construction of a large area of ponds, swales and wetlands created for amenity and storage, treatment and soakage and for roading and dwelling sites. There a potential risk of sediment being discharged to the Taranaki Stream during earthworks for these construction works. The applicant proposes that sediment capture and control mechanisms will be employed to ensure sediment run-off does not create adverse effects to the stream during the construction stage, and to control dust by damping of soil with water when required. Revegetation will occur as soon as practical after construction. An environmental management plan will be prepared by contractors to identify potential adverse effects and to provide strategies for mitigation of any effects. Overall we agree with Mr Blay's conclusion that these measures will appropriately mitigate or avoid potential adverse effects of silt on water bodies and that effects on watercourse are no more than minor.

227. Mr Blay also covered issues relating to fertiliser application on the golf course which we consider to be no more than minor based on his evidence.

228. The application involves the storage and use of hazardous substances. Those will include LPG, petrol, diesel and various agricultural and horticultural sprays. The quantities of LPG, petrol and diesel exceed the permitted standards of the District Plan. The application states that appropriate purpose built secure and self-contained storage faculties with bunding where appropriate will be provided. We accept on this basis that the potential for soil or water contamination will be very limited.

229. During the construction stage heavy machinery will be used to undertake earthworks and cartage of materials, and refuelling and oil changes will be required. The application includes a construction management report which provides that bulk fuel storage will be limited to one site and that site will not be within 20m of any water course, external boundary or the western ridge conservation management area. We were told that drip trays and containers will be in place at dispensing units at all times with sealed waste bins provided for the collection of waste drums, oily rags, oil filters etc. A spill management procedure will be developed and any regulations complied with. On this basis we were well satisfied that there are adequate provisions to avoid site contamination but if a spill were to occur there are measures in place to contain the spill and thereby mitigate the possible effect on soil contamination and water quality.

230. In relation to cultural heritage we were satisfied that the applicant has undertaken extensive consultation with Ngai Tuahuriri Runanga. The evidence of Te Marino Lenihan well satisfied us that Ngai Tuahuriri and Ngai Tahu values, and the relationship with what they described as their ancestral land, waterway sites, waahi tapu and other taonga are recognised and provided for, and measures to avoid remedy or mitigate any actual or potential effects on those values will be implemented. Mr Lenihan recorded that provided an open and honest relationship between the parties continues then the obligations to recognise and provide for matters important to Iwi will be able to be adequately met.

231. Another potential effect is flooding. Mr Blay noted that the potential effects of flood waters within the site are likely to be minor as the areas where dwellings will be located will be raised to the levels set out in the District Plan. Potential effects on areas outside of the site due to the diversion of flood water flows were also, we were told, likely to be no more than minor. Mr Blay recorded that he had checked this position with the Council subdivision engineer and we accordingly accept that advice. We note also that the potential for flooding had been submitted on by officers of the CRC, and their submission was addressed after the applicant made changes to better avoid the risk of properties on the site being flooded.

232. Liquefaction was a further effect discussed. An independent review of the geotechnical assessment provided with the application by Mr McCahon has indicated that the potential adverse effects to structures from liquefaction is likely to be no more than minor due to the relative light weight of the structures proposed and the foundation construction methods and that the District Plan requirements are met. We accept this view.

233. For the sake of completeness we record that we have yet to consider other effects such as the effect of granting consent on the integrity of the District Plan, any precedent effect and any precedent effect of approving the decision. We will come to these matters after we have considered the objectives and policies of the Operative District Plan in relation to determining how this application sits with those objectives and policies of the operative District Plan.

Conclusion on Actual and Potential Effects

234. In conclusion, apart from the matters raised immediately above, we have reached the conclusion that the effects on the environment arising from a grant of the WDC consent are no more than minor.

4.3.3 Objectives and Policies of the Operative District Plan

235. Under s104D(1) we are required to consider whether the proposal complied with the threshold tests of either having minor effects, or not being contrary to the objectives and policies of the relevant plan. Although we have already concluded that certain effects are to be no more minor it is appropriate that we still consider the second threshold test and reach a finding on the same.

236. We were reminded during the course of the hearing that case law suggests "contrary" should be interpreted as meaning oppose in nature, different or opposite to also repugnant and antagonistic.

237. Our starting point is that both Mr Blay and Mr Bretherton generally agreed as to the relevant policies and objectives. While acknowledging that position we wish to concentrate on what we consider are the key objectives and policies. These are those matters contained in Chapter 12 which deal with health, safety and well being and Chapter 14 which deals with Rural Zones.

238. We have already set out a review of the key policies and objectives in Chapter 12 and Chapter 14 in earlier paragraphs noted above.

239. The policies and objectives in both Chapter 12 and Chapter 14 are focussed upon maintaining amenity values and the quality of the environment of the zones in question. Dwelling houses are not to be a dominating feature of the landscape. In addition the open characteristics of Rural Zones brought about by the presence of paddocks, trees, natural features and agricultural, pastoral or horticultural activities are to be maintained or enhanced. Lawfully established farming activity is not to be constrained by subdivision and dwelling house development. The plan seeks a domination of Rural Zones by agricultural, pastoral or horticultural activities and the natural features, clean air, quietness and limited signage are to be maintained and enhanced.

240. As we noted above we consider these policies need be read having regard to the existence of the Mapleham Rural 4 Zone and the Pegasus Rural Zone (Special Purpose Area). For example, while the plan seeks a domination of Rural Zones by agricultural, pastoral or horticultural activities, we think it the case that, as Mr Bretherton put it, meaningful productive agricultural or horticultural activities are not likely to take place on the Mapleham Rural 4B Zone. The same can be said for the Pegasus Rural Zone (Special Purpose Area) - agricultural, pastoral or horticultural activities will not be occurring on this block because the plan intends it to be utilised for sewage disposal.

241. This circumstance affects the policy direction of the Plan. That policy direction is to maintain agricultural, pastoral or horticultural activities. Secondly it is to ensure that lawfully established farming activities are not constrained by subdivision and dwelling house development. Our simple point is that we think it unrealistic to consider that there will in fact be productive agricultural or horticultural activities in either the Mapleham Rural 4 Zone or the Pegasus Rural Zone (Special Purpose Area) because of the zoning of each block.

242. The Mapleham Rural 4B Zone has a specific subdivision standard being a, minimum lot size of 1 ha, an average lot size requirement of not less than 1.5ha and a maximum number of lots being 35. These matters are contained and expressed within the Mapleham: Outline Development Plan Planning Map 147 of the District Plan.

243. Mr Blay noted that the Mapleham Rural 4B Zone does not have any specific guides as to the characteristics to be expected within that zone. He noted that the zoning carries the notation of rural but nevertheless given the outcomes of the zoning it was his opinion that the appropriate amenity values and environmental qualities was more in line with the Residential 4B Zone. We agree with him. Accordingly we also agree with him that the appropriate amenity and character provided for in this zone are likely to be more similar to the Residential 4B Zone than the Rural Zone.

244. Mr Blay helpfully listed the characteristics of the Residential 4B Zone which he contended formed a more appropriate basis for assessment of amenity and character effects which in turn leads us to be able to assess the effects of this activity against the outcomes provided for in the plan.

245. Mr Blay considered several of the characteristics he identified were met by the proposal. These included:

- a predominant activity of living;
- detached dwellings;
- limited numbers of lots located in a rural environment;
- rural style roads;
- rural outlook;
- few vehicle movements;
- access not from arterial road;
- community water and sewage scheme; and
- limited kerb channelling and street lighting.

246. The most critical standard that Mr Blay identified for us was the requirement that the Mapleham Rural 4B Zone have allotments which range between 1 to 1.5 ha in size and that there be a maximum of 35 of them. Mr Blay acknowledged that the proposal would not meet those standards. However he considered the retention of large areas of open space within the golf course, and the perception of that open space being associated with and providing an amenity and environmental quality for, the dwelling lots may maintain an appropriate amenity and character. He considered therefore that the proposal was not contrary to the intended plan approach for the Mapleham Rural 4B insofar as Objective 12.1.1 and Policy 12.1.1.3 are concerned. We agree with both his approach and his conclusion in that regard.

247. In relation to the Pegasus Rural Zone (Special Purpose Area) Mr Blay notes that the allotment sizes intended to be created within the Pegasus Rural Zone (Special Purpose Area) part of the application site are large at being between approximately 1,400m² to 2,500m². He notes that the clustering of the dwelling sites coupled with significant areas of open space remaining within the golf course provides a measure of mitigation by retaining a perception of openness. Also he considers the extensive amenity planting will avoid or mitigate potential adverse effects to rural amenity and quality of environment by avoiding domination of the landscape by dwellings. We agree with his assessment that the proposal is not contrary to Policy 12.1.1.3 or to Objective 12.1.1 as dwelling houses are not likely to be a dominating feature of the landscape.

248. Objective 14.1.1 sets out the characteristics and qualities of the Rural Zone that are to be maintained and enhanced. These in summary form include the dominant effect of paddocks, trees, natural features and agricultural and pastoral or horticultural activities. Separation distances between houses are to be maintained to ensure privacy and a sense of openness and dwelling houses are to be clustered with ancillary buildings and structures on the same site. Other relevant characteristics sought are generally quiet, clean air environment, with limited or no road side advertising.

249. Policies 14.1.1,1, 14.1.1.2 and 14.1.1.3 seek respectively to:

- maintain or enhance the physical characteristics of the Rural Zones by avoiding subdivision and/or dwelling house development resulting in any loss of those physical characteristics or that may constrain lawfully established farming activities;
- maintain the domination of rural zones by agricultural, pastoral or horticultural activities;

- maintain and enhance the environmental qualities of natural features, clean air, quietness and limited signage.

250. Policy 14.1.1.2 seeks to maintain the domination of Rural Zones by agricultural, pastoral or horticultural activities. Bearing in mind our analysis in terms of the permitted baseline we think that the zoning of the subject site into the Mapleham 4B Rural Zone and the Pegasus Rural Zone (Special Purpose Area) impacts on this policy. This is because we think it unlikely that there would be meaningful agricultural, pastoral or horticultural activity on either of those separately zoned parcels of the application site.

251. However in contrast we think that the application does further that particular policy to the extent at least that large tracts of the site will be in open space areas which areas are also present when agricultural, pastoral and horticultural activities take place.

252. In relation to Policy 14.1.1.3 we have little difficulty in concluding that the proposal will maintain and enhance the environmental qualities of natural features, clean air, quietness and limited signage.

253. In relation to policy 14.1.1.2 we observe that the entire subject site makes up only a very small portion of the Rural Zone in the District, and we did not see that the granting of consent would lead to a result where Rural Zones were dominated by anything other than agricultural, pastoral or horticultural activities. More specifically we did consider that because of the retention and enhancement of large areas of open space, principally the grassed area of the golf course we concluded as did Mr Blay that because these factors are common to agricultural pastoral and horticultural activities the maintenance of the domination of the Rural Zone by such activities would not be an issue if consent were granted.

254. Policy 14.1.1.1 is the main challenge. That policy seeks to avoid any subdivision and/or dwelling development where to do so would result in the loss of the physical characteristics of the Rural Zone. Also subdivision is to be avoided where such subdivision would constrain lawfully established farming activities.

255. Dealing with the second element first we think it the case that as Mr Bretherton put it, meaningful productive agricultural or horticultural activities are not likely to take place on the Mapleham Rural 4B Zone. The same can be said for the Pegasus Rural Zone (Special Purpose Area). Agricultural, pastoral or horticultural activities will not be occurring on this block because the plan intends it to be utilised for sewage disposal.

256. In relation to constraining lawful farming activities we accept the evidence of Ms Tracy Freeman that, at least in terms of the Mapleham Rural 4B Zoned area, this proposal will have reverse sensitivity effects less than that provided for within the current Mapleham 4B Rural Zone.

257. In relation to the Pegasus Rural Zone (Special Purpose Area) we did ask questions about the farming activities which are taking place on the land to the south of this part of the application site. We were told that general farming activities occurred and no activity was identified which could give rise to a reverse sensitivity issue, thus constraining lawfully established farming activities on this neighbouring land.

258. Mr Blay in his report noted that there are several lots surrounding the Pegasus Rural Zone (Special Purpose Area) that do not meet the minimum rural lot size and that they

are less than 4ha in area. He noted that these allotments predominate in the band to the immediate south of the application site and to the north of the township of Woodend. This being so we would not think it realistic for an agricultural, horticultural or farming activity to locate giving rise to a reverse sensitivity issue.

259. Returning to the second element of policy 14.1.1.1 we note that the physical characteristics and qualities of the Rural Zone are identified in Objective 14.1.1. We have set them out earlier. We have to ask will the subdivision and dwelling house development here proposed maintain or enhance the physical characteristics of the Rural Zone? Mr Blay noted for us that Objective 14.1.1 provides no weighting between the key physical characteristics listed. He referred to the explanation provided in the plan and suggested that it appears to place a larger weighting on separation distances between dwelling houses as a key device in maintaining rural perspectives and physical characteristics of the Rural Zone. We agree with him.

260. Applying this approach to the separate zones, this objective creates some difficulty in the Pegasus Rural Zone (Special Purposes Area). This zone, with its lack of minimum size provided or internal dimension requirements, creates a unique situation. However having regard to what is here proposed it appears to us that because the applicant is proposing allotment sizes in generous proportions, and that at least one boundary of the allotment will face the golf course or open space area, there will be adequate separation between the dwelling houses to maintain privacy within the individual lots. Therefore a sense of openness for the residences on those lots will be provided. We think it is therefore appropriate as Mr Blay did to consider the proposal as not contrary to Objective 14.1.1 or Policies 14.1.1.1 to 14.1.1.3.

261. For the Mapleham Rural 4B Zone we first record that Mr Blay notes that the minimum subdivision standards and land use requirements within the zone do not in his opinion sit comfortably with the criteria set out in Objective 14.1.1. We agree with him. Nevertheless that is the zoning we need deal with. Applying the same approach in terms of an emphasis on dwelling house separation distances we do think that the sense of openness envisaged for the Mapleham Rural 4B Zone would still be maintained by this proposal. We say this because again the lot sizes are generous, there is access and connection between the lots and the large open space areas provided for within the proposal. We therefore conclude as did Mr Blay that the proposal is not contrary to Objective 14.1.1 and Policies 14.1.1.1 to 14.1.1.3 with regard to the Mapleham Rural 4B Zone.

262. At this point we reach the conclusion that the proposal is not contrary to the core Objectives and Policies of the Plan, namely those in Chapters 12 being Objective 12.1.1, Policy 12.1.3 and Chapter 14 primarily Objective 14.1 and Policies 14.1.1.1 to 14.1.1.3. We accept the analysis provided to us by Mr Blay and Mr Bretherton on this issue.

263. Other objectives and policies for the Pegasus Rural Zone do assist us to some degree in relation to the environmental outcomes for this zone provided for within the District Plan. Objective 14.4.1 seeks to protect the life supporting capacity of soil, air and water resources within the zone and Policy 14.4.1.1 seeks to maintain and enhance the nature conservation and cultural values of the Pegasus Rural Zone. Particularly in relation to Policy 14.4.1.1 the proposal seeks to maintain and enhance both the nature conservation and cultural values found within that part of the Pegasus Rural Zone

which is impacted upon by these applications. We also consider the life supporting capacity of air, soil and water resources will be maintained and enhanced by these applications.

264. Pegasus Rural Zone (Special Purpose Area) is controlled only by the requirement to be in general accordance with the outline plan for Pegasus Township. Mr Blay told us that this means that there should be only one lot but the other requirements such as boundary set-backs, site coverage and separation distances for vehicle entranceways do not apply. The Pegasus outline development plan is Planning Map 142 in the District Plan. Map 142 identifies the special purpose area. We note that Policy 14.4.1.2 which deals with the management of the quality of the environment in the Pegasus Rural Zone seeks to avoid remedy or mitigate adverse effects on the quality, flows and levels of ground and surface waters from the use of the Pegasus Rural Zone for the treatment and disposal of waste water from Pegasus (Town ship).

265. Mrs Kane drew our attention to the explanation underpinning the policy drawing our particular attention to the explanation following Policy 14.4.1.2. In particular the last sentence of the explanation provides:

> *"The use of this part of the zone for waste water treatment and disposal ensures that it has an open spacious character, consistent with the Community's desire to maintain a separation of rural open space between towns."*

266. We observe that this is not part of the policy but acknowledge that the outcome of maintaining a separation of rural open space between towns is a consequence of the policy.

267. While granting consent will reduce the separation between towns, there will in our view be sufficient separation provided by the remaining rural open space to achieve the community's desire to retain such a separation.

268. We note Mr Blay identified other relevant objectives and policies contained within the District Plan which he considers are relevant to this proposal. His views were support by Mr Bretherton. We comment upon them briefly for the sake of completeness.

269. Mr Blay identified objectives in Chapter 2 which seek to recognise and provide for the concept of Manawhenua in the practice of Kaitiakitanga in the management of natural and physical resources and to recognise and protect Wahi Taonga and Mahinga Kai resources that are important to the Tuahuriri Runanga. The policies associated with these objectives initiate processes to identify and subsequently avoid, remedy or mitigate adverse effects on the cultural and traditional values associated with the Wahi Taonga, to protect Koiwi Tangata and Maori artefacts and to enable the enhancement of Mahinga Kai and surrounding taonga to provide a sustainable resource for the use by future generations. It was Mr Blay's view based largely upon the evidence of Mr Lenihan that the proposal is likely to result in an improvement in the natural values of the area and waterways by returning them to a more natural native state. This will assist in the enhancement of habitat and thereby the protection of Mahinga Kai. He was of the opinion, and we agree with him, that the proposal was not contrary to the objections and policies of Chapter 2.

270. Chapter 3 of the plan deals with water. Put broadly the relevant policies are to avoid, remedy or mitigate adverse effects on water quality, natural character, ecosystems, habitat of trout and salmon, significant amenity and recreational values of rivers and their margins, and Mahinga Kai resources, Wahi Taonga and other matters significant to Maori, including the Mauri of water. In addition, policies are directed at avoidance or mitigation of any adverse effects of the use, development or protection of land on the water quality of groundwater aquifers and the maintenance and enhancement of public access to and along rivers.

271. Again, as earlier noted the application involves mechanisms to avoid or mitigate adverse effects on water quality they include environmentally aware construction methods, sediment control measures, identification, protection and investigation of sites important to Maori and exotic vegetation removal during the restoration and enhancement of streams and wetlands.

272. Mr Blay in his report noted that an esplanade requirement is relevant for the Taranaki Stream. He noted that the purpose of the esplanade requirement is listed in Table 32.1 of the District Plan as being for natural hazard mitigation and conservation purposes only. The proposal is to establish a publicly accessible golf course and to enhance the riparian margin of the Taranaki Stream and restore the Taerutu Gully. While general public access to the Taranaki Stream will not be available, this arrangement will nevertheless have benefits according to Mr Blay for public access in the area of the Taranaki Stream and would meet the District Plan requirements. He concluded that the application was therefore not contrary to Objectives 3.2.1, 3.3.1 and 3.4.1 and to Policies 3.2.1.1, 3.3.1.1 or 3.4.1.1. We agree with him for the reasons he put forward.

273. Chapter 4 deals with land and water margins. These policies are directed towards the maintenance and enhancement of the life supporting capacity of the land resource. Associated policies direct consideration to contributing factors such as soil loss, non point source pollution of waterways, potential adverse effect to stream margins, aquatic habitats and wetlands, and the promotion of land uses which safeguard the life supporting capacity of soils.

274. Mr Blay referred us to the large amount of earthworks associated with the proposed construction of the golf course and stormwater management system, and raising of building platforms. He pointed out to us that there is a potential for soil loss to occur at this stage through wind and water action or cartage of materials from the site. However, he was of the view that sediment control measures proposed by the applicant would have the ability to avoid or mitigate potential adverse effects.

275. With regard to the promotion of land uses which safeguard the life supporting capacity of soils and promote their ability for future uses, Mr Blay noted that the vast majority of the area is to become a golf course. Future uses of the soil within the golf course would be preserved and available for future generations.

276. He considered that the proposal was not contrary to the objectives and policies of Chapter 4. We agree with him.

277. Chapter 6 contains policies concerning the safeguarding of indigenous biological diversity and ecosystems, the maintenance, enhancement and restoration of wetland

ecosystems and the maintenance, enhancement and restoration of waterways as areas of indigenous vegetation, Mahinga Kai and habitats of indigenous fauna. Policy 6.1.1.5 directs that adverse effects of activities on the intrinsic values of indigenous ecosystems should be avoided, remedied or mitigated. In particular, ecosystem integrity, form, functioning and resilience are identified. Mr Blay noted, as did many other witnesses, that because the Mapleham area had been the subject of intensive development for farming purposes little indigenous vegetation remained and the remaining indigenous fauna was largely dependent upon exotic plant species. The proposal contains commitments to restore and enhance existing stream margins and wetland areas and to create a large amount of additional wetland area utilising indigenous plant species. This would, according to Mr Blay, add to the integrity, form, and function and resilience of indigenous ecosystems both in the immediate area and in associated areas where a corridor or stepping stone function can be provided.

278. Policy 6.2.1.1 seeks to safeguard the ecological integrity and natural functioning of wetlands. Because the application will create several wetland water storage areas and will dam and restore the Taerutu Gully and the riparian areas of the Taranaki Stream, water will be retained within the site and continue to be available water for existing wetland sites. We agree with Mr Blay in that the ecological integrity and natural functioning of wetlands within and adjacent to the site will be at least maintained, if not enhanced. We also agree with his view that the proposal is not contrary to Objective 6.1.1, 6.2.1 and 6.3.1 and Policy 6.1.15, 6.2.1.1, 6.3.1.1 and 6.3.1.2.

279. Mr Blay referred us then to Chapter 8 which deals with natural hazards. Objective 8.2.1 seeks to achieve appropriate protection from flood events.

280. The entire Mapleham Rural 4B zone has been identified as being subject to potential flooding from any outbreak of the Ashley River and a minimum floor height of 6m above mean sea level has been imposed as a method to avoid this flood hazard. The applicant confirms that dwellings are to be located on ground levels raised to comply with this requirement.

281. A related issue under this policy is the diversion of the flood waters from the site on to adjoining sites. Mr Blay noted that the mounding provided for on the site appears likely to direct flows either into the Taranaki Stream or into the central area of the golf course and then into the Taerutu Gully and other storm management areas. Therefore, deflection of flows towards neighbouring areas are likely to be minimised although not entirely eliminated.

282. Objective 8.3.1 deals with liquefaction. We have already discussed this matter. The applicants supplied a geotechnical assessment with the application which concluded that the areas on which the buildings will be located are not at significant risk from liquefaction or lateral spreading. Council commissioned an independent review of that report by Mr McCahon. The review was supportive of the applicant's assessment. Accordingly we accept Mr Blay's view that the proposal is not contrary to Objectives 8.2.1, 8.3.1 and Policies 8.2.1.1, 8.2.1.2, 8.2.1.3, 8.2.1.4 and 8.3.1.1.

283. Chapter 9 deals with heritage issues. Objective 9.1.1 seeks recognition and protection of heritage sites, structures and places meeting the criteria set out in Policy 9.1.1.1.

284. Through the course of the presentation of evidence and written material it is clear to us extensive archaeological investigation and consultation with local Maori has been undertaken and will continue to be undertaken. This will greatly contribute to the knowledge base relating to the area and will provide an archaeological register of heritage resources in the area. There are accidental discovery protocols provided for in suggested conditions. We will discuss this matter in the condition section of our decision in greater detail.

285. Mr Blay reached the view that the proposal was not contrary to Objective 9.1.1 or its associated policies. We agree with him.

286. Mr Blay referred us then to Chapter 11 Utilities and Traffic Management. The objectives and policies in this section of the plan are to do with the role of utilities in maintaining of enhancing the community's social economic and cultural wellbeing and its health and safety. Inadequate roading infrastructure is also addressed by these policies.

287. Given that the applicant intends to provide reticulated sewer and potable water, an integrated stormwater management system, electricity, telephone and gas to residential lot boundaries. We agree with Mr Blay, given that Objective 11.1.1 and its associated relevant policies are met.

288. Similarly in relation to roading, we do not see that there is an issue and conclude that the proposal is consistent with Objective 11.1.1 and Policies 11.1.1.1 through to 11.1.1.6.

289. Onsite car parking is dealt with in Policy 11.1.1.7. Based on the evidence provided and the further review of that evidence by Mr Ray Edwards of Urbis Consultants, we are well satisfied that the proposal is consistent with Policy 11.1.1.7.

290. Objective 11.2.1 and its associated policies seek to avoid, remedy or mitigate adverse effects caused by the provision, use, maintenance and upgrading of utilities. We have earlier detailed how this proposal intends to be serviced by utilities. In short there will be reticulated services provided which will integrate with the existing infrastructure importantly a storm water management system will be constructed which will treat run-off and release that run-off to the Taranaki Stream in a controlled manner. Accordingly we agree with Mr Blay when he reaches the conclusion that the proposal is not contrary to Objective 11.2.1 and Policy 11.2.1.1.

291. Policies 12.1.1.5 and 12.1.1.6 deal with the effect of glare from artificial lighting. In the opening part of this decision we noted that the lighting within the development is to be limited to road intersection with the main access road. Low bollard lighting directed towards the ground will be located along pedestrian pathways. Design guides are provided to avoid light spill from the residential lots. We did note that the Council's roading engineer is seeking to impose a condition requiring lighting over pedestrian areas be placed on poles. We accept the reasoning behind this stance and we do not think that this recommendation affects our overall finding that the proposal is consistent with Policy 12.1.1.5 and 12.1.1.6.

292. Noise is referred to in Policies 12.1.1.7 and 12.1.1.8. Those policies seek to control noise levels such that they do not adversely affect amenity values and the health and safety of people on neighbouring sites. Policy 12.1.1.9 is aimed at traffic noise.

293. We have little difficulty in concluding that there will be generation of noise caused by activities undertaken within the proposal site that is likely to be unreasonable within either the Pegasus Rural Zone or the Mapleham Rural 4B Zone. The roading layout provides for a number of cul-de-sacs with limited numbers of houses. We accept Mr Blay's view that this will mitigate and/or reduce the amount of perceived traffic noise. Accordingly we agree with his view that the proposal is not contrary to Policies 12.1.1.7, 12.1.1.8 and 12.1.1.9.

294. Policies 12.1.1.10, 12.1.1.11 and 12.1.1.12 deal with storage and use of hazardous substances. The key element emerging is that the storage facilities need be secure and appropriately located with suitable spill containment measures and explicit emergency management procedures.

295. We note that it is intended to reticulate the development with natural gas. Storage quantities of LPG will exceed the permitted standard of 6 tonnes within the Pegasus Rural Zone. The storage facility will be located within a utility lot (lot 213) and will need to be constructed to industry standards. The site will be secured by a security fence.

296. We also note quantities of petrol and diesel exceeding permitted standards are to be stored within the golf maintenance area. A secure storage facility with bunding and spill containment measures is to be constructed.

297. Therefore, given these measures we agree with Mr Blay's assessment that the proposal is not contrary to Policies 12.1.1.10, 12.1.1.11 and 12.1.1.12. We also agree with Mr Blay's assessment that the proposal is not contrary to Objective 12.1.1 in relation to the issues discussed immediately namely glare, noise and hazardous substance because the amenity values and quality of the environment will be maintained and that the health, safety and wellbeing of people will be protected.

298. Objective 18.1.1 seeks that the sustainable management of natural physical resources and recognises and provides for:

- Changes in the environment of an area as a result of land use development and subdivision;
- Changes in the resource management expectations the community holds for the area; and
- The actual and potential effects of subdivision, use and development

299. Policy 18.1.1 requires growth and development proposals to provide an assessment of how:

- The sustainable and integrated management of natural and physical resources affected by the proposal will be achieved; and
- Adverse effects will be avoided, remedied or mitigated.

300. In relation to these policies Mr Blay identified for us two matters which have not already been previously addressed. The were:

- Maintenance and enhancement of the form and function of district towns.
- Enabling local communities to be more self sustaining.

301. Mr Blay was of the view that the proposal will maintain the form and function of other towns in the district. In particular it is likely to enable the Woodend community to be more self sustaining. He reached this conclusion because the form and function of Woodend will be maintained due to physical separation of this development from the Woodend township. He considered the increase in local population is likely to increase visitor numbers due to the use of the golf course and other sporting or entertainment facilities. He contended that this was likely to generate more business opportunities within Woodend and would enable justification and would support upgrading of infrastructure and/or roading in the area. We agree with these assessments and we also agree with Mr Blay's view that the proposal is not contrary to Policy 18.1.1 or Policy 18.1.1.1.

Conclusion on Policies and Objectives

302. In conclusion then it is our finding that the proposal is not contrary to the objectives and policies of the District Plan in relation to either the Pegasus Rural Zone (special purpose area) or the Mapleham Rural 4B Zone. We accept Mr Blay's opinion that the proposal will maintain rural amenity, quality of the environment and character within the unique situations provided by the Pegasus Rural Zone (special purpose area) and the Mapleham Rural 4B Zone.

4.3.4 Other matters

303. For the purpose of this of this non-complying activity resource consent we must be satisfied that the s104D test can be met. However, we still have an overall discretion to exercise under s104. In particular, under s104(1)(c) we are required to have regard to what the Act refers to as:

> *"Any other matter the consent authority considers relevant and reasonably necessary to determine the application".*

Under this context we consider issues of integrity of the plan and consistent administration of the plan.

304. Because the activity before us is a non-complying activity it is important to have regard to public confidence in the District Plan and the consistent administration of these provisions. There is considerable case law surrounding these matters. In summary form and acknowledging we are probably over paraphrasing the matter the case law requires that there must be some differentiating characteristics in the proposal seeking consent that separates it from the generality of other proposals. Otherwise the grant of consent would adversely affect the integrity and the consistent administration of the plan. This is commonly expressed using words which describe some element of the application which is either unique or at least very unusual such that it sets this application apart from others. It is that differentiation from other sites or applications that is relied upon to support approval.

305. We have identified through the evidence of Mr Blay in particular a number of factors or features which we think supports the view that this application is unique. The key factor is the zoning of the subject site. The plan by providing for the Mapleham Rural 4B Zone and the Pegasus Rural Zone (Special Purpose Area), each with their own requirements, sets this site apart from the generality of others. Mr Blay tells us that there is no other Mapleham Rural 4B zone in the District Plan. He also explains that the Pegasus Rural Zone (Special Purpose Area) is also unique with no other similar zoning within the plan. He drew attention to the point that there was a Pegasus Rural Zone, however that did not have an overlay of a Special Purpose Area. This in itself sets it apart from the balance of the Pegasus Rural Zone which in any event we note has a focus on conservation issues.

306. The location of the application site is also worthy of mention in this regard. The application site is nearby to the location of the Pegasus 6 and 6A zonings. The Pegasus Rural Zone is some 400m or so from the Woodend town boundary and is approximately 100m from the Pegasus Residential 6 and Residential 6A zones. A further unique feature we consider is the fact that the proposal is an integrated approach to create a golf course with associated infrastructure and residential sites incorporated within that golf course.

307. For these reasons we are satisfied that the granting of consent would not create any precedent effect. In addition, because of the unique features we have referred to, particularly those in relation to the existence of the Mapleham Rural 4B and Pegasus Rural Zone (Special Purpose Area) that do not appear elsewhere within the plan, we consider that the approval of the application would not result in inconsistent administration of the plan.

308. If it were the case that these particular zonings did not exist and dominate the application site then we can signal that our thinking would have been quite different on this point.

4.4 *The Applications to Canterbury Regional Council*

4.4.1 Actual and Potential Effects

309. We consider the actual and potential effects of the present applications to the CRC to be:

- effects from construction works, including those in the beds of watercourses;
- effects of the discharge of contaminants on surface water quality:
- effects of the discharge of contaminants on groundwater quality;
- effects on surface water flows, including flood flows; and
- positive effects from ecological enhancement.

We assess these in turn.

Effects From Construction Works

310. There will be significant construction works undertaken as part of the proposed development. These include cutting and filling to form the golf course, the ponds, building sites, the facilities area and roads. There will also be works undertaken in the beds of the Taranaki Stream and Taerutu Gully to remove existing exotic vegetation such as willows and invasive weeds, and replace these with indigenous species. All these works could result in sediment entering watercourses with adverse effects on existing instream values.

311. The site is virtually flat and the extent of cut and fill involved is not great. We are satisfied that good construction management techniques can ensure that any adverse effects on waterways are almost entirely avoided, and we have provided for this in the consents granted. Now that bridges rather than culverts are proposed for the crossings of the Taranaki Stream within the golf course, there will be no need to divert the stream during construction of the crossings.

312. Of more potential significance are the effects of removing existing vegetation in and alongside watercourses and replacing it with indigenous species.

313. In the Taerutu Gully effects on downstream water quality can be largely avoided by the construction of a bund at the lower end of the gully prior to vegetation removal and re-establishment taking place. As the gully does not contain water that flows in most circumstances, the bund will very largely prevent water contaminated by sediment entering the Taranaki Stream. During flood conditions water containing sediment will flow over the bund, but this will be at times when sediment loads in the Taranaki Stream are high in any case. In the longer term the native species to be planted in the Taerutu Gully, along with the bund present to allow stormwater detention, will mean that any effects of the discharge from the gully on water quality in the Taranaki Stream will be no greater than those that exist presently.

314. The effects of removing exotic vegetation alongside the Taranaki Stream will inevitably involve some sediment entering the stream due to the disturbance of soil along the riparian margin. There will be some potential temporary effects on instream communities, along with disturbance of existing native species from the riparian margin.

315. The application and AEE outlines mitigation measures to control sediment generation from vegetation clearance along the stream. These include temporary instream sediment traps, and the selective and staged removal of vegetation. We agree with Mr Brough that a management plan should be prepared to cover these activities, and we have provided for this in conditions of consent. We note that while there may be some minor, short term adverse effects from this removal of vegetation, there will be significant long term benefits from ecological restoration and enhancement of the stream. This is certainly compatible with the objectives of the Waikuku Water Users Group, who have also promoted riparian planting and ecological restoration in the Taranaki Stream. We do not consider it is necessary to compel the construction of a sediment trap in the bed of the stream as sought by the WWUG, but we do envisage the management plan providing for some form of temporary silt trap in the stream.

Effects of the Discharges of Contaminants on Surface Water Quality

316. There are several potential sources of contaminants that could affect surface water quality in the Taranaki Stream and Taerutu Gully. These include sediment generation during construction, which we have discussed above, potential effects from the storage of fuel and other hazardous substances on the site during construction and for the maintenance of facilities and the golf course, the use of herbicides and pesticides on the golf course, and the discharge of contaminated stormwater.

317. The application discusses the management of hazardous substances on the site, and proposes comprehensive measures to ensure they do not contaminate natural water. It proposes spill management procedures will be provided for in the contractor's environmental management plan. Again we agree with Mr Brough that the submission of such a plan to the CRC prior to construction works being initiated on the site is an appropriate means of ensuring such effects do not occur. We have provided for this in the conditions of consent.

318. Once the development is completed, impervious surfaces such as roads and carparks will generate stormwater contaminated by substances such as sediment, heavy metals and hydrocarbons. Herbicides and pesticides may be used on the golf course.

319. The applicant has proposed a very comprehensive "treatment train" to avoid or mitigate any effects of stormwater discharges and other run-off on watercourses. In all but two short sections of road near the Taranaki Stream, this involves treatment by swales or filter strips prior to discharge to the amenity lakes on the golf course. This water will subsequently be used for irrigation. During high flow events water will discharge to the Taerutu Gully, from where it will discharge to Taranaki Stream about 15 times per year. For the two short sections of road stormwater will be treated by swales or filter strips prior to discharge to the stream. This is standard treatment practice for stormwater treatment from new subdivisions. We are satisfied that the comprehensive treatment proposed will avoid any adverse effects on water quality in either Taerutu Gully or Taranaki Stream.

Effects on Groundwater Quality

320. Contaminants from the site could contaminate shallow groundwater. This could be either by seepage from the amenity lakes on the golf course, or from seepage through the soil. The amenity lakes will be sealed (primarily to reduce liquefaction hazards) and any discharge through the soil will have only very minor effects at most (and indeed will likely be less than would occur from ploughed pasture).

Effects on Surface Water Flows, Particularly Flood Flows

321. Flows generated during heavy rain on the site will flow primarily to the amenity lakes on the golf course, and from there to the wetland in Taerutu Gully. The application states that storage in these systems will be sufficient to contain a 24 hour "1 in 100 year" storm. Discharge from Taerutu Gully to Taranaki Stream will occur only when the wetland is full, and is expected to occur about 15 times per year.

322. The discharge from Taerutu Gully will be controlled by an orifice plate. This will mean that post development run-off from the site will be no greater than pre-development run-off. Accordingly, any effects on flood flows in the Taranaki Stream will be no more than minor.

323. No concerns were raised about the effects of the proposed development on low flows in the Taranaki Stream. We cannot envisage any such effects occurring, as at no time will water be taken from the stream for Mapleham. Clearly we cannot impose the condition sought by the WWUG preventing the applicant having adverse effects on flows in the Taranaki Stream as no consent has been sought to take water from the stream, and we cannot constrain Pegasus Town Limited from making such application in the future.

Positive Effects of Ecological Enhancement

324. As emphasised by several witnesses for the applicant, there will be significant benefits from the ecological enhancement of watercourses on Mapleham. In particular, Taerutu Gully will be transformed from an overgrown willow and weed infested depression into a revegetated wetland with substantial ecological value, which will provide potential habitat for species such as pukeko and bittern. The reach of Taranaki Stream to be restored will also be much more natural, and we would encourage the applicant to work with the Department of Conservation to allow similar restoration of the drainage reserve along the stream vested in the department.

325. Our understanding is that tangata whenua sought the restoration of Taerutu Gully, and we commend them for that. We do not share Mrs Kane's view that the enhancement proposed is "insulting" – rather we see it as providing benefits that certainly help remedy any adverse effects that result from the Mapleham concept development.

Conclusion re Effects of the Applications to the CRC

326. As summarised in the above discussion, we are satisfied that the effects of the applications to the CRC are no more than minor. Further, the applicant has committed to a range of measures that will avoid, remedy or mitigate the potential adverse effects of the development, and there are some positive effects resulting from ecological enhancement.

4.4.2 Provisions of Statutory Instruments

327. Two statutory instruments prepared by the CRC are relevant to the present applications. These are the Operative Regional Policy Statement, and the Proposed Natural Resources Regional Plan.

The Regional Policy Statement ("the RPS")

328. We have examined the relevant Objectives and Policies in Chapters 6 -10 and 12 of the operative RPS. In our view there is nothing in those Objectives and Policies that weigh against granting the consents sought from the CRC.

The Proposed Natural Resources Regional Plan ("the PNRRP")

329. Variation 1 of the PNRRP, which covers water quality and land use, was publicly notified on 3 July 2004. It is still going through the formal submission process, and no hearings have been held.

330. Accordingly, we are required to have some limited regard to the relevant Objectives and Policies in the PNRRP. We have examined these Objectives and Policies as they relate to the present applications. In our view there is nothing in those Objectives and Policies that weigh against granting the consents sought from the CRC.

4.5 Part II of the Act

Section 5

331. This section of the Act defines sustainable management. We consider the present applications are consistent with the definition in the Act, noting particularly that:

- The proposed activities will allow the applicants and the local community to help provide for their social and economic needs. It will also provide significant employment opportunities, and other downstream benefits, for the local community and the future residents of Pegasus town. Local recreational opportunities will be provided on the golf course.
- The proposed activities will not compromise the reasonable needs of future generations, nor will they have adverse effects on the life supporting capacity of water or ecosystems.
- The potential adverse effects of the proposed activities can be adequately avoided or mitigated through the conditions imposed on the consents granted.
- There are some positive benefits from the ecological remediation works that will be carried out by the applicant.

Section 6

332. Section 6 of the Act lists seven matters of national importance that we must recognise and provide for in this decision. Four of these matters are potentially relevant to the present application. We agree with the applicant that there are no outstanding natural features or landscapes at Mapleham, nor are there areas of significant indigenous vegetation or habitats of indigenous fauna.

333. Section 6(a) requires, inter alia, the preservation of rivers and their margins from inappropriate subdivision, use and development. This requirement of the Act is met, particularly as the margin of the Taranaki Stream on the site will be restored to a much more natural state than presently exists.

334. Section 6(e) requires the consideration of the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga.

335. As discussed in the evidence of Mr Lenihan, the applicant has worked closely with tangata whenua. The proposed development is close to the site of Kai-a-poi pa, which is of great cultural significance to Ngai Tahu. It will not however impinge upon the pa site, and the development recognises cultural values through measures such as acknowledging the former kumara cultivation area on the north of the site, and the restoration of Taerutu Gully. Further, there is no discharge of untreated stormwater to water, and the associated proposal for Pegasus town allows for the protection of a historic greenstone working site. Accordingly we conclude that the proposed development is consistent with Section 6(e) of the Act.

336. Section 6(f) means that we must consider historic heritage. This was addressed comprehensively by Dr Witter, and is provided for in the Section 12 HPT consent. There is an accidental discovery protocol. We have provided for these matters in the

conditions of consent, and are satisfied the applications are consistent with Section 6(f) of the Act.

Section 7

337. This section of the Act lists eleven matters that we must have particular regard to. Four of these matters are of potential relevance to the present application.

338. The first of these matters is kaitiakitanga. Tuahuriri consider themselves as kaitiaki of the subject land, and they were strongly involved in the planning process for the catchment. We are satisfied that their involvement means the kaitiaki status of Tuahuriri has been had particular regard to in developing the Mapleham concept.

339. For the reasons we have set out earlier we think that amenity values will be maintained and enhanced. The provision of large open space areas and comprehensive plantings will both maintain and enhance the open space amenity.

340. Granting the present applications will have effects on the quality of the environment. As we have already discussed in some detail, we see most of those effects as being relatively neutral, with a public recreational resource replacing present pastoral land. There will be significant benefits for environmental quality in the Taranaki Stream and Taerutu Gully due to the extensive habitat restoration to be undertaken as part of the overall proposal.

341. Trout are present in the Taranaki Stream. We do not consider the proposed developments will have adverse effects on water quality or trout habitat in the stream. The ecological restoration works to be undertaken may slightly improve trout habitat. Accordingly, we are satisfied that the requirement to have particular regard to the habitat of trout is met by the proposed development.

Section 8

342. The information available to us indicates that the present applications are not inconsistent with the Principles of the Treaty of Waitangi. We were not made aware of any taonga that need active protection that would be compromised by granting the applications.

4.6 Section 105 of the Act

343. As the application is for a discharge to the environment regard must be had to the criteria in Section 105(1) of the Act, which are

> *(a) "the nature of the discharge and the sensitivity of the receiving environment to adverse effects;*
> *(b) the applicant's reasons for the proposed choice; and*
> *(c) any possible alternative methods of discharge, including discharge into any other receiving environment".*

344. Case law requires the consent authority to find whether, in proposing a discharge of contaminants, the applicant has given adequate consideration to alternatives that would avoid, remedy or mitigate the effects of the discharge of contaminants, and then made a reasoned choice.

345. We are satisfied that this is the case. The sediment control methods proposed by the applicant during the construction phase are appropriate, provided they are fully implemented. They are consistent with best practice on a site such as Mapleham.

346. Similarly we are satisfied that the long term stormwater treatment proposed by the applicant is a reasoned choice. Stormwater will be treated to a very high standard where this is practicable, and any discharge is likely to contain only low levels of contaminants.

4.7 Section 107 of the Act

347. We must also have regard to the criteria in Section 107 of the Act, which apply to all discharges to water. The relevant provisions read (in paraphrased form) as follows:

> *"(1) Except as provided in subsection (2), a consent authority shall not grant a discharge permit allowing the discharge of a contaminant or water into water. if after reasonable mixing, the contaminant or water discharged is likely to give rise to all or any of the following effects in the receiving waters;*
>
> *(c) The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;*
> *(d) Any conspicuous change in the colour of visual clarity;*
> *(e) Any emission of objectionable odour;*
> *(f)) The rendering of fresh water unsuitable for consumption by farm animals;*
> *(g) Any significant adverse effects on aquatic life*
>
> *(2)) A consent authority may grant a discharge permit to do something that would otherwise contravene section 15 [or section 15A] that may allow any of the effects described in subsection (1) if it is satisfied –*
>
> *(a) That exceptional circumstances justify the granting of the permit; or*
> *(b) That the discharge is of a temporary nature; or*
> *(c) That the discharge is associated with necessary maintenance work –*
> *And that it is consistent with the purpose of this Act to do so."*

348. We think it is likely that the provisions of Section 107 relating to the discharge of sediment will be breached during the works to remove existing exotic vegetation from the Taranaki Stream. We are satisfied that this effect is temporary, and that accordingly the exemption provisions of subsection (2) can be applied. In saying this, we note also there are long term benefits from the works being undertaken.

349. We are very confident that the stormwater discharges from the developed Mapleham property will not contravene the provisions of Section 107(1). We have included those

narrative standards on the relevant consents to ensure that these provisions are met at all times by the ongoing discharges.

4.8 Overall Conclusion of our Evaluation

350. Having considered all of the relevant matters under Section 104 and Part II, as discussed above, we consider that all the applications can be granted subject to appropriate terms and conditions. Our main reasons for this are as follows:

- In relation to the consent applications to the WDC we have concluded that having regard to the mitigation measures proposed by the applicant and being informed by the permitted baseline test the environmental effects from this proposal we conclude will be no more than minor.

- In relation to the Objectives and Policies of the Operative Waimakariri District Plan we are satisfied that what is here proposed does not run contrary to those Policies and Objectives as they relate to the subject site. We also record that we accept that this proposal and the subject site give rise to some unique features which sets this proposal apart from the generality of cases. This being so we are well satisfied that the integrity of the District Plan will not be imperilled nor will a precedent effect arise from the grant of this consent.

- In relation to the consent applications to the CRC, we consider that provided good development practice is followed on the site, the effects of the activities for which consents are sought will be no more than minor. Adverse effects can be avoided or mitigated, and there are positive benefits from restoration of stream and wetland habitats.

- There are no provisions in either the operative Canterbury Regional Policy Statement, nor in the Proposed Natural Resources Regional Plan, that weigh against granting the applications.

- The applications meet the requirements of Sections 105 and 107 of the Act.

- The proposed development is consistent with the principle of sustainable management in Section 5 of the Act, and there are no other Part II matters that weigh against granting the applications sought.

6 Conditions

351. There were four main matters relating to the conditions on which the consent is granted that we had to consider carefully. We discuss these in turn.

6.1 Duration of Consents for Construction

352. All the applications to the CRC were sought for a duration of 35 years. Five of those consent applications (CRC 061211 – 061215 inclusive) are for activities associated with site construction, such as removal of existing vegetation from the Taranaki Stream and Taerutu Gully, and sediment discharges during site excavation and filling.

353. We had raised the issue of whether it was appropriate that those consents all be granted for 35 years, given that construction activities associated with the development of the site are likely to take no more than 2-3 years. Further we suggested that a term of about 10 years would be appropriate.

354. The applicant took this matter on board and agreed that the construction consents could be issued for a shorter term, which they have suggested be 15 years. We have agreed to that. In doing so, we suggest that the applicant surrender the consents related to the construction of the site once that construction is completed. This will ensure that they are not charged fees for the administrative costs of consents that are no longer necessary.

6.2 Other Matters

Provision of an Esplanade Reserve

355. There had been some debate at the hearing as to whether an Esplanade Reserve needed to be taken along the Taranaki Stream. In the Waimakariri District Plan such reserves or strips along the Taranaki Stream are provided only for the purposes of mitigating natural hazards and conservation. In his report Mr Blay recommends an esplanade strip of 10 metres be provided. We agree with him and we have provided for this in conditions of consent.

Are Building Restrictions Needed on the District Consents

356. In his verbal comments Mr Blay said the Council would not be supportive of a condition included in the land use consent to control building design within the Mapleham Development. The applicant originally favoured the inclusion of such controls as a condition of consent, but in their right of reply indicated they would be comfortable taking responsibility for this matter. For the reasons advanced earlier in this decision we conclude that it is appropriate that the applicant take responsibility for this matter and record it is their intention to deal with the issue by way of placing covenants on the titles to be created within the subdivision.

Conditions on the CRC Consents

357. Although at the hearing there were some significant differences between the applicant and the reporting officer Mr Brough about some of the conditions imposed, almost all of the conditions eventually recommended by Mr Brough were accepted by the applicant. We have taken on board most of the minor suggested amendments by the applicant, including removing a requirement to liaise directly with the Waikuku Water Users Group during activities that may generate sediment in the stream, and to clarify the 1 in 100 year design standard for secondary flood flow paths on the site.

358. We have also added a new Condition 5 to CRC 061218 to require the applicant to provide design plans for the stormwater system to the CRC. In several places we have added a requirement for the applicant to comply with the provisions of the management plans that they must prepare. This is because we consider there is little point in preparing a management plan if there is no requirement to comply with that plan.

Dated this 13th day of February 2006

Paul Rogers
Chair of the Hearing Committee

7 Decisions

Applications to the Waimakariri District Council

Subdivision

THAT pursuant to Section 104B of the Act or the RMA, consent be granted to subdivide Lot 1 DP 77303, Lot 2 DP 77303, Pt Lot 2 DP 1799, Lot 1 DP 80926, Lot 1 DP 327014, Sec 1 SO 20252, and Lot 1 DP 76141 comprising 127 hectares into Lots 1 to 98 (approx 1400m^2 to 2600m^2), Lot 200 (0.4732ha), Lot 201 (4.7247ha), Lot 202 (0.7913ha), Lots 203 to 211, 213, 600 and 601 (totalling 75.0662ha), Lot 214 (0.5418ha), Lots 800 to 805 (3.4292ha), Lots 215 and 216 (0.2770ha), Lots 700 to 702 (0.0619ha) and Lots 500 to 505 (10.3071ha) at 1220, 1221, 1228, 1250, 1266, 1274 and 1276 Main North Road, Woodend as a non-complying activity subject to the following conditions which are imposed under Section 108 of the Act:

THAT pursuant to Section 125 of the Act or the RMA, this consent shall expire 10 years from the date of issue, being 13 February 2016.

1. Except where necessary to give effect to the following conditions, the activity shall be carried out in accordance with the attached approved application plans numbered Plan 1, Plan 2, Plan 3, Plan 4, Plan 5, Plan 6, Plan 7, Plan 8, Plan 9, Plan 10, Plan 11, Plan 12, Plan 13, Plan 14, Traffic Design Group Drawing 7443/3MAR, Traffic Design Group Drawing 7443CTB-SHT and Plan 21.

2. **Connection to State Highway**

   The consent holder shall provide written confirmation from Transit New Zealand that a Section 93 Notice, pursuant to the Transit New Zealand Act 1989, has been obtained for permanent access via the limited access road, being State Highway 1, prior to the issue of a Section 224c certificate.

3. **Archaeological Sites Protocol**

3.1 A consulting archaeologist shall monitor all earthmoving activities and shall advise on methods to be undertaken to ensure that adverse effects on archaeological values are avoided, remedied or mitigated. The consent holder shall consult with Te Rununga o Ngai Tahu and Te Ngai Tuahuriri Rununga regarding the appointment of the archaeologist.

3.2 The consent holder shall provide the consulting archaeologist, Te Rununga o Ngai Tahu and Te Ngai Tuahuriri Rununga, the following information no less

than 25 working days prior to any earth-moving works:

- A schedule of the dates of all significant earthmoving events, their sequence and duration;
- A summary of all measures being undertaken to ensure that adverse effects on archaeological values are avoided, remedied, reduced or mitigated.

3.3 The consent holder shall invite Te Rununga o Ngai Tahu and Te Ngai Tuahuriri Rununga to attend any episode of monitoring or earthmoving activity.

3.4 The consent holder shall provide Te Rununga o Ngai Tahu and Te Ngai Tuahuriri Rununga and the New Zealand Historic Places Trust with a copy of all archaeological monitoring and investigation results which are required by the conditions of this consent with an invitation to respond, comment or meet to discuss any results.

3.5 The consent holder shall notify the District Council of all information provided to Te Rununga o Ngai Tahu and Te Ngai Tuahuriri Rununga and any responses received. If appropriate, the District Council, with the agreement of the consent holder and Te Rununga o Ngai Tahu and Te Ngai Tuahuriri Rununga, shall convene meetings/hui should any of the information or issues require further discussion.

4. **Wahi taonga, wahi tapu and urupa protocol**

4.1 A representative of Te Ngai Tuahuriri Rununga shall be engaged to be present during construction and excavation of the subdivision to act as advisor to the developer on identification or protection of wahi tapu, wahi taonga, urupa or historic cultural sites.

4.2 The consent holder shall consult with Te Rununga o Ngai Tahu and Te Ngai Tuahuriri Rununga to determine, in accordance with tikanga Maori, if there are any matters of protocol which tangata whenua wish to undertake in relation to the commencement of any development works, significant events or the commissioning of the completed works.

4.3 The consent holder shall ensure that staff involved with earthmoving activities have received training and are aware of the requirement to monitor earthmoving activities in a way that enables the identification of wahi tapu, wahi taonga, urupa or historic cultural sites. Te Rununga o Ngai Tahu and Te Ngai Tuahuriri Rununga shall be contracted to provide appropriate training to such staff.

4.4 Immediately that it becomes apparent that an urupa, wahi tapu, wahi taonga or suspected historical site has been uncovered, earthmoving operations shall stop. The contractor will shut down all machinery or activity immediately, leave the area and advise the consent holder of the occurrence.

4.5 In cases other than suspected koiwi tangata (human remains):

(i) The representative of Te Ngai Tuahuriri Runanga shall be consulted by the consent holder of the site to determine what further actions are appropriate to safeguard the site or its contents, and to avoid, reduce, remedy or mitigate any damage to the site.

4.6 Where koiwi tangata (human remains) are suspected:

(i) The consent holder shall take steps immediately to secure the area in a way that ensures the koiwi tangata are untouched.

(ii) The consent holder shall be responsible for notifying the Te Ngai Tuahuriri Runanga, the Police and the Historic Places Trust and that it is suspected koiwi tangata have been uncovered.

(iii) The consent holder of the site shall see that staff are available to meet and guide kaumatua, Police and Historic Places Trust staff to the site, assisting with any requests that they may make.

(iv) Earthmoving operations in the affected area shall remain halted until the kaumatua, the Police and Historic Places Trust staff have marked off the area around the site and have given approval for earthmoving operations to recommence.

(v) If the kaumatua are satisfied that the koiwi tangata are of Maori origin the kaumatua will decide what happens to the koiwi tangata and will give their decision to the Police, the archaeologist and the consent holder.

5. Standards

All stages of design and construction shall be in accordance with the Waimakariri District Council Engineering Code of Practice, together with other related standards, being:-

- Transit New Zealand standards.

- N.Z.S. 4004 – 2004 - Land Development and Subdivision Engineering.
- NZS 4431, 1989 Code of practice for Earthfill for Residential Development.
- SNZ PAS 4509: 2003. New Zealand Fire Service Fire Fighting Water Supplies Code of Practice.

6. **Easements**

All services, including open drains and access ways, serving more than one lot or traversing lots other than those being served and not situated within a public road or proposed public road, shall be protected by easements. All such easements shall be granted and reserved.

7. **Lots to Vest**

That proposed Lots 500 to 505 shall vest in the Council as Road.

8 **Power and Telephone**

8.1 An appropriate network utility operator at the consent holder's expense shall provide underground electrical and telephone reticulation to the boundaries of proposed Lots 1 to 98, 200, 201, 202 and 214.

8.2 The consent holder shall provide evidence in writing from the relevant service utility providers that electrical and telephone reticulation has been installed to Lots 1 to 98, 200, 201, 202 and 214.

9. **Plans and Specifications**

9.1 Three copies of the design plans and specifications of all works shall be submitted to the Council for approval. Approval of complying documents shall be given in writing and work shall not commence until this has been received from the Council.

9.2 The consent holder shall forward with the design and engineering plans and specifications, copies of any other consents granted in respect of this subdivision. The calculations for the stormwater flows, including the water budget modelling, shall be included with the plans submitted.

9.3 Any subsequent amendments to the design, plans and specifications shall be submitted to Council for approval.

9.4 The engineering plans submitted for approval shall show proposed bank protection works, where culverts or bridges are to be installed.

10. Earthworks

10.1 All earthworks shall be accordance with N.Z.S. 4004 – 2004 - Land Development and Subdivision Engineering.

10.2 All filling shall be in accordance with NZS 4431, 1989 Code of Practice for Earthfill for Residential Development. Where land filling is to be undertaken the areas affected, together with dimensions relative to the created property boundaries, shall be shown on the "As Built" plans to be supplied to the Council.

10.3 Any areas of fill or earthworks not certified in accordance with NZS 4431 shall, together with sufficient dimension to locate the feature from property boundaries, be registered on the land transfer title plans and shown on the "As Built" plans.

10.4 Where excavated cut material is greater than 200mm in thickness, the consent holder shall undercut and replace with 100mm minimum of compacted topsoil.

10.5 Road sub-bases shall be built to a standard suitable for the proposed road formation. The subbase shall be tested with the earthworks operation to ensure the formation is adequate for the metal courses and surfacing.

10.6 The consent holder shall submit detailed drawings of sediment controls to the Waimakariri District Council for engineering approval. Such measures shall be designed in accordance with the ARC Guidelines (TP 90).

10.7 At least 20 working days prior to any works on site commencing, the consent holder shall provide an Environmental Management Plan (E.M.P) detailing the methodology of works and the environmental controls in place to limit the effects from issues such as flooding, dust, noise, pollution, sedimentation and wildlife, etc.

10.8 The consent holder shall be responsible for installing Waimakairi DC approved sediment control devices before the commencement of earthworks and maintaining the sediment control devices, including carrying out regular inspections especially during and after significant rainfall events, Records of these inspections shall be provided to the Council on request.

10.9 All parts of the earthworks shall be made complete before moving to the next stage. The consent holder shall grass each lot at the completion of earthworks and shall maintain the areas for six months, so that any areas of dead grass are replaced immediately, in order to avoid nuisance effects created by dust.

10.10 Where earthworks are to be done in the bed of Taranaki Stream, or with 20 metres of that stream, measures shall be utilised to prevent soil entering the stream, or for works within the stream, erected downstream such that prevention of silt contamination of the stream beyond the site of the works is achieved.

10.11 The above described earthworks will be carried out in accordance with Plans 11 through to 14.

11. Supervision and Setting Out

11.1 A Chartered Professional Engineer or Registered Surveyor, who shall be engaged prior to commencement of any works, shall supervise all engineering works and setting out.

11.2 The Supervising Engineer/Surveyor shall supply a certificate to the Council, stating that all works have been designed in accordance with the appropriate standards and sound engineering practice.

11.3 The engineer/surveyor shall submit a programme of inspection intended to meet the requirements of this clause at the time of submitting the engineering plans and specifications.

11.4 The supervising engineer/surveyor shall supply to Council a certificate stating that all works and services associated with the subdivision have been installed in accordance with the approved plans and specifications and that the "As Built" plans are a true and accurate record of all works and services as constructed. This certificate shall be supplied at the time of requesting the Section 224c Certificate.

11.5 The Supervising Engineer/Surveyor shall forward copies of Site Inspection notes for all Supervision site visits to the Council. These shall be forwarded within five working days of the date of that site visit.

12. Road Opening/Trenching

All works involving trenching/road opening shall meet the requirements of the Council's Standard conditions for Trenching. No excavation shall commence within a public road reserve without the prior receipt of a Road Opening Permit from the Waimakariri District Council. In the event of any works or trenching being required across the frontage of adjacent properties the consent holder shall inform the affected occupiers of those properties, 48 hours prior to the commencement of any work.

13. Sewer

13.1 The Consent holder shall install a reticulated sewer system to service Lots 1 to 98, 200, 201, 202, and 214 within the subdivision in accordance with the approved plans and specifications.

13.2 The reticulated sewer system shall connect to the Eastern Districts Sewer Scheme at the Woodend Waste Water Treatment Plant in Gladstone Road.

13.3 The consent holder shall install either:

Option 1. A piped gravity sewer system,

or

Option 2. A fully pumped sewer system.

13.4 Should Option 1 be chosen the following requirements shall be met:

(i) The design and construction of a piped gravity sewer system to service Lots 1 to 98, 200 to 202 and 214 and reticulate the effluent to the Woodend Waste Water Treatment Plant. The reticulation shall incorporate pump stations as required, and shall be in accordance with Waimakariri District Council Engineering Standards. The design shall be approved by the Council prior to construction.

(ii) The discharge point for the rising main shall be changed from the Woodend Wastewater Treatment Plant to the gravity reticulation for Pegasus Township within 6 months of the Pegasus gravity reticulation becoming available.

(iii) When the discharge point is moved to the Pegasus Township gravity reticulation, an odour control unit shall be designed and constructed to the approval of the Council. The Developer shall make provision for adequate land to be vested in the Council to accommodate the odour control unit, including adequate room for maintenance of the unit. The Odour Control shall not be constructed in the Road Reserve.

(iv) The design and construction of odour control units, to extract and treat odour at the discharge to the Woodend Treatment Plant and any intermediate pumps. The Odour Control Unit shall be designed and constructed to the approval of the Council in accordance with the Waimakariri District Council Engineering Code of Practice.

(v) Installation of domestic sewer laterals a minimum of 1.0 metres inside the main body of Lots 1 to 98, 200 to 202 and 214.

13.5 Should Option 2 be chosen the following requirements shall be met:

(i) The design and construction of a common rising main to service Lots 1 to 98, 200 - 202 and 214 and reticulate the treated primary effluent to the Woodend Waste Water Treatment Plant. Intermediate pump stations may be required along the route. The design of the rising main system shall be consistent with the Councils standard pump for on site Septic Tank Effluent Pump systems

(ii) The discharge point for the rising main shall be changed from the Woodend Wastewater Treatment Plant to the gravity reticulation for Pegasus Township within 6 months of the Pegasus gravity reticulation becoming available.

(iii) When the discharge point is moved to the Pegasus Township gravity reticulation, an odour control unit shall be designed and constructed to the approval of the Council. The Developer shall make provision for adequate land to be vested in the Council to accommodate the odour control unit, including adequate room for maintenance of the unit. The Odour Control shall not be constructed in the Road Reserve.

(iv) The design and construction of odour control units, to extract and treat odour at the discharge to the Woodend Treatment Plant and any intermediate pumps. The Odour Control Unit shall be designed and constructed to the approval of the Council in accordance with the Waimakariri District Council Engineering Code of Practice.

(v) Installation of domestic sewer laterals a minimum of 1.0 metres inside the main body of Lots 1 to 98, 200 to 202 and 214.

(vi) The consent holder shall install the connection for a Septic Tank Effluent Pump system on Lots 1 to 98, 200 to 202 and 214. Each connection shall include a lateral with a non-return valve, isolation valve, and valve box at the road boundary, designed and installed in accordance with the revised Waimakariri District Council Standard Drawing 600-371b issue B.

13.6 The consent holder shall install a multi-chamber septic tank, with a minimum volume of 4500 litres, complete with a Biological Filter on the outlet and an effluent pump and connect to the reticulation provided. The on- site treatment system shall be designed and constructed in accordance with the revised Waimakariri District Council Standard Drawing 600-374 issue C.

on each lot?

13.7 The consent holder shall have a maintenance contract with a suitably qualified person to inspect and maintain the septic tank, filter, and pump system on an annual basis and de sludge the septic tank every three years.

13.8 Conditions 13.6 and 13.7 as they apply to Lots 1 to 98, 200 to 202 and 214 shall be subject to a Consent Notice pursuant to section 221 of the Act or the RMA, to be registered on the certificates of title. The Consent Notice shall

require that condition 13.4 is met and condition 13.5 entered into prior to the erection of any dwelling or buildings on Lots 1 to 98, 200 to 202 and 214.

13.9 The developer shall provide written documentation agreeing to conditions 13.4(ii) and 13.3(iii) if Option 1 is chosen, or conditions 13.5(ii) and 13.5(iii) if Option 2 is chosen.

14. Water Supply

14.1 The consent holder shall provide an adequate reticulated domestic restricted water supply to proposed Lots 1 to 98, 200, 201, 202 and 214 of at least 2 units (2.0m3/day).

14.2 Lots 1 to 98, 202 to 202 and 214 shall be provided with a 2000litre/day-restricted connection to the Woodend Water Supply, which is administered by the Waimakariri District Council.

14.3 The golf course (Lots 203 –211, 213, 600 and 601) shall not be reticulated from the Council supply.

14.4 The consent holder shall provide a fire fighting supply sufficient to provide protection for all the proposed residential and commercial buildings in the subdivision. The supply shall meet the SNZ PAS 4509: 2003. New Zealand Fire Service Fire Fighting Water Supplies Code of Practice.

14.5 The installation shall incorporate the following minimum requirements:

14.5.1 A 200mm diameter pipeline from the existing 150mm main in Chinnerys Road to the intersection of Chinnerys Road and Main North Road. The 200mm main shall be connected to the existing100mm pipe on the east side of the Main North Road with a 100mm pipeline. All reticulation shall be installed in the road reserve with appropriate valves and fittings at the intersections.

14.5.2 The consent holder shall install a 150 mm main along the Main North Road from Chinnerys Road to the entrance off S.H.1 to the subdivision.

14.5.3 The subdivision shall be reticulated with 150 mm and 100mm piping with valves, fittings, and hydrants to provide a fire fighting service to the rear of all building lots.

14.5.4 An additional 50mm submain shall be installed where lots are on both sides of the roads.

14.5.5 15mm I.D diameter laterals shall be laid from either the 150mm or 50mm main to the frontage of Lots 1 to 98, 200 to 202 and 214.

14.5.6 Toby valves, 2.0m3/day restrictors and valve boxes shall be installed at the road frontages.

14.5.7 A 4500 litre storage tank shall be established on each lot.

15. Land Drainage/Stormwater

15.1 The consent holder shall ensure that all lots are provided with reticulation to a public drain, swale or natural watercourse

15.2 Stormwater runoff from the new roads shall be taken to the Taranaki Stream or the Taerutu gully.

15.3 Stormwater in other locations shall be directed from the swales to the pond system in the golf course by way of a vegetated swale or depression.

15.4 The pond system on the golf course, and the wetland system in Taerutu Gully, shall each accommodate the flow path from a 2 %A.E.P. (I in 50 Year) storm.

15.5 The consent holder shall install culverts or piping, of a sufficient size, where any road, footpath, right of way or access crosses a natural channel, watercourse or drain. These culverts or piping and their sizes shall be shown on the engineering plans submitted for approval.

16. Culverts or Bridges

16.1 Culverts or bridges shall be installed on the natural watercourses, swales and streams where the formation from a road or access crosses the channel.

16.2 On Taranaki Stream the consent holder shall design and install a bridge or box-culvert to accommodate a minimum flow of 7.0 m3/sec based on a 5% A.E.P. storm. The waterway size shall be a minimum 4.0m^2 with dimensions for a box culvert of 3.3 m wide x 1.2 m deep.

16.3 All culverts and stormwater piping shall be installed in terms of the Civil Engineering Construction Standard Specification Part 3 (2002) – Drainage

16.4 The installations shall be installed to Environment Canterbury and Council requirements.

16.5 The culvert design shall provide for fish and wild life passage. The consent holder shall provide an impact assessment of the effect of the installation of the culverts in Taranaki Stream on the passage of fish and aquatic life for approval. This shall be submitted at the time of engineering plan approval.

17. Building Platforms

17.1 Any dwellings and commercial buildings within the subdivision shall have floor levels at least R.L.6.0 metres above mean sea level. Building platforms shall be set at a minimum level that allows this to be achieved.

17.2 Condition 17.1 shall be subject to a consent notice pursuant to Section 221 of the Act or the RMA to be registered on the Certificate of Title to issue for Lots 1 to 98, 200, 201, 202, 215 and 216.

18. Roading

18.1 The consent holder shall construct all roading to service the subdivision to be generally in accordance with the Waimakariri District Council Standard Drawing 600-270 issue c.

18.2 The intersection of Pegasus Town Road with the Main North Road shall be controlled by a T Intersection with a right turn bay from the south in accordance with Traffic Design Group drawing number 7443/3 MAR. The design, controls and layout shall be approved by Transit New Zealand. The transition zone should be continued down Pegasus Town Road for at least 150 metres.

18.3 The central intersection shall be a controlled four leg roundabout in accordance with Traffic Design Group drawing number 7443 CTB- SHT.

18.4 The other three intersections shall comply with the Waimakariri District Council standards.

18.5 Pegasus Town Road shall be 29 metres wide with a carriageway consisting of two 3.7 metre wide lanes and 0.5 metre wide hard shoulders. To allow for the swales, trees should be set back at least 5.0 metres clear of the edge of the formation and 1.0 metres clear of any footpath.

18.6 If trees are to be planted on local roads within the subdivision, these roads shall have a Road Reserve minimum width of 18 metres with the trees being 2.5 metres clear of the edge of seal and 2.0 metres clear of the boundary.

18.7 The bridges or box-culverts constructed on the bends shall be made wider or straights incorporated on each side.

18.8 The Village Green gyratory shall have 4.0 metre lanes with 1.0 metre hard shoulders. Bends shall be a sufficient width to take an 11 metre truck. The entries and exits shall be specifically designed and set out on the engineering plans to be submitted for approval.

18.9 Car parking layout and design shall comply with the Waimakariri District Council Standards. A total of 115 car parks shall be provided adjacent to the clubhouse / café area.

18.10 The consent holder shall be required to carry out Benkelman Beam tests or other approved in situ formation bearing tests following completion of the base course layer and prior to sealing.

18.11 The new roads shall be sealed comprising a two wet coat seal system (grade 6 chip over grade 4 chip) over the entire carriageway surface, except for cul-de-sac heads, which shall be surfaced with asphaltic concrete over a waterproofing single coat chip seal.

19. <u>Access.</u>

19:1 The consent holder shall abandon the two existing access on to the Main North road and permanently fence along the frontage as soon as alternative access from the Main Road becomes available.

19.2 The consent holder shall install accesses to lots with existing houses in accordance with Waimakariri District Council Standard Drawing 600-214 issue c. These accesses shall be shown on the engineering plans to be submitted for approval.

20. <u>Liquefaction</u>

20.1 The design of any earthworks, deep pipelines, pumping stations or large buildings shall be subject to the consideration of liquefaction effects. Proposed mitigation measures shall be shown on the engineering plans to be submitted for approval.

20.2 The proposed golf course ponds shall be designed and lined with a liner of sufficient impermeability so that seepage from the ponds does not increase the likelihood of liquefaction. The design shall be submitted to Waimakariri District Council for approval at the time engineering approvals are sought.

21. <u>Landscaping</u>

21.1 A landscaping proposal for trees in the road reserves shall be submitted to the

Community and Recreation Manager for approval at the time of submission of the engineering plans and specifications. The landscape plan will be generally in accordance with Plan 21 and shall include the height of plants and trees proposed at time of planting.

21.2 Trees located within the road reserve shall meet the following minimum requirements;

a. The type of tree shall be noted on the landscape plan and approved by the Community and Recreation Manager.

b. Each tree shall have a single leader.

c. The consent holder shall maintain all trees for a period of two years or two growing seasons (whichever is the lesser) from planting, and any dead or damaged plants shall be replaced in the next planting season.

21.3 The trees shall, where appropriate, be planted in locations toward the centre of the road frontage a lot, in order to avoid relocation at the time vehicle crossings are installed.

21.4 Where the consent holder wishes to install a plant watering system, this shall comply with the Council's Policy 582 'Street Trees and Local Purpose Reserves - Subdivision - Water Systems'. A design showing all engineering details shall be submitted to the Council for approval at the time of submission of the engineering plans and specifications.

21.5 'As Built' plans of any watering system shall be supplied to the Council in accordance with the 'As Built' requirements contained elsewhere in this approval.

22. <u>Walkways /Cycleway.</u>

22.1 All walkways shall be 2.0 metres wide for pedestrians only and 2.4 metres wide for combined cycleway /walkways.

22.2 Where public walkways pass through the golf course the paths shall be made safe from any hazard from flying golf balls. Design features such as large trees or hedges shall be installed so as to achieve this requirement.

22.3 The underpasses shall have a minimum width of 3.5 clear metres, with open entries and exits and shall be adequately lighted and provided with provision for stormwater drainage.

23. <u>Lighting</u>

23.1 High mounted directional lighting shall be installed where appropriate along the walkways /cycleway.

23.2 The underpasses, road intersections and village green shall have adequate street lighting.

23.3 The proposals for lighting shall be submitted for approval at the time of submission of the engineering plans and specifications.

24. Traffic Management

24.1 The consent holder shall submit for approval a comprehensive Traffic Management Plan (*format* attached) detailing traffic control works (including sketch layout and control signs). This plan shall be submitted at the time of engineering plan approval. No work may commence on or in the Road Reserves prior to this approval being obtained. Traffic Management shall be to Level 1 in Chinnerys Road and Level 2 in the Main North Road, as described in the TNZ & LTSA Code of Practice for Temporary Traffic Management. Approval is required from Transit New Zealand covering works on the Main North Road.

25. Conditions Auditing.

25.1 The Council will audit compliance with the conditions of consent by both site inspections and checking of associated documentation to the extent necessary to ensure the work is completed in accordance with the approved plans and specifications and to the Council's standards. The Council on an actual cost basis will undertake inspections and checking. The developer, or their authorised agent, shall notify Council at least one working day prior to commencing various stages of the works. This is to enable audit inspections required by the consent to be performed.

The minimum level of inspection shall be as follows:

Earthworks

- Following striping and during earthworks operations.

Roading and Car Parks

- Following shaping of roading and footpath sub-grade prior to placement of sub base material.
- Following metalling up, prior to pouring any kerbs or channels.
- Following compaction of base course prior to sealing. This surface is to be tested with a Benkelman Beam and the results submitted to Council for approval.

Sewer

- During installation
- Testing of mains and laterals.

Water

- During installation
- Testing of mains and laterals
- Disinfection of water mains.

Entrances

- On completion of excavation to sub-grade.
- Following compaction of base course prior to final surfacing.

Stormwater

- On the excavation, construction and completion of any bridge, culvert and piping works.

Landscaping

- Following installation of planting in the road reserves.

Whole Works

- Prior to issue of a certificate under Section 224(c) of the Resource Management Act.
- on completion of maintenance period (where applicable).

Where repeat inspections are required because of faulty workmanship or work not being ready contrary to the receipt of a notification, such inspections will be carried out on the same charging basis as the normal inspections.

26. <u>Completion Certificate</u>

26.1 On completion of the works the consent holder shall provide a Completion Certificate stating that the works have been constructed and completed to the requirements and standards set out in the approved plans and specifications.

27. <u>Maintenance</u>

27.1 The subdivider shall be responsible for the maintenance of all subdivision works for a period of six months following the date of issue of the Council's 'Condition Certificate'. A bond equal to 5% of the cost of construction works shall be lodged with Council for the same period

Maintenance shall include:

- Repair of any damage or defects in any of the works or services associated with the development of the subdivision as consented to.

Note: To assist in complying with this clause the consent holder is advised not to release the Contractor until the end of the maintenance period or without the Council having inspected and approved the works. Also to include in sale and purchase agreements a mechanism to ensure that the owners and or builders working within the development are made accountable for damage caused by their construction traffic.

28. <u>As Built Plans</u>

28.1 The consent holder shall provide daily site sealing records from the Sealing Contractor as part of the As Built record, to enable accurate RAMM records to be established for the new road construction.

28.2 "As Built" plans setting out in detail the location of all services shall be provided to the Council immediately following completion of the works and shall be available at the time of the Condition Certificate inspection. Two sets of plans shall be provided at a scale of 1:1000 and 1: 500. In addition to the plans a practising registered civil engineer or registered surveyor shall provide a separate certificate stating that the As-built plans are a true and accurate record of all services. "As Built" drawings of the sewer pump station shall also be provided at an appropriate scale.

28.3 Where plans have been prepared using computer aided draughting techniques a copy of the file shall be made available to the Council in either of the following format - Microstation (.DGN), Autocad (.DWG), or (.DXF).

29. <u>Street Names</u>

29.1 The consent holder shall submit a minimum of three street names for each road for the approval of the Council.

29.2 Then consent holder shall provide and install the street name signs for each road and poles at each intersection to the Council's standard.

30 <u>Esplanade Strip</u>

30.1 A 10-metre wide esplanade strip shall be created along the edge of the Taranaki Stream, for the purposes of natural hazard mitigation and conservation.

31. Development Contributions.

31.1 Pursuant to section 198 of the Local Government Act 2002, the consent holder shall pay **$861,179.63 including GST**. This amount is based on the following contributions:

Description	Area	Units/ Lots	Factor (excluding GST) Per Unit/Lot $	Amount (excluding GST) Total $	Amount (inclusive GST) Total $
Reserves	Rural Zone	98	2,481.00	243,138.00	273,530.25
Water	Woodend	103	1,207.00	124,321.00	139,861.13
Sewer	Eastern Districts	102	2,072.00	211,344.00	237,762.00
Roading	District	98	1,731.00	169,638.00	190,842.75
Community Infrastructure	Community Infrastructure	98	174.00	17,052.00	19,183.50
Total			**7,665.00**	**765,493.00**	**861,179.63**

32. Amalgamation Condition

Pursuant to section 220 (1)(b)(iii) of the Act or the RMA, Lots 215 and 216 hereon shall be amalgamated with Lot 1 DP 76141 (CT CB38C/61) and one certificate of title issued for the parcels (ref: 508549).

33. Works Conditions

That a certificate under Section 224(c) of the Act or the RMA will not be issued until conditions 1 to 32 above have been met to the satisfaction of the Waimakariri District Council, at the expense of the consent holder.

ADVICE NOTES

(a) The requirements and conditions listed are a statement of the Council's minimum standards. Where the consent holder proposes higher standards or more aesthetically acceptable alternatives these shall be submitted to the Council for approval.

(b) The consent holder is advised that vehicle access to any lot must comply with the requirements of the Waimakariri District Vehicle Crossings Bylaw 1997. Wherein no vehicle may be taken onto any property in the Waimakariri District other than by way of a properly formed vehicle crossing. The owner or occupier of any lot who may require vehicular access across any footpath, berm and water channel adjoining that lot is required to apply in writing to the Council to construct a vehicle crossing at the owner's or occupier's cost. No owner or occupier of any lot can build, or allow to be built, any dwelling, other significant building or any part of such a building on any property unless the

building site on that property is provided with adequate site access in terms of the above-mentioned bylaw.

(c) A Resource Consent is required from Canterbury Regional Council for the creation of the ponds, discharge to a waterway and extraction of groundwater.

(d) Land Use consents will be required from Canterbury Regional Council for any works in Taranaki Stream. Where the stream is to be realigned the naturalisation and revegetation shall be carried out to enhance the ecological and biodiversity values.

(e) The Council will pay the marginal cost difference for increasing the Chinnerys Road Main from 150mm to 200 mm diameter. This cost has been assessed by the Council as $159,600 plus G.S.T. ($76/m x 2100m), which allows for additional design, materials and construction cost, and contract administration.

(f) It is acknowledged that high barriers along route G would have a significant impact so an alternative to site the walkway along the edge of the crown land on Taranaki Stream to join the road at the proposed bridge /culvert should be considered.

(g) Where required, a building consent and resource consent shall be obtained prior to construction of any structures, such as the underpasses and bridges.

(h) The reticulated sewer system will become available once the Council has obtained the necessary resource consents to upgrade the Woodend Sewage Treatment Plant and the appeal period has ended and a contract has been awarded for the physical works.

(i) The consent holder shall obtain the necessary air discharge consent for the odour control units from Canterbury Regional Council in the name of the Waimakariri District Council.

(j) The Council shall not be responsible for any maintenance on the golf course and its liabilities shall cease at the legal road boundary.

(k) Main North Road is a Limited Access Road. The consent holder will need to meet Transit New Zealand requirements in addition to any imposed on this consent. The consent holder should contact Transit New Zealand to ensure their requirements are met.

(l) Electrical and telephone reticulation requires that the network distribution structures be available. In some cases, this will mean that ducting only is provided to the lot from the service box.

Landuse

THAT pursuant to Section 104B of the Act or the RMA, consent be granted to erect dwellings on Lots 1 to 98, to erect a golf clubhouse on Lot 200, to construct and utilise a golf driving range on Lot 201, to construct and utilise a golf maintenance area with hazardous substance storage facility on Lot 202, to construct and utilise a golf course on Lots 203 to 211, 600 and 601, to construct and operate an LPG storage facility on Lot 213, to construct and utilise tennis courts on Lot 214, and to undertake required earthworks, being a subdivision of Lot 1 DP 77303, Lot 2 DP 77303, Pt Lot 2 DP 1799, Lot 1 DP 80926, Lot 1 DP 327014, Sec 1 SO 20252, and Lot 1 DP 76141 at 1220, 1221, 1228, 1250, 1266, 1274 and 1276 Main North Road, Woodend as a non-complying activity subject to the following conditions which are imposed under Section 108 of the Act:

THAT pursuant to Section 125 of the Act or the RMA, this consent shall expire 10 years from the date of issue, being 13 February 2016.

1. Except where necessary to give effect to the following conditions, the activity shall be carried out in accordance with the attached approved application plans being Plans 1 – 10, Plans 11-14 and Plans 15-20.

2. **Archeological Sites Protocol**

2.1 A consulting archaeologist shall monitor all earthmoving activities and shall advise on methods to be undertaken to ensure that adverse effects on archaeological values are avoided, remedied or mitigated. The consent holder shall consult with Te Rununga o Ngai Tahu and Te Ngai Tuahuriri Rununga regarding the appointment of the archaeologist.

2.2 The consent holder shall provide the consulting archaeologist, Te Rununga o Ngai Tahu and Te Ngai Tuahuriri Rununga, the following information no less than 25 working days prior to any earth-moving works:

- A schedule of the dates of all significant earthmoving events, their sequence and duration;
- A summary of all measures being undertaken to ensure that adverse effects on archaeological values are avoided, remedied, reduced or mitigated.

2.3 The consent holder shall invite Te Rununga o Ngai Tahu and Te Ngai Tuahuriri Rununga to attend any episode of monitoring or earthmoving activity.

2.4 The consent holder shall provide Te Rununga o Ngai Tahu and Te Ngai Tuahuriri Rununga and the New Zealand Historic Places Trust with a copy of all

archaeological monitoring and investigation results which are required by the conditions of this consent with an invitation to respond, comment or meet to discuss any results.

2.5 The consent holder shall notify the District Council of all information provided to Te Rununga o Ngai Tahu and Te Ngai Tuahuriri Rununga and any responses received. If appropriate, the District Council, with the agreement of the consent holder and Te Rununga o Ngai Tahu and Te Ngai Tuahuriri Rununga, shall convene meetings/hui should any of the information or issues require further discussion.

3. **Wahi taonga, wahi tapu and urupa protocol**

3.1 A representative of Te Ngai Tuahuriri Rununga shall be engaged to be present during construction and excavation of the subdivision to act as advisor to the developer on identification or protection of wahi tapu, wahi taonga, urupa or historic cultural sites.

3.2 The consent holder shall consult with Te Rununga o Ngai Tahu and Te Ngai Tuahuriri Rununga to determine, in accordance with tikanga Maori, if there are any matters of protocol which tangata whenua wish to undertake in relation to the commencement of any development works, significant events or the commissioning of the completed works.

3.3 The consent holder shall ensure that staff involved with earthmoving activities have received training and are aware of the requirement to monitor earthmoving activities in a way that enables the identification of wahi tapu, wahi taonga, ururpa or historic cultural sites. Te Rununga o Ngai Tahu and Te Ngai Tuahuriri Rununga shall be contracted to provide appropriate training to such staff.

3.4 Immediately that it becomes apparent that an urupa, wahi tapu, wahi taonga or suspected historical site has been uncovered, earthmoving operations shall stop. The contractor will shut down all machinery or activity immediately, leave the area and advise the consent holder of the occurrence.

3.5 In cases other than suspected koiwi tangata (human remains):

(i) The representative of Te Ngai Tuahuriri Rununga shall be consulted by the consent holder of the site to determine what further actions are appropriate to safeguard the site or its contents, and to avoid, reduce, remedy or mitigate any damage to the site.

3.6 Where koiwi tangata (human remains) are suspected:

(i) The consent holder shall take steps immediately to secure the area in a way that ensures the koiwi tangata are untouched.

(ii) The consent holder shall be responsible for notifying the Te Ngai Tuahuriri Rununga, the Police and the Historic Places Trust and that it is suspected koiwi tangata have been uncovered.

(iii) The consent holder of the site shall see that staff are available to meet and guide kaumatua, Police and Historic Places Trust staff to the site, assisting with any requests that they may make.

(iv) Earthmoving operations in the affected area shall remain halted until the kaumatua, the Police and Historic Places Trust staff have marked off the area around the site and have given approval for earthmoving operations to recommence.

(v) If the kaumatua are satisfied that the koiwi tangata are of Maori origin the kaumatua will decide what happens to the koiwi tangata and will give their decision to the Police, the archaeologist and the consent holder.

4. <u>Hazardous Substances</u>

4.1 No hazardous substances other than diesel, petrol, LPG, or pesticides required for golf course maintenance shall be stored on the site.

4.2 All sites, or parts of sites, where fuels and other potentially hazardous substances associated with the ongoing operation of the golf course are handled or stored shall:

i. Have all use, handling and storage areas sealed from the ground with impervious materials; and

ii. Provide protection measures to contain a spill or release of hazardous substance within a bunded or other secure area.

4.3 No hazardous substance shall be stored, used or disposed of in a manner in which it can be deposited or carried into any stormwater system, sewer system or water body.

4.4 The Manager or owner of any site used for the use or storage of any fuel or other potentially hazardous substance shall hold on the site, or on the facility, a copy of a contingency plan setting out emergency procedures to be followed in

the event of an escape or spillage of those substances. A copy of the contingency plan shall be supplied to the Council.

4.5 The construction or use of facilities to store fuels or other potentially hazardous substances associated with the operation of the golf course shall adhere to the criteria contained in the Environment Canterbury 'Pollution Prevention Guidelines' and all relevant requirements of the Hazardous Substances and New Organisms Act 1996.

4.6 Any fuel storage tanks shall either have an underground capacity of 110%, or comply with New Zealand Standard 8409:2004, whichever is the lesser standard at the time of installation.

5. Building Platforms

5.1 Any dwellings and commercial buildings within the area north of the main access road shall have floor levels at least R.L.6.0 metres above mean sea level. Building platforms shall be set at a minimum level that allows this to be achieved.

5.2 Any buildings located to the south of a line defined by linking the high point of the channel edge through points defined by:

Cross section 1 – chainage 2000.00
Cross section 2 – chainage 350.00
Cross section 3 – chainage 400.00
Cross section 4 – chainage 500.00

finished floor levels shall be at least 600mm above the height of the adjoining channel edge.

5.3 Any buildings north of the line defined in Condition 5.2, and south of the main access road, shall have finished floor levels at least 600mm above the existing surrounding ground levels.

5.4 Roads on the southern side of the main access road shall include provision for safe passage of secondary flows or out of channel flows.

5.5 The indicative location of the line referred to in conditions 5.1 and 5.2 is as defined by the following attached plans numbered Plan 15, Plan 16, Plan 17, Plan 18, Plan 19, and Plan 20

- Mapleham masterplan showing the location of cross-sections 1-4.
- Earthworks cross-sections (Wood and Partners) drawings nos. 001,002,003 and 004.
- Outline development plan showing marked in blue "Indicative Location of Ridge bounding Waihora Floodway

5.6 Condition 5.1 shall be subject to a consent notice pursuant to Section 221 of the Act or the RMA to be registered on the Certificate of Title to issue for Lots 50 to 98 and lots 200 to 203.

5.7 Condition 5.2 shall be subject to a consent notice pursuant to Section 221 of the Act or the RMA to be registered on the Certificate of Title to issue for Lots 22 to 24.

5.8 Condition 5.3 shall be subject to a consent notice pursuant to Section 221 of the Act or the RMA to be registered on the Certificate of Title to issue for Lots 1 to 21 and Lots 25 to 49.

6. Car Parking

Car parks shall be laid out and designed to comply with the Waimakariri District Council Standards. A total of 115 car parks shall be provided adjacent to the clubhouse / café area.

7. Walkways

7.1 Public walkways passing through the golf course shall be made safe from any hazard from flying golf balls by barriers, such as large trees or hedges.

8. Earthworks

8.1 Where earthworks are to be done in the bed of Taranaki Stream, or within 20 metres of that stream, measures shall be utilised to prevent soil entering the stream, or for works within the stream, erected downstream such that prevention of silt contamination of the stream beyond the site of the works is achieved.

8.2 At least 20 working days prior to any works commencing on site the consent holder shall provide an Environmental Management Plan (E.M.P) detailing the methodology of works and the environmental controls to be put in place to limit the effects from issues such as flooding, dust, noise, pollution, sedimentation and wildlife, etc.

8.3 The consent holder shall be responsible for installing and maintaining the sediment control devices, including carrying out regular inspections.

8.4 All parts of the earthworks shall be made complete before moving to the next stage. The consent holder shall grass each lot at the completion of earthworks and shall maintain the areas, so that any areas of dead grass are replaced immediately, in order to avoid nuisance effects created by dust.

9. Where any culvert or bridge is required to be constructed to cross a natural watercourse, swale or stream, plans shall be submitted to the Councils for

approval by the Subdivisions Engineer prior to any commencements of work on the culvert or bridge.

10. Ecological Enhancement Plan

10.1 At least 20 working days prior to any work commencing a detailed Ecological Enhancement Plan (contained within the application) consistent with the Landscape Assessment and Ecological Assessment prepared by Boffa Miskell Limited shall be submitted to the Council prior to any earthworks or vegetation clearance within 20 metres of the Taranaki Stream, or within 50 metres of the Taerutu Gully. The plan shall detail plant species, sizes and numbers and detail the following:

a. Identify the staging of all ecological enhancement planting including native tree and bush areas, native wetland planting, numbers and species of all plants within each stage, areas included in each stage;

b. Identify maintenance periods, protocols for replacement of dead or dying plants, and ongoing requirements to ensure the survival of proposed plantings;

c. Any other provisions or information necessary to provide for the successful implementation of these works.

11 Construction

11.1 At least 20 working days prior to any land development work commencing on the site, a Contractor's Environmental Management Plan shall be prepared detailing the measures and procedures to be put in place to undertake the land development phases of construction. This Plan shall be submitted to the Waimakariri District Council prior to construction work commencing. A copy shall also be held by the consent holder along with a copy of the consent. Where necessary, this plan may be reviewed and updated, and resubmitted to the Waimakariri District Council.

11.2 The Contractor's Environmental Management Plan shall include, as a minimum, the following:

a. A temporary traffic management plan as detailed by the Transit New Zealand Code of Practice for Temporary Traffic Management.

b. All stockpiles of soil shall be located at least 20 metres away from watercourses and 50 metres away form external site boundaries.

c. Bulk fuel storage during the construction phase shall be limited to one location which shall not be within 20 metres of any watercourse of external site boundary.

d. The fuel storage area shall be bunded to contain spillage and prevent contamination of surrounding areas. All dispensing units shall have drip trays and drip containers in place at all times. Sealed waste bins shall be provided for the collection of waste drums, oily rags, oil filters etc.

e. A spill management procedure for fuels and other potentially hazardous substances.

f. The storage of small quantities of dangerous or hazardous substances shall comply with the Dangerous Goods Regulations and all other relevant legislation. This includes obtaining all necessary licences.

g. Construction noise in any zone shall not exceed the recommended limits specified in, and shall be measured and assessed in accordance with, the provisions of NZS:6803: P1984 "Measurement and Assessment of Noise from Construction, Maintenance, and Demolition Work".

h. The site will be watered regularly using water carts, particularly during hot, dry periods. Construction shall cease and the site be wetted if dust becomes problematic due to unusually strong winds.

11.3 The consent holder shall ensure that all work on site shall at all time follow the measures and procedures set out in the Contractor's Environmental Management Plan.

12. **Bulk and Location of Structures**

12.1 Dwelling houses shall be located only on Lots 1 to 98.

12.2 There shall be only one dwelling house per lot.

12.3 Dwelling houses shall not be located within 10 metres of any lot boundary.

12.4 Structures other than dwelling houses shall not be located within 3 metres of any lot boundary.

12.5 The structure coverage of the net area of Lots 1 to 98 shall not exceed 20% of the lot area. Calculation of structure coverage shall exclude any area covered solely by any eave, pergola, deck, outdoor swimming pool, fence, or structures less than 5m2 and less than 2m high.

12.6 Any structure shall not exceed a height of 10 metres.

13. **Conditions Auditing.**

13.1 The Council will audit compliance with the conditions of consent by both site inspections and checking of associated documentation to the extent necessary to ensure the work is completed in accordance with the approved plans and specifications and to the Council's standards. The Council on an actual cost basis will undertake inspections and checking. The developer, or their authorised agent, shall notify Council at least one working day prior to commencing various stages of the works. This is to enable audit inspections required by the consent to be performed.

The minimum level of inspection shall be as follows:

Car Parks

- Prior to placement of sub base material.
- Prior to final surfacing.
- Following completion of final surfacing.

14. **Inspection**

14.1 That compliance with the above conditions shall be verified by inspection by a Council Officer pursuant to Section 35(2)(d) of the Act or the RMA. The consent holder shall pay to the Council charges pursuant to Section 36(1)(c) of the Act or the RMA to enable the Council to recover its actual and reasonable costs in carrying out the inspections.

Advice Notes

(a) The requirements and conditions listed are a statement of the Council's minimum standards. Where the consent holder proposes higher standards or more aesthetically acceptable alternatives these shall be submitted to the Council for approval.

(b) The consent holder is advised that vehicle access to any lot must comply with the requirements of the Waimakariri District Vehicle Crossings Bylaw 1997. Wherein no vehicle may be taken onto any property in the Waimakariri District other than by way of a properly formed vehicle crossing. The owner or occupier of any lot who may require vehicular access across any footpath, berm and water channel adjoining that lot is required to apply in writing to the Council to construct a vehicle crossing at the owner's or occupier's cost. No owner or occupier of any lot can build, or allow to be built, any dwelling, other

significant building or any part of such a building on any property unless the building site on that property is provided with adequate site access in terms of the above-mentioned bylaw.

(c) A Resource Consent is required from Environment Canterbury for the creation of the ponds, discharge to a waterway and extraction of groundwater.

(d) Land Use consents will be required from Environment Canterbury for any works in Taranaki Stream. Where the stream is to be realigned the naturalisation and revegetation shall be carried out to enhance the ecological and biodiversity values.

(e) Where required, a building consent and resource consent shall be obtained prior to construction of any structures, such as the underpasses and bridges.

(f) The Council shall not be responsible for any maintenance on the Golf Course and its liabilities shall cease at the legal road boundary.

(g) A contingency plan, approved by the relevant agency, will be held on site.

Applications to the Canterbury Regional Council

CRC061210 to install, use and maintain a sewerage network on the property known as Mapleham at or about map reference NZMS 260: M35 665-843 for a term expiring on 31 January 2041 on the following terms and conditions:

1. An asset management plan shall be prepared for the network and shall include the following matters:
   (a) Measures to avoid or minimise leakage or overflows from the network and the resulting adverse effects on ground and surface water quality.
   (b) Measures to avoid or minimise the entry of stormwater or groundwater into the network.
   (c) A monitoring programme to identify sources of leaks or overflows from the network.
   (d) Management response measures to contain and minimise discharges to groundwater or surface water from the network in the event of a system failure, during periods of maintenance, an accident, or a natural hazard event.
   (e) A programme of works or measures to implement Conditions 1(a) to 1(d).
2. The asset management plan prepared for condition (1) shall be submitted to Canterbury Regional Council at least 30 working days prior to the use of the network.

3. Pursuant to Section 128 of the Act or the RMA, the Canterbury Regional Council may review the conditions of the consent by serving notice on any of the last five working days of January each year, for any of the following purposes:

   (a) To 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 the consent holder to adopt the best practicable option to remove or reduce any adverse effect on the environment.

4. The lapsing provisions of Section 125 of the Act or the RMA will apply on expiry of ten years from the date of commencement of this consent.

CRC061211 to undertake vegetation clearance and contouring work within riverbeds/ margins adjacent to the Taranaki Stream and Taerutu Gully on the property known as Mapleham at or about map reference NZMS 260: M35 665-843 for a term expiring on 31 January 2021 on the following terms and conditions:

1. The activities covered by this consent are to be carried out in the areas identified in Figure CRC061211 attached to this consent.
2. The consent holder shall take all practicable measures to avoid spillages of contaminants during the clearance of vegetation and contouring works within the riverbeds/margins adjacent to the Taranaki Stream and Taerutu Gully. In the event of any accidental spillage, the consent holder shall inform Canterbury Regional Council within 24 hours of the event, and shall provide the following information:
   (a) The date, time, location, and estimated volume of the spillage.
   (b) The cause of the spillage, details of the steps taken to control and remediate the effects of the spill on the receiving environment, and measures taken to prevent a reoccurrence.
3. During the clearance of the vegetation and contouring works, the consent holder shall implement and maintain appropriate measures for the control of sediment discharge to the Taranaki Stream.
4. All practicable measures shall be undertaken to minimise adverse effects on property, amenity values, wildlife, vegetation and ecological values from construction activities on the site.
5. The clearance of the vegetation shall occur during periods of low flow in the Taranaki Stream. The consent holder shall take all practicable measures to ensure that the works do not affect irrigation takes downstream of the area of works.
6. The clearance of the vegetation and contour works shall be carried out in stages to minimise the area of soil open at any one time.
7. The vegetation clearance within the bed or margins of the Taranaki Stream shall not prevent the passage of fish in the Taranaki Stream.
8. The vegetation clearance within the bed or margins of the Taranaki Stream shall not cause erosion of the banks or bed of the Taranaki Stream.
9. New riparian vegetation shall be planted as soon as practicable after any exposure of the soil in the area of the works.
10. Planting of vegetation shall be in accordance with the Ecological Assessment (attached to the application as Appendix I).
11. Where practicable, vehicles shall not be used for vegetation clearance within the 20 metre riparian margin on Taranaki Stream as a means of minimising any temporary adverse effect on in-stream values.
12. At least 30 working days prior to any vegetation clearance and contour work commencing within the Taranaki Stream and Taerutu Gully, the consent holder shall submit to Canterbury Regional Council an Environmental and Sediment Control Management Plan detailing the measures and procedures to be put in place to undertake the activities identified in this consent in compliance with conditions 2-11 of this consent. A copy shall also be held by the consent holder along with a copy of this

consent. The consent holder shall comply with the provisions of this plan at all times. Where necessary, this Plan may be reviewed and updated and resubmitted to Canterbury Regional Council.

13. Within 12 months of giving action to this consent the consent holder shall submit a management plan to describe how maintenance of the vegetation within the bed and margins of the Taranaki Stream, that pass through the Mapleham development, and the Taerutu Gully shall occur while minimising the sediment discharge to the Taranaki Stream. The consent holder shall comply with the provisions of this plan at all times.

14. Pursuant to Section 128 of the Act or the RMA, the Canterbury Regional Council may review the conditions of the consent by serving notice on any of the last five working days of January each year, for any of the following purposes:

    (a) To 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 the consent holder to adopt the best practicable option to remove or reduce any adverse effect on the environment.

15. The lapsing provisions of Section 125 of the Act or the RMA will apply on expiry of ten years from the date of commencement of this consent.

CRC061212 to undertake excavation work, to place structures and new planting within the bed or margin of Taranaki Stream and Taerutu Gully for the purpose of road construction on the property known as Mapleham at or about map reference NZMS 260: M35 665-843 for a term expiring on 31 January 2021 on the following terms and conditions:

1. The bridge crossings shall be located at the positions identified in Figure CRC061212 attached to this consent.
2. The consent holder shall take all practicable measures to avoid spillages of contaminants during the construction of the bridges. In the event of any accidental spillage, the consent holder shall inform Canterbury Regional Council within 24 hours of the event, and shall provide the following information:
   (a) The date, time, location, and estimated volume of the spillage.
   (b) The cause of the spillage, details of the steps taken to control and remediate the effects of the spill on the receiving environment, and measures taken to prevent a reoccurrence.
3. During the construction of the bridges and associated works, the consent holder shall implement and maintain appropriate measures for the control of sediment discharge to the Taranaki Stream.
4. All practicable measures shall be undertaken to minimise adverse effects on property, amenity values, wildlife, vegetation and ecological values from construction activities on the site.
5. Vehicles and machinery shall, as far as practicable, not enter channels containing flowing water.
6. Any works related to the construction of the bridges that requires entering the bed of the Taranaki Stream shall occur during periods of low flow in the Taranaki Stream. The consent holder shall take all practicable measures to ensure that the works do not affect irrigation takes downstream of the area of works.
7. The construction of the bridges across the Taranaki Stream shall not prevent the passage of fish in the Taranaki Stream.
8. The construction of the bridges shall not cause erosion of the banks or bed of the Taranaki Stream.
9. At least 30 working days prior to the construction of the bridges commencing , the consent holder shall submit to Canterbury Regional Council an Environmental and Sediment Control Management Plan detailing the measures and procedures to be put in place to undertake the construction activity in compliance with conditions 2-8 of this consent. A copy shall also be held by the consent holder along with a copy of the consent. The consent holder shall comply with the provisions of this plan at all times. Where necessary, this Plan may be reviewed and updated and resubmitted to Canterbury Regional Council.
10. Pursuant to Section 128 of the Act or the RMA, the Canterbury Regional Council may review the conditions of the consent by serving notice on any of the last five working days of January each year, for any of the following purposes:

(a) To 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 the consent holder to adopt the best practicable option to remove or reduce any adverse effect on the environment.

11. The lapsing provisions of Section 125 of the Act or the RMA will apply on expiry of ten years from the date of commencement of this consent.

CRC061213 to carry out work in areas that are deemed to be wetlands or streams for the new lakes in the golf course on the property known as Mapleham at or about map reference NZMS 260: M35 665-843 for a term expiring on 31 January 2021 on the following terms and conditions:

1. The consent holder shall take all practicable measures to avoid spillages of contaminants during construction. In the event of any accidental spillage, the consent holder shall inform the Environment Canterbury within 24 hours of the event, and shall provide the following information:
   (a) The date, time, location, and estimated volume of the spillage.
   (b) The cause of the spillage, details of the steps taken to control and remediate the effects of the spill on the receiving environment, and measures taken to prevent a reoccurrence.
2. During the construction of the stormwater control bund in Taerutu Gully, the consent holder shall implement and maintain appropriate measures for the control of sediment discharge to the Taranaki Stream.
3. All practicable measures shall be undertaken to minimise adverse effects on property, amenity values, wildlife, vegetation and ecological values from construction activities on the site.
4. Vehicles and machinery shall, as far as practicable, not enter channels containing flowing water.
5. At least 30 working days prior to the construction of the bridges commencing , the consent holder shall submit to Canterbury Regional Council an Environmental and Sediment Control Management Plan detailing the measures and procedures to be put in place to undertake the construction activity in compliance with conditions 2-4 of this consent. The consent holder shall comply with the provisions of this plan at all times. A copy shall also be held by the consent holder along with a copy of the consent. Where necessary, this Plan may be reviewed and updated and resubmitted to Canterbury Regional Council.
6. Pursuant to Section 128 of the Act or the RMA, the Canterbury Regional Council may review the conditions of the consent by serving notice on any of the last five working days of January each year, for any of the following purposes:
   (a) To 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 the consent holder to adopt the best practicable option to remove or reduce any adverse effect on the environment.
7. The lapsing provisions of Section 125 of the Act or the RMA will apply on expiry of ten years from the date of commencement of this consent.

CRC061214 to restore an existing wetland with the Taerutu Gully on the property known as Mapleham at or about map reference NZMS 260: M35 665-843 for a term expiring on 31 January 2021 on the following terms and conditions:

1. The consent holder shall take all practicable measures to avoid spillages of contaminants during the restoration of Taerutu Gully. In the event of any accidental spillage, the consent holder shall inform the Environment Canterbury within 24 hours of the event, and shall provide the following information:
   (a) The date, time, location, and estimated volume of the spillage.
   (b) The cause of the spillage, details of the steps taken to control and remediate the effects of the spill on the receiving environment, and measures taken to prevent a reoccurrence.
2. During the restoration of Taerutu Gully, the consent holder shall implement and maintain appropriate measures to minimise discharge of sediment to the Taranaki Stream.
3. All practicable measures shall be undertaken to minimise adverse effects on property, amenity values, wildlife, vegetation and ecological values from construction activities on the site.
4. Vehicles and machinery shall, as far as practicable, not enter channels containing flowing water.
5. New riparian vegetation shall be planted as soon as practicable after any exposure of bare soil in Taerutu Gully.
6. Planting of vegetation shall be in accordance with the Ecological Assessment (attached to the application as Appendix I).
7. At least 30 working days prior to the construction of the bridges commencing , the consent holder shall submit to Canterbury Regional Council an Environmental and Sediment Control Management Plan detailing the measures and procedures to be put in place to undertake the construction activity in compliance with conditions 2-6 of this consent. A copy shall also be held by the consent holder along with a copy of the consent. The consent holder shall comply with the provisions of this plan at all times. Where necessary, this Plan may be reviewed and updated and resubmitted to Canterbury Regional Council.
8. Pursuant to Section 128 of the Act or the RMA, the Canterbury Regional Council may review the conditions of the consent by serving notice on any of the last five working days of January each year, for any of the following purposes:
   (a) To 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 the consent holder to adopt the best practicable option to remove or reduce any adverse effect on the environment.
9. The lapsing provisions of Section 125 of the Act or the RMA will apply on expiry of ten years from the date of commencement of this consent.

CRC061215 to discharge water and contaminants to land and water, and to land in circumstances where it may enter water on the property known as Mapleham at or about map reference NZMS 260: M35 665-843 for a term expiring on 31 January 2021 on the following terms and conditions:

1. The area of the development is identified in Figure CRC061215 attached to this consent.
2. The consent holder shall take all practicable measures to avoid spillages of contaminants during construction. In the event of any accidental spillage, the consent holder shall inform the Environment Canterbury within 24 hours of the event, and shall provide the following information:
   (a) The date, time, location, and estimated volume of the spillage.
   (b) The cause of the spillage, details of the steps taken to control and remediate the effects of the spill on the receiving environment, and measures taken to prevent a reoccurrence.
3. During construction at the site, the consent holder shall implement and maintain appropriate stormwater management measures for the interception and treatment of stormwater run off from the works on the site. These measures shall remove at least 75% of the sediment in the runoff from the site in accordance with the design guidelines in the Auckland Regional Council Technical Publication 90 "Erosion and Sediment Control – Guidelines for Land Disturbing Activities".
4. Compliance with condition 3 shall be demonstrated by measuring the concentration of the inlet stormwater runoff and the outlet from the stormwater control systems in samples taken once per month while rainfall is occurring. These samples shall be analysed by a laboratory approved to test for suspended sediments. The results shall be submitted to Canterbury Regional Council within 10 working days of the sample being taken. In the event that the 75 percent removal is not demonstrated then the applicant shall immediately investigate methods to improve the treatment and report what changes are made within 5 working days of submitting the results to Canterbury Regional Council.
5. All practicable measures shall be undertaken to minimise adverse effects on property, amenity values, wildlife, vegetation and ecological values from construction activities on the site.
6. Vehicles and machinery shall, as far as practicable, not enter channels containing flowing water.
7. Any works related to the construction of the bridges that requires entering the bed of the Taranaki Stream shall occur during periods of low flow in the Taranaki Stream. The consent holder shall take all practicable measures to ensure that the works do not affect irrigation takes downstream of the area of works.
8. There shall not be any stockpiling of soil on the site within 20 m of the Taranaki Stream
9. The Erosion and Sediment Control Management Plan required in condition 10 shall set out a programme for regular monitoring of sediment control devices, including attention during storm events during construction works. Copies of these records shall be provided to Canterbury Regional Council on request.

10. Prior to any work commencing, the consent holder shall submit to Canterbury Regional Council an Environmental and Sediment Control Management Plan detailing the measures and procedures to be put in place to undertake the construction activity in compliance with conditions 2-9 of this consent. A copy shall also be held by the consent holder along with a copy of the consent. The consent holder shall comply with the provisions of this plan at all times. Where necessary, this Plan may be reviewed and updated and resubmitted to Canterbury Regional Council.

11. Pursuant to Section 128 of the Act or the RMA, the Canterbury Regional Council may review the conditions of the consent by serving notice on any of the last five working days of January each year, for any of the following purposes:

    (a) To 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 the consent holder to adopt the best practicable option to remove or reduce any adverse effect on the environment.

12. The lapsing provisions of Section 125 of the Act or the RMA will apply on expiry of ten years from the date of commencement of this consent.

CRC061216 to discharge water and contaminants from the golf course, including any run-off from ongoing irrigation, to the ephemeral gully known as Taerutu Gully, and from there to Taranaki Stream, on the property known as Mapleham at or about map reference NZMS 260: M35 665-843 for a term expiring on 31 January 2041 on the following terms and conditions:

1. The consent holder shall take all practicable measures to avoid spillages of contaminants onto the golf course. In the event of any accidental spillage, the consent holder shall inform Canterbury Regional Council within 24 hours of the event, and shall provide the following information:

   (a) The date, time, location, and estimated volume of the spillage.

   (b) The cause of the spillage, details of the steps taken to control and remediate the effects of the spill on the receiving environment, and measures taken to prevent a reoccurrence

2. A Golf Course Environmental Management and Maintenance Plan including details in relation to the fertiliser application methods, buffer zones, and irrigation methods shall be developed for the site and submitted to Canterbury Regional Council prior to the operation of the Golf Course. A copy shall also be held by the consent holder along with a copy of the consent. The consent holder shall comply with the provisions of this plan at all times. Where necessary, this Plan may be reviewed and updated and resubmitted to Canterbury Regional Council.

3. Operation and maintenance of the Golf Course shall at all times be in accordance with the Golf Course Environmental Management and Maintenance Plan required by condition 2 of this consent.

4. Pursuant to Section 128 of the Act or the RMA, the Canterbury Regional Council may review the conditions of the consent by serving notice on any of the last five working days of January each year, for any of the following purposes:

   (a) To 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 the consent holder to adopt the best practicable option to remove or reduce any adverse effect on the environment.

5. The lapsing provisions of Section 125 of the Act or the RMA will apply on expiry of ten years from the date of commencement of this consent.

CRC061217 to discharge water and contaminants from new lakes associated with the golf course to the ephemeral gully known as Taerutu Gully, and from there to Taranaki Stream, on the property known as Mapleham at or about map reference NZMS 260: M35 665-843 for a term expiring on 31 January 2041 on the following terms and conditions:

1. Discharge to Taranaki Stream from the lakes within the Mapleham golf course and residential complex, shall occur, via Taerutu Gully at or about:
    - NZ Map M35 Grid 5766620 North, 2484740 East,
2. The maximum rate of discharge to the Taranaki Stream from the lakes shall not be more than the rate of discharge from the land, in its state before the development commences, for all events up to the 1 in 50 year return period storm for the critical duration of the land before development.
3. A certificate signed by the person responsible for designing the stormwater system, or a competent person, shall be submitted to Canterbury Regional Council within one month of construction, to certify that the system has been constructed and installed in accordance with the plans, design details and procedures submitted with the application as required by conditions 1-2 of this consent.
4. The consent holder shall take all practicable measures to avoid spillages of contaminants into the lakes. In the event of any accidental spillage, the consent holder shall inform Canterbury Regional Council within 24 hours of the event, and shall provide the following information:
    (a) The date, time, location, and estimated volume of the spillage.
    (b) The cause of the spillage, details of the steps taken to control and remediate the effects of the spill on the receiving environment, and measures taken to prevent a reoccurrence.
5. The consent holder shall ensure that an on-going record is kept of the number of times per year that water from the lakes is discharged into Taerutu Gully, including a record of the level that the wetland in Taerutu Gully rises to in situations of discharge. Copies of these records shall be provided to Canterbury Regional Council on request.
6. The consent holder shall ensure that the receiving environment immediately downstream of the wetland rock filters at Taerutu Gully is inspected monthly on an on-going basis to identify if there is evidence of settled material or scour. Copies of these records shall be provided to Canterbury Regional Council on request.
7. The consent holder shall sample annually during a discharge from the wetland to the Taranaki Stream, the sediment depth, water clarity, dissolved oxygen, pH, and temperature in the Taranaki Stream. Sampling shall include sampling points both up and downstream of Mapleham. These sampling points shall be easily identified and accessible, and the upstream sampling point shall be located no more than 200 metres upstream of Mapleham. A map showing the location of these sampling points shall be submitted to Canterbury Regional Council at least 10 working days prior to the first sampling period.
8. The results of the sampling in condition 7 shall meet the following criteria:
    (a) The increase in the depth of sediment at the downstream site shall not be more than 10 percent higher than that which has occurred in the upstream site.

(b) Water clarity shall not be reduced by more than 20 percent in the downstream sample from the upstream sample.
(c) The dissolved oxygen concentration in the downstream sample shall not be lower than that in the upstream sample.
(d) There shall not be more than a 0.5 unit difference in the pH in the downstream sample compared with the upstream sample.
(e) The water temperature in the downstream sample shall not be more than three degrees Celsius higher than that in the upstream sample.

9. The results of the samples taken in Condition 7 shall be submitted to Canterbury Regional Council within 30 working days of the date of sampling. Where results exceed the requirements of Condition 8 the report shall provide an explanation for these and where necessary provide details of how the stormwater system will be changed to ensure compliance with Condition 8 in future sampling.

10. Records of the operation and maintenance of the stormwater system shall be kept. The records shall include, but not be limited to information that demonstrates compliance with the management plan referred to in condition 11 of this consent. Copies of these records shall be provided to Canterbury Regional Council on request.

11. A Stormwater Management Plan detailing the operation and maintenance of the stormwater system, including measures undertaken to ensure compliance with conditions 4 to 10, shall be developed for the site and submitted to Canterbury Regional Council at least 10 working days prior to the operation of the system. A copy shall also be held by the consent holder along with a copy of the consent. The consent holder shall comply with the provisions of this plan at all times. Where necessary, this Plan may be reviewed and updated and resubmitted to Canterbury Regional Council.

12. Operation and maintenance of the stormwater system shall at all times be in accordance with the Stormwater Management Plan required by condition 11 of this consent.

13. Discharge of treated stormwater from Taerutu Gully to Taranaki Stream shall only be as described in the application and shall be located at or about NZMS 260 M35: 5766620-2484740 East.

14. Stormwater secondary flow paths shall be designed such that when flows exceed the capacity of the proposed system due to an extreme rainfall event, the overland flows from Mapleham will not have an adverse effect off-site.

15. Pursuant to Section 128 of the Act or the RMA, the Canterbury Regional Council may review the conditions of the consent by serving notice on any of the last five working days of January each year, for any of the following purposes:

    (a) To 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 the consent holder to adopt the best practicable option to remove or reduce any adverse effect on the environment.

16. The lapsing provisions of Section 125 of the Act or the RMA will apply on expiry of ten years from the date of commencement of this consent.

CRC061218 to discharge stormwater to land and water, and to land where it may enter water on the property known as Mapleham at or about map reference NZMS 260: M35 665-843 for a term expiring on 31 January 2041 on the following terms and conditions:

1. Stormwater discharge to Taranaki Stream via swales and artificial waterbodies from roads, roofs, hardstand areas, tees and greens within the Mapleham golf course and residential complex, shall occur, as shown in the Figure CRC061218, at or about:
    - NZ Map M35 Grid 5766620 North, 2484740 East,
    - NZ Map M35 Grid 5766500 North, 2484000 East; and
    - NZ Map M35 Grid 5766770 North, 2484500 East
2. There shall be no untreated discharge from roads, roofs, hardstand areas, tees and greens to Taerutu Gully or Taranaki Stream.
3. Design, construction and management of the stormwater system including grassed swales and artificial waterbodies, shall be carried out in accordance with the design details and procedures provided in the Stormwater Management Report in the application.
4. The maximum rate of discharge to the Taranaki Stream from the stormwater treatment system shall not be more than the rate of discharge from the land, in its state before the development commences, for all events up to the 50 year return period storm for the critical duration of the land before development.
5. A certificate signed by the person responsible for designing the stormwater system, or a competent person, shall be submitted to the Canterbury Regional Council within one month of construction, to certify that the system has been constructed and installed in accordance with the plans, design details and procedures submitted with the application as required by conditions 1-4 of this consent.
6. At least one month prior to the construction of each stage of the development the consent holder shall submit to the Canterbury Regional Council:
    a) design plans for the stormwater treatment and disposal system, including the sumps; and
    b) any additional assessments and calculations not included in the application that are necessary and have been undertaken to ensure compliance with Conditions 1-4 of this consent.
7. The consent holder shall take all practicable measures to avoid spillages of contaminants to the stormwater system. In the event of any accidental spillage, the consent holder shall inform Canterbury Regional Council within 24 hours of the event, and shall provide the following information:
    (a) The date, time, location, and estimated volume of the spillage.
    (b) The cause of the spillage, details of the steps taken to control and remediate the effects of the spill on the receiving environment, and measures taken to prevent a reoccurrence.
8. All catchpits, swales, filter strips, rain gardens and artificial waterbodies shall be inspected at least once every six months. Any visible sediment and litter on the swales

shall be removed immediately. All other necessary measures shall be undertaken to ensure that the catchpits, swales, filter strips, rain gardens and artificial waterbodies are operating in accordance with the design details and procedures specified in condition 3.

9. As a means of providing for their appropriate disposal all sediments removed from the stormwater system shall be tested to determine the concentration of copper, lead, zinc and total petroleum hydrocarbons. The tests shall be carried out by a laboratory accredited for the above tests. Should the concentrations found exceed the sediments shall be disposed of at an appropriate facility. A certificate shall be retained by the applicant showing the volume and location of disposal. This certificate shall be made available to Canterbury Regional Council on request.

10. All swales, filter strips, rain gardens and artificial waterbodies shall be regularly maintained to ensure that vegetation is in a healthy and uniform state.

11. The consent holder shall ensure that an on-going record is kept of the number of times per year that water from the artificial waterbodies is discharged into Taerutu Gully, including a record of the level that the wetland in Taerutu Gully rises to in situations of discharge. Copies of these records shall be provided to Canterbury Regional Council on request.

12. The consent holder shall ensure that the receiving environment immediately downstream of the wetland rock filters at Taerutu Gully is inspected monthly on an on-going basis to identify if there is evidence of settled material or scour. Copies of these records shall be provided to the Canterbury Regional Council on request.

13. The consent holder shall sample annually during a discharge from the wetland to the Taranaki Stream, the sediment depth, water clarity, dissolved oxygen, pH, and temperature in the Taranaki Stream. Sampling shall include sampling points both up and downstream of Mapleham. These sampling points shall be easily identified and accessible. A map showing the location of these sampling points shall be submitted to Canterbury Regional Council at least 10 working days prior to the first sampling period.

14. The results of the sampling in condition 13 shall meet the following criteria:

    (a) The increase in the depth of sediment at the downstream site shall not be more than 10 percent higher than that which has occurred in the upstream site.

    (b) Water clarity shall not be reduced by more than 20 percent in the downstream sample from the upstream sample.

    (c) The dissolved oxygen concentration in the downstream sample shall not be lower than that in the upstream sample.

    (d) There shall not be more than a 0.5 unit difference in the pH in the downstream sample compared with the upstream sample.

    (e) The water temperature in the downstream sample shall not be more than three degrees Celsius higher than that in the upstream sample.

15. The results of the samples taken in Condition 13 shall be submitted to Environment Canterbury within 30 working days of the date of sampling. Where results exceed the requirements of Condition 13 the report shall provide an explanation for these and where necessary provide details of how the stormwater system will be changed to ensure compliance with Condition 13 in future sampling.

16. Records of the operation and maintenance of the stormwater system shall be kept. The records shall include, but not be limited to information that demonstrates

compliance with the management plan referred to in condition 11 of this consent. Copies of these records shall be provided to the Environment Canterbury on request.

17. A Stormwater Management Plan detailing the operation and maintenance of the stormwater system, including measures undertaken to ensure compliance with conditions 6 to 15, shall be developed for the site and submitted to Canterbury Regional Council at least 10 working days prior to the operation of the system. A copy shall also be held by the consent holder along with a copy of the consent. The consent holder shall comply with the provisions of this plan at all times. Where necessary, this Plan may be reviewed and updated and resubmitted to Canterbury Regional Council.

18. Operation and maintenance of the stormwater system shall at all times be in accordance with the Stormwater Management Plan required by condition 16 of this consent.

19. Discharge of treated stormwater from Taerutu Gully to Taranaki Stream shall only be as described in the application and shall be located at or about NZMS 260 M35: 5766620-2484740 East.

20. Stormwater secondary flowpaths shall be designed such that when flows exceed the capacity of the proposed system for all events up to the 1 in 100 year return period storm, the overland flows from Mapleham will not have an adverse effect off-site.

21. Pursuant to Section 128 of the Act or the RMA, the Canterbury Regional Council may review the conditions of the consent by serving notice on any of the last five working days of January each year, for any of the following purposes:

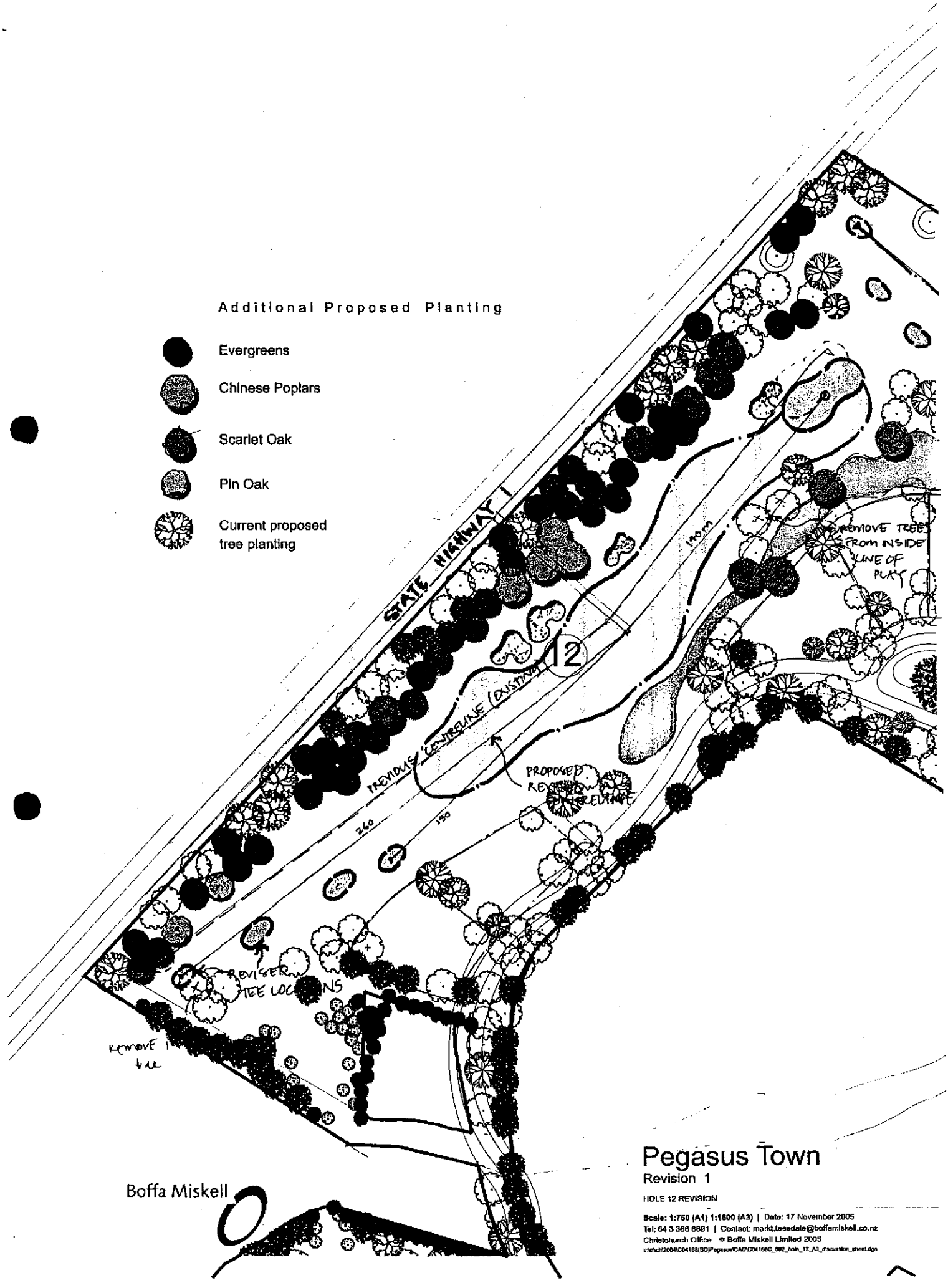
    (a) To deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage, or

    (b) To require the consent holder to adopt the best practicable option to remove or reduce any adverse effect on the environment.

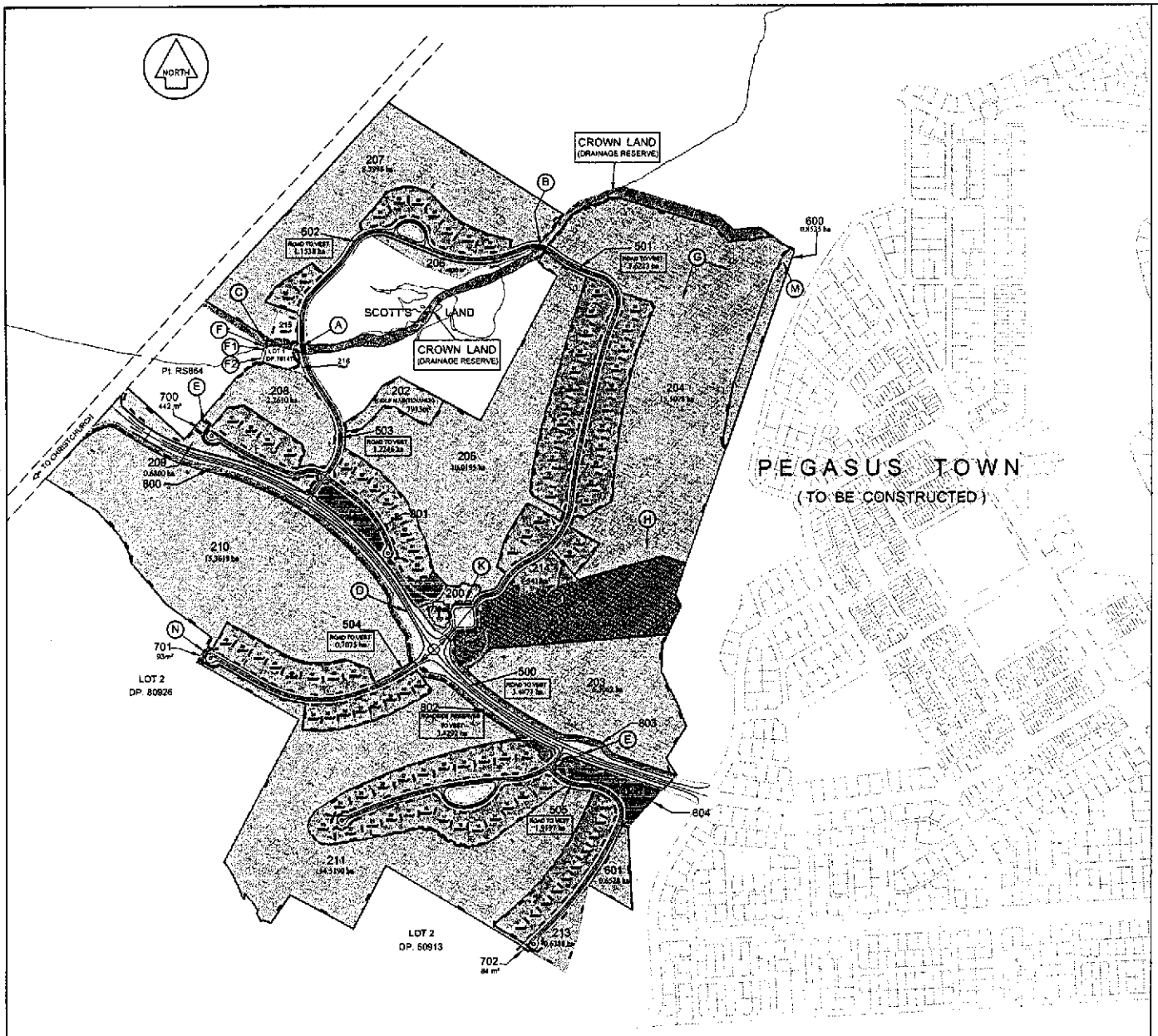
22. The lapsing provisions of Section 125 of the Act or the RMA will apply on expiry of ten years from the date of commencement of this consent.

PLAN 1

NORTH
0 40 80 200m
Mapleham
masterplan
INFINITY
BOFFA MISKELL
planning · design · ecology


Additional Proposed Planting
Evergreens
Chinese Poplars
Scarlet Oak
Pin Oak
Current proposed tree planting
STATE HIGHWAY 1
12
140m
REMOVE TREES FROM INSIDE LINE OF PLAY
PREVIOUS CENTRELINE (EXISTING)
PROPOSED REVISED CENTRELINE
260
190
REVISED TEE LOCATIONS
REMOVE 1 tree
Boffa Miskell
Pegasus Town
Revision 1
HOLE 12 REVISION
Scale: 1:750 (A1) 1:1500 (A3) | Date: 17 November 2005
Tel: 64 3 366 8891 | Contact: markt.tessdale@boffamiskell.co.nz
Christchurch Office © Boffa Miskell Limited 2005

PLAN 3



LEGEND & SCHEDULE OF AREAS

	GOLF RESIDENTIAL (LOTS 1 - 98)	= 20.6202 ha
	GOLF CLUB HOUSE (LOT 200)	= 0.4732 ha
	GOLF DRIVING RANGE (LOT 201)	= 4.7247 ha
	GOLF MAINTENANCE (LOT 202)	= 0.7913 ha
	GOLF COURSE (LOTS 203 -211,213; 600 & 601)	= 75.0662 ha
	TENNIS COURTS (LOT 214)	= 0.5418 ha
	ROADS TO VEST (LOTS 500 - 505)	= 10.3071 ha
	LOTS TO BE TRANSFERRED TO LOT 1 DP 76141(LOTS 215 & 216)	= 0.2770 ha
	FUTURE ACCESS (LOTS 700 - 702)	= 0.0619 ha
	RESERVE LOTS (LOTS 800 - 805)	= 3.4292ha
	TOTAL AREA	= 116.2402 ha

NOTES.

1. LOTS 203-211, 213 & 600 ARE TO BE HELD IN ONE CERIFICATE OF TITLE.

2. AREAS (A), (B) &(C) TO BE SUBJECT TO LEASES FROM DOC.

3. AREAS (D) & (E) TO BE SUBJECT TO LEASES FOR GOLF CART UNDERPASSES FROM WAIMAKARIRI DISTRICT COUNCIL.

4. LOTS 215 & 216 ARE TO BE HELD IN THE SAME CERTIFICATE OF TITLE AS LOT 1. DP 76141

PROPOSED SCHEDULE OF EASEMENTS

PURPOSE	SHOWN	DOMINANT TENEMENT	SERVIENT TENEMENT
ROW	E	PT. RS864	LOT 700 HEREON,
ROW	F & F1	LOTS 207 & 208 HEREON	PT. RS864
ROW	F2	LOTS 207 & 208 HEREON	LOT 1 DP.76141
ROW	N	LOT 2 DP. 80926	LOT 701 HEREON,

PROPOSED SCHEDULE OF EASEMENTS IN GROSS

SHOWN	PURPOSE	SERVIENT TENEMENT	GRANTEE
G, H	ROW	LOT 204	WAIMAKARIRI DISTRICT COUNCIL
I	ROW	LOT 214	
K	ROW	LOT 200	
M	ROW	LOT 600	

REVISIONS:	DATE	NAME
1. SCHEME AMENDED	20/09/05	JFG
2. SCHEME AMENDED	23/09/05	DW
3. SCHEME AMENDED	07/10/05	AJK

Client: INFINITY INVESTMENT GROUP

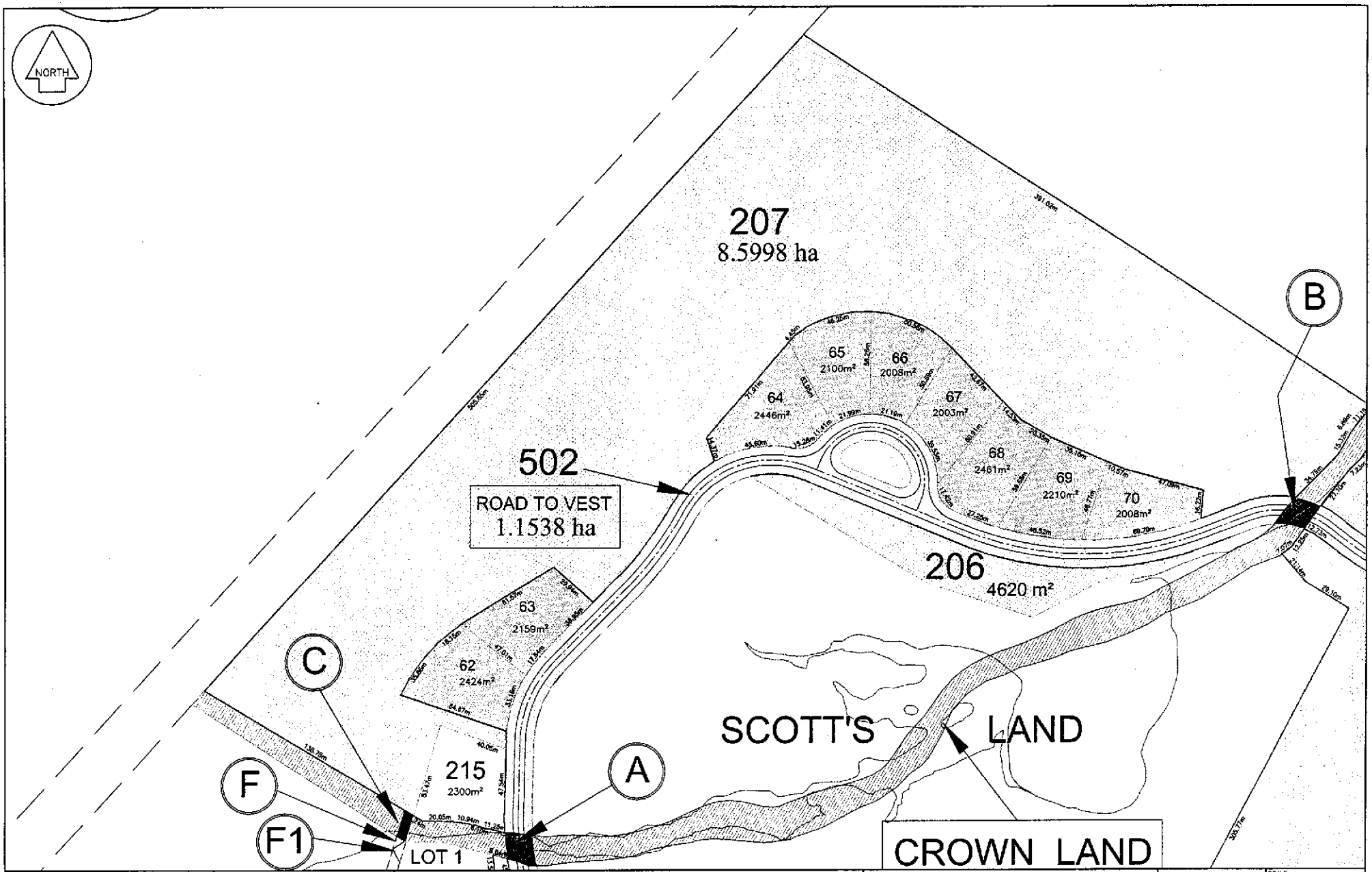
PEGASUS TOWN LIMITED
GOLF COURSE SCHEME PLAN
(SHEET 1 OF 7 SHEETS)
WAIMAKARIRI DISTRICT COUNCIL

WOOD AND PARTNERS

REGISTERED SURVEYORS
CONSULTING ENGINEERS
TOWN & RESOURCE PLANNERS
Level 4 Building 3
655 Great South Road
PO Box 8762 Auckland
Ph 09 571 2470
Fax 09 571 3405

DESIGNED: XXX		SCALE:	1:4000 @ A1 1:2000 @ A3
DRAWN: TUI		JOB NO:	60079
CHECKED: XXX			
CAD REF: GOLF SCHEME DWG			
APPROVED: XXX		DRAWING NO:	G/SCH/01
ISSUED: 17/08/05			

PLAN 4



REVISIONS:	DATE	NAME
1. SCHEME AMENDED	20/09/05	JFG
2. SCHEME AMENDED	23/09/05	DW
3. SCHEME AMENDED	07/10/05	AJK

Client: INFINITY INVESTMENT GROUP

PEGASUS TOWN LIMITED
GOLF COURSE SCHEME PLAN
(SHEET 1 OF 7 SHEETS)
WAIMAKARIRI DISTRICT COUNCIL

WOOD AND PARTNERS

REGISTERED SURVEYORS
CONSULTING ENGINEERS
TOWN & RESOURCE PLANNERS

Level 4 Building 3
866 Great South Road
PO Box 6752 Auckland

Ph 09 571 2470
Fax 09 571 3405

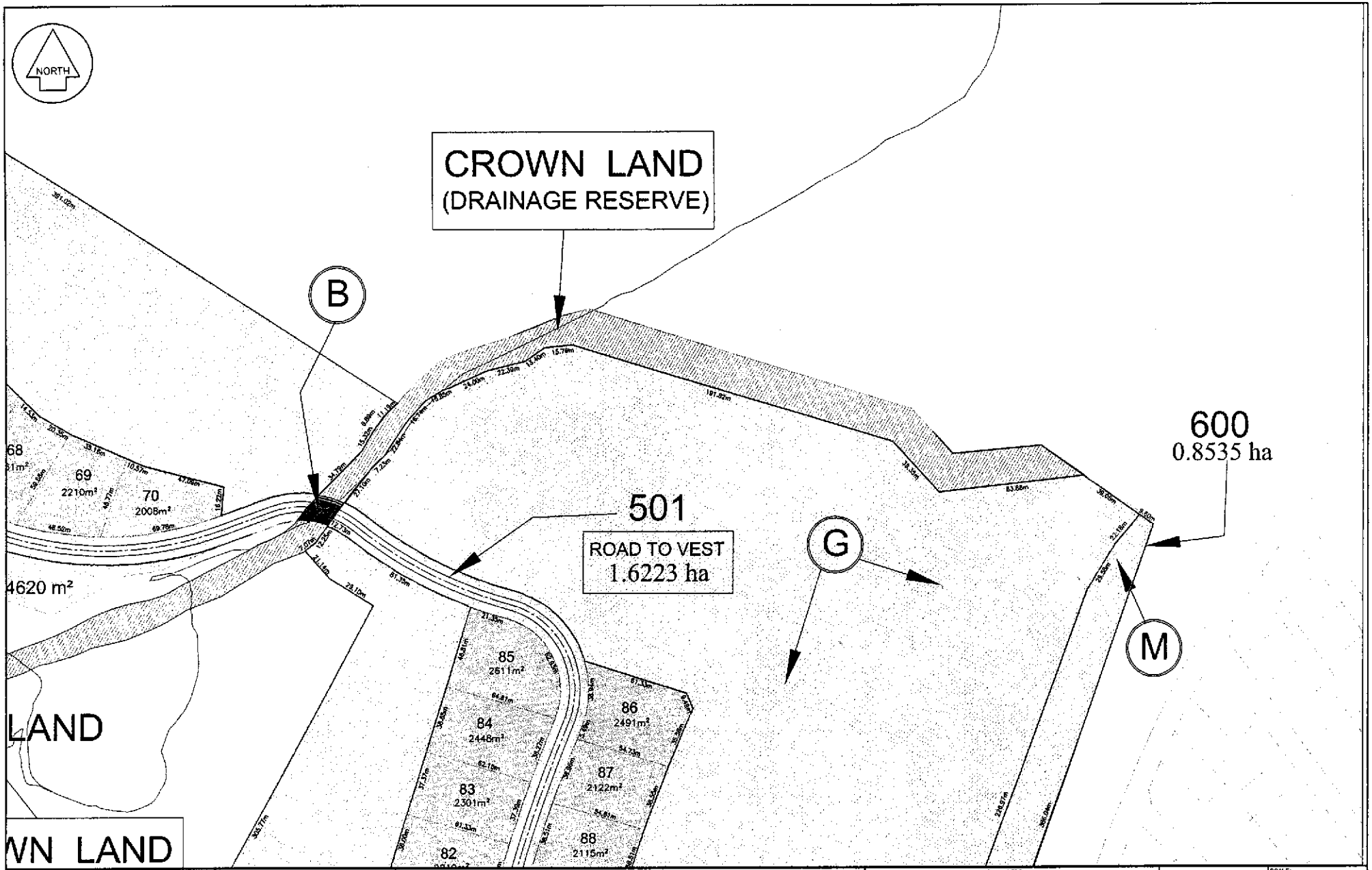
DESIGNED:	XXX
DRAWN:	TUI
CHECKED:	XXX
CAD REF:	GOLF SCHEME.DWG
APPROVED:	XXX
ISSUED:	17/08/05

SCALE: 1:2000 @ A1, 1:1000 @ A3

JOB NO: 60079

DRAWING NO: G/SCH/01

PLAN 5



REVISIONS:	DATE	NAME
1. SCHEME AMENDED	20/09/05	JFG
2. SCHEME AMENDED	23/09/05	DW
3. SCHEME AMENDED	07/10/05	AJK

Client: INFINITY INVESTMENT GROUP

PEGASUS TOWN LIMITED
GOLF COURSE SCHEME PLAN
(SHEET 2 OF 7 SHEETS)
WAIMAKARIRI DISTRICT COUNCIL

WOOD AND PARTNERS

REGISTERED SURVEYORS
CONSULTING ENGINEERS
TOWN & RESOURCE PLANNERS

Level 4 Building 3
656 Great South Road
PO Box 6752 Auckland

Ph 09 571 2470
Fax 09 571 3405

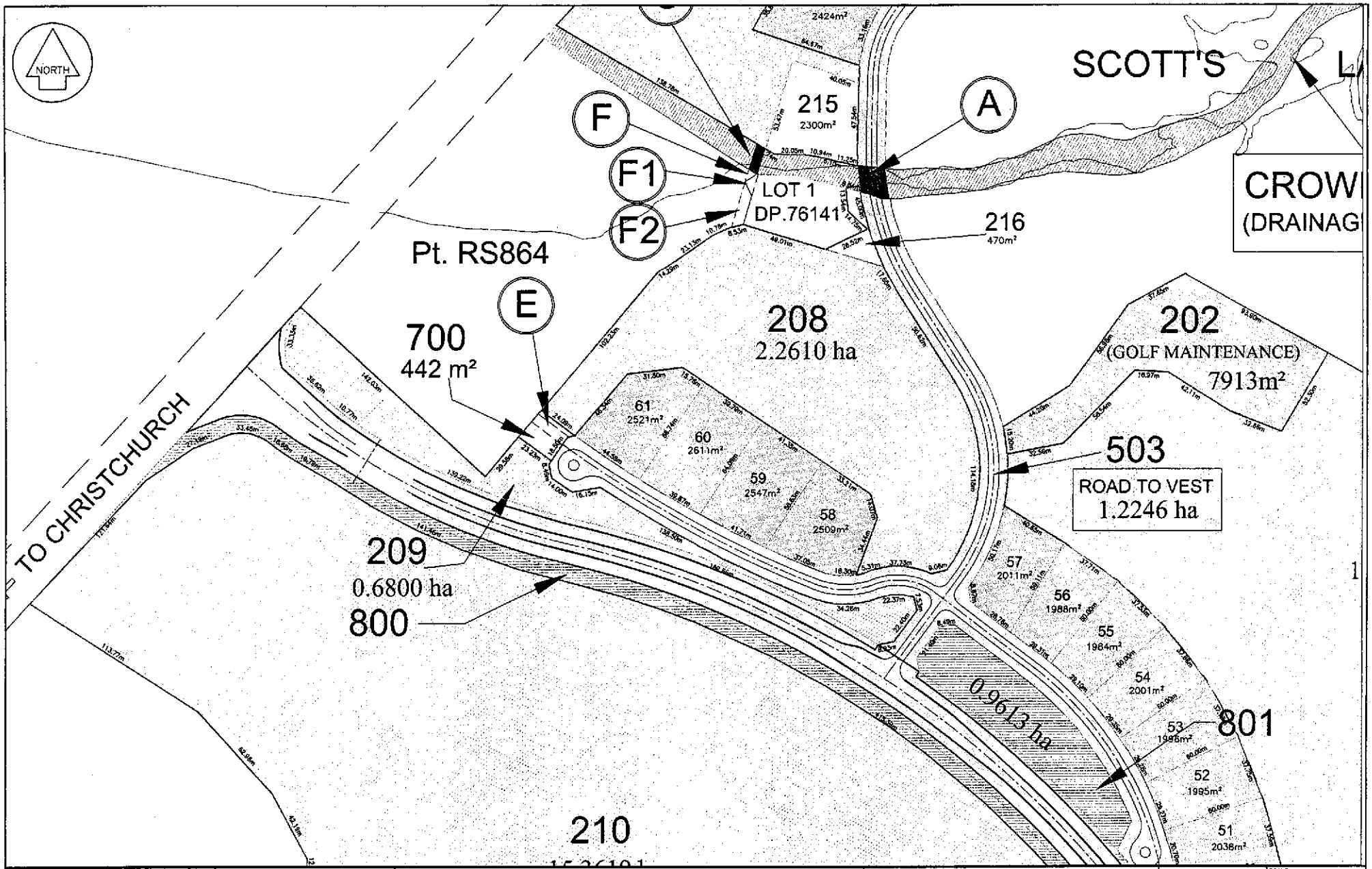
DESIGNED:	XXX
DRAWN:	TUI
CHECKED:	XXX
CAD REF:	GOLF SCHEME.DWG
APPROVED:	XXX
ISSUED:	17/08/06

SCALE: 1:1000 @ A1, 1:2000 @ A3

JOB NO: 60079

DRAWING NO: G/SCH/02

PLAN 6



REVISIONS:	DATE	NAME
1. SCHEME AMENDED	20/09/05	JFG
2. SCHEME AMENDED	23/09/05	DM
3. SCHEME AMENDED	07/10/05	AJK

Client: INFINITY INVESTMENT GROUP

PEGASUS TOWN LIMITED
GOLF COURSE SCHEME PLAN
(SHEET 3 OF 7 SHEETS)
WAIMAKARIRI DISTRICT COUNCIL

WOOD AND PARTNERS

REGISTERED SURVEYORS
CONSULTING ENGINEERS
TOWN & RESOURCE PLANNERS

Level 4 Building 3
616 Great South Road
PO Box 6752 Auckland
Ph 09 571 2470
Fax 09 571 3405

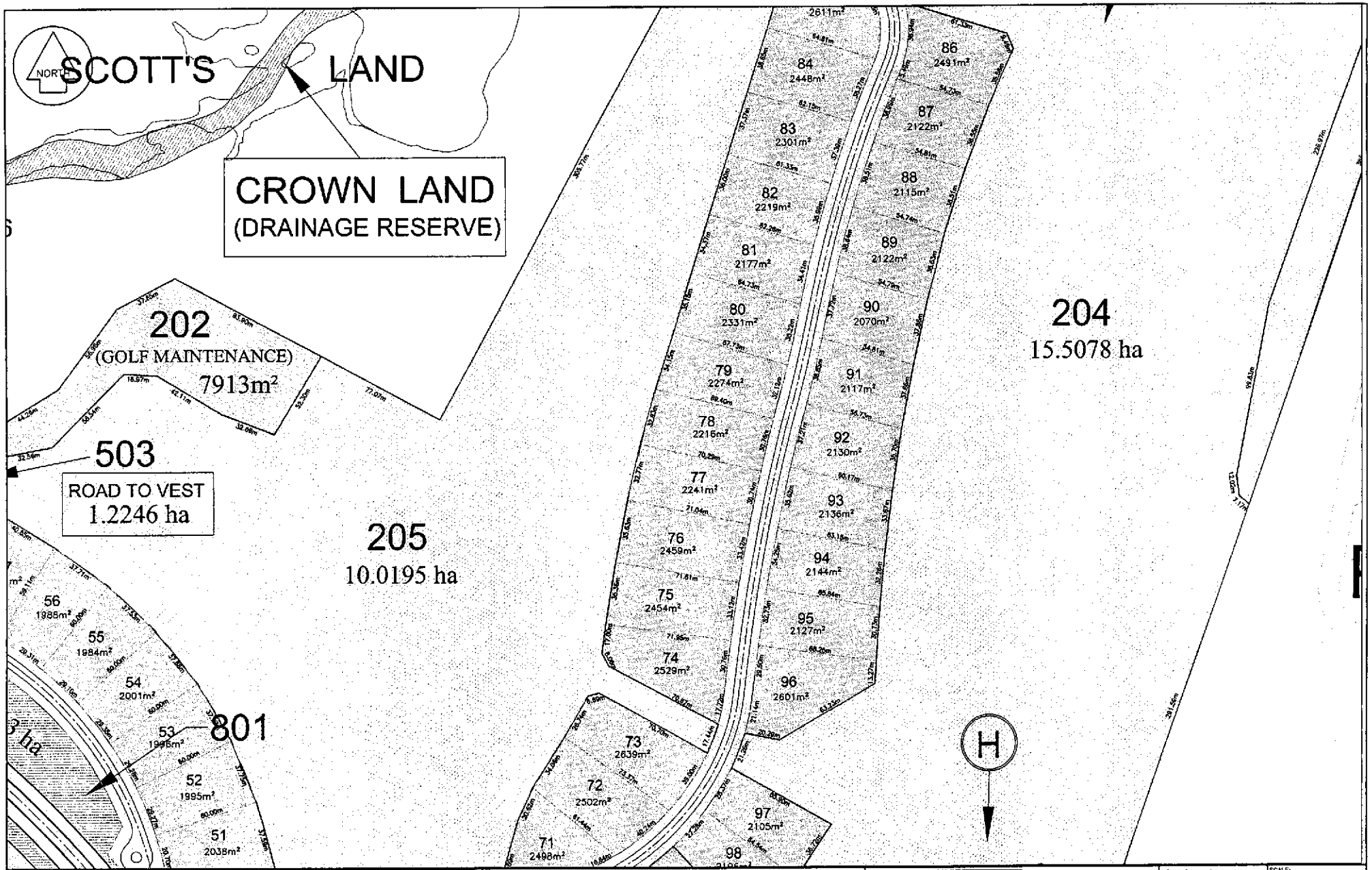
DESIGNED:	XXX
DRAWN:	TUI
CHECKED:	XXX
CAD REF:	GOLF SCHEME.DWG
APPROVED:	XXX
ISSUED:	17/08/05

SCALE: 1:1000 @ A1, 1:2000 @ A3

JOB NO: 60079

DRAWING NO: G/SCH/03

PLAN 7



REVISIONS:	DATE	NAME
1. SCHEME AMENDED	20/09/05	JFG
2. SCHEME AMENDED	23/09/05	DW
3. SCHEME AMENDED	07/10/05	AJK

Client: INFINITY INVESTMENT GROUP

PEGASUS TOWN LIMITED
GOLF COURSE SCHEME PLAN
(SHEET 4 OF 7 SHEETS)
WAIMAKARIRI DISTRICT COUNCIL

WOOD AND PARTNERS

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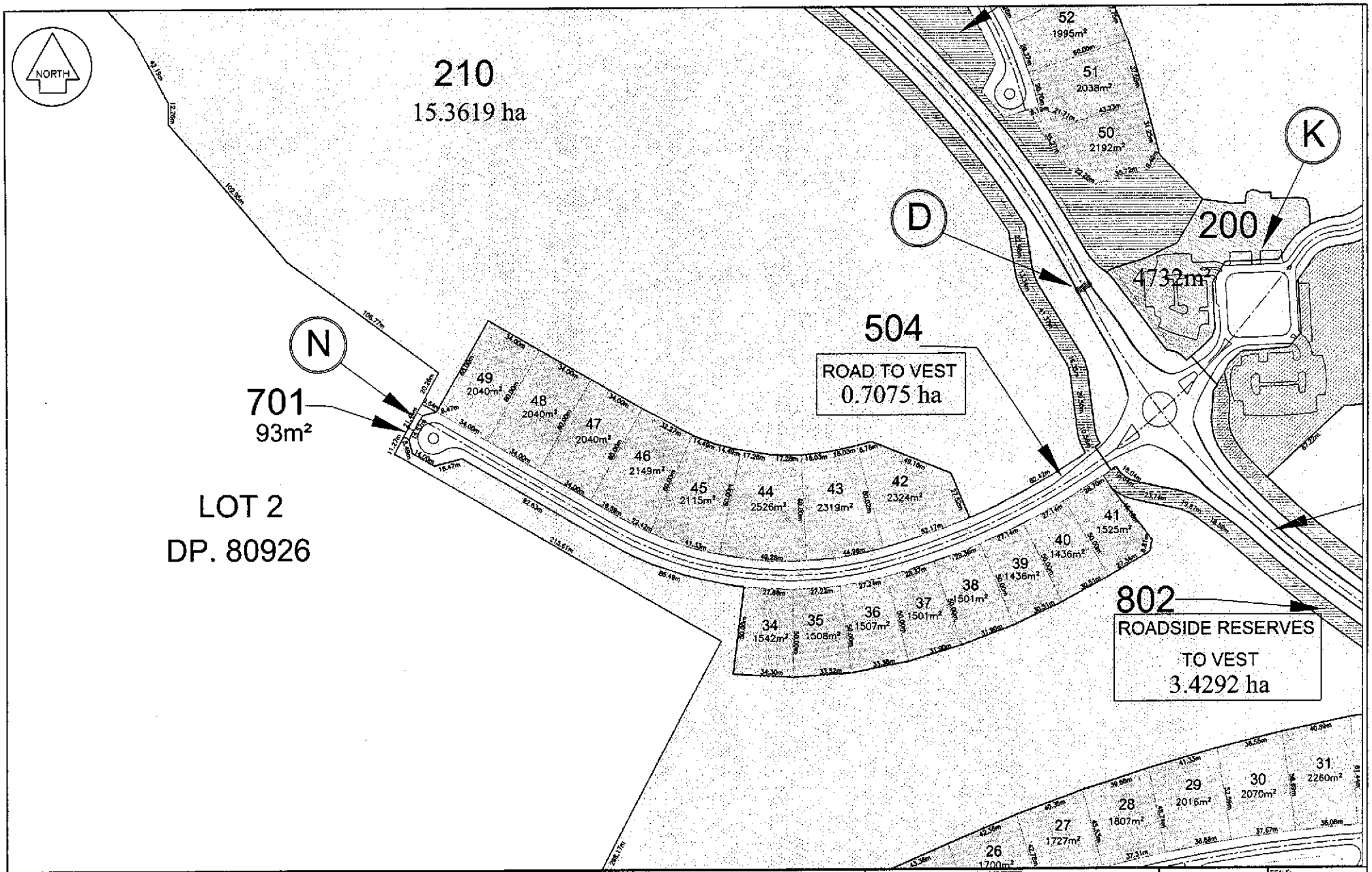
Level 4 Building 3
866 Great South Road
PO Box 6752 Auckland
Ph 09 571 2470
Fax 09 571 3405

DESIGNED:	XXX	SCALE:	1:1000 @ A1 1:2000 @ A3
DRAWN:	TUI		
CHECKED:	XXX	JOB NO:	60079
CAD REF:	GOLF SCHEME.DWG		
APPROVED:	XXX	DRAWING NO:	G/SCH/04
ISSUED:	17/08/05		

PLAN 8



REVISIONS:	DATE	NAME
1. SCHEME AMENDED	20/09/05	JFG
2. SCHEME AMENDED	23/09/05	DW
3. SCHEME AMENDED	07/10/05	AJK

Client: INFINITY INVESTMENT GROUP

PEGASUS TOWN LIMITED
GOLF COURSE SCHEME PLAN
(SHEET 5 OF 7 SHEETS)
WAIMAKARIRI DISTRICT COUNCIL

WOOD AND PARTNERS

REGISTERED SURVEYORS
CONSULTING ENGINEERS
TOWN & RESOURCE PLANNERS

Level 4 Building 3
666 Great South Road
PO Box 9762 Auckland

Ph 09 571 2470
Fax 09 571 3405

DESIGNED: XXX	SCALE: 1:1000 @ A1, 1:2000 @ A3
DRAWN: TUI	JOB NO: 60079
CHECKED: XXX	
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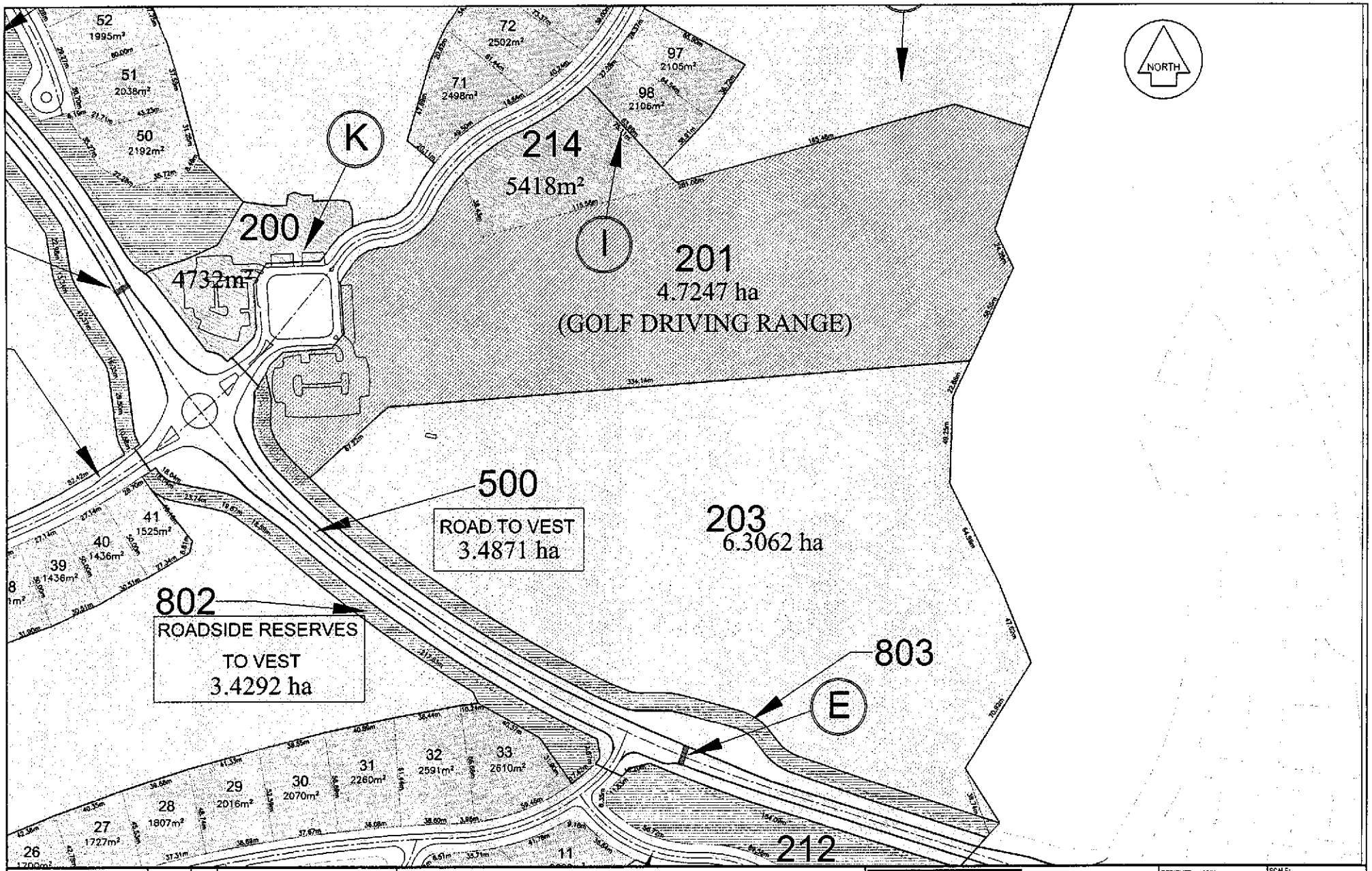
APPROVED: XXX	DRAWING NO: G/SCH/05
ISSUED: 17/08/05	

PLAN 9



REVISIONS:	DATE	NAME
1. SCHEME AMENDED	20/09/05	JFG
2. SCHEME AMENDED	23/09/05	DW
3. SCHEME AMENDED	07/10/05	AJK

Client: INFINITY INVESTMENT GROUP

PEGASUS TOWN LIMITED
GOLF COURSE SCHEME PLAN
(SHEET 6 OF 7 SHEETS)
WAIMAKARIRI DISTRICT COUNCIL

WOOD AND PARTNERS

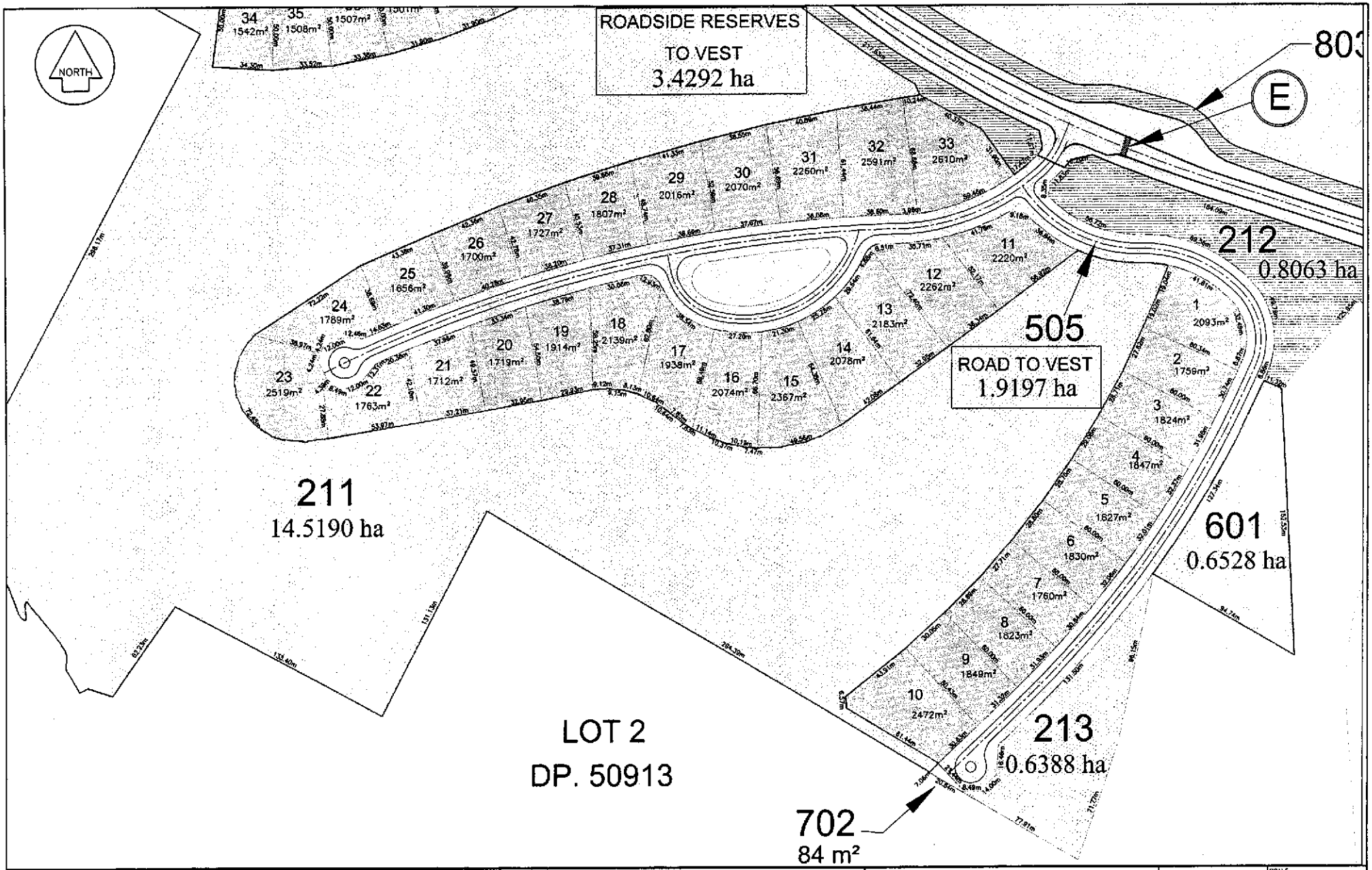
REGISTERED SURVEYORS
CONSULTING ENGINEERS
TOWN & RESOURCE PLANNERS

Level 4 Building 3
666 Great South Road
PO Box 6752 Auckland

Ph 09 571 2470
Fax 09 571 3405

DESIGNED:	XXX	SCALE:	1:1000 @ A1 1:2000 @ A3
DRAWN:	TUI		
CHECKED:	XXX	JOB NO:	60079
CAD REF:	GOLF SCHEME.DWG		
APPROVED:	XXX	DRAWING NO:	G/SCH/06
ISSUED:	17/08/05		

PLAN 10



REVISIONS:	DATE	NAME
1. SCHEME AMENDED	20/09/05	JFG
2. SCHEME AMENDED	23/09/05	DW
3. SCHEME AMENDED	07/10/05	AJK

Client: INFINITY INVESTMENT GROUP

PEGASUS TOWN LIMITED
GOLF COURSE SCHEME PLAN
(SHEET 7 OF 7 SHEETS)
WAIMAKARIRI DISTRICT COUNCIL

WOOD AND PARTNERS

REGISTERED SURVEYORS
CONSULTING ENGINEERS
TOWN & RESOURCE PLANNERS

Level 4 Building 3
556 Great South Road
PO Box 6762 Auckland

Ph 09 571 2470
Fax 09 571 3405

DESIGNED:	XXX
DRAWN:	TUI
CHECKED:	XXX
CAD REF:	GOLF SCHEME.DWG
APPROVED:	XXX
ISSUED:	17/08/05

SCALE: 1:1000 @ A1, 1:2000 @ A3

JOB NO: 60079

DRAWING NO: G/SCH/07

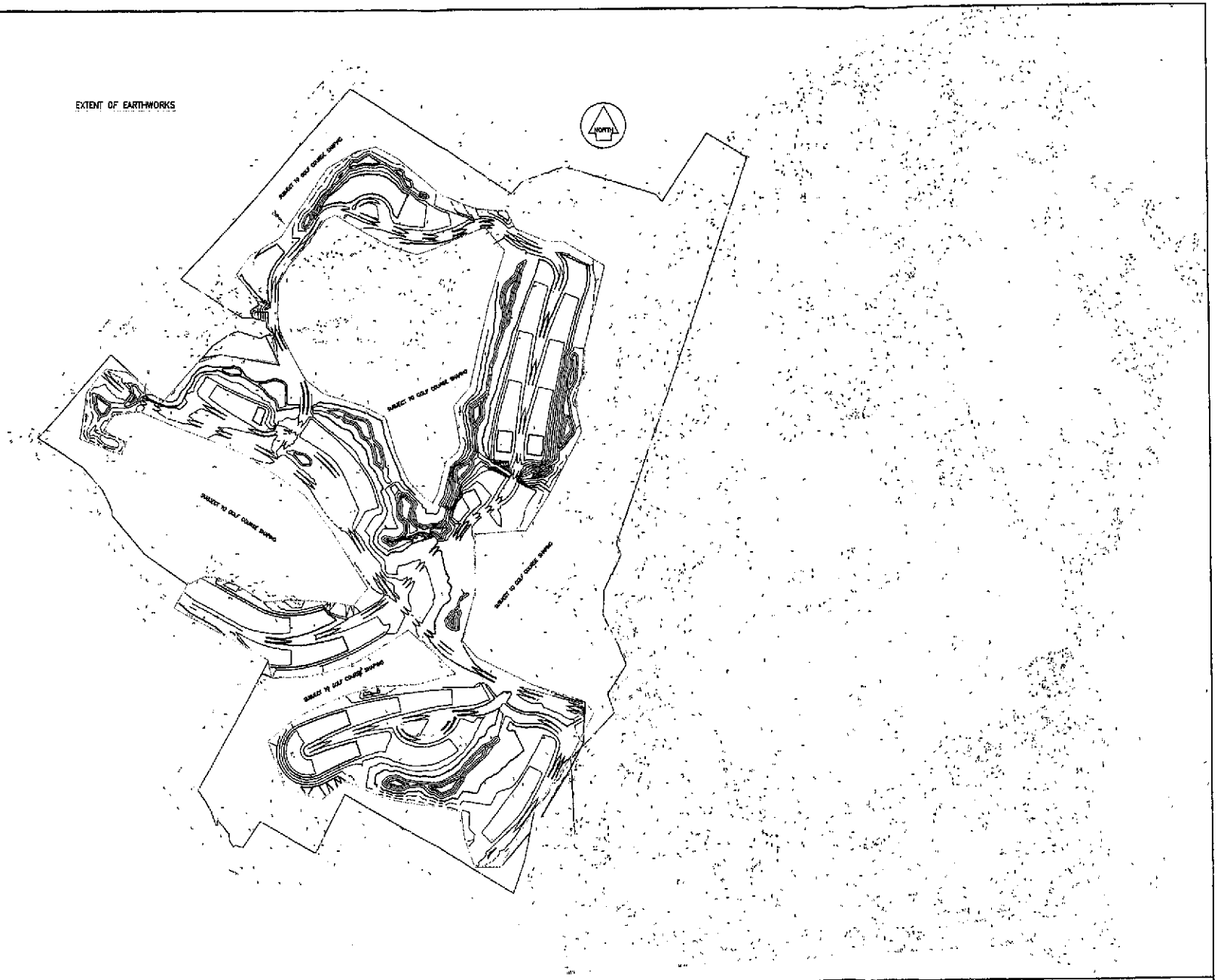
PLAN 11

NOTES

1. UNDERFILL DRAINAGE IS TO BE INSTALLED AT THE DIRECTION OF THE ENGINEER. IF THE CONTRACTOR ENCOUNTERS SPRINGS OR OTHER SOURCES OF WATER HE IS TO NOTIFY THE ENGINEER.
2. ALL UNSUITABLE MATERIAL AS DEFINED IN THE SPECIFICATION IS TO BE REMOVED AND THE STRIPPED AREAS INSPECTED BY THE ENGINEER BEFORE COMMENCES.
3. EARTHWORKS ARE NOT TO BE EXTENDED INTO ADJOINING SITES UNLESS THE ENGINEER HAS ISSUED SPECIFIC INSTRUCTIONS.
4. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND PROTECTING EXISTING SERVICES AND DRAINAGE ON SITE.
5. THE CONTRACTOR SHALL CLARIFY THE AREAS AND EXTENT OF CLEARING WITH THE ENGINEER BEFORE COMMENCEMENT AND CONFIRM THAT ALL NECESSARY CONSENTS ARE IN PLACE.
5. EXTENT OF EARTHWORKS DOES NOT INCLUDE GOLF COURSE SHAPING, WHICH WILL PRIMARILY BE CONTOURED USING EXCESS TOPSOIL STRIPPED OFF SITE.

LEGEND

FINAL CONTOURS
EXISTING CONTOURS
CUT FILL LINE
FILL AREAS
ROAD CENTRELINES AND CHAINAGES
RETAINING WALLS
EXISTING TREES
UNDERFILLS



REVISIONS:	DATE	NAME

Client:

MAPLEHAM GOLF COURSE
EARTHWORKS
OVERALL PLAN
WAIMAKARIRI DISTRICT COUNCIL

WOOD AND PARTNERS

REGISTERED SURVEYORS
CONSULTING ENGINEERS
TOWN & RESOURCE PLANNERS
Level 4 Building G
666 Great South Road
PO Box 5752 Auckland
Ph 09 571 2470
Fax 09 571 3406

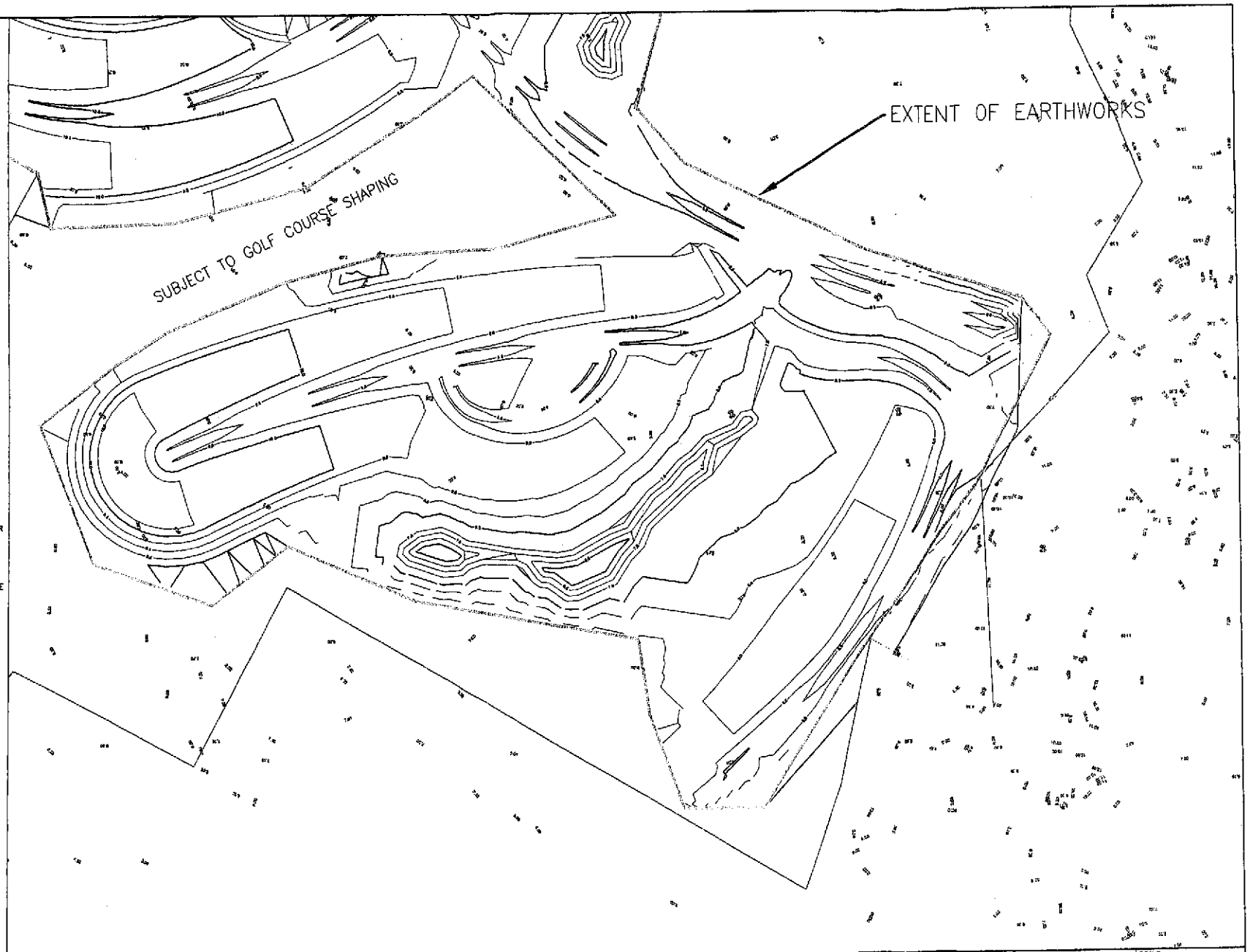
DESIGNED:	AJK
DRAWN:	TK
CHECKED:	JFG
CAD REF:	100-EARTHWORKS.DWG
APPROVED:	
ISSUED:	2005.09.22

SCALE: 1:4000 @A1, 1:8000 @A3

JOB NO: 60079

DRAWING NO: 100

PLAN 12



NOTES

1. UNDERFILL DRAINAGE IS TO BE INSTALLED AT THE DIRECTION OF THE ENGINEER. IF THE CONTRACTOR ENCOUNTERS SPRINGS OR OTHER SOURCES OF WATER HE IS TO NOTIFY THE ENGINEER.
2. ALL UNSUITABLE MATERIAL AS DEFINED IN THE SPECIFICATION IS TO BE REMOVED AND THE STRIPPED AREAS INSPECTED BY THE ENGINEER BEFORE COMMENCES.
3. EARTHWORKS ARE NOT TO BE EXTENDED INTO ADJOINING SITES UNLESS THE ENGINEER HAS ISSUED SPECIFIC INSTRUCTIONS.
4. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND PROTECTING EXISTING SERVICES AND DRAINAGE ON SITE.
5. THE CONTRACTOR SHALL CLARIFY THE AREAS AND EXTENT OF CLEARING WITH THE ENGINEER BEFORE COMMENCEMENT AND CONFIRM THAT ALL NECESSARY CONSENTS ARE IN PLACE.
6. EXTENT OF EARTHWORKS DOES NOT INCLUDE GOLF COURSE SHAPING, WHICH WILL PRIMARILY BE CONTOURED USING EXCESS TOPSOIL STRIPPED OFF SITE.

LEGEND

FINAL CONTOURS — 23.6
EXISTING CONTOURS — 23.0
CUT FILL LINE
FILL AREAS
ROAD CENTRELINES AND CHAINAGES
RETAINING WALLS
EXISTING TREES
UNDERFILLS

REVISIONS:	DATE	NAME

Client:

MAPLEHAM GOLF COURSE

EARTHWORKS PLAN (SHEET 5 OF 5 SHEETS)

WAIMAKARIRI DISTRICT COUNCIL

WOOD AND PARTNERS

REGISTERED SURVEYORS
CONSULTING ENGINEERS
TOWN & RESOURCE PLANNERS

Level 4 Building 3
866 Great South Road
PO Box 8752 Auckland

Ph 09 571 2470
Fax 09 571 3405

DESIGNED:	AJK	SCALE:	1:1250 @A1 1:2500 @A3
DRAWN:	TK		
CHECKED:	JFC	JOB NO:	60079
CAD REF:	100-EARTHWORKS.DWG		
APPROVED:		DRAWING NO:	105
ISSUED:	2005.09.22		

PLAN 13

NOTES

1. UNDERFILL DRAINAGE IS TO BE INSTALLED AT THE DIRECTION OF THE ENGINEER. IF THE CONTRACTOR ENCOUNTERS SPRINGS OR OTHER SOURCES OF WATER HE IS TO NOTIFY THE ENGINEER.
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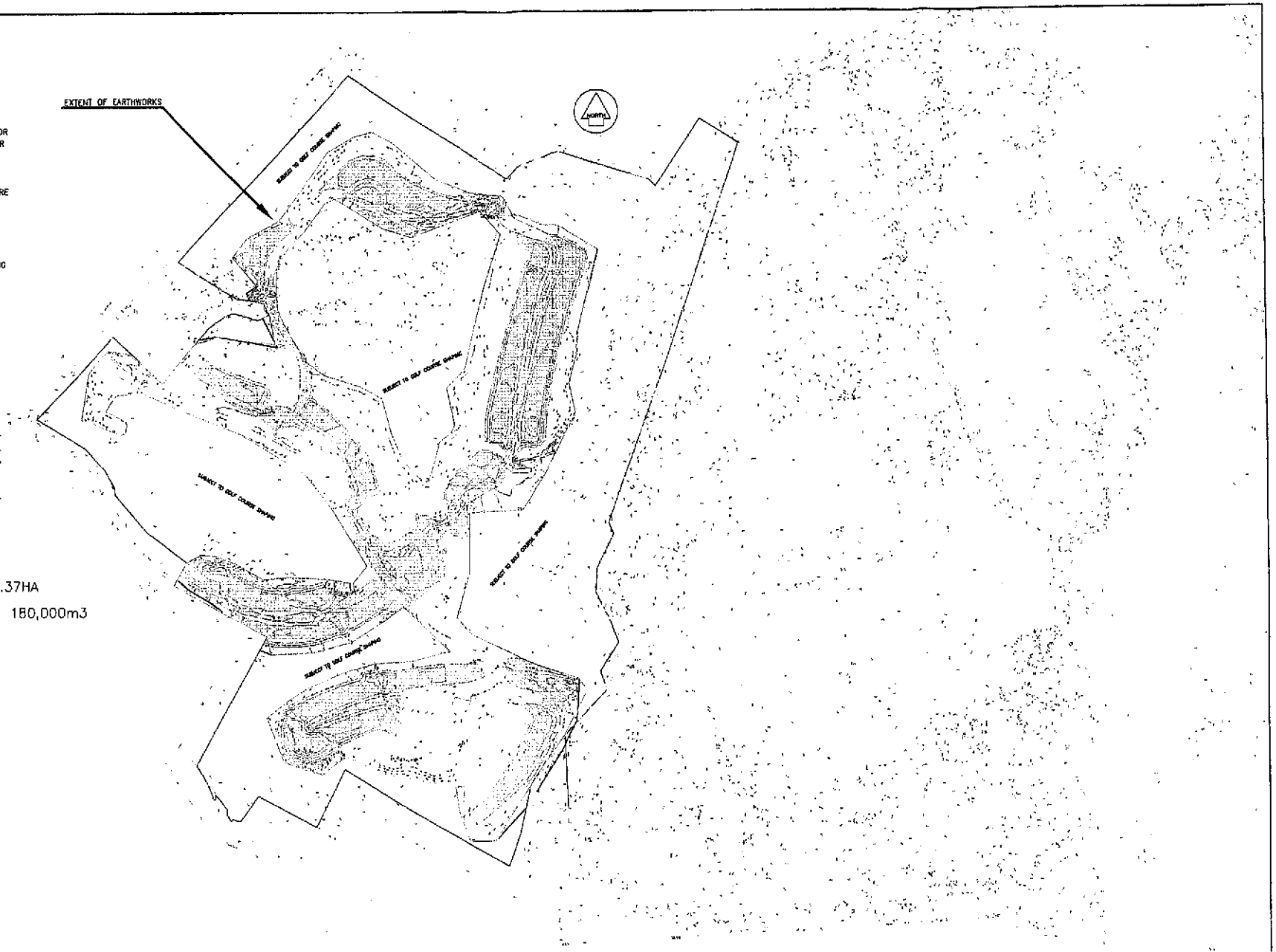
4. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND PROTECTING EXISTING SERVICES AND DRAINAGE ON SITE.
5. THE CONTRACTOR SHALL CLARIFY THE AREAS AND EXTENT OF CLEARING WITH THE ENGINEER BEFORE COMMENCEMENT AND CONFIRM THAT ALL NECESSARY CONSENTS ARE IN PLACE.
5. EXTENT OF EARTHWORKS DOES NOT INCLUDE GOLF COURSE SHAPING, WHICH WILL PRIMARILY BE CONTOURED USING EXCESS TOPSOIL STRIPPED OFF SITE.

LEGEND

FINAL CONTOURS
EXISTING CONTOURS
CUT FILL LINE
FILL AREAS
ROAD CENTRELINES AND CHAINAGES
RETAINING WALLS
EXISTING TREES
UNDERFILLS

TOTAL EARTHWORKS AREA = 59.37HA

TOTAL EARTHWORKS VOLUMES = 180,000m3



REVISIONS:	DATE	NAME

Client:

MAPLEHAM GOLF COURSE
OVERALL CUT & FILL PLAN
WAIMAKARIRI DISTRICT COUNCIL

WOOD AND PARTNERS

REGISTERED SURVEYORS
CONSULTING ENGINEERS
TOWN & RESOURCE PLANNERS

Level 4 Building 3
666 Great South Road
PO Box 9752 Auckland

Ph 09 571 2470
Fax 09 571 3405

DESIGNED: AJK		SCALE:	1:2500 @A1 1:5000 @A3
DRAWN: TK			
CHECKED: JFG		JOB NO:	60079
CAD REF: 100-EARTHWORKS.DWG			
APPROVED:		DRAWING NO:	110
ISSUED: 2005.09.22			

PLAN 14

NOTES

1. UNDERFILL DRAINAGE IS TO BE INSTALLED AT THE DIRECTION OF THE ENGINEER. IF THE CONTRACTOR ENCOUNTERS SPRINGS OR OTHER SOURCES OF WATER HE IS TO NOTIFY THE ENGINEER.
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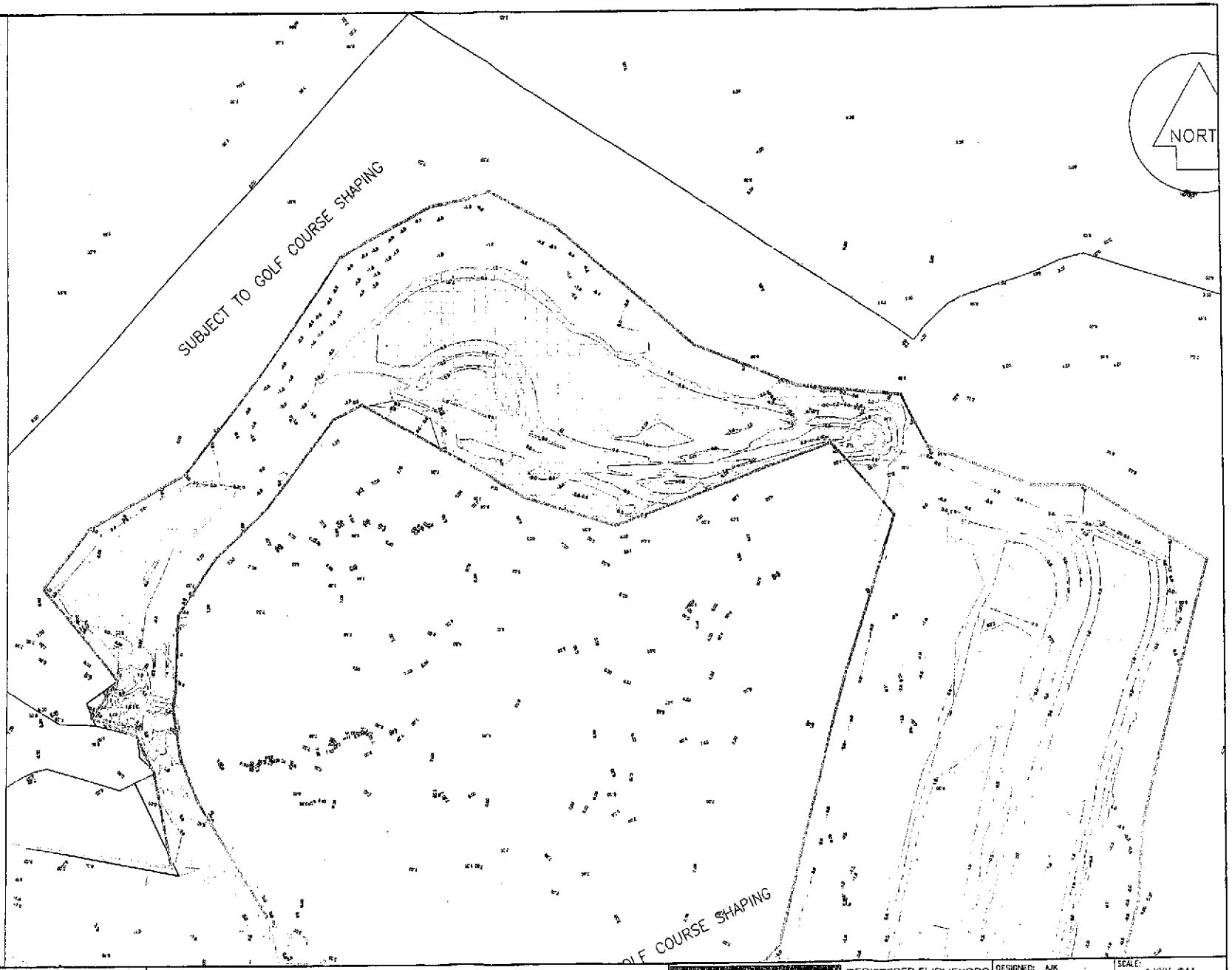
4. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND PROTECTING EXISTING SERVICES AND DRAINAGE ON SITE.
5. THE CONTRACTOR SHALL CLARIFY THE AREAS AND EXTENT OF CLEARING WITH THE ENGINEER BEFORE COMMENCEMENT AND CONFIRM THAT ALL NECESSARY CONSENTS ARE IN PLACE.
5. EXTENT OF EARTHWORKS DOES NOT INCLUDE GOLF COURSE SHAPING, WHICH WILL PRIMARILY BE CONTOURED USING EXCESS TOPSOIL STRIPPED OFF SITE.

LEGEND

- FINAL CONTOURS
- EXISTING CONTOURS
- CUT FILL LINE
- FILL AREAS
- ROAD CENTRELINES AND CHAINAGES
- RETAINING WALLS
- EXISTING TREES
- UNDERFILLS



REVISIONS:	DATE	NAME

Client:

MAPLEHAM GOLF COURSE

CUT - FILL PLAN (SHEET 1 OF 5 SHEETS)

WAIMAKARIRI DISTRICT COUNCIL

WOOD AND PARTNERS

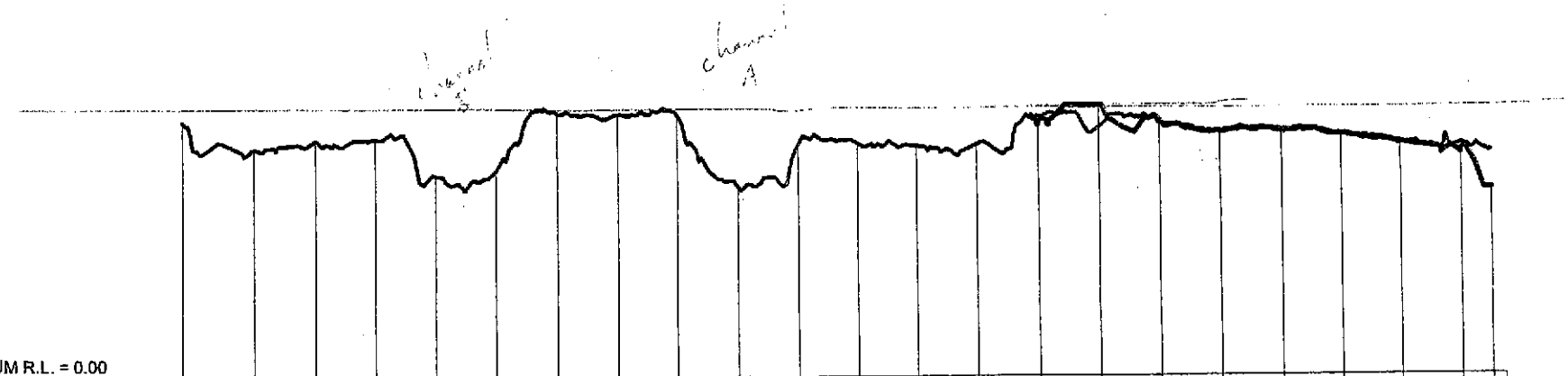
REGISTERED SURVEYORS
CONSULTING ENGINEERS
TOWN & RESOURCE PLANNERS

Level 4 Building 3
366 Great South Road
PO Box 6782 Auckland

Ph 09 571 2470
Fax 09 571 3405

DESIGNED:	AJK	SCALE:	1:XXX @A1 1:XXX @A3
DRAWN:	TK		
CHECKED:	JFG	JOB NO:	50079
CAD REF:	100-EARTHWORKS.DWG		
APPROVED:		DRAWING NO:	111
ISSUED:	2005.09.22		

3.2cm = 200m
1cm = 62.5m
NORTH
0 40 80 200m
1cm : 6153.8
37.5 . 200
Mapleham
masterplan
INFINITY
BOFFA MISKELL
planning · design · ecology



DATUM R.L. = 0.00

EXISTING SURFACE	10.38	8.26	9.62	9.88	8.21	8.40	10.75	10.72	10.69	7.80	9.52	9.53	9.42	9.45	10.59	10.11	10.29	9.95	10.00	9.82	9.43	9.41	9.11
CUT / FILL DEPTH																-0.88	-0.10	-0.01	0.03	-0.02	-0.06	0.23	1.51
CL DESIGN LEVELS																10.99	10.39	9.96	9.97	9.84	9.50	9.18	7.60
CHAINAGE	1290.68	1350.00	1400.00	1450.00	1500.00	1550.00	1600.00	1650.00	1700.00	1750.00	1800.00	1850.00	1900.00	1950.00	2000.00	2050.00	2100.00	2150.00	2200.00	2250.00	2300.00	2350.00	2374.84

CROSS SECTION 1

250 m

500m

Looking upstream!

REVISIONS:	DATE	NAME	Client:

PEGASUS TOWN LIMITED
EARTHWORKS CROSS SECTIONS
LOT XX DP XXXXX
WAIMAKARIRI DISTRICT COUNCIL

WOOD AND PARTNERS

REGISTERED SURVEYORS
CONSULTING ENGINEERS
TOWN & RESOURCE PLANNERS

Level 4 Building 3
566 Great South Road
PO Box 6752 Auckland
Ph 09 571 2470

DESIGNED: AK	SCALE: H 1:2000 @A1 V 1:100 @A1
DRAWN: JNN AK	JOB NO: 60079
CHECKED: AK	
CAD REF: XSECTIONS	
APPROVED:	DRAWING NO:

DATUM R.L. = 0.00

CHAINAGE	EXISTING SURFACE	CUT / FILL DEPTH	CL DESIGN LEVELS
0.00	8.47	-0.81	8.28
50.00	8.56	-0.90	9.45
100.00	8.86	-0.31	9.16
150.00	9.09	-0.83	8.83
200.00	9.36	-0.32	9.67
250.00	9.71	0.67	9.04
300.00	9.39	0.04	9.35
350.00	9.61	0.13	9.48
400.00	8.07	-0.45	8.52
450.00	8.50		
500.00	8.78		
550.00	9.08		
600.00	7.75		
650.00	8.33		
700.00	9.90		
750.00	9.23		
800.00	8.99		
850.00	8.88		
900.00	8.83		
950.00	9.19		
1000.00	9.82		
1050.00	9.85		
1100.00	7.53		
1150.00	7.95		
1200.00	8.91		
1250.00	8.55		
1300.00	8.30		
1322.48	8.53		

CROSS SECTION 2

Looking downstream

REVISIONS:	DATE	NAME

Client:

PEGASUS TOWN LIMITED
EARTHWORKS CROSS SECTIONS
LOT XX DP XXXXX
WAIMAKARIRI DISTRICT COUNCIL

WOOD AND PARTNERS

REGISTERED SURVEYORS
CONSULTING ENGINEERS
TOWN & RESOURCE PLANNERS

Level 4 Building 3
888 Great South Road
PO Box 5762 Auckland
Ph 09 571 2470

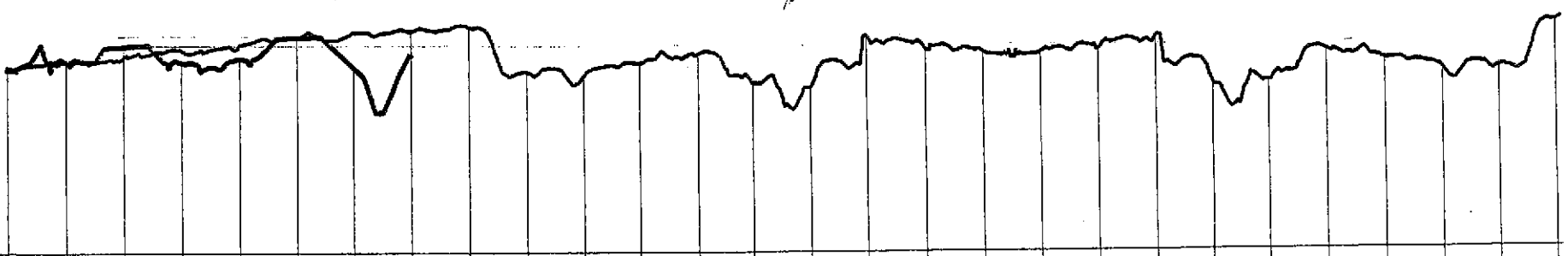
DESIGNED:	AK
DRAWN:	JMM AK
CHECKED:	AK
CAD REF:	XSECT.DWG
APPROVED:	

SCALE: H 1:2000 @A1
V 1:100 @A1

JOB NO: 60079

DRAWING NO:

PLAN 18



DATUM R.L. = 0.00

EXISTING SURFACE	7.96	8.22	8.37	8.68	8.90	9.20	9.42	9.45	9.65	7.73	7.55	8.07	8.48	7.24	7.03	9.21	8.66	8.50	8.45	8.57	9.12	7.17	7.21	8.52	8.09	7.67	7.70	9.62
CUT / FILL DEPTH	0.11	0.05	-0.46	0.53	0.59	-0.02	1.50	1.03																				
DESIGN LEVELS	7.85	8.17	8.84	8.15	8.31	9.22	7.93	8.42																				
CHAINAGE	0.00	50.00	100.00	150.00	200.00	250.00	300.00	350.00	400.00	450.00	500.00	550.00	600.00	650.00	700.00	750.00	800.00	850.00	900.00	950.00	1000.00	1050.00	1100.00	1150.00	1200.00	1250.00	1300.00	1350.00

CROSS SECTION 3

Looking downstream

REVISIONS:	DATE	NAME

Client:

PEGASUS TOWN LIMITED
EARTHWORKS CROSS SECTIONS
LOT XX DP XXXXX
WAIMAKARIRI DISTRICT COUNCIL

WOOD AND PARTNERS

REGISTERED SURVEYORS
CONSULTING ENGINEERS
TOWN & RESOURCE PLANNERS

Level 4 Building B
655 Great South Road
PO Box 6762 Auckland
Ph 09 571 2470

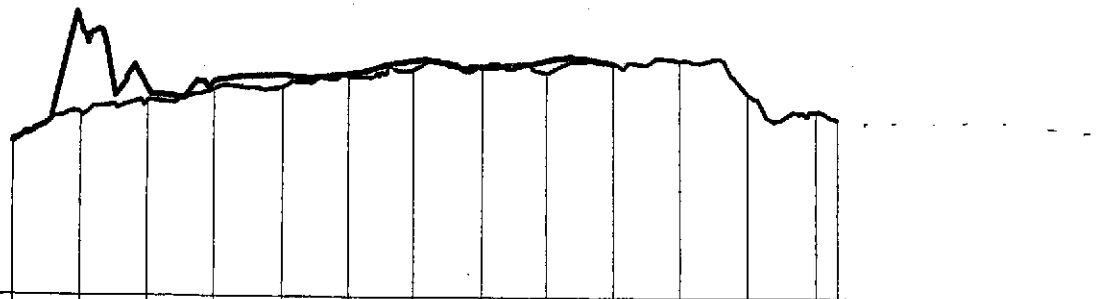
DESIGNED:	AK
DRAWN:	JMM AK
CHECKED:	AK
CAD REF:	XSECT.DWG
APPROVED:	

SCALE: H 1:2000 @A1 V 1:100 @A1

JOB NO: 60079

DRAWING NO:

PLAN 19



DATUM R.L. = 0.00

CL DESIGN LEVELS	5.61	9.95	7.60	7.82	8.10	8.17	8.63	8.43	8.69					
CUT / FILL DEPTH	-0.08	3.33	0.48	0.28	0.46	0.08	0.35	0.04	0.45					
EXISTING SURFACE	5.70	6.65	7.12	7.55	7.84	8.09	8.28	8.39	8.24	8.58	8.67	7.45	6.81	8.53
CHAINAGE	0.00	50.00	100.00	150.00	200.00	250.00	300.00	350.00	400.00	450.00	500.00	550.00	600.00	615.87

CROSS SECTION 4

Doesn't include floodway section

REVISIONS:	DATE	NAME	Client:

PEGASUS TOWN LIMITED
EARTHWORKS CROSS SECTIONS
LOT XX DP XXXXX
WAIMAKARIRI DISTRICT COUNCIL

WOOD AND PARTNERS

REGISTERED SURVEYORS
CONSULTING ENGINEERS
TOWN & RESOURCE PLANNERS

Level 4 Building 3
866 Great South Road
PO Box 6762 Auckland

Ph 09 571 2470

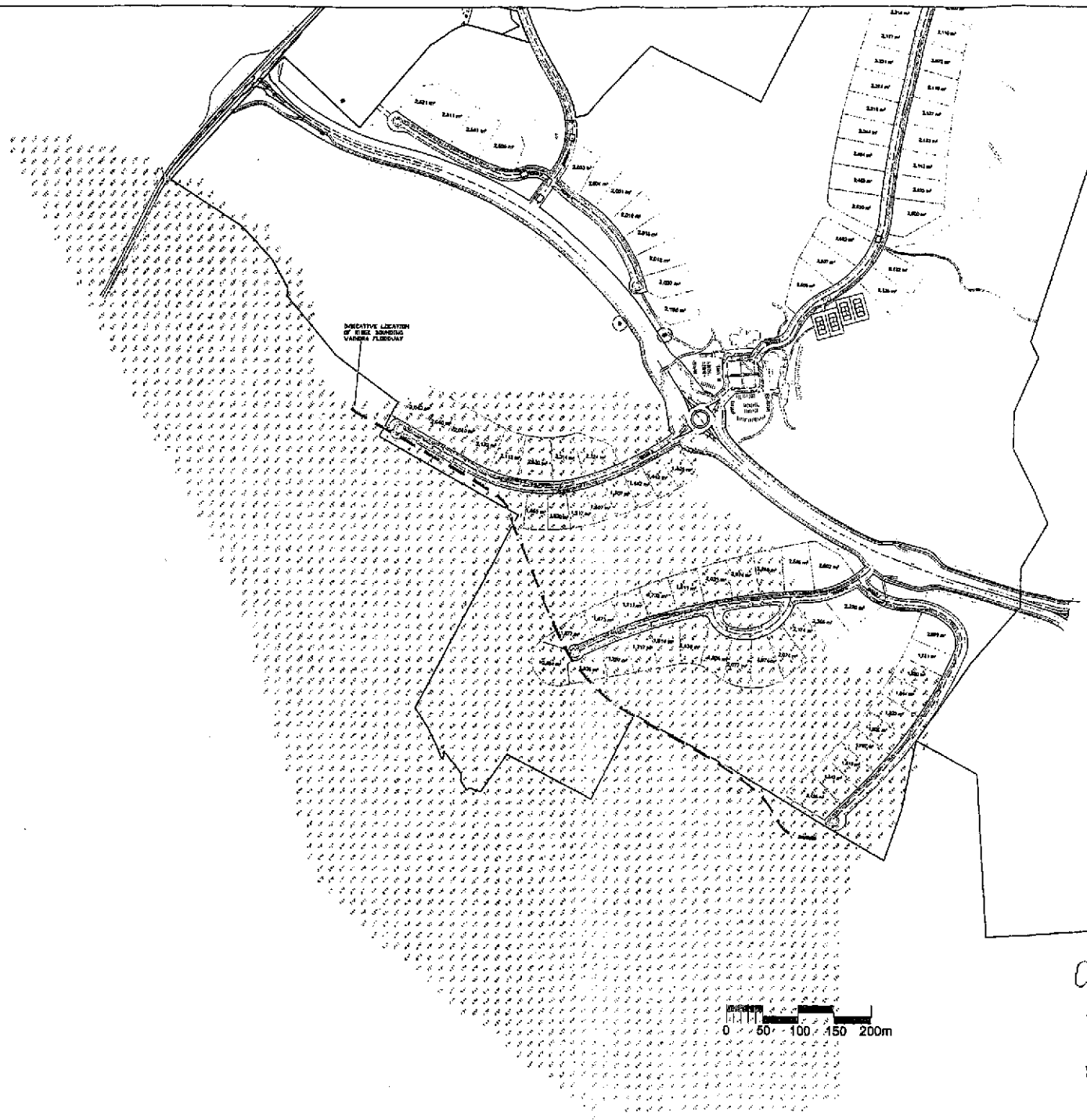
DESIGNED:	AK
DRAWN:	JMM AK
CHECKED:	AK
CAD REF:	XSECT.DWG
APPROVED:	

SCALE: H 1:2000 @A1 V 1:100 @A1

JOB NO: 60079

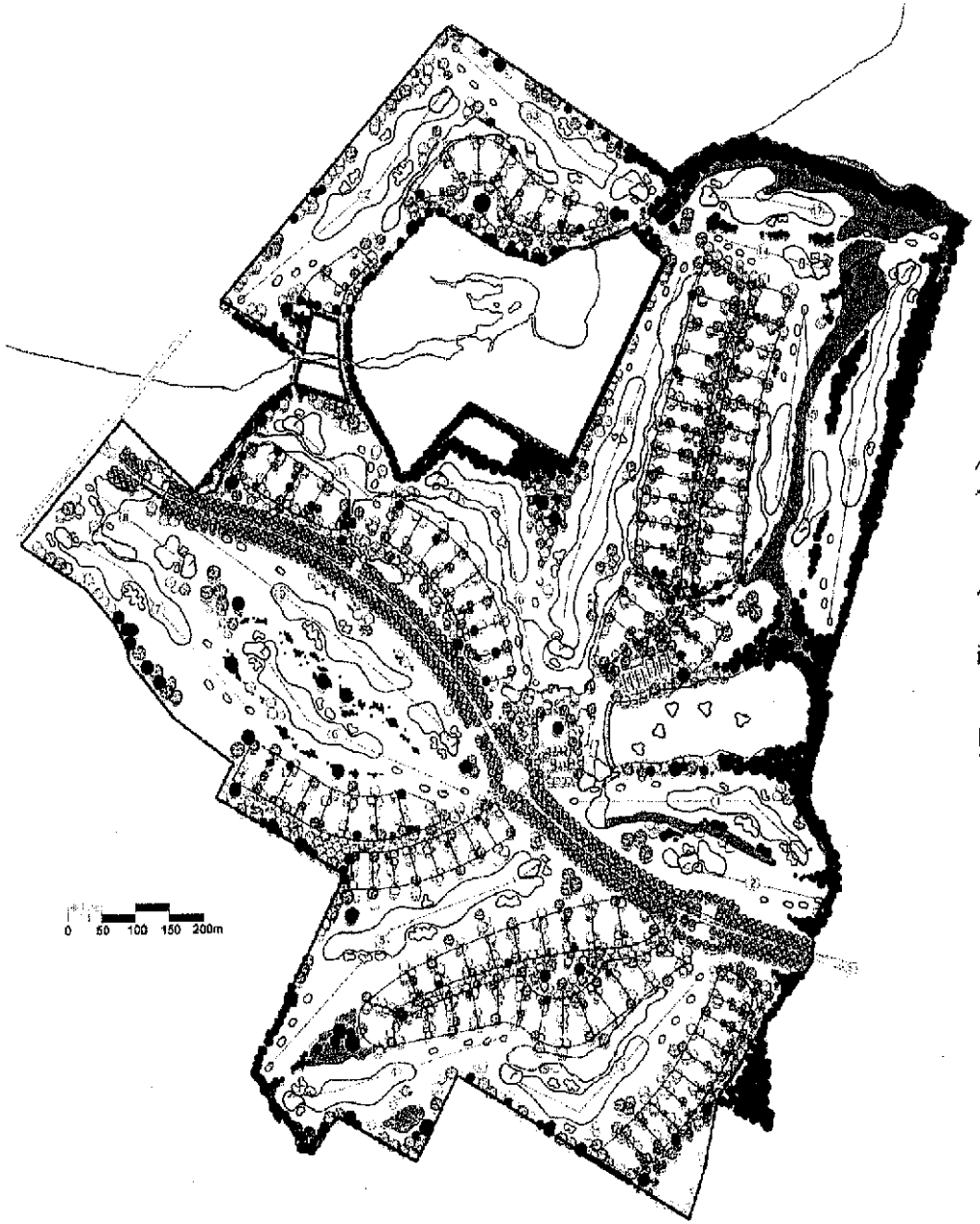
DRAWING NO:

PLAN 20



Outline Development Plan
Showing Indicative Location
of Ridge Bounding
Waihora Floodway.

PLAN 21



Rural Amenity Trees

Evergreen Trees (including mixed native species)

Wetland Areas

Tree Planting Proposal

Common Name	Botanical Name	Number	
Rural Amenity Trees			
Field maple	*Acer campestre*	76	
Norway maple	*Acer platanoides*	108	
Cabbage tree	*Cordyline australis*	77	
Eucalyptus	*Eucalyptus leucoxylon 'Rosea'nitens*	33	
European beech	*Fagus sylvatica*	179	
Kanuka	*Kunzea ericoides*	299	
Liquidamber	*Liquidamber styraciflua*	53	
English Oak	*Quercus robur*	112	
Totara	*Podocarpus totara*	102	
Chinese poplar	*Populus yunnanensis*	85	
Scarlet oak	*Quercus coccinea*	307	
Pin oak	*Quercus palustris*	378	
Redwood	*Sequoia sempervirens*	8	
Kowhai	*Sophora microphylla*	136	
Broad-leaved lime	*Tilia platyphyllos*	136	
Mixed Native Species		679	

NORTH

Figure CRC061211

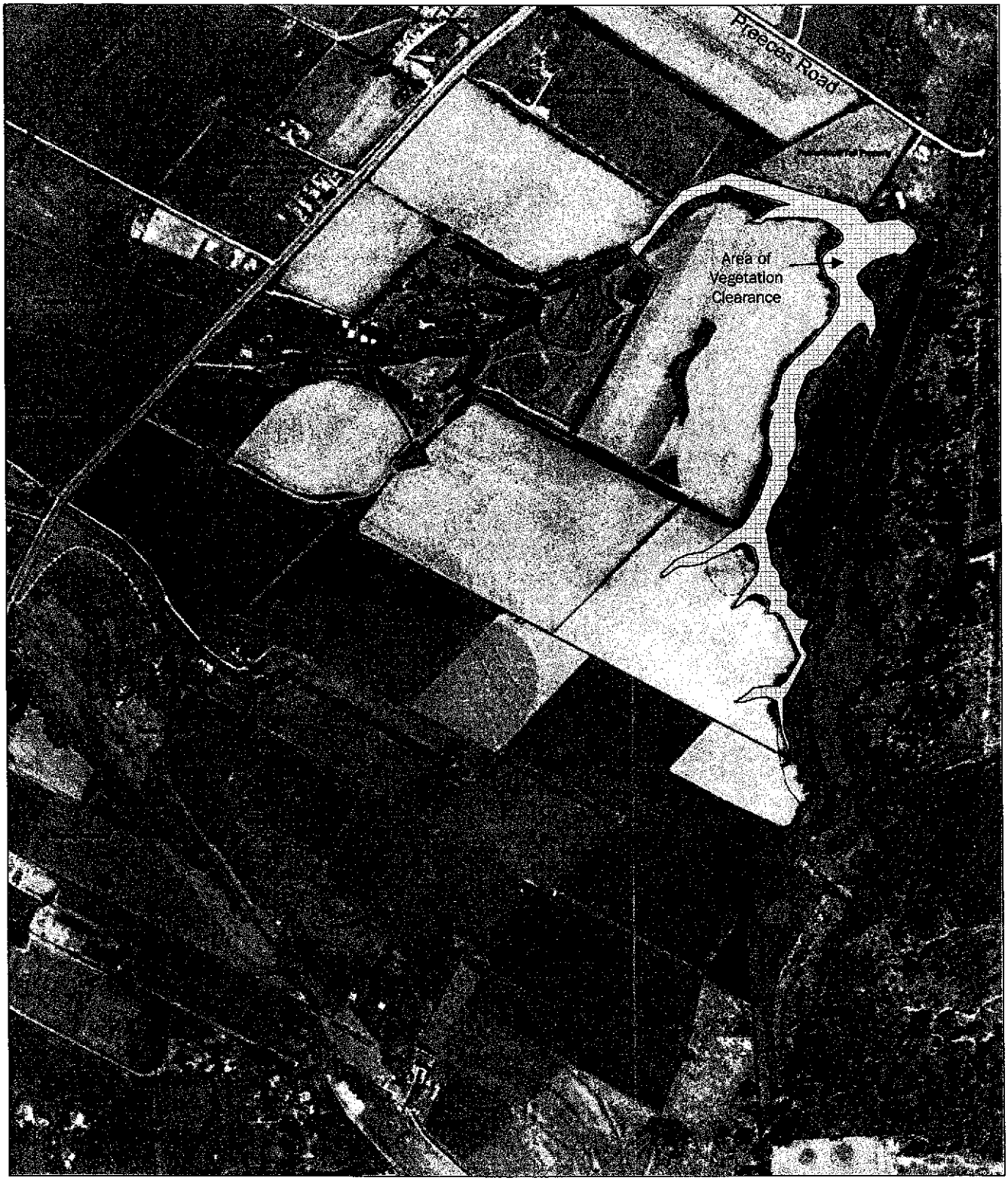


Figure CRC061212

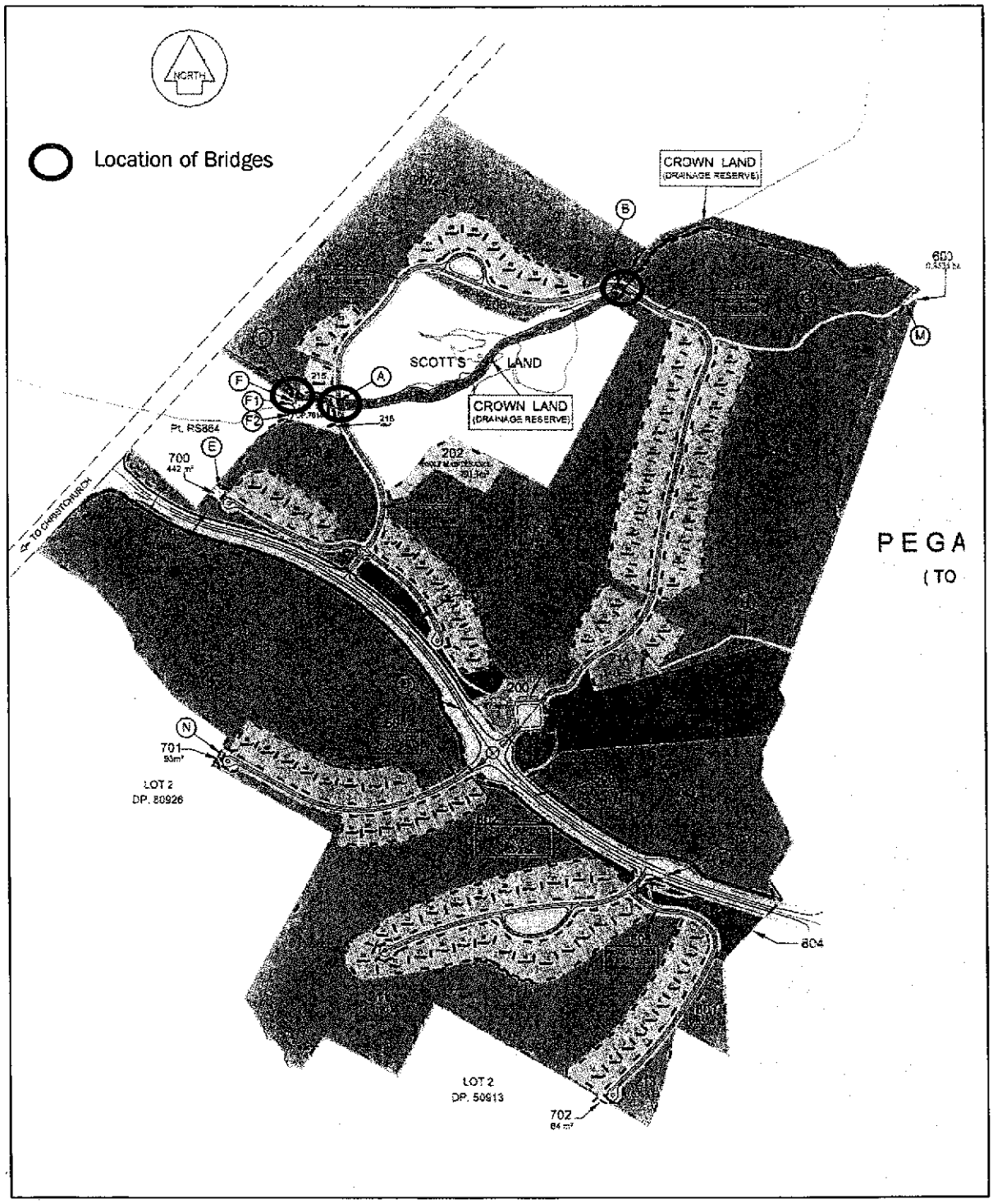


Figure CRC061215

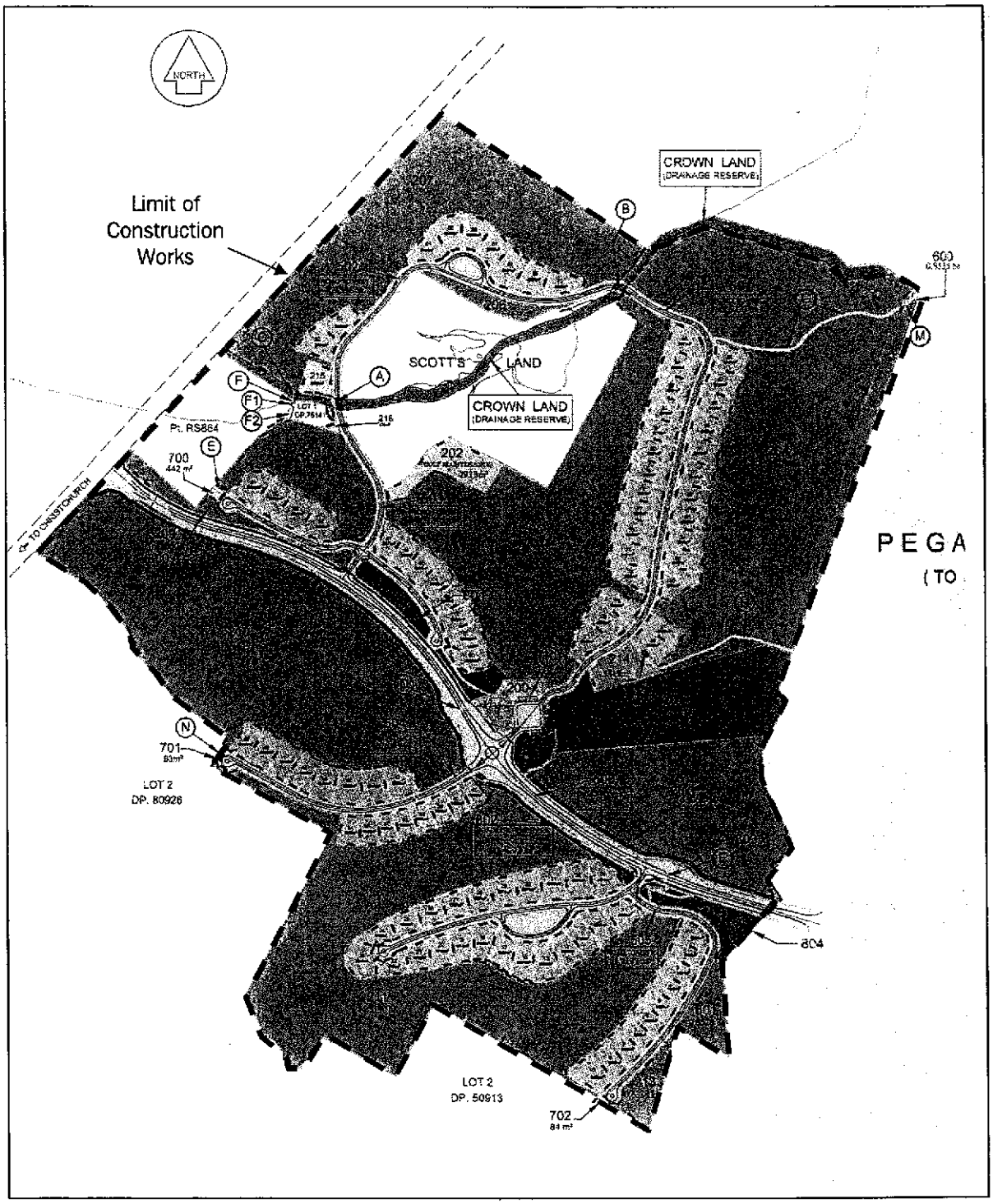


Figure CRC061218