Determination No. 2005/28

Revisited protection of other property from coastal hazards

1 THE MATTER TO BE DETERMINED

- 1.1 This is a determination under section 17 of the Building Act 1991 ("the Act") as amended by section 424 of the Building Act 2004 made under due authorisation by me, John Gardiner, Determinations Manager, Department of Building and Housing, for and on behalf of the Chief Executive of that Department.
- 1.2 The matter before me is a dispute about a building consent ("the second building consent") for the construction of a house on the seafront ("the house"), and specifically whether the house will comply with the building code (the First Schedule to the Building Regulations 1992) in respect of protecting certain other property against coastal hazards.

2 THE PARTIES

2.1 The applicants are the owners of the other property concerned acting through a firm of solicitors. The other parties are the owner of the house ("the owner") and the territorial authority concerned.

3 BACKGROUND

- 3.1 This determination is to be read together with Determination 2004/08.
- 3.2 Determination 2004/08 concerned a virtually identical dispute between the same parties in respect of a previous building consent ("the first building consent"). I understand that the only relevant differences are in the location of the house and the conditions of the building consent. In Determination 2004/08, the Building Industry Authority ("the Authority" or "the BIA") determined that the proposed house did not comply with clause E1.3.1 of the building code, and accordingly reversed the territorial authority's decision to issue the first building consent.
- 3.3 In Determination 2004/08 the Authority said:
 - "4.3.9 In this case, therefore, clause E1 requires that the house, in performing its functional requirement of safeguarding other property from damage caused by seawater, must satisfy the performance criterion specified in clause E1.3.1 of avoiding 'the likelihood of damage or nuisance to other property' resulting from 'an event having a 10% probability of occurring annually' (referred to below as 'a 10% AEP storm', and colloquially as, 'a 10 year storm')."

I accept that interpretation of the relevant requirements of the building code.

- 3.4 The Authority went on to say:
 - "6.2.3.1... [technical reports said] that the applicants' property will be at risk of erosion caused by the presence of the house only if:
 - "(a) The house collapses to such an extent as to form a groyne, and
 - "(b) That groyne results in wave focussing or surging of seawater adverse to the applicants' property.

"In the absence of any evidence to the contrary, the Authority accepts those opinions. There is no need to consider the cumulative effects of previous storms, because there can be no damage to other property unless and until the house has collapsed."

I accept the Authority's findings on that point.

- 3.5 The first building consent was subject to a condition to the effect that the proposed house had a specified intended life of the lesser of 50 years or until any part of the seaward toe of the foredune to the north is 10 metres distant from any part of the building ("the 10 m trigger distance"). Section 39 of the Act provides that a building having a specified intended life "shall be altered, removed, or demolished on or before the end of the specified intended life . . ."
- 3.6 After Determination 2004/08 had been issued and the first building consent consequentially cancelled, the owner successfully applied to the territorial authority for the second building consent. The house is to be located some 3 metres further back from the seaward boundary, and the second building consent is subject to a condition to the effect that the house has a specified intended life of the lesser of 50 years or until any part of the seaward toe of the foredune to the north is 15 metres distant from any part of the building ("the 15 m trigger distance").
- 3.7 Determination 2004/08 refers to four technical reports on coastal hazards. The application for the second building consent was accompanied by a review of those reports ("the review") that had been prepared for the owner by a consulting firm
- 3.8 The second building consent was also subject to various other conditions, some of which had also applied to the first building consent. Most of those conditions are not discussed below because, after carefully considering them, I conclude that they are not relevant to the matter to be determined.
- 3.9 The application for this determination did not specifically say how, if at all, the house differs (except as to location) from the building authorised by the first building consent. I have accordingly proceeded on my understanding that in respect of its ability to withstand erosion the house is identical to the proposed house considered in Determination 2004/08.

4 THE SUBMISSIONS

4.1 The application and the other parties' responses

4.1.1 The applicants' statement of the matter of doubt or dispute said:

"The Council erred in concluding that the [second building consent] could satisfy the terms of clause E1.3.1 of the Building Code because:

- "(a) The Authority found in its Determination [2004/08] that the House did not comply with clause E1.3.1 of the Building Code. . . .
- "(c) The Council is unable to determine whether or not the New Plans [on which the second building consent was issued] comply with E1.3.1 of the Building Code in that [the review] does not specify how the New Plans satisfy the terms of sections E1.3.1 of the Building Code nor how the New Plans address the concerns raised in the Determination [2004/08] particularly so far as section 6.2 of the Determination is concerned.
 - "The [review] appears to conclude . . . that the proposed 10 m trigger distance is sufficient . . .
- "(e) Accordingly, the [second building consent] is flawed for the same reasons as those which caused the Authority to reverse the Council's decision to issue [the first building consent]."
- 4.1.2 The owner responded to the application for determination by submitting:
 - "The [owner] took strong heed of the concerns raised by the decision issued by the BIA. In light of the findings the [owner] and their architects commissioned a review of [Determination 2004/8 and the technical reports referred to in it].
 - "The plans submitted to the [territorial authority] for [the second building consent] contain changes made in response to the findings and recommendations of [the review] with strong weight being given to the decision of the BIA."
- 4.1.3 The review took issue with certain conclusions of the previous reports and its own conclusions differed somewhat from the Authority's conclusions as noted in Determination 2004/08. In particular, the review expressed the opinion that the Authority had over-estimated relevant coastal hazards in Determination 2004/08.
- 4.1.4 The territorial authority responded to the application for determination by submitting:
 - "The arguments supporting the [application for determination] have taken no regard of:
 - "• The position of the [house] in relation to the site boundaries, and in particular the seaward boundary; and
 - "• The conditions of the [second] building consent.
 - "... The [house] has been repositioned on site and is now outside the current erosion risk zone. The conditions of the [second] building consent have increased the 'trigger distance' from 10 metres to 15 metres...."

4.2 Subsequent submissions

- 4.2.1 The applicant subsequently rejected the territorial authority's suggestion that the applicant had taken no regard of the position of the building. On the contrary, the applicant had "carefully assessed the repositioning".
- 4.2.2 The applicant also submitted:
 - (a) "The claim is made by [the territorial authority], that the trigger zone has been extended by 5 metres. This is misleading. In reality, the trigger zone has only been extended 2 metres towards the sea, as the site of the proposed building has been moved back three metres."
 - (b) The conditions of the building consent made the owner responsible for monitoring the position of the foredune and altering, removing, or demolishing the building as necessary, and for indemnifying the territorial authority, with the territorial

- authority accepting no ongoing responsibility. Responsibility was "unclear in the event of sale of the property".
- "Surely, in such an acknowledged high risk situation (as is the case here), ratepaying affected parties should be able to rely on the local territorial authority to <u>at least monitor</u> compliance."
- (c) "It is simply not possible to obtain the required tradespeople [to alter, remove, or demolish the building] in any reasonable timeframe, even if access to the property is available, and in an inundation disaster, access would be seriously impaired."
- (d) The condition that earthworks are not to exceed 20 cubic metres in volume (other than topsoil removal) "has already been violated by the [owner]."
- 4.2.3 The applicant also submitted further information about the position of the beach shoreline in the 1960s and 1970s, and said:
 - "You will observe that even [under the second building consent], a significant part of the [house] would be constructed on what was, until the early 1980s beach. In environmental/geological terms, this is very recent."

5 DISCUSSION

- Determination 2004/08 decided that the proposed house as approved under the first building consent did not protect the applicants' property to the extent required by the building code against increased erosion because of seawater diverted by the proposed house. That determination sets out the Authority's reasons for that decision, suffice it to say that the matter turned on the effectiveness of the 10 m trigger distance.
- 5.2 Under the second building consent, the trigger distance has increased to 15 m.
- 5.3 In Determination 2004/08, the Authority quoted one of the reports before it as estimating that a 10% AEP event could cause up to 16 m of erosion, and another as estimating 15 m of erosion "if the event is sustained over two or three days". Thus if a 10% AEP storm occurred when the foredune was just outside the first building consent's 10 m trigger distance, then the result could be erosion advancing five or six metres under the proposed house.
- 5.4 The review expressed the opinion that in Determination 2004/08 the Authority had over-estimated relevant coastal hazards. Therefore, using the same estimates in this determination errs, if at all, on the side of caution.
- On that basis, therefore, I conclude that with the current 15 m trigger distance, if a 10% AEP storm occurred when the foredune was just outside the trigger distance, then the result could be erosion advancing about a metre under the house.
- In Determination 2004/08 it was noted that the seaward 3 m of the proposed house was "supported on 4.2 metre long [piles and] is designed to be self supporting". On the understanding that the design is unchanged in respect of its ability to resist erosion, that means that erosion advancing a metre under the house would not cause it to collapse.
- 5.7 If the house will not collapse in a 10% AEP storm occurring when the foredune is just outside the trigger distance, then the applicant's property will not be threatened by wave focusing resulting from a 10% AEP storm.
- Accordingly, although the house will still have to be altered, removed or demolished when the sea comes within the trigger distance, there will now be less urgency to do so because there is no longer the possibility that it will have to be done during a storm.

- I conclude that, provided the design of the house is as I understand it to be, and provided the relevant provisions of the building consent are complied with, the house is not likely to collapse and form a groyne that could result in wave focusing causing erosion of the applicant's property in a 10% AEP storm.
- 5.10 As to the applicant's other submissions:
 - (a) The conditions of the building consent as to responsibilities and liabilities of the owner and the territorial authority raise legal questions that are beyond my jurisdiction. However, I would be surprised if a territorial authority could impose conditions on a building consent without assuming a responsibility to take reasonable steps to ensure compliance with those conditions.
 - (b) The condition as to the maximum amount of earthworks does not appear to be relevant to compliance with the building code but appears to relate to a requirement of the district plan under the Resource Management Act. Again, that is beyond my jurisdiction.
 - (c) The further information as to the position of the shoreline in the 1960s and 1970s does not persuade me to take a different view. The critical factor is not the location of the shoreline or the foredune, but the 15 m trigger distance between the house and the foredune.

6 DECISION

- 6.1 In accordance with section 20 of the Act, but subject to 6.2 below, I hereby:
 - (a) Determine that the house complies with clause E1.3.1 of the building code, and accordingly
 - (b) Confirm the territorial authority's decision to issue the second building consent.
- Those decisions are subject to the territorial authority's being satisfied on reasonable grounds that the design and construction of the house is such that erosion advancing a metre under the house would not cause it to collapse and form a groyne. Any dispute on that point may be submitted for further determination.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 10 March 2005.

John Gardiner

Determinations Manager