



Determination 2014/059

Regarding whether a barrier is required in compliance with clause F4 to a jetty at Moturoa Island, Bay of Islands

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:
 - Moturoa Island Limited acting through their consultant engineer (“the applicant’s engineer”)
 - Far North District Council (“the authority”), carrying out its duties as a territorial authority or building consent authority.
- 1.3 This determination arises from the construction of a timber jetty, gangway and pontoon on Moturoa Island (“the island”). The timber jetty is under an approved building consent for a safety barrier on one side and is currently under construction including a pontoon and gangway. The authority has declined an amendment to the building consent for the pontoon and gangway and is seeking for the jetty to now have a safety barrier on both sides to comply with Clause F4 as the jetty will now be a walkway to the pontoon.
- 1.4 The matter to be determined² is therefore whether the authority is correct to refuse an amendment to the building consent for a pontoon and gangway in relation to compliance of a jetty with clause F4.3.1 of the Building Code.
- 1.5 In making my decision, I have considered the submissions of the parties and the other evidence in this matter. I have not considered any other clauses of the Building Code, for example Clause D1.
- 1.6 Two previous determinations will be referred to as they relate to the current determination: Determination 1995/004³ and Determination 2001/12.⁴
- 1.7 Unless otherwise stated, references to sections are to sections of the Act and references to clauses are to clauses of the Building Code.

2. The building work

- 2.1 The building work consists of a timber jetty (“the jetty”) under BC-2014-783/0 issued on 13 March 2014. The jetty extends across an area of the beach with a rocky

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.

² Under sections 177(1)(a), 177(1)(b) and 177(2)(a)

³ Determination 1995/004 Safety barrier for a waterfront walkway (*Building Industry Authority*) 30 October 1995

⁴ Determination 2001/12 Safety barrier for a jetty (*Building Industry Authority*) 4 December 2001

area along one side. The timber decking is laid over timber joists supported by timber bearers on timber piles. The jetty plans show a timber kerb along the side without a hand rail with dimensions around 100mm wide and 120mm high. The applicant has confirmed the timber kerb will be installed continuously along the jetty. The jetty is partially constructed at the time of writing this determination.

- 2.2 The jetty is available to the public, although I note the population of the Island is small and the southern jetty is the main access for occupants and visitors.
- 2.3 The applicant's engineer has applied for an amendment to the building consent for the pontoon and gangway, which are not yet constructed. The gangway is an aluminium structure. The pontoon is concrete held in place by anchors, connecting the pontoon to the seabed. The seabed connections consist of deeply embedded galvanised steel pipes in concrete filled holes and galvanised mooring loops. Due to the marine environment, the steel frame of the pontoon will be double corrosion protected with a paint and zinc spray and fitted with an anode.

3. Background

- 3.1 On 13 March 2014 building consent BC-2014-783/0 was issued by the authority for construction of the jetty ("the building consent"). The building consent was subject to a condition that if a fall exceeds 1m then a balustrade will be required.
- 3.2 On 11 March 2014 the authority sent a request for information to specify the number of concrete pours, a revised design as it appears from elevations the total depth exceeds 1m and non-compliance of the balustrade. The authority stated 'Please refer 1.2.2 of F4 of the New Zealand Building Code'. I note this appears to be a reference to paragraph 1.2.2 of the Acceptable Solution F4/AS1, not of Clause F4 as stated.
- 3.3 On 12 March 2014 the applicant's engineer responded to the request for information stating:
- It is likely each pile will be poured with concrete independently along the rock shelf due to tides and wind. It is not practical for each hole to be observed by the authority. Three inspections should be adequate to obtain a reasonable cross-section.
 - The jetty has been designed with balustrades where the fall height is 1m or more, except on the seaward side. The balustrades comply with paragraph 1.2.2 of F4/AS1 with a vertical gap of less than 460mm between horizontal rails. The gangway will require the same.
- 3.4 On 8 September 2014 the applicant's engineer sent a letter to the authority to apply for an amendment for a building consent for the pontoon and gangway, providing a description of the building work and materials to be used.
- 3.5 On 19 September 2014 the authority sent a direction to the applicant that a barrier was needed on both sides of the jetty as the pontoon will be used for berthing boats and the fall is more than 1m.
- 3.6 On 30 September 2014 the authority sent an email to the applicant requesting further information regarding the barrier on both sides of the jetty. An email exchange occurred between applicant's engineer and the authority on the same day, in summary:
- The applicant's engineer is of the view the intended use is for dinghies to still be able to tie up to the outside of the jetty at high tide. A handrail is incompatible

with the intended use as a ‘working wharf’. The residents of Moturoa will want to use the jetty during busy summer periods or when the southern jetty cannot be used in a strong southerly. The applicant’s engineer informed the authority he would seek further information from the applicant regarding the intended use of the jetty.

- The authority’s view is that the jetty is private and not a working wharf and the place to tie up dinghies will be the floating pontoon. The pontoon has four accessible sides for boats. The fall from the jetty is onto rocks not sand or deep water.

3.7 On 3 October 2014 the applicant’s engineer sent the authority a letter from the applicant regarding how residents of Moturoa would use the jetty. In summary:

- The design of the jetty has been developed over the past three years in consultation with the occupiers of the Island.
- The occupants of the Island are often required to attach their boats to the western side of the jetty as the southern jetty cannot be used in poor weather. Having a handrail in this area will ‘severely impact’ on the use of the jetty.

3.8 On 3 October 2014 the authority responded to the applicant’s engineer confirming their view that the fall from the walkway to the floating pontoon requires a barrier under Clause F4 and does not constitute a working wharf. The officer of the authority also notes that in places the fall will be over 2m onto rocks. The option to apply for a determination is discussed.

3.9 On 16 October 2014 the authority sent a reminder letter to the applicant in relation to the request for information.

3.10 The Ministry received an application for determination on 29 October 2014.

4. The submissions

4.1 The applicant’s engineer provided a written submission with their application for determination. In summary the applicant’s engineer contended:

- There are areas on both sides of the jetty with a fall height of 1m or greater; this is not disputed. The current building consent approves the jetty to have a barrier against the non-seaward side, as the seaward side will be used for berthing vessels as a primary objective.
- The applicant has applied for an amended building consent for the design of a pontoon and gangway. The authority contends that with the pontoon installed, the jetty will no longer be a working wharf, but a walkway for pedestrian access to the pontoon.
- A barrier on the seaward side of the jetty will interfere with the intended use of the jetty as a working wharf for berthing of vessels. The intended use of the jetty is provided in the ‘limits of application’ under Clause F4.3.1.
- The primary access to the island is via a timber jetty on the southern side of the Island. However the southern side is exposed to dominant southern wind/waves, in which case the new northern jetty provides an alternative access in strong southerly conditions.
- The island has around 15 residential houses, some fulltime residents and some holiday homes. People and materials are ferried to the island on a regular, ‘almost

daily' basis. The pontoon provides for berthing on both sides limiting use to only two vessels at any one time.

- Some of the water alongside the jetty is only navigable at high water; however, the intended use of the jetty is to berth vessels when conditions are suitable.
- The applicant's engineer refers to both Determination 1995/004 and Determination 2001/12.

4.2 The applicant provided the following documentation with their application:

- correspondence between the applicant and the authority dated between 11 March 2014 and 16 October 2014.
- photographs of the jetty under construction and partially complete
- building consent documentation
- resource consent documentation
- building plans as approved and showing the safety barrier.

4.3 The authority did not provide a written submission to the application for determination.

5. The draft determination and further submissions

5.1 On 14 November 2014 I issued a draft determination to the parties. The draft determination concluded that the jetty only required a barrier on one side to comply with Clause F4.3.1 as it was a reasonably foreseeable occasional other use (not incompatible with the intended use) for the jetty to be used for berthing boats at certain times.

5.2 On 24 November 2014 the applicant accepted the draft determination with a minor amendment which I have taken account of.

5.3 On 25 November 2014 the authority provided a written submission declining the draft determination, in summary:

- The floating pontoon is the working wharf, the jetty is a walkway and not for berthing boats in summer.
- The limits of application for Clause F4 do not apply, 1-2 boats using the jetty for 2 hours a day (the period of time the tide is full) when more people use the jetty as a walkway. The risk of falling (2.5m) outweighs the ability for someone to tie their boat up.
- A purpose of the Act is for people to use a building safely and without endangering health. The draft determination contradicts this purpose.

6. Discussion

6.1 The jetty is a permanent structure that clearly comes within the definition of a 'building' under section 8(1)(a) of the Act. Clause F4.3.1 states:

Where people could fall 1 metre or more from an opening in the external envelope or floor of a building, or from a sudden change of level within or associated with a building, a barrier shall be provided

There is a sudden change of level within the jetty. It is not disputed by the parties this sudden change of level has a fall height of 1m or greater in some areas. The functional requirement under Clause F4.2 states that building shall be constructed to

reduce the likelihood of accidental fall. The jetty is to be used by people, mostly residents to the island. I consider it reasonably foreseeable that people are likely to be at risk on the jetty from falling.

- 6.2 However, given the location of the jetty and the people that will use the jetty, I consider the likelihood of accidental fall in this case to be relatively low. Determination 2014/029⁵ discussed the ‘likelihood of accidental fall’ relating to the chance of falling, noting that ‘likely’ and ‘likelihood’ have not been defined under the Act or Building Code, however ‘likely’ has been considered in the courts where it was held that:

“Likely” does not mean probable, as that puts the test too high. On the other hand, a mere possibility is not enough. What is required is “a reasonable consequence or [something which] could well happen.”⁶

“Likely” means that there is a reasonable probability, or that having regard to the circumstances of the case it could well happen.⁷

- 6.3 Although the Island is not private, there are only 15 residential houses on the island. The majority of the people who will use the jetty will be residents and workers bringing supplies, with some holiday users. I acknowledge the southern jetty is the main jetty for accessing the Island. The people using the northern jetty (mostly residents of the Island) will be familiar with walking on a jetty, being on a vessel and being cautious about water safety.
- 6.4 Additionally, I note Clause F4.2 requires the risk of accidental fall to be reduced, as no person can ever be completely protected from falling.⁸ The jetty does have a timber kerb continuously following the length of the structure. Although this is not a barrier for the purposes of Clause F4.2 it will act as guidance to the users and provide support for a wheelchair visitor to the wharf. In conclusion, although I still consider it is possible to fall, this is a low probability given the location of the island and the nature of the residents.

6.5 The intended use of the jetty

- 6.5.1 However, under the ‘limits of application’, clause F4.3.1 does not apply where such a barrier would be incompatible with the intended use of an area. The interpretation of ‘intended use of a building’ from clause A2 (interpretation), includes:

Any reasonably foreseeable occasional other use that is not incompatible with the intended use

...

- 6.5.2 The applicant states the intended use of the jetty is for residents of the island to tie vessels up at high tide during busy summer months and/or during strong southerly wind/waves that prohibit the use of the southern jetty. The authority contends the jetty is a walkway allowing pedestrian access to the floating pontoon.
- 6.5.3 Determination 1995/004⁹ involved determining whether a walkway was a working wharf stating ‘in some parts it is possible that vessels would occasionally tie up to the

⁵ Determination 2014/029 Regarding the refusal to issue a code compliance certificate for failure to comply with Building Code Clause F4 for a batter slope at a house (*Ministry of Business, Innovation and Employment*) 12 June 2014

⁶ *Auckland City Council v Weldon Properties Limited* 8/8/96, Judge Boshier, DC Auckland NP2627/95, upheld on appeal in *Weldon Properties Limited v Auckland City Council* 21/8/97, Salmon J, HC Auckland HC26/97

⁷ *Rotorua DC v Rua Developments Limited* 17/12/99, Judge McGuire, DC Rotorua NP1327/97

⁸ Determination 2010/85 Safety from falling from an infinity edge swimming pool at a house (*Department of Building and Housing*)15 September 2010

⁹ Determination 1995/004 Safety barrier for a waterfront walkway (*Building Industry Authority*) 30 October 1995

walkway at high water, but that would not mean that the intended use of the walkway is as a working wharf’.

6.5.4 In my view the intended use of the jetty is as a walkway to access the pontoon. I do not consider the phrase ‘working wharf’ from Determination 1991/004 applies to this jetty. However I consider the occasional use of the jetty for berthing vessels at high tide during summer months and during strong southerly winds (making the southern jetty unusable) constitutes a ‘reasonably foreseeable occasional other use that is not incompatible with the intended use’. It is reasonably foreseeable that the small number of residents on the island may wish to tie boats to the jetty at high tide. This is not incompatible with the intended use of the jetty as a walkway onto the pontoon.

6.5.5 The authority submitted the tidal movements mean the jetty could only be used for 2 hours per day (being 24 hours). The Act or Building Code do not provide a definition for ‘occasional’ so I have turned to the ordinary and natural dictionary meaning being

Occurring, appearing, or done infrequently and irregularly¹⁰

I consider that intermittent use of the jetty for berthing boats (2 hours a day during summer months and southerly wind/waves to the Island) comes within the definition of occasional.

6.5.6 In comparison to other islands around New Zealand, Moturoa does not have a large number of people visiting on an everyday basis. It is a small, almost private island and the southern jetty will take the majority of the island traffic. The intended use of the jetty as a walkway is distinct from other walkways that have a large amount of public use.

6.5.7 Although I do not consider the phrase ‘working wharf’ applies to the jetty, the intended use of the jetty to include the reasonable foreseeable occasional other use, being the berthing of vessels is satisfied, therefore I consider the jetty falls under the ‘limits of application’ for clause F4 and a barrier is not required.

6.6 Children under the age of six

6.6.1 Under Clause 4.3.4 barriers shall restricted the entry of children under the age of 6 when located in areas likely to be frequented by them. As discussed in Determination 2001/12¹¹ the jetty is not a location likely to be frequented by children under the age of six, although they may visit the jetty at occasional times.

¹⁰ Oxford University Press Dictionary, 2014

¹¹ Determination 2001/12 Safety barrier for a jetty (*Building Industry Authority*) 4 December 2001

7. The decision

- 7.1 In accordance with section 188 of the Building Act 2004, I hereby determine that the jetty does not require a barrier on both sides to comply with clause F4.3.1 of the Building Code, therefore the authority was incorrect to refuse the amended building consent.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 10 December 2014.

John Gardiner
Manager Determinations and Assurance

Appendix A

A.1 The relevant clauses of the Building Code

CLAUSE F4 – Safety from falling

F4.2 Buildings shall be constructed to reduce the likelihood of accidental fall

F4.3.1 Where people could fall 1 metre or more from an opening in the external envelope or floor of a building, or from a sudden change of level within or associated with a building, a barrier shall be provided

Limits of application

Performance F4.3.1 shall not apply where such a barrier would be incompatible with the intended use of an area, or to temporary barriers on construction sites where the possible fall is less than 3 metres, or to buildings providing pedestrian access in remote locations where the route served presents similar natural hazards.

F4.3.4 Barriers shall:

- (a) Be continuous and extend for the full extent of the hazard,
- (b) Be of appropriate height,
- (c) Be constructed with adequate rigidity,
- (d) Be of adequate strength to withstand the foreseeable impact of people and, where appropriate, the static pressure of people pressing against them.
- (e) be constructed to prevent people from falling through them, and
- (f) ...
- (g) Restrict the passage of children under 6 years of age when provided to guard a change of level in areas likely to be frequented by them.
- (h) ...