

Director – Regional Assessments
Keiran Thomas
Department of Planning Industry and Environment
4 Parramatta Square, 12 Darcy Street
Parramatta NSW 2150

**46 FITZROY STREET, CARRINGTON (DA 10689) RESPONSE TO
SUBMISSIONS ADDENDUM**

Date 1/11/2021

We refer to correspondence received from the Department of Planning, Industry and Environment (the Department) on 15 October 2021 in relation to the Part 4 development application at 46 Fitzroy Street, Carrington (DA 10689). Ramboll Australia Pty Ltd (Ramboll), on behalf of Port of Newcastle (PON), provides this addendum response to the submissions received from the City of Newcastle.

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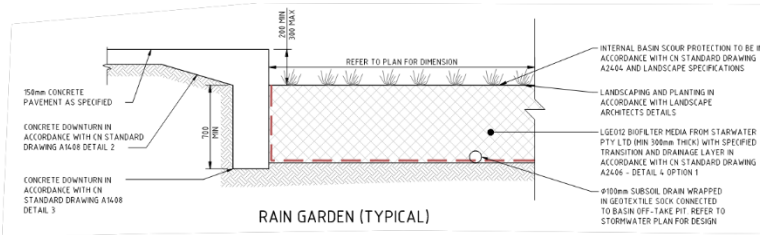
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Ref Response to Submissions
DA-10689

Response to the City of Newcastle Council submission

Table 1-1 lists the additional matters raised by City of Newcastle on DA 10689 and provides a response to each.

Table 1-1: Matters raised by City of Newcastle on DA 10689 and how they have been addressed

Matter raised	Response
<p>1. Proposed rain garden</p> <ul style="list-style-type: none"> It is uncertain how the proposed rain gardens will interface with surrounding parking areas due to limited information provided for their design. It is recommended that detailed cross-sections of the proposed bioretention rain gardens be provided to clarify: <ol style="list-style-type: none"> How runoff from adjacent hardstand areas will be collected to the rain garden (i.e. using castellated kerb); and How the proposed rain gardens will be protected from vehicle damage. Typical cross-sections should also be provided for sections of rain garden crossing through any proposed tree vaults and tree plantings to clarify how these design elements will be implemented in the same space. 	<p>While full design details will be provided at construction certificate stage, it is the intent of the design to generally have a downturn in the pavement with kerbs on the side of parks and wheel stops used to prevent vehicles entering the biofiltration areas.</p>  <p>The diagram illustrates a cross-section of a rain garden. On the left, a 150mm concrete pavement is shown with a concrete downturn in accordance with CN Standard Drawing A1408 Detail 2. A 750mm high concrete downturn in accordance with CN Standard Drawing A1408 Detail 3 is also indicated. The rain garden area contains landscaping and planting in accordance with landscape architects' details. The biofilter media is specified as L60012 biofilter media from Starwater Pty Ltd, 150mm thick, with a specified transition and drainage layer in accordance with CN Standard Drawing A2404 - Detail 4 Option 1. A 100mm subsoil drain wrapped in geotextile sock is connected to the basin off-take pit, with a reference to the stormwater plan for design. The internal basin scum protection is to be in accordance with CN Standard Drawing A2404 and landscape specifications. A note refers to the plan for dimensions.</p> <p>RAIN GARDEN (TYPICAL)</p> <p>Typically, we would provide this detail at construction certificate stage. It includes turning the geotextile up (as per detail above the geotextile is shown against the concrete downturn) against the tree pit to discourage root penetration into the filter media. The subsoil from the biofiltration area can then be ran with the tree pits as required.</p>

Matter raised	Response
<p>2. Overland flow path</p> <ul style="list-style-type: none"> - In the design of the east car park, it is noted that the 4th parking aisle (from the left) is graded falling westward to drain runoff to the adjacent bioretention garden. There is a concern this design may result in the formation of an unrelieved low point between the 3rd and 4th parking aisles causing in ponding over the car park during major storm events (assuming site controls fail). - It is recommended that an overland flow path be provided to alleviate or limit ponding over this low point.' 	<p>The parking area has been specifically designed to have ponding in the area in question to a maximum depth of 200mm. This maximises the treatment in the biofiltration and permeable paving. The relief point is the driveway area RL2.00 which will ensure runoff does not pond to deeper levels.</p>
<p>3. Proposed tree planting</p> <ul style="list-style-type: none"> - It is recommended that the proposed tree planting within the car park comply with requirements set out in Section 7.02 of the Newcastle DCP for landscaping within external car parks: - <i>Generous shade trees are planted within the parking area at a rate of at least one shade tree per six parking spaces with an aim to achieve at least 50% shade cover of the area. Shade area is to be calculated from the estimated crown projections of a tree 15 years in age under suitable growing conditions. Selected tree species are to develop a clean trunk height greater than 4.5m and a crown projection of at least 50m² to provide adequate shade and vehicle clearance. Landscape documentation is to detail the provision of sub-grade load bearing root vaults to provide suitable rooting volume for the required number of shade trees.</i> 	<p>It is noted that the intent of the requirements of Section 7.02 of the Newcastle DCP is to reduce heat and glare within the car park.</p> <p>Shade trees are proposed at a rate of one every five car spaces with the exception of the central isle. The proposed garden beds in the car park are 1.2 metres wide and the tree coverage is in the order of 19% of the total car parking area. In addition to the shade trees, there is provision for smaller strips of landscaping between the rows of car spaces to improve the aesthetics of the car park.</p> <p>39% of the car park is proposed to be permeable medium rather than bitumen/concrete and therefore both the heat and glare generated in this area will be reduced.</p> <p>As a result 58% of the total car parking area is comprised of measures that will reduce heat and glare generation.</p>

Matter raised	Response
<ul style="list-style-type: none"> - Where tree planting is proposed in landscaping strips within the car park, these landscaping strips should be at least 1.5m wide.' 	

1. Conclusion

We trust that the above response adequately addresses the submissions raised. If you would like to further discuss we would be happy to arrange a meeting with you.



Kind regards

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