DCI - DESIGN CONSTRUCT INDUSTRIES PTY LTD

STRUCTURAL & CONSTRUCTION CONSULTANTS

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Structural Assessment: 45 Carefree Rd Narrabeen/ Robert Warren

Summary: -

The construction at 45 Carefree Rd is based on a solution encompassing bored piers to refusal, capped with strip beam footings. The foundations support core filled reinforced blockwork walls and reinforced concrete slabs formed on bondek.

Site considerations: -

The site is constrained by an extremely narrow public road, a fall-away from the road of up to 12m, dictates traditional construction techniques of blockwork, and cast-in-situ slabs as opposed to precast panels which would require craneage. The material required can be delivered by medium sized trucks and deposited on the off road car parking area on a needs/daily basis.

Construction: -

As indicated above, the construction work is based on traditional methods staged to suit the site access difficulties

- Piers and reinforced strip footings poured in discrete stages
- Reinforced core filled block work supported by perimeter scaffolding and intermediate bondek formed cast-in-situ slabs.
- Construction- fit out, plumbing, electrical comms etc. as normal.
- Dilapidated retaining wall to be replaced with core filled blockwork on a foundation piered to solid rock

Geotechnical considerations: -

The soil conditions are classes as 's'- sandy loam overlaying bedrock and floaters. To overcome the variable ground conditions piering to solid rock is recommended.

Date: 01 02 2021

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