



## **Determination 2016/032**

# **Regarding the use of existing drains for a new dwelling at 175 Orangi Kaupapa Road, Northland, Wellington**

### **Summary**

This determination considers a requirement put in place after a building consent was issued to replace existing drains on a property where a new dwelling was being constructed. The decision turns on the means of compliance stated in the building consent and the authority's powers after the consent was issued. The determination also discusses the Building Code obligations that apply in regards to drainage systems and the performance requirements and assessment of existing drains.

### **1. The matter to be determined**

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004<sup>1</sup> ("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 this determination are:
  - the owners of the property, B Donaldson & J Mountain ("the applicants"), acting through an agent
  - Wellington City Council, carrying out its duties as a territorial authority or building consent authority ("the authority").
- 1.3 The determination arises from the construction of a new building on a property with new surface water<sup>2</sup> and foul water drains connecting to existing drains. The authority is requiring the existing drains be replaced. The applicants are of the view that the authority's requirement is in effect a condition on the consent being applied after the consent was issued.
- 1.4 The matter to be determined<sup>3</sup> is the authority's exercise of its powers of decision in requiring the existing drains to the property be replaced after the building consent was issued.
- 1.5 In making my decision, I have considered the submissions of the parties and the other evidence in this matter.

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<sup>1</sup> The Building Act, Building Code, compliance documents, past determinations and guidance documents issued by the Ministry are all available at [www.building.govt.nz](http://www.building.govt.nz) or by contacting the Ministry on 0800 242 243.

<sup>2</sup> The surface water drains are also referred to by the parties herein as stormwater drains.

<sup>3</sup> Under section 177(2)(b) and 177(2)(a) of the Act

## 2. The building work and background

2.1 On 13 June 2014 the authority issued building consent No. 306652 for the demolition and rebuild of a two-storey house on the property, noting that resource consent was required. In an addendum to the consent the authority noted the inspections required included:

Drainage; testing any drainage work prior to back filling and before covering any field drains.

Pre-Slab; plumbing in/under the floor slab.

Pre-Line; plumbing systems before fitting any linings.

Final; final inspection on completion of work.

The addendum also noted that as-built drainage plans would be required before a code compliance certificate was issued.

2.2 In a section titled “Plumbing” in the addendum to the consent, it was noted that the plumbing and drainage services were approved ‘as drawn and specified’ with foul water drains ‘to connect back to existing laterals’ and surface water ‘to discharge to kerb and channel using existing connections if in good condition’.

2.3 The approved specifications noted:

All Sewage work shall be carried out in accordance with AS/NZS 3500, Part 2<sup>[4]</sup>.

All Stormwater work shall be carried out in accordance with New Zealand Building Code Clause E1 Surface water. ...

Existing Sewer and Stormwater laterals position shown on drawings are plotted from [the authority’s] asbuilts. ...

2.4 The approved drawings (see Figure 1 in Appendix B) included:

- A notation on the site plan (sheet 2) in respect of the ‘sanitary sewer lead’ and ‘stormwater lead’: ‘Services to be capped off till reused for New Dwelling’.
- Ground floor plumbing and drainage plan (sheet 4) showing ‘Stormwater pipe to have Water sealed interceptor connected at lateral stormwater drain’ and both surface water and sewage connecting to existing laterals.

The sewer and surface mains both are wholly within the property, with both private connections to the mains occurring within the property boundary at the northwest (see Appendix B Figure 2).

2.5 On 8 July 2015 the authority issued a site notice in respect of a final plumbing inspection. In regards to the drains, the record notes:

Extend the as laid plan to include where the drains discharge to, in relation to the WCC mains.

Are there any ceramic drains left in both legs to the mains.

Video inspection and report is required.

There have been no drainage inspections outside the foundation line of the dwelling. Has interception been installed to stormwater drainage. Drainlayer to advise.

2.6 A handwritten annotation on the site notice records:

Existing drain in ceramic

Interceptor installed at corner of house visible at prelab insp.

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<sup>4</sup> Australian/New Zealand Standard AS/NZS 3500.2:2003 Plumbing and drainage – Part 2: Sanitary plumbing and drainage

Unsure where wcc drain laterals are?

No drainage insp as no drainage work carried out outside perimeter of house except connections made at pre slab time.

- 2.7 On 15 December 2015 a drainage inspection company provided a CCTV report for the surface water and sewerage drains at the property. The covering email noted:

CCTV s/w from c/e riser right back corner of house and under deck going down 19-20m and then drops in to what looks to be a 300mm council main. Drain is a combination of PVC and earthenware and appears to be in good condition.

The s/s drain, the pan was removed, then CCTV down to council main. Drain looks to be in good condition with minor intrusions between some earthenware joints. It changes from PVC to earthenware at 11-12m.

- 2.8 On 17 December 2015 an officer of the authority emailed the agent to advise that as a requirement of the authority's policy<sup>5</sup>:

... the sewer and stormwater drainage must be fully replaced in pvc or similar material, to the public drainage saddle'.

The existing ceramic drain, as per the video report submitted indicates defects in the system. G13 also relates to the connection to an existing system must be proved sound. Prior to the issue of [a code compliance certificate], the drainage system shall be fully replaced to the WCC mains.

- 2.9 By email on 17 December 2015 the agent advised that a determination would be sought on the matter.

- 2.10 The Ministry received the application for determination on 5 February 2016.

- 2.11 On 10 February 2016 I sought clarification from the authority regarding the 'policy' referred to in its email of 17 December 2015 (refer paragraph 3.2.2). The authority responded on 25 February 2016, acknowledging the application for determination and providing an extract from a "Code of practice for land development".

- 2.12 On 29 February 2016 I queried the code of practice referred to and whether it was enforceable. I noted that there appeared to be no conditions on the consent in relation to the existing drains and requested the authority clarify its position. I also requested the authority confirm whether the connection of the new drains to the existing was observed and/or tested. The authority did not responded to these requests for information prior to the draft determination being issued.

- 2.13 On 31 March 2016 I requested confirmation from the agent as to the type of joints in the existing earthenware pipes. The agent responded on 5 April, noting that the plumber 'recalls the joins being collar and rubber ringed'.

### **3. The submissions**

#### **3.1 The applicants' submissions**

- 3.1.1 The applicants noted in the application form that the drainage connections had been completed as per the consent documents and a CCTV inspection supplied, but that the authority had 'produced a new policy ... which changes its consent conditions'. The applicants are of the view that the authority does not have the power to require the existing private drains be replaced.

<sup>5</sup> The reference to the authority's "policy" appears to relate to a code of practice. Refer paragraph 3.2.2

3.1.2 Along with the application for determination the applicants provided copies of:

- email correspondence from the authority
- the CCTV footage and covering email
- the site notice issued by the authority
- the building consent and approved documents.

### **3.2 The authority's submissions**

3.2.1 By email on 25 February 2016 the authority acknowledged the application for determination and responded to my request for clarification regarding its policy. The authority submitted that it was aware the Building Code is silent in regard to the use of existing drains, but that the Acceptable Solution G13/AS2 (sections 5.10 to 6.1.4) outlines the requirements for disused drains and the requirements for the testing of a disused drain. The authority stated that its concern was with the earthenware drain that has been identified as having intrusions between the joints and 'have not been tested to meet the requirements of the acceptable water or air test for drainage'.

3.2.2 The authority provided a copy of excerpts from its Regional Standard for Water Services (November 2012); it appears that the authority's references to its "policy" are to this document. I note that this is a Code of Practice and the use of the document is stated as being 'subordinate to the [authority's] district plan and is to be used in parallel with any operative subdivision or development codes of practice.' This document was not referred to in the granting of the building consent.

3.2.3 The excerpts provided by the authority included section 4 'Stormwater', paragraph 4.4.5.2 and section 5 wastewater, paragraph 5.4.2.1, which state:

Where an existing building has to be demolished or replaced, the end of the lateral is to be capped at the main or re-laid for future use. The [authority] shall be advised of the final treatment.

The reuse of a previously used lateral over 25 years old is not permitted.

### **3.3 The drafts of this determination and submissions in response**

3.3.1 A first draft of the determination was issued to the parties for comment on 7 April 2016.

3.3.2 By email on 18 April 2016 and in response to the first draft, the authority sought clarification regarding the obligations of the applicant to establish that the existing drains comply, the relevant testing methodology, and what would be required if the existing drains did not meet the test. The authority also requested that it be present when testing is carried out. (I note the authority's presence during testing is a matter that is outside of the ambit of a determination.)

3.3.3 The applicant did not respond to the first draft determination.

3.3.4 I amended the draft determination to take into account the authority's request for clarification regarding testing for compliance of the existing drains and to provide additional analysis regarding the requirements under the Building Code in respect of "plumbing systems" and "drainage systems".

3.3.5 A second draft of the determination was issued to the parties for comment on 30 May 2016.

- 3.3.6 The authority responded on 1 July 2016, accepting the draft and noting that ‘[the authority] should have required the private laterals to be tested to demonstrate compliance as part of the building consent application’, but that it should also be possible to address that error during the construction process ‘in this case [by] requesting that the existing drains be tested using the relevant testing methodology and in the event the drains failed have them repair (*sic*) or replaced and retested.’
- 3.3.7 The agent for the applicant also responded on 1 July 2016, accepting the findings of the second draft of the determination but requesting further clarification regarding the accepted practise for determining the condition of existing drains by way of CCTV footage and a report from a registered drainlayer.
- 3.3.8 I have amended the determination as I consider appropriate.

## 4. Discussion

- 4.1 The functional requirement in Clause G13.1(a) requires that buildings with sanitary fixtures and sanitary appliances that use water-borne waste disposal systems must be provided with ‘an *adequate* plumbing and drainage system to carry *foul water* to appropriate *outfalls*’.
- 4.2 “Outfall” is defined in Clause A2 Interpretation as:  
that part of the disposal system receiving surface water or foul water from the drainage system. For foul water the outfall may include a sewer or a septic tank. ...
- 4.3 For the purpose of the Building Code, “plumbing systems” are those parts of the system conveying foul water that are above ground, and “drainage systems” are those parts that are normally laid below ground. The “outfall” in this case is the point at which the foul water drain enters the sewer. The existing drain and connection to the sewer is wholly within the property. An owner is responsible for the installation and compliance of drainage system, excluding the council mains, on his or her property only.
- 4.4 The performance requirements for plumbing systems are set out in Clause G13.3.1, and those for drainage systems in G13.3.2 (refer Appendix A).
- 4.5 In this case the consented building work included the installation of a portion of the drainage system which connected to an existing drain. The “drainage system” in this case, being the drains carrying the foul water to the outfall, is therefore made up of both the building work carried out under the building consent and the existing drains. This is not an uncommon circumstance when a dwelling is replaced or a new dwelling is connected to existing systems.
- 4.6 The performance obligation in G13.3.2 applies to the “drainage system”, and the drainage system must be “adequate” and carry the foul water to the appropriate outfall. Where new drains are connected to existing ones the existing drains will need to be assessed to ensure they are performing adequately to meet the requirements of G13.3.2 for the drainage system as a whole.
- 4.7 An assessment of an existing drain should include its condition and age, and its physical attributes (such as type, fall, length, and adjacent vegetation). The assessment may include CCTV inspection. The results of this assessment may indicate further investigation, such as pressure-testing, is required.

- 4.8 The building consent application in this case cited AS/NZS 3500.2 as the means of achieving compliance in respect of the performance clauses G13.3.2 relating to compliance of drainage systems. Section 3.16 of the version of that standard current at the time the consent was applied for addresses the re-use of existing sanitary drains as follows:

**3.16 Re-use of existing sanitary drains**

When a building containing sanitary plumbing and drainage is demolished or removed from site and a new building constructed, the following requirements shall apply to the use of existing sanitary drains up to the point of connection:

- (a) Mortar-jointed vitrified clay, mortar-jointed concrete, asbestos cement and fibre-reinforced cement pipes shall not be re-used unless, where authorized by the authority having jurisdiction, they have been renovated using a structural plastics liner.
- (b) Drains constructed of other authorized materials shall not be re-used unless they have been verified for compliance in accordance with the relevant clauses of this Standard and tested in accordance with Section 13 and found to be satisfactory.

Drains that do not comply shall be replaced or repaired and retested.

- 4.9 The applicant's agent has stated that the earthenware pipes were collar and rubber ringed. As the pipes were not mortar-jointed, it is section 3.16(b) of the Standard that applies in regards to establishing compliance. Subject to compliance being established in accordance with the Standard<sup>6</sup>, the applicants are not required to take any further action in respect of the existing drains. Section 13.1 of the Standard addresses the issue of existing drainage that is not performing adequately, requiring: 'defects shall either be repaired or replaced with pipes and fittings of a suitable material and the repaired or replaced section retested until it complied with this Section'.
- 4.10 Given that the replacement of the existing drains was not required as a condition before the building consent was granted, I am of the view the authority incorrectly exercised its powers of decision in requiring this work be carried out. I note here that it was open for the authority to issue a notice to fix to address the testing requirement in accordance with the Standard cited in the building consent.
- 4.11 I note that the Standard cited in the building consent application is one means of establishing compliance with the performance requirements of the Building Code. An alternative means of establishing compliance can be used (refer paragraphs 4.6 and 4.7), however this would require an amendment to the building consent.

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<sup>6</sup> Section 13 Testing of sanitary plumbing and sanitary drainage installations

## **5. The decision**

- 5.1 In accordance with section 188 of the Act, I hereby determine the authority incorrectly exercise of its powers of decision in requiring the existing drains to the property be replaced after the building consent was issued.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 20 July 2016.

John Gardiner  
**Manager Determinations and Assurance**

## Appendix A

- A.1 The relevant clauses of the Building Code (First Schedule Building Regulations 1992)

### A2 Interpretation

**drain** a pipe normally laid below ground level including fittings and equipment and intended to convey foul water or surface water to an outfall

**plumbing system** pipes, joints and fittings laid above ground and used for the conveyance of foul water to the foul water drain, and includes vent pipes

**outfall** that part of the disposal system receiving surface water or foul water from the drainage system. For foul water the outfall may include a sewer or a septic tank. For surface water, the outfall may include a natural water course, kerb and channel, or soakage system

### G13 Foul water

Functional requirement

G13.2 Buildings in which sanitary fixtures and sanitary appliances using water-borne waste disposal are installed must be provided with—

- (a) an adequate plumbing and drainage system to carry foul water to appropriate outfalls;  
...

Performance

G13.3.1 The plumbing system shall be constructed to:

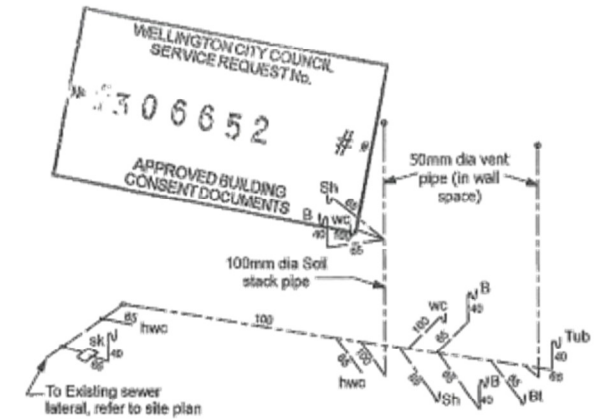
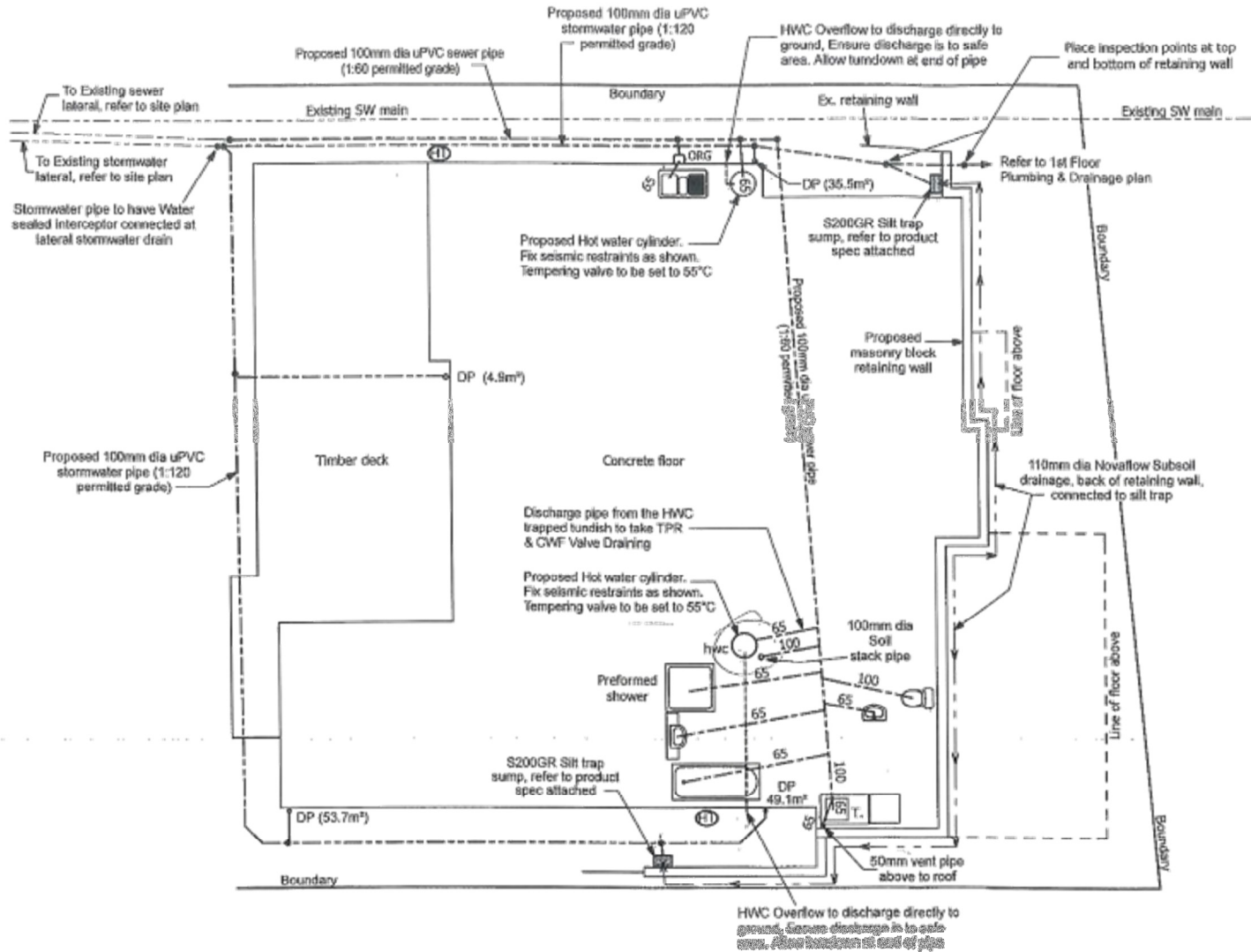
- (a) convey foul water from buildings to a drainage system,  
...

G13.3.2 The drainage system shall:

- (a) convey foul water to an appropriate outfall,  
(b) be constructed to avoid the likelihood of blockage,  
(c) be supported, jointed and protected in a way that will avoid the likelihood of penetration of roots or the entry of ground water,  
...



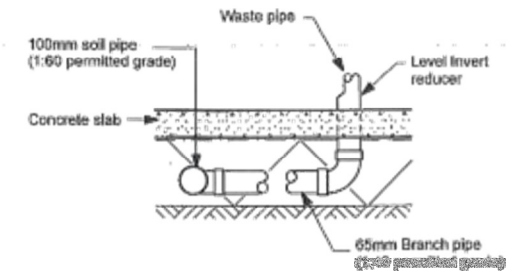
Appendix B Figure 1: Ground floor plumbing and drainage plan as approved (not to scale)



**PLUMBING SCHEMATIC**

NOT TO SCALE  
SEWER DRAINAGE SHOWN ONLY

LEGEND	
ORG	- Overflow Relief Gully
IP	- Inspection Point
S	- Shower
T	- Tub
B	- Basin
WC	- Water Closet
Sk	- Sink
Bl	- Bath



**Appendix B Figure 2: Drains as recorded on GIS**

