

**IN THE MATTER OF** The Resource Management Act  
1991

**AND**

**IN THE MATTER OF** Application CRC072223 by Mr A  
J Cameron for a land use  
consent.

**Decision of the Hearing Commissioner  
Barry Loe**

**Appointment**

1. This is the decision of Hearing Commissioner Barry Loe appointed by Canterbury Regional Council (CRC) to hear and decide the application by Mr A J Cameron for land use consent to excavate and deposit gravel, sand and other natural material, and to disturb the bed of a river.

**Hearing**

2. The Hearing of the application and submissions was held at Lincoln on Tuesday 13<sup>th</sup> September 2011. The Hearing was closed at the conclusion of proceedings on that day.

**Appearances at the Hearing**

*For the Applicant:*

Mr Andrew Shulte, Solicitor

Mr Alistair Cameron, the Applicant

*For the Submitters:*

(i) Taggart Earthmoving Ltd

Mr Tom Evatt, Solicitor

Mr Robert Bright

(ii) Waimakariri District Council

Mr Brian Peters, Consultant Civil Engineer

Mr Marco Göbbels, Consultant Planner

*CRC Consent Reporting Officer:*

Dr Philip Burge

**History of the Application**

3. This application has a long history. Mr Cameron holds CRC971057 which authorises the excavation of 2000 cubic metres per year of metres of gravel, sand and other natural material (hereafter referred to as "gravel") per year from the bed of the Ashley River/Rakahuri downstream of the rail bridge. This consent has an expiry date of 26 September 2007.
4. In January 2007 Mr Cameron made an application for land use consent to excavate up to 3,000 cubic metres per year from the same location. This application was receipted and with the agreement of the applicant the application was placed "on hold" until such time as an application with a higher priority of decision, application CRC072869 by Taggart Earthmoving Ltd, was resolved.

5. Mr Cameron amended his application in 28 May 2007 to reduce the total volume to be excavated to 2,000 cubic metres per year, to match the volume authorised under his consent CRC971057. By reducing the volume, the new application was considered by CRC to be a replacement consent, and Mr Cameron is therefore able to continue exercising CRC971057 pursuant to s124(b) of the Resource Management Act 1991 (RMA) until this application CRC072223, is resolved.
6. Following the resolution of the appeal on the Taggart Earthmoving Ltd application in November 2010, and discussions with CRC staff, Mr Cameron requested public notification of his application.

## Notification

7. The application was publicly notified on 30 April and 2 May 2011 as:

<b>Ashley River/Rakahuri</b>	
<b>Applicant:</b>	A J Cameron
<b>Address:</b>	C/- Cavell Leitch Pringle and Boyle, PO Box 799, Christchurch 8140
<b>Attention:</b>	Mr Andrew Schulte
<p>Mr A J Cameron has applied to the Canterbury Regional Council for a land use consent to excavate gravel, sand and other natural material from the bed of the Ashley River/Rakahuri between the Rail Bridge and Toppings Road, being between map references NZMS 260 M35:7731-6944 (NZTM BW24:6731-0781) and NZMS 260 M34:8318-7010 (NZTM BW24:7318-0848), as follows:</p> <p><b>CRC072223</b> - To excavate and deposit gravel, sand and other natural material, and to disturb the bed of the Ashley River/Rakahuri, with a maximum volume of 2,000 cubic metres of gravel to be excavated per year, and up to 500 cubic metres to be stockpiled for up to one month.</p> <p>The applicant has requested consent duration of 10 years. This is an application to replace resource consent CRC971057.</p>	

## Submissions Received

8. Four submissions were received by CRC. These are from:
  - Wayne Dyer, in support, not to be heard,
  - CRC Regional Engineer, in opposition, to be heard, but subsequently withdrew this request,
  - Taggart Earthmoving Ltd, in opposition, to be heard,
  - Waimakariri District Council, in opposition, to be heard.
9. The hearing of this application was then delayed due to an application for a declaration to the Environment Court lodged by Christchurch Ready Mix Concrete Limited (CRMC). While CRMC's application related to the Waimakariri River rather than the Ashley River/Rakahuri, it was sought in order to determine the priority of hearing for competing applications to excavate gravel. Given this, the result of that declaration was considered relevant to Mr Cameron's application as there are several applications lodged with CRC to excavate gravel in the same reach of the Ashley River/Rakahuri.
10. Mr Cameron agreed to the "holding" of his application until the Environment Court issued its decision. This was issued on 11 July 2011 noting that as s124A through

s124C of the RMA do not apply to applications to excavate gravel a “first come, first served” approach should apply when hearing applications<sup>1</sup>.

11. On the basis of the decision from the Court, CRC are proceeding to hear the applications for excavation of gravel from this reach of the Ashley River/Rakahuri in the order that they were deemed capable of being notified. Mr Cameron’s application is the first of a number of applications to excavate gravel to go to a hearing.

### **Evidence & Information provided**

12. The application and the evidence presented by the applicant and submitters to the Hearing is a matter of public record. Where evidence or information relates to the principal issues and my findings on these I have referred to it.

### **The Officer’s report**

13. The Officer’s report of Dr Philip Burge is also a matter of public record. My consideration of the application and evidence includes the advice provided in Dr Burge’s report, and where it is relevant to the identification and analysis of the principal issues, I have referred to it.

### **The Applicant’s Right of Reply**

14. The Applicant’s reply was presented verbally, and addressed a range of matters that are included in the summary of the principal issues.

### **Statutory Provisions & Assessment**

#### **The Resource Management Act 1991 (RMA)**

15. As this application was accepted by CRC in 2007 the application is to be considered under the RMA as enacted at that time. This excludes the provisions of the Resource Management (Simplifying and Streamlining) Amendment Act 2009.
16. Part 3 of the RMA sets out duties and restrictions, including restrictions related to land use activities, activities involving water, and restrictions related to discharges.
17. The RMA defines the bed of a river as:  
*“the space of land which the waters of a river cover at its fullest flow without overtopping its banks.”*
18. The land use activity proposed by Mr Cameron falls entirely within the area legally defined as the bed of the Ashley River/Rakahuri and is therefore addressed by section 13 of the RMA which deals with restrictions on certain uses in the beds of lakes and rivers. Section 13 states that:
  - “1) No person may, in relation to the bed of any lake or river,—
    - (a) Use, erect, reconstruct, place, alter, extend, remove, or demolish any structure or part of any structure in, on, under, or over the bed; or
    - (b) Excavate, drill, tunnel, or otherwise disturb the bed; or
    - (c) Introduce or plant any plant or any part of any plant (whether exotic or indigenous) in, on, or under the bed; or
    - (d) Deposit any substance in, on, or under the bed; or
    - (e) Reclaim or drain the bed—

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<sup>1</sup> *Christchurch Ready Mix Concrete Limited v Canterbury Regional Council*, EnvC Christchurch C195/2011, 11 July 2011

*unless expressly allowed by a rule in a regional plan and in any relevant proposed regional plan or a resource consent.*

- 2) No person may—
- (a) Enter or pass across the bed of any river or lake; or
  - (b) Disturb, remove, damage, or destroy any plant or part of any plant (whether exotic or indigenous) or the habitats of any such plants or of animals in, on, or under the bed of any lake or river—
- in a manner that contravenes a rule in a regional plan or proposed regional plan unless that activity is—*
- (c) Expressly allowed by a resource consent granted by the regional council responsible for the plan; or
  - (d) Allowed by section 20A (certain existing lawful uses allowed)."

19. The excavation, deposition and disturbance of the bed of the Ashley River/Rakahuri proposed by Mr Cameron has not been granted resource consent and is not covered in the lawfully allowed activities in section 20A of the RMA. There is no rule in a regional plan and a proposed plan that would allow this activity, so resource consent is required.

## **Canterbury Regional Council Statutory Instruments Regional Plans & the Activity Status of the Application Transitional Regional Plan**

20. At the time this application was accepted in January 2007, the Transitional Regional Plan (TRP) was an operative plan for the Canterbury Region and the application is to be considered under the relevant provisions of that plan.
21. Part V of the former North Canterbury Catchment Board By-laws (NCCB) is deemed to be part of the TRP by Section 368(1) of the RMA, and deals with regulations relating to watercourses in the North Canterbury Area. Clause 29 of the Bylaw relates to the excavation (and disturbance) of gravel, sand and other natural material from the bed of a river and states that:
- "No person shall without the written license of the Board remove shingle sand or other material from any watercourse under the control of the Board and any such licence may be recoverable at the will of the Board or on breach of conditions thereof or otherwise and may be given subject to payment or royalties or other consideration and may be subject to such conditions as the Board thinks fit to impose. "*
22. Section 369(1)(b) of the RMA states that any provision which is deemed to be a provision of a regional plan under Section 368(1) of the RMA and that requires consent or approval, shall be considered to be a regional rule in respect of a discretionary activity.
23. The TRP does not address the deposition of material on the bed of a river in North Canterbury, and this activity is therefore considered an innominate activity requiring resource consent as a discretionary activity pursuant to s77C(1)(a) of the RMA.
24. The TRP therefore classifies the application to be for a **discretionary activity**.

## **Natural Resources Regional Plan**

25. Chapters 4 to 8 of the proposed Natural Resources Regional Plan (pNRRP) were publicly notified in July 2004, and as this was a proposed plan at the date the application was accepted, the application is also considered under the relevant provisions of that plan.

26. On 11 June 2011 the NRRP became the operative Regional Plan for the Canterbury Region replacing the equivalent provisions in the TRP, including rules.
27. While a resource consent application lodged prior to the NRRP becoming operative has to be processed and decided as the type of activity it was at the time the application was lodged<sup>2</sup>, the consent authority is required to have regard to the provisions of any plan that exists at the time the application is considered<sup>3</sup>.

### **NRRP Chapter 6 – Beds of Lakes and Rivers**

28. Chapter 6 of the NRRP sets out the objectives, policies and rules for land use activities in the beds of lakes and rivers, including the excavation and deposition of gravel, sand and other natural material.

#### *NRRP as notified*

29. Rule BLR3 of Chapter 6 of the pNRRP classifies the excavation, disturbance and deposition of natural material in the bed of a river as a permitted activity subject to conditions. The proposal does not meet those conditions (in particular condition (3)), and is therefore to be considered under Rule BLR8 of the pNRRP.
30. Rule BLR8 of Chapter 6 of the pNRRP classifies the excavation, disturbance and deposition of natural material in the bed of a river as a **discretionary** activity.

#### *NRRP as operative*

31. As discussed in paragraph 27 above, while this activity must be decided in accordance with the status of the activity under the TRP and pNRRP, I must have regard to the provisions of the now operative NRRP when considering the application (see paragraph 60).

### **Consent Status of the Application**

32. This application is to be considered as a **discretionary** activity.

### **Principal Issues in Contention and Main Findings**

The principal issues in contention in this application are:

#### ***Access to and availability of gravel***

33. Resource consent is required to excavate gravel in the bed of the river to comply with the Resource Management Act and the regional plans. This resource consent process is independent of, and does not include consideration of, the permission needed to access the land in the river bed to carry out the activities.
34. Canterbury Regional Council is the land owner of the bed of the Ashley River/Rakahuri in the location where Mr Cameron seeks resource consent to excavate the gravel. Mr Cameron also needs the permission of the Canterbury Regional Council, as the landowner, to access the site, excavate and remove the gravel. The area is now within a Regional Park so CRC Regional Parks staff will also have an interest in these activities in the river bed.
35. Following this resource consent decision process Canterbury Regional Council continues with on-going roles as both the landowner, authorising and monitoring access to the river bed, and as the consent authority monitoring the conditions of any resource consent issued.

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<sup>2</sup> in accordance with s88A(1A) of the RMA

<sup>3</sup> in accordance with s88A(2) of the RMA

36. The Regional Engineer Canterbury Regional Council, in his submission to the application, states that due to the degraded bed it is unlikely that Mr Cameron will be granted permission to access, i.e. enter, excavate and remove gravel from, those areas of the river bed where the level of the bed is at or below the minimum mean bed level (MMBL). The MMBL is calculated by Canterbury Regional Council River Engineers as the desirable bed level for flood carrying capacity and bank stability purposes in a particular reach of the river.
37. It is possible that Mr Cameron may never be able to access all or any of the proposed excavation area, even if consent is granted. It is possible that any consent granted to Mr Cameron may never be exercised.
38. There is no legal impediment to granting consent under such circumstances, and Mr Cameron is aware of this prospect.
39. The dual roles of Canterbury Regional Council, as landowner and consent authority, and the management of the permission process to access the riverbed has created confusion for all parties, including within the Council. The advice from the Regional Engineer withdrawing his request to be heard included more information about access stating, :

*To date, no contractor on the Ashley or Waimakariri River has any formal permission from ECan to access or excavate our land, however we do disallow excavation where there is an adverse effect. We are currently developing a permit system to manage gravel extraction activities on ECan's land.*
40. Access to the bed hasn't been formally managed in the past by the Council and this has lead to contractors 'staking claims' to perceived exclusive rights to gravel in the river bed. In the Ashley River this perception has, I believe, been enhanced by the dominant presence of Taggart Earthmoving Ltd excavating and removing gravel for their commercial purposes, and also undertaking river realignment work for the Regional Engineer.
41. Considerable time at the Hearing was spent untangling the web of controls that exist, or don't exist in practice but are being developed, to separate out the issues relevant to the resource consent from those relating to access and ownership of the gravel resource. The time spent on this could have been reduced had the Regional Engineer, or his staff, been present at the Hearing, to explain their processes. While, as a submitter, they can choose to withdraw their request for Hearing, it would have considerably assisted the process had they continued to participate in the Hearing.
42. Taggart Earthmoving Ltd submitted that the application should be declined because there is no gravel 'available' to Mr Cameron, as Taggart Earthmoving intend to remove all the 'available' gravel, i.e. down to the MMBL, and below this level if directed by the Regional Engineer. The resource consent held by Taggart Earthmoving to excavate the Ashley/Rakahuri river bed in the same area as Mr Cameron's application, authorises the taking of up to 50 000 m<sup>3</sup> per year, or whatever gravel is available above the MMBL in the area of excavation.
43. In 2010 Taggart Earthmoving Ltd undertook a survey of the gravel resource in the area where they are operating, which includes the area of Mr Cameron's application, and the survey showed there is 'significantly less' gravel available than the Regional Engineer estimated in 2008, and consequently the excavation in this area could be completed within 12 to 24 months.
44. Taggart Earthmoving also submitted that to grant consent to Mr Cameron would be a derogation of Taggart Earthmoving Ltd's right to excavate gravel in the bed of the river, as the authorisations that each would hold are for a common area. I do not agree with this proposition. The resource consent does not confer any right to either party to excavate and or remove the gravel. The rights to access the site, undertake

excavation and remove gravel are granted by the landowner, not the consent authority.

45. Issues of priority, allocation of gravel to be excavated and removed, location of activity within the areas where the excavation is authorised by resource consents and health and safety are all matters between the contractors and the Canterbury Regional Council, as the landowner. There are many other situations where there are several contractors holding consents to excavate gravel in the same area of a riverbed, and they operate compatibly under the direction of the landowner or the Regional Engineer if in a river rating district.
46. However, overlapping consents to excavate could affect other consent holders should excavation by one contractor result in the MMBL being reached, and other contractors with the same MMBL conditions in their resource consent for the same area would have to cease excavation in the area, perhaps earlier than if there been a single contractor operating in the area.
47. In this case, the consent conditions proposed by Mr Cameron include a requirement for him to determine where and how much gravel is available above the MMBL as part of preparing an annual Excavation Management Plan (EMP). Taggart Earthmoving Ltd has a very similar condition on their resource consent. If both parties are vying for the same gravel, then the Canterbury Regional Council, as landowner will need to manage this competition.
48. The maximum volume of gravel that Mr Cameron seeks to excavate each year is only 4% of the maximum volume that Taggart Earthmoving Ltd is authorised to excavate. It would seem improbable that Canterbury Regional Council would not be able to accommodate both operators in the riverbed with each being allowed to take a portion of the available gravel. As Mr Cameron is applying to replace his previous consent, the situation of both these parties holding consent for excavation in this area has been in existence for some time.
49. While much of the effort of submitters related to the issues of availability of and access to the gravel these are not matters for consideration for the resource consent application.

### ***Trade Competition***

50. This application is being considered under the RMA as enacted in 2007. This precludes consideration of s308, introduced in 2009, relating to submissions about an application by a trade competitor. Mr Cameron and Taggart Earthmoving are trade competitors, albeit of unequal size. They each seek to remove the gravel, which is a limited resource, for commercial purposes. Some of the matters raised in the submission by Taggart Earthmoving Ltd relate to trade competition. As directed by s104(3)(a) of the RMA (as amended 20 May 2003), in considering this application I have given no regard to trade competition.

### ***Cumulative Effects on the Environment***

51. Dr Burge's report advised that over much of the area of the application the current bed level is considerably lower than the level recommended by Canterbury Regional Council. This creates a higher than desired risk of bank erosion. The deficit of gravel is some 190,000m<sup>3</sup> below the recommended MMBL across the entire area of Mr Cameron's application and the Taggart Earthmoving Ltd consent. Within this area there are specific sites where the bed level is above MMBL and this is where excavation is occurring at present.
52. Setting of minimum bed levels on resource consents to excavate is the principal method adopted by Canterbury Regional Council to avoid cumulative effects

occurring. The minimum bed levels appear to be set to address flood capacity of the river and river bank erosion effects.

53. The Waimakariri District Council, in its first-ever submission on a resource consent application for gravel extraction from the Ashley River/Rakahuri, raised concerns about the effects of gravel extraction from the Ashley River/Rakahuri on the structural integrity of the Cones Road Bridge. This bridge provides road access from Rangiora to Loburn and Ashley communities, and is an alternative to the State Highway 1 bridge across the Ashley River/Rakahuri.
54. The river bed level at the bridge is now about 1.5 metres lower than when the bridge was constructed in 1911. If gravel extraction ceased in this reach it would take 25 years for the volume of gravel in the riverbed to recover to Canterbury Regional Council's recommended level, and 75 years to return to the level of the 1960's, which is the District Council's 'acceptable compromise' level.
55. The lowered bed level has significantly reduced the distance that the bridge piers are now embedded in the riverbed, creating higher risk of damage from undermining and scouring, with associated higher maintenance costs, and potential collapse of bridge spans. The District Council is concerned that if historical gravel extraction rates are allowed to continue in the reach that is 4 km upstream and 4 km downstream of the Cones Road Bridge, the risk to the bridge will be further increased.
56. The District Council sought some form of cost contribution arrangement towards the on-going maintenance of the bridge to be included in resource consent conditions. However the District Council acknowledged that the present situation has arisen from historical gravel extraction in combination with natural fluvial forces. The excavation area for Mr Cameron's application commences 3.3 km downstream of the Cones Road Bridge, close to the lower extent of their area of concern. The small scale of Mr Cameron's previous consent and this replacement application is such that should he be required to make a contribution, Mr Cameron would be paying heavily for the effects of others' actions.
57. While there are cumulative adverse effects on the Cones Road Bridge from past, and possibly current and future gravel extraction, Mr Cameron is not a significant contributor to these effects. It would be unreasonable to impose a condition requiring a contribution to the maintenance of the bridge. The imposition of minimum bed levels on consents is the most appropriate way to manage cumulative effects. However the minimum level should be determined by the Canterbury Regional Council in consultation with other users of the riverbed such as the District Council.

## **Section 104**

### ***Section 104(1)(a) The effects on the environment***

58. Under this section of the Act I must have regard to the actual and potential effects on the environment of allowing the activity. These are the effects on:
  - River bed and bank stability, flooding and structures
  - Water quality, riverbed plants and animals
  - Amenity values, natural features and landscapes
  - People and communities
  - Tangata Whenua values
59. The assessment of these effects is comprehensively addressed in the s42A report of Dr Burge. I agree that the adverse effects of allowing the activity under the proposed conditions of consent, will be minor.



## **Section 104(1)(b) Policy Statements and Plans**

### **Regional Policy Statements**

60. Policies of the operative Regional Policy Statement and the proposed Regional Policy Statement relevant to these applications have been considered. The application is consistent with those policies.

### **Natural Resources Regional Plan**

61. The objectives and policies of both the proposed NRRP and the operative NRRP that are relevant to this application are very similar. The objectives and policies provide for activities such as gravel excavation provided the values of the riverbed for other purposes are protected. The application is consistent with those policies of the Regional Plan.

### **Section 104(2) - Permitted Baseline**

62. This section provides the discretion for a decision-maker to disregard an effect of the activity on the environment if the plan permits such an effect. RMA Section 43AA defines 'regional plan' to mean '*an operative plan approved by a regional council...*'.
63. The operative NRRP rule controlling excavation in a river bed is BLR5. Under Condition 6(a) of this rule up to 50 cubic metres of gravel per year can be excavated as a permitted activity from that section of the Ashley River/Rakahuri where this application is located, at a maximum rate of 20 cubic metres per week, and subject to other conditions.
64. This permitted baseline is for such a low level of activity, compared to the application, that I have decided to not invoke the permitted baseline.
65. I note that the regional plan can only authorise the excavation of the limited volumes of gravel as a permitted activity, the permission to access the bed to remove even these small volumes must, in theory at least, still be gained from CRC as landowner.

## **Part 2 of the Act**

### **Section 5**

66. In the Act, sustainable management is defined as "*managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while –*
- (a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonable foreseeable needs of future generations; and*
- (b) Safeguarding the life supporting capacity of air, water, soil and ecosystems; and*
- (c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment"*
67. Gravel excavation plays an important role in the management of flood risk from the Ashley River/Rakahuri. The gravel extracted from the river is a commercial product that contributes to the well-being of the community. Limiting the amount of gravel that is taken will sustain the potential of the resource, safeguard the life supporting capacity and avoid adverse effects.

### **Sections 6, 7 and 8**

68. Section 6 of the Act lists matters of national importance that must be recognised and provided for in this decision. This includes Section 6(a) to preserve the natural

character of rivers. Conditions to limit the extent of gravel excavation and the way the excavation is undertaken will serve to protect the natural character of the Ashley River/Rakahuri. Section 6(c) requires the protection of significant habitats of indigenous fauna. Conditions are included in the consent to protect birds, including endangered species that are nesting in the riverbed, from the effects of the excavation.

69. Section 7 of the Act lists matters to which I must have particular regard. Several are relevant to this application; Section 7(b) the use and development of natural resources, Section 7(c) the maintenance and enhancement of amenity values; Section 7(d) intrinsic values of ecosystems, Section 7(f) the maintenance and enhancement of the quality of the environment and Section 7(g) any finite characterises of natural and physical resources.
70. The excavation of gravel in the bed of the river has potential to impact on these matters, and these are each addressed by way of limits either in the scale of the activity or imposed by consent conditions.
71. In relation to Section 8 of the Act, the information provided in the s42A report indicates that there has been an appropriate level of consultation with tangata whenua and the relevant Runanga, and this is reflected in the consent conditions.

## **Part 2 Conclusion**

72. Overall, I consider that, subject to the conditions proposed, the application is consistent with the sustainable management purpose, and Sections 5, 6, 7 and 8, of the RMA.

## **Decision**

73. Having considered all of the relevant matters under Section 104 and Part II, as discussed above, it is my decision that the application can be granted for 10 years, subject to conditions.
74. The reasons for this decision are:
- Adverse effects on the environment of the activity can be managed through the consent conditions, and will be minor;
  - The activity is in accord with the objectives and policies of the Regional Policy Statements, and the regional plans; and
  - The activity is consistent with Part II of the RMA.

# Resource Consent

## Duration

10 years

## CONDITIONS

### GENERAL

- 1) The works authorised by this consent shall be limited to:
  - (a) Excavation and deposition of gravel, sand and other natural material;
  - (b) Placement of temporary culverts or single span bridges to enable access to material to be excavated in accordance with condition (a)
  - (c) Disturbance of the bed in association with those works authorised by clauses (a) and (b).
- 2) The works authorised by condition (1) shall only occur within the bed of the Ashley River/Rakahuri between Point A, at map reference NZTM BW24:7210-0854 (NZMS 260 M34:8210-7017), and Point B, at map reference NZTM BW24:7054-0809 (NZMS 260 M35:8054-6972), as shown on the attached plan CRC072223A which forms part of this consent, and as further defined in any Excavation Management Plan submitted in accordance with condition (5).
- 3) The total quantity of gravel, sand and other natural material (gravel) excavated from the area specified in condition (3) in any consecutive 12 month period shall not exceed:
  - (a) 2,000 cubic metres; or
  - (b) the total volume of "available gravel", as defined in condition (8)(d)(ii), at those sites identified in any Excavation Management Plans submitted in accordance with condition (5);

whichever is the lesser volume.

### EXCAVATION MANAGEMENT PLANS

- 4) Notwithstanding conditions (2) and (3), all excavation undertaken under this consent shall be undertaken in accordance with a current Excavation Management Plan (EMP) submitted in accordance with condition (5).
- 5) An EMP shall be submitted to the Canterbury Regional Council, attention RMA Compliance and Enforcement Manager and Gravel Resources Officer at least eight working days prior to undertaking any works authorised by this consent. The EMP shall identify a specific site within the area specified in condition (2) at which the works authorised by condition (1) may occur.
- 6) An EMP submitted in accordance with condition (5) shall be considered current for 12 months from the date of submission to Canterbury Regional Council. After 12 months the EMP will no longer be considered current and works at that site must cease unless the consent holder has provided a revised EMP for that site in accordance with condition (5).
- 7) Any EMPs submitted in accordance with condition (5) shall:
  - (a) be from within the area specified in condition (2);
  - (b) include:
    - (i) Either:

- a. the certified survey data and calculations of the volume of gravel above the recommended minimum bed level, hereafter the “available gravel”, as calculated in accordance with condition (8); or
  - b. written agreement from the Canterbury Regional Council, Regional Engineer, or their delegated representative, that those surveys and calculations specified in condition (8) are not required for this version of the Excavation Management Plan;
- (ii) map references and plan(s) defining the extent of the areas within which the “available gravel” above the recommended minimum bed level, as calculated in accordance with condition (8), is located;
  - (iii) the intended depth, length and width of excavation within those areas identified in clause (b), in order to ensure excavation approximates the grade line of the recommended minimum mean bed level as defined by condition (8)(d)(iii).
- 8) Except with written agreement from the Canterbury Regional Council, Regional Engineer, or their delegated representative, prior to submitting an EMP in accordance with condition (5):
- (a) Those cross-sections set out in Table A, and illustrated in plan CRC072223A, that are within or immediately adjacent to the area identified in the EMP shall be surveyed over the survey widths specified in Table A; and

**TABLE A**

Cross-section (River distance (km))	True Left (TL) Fairway Limit NZTM Map Reference	True Left (TL) Fairway Limit NZMS 260 Map Reference	Fairway width (m)	True Right (TR) Fairway Limit NZTM Map Reference	True Right (TR) Fairway Limit NZMS 260 Map Reference	Recommended minimum mean bed level (above mean sea level, m)
5.63	BW24:7207-0857	M34:8207-7019	202.35	BW24:7209-0837	M35:8209-6999	13.44
6.44	BW24:7125-0842	M34:8125-7004	231.6	BW24:7129-0819	M35:8129-6981	15.61
7.24	BW24:7046-0823	M35:8046-6985	413.7	BW24:7058-0783	M35:8058-6946	19.01

- (b) Intermediate cross-sections between those specified in Table A and illustrated in plan CRC072223A may be surveyed. The width of intermediate surveys shall be a linear interpolation of those cross-section survey widths specified in Table A unless otherwise agreed in writing with the Canterbury Regional Council, Regional Engineer, or their delegated representative;
- (c) All surveys undertaken in accordance with clauses (a) and (b) shall be undertaken by a suitably qualified individual in accordance with the Canterbury Regional Council Survey Standards specified in Appendix A, which forms part of this consent.
- (d) A suitably qualified person shall use the results of the surveys undertaken in accordance with clauses (a) and (b) to establish:
  - (i) the current mean bed level at the surveyed cross-sections; and
  - (ii) the “available gravel”, as defined in clause (d)(ii), and using the methodology specified in Appendix B, which forms part of this consent;

- (iii) for the purposes of this consent, the recommended minimum mean bed level shall operate as a plane on a constant gradient between those cross-sections specified in Table A. The recommended minimum bed level at any point on that plane shall be based on a linear interpolation from the recommended minimum mean bed levels of those cross-sections specified in Table A.
- (e) The suitably qualified person(s) who undertook the surveys and/or calculations in accordance with clauses (a) through (d) inclusive, shall provide a certificate to the Canterbury Regional Council, attention RMA Compliance and Enforcement Manager that the surveys and/or calculations are in accordance with:
  - (i) the survey standards specified in Appendix A; and/or
  - (ii) the calculation methodology specified in Appendix B.
- (f) For the purpose of this condition, a suitably qualified person shall have either:
  - (i) a New Zealand Certification of Engineering;
  - (ii) a National Diploma of Civil Engineering;
  - (iii) a New Zealand Certificate of Surveying;
  - (iv) a minimum of three years demonstrated experience undertaking engineering surveys; or
  - (v) as otherwise agreed in writing, prior to the submission of the survey and/or calculations, by the Canterbury Regional Council, Regional Engineer, or their delegated representative.

#### PRIOR TO WORKS

9)

- (a) The Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, shall be notified at least two working days prior to commencement of works authorised by this consent. Notification shall include:
    - (i) the proposed start and end dates of the period of work; and
    - (ii) where consent is to be exercised by a person other than the consent holder, the name, address and contact telephone number of the person(s) exercising the consent.
  - (b) Where works have been discontinued for more than eight days, the Canterbury Regional Council shall be re-notified as specified in clause (a)
- 10) Prior to commencing works, the consent holder shall provide a copy of this resource consent to all persons undertaking activities authorised by this consent, and explain to those persons how to comply with the consent conditions.
- 11) Prior to any works authorised by this consent being carried out in the period 1 September to 1 February, the consent holder shall ensure that:
- (a) an independent and suitably qualified person inspects the proposed area of works, no earlier than eight working days prior to any works being carried out, and locates any bird breeding sites of birds listed in Appendix C, which forms part of this consent;
  - (b) the person carrying out the inspection prepares a written report that identifies all the located bird breeding or nesting sites and, prior to the works commencing, provides copies of that report to the consent holder and the Canterbury Regional Council;

- (c) For the purpose of this condition, a suitably qualified person is defined as:
  - (i) a person with at least three years demonstrated experience as a professional ecologist and/or ornithologist; or
  - (ii) as otherwise agreed in writing, prior to the submission of the survey, by the Canterbury Regional Council, RMA Compliance and Enforcement Manager.

The name and qualifications of the person carrying out the survey shall be provided to the Canterbury Regional Council with the report.

- (d) any person carrying out works authorised by this consent are informed of any bird breeding or nesting sites located; and
- (e) where work ceases for more than eight days, the site will be re-inspected for bird breeding and nesting sites in accordance with clauses (a) to (d) of this condition.

#### DURING WORKS

- 12) Whenever access to the riverbed is gained across a stopbank, the consent holder shall ensure that there is at least 200 millimetres of gravel on top of the crest of the stopbank, as indicated by plan CRC072223B, which forms part of this consent  
**Advice Note:** This consent does not grant access to the extraction area. This must be arranged with the landowner.
- 13) Gravel, sand and natural material shall not be excavated within:
  - (a) 40 metres of the banks of the river or flood protection works. For the purpose of this condition flood protection works are defined as, but not limited to: areas of vegetation maintained or planted in the beds of rivers; access tracks; rockwork; anchored trees; wire rope; and groynes;
  - (b) 60 metres of stopbanks and any other structures;
  - (c) Five metres of flowing water
- 14) Notwithstanding the requirement to provide an EMP in accordance with condition (5), depth of excavation shall not exceed two metres below the natural riverbed prior to excavation.
- 15) All stockpiling of gravel, sand and other natural material, occur as follows:
  - (a) The quantity stockpiled shall not exceed 500 cubic metres at any one time.
  - (b) Stockpiling shall occur within the area of excavation and deposition identified in the EMP submitted in accordance with condition (5)
  - (c) Stockpiles shall not be deposited closer than 10 metres to any river banks, stopbank, flood protection works or structure.
  - (d) Stockpiles shall be positioned and aligned so as to not deflect the flow of the river onto adjoining land, river banks, stopbanks, flood protection works or structures.
  - (e) Stockpiles shall be removed by one month after the date of deposition, or by one month prior to the expiry date of this resource consent, which ever date comes first.
- 16) To prevent the spread of pest species, including but not limited to Didymo, the consent holder shall ensure that activities authorised by this consent are undertaken in accordance with the Biosecurity New Zealand's hygiene procedures and that machinery shall be free of plants and plant seeds prior to use in the riverbed.

**Advice Note:** You can access the most current version of these procedures from the Biosecurity New Zealand website <http://www.biosecurity.govt.nz>.

- 17)
- (a) Vehicles and machinery shall not enter or excavate from river channels containing flowing water except as necessary to install temporary crossing structures as specified in clause (b).
  - (b) In the event that it is necessary to cross river channels containing flowing water to access the work site(s) then temporary culverts or single span bridges shall be installed.
  - (c) Where practicable, temporary culverts or single span bridges shall not be placed in riffles or cause the impoundment of water.
  - (d) Temporary culverts or single span bridges shall not prevent the passage of fish.
- 18) All practicable measures shall be undertaken to minimise:
- (a) erosion of the bed and banks of the Ashley River/Rakahuri; and
  - (b) the discharge of sediment to the Ashley River/Rakahuri;
- as a result of the works.
- 19)
- (a) Vehicles and/or machinery shall not operate within 100 metres of birds which are nesting or rearing their young in the bed of the river, as identified by the inspection undertaken in accordance with condition (11).
  - (b) For the purposes of this condition birds are defined as those bird species listed in Appendix C, which forms part of this consent.
- 20)
- (a) All practicable measures shall be undertaken to prevent oil and fuel leaks from vehicles and machinery.
  - (b) There shall be no storage of fuel or refuelling of vehicles and machinery within 20 metres of the bed of a river.
  - (c) Fuel shall be stored securely or removed from site overnight.
- 21) If further excavation at the site in the active riverbed is not to occur within eight days following the last working at the site, then the following shall occur:
- (a) All deposits of gravel, sand and other natural material shall be levelled to the natural bed level;
  - (b) The excavation area shall be reshaped and formed to a state consistent with the surrounding natural river bed; and
  - (c) Reject material shall be removed from the river bed; and
  - (d) Any temporary culverts or single bridges as referred to in Condition (17) shall be removed.
- 22)
- (a) Works shall not be carried out on weekends or public holidays.
  - (b) Works shall only occur between the hours of 7am and 6pm inclusive.

## POST EXCAVATION AND REHABILITATION

- 23) Excavation shall cease at least one month prior to the expiry date of this resource consent and the site shall then be restored to a state consistent with the natural character of the site prior to any works occurring as specified in condition (21).

## TANGATA WHENUA

24)

- (a) In the event of any disturbance of Koiwi Tangata (human bones) or taonga (treasured artefacts), the consent holder shall immediately:
- (i) cease earthmoving operations in the affected area; and
  - (ii) mark off the affected area until earthmoving operations recommence; and
  - (iii) advise the Canterbury Regional Council of the disturbance; and
  - (iv) advise the Upoko Runanga of Tuahuriri, or their representative(s) (contact information can be obtained from the Canterbury Regional Council), and the New Zealand Historic Places Trust, of the disturbance.
- (b) Earthmoving operations shall not recommence until either:
- (i) the consent holder provides a certificate in writing to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, signed by Upoko Runanga of Tuahuriri, or their representative(s) stating that appropriate action has been undertaken in relation to the discovered culturally sensitive material; or
  - (ii) after five working days after advising the Upoko, a certificate signed by an archaeologist (i.e., a person with a post graduate degree in archaeology, and who is a member of the New Zealand Archaeological Association) is provided to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, that states that in the archaeologist's professional opinion appropriate action has been undertaken in relation to the discovered culturally sensitive material. That certificate shall detail the action that has been undertaken by the consent holder. A copy of the archaeologist's qualifications shall also be provided with any such certificate.

**Advice Note:** This condition is in addition to any agreements that are in place between the consent holder and the Upoko Runanga (Cultural Site Accidental Discovery Protocol) or the New Zealand Historic Places Trust. This condition does not replace other legal responsibilities, such as those under the Historic Places Act.

## ADMINISTRATION

- 25) All vehicles and machinery operating in the bed of the river shall be clearly identified with the name or logo of the operator of the vehicle, to ensure that the name is able to be read at a distance of five metres.
- 26) The volume of gravel removed from the riverbed shall be measured by the loader operator and recorded in a logbook. The logbook shall detail any calculations used to determine the volume and record the name of the operator, date, time and identification details of trucks used to remove the gravel out of the riverbed. A copy of the logbook entries shall be made available to the Canterbury Regional Council on request. A "Gravel Excavation Return" form, for completion at the end of each quarter, shall be submitted to The Canterbury Regional Council, Attention: RMA



Compliance and Enforcement Manager, by the 20th of January, April, July and October each year.

- 27) The Canterbury Regional Council may, once per year, on any of the last five working days of February or July, serve notice of its intention to review the conditions of this consent for the purposes of dealing 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.
- 28) The lapsing date for the purposes of section 125 of the Resource Management Act 1991 shall be [between 5 years and 5 years three months, date set for each quarter].

#### ADVICE NOTES

##### **Landowner Authorisation.**

In addition to this consent, the consent holder is required to obtain permission from the landowner(s) in order to secure access to and/or undertake works in the river bed. The bed of the Ashley River/Rakahuri has been vested into the control of Canterbury Regional Council and a separate authorisation is therefore required from Canterbury Regional Council Parks and Reserves.

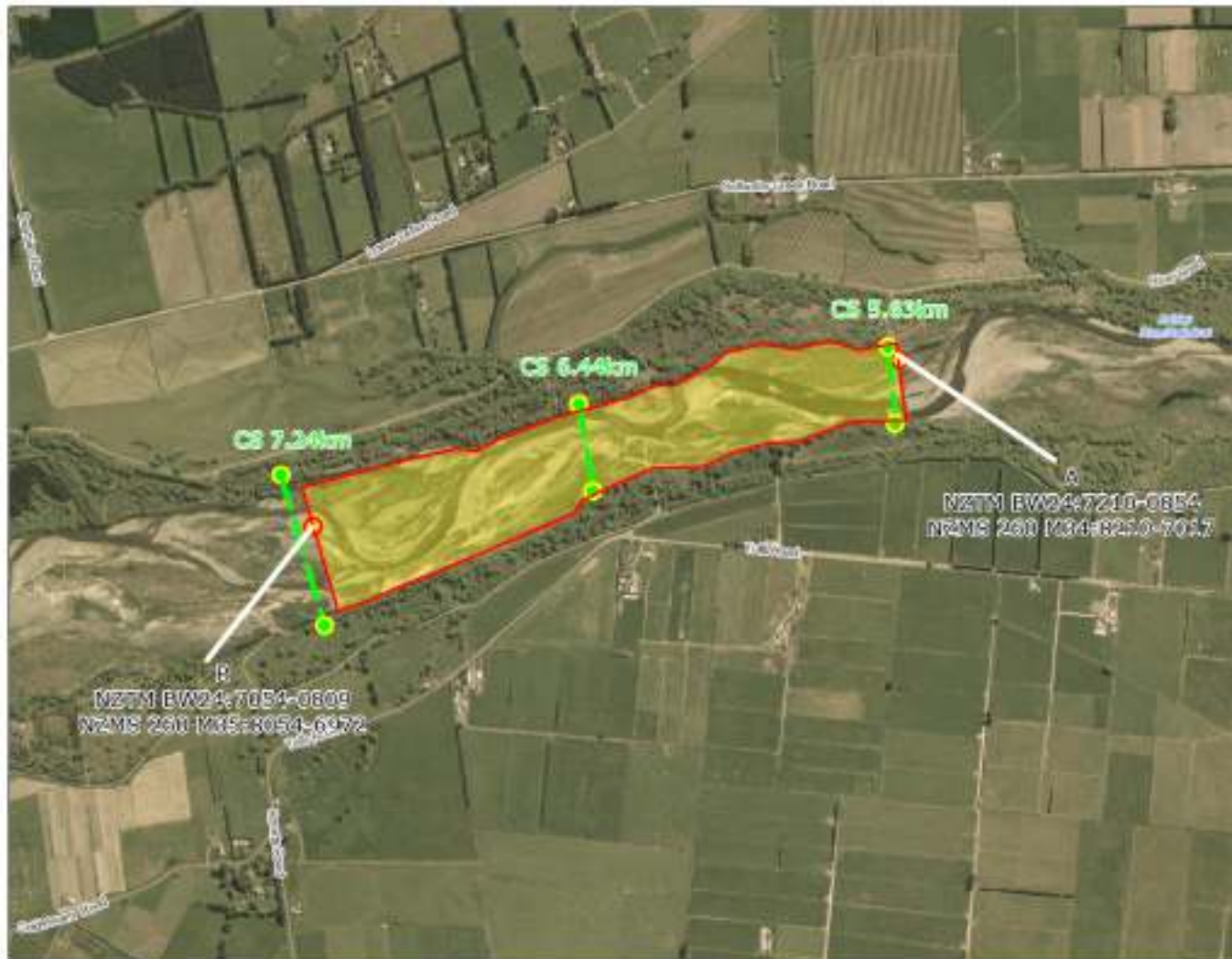
##### **Discharge of Dust to Air.**

In addition to this consent, the consent holder will also need to ensure that the activity complies with Rule AQL42A (Handling of bulk materials as part of a quarry or mining activity not permitted by Rule AQL42 – permitted), of Chapter 3 of the Natural Resources Regional Plan. If the activity does not comply with Rule AQL42A an additional consent to discharge dust to air will be required pursuant to section 15 of the Resource Management Act 1991.



**Hearing Commissioner**

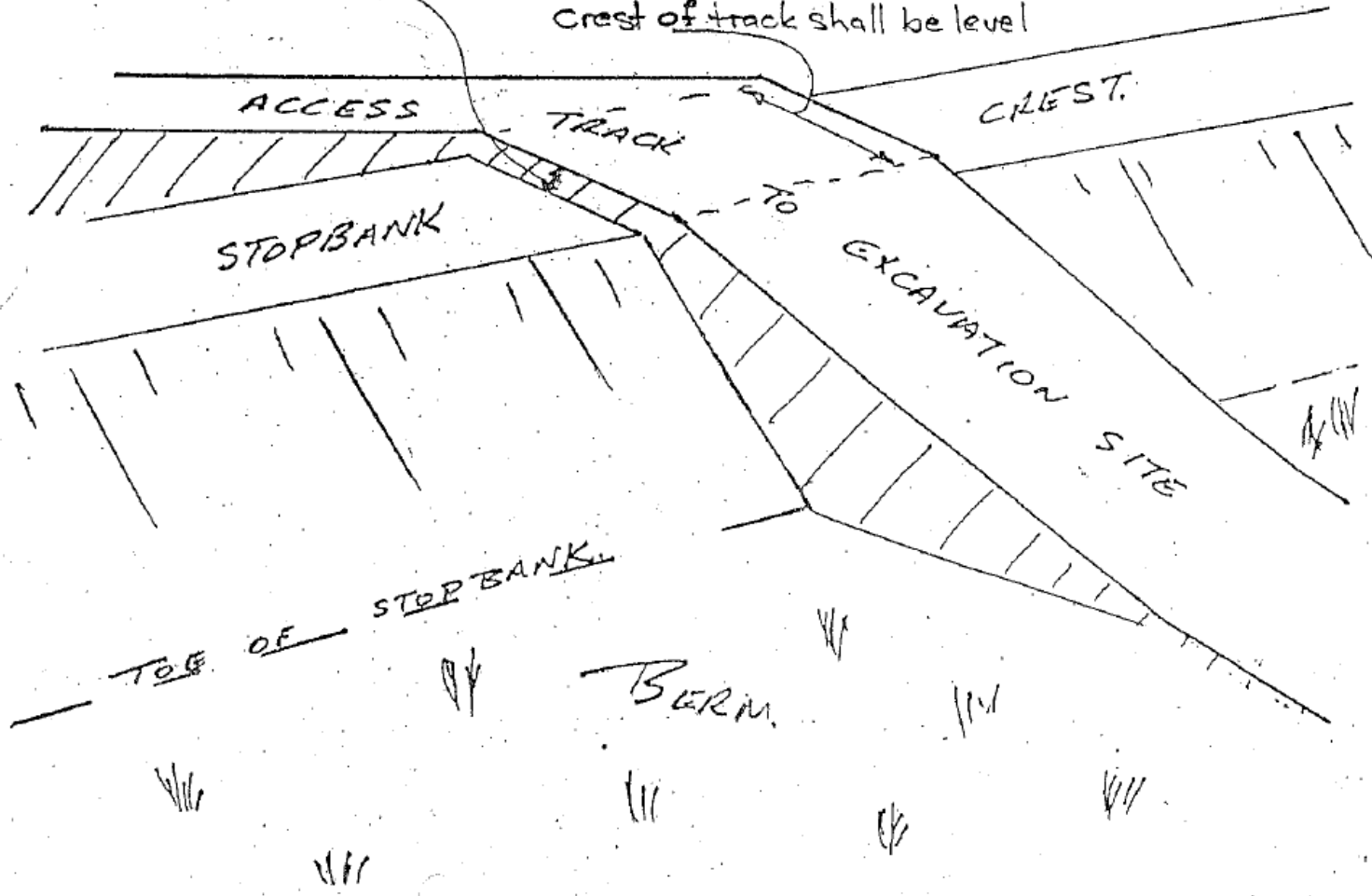
6<sup>th</sup> October 2011



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Plan CRC072223B – A J Cameron – Ashley River/Rakahuri – Stopbank Protection Plan

ALLOW 200mm of gravel over the stopbank crest.  
Crest of track shall be level



## **CRC072223 Appendix A – A J Cameron – Ashley River/Rakahuri – Canterbury Regional Council Cross-Section Survey Standard**

### **Survey:**

- Observe all changes of grade along the true line between the designated benchmarks. No actual ground point along the line should be more than 0.05m above or below the grade between any two observed points.
- Maximum distance between any 2 observations:
  - Turbid water - using a boat - 5% of the waterway width up to a maximum of 5m plus check between significant changes in depth.
  - Maximum distance on dry land - 10 m.
- The height of any single face recorded observation will be  $\pm 30$ mm, to 2 standard deviations, relative to the control mark.
- Observations will be within  $\pm 0.5$ m of true line, to 1 standard deviation. Take extra care to stay on line when deviation will be significant.
- Each cross section line shall extend from at least 5m left of the defined left channel limit or 5m into the left hand side “vegetated berm” across the whole active bed (fairway) to 5m right of the defined right channel limit or 5m into the right hand side “vegetated berm”.
- Record all back-sights and check observations to existing control marks.
- This data is to be included with the supplied data.
- Maximum observation length should not be greater than 350m. (Observed distances may be longer in good conditions or if other restraints preclude staying under 350m. Observation lengths should always be reduced to minimise refraction when shimmer is significant).
- Preferred codes (descriptions) for observations are as follows:
  - WE Waters Edge of all channels and pools.
  - I Invert – all points that are under-water.
  - BT Bank Top is helpful but not essential.
  - BB Bank Bottom is helpful.
- Identify stockpiles if they are on the defined line.
- Surveyors using GPS equipment will need to demonstrate that vertical plane is calibrated.

### **Results:**

- Cross section plots are not required by Environment Canterbury although they may be useful to the surveyor as a quick visual check.
- A comma separated variable (csv) file of all observed and edited data is all that is required. Other survey formats may also be possible.

## **CRC072223 Appendix B – A J Cameron – Ashley River/Rakahuri – Canterbury Regional Council “Available Gravel” Calculation Procedure Calculation of mean bed level**

The survey section of Canterbury Regional Council may be able to assist with this step.

The mean bed level is the average level of the bed across the fairway (including parts underwater); such that if a line is drawn at the mean bed level, then the cross-section would show equal areas above and below that line. The fairway is normally defined by the widths specified in the consent, which usually corresponds to the width between the top of the banks adjacent to the “active channel”. Where there are to be intermediate cross-sections not specified in the consent, the width shall be taken as a linear interpolation of the width of the adjacent consent. In exceptional circumstances, such as where there are large erosion embayments, a different width can be agreed, provided it corresponds to a more appropriate fairway width, representative of the adjacent reach of river.

The area under the surveyed cross-section (to a datum) is the same as the area under the mean bed level (to the same datum) over the full width of the fairway. This can be calculated using a weighted average approach (where the horizontal distance between points determines the weighting). Alternatively the CRC survey section may be able to perform this calculation once the csv file is supplied.

### **Calculation of “available” volume**

To calculate the available volume between two cross-sections:

*In symbols:*

$$\text{Volume available} = V_x - V_{\min} - V_{\text{ex}} - V_{\text{EMP}}$$

$$\text{Where } V_x = (D_2 - D_1) \times (\sqrt{A_1 \times A_2} + A_1 + A_2) / 3$$

$$A_x = L_x \times W_x$$

$$D_x = \text{river distance of cross-section } x$$

$$A_x = \text{end area of cross-section } x$$

$$L_x = \text{surveyed mean bed level at cross-section } x$$

$$W_x = \text{fairway width at cross-section } x$$

$$V_{\min} = \text{volume between datum and minimum mean bed levels (using } L_{\min} \text{ in place of } L_x \text{ in formula above)}$$

$$V_{\text{ex}} = \text{volume known to have been excavated and removed since the survey (including reported returns and material yet to be reported)}$$

$$V_{\text{EMP}} = \text{volume identified in any current Excavation Management Plan for the area that has already been submitted to Canterbury Regional Council.}$$

*In words:*

1. Calculate the surveyed mean bed level at each cross-section.
2. Multiply the surveyed mean bed level by the width at each cross-section. This is the “end area” of the cross-section.
3. Work out the distance between the cross-sections based on the nominal distances specified in the consent. Cross-section distances shall be those specified on the consent conditions, or, for intermediate cross-sections, a linear interpolation of those distances (interpolated along the fairway centreline).
4. Calculate the surveyed volume between the cross-sections using the following formula: Volume = Distance between sections multiplied by (square root of (End area<sub>1</sub> multiplied by End area<sub>2</sub>) + End area<sub>1</sub> + End area<sub>2</sub>) divided by 3
5. To calculate the volume between the datum and minimum mean bed levels repeat the calculations in steps 2, 3 and 4 using the minimum mean bed levels in place of the surveyed levels.
6. Subtract the volume calculated in step 5 from the volume calculated in step 4.

7. Subtract any known excavation volume that has been removed since the survey (including reported returns and material yet to be reported) from the volume calculated in Step 6. This is the “available” volume.
8. Subtract any “available gravel” identified in a current Excavation Management Plan that has already been submitted to Canterbury Regional Council.

**CRC072223 Appendix C – A J Cameron – Ashley River/Rakahuri – List of Bird Species referred to in condition (11) and condition (19)**

South Island Pied oystercatcher

Black stilt

Pied stilt

Wrybill

Banded dotterel

Black-fronted dotterel

Blue duck

Paradise shelduck

Grey duck

NZ shoveler

Grey teal

NZ scaup

Black-billed gull

Red-billed gull

Caspian tern

White-fronted tern

Black-fronted tern

White-winged Black tern

Australasian bittern

Marsh crake

Spotless crake

Cormorant/shag colonies

Royal spoonbill

Crested grebe