



PLANNING & ENVIRONMENT ACT 1987
MOIRA PLANNING SCHEME

This Development Plan is pursuant to the Development Plan

Overlay Number 4

Council approved this plan at its meeting on 21/7/08

Delegate [Signature]

Date 1/18/08

RYPAGE P/L & BAPAUME P/L

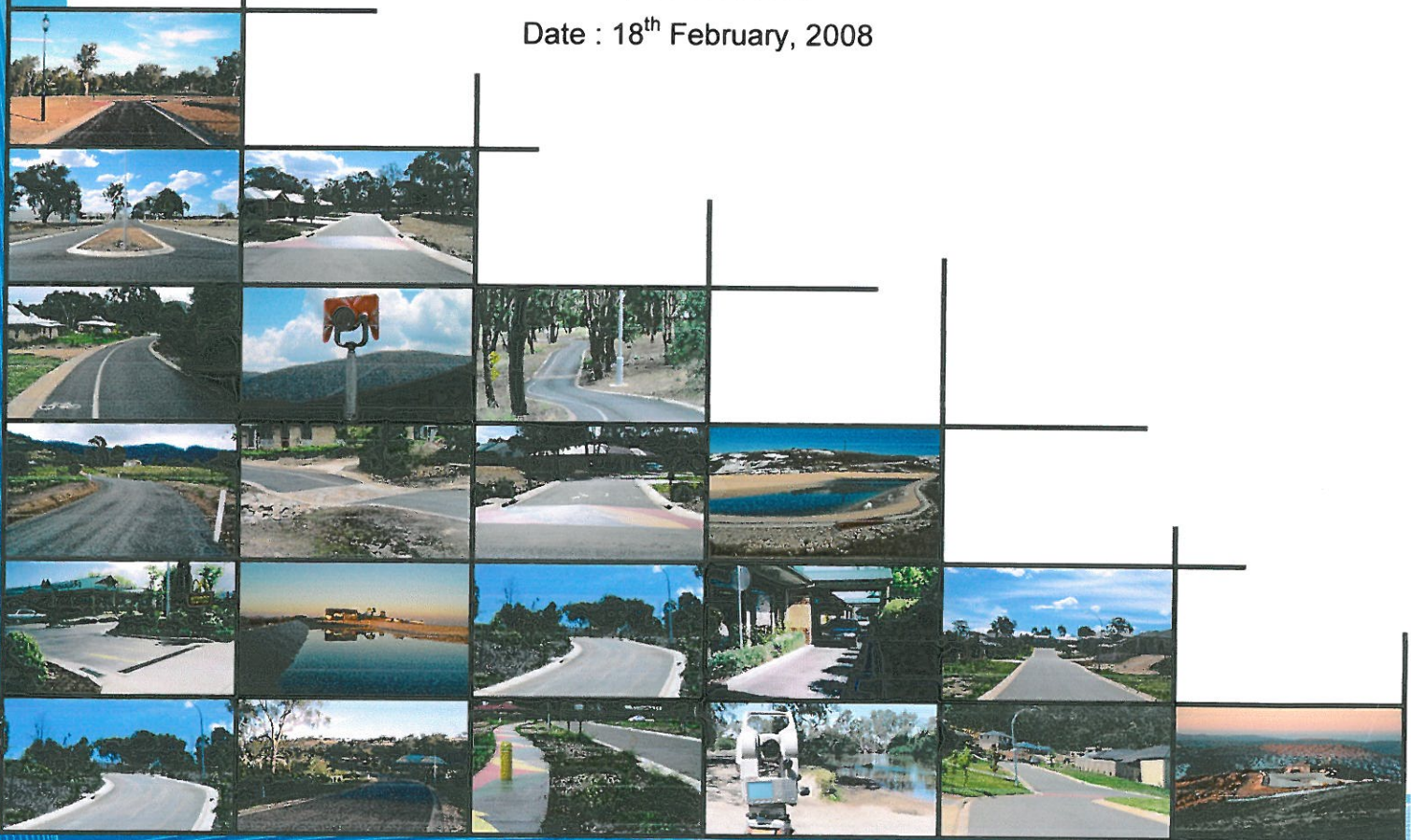
Residential 1 Development Plan

Planning Permits No. TP 0700286 and TP0700425

Murray Valley Highway - Yarrawonga

Project no: 61777

Date : 18th February, 2008



**RESIDENTIAL 1 DEVELOPMENT PLAN
PROPOSED SUBDIVISIONS
RYPAGE P/L AND BAPAUME PTY LTD
PLANNING PERMIT APPLICATION NOS.TP0700286 and TP0700425**

In accordance with Moira Planning Scheme requirements for Schedule 4 to the Development Plan Overlay this plan has been prepared to provide an overview of the proposed developments and allows the adjoining owners the opportunity to make comment on the proposals prior to the submission of a formal Planning Permit.

THE SITES



Aerial photo shows the vacant area in the centre to be developed. Site 1 is the eastern section that extends from the end of the sealed service road. Site 2 is to the west and extends along the length of the sealed service road.

the lot owners entering into a Section 173 Agreement under the Planning and Environment Act 1987, which is binding agreement outlining the setback provision and being formally registered on title once the plan of subdivision is registered.

4. Excess roof runoff and surface run off will be directed towards the lake and intercepted by absorption trenches to be constructed on each lot. These trenches will then drain into a pipeline to be constructed at the rear of all the lots with a single outlet proposed to be directed into the lake in accordance with GMW approval and council's specifications and requirements.

See **Stormwater Management Plan** shown as **Annexure 4** which has been prepared for the site in accordance with the principles outlined in *Urban Stormwater Best Practice Environmental Management Guidelines*. The Stormwater Water Management Plan shows details of the proposed bioretention system for each lot and includes MUSIC modelling of the data to demonstrate that the development can meet post construction objectives.

5. The owners have advised that the land has been used for grazing and agricultural purposes over a long period of time and that it is their belief that there is no soil contamination on the subject land. An Environmental Site Assessment dated 26th June, 2007 conducted by CivilTest Albury Wodonga over 50% of the site and the results shown as **Annexure 1** attached to this report, has substantiated this.
6. A building setback of 20 metres from the Murray Valley Highway have been adopted and shown on the plan of proposed subdivision. The setback will be achieved by lot owners entering into a Section 173 Agreement under the Planning and Environment Act 1987, which is binding agreement outlining the setback provision and being formally registered on title once the plan of subdivision is registered.
7. There is no physical public access along the lake foreshore due the existing aquatic vegetation and willow trees that not only act as a deterrent but also prevent any soil erosion from occurring. Any future development along the foreshore will be in accordance with council's Lake Mulwala Foreshore Master Plan that is currently being prepared by Consultants engaged by council to undertake the work.
8. Written confirmation is provided from North East Water Authority that reticulated sewer and water is available to and can be connected to each lot for **Site 1**, at the cost of the landowner shown as **Annexure 2** attached and dated 22 February, 2007. Three lots on **Site 2** are already connected to reticulated sewer and water in accordance with the original design which has now been amended to include a further two lots. It is proposed that two additional connections will now be provided. See written confirmation from North East Water in relation to **Site 2**
9. The Consultants preparing the Lake Mulwala Foreshore Master Plan do not consider a road fronting Lake Mulwala in this vicinity to be appropriate. The interface with Lake Mulwala and the subject land will therefore remain the same.
10. There is no public access to the lake from these sites to be maintained.
11. It is not proposed that the subdivisions will be staged.

12. The lots will be fully serviced in accordance with North East Water Authority Guidelines and connected to the existing services running parallel to the Murray Valley Highway.
13. A sealed one way service road accessed off the Murray Valley Highway east of Buchanans Road and extending along the full frontage of **Site 2** already exists. It is proposed to extend this existing service road to link up with the existing service road that adjoins **Site 1** on the east in accordance with VicRoads requirements. See site plan and VicRoads **Annexure 5**

The impact on the surrounding road system will be approximately 10 additional car movements per lot per day.
14. The design and lot density for these sites is similar to the land adjoining to the east and other subdivisions located on the lake further west of the subject site. There is a demand for larger lots in the vicinity in accordance with zone requirements. These two sites provide a variety of sizes given the restriction in terms of the zone overlays.
15. The scale and location of the development is not suited to any further direct dedication of land for open space or other community infrastructure. An open space contribution of 5% of the land value is required under Clause 52 of the Moira Planning Scheme in relation to Site 1. The contributions made for this development, together with the resulting increased rate base, will enable Council to cater for the increased need for open space and recreation facilities in accordance with Council's plan. The sites are located approximately 450 metres west of an existing reserve for recreation purposes located on the Lake Mulwala foreshore accessed from the Murray Valley Highway and on the existing walking and cycle track.
16. The environmental impact on the lake relates to water quality of the lake, scenic views to and from the lake and preservation of the aquatic vegetation along the foreshore. The past land use of the site has been for agricultural and so there are no known sites of flora or fauna significance or archaeological significance on the subject lands. All stormwater runoff will be retained and treated on site for both proposed developments. The appropriate siting and set back provisions for future dwellings will preserve the scenic quality to and from the lake and ensure that all buildings do not encroach on the vegetated areas close to the foreshore. See **Annexure 3 - Flora and Fauna Assessment December, 2007 – Glenda Datson.**
17. The existing service road is accessed east of the Buchanans Road Murray Valley Highway intersection adjacent to the eastern boundary of Lot 3 PS 4069886 (the motel) and has been extended to the common boundary between **Sites 1 and 2**. It is proposed to further extend this road to the existing entrance from the Murray Valley Highway opposite Lot 1 on PS345996 to provide access to the proposed lots in the subdivision of **Site 1** and through access for both sites. Safe access to the Murray Valley Highway will be achieved through the upgrading of the entry and exit points of the existing service roads in accordance with Austroads Guide to Traffic Engineering Practice and VicRoads requirements and specifications as shown on the plan of proposed subdivision and VicRoads **Annexure 5**. The upgrades will be a joint project at the applicant's expense.

ANNEXURES

- 1. Environmental Site Assessment – CivilTest Albury Wodonga**
- 2. North East Water requirements – Site 1 and Site 2**
- 3. Flora and Fauna Assessment December, 2007 – Glenda Datson**
- 4. Stormwater Management Plan**
- 5. Diagrams showing VicRoads Requirements and Confirmation letter to Approval in Principle from VicRoads dated 30th January, 2008**

ANNEXURE 1

CIVIL TEST ALBURY WODONGA

Form CT13.

SOILS ENGINEERING LABORATORY

Borehole/Trench No: 1

Page: 1 of 1

INVESTIGATION LOG REPORT NO: 07CT377

Client: **Esler & Associates**

Date Logged: **21/05/07**

Investigation For: **Site Investigation**

Logged By: **JH & AB**

Location: **DP04 Murray Valley Highway, Yarrawonga**

Checked By: **PCV**

Borehole/Trench Location: **21m from front, 11m from LHS**

Date: **23/05/07**

Method: Hand Auger Backhoe Drill Rig Other

Alignment: **90°**

DEPTH mm	MATERIAL DESCRIPTION & CLASSIFICATION	MOISTURE CONDITION	CONSIST. DENSITY INDEX	CBR *	SAMPLE TAKEN	REMARKS
300	Silty CLAY, dark brown Fine to medium grained Low plasticity	Moist	Firm		D=0 -500	
	Silty CLAY, orange & red-brown Fine to medium grained Medium plasticity				D=500 -1000	
600	Silty CLAY, red-brown Fine to medium grained Medium to high plasticity	Dry	Stiff			
1600			Firm			
2000	Borehole terminated at 2.0m					

ISS - Shrink Swell Index

LL - Liquid Limit

LS - Linear Shrinkage

DRAINAGE:

-General Good Fair Poor Free Water Swampy Subject to Flooding

TOPOGRAPHY:

-General Flat Undulating Hilly

-Local Flat Moderate Slope Dip Valley High Flat Low Flat Crest Steep Slope

---W---

- Water Level

D

-Disturbed Sample

<-----

- Water Inflow

U50

-Undisturbed Sample 50mm dia

MD

- Medium Dense

CBR*

-9kg Scala Dynamic Cone

Vst

- Very Stiff

MC

-Moisture Content Taken

CIVIL TEST ALBURY WODONGA

Form CT132

SOILS ENGINEERING LABORATORY

Borehole/Trench No: 2

Page : 1 of 1

INVESTIGATION LOG REPORT NO: 07CT377

Client: **Esler & Associates**

Date Logged: **21/05/07**

Investigation For: **Site Investigation**

Logged By: **JH & AB**

Location: **DP04 Murray Valley Highway, Yarrawonga**

Checked By: **PCV**

Borehole/Trench Location: **29m from front, 15m from LHS**

Date: **23/05/07**

Method: Hand Auger Backhoe Drill Rig Other

Alignment: **90°**

DEPTH mm	MATERIAL DESCRIPTION & CLASSIFICATION	MOISTURE CONDITION	CONSIST. DENSITY INDEX	CBR *	SAMPLE TAKEN	REMARKS
100	Silty CLAY, dark brown, fine to medium grained, Low plasticity	Moist	Firm		D=0	
	Silty CLAY, red-brown Fine to medium grained Medium plasticity				-500	
500	Silty CLAY, orange & red-brown Fine to medium grained, medium plasticity				D=500	
700	Silty CLAY, red & grey-brown Fine to medium grained High plasticity				-1000	
			Stiff			
1300	Silty CLAY, brown Fine to medium grained Medium plasticity Trace gravel to 10mm		Firm			
2000	Borehole terminated at 2.0m					

ISS - Shrink Swell Index

LL - Liquid Limit

LS - Linear Shrinkage

DRAINAGE: -General Good Fair Poor Free Water Swampy Subject to Flooding

TOPOGRAPHY:

-General Flat Undulating Hilly

-Local Flat Moderate Slope Dip Valley High Flat Low Flat Crest Steep Slope

----W---- - Water Level

<----- - Water Inflow

MD - Medium Dense

Vst - Very Stiff

D

U50

CBR*

MC

-Disturbed Sample

-Undisturbed Sample 50mm dia

-9kg Scala Dynamic Cone

-Moisture Content Taken

CIVIL TEST ALBURY WODONGA

Form CT132

SOILS ENGINEERING LABORATORY

Borehole/Trench No: 3

Page: 1 of 1

INVESTIGATION LOG REPORT NO: 07CT377

Client: **Esler & Associates**

Date Logged: **21/05/07**

Investigation For: **Site Investigation**

Logged By: **JH & AB**

Location: **DP04 Murray Valley Highway, Yarrawonga**

Checked By: **PCV**

Borehole/Trench Location: **40m from front, 15m from LHS**

Date: **23/05/07**

Method: Hand Auger Backhoe Drill Rig Other

Alignment: **90°**

DEPTH mm	MATERIAL DESCRIPTION & CLASSIFICATION	MOISTURE CONDITION	CONSIST. DENSITY INDEX	CBR *	SAMPLE TAKEN	REMARKS
100	Silty CLAY, dark brown, fine to medium grained, Low plasticity	Moist	Firm		D=0	
	Silty CLAY, red-brown Fine to medium grained Medium plasticity				-500	
400	Silty CLAY, orange & red-brown Fine to medium grained, medium plasticity					
600	Silty CLAY, red & grey-brown Fine to medium grained High plasticity				Stiff	D=500 -1000
1400	Silty CLAY, red-brown Fine to medium grained Medium plasticity Trace gravel to 10mm		Firm			
2000	Borehole terminated at 2.0m					

ISS - Shrink Swell Index

LL - Liquid Limit

LS - Linear Shrinkage

DRAINAGE: -General Good Fair Poor Free Water Swampy Subject to Flooding

TOPOGRAPHY:

-General Flat Undulating Hilly

-Local Flat Moderate Slope Dip Valley High Flat Low Flat Crest Steep Slope

---W--- - Water Level

<----- - Water Inflow

MD - Medium Dense

Vst - Very Stiff

D

U50

CBR*

MC

-Disturbed Sample

-Undisturbed Sample 50mm dia

-9kg Scala Dynamic Cone

-Moisture Content Taken

CIVIL TEST ALBURY WODONGA

Form CT13:

SOILS ENGINEERING LABORATORY

Borehole/Trench No: 4

Page : 1 of 1

INVESTIGATION LOG REPORT NO: 07CT377

Client: **Esler & Associates**

Date Logged: **21/05/07**

Investigation For: **Site Investigation**

Logged By: **JH & AB**

Location: **DP04 Murray Valley Highway, Yarrawonga**

Checked By: **PCV**

Borehole/Trench Location: **44m from front, 15m from LHS**

Date: **23/05/07**

Method: Hand Auger Backhoe Drill Rig Other

Alignment: **90°**

DEPTH mm	MATERIAL DESCRIPTION & CLASSIFICATION	MOISTURE CONDITION	CONSIST. DENSITY INDEX	CBR *	SAMPLE TAKEN	REMARKS
400	Silty CLAY, dark brown Fine to medium grained low plasticity	Moist	Firm		D=0 -500	
600	Silty CLAY, red-brown Fine to medium grained, medium plasticity					D=500 -1000
1100	Silty CLAY, red & grey-brown Fine to medium grained High plasticity		Stiff			
2000	Silty CLAY, red & grey-brown Fine to medium grained High plasticity Trace gravel to 10mm		Firm			
	Borehole terminated at 2.0m					

ISS - Shrink Swell Index

LL - Liquid Limit

LS - Linear Shrinkage

DRAINAGE: -General Good Fair Poor Free Water Swampy Subject to Flooding

TOPOGRAPHY:

-General Flat Undulating Hilly

-Local Flat Moderate Slope Dip Valley High Flat Low Flat Crest Steep Slope

----W---- - Water Level

<----- - Water Inflow

MD - Medium Dense

Vst - Very Stiff

D - Disturbed Sample

U50 - Undisturbed Sample 50mm dia

CBR* - 9kg Scala Dynamic Cone

MC - Moisture Content Taken

CIVIL TEST ALBURY WODONGA

Form CT132

SOILS ENGINEERING LABORATORY

Borehole/Trench No: 5

Page : 1 of 1

INVESTIGATION LOG REPORT NO: 07CT377

Client: **Esler & Associates**

Date Logged: **21/05/07**

Investigation For: **Site Investigation**

Logged By: **JH & AB**

Location: **DP04 Murray Valley Highway, Yarrawonga**

Checked By: **PCV**

Borehole/Trench Location: **50m from front, 15m from LHS**

Date: **23/05/07**

Method: Hand Auger Backhoe Drill Rig Other

Alignment: **90°**

DEPTH mm	MATERIAL DESCRIPTION & CLASSIFICATION	MOISTURE CONDITION	CONSIST. DENSITY INDEX	CBR *	SAMPLE TAKEN	REMARKS
500	Silty CLAY, dark brown Fine to medium grained Low plasticity	Moist	Firm		D=0 -500	
900	Silty CLAY, red & grey-brown Fine to medium grained High plasticity		Stiff		D=500 -1000	
2000	Silty CLAY, red & grey- light brown Fine to medium grained High plasticity Trace gravel to 10mm		Firm			
	Borehole terminated at 2.0m					

ISS - Shrink Swell Index

LL - Liquid Limit

LS - Linear Shrinkage

DRAINAGE: -General Good Fair Poor Free Water Swampy Subject to Flooding

TOPOGRAPHY:

-General Flat Undulating Hilly

-Local Flat Moderate Slope Dip Valley High Flat Low Flat Crest Steep Slope

----W---- - Water Level

D -Disturbed Sample

<----- - Water Inflow

U50 -Undisturbed Sample 50mm dia

MD - Medium Dense

CBR* -9kg Scala Dynamic Cone

Vst - Very Stiff

MC -Moisture Content Taken

APPENDIX B

Client: Civil Test. Albury Wodonga

Address: 16 Kane Street
WODONGA NSW 3689
AUSTRALIA

Attention: Peter Vella

Page 1 of 4

Certificate of Analysis

Batch No: 07-06045

Final Report

Report Number: 7767



Ecowise Environmental
68 Ricketts Rd
Mt Waverley VIC 3149
Tel: 03 9550 1000
Fax: 03 9543 7372

Date Issued: 06-Jun-2007

Date Sampled: 24-May-2007

Date Received: 29-May-2007

PO No: Not Available

Client Program Ref: 07CT377

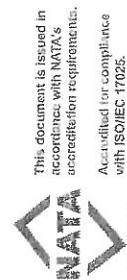
Ecowise Program Ref: CTALBMISC

The sample(s) referred to in this report were analysed by the following method(s):

Analysis	Method	Laboratory	Analysis	Method	Laboratory
Cyanide	APHA 4120 B	Melbourne	WAD CN	APHA 4500-CN,I	Melbourne
Cr 3+	WSL 112	Melbourne	Cr 6+	WSL 112	Melbourne
MS Total Metals	WSL 032	Melbourne	OCP	WSL 8080B	Melbourne
OES Cations	WSL 023A	Melbourne	PAH	WSL 8100B	Melbourne
PCB	WSL 8080B	Melbourne	SO4	WSL 109	Melbourne
Total Phenols	APHA 4120 B	Melbourne	TPH	WSL 030	Melbourne

Principal Contact for this Report:

Vic Willms
Manager Chemistry



The results in this report were authorised by:

Name
Hao Zhang
John Levvey
Samantha Smith

Title
Principal Organic Chemist
Principal Trace Metals Chemist
Client Manager

Client: Civil Test Albury Wodonga

Client Program Ref: 07CT377

Batch No: 07-06045

Report Number: 7767

EcoWise Program Ref: CTALBMISC

Date Issued: 06-Jun-2007



Soil Analysis

Sample	Sampled Date	Your Ref	Analysis:		WAD CN	Total Phenols	SO4	Cr3+	Cr6+	Cr6+
			Component:	Units:						
1177020	24-05-07	07CT377 #1	0.5-1.0m	Cyanide	WAD CN	SO4	Cr3+	Cr6+	Cr6+	Chromium 6+
				Cn	mg/kg	mg/kg	CR3+	mg/kg	mg/kg	mg/kg
1177021	24-05-07	07CT377 #2	0-0.5m	<5	<5	34	38	<0.1	<0.1	0
1177022	24-05-07	07CT377 #3	0.5-1.0m	<5	<5	13	27	<0.1	<0.1	0
1177023	24-05-07	07CT377 #4	0-0.5m	<5	<5	19	41	<0.1	<0.1	0
1177024	24-05-07	07CT377 #5	0-0.5m	<5	<5	21	22	<0.1	<0.1	0
						25	18	<0.1	<0.1	0

Soil Metals

Sample	Sampled Date	Your Ref	Analysis:		MS Total Metals		MS Total Metals		MS Total Metals		MS Total Metals		MS Total Metals	
			Component:	Units:	As	Ba	Be	B	Cd	Cr	Co	Cu	Pb	
1177020	24-05-07	07CT377 #1	0.5-1.0m	9	100	<5	<5	<0.2	38	15	22	22	22	22
1177021	24-05-07	07CT377 #2	0-0.5m	5	81	<5	<5	<0.2	27	7	11	17	17	17
1177022	24-05-07	07CT377 #3	0.5-1.0m	11	100	<5	<5	<0.2	41	32	22	24	24	24
1177023	24-05-07	07CT377 #4	0-0.5m	<5	55	<5	<5	<0.2	22	5	9	13	13	13
1177024	24-05-07	07CT377 #5	0-0.5m	<5	62	<5	<5	<0.2	18	<5	8	11	11	11

Soil Metals

Sample	Sampled Date	Your Ref	Analysis:		MS Total Metals		MS Total Metals		MS Total Metals	
			Component:	Units:	Mn	Hg	Ni	V	Zn	
1177020	24-05-07	07CT377 #1	0.5-1.0m	500	<0.05	20	54	43	43	43
1177021	24-05-07	07CT377 #2	0-0.5m	160	<0.05	15	43	23	23	23
1177022	24-05-07	07CT377 #3	0.5-1.0m	470	<0.05	26	61	44	44	44
1177023	24-05-07	07CT377 #4	0-0.5m	270	<0.05	10	31	23	23	23
1177024	24-05-07	07CT377 #5	0-0.5m	320	<0.05	9	26	20	20	20

Soil Metals - OES

Sample	Sampled Date	Your Ref	Analysis:		OES Cations		OES Cations	
			Component:	Units:	P	S		
1177020	24-05-07	07CT377 #1	0.5-1.0m	260	32	32	32	
1177021	24-05-07	07CT377 #2	0-0.5m	150	52	52	52	
1177022	24-05-07	07CT377 #3	0.5-1.0m	210	43	43	43	
1177023	24-05-07	07CT377 #4	0-0.5m	150	63	63	63	
1177024	24-05-07	07CT377 #5	0-0.5m	190	95	95	95	

Batch No: 07-06045

Date Issued: 06-Jun-2007

Client: Civil Test Albury Wodonga

Report Number: 7767

Client Program Ref: 07CT377

Ecowise Program Ref: CTALBMISC



Soil TPH

Sample	Sampled Date	Your Ref	Analysis: Component: Units:	TPH TPHC6+ mg/kg	TPH TPHC10+ mg/kg	TPH TPHC15+ mg/kg	TPH TPHC29+ mg/kg
1177020	24-05-07	07CT377 #1	0.5-1.0m	<20	<20	<50	<50
1177021	24-05-07	07CT377 #2	0-0.5m	<20	<20	<50	<50
1177022	24-05-07	07CT377 #3	0.5-1.0m	<20	<20	<50	<50
1177023	24-05-07	07CT377 #4	0-0.5m	<20	<20	<50	<50
1177024	24-05-07	07CT377 #5	0-0.5m	<20	<20	<50	<50

Soil PAH

Sample	Sampled Date	Your Ref	Analysis: Component: Units:	PAH ACE mg/kg	PAH ACY mg/kg	PAH ANT mg/kg	PAH BAA mg/kg	PAH BAP mg/kg	PAH BBF mg/kg	PAH BGP mg/kg	PAH BKF mg/kg	PAH CHR mg/kg
1177020	24-05-07	07CT377 #1	0.5-1.0m	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1177021	24-05-07	07CT377 #2	0-0.5m	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1177022	24-05-07	07CT377 #3	0.5-1.0m	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1177023	24-05-07	07CT377 #4	0-0.5m	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1177024	24-05-07	07CT377 #5	0-0.5m	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Soil PAH

Sample	Sampled Date	Your Ref	Analysis: Component: Units:	PAH DBA mg/kg	PAH FLA mg/kg	PAH FLU mg/kg	PAH IPY mg/kg	PAH NAP mg/kg	PAH PHE mg/kg	PAH PYR mg/kg	PAH TOTPAHs mg/kg
1177020	24-05-07	07CT377 #1	0.5-1.0m	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
1177021	24-05-07	07CT377 #2	0-0.5m	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
1177022	24-05-07	07CT377 #3	0.5-1.0m	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
1177023	24-05-07	07CT377 #4	0-0.5m	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
1177024	24-05-07	07CT377 #5	0-0.5m	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND

Soil O.C. Pesticides

Sample	Sampled Date	Your Ref	Analysis: Component: Units:	OCp ABHC mg/kg	OCp AENDOSUL mg/kg	OCp ALDR mg/kg	OCp BBHC mg/kg	OCp BENDOSUL mg/kg	OCp CHLOR mg/kg	OCp DBHC mg/kg	OCp DDD mg/kg	OCp DDE mg/kg
1177020	24-05-07	07CT377 #1	0.5-1.0m	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1177021	24-05-07	07CT377 #2	0-0.5m	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1177022	24-05-07	07CT377 #3	0.5-1.0m	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1177023	24-05-07	07CT377 #4	0-0.5m	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1177024	24-05-07	07CT377 #5	0-0.5m	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Batch No: 07-06045

Date Issued: 06-Jun-2007

Client: Civil Test Albury Wodonga

Report Number: 7767

Client Program Ref: 07CT377

Ecowise Program Ref: CTALBMISC



Soil O.C. Pesticides

Sample	Sampled Date	Your Ref	Analysis:		OCPP		OCPP		OCPP		OCPP		OCPP		OCPP		OCPP	
			Sampled Date	Your Ref	DDT mg/kg	DIEL mg/kg	ENDOS mg/kg	ENDR mg/kg	ENDRALD mg/kg	ENDRKET mg/kg	HCB mg/kg	HEPEP mg/kg	HEPT mg/kg					
1177020	24-05-07	07CT377 #1	0.5-1.0m		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1177021	24-05-07	07CT377 #2	0-0.5m		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1177022	24-05-07	07CT377 #3	0.5-1.0m		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1177023	24-05-07	07CT377 #4	0-0.5m		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1177024	24-05-07	07CT377 #5	0-0.5m		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Soil O.C. Pesticides

Sample	Sampled Date	Your Ref	Analysis:		OCPP	
			Sampled Date	Your Ref	LIND mg/kg	METHOX mg/kg
1177020	24-05-07	07CT377 #1	0.5-1.0m		<0.05	<0.05
1177021	24-05-07	07CT377 #2	0-0.5m		<0.05	<0.05
1177022	24-05-07	07CT377 #3	0.5-1.0m		<0.05	<0.05
1177023	24-05-07	07CT377 #4	0-0.5m		<0.05	<0.05
1177024	24-05-07	07CT377 #5	0-0.5m		<0.05	<0.05

Soil PCBs

Sample	Sampled Date	Your Ref	Analysis:		PCB		PCB		PCB		PCB		PCB		PCB	
			Sampled Date	Your Ref	1016ARCL mg/kg	1221ARCL mg/kg	1232ARCL mg/kg	1242ARCL mg/kg	1248ARCL mg/kg	1254ARCL mg/kg	1260ARCL mg/kg	TOTPCB mg/kg				
1177020	24-05-07	07CT377 #1	0.5-1.0m		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
1177021	24-05-07	07CT377 #2	0-0.5m		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
1177022	24-05-07	07CT377 #3	0.5-1.0m		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
1177023	24-05-07	07CT377 #4	0-0.5m		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
1177024	24-05-07	07CT377 #5	0-0.5m		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND

ANNEXURE 2

To: aon@eslers.com.au
Subject: 8280 Murray Valley Hwy. Bathumi
From: cmaher@nerwa.vic.gov.au
Date sent: Thu, 22 Feb 2007 15:50:13 +1100

Tony

As installed details as requested.

The developer will need to supply individual connections to the 80mm PVC rising main, with each property owner supply and installing a packaged pump station. Our guidelines are attached.

Water for each lot to be tapped off the existing 150PVC.

Regards

Chris Maher
North East Water
Development Co ordinator
(02) 60220586
0419 350 987
Fax (02) 60247454

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify postmaster@nerwa.vic.gov.au or telephone +61 1300 361 622



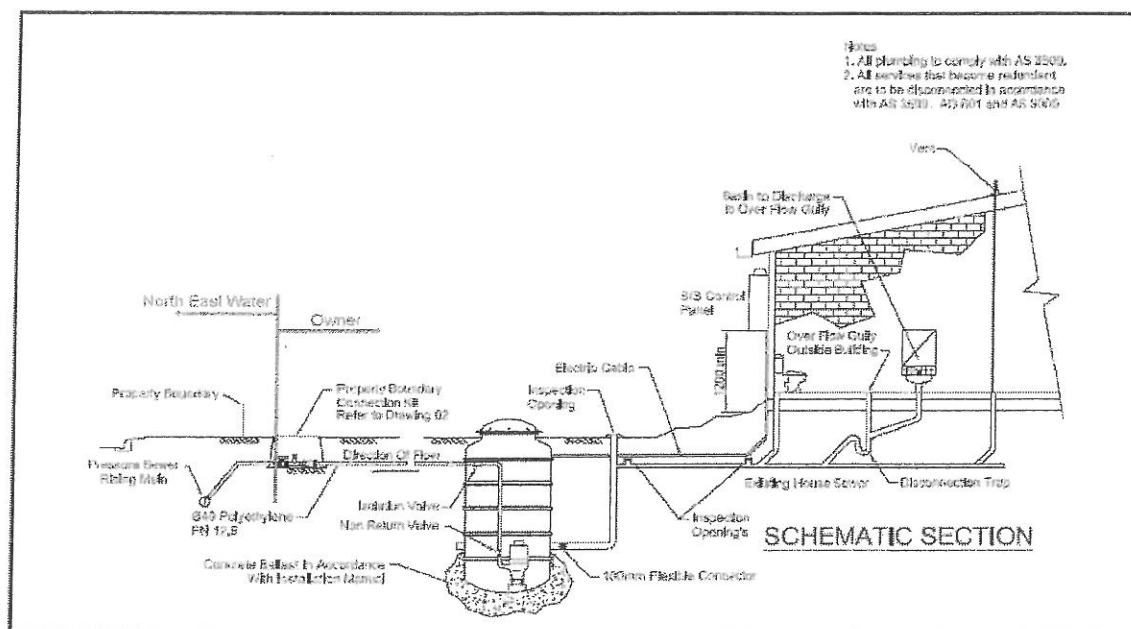
NORTH EAST WATER

Low Pressure Sewerage System Installation Guidelines

Prepared by John McDiarmid
Plumbing and Minor Trade Waste Co-Ordinator

DOCUMENT INTENT

The intent of this document is to provide North East Water's requirements and guidelines for the supply, installation and connection to the Authority's sewerage system of a Residential Low Pressure Sewerage System, to property owners and plumbing contractors. Low Pressure Sewerage systems are a cost effective system where conventional gravity systems are not viable. These systems are a joint venture between North East Water and the property owner, where as North East Water is responsible for the Low Pressure sewerage system in the road reserve and connection point within the property. The property owner is responsible for all of the system inside the property up to and including the property boundary kit. See diagram:



1. General

1.1 The Pressure Sewerage System all must consist of:

- Proprietary Brand Packaged Pump Unit.
- Conventional gravity sewer system from the dwelling to the pump unit.
- Delivery line from the pump unit to the connection point that has been provided by the Authority.

1.2 Prior to the Authority issuing a Consent to Connect Notice, the owner/agent must lodge with the Authority for approval.

- A statement, confirming that the following are available if requested; a complete set of the manufactures specifications, detailing installation requirements, pump performance and documentation of compliance with the relevant Codes of Australian Standards.

- A copy of the site plan lodged for building approval and endorsed by the property owner showing the proposed location of the pump station and delivery line.
 - If requested, documentation from the supplier/manufacturer of the performance and maintenance history of the pump unit used in similar situations.
 - A signed agreement for connection to low pressure sewer main
- 1.3 The complete installation must comply with the requirements of North East Water, Manufacturers recommendations and the relevant Australian Standards or Codes of Practice.
- 1.4 A condition of the Consent to Connect Notice will include the lodgment of as constructed plans of the complete installation with the Authority.
- 1.5 Plumbing contractors licensed with the Plumbing Industry Commission of Victoria must carry out the installation.

2. Pump Well

- 2.1 Must be manufactured to comply with the relevant Australian Standard particular to the material used for construction and capable of handling raw sewage.
- 2.2 Must have a minimum holding capacity above the high level alarm of either a volume equal to 24 hours discharge OR 750 litres, whichever is the greatest with a minimum of 1000 litres holding capacity
- 2.3 Must be installed and provided with anti buoyancy ballast material in accordance with the manufactures recommendations.
- 2.4 Must be located in a non-trafficable area with reasonable access for maintenance purposes.
- 2.5 Must be installed to prevent entry of ground water into the system.

3. Pump

- 3.1 Must be a submersible or dry well positive displacement, semi positive displacement or progressing cavity grinder pump.
- 3.2 The pump performance curve shall operate within the parameters of 0.40 litres/sec @ 50 metre head to 0.80 litres/sec @ 10 meter head to ensure scouring velocity through the pipe to eliminate settling out of solids.
- 3.3 Must be capable of pumping raw sewerage.
- 3.4 The outlet of the pump must be fitted with a non-return valve, isolating valve and a quick coupling for disconnection. All components must be contained within the pump well.
- 3.5 Submersible pumps must be fitted with a lifting chain and or guide rails.
- 3.6 The disconnection and removal of the pump must be possible without the need for confined space entry.

Please Quote Our Reference: SYA0335

Consumer Number:

Your Ref: TP0700425

Enquiries: Rebecca Randall

Thursday, 6 September 2007

PO Box 889
Wodonga, Victoria 3689

Level 1, Hovell Street
Wodonga, Victoria 3690

Telephone: 1300 361 622
Accounts: 1300 361 633
Facsimile: (02) 6024 7454



NORTH EAST WATER

Shelly Welsh
Moira Shire
PO Box 578
COBRAM VIC 3643

Dear Shelly,

Re: Granting of a Planning Permit application subject to Sewerage and Water supply conditions

PROPERTY DESCRIPTION: 8290 Murray Valley Hwy, Yarrawonga - Lot Title Subdivision

APPLICANT/OWNER: Bapaume Pty Ltd / Barden Consulting Engineers P/L

PLAN NO.: -

COUNCIL REF: TP0700425

I refer to your letter dated 29/08/2007 requesting comments in respect to the above Town Planning Application.

The North East Region Water Corporation has investigated the application forwarded under Section 55 of the Planning and Environment Act 1987 and considers that both water supply and sewerage facilities should be provided to the proposed subdivision.

In accordance with Section 56 (i) (b) of the Planning and Environment Act 1987, the Corporation does not object to the granting of a permit, if it is subject to the following conditions: -

- (i) Payment to the North East Region Water Corporation of a contribution of money (Headworks) towards the water supply system supplying the area as determined by North East Water's policy for development charges.
- (ii) That the owner/applicant enters into an agreement with North East Water to construct all necessary works to provide water supply to serve all lots of the proposed subdivision, at the applicant's cost, and in accordance with the Corporation's specifications and requirements.



Certified
Environmental
Management
ISO 14001:2004
and ISO 14001:2004

*"North East Region Water Authority now known as North East Region Water Corporation
in accordance with amendments to Part 6 of the Water Act 1989"*

SERVICING Beechworth, Benalla, Bright, Corryong, Mt. Beauty, Myrtleford, Rutherglen,
Tallangatta, Wangaratta, Wodonga, Yarrawonga and Districts



Occupational
Health
and Safety
SAFETY, HEALTH AND WELFARE
2001 WHS and OHS Act

- (iii) Payment to North East Region Water Corporation of a contribution of money (Headworks) towards the Corporation's sewers and disposal systems serving the area as determined by North East Water's policy for development charges.
- (iv) That the owner/applicant enters into an agreement with North East Water to construct all necessary works to provide sewerage to serve all lots of the proposed subdivision, at the applicant's cost, and in accordance with the Corporation's specifications and requirements.
- (v) Provision of easements in favour of the North East Region Water Corporation over all existing and proposed sewer mains located within the proposed subdivision.
- (vi) Ensure that any private water services do not traverse property boundaries and are supplied independently from an approved point of supply.
- (vii) The plan of subdivision submitted for certification must be referred to the Corporation in accordance with Section 8 of the Subdivision Act 1988.
- (viii) Prior to the issue of a Statement of Compliance under the Subdivision Act 1988 consent must be obtained from North East Region Water Corporation.

Regards,



Per
John Morris
Manager Business Services

ANNEXURE 3



Glenda Datson
Ass. Dip. Hort.
M.A.I.H.

Environmental
& Horticultural
Consultant

4 Wickham Court
Baranduda Vic 3691

Phone:
(02) 6020 8104
Mob: 0428 401 090
E-mail:
gdatson@bigpond.net.au

FLORA AND FAUNA ASSESSMENT

PROPOSED SUBDIVISIONS RYPAGE P/L & BAPAUME PTY LTD

MURRAY VALLEY HIGHWAY

YARRAWONGA

December 2007

Introduction

Glenda Datson was contracted to undertake a flora and fauna assessment of two adjacent sites on the Murray Valley Highway, Yarrawonga, adjoining the foreshore of Lake Mulwala, for the purpose of a planning permits. This assessment relates to Planning Permit Application Nos. TP0700286 and TPO0700425.

Methodology

The sites were traversed on foot, using the 'random meander' methodology, and aided by the use of binoculars. The survey was undertaken on 4th December, 2007 in warm, sunny conditions, the day after a heavy storm. Searches were conducted for both reptiles and amphibians under logs and other ground substrate wherever possible. Opportunistic diurnal sightings of birds were recorded while undertaking other activities on site. A search was made for habitat for threatened species and others which might occur in the vicinity. As well, the sites were searched for any arboreal connectivity between trees on these sites and adjoining areas to determine whether there was potential for arboreal mammals, e.g. the threatened Squirrel Gliders, to move through the area. The Native Vegetation Guide for Assessment of Referred Planning Permit Applications was also referred to.

Constraints

The sites had recently been slashed, making identification of some flora species difficult. Also, some flora and fauna species which may be present during other seasons or which may utilize the site from time to time were not able to be identified.

Results

The sites are highly modified with all native tree and shrub cover having been cleared in the past for grazing or cropping. The ground layer is now dominated by introduced weeds. A list of species found is attached in Appendix 2. The vegetation on site cannot be categorized as Native Vegetation because: (a) there are no trees, and (b) the groundflora contains more than 75% weeds or non-native plants.

The Lake Mulwala foreshore lies within a few metres of the sites' northern boundaries. The fringing vegetation of the lake at this location is dominated by Common Reed, *Phragmites australis*, and has been overplanted with introduced Willows, mainly *Salix babylonica*. All willow species have been declared noxious weeds in Australia.

Very few birds were observed during the survey period. The subject sites provide little in the way of habitat for most species. Old stag trees (dead trees) have been knocked over and pushed into heaps where the Tiger or Red-bellied Black Snakes might shelter. Rabbit warrens were found at the northern boundary.

Photos of the site are included for reference at Appendix 1.

Conclusion

The sites can be categorized as treeless, degraded vegetation and are unlikely to provide habitat for any threatened species. They are also unlikely to provide quality habitat for most other native wildlife.

Appendix 1.



Subject sites (middle of photo)



View across subject sites



Lake Mulwala foreshore – native vegetation north of site boundaries

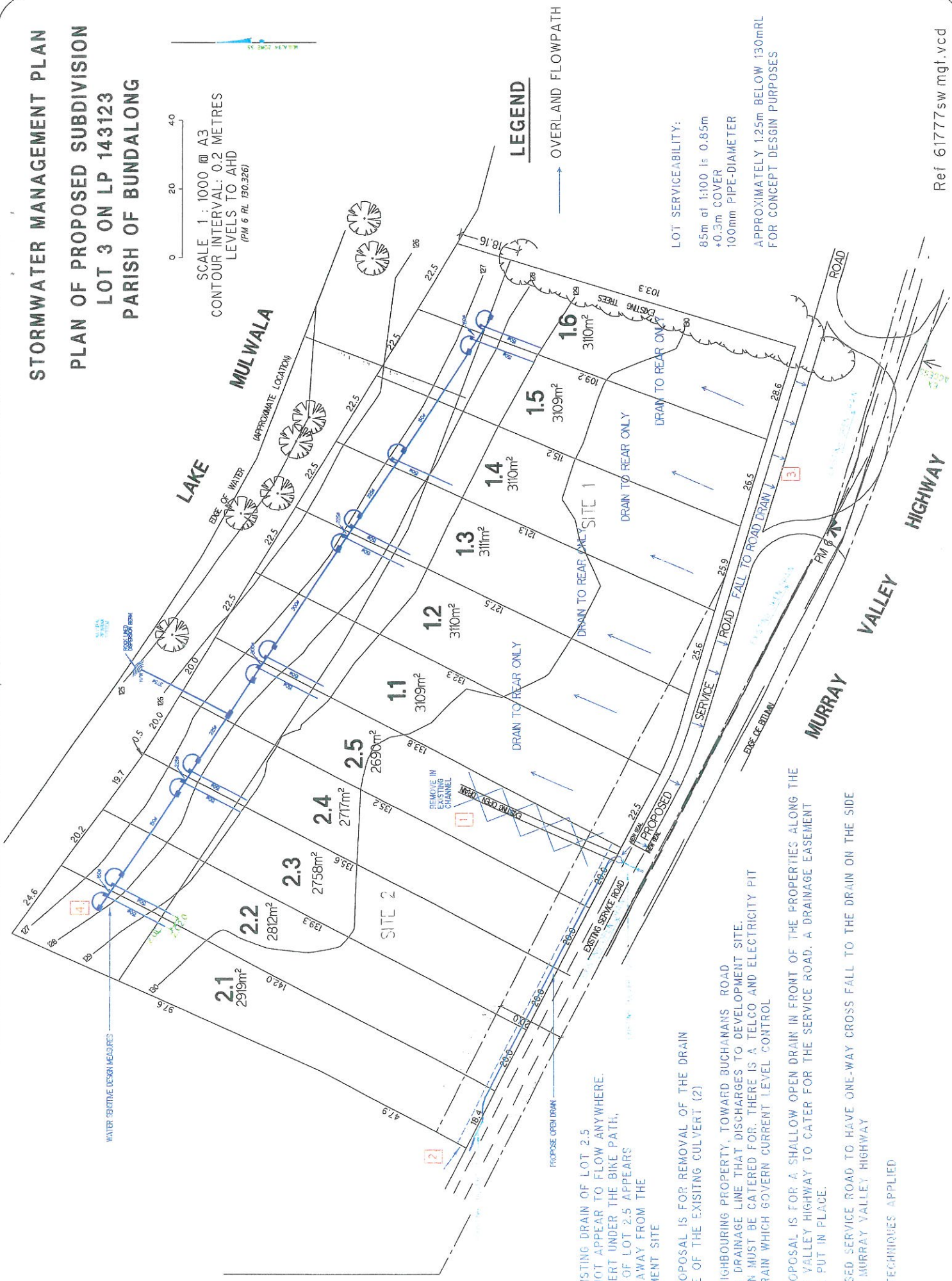
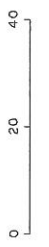
Appendix 2.

Common Name	Scientific Name
Flora:	
Cootamundra wattle*	<i>Acacia baileyana</i>
Wyalong wattle*	<i>Acacia cardiophylla</i>
Yellow burr weed*	<i>Amsinckia sp.</i>
Cape weed*	<i>Arctotheca calendula</i>
Wild Oats*	<i>Avena fatua</i>
Red-leg grass	<i>Bothriochloa macra</i>
Red Brome*	<i>Bromus rubens</i>
Sterile Brome*	<i>Bromus sterilis</i>
Windmill grass	<i>Chloris truncata</i>
Skeleton weed*	<i>Chondrilla juncea</i>
Spear Thistle*	<i>Cirsium vulgare</i>
Couch grass*	<i>Cynodon dactylon</i>
Umbrella sedge*	<i>Cyperus eragrostis</i>
Paterson's Curse*	<i>Echium plantagineum</i>
Barley grass*	<i>Hordeum leporinum</i>
Flat weed*	<i>Hypochoeris radicata</i>
Yellow Rush	<i>Juncus flavidus</i>
Prickly Lettuce*	<i>Lactuca serriola</i>
Mallow*	<i>Malva sp.</i>
Mallow*	<i>Malva sp.</i>
Paspalum*	<i>Paspalum dilatatum</i>
Kikuyu grass*	<i>Pennisetum clandestinum</i>
Lolium perenne*	<i>Perennial Ryegrass</i>
Toowoomba Canary grass*	<i>Phalaris aquatica</i>
Common Reed	<i>Phragmites australis</i>
Native Dock	<i>Rumex brownii</i>
Curled Dock*	<i>Rumex crispus</i>
Weeping Willow	<i>Salix babylonica</i>
Willow	<i>Salix sp.</i>
Black nightshade*	<i>Solanum nigrum</i>
Milk thistle*	<i>Sonchus oleraceus</i>
Strawberry Clover*	<i>Trifolium fragiferum</i>
Squirrel Tail Fescue*	<i>Vulpia bromoides</i>
Fauna:	
Yellow-rumped Thornbill	<i>Acanthiza chrysorrhoa</i>
Clamorous Reed Warbler	<i>Acrocephalus stentoreus</i>
Sulphur-crested Cockatoo	<i>Cacatua galerita</i>
Galah	<i>Cacatua roseicapilla</i>
Welcome Swallow	<i>Hirundo neoxena</i>
House Sparrow*	<i>Passer domesticus</i>
Willy Wagtail	<i>Rhipidura leucophrys</i>
European Rabbit*	<i>Oryctolagus cuniculus</i>

ANNEXURE 4

STORMWATER MANAGEMENT PLAN
PLAN OF PROPOSED SUBDIVISION
LOT 3 ON LP 143123
PARISH OF BUNDALONG

SCALE 1 : 1000 @ A3
 CONTOUR INTERVAL: 0.2 METRES
 LEVELS TO AHD
 (PM 6 RL 130.326)



LEGEND

OVERLAND FLOWPATH

LOT SERVICEABILITY:
 85m at 1:100 is 0.85m
 +0.3m COVER
 100mm PIPE-DIAMETER
 APPROXIMATELY 1.25m BELOW 130mRL
 FOR CONCEPT DESIGN PURPOSES

BUCHANAN'S ROAD

NOTES

1. THE EXISTING DRAIN OF LOT 2.5 IS DOES NOT APPEAR TO FLOW ANYWHERE. THE CULVERT UNDER THE BIKE PATH, IN FRONT OF LOT 2.5 APPEARS TO FALL AWAY FROM THE DEVELOPMENT SITE
2. THIS PROPOSAL IS FOR REMOVAL OF THE DRAIN AND USE OF THE EXISTING CULVERT (2)
3. THE NEIGHBOURING PROPERTY, TOWARD BUCHANAN'S ROAD FRONTS A DRAINAGE LINE THAT DISCHARGES TO DEVELOPMENT SITE. THIS DRAIN MUST BE CATERED FOR. THERE IS A TELCO AND ELECTRICITY PIT IN THIS DRAIN WHICH GOVERN CURRENT LEVEL CONTROL
4. THIS PROPOSAL IS FOR A SHALLOW OPEN DRAIN IN FRONT OF THE PROPERTIES ALONG THE MURRAY VALLEY HIGHWAY TO CATER FOR THE SERVICE ROAD. A DRAINAGE EASEMENT WILL BE PUT IN PLACE.
5. PROPOSED SERVICE ROAD TO HAVE ONE-WAY CROSS FALL TO THE DRAIN ON THE SIDE OF THE MURRAY VALLEY HIGHWAY
6. WSUD TECHNIQUES APPLIED

STORMWATER MANAGEMENT PLAN
PLAN OF PROPOSED SUBDIVISION
LOT 3 ON LP 143123
PARISH OF BUNDALONG

SCALE 1 : 1000 @ A3
 CONTOUR INTERVAL: 0.2 METRES
 LEVELS TO AHD
 (PM 6 RL 130.326)



BUCHANANS ROAD

LAKE MULWALA
 EXISTING WATER
 (APPROXIMATE LOCATION)

LEGEND

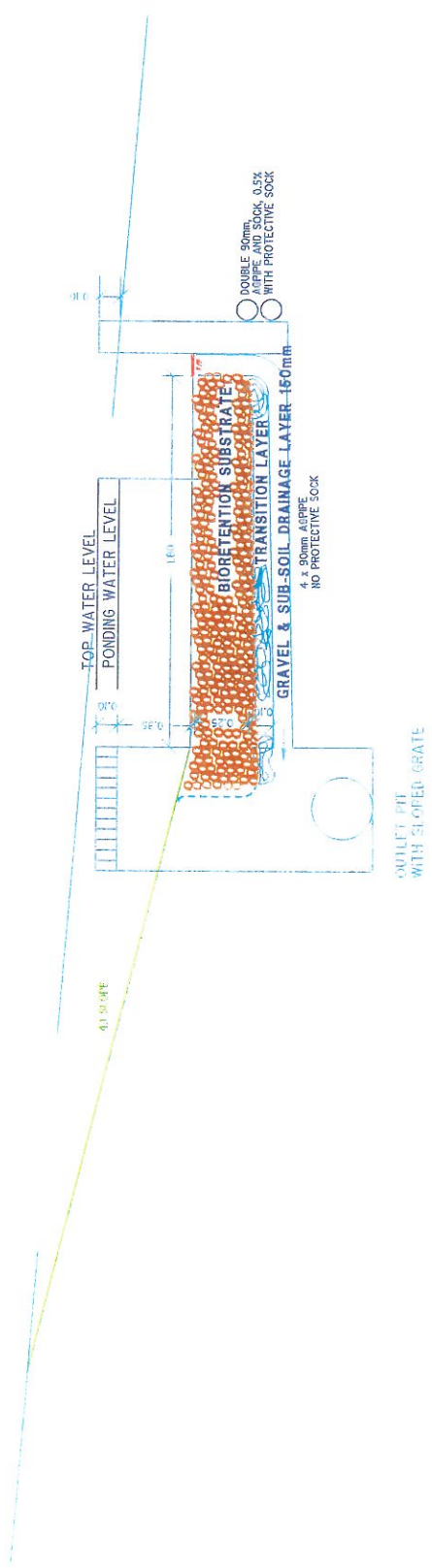
OVERLAND FLOWPATH

LOT SERVICEABILITY:
 85m at 1:100 is 0.85m
 +0.3m COVER
 100mm PIPE DIAMETER
 APPROXIMATELY 1.25m BELOW 150mRL
 FOR CONCEPT DESIGN PURPOSES



NOTES

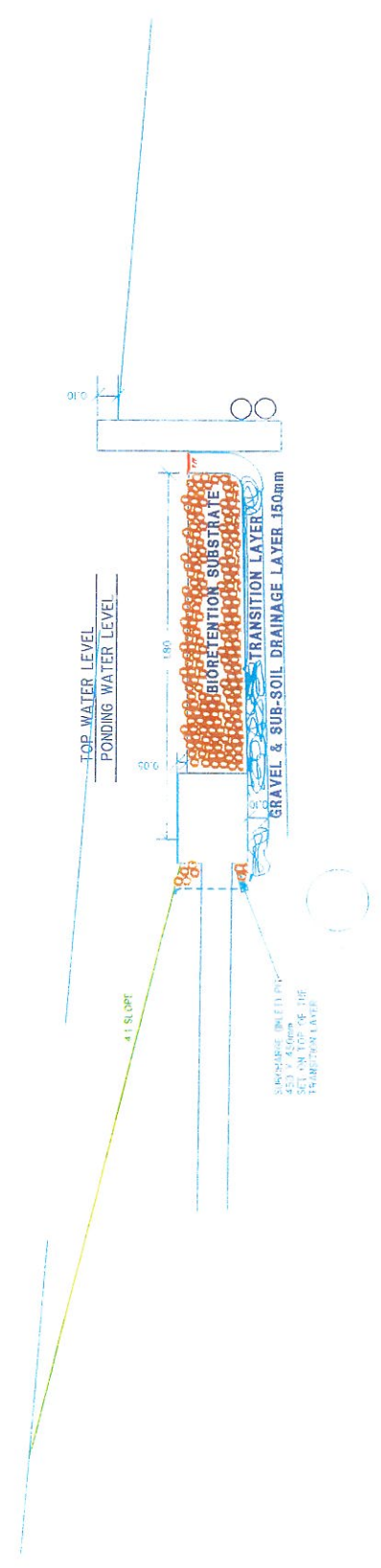
1. THE EXISTING DRAIN OF LOT 2.5 IS DOES NOT APPEAR TO FLOW ANYWHERE. THE CULVERT UNDER THE BIKE PATH, IN FRONT OF LOT 2.5 APPEARS TO FALL AWAY FROM THE DEVELOPMENT SITE
2. THIS PROPOSAL IS FOR REMOVAL OF THE DRAIN AND USE OF THE EXISTING CULVERT (2)
3. THE NEIGHBOURING PROPERTY TOWARD BUCHANANS ROAD FRONTS A DRAINAGE LINE THAT DISCHARGES TO DEVELOPMENT SITE. THIS DRAIN MUST BE CATERED FOR. THERE IS A TELCO AND ELECTRICITY PIT IN THIS DRAIN WHICH GOVERN CURRENT LEVEL CONTROL
4. THIS PROPOSAL IS FOR A SHALLOW OPEN DRAIN IN FRONT OF THE PROPERTIES ALONG THE MURRAY VALLEY HIGHWAY TO CATER FOR THE SERVICE ROAD. A DRAINAGE EASEMENT WILL BE PUT IN PLACE.
5. PROPOSED SERVICE ROAD TO HAVE ONE-WAY CROSS FALL TO THE DRAIN ON THE SIDE OF THE MURRAY VALLEY HIGHWAY
6. WSD TECHNIQUES APPLIED



SCALE



SECTION (A)-(a) CLOSE UP



SECTION (B)-(b) CLOSE UP

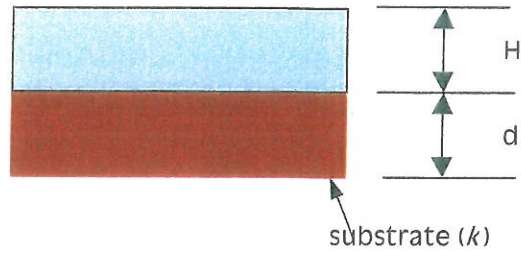
Number of SubSoil Drains Required

Infiltration

Darcy's Law

$$Q_{\max} = k \cdot L \cdot W_{\text{base}} \cdot (h_{\max} + d) / d$$

k (mm/hr)	180
k (m/s)	0.00005
A (per l.m)	3
d (m)	0.25
H (m)	0.35
Q (L/s)	0.13



SSD
UNDER
BIORETENTION
BASIN

D	0.09
Q	0.030
A	0.01
vel	4.72

match these

no. of drains required 4.2

k	0.06	estimated for agpipe
v	1.01E-06	
N_R	4.2E+05	
f	0.09	
L	100	(unit length)
f_L	107.23	
S_F 1in:	0.933	
%	107.2%	

Note: 30L/s is equivalent to a Q5 flow from one lot

Hydrological/ Hydraulic Estimates for Concept Design

No. Lots	1	2	same	3	4	same	5	6
f	0.4	0.4		0.4	0.4		0.4	0.4
C5	0.36	0.36		0.36	0.36		0.36	0.36
A	0.311	0.3109		0.3110	0.3111		0.3109	0.3110
sum(CA)	0.1	0.22		0.34	0.45		0.56	0.67
tc	12	12.50		13.00	13.50		14.00	14.50
I5	60.6	59.5		58.4	57.3		56.3	55.4
Q5	0.019	0.037		0.054	0.071		0.088	0.103

1	11
---	----

	WHOLE SITE	
C100	0.60	0.60
A	0.311	2.300
sum(CA)	0.2	1.4
tc	12	15
I5	121.1	108.2
Q100	0.063	0.415

SSD
UNDER
BIORETENTION
BASIN

D	0.150	0.150	0.225	0.225	0.225	0.300	0.300	0.300
Q	0.019	0.037	0.037	0.054	0.071	0.071	0.088	0.103
A	0.02	0.02	0.04	0.04	0.04	0.07	0.07	0.07
vel	1.07	2.09	0.93	1.37	1.79	1.01	1.24	1.46
material type	upvc	upvc	upvc	upvc	upvc	RCP	RCP	RCP
k	0.015	0.015	0.015	0.015	0.015	0.06	0.06	0.06
v	1.01E-06	1.01E-06	1.01E-06	1.01E-06	1.01E-06	1.01E-06	1.01E-06	1.01E-06
N _R	1.6E+05	3.1E+05	2.1E+05	3.1E+05	4.0E+05	3.0E+05	3.7E+05	4.3E+05

D	0.150	0.375
Q	0.063	0.415
A	0.02	0.11
vel	3.55	3.75
	upvc	RCP
k	0.0015	0.06
v	1.01E-06	1.01E-06
N _R	5.3E+05	1.4E+06

0.090
0.040
0.01
6.29
agpipe
0.03
1.01E-06
5.6E+05

f	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03
L	100	100	100	100	100	100	100	100

f	0.01	0.03
L	100	100

0.04
100

f _L	0.74	2.86	0.30	0.66	1.13	0.51	0.77	1.07
S _F 1in:	134.6	35.0	328.5	151.6	88.5	196.8	130.5	93.8
%	0.7%	2.9%	0.3%	0.7%	1.1%	0.5%	0.8%	1.1%

f _L	3.08	4.85
S _F 1in:	32.5	20.6
%	3.1%	4.9%

96.65
1.035
96.6%

ANNEXURE 5

Ms Heather McCallum
Esler & Associates
598 Macauley Street
ALBURY NSW 2640

30 January 2008Contact: Ian Ridgwell
Telephone: 03 57 611 874
Your Ref: TP0700286 & TP0700425
File No: SY 00327 MOI

Dear Ms McCallum

**PROPOSED DEVELOPMENT PLAN
8280 MURRAY VALLEY HIGHWAY, YARRAWONGA**

I refer to your email to Mr Ian Ridgwell at this office on the 23 January 2008 regarding a Development Plan for 8280 Murray Valley Highway, Bathumi which includes reference to planning permits TP0700286 and TP0700425.

The Development Plan appended to your email has been reviewed and is acceptable to VicRoads as it has been amended to address the comments in VicRoads letter to you dated 15 January 2008.

It is understood that you have advised Mr Ian Ridgwell at this office that you will be holding further discussions with the three developers affected by the construction of the proposed service road to determine the apportionment of construction costs. The service road shall be constructed at no cost to VicRoads.

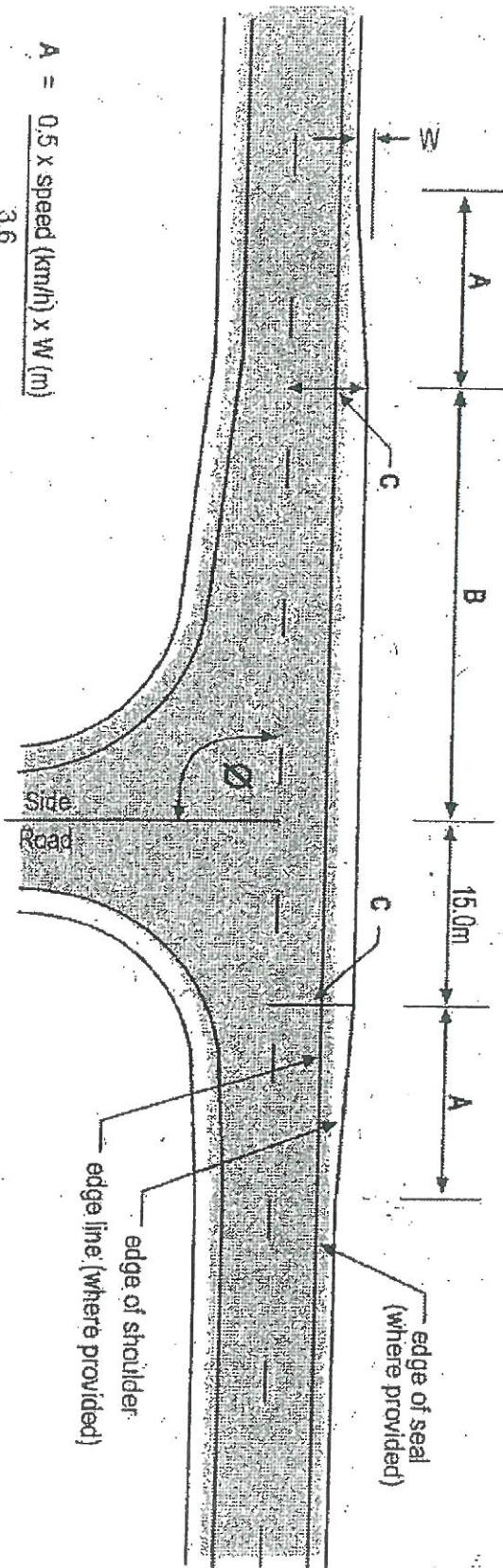
VicRoads will provide detailed planning permit conditions for the proposed subdivision of the subject land at 8280 Murray Valley Highway when a planning permit application referral has been received from the Moira Shire.

If you require further information, please do not hesitate to contact Mr Ian Ridgwell at this office on ☎ (03) 57 611 874.

Yours sincerely

**GRAHAM FREESTONE
NORTH EASTERN REGIONAL DIRECTOR****CC: Mr Peter Stenhouse, Statutory Planning Coordinator, Moira Shire, PO Box 578, Cobram 3643.**

It is preferred that the widened shoulder is sealed; unless the shoulder can be maintained with a sound and even surface.



Line marking and signposting to be in accordance with Australian Standards

$$A = \frac{0.5 \times \text{speed (km/h)} \times W \text{ (m)}}{3.6}$$

ϕ	70°	90°	110°
Length(m)	40	35	30

- C** = on straight - 6.0m min.
on curve - 2 x (3.0m + corresponding widening for curve radius) m
- W** = formation widening (if required)

Figure 6.37 — Type BAR Right Turn Treatment on the Through Road

Note: See also notes on Figure 2.3

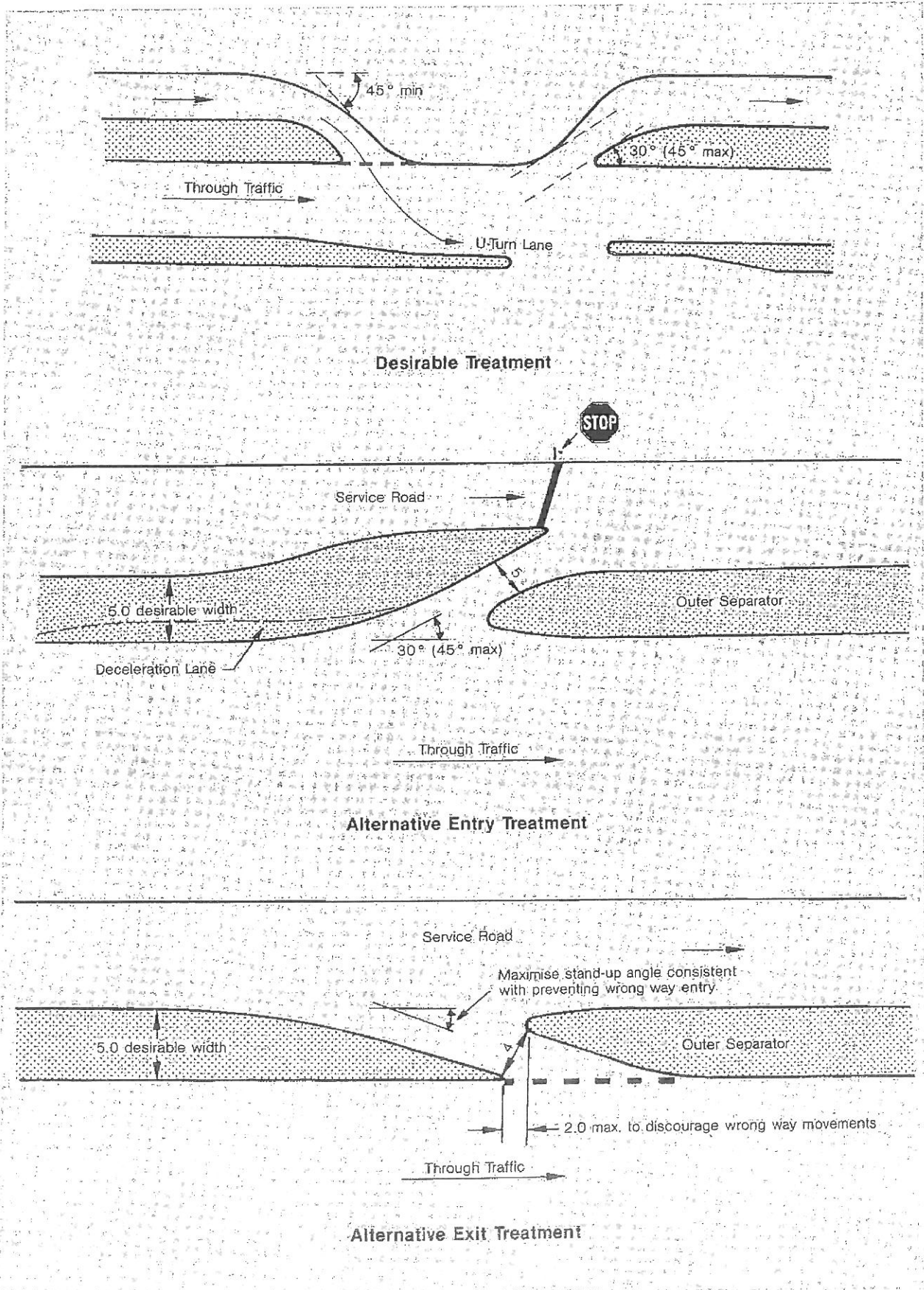
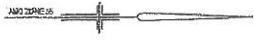
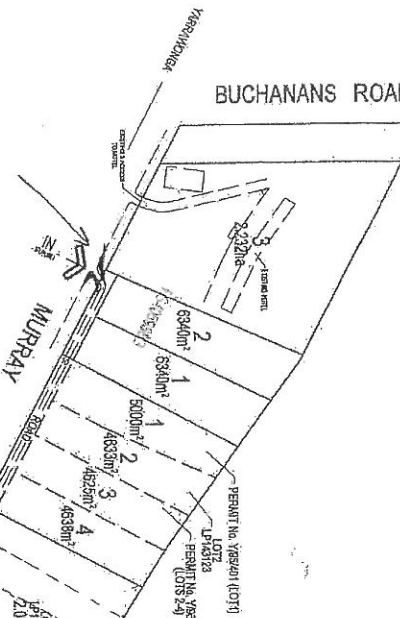


FIGURE 5.32 Treatment of Service Roads Mid-Block



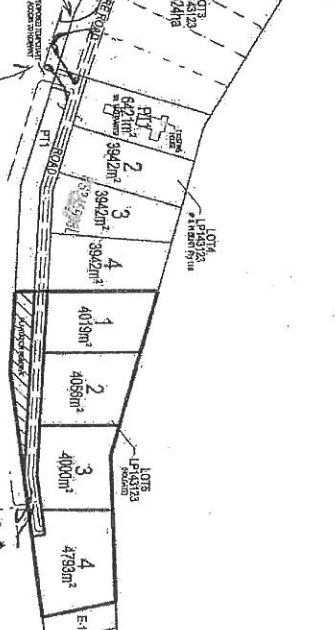
BUCHANANS ROAD



Realign to standard 45° entry treatment

Proposed Emit

LAKE MULWALA



Realign ending in lieu of left turn here

Standard Service Rd 45° east treatment

HIGHWAY

ROAD

STEPHEN OXLEY & COMPANY
 71 OPPON STREET, MARGARITA, 3977
 PHONE: (08) 076 0244 FAX: (08) 076 2772
 24 & 22 Oxley Pty Ltd Lic No 14148
 Surveyors and development consultants
 SURVEYORS REFERENCE: S1238
 VERSION: 1
 DATE: 01/01/01

OUTLINE DEVELOPMENT PLAN
 MURRAY VALLEY HIGHWAY, YARRAWONGA

E-1 WATER SUPPLY (WIDE BR44721)

SHEET 1 OF 1 SHEETS

SCALE: $\frac{1}{50}$
 ORIGINAL SCALE SHEET SIZE: 1:2000
 A1