

PO Box 151 Freshwater NSW 2096

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Craig Roberts 45 Smith Avenue Allambie Heights NSW 2100

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## Hydraulic engineering design for proposed alterations and additions at 45 Smith Avenue

## Dear Craig

Please find attached the drawings describing the stormwater management plan for the proposed alterations and additions at 45 Smith Avenue, Allambie Heights.

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

DR-000 Revision 1 Legend

DR-001 Revision 1 Pipe Layout & Details

DR-002 Revision 1 Roof Layout

DR-003 Revision 1 OSD Tank Details

The stormwater management plan conforms to the relevant requirements of the following with noted exceptions:

- Australian Standard AS3500.3 "Plumbing and Drainage: Part 3 Stormwater Drainage"
- Northern Beaches Council (Warringah), POL 136 "Stormwater Drainage from Low-Level Properties"

The site falls away from the street and an on-site dispersion system (level spreader) is proposed. Other methods of disposal were investigated but eliminated due to site constraints.

The OSD system is designed using DRAINS and restricts stormwater flows leaving the site to the "state of nature" (100% pervious) case for all storms up to and including the 100 year ARI storm event. DR-003 - Table 1 shows the peak flows generated by the site. DR-003, Plan 4 details the proposed catchment plan for the site.

Stormwater flows from the site as a result of the development are not expected to adversely impact adjoining and downstream properties.

Kind regards,

Logan English-Smith

MM

Engineer

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