OUR REF: MCUC 755/2015 (457409)

12 June 2015

Mr Dean Miller & Ms Nicole Rumney
PO Box 128
PORT DOUGLAS QLD 4877

Dear Sir/Madam

DECISION NOTICE UNDER S 335 SUSTAINABLE PLANNING ACT 2009:
DEVELOPMENT APPLICATION FOR
19-21 FINLAY CRESCENT, OAK BEACH

With reference to the abovementioned Development Application, which was determined under Instrument of Delegation on 12 June 2015, please find attached the relevant Decision Notice.

The Notice includes extracts from the Act with respect to making representations about conditions, negotiated decisions, suspension of the appeal period, and lodging an Appeal.

Should you have any enquiries in relation to this Decision Notice, please contact Jenny Elphinstone of Development and Environment on telephone number 07 4099 9482.

Yours faithfully

Paul Hoye
General Manager Operations

Att

APPLICANT DETAILS
Dean Miller & Nicole Rumney
PO Box 128
PORT DOUGLAS QLD 4877

ADDRESS
19-21 Finlay Crescent, Oak Beach

REAL PROPERTY DESCRIPTION
Lot 4 on SP212657

PROPOSAL
House

DECISION
Approved subject to conditions (refer to approval package below).

DECISION DATE
12 June 2015

TYPE
Material Change of Use (Development Permit)

REFERRAL AGENCIES
None Applicable

SUBMISSIONS
There were no submissions for this application.

FURTHER DEVELOPMENT PERMITS REQUIRED
Development Permit for Building Works

CODES TO COMPLY WITH FOR SELF-ASSESSABLE DEVELOPMENT
None

DOES THE ASSESSMENT MANAGER CONSIDER THE APPLICATION TO BE IN CONFLICT WITH APPLICABLE CODES, PLANNING SCHEME, STATE PLANNING POLICIES OR PRIORITY INFRASTRUCTURE PLAN (IF YES, INCLUDE STATEMENT OF REASONS)
Not in conflict

APPROVED DRAWING(S) AND/OR DOCUMENT(S)
The term 'approved drawing(s) and/or document(s)' or other similar expression means:

Drawing or Document	Reference	Date
Site Plan prepared by Marshall Design	15060 SK- 4/1	January 2015
Earthworks Plan prepared by Marshall Design	15060 SK- 4/2	January 2015
Floor Plan prepared by Marshall Design	15060 SK- 4/3	January 2015
Elevations prepared by Marshall Design	15060 SK- 4/4	January 2015
Elevations prepared by Marshall Design	15060 SK- 4/4	January 2015
Onsite Sewerage Assessment prepared by ETS Geotechnical	GT15-081-001R OSA Rev 2	April 2015

ASSESSMENT MANAGER CONDITIONS

1. Carry out the approved development generally in accordance with the approved drawing(s) and/or document(s), and in accordance with:

    a. The specifications, facts and circumstances as set out in the application submitted to Council;

    b. The following conditions of approval and the requirements of Council's Planning Scheme and the *FNQROC Development Manual*.

    Except where modified by these conditions of approval

Timing of Effect

2. The conditions of the Development Permit must be effected prior to Commencement of Use, except where specified otherwise in these conditions of approval.

3. Prior to a Development Permit for Building Works being issued for the proposed 'future studio', detailed elevations and siting of the proposed 'future studio' are to be submitted to Council for Council's endorsement.

Water Supply

4. Water storage tank(s) with a minimum capacity not less than 30 000 litres, and must be installed prior to occupation of the premises. Details of the water tank(s) must be shown on plans submitted with the building application. Such water tanks must be provided with:

    a. Mosquito-proof screens of brass, copper, aluminium or stainless steel gauze not coarser than one (1) mm aperture mesh of substantial construction and installed in such manner as not to cause o accelerate corrosion; or

    b. Flap valve at every opening of the tank or other receptacle; or

    c. Other approved means for preventing the ingress or egress of mosquitoes; and

    d. Where a tank or other receptacle is provided with a manhole, the manhole must have a diameter of no more than 40 cm; and

    e. The water tank(s) shall be fitted with a 50 mm ball valve with a camlock fitting.

On-Site Effluent Disposal

5. The method of on-site effluent disposal must be in accordance with the Queensland Plumbing & Wastewater Code. The wastewater treatment system to be installed is to be in accordance with Onsite Sewerage Assessment GT15-081-001R OSA Rev 2 prepared by ETS Geotechnical or another system to the satisfaction of the Chief Executive Officer.

Geotechnical Assessment

6. All earthwork batters steeper than 1 in 2 and/or higher than 1.8 metres must be certified by a qualified Geotechnical Engineer prior to the Commencement of Use.

Landscaping

7. A Landscape Plan nominating the species and location of trees and shrubs to be planted must be endorsed by the Chief Executive Officer for the proposed three (3) metre wide buffer strip along the southern boundary of the site and the ten (10) metre buffer strip along the road frontage. Sixty per cent of the total proposed species for landscaping must consist of native and endemic species only and planted in an irregular and random fashion to blend with existing vegetation. The approval of all landscaping works must be undertaken in accordance with the endorsed plan prior to the issue of a Certificate of Classification whichever occurs first. The landscape plan does not need to be professionally drawn but does need to be of a standard which clearly illustrates those areas to be planted.

Vegetation Clearing

8. The trees nominated on the plan as ‘Termite Infested Trees To Be Removed’ are to be retained until such time that report from a qualified arborist, which addresses the potential danger that these trees may pose to the proposed house has been provided to, and endorsed by, Council.

Building Colours

9. The exterior finishes and colours of Buildings must be non-reflective and must blend with the natural colours of the surrounding environment. Roofs and structures (including Water Tanks) must be of moderately dark to darker shades of green, grey, blue and brown.

Wildlife

10. Prior to removal of any tree, an inspection must be carried out for any signs of protected wildlife including nests and animal habitat. Should any recent wildlife activity be identified, removal of the tree must not occur until the animal has vacated the area of immediate danger. If the animal does not move from the area of danger, the Wildlife Management Unit, Department of Environment and Heritage Protection must be contacted for advice. Important habitat trees should be retained wherever possible.

Lawful Point of Discharge

11. All stormwater from the property must be directed to a lawful point of discharge such that it does not adversely affect surrounding properties or properties downstream from the development, all to the requirements and satisfaction of the Chief Executive Officer.

External Works

12. Undertake the following works external to the land at no cost to Council:

    a. Provision of a piped concrete crossover and apron to provide access to the site.

    The external works outlined above constitute Operational Works. Three (3) copies of a plan of the works at A1 size and one (1) copy at A3 size must be endorsed by the Chief Executive Officer prior to commencement of such works. Such work must be constructed in accordance with the endorsed plan to the satisfaction of the Chief Executive Officer prior to Commencement of Use.

Sustainable Development

13. The proposed building should comply as far as practically possible with the provisions of 4.6.7 Sustainable Development Code of the Douglas Shire Planning Scheme 2006, or a higher standard as required by the Building Code of Australia (BCA).

ADVICE

1. This approval, granted under the provisions of the *Sustainable Planning Act* 2009*,* shall lapse four (4) years from the day the approval takes effect in accordance with the provisions of section 339 and section 341 of the *Sustainable Planning Act* 2009*.*

2. All building site managers must take all action necessary to ensure building materials and / or machinery on construction sites are secured immediately following the first cyclone watch and that relevant emergency telephone contacts are provided to Council officers, prior to commencement of works.

3. This approval does not negate the requirement for compliance with all other relevant Local Laws and other statutory requirements.

4. For information relating to the *Sustainable Planning Act* 2009 log on to www.dilgp.qld.gov.au . To access the *FNQROC Development Manual*, Local Laws and other applicable Policies log on to www.douglas.qld.gov.au .

LAND USE DEFINITIONS

In accordance with the Douglas Shire Planning Scheme 2008, the approved land use of House is defined as:

Means the use of premises comprising one (1) Dwelling Unit, located on one (1) lot for the exclusive residential use of one (1) Household. The use includes:

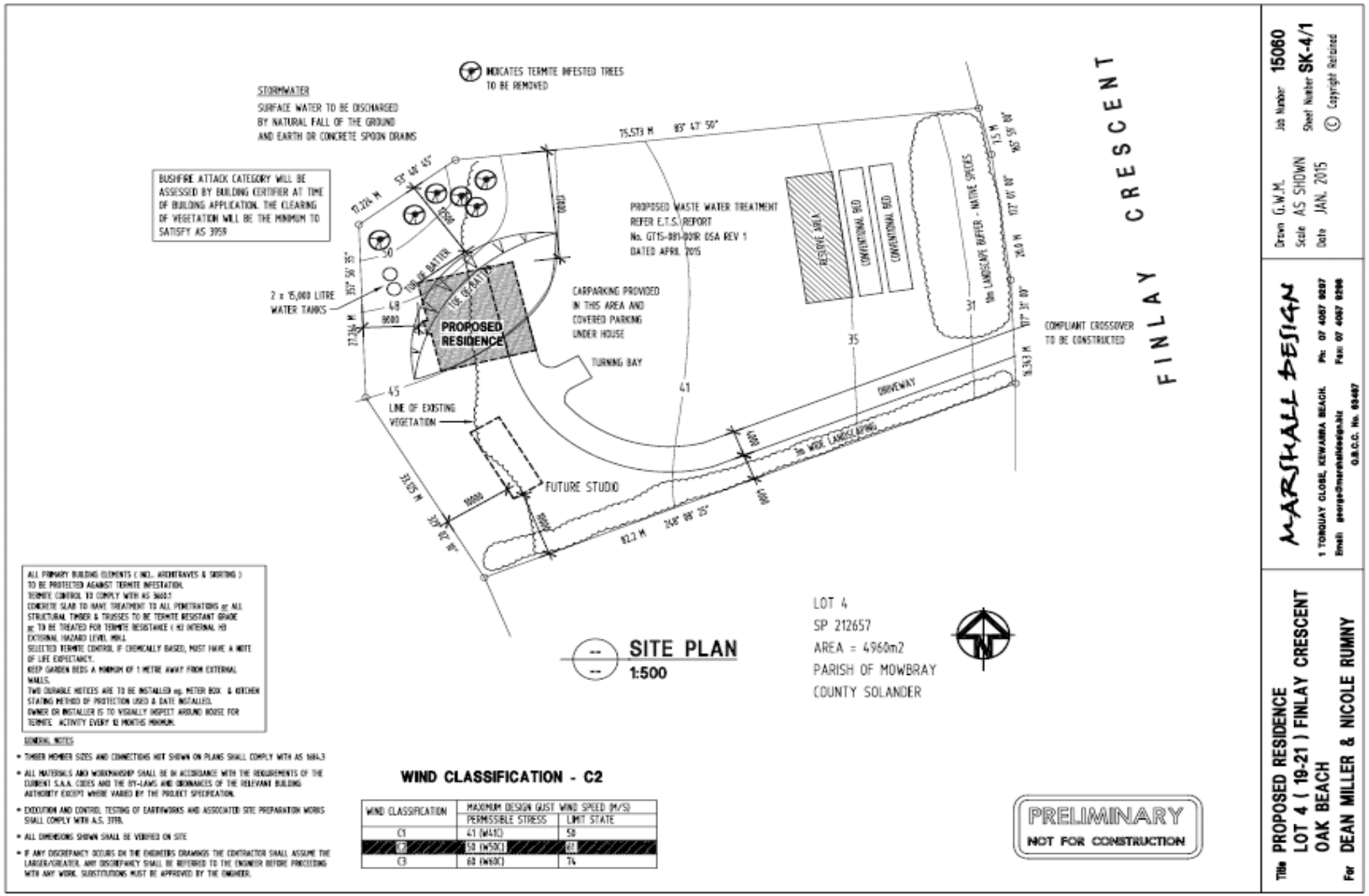
- *outbuildings / structures incidental to and necessarily associated with the residential use;*
- *the care of children in accordance with the Child Care (Family Day Care) Regulation 1991;*
- *accommodation for a member or members of the extended family of the Household occupying the House and for personal staff; and*
- *a display house which displays to the general public the type of construction or design offered by a builder / developer, for a maximum period of 12 months and which then converts to a House for the exclusive use of one (1) Household.*

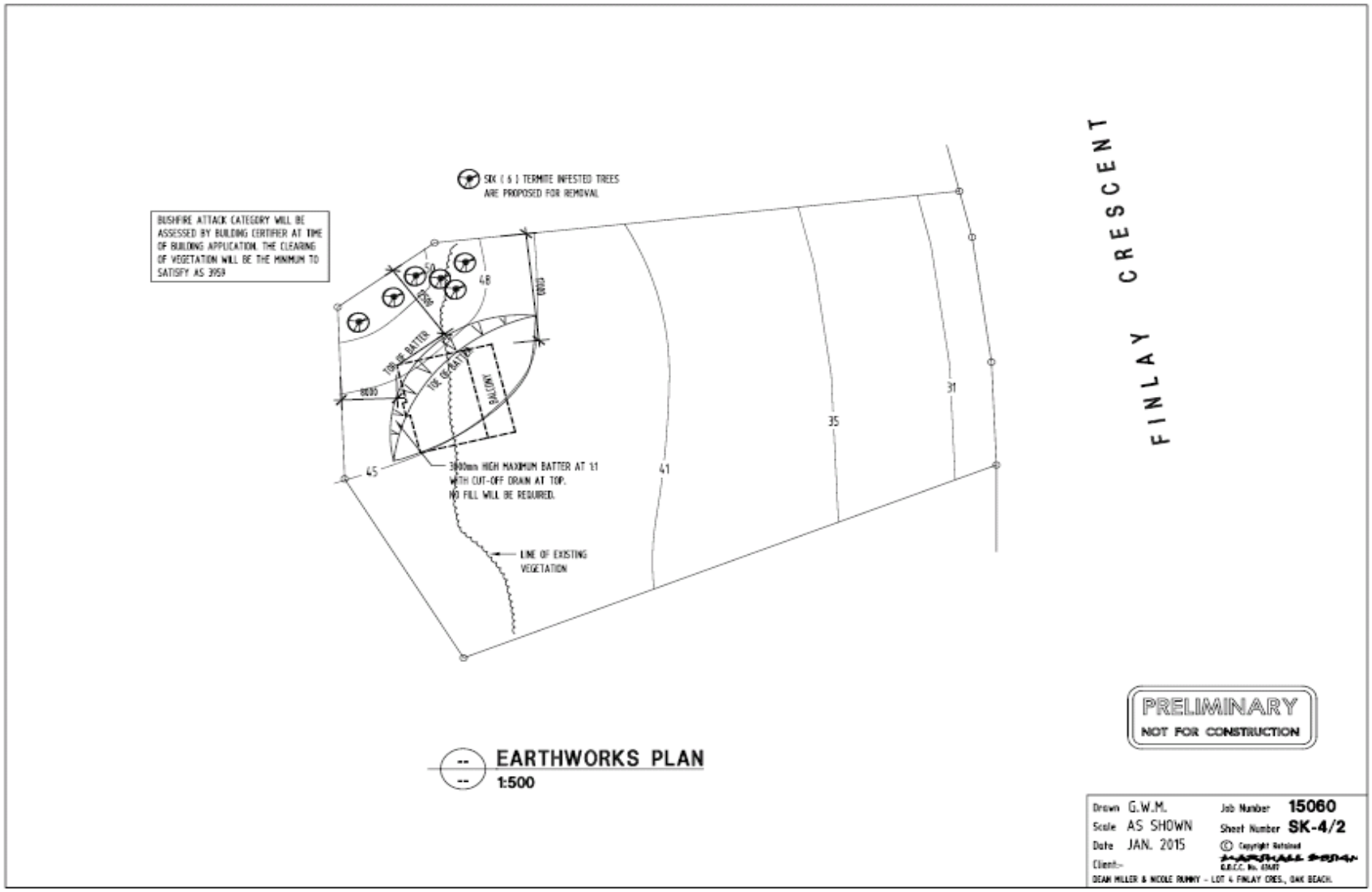
*This definition is provided for convenience only. This Development Permit is limited to the specifications, facts and circumstances as set out in the application submitted to Council and is subject to the abovementioned conditions of approval and the requirements of Council's Planning Scheme and the *FNQROC Development Manual*.

RIGHTS OF APPEAL
Attached

End of Decision Notice

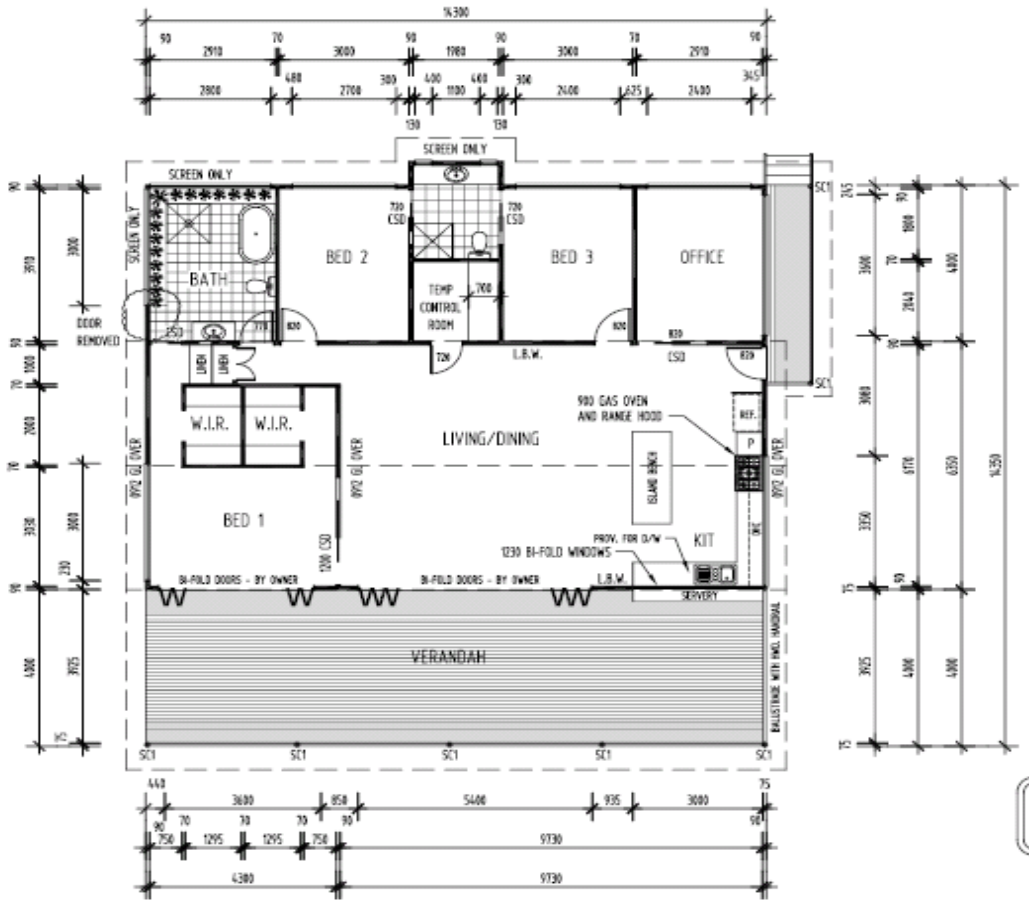
APPENDIX 1: APPROVED DRAWING(S) & DOCUMENT(S)





43.2015.755
8/27

AREAS	
LIVING	149.30m2
VERANDAH	57.20m2
TOTAL	206.50m2



WIND CLASSIFICATION - C2

TEMPERATURE CONTROLLED ROOM
PROVISION FOR AIR CONDITIONING TO BE MADE
WALLS ARE TO HAVE 50mm FOIL-BACKED INSULATION
SOLID CORE 720 DOOR WITH AIR SEALS FITTED
JOINERY BY OTHERS

WALK-IN ROBES
WALLS TO WALK-IN ROBE TO 2700 HIGH ONLY
(NO CEILING).
REFER ROOF FRAMING PLAN FOR INDICATION
OF FULL HEIGHT WALLS.

WINDOWS
ALL WINDOWS AND DOORS ARE TO BE FITTED
WITH INSECT SCREENS.

FLOORING
YELLOW TONGUE "STRUCTA-FLOR" BASE FLOORING
WITH FLOATING BAMBOO FLOORING OVER.

PRELIMINARY
NOT FOR CONSTRUCTION

FLOOR PLAN
1:100

Drawn	G.W.M.	Job Number	15060
Scale	AS SHOWN	Sheet Number	SK-4/3
Date	JAN. 2015	© Copyright Retained	
Client:-		[redacted]	

DEAN MILLER & NICOLE RUMMY - LOT 4 FINLAY CRES., OAK BEACH.

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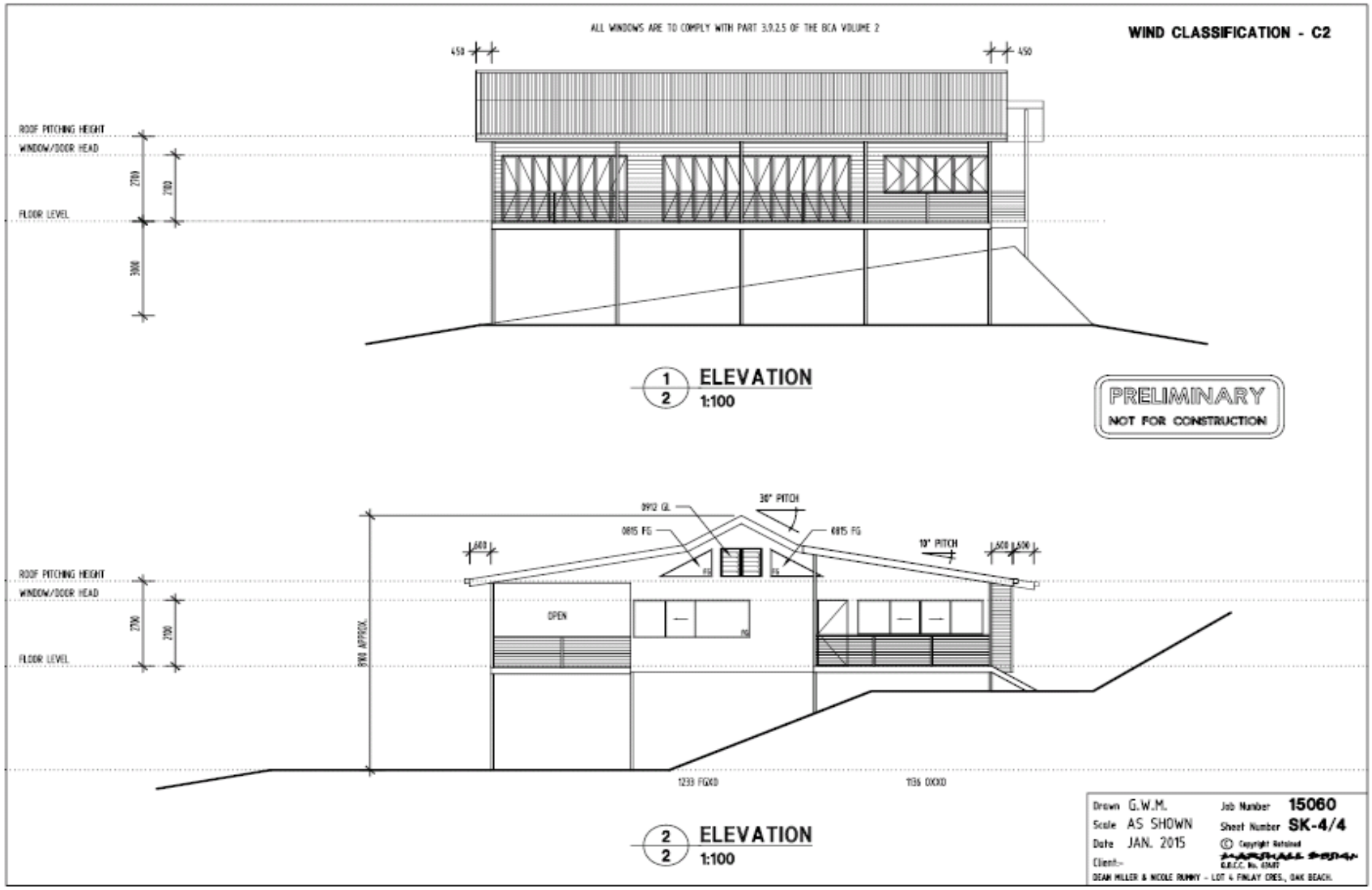
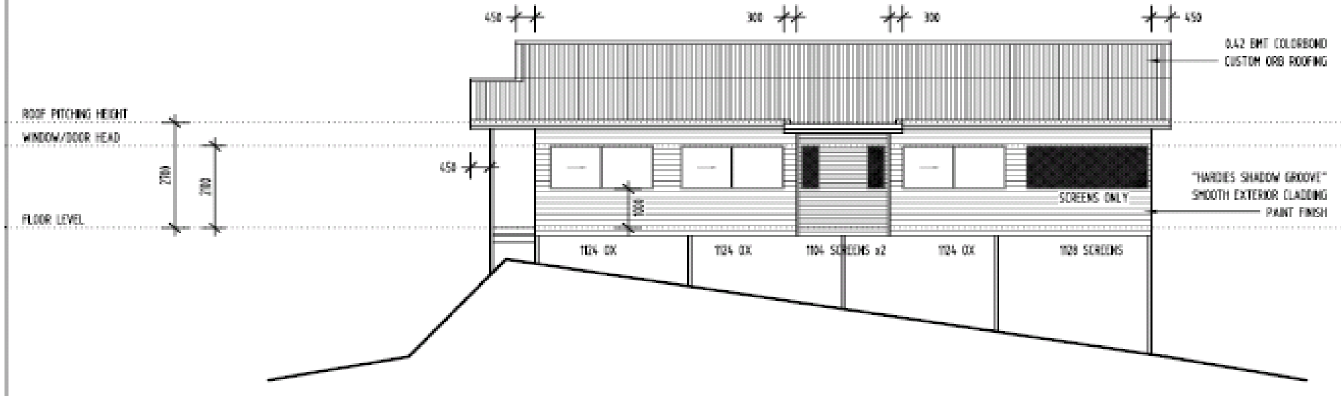
9/27

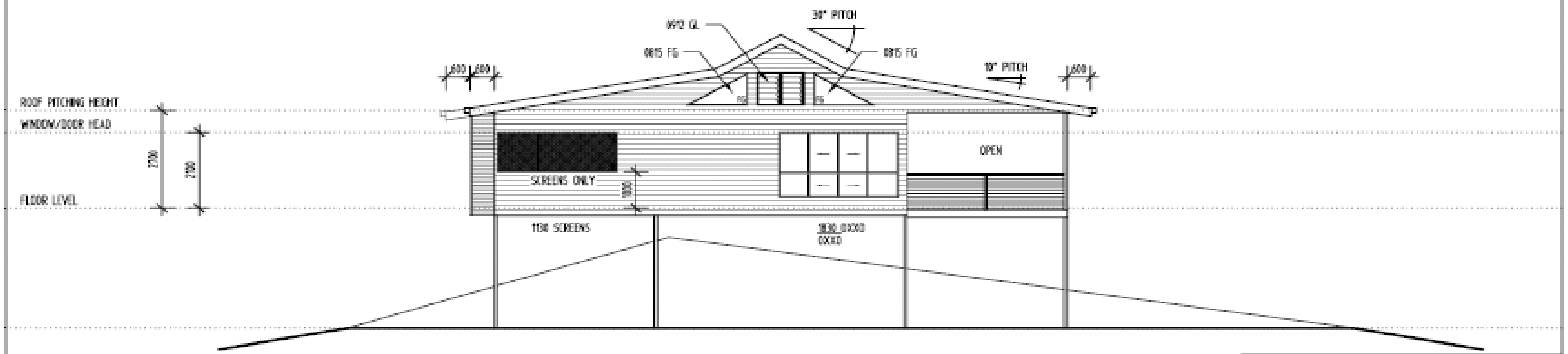

ALL WINDOWS ARE TO COMPLY WITH PART 3.9.2.5 OF THE BCA VOLUME 2
WIND CLASSIFICATION - C2
450
450
ROOF PITCHING HEIGHT
WINDOW/DOOR HEAD
FLOOR LEVEL
2700
2100
3000
1 ELEVATION
2 1:100
PRELIMINARY
NOT FOR CONSTRUCTION
30° PITCH
9912 GL
6815 FG
6815 FG
10° PITCH
600
600
600
ROOF PITCHING HEIGHT
WINDOW/DOOR HEAD
FLOOR LEVEL
2700
2100
6900 APPROX.
OPEN
1239 FGXD
1136 OXXD
2 ELEVATION
2 1:100
Drawn G.W.M.
Scale AS SHOWN
Date JAN. 2015
Client:-
Job Number 15060
Sheet Number SK-4/4
© Copyright Retained
G.B.C.C. No. 40417
DEAN MILLER & NICOLE RUMMY - LOT 4 FINLAY CRES., OAK BEACH.

ALL WINDOWS ARE TO COMPLY WITH PART 3.9.2.5 OF THE BCA VOLUME 2



ELEVATION 1/2
1:100

PRELIMINARY
NOT FOR CONSTRUCTION



2/2 **ELEVATION**
1:100

Drawn G.W.M.
Scale AS SHOWN
Date JAN. 2015
Client:-
DEAN MILLER & NICOLE RUMMY - LOT 4 FINLAY CRES., OAK BEACH.
Job Number **15060**
Sheet Number **SK-4/5**

DEAN MILLER

ONSITE SEWERAGE ASSESSMENT

19-21 (LOT 4) FINLAY CRESCENT
OAK BEACH, QUEENSLAND

REPORT No. GT15-081-001R OSA REV 2

APRIL 2015

REVISION NO. 1

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Document Status							
Revision No.	***Author***	***Reviewer***	***Reason for Issue***	***Approved for Issue***			
				Name	***Signature***	***Date***	***RPEQ No***
1	L. Jones	C. Ryan	FINAL	M.Ganza	M. Ganza	23.04.15	4449
2	L. Jones	C. Ryan	Minor Amendments	M.Ganza	M. Ganza	29.04.15	4449

TABLE OF CONTENTS

1.0 INTRODUCTION

Engineering Testing Services Pty Ltd (ETS) have been engaged by Dean Miller to revise an existing Onsite Sewerage Assessment (OSA) report (ref. C07-044 Rev.B) in accordance with requirements of the current standards and also to assess additional facilities now proposed as a part of a future development. The previous report had been undertaken and reported in 2007 under now superseded standards. As no site inspection has been undertaken it has been assumed that all of the site conditions and pertinent features are as they were during ETS 2007 investigation.

The objective of this OSA report is to assess the suitability of installing a wastewater treatment system to serve a proposed three (3) bedroom residence and future studio at 19-21 (Lot 4) Finlay Crescent, Oak Beach. The block has an area of approximately 4,960 m² in the local government area of the Douglas Shire Council. This OSA addresses the requirements under AS/NZS1547:2012 for the proposed residence on the site.

2.0 LEGISLATIVE REQUIREMENTS

The Queensland Plumbing and Wastewater Code (the Code) specifies the requirements for onsite sewerage disposal and treatment systems that have a peak design capacity of 20 equivalent persons (EP) or less. The Code defines performance criteria for the following:

- Onsite Wastewater Management Systems
- Greywater Use Facilities
- Land Application Systems (including setback distances)
- Water Meters for New Premises
- Chief Executive Approvals (of treatment systems)

In consideration of an application for on-site treatment and disposal facilities, the local government is required to assess whether the application triggers referral for an Environmentally Relevant Activity under the Environmental Protection Act 1994. Disposal of on-site wastes becomes the Environmentally Relevant Activity (ERA) of sewage treatment when daily flows exceed 4,000 litres. Environmentally Relevant

Activities require approvals from the Environmental Protection Agency, either as a concurrence agency or assessment manager.

This proposal does not exceed the daily flow limit therefore will not require referral to the Environmental Protection Agency.

Under Sections 440ZG of the EP Act, which relates to depositing prescribed 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 faecal streptococci, including: for example:

- waste water pumped out from a septic tank, or
- 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.

Relevant Australian Standards for the treatment of on-site effluent include the following:

- AS/NZS1547:2012 'On-site domestic-wastewater management'.
- AS1546.1 – 2008 'On-site domestic wastewater treatment units – Septic tanks'
- AS1546.1 – 2008 'On-site domestic wastewater treatment units – Waterless composting toilets'
- AS1546.1 – 2008 'On-site domestic wastewater treatment units – Aerated wastewater treatment systems'
- AS3500 – National Plumbing and Drainage Code
- Department of Infrastructure and Planning 'Queensland Plumbing and Wastewater Code' April 2010 (the Code)

This report was prepared in accordance with the requirements of the standards set in these documents.

3.0 SITE AND SOIL EVALUATION

3.1 Site Assessment

SITE FACTOR	RESULT
Area	4,960 m²
Slope	8 to 10°
Drainage Pattern	Waning Divergent
Exposure	Good
Erosion and Land Slip	N/A
Boulders and Rock Outcrops	N/A
Vegetation	Sparsely situated medium to large size trees with short thick grass.
Water Course	N/A
Water Bore	Yes, greater than 50 metres from the selected test area.
Water Table	Not encountered
Cut and Fill	Not encountered at the land disposal area
Flooding	Infrequent
Channelled Runoff	N/A
Soil Surface Condition	Dry to moist
Other Site Specific Factors	None

3.2 Soil Assessment

SOIL PROPERTY	RESULT
Colour	Red brown
Texture	Clay Loam
Structure	Weak to Moderately structured
Permeability	0.12 - 0.5 m/day
Soil Category	4
Design Loading Rate (DLR) (mm/day)	6 – Primary Effluent, Conventional bed

4.0 SYSTEM SIZING FACTORS

4.1 Potable Water Supply

Water supply will be from a bore water supply.

4.2 Separation Distances

Table T7 from the "Queensland Plumbing and Wastewater Code" recommends the following horizontal separation distances for subsurface land application areas.

Feature	Recommended Separation Distance	Measured Distance
Top of bank of permanent water course; Top of bank of intermittent water course; Top of bank of a lake, bay or estuary Top water level of a surface water source used for agriculture, aquaculture or stock purposes; Easement boundary of unlined open stormwater drainage channel or drain.	Primary effluent: 50 metres (horizontal) Secondary effluent: 30 metres (horizontal). Advanced secondary effluent: 10 metres (horizontal).	>50m to watercourse and bay from land disposal area
Bore or a dam used or likely to be used for human and or domestic consumption	Primary Effluent: 50 metres (horizontal). Secondary Effluent: 30 metres (horizontal). Advanced Secondary Effluent: 10 metres (horizontal).	>50m to water bore from land disposal area.
Unsaturated soil depth to a permanent water table.	Primary Effluent: 1.2 metres (vertical). Secondary Effluent: 0.6 metres (vertical). Advanced Secondary Effluent: 0.3 metres (vertical).	>1.2m

In accordance with Table T7 of the Code, the horizontal separation requirement for a primary treated effluent is 50 metres. No features were observed within the specified 50m horizontal separation distance. Therefore, the required horizontal separation for primary effluent would be achieved for a conventional bed type of application.

The vertical separation distances as recommended in the Code can also be achieved for primary effluent at the site.

Table T4 of the Code recommends the following horizontal separation distances for subsurface land application areas measured from the edge of the trench/bed excavation or any subsurface irrigation distribution pipework to the feature. These separation distances will be readily achieved on-site.

Feature	Separation Distance Down slope	Separation Distance Up slope	Separation Distance Level
Property boundaries, pedestrian paths and walkways, recreation areas, footings of buildings, retaining wall footings.	2 metres	4 metres	2 metres
In ground swimming pools	6 metres	6 metres	6 metres
In ground potable water tank*	6 metres	6 metres	6 metres

*Note: For primary effluent the separation distance from an in-ground potable water tank must be 15 metres.

Stormwater shall be diverted away from the land application areas.

The land application area shown on Figure 1, Appendix A meets all recommended horizontal separation distances for primary effluent quality.

4.3 Estimation of Daily Flows

The following typical wastewater flow design allowance is given in AS/NZS1547:2012 for a three (3) bedroom dwelling and future studio.

Classification	*No.*	*Flow (L/person/day)*	*Total Flow (L/day)*
Persons in a three (3) bedroom dwelling	5	150	750
Persons using future studio facilities	2	25	50
		Total	800

For design of a wastewater treatment system the design daily flow rate should be taken as 800 litres per day, or 5.33 equivalent persons (EP), for the site.

To ensure the integrity of any treatment system standard water reducing fixtures should be incorporated to further reduce water consumption. These should include:-

- Shower flow restrictors
- Dual flush 6/3 litre water closet
- Aerator faucets
- Water conserving washing machines

4.4 Wastewater Treatment Options

Appendix 1 of the Code specifies the following effluent quality standards for the different standards of wastewater treatment.

Parameter	Primary Effluent (g/m^3)	Secondary Effluent (g/m^3)	Advanced Secondary Effluent (g/m^3)
Biological Oxygen Demand	120-240	20	10
Total Suspended Solids	65-180	30	10
Thermo-tolerant Organisms (org/100ml)	N/A	200	10
Suitable treatment system	Septic tank with outlet filter	Aerated wastewater treatment system.	Aerated wastewater treatment plant with sand filter

The recommended option for the Land Disposal Area is:

Primary Wastewater Treatment System: A wastewater treatment system with the capacity to treat at least 800 litres of wastewater per day would be required to serve the proposed three (3) bedroom dwelling and a future studio on the site. The primary standard effluent from the wastewater treatment system can then be disposed of to land.

4.5 Method of Disposal

Table K1 of AS/NZS1547:2012 identifies Land Application systems that are considered suitable for different site, soil and climatic factors. The land application system that may be used on this site is a conventional bed for primary standard effluent.

4.6 Required Disposal Area for Effluent Disposal

As per AS/NZS 1547:2012 Section L4.2 *Sizing*. - L = Q / (DLR * W)

Land Disposal Area – Conventional Bed

Q = design daily flow in L/day =	800
DLR = Design Loading Rate mm/day =	6 (primary)
W = Width (m) =	6.7
L = length (m) =	20
Total Area (m^2)	**134**

The required effluent disposal area for the wastewater treatment system could be provided by two (2) conventional beds, dimensioned at 20 metres long by 3.35 metres wide by 0.45 metres deep with a minimum one (1) metre separation (sidewall to sidewall) between beds.

The configuration of the effluent disposal area may be amended to fit in with the actual final layout of the buildings and associated infrastructure but must achieve the above specified area size and conform to the requirements of AS/NZS 1547:2012 as a minimum.

It is recommended that:

- Stormwater is diverted away from the land disposal areas by bunding or diversion drains;
- Effluent is distributed uniformly over the land disposal area;
- The land disposal areas are planted with suitable species where no established vegetation exists;
- Loadings should be alternated to rest sections of the land application areas and minimise the risk of clogging;
- An outlet filter should be fitted to the septic tank.

A cross section of the recommended land disposal option is shown in Figure 1, Appendix A.

5.0 SYSTEM INSTALLATION REQUIREMENTS

5.1 General

The systems and all of their components shall be designed and installed by a licensed Plumber in accordance with the manufacturer's recommendations and the relevant Australian Standards.

5.2 Wastewater Treatment Systems

In accordance with the requirements of AS/NZS1547:2012, the disposal area shall require a primary wastewater treatment system with a minimum capacity of 800 litres per day to service the proposed three (3) bedroom dwelling and future studio on the site.

5.3 Available Reserve Area

AS/NZS1547:2012 5.5.3.4 requires a reserve area of 100% of the design area to be available for the site for any future expansion purposes. The reserve area shall be protected from any development that would prevent it from being used in the future.

5.4 Earthworks and Stormwater

The effluent land disposal areas shall be graded to minimise contact between stormwater and the disposal area. All excess roof stormwater shall be collected and piped to a suitable discharge point away from any land disposal area.

6.0 SUMMARY & RECOMMENDATIONS

Date of Inspection	22nd January 2007
Location of Site:	19-21 (Lot 4) Finlay Crescent, Oak Beach
Owner's Name:	Dean Miller
Local Government:	Douglas Shire Council
Proposed Dwelling Type:	Three (3) bedroom dwelling and future studio
Land Area:	4,960 m^2
Referral to EPA required:	No
Assumed Design Daily Flow:	800 litres/day
Assumed Soil Category:	Category 4 –Clay Loam
Assumed Design Loading Rate:	6 mm/day
Wastewater Treatment Options:	Primary standard wastewater treatment system – 800 litres/day minimum capacity (5.33 EP)
Dimensions of Land Application Facility:	2 x Conventional beds –20mL X 3.35mW X 0.45mD.
Method of Calculations:	AS/NZS 1547:2012
Horizontal Separation Distances:	All primary effluent setbacks complied with.
Vertical Separation Distances:	OK
Potable Water Supply:	Bore Water
Reserve Area:	100% achieved.

The installation of the treatment and disposal system shall be inspected by Engineering Testing Services Pty Ltd to ensure the intent of the design is met.

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

Pollution Exclusion

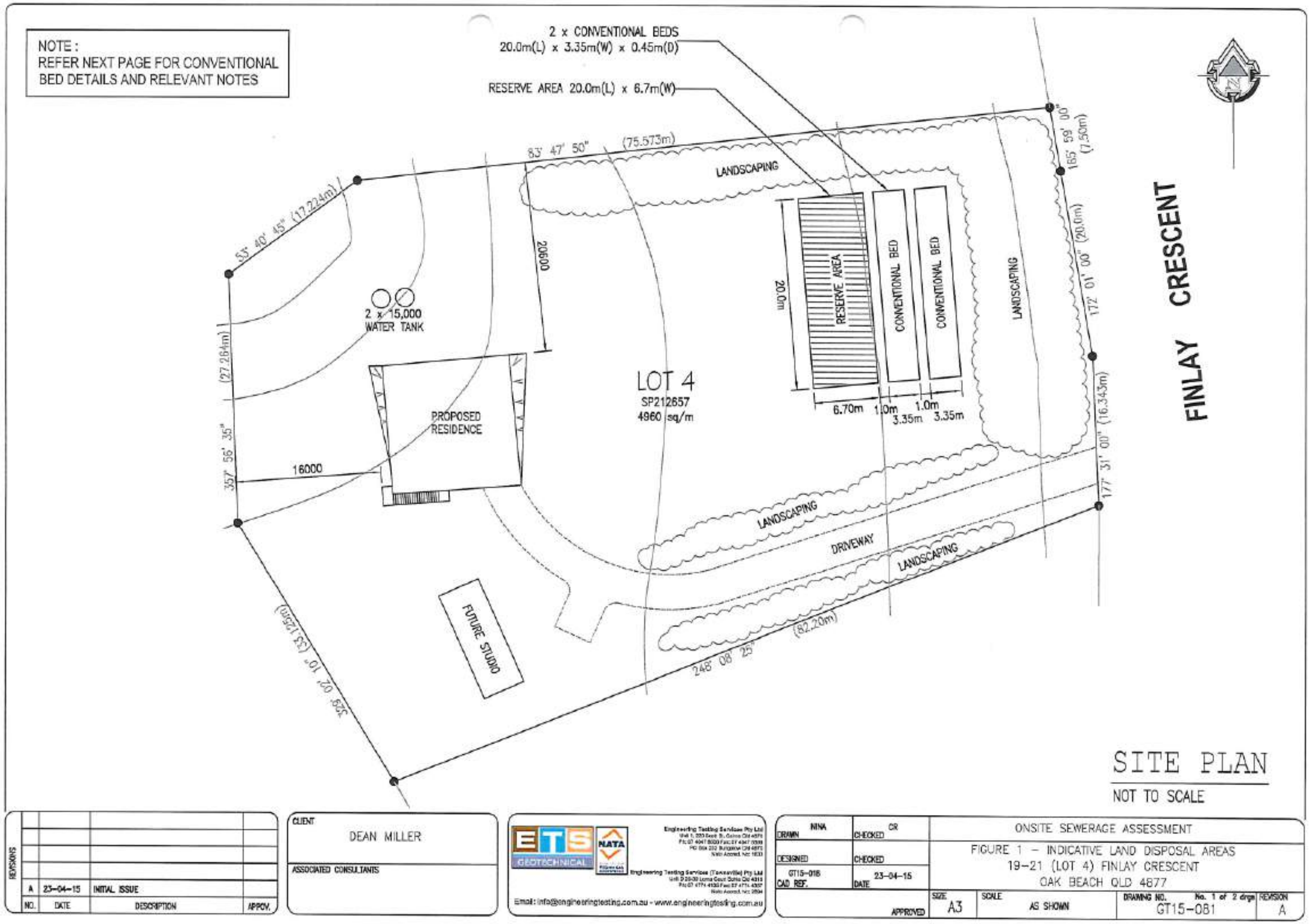
Engineering Testing Services Pty Ltd, its employees and sub-consultants shall not be liable in respect of any claim for Personal Injury or Damage to Property including costs and expenses incurred in preventing, removing, nullifying or clean-up caused by or arising directly or indirectly out of actual, alleged or threatened discharge, dispersal, release or escape of smoke, vapour, soot, fumes, acids, alkalis, toxic chemical, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon any property, land, the atmosphere or any water course or body of water (including groundwater).

DEAN MILLER

19-21 (LOT 4) FINLAY CRESCENT OAK BEACH, QUEENSLAND

APPENDIX A

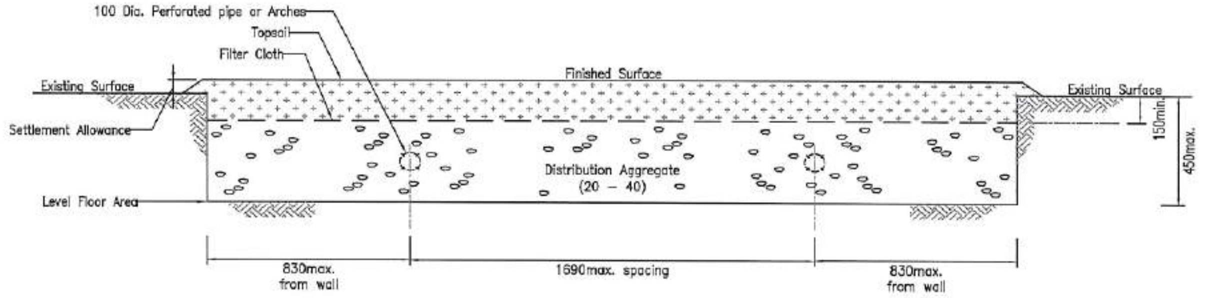
PLANS & DRAWINGS


NOTE :
REFER NEXT PAGE FOR CONVENTIONAL BED DETAILS AND RELEVANT NOTES
2 x CONVENTIONAL BEDS
20.0m(L) x 3.35m(W) x 0.45m(D)
RESERVE AREA 20.0m(L) x 6.7m(W)
83° 47' 50" (75.573m)
LANDSCAPING
53° 40' 45" (17.224m)
20600
20.0m
RESERVE AREA
CONVENTIONAL BED
CONVENTIONAL BED
LANDSCAPING
165° 59' 00" (7.50m)
172° 01' 00" (20.0m)
177° 31' 00" (16.343m)
FINLAY CRESCENT
2 x 15,000
WATER TANK
(27.264m)
357° 56' 35"
PROPOSED RESIDENCE
16000
LOT 4
SP212657
4960 sq/m
6.70m 1.0m 1.0m
3.35m 3.35m
LANDSCAPING
DRIVEWAY
LANDSCAPING
(82.20m)
248° 08' 25"
FUTURE STUDIO
328° 02' 10" (33.125m)
SITE PLAN
NOT TO SCALE
REVISIONS
A 23-04-15 INITIAL ISSUE
NO. DATE DESCRIPTION APPDV.
CLIENT
DEAN MILLER
ASSOCIATED CONSULTANTS
ETS GEOTECHNICAL
NATA
Email: info@engineeringtesting.com.au - www.engineeringtesting.com.au
DRAWN NINA
CHECKED CR
DESIGNED
CHECKED
CAD REF. GT15-018
DATE 23-04-15
APPROVED
ONSITE SEWERAGE ASSESSMENT
FIGURE 1 - INDICATIVE LAND DISPOSAL AREAS
19-21 (LOT 4) FINLAY CRESCENT
OAK BEACH QLD 4877
SIZE A3
SCALE AS SHOWN
DRAWING NO. GT15-081
No. 1 of 2 drgs
REVISION A

NOTE

1. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE LOCAL GOVERNMENT REQUIREMENTS AND THE FOLLOWING CODES :
- AS 3500 NATIONAL PLUMBING AND DRAINAGE CODE
- AS 1546.1 : 2008 ONSITE DOMESTIC WASTEWATER TREATMENT UNITS – SEPTIC TANKS
- AS 1547 : 2012 ONSITE DOMESTIC WASTEWATER MANAGEMENT
- DEPARTMENT OF INFRASTUCTURE & PLANNING QUEENSLAND PLUMBING AND WASTE WATER CODE APRIL 2010
2. SURFACE WATER SHALL BE DIVERTED AROUND THE PERIMETER & UPSLOPE OF THE LAND APPLICATION AREA
3. ALL WASTEWATER DRAINAGE LEVELS ARE TO BE CONFIRMED BY PLUMBER ONSITE PRIOR TO COMMENCING CONSTRUCTION

NOTE:
DISPOSAL AREA IS TO BE LOCATED A MINIMUM OF 4.0m FROM ANY BUILDING, 2.0m FROM BOUNDARIES AND 50.0m FROM ANY WATER COURSES OR BORES.



LEVEL SITE - SLOPE LESS THAN 5%

FIGURE 4.5A5 – CONVENTIONAL BED DETAILS (AS/NZS 1547:2012)
N.T.S.

REVISIONS

NO.	DATE	DESCRIPTION	APPOV.
A	23-04-15	INITIAL ISSUE	

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DRAWN: NNA	CHECKED: CR	ONSITE SEWERAGE ASSESSMENT
DESIGNED	CHECKED	FIGURE 1 – INDICATIVE LAND DISPOSAL AREAS 19–21 (LOT 4) FINLAY CRESCENT OAK BEACH QLD 4877
CAD REF.: GT15-018	DATE: 23-04-15	
APPROVED	SIZE: A3	SCALE: AS SHOWN
DRAWING NO.: GT15-081	No. 2 of 2 drgs	REVISION: A