

BUILDING CONSENT BCA122892

Under Section 51 Building Act 2004

This building consent is issued under Section 51 of the Building Act 2004. This building consent does not relieve the owner of the dam (or proposed dam) of any duty or responsibility under any other Act relating to or affecting the dam (or proposed dam). This building consent also does not permit the construction, alteration, demolition, or removal of the dam (or proposed dam) if that construction, alteration, demolition, or removal would be in breach of any other Act.

THE DAM (Including Appurtenant Structures)

Street address of the property where the dam is located: Western side of intersection of Dixons & Wrights Roads

Legal description of land where dam is located: Lot No. 1 DP No. 27020

Name of Dam (if applicable): Waimakariri Irrigation Ponds

Location of building and/or dam within site/block number: L35:4460-5863

OWNER DETAILS

Name of owner: Waimakariri Irrigation Limited **Contact:** Mr Brent Walton

Postal address: Koller & Hassall Ltd, PO Box 556, Rangiora 7440

Street address/reg. office: 267 High Street, Rangiora 7440

Phone (home): **Phone (business):** 03 313 8103

Fax (home): **Fax (business):** 03 313 4509

Email: Brent.walton@wil.co.nz **Cellphone:** 022 086 9986

First point of contact for communication with the building consent authority:

Contact person: Lynn Torgerson

Company: Pattle Delamore Partners Ltd

Postal address: PO Box 389, Christchurch 8440

Phone: 03 363 3107 **Fax:** 03 363 3101

Email: Lynn.torgerson@pdp.co.nz **Cellphone:**

BUILDING WORK

The following building work is authorised by this building consent:

Project: Construction of 2 storage ponds using earth embankments to retain water for irrigation. Pond embankments range in height from 4.5m to 12.5m. Stored volumes of water in each pond are 2,0m³ pond 1, 6,2 pond 2.

This building consent is subject to the following conditions:

1. The work shall be carried out in accordance with drawings, specifications and design recommendations (Issue 3 February 2013) provided in the application, as well as all changes arising from the regulatory review.
2. Inspections be undertaken by Environment Canterbury (or their agent) at the following critical construction stages:
 - Each pipe penetration through a high PIC embankment following installation of pipe and bedding prior to being backfilled i.e. G2, G3, G4, G5 and Dixon Rd Pump Station;
 - Surface preparation for liner at the first pipe penetration to be constructed prior to placement of liner;
 - Completion of construction; and
 - Any other times where unexpected conditions are encountered.

The applicant shall notify Environment Canterbury a minimum of 48 hours prior to these construction stages occurring to ensure that the works are not delayed.

The designer will provide Producer Statements for construction and a Contractor's producer Statement would also be provided along with peer review statements

3. During construction the designer shall provide Environment Canterbury with the following documentation in accordance with Riley Consultants Regulatory Review (ref 12854-D)
 - Pre-commissioning procedures;
 - Construction report;
 - Producer statements PS3 (Construction) and PS4 (Construction Review);
 - Commissioning report confirming adequate performances after lake filling stage; and
 - Independent peer review endorsement of the above.

These reports are to be provided to ECAN at various stages, for example:

- Prior to commencement of lake filling; and
 - Application for code compliance certificate.
4. An appropriately qualified designer's representative will be present on site throughout construction. In addition, specific preconstruction and construction control stages requiring the designer's attention have been nominated – Condition 2. This is in line with NZSOLD Guidelines for High PIC dam.
 5. The dam owner shall engage a Category B Recognised Engineer to prepare a dam Operation, Maintenance and Surveillance Plan consistent with the requirements of the New

Zealand Society On Large Dams New Zealand Dam Safety Guidelines. The Operation, Maintenance and Surveillance Plan shall be updated from time to time to reflect current industry practices pertaining to the dam Potential Impact Category. The dam owner shall undertake regular maintenance, monitoring and surveillance of the dam in accordance with the Operation, Maintenance and Surveillance Plan and the current edition of the New Zealand Dam Safety Guidelines or superseding document as pertains to the dam Potential Impact Category. Monitoring and surveillance shall include specialist inspections and inspections following unusual occurrences to the extent required by the New Zealand Dam Safety Guidelines or equivalent document.

6. The Operation, Maintenance and Surveillance Plan shall include a requirement for inspections by a Chartered Professional Engineer (CPEng) with expertise in dam engineering every year for the first three years following first filling and every three years thereafter. A report shall be prepared documenting each annual and triennial inspection and shall be submitted to the Ecan BCA Coordinator.

ADVISORY NOTE

1. Site confirmation

Confirmation is required that the dam was constructed on the site and to the specifications approved. A site visit may be required to assess site confirmation. A copy is to be provided to BCA as soon as practicable, but within 10 working days of construction being completed.

2. Inspections reports required by Environment Canterbury:

A copy of any inspection records requested as a condition of the building consent are to be provided to the BCA Coordinator within 10 working days unless prior arrangements have been made with the BCA Coordinator. Failure to provide the records may mean that the BCA Coordinator request that you cease work until the information requested is supplied.

COMPLIANCE SCHEDULE

A compliance schedule is not required for the dam.

ATTACHMENTS

Copies of the following documents are attached to this building consent:

Drawings:

Overall project layout

WIL1125_30_1(R2), WIL1125_30_2(R2), WIL1125_30_3(R3), WIL1125_30_4(R1),
WIL1125_30_5(R2), WIL1125_30_8(R1), WIL1125_30_9(R1), WIL1125_30_11(R2),
WIL1125_30_12(R3), WIL1125_30_13(R3)

Ponds

WIL1125_30_21(R3), WIL1125_30_22(R3), WIL1125_30_23(R3), WIL1125_30_/24

Inlet race, inlet and outlet structures, inter pond structures

WIL1125_30_101(R3), WIL1125_30_102(R2), WIL1125_30_103(R3), WIL1125_30_104(R3),
WIL1125_30_105(R1), WIL1125_30_106(R3), WIL1125_30_107(R2), WIL1125_30_108(R1),
WIL1125_30_109(R1), WIL1125_30_110(R2), WIL1125_30_111(R3), WIL1125_30_112(R2),
WIL1125_30_113(R3), WIL1125_30_114(R3), WIL1125_30_115(R2), WIL1125_30_116(R2),
WIL1125_30_117(R3), WIL1125_30_118(R3), WIL1125_30_119(R3), WIL1125_30_120(R3),
WIL1125_30_121(R2), WIL1125_30_122(R1), WIL1125_30_123(R1), WIL1125_30_124(R3),
WIL1125_30_125(R3), WIL1125_30_126(R3), WIL1125_30_127(R2), WIL1125_30_128(R1),
WIL1125_30_129(R2), WIL1125_30_130 WIL1125_30_131, WIL1125_30_132, WIL1125_30_133,
WIL1125_30_134, WIL1125_30_135(R1), WIL1125_30_136, WIL1125_30_137, WIL1125_30_138,
WIL1125_30_139(R1), WIL1125_30_140(R1), WIL1125_30_141, WIL1125_30_142,

WIL1125_30_143, WIL1125_30_146, WIL1125_30_151(R1), WIL1125_30_152(R1),
WIL1125_30_153(R3), WIL1125_30_154(R2), WIL1125_30_155(R2), WIL1125_30_156(R2),
WIL1125_30_157(R1), WIL1125_30_158(R1), WIL1125_30_159(R2), WIL1125_30_160(R2),
WIL1125_30_161(R1), WIL1125_30_162(R1), WIL1125_30_163(R2), WIL1125_30_164(R2),
WIL1125_30_165(R2), WIL1125_30_166(R2), WIL1125_30_167(R2), WIL1125_30_168(R2),
WIL1125_30_169(R2), WIL1125_30_170(R1), WIL1125_30_171(R1), WIL1125_30_172(R2),
WIL1125_30_173(R2), WIL1125_30_174(R2), WIL1125_30_175(R2), WIL1125_30_176(R1),
WIL1125_30_177(R1), WIL1125_30_178(R3), WIL1125_30_179, WIL1125_30_180(R1),
WIL1125_30_181, WIL1125_30_182, WIL1125_30_183(R1), WIL1125_30_201,
WIL1125_30_202(R1), WIL1125_30_203, WIL1125_30_204, WIL1125_30_205, WIL1125_30_206,
WIL1125_30_211(R1), WIL1125_30_212(R1), WIL1125_30_213(R1), WIL1125_30_214(R1),
WIL1125_30_215(R1), WIL1125_30_216(R1), WIL1125_30_217(R1).

Technical Specifications (Issue 3)
Design Report (Issue 3)
Riley Consultants Ltd – Review Report 12854-D

CODE COMPLIANCE CERTIFICATE:

A Code Compliance Certificate application form (F006) is attached. This is to be filled in and returned to Environment Canterbury at completion of building works.

AUTHORISATION

Signature:  _____ Date: 12 July 2013
Position: BCA Co-ordinator
On behalf of: ENVIRONMENT CANTERBURY