



Ms J C Misner
373-391 Ewingsdale Road
EWINGSDALE NSW 2481

16 April 2009

Dear Ms Misner

**APPROVAL TO OPERATE
AN ON-SITE SEWAGE MANAGEMENT SYSTEM**

Approval No.	70.2001.141.2
Parcel No.	187910
Property Description	LOT: 1 DP: 126727
	777 Wilsons Creek Road WILSONS CREEK 2482
Operator	Ms J C Misner
System	Aerated Waste Treatment System / Wetland / Pumpwell / Subsurface Irrigation

Consent is granted under the provisions of the NSW Local Government Act 1993 and Local Government (General) Regulation 2005. Consent is further subject to the requirements conditions described below:

- 1) Council reserves the right to revoke or modify any approval issued for the operation of a sewage management system. This may include reducing the duration of length of time that an approval is valid and/or placing additional conditions on the approval where a problem with a system is identified.
- 2) The OSMS was not inspected prior to issue of this Approval to Operate, and system components are assumed to be in working order i.e. treating and disposing of effluent in a way that makes appropriate provision for the following:
 - a. Preventing the spread of disease by micro-organisms,
 - b. The prevention of the spread of foul odours,
 - c. Preventing the contamination of water,
 - d. Preventing degradation of soil and vegetation,
 - e. The discouragement of insects and vermin,
 - f. Ensuring that persons do not come into contact with untreated sewage or effluent (whether treated or not) in their ordinary activities on the premises concerned,
 - g. The minimisation of any adverse impacts on the amenity of the land on which it is installed or constructed and other land in the vicinity of that land.

ALL COMMUNICATIONS TO BE ADDRESSED TO THE GENERAL MANAGER

PO Box 219 Mullumbimby NSW 2482 (70-90 Station Street)
Tel: (02) 6626 7000 DX 20007 Mullumbimby
Fax: (02) 6684 3018 Email: council@byron.nsw.gov.au
Web: www.byron.nsw.gov.au ABN:14 472 131 473

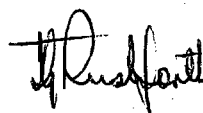
- 3) The operator has approval to operate a Sewerage Management Facility comprising the following:
 - a) Aerated Waste Treatment System
 - b) Wetland
 - c) Pumpwell
 - d) Subsurface Irrigation
- 4) The proposed wastewater system is to be operated generally in accordance with:
 - (a) This approval: 70.2001.141 and DA 99/0250;
 - (b) NSW Environment and Health Protection Guidelines;
 - (c) Council specifications – see attached: OS-AWTS, OS-SSI, OS-PW, OS-WL;
 - (d) the report, of Greg Alderson & Associates, dated 27 July 1999;
 - (e) Wastewater plan approved 20/8/99 and notations (IN RED).
- 5) The on-site sewage management system has been designed for treatment of a wastewater loading of 8 persons.
- 6) The system shall be maintained and serviced by a suitably qualified and experienced person acceptable to Council. **A service report must be forwarded to Council quarterly.**
- 7) The system shall be maintained and checked annually by a suitably qualified and experienced tradesperson.
- 8) Any failure of the OSMS likely to cause a risk to public health or the natural environment shall be reported to Byron Shire Council within seven days of the failure occurring. Strict penalties apply for failure to notify pollution events.
- 9) This approval is valid until 15 April 2012 or until such time that the ownership of the property is transferred.

REASONS

These conditions have been imposed to ensure the effective operation of the sewage management facility for the protection of public health and the environment surrounding the installation site.

NOTE: Rights of Appeal

You are advised of your rights to request a review of Council's determination pursuant to Section 100 of Local Government Act 1993. Such a request must be made within 28 days of the date of determination. A fee is payable in respect to this request.



Jon Rushforth
Authorised Officer of Approval

SUBSURFACE IRRIGATION

SPECIFICATION

DESIGN REQUIREMENTS

1. The irrigation system shall be located and sized according to the conditions of Council approval.
2. Effluent quality for covered surface drip and shallow subsurface drip irrigation systems shall be of secondary treatment standard and when tested shall comply with the following:
 - a) Ninety percent of the samples shall have a BOD₅ less than or equal to 20 g/m³ with no sample greater than 30 g/m³
 - b) Ninety percent of the samples shall have total SS less than or equal to 30 g/m³ with no sample greater than 45 g/m³

For detailed design requirements see Council's Design Guidelines or NSW Environment and Health Protection Guidelines 1998.

INSTALLATION REQUIREMENT

1. All irrigation pipe work and fittings between the treatment tanks and disposal field shall comply with Australian Standard AS 2698 "Plastic Pipes and Fittings for Irrigation and Rural Application"; and:

Effluent grade pipework shall be used

- a) The irrigation system shall be buried and not capable of connection to any water supply or standard household hose fittings;
 - b) Soaker hoses, garden sprinklers and standard water hoses and attachments shall not be used for the irrigation of aerated septic treatment system effluent.
2. Effluent from the system shall be disposed of by pressurised sub-surface low pressure injection into the prepared disposal field. Subsurface irrigation equipment connected to the distribution lines shall be fixed, and ensure an even distribution of effluent over the total available disposal field area.

OPERATION REQUIREMENTS

1. The irrigation area shall be operated in such a manner as to prevent any run-off of effluent from the disposal area to adjoining allotments, public places or reserves.
2. Operating procedures shall be provided in a manual to the applicant / occupier and Council.

MAINTENANCE REQUIREMENTS

1. The system operator shall maintain the irrigation area in regard to adequate cover, elimination of weeds, maintenance of plants and shrubs.
2. A three monthly service is to be carried out by a service contractor authorised by Council to service irrigation systems.
3. A service report sheet shall be completed for every service. Every service report shall be in triplicate and is to specify ALL service items, the date of service, and the technician's initials. The triplicate shall be given or left for the owner, the duplicate forwarded to Council and the original to be retained by the applicant.
4. Occupants should maintain records of all service inspections and pump outs performed whilst the sewage management facility continues to operate.

PUMP WELL - PUMP TO IRRIGATION

SPECIFICATION

DESIGN REQUIREMENTS

Pump wells should be suitable for the purpose with a minimum life expectancy of 15 years.

The well shall be sized according to the storage capacity required to meet the design loading of the irrigation area plus one day's storage of effluent.

INSTALLATION REQUIREMENTS

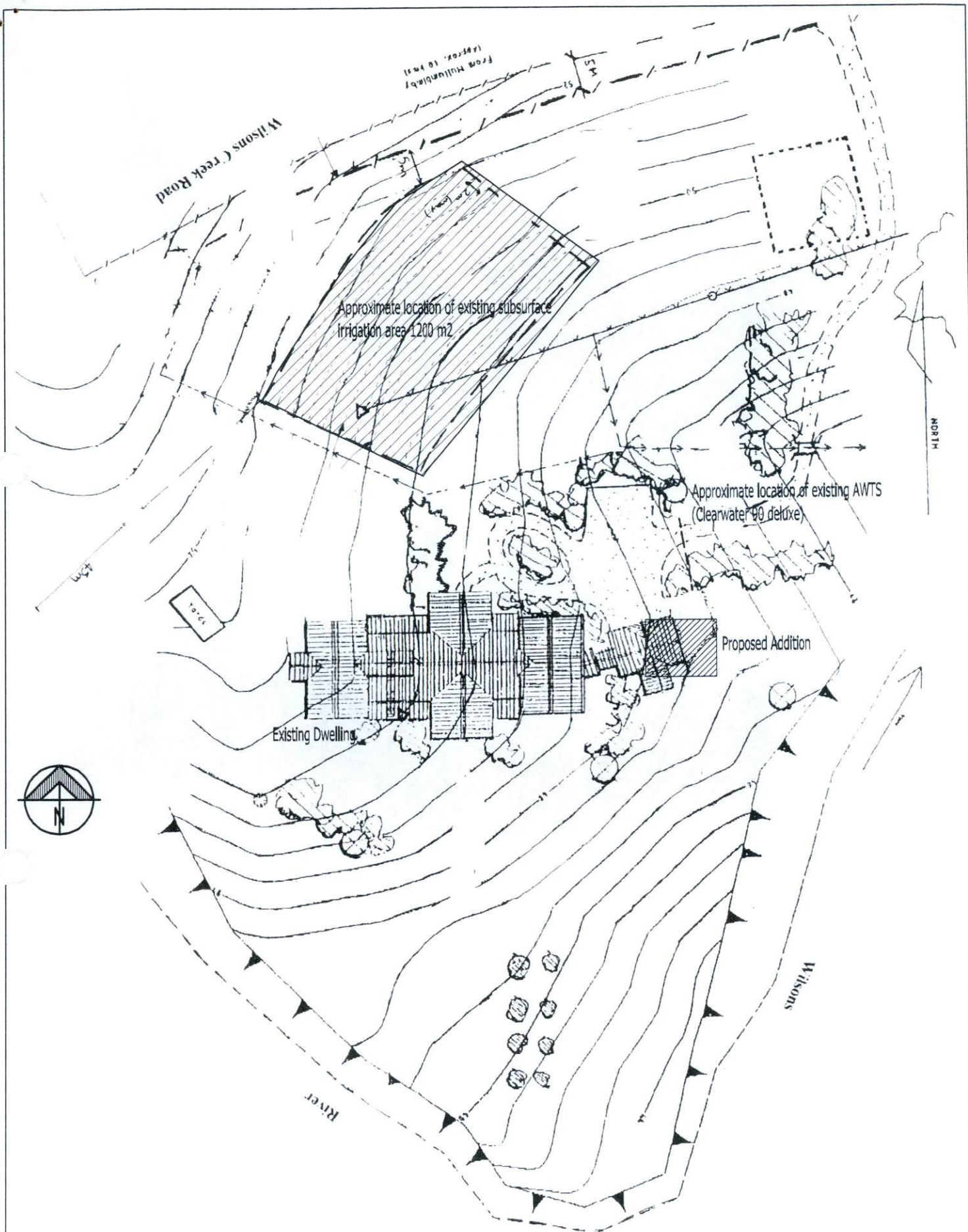
1. The pump well shall be installed and operated in accordance with the manufacturer's designs, installation specifications and maintenance guide.
2. All plumbing and drainage work shall be performed by a licensed tradesperson in accordance with permit conditions issued by Council.
3. All drainage work shall satisfy the requirements of AS3500 "National Plumbing and Drainage Code" and AS1547-2000 "On-site Domestic Wastewater Management"
4. Provision shall be made for the installation of ground anchorage in accordance with the manufacturers recommendation to prevent "floating" of pump wells due to hydraulic pressure.
5. A warning light or alarm, visible from the dwelling is required to indicate overloading of the pump well. The alarm must activate prior to surcharge of effluent from the pump well.

OPERATION REQUIREMENTS

All wastewater treatment systems have a limited hydraulic capacity where usage exceeds design capacity a health risk or pollution incident may occur.

MAINTENANCE REQUIREMENTS

1. A routine check of the tank is required every three months. System failures are generally indicated by
 - a) Surcharge of effluent from the tank or drainage fittings.
 - b) Foul odours emanating from the tank or disposal system.
 - c) Excessive sludge levels in the septic tank and overflow of solids to the pump well.
2. Owner/occupants should maintain records of all service inspections and pump-outs performed whilst the sewage management facility continues to operate.



WASTEWATER NOTES:

1. All wastewater from proposed addition to be collected and treated in existing AWTS
2. Existing 1200 m2 subsurface Irrigation area to be utilised for re-use of treated wastewater

Date: 28th June 2007
 Scale: Approx 1:500
 Job No: s 07233_Misre(07233_plan)
 Drawn: WAA
 Base Plan Source:
 C. Loneragan

**GREG ALDERSON &
 ASSOCIATES PTY LTD**

ABN 60 059 559 858
 Scarrabelotts Rd NASHUA NSW 2479
 Ph: 02 6629 1552 Fax: 02 6629 1566 Email: alderson@spot.com.au

**EXHIBIT NO. 2
 ON-SITE WASTEWATER LAYOUT
 PROPOSED DUAL OCCUPANCY**

Lot 1 DP 126727
 Wilsons Creek Road, Wilsons Creek

Byron OSMS Design Model

Version: 07233 byron model.XLS

Set Defaults

STEP 1: bedrooms persons

STEP 2: # persons (Grp 1) 11.5

STEP 3: Buffer to permanent water Buffer to intermittent water

STEP 4: Block size (m²) 32000

STEP 5: Daily effluent flow accord. water supply type

STEP 6: Wastewater stream

STEP 7: Treatment system

STEP 8: P soil sorption accord. soil type

STEP 9: Soil texture & structure beneath system

STEP 10: Water Table/ Bedrock Depth (m) 1.50

STEP 11: % Effective Rainfall

STEP 12: Soil texture in root zone

STEP 13: Land Application Type

STEP 14: Calculate (or Ctrl-q)

STEP 15: 2.00

Total Daily Flow (L/day) * 1322.5

TN production per year (kg/year) 48.30

TN reduced by all N loss (kg/year) * 30.91

N Plant Uptake rate (kg/ha/year) 2000

Phosphorus in effluent (Ip) (kg/yr) * 6.90

P uptake by plants (Hp) (kg/ha/yr) 20

P soil sorption (Ps) (kg/ha/m depth) 10000

Water Table/ Bedrock Depth (m) 1.50

Buffer to Water Table (Bwt) (m) 0.5

Time for accumulation of P (years) 50

Final area (m²) 1066

Phosphorus area (m²) 314

Water balance area (m²) 1066

Specific Crop Coeff. (grass=1.00) 1.00

% Effective Rainfall 85%

Percolation (mm/d) 4

Avg depth of root zone (m) 0.30

Avg depth bluemetel (etc) in trench below root zone (m) 0.00

Soil Moisture Holding Capacity: saturation & AWC (mm) 111.00 45.00

Permissible percentile exceedence 5.00%

Minimum effluent application (mm/day/m²) 1.24

Daily Effluent Flow per person (L/day) 115

% black to tot WW in a full system 3%

% black to tot WW in a full system: TN 7%

N loss in disposal bed (% reduction) 20%

P prod. per person per yr (kg/person/yr) 0.60

wastewater in a full system: TP 10%

Nitrogen Report

N plant uptake (kg/yr) 21.32

Total N-load 30.91 kg/yr

N load exceedence 0.00

N load percolated (kg/yr) 9.59

N released (perc+exceed.) (kg/yr) 9.59

Enviro.N limit (kg/yr) 9.59

Hydraulic area (m²) 749

Avail. Water Capacity (AWC) of root zone 0.15

Effective porosity of root zone 0.37

SSI laterals pipe separation (m) 0.60

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