

Determination 2006/27

Protection of other property in the construction of a tennis court at 21 Queens Avenue, Fendalton, Christchurch

1 The matter to be determined

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004 (“the Act”) 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 applicant is A Dingwall (“the neighbour”) acting through a firm of solicitors. The other parties are R and L Forbes (“the owners”), also acting through a firm of solicitors, and the Christchurch City Council (“the territorial authority”).
- 1.3 The application arises from a dispute about whether the proposed construction of a tennis court, including drainage work and fencing, complies with the provisions of the Building Code for the protection of the neighbours’ property.
- 1.4 I take the view that the matters to be determined are:
 - (a) Whether the building work concerned complies with clauses B1.3.1 and E1.3.1 of the Building Code (the First Schedule to the Building Regulations 1992), and
 - (b) Whether I should confirm, reverse, or modify the territorial authority’s decision, under section 49 of the Act to grant a building consent for the work.
- 1.5 In making my decision I have not considered any other aspects of the Act or of the Building Code.
- 1.6 Unless otherwise stated, references below 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 locality is flat. The tennis court is to be on an allotment (“the site”) containing the owners’ house. The proposed building work consists of constructing a tennis court 34 m long and 16 m wide together with its surrounding fence. The length of the court runs parallel to and 1 m from the boundary with the neighbour’s allotment (the neighbour’s house and garage appear to be about 1 m on the other side of that boundary). The width of the court runs parallel to and 2 m from the road boundary.
- 2.2 The court has an asphalt surface over compacted hardfill for a total depth of 300 mm. The surface has a 100 mm fall along the length of the court towards the road boundary and a 160 mm fall across the court towards the neighbour’s boundary. There is a kerb and channel along the edge of the court adjacent to the neighbour’s boundary. Surface water from the court is collected by a new sump and flows through a 100 mm pipe into an existing buried chamber which discharges through a 150 mm pipe to a territorial authority sump under the road which in turn discharges into an open waterway. Relevant parts of the existing surface water disposal system are shown diagrammatically in Figure 1 below.

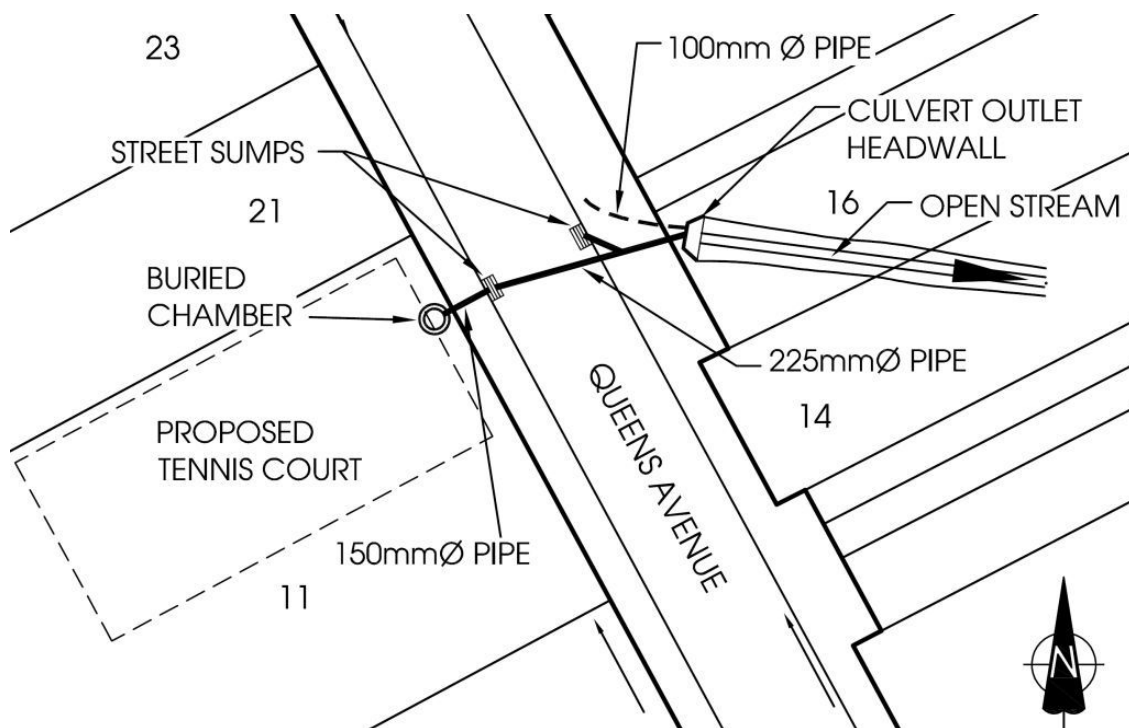


Figure 1: Relevant parts of the existing drainage system.

- 2.3 The court is surrounded by a 3 m high mesh fence incorporating four 6 m posts to support lights.
- 2.4 The territorial authority has issued a building consent for the construction of the court and associated drainage work together with the fence (and has also issued a corresponding resource consent under the Resource Management Act 1991).

- 2.5 The neighbour complained to the territorial authority to the effect that the building work did not comply with the Building Code and would result in land instability and flooding that would cause damage to the neighbour's property. The territorial authority did not agree, and the neighbour accordingly applied for this determination.

3 The legislation

- 3.1 The relevant provisions of the Act are:

- 7 Interpretation**
In this Act, unless the context otherwise requires,—
building work —
(a) means work—
(i) for, or in connection with, the construction, alteration, demolition, or removal of a building; and . . .
- 8 Building: what it means and includes**
(1) In this Act, unless the context otherwise requires, building—
(a) means a temporary or permanent movable or immovable structure . . .
- 176 Meaning of party**
In sections 179 to 190, party, in relation to a determination, means any or all of the following persons affected by the determination:
(a) the territorial authority;
(c) the owner;
(e) if the matter for determination relates to—
(i) a provision in the Building Code that has the purpose of protecting other property, the owner of the other property:
- 179 Chief executive may refuse application for determination**
(1) The chief executive may—
(a) refuse an application for a determination; and
(b) return the application to the applicant (and do no more in relation to the application).
(2) Subsection (1) applies only if, in the chief executive's opinion,—
(a) the application is not genuine or is vexatious or frivolous; or
(b) the applicant is not a party . . .

- 3.2 The relevant provisions of the Building Code are:

B1.1 The objective of this provision is to:

- (c) Protect other property from physical damage caused by structural failure.

B1.3.1 *Buildings, building elements* and *sitework* shall have a low probability of rupturing, becoming unstable, losing equilibrium, or collapsing during *construction* or *alteration* and throughout their lives.

E1.1 The objective of this provision is to:

- (a) Safeguard people from injury or illness, and *other property* from damage, caused by *surface water*, and

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*.

4 The submissions

4.1 The parties' submissions

4.1.1 The neighbour and the owners made extensive submissions that are summarised below. I have taken full account of all relevant matters in those submissions, and points that are not mentioned did not affect my decision.

4.1.2 The neighbour submitted:

- (a) That the matters for determination were:
- Whether the proposed building work would protect the neighbour's property from physical damage caused by structural failure.
 - "The decision of [the territorial authority] to issue the building consent . . . without the need for engineering assessment of soil and hydraulic systems in the area."
- (b) "The . . . location is known for soft soils and in the ordinary course when building consents are applied for . . . the Council requires an engineer's report [but in this case] it appears the Council has not specifically turned its mind to the consequences of compaction associated with the construction of the tennis court on the ground conditions and subterranean water sources [and] the potential for such construction activities to impact on drainage of stormwater and land instability and flooding, thereby causing damage to [the neighbour's] property."
- (c) "[The neighbour] has observed that there is an existing difficulty with drainage in the locality whereby the gutter overflows and cannot cope with some storm events [when surface water] floods across the footpath almost up to the fenceline and partly onto the road . . . and sometimes [the neighbour's] property. . . . [The neighbour] is concerned that the added impact of the stormwater from the tennis court will exacerbate the situation and cause inundation and flooding on [the neighbour's] property potentially causing damage and likely causing an ongoing nuisance."
- (d) ". . . Council staff assures [the neighbour] that this particular building activity will not exacerbate the existing situation and that there is no risk of slipping, slumping or inundation as a result of the earthworks or drainage work [but] those assessments appear to have been made without the benefit of any engineering report or assessment of the site conditions Accordingly, [the neighbour] seeks a determination . . . as to compliance with the Building Code and to require the Council to obtain an independent full engineering report of the site to ensure all mitigating measures are put in place to avoid damage to [the neighbour's] property as a consequence of this work."

4.1.3 The owners submitted that the application for determination should be rejected on legal grounds because:

- (a) The application was vexatious and frivolous, and

- (b) The neighbour did not have the status of a party under section 176(e)(i) because the claim was in respect of flooding on the road and not the neighbour's property.

4.1.4 The owners also said that if I did decide to make a determination then pending that determination I should allow the building work to continue pursuant to section 183, and advised that the owners had suffered financial costs and delays due to the application and wished to make an application for costs under section 190.

4.1.5 As to technical matters, the owners submitted:

- (a) “[The territorial authority] advised that an Engineers report is only required on a case by case basis. . . . In this case . . . an Engineers Report was not required because the works being carried out were minor in effect and nature.”
- (b) “[There is] no heavy loading on the soil [and] only minor excavation work is to occur being 200-250 mm deep and that the removal of a cubic metre weighing 1 – 1½ tonnes is replaced with asphalt being of similar weight (1½ – 2 tonnes a cubic metre) . . .”

4.1.6 The territorial authority provided documentation regarding the resource consent, the project information memorandum, and the building consent, together with a summary of events. The territorial authority submitted:

- “1. **Soil Tests:** The PIM notes that the site is in an area of possible soft ground and that a soil test might be required. We have assessed the proposed work and have decided that a soils test is not necessary. The work does not impose significant loads on the ground and soil conditions can be adequately assessed when the excavation is opened up. [The building consent noted that territorial authority inspections of drains and foundations were required as well as a final inspection.]
- “2. **Drainage:** The drainage from the court and the connection to the Council drain were assessed by Building Consent staff and discussed with the Senior Contract Manager in our land drainage department. We do not believe the work will adversely effect drainage in the area.”

4.2 The expert's report

4.2.1 I engaged a consulting engineer (“the expert”) to visit the site and report on the technical matters concerned. I copied his report to the parties for their comments.

4.2.2 As to land instability in relation to clause B1, the expert reported that:

- (a) “The site . . . is flat and has no risk of general ground instability.”
- (b) “[The] tennis court area has an upper layer of topsoil and soft soils to a depth of between 400 mm and 500 mm. . . . The material beneath the soft soil layer was found to be very firm [and] to contain gravel and silt.”

- (c) “The underlying soils have been found to be firm and are considered to be capable of supporting the relatively minor layer of imported fill without affecting the stability of the surrounding ground or the natural groundwater system.”
- (d) “The proposed works do not involve the construction of a significant building structure with associated foundation systems requiring confirmed bearing capacity for design. The earthworks are relatively minor in terms of loading on the existing soils and the fence construction is minor work in terms of foundations and bearing capacity.”
- (e) “The [territorial authority] incorporated a condition of building consent that required an inspection of the drains and foundations as part of the process of checking on-site conditions and managing these issues if site conditions were greatly worse than anticipated at time of processing the building consent. This process is consistent with normal construction of this scale of work.”

4.2.3 As to flooding in relation to clause E1, the expert reported that:

- (a) The relevant part of the territorial authority drainage system consists of roadside channels and road sumps receiving flow from the road and adjoining property and discharging into an open drain, with an estimated capacity of 60 l/s, leading to a large piped drain. The road sumps “have a high risk of blockage [from leaves and the like] if they are not maintained in a clean state.”
- (b) “The surface water draining [from the site] . . . resulting from a 10 minute duration event having a [10% probability of occurring annually as mentioned in clause E1.3.1 ‘(the 10% AEP event)’] is estimated to be approximately 30 l/s.”
- (c) The additional flow resulting from the installation of the tennis court is estimated to be 6 l/s
- (d) The territorial authority system “has the capacity to pass [that additional flow] without surcharging to the extent that the free water surface would reach the surface at the sump, assuming the sump is free from blockage. . . . [Previous flooding mentioned by the neighbour is likely to have] resulted from partial blockage of the sump inlet rather than under capacity of the drainage system . . .”
- (e) “It is therefore concluded that the increased runoff from the tennis court will not cause any identifiable effects on the overall stormwater system in the area. It is also concluded that the proposed stormwater details for the tennis court comply with Clause E1.”

4.3 The first draft determination and the parties' responses

- 4.3.1 The neighbour had requested that I hold a formal hearing at which the parties could speak and present evidence. Accordingly, I prepared a draft determination (“the first draft”) and sent it to the parties, asking them to indicate whether they accepted the draft subject to non-contentious amendments if any, or did not accept the draft and requested a hearing.
- 4.3.2 The owners accepted the first draft without amendment. The owners also submitted an affidavit and supporting documents relevant to an application for costs under section 190.
- 4.3.3 The neighbour requested that the first draft should be amended to take account of a report from a firm of consulting engineers (“the neighbour’s engineer”) which raised various technical queries. Particular concerns were the possibilities of:
- (a) Higher than anticipated groundwater levels, and
 - (b) That construction excavations might interfere with unrecorded springs and field tile lines in the tennis court area.
- 4.3.4 I referred that report to the expert, who responded to the queries by amending the expert’s report outlined in 4.2 above.
- 4.3.5 I consider that the amended expert’s report adequately answers the queries raised by the neighbour’s consultant. However, the expert emphasised the importance of inspecting the excavated platform and the existing drainage system on site that would be affected by the installation of the tennis court, and of amending the building consent as necessary by way of modifying the plans and specifications to cope with any unanticipated drainage problems.

4.4 The second draft determination and the parties' responses

- 4.4.1 I accordingly prepared another draft determination (“the second draft”) containing an account of the parties’ responses to the first draft, modifying the building consent by requiring a specific inspection by an appropriately qualified person, and making other minor amendments.
- 4.4.2 I sent that second draft to the parties, together with the amended expert’s report, on the same basis as the first draft.
- 4.4.3 The parties responded to the report as follows:
- (a) The neighbour submitted that the specific inspection should be undertaken by a chartered professional engineer experienced in stormwater matters as recommended in the amended expert’s report.
 - (b) The owners responded that “not all persons specialising in stormwater matters are chartered engineers’. The owners also said (in connection with the question of costs under section 190) that it was questionable whether a building consent was actually required for a tennis court.

- (c) The territorial authority accepted the draft.

5 Discussion

5.1 Legal matters

- 5.1.1 Having read the application for determination I decided that the neighbour had a legitimate concern. Despite the fact that the application was not supported by any technical information I decided that in this case the application was not vexatious or frivolous and accordingly rejected the owners' request (see 4.1.3(a) above) that I refuse the application under section 179(2)(a). However, that is not to be taken as implying that in other cases I will accept applications that are not supported by at least some technical information tending to confirm the applicant's contentions that the building work concerned did not comply with the Building Code or that the disputed decision of a building consent authority was incorrect.
- 5.1.2 As to whether the applicant had the status of a party under section 176(e)(i), I take the view that clauses B1 and E1 have the purpose, amongst others, of protecting other property including the neighbour's property. For example, if the fence did not comply with clause B1 it could conceivably collapse onto the neighbour's house, or if the tennis court's surface water disposal system did not comply with clause E1 then in a 10% AEP event, water collected by the court could conceivably cause damage or nuisance to the neighbour's allotment. Accordingly, I declined the owners' request (see 4.1.3(b) above) that I reject the application under section 179(2)(b).
- 5.1.3 The question of costs under section 190 is a matter for a separate direction.
- 5.1.4 As to whether a building consent was required for the tennis court, I take the view that the construction of the tennis court together with the associated drainage work and the fence is "building work" as defined in section 7 because, although the court itself does not appear to come within the section 8 definition of "building", nevertheless:
- (a) The fence is clearly a structure, and therefore comes within the definition of "building" so that its construction is "building work". It does not come within any of the exclusions of section 9, and it is not exempted from the need for building consent by clause (d) of Schedule 1 because it exceeds 2 m in height.
- (b) The construction of the tennis court and associated drainage work is also "building work" because it is work in connection with the construction of a building, namely the fence.

5.2 Technical matters

5.2.1 As to land instability in relation to compliance with clause B1:

- (a) I recognise that it is not always necessary to test soil samples on a particular site. Frequently, and particularly with minor works involving small loadings, it is sufficient to rely on local knowledge and practical experience.
- (b) I note that the building consent required an inspection of “Drains & Foundations”.
- (c) I accept the expert’s report as establishing that the “firm” underlying soil is suitable for the comparatively minor building work involved in the construction of the tennis court and its fence and that therefore that work, as required by clause B1.3.1, has a low probability of failing throughout its life.
- (d) I consider that even if the actual conditions on site are not as suitable as they appear to be, then (as the expert noted) that should be revealed by inspections in the course of construction and dealt with as necessary.

I therefore conclude that I have reasonable grounds on which to be satisfied that the proposed building work will comply with clause B1 provided that appropriate inspections are made in the course of construction. I agree with the owners that such inspections need not necessarily be made by a chartered engineer, provided that they are made by an appropriately qualified person experienced in stormwater matters.

5.2.2 As to flooding in relation to clause E1:

- (a) I accept the expert’s report as establishing that in the 10% AEP event both the drainage provisions of the tennis court itself and the territorial authority’s surface water drainage system have the capacity to accept the surface water collected and concentrated by the tennis court.
- (b) I therefore consider that, as required by clause E1.3.1, the construction of the tennis court is not likely to cause damage or nuisance to the neighbour’s property.

I therefore conclude that I have reasonable grounds on which to be satisfied that the proposed building work will comply with clause E1.

6 Decision

6.1 In accordance with section 188(1), I hereby

- (a) Determine that the building work concerned complies with clauses B1 and E1, and
- (b) Modify the territorial authority’s decision to grant the building consent to require, in addition to any other required inspections, a specific inspection of the excavated platform and the existing stormwater chamber to be made by an appropriately qualified person experienced in stormwater matters,

prior to the placement of fill material, to confirm the presence (or otherwise) of any sub-soil drains and groundwater springs within the excavation area. If such sub-soil drains or springs are present then the owners shall apply for an amendment to the building consent so that the existing drains can be modified or new ones installed as necessary.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 12 April 2006.

John Gardiner
Determinations Manager