

Stellen Consulting Level 1, 27 Belgrave Street Manly NSW 2095

PO Box 151 Freshwater NSW 2096

4th April 2023

Adrian McGregor 50 Condover Street, North Balgowlah, NSW 2093

adrian.mcgregor@mcgregorcoxall.com

Stormwater management plan and driveway design statement for 50 Condover Street, North Balgowlah

Dear Adrian,

Please find attached the drawings describing Stormwater management plan and driveway design for the proposed development at 50 Condover, North Balgowlah

1.0 Stormwater Management Plan

The stormwater management plan is described in the following Stellen drawings:

DR-SW-000	Revision 2	Legend
DR-SW-001	Revision 2	Pipe Layout - Lot 1
DR-SW-002	Revision 2	Pipe Layout - Lot 2
DR-SW-003	Revision 2	Roof Layout
DR-SW-004	Revision 2	Details & Easement Section
DR-SW-005	Revision 1	OSD Details
DR-SW-006	Revision 1	Site Areas
DR-SD-100	Revision 1	Sediment & Erosion Control Plan

The proposed stormwater design as described by the drawing complies with the following documents with noted exceptions:

- Australian Standard AS3500.3 (2021) Plumbing and Drainage: Part 3 Stormwater Drainage.
- Northern Beaches Council Water Management for Development Policy 2021.

We recommend the proposed plan (as described in the drawings) as a safe and practical solution to support the development.

2.0 Driveway Design

The driveway design is described in the following Stellen Consulting drawings:

CV-000	Revision 2	Legend
CV-101	Revision 4	Layout Plan
CV-102	Revision 4	Driveway Centreline Long Section and Kerb Detail
CV-103	Revision 0	Swept path (Ingress)
CV-104	Revision 0	Swept path (Egress)



The proposed driveway conforms to the following documents:

- Australian Standard 2890.1 2004 Parking facilities: Part 1: Off-street car parking
- Northern Beaches P21 DCP Appendix 10 2014*

* Exceptions:

Lot 2's (CV-102) proposed driveway in Section 2 was designed to accommodate the site's high topography. The gradient of the driveway was limited to a maximum of 30.25%, which exceeds the recommended 25% gradient from the council's Driveway Profile (Extra High) in Northern Beaches P21 DCP Appendix 10. To ensure vehicle clearance, the design includes a 14.5% transition at a 2m distance, and the section was tested using vehicle template B85. The test confirmed that the proposed driveway section does not cause any scraping.

We recommend the proposed driveway design (as described in the drawings) as a safe and practical solution to support the development.

Kind regards,

Yasser

Yasser Yahya Al-Ashmori Civil Engineer

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