

client: Progeni Ltd

office: Wellington

principal: n

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project: 68 Exploration Way

by: AH

location: n n

checked: NS

Water tank load calcs:

Each tank: 30,000L ; 3.7m diameter ; 10.75m² base area.

From NZS1170.0 $E_d = 1.2G + 1.5Q$.

Dead Load, G = tank weight, ~ 0.5 tonne.

$$= 4.98 \text{ kN} / 10.75 \text{ m}^2$$

$$= 0.46 \text{ kN/m}^2$$

Live Load, Q = water in tank (full)

$$= 30 \text{ m}^3 \times 9.81 \text{ kN/m}^3$$

$$= 294.3 \text{ kN} / 10.75 \text{ m}^2$$

$$= 27.38 \text{ kN/m}^2$$

Total Load, $E_d = 1.2 \times 0.46 + 1.5 \times 27.38$

$$= 41.62 \text{ kN/m}^2$$

$$\therefore E_d \approx \underline{\underline{42 \text{ kN/m}^2}}.$$