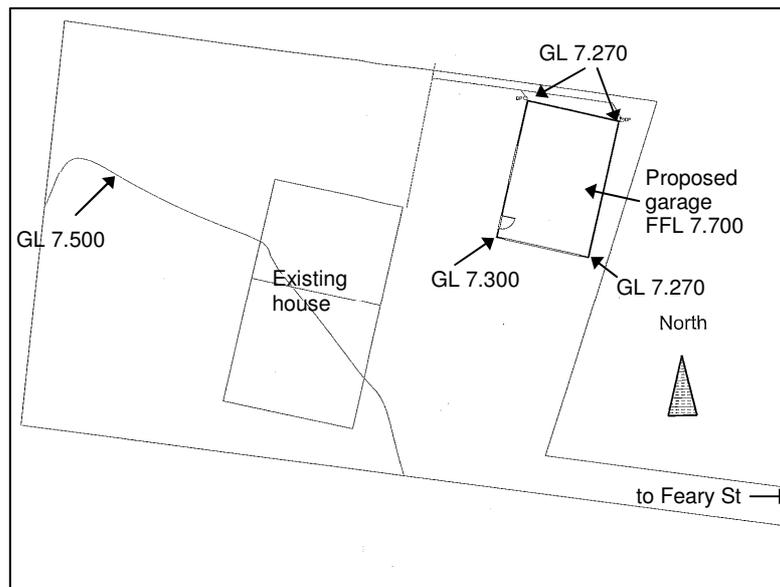




Determination 2013/047

Regarding the refusal to grant building consent without a section 73 notice for a garage on land subject to inundation at 15 Feary Crescent, Takaka



1. The matter to be determined

1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004¹ (“the Act”) made under due authorisation by me, John Gardiner, Manager Determinations and Assurance, Ministry of Business, Innovation and Employment (“the Ministry”), for and on behalf of the Chief Executive of the Ministry.

1.2 The parties to the determination are

- the owners of the building, C and L Sangster (“the applicants”), acting through an agent (“the applicants’ agent”)
- Tasman District Council (“the authority”), carrying out its duties as a territorial authority or a building consent authority.

1.3 This determination arises from the authority’s decision to refuse to issue a building consent for the construction of a proposed garage (“the garage”) unless a section 73 notice was entered on the certificate of title of the land. This is on the grounds that the land on which the garage is to be built is subject to flooding (inundation).

¹ The Building Act, Building Code, Compliance documents, past determinations and guidance documents issued by the Ministry are all available at www.dbh.govt.nz or by contacting the Ministry on 0800 242 243.

- 1.4 The matter to be determined² is therefore whether the authority correctly exercised its powers in refusing to issue the building consent without a section 73 notice. In making this decision I must consider:
- whether the proposed building work complies with the Building Code³ (First Schedule, Building Regulations 1992) in respect of inundation; and
 - whether the land is subject to a natural hazard such that the building consent should be subject to a notification under section 73.
- 1.5 In making my decision, I have considered the submissions of the parties, the report of the expert commissioned by the Ministry to advise on this dispute (“the expert”), and the other evidence in this matter.
- 1.6 The relevant sections of the Act are set out Appendix A.

2. The building work

- 2.1 In the interests of clarity, I note that in this determination where site or building levels are expressed in metres, these levels are related to the contour heights established by the authority for the local land areas.
- 2.2 The building work in question consists of a proposed proprietary garage 9 metres long x 6 metres wide that is to be situated on the northeast corner of a 906m² property (“the property”) presently occupied by a free-standing house. The property slopes down towards the area where the garage is to be built and at the end furthest from this area it adjoins the Takaka River plain.
- 2.3 The proposed garage is timber-framed and built on a concrete slab with thickened perimeters supported on shallow 250mm diameter concrete piles. The external walls are clad with aluminium/zinc alloy steel pre-finished weatherboards and the roof is clad with long run aluminium/zinc alloy steel pre-finished roofing. The completed building is of a simple shape in plan and form and its area of 54m² occupies 19% of the whole property.
- 2.4 The finished floor level of the base slab is to be set at the 7.70 metre level with the adjacent ground levels ranging from 7.25 to 7.30 metres. The property as a whole is located between the 7.00 and 8.00 metre contours and the garage footprint will be located on the low side of the 7.50 metre inferred contour.
- 2.5 Some distance from the property, a broad metre high bank has been constructed on the east side of the Takaka River to protect the Takaka township by preventing the river from breaking out.

3. Background

- 3.1 According to the applicants’ agent the Land Information Memorandum obtained by the applicants prior to purchasing the property did not make reference to the application of a section 72 impediment. The authority has noted that this is due to the existing dwelling being built in the mid-1970s which was before such notices were issued.

² Under sections 177(1)(b) and 177(2)(a) of the Act.

³ In this determination, unless otherwise stated, references are to sections of the current Act and references to clauses are references to the Building Code

- 3.2 The applicants' agent applied to the authority for a building consent, with documentation that was dated 3 October 2012.
- 3.3 The authority issued a revised project information memorandum ("PIM") No. 121017 for the garage dated 8 October 2012, which was forwarded to the applicants' agent on 8 November 2012. The PIM referred to a flooding hazard affecting parts of the property due to extreme flooding of the adjacent Takaka River. To obtain a flood-free status, the garage floor level was required to be raised by at least 0.3 metres. While no further flood hazard mitigation measures were required, the authority considered that a section 73 notice on the property was warranted.
- 3.4 On 2 November 2012 the authority wrote to the applicant's agent noting that the situation was being reviewed by the authority's Natural Hazards team.
- 3.5 Following a request from the applicant's agent, the authority forwarded an email dated 12 November 2012 that stated if the land on which the garage was to be built as well as the garage slab was raised a further 300mm, the authority would reconsider the requirement to issue a section 73 notice.
- 3.6 The plans for the garage were revised to accommodate the raised floor level, (to 7.7) and a reduced height as requested by the authority, and these were forwarded to the authority on 26 November 2012.
- 3.7 The authority emailed the applicants' agent on 3 December 2012, stating that while the situation was marginal, due to the raised floor level and the low probability of flooding risk, the authority was now of the view that it was not necessary to retain the 73 notice.
- 3.8 According to the applicants' agent, the authority phoned the agent on 17 January 2013, advising that even with the raised floor level, a section 73 notice would have to be added to the property title. Further negotiations and correspondence then took place.
- 3.9 The applicants' agent wrote to the authority on 24 January 2013. The agent referred to previous determinations and court decisions, and noted that:
- the agent had met with a research scientist and had been shown the computer modelling of the theoretical 100-year flood in relation to the property. In summary, the model indicated that at only the peak of such an event would flood water affect the property and this would be of a short duration. The flood water would be of a low velocity and slow moving, with the garage site being the last area to be affected. The scientist predicted that the 'maximum theoretical depth of water on this property would be approximately 200mm at the peak of flooding'
 - a 100-year flood hazard map issued by the authority showed that the property was not inundated by such a flood nor was it during the '100-year flood' of December 2011
 - the volume of water that the garage would displace in an 100-year event would be negligible
 - while the life expectancy of the building was 50 years or greater, the flood model was based on a theoretical 100-year flood that might or might not occur once during the life of the building

- the depth, flow rate, and duration of the theoretical 100-year event would only be a nuisance value rather than an on-going concern. The raised floor level would also protect the garage from flooding. The land did not require protection, other property would be barely affected by the theoretical flood and there was no need to make provision for restoration of the property or other property.
- 3.10 In an letter to the applicants' agent dated 21 March 2013, the authority stated that
- the scientist's report did not deny that the property was subject to flooding
 - the authority was of the opinion that in the July 1983 event, the property was likely have been affected by flooding to some degree
 - the authority's floodplain modelling, taking into account the "McKenzie bank" installation, indicated floodwater depths of up to 250mm in both a 50 and 100-year 'average return period event' in the Takaka River
 - the December 2011 rainfall event was not a "100-year event"
 - the displacement of floodwater was not a relevant issue. What was relevant was the fact that the land associated with the garage would be affected by floodwater in a '1-2% Annual exceedance probability [AEP] flood event in the Takaka river'
 - it was unlikely that the garage site would cause floodwater diversion in such a manner as to affect adjoining property.
- 3.11 The Ministry received an application for a determination on 26 March 2013.

4. The submissions

- 4.1 In a submission to the Ministry dated 22 March 2013, the applicants' agent set out the background to the dispute. The agent was of the opinion that the authority was not taking a 'sensible approach to the degree of risk to this property' and requested that the building consent application be assessed on the basis of the Court of Appeal ruling that he had attached.
- 4.2 The agent provided copies of
- the consented plans and specifications
 - the building consent application and the PIM dated 8 October 2012
 - Determination 2008/82
 - two court decisions⁴
 - the authority's "100-year ARI Flood Hazard Map"
 - correspondence with the authority.

⁴ *Logan v Auckland City Council* A129/97 [1997] NZEnvC (31 October 1997); *Logan v Auckland City Council* CA243/99, Richardson P

- 4.3 The authority made a submission dated 19 April 2013, which described the property and some of the background to the dispute. The authority submitted that
- computer modelling, which took into account current and predicted conditions, indicated that ‘property inundation could well happen in a Q50 (2%AEP) and Q100 event, being within the life of the building’
 - while the garage would be subject to water entry, as it was classified as an “Outbuilding”, there was no impediment to water entering the building.
 - as the authority was satisfied that the garage would comply with the requirements of the Building Code, it was not necessary, or reasonable, to grant a waiver or modification
 - however, as the land on which the building is to be constructed was subject to inundation, the garage fell within the provisions of section 72.
- 4.4 The authority provided copies of
- an annotated copy of the decision tree (refer appendix B) setting out the application of sections 71 and 72
 - Determination 2008/82
 - some flood survey maps
 - a topographical map of the property and adjacent sites
 - three photographs of the proposed garage site
 - a memorandum dated 26 February 2013 that was sent to the authority’s Environment and Planning Department regarding a Public Forum presentation
 - correspondence with the applicants’ agent.
- 4.5 A draft determination was issued to the parties for comment on 5 June 2013.
- 4.6 The authority provided a submission dated 24 June 2013 in response to the draft determination, noting that it agreed with ‘the majority of the information in the determination, but does not support it in its entirety’. In respect of the matter to be determined (refer paragraph 1.4) the authority questioned whether the Ministry had the discretion to decide what is a “significant” natural hazard, and stated the opinion that such discretion resides with the authority. The authority also submitted that the interpretation of section 71(1)(a) and (b) was incorrect (refer paragraph 6.2.1); either subsection has an effect and they are not mutually reliant in order to have an effect.
- 4.7 The authority restated its view that the land is likely to be subject to inundation at a level of up to 200mm and at this level the authority considers the inundation constitutes a natural hazard. The authority also noted that
- there was no reference to the application of a section 72 impediment in the LIM as the existing dwelling had been constructed in the mid-1970s before such notices were issued (refer paragraph 3.1)
 - the December 2011 flood is not relevant as it was centred elsewhere and had a very minimal effect in Takaka (refer paragraph 3.9).

- 4.8 The applicant's agent provided a submission dated 11 July 2013 in response to the draft and to the authority's submission. The agent noted
- the authority had misinterpreted the meaning in paragraph 6.2.1 which was to state that both subsections 71(1)(a) and (b) had been considered, not that they were mutually reliant
 - the question is whether there is a risk of a level and frequency to justify the requiring of a notice, and low water levels should not be considered a natural hazard.

5. The expert's report

5.1 As described in paragraph 1.5, I engaged the services of an expert, who is an engineer employed by a firm of consultants, to assist me. The expert examined the relevant documentation and produced a report dated 3 May 2013. This report, which was also reviewed by a chartered professional engineer, was forwarded to the parties on 3 May 2013.

5.2 I summarise below what I consider to be the salient points described in the report:

- The relative floor level and ground levels of the property were described and these were as I have set out in paragraph 2.4.
- The expert described an electronic flood model that the authority had used to determine the effects of a 2% AEP and a 1% AEP flood, and considered that it was appropriate to use this model to assess future events.
- The model indicated that in a 1% AEP event, only a small area to the south-west corner of the property would remain dry at the peak flood moment, and between 0.13 and 0.22 metres depth of water could occur across the site at this time. The relative level of the flood water would be at the 7.58 metre level adjacent to the garage footprint.
- The March 2006 flood map indicated that flood water did cover the property during the 1983 flood event and the nearest recorded flood marks to the property were:

Location	Recorded water depth	Council LiDAR Ground level
27 Feary Crescent	7.50 metres relative level	Between 7.0 and 7.5 metres
3/10 Feary Crescent	350mm above floor level	Between 7.0 and 7.5 metres

The dry zone on the flood map began between the 7.5 metre and the 8.0 metre contours.

- The expert considered that it was reasonable to accept the authority's modelling that indicated there would be up to 150mm of floodwater on the property in a 2% AEP event, and 220mm of floodwater at the peak of a 1% AEP flood event.
- The floodwaters affecting the property were generally back waters from the southern direction, which was opposite to the main river flow, and these have an inundation limit (edge of the dry zone) on or near the property. As such the

floodwaters would have low energy and be ‘slow moving with little potential for erosion or scour’. However, the shallow ponding on the property caused by the back water will cause a nuisance.

- The floodwater was not expected to inundate the garage floor level, which had a freeboard of 180mm, as it was a minimum of 400mm above the adjacent ground level.

6. Discussion

6.1 The code-compliance of the building

- 6.1.1 Before sections 71, 72, and 73 can be considered, I must first establish whether the proposed garage would comply with the Building Code assuming that it was constructed on land not subject to inundation.
- 6.1.2 In its submission, the authority classified the garage as falling within the category of an “Outbuilding” and was satisfied that the garage would comply with the requirements of the Building Code.
- 6.1.3 Clause A1 states that the classification “Outbuildings” may be applied to ‘a building or use which may be included within each classified use but are not intended for human habitation, and are accessory to the principal use of associated buildings’ and includes a garage as an example.
- 6.1.4 The limits on application for Clause E1.3.2 state that ‘Performance E1.3.2 shall apply only to *housing, communal residential and communal non-residential buildings.*’ as defined in clause A1. The garage as an outbuilding may also be included within the classified use of “housing” though it is a non-habitable space.
- 6.1.5 I accept the expert’s conclusion that the floodwater is not expected to inundate the garage floor level, and accordingly I consider the garage complies with Clause E1.3.2 whether or not it is constructed on land subject to inundation.

6.2 Section 71: Is the land subject to a natural hazard?

- 6.2.1 Based on the evidence provided to me, I have accepted that the proposed garage is code-compliant. In order to consider whether the authority correctly exercised its powers when it refused to grant building consent without notification under section 73, I have considered whether, in terms of section 71(1)(a), the land on which the proposed garage is to be constructed is subject (or is likely to be subject) to inundation and whether, in terms of section 71(1)(b), the building work is likely to accelerate, worsen, or result in a natural hazard on that land or any other property .
- 6.2.2 I note that the word “likely” occurs in both sections 71(1)(a) and (b). I discussed the term “likely” in the context of section 121 in Determination 2008/82⁵. I accepted that previous decisions of the Courts were good law in respect of the word “likely” in section 71, which was interpreted to mean that there had to be a reasonable probability or consequence that something could happen. I also accept that this interpretation can be applied to the current situation.

⁵ Determination 2008/082: Building consent for a storage shed on land subject to inundation

- 6.2.3 As set out in paragraph 5.2, the expert is of the opinion that the flood model that the authority used was appropriate to assess future events and that the relative level of the flood water would be at the 7.58 metre level adjacent to the garage footprint in a 1% AEP event. The expert also noted that the flood waters would be backwaters that would range from 0.13 to 0.22 metres at the peak flood moment and have a low energy with little potential for erosion or scour. The floodwaters were not expected to inundate the garage floor level, which had been raised above ground level, and there would be a dry area to the south-west corner of the property.
- 6.2.4 Section 7 provides that the term ‘natural hazard’ has the meaning given to it by section 71. Section 71(3)(a) to (e) defines a natural hazard by the event occurring (in this case inundation) but does not give an indication of the extent of that event. I consider that while inundation will occur and may be a nuisance, it will be a temporary and minimal effect and does not require notification as a natural hazard and an entry on the land title. My reasons for concluding that section 71 requires an assessment of whether the effect of a natural hazard will be more than minimal or trivial are set out below.
- 6.2.5 The Court of Appeal observed in *Logan v Auckland City Council*⁶ that common-sense and discretion is required when applying the natural hazard provisions. While the comments were made in respect of the provisions in the Building Act 1991, I consider the comments are also applicable to the natural hazards provisions that were carried over in substantially the same form to the current Act. The Court of Appeal stated at [33]:
- We should add that in determining whether the statutory risk threshold under subs (1)(a) and subs (2)(b) [whether the land is subject to or is likely to be subject to a natural hazard] has been reached, and what will be adequate provision to protect the land under subs (1), given, too, that adequate provision for protection does not require the elimination of any possibility in all conceivable circumstances of inundation or other relevant hazards, a territorial authority can be expected to take a common-sense approach. Whether the risk is at the level and frequency to justify the expense and other implications of making adequate provision to protect the land and, if not, to require a warning notice, which is a blot on the title and may have significant insurance implications, will always require a sensible assessment involving considerations of fact and degree.
- 6.2.6 The Court of Appeal’s comments make it clear that some judgment is required in determining when land will be subject to a natural hazard, that the provisions do not require the elimination of all inundation, and that such judgments involve “a sensible assessment involving considerations of fact and degree”.
- 6.2.7 I also note that there are a number of requirements that must be satisfied for section 71 to apply and each of these requirements will involve considerations of fact and degree. This indicates that an assessment of whether a natural hazard is of such a minimal effect that it would not be appropriate to apply s 71 is consistent with the approach that must be taken to other requirements in section 71. For example, for section 71 to apply there must be an assessment that “the land on which the building work is to be carried out” is subject to a natural hazard, there must be an assessment of likelihood in terms of whether the land is “likely” to be subject to a natural hazard, and section 71 will only apply to the construction of a building or “major alterations” to a building.

⁶ CA243/99, 9 March 2000.

6.2.8 Further, section 71 does not apply if adequate provision has been or will be made to protect the land, building work, or other property from the natural hazard, or to restore the damage to the land or other property as a result of the building work. I accept the expert's conclusion that a 1% AEP will have little potential for damage to the land, and that the floodwater would not inundate the garage floor level. I also accept the authority's conclusion that the building work would not cause floodwater diversion or displacement in such a way as to affect adjoining property. The owner also took steps to raise the level of the garage slab and this has further ensured that the natural hazard does not reach the level that would require the building work to be protected from the natural hazard.

6.3 Conclusion

6.3.1 I am of the view therefore that the inundation cannot be said to be a natural hazard for the purposes of section 71 in cases where the inundation:

- will be of temporary and minimal effect, and
- has no potential for affecting the land, the proposed building work or other property in such a way as to require protection, and
- does not have the potential for causing damage that will need to be restored.

6.3.2 Accordingly I consider that section 71 does not apply as the land on which the building work is to be carried out is not subject to and is not likely to be subject to a natural hazard of a type that requires the application of section 71, the consequential notification of the natural hazard and an entry on the title to land.

7. The Decision

7.1 In accordance with section 188 of the Building Act 2004, I determine that:

- the proposed building work complies with the relevant provisions of the Building Code in respect of inundation, and
- the authority incorrectly exercised its powers when it refused to grant a building consent unless a section 73 notification is attached, and that decision is reversed.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 20 August 2013.

John Gardiner
Manager Determinations and Assurance

Appendix A: The legislation

A.1 The relevant sections of the Act are:

71 Building on land subject to natural hazards

- (1) A building consent authority must refuse to grant a building consent for construction of a building, or major alterations to a building, if –
 - (a) the land on which the building work is to be carried out is subject or is likely to be subject to 1 or more natural hazards: or
 - (b) the building work is likely to accelerate, worsen or result in a natural hazard on that land or any other property.
- (2) Subsection (1) does not apply if the building consent authority is satisfied that adequate provision has been or will be made to –
 - (a) protect the land, building work, or other property referred to in that subsection from the natural hazard or hazards; or
 - (b) restore any damage to that land or other property as a result of the building work.
- (3) In this section and sections 72 to 74, natural hazard means any of the following:
 - (d) inundation:

72 Building consent for building on land subject to natural hazards must be granted in certain cases

Despite section 71, a building consent authority must grant a building consent if the building consent authority considers that-

- (a) the building work to which an application for a building consent relates will not accelerate, worsen, or result in a natural hazard on the land on which the building work is to be carried out or any other property; and
- (b) the land is subject or is likely to be subject to 1 or more natural hazards: and
- (c) it is reasonable to grant a waiver or modification of the building code in respect to the natural hazard concerned.

73 Conditions on building consents granted under section 72

- (1) A building consent authority that grants a building consent under section 72 must include, as a condition of the consent, that the building consent authority will, on issuing the consent, notify the consent to,—
 - (c) . . . the Registrar-General of Land.

A.2 The relevant provisions of the Building Code are:

PERFORMANCE

E1.3.1 Except as otherwise required under the Resource Management Act 1991 for the protection of other property, surface water, resulting from an event having a 10 percent probability of occurring annually and which is collected or concentrated by buildings or sitework, shall be disposed of in a way that avoids the likelihood of damage or nuisance to other property.

E1.3.2 Surface water, resulting from an event having a 2 percent probability of occurring annually, shall not enter buildings.

Performance E1.3.2 shall apply only to housing, communal residential and communal non-residential buildings.

Appendix B: Decision tree in relation to building sites subject to hazards

