180 Pavia Drive, Cleveland Palms. Lot LB on SP 102512

INTRODUCTION

E.G.Clark (Designer) has been engaged by William Camilleri to prepare an Onsite Sewerage Assessment (OSA) to assess the suitability of installing a septic tank and Absorption Bed to serve the proposed dwelling with at 180 Pavia Drive, Cleveland Palms.

The property is located in the local government area of Townsville. This OSA addresses the requirements under AS/NZS 1547:2012 for the proposed dwelling on this site.

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Under sections 440ZG of the Environmental Protection Act, which relates to depositing prescibed contaminants in waters, it is an offence to deposit or release sewage and sewage residues, whether treated or untreated, and any other matter containing faecal coliforms or faecel strepococci, including for example:

Solid or liquid waste from an On-site Sewerage facility;

into waters, or a roadside gutter or stormwater drainage, or at another place, and in a way, so that the contaminant could reasonably be expected to wash, blow, fall or otherwise move into waters, a roadside gutter or stormwater drainage.

DESIGN CRITERIA

The design of this On-Site Wastewater system has been based on the following information.

- 1. Queensland Plumbing & Wastewater code.
- 2. A.S/NZS 1547: 2012 Onsite Domestic Wastewater Management.
- 3. Local Authorities policy on On-Site Wastewater Disposal systems.
- Site Evaluation
- 5. Soil Test
- 6. Site plan of the proposed dwelling.

Onsite Evaluation

Intended water supply source:- Tank supply. Boundaries:- Clearly Identified. Waterway located in vicinity of Land application area:- Nil Bore:- nil.

DESIGN PARAMETERS.

1.	Number of Bedrooms -	2
2.	Number of people -	3
3.	Treatment type –	Primary
4.	Manufacture -	Everhard
5.	Soil Class -	2
9.	Soil Permeability-	Weakly Structured 3
10.	Absorption Bed Area -	12 sq. M

CERTIFIED DESIGN.

1.	Treatment Type –	Septic Tank & Absorption Bed
2.	Effluent Type –	Primary
3.	Disposal type –	Absorption Bed
4.	Disposal area –	12 sq. M

SETBACK DISTANCES.

- 1. Property Boundary 2m
- 2. Building/houses 10m
- 3. Bore/well 10m
- 4. Pool/play area 3-15m
- 5. Inground tank 4-15m

Topography

The designated Land Application area has nil fall.

Land application area calculation

As per AS/NZS 1547:2012 section L4.2 sizing:- Area =Daily Flow Rate / DLR

Absorption Bed

Q = design daily flow in L / day	360 L / day (3 X 120 L / Person / day)
DLR = Design Load Rating mm / day	30
W = Width of Dispersal Area (M)	1 m
L = Length of Dispersal Area (M)	12 m
Total Dispersal Area (Sq M)	12 Sq M

Plumbing contractor installing this Onsite Wastewater System Signature

Signature:

(Note: Please sign and forward to before commencing work.)

CONSTRUCTION SEQUENCE FOR TRENCHES

1. Mark out area to be used for land application area.

2. Check with the owner prior to excavation for any existing trees, Irrigation systems, services or cables that may interfere with the position of the land application area.

3. Excavate the soil from the disposal area. Consult with the owners for the location of excess soil for the future use or removal.

4. Base of the Absorption Trench must be level to disperse effluent evenly.

5. 90mm slotted pipe on outlet of Distribution pit to disperse effluent evenly.

6. Construct Absorption Trench as per details on plan. (Cross Section Design.)

7. Wrap trench aggregate with geotextile filter cloth then place topsoil as per cross section detail with the domed surface to prevent ponding of rainwater on land application area.

8. 100 mm Inspection Port installed in prominent position of Bed for access.

9. Inspection port capped as per local authority requirements.

10. All excavation in accordance with A.S.3500 Part 2 Figure 3.4.

NOTES

*Surface Vegetation for beds/trenches shall be plants such as grasses and shrubs that tolerate wet conditions and have high evapotranspiration capacity.

*Surface water shall be diverted around the parameter and up slope of the land application area.

*No vehicles to drive over Application Area. (Ride on lawn mower accepted.)

*All work is to be carried out as per AS1547:2012 standards and designer's specification.

*Access to Septic Tank for future maintenance.

* Service and maintenance completed at three to five year intervals as per manufacturer's and local authority specification.

* Topsoil must be non - clay to allow for evaporation action to work successfully.

Summary and recommendations

This report is based on the information provided by the client. If any aspect of the site preparation or proposed construction changes from the original design, the Designer shall be notified so that any amendments can be made. Should soil or environmental conditions encountered on the site differ significantly from those indicated from the soil report, the designer must be notified before proceeding, as modifications to the design may be required.



Design Certificate for On-Site Sewerage Facilities

Plumbing and Drainage Act 2018

Location and property description

Residential address: 180 Pavia Drive,

Suburb: Cleveland Palms State: Qld Post code: 4816

Property description: Lot LB on SP 102512

Design particulars:

Number of bedrooms in the Dwelling = 2

Number of equivalent persons = 3

Maximum daily flow for entire facility = 360 Litres / Day

Soil category and/or soil texture = 2

Design loading (DLR) 30

Design irrigation rate (DIR)

With my designer's report/design I have included:

a) 1 x copy of the floor plan (with bedrooms clearly indicated)

b) Any other relevant information as listed in the Registered Designer's Report/Design Checklist.

Applicant declaration

I, Edward George Clark, being a registered on-site sewerage designer, do hereby certify that:

a) The design of the on-site sewerage facility/land application area for the above property has been designed in accordance with:

» the Plumbing and Drainage Act 2018, and associated Regulations

» the Queensland Plumbing and Wastewater Code

- » relevant Australian/New Zealand Standards
- » SC6.4.3.10 On-site sewerage facilities (Townsville City Plan)
- » any additional requirements of council; and
- b) I am familiar with the regulatory requirements that are relevant for this design; and

c) I accept professional liability for the interpretation of, conclusions drawn from and recommendations made as a result of this design; and

d) The on-site sewerage facility/land application area (as designed) is appropriate for the allotmer
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1/ UN -Signature ____

_____ Date: 17. 05 . 25













Document Set ID: 27283991 Version: 1, Version Date: 02/07/2025

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