

Before an Independent Hearings Panel  
Appointed by Waimakariri District Council

---

*under:* the Resource Management Act 1991

*in the matter of:* Submissions and further submissions on the Proposed  
Waimakariri District Plan

*and:* Hearing Stream 12D: Ōhoka Rezoning

*and:* **Carter Group Property Limited**  
(Submitter 237)

*and:* **Rolleston Industrial Developments Limited**  
(Submitter 160)

Memorandum of counsel in opposing further evidence on flood  
modelling

---

Dated: 29 October 2024

---

Reference: J M Appleyard (jo.appleyard@chapmantripp.com)  
L M N Forrester (lucy.forrester@chapmantripp.com)

chapmantripp.com  
T +64 3 353 4130  
F +64 4 472 7111

PO Box 2510  
Christchurch 8140  
New Zealand

Auckland  
Wellington  
Christchurch



## **MEMORANDUM OF COUNSEL OPPOSING FURTHER EVIDENCE ON FLOOD MODELLING**

- 1 This memorandum of counsel is filed on behalf of Carter Group Property Limited (Submitter 237) and Rolleston Industrial Developments Limited (Submitter 160) (*Submitters*).
- 2 The PDP hearings process for Hearing Stream 12D has been ongoing for a significant period of time now. Notably, having been allocated a hearing stream, the following occurred in accordance with the Panel's Minute 1:
  - 2.1 The Submitters filed expert evidence supporting the rezoning on 5 March 2024. This included evidence specifically on hydrological, flooding, wastewater, and stormwater matters from Mr O'Neill, Mr Throssell, Mr Veendrick, and Mr McLeod dated 5 March 2024.
  - 2.2 Having reviewed that evidence, the Council then issued its Section 42A Report on 31 May 2024 which responded to the Submitters' expert evidence.
  - 2.3 Further expert evidence from Mr O'Neill, Mr Throssell, and Mr McLeod in response to the Section 42A report was filed on 13 June 2024.
  - 2.4 The Submitters also filed further statements of evidence from Mr O'Neill (dated 25 June 2024) and Mr Throssell (dated 4 July 2024) to respond to other submitter evidence and matters that arose from the hearing.
  - 2.5 The hearing for Stream 12D was held on 1 to 3 July 2024 and ultimately adjourned for the reasons set out in Minute 31 including that the Panel was directing expert conferencing.
  - 2.6 On 10 July 2024, the Submitters filed a memorandum suggesting appropriate expert conferencing questions for the engineering considerations and a list of experts it considered appropriate to attend this conferencing (being Mr Throssell, Mr O'Neill, Mr McLeod, Mr Veendrick, Mr Bacon, Mr Roxburgh, Mr Keenan (who had all provided expert evidence on behalf of the various parties)).
  - 2.7 On 11 July 2024, the Council filed a memorandum suggesting additional questions for the expert conferencing.
  - 2.8 On 15 July 2024, the Panel issued Minute 31 directing a range of expert conferencing (including for the engineering experts listed in paragraph 2.1 above) to be completed by 23 August 2024.

- 2.9 A number of joint witness statements (*JWS*) were filed, including one by the engineering experts dated 6 August 2024.
- 2.10 On 29 July 2024, the Panel issued Minute 33 directing expert conferencing (including on cumulative effects) of the Hearing Stream 12C and 12D wastewater and stormwater experts to be completed by 13 September 2024.
- 2.11 Both the wastewater and stormwater conferencing occurred and resulted in two *JWS*s both dated 4 September 2024. Relevantly, Mr O’Neill, Mr Throssell, and Mr Veendrick attended the stormwater expert conferencing for the Submitters.
- 2.12 On 19 September 2024, the Panel issued Minute 40 directing timeframes and next steps for the reconvened hearing for Stream 12D. In accordance with that Minute:
- (a) The Officer filed the addendum to his Section 42A Report on 9 October 2024; and
  - (b) The Submitters (and other submitters) filed expert evidence for the reconvened hearing on 17 October 2024.
- 2.13 The reconvened hearing for Stream 12D is scheduled for 4 November 2024.

**Email from DHI – 17 October 2024**

- 3 On 17 October 2024, the same day the Submitters filed their evidence for the reconvened hearing in accordance with Minute 40, Mr Throssell and Mr O’Neill received an email from a Mr Cope of DHI Water and Environment Limited (*DHI*) (attached at **Appendix 1**).
- 4 The email states that DHI have been “*recently commissioned*” by Waimakariri District Council (*Council*) to “*review the studies and comments regarding the proposed Ohoka Carter Group proposal*”. The email goes on to ask Mr Throssell and Mr O’Neill for a meeting to seek further information/clarification on the modelling that went into their Hearing Stream 12D evidence filed over six months earlier on 5 March 2024.
- 5 DHI note that their review “*needs to be completed by the end of the month*” (October) presumably so that the findings can be provided either at the reconvened hearing on 4 November 2024 or as part of the Council’s reply report.
- 6 We also note that the Panel declined to accept further expert evidence on behalf of the Ohoka Residents Association (*ORA*)

related to flood modelling. The Submitters understand that the ORA has subsequently been engaging with the Council (see **Appendix 2** which is an extract from ORA's webpage dated 14 October 2024 stating that "*ORA has been engaged with WDC regarding the desktop flood modelling that it and RIDL have used to evaluate the flood risk at the proposed development site.*").

- 7 For the sake of transparency, having already filed evidence and attended expert conferencing, the Submitters have not given Mr Throssell and Mr O'Neill consent to engage in the discussions requested by Mr Cope. The Submitters do not consider the Expert Code of Conduct requires them to collaborate at this late stage with a person who has not been a witness at the hearing.
- 8 The Submitters oppose any further technical expert evidence being produced by the Council in respect of Hearing Stream 12D this late in the process and seek a direction from the Panel as to their expectations as to matters which can be properly introduced this late in the process which the Submitters will be unable to comment on.
- 9 The Submitters note that the Panel have previously rejected the filing of further evidence by other submitters in this process.<sup>1</sup> The Panel's reasoning for rejecting this evidence is founded in natural justice and the same considerations should apply to the Council itself belatedly introducing new evidence.
- 10 The Panel should resist any additional technical evidence being provided by the Council at such a late stage in the PDP process where all parties have already provided extensive technical evidence on the topic, a Section 42A Report has been prepared, evidence has been presented at a hearing, and expert conferencing (including cumulative conferencing) has taken place with the topics for conferencing agreed in advance.
- 11 We acknowledge that the Council is afforded with a right of reply following the adjournment of a hearing stream in accordance with Minute 1. As noted by the Panel in Minute 43, the Council's reply reports are intended to be a "wrap up" of the hearing stream.
- 12 In the interests of fairness and natural justice, we do not consider that this provides the Council with the opportunity to seek include new technical inputs or reviews at this late stage, and certainly not from experts who did not provide evidence at the hearing, and who did not participate in expert conferencing.

---

<sup>1</sup> Minute 36 where the Panel declined to grant leave to the Ohoka Residents Association for the late provision of expert engineering evidence; Minute 43 where the Panel declined to grant leave to the Christchurch International Airport Limited for the late provision of expert health practitioner evidence.

- 13 We note that flooding modelling has already been addressed extensively in the evidence for Hearing Stream 12D which has already been the subject of considerable assessment and expert conferencing, culminating in multiple joint witness statements. A review by DHI would not add significantly to the body of evidence the Panel already has.
- 14 The Submitters respectfully request that the Panel provides a direction on this issue and in particular its expectations as to the extent to which new evidence can be introduced by experts who did not participate in the hearing process and expert conferencing previously.

Dated: 29 October 2024



---

J M Appleyard / L M N Forrester  
Counsel for Carter Group Property  
Limited and Rolleston Industrial  
Developments Limited

## APPENDIX 1

**From:** Mike Cope <mcop@dhigroup.com>  
**Sent:** Thursday, October 17, 2024 11:51 AM  
**To:** Ben Throssell <Ben.Throssell@pdp.co.nz>; Eoghan O'Neill <Eoghan.ONEill@pdp.co.nz>  
**Subject:** Ohoka Carter Group Proposal - Review of Flooding Evidence

Some people who received this message don't often get email from mcop@dhigroup.com. [Learn why this is important](#)

Hi Ben and Eoghan

We (DHI) have recently been commissioned by WDC (Colin Roxborough and Chris Bacon) to review the studies and comments regarding the proposed Ohoka Carter Group proposal. This includes the related modelling work carried out by PDP.

We have as reference your 'Statement of Evidence', dated 5 March 2024, and while this is fairly comprehensive in giving the general picture it doesn't appear to cover all the relevant details of the model I would like to see. By end this week I should have largely gone through what I have, and it would be beneficial to have a brief (say 30min) chat with you to gain further information/clarification and hopefully some further insight into the modelling work you completed (e.g. roughness factors used, application of boundary conditions, flood flow paths, etc).

Would you have some time to meet up next week? The review needs to be completed by month end, so appreciate if you can assist. I could come by your office if that would be ok.

Please feel free to call and discuss any time, or email or message me (when I work from home, such as tomorrow, the phone connection is not always great). Thanks.

Kind regards,

**Mike Cope**  
BSc (Civil), CEng (UK)  
Principal Engineer  
*Water Resources & Mining*



The expert in **WATER ENVIRONMENTS**

**DHI Water & Environment Ltd.**  
1st Floor  
Unit 9, Cowlishaw Mews  
296 Montreal Street  
Christchurch 8013

PO Box 26131  
Christchurch 8148  
New Zealand

Tel:  
Mobile: +64 21 435 796

[mcop@dhigroup.com](mailto:mcop@dhigroup.com)  
[www.dhigroup.com](http://www.dhigroup.com)

[Privacy policy](#)

This message contains information which may be confidential and privileged. Unless you are the intended recipient (or authorised to receive this message for the intended recipient), you may not use, copy, disseminate or disclose any information contained in it thereof. If you have received this communication in error, please advise the sender appropriately by reply e-mail, and then delete it. Thank you very much.

**APPENDIX 2**



David R. Nixon



By Way of Update:

The ORA has been engaged with WDC regarding the desktop flood modelling that it and RIDL have used to evaluate the flood risk at the proposed development site. This flood model is generic and is Rangiora and Kaiapoi centric i.e. has not been calibrated or validated for Ohoka. Ordinarily this would be left until subdivision stage, however there are concerns regarding the accuracy of the picture RIDL are currently painting from a flood modelling perspective. Currently even in modest rain events (i.e., >60 mm in 24 hours), which can happen 2-6 times a year, the depth of the flood water at property in the immediate vicinity of the proposed development site, can very frequently exceed that indicated in the PDP (Proposed Development Plan) Model's modelled pre-development maximum flooding depth for a 0.5% AEP event. During regular rain events water levels at properties opposite the proposed development site have reached 210 mm. However, according to RIDL's PDP Model this is effectively impossible: an unspecified level under 100 mm is only expected with probability of 0.5% every year. Given the flood level is much higher than this and happens multiple times a year, it indicates that both WDC and RIDL's models are *extremely poorly* calibrated for Ohoka and/or are ignoring critical aspects of the flooding process therefore materially underestimating the effects of the proposed development. ORA's independent engineer has concluded that once the model is correctly calibrated safe and effective management of stormwater at the proposed development site will almost certainly be impossible.

Whilst this development has been accepted into the Fast-track process, it is still required to satisfy basic development criteria. Once WDC's flood model is updated, following the validation/calibration exercise, it will show that the proposed development site is indeed a flood hazard. The unpredictable and volatile nature of the area with respect to undercurrent and resurgent systems is another key contributing factor - rivers and streams 'pop-up and flow' throughout Ohoka making it very difficult to accurately model flood levels, at all.

At this juncture, were any sort of development allowed to proceed at the site, the contingent liability on the authority which approves it would be significant. Following major floods in the North Island in 2023 ~1000 properties in New Zealand fell uninsurable, and are being bought by authorities. Should development at the site be allowed to proceed the increased risk to every homeowner would be significant - this is deeply concerning to us as a community, and is why the site needs to be confirmed as unsuitable for intensive development. <https://www.newshub.co.nz/.../warning-new-zealand...>



NEWSHUB.CO.NZ

Warning New Zealand homebuyers aren't pricing in climate risks

35

9 comments

Like

Comment

Send

All comments