

22 March 2023

NL230615

Barr Planning  
Katrina Walker  
92 Young Street  
Carrington NSW 2294

Dear Katrina,

**Re: 505 Minmi Road, Fletcher – Preliminary Rezoning Flood Advice**

Northrop Consulting Engineers have been engaged to assess whether there is likely to be any significant impacts from the proposed development on flood behaviour and provide a response to the Ministerial Directions – Flooding. Included herein is a description of the subject site, proposed rezoning boundary, likely impacts of development, and discussion in response to the directions.

The subject site is located at 505 Minmi Road, Fletcher and is otherwise known as Lot 23 DP 1244350. The site is currently densely vegetated with elevations ranging from 6 m AHD to 55 m AHD. Two drainage gullies traverse the subject site and converge just upstream of Minmi Road. One of these is noted as a first order watercourse on the 1:25,000 topographical maps and discharges under Minmi Road through a single 1050 diameter pipe. An additional drainage gully discharges into the neighbouring property to the west.

The planning proposal looks to rezoning land along the western and eastern portions of the lot to facilitate residential development. A figure showing the extent of rezoned land and site features described above is presented overleaf in Figure 1.

The development is likely to result in an increase in peak flows due to an increased pervious footprint. We believe it is feasible to include engineering solutions such as detention basins to reduce peak flows back to pre-development levels. This is typically undertaken for frequent events such as the 18% AEP, and rare events such as the 1% AEP. These basins are also likely to provide some attenuation benefit in the PMF.

Provision of the road along the western boundary may encroach on the PMF flood storage area. This is unlikely to significantly impact flood behaviour because the downstream road already overtops in the PMF event. Furthermore, the Newcastle DCP 2012 Clause 4.01.02 – Control 1 allows for filling of 20% of flood storage areas. We believe this will accommodate the road filling, and consider it feasible from a floodplain management perspective to undertake minor regrading works or retaining of the road to account for any shortfall.

The gully that runs adjacent to the western portion of the development is unlikely to affect the development extent because the invert of this gully is approximately three metres lower than the rezoned area.

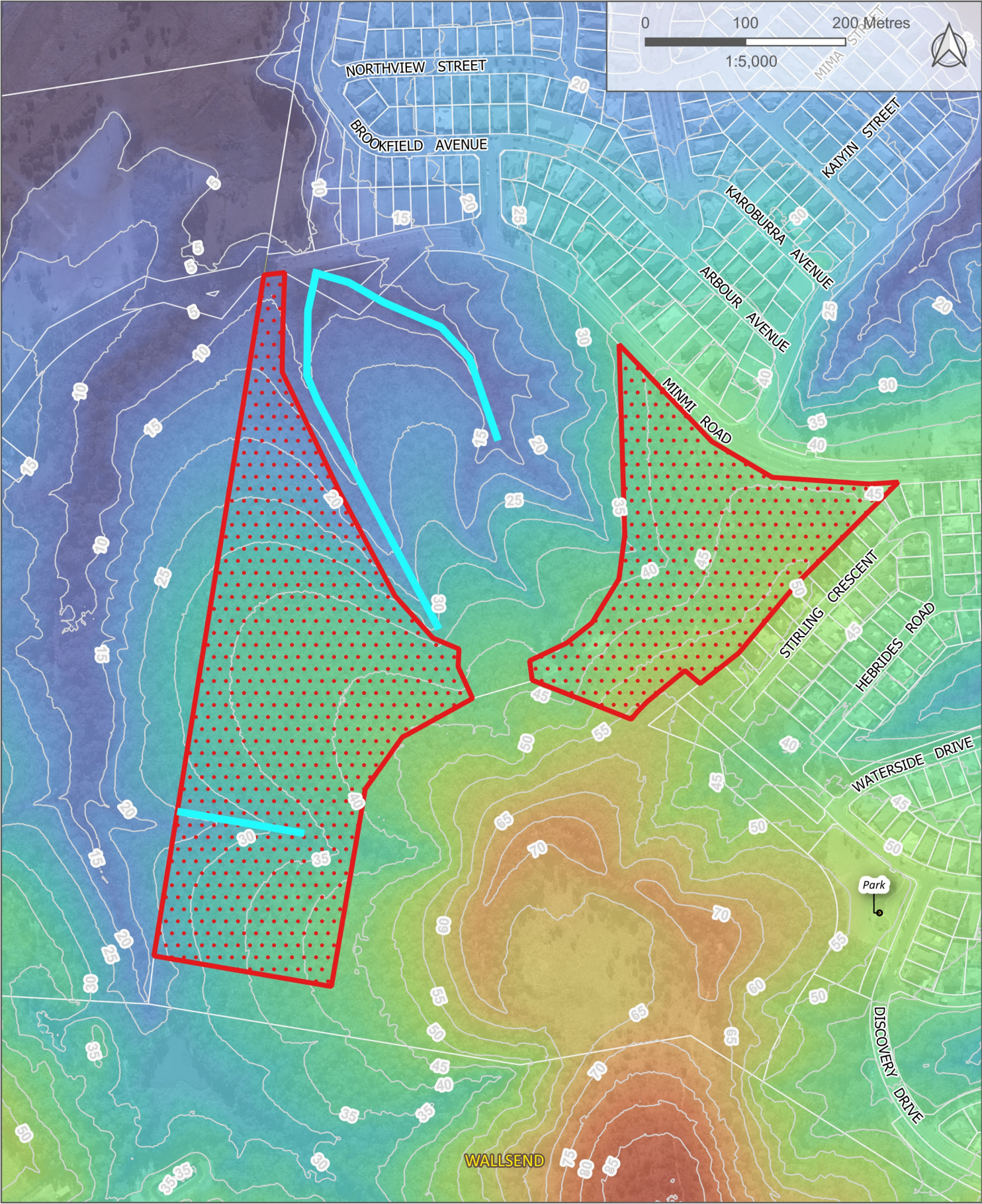
A response to the Ministerial Directions is provided overleaf in Table 1.

		Date
Prepared by	GB	22/03/2023
Checked by	AB	22/03/2023
Admin	GB	22/03/2023

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**Legend**

- 5m Contour
- Elevation (m AHD)
- Band 1 (Gray)
- 100
- 0
- Zone Boundary
- Drainage Gully

**Figure 1**

Site Features

Proposed Rezoning  
505 Minmi Road Fletcher





Table 1 – Response to Ministerial Directions - Flooding

Requirement	Response
<b>4.1.1 A planning proposal must include provisions that give effect to and are consistent with:</b>	
a) The NSW Flood Prone Land Policy.	<p>The subject site is located within the Flood Planning Area and as such, the provisions of the NSW Flood Prone Land Policy and Floodplain Development Manual are applicable.</p> <p>The principles of the NSW Flood Prone Land Policy are expected to be satisfied through adoption of appropriate flood mitigation and controls.</p>
b) The principles of the Floodplain Development Manual 2005.	<p>The principles of the Floodplain Development Manual (2005) are expected to be achievable through the implementation of the necessary development controls outlined in Newcastle DCP.</p> <p>This is expected to be further reviewed at Development Application Phase.</p>
c) The considering Flooding in land use planning guideline 2021, and	<p>The recommendations contained within this guideline are included in the Newcastle LEP.</p> <p>It is noted, Newcastle LEP has not captured any additional “Special Flood Considerations” outlined by this guideline.</p> <p>This is expected to be further reviewed at Development Application Phase.</p>
d) Any adopted flood study and/or floodplain risk management plan prepared in accordance with the principles of the Floodplain Development Manual 2005 and adopted by the relevant council.	<p>Council does not currently have modelling and an adopted FRMSP for this area.</p>
<b>4.1.2 A planning proposal must not rezone land within the flood planning area from Recreation, Rural, Special Purpose or Conservation Zones to a Residential, Employment, Mixed Use, W4 Working Waterfront or Special Purpose Zones.</b>	<p>The proposal generally limits land rezoning to outside the Flood Planning Area.</p>
<b>4.1.3 A planning proposal must not contain provisions that apply to the flood planning area which:</b>	
a) Permit development in floodway areas,	<p>We do not believe the proposed development would be located in a floodway.</p>

Requirement	Response
b) Permit development that will result in significant flood impacts to other properties,	It is unlikely the development would cause significant impacts due to implementation of detention measures, and not significantly impacting flooding due to fill.
c) Permit development for the purpose of residential accommodation in high hazard areas,	Due to the topography, we do not believe the development will be located in a high hazard area.
d) Permit a significant increase in the development and/or dwelling density of that land.	Intensification of dwelling density is limited to areas greater than three metres above the drainage gullies running through the site.
e) Permit development for the purpose of centre-based childcare facilities, hostels, boarding houses, group homes, hospitals, residential care facilities, respite day care centres and senior housing, in areas where the occupants of the development cannot effectively evacuate,	We expect the development will be limited to residential lot creation and associated residential dwelling.
f) permit development to be carried out without development consent except for the purposes of exempt development or agriculture. Dams, drainage canals, levees, still require development consent,	Subject to planning advice.
g) are likely to result in a significantly increased requirement for government spending on emergency management services, flood mitigation and emergency response measures, which can include but are not limited to the provision of road infrastructure, flood mitigation infrastructure and utilities, or	We believe the development will have rising road access to areas above the PMF level.
h) permit hazardous industries or hazardous storage establishments where hazardous materials cannot be effectively contained during the occurrence of a flood event.	The proposal is not expected to include hazardous industries.
<b>4.1.5 For the purposes of preparing a planning proposal, the flood planning area must be consistent with the principles of the Floodplain Development Manual 2005 or as otherwise determined by a Floodplain Risk Management Study or Plan adopted by the relevant council.</b>	The definition of Flood Planning Area in Newcastle LEP is consistent with the NSW Floodplain Development Manual (2005). As such, the Flood Planning Area for the subject site is expected to be defined as the 1% AEP + 500mm.

We trust the above meets with your requirements at this stage, should you have any questions or require further information, please do not hesitate to contact the undersigned on (02) 4943 1777.

Yours sincerely,



**Angus Brien**

Principal | Flooding Group Manager  
BEng (Civil) MIEAust CPEng NER RPEQ

### Limitation Statement

Northrop Consulting Engineers Pty Ltd (Northrop) has been retained to prepare this report based on specific instructions, scope of work and purpose pursuant to a contract with its client. It has been prepared in accordance with the usual care and thoroughness of the consulting profession for the use by Barr Planning. The report is based on generally accepted practices and standards applicable to the scope of work at the time it was prepared. No other warranty, express or implied, is made as to the professional advice included in this report.

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Rev	Status	Prepared	Approved	Date
A	Approval	GB	GB	17 March 2023
B	Approval	GB	GB	22 March 2023