



ENGINEERING CALCULATIONS

WATER SUPPLY CAPACITY CHECK

Location: 96 Beach Haven Road/13 Cresta Avenue, Beach Haven

Client Bentley Studios Ltd.
Job No 200626/01
Date 15/09/2021
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 PROJECT: 96 Beach Haven Road/13 Cresta Avenue
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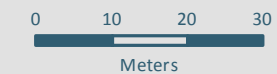
SHEET No.: 1
 CALCS. BY: NNN
 DATE: 23.03.2021

WATER FLOW CALCULATIONS				REFERENCE
Average Daily Demand				<i>Water Code of Practice</i>
Number of Dwellings		100		
People per Dwelling		3.0		
Daily Consumption		180.0	l/person/day	
Average Demand		0.625	l/s	
Peak Flow				
Average Demand		54000		
Peak Day Demand		108000.0		
Peaking Factor		2.5		
Peaking Factor	PF	270000.0		
Peak Demand		3.125	l/s	



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96 Beach Haven Road/13 Cresta Avenue - Locality Plan



Scale @ A3
= 1:1,000

Date Printed:
23/03/2021



Development information form – Water network planning summary assessment

Development consideration	Description	Comments
Query status	Enquiry to support Plan Change Application	Pre-purchase enquiry / Enquiry to support Plan Change application / Pre-application enquiry / Resource Consent application / Engineering Plan approval.
Query submission date	23.03.2021	
Address	96 Beach Haven Road and 13 Cresta Avenue, Beach Haven	Include suburb
Attach layout plan	Layout Plan enclosed	Plan must clearly show proposed development site and include: <ul style="list-style-type: none"> • Aerial photograph with elevation contours (Note 1) • Road names • Boundary of development • Preferred point of connection to existing water supply and wastewater asset.
Current land use	Residential (single family dwellings)	Residential (single family dwellings) / Residential (multi-unit dwellings) / Residential (multi-storey apartment blocks) / Commercial / Industrial / Other (Please specify).
Proposed land use	Residential (multi-storey apartment blocks)	
Unitary plan zoning	Residential Single Housing Zone	Refer Auckland Unitary Plan
Total development site area (m ² / hectares) (i.e. Land area for residential developments)	7,147m ²	
Total development floor area (m ²) (i.e. Include all levels of multi-storey apartments and commercial developments)	Still to be confirmed, following plan change proposal	

<p>Number of proposed residential dwellings</p> <p>(Typically consent or include ultimate if development is to be staged and consented at a future date)</p>	<p>75–100-unit, 2-3 storey residential apartment building, with between 3-4 bedroom each</p>	<p>Include type and number of bedrooms for residential dwellings:</p> <p><u>Type:</u> <u>Quantity:</u></p> <p>1 bed</p> <p>2 bed</p> <p>3 bed</p> <p>4bed</p> <p>5+bed</p>
<p>Note: (1) Watercare’s GIS Viewer for Asset Data Query and Land Development/ Subdivision can be used to display aerial photography and land contour information.</p>		

Information to be completed by Developer/ Engineering Consultant

(This section should not be duplicated if both water and wastewater is applied. Refer to Chapter 5 of the CoP.)

Refer to the Auckland Code of Practice for Land Development and Subdivision chapter 6: Water, when completing this form:

Water supply development assessment		
Design consideration	Description	Comments
<p>Average and Peak Residential Demand (L/s)</p>	<p>Average Demand Design Flow = 0.625 L/s</p> <p>Peak Demand Design Flow = 3.125 L/s</p> <p>Calculation Enclosed</p>	<p>Show calculations based on Watercare CoP.</p>
<p>Average and Peak Non-Residential Demand (L/s)</p>	<p>N/A</p>	<p>Show calculations based on Watercare CoP.</p>
<p>Non-Residential Demand typical daily consumption profile / trend</p>		<p>E.g. 24 hr operation / 10 hr (9am – 5pm) / Filling on-site storage at certain frequency.</p>
<p>Fire- fighting classification required by the proposed site</p>	<p>FW2</p>	<p>Refer to New Zealand Standard SNZ PAS 4509:2008.</p>

Hydrant flow test results	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>Attach hydrant flow test layout plan and results showing test date & time; location of hydrants tested and pressure logged; static pressure; flow; residual pressure.</i>
Sprinkler system in building?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>Sprinkler design should consider Watercare Level of Service: minimum pressure at 200kPa and minimum flow at 25 l/min. The building owner shall conduct periodic review of sprinkler design.</i>
<p>Further water supply comments:</p> <p>Connection to be taken of Beach Haven Road</p>		