# **Table of Contents**

Location Confidences
Dataset Listings
Site Location Aerial
Topographic Features
Elevation Contours7
EPA Records
Waste Management Facilities11
Historical Business Activities12
Historical Aerial Imagery & Maps 19
Features of Interest
Hydrogeology & Groundwater
Groundwater Boreholes
Geology
Coastal Acid Sulfate Soils 46
Planning Zones
Planning Overlays
Cultural Heritage Sensitivity
Natural Hazards
Ecological Constraints
Terms & Conditions

# **Location Confidences**

Where Lotsearch has had to georeference features from supplied addresses, a location confidence has been assigned to the data record. This indicates a confidence to the positional accuracy of the feature. Where applicable, a code is given under the field heading "LocConf". These codes lookup to the following location confidences:

LC Code	Location Confidence
1	Georeferenced to the site location / premise or part of site
2	Georeferenced with the confidence of the general/approximate area
3	Georeferenced to the road or rail
4	Georeferenced to the road intersection
5	Feature is a buffered point
6	Land adjacent to Georeferenced Site
7	Georeferenced to a network of features

# **Dataset Listing**

Datasets contained within this report, detailing their source and data currency:

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	No. Features Onsite	No. Features within 100m	No. Features in Buffer
Topographic and Cadastre data	State Government Victoria - Department of Environment, Land, Water & Planning	06/02/2017	06/02/2017	Quarterly	-	-	-
Current Priority Sites	Environment Protection Authority (Vic)	06/02/2017	31/12/2016	Monthly	0	0	0
Former Priority Sites & other Pollution Notices	Environment Protection Authority (Vic)	06/02/2017	05/01/2017	Monthly	0	0	0
EPA Environmental Audit Reports	Environment Protection Authority (Vic)	06/02/2017	24/11/2016	Monthly	0	0	0
Groundwater Zones with Restricted Uses	Environment Protection Authority (Vic)	06/02/2017	27/01/2017	Monthly	0	0	0
Licensed Activities	Environment Protection Authority (Vic)	06/02/2017	29/01/2017	Monthly	0	0	0
Former Licensed Activities	Environment Protection Authority (Vic)	06/02/2017	29/01/2017	Monthly	0	0	0
Works Approvals	Environment Protection Authority (Vic)	06/02/2017	06/02/2017	Monthly	0	0	0
National Waste Management Site Database	Geoscience Australia	06/02/2017	15/11/2012	Quarterly	0	0	0
Statewide Waste and Resource Recovery Infrastructure Plan Facilities	ecovery Sustainability		31/12/2012	None planned	0	0	0
EPA Prescribed Industrial Waste	Environment Protection Authority (Vic)	04/01/2017	04/01/2017	Quarterly	0	0	0
UBD Business to Business Directory 1991	Hardie Grant			Not required	0	47	60
UBD Business to Business Directory 1991 - Garages & Service Stations	Hardie Grant			Not required	0	0	0
UBD Business Directory 1980	Hardie Grant			Not required	14	21	21
UBD Business Directory 1980 Drycleaners, Motor Garages & Service Stations	Hardie Grant			Not required	0	0	0
UBD Business Directory 1960 Drycleaners, Motor Garages & Service Stations	Hardie Grant			Not required	0	0	0
UBD Business Directory 1950	Hardie Grant			Not required	0	0	0
UBD Business Directory 1950 Drycleaners, Motor Garages & Service Stations	Hardie Grant			Not required	0	0	0
Features of Interest	State Government Victoria - Department of Environment, Land, Water & Planning	03/02/2017	27/01/2017	Quarterly	2	9	11
Hydrogeology Map of Australia	Commonwealth of Australia (Geoscience Australia)	08/10/2014	17/03/2000	As required	1	1	1
Groundwater Salinity	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	29/08/2012	Unknown	2	-	-
Depth to Watertable	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	29/08/2012	Unknown	1	-	-
Surface Elevation	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	23/09/2013	Unknown	1	-	-
Basement Elevation	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	23/09/2013	Unknown	1	-	-
Groundwater Boreholes WMIS	State Government Victoria - Department of Environment, Land, Water & Planning	29/04/2016	28/04/2016	Annually	0	4	122
Groundwater Boreholes Earth Resources Database	The State of Victoria, Department of Economic Development, Jobs, Transport and Resources	29/04/2016	17/02/2010	As required	1	2	20
Groundwater Boreholes Fed Uni	Federation University Australia	29/04/2016	07/01/2014	As required	0	0	0
Geological Units 1:50,000	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	1	-	2
Geological Structures 1:50,000	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	0	-	0

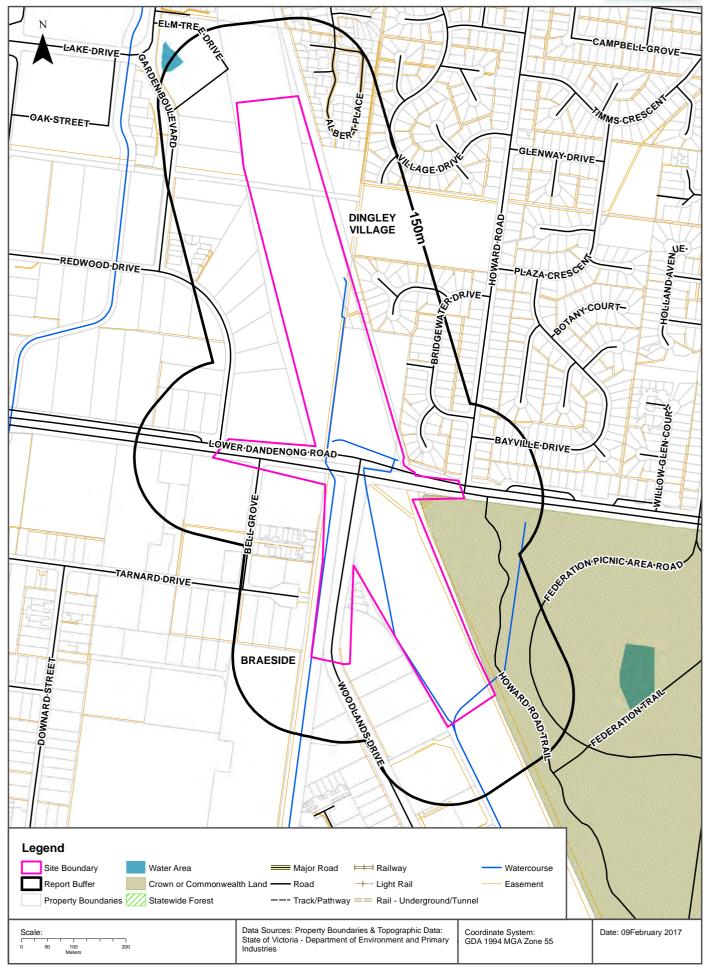
Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	No. Features Onsite	No. Features within 100m	No. Features in Buffer
Dykes and Marker Beds 50k	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	0	0	0
Shear zones 250k	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	0	-	0
Coastal Acid Sulfate Soils	The State of Victoria, Department of Economic Development, Jobs, Transport and Resources	15/07/2016	30/03/2011	None planned	0	0	0
Planning Scheme Zones	State Government Victoria - Department of Environment, Land, Water & Planning	27/01/2017	27/01/2017	Quarterly	4	6	6
Planning Scheme Overlay	State Government Victoria - Department of Environment, Land, Water & Planning	27/01/2017	27/01/2017	Quarterly	5	7	8
Cultural Heritage Sensitivity	State Government Victoria - Department of Planning and Community Development	03/02/2017	27/01/2017	Quarterly	0	0	0
Bushfire Prone Area	State Government Victoria - Department of Transport, Planning and Local Infrastructure	27/01/2017	27/01/2017	Quarterly	1	1	1
Fire History	State Government Victoria - Department of Environment, Land, Water & Planning	27/01/2017	27/01/2017	Quarterly	0	0	0
Flood - 1 in 100 Year Modelled Flood Extent	State Government Victoria - Department of Environment, Land, Water & Planning	27/01/2017	27/01/2017	Quarterly	0	0	0
Native Vegetation (Modelled 2005 Ecological Vegetation Classes)	State Government Victoria - Department of Environment, Land, Water & Planning	13/01/2015	31/12/2005	None planned	2	2	3
RAMSAR Wetlands	State Government Victoria - Department of Environment, Land, Water & Planning	13/01/2015	24/06/2013	None planned	0	0	0





### **Topographic Data**





## **Elevation Contours (m AHD)**





# **EPA Records**

#### **OSAR Proposed Road Alignments - Site 26 (Section 3)**

## **Current EPA Priority Sites Register**

#### What sites on the current EPA priority sites register exist within the report buffer?

Notice No	Address	Suburb	Issue	Loc Conf	Dist (m)	Direction
N/A	No records in buffer					

Priority Sites Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

# Former EPA Priority Sites & Other Pollution Notices

#### What sites within the report buffer have been issued a Pollution Notice? Note. Due to pollution notices being revoked and removed from published lists this is not an exhaustive list of all past pollution notices.

Notice No	Notice Type	Company	Address	Suburb	Status	Issue	Date Issued	Loc Conf	Dist	Dir
N/A	No records in buffer									

Pollution Notice Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

# **EPA Records**

#### **OSAR Proposed Road Alignments - Site 26 (Section 3)**

### **EPA Environmental Audits**

#### What EPA environmental audit records exist within the report buffer? Note. Please click on CARMS No. to activate a hyperlink to online documentation. If link does not work, documentation may still be accessible via the EPA Interaction Portal.

CARMS No	Transaction No	Site	Address	Suburb	Date Complete	Loc Conf	Distance	Direction
N/A	No records in buffer							

Environmental Audit Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

## **EPA Groundwater Zones with Restricted Uses**

#### What EPA GQRUZ exist within the report buffer?

Note. Please click on CARMS No. to activate a hyperlink to online documentation.

CARMS No	EPA Id	Site History	Site Address	Restricted Uses	Loc Conf	Distance	Direction
N/A	No records in buffer						

Environmental GQRUZ Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

# **EPA Records**

#### **OSAR Proposed Road Alignments - Site 26 (Section 3)**

### **EPA Licensed Activities**

#### What EPA licensed activities exist within the report buffer?

Trans No	Licence No	Licence Type	Organisation	Premise Ref	Premise Address 1	Premise Address 2	Activities	Loc Conf	Dist (m)	Direction
N/A	No records in buffer									

Licensed Activity Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

## **Former EPA Licensed Activities**

#### What former EPA licensed activities exist within the report buffer?

Licence No	Organisation	Premise Address	Suburb	Activities	Loc Conf	Dist (m)	Direction
N/A	No records in buffer						

Former Licensed Activity Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

## **EPA Works Approvals**

#### What EPA works approvals exist within the report buffer?

Transaction No	Status	Approval No	Organisation	Premise Address	Suburb	Scheduled Categories	Loc Conf	Dist (m)	Direction
N/A	No records in buffer								

Works Approvals Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

# **Waste Management Facilities**

#### **OSAR Proposed Road Alignments - Site 26 (Section 3)**

### **National Waste Management Site Database**

Sites on the National Waste Management Site Database within the report buffer:

Site Id	Owner	Name	Address	Suburb	Postcode	Landfill	Reprocess	Transfer	Loc Conf	Dist (m)	Direction
N/A	No records in buffer										

Waste Management Facilities Data Source: Australian Government Geoscience Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Statewide Waste and Resource Recovery Infrastructure Plan Facilities**

Statewide Waste and Resource Recovery Infrastructure Plan Facilities within the report buffer:

Map Id	Owner	Site Name	Address	Suburb	Category	Sub Category	Loc Conf	Distance	Direction
N/A	No records in buffer								

SWRRIPF Data Source: State Government Victoria - Department of Sustainability

### **EPA Prescribed Industrial Waste**

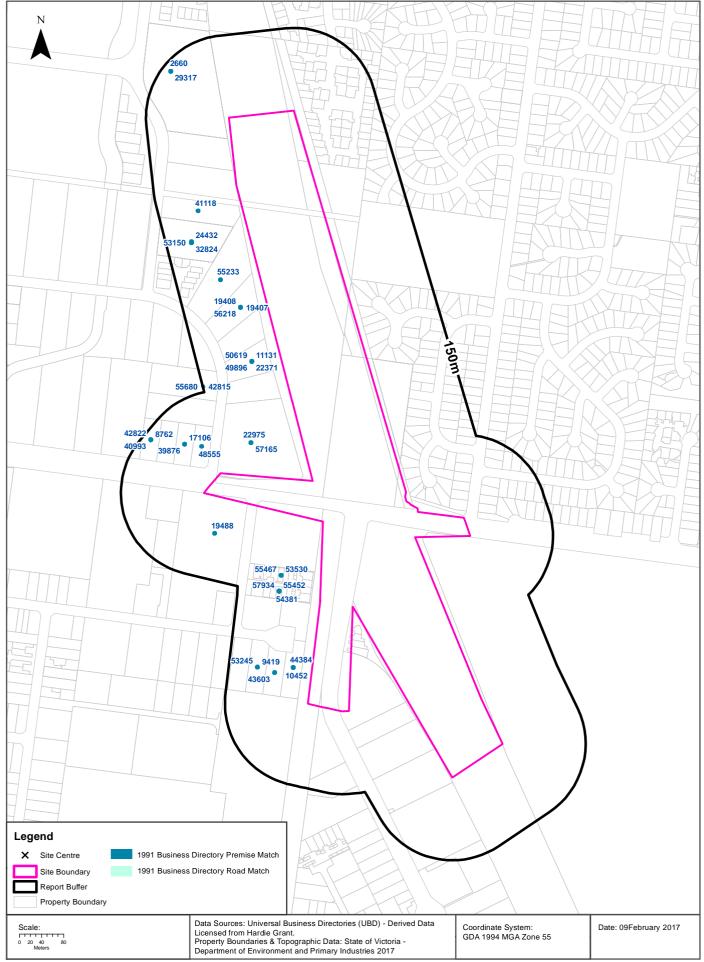
EPA Prescribed industrial waste sites within the report buffer:

Map Id	Company Name	Address	Suburb	Treatment /Disposal	Transport	Accredited Agent	EPA List Status	Loc Conf	Dist (m)	Direct
N/A	No records in buffer									

Prescribed Industrial Waste Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

### **Historical Business to Business Directory Activity 1991**





# **Historical Business Directories**

### OSAR Proposed Road Alignments - Site 26 (Section 3)

## **1991 Business to Business Directory Records**

#### 1991 UBD Business Directory Records within 150m of the site:

	Organisation	Address	Ref No.	Location Confidence	Distance	Direction
Tank &/or Tankstand Mfrs. &/or Dists	Proscon Plastics PTY LTD	62 Tarnard Dr., Braeside. 3195	44384	Premise Match	32m	South
Mouldings Mfrs. &for Dists.	Proscon Plastics Pty. Ltd.,	62 Tarnard Dr., Braeside. 3195	10452	Premise Match	32m	South
Tank &/or Tankstand Mfrs. &/or Dists	Proscon Plastics Pty. Ltd.,	62 Tarnard Dr., Braeside. 3195	10451	Premise Match	32m	South
Tube Benders	Bundy Tubing Company (Australia) Pty Ltd	51 Redwood Dr Dingley 3172	19407	Premise Match	46m	North West
Tube-Metal-Mfrs &/or Dists	Bundy Tubing Company (Australia) Pty Ltd	51 Redwood Dr Dingley 3172	8933	Premise Match	46m	North West
Tube-Steel-Mfrs ∨ Dists	Bundy Tubing Company (Australia) Pty Ltd	51 Redwood Dr Dingley 3172	56218	Premise Match	46m	North West
Steel Fabricators	Bundy Tubing Company (Australia) PTY LTD,	51 Redwood Dr. Dingley 3172	19408	Premise Match	46m	North West
Ventilating Equipment &/or Systems Mfrs &/or Dists	Oates Airconditioning Equipment Pty Ltd	65 Redwood Dr Dingley 3172	11131	Premise Match	51m	North West
Air Conditioning Equipment & Parts Mfrs. &/or Imps &/or Dists	Oates Airconditioning Equipment Pty Ltd	65 Redwood Dr., Dnigley 3172	50619	Premise Match	51m	North West
Manhole Covers &/or Gratings	Oates Airconditioning Equipment Pty Ltd	65 Redwood Dr Dingley 3172	22371	Premise Match	51m	North West
Heating Equipment &/or System Mfrs &/or Dists &/or Installers	Qates airconditioning Equipment Pty Ltd	65 Redwood Dr Dingley 3172	49896	Premise Match	51m	North West
Motor Electrical Equipment Mfrs &/or Dists	Hella Australia Pty Limited	95 Redwood Dr Dingley 3172	57165	Premise Match	58m	West
Motor Accessories Mfrs &/or Imps &/or W/salers	Hella -Australia Pty Limited	95 Redwood Dr Dingley 3172	22975	Premise Match	58m	West
Bottle Caps Seals &/or Corks Mfrs &/or Imps &/or Dists	Mauri closures pty.ltd	407 lower dandenomng rd,dingley 3172	48555	Premise Match	58m	West
Packaging Materials Mfrs. &/or Dists.	A.B M. Plastics (Australia) Pty. Ltd.,	60 Tarnard Dr., Braeside. 3195	339	Premise Match	65m	South
Plastic Bag Mfrs. &/or Dists	A.B.M. Plastics (Australia) Pty. Ltd.,	60 Tarnard Dr, Braeside. 3195	43603	Premise Match	65m	South
Hardware Mfrs &/or Dists &/or W/salers	Danks John & Sons Pty Ltd	414 Lower Dandenong Rd Braeside 3195	19488	Premise Match	65m	South West
Plastic Moulders	B.T.R. Nylex Rotomould,	43 Redwood Dr., Dingley. 3172	55233	Premise Match	69m	North West
Electroplaters	Electromech Plating Works Pty Ltd	Factory 5/9 Bell Gr Braeside 3195	25771	Premise Match	70m	South West
Furniture Removalist & / or Storage	T.C. Printing Pty. Ltd.,	4/9 Bell Gr., Braeside. 3195	340	Premise Match	70m	South West
Builders &/or Building Contractors	Wakker jan constructions pty ltd	factory 8/9 bell gr braeside 3195	53530	Premise Match	70m	South West
Ceiling Systems &/or Ceilings - Domestic &/or Industrial - Mfrs &/or Contractors	Wakker Jan constructions pty Itd	Factory 8/9 Bell Gr Braeside 3195	55467	Premise Match	70m	South West
Computer Flooring	Wakker, Jan constructions pty. Ltd.,	factory 8/9 Bell Gr., Braeside 3195	49484	Premise Match	70m	South West
Partition Mfrs. &/or Dists.	Weldor. Jan Constructions Pty. Ltd.,	Factory 8/9 Bell Gr., BraesIds. 3195	23890	Premise Match	70m	South West
Engineers - Precision	A T I M Engineering Pty Ltd	Factory 2/11 Bell Gr Braeside 3195	51551	Premise Match	73m	South West
Engineers - Printing	A T I M Engineering Pty Ltd	Factory 2/11 Bell Gr Braeside 3195	46844	Premise Match	73m	South West
Engineers - Machining To The Trade	A T I M Engineering Pty Ltd	Factory 2/11 Bell Gr Braeside 3195	49530	Premise Match	73m	South West

Activity	Organisation	Address	Ref No.	Location Confidence	Distance	Direction
Machine Tool Reconditioners	A T I M Engineering Pty Ltd	Factory 2/11 Bell Gr Braeside 3195	22875	Premise Match	73m	South West
Engineers - Jobbing	A.T I M Engineering Pty Ltd	Factory 2/11 Bell Gr Braeside 3195	22748	Premise Match	73m	South West
Engineers - General	A.T.M. Engineering Pty Ltd	Factory 2/11 Bell Gr Braeside 3195	51552	Premise Match	73m	South West
Go-Kart Mfrs &/or Dists	Baron Engine Developments	Factory 7/11 Bell Gr Braeside 3195	24085	Premise Match	73m	South West
Engineers - Manufacturing	Engineering Pty Ltd	Factory 2/11 Bell Gr Braeside 3195	23327	Premise Match	73m	South West
Die & Press Tool Makers	foiur star tooling pty ltd	8/11 bell gr braeside 3195	57934	Premise Match	73m	South West
Toolmakers	Four Star Tooling Pty Ltd	Factory 8/11 Bell Gr Braeside 3195	13131	Premise Match	73m	South West
Plastic Mfrs. &/or Moulders Machiner7 Mfrs. &/or Dists.	Four Star Tooling Pty. Ltd.,	Factory 8/11 Bell Gr., Braeside. 3195	24734	Premise Match	73m	South West
Boat Launch &/or Yacht Builders &/or Designers &/or Repairers	smallcraft design service pty ltd	3/11 bell gr braeside 3195	14078	Premise Match	73m	South West
Blind Mfrs &/or Specialists	smallcraft design service pty.ltd	3/11 bell gr braeside 3195	14079	Premise Match	73m	South West
Blind Mfrs &/or Specialists	South East Yacht Services	Factory 3/11 Bell Gr, Braeside 3195	50922	Premise Match	73m	South West
Boat Launch &/or Yacht Accessories Mfrs &/or Dists	south east yacht services factory	3/11 bell gr braeside 3195	50923	Premise Match	73m	South West
Boat Launch &/or Yacht Builders &/or Designers &/or Repairers	south east yacht services factory	3/11 bell gr braeside 3195	55452	Premise Match	73m	South West
Motor Cycle Accessories &/or Spare Parts Mfrs &/or Imps &/or Dists	V Twin	Factory 5/11 Bell Gr Braeside 3195	53401	Premise Match	73m	South West
Motor Engine Reconditioners	V- Twin	Factory 5/11 Bell Gr. Braeside. 3195	54381	Premise Match	73m	South West
Concrete - Pre-cast	Hicrete Precast Pty.Ltd,	4 Garden Blvde., Dingley 3172	41118	Premise Match	77m	North West
Plastic Bottle &/or Container Mfrs. &/or Dists.	Blow Moulded Plastics,	403 lower Dandenong Rd., Oingley. 3172	17106	Premise Match	82m	West
Plastic Moulders	Blow Moulded Plastics,	403 Lower Dandenong Rd., Oingley. 3172	39876	Premise Match	82m	West
Carport &/or Awning Mfrs &/or Erectors	clifton garages pty ltd	58 tarnard dr braeside 3195	9419	Premise Match	97m	South West
Garage Mfrs &/or Dists &/or Installers	Clitton Garages Pty Ltd	58 Tarnard Dr Braeside 3195	53245	Premise Match	97m	South West
Public Address System Mfrs. &/or Suppliers &/or Installers	COMSOUND AUSTRALIA	Factory 19, 2 Garden Boulevarde South, Dingley 3172	24432	Premise Match	102m	North West
Electrical Contractors	Braeside Electrical Contracting Services Pty Ltd	Factory 19/2 Garden Blvde Dingley 3172	52437	Premise Match	103m	North West
Electrical Contractors	Byrne, R. P. Pty Ltd	Factory 19/2 Garden Blvde Dingley 3172	53150	Premise Match	103m	North West
Die & Press Tool Makers	wacner enterprise pty Itd	factory 22/2 garden bldve,dingley 3172	32824	Premise Match	103m	North West
Pump & Pumping Equipment Mfrs &/or Dists	Warman International Ltd	Unit 1 Business Centre 14 Garden Blvd Dingley 3172	29317	Premise Match	133m	North West
Mining Machinery &/or Equipment Mfrs &/or Imps &/or Dists	Warman International Lts	Unit 1 Business Centre 14 Garden Blvd Dingley 3172	2660	Premise Match	133m	North West
Builders Supplies	white timber & trading	395 lower dandenong rd dingley 3172	8762	Premise Match	134m	West
Builders Hardware Mfrs &/or Imps &/or Dists	whites timber & trading	395 lower dandenong rd dingley 3172	40993	Premise Match	134m	West
Timber Agents & Brokers	Whites Timber & Trading	395 L9wer Dandenong Rd., Dingley. 3172	42821	Premise Match	134m	West
Timber Exporters &/or Importers.	Whites Timber & Trading	395 Lower Dandenong Rd., Dingley. 3172	41110	Premise Match	134m	West
Timber Merchants &/or Sawmillers	Whites Timber & Trading	395 Lower Dandenong Rd., Dingley. 3172	42822	Premise Match	134m	West
Shop &/or Office Fitters	Herschell-Stent Pty Ltd	42 Redwood Dr Dingley 3172	42815	Premise Match	148m	North West
Shop &/or Office Fittings Mfrs &/or Dists	Herschell-Stent Pty Ltd	42 Redwood Dr Dingley 3172	55680	Premise Match	148m	North West

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

# **Historical Business Directories**

**OSAR Proposed Road Alignments - Site 26 (Section 3)** 

## **1991 Business to Business Directory Garages & Service Stations**

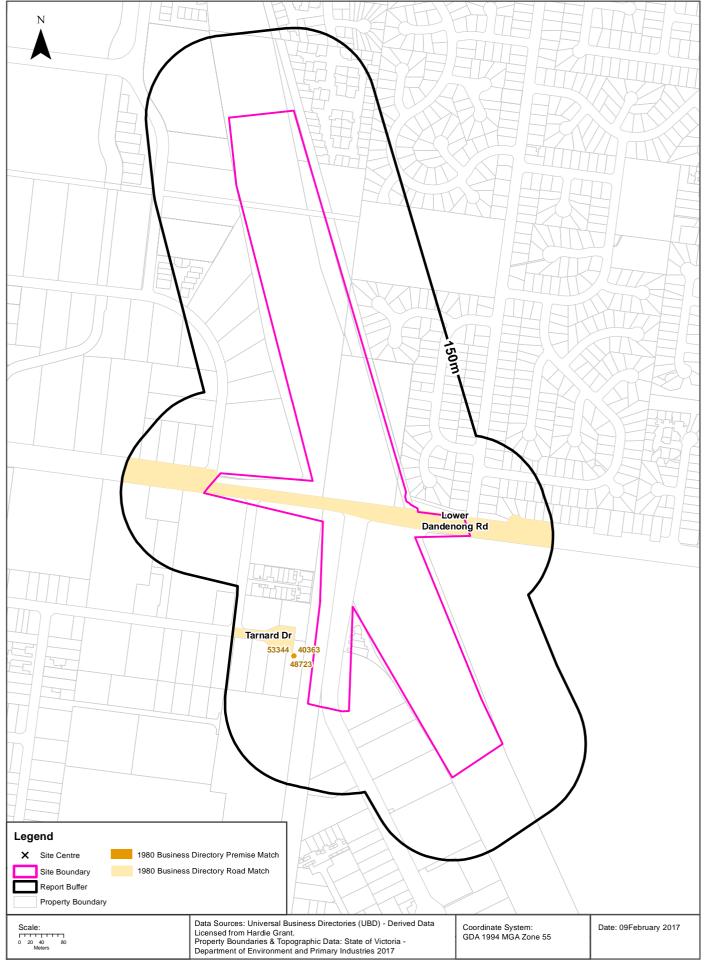
#### 1991 UBD Business Directory Garages & Service Stations within 1km of the site:

Activity	Organisation	Address	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer					

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

### **Historical Business Directory Activity 1980**





# **Historical Business Directories**

#### **OSAR Proposed Road Alignments - Site 26 (Section 3)**

### **1980 Business Directory Records**

#### 1980 UBD Business Directory Records within 150m of the site:

Activity	Premise	Ref No.	Location Confidence	Distance	Direction
HARDWARE - WHOLESALE. ZENITH HARDWARE	Danks, John & Son Pty. Ltd., Lower Dandenong Rd., Braeside.	31769	Road Match	0m	-
MATTRESS &/OR BEDDING MFRS. &/OR DISTS.	Dunlopillo Pty. Ltd., Lower Dandenong Rd., Braeside.	36127	Road Match	0m	-
MOTOR CAR & TRUCK IMPS. &/OR DISTS.	Datsun (Distribution) Pty. Ltd., Lower Dandenong Rd., Braeside.	38587	Road Match	0m	-
MOTOR CAR &/OR TRUCK MFRS. &/OR IMPS. &/OR DISTS.	Datsun (Distribution) Pty. Ltd., Lower Dandenong Rd., Braeside.	38645	Road Match	0m	-
MOTOR CAR &/OR TRUCK MFRS. &/OR IMPS. &/OR DISTS.	Nissan Motor Co. (Aust.) Pty. Ltd., Lower Dandenong Rd., Braeside.	38646	Road Match	0m	-
BRASS SHEETS, RODS, WIRE MFRS. &/OR DISTS.	Danks, John & Son Pty Ltd , Lower Dandenong Rd., Braeside	8238	Road Match	0m	-
FURNITURE MFRS. &/OR W/SALERS.	Dunlopillo Pty. Ltd., Lower Dandenong Rd Braeside.	27161	Road Match	0m	-
RUBBER - LATEX FOAM PRODUCTS MANUFACTURERS.	Dunlopillo Pty. Ltd., Lower Dandenong Rd., Braeside.	14314	Road Match	0m	-
RUBBER GOODS MFRS. INDUSTRIAL.	Dunlopillo Pty. Ltd., Lower Dandenong Rd., Braeside.	48742	Road Match	0m	-
RUBBER SEATING MFRS.	Dunlopillo Pty. Ltd., Lower Dandenong Rd., Braeside.	48782	Road Match	0m	-
RUBBER SPONGE MANUFACTURERS.	Dunlopillo Pty. Ltd., Lower Dandenong Rd., Braeside.	48785	Road Match	0m	-
SHEET METAL WORKERS.	Danks, John & Son Pty. Ltd., Lower Dandenong Rd., Braeside.	49685	Road Match	0m	-
PUMP MFRS. & SPECIALISTS.	Danks, John & Son Pty. Ltd., Lower Dandenong Rd., Braeside.	46885	Road Match	0m	-
TOOL STOCKISTS.	Danks, John & Son Pty. Ltd., Lower Dandenong Rd., Braeside.	54506	Road Match	0m	-
PLASTIC - GRINDING.	Plasti-Grind Pty. Ltd., 62 Tarnard Dr., Braeside.	44936	Premise Match	33m	South
PLASTIC - GRINDING.	Plasti-Grind Pty. Ltd. 62 Tarnard Drive, Braeside.	44935	Premise Match	33m	South
TANKS - CHEMICAL.	Roto Plastics Pty. Ltd., 62 Tarnard Dr., Braeside.	53344	Premise Match	33m	South
PLASTIC MOULDERS.	Roto Plastics Pty. Ltd., 62 Tarnard Dr., Braeside.	45181	Premise Match	33m	South
MOULDINGS.	Roto Plastics Pty. Ltd., 62 Tarnard Dr., Braeside.	40363	Premise Match	33m	South
ROTATIONAL MOULDING	Roto Plastics Pty. Ltd. 62 Tarnard Drive, Braeside	48723	Premise Match	33m	South
FURNITURE MFRS. &/OR W/SALERS.	Grimes. John, Furniture Pty. Ltd., Tarnard Drive Braeside.	27183	Road Match	39m	South West

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

### **1980 Business Directory Drycleaners, Garages & Service Stations**

#### Drycleaners, Garages & Service Stations from the 1980 UBD Business Directory within 1km of the site:

Activity	Premise	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

# **Historical Business Directories**

#### **OSAR Proposed Road Alignments - Site 26 (Section 3)**

### **1960 Business Directory Drycleaners, Garages & Service Stations**

#### Drycleaners, Garages & Service Stations from the 1960 UBD Business Directory within 1km of the site:

Activity	Premise	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

### **1950 Business Directory Records**

#### 1950 UBD Business Directory Records within 150m of the site:

Activity	Premise	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

## **1950 Business Directory Drycleaners, Garages & Service Stations**

#### Drycleaners, Garages & Service Stations from the 1950 UBD Business Directory within 1km of the site:

Activity	Premise	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

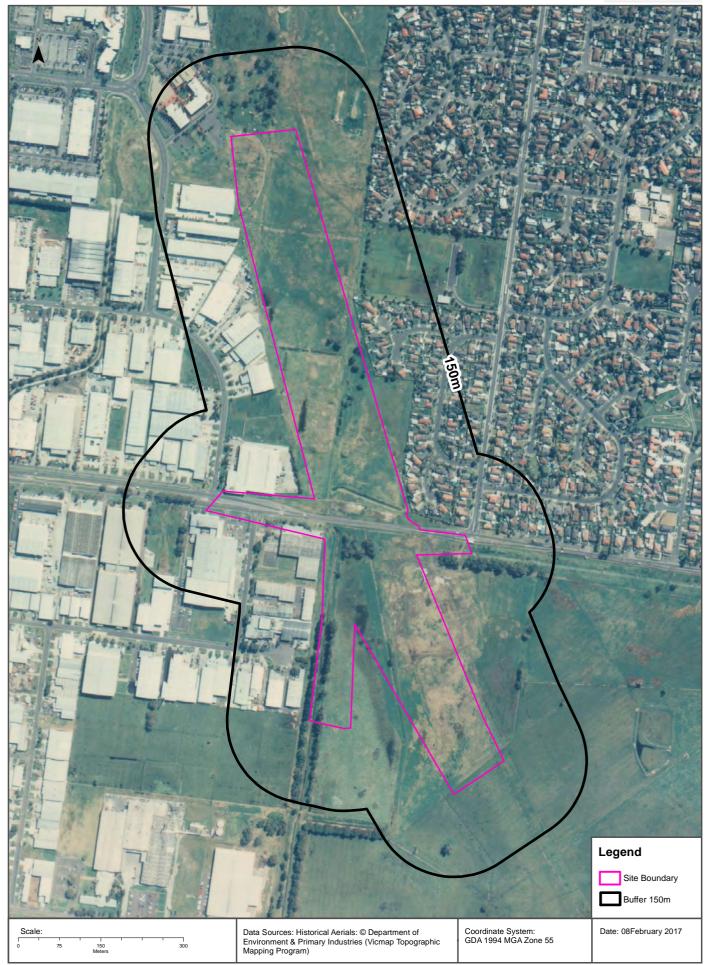




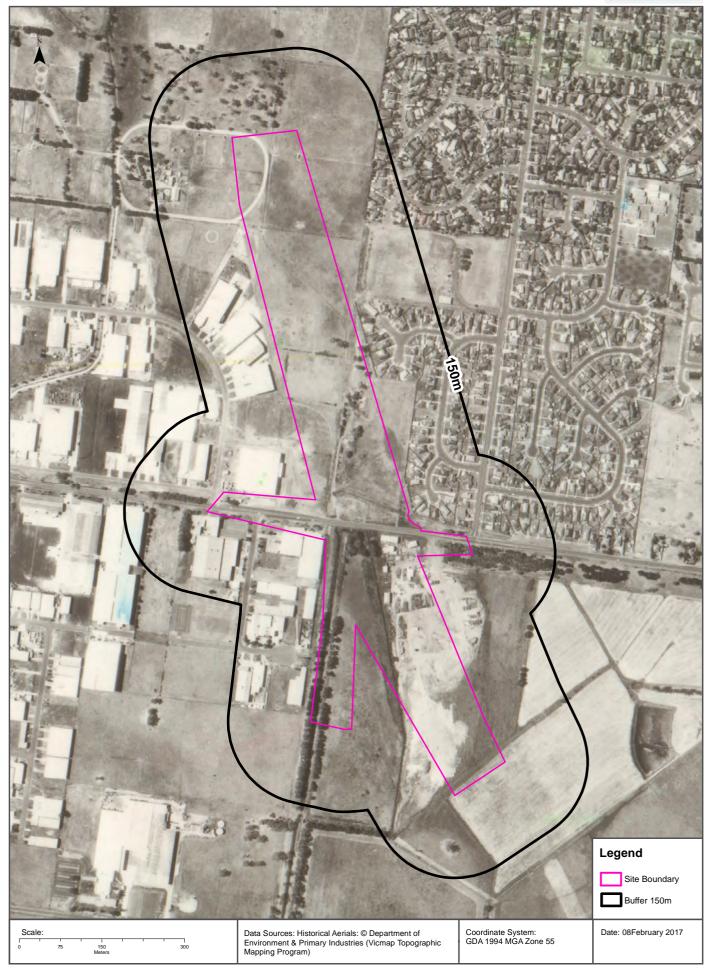




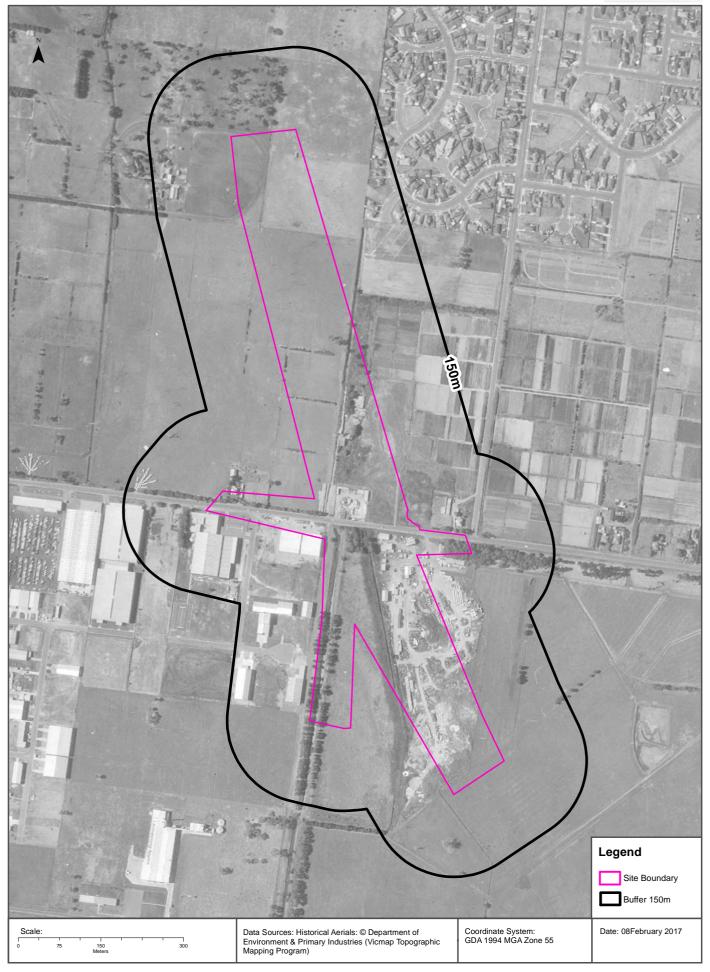




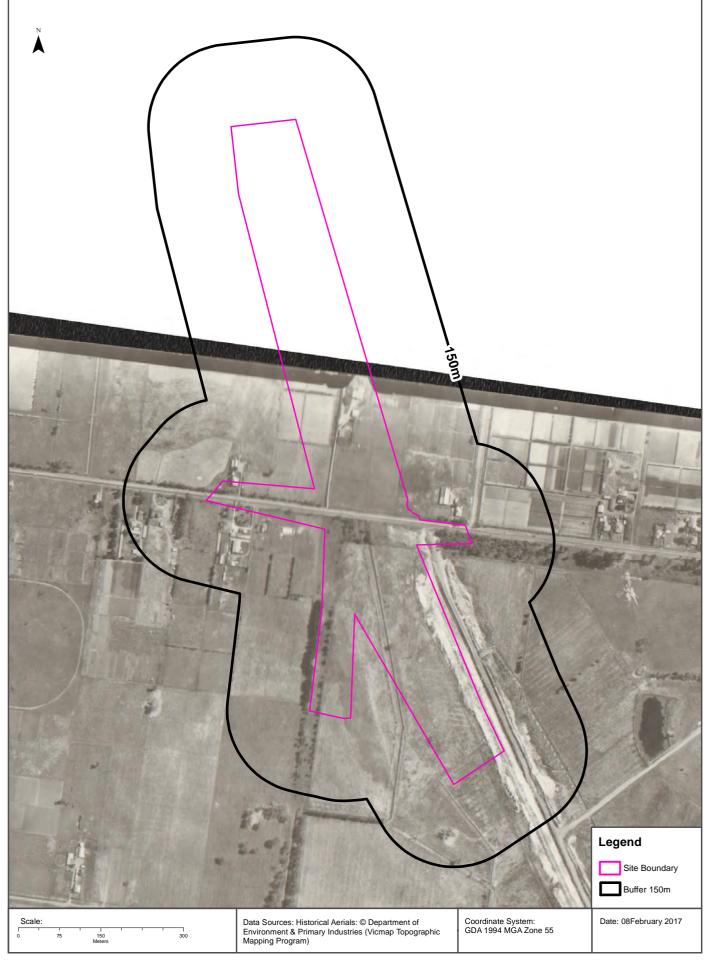




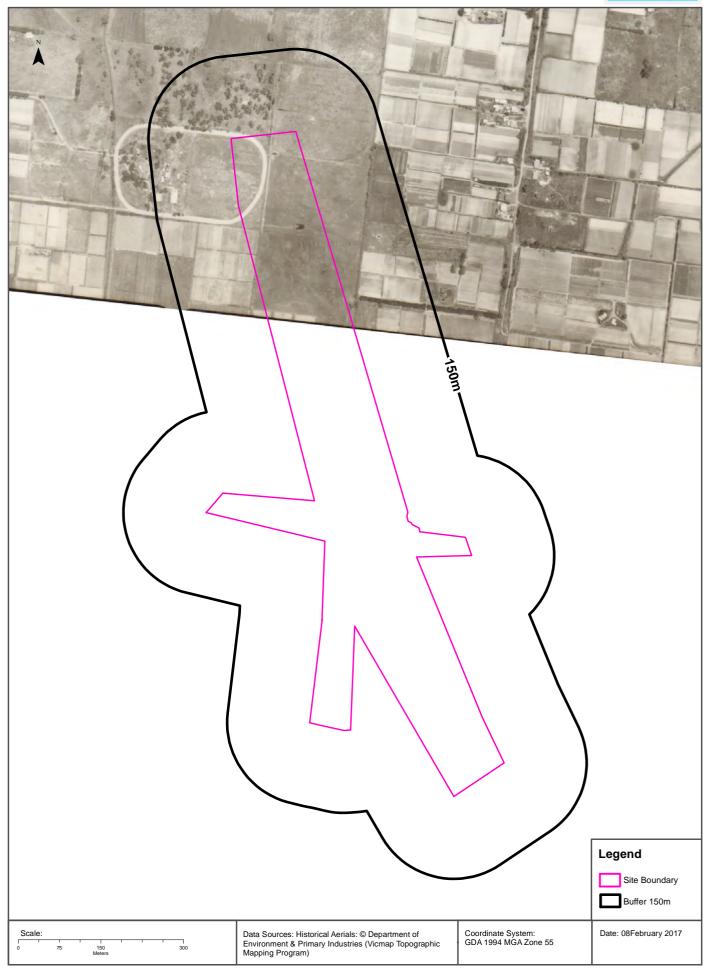




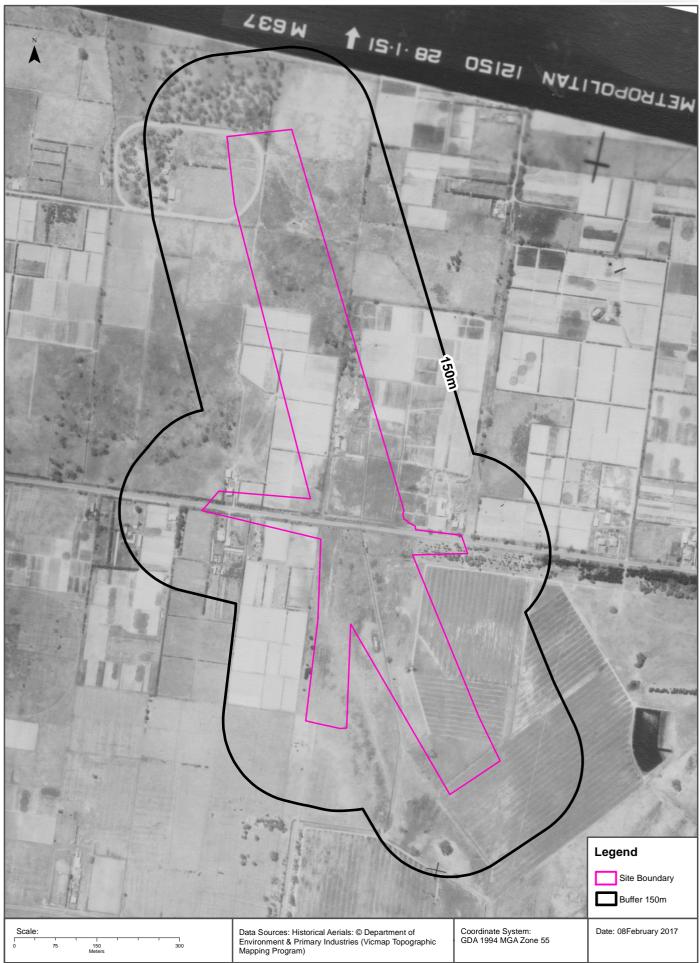












### **Features of Interest**





# **Features of Interest**

#### OSAR Proposed Road Alignments - Site 26 (Section 3)

### **Features of Interest**

Features of Interest within 1km of the site:

Feature Id	Feature Type	Feature Sub Type	Name	Distance	Direction
636694	reserve	park	Woodlands Industrial Estate Linear Reserve	0m	Onsite
1146331	reserve	conservation park	Braeside Park	0m	Onsite
643896	reserve	park		4m	South East
78769	reserve	park		14m	North
643898	reserve	park		24m	East
648213	reserve	park		39m	North
654113	sign	emergency marker	BSP410	58m	South East
635998	reserve	park	Albert Place Reserve	67m	North
996811	sport facility	sports ground		75m	North
78775	reserve	park		119m	North West
636048	reserve	park	Bayville Drive Reserve	148m	East

Features of Interest Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

# Hydrogeology & Groundwater

#### **OSAR Proposed Road Alignments - Site 26 (Section 3)**

### **Hydrogeology**

Description of aquifers within report buffer:

Description	Distance	Direction
Porous, extensive highly productive aquifers	0m	Onsite

Hydrogeology Map of Australia: Commonwealth of Australia (Geoscience Australia) Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Groundwater Salinity**

#### On-site Groundwater Salinity:

Groundwater Salinity	Percent Of Site Area
500 - 1,000 mg/l	56
1,000 - 3,500 mg/l	44

### **Depth to Watertable**

On-site Depth to Watertable:

Depth to Watertable	Percent Of Site Area
Less than 5 metres	100

### **Surface Elevation**

Approximate on-site Surface Elevation:

Surface Elevation

8 AHDm to 12 AHDm

## **Basement Elevation**

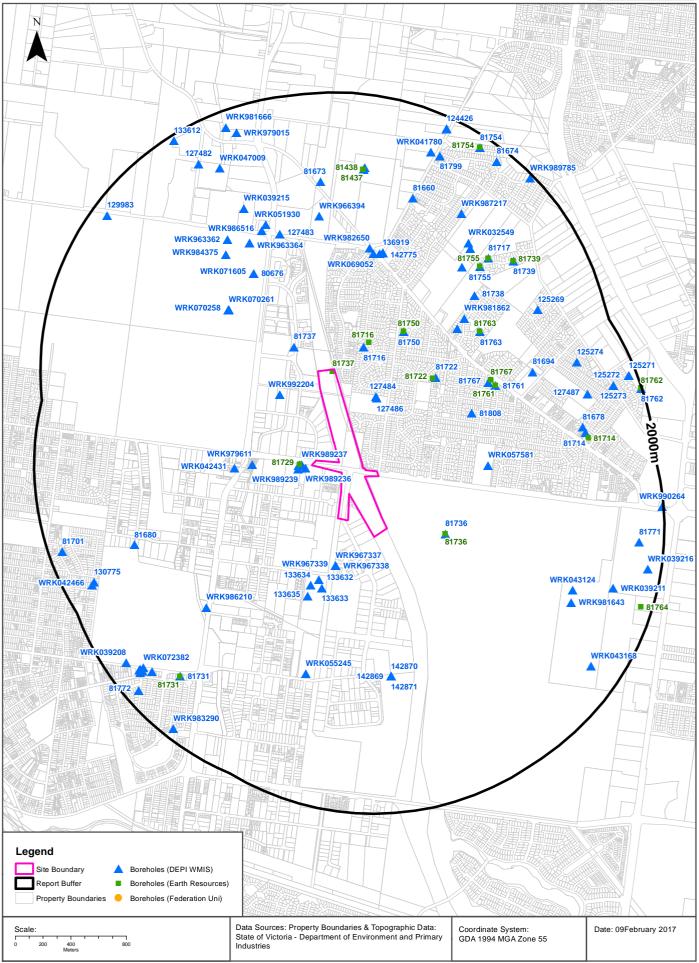
Approximate on-site Basement Elevation:

Basement Elevation - Basement Rocks comprise Lower Palaeozoic basement rocks that form the highlands and the crystalline basement; and Mesozoic rocks of the Otway and Gippsland basins both outcropping and subsurface -47 AHDm to -41 AHDm

Groundwater Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

### **Groundwater Boreholes**





# **Groundwater Boreholes**

#### **OSAR Proposed Road Alignments - Site 26 (Section 3)**

## **Boreholes (DEPI WMIS)**

Boreholes from the Department of Environment and Primary Industries' Water Measurement Information System, within the report buffer:

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK989236							47	West
WRK989237							73	West
81729	Domestic	0.00m-3.05m CLAY 3.05m-12.19m SANDY CLAY BROWN 12.19m-21.34m SAND BROWN 21.34m-36.58m SAND GREY 36.58m-49.38m SAND BLACK	0.00m-36.58m INNER LINING - CASING = Pvc 36.58m-38.10m INNER LINING - SCREEN = Pvc 38.10m-44.50m INNER LINING - CASING = Pvc 42.98m-45.72m INNER LINING - SCREEN = Pvc		36.58m-38.10m Sand 42.98m-45.72m Sand	1982-12-23	87	West
WRK989238							96	West
WRK989239							101	West
127486	Groundwater Investigation, Observation, State Observation Network	0.00m-1.00m FINE GREY SAND 1.00m-7.00m LIGHT BROWN CLAYEY SAND 7.00m-15.00m BROWN CLAYEY SAND 15.00m-30.00m SANDY MARL	0.00m-27.00m INNER LINING - CASING = Pvc 27.00m-29.00m INNER LINING - SCREEN = Pvc 29.00m-30.00m INNER LINING - CASING = Pvc 26.00m-27.00m OUTER LINING - GRAVEL = Bentonite 27.00m-30.00m OUTER LINING - GRAVEL = Gravel	Date/time: 2016-02-23 1043 Quality: 43 WLMP: 4.17m DBNS: 4.24m RWL: 6.88mAHD		1996-04-18	232	North East
127484	Groundwater Investigation, Observation, State Observation Network	0.00m-1.00m DARK GREY SANDY SOIL 1.00m-2.00m ORANGY BROWN SANDY CLAY 2.00m-3.00m BROWNY ORANGE SANDY CLAY 3.00m-5.00m ORANGE GRAVELY CLAY 5.00m-13.00m ORANGE & GREY GRAVELY CLAY 13.00m-15.00m GREY SILTY SAND	0.00m-12.00m INNER LINING - CASING = Pvc 12.00m-14.00m INNER LINING - SCREEN = Pvc 14.00m-15.00m INNER LINING - CASING = Pvc 10.00m-11.00m OUTER LINING - GRAVEL = Bentonite 11.00m-15.00m OUTER LINING - GRAVEL = Gravel	Date/time: 2016-02-23 1042 Quality: 43 WLMP: 4.18m DBNS: 4.20m RWL: 6.95mAHD		1996-04-12	233	North East
81737	Domestic	0.00m-3.00m TOP SOIL WITH GREY SAND 3.00m-5.00m GREY SANDY CLAY 5.00m-11.00m GREY CLAY WITH SAND 11.00m-17.00m BROWN SANDY CLAY 17.00m-59.00m BLACK CLAY 59.00m-60.00m WEATHERED MUDSTONE 60.00m-86.00m MUDSTONE	0.00m-59.20m INNER LINING - CASING = Mild Steel 59.20m-86.00m INNER LINING - SCREEN = Mild Steel		59.20m-86.00m Mudstone	1983-12-02	245	North West
81716	Domestic	0.00m-2.00m TOP SOIL 2.00m-6.00m CLAY 6.00m-7.00m LIGHT CLAY AND SAND 7.00m-8.00m LIGHT SAND 8.00m-10.00m COARSE SAND	0.00m-7.00m INNER LINING - CASING = Pvc 7.00m-10.00m INNER LINING - SCREEN = Pvc		7.00m-10.00m Clay	1983-06-12	264	North
WRK992204	Groundwater Investigation	0.00m-0.50m fill 0.50m-5.00m brighton group sands	0.00m-2.00m INNER LINING - CASING = Pvc 2.00m-5.00m INNER LINING - SCREEN = Pvc 0.00m-0.20m OUTER LINING - GRAVEL = Cement 0.20m-1.50m OUTER LINING - GRAVEL = Bentonite 1.50m-5.00m OUTER LINING - GRAVEL = Gravel			2009-08-10	291	North West
WRK967337							336	South
WRK967338							336	South
WRK967339							336	South

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
81736	Domestic	0.00m-0.30m TOP SOIL 0.30m-0.91m WHITE SAND 0.91m-3.61m CLAY 3.61m-7.01m CLAY AND FINE SAND 7.01m-9.71m SHELL GRIT AND SHALE WITH COARSE PARTS 9.71m-11.84m COARSE WATER BEARING CLAY 11.84m-16.15m CLAY SHELL GRIT AND SHALE 16.15m-24.38m SHELL, GRIT AND SHALE	0.00m-22.86m INNER LINING - CASING = Pvc 22.86m-24.38m INNER LINING - SCREEN = Pvc		22.86m-24.38m Clay	1983-08-10	422	South East
WRK979611							427	West
133632	Groundwater Investigation	0.00m-0.90m FILL CLAYEY SILT 0.90m-3.50m SANDY CLAY 3.50m-6.00m CLAYEY SAND				1998-01-21	461	South
133633	Groundwater Investigation	0.00m-1.30m FILL SAND & SANDY CLAY 1.30m-6.00m SANDY CLAY				1998-01-21	514	South
133634	Groundwater Investigation	0.00m-1.00m FILL FRAVEL & SANDY CLAY 1.00m-5.50m SANDY CLAY 5.50m-6.00m CLAYEY SAND				1998-01-21	519	South
WRK042431	Irrigation	0.00m-4.60m MEDIUM GRAINED SAND 4.60m-5.60m GREY CLAY 5.60m-12.00m ORANGE/BROWN, VERY FINE SANDSTONE 12.00m-47.50m GREY SILT/SOME SHELLS AT DEPTH 47.50m-48.50m GREY SANDSTONE 48.50m-50.00m DARK GREY/SANDY LIMESTONE 50.00m-51.00m LIGHT GREY HARD LIMESTONE 51.00m-53.00m BROWN CLAY 53.50m-54.00m QUARTZ SAND 54.00m-55.00m BROWN CLAY 55.00m-57.00m COARSE SAND CEMENTED PYRITE 57.00m-59.50m LIGHT GREY SANDSTONE 59.50m-62.00m LIGHT GREY BASALT 62.00m-66.00m COARSE SANDWOODY 66.00m-67.00m GREY CLAY	0.00m-59.60m INNER LINING - CASING = Abs Plastic 59.60m-62.00m INNER LINING - SCREEN = Abs Plastic 0.00m-41.00m OUTER LINING - GRAVEL = Cement 41.00m-56.30m OUTER LINING - GRAVEL = Bentonite 56.30m-65.70m OUTER LINING - GRAVEL = Gravel		59.60m-62.00m Basalt	1997-11-25	556	West
81750	Domestic	0.00m-0.50m GREY SANDY LOAM 0.50m-3.00m YELLOW CLAY 3.00m-3.15m SANDY LAYER MEDIUM 3.15m-5.00m WHITE GREY CLAY 5.00m-5.07m THIN ROCK LAYER 5.07m-5.45m COARSE SAND WITH SOME FINE CLAY 5.45m-6.00m GREY CLAY	0.00m-5.00m INNER LINING - CASING = Pvc 5.00m-5.45m INNER LINING - SCREEN = Pvc 5.45m-6.00m INNER LINING - SCREEN = Slotted Pvc		5.00m-5.45m Sand 5.45m-6.00m Clay	1984-06-04	568	North East
133635	Groundwater Investigation	0.00m-1.50m FILL SANDY LOAM 1.50m-2.00m CLAY 2.00m-6.50m SANDY CLAY				1998-01-21	601	South
81722	Domestic	0.00m-1.20m TOP SOIL 1.20m-8.00m CLAY 8.00m-9.00m RIVER SAND 9.00m-0.00m ROCK (SANDSTONE)	0.00m-6.00m INNER LINING - CASING = Pvc 6.00m-9.00m INNER LINING - SCREEN = Pvc 0.00m-1.00m OUTER LINING - GRAVEL = Cement 0.30m-0.00m OUTER LINING - GRAVEL = Seal		6.00m-9.00m Sand	1983-02-28	683	North East
WRK070259	Observation					2012-07-03	781	North West
WRK070261	Observation					2012-07-05	781	North West
WRK070260	Observation					2012-07-04	781	North West
WRK070258	Observation					2012-07-02	782	North West
WRK057581	Irrigation	0.00m-2.50m Sand 2.50m-3.20m sandy Clay 3.20m-6.50m Grey Clay 6.50m-13.30m Brown Sandy Clay 13.30m-18.50m Blue Clay 18.50m-20.50m Fine Sand 20.50m-29.50m Blue Clay 29.50m-32.00m Sand 32.00m-33.00m Blue Clay				2010-09-23	790	East
81808	Not Known					1988-01-01	800	East
80676	Not Known					1988-01-01	843	North West
WRK071605	Irrigation					2012-10-02	843	North West

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK069052	Observation	0.00m-0.40m FILL 0.40m-9.50m CLAY	0.00m-6.00m INNER LINING - CASING = Pvc 6.00m-9.00m INNER LINING - SCREEN = Pvc 9.00m-9.50m INNER LINING - CASING = Pvc 0.00m-5.00m OUTER LINING - GRAVEL = Cement 5.00m-6.00m OUTER LINING - GRAVEL = Bentonite 6.00m-9.00m OUTER LINING - GRAVEL = Gravel		9.00m-9.50m Clay	2012-08-17	880	North
WRK991278	Groundwater Investigation	0.00m-0.30m topsoil 0.30m-1.50m sand 1.50m-3.60m sandstone 3.60m-8.20m sand	0.00m-4.20m INNER LINING - CASING = Pvc 4.20m-8.20m INNER LINING - SCREEN = Pvc 0.00m-2.50m OUTER LINING - GRAVEL = Cement 2.50m-3.70m OUTER LINING - GRAVEL = Bentonite 3.70m-8.20m OUTER LINING - GRAVEL = Gravel			2009-05-08	893	North
WRK982650							910	North
142768	Groundwater Investigation	0.00m-4.00m CLAYEY SAND 4.00m-5.00m SILTY SAND 5.00m-11.00m CLAYEY SAND	0.00m-6.50m INNER LINING - CASING = Pvc 6.50m-11.00m INNER LINING - SCREEN = Pvc 0.00m-5.50m OUTER LINING - GRAVEL = Cement 5.50m-6.00m OUTER LINING - GRAVEL = Bentonite 6.00m-11.00m OUTER LINING - GRAVEL = Gravel		6.50m-11.00m Sand	1998-08-12	911	North
142771	Groundwater Investigation		0.00m-3.00m INNER LINING - CASING = Pvc 3.00m-6.00m INNER LINING - SCREEN = Pvc 1.50m-2.00m OUTER LINING - GRAVEL = Bentonite 2.00m-0.00m OUTER LINING - GRAVEL = Seal			1998-10-22	911	North
136918	Groundwater Investigation	0.00m-0.80m SANDY SILT, BROWN, DENSE, MOIST FILL 0.80m-7.50m CLAYEY SAND, FINE AND MEDIUM SAND, RED BROWN, YELLOW BROWN,	0.00m-4.00m INNER LINING - CASING = Pvc Class 18 4.00m-7.50m INNER LINING - SCREEN = Pvc Class 18 0.00m-0.20m OUTER LINING - GRAVEL = Cement 2.40m-3.00m OUTER LINING - GRAVEL = Bentonite 3.00m-7.50m OUTER LINING - GRAVEL = Gravel			1998-10-06	911	North
136919	Groundwater Investigation	0.00m-0.90m SILTY SAND, BROWN, MOIST FILL 0.90m-7.50m CLAYEY SAND RED BROWN, YELLOW BROWN AND PAIL GREY, MEDIUM GR	0.00m-4.00m INNER LINING - CASING = Pvc Class 18 4.00m-7.50m INNER LINING - SCREEN = Pvc Class 18 0.00m-0.20m OUTER LINING - GRAVEL = Cement 2.30m-3.00m OUTER LINING - GRAVEL = Bentonite 3.00m-7.50m OUTER LINING - GRAVEL = Gravel			1998-10-06	911	North
142769	Groundwater Investigation	0.00m-4.00m CLAYEY SAND 4.00m-5.00m SILTY SAND 5.00m-11.00m CLAYEY SAND	0.00m-6.50m INNER LINING - CASING = Pvc 6.50m-11.00m INNER LINING - SCREEN = Pvc 0.00m-5.50m OUTER LINING - GRAVEL = Cement 5.50m-6.00m OUTER LINING - GRAVEL = Bentonite 6.00m-11.00m OUTER LINING - GRAVEL = Gravel		6.50m-11.00m Sand	1998-08-12	911	North
142770	Groundwater Investigation	0.00m-4.00m CLAYEY SAND 4.00m-5.00m SILTY SAND 5.00m-11.00m CLAYEY SAND	0.00m-6.50m INNER LINING - CASING = Pvc 6.50m-11.00m INNER LINING - SCREEN = Pvc 0.00m-5.50m OUTER LINING - GRAVEL = Cement 5.50m-6.00m OUTER LINING - GRAVEL = Bentonite 6.00m-11.00m OUTER LINING - GRAVEL = Gravel		6.50m-11.00m Sand	1998-08-12	911	North
142773	Groundwater Investigation		0.00m-3.00m INNER LINING - CASING = Pvc 3.00m-6.00m INNER LINING - SCREEN = Pvc 1.50m-2.00m OUTER LINING - GRAVEL = Bentonite 2.00m-0.00m OUTER LINING - GRAVEL = Seal			1998-10-22	911	North

IBB977   Groutewater (meeting)   Groutewater (meeting)   Groutewater (meeting)   Groutewater (meeting)   IBB0-10-00 (meeting)   911   Nutri- (meeting)     142774   Groutewater (meeting)   Groutewater (meeting)   Groutewater (meeting)   Imbo - 2 m (meeting)	Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
Investigation   Investig	136917		MOIST FILL 0.80m-1.00m SAND CLAY, ORANGE BROWN, PAIL BROWN, YELLOW BROWN, STIFF, MO 1.00m-7.50m CLAYEY SAND FINE AND MEDIUM SAND, RED BROWN,	CASING = Pvc Class 18 3.50m-7.50m INNER LINING - SCREEN = Pvc Class 18 0.00m-0.20m OUTER LINING - GRAVEL = Cement 2.30m-3.00m OUTER LINING - GRAVEL = Bentonite 3.00m-7.50m OUTER LINING -			1998-10-06	911	North
Number   Investigation   CASING - Pro- SOUTH 1000 FILLINING- CASING - Pro- GRAVEL - South 10000 FILLINING- CASING - Pro- GRAVEL - South 1000 FILLINI	142774			CASING = Pvc 3.00m-6.00m INNER LINING - SCREEN = Pvc 1.50m-2.00m OUTER LINING - GRAVEL = Bentonite 2.00m-0.00m OUTER LINING -			1998-10-22	911	North
Number   Investigation   Octome   CASIMG = Proc SCREEN = Inve   Color Cole   Cole <th< td=""><td>142775</td><td></td><td></td><td>CASING = Pvc 3.00m-7.00m INNER LINING - SCREEN = Pvc 1.50m-2.00m OUTER LINING - GRAVEL = Bentonite 2.00m-0.00m OUTER LINING -</td><td></td><td></td><td>1998-10-22</td><td>911</td><td>North</td></th<>	142775			CASING = Pvc 3.00m-7.00m INNER LINING - SCREEN = Pvc 1.50m-2.00m OUTER LINING - GRAVEL = Bentonite 2.00m-0.00m OUTER LINING -			1998-10-22	911	North
Control   Control <t< td=""><td>142772</td><td></td><td></td><td>CASING = Pvc 3.00m-6.00m INNER LINING -</td><td></td><td></td><td>1998-10-22</td><td>911</td><td>North</td></t<>	142772			CASING = Pvc 3.00m-6.00m INNER LINING -			1998-10-22	911	North
International content of intermediation intermediatintermediatintermediation intermediation intermediation intermediat	WRK039206	Irrigation					1970-12-31	931	
142870 Groundwater 0.00m-12:50m SANDY CLAY D0m 5.00m INRER LINING- S0m 12:50m INING - GOM 5.00m INRER LINING- GOM 5.00m INRER LINING- GOM 5.00m INRER LINING- GOM 5.00m INRER LINING- GOM 5.00m INRER LINING- GRAVEL = Bertonie Image: Company 5.00m 10.00m 10	WRK981862							1005	North
Number Investigation <td>142870</td> <td></td> <td>0.00m-12.50m SANDY CLAY</td> <td>CASING = Pvc 5.00m-12.50m INNER LINING - SCREEN = Pvc 0.00m-4.00m OUTER LINING - GRAVEL = Cement 4.00m-4.50m OUTER LINING - GRAVEL = Bentonite 4.50m-12.50m OUTER LINING</br></td> <td></td> <td></td> <td>1999-10-18</td> <td>1014</td> <td></td>	142870		0.00m-12.50m SANDY CLAY	CASING = Pvc 5.00m-12.50m INNER LINING - SCREEN = Pvc 			1999-10-18	1014	
InvestigationInvestigationCASING = Pvc SORT 200m INNER LINING - SCREEN = Pvc GRAVEL = Cement 4 50m -12.00m INNER LINING - GRAVEL = Cement 4 50m -12.00m INNER LINING - GRAVEL = GravelInvestigationInvestigationInvestigation81767Domestic0.00m-0.30m SURFACE SOIL 0.30m-0.60m GREY SAND 0.30m -0.60m GREY SAND 14.00m -15.80m INNER LINING - GRAVEL = Gravel15.80m -17.90m CLAY - GRAVEL = Gravel15.80m -17.90m Sand1983-09-01 Sand1025North East127483Groundwater voltaget and the GREY SAND 10.00m -12.00m INNER LINING - (CASING = Pvc SAND V CLAY SAND V CLA	142869		0.00m-14.40m SANDY CLAY	CASING = Pvc 11.40m-14.40m INNER LINING - SCREEN = Pvc 10.40m-10.90m OUTER LINING - GRAVEL = Bentonite 10.90m-14.40m OUTER			1999-11-03	1014	South
Bindball   Display   <	142871		0.00m-12.50m SANDY CLAY	CASING = Pvc 5.00m-12.00m INNER LINING - SCREEN = Pvc 0.00m-4.00m OUTER LINING - GRAVEL = Cement 4.00m-4.50m OUTER LINING - GRAVEL = Bentonite 4.50m-12.50m OUTER LINING			1999-10-18	1014	South
Investigation, Observation, State1.00m-2.00m LIGHT ORANGE CLAY 2.00m-4.00m YELLOW AND GREY SANDY CLAY (LAY) 10.00m-12.00m ORANGE CLAYEY SAND 12.00m-15.00m GREY SAILTY CLAYCASING = Pvc 1.20m-15.00m INNER LINING -CASING = Pvc 11.00m-12.00m OUTER LINING - GRAVEL = Bentonite 12.00m-15.00m OUTER LINING - GRAVEL = Bentonite 12.00m-15.00m OUTER LINING - GRAVEL = Gravel2016-02-23 1104 Quality: 43 Quality: 43 Quality: 43 DBNS: 5.29m DBNS: 5.34m2016-02-23 10.00mInvestigation, Quality: 43 Quality: 43 Quality: 43 DBNS: 5.29m DBNS: 5.34m2016-02-23 10.00mInvestigation, Quality: 43 Quality: 43 Quality: 43 DBNS: 5.29m DBNS: 5.34m2016-02-23 10.00Investigation, Quality: 43 Quality: 43 Quality: 43 DBNS: 5.29m DBNS: 5.34m2016-02-23 10.00Investigation, Quality: 43 Quality: 43 Quality: 43 DBNS: 5.29m DBNS: 5.34m2016-02-23 Investigation, CASING = Pvc 10.00m-12.00m OUTER LINING - GRAVEL = Bentonite 12.00m-13.00m OUTER LINING - GRAVEL = Gravel2016-02-23 Investigation, CASING = Pvc 12.00m-13.00m OUTER LINING - GRAVEL = Gravel2016-02-23 Investigation, CASING = Pvc Sam Sam Sam2016-02-23 DBNS: Sam DBNS: Sam DBNS: Sam DBNS: Sam DBNS: Sam Sam DBNS: Sam Sam Sam Sam Sam Sam Sam Sam Sam2016-02-23 Sam Sam DBNS: Sam DBNS: Sam Sam DBNS: Sam <br< td=""><td>81767</td><td>Domestic</td><td>0.30m-0.60m GREY SAND 0.60m-4.20m CLAY 4.20m-14.00m SANDY CLAY 14.00m-15.80m SLOPPY CLAYEY SAND 15.80m-17.90m CLAYEY SAND WITH</td><td>CASING = Pvc 15.80m-17.90m INNER LINING - SCREEN = Pvc 4.50m-17.90m OUTER LINING</td><td></td><td></td><td>1983-09-01</td><td>1025</td><td></td></br<>	81767	Domestic	0.30m-0.60m GREY SAND 0.60m-4.20m CLAY 4.20m-14.00m SANDY CLAY 14.00m-15.80m SLOPPY CLAYEY SAND 15.80m-17.90m CLAYEY SAND WITH	CASING = Pvc 15.80m-17.90m INNER LINING - SCREEN = Pvc 4.50m-17.90m OUTER LINING			1983-09-01	1025	
Image: Normal stateImage: Normal	127483	Investigation, Observation, State Observation	1.00m-2.00m LIGHT ORANGE CLAY 2.00m-4.00m YELLOW AND GREY SANDY CLAY 4.00m-10.00m LIGHT BROWN SANDY CLAY 10.00m-12.00m ORANGE CLAYEY SAND	CASING = Pvc 12.00m-14.00m INNER LINING - SCREEN = Pvc 14.00m-15.00m INNER LINING - CASING = Pvc 11.00m-12.00m OUTER LINING - GRAVEL = Bentonite 12.00m-15.00m OUTER	2016-02-23 1104 Quality: 43 WLMP: 5.29m DBNS: 5.34m RWL:		1996-04-18	1026	North
WRK963364MRK96364MRK96364 <t< td=""><td>WRK963363</td><td></td><td></td><td></td><td></td><td></td><td></td><td>1048</td><td></td></t<>	WRK963363							1048	
81761   Domestic, Stock   0.00m-1.00m FILL BRICK RUBBLE 1.00m-3.00m SAND YELLOW 3.00m-6.00m SANDY CLAY 6.00m-9.00m CLAY 9.00m-13.50m SAND 13.50m-0.00m BEDROCK   0.00m-12.00m INNER LINING - CASING = Pvc 12.00m-13.50m INNER LINING - SCREEN = Pvc   12.00m-13.50m Sand   1983-12-31   1053   North East     WRK984375         1072   North	WRK963364							1048	North
WRK984375 1072 North	81761	· · ·	1.00m-3.00m SAND YELLOW 3.00m-6.00m SANDY CLAY 6.00m-9.00m CLAY 9.00m-13.50m SAND	CASING = Pvc 12.00m-13.50m INNER LINING			1983-12-31	1053	North
	WRK984375							1072	North West

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
81763	Domestic	0.00m-0.25m TOP SOIL 0.25m-0.75m ORANGE SAND 0.75m-6.00m ORANGE CLAY 6.00m-7.00m GREY CLAY 7.00m-8.00m ORANGE SANDY CLAY 8.00m-9.15m IRON STONE	0.00m-8.95m INNER LINING - CASING = Galvanised Iron 8.95m-9.15m INNER LINING - SCREEN = Galvanised Iron		8.95m-9.15m Ironstone	1982-11-12	1083	North East
WRK986516							1093	North
WRK055245	Observation		0.00m-2.00m INNER LINING - CASING = Pvc 2.00m-8.00m INNER LINING - SCREEN = Pvc 0.00m-1.50m OUTER LINING - GRAVEL = Bentonite 1.50m-8.00m OUTER LINING - GRAVEL = Gravel			2010-02-23	1104	South
WRK966394							1112	North
WRK051930	Observation	0.00m-6.00m clay	0.00m-3.00m INNER LINING - CASING = Pvc 3.00m-6.00m INNER LINING - SCREEN = Pvc 0.00m-1.00m OUTER LINING - GRAVEL = Cement 1.00m-2.00m OUTER LINING - GRAVEL = Bentonite 2.00m-6.00m OUTER LINING - GRAVEL = Gravel		0.00m-3.00m Clay 3.00m-6.00m Clay	2009-10-21	1122	North
81738	Domestic	0.00m-1.50m GREY LOAM AND SAND 1.50m-3.00m GREY FIRM SAND 3.00m-4.52m GREY FINE SAND AND CLAY 4.52m-6.10m GREY SAND MEDIUM COARSE 6.10m-7.62m GREY COARSE SAND 7.62m-9.10m YELLOW CLAY SOME GRIT 9.10m-10.62m FINE SAND AND CLAY 10.62m-11.30m MEDIUM FINE SAND 11.30m-12.70m GREY MEDIUM COARSE SAND 12.70m-13.70m GREY MEDIUM COARSE SAND SOME CLAY 13.70m-15.20m COARSE GREY SAND WITH CLAY 15.20m-16.70m YELLOW CLAY FINE SAND 16.70m-19.81m COARSE GREY SAND	0.00m-7.62m INNER LINING - CASING = Pvc 7.62m-18.50m INNER LINING - SCREEN = Pvc 18.50m-19.81m INNER LINING - SCREEN = Slotted Pvc		7.62m-18.50m Clay 18.50m-19.81m Sand	1983-09-14	1140	North East
WRK986210							1144	South
WRK963362	Domestic & Stock					2005-11-07	1152	West North West
WRK985144							1177	North East
81755	Domestic	0.00m-0.30m TOP SOIL 0.30m-7.62m CLAY 7.62m-12.80m SAND AND CLAY	0.00m-11.58m INNER LINING - CASING = Pvc 11.58m-12.80m INNER LINING - SCREEN = Pvc		11.58m-12.80m Sand	1983-06-01	1284	North East
WRK039215	Irrigation	0.00m-5.60m STIFF YELLOW/BROWN CLAY 5.60m-10.70m GREY FINE TO MEDIUM GRAINED SAND 10.70m-29.70m YELLOW/GREY FIRM CLAYEY SAND 29.70m-40.02m YELLOW/WHITE VERY LOOSE COARSE GRAINED SAND &	0.00m-30.00m INNER LINING - CASING = Pvc 30.00m-39.50m INNER LINING - SCREEN = Pvc 39.50m-40.02m INNER LINING - CASING = Pvc 39.00m-40.02m OUTER LINING - GRAVEL = Gravel		30.00m-39.50m Sand	1990-02-20	1290	North West
81791	Not Known	0.00m-0.50m SANDY LOAM 0.50m-1.50m FINE WHITE SAND 1.50m-2.00m DARK BROWN SANDY CLAY 2.00m-15.50m LIGHT GREY & YELLOW SANDY CLAY 15.50m-19.00m DIRTY DRIFT SAND 19.00m-36.00m GREEN MARINE SILT 36.00m-37.00m BROWN COAL 37.00m-44.00m GREEN SILT & SHELL 44.00m-45.00m LIGNIOUS CLAY 45.00m-59.00m SOFT MUDSTONE				1990-09-05	1310	North East
WRK032549	Irrigation	0.00m-4.00m TOP SOIL AND CLAY 4.00m-43.00m SAND 43.00m-50.00m SANDSTONE AND SLATE 50.00m-55.00m SANDSTONE 55.00m-73.00m GRAVEL AND COAL AND SEA SHELLS 73.00m-85.00m SANDSTONE	0.00m-43.00m INNER LINING - CASING = Steel 0.00m-74.00m INNER LINING - CASING = Steel 60.00m-85.00m INNER LINING - SCREEN = Steel			1997-10-03	1328	North East
81694	Miscellaneou s	0.00m-4.26m FINE GREY-BROWN SAND 4.26m-7.92m FIRM YELLOW BROWN SANDY CLAY 7.92m-13.72m BROWN SILTY FINE- MEDIUM SAND	0.00m-13.72m INNER LINING - CASING = Not Known 8.22m-13.72m INNER LINING - SCREEN = Not Known			1973-04-18	1332	North East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
81673	Not Known	0.00m-0.30m SURFACE SOIL 0.30m-1.22m SAND 1.22m-6.10m CLAYEY SAND 6.10m-6.40m SAND 6.40m-10.67m CLAY 10.67m-14.02m STICKY MARINE CLAY SAND 14.02m-18.29m SANDSTONE PIECES MARINE SILT SAND 18.29m-37.19m MARINE SILT CLAY 37.19m-38.71m DARK MARINE SHELL 38.71m-42.30m DARK MARINE SHELL LITTLE LIMESTONE				1970-01-06	1357	North
81660	Not Known					1970-12-31	1358	North
81717	Domestic, Stock	0.00m-1.00m SAND BROWN 1.00m-1.80m SAND GREY 1.80m-3.00m CEMENTED FERRIGINOUS PIECES 3.00m-7.00m CLAYEY SAND 7.00m-8.00m GRAVEL 8.00m-10.00m SANDY CLAY 10.00m-11.00m COFFEE ROCK 11.00m-15.00m SILT GRAVEL AND BLACK SAND 15.00m-15.50m CLAYEY SAND 15.50m-16.20m GRAVEL 16.20m-0.00m ROCK	0.00m-12.00m INNER LINING - CASING = Pvc 12.00m-16.20m INNER LINING - SCREEN = Pvc 0.00m-2.00m OUTER LINING - GRAVEL = Cement		12.00m-16.20m Silt	1981-08-13	1368	North East
81680	Not Used - Capped	0.00m-12.19m YELLOW GREY CLAY 12.19m-21.34m SANDY GRAVEL AND CLAY 21.34m-47.24m LIGHT GREY SANDY CLAY 47.24m-47.55m SMALL BAND OF LIMESTONE 47.55m-53.34m COARSE SAND - SHELL AND WOOD 53.34m-55.78m DECOMPOSED BASALT 55.78m-60.96m HARD BASALT	0.00m-56.08m INNER LINING - CASING = Not Known 0.00m-56.08m OUTER LINING - GRAVEL = Cement			1973-01-13	1400	West
WRK043124	Not Known					1988-01-01	1410	South East
WRK981643							1430	South East
WRK987217							1448	North East
81438	Not Known					1985-09-20	1456	North
81437	Not Known					1985-09-20	1456	North
81421	Observation, State Observation Network	0.00m-1.20m SAND 1.20m-6.40m SANDY CLAY YELLOW 6.40m-7.90m SANDS DARK GREY 7.90m-14.90m GREEN MARL SANDY GRAVEL 14.90m-15.20m HARD STONE BAR 15.20m-21.30m GRAVEL CLAY SOME HARD BARS 21.30m-30.50m SILTY MARL GREEN 30.50m-32.00m SILTY MARL SAND GREYT MICA 32.00m-38.40m SILTY MARL SAND GREY 38.40m-39.90m DARKER SILTY CLAY 39.90m-42.10m GREEN MARL FIRM SHELLS 42.10m-44.20m HARD BAR STONE 44.20m-50.29m GREY CLAY TURNED TO STONE (BEDROCK)	0.00m-30.50m INNER LINING - CASING = Pvc 30.50m-42.70m INNER LINING - SCREEN = Pvc 42.70m-50.29m INNER LINING - CASING = Pvc 0.00m-1.00m OUTER LINING - GRAVEL = Cement 25.90m-50.29m OUTER LINING - GRAVEL = Gravel	Date/time: 1991-12-04 0000 Quality: 43 WLMP: 4.21m DBNS: 3.34m RWL: 18.36mAHD	30.50m-42.70m Marl	1973-02-21	1456	North
WRK046838						2006-08-10	1473	North
81739	Domestic	0.00m-1.50m GREY SANDY LOAM 1.50m-4.52m YELLOW CLAY 4.52m-9.10m YELLOW ORANGE CLAY 9.10m-10.60m MEDIUM SAND AND MEDIUM COARSE GRAVEL 10.60m-12.10m YELLOW CLAY 12.10m-15.20m YELLOW CLAY, COARSE GRAVEL 15.20m-18.29m GREEN CLAY, SOME GRAVEL 18.29m-19.51m GREEN CLAY - GRAVEL	0.00m-6.40m INNER LINING - CASING = Pvc 6.40m-18.00m INNER LINING - SCREEN = Pvc 18.00m-18.50m INNER LINING - CASING = Pvc 18.50m-19.51m INNER LINING - SCREEN = Pvc		6.40m-18.00m Clay 18.50m-19.51m Clay	1983-12-13	1507	North East
81678	Domestic, Stock	0.00m-0.91m DARK SANDY SOIL 0.91m-2.44m GREY AND BROWN SAND CLAY 2.44m-4.57m GREY BROWN CLAY 4.57m-7.31m FATTY FINE COARSE SAND 7.31m-11.28m FINE FATTY CLAYED SAND 11.28m-12.19m FINE AND COARSE SAND 12.19m-14.02m FINE AND COARSE SAND	0.00m-11.27m INNER LINING - CASING = Not Known 11.27m-12.80m INNER LINING - SCREEN = Not Known			1972-11-30	1511	East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
81714	Domestic, Stock	0.00m-3.05m TOP SOIL 3.05m-6.10m SAND 6.10m-12.19m CLAY RED 12.19m-18.29m CLAY BROWN 18.29m-24.38m GRAVEL 24.38m-39.62m GREY CLAY - ROCK LAYERS 39.62m-42.67m SAND WHITE	0.00m-18.29m INNER LINING - CASING = Pvc Class 9 18.29m-30.48m INNER LINING - SCREEN = Pvc Class 9 30.48m-41.15m INNER LINING - CASING = Pvc Class 9 41.15m-42.67m INNER LINING - SCREEN = Pvc Class 9		18.29m-30.48m Gravel 41.15m-42.67m Sand	1983-02-27	1522	East
125269	Groundwater Investigation, State Observation Network	0.00m-2.00m DRY SAND 2.00m-8.00m SANDY CLAY 8.00m-11.00m GRAVEL SILT & CLAY 11.00m-77.00m YELLOW SILTY CLAY 17.00m-28.00m GREY SILTY CLAY	0.00m-8.50m INNER LINING - CASING = Pvc 8.50m-10.50m INNER LINING - SCREEN = Pvc 10.50m-13.50m INNER LINING - CASING = Pvc 8.50m-13.50m OUTER LINING - GRAVEL = Gravel 13.50m-14.50m OUTER LINING - GRAVEL = Bentonite	Date/time: 2016-02-23 1019 Quality: 43 WLMP: 6.33m DBNS: 6.33m RWL: 20.88mAHD		1995-01-13	1527	North East
81731	Not Known	0.00m-7.62m FINE BLUE CLAY 7.62m-11.27m FINE ORANGE CLAY 11.27m-44.80m MED/COARSE SILTY SAND 44.80m-52.70m SILTY SILURIAN CLAY 52.70m-122.00m HARD SANDSTONE	0.00m-54.00m INNER LINING - CASING = Steel 54.00m-122.00m INNER LINING - SCREEN = Steel		54.00m- 122.00m Sandstone	1983-02-16	1609	South West
127487	Groundwater Investigation, Observation, State Observation Network	0.00m-0.50m FINE GREY SNAD 0.50m-2.00m BROWN SANDY CLAY 2.00m-4.00m YELLOW SANDY CLAY 4.00m-15.00m ORANGE CLAYEY SAND	0.00m-12.00m INNER LINING - CASING = Pvc 12.00m-14.00m INNER LINING - SCREEN = Pvc 14.00m-15.00m INNER LINING - CASING = Pvc 11.00m-12.00m OUTER LINING - GRAVEL = Bentonite 12.00m-15.00m OUTER LINING - GRAVEL = Gravel	Date/time: 2016-02-23 1005 Quality: 43 WLMP: 5.74m DBNS: 5.79m RWL: 18.39mAHD		1996-04-19	1614	East
WRK047009							1627	North West
125274	Groundwater Investigation, State Observation Network	0.00m-1.00m DRY SAND 1.00m-6.00m SANDY CLAY 6.00m-10.00m GRAVEL SAND & CLAY (WET) 10.00m-12.00m SANDY CLAY 12.00m-35.00m GREY SANDY CLAY	0.00m-8.00m INNER LINING - CASING = Pvc 8.00m-10.00m INNER LINING - SCREEN = Pvc 10.00m-24.00m INNER LINING - CASING = Pvc 6.00m-7.00m OUTER LINING - GRAVEL = Bentonite 7.00m-12.00m OUTER LINING - GRAVEL = Gravel 24.00m-24.50m OUTER LINING - GRAVEL = Bentonite	Date/time: 2016-02-23 0952 Quality: 43 WLMP: 1.89m DBNS: 1.89m RWL: 20.83mAHD		1995-01-29	1642	North East
WRK039211	Irrigation	0.00m-0.30m SURFACE SANDY SOIL 0.30m-4.00m FINE SAND 4.00m-30.50m CLAYEY SAND & STONE PIECES 30.50m-37.00m SILTY ORANGE SAND 37.00m-41.00m SILTY ORANGE SAND 41.00m-47.00m FIRM GREY MUDSTONE 47.00m-130.00m MEDIUM HARD BLUE SHALE 130.00m-162.00m HD BL SHALE SOME FRACS ALTER.TO BCP/28133	0.00m-106.00m INNER LINING - CASING = Mild Steel 106.00m-162.00m INNER LINING - SCREEN = Mild Steel		106.00m- 162.00m Shale	1987-04-24	1685	South East
WRK041780	Dairy						1716	North
81799	Domestic, Stock					1988-01-01	1718	North
127482	Groundwater Investigation, Observation, State Observation Network	0.00m-1.00m YELLOW AND GREY CLAY 1.00m-8.00m YELLOW SANDY CLAY 8.00m-15.00m SANDY MARL	0.00m-12.00m INNER LINING - CASING = Pvc 12.00m-14.00m INNER LINING SCREEN = Pvc 14.00m-15.00m INNER LINING - CASING = Pvc 11.00m-12.00m OUTER LINING - GRAVEL = Bentonite 12.00m-15.00m OUTER LINING - GRAVEL = Gravel	Date/time: 2016-02-23 1124 Quality: 43 WLMP: 7.28m DBNS: 7.30m RWL: 11.34mAHD		1996-04-16	1725	North West
WRK987435							1736	South West
WRK072382	Observation	0.00m-0.30m GRAss/topsoil 0.30m-0.50m FILL/rubblegritty material 0.50m-0.70m Ddark silty clay 0.70m-2.00m Stiff clay/yellow mottled 2.00m-4.00m CLAYey sand	0.00m-1.00m INNER LINING - CASING = Pvc 1.00m-4.00m INNER LINING - SCREEN = Pvc 0.00m-0.60m OUTER LINING - GRAVEL = Cement 0.60m-0.90m OUTER LINING - GRAVEL = Bentonite 0.90m-4.00m OUTER LINING - GRAVEL = Gravel		1.00m-4.00m Clay	2013-05-27	1767	South West
WRK043168	Irrigation					1982-01-01	1774	South East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
130775	Not Used - Capped	0.00m-2.50m GREY FINE SOIL 2.50m-3.50m LIGHT TAN/BROWN CLAY/COARSE SAND LAYERS 3.50m-7.50m LIGHT BROWN/SILTY/FINE SAND CLAY 7.50m-11.50m DARK BROWN WEATHERED SANDSTONE 11.50m-48.40m BLACK/GREY SILTY CLAY FINE SHELLS 48.40m-60.50m BROWN SILTY CLAY/FINE SHELLS 50.50m-52.10m HARD GREN LIMESTONE 52.10m-53.30m SOFT GREEN LIMESTONE 53.30m-55.70m BROWN FIRM CLAY/FINE SAND 55.70m-67.00m WHITE/BROWN FIRM CLAY 77.00m-61.50m BLACK/GREY BASALT 61.80m-63.70m WEATHERED BLACK/GREY BASALT 63.70m-64.00m GREY/BROWN CLAY BASALT GRAVEL	-0.20m-55.65m INNER LINING - CASING = Abs Plastic 60.40m-64.00m INNER LINING - CASING = Abs Plastic 0.00m-40.00m OUTER LINING - GRAVEL = Cement 40.00m-64.00m OUTER LINING - GRAVEL = Gravel			1996-11-23	1780	South West
WRK072379	Observation	0.00m-0.40m Rubble 0.40m-0.70m Black sitt 0.70m-2.50m CLAY 2.50m-4.20m CLAYey sand/sitt	0.00m-1.20m INNER LINING - CASING = Pvc 1.20m-4.20m INNER LINING - SLOT = Pvc 0.00m-0.80m OUTER LINING - GRAVEL = Cement 0.80m-1.00m OUTER LINING - GRAVEL = Bentonite 1.00m-4.20m OUTER LINING - GRAVEL = Gravel		1.20m-4.20m Clay	2013-05-28	1787	South West
WRK072381	Observation	0.00m-0.30m FILL/disturbed clay some rubble 0.30m-0.70m CLAYey silt/black 0.70m-1.50m SANDy clay/dense 1.50m-2.50m SANDy clay/silty 2.50m-4.20m LIGhter clayey sand/wet	0.00m-1.20m INNER LINING - CASING = Pvc 1.20m-4.20m INNER LINING - SCREEN = Pvc 0.00m-0.60m OUTER LINING - GRAVEL = Cement 0.60m-0.90m OUTER LINING - GRAVEL = Bentonite 0.90m-4.20m OUTER LINING - GRAVEL = Gravel		1.20m-4.20m Clay	2013-05-27	1790	South West
WRK072384	Observation	0.00m-0.40m CLAY& some srubble bricks concretesome rocks 0.40m-0.80m Sisturbed clay 2.50m-3.00m SiLTy clay & sand 3.00m-4.50m wet yellow clayey sand	0.00m-1.50m INNER LINING - CASING = Pvc 1.50m-4.50m INNER LINING - SCREEN = Pvc 0.00m-1.00m OUTER LINING - GRAVEL = Cement 1.00m-1.20m OUTER LINING - GRAVEL = Bentonite 1.20m-4.50m OUTER LINING - GRAVEL = Gravel		1.50m-4.50m Clay	2013-05-28	1800	South West
WRK042466	Irrigation		56.85m-0.00m OUTER LINING - GRAVEL = Packer			1963-12-31	1802	South West
WRK072380	Observation	0.00m-0.40m FILLbuilding ruble/clay 0.40m-0.80m DArk peaty clay 0.80m-3.00m Mottled silty clay 3.00m-5.00m SANDy clay/silt 5.00m-6.00m wet sand & yellow clay	0.00m-1.50m INNER LINING - CASING = Pvc 1.50m-6.00m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement 0.50m-1.40m OUTER LINING - GRAVEL = Bentonite 1.40m-6.00m OUTER LINING - GRAVEL = Gravel		1.50m-6.00m Clay	2013-05-27	1808	South West
125273	Groundwater Investigation, State Observation Network	0.00m-0.50m DRY SAND 0.50m-2.00m CLAY 2.00m-5.50m SANDY CLAY 5.50m-8.00m SANDY SILT & GRAVEL 8.00m-11.00m GRAVEL & CLAY (WET) 11.00m-12.00m SANDY CLAY	0.00m-8.00m INNER LINING - CASING = Pvc 8.00m-11.00m INNER LINING - SCREEN = Pvc 11.00m-12.00m INNER LINING - CASING = Pvc 5.00m-6.00m OUTER LINING - GRAVEL = Bentonite 6.00m-12.00m OUTER LINING - GRAVEL = Gravel	Date/time: 2016-02-23 0939 Quality: 43 WLMP: 6.20m DBNS: 6.20m RWL: 19.91mAHD		1995-01-26	1812	East
125272	Groundwater Investigation, State Observation Network	0.00m-0.50m DRY SAND 0.50m-2.00m CLAY 2.00m-5.50m SANDY CLAY 5.50m-8.00m SAND SILT & CLAY 8.00m-11.00m GRAVEL & CLAY (WET) 11.00m-16.00m SANDY CLAY 16.00m-18.00m GREY SILT SANDY CLAY 18.00m-23.50m DIRTY SAND & GRAVEL (WET) 23.50m-40.00m GREY SILTY CLAY	0.00m-20.50m INNER LINING - CASING = Pvc 20.50m-22.50m INNER LINING - SCREEN = Pvc 22.50m-40.00m INNER LINING - CASING = Pvc 17.00m-0.00m OUTER LINING - GRAVEL = Seal	Date/time: 2016-02-23 0940 Quality: 43 WLMP: 7.35m DBNS: 7.35m RWL: 18.76mAHD		1995-01-26	1813	East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
81771	Irrigation	0.00m-0.30m TOP SOIL 0.30m-13.70m ORANGE/BROWN CLAY 13.70m-14.00m CLAY BOUND SAND 14.00m-40.80m SANDY CLAY AND LAYERS OF LIMESTONE 40.80m-43.20m COARSE SAND 43.20m-44.00m MUDSTONE	0.00m-40.70m INNER LINING - CASING = Mild Steel 40.70m-43.70m INNER LINING - SCREEN = Mild Steel 43.70m-44.00m INNER LINING - CASING = Mild Steel 0.00m-36.00m OUTER LINING - GRAVEL = Cement 36.00m-44.00m OUTER LINING - GRAVEL = Gravel		40.70m-43.70m Sand	1986-11-12	1820	East
WRK979015							1821	North
WRK039208	Irrigation		0.00m-60.35m INNER LINING - CASING = Not Known 56.08m-60.35m INNER LINING - SCREEN = Not Known			1963-12-31	1847	South West
WRK981666							1881	North
129983	Groundwater Investigation, Observation	0.00m-7.00m CLAY 7.00m-11.00m SAND 11.00m-15.00m MUDSTONE 15.00m-33.00m SAND 33.00m-45.00m MUDSTONE 45.00m-54.00m GREEN MUDSTONE 54.00m-58.00m COAL 58.00m-87.00m MUDSTONE 88.00m-87.00m MUDSTONE 87.00m-90.00m FRACTURED MUDSTONE & BASALT 90.00m-150.00m WEATHERED BASALT	-0.30m-4.20m INNER LINING - CASING = Not Known -0.30m-91.00m INNER LINING - CASING = Not Known 61.00m-91.00m INNER LINING - SCREEN = Not Known			1997-02-07	1889	North West
81772	Not Known		0.00m-95.80m INNER LINING - CASING = Galvanised Iron 96.00m-107.20m INNER LINING - SCREEN = Galvanised Iron			1987-03-27	1897	South West
81701	Domestic, Stock	0.00m-1.22m SURFACE SOIL 1.22m-3.05m CLAY 3.05m-3.66m ROCK 3.66m-5.49m SOFT CLAY 5.49m-6.10m GRAVEL				1974-06-27	1902	West
WRK039216	Not Known					1988-01-01	1903	East
81674	Not Known	0.00m-0.30m SURFACE SOIL 0.30m-1.52m CLAY 1.52m-3.35m SANDY CLAY 3.35m-6.10m SLOPPY CLAYEY SAND 6.10m-7.62m CLAY MOTTLEY 7.62m-10.67m BROWN CLAYEY SAND 10.67m-11.28m BLACK CLAY 11.28m-17.07m MARINE STICKY SAND CLAY 17.07m-27.32m MARINE SAND CLAY SILT 27.32m-29.26m BROWN COAL CLAY SILT 29.26m-38.71m DARK MARINE CLAY LITTLE SHELL 38.71m-39.32m SHELL MARINE CLAY WITH FEW PEBBLES 39.32m-40.23m SILT BROWN CLAY MUDSTONE WITH THIS LAYERS SANDSTONE 40.23m-50.90m SANDSTONE				1970-01-06	1903	North East
81754	Not Known	0.00m-2.00m FINE BLACK SAND 2.00m-8.00m FINE/MED MUDDY ORANGE SAND 8.00m-8.10m LIGNITE 8.10m-30.00m FINE MUDDY GREY SAND				1983-05-10	1914	North East
127109	Groundwater Investigation	0.00m-9.00m BACK FILL FROM TIP 9.00m-16.00m GREY CLAYEY SAND 16.00m-19.00m GREY SILTY CLAY 19.00m-20.00m MUDSTONE 20.00m-30.00m SANDY MARL	0.30m-27.00m INNER LINING - CASING = Pvc 27.00m-29.00m INNER LINING - SCREEN = Pvc 29.00m-30.00m INNER LINING - CASING = Pvc 25.50m-26.50m OUTER LINING - GRAVEL = Bentonite 26.50m-30.00m OUTER LINING - GRAVEL = Gravel			1995-11-24	1915	North
124426	Groundwater Investigation			Date/time: 1996-09-26 0000 Quality: 47 WLMP: 3.76m DBNS: 2.75m RWL: 27.60mAHD		1995-04-07		
WRK983290							1925	South West

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
125270	Groundwater Investigation, State Observation Network	0.00m-1.00m DRY SAND 1.00m-2.50m CLAY 2.50m-6.50m SANDY CLAY 6.50m-9.00m DIRTY SAND (WET) 9.00m-14.00m SANDY CLAY 14.00m-18.00m GREY SILTY CLAY 16.00m-18.00m GREY DIRTY SAND & GRAVEL (WET) 18.00m-30.00m SANDY CLAY	0.00m-16.00m INNER LINING - CASING = Pvc 16.00m-18.00m INNER LINING - SCREEN = Pvc 18.00m-30.00m INNER LINING - CASING = Pvc 10.00m-11.00m OUTER LINING - GRAVEL = Bentonite	Date/time: 2016-02-23 0925 Quality: 43 WLMP: 6.84m DBNS: 6.84m RWL: 20.42mAHD		1995-01-16	1939	East
125271	Groundwater Investigation, State Observation Network	0.00m-1.00m DRY SAND 1.00m-2.50m CLAY 2.50m-6.50m SANDY CLAY 6.50m-9.00m DIRTY SAND (WET) 9.00m-10.00m SANDY CLAY	0.00m-7.00m INNER LINING - CASING = Pvc 7.00m-9.00m INNER LINING - SCREEN = Pvc 9.00m-10.00m INNER LINING - CASING = Pvc 4.50m-5.00m OUTER LINING - GRAVEL = Bentonite 5.00m-10.00m OUTER LINING - GRAVEL = Gravel	Date/time: 2016-02-23 0924 Quality: 43 WLMP: 5.79m DBNS: 5.79m RWL: 21.47mAHD		1995-01-17	1940	East
133612	Irrigation	0.00m-52.00m SILTY SANDS & CLAYEY MARLS SOME FILLING ENCOUNTERED AT 5-9 M 52.00m-150.00m FRIM GREY MUDSTONES	0.30m-52.00m INNER LINING - CASING = Steel 52.00m-150.00m INNER LINING - SCREEN = Steel 0.00m-52.00m OUTER LINING - GRAVEL = Cement		52.00m- 150.00m Mudstone	1997-11-24	1961	North West
WRK989785							1972	North East
WRK990264	Groundwater Investigation					2009-03-13	1990	East
81762	Domestic	0.00m-1.50m FILL SANDY BLACK SOIL 1.50m-4.00m SAND 4.00m-6.00m CLAY SAND 6.00m-13.50m SAND MED TO FINE GRAINED 13.50m-0.00m BEDROCK	0.00m-12.00m INNER LINING - CASING = Pvc 12.00m-13.50m INNER LINING - SCREEN = Pvc		12.00m-13.50m Sand	1983-12-31	1993	East

Boreholes WMIS Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

# **Groundwater Boreholes**

### **OSAR Proposed Road Alignments - Site 26 (Section 3)**

### **Boreholes (Earth Resources Database)**

#### Boreholes from the Earth Resources dataset, within the report buffer:

Bore Id	Bore Type	Company	Usage	Method	Status	Drill Date	Depth	Elevation	Accuracy (m)	Dist (m)	Direct
81737		Private Individual/Corporati on	Domestic water supply	Rotary (diamond/drag bit)		02/12/1983	86.00		100	0	Onsite
81729		Private Individual/Corporati on	Domestic water supply	Rotary (diamond/drag bit)		23/12/1982	49.38		100	89	West
81716		Private Individual/Corporati on	Domestic water supply	Hand Auger		12/06/1983	10.00		100	312	North
81736		Private Individual/Corporati on	Domestic water supply	Rotary (diamond/drag bit)		10/08/1983	24.38		100	419	South East
81750		Private Individual/Corporati on	Domestic water supply	Hand Auger		04/06/1984	6.00		100	566	North East
81722		Private Individual/Corporati on	Domestic water supply	Hand Auger		28/02/1983	9.00		100	659	North East
81761		Private Individual/Corporati on	Domestic water supply	Rotary (diamond/drag bit)		31/12/1983	13.50		100	1051	North East
81767		Private Individual/Corporati on	Domestic water supply	Percussion (cable)		01/09/1983	17.90		100	1052	North East
81763		Private Individual/Corporati on	Domestic water supply	Percussion (cable)		12/11/1982	9.15		100	1080	North East
81755		Private Individual/Corporati on	Domestic water supply	Hand Auger		01/06/1983	12.80		100	1283	North East
81717		Private Individual/Corporati on	Domestic water supply	Hand Auger		13/08/1981	16.20		100	1367	North East
81421		Department of Manufacturing & Industry Development	Groundwater Observation	Percussion (cable)		21/02/1973	51.82	21.70	100	1457	North
81437		Department of Manufacturing & Industry Development		Hand Auger	Abandoned	20/09/1985	4.00		100	1457	North
81438		Department of Manufacturing & Industry Development		Hand Auger	Abandoned	20/09/1985	2.90		100	1457	North
81739		Private Individual/Corporati on	Domestic water supply	Rotary (diamond/drag bit)		13/12/1983	19.51		100	1506	North East
81714		Private Individual/Corporati on	Domestic water supply	Rotary (diamond/drag bit)		27/02/1983	42.67		100	1532	East
81731		Local Government Authority	Irrigation	Air Percussion/Air Rotary		16/02/1983	122.00		100	1611	South West
81754		Private Individual/Corporati on		Percussion (cable)	Abandoned	10/05/1983	30.00		100	1914	North East
81764		Private Individual/Corporati on	Public/town water supply	Air Percussion/Air Rotary		24/04/1987	127.60		100	1914	South East
81762		Private Individual/Corporati on	Domestic water supply	Rotary (diamond/drag bit)		31/12/1983	13.50		100	1991	East

Boreholes Earth Resources Data Source: © The State of Victoria, Department of Economic Development, Jobs, Transport and Resources 2015. Creative Commons Attribution 3.0 Australia

# **Groundwater Boreholes**

### OSAR Proposed Road Alignments - Site 26 (Section 3)

## **Boreholes (Federation University)**

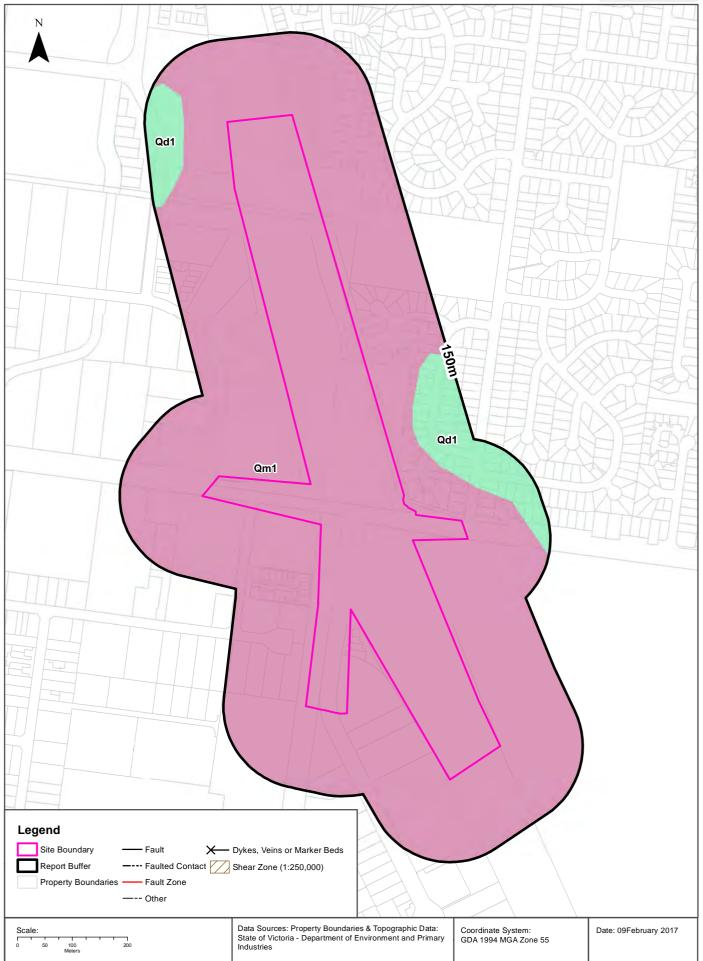
### Boreholes from the Federation University Australia dataset, within the report buffer:

Bore Id	Authority	Туре	Uses	Initial TD	Log	Dist (m)	Direct
N/A	No records within buffer						

Boreholes FedUni Data Source: © Federation University Australia

# Geology 1:50,000





# Geology

### **OSAR Proposed Road Alignments - Site 26 (Section 3)**

### **Geological Units**

#### What are the Geological Units onsite?

Symbol	Name	Description	Geological Age	Lithology	Dataset
Qm1	swamp and lake deposits (Qm1): generic	Grey to black carbonaceous mud, silt, clay, minor peat: generally unconsolidated; rare dolomite	Pleistocene to Holocene	mud (major proportion); silt material (significant); clay lithology (significant); peat (minor proportion)	1:50,000

### What are the Geological Units within the report buffer?

Symbol	Name	Description	Geological Age	Lithology	Dataset
Qd1	inland dune deposits (Qd1): generic	Sand, silt, clay: friable to consolidated; well sorted; includes both lunette deposits and deposits of longitudinal dunes	Quaternary to Quaternary	sand (significant); silt material (significant); clay lithology (significant)	1:50,000
Qm1	swamp and lake deposits (Qm1): generic	Grey to black carbonaceous mud, silt, clay, minor peat: generally unconsolidated; rare dolomite	Pleistocene to Holocene	mud (major proportion); silt material (significant); clay lithology (significant); peat (minor proportion)	1:50,000

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# Geology

#### OSAR Proposed Road Alignments - Site 26 (Section 3)

### **Geological Structures**

What are the Geological Faults or Faulted Contacts onsite?

Map Id	Туре	Name	Contact	Positional Accuracy	Dataset
No features					1:50,000

What are the Dykes, Marker Beds and Veins onsite?

Map Id	Туре	Name	Description	Positional Accuracy	Dataset
No features					1:50,000

What are the Shear Zones onsite (1:250,000 scale)?

Map Id	Туре	Name	Description	Positional Accuracy	Dataset
No features					1:250,000

What are the Geological Faults or Faulted Contacts within the report buffer?

Map Id	Туре	Name	Contact	Positional Accuracy	Dataset
No features					1:50,000

What are the Dykes, Marker Beds and Veins within the report buffer?

Map Id	Туре	Name	Description	Positional Accuracy	Dataset
No features					1:50,000

#### What are the Shear Zones within the report buffer (1:250,000 scale)?

Map Id	Туре	Name	Description	Positional Accuracy	Dataset
No features					1:250,000

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# **Coastal Acid Sulfate Soils**

### **OSAR Proposed Road Alignments - Site 26 (Section 3)**

### **Coastal Acid Sulfate Soils**

### What are the on-site Coastal Acid Sulfate Soil types?

Coastal Acid Sulfate Soil Types	
There are no Acid Sulfate areas onsite	

### What are the Coastal Acid Sulfate Soil types within the report buffer?

Coastal Acid Sulfate Soil Types	Distance	Direction
There are no Acid Sulfate areas within the report buffer		

Coastal Acid Sulfate Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

### **Planning Zones**





# **Planning Zones**

### OSAR Proposed Road Alignments - Site 26 (Section 3)

### **Planning Zones**

### Planning zones within the report buffer:

Zone Code	Description	Distance	Direction
RDZ1	ROAD ZONE - CATEGORY 1	0m	Onsite
IN1Z	INDUSTRIAL 1 ZONE	0m	Onsite
GRZ3	GENERAL RESIDENTIAL ZONE - SCHEDULE 3	0m	Onsite
PUZ1	PUBLIC USE ZONE - SERVICE AND UTILITY	0m	Onsite
PPRZ	PUBLIC PARK AND RECREATION ZONE	0m	South East
PPRZ	PUBLIC PARK AND RECREATION ZONE	14m	North

Planning Zone Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

### **Planning Overlays**





# **Planning Overlays**

### **OSAR Proposed Road Alignments - Site 26 (Section 3)**

## **Planning Overlays**

#### Planning overlays within the report buffer:

Zone Code	Description	Distance	Direction
SBO	SPECIAL BUILDING OVERLAY	0m	Onsite
PAO1	PUBLIC ACQUISITION OVERLAY 1	0m	Onsite
DDO5	DESIGN AND DEVELOPMENT OVERLAY - SCHEDULE 5	0m	Onsite
LSIO	LAND SUBJECT TO INUNDATION OVERLAY	0m	Onsite
DDO4	DESIGN AND DEVELOPMENT OVERLAY - SCHEDULE 4	0m	Onsite
AEO1	AIRPORT ENVIRONS OVERLAY (AEO1)	23m	North West
SBO	SPECIAL BUILDING OVERLAY	45m	West
PAO1	PUBLIC ACQUISITION OVERLAY 1	135m	North

Planning Overlay Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

# **Cultural Heritage Sensitivity**

#### **OSAR Proposed Road Alignments - Site 26 (Section 3)**

### **Cultural Heritage Sensitivity**

# Areas of Cultural Heritage Sensitivity as specified in Division 3 of Part 2 in the Aboriginal Heritage Regulations 2007, within the report buffer:

Map Id	Culturally Sensitive	Distance	Direction
N/A	No records in buffer		

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### **Natural Hazards**





# **Natural Hazards**

**OSAR Proposed Road Alignments - Site 26 (Section 3)** 

### **Bushfire Prone Areas**

What are the designated bushfire prone areas within the report buffer?

Map ID	Feature	Plan No	LGA	Gazetted Date	Distance	Direction
56	Designated Bushfire Prone Area	LEGL./14-158	KINGSTON	07/04/2014	0m	Onsite

Bushfire Prone Area Data Custodian: State Government Victoria - Dept of Transport, Planning & Local Infrastructure Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

# **Fire History**

What are the fire history records of fires primarily on public land, within the report buffer?

Map Id	Fire Type	Fire Key	Season	Fire No	Fire Name	Treatment	Fire Cover	Start Date	Dist (m)	Direction
N/A	No records within buffer									

Fire History Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

### Flood - 1 in 100 year modelled flood extent

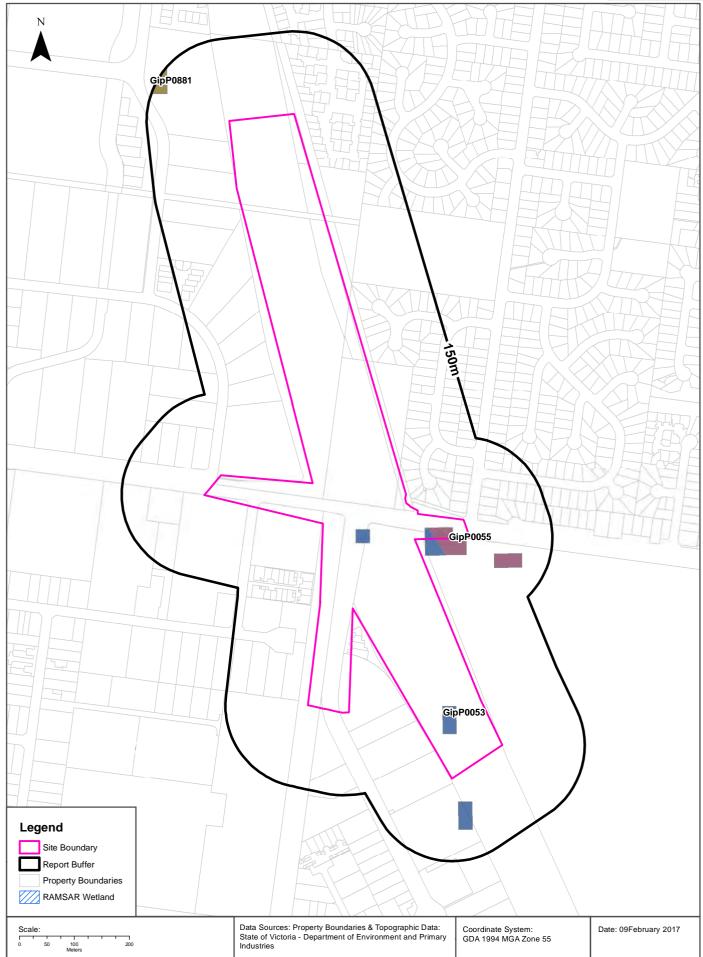
#### What 1 in 100 year flood extent features exist within the report buffer?

Feature	Source	Method	Scale	Modified Date	Distance	Direction
N/A	No records within buffer					

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### **Ecological Constraints - Native Vegetation 2005 & RAMSAR Wetlands**





# **Ecological Constraints**

### OSAR Proposed Road Alignments - Site 26 (Section 3)

### Native Vegetation (Modelled 2005 Ecological Vegetation Classes)

What native vegetation exists within the report buffer?

Veg Code	EVC Name	EVCCode	Group	Subgroup	Bioregion	Conservation Status	Geographic Occurance	Distance
GipP0053	Swamp Scrub	0053	Riparian Scrubs or Swampy Scrubs and Woodlands		Gippsland Plain	Endangered	Common	Om
GipP0055	Plains Grassy Woodland	0055	Plains Woodlands or Forests	Freely-draining	Gippsland Plain	Endangered	Common	0m
GipP0881	Damp Sands Herb- rich Woodland/Heathy Woodland Mosaic	0881	Herb-rich Woodlands	Damp Sands	Gippsland Plain	Vulnerable	not applicable	122m

Native Vegetation Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

### **RAMSAR Wetlands**

What RAMSAR wetland areas exist within the report buffer?

Map ID	Site Name	Lake Name	Distance	Direction
N/A	No records within buffer			

RAMSAR Wetland Area Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

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# **Environmental Risk and Planning Report**

### **OSAR Proposed Road Alignments - Site 26 (Section 4)**

### **Report Buffer: 150m**

### Report Date: 09 Feb 2017 10:52:50

Disclaimer:

The purpose of this report is to provide an overview of some of the site history, environmental risk and planning information available, affecting an individual address or geographical area in which the property is located. It is not a substitute for an onsite inspection or review of other available reports and records. It is not intended to be, and should not be taken to be, a rating or assessment of the desirability or market value of the property or its features.

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# **Table of Contents**

Location Confidences
Dataset Listings
Site Location Aerial
Topographic Features
Elevation Contours7
EPA Records
Waste Management Facilities11
Historical Business Activities12
Historical Aerial Imagery & Maps15
Features of Interest
Hydrogeology & Groundwater24
Groundwater Boreholes
Geology
Coastal Acid Sulfate Soils
Planning Zones
Planning Overlays
Cultural Heritage Sensitivity
Natural Hazards
Ecological Constraints
Terms & Conditions

# **Location Confidences**

Where Lotsearch has had to georeference features from supplied addresses, a location confidence has been assigned to the data record. This indicates a confidence to the positional accuracy of the feature. Where applicable, a code is given under the field heading "LocConf". These codes lookup to the following location confidences:

LC Code	Location Confidence
1	Georeferenced to the site location / premise or part of site
2	Georeferenced with the confidence of the general/approximate area
3	Georeferenced to the road or rail
4	Georeferenced to the road intersection
5	Feature is a buffered point
6	Land adjacent to Georeferenced Site
7	Georeferenced to a network of features

# **Dataset Listing**

Datasets contained within this report, detailing their source and data currency:

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	No. Features Onsite	No. Features within 100m	No. Features in Buffer
Topographic and Cadastre data	State Government Victoria - Department of Environment, Land, Water & Planning	06/02/2017	06/02/2017	Quarterly	-	-	-
Current Priority Sites	Environment Protection Authority (Vic)	06/02/2017	31/12/2016	Monthly	0	0	0
Former Priority Sites & other Pollution Notices	Environment Protection Authority (Vic)	06/02/2017	05/01/2017	Monthly	0	0	0
EPA Environmental Audit Reports	Environment Protection Authority (Vic)	06/02/2017	24/11/2016	Monthly	0	0	0
Groundwater Zones with Restricted Uses	Environment Protection Authority (Vic)	06/02/2017	27/01/2017	Monthly	0	0	0
Licensed Activities	Environment Protection Authority (Vic)	06/02/2017	29/01/2017	Monthly	0	0	0
Former Licensed Activities	Environment Protection Authority (Vic)	06/02/2017	29/01/2017	Monthly	0	0	0
Works Approvals	Environment Protection Authority (Vic)	06/02/2017	06/02/2017	Monthly	0	0	0
National Waste Management Site Database	Geoscience Australia	06/02/2017	15/11/2012	Quarterly	0	0	0
Statewide Waste and Resource Recovery Infrastructure Plan Facilities	State Government Victoria - Department of Sustainability	27/11/2014	31/12/2012	None planned	0	0	0
EPA Prescribed Industrial Waste	Environment Protection Authority (Vic)	04/01/2017	04/01/2017	Quarterly	0	0	0
UBD Business to Business Directory 1991	Hardie Grant			Not required	0	0	0
UBD Business to Business Directory 1991 - Garages & Service Stations	Hardie Grant			Not required	0	0	0
UBD Business Directory 1980	Hardie Grant			Not required	0	0	0
UBD Business Directory 1980 Drycleaners, Motor Garages & Service Stations	Hardie Grant			Not required	0	0	0
UBD Business Directory 1960 Drycleaners, Motor Garages & Service Stations	Hardie Grant			Not required	0	0	0
UBD Business Directory 1950	Hardie Grant			Not required	0	0	0
UBD Business Directory 1950 Drycleaners, Motor Garages & Service Stations	Hardie Grant			Not required	0	0	0
Features of Interest	State Government Victoria - Department of Environment, Land, Water & Planning	03/02/2017	27/01/2017	Quarterly	4	4	4
Hydrogeology Map of Australia	Commonwealth of Australia (Geoscience Australia)	08/10/2014	17/03/2000	As required	1	1	1
Groundwater Salinity	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	29/08/2012	Unknown	1	-	-
Depth to Watertable	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	29/08/2012	Unknown	1	-	-
Surface Elevation	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	23/09/2013	Unknown	1	-	-
Basement Elevation	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	23/09/2013	Unknown	1	-	-
Groundwater Boreholes WMIS	State Government Victoria - Department of Environment, Land, Water & Planning	29/04/2016	28/04/2016	Annually	0	0	85
Groundwater Boreholes Earth Resources Database	The State of Victoria, Department of Economic Development, Jobs, Transport and Resources	29/04/2016	17/02/2010	As required	0	0	13
Groundwater Boreholes Fed Uni	Federation University Australia	29/04/2016	07/01/2014	As required	0	0	0
Geological Units 1:250,000	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	3	-	3
Geological Structures 1:250,000	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	0	-	0

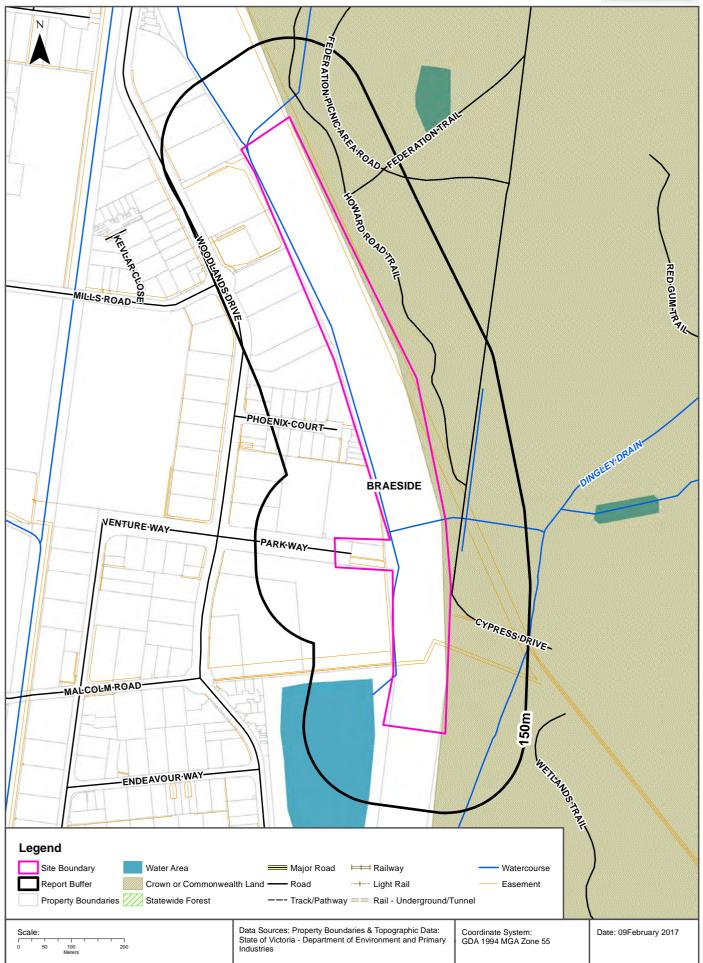
Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	No. Features Onsite	No. Features within 100m	No. Features in Buffer
Shear zones 250k	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	0	-	0
Coastal Acid Sulfate Soils	The State of Victoria, Department of Economic Development, Jobs, Transport and Resources	15/07/2016	30/03/2011	None planned	1	1	1
Planning Scheme Zones	State Government Victoria - Department of Environment, Land, Water & Planning	27/01/2017	27/01/2017	Quarterly	2	2	2
Planning Scheme Overlay	State Government Victoria - Department of Environment, Land, Water & Planning	27/01/2017	27/01/2017	Quarterly	3	3	3
Cultural Heritage Sensitivity	State Government Victoria - Department of Planning and Community Development	03/02/2017	27/01/2017	Quarterly	2	3	3
Bushfire Prone Area	State Government Victoria - Department of Transport, Planning and Local Infrastructure	27/01/2017	27/01/2017	Quarterly	1	1	1
Fire History	State Government Victoria - Department of Environment, Land, Water & Planning	27/01/2017	27/01/2017	Quarterly	0	0	0
Flood - 1 in 100 Year Modelled Flood Extent	State Government Victoria - Department of Environment, Land, Water & Planning	27/01/2017	27/01/2017	Quarterly	0	0	0
Native Vegetation (Modelled 2005 Ecological Vegetation Classes)	State Government Victoria - Department of Environment, Land, Water & Planning	13/01/2015	31/12/2005	None planned	1	2	2
RAMSAR Wetlands	State Government Victoria - Department of Environment, Land, Water & Planning	13/01/2015	24/06/2013	None planned	0	0	0





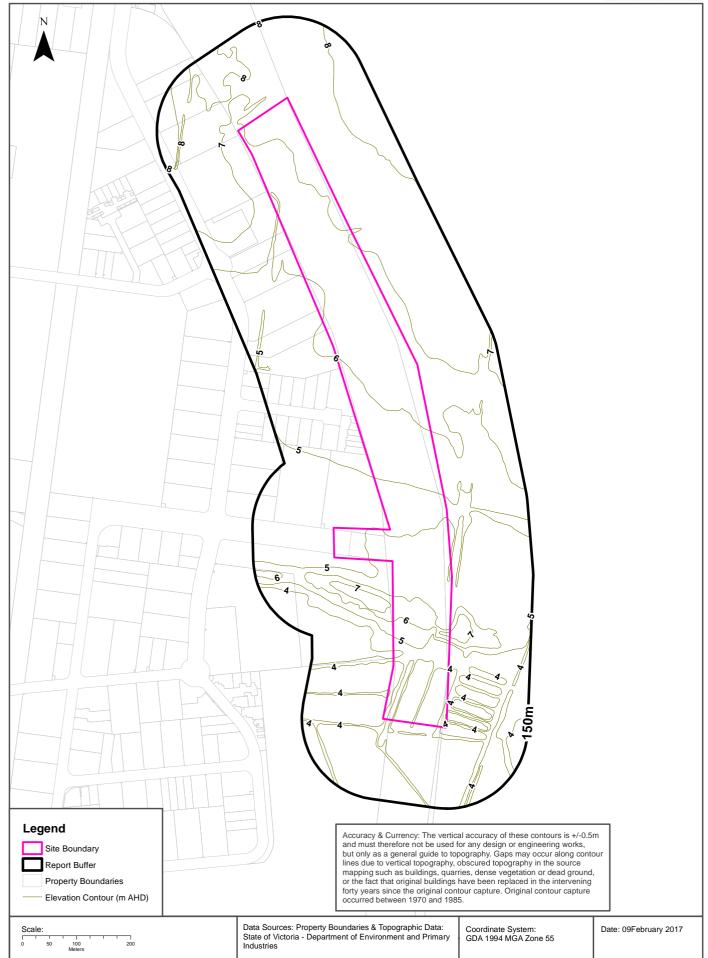
### **Topographic Data**





### **Elevation Contours (m AHD)**





# **EPA Records**

### **OSAR Proposed Road Alignments - Site 26 (Section 4)**

### **Current EPA Priority Sites Register**

#### What sites on the current EPA priority sites register exist within the report buffer?

Notice No	Address	Suburb	Issue	Loc Conf	Dist (m)	Direction
N/A	No records in buffer					

Priority Sites Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

# Former EPA Priority Sites & Other Pollution Notices

#### What sites within the report buffer have been issued a Pollution Notice? Note. Due to pollution notices being revoked and removed from published lists this is not an exhaustive list of all past pollution notices.

Notice No	Notice Type	Company	Address	Suburb	Status	Issue	Date Issued	Loc Conf	Dist	Dir
N/A	No records in buffer									

Pollution Notice Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

## **EPA Records**

### **OSAR Proposed Road Alignments - Site 26 (Section 4)**

### **EPA Environmental Audits**

What EPA environmental audit records exist within the report buffer? Note. Please click on CARMS No. to activate a hyperlink to online documentation. If link does not work, documentation may still be accessible via the EPA Interaction Portal.

CARMS No	Transaction No	Site	Address	Suburb	Date Complete	Loc Conf	Distance	Direction
N/A	No records in buffer							

Environmental Audit Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

### **EPA Groundwater Zones with Restricted Uses**

#### What EPA GQRUZ exist within the report buffer?

Note. Please click on CARMS No. to activate a hyperlink to online documentation.

CARMS No	EPA Id	Site History	Site Address	Restricted Uses	Loc Conf	Distance	Direction
N/A	No records in buffer						

Environmental GQRUZ Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

## **EPA Records**

#### **OSAR Proposed Road Alignments - Site 26 (Section 4)**

### **EPA Licensed Activities**

#### What EPA licensed activities exist within the report buffer?

Trans No	Licence No	Licence Type	Organisation	Premise Ref	Premise Address 1	Premise Address 2	Activities	Loc Conf	Dist (m)	Direction
N/A	No records in buffer									

Licensed Activity Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

### **Former EPA Licensed Activities**

#### What former EPA licensed activities exist within the report buffer?

Licence No	Organisation	Premise Address	Suburb	Activities	Loc Conf	Dist (m)	Direction
N/A	No records in buffer						

Former Licensed Activity Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

## **EPA Works Approvals**

#### What EPA works approvals exist within the report buffer?

Transaction No	Status	Approval No	Organisation	Premise Address	Suburb	Scheduled Categories	Loc Conf	Dist (m)	Direction
N/A	No records in buffer								

Works Approvals Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

# **Waste Management Facilities**

#### **OSAR Proposed Road Alignments - Site 26 (Section 4)**

### **National Waste Management Site Database**

Sites on the National Waste Management Site Database within the report buffer:

Site Id	Owner	Name	Address	Suburb	Postcode	Landfill	Reprocess	Transfer	Loc Conf	Dist (m)	Direction
N/A	No records in buffer										

Waste Management Facilities Data Source: Australian Government Geoscience Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

### **Statewide Waste and Resource Recovery Infrastructure Plan Facilities**

Statewide Waste and Resource Recovery Infrastructure Plan Facilities within the report buffer:

Map Id	Owner	Site Name	Address	Suburb	Category	Sub Category	Loc Conf	Distance	Direction
N/A	No records in buffer								

SWRRIPF Data Source: State Government Victoria - Department of Sustainability

### **EPA Prescribed Industrial Waste**

EPA Prescribed industrial waste sites within the report buffer:

Map Id	Company Name	Address	Suburb	Treatment /Disposal	Transport	Accredited Agent	EPA List Status	Loc Conf	Dist (m)	Direct
N/A	No records in buffer									

Prescribed Industrial Waste Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

# **Historical Business Directories**

#### **OSAR Proposed Road Alignments - Site 26 (Section 4)**

### **1991 Business to Business Directory Records**

#### 1991 UBD Business Directory Records within 150m of the site:

Activity	Organisation	Address	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer					

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

### **1991 Business to Business Directory Garages & Service Stations**

#### 1991 UBD Business Directory Garages & Service Stations within 1km of the site:

Activity	Organisation	Address	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer					

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

# **Historical Business Directories**

### OSAR Proposed Road Alignments - Site 26 (Section 4)

### **1980 Business Directory Records**

#### 1980 UBD Business Directory Records within 150m of the site:

Activity	Premise	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

### **1980 Business Directory Drycleaners, Garages & Service Stations**

#### Drycleaners, Garages & Service Stations from the 1980 UBD Business Directory within 1km of the site:

Activity	Premise	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

# **Historical Business Directories**

#### **OSAR Proposed Road Alignments - Site 26 (Section 4)**

### **1960 Business Directory Drycleaners, Garages & Service Stations**

#### Drycleaners, Garages & Service Stations from the 1960 UBD Business Directory within 1km of the site:

Activity	Premise	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

## **1950 Business Directory Records**

#### 1950 UBD Business Directory Records within 150m of the site:

Activity	Premise	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

### **1950 Business Directory Drycleaners, Garages & Service Stations**

#### Drycleaners, Garages & Service Stations from the 1950 UBD Business Directory within 1km of the site:

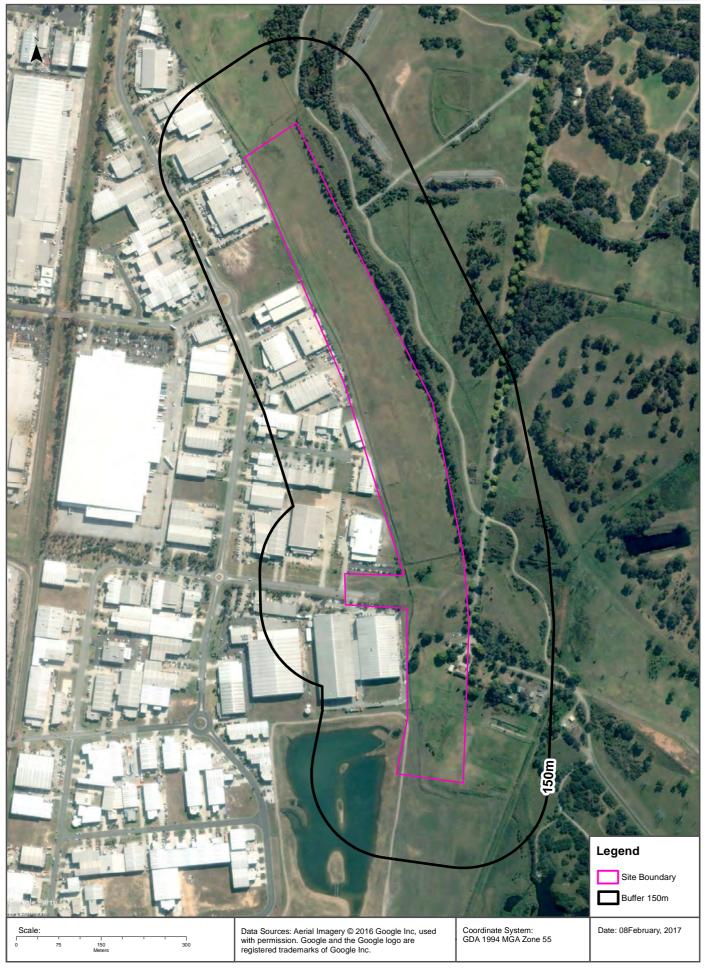
Activity	Premise	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

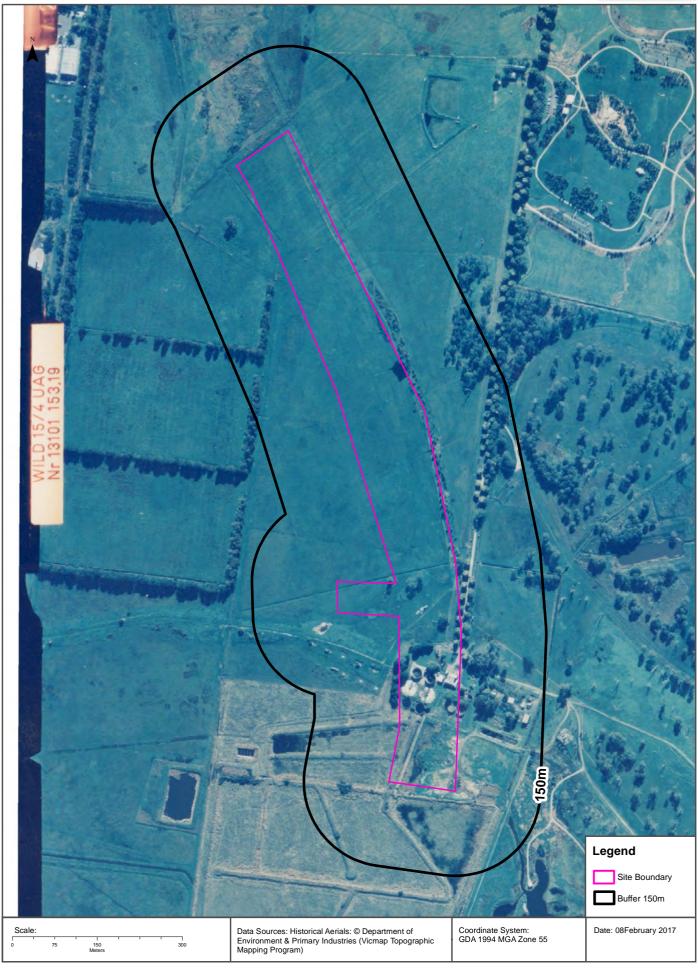




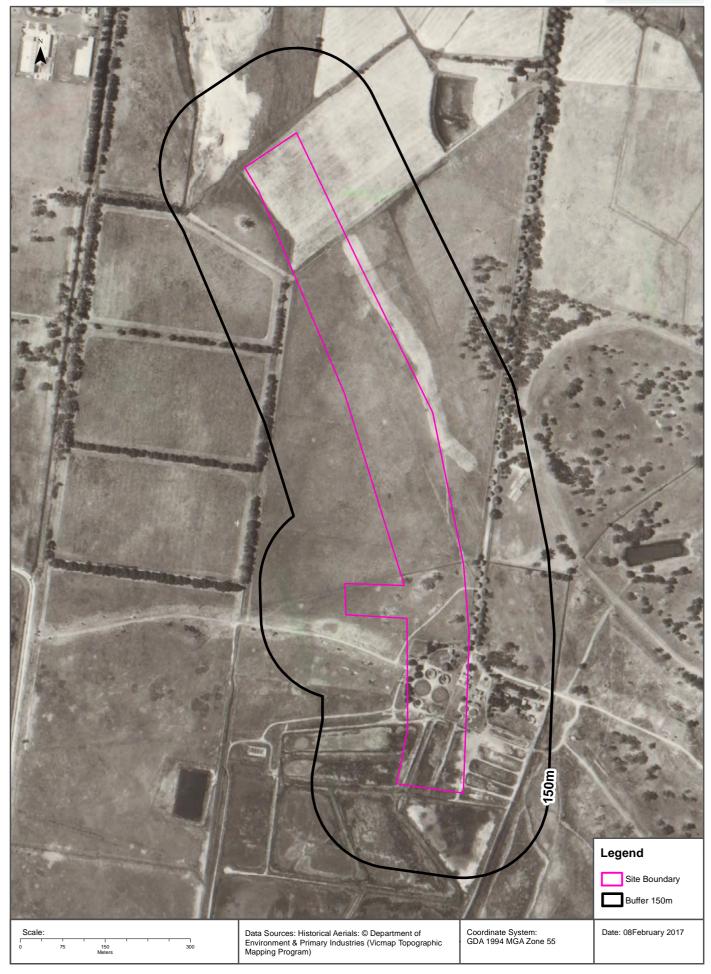




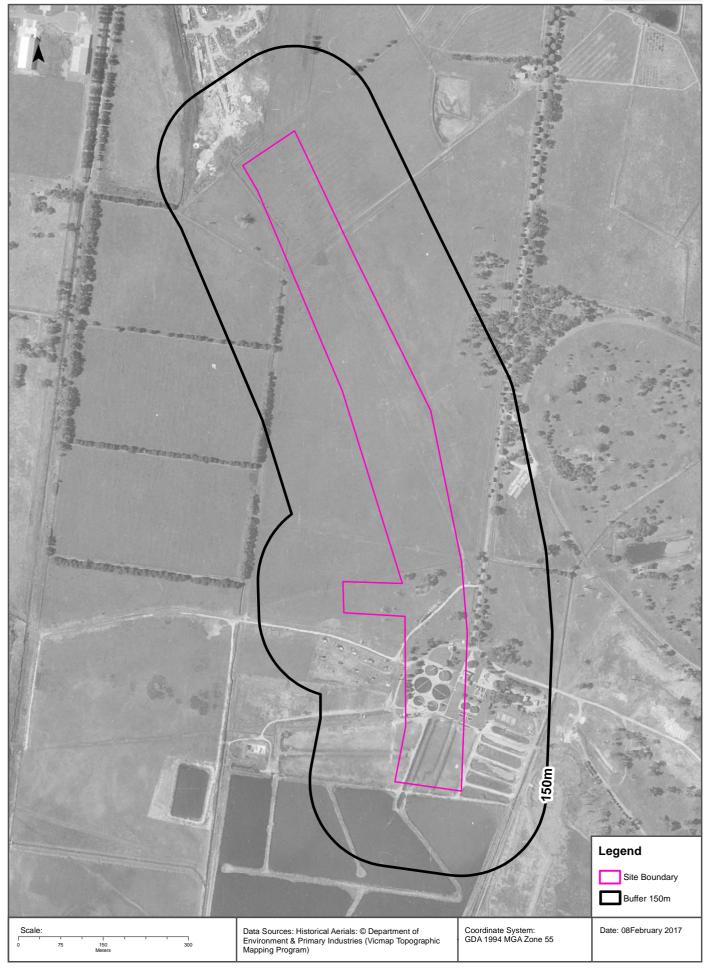




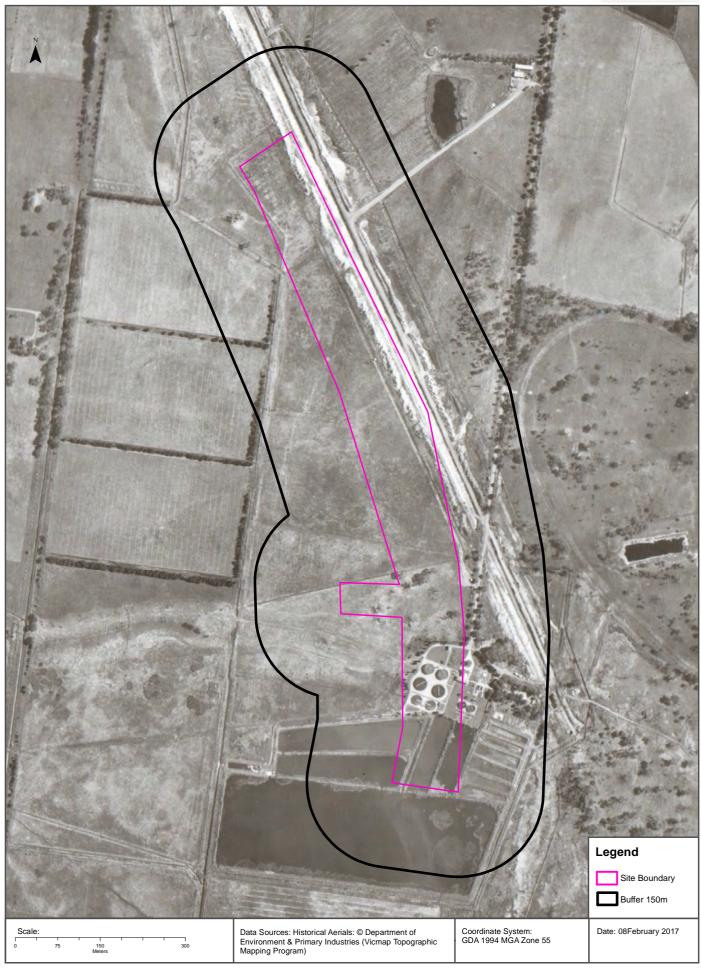




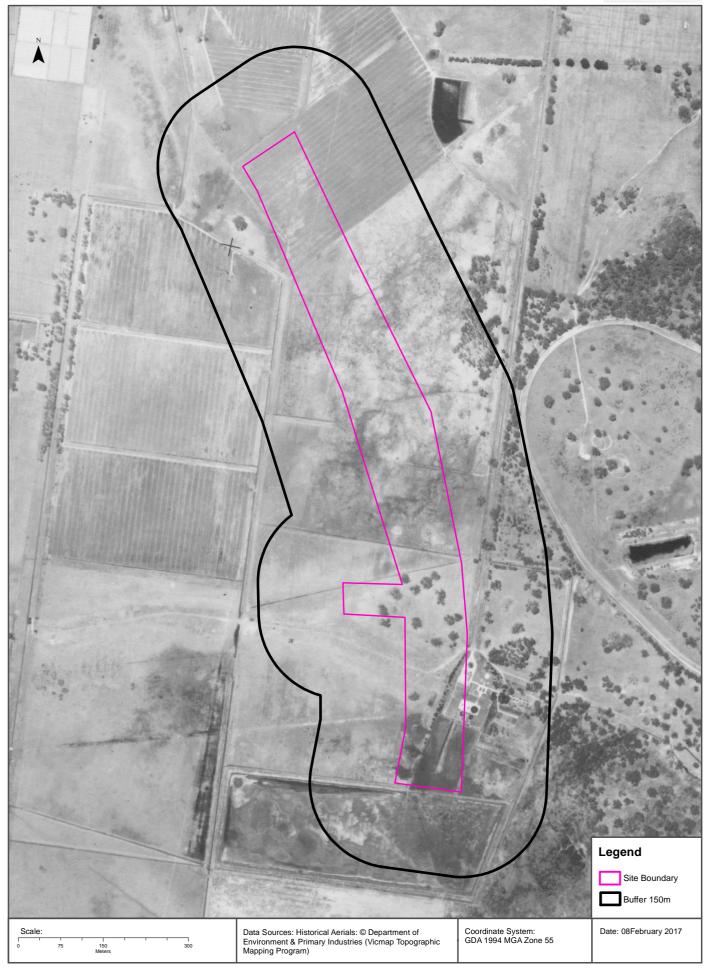






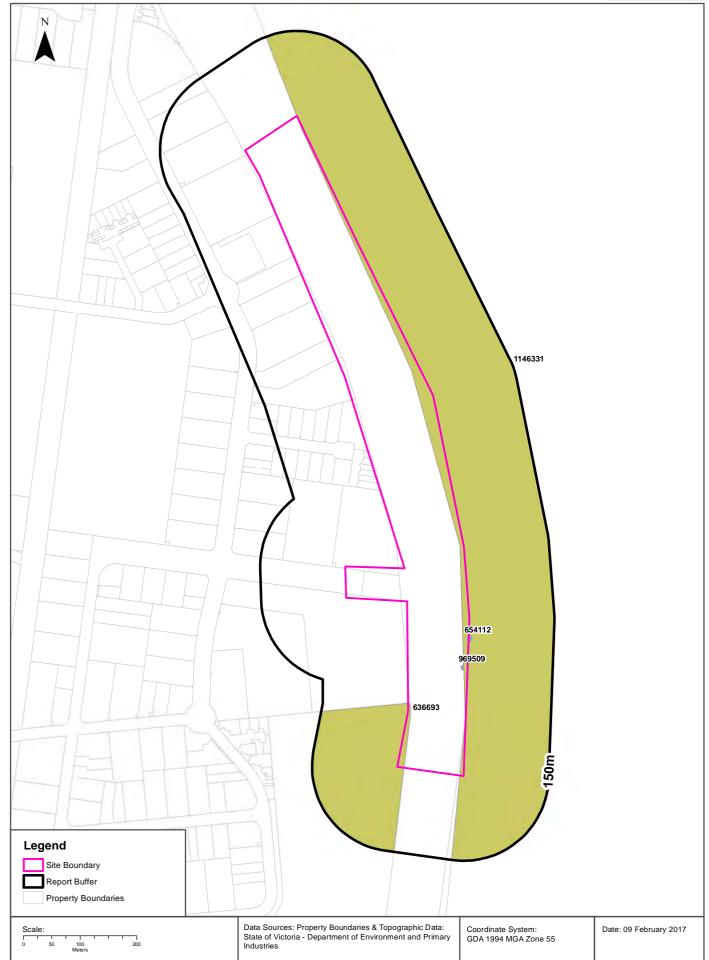






### **Features of Interest**





# **Features of Interest**

#### OSAR Proposed Road Alignments - Site 26 (Section 4)

## **Features of Interest**

Features of Interest within 1km of the site:

Feature Id	Feature Type	Feature Sub Type	Name	Distance	Direction
969509	admin facility	office	Braeside	0m	Onsite
636693	reserve	park	Woodlands Industrial Estate Environmental Wetland	0m	Onsite
1146331	reserve	conservation park	Braeside Park	0m	Onsite
654112	sign	emergency marker	BSP409	0m	Onsite

Features of Interest Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

# Hydrogeology & Groundwater

#### **OSAR Proposed Road Alignments - Site 26 (Section 4)**

### **Hydrogeology**

#### Description of aquifers within report buffer:

Description	Distance	Direction
Porous, extensive highly productive aquifers	0m	Onsite

Hydrogeology Map of Australia: Commonwealth of Australia (Geoscience Australia) Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Groundwater Salinity**

#### On-site Groundwater Salinity:

Groundwater Salinity	Percent Of Site Area
1,000 - 3,500 mg/l	100

### **Depth to Watertable**

On-site Depth to Watertable:

Depth to Watertable	Percent Of Site Area
Less than 5 metres	100

## **Surface Elevation**

Approximate on-site Surface Elevation:

Surface Elevation

4 AHDm to 8 AHDm

### **Basement Elevation**

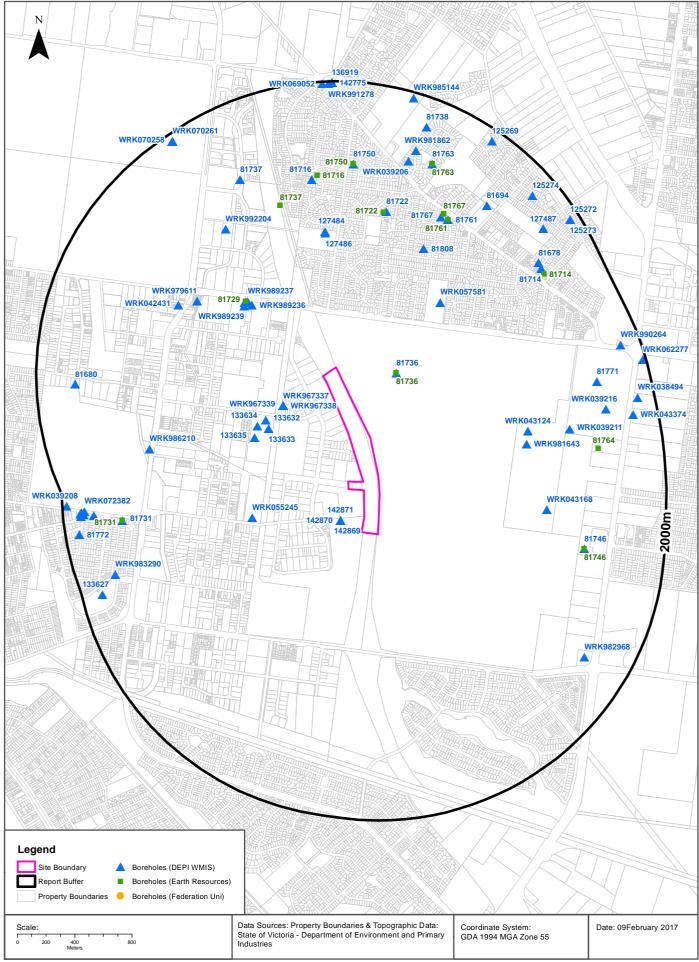
#### Approximate on-site Basement Elevation:

Basement Elevation - Basement Rocks comprise Lower Palaeozoic basement rocks that form the highlands and the crystalline basement; and Mesozoic rocks of the Otway and Gippsland basins both outcropping and subsurface -41 AHDm to -38 AHDm

Groundwater Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

### **Groundwater Boreholes**





# **Groundwater Boreholes**

#### OSAR Proposed Road Alignments - Site 26 (Section 4)

# **Boreholes (DEPI WMIS)**

Boreholes from the Department of Environment and Primary Industries' Water Measurement Information System, within the report buffer:

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
142869	Groundwater Investigation	0.00m-14.40m SANDY CLAY	0.00m-11.40m INNER LINING - CASING = Pvc 11.40m-14.40m INNER LINING - SCREEN = Pvc 10.40m-10.90m OUTER LINING - GRAVEL = Bentonite 10.90m-14.40m OUTER LINING - GRAVEL = Gravel			1999-11-03	158	South
142870	Groundwater Investigation	0.00m-12.50m SANDY CLAY	0.00m-5.00m INNER LINING - CASING = Pvc 5.00m-12.50m INNER LINING - SCREEN = Pvc 0.00m-4.00m OUTER LINING - GRAVEL = Cement 4.00m-4.50m OUTER LINING - GRAVEL = Bentonite 4.50m-12.50m OUTER LINING - GRAVEL = Gravel			1999-10-18	158	South
142871	Groundwater Investigation	0.00m-12.50m SANDY CLAY	0.00m-5.00m INNER LINING - CASING = Pvc 5.00m-12.00m INNER LINING - SCREEN = Pvc 0.00m-4.00m OUTER LINING - GRAVEL = Cement 4.00m-4.50m OUTER LINING - GRAVEL = Bentonite 4.50m-12.50m OUTER LINING - GRAVEL = Gravel			1999-10-18	158	South
WRK967337							342	North West
WRK967338							342	North West
WRK967339							342	North West
81736	Domestic	0.00m-0.30m TOP SOIL 0.30m-0.91m WHITE SAND 0.91m-3.61m CLAY 3.61m-7.01m CLAY AND FINE SAND 7.01m-9.71m SHELL GRIT AND SHALE WITH COARSE PARTS 9.71m-11.84m COARSE WATER BEARING CLAY 11.84m-16.15m CLAY SHELL GRIT AND SHALE 16.15m-24.38m SHELL, GRIT AND SHALE	0.00m-22.86m INNER LINING - CASING = Pvc 22.86m-24.38m INNER LINING - SCREEN = Pvc		22.86m-24.38m Clay	1983-08-10	363	North East
133632	Groundwater Investigation	0.00m-0.90m FILL CLAYEY SILT 0.90m-3.50m SANDY CLAY 3.50m-6.00m CLAYEY SAND				1998-01-21	491	West
133633	Groundwater Investigation	0.00m-1.30m FILL SAND & SANDY CLAY 1.30m-6.00m SANDY CLAY				1998-01-21	496	West
133634	Groundwater Investigation	0.00m-1.00m FILL FRAVEL & SANDY CLAY 1.00m-5.50m SANDY CLAY 5.50m-6.00m CLAYEY SAND				1998-01-21	562	West
133635	Groundwater Investigation	0.00m-1.50m FILL SANDY LOAM 1.50m-2.00m CLAY 2.00m-6.50m SANDY CLAY				1998-01-21	612	West
WRK055245	Observation		0.00m-2.00m INNER LINING - CASING = Pvc 2.00m-8.00m INNER LINING - SCREEN = Pvc 0.00m-1.50m OUTER LINING - GRAVEL = Bentonite 1.50m-8.00m OUTER LINING - GRAVEL = Gravel			2010-02-23	698	South West
WRK989236							699	North West
WRK989239							736	North West

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK989237							739	North West
81729	Domestic	0.00m-3.05m CLAY 3.05m-12.19m SANDY CLAY BROWN 12.19m-21.34m SAND BROWN 21.34m-36.58m SAND GREY 36.58m-49.38m SAND BLACK	0.00m-36.58m INNER LINING - CASING = Pvc 36.58m-38.10m INNER LINING - SCREEN = Pvc 38.10m-44.50m INNER LINING - CASING = Pvc 42.98m-45.72m INNER LINING - SCREEN = Pvc		36.58m-38.10m Sand 42.98m-45.72m Sand	1982-12-23	749	North West
WRK989238							750	North West
WRK057581	Irrigation	0.00m-2.50m Sand 2.50m-3.20m sandy Clay 3.20m-6.50m Grey Clay 6.50m-13.30m Brown Sandy Clay 13.30m-18.50m Blue Clay 18.50m-20.50m Fine Sand 20.50m-29.50m Blue Clay 29.50m-32.00m Sand 32.00m-33.00m Blue Clay				2010-09-23	858	North East
127486	Groundwater Investigation, Observation, State Observation Network	0.00m-1.00m FINE GREY SAND 1.00m-7.00m LIGHT BROWN CLAYEY SAND 7.00m-15.00m BROWN CLAYEY SAND 15.00m-30.00m SANDY MARL	0.00m-27.00m INNER LINING - CASING = Pvc 27.00m-29.00m INNER LINING - SCREEN = Pvc 29.00m-30.00m INNER LINING - CASING = Pvc 26.00m-27.00m OUTER LINING - GRAVEL = Bentonite 27.00m-30.00m OUTER LINING - GRAVEL = Gravel	Date/time: 2016-02-23 1043 Quality: 43 WLMP: 4.17m DBNS: 4.24m RWL: 6.88mAHD		1996-04-18	942	North
127484	Groundwater Investigation, Observation, State Observation Network	0.00m-1.00m DARK GREY SANDY SOIL 1.00m-2.00m ORANGY BROWN SANDY CLAY 2.00m-3.00m BROWNY ORANGE SANDY CLAY 3.00m-5.00m ORANGE GRAVELY CLAY 5.00m-13.00m ORANGE & GREY GRAVELY CLAY 13.00m-15.00m GREY SILTY SAND	0.00m-12.00m INNER LINING - CASING = Pvc 12.00m-14.00m INNER LINING - SCREEN = Pvc 14.00m-15.00m INNER LINING - CASING = Pvc 10.00m-11.00m OUTER LINING - GRAVEL = Bentonite 11.00m-15.00m OUTER LINING - GRAVEL = Gravel	Date/time: 2016-02-23 1042 Quality: 43 WLMP: 4.18m DBNS: 4.20m RWL: 6.95mAHD		1996-04-12	954	North
WRK979611							1021	North West
81808	Not Known					1988-01-01	1031	North
WRK981643							1058	East
WRK043124	Not Known					1988-01-01	1086	East
WRK042431		0.00m-4.60m MEDIUM GRAINED SAND 4.60m-5.60m GREY CLAY 5.60m-12.00m ORANGE/BROWN, VERY FINE SANDSTONE 12.00m-47.50m GREY SIL/SOME SHELLS AT DEPTH 47.50m-48.50m GREY SANDSTONE 48.50m-50.00m DARK GREY/SANDY LIMESTONE 50.00m-51.00m LIGHT GREY HARD LIMESTONE 51.00m-53.50m BROWN CLAY 53.50m-54.00m QUARTZ SAND 54.00m-55.00m BROWN CLAY 55.00m-57.00m COARSE SAND CEMENTED PYRITE 57.00m-59.50m LIGHT GREY CLAY 59.00m-59.50m LIGHT GREY SANDSTONE 59.00m-62.00m LIGHT GREY BASALT 62.00m-66.00m COARSE SAND/WOODY 66.00m-67.00m GREY CLAY	0.00m-59.60m INNER LINING - CASING = Abs Plastic 59.60m-62.00m INNER LINING - SCREEN = Abs Plastic 0.00m-41.00m OUTER LINING - GRAVEL = Cement 41.00m-56.30m OUTER LINING - GRAVEL = Bentonite 56.30m-65.70m OUTER LINING - GRAVEL = Gravel		59.60m-62.00m Basalt	1997-11-25		North West
81722	Domestic	0.00m-1.20m TOP SOIL 1.20m-8.00m CLAY 8.00m-9.00m RIVER SAND 9.00m-0.00m ROCK (SANDSTONE)	0.00m-6.00m INNER LINING - CASING = Pvc 6.00m-9.00m INNER LINING - SCREEN = Pvc 0.00m-1.00m OUTER LINING - GRAVEL = Cement 0.30m-0.00m OUTER LINING - GRAVEL = Seal		6.00m-9.00m Sand	1983-02-28	1145	North
WRK043168	Irrigation					1982-01-01	1168	East
WRK992204	Groundwater Investigation	0.00m-0.50m fill 0.50m-5.00m brighton group sands	0.00m-2.00m INNER LINING - CASING = Pvc 2.00m-5.00m INNER LINING - SCREEN = Pvc 0.00m-0.20m OUTER LINING - GRAVEL = Cement 0.20m-1.50m OUTER LINING - GRAVEL = Bentonite 1.50m-5.00m OUTER LINING - GRAVEL = Gravel			2009-08-10	1230	North West

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
81767	Domestic	0.00m-0.30m SURFACE SOIL 0.30m-0.60m GREY SAND 0.60m-4.20m CLAY 4.20m-14.00m SANDY CLAY 14.00m-15.80m SLOPPY CLAYEY SAND 15.80m-17.90m CLAYEY SAND WITH PIECES OF IRONSTONE	0.00m-15.80m INNER LINING - CASING = Pvc 15.80m-17.90m INNER LINING - SCREEN = Pvc 4.50m-17.90m OUTER LINING - GRAVEL = Gravel		15.80m-17.90m Sand	1983-09-01	1280	North
81761	Domestic, Stock	0.00m-1.00m FILL BRICK RUBBLE 1.00m-3.00m SAND YELLOW 3.00m-6.00m SANDY CLAY 6.00m-9.00m CLAY 9.00m-13.50m SAND 13.50m-0.00m BEDROCK	0.00m-12.00m INNER LINING - CASING = Pvc 12.00m-13.50m INNER LINING - SCREEN = Pvc		12.00m-13.50m Sand	1983-12-31	1293	North
WRK986210							1310	West
81716	Domestic	0.00m-2.00m TOP SOIL 2.00m-6.00m CLAY 6.00m-7.00m LIGHT CLAY AND SAND 7.00m-8.00m LIGHT SAND 8.00m-10.00m COARSE SAND	0.00m-7.00m INNER LINING - CASING = Pvc 7.00m-10.00m INNER LINING - SCREEN = Pvc		7.00m-10.00m Clay	1983-06-12	1321	North
WRK039211	Irrigation	0.00m-0.30m SURFACE SANDY SOIL 0.30m-4.00m FINE SAND 4.00m-30.50m CLAYEY SAND & STONE PIECES 30.50m-37.00m SILTY ORANGE SAND 37.00m-41.00m SILTY OREY SAND 41.00m-47.00m FIRM GREY MUDSTONE 47.00m-130.00m MEDIUM HARD BLUE SHALE 130.00m-162.00m HD BL SHALE SOME FRACS ALTER.TO BCP/28133	0.00m-106.00m INNER LINING - CASING = Mild Steel 106.00m-162.00m INNER LINING - SCREEN = Mild Steel		106.00m- 162.00m Shale	1987-04-24	1374	East
81750	Domestic	0.00m-0.50m GREY SANDY LOAM 0.50m-3.00m YELLOW CLAY 3.00m-3.15m SANDY LAYER MEDIUM 3.15m-5.00m WHITE GREY CLAY 5.00m-5.07m THIN ROCK LAYER 5.07m-5.45m COARSE SAND WITH SOME FINE CLAY 5.45m-6.00m GREY CLAY	0.00m-5.00m INNER LINING - CASING = Pvc 5.00m-5.45m INNER LINING - SCREEN = Pvc 5.45m-6.00m INNER LINING - SCREEN = Slotted Pvc		5.00m-5.45m Sand 5.45m-6.00m Clay	1984-06-04	1425	North
81746	Domestic	0.00m-3.05m BROWN CLAY 3.05m-15.24m BROWN SANDY CLAY 15.24m-24.38m BLUE GREY GRAVELLY CLAY 24.38m-39.62m GREY GREEN SANDY CLAY 39.62m-45.41m GREY GREEN GRAVELLY CLAY	0.00m-4.57m INNER LINING - CASING = Pvc 0.00m-33.05m INNER LINING - CASING = Pvc 33.05m-38.10m INNER LINING - SCREEN = Pvc 39.92m-41.15m INNER LINING - SCREEN = Wire W S/Steel		33.05m-38.10m Clay 39.92m-41.15m Clay	1982-02-28	1440	South East
81737	Domestic	0.00m-3.00m TOP SOIL WITH GREY SAND 3.00m-5.00m GREY SANDY CLAY 5.00m-11.00m GREY CLAY WITH SAND 11.00m-17.00m BROWN SANDY CLAY 17.00m-59.00m BLACK CLAY 59.00m-60.00m WEATHERED MUDSTONE 60.00m-86.00m MUDSTONE	0.00m-59.20m INNER LINING - CASING = Mild Steel 59.20m-86.00m INNER LINING - SCREEN = Mild Steel		59.20m-86.00m Mudstone	1983-12-02	1471	North West
WRK039206	Irrigation					1970-12-31	1528	North
81694	Miscellaneou s	0.00m-4.26m FINE GREY-BROWN SAND 4.26m-7.92m FIRM YELLOW BROWN SANDY CLAY 7.92m-13.72m BROWN SILTY FINE- MEDIUM SAND	0.00m-13.72m INNER LINING - CASING = Not Known 8.22m-13.72m INNER LINING - SCREEN = Not Known			1973-04-18	1543	North East
81763	Domestic	0.00m-0.25m TOP SOIL 0.25m-0.75m ORANGE SAND 0.75m-6.00m ORANGE CLAY 6.00m-7.00m GREY CLAY 7.00m-8.00m ORANGE SANDY CLAY 8.00m-9.15m IRON STONE	0.00m-8.95m INNER LINING - CASING = Galvanised Iron 8.95m-9.15m INNER LINING - SCREEN = Galvanised Iron		8.95m-9.15m Ironstone	1982-11-12	1571	North
81678	Domestic, Stock	0.00m-0.91m DARK SANDY SOIL 0.91m-2.44m GREY AND BROWN SAND CLAY 2.44m-4.57m GREY BROWN CLAY 4.57m-7.31m FATTY FINE COARSE SAND 7.31m-11.28m FINE FATTY CLAYED SAND 11.28m-12.19m FINE AND COARSE SAND 12.19m-14.02m FINE AND COARSE SAND	0.00m-11.27m INNER LINING - CASING = Not Known 11.27m-12.80m INNER LINING - SCREEN = Not Known			1972-11-30	1588	North East
81714	Domestic, Stock	0.00m-3.05m TOP SOIL 3.05m-6.10m SAND 6.10m-12.19m CLAY RED 12.19m-18.29m CLAY BROWN 18.29m-24.38m GRAVEL 24.38m-39.62m GREY CLAY - ROCK LAYERS 39.62m-42.67m SAND WHITE	0.00m-18.29m INNER LINING - CASING = Pvc Class 9 18.29m-30.48m INNER LINING - SCREEN = Pvc Class 9 30.48m-41.15m INNER LINING - CASING = Pvc Class 9 41.15m-42.67m INNER LINING - SCREEN = Pvc Class 9		18.29m-30.48m Gravel 41.15m-42.67m Sand	1983-02-27	1588	North East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
81731	Not Known	0.00m-7.62m FINE BLUE CLAY 7.62m-11.27m FINE ORANGE CLAY 11.27m-44.80m MED/COARSE SILTY SAND 44.80m-52.70m SILTY SILURIAN CLAY 52.70m-122.00m HARD SANDSTONE	0.00m-54.00m INNER LINING - CASING = Steel 54.00m-122.00m INNER LINING - SCREEN = Steel		54.00m- 122.00m Sandstone	1983-02-16	1589	West
WRK981862							1615	North
81771	Irrigation	0.00m-0.30m TOP SOIL 0.30m-13.70m ORANGE/BROWN CLAY 13.70m-14.00m CLAY BOUND SAND 14.00m-40.80m SANDY CLAY AND LAYERS OF LIMESTONE 40.80m-43.20m COARSE SAND 43.20m-44.00m MUDSTONE	0.00m-40.70m INNER LINING - CASING = Mild Steel 40.70m-43.70m INNER LINING - SCREEN = Mild Steel 43.70m-44.00m INNER LINING - CASING = Mild Steel 0.00m-36.00m OUTER LINING - GRAVEL = Cement 36.00m-44.00m OUTER LINING - GRAVEL = Gravel		40.70m-43.70m Sand	1986-11-12	1625	East
WRK039216	Not Known					1988-01-01	1647	East
WRK982968							1672	South East
81680	Not Used - Capped	0.00m-12.19m YELLOW GREY CLAY 12.19m-21.34m SANDY GRAVEL AND CLAY 21.34m-47.24m LIGHT GREY SANDY CLAY 47.24m-47.55m SMALL BAND OF LIMESTONE 47.55m-53.34m COARSE SAND - SHELL AND WOOD 53.34m-55.78m DECOMPOSED BASALT 55.78m-60.96m HARD BASALT	0.00m-56.08m INNER LINING - CASING = Not Known 0.00m-56.08m OUTER LINING - GRAVEL = Cement			1973-01-13	1728	West
WRK983290							1729	South West
127487	Groundwater Investigation, Observation, State Observation Network	0.00m-0.50m FINE GREY SNAD 0.50m-2.00m BROWN SANDY CLAY 2.00m-4.00m YELLOW SANDY CLAY 4.00m-15.00m ORANGE CLAYEY SAND	0.00m-12.00m INNER LINING - CASING = Pvc 12.00m-14.00m INNER LINING - SCREEN = Pvc 14.00m-15.00m INNER LINING - CASING = Pvc 11.00m-12.00m OUTER LINING - GRAVEL = Bentonite 12.00m-15.00m OUTER LINING - GRAVEL = Gravel	Date/time: 2016-02-23 1005 Quality: 43 WLMP: 5.74m DBNS: 5.79m RWL: 18.39mAHD		1996-04-19	1739	North East
WRK987435							1785	West
81738	Domestic	0.00m-1.50m GREY LOAM AND SAND 1.50m-3.00m GREY FIRM SAND 3.00m-4.52m GREY FIRM SAND CLAY 4.52m-6.10m GREY SAND MEDIUM COARSE 6.10m-7.62m GREY COARSE SAND 7.62m-9.10m YELLOW CLAY SOME GRIT 9.10m-10.62m FINE SAND AND CLAY 10.62m-11.30m MEDIUM FINE SAND 11.30m-12.70m GREY MEDIUM COARSE SAND 22.70m-13.70m GREY MEDIUM COARSE SAND 12.70m-13.70m GREY MEDIUM COARSE SAND 13.70m-15.20m COARSE GREY SAND WITH CLAY 15.20m-16.70m YELLOW CLAY FINE SAND 16.70m-19.81m COARSE GREY SAND	0.00m-7.62m INNER LINING - CASING = Pvc 7.62m-18.50m INNER LINING - SCREEN = Pvc 18.50m-19.81m INNER LINING - SCREEN = Slotted Pvc		7.62m-18.50m Clay 18.50m-19.81m Sand	1983-09-14	1795	North
125274	Groundwater Investigation, State Observation Network	0.00m-1.00m DRY SAND 1.00m-6.00m SANDY CLAY 6.00m-10.00m GRAVEL SAND & CLAY (WET) 10.00m-12.00m SANDY CLAY 12.00m-35.00m GREY SANDY CLAY	0.00m-8.00m INNER LINING - CASING = Pvc 8.00m-10.00m INNER LINING - SCREEN = Pvc 10.00m-24.00m INNER LINING - CASING = Pvc 6.00m-7.00m OUTER LINING - GRAVEL = Bentonite 7.00m-12.00m OUTER LINING - GRAVEL = Gravel 24.00m-24.50m OUTER LINING - GRAVEL = Bentonite	Date/time: 2016-02-23 0952 Quality: 43 WLMP: 1.89m DBNS: 1.89m RWL: 20.83mAHD		1995-01-29	1821	North East
WRK043374	Irrigation	0.00m-2.00m FINE & DRY SAND 2.00m-4.00m CLAY/SAND 4.00m-29.00m BRIGHTON GROUP 29.00m-42.00m SILTY SAND 42.00m-42.00m KLAY 45.00m-47.00m MUDSTONE CW 47.00m-66.00m MUDSTONE SOFT MW 66.00m-69.00m SANDSTONE HARD MW 69.00m-96.00m MUDSTONE FIRM MW	0.00m-90.00m INNER LINING - CASING = Pvc 90.00m-96.00m INNER LINING - SCREEN = Slotted Steel 0.00m-61.00m OUTER LINING - GRAVEL = Cement 61.00m-96.00m OUTER LINING - GRAVEL = Seal		90.00m-96.00m Mudstone	2009-01-21	1826	East

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WRK072382	Observation	0.00m-0.30m GRAss/topsoil 0.30m-0.50m FILL/rubblegritty material 0.50m-0.70m Ddark silty clay 0.70m-2.00m Stiff clay/yellow mottled 2.00m-4.00m CLAYey sand	0.00m-1.00m INNER LINING - CASING = Pvc 1.00m-4.00m INNER LINING - SCREEN = Pvc 0.00m-0.60m OUTER LINING - GRAVEL = Cement 0.60m-0.90m OUTER LINING - GRAVEL = Bentonite 0.90m-4.00m OUTER LINING - GRAVEL = Gravel		1.00m-4.00m Clay	2013-05-27	1846	West
WRK072379	Observation	0.00m-0.40m Rubble 0.40m-0.70m Black silt 0.70m-2.50m CLAY 2.50m-4.20m CLAYey sand/silt	0.00m-1.20m INNER LINING - CASING = Pvc 1.20m-4.20m INNER LINING - SLOT = Pvc 0.00m-0.80m OUTER LINING - GRAVEL = Cement 0.80m-1.00m OUTER LINING - GRAVEL = Bentonite 1.00m-4.20m OUTER LINING - GRAVEL = Gravel		1.20m-4.20m Clay	2013-05-28	1856	West
133627	Groundwater Investigation	0.00m-0.50m CLAY 0.50m-1.40m FILL CRUSEHD ROCK & SILTSTONE 1.40m-4.00m CLAY	1.00m-4.00m INNER LINING - SCREEN = Not Known		1.00m-4.00m Clay	1998-04-21	1857	South West
WRK990264	Groundwater Investigation					2009-03-13	1862	East
WRK072381	Observation	0.00m-0.30m FILL/disturbed clay some rubble 0.30m-0.70m CLAYey silt/black 0.70m-1.50m SANDy clay/dense 1.50m-2.50m SANDy clay/silty 2.50m-4.20m LIGhter clayey sand/wet	0.00m-1.20m INNER LINING - CASING = Pvc 1.20m-4.20m INNER LINING - SCREEN = Pvc 0.00m-0.60m OUTER LINING - GRAVEL = Cement 0.60m-0.90m OUTER LINING - GRAVEL = Bentonite 0.90m-4.20m OUTER LINING - GRAVEL = Gravel		1.20m-4.20m Clay	2013-05-27	1868	West
WRK072380	Observation	0.00m-0.40m FILLbuilding ruble/clay 0.40m-0.80m DArk peaty clay 0.80m-3.00m Mottled sitly clay 3.00m-5.00m SANDy clay/silt 5.00m-6.00m wet sand & yellow clay	0.00m-1.50m INNER LINING - CASING = Pvc 1.50m-6.00m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement 0.50m-1.40m OUTER LINING - GRAVEL = Bentonite 1.40m-6.00m OUTER LINING - GRAVEL = Gravel		1.50m-6.00m Clay	2013-05-27	1873	West
WRK072384	Observation	0.00m-0.40m CLAY& some srubble bricks concretesome rocks 0.40m-0.80m SIsturbed clay 2.50m-3.00m SILTy clay & sand 3.00m-4.50m wet yellow clayey sand	0.00m-1.50m INNER LINING - CASING = Pvc 1.50m-4.50m INNER LINING - SCREEN = Pvc 0.00m-1.00m OUTER LINING - GRAVEL = Cement 1.00m-1.20m OUTER LINING - GRAVEL = Bentonite 1.20m-4.50m OUTER LINING - GRAVEL = Gravel		1.50m-4.50m Clay	2013-05-28	1876	West
WRK038494	Irrigation, Not Known					1968-12-31	1881	East
81772	Not Known		0.00m-95.80m INNER LINING - CASING = Galvanised Iron 96.00m-107.20m INNER LINING - SCREEN = Galvanised Iron			1987-03-27	1901	West
125269	Groundwater Investigation, State Observation Network	0.00m-2.00m DRY SAND 2.00m-8.00m SANDY CLAY 8.00m-11.00m GRAVEL SILT & CLAY 11.00m-77.00m YELLOW SILTY CLAY 17.00m-28.00m GREY SILTY CLAY	0.00m-8.50m INNER LINING - CASING = Pvc 8.50m-10.50m INNER LINING - SCREEN = Pvc 10.50m-13.50m INNER LINING - CASING = Pvc 8.50m-13.50m OUTER LINING - GRAVEL = Gravel 13.50m-14.50m OUTER LINING - GRAVEL = Bentonite	Date/time: 2016-02-23 1019 Quality: 43 WLMP: 6.33m DBNS: 6.33m RWL: 20.88mAHD		1995-01-13	1918	North East
125273	Groundwater Investigation, State Observation Network	0.00m-0.50m DRY SAND 0.50m-2.00m CLAY 2.00m-5.50m SANDY CLAY 5.50m-8.00m SANDY SILT & GRAVEL 8.00m-11.00m GRAVEL & CLAY (WET) 11.00m-12.00m SANDY CLAY	0.00m-8.00m INNER LINING - CASING = Pvc 8.00m-11.00m INNER LINING - SCREEN = Pvc 11.00m-12.00m INNER LINING - CASING = Pvc 5.00m-6.00m OUTER LINING - GRAVEL = Bentonite 6.00m-12.00m OUTER LINING - GRAVEL = Gravel	Date/time: 2016-02-23 0939 Quality: 43 WLMP: 6.20m DBNS: 6.20m RWL: 19.91mAHD		1995-01-26	1931	North East
125272	Groundwater Investigation, State Observation Network	0.00m-0.50m DRY SAND 0.50m-2.00m CLAY 2.00m-5.50m SANDY CLAY 5.50m-8.00m SAND SILT & CLAY 8.00m-11.00m GRAVEL & CLAY (WET) 11.00m-16.00m SANDY CLAY 16.00m-18.00m GREY SILT SANDY CLAY 18.00m-23.50m DIRTY SAND & GRAVEL (WET) 23.50m-40.00m GREY SILTY CLAY	0.00m-20.50m INNER LINING - CASING = Pvc 20.50m-22.50m INNER LINING - SCREEN = Pvc 22.50m-40.00m INNER LINING - CASING = Pvc 17.00m-0.00m OUTER LINING - GRAVEL = Seal	Date/time: 2016-02-23 0940 Quality: 43 WLMP: 7.35m DBNS: 7.35m RWL: 18.76mAHD		1995-01-26	1932	North East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK070259	Observation					2012-07-03	1945	North West
WRK070258	Observation					2012-07-02	1945	North West
WRK070260	Observation					2012-07-04	1945	North West
WRK070261	Observation					2012-07-05	1946	North West
WRK985144							1960	North
WRK039208	Irrigation		0.00m-60.35m INNER LINING - CASING = Not Known 56.08m-60.35m INNER LINING - SCREEN = Not Known			1963-12-31	1968	West
WRK062277	Observation	0.00m-0.60m SAND 0.60m-1.50m CLAY 1.50m-5.50m SAND	0.00m-2.50m INNER LINING - CASING = Pvc 2.50m-5.50m INNER LINING - SCREEN = Pvc 0.00m-1.00m OUTER LINING - GRAVEL = Cement 1.00m-2.00m OUTER LINING - GRAVEL = Bentonite 2.00m-5.50m OUTER LINING - GRAVEL = Gravel		0.00m-2.50m Clay 2.50m-5.50m Sand	2011-09-01	1976	East
WRK991278	Groundwater Investigation	0.00m-0.30m topsoil 0.30m-1.50m sand 1.50m-3.60m sandstone 3.60m-8.20m sand	0.00m-4.20m INNER LINING - CASING = Pvc 4.20m-8.20m INNER LINING - SCREEN = Pvc 0.00m-2.50m OUTER LINING - GRAVEL = Cement 2.50m-3.70m OUTER LINING - GRAVEL = Bentonite 3.70m-8.20m OUTER LINING - GRAVEL = Gravel			2009-05-08	1982	North
WRK069052	Observation	0.00m-0.40m FILL 0.40m-9.50m CLAY	0.00m-6.00m INNER LINING - CASING = Pvc 6.00m-9.00m INNER LINING - SCREEN = Pvc 9.00m-9.50m INNER LINING - CASING = Pvc 0.00m-5.00m OUTER LINING - GRAVEL = Cement 5.00m-6.00m OUTER LINING - GRAVEL = Bentonite 6.00m-9.00m OUTER LINING - GRAVEL = Gravel		9.00m-9.50m Clay	2012-08-17	1984	North
136917	Groundwater Investigation	0.00m-0.80m SANDY SILT, BROWN, MOIST FILL 0.80m-1.00m SAND CLAY, ORANGE BROWN, PAIL BROWN, YELLOW BROWN, STIFF, MO 1.00m-7.50m CLAYEY SAND FINE AND MEDIUM SAND, RED BROWN, YELLOW BROWN AN	0.00m-3.50m INNER LINING - CASING = Pvc Class 18 3.50m-7.50m INNER LINING - SCREEN = Pvc Class 18 0.00m-0.20m OUTER LINING - GRAVEL = Cement 2.30m-3.00m OUTER LINING - GRAVEL = Bentonite 3.00m-7.50m OUTER LINING - GRAVEL = Gravel			1998-10-06	1990	North
142775	Groundwater Investigation		0.00m-3.00m INNER LINING - CASING = Pvc 3.00m-7.00m INNER LINING - SCREEN = Pvc 1.50m-2.00m OUTER LINING - GRAVEL = Bentonite 2.00m-0.00m OUTER LINING - GRAVEL = Seal			1998-10-22	1990	North
142772	Groundwater Investigation		0.00m-3.00m INNER LINING - CASING = Pvc 3.00m-6.00m INNER LINING - SCREEN = Pvc			1998-10-22	1990	North
142774	Groundwater Investigation		0.00m-3.00m INNER LINING - CASING = Pvc 3.00m-6.00m INNER LINING - SCREEN = Pvc 1.50m-2.00m OUTER LINING - GRAVEL = Bentonite 2.00m-0.00m OUTER LINING - GRAVEL = Seal			1998-10-22	1990	North
142773	Groundwater Investigation		0.00m-3.00m INNER LINING - CASING = Pvc 3.00m-6.00m INNER LINING - SCREEN = Pvc 1.50m-2.00m OUTER LINING - GRAVEL = Bentonite 2.00m-0.00m OUTER LINING - GRAVEL = Seal			1998-10-22	1990	North
142768	Groundwater Investigation	0.00m-4.00m CLAYEY SAND 4.00m-5.00m SILTY SAND 5.00m-11.00m CLAYEY SAND	0.00m-6.50m INNER LINING - CASING = Pvc 6.50m-11.00m INNER LINING - SCREEN = Pvc 0.00m-5.50m OUTER LINING - GRAVEL = Cement 5.50m-6.00m OUTER LINING - GRAVEL = Bentonite 6.00m-11.00m OUTER LINING - GRAVEL = Gravel		6.50m-11.00m Sand	1998-08-12	1990	North

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142769	Groundwater Investigation	0.00m-4.00m CLAYEY SAND 4.00m-5.00m SILTY SAND 5.00m-11.00m CLAYEY SAND	0.00m-6.50m INNER LINING - CASING = Pvc 6.50m-11.00m INNER LINING - SCREEN = Pvc 0.00m-5.50m OUTER LINING - GRAVEL = Cement 5.50m-6.00m OUTER LINING - GRAVEL = Bentonite 6.00m-11.00m OUTER LINING - GRAVEL = Gravel		6.50m-11.00m Sand	1998-08-12	1990	North
136918	Groundwater Investigation	0.00m-0.80m SANDY SILT, BROWN, DENSE, MOIST FILL 0.80m-7.50m CLAYEY SAND, FINE AND MEDIUM SAND, RED BROWN, YELLOW BROWN,	0.00m-4.00m INNER LINING - CASING = Pvc Class 18 4.00m-7.50m INNER LINING - SCREEN = Pvc Class 18 0.00m-0.20m OUTER LINING - GRAVEL = Cement 2.40m-3.00m OUTER LINING - GRAVEL = Bentonite 3.00m-7.50m OUTER LINING - GRAVEL = Gravel			1998-10-06	1990	North
136919	Groundwater Investigation	0.00m-0.90m SILTY SAND, BROWN, MOIST FILL 0.90m-7.50m CLAYEY SAND RED BROWN, YELLOW BROWN AND PAIL GREY, MEDIUM GR	0.00m-4.00m INNER LINING - CASING = Pvc Class 18 4.00m-7.50m INNER LINING - SCREEN = Pvc Class 18 0.00m-0.20m OUTER LINING - GRAVEL = Cement 2.30m-3.00m OUTER LINING - GRAVEL = Bentonite 3.00m-7.50m OUTER LINING - GRAVEL = Gravel			1998-10-06	1990	North
142771	Groundwater Investigation		0.00m-3.00m INNER LINING - CASING = Pvc 3.00m-6.00m INNER LINING - SCREEN = Pvc 1.50m-2.00m OUTER LINING - GRAVEL = Bentonite 2.00m-0.00m OUTER LINING - GRAVEL = Seal			1998-10-22	1990	North
142770	Groundwater Investigation	0.00m-4.00m CLAYEY SAND 4.00m-5.00m SILTY SAND 5.00m-11.00m CLAYEY SAND	0.00m-6.50m INNER LINING - CASING = Pvc 6.50m-11.00m IINNER LINING - SCREEN = Pvc 0.00m-5.50m OUTER LINING - GRAVEL = Cement 5.50m-6.00m OUTER LINING - GRAVEL = Bentonite 6.00m-11.00m OUTER LINING - GRAVEL = Gravel		6.50m-11.00m Sand	1998-08-12	1990	North

Boreholes WMIS Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

# **Groundwater Boreholes**

#### **OSAR Proposed Road Alignments - Site 26 (Section 4)**

### **Boreholes (Earth Resources Database)**

Boreholes from the Earth Resources dataset, within the report buffer:

Bore Id	Bore Type	Company	Usage	Method	Status	Drill Date	Depth	Elevation	Accuracy (m)	Dist (m)	Direct
81736		Private Individual/Corporati on	Domestic water supply	Rotary (diamond/drag bit)		10/08/1983	24.38		100	361	North East
81729		Private Individual/Corporati on	Domestic water supply	Rotary (diamond/drag bit)		23/12/1982	49.38		100	751	North West
81722		Private Individual/Corporati on	Domestic water supply	Hand Auger		28/02/1983	9.00		100	1130	North
81737		Private Individual/Corporati on	Domestic water supply	Rotary (diamond/drag bit)		02/12/1983	86.00		100	1197	North
81761		Private Individual/Corporati on	Domestic water supply	Rotary (diamond/drag bit)		31/12/1983	13.50		100	1292	North
81767		Private Individual/Corporati on	Domestic water supply	Percussion (cable)		01/09/1983	17.90		100	1307	North
81716		Private Individual/Corporati on	Domestic water supply	Hand Auger		12/06/1983	10.00		100	1347	North
81750		Private Individual/Corporati on	Domestic water supply	Hand Auger		04/06/1984	6.00		100	1426	North
81746		Private Individual/Corporati on	Domestic water supply	Rotary (diamond/drag bit)		28/02/1982	45.41		100	1438	South East
81764		Private Individual/Corporati on	Public/town water supply	Air Percussion/Air Rotary		24/04/1987	127.60		100	1546	East
81763		Private Individual/Corporati on	Domestic water supply	Percussion (cable)		12/11/1982	9.15		100	1571	North
81714		Private Individual/Corporati on	Domestic water supply	Rotary (diamond/drag bit)		27/02/1983	42.67		100	1588	North East
81731		Local Government Authority	Irrigation	Air Percussion/Air Rotary		16/02/1983	122.00		100	1592	West

Boreholes Earth Resources Data Source: © The State of Victoria, Department of Economic Development, Jobs, Transport and Resources 2015. Creative Commons Attribution 3.0 Australia

## **Boreholes (Federation University)**

#### Boreholes from the Federation University Australia dataset, within the report buffer:

Bore Id	Authority	Туре	Uses	Initial TD	Log	Dist (m)	Direct
N/A	No records within buffer						

Boreholes FedUni Data Source: © Federation University Australia

# Geology 1:250,000





# Geology

#### **OSAR Proposed Road Alignments - Site 26 (Section 4)**

## **Geological Units**

#### What are the Geological Units onsite?

Symbol	Name	Description	Geological Age	Lithology	Dataset
Qd1	inland dune deposits (Qd1): generic	Sand, silt, clay: friable to consolidated; well sorted; includes both lunette deposits and deposits of longitudinal dunes	Quaternary to Quaternary	sand (significant); silt material (significant); clay lithology (significant)	1:250,000
Qg	coastal lagoon deposits (Qg): generic	Silt, clay: dark grey to black; variably consolidated	Holocene to Holocene	silt material (significant); clay lithology (significant)	1:250,000
Qm1	swamp and lake deposits (Qm1): generic	Grey to black carbonaceous mud, silt, clay, minor peat: generally unconsolidated; rare dolomite	Pleistocene to Holocene	mud (major proportion); silt material (significant); clay lithology (significant); peat (minor proportion)	1:250,000

#### What are the Geological Units within the report buffer?

Symbol	Name	Description	Geological Age	Lithology	Dataset
Qd1	inland dune deposits (Qd1): generic	Sand, silt, clay: friable to consolidated; well sorted; includes both lunette deposits and deposits of longitudinal dunes	Quaternary to Quaternary	sand (significant); silt material (significant); clay lithology (significant)	1:250,000
Qg	coastal lagoon deposits (Qg): generic	Silt, clay: dark grey to black; variably consolidated	Holocene to Holocene	silt material (significant); clay lithology (significant)	1:250,000
Qm1	swamp and lake deposits (Qm1): generic	Grey to black carbonaceous mud, silt, clay, minor peat: generally unconsolidated; rare dolomite	Pleistocene to Holocene	mud (major proportion); silt material (significant); clay lithology (significant); peat (minor proportion)	1:250,000

Geology Data Custodian: State Government Victoria - Dept of Economic Development, Jobs, Transport & Resources Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

# Geology

#### OSAR Proposed Road Alignments - Site 26 (Section 4)

### **Geological Structures**

What are the Geological Faults or Faulted Contacts onsite?

Map Id	Туре	Name	Contact	Positional Accuracy	Dataset
No features					1:250,000

What are the Dykes, Marker Beds and Veins onsite?

Map Id	Туре	Name	Description	Positional Accuracy	Dataset
No Data Covergae					

What are the Shear Zones onsite (1:250,000 scale)?

Map Id	Туре	Name	Description	Positional Accuracy	Dataset
No features					1:250,000

What are the Geological Faults or Faulted Contacts within the report buffer?

Map Id	Туре	Name	Contact	Positional Accuracy	Dataset
No features					1:250,000

What are the Dykes, Marker Beds and Veins within the report buffer?

Map Id	Туре	Name	Description	Positional Accuracy	Dataset
No Data Coverage					

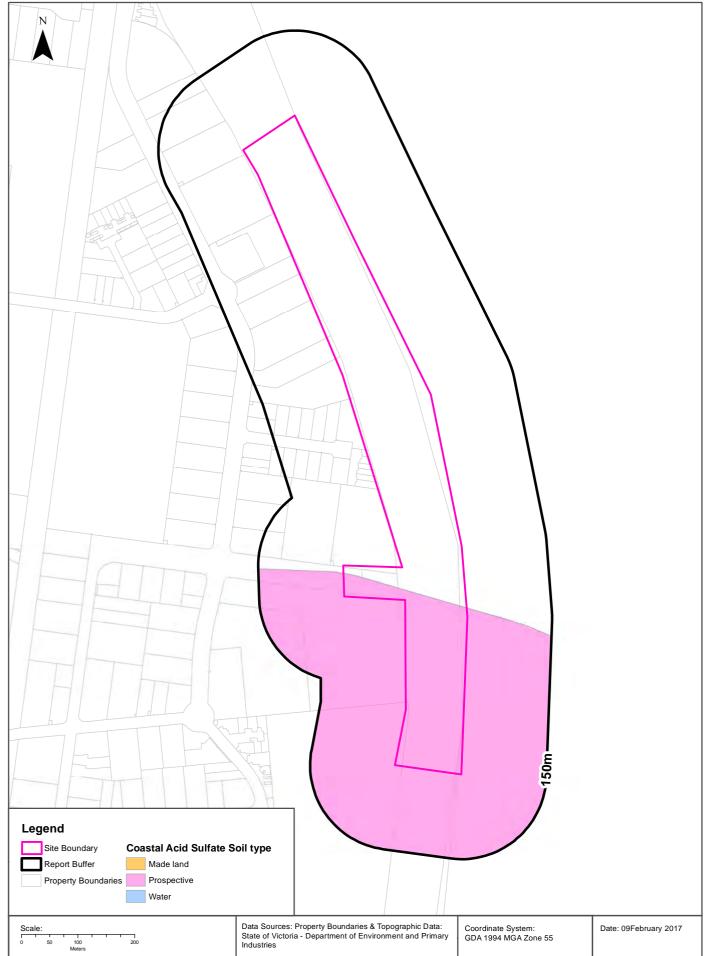
#### What are the Shear Zones within the report buffer (1:250,000 scale)?

Map Id	Туре	Name	Description	Positional Accuracy	Dataset
No features					1:250,000

Geology Data Custodian: State Government Victoria - Dept of Economic Development, Jobs, Transport & Resources Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Coastal Acid Sulfate Soils**





# **Coastal Acid Sulfate Soils**

#### **OSAR Proposed Road Alignments - Site 26 (Section 4)**

## **Coastal Acid Sulfate Soils**

#### What are the on-site Coastal Acid Sulfate Soil types?

Coastal Acid Sulfate Soil Types	
Prospective	

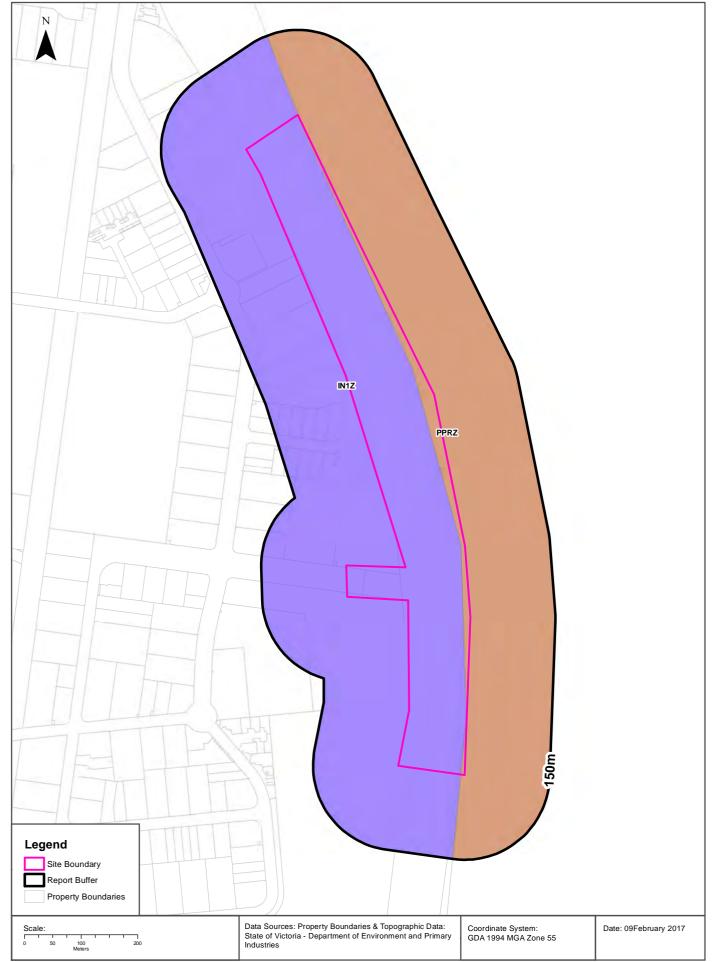
#### What are the Coastal Acid Sulfate Soil types within the report buffer?

Coastal Acid Sulfate Soil Types	Distance	Direction
Prospective	0m	Onsite

Coastal Acid Sulfate Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Planning Zones**





# **Planning Zones**

#### OSAR Proposed Road Alignments - Site 26 (Section 4)

## **Planning Zones**

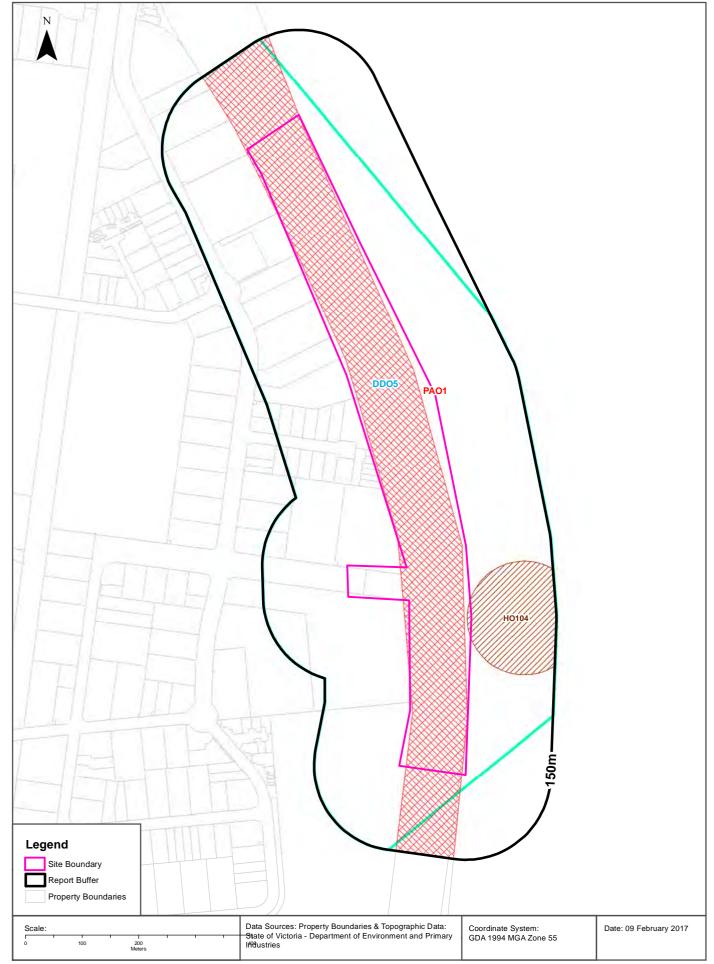
#### Planning zones within the report buffer:

Zone Code	Description	Distance	Direction
IN1Z	INDUSTRIAL 1 ZONE	0m	Onsite
PPRZ	PUBLIC PARK AND RECREATION ZONE	Om	Onsite

Planning Zone Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Planning Overlays**





# **Planning Overlays**

#### **OSAR Proposed Road Alignments - Site 26 (Section 4)**

# **Planning Overlays**

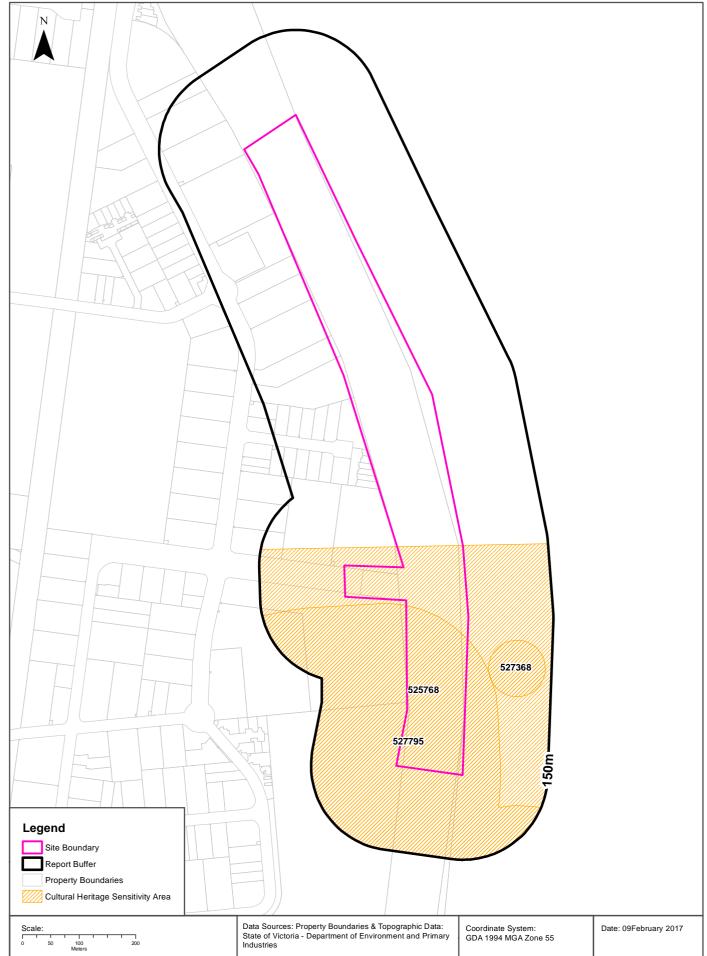
#### Planning overlays within the report buffer:

Zone Code	Description	Distance	Direction
DDO5	DESIGN AND DEVELOPMENT OVERLAY - SCHEDULE 5	0m	Onsite
PAO1	PUBLIC ACQUISITION OVERLAY 1	0m	Onsite
HO104	HERITAGE OVERLAY (HO104)	0m	Onsite

Planning Overlay Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

# **Cultural Heritage Sensitivity**





# **Cultural Heritage Sensitivity**

#### **OSAR Proposed Road Alignments - Site 26 (Section 4)**

## **Cultural Heritage Sensitivity**

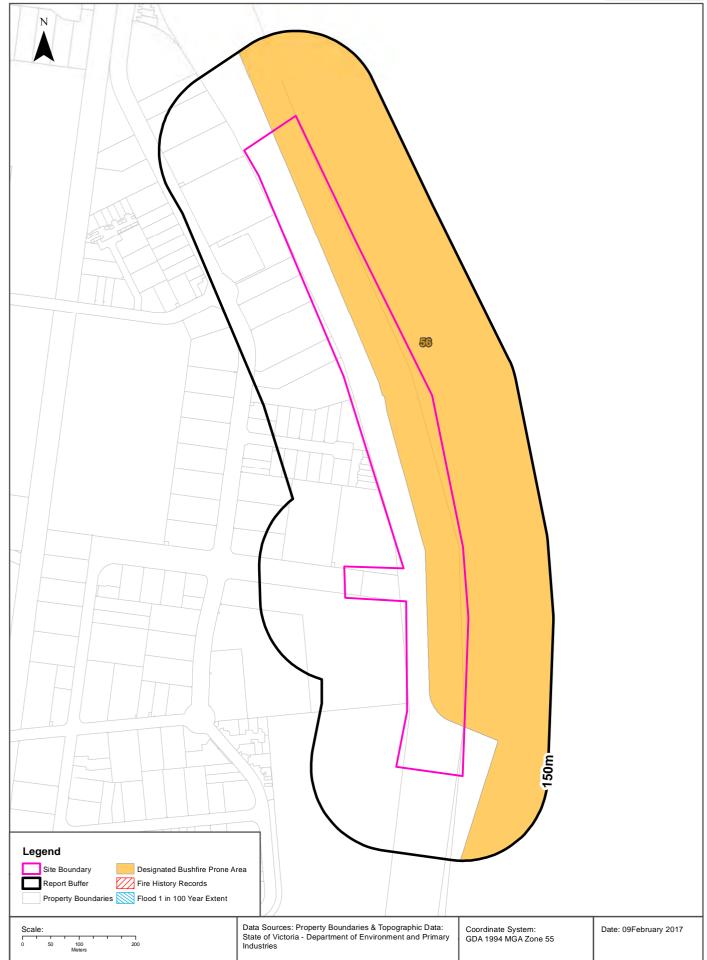
Areas of Cultural Heritage Sensitivity as specified in Division 3 of Part 2 in the Aboriginal Heritage Regulations 2007, within the report buffer:

Map Id	Culturally Sensitive	Distance	Direction
525768	YES	0m	Onsite
527795	YES	0m	Onsite
527368	YES	39m	South East

Cultural Heritage Sensitivity Data Custodian: State Government Victoria - Dept of Planning and Community Development Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Natural Hazards**





# **Natural Hazards**

**OSAR Proposed Road Alignments - Site 26 (Section 4)** 

## **Bushfire Prone Areas**

What are the designated bushfire prone areas within the report buffer?

Map ID	Feature	Plan No	LGA	Gazetted Date	Distance	Direction
56	Designated Bushfire Prone Area	LEGL./14-158	KINGSTON	07/04/2014	0m	Onsite

Bushfire Prone Area Data Custodian: State Government Victoria - Dept of Transport, Planning & Local Infrastructure Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

# **Fire History**

What are the fire history records of fires primarily on public land, within the report buffer?

Map Id	Fire Type	Fire Key	Season	Fire No	Fire Name	Treatment	Fire Cover	Start Date	Dist (m)	Direction
N/A	No records within buffer									

Fire History Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## Flood - 1 in 100 year modelled flood extent

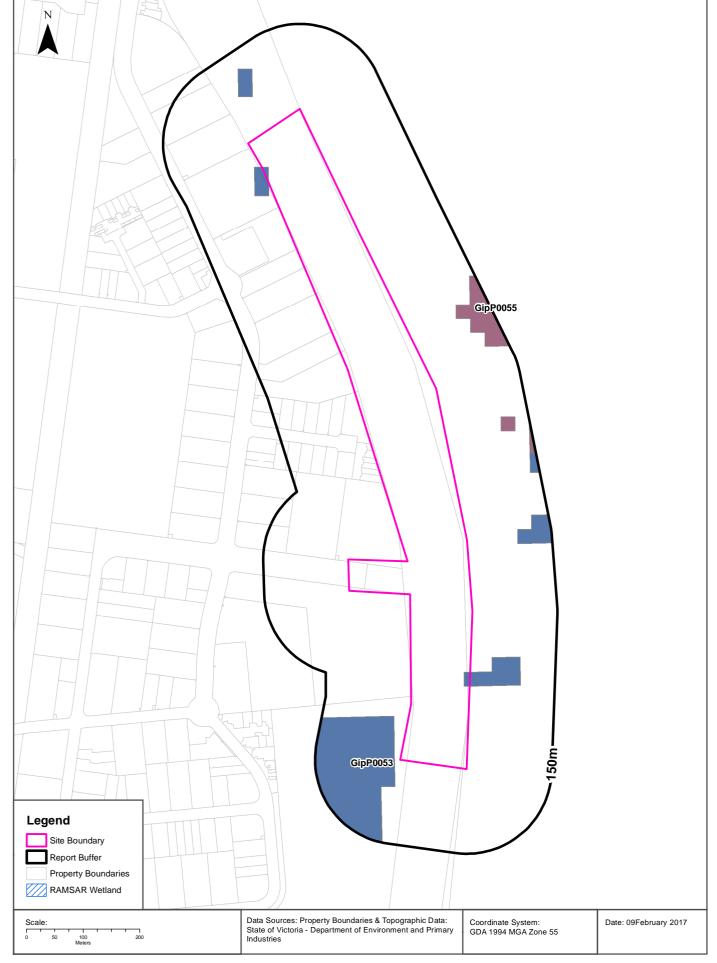
#### What 1 in 100 year flood extent features exist within the report buffer?

Feature	Source	Method	Scale	Modified Date	Distance	Direction
N/A	No records within buffer					

Flood Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Ecological Constraints - Native Vegetation 2005 & RAMSAR Wetlands**





# **Ecological Constraints**

#### OSAR Proposed Road Alignments - Site 26 (Section 4)

### Native Vegetation (Modelled 2005 Ecological Vegetation Classes)

What native vegetation exists within the report buffer?

Veg Code	EVC Name	EVCCode	Group	Subgroup	Bioregion	Conservation Status	Geographic Occurance	Distance
GipP0053	Swamp Scrub	0053	Riparian Scrubs or Swampy Scrubs and Woodlands		Gippsland Plain	Endangered	Common	Om
GipP0055	Plains Grassy Woodland	0055	Plains Woodlands or Forests	Freely-draining	Gippsland Plain	Endangered	Common	85m

Native Vegetation Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **RAMSAR Wetlands**

#### What RAMSAR wetland areas exist within the report buffer?

Map ID	Site Name	Lake Name	Distance	Direction
N/A	No records within buffer			

RAMSAR Wetland Area Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

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# **Environmental Risk and Planning Report**

### **OSAR Proposed Road Alignments - Site 26 (Section 5)**

### **Report Buffer: 150m**

### Report Date: 09 Feb 2017 13:20:58

Disclaimer:

The purpose of this report is to provide an overview of some of the site history, environmental risk and planning information available, affecting an individual address or geographical area in which the property is located. It is not a substitute for an onsite inspection or review of other available reports and records. It is not intended to be, and should not be taken to be, a rating or assessment of the desirability or market value of the property or its features.

You should obtain independent advice before you make any decision based on the information within the report. The detailed terms applicable to use of this report are set out at the end of this report.

# **Table of Contents**

Location Confidences2
Dataset Listings
Site Location Aerial
Topographic Features
Elevation Contours7
EPA Records
Waste Management Facilities
Historical Business Activities12
Historical Aerial Imagery & Maps16
Features of Interest
Hydrogeology & Groundwater25
Groundwater Boreholes
Geology
Coastal Acid Sulfate Soils
Planning Zones
Planning Overlays
Cultural Heritage Sensitivity41
Natural Hazards
Ecological Constraints
Terms & Conditions

# **Location Confidences**

Where Lotsearch has had to georeference features from supplied addresses, a location confidence has been assigned to the data record. This indicates a confidence to the positional accuracy of the feature. Where applicable, a code is given under the field heading "LocConf". These codes lookup to the following location confidences:

LC Code	Location Confidence
1	Georeferenced to the site location / premise or part of site
2	Georeferenced with the confidence of the general/approximate area
3	Georeferenced to the road or rail
4	Georeferenced to the road intersection
5	Feature is a buffered point
6	Land adjacent to Georeferenced Site
7	Georeferenced to a network of features

# **Dataset Listing**

Datasets contained within this report, detailing their source and data currency:

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	No. Features Onsite	No. Features within 100m	No. Features in Buffer
Topographic and Cadastre data	State Government Victoria - Department of Environment, Land, Water & Planning	06/02/2017	06/02/2017	Quarterly	-	-	-
Current Priority Sites	Environment Protection Authority (Vic)	06/02/2017	31/12/2016	Monthly	0	0	0
Former Priority Sites & other Pollution Notices	Environment Protection Authority (Vic)	06/02/2017	05/01/2017	Monthly	0	0	0
EPA Environmental Audit Reports	Environment Protection Authority (Vic)	06/02/2017	24/11/2016	Monthly	0	0	0
Groundwater Zones with Restricted Uses	Environment Protection Authority (Vic)	06/02/2017	27/01/2017	Monthly	0	0	0
Licensed Activities	Environment Protection Authority (Vic)	06/02/2017	29/01/2017	Monthly	0	0	0
Former Licensed Activities	Environment Protection Authority (Vic)	06/02/2017	29/01/2017	Monthly	0	0	0
Works Approvals	Environment Protection Authority (Vic)	06/02/2017	06/02/2017	Monthly	0	0	0
National Waste Management Site Database	Geoscience Australia	06/02/2017	15/11/2012	Quarterly	0	0	0
Statewide Waste and Resource Recovery Infrastructure Plan Facilities	State Government Victoria - Department of Sustainability	27/11/2014	31/12/2012	None planned	0	0	0
EPA Prescribed Industrial Waste	Environment Protection Authority (Vic)	04/01/2017	04/01/2017	Quarterly	0	0	0
UBD Business to Business Directory 1991	Hardie Grant			Not required	1	1	1
UBD Business to Business Directory 1991 - Garages & Service Stations	Hardie Grant			Not required	0	0	0
UBD Business Directory 1980	Hardie Grant			Not required	0	0	0
UBD Business Directory 1980 Drycleaners, Motor Garages & Service Stations	Hardie Grant			Not required	0	0	0
UBD Business Directory 1960 Drycleaners, Motor Garages & Service Stations	Hardie Grant			Not required	0	0	0
UBD Business Directory 1950	Hardie Grant			Not required	0	0	0
UBD Business Directory 1950 Drycleaners, Motor Garages & Service Stations	Hardie Grant			Not required	0	0	0
Features of Interest	State Government Victoria - Department of Environment, Land, Water & Planning	03/02/2017	27/01/2017	Quarterly	4	6	9
Hydrogeology Map of Australia	Commonwealth of Australia (Geoscience Australia)	08/10/2014	17/03/2000	As required	1	1	1
Groundwater Salinity	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	29/08/2012	Unknown	1	-	-
Depth to Watertable	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	29/08/2012	Unknown	1	-	-
Surface Elevation	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	23/09/2013	Unknown	1	-	-
Basement Elevation	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	23/09/2013	Unknown	1	-	-
Groundwater Boreholes WMIS	State Government Victoria - Department of Environment, Land, Water & Planning	29/04/2016	28/04/2016	Annually	0	0	53
Groundwater Boreholes Earth Resources Database	The State of Victoria, Department of Economic Development, Jobs, Transport and Resources	29/04/2016	17/02/2010	As required	0	0	13
Groundwater Boreholes Fed Uni	Federation University Australia	29/04/2016	07/01/2014	As required	0	0	0
Geological Units 1:250,000	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	1	-	2
Geological Structures 1:250,000	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	0	-	0

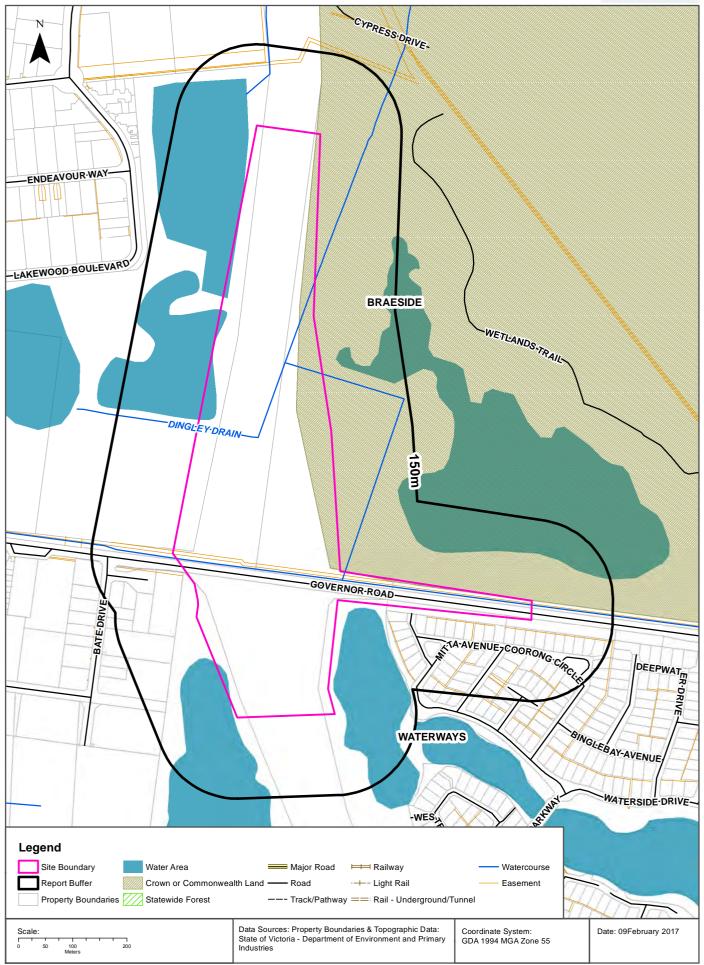
Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	No. Features Onsite	No. Features within 100m	No. Features in Buffer
Shear zones 250k	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	0	-	0
Coastal Acid Sulfate Soils	The State of Victoria, Department of Economic Development, Jobs, Transport and Resources	15/07/2016	30/03/2011	None planned	1	1	1
Planning Scheme Zones	State Government Victoria - Department of Environment, Land, Water & Planning	27/01/2017	27/01/2017	Quarterly	5	6	6
Planning Scheme Overlay	State Government Victoria - Department of Environment, Land, Water & Planning	27/01/2017	27/01/2017	Quarterly	5	5	5
Cultural Heritage Sensitivity	State Government Victoria - Department of Planning and Community Development	03/02/2017	27/01/2017	Quarterly	3	3	3
Bushfire Prone Area	State Government Victoria - Department of Transport, Planning and Local Infrastructure	27/01/2017	27/01/2017	Quarterly	1	1	1
Fire History	State Government Victoria - Department of Environment, Land, Water & Planning	27/01/2017	27/01/2017	Quarterly	0	0	0
Flood - 1 in 100 Year Modelled Flood Extent	State Government Victoria - Department of Environment, Land, Water & Planning	27/01/2017	27/01/2017	Quarterly	0	0	0
Native Vegetation (Modelled 2005 Ecological Vegetation Classes)	State Government Victoria - Department of Environment, Land, Water & Planning	13/01/2015	31/12/2005	None planned	2	2	2
RAMSAR Wetlands	State Government Victoria - Department of Environment, Land, Water & Planning	13/01/2015	24/06/2013	None planned	0	0	0





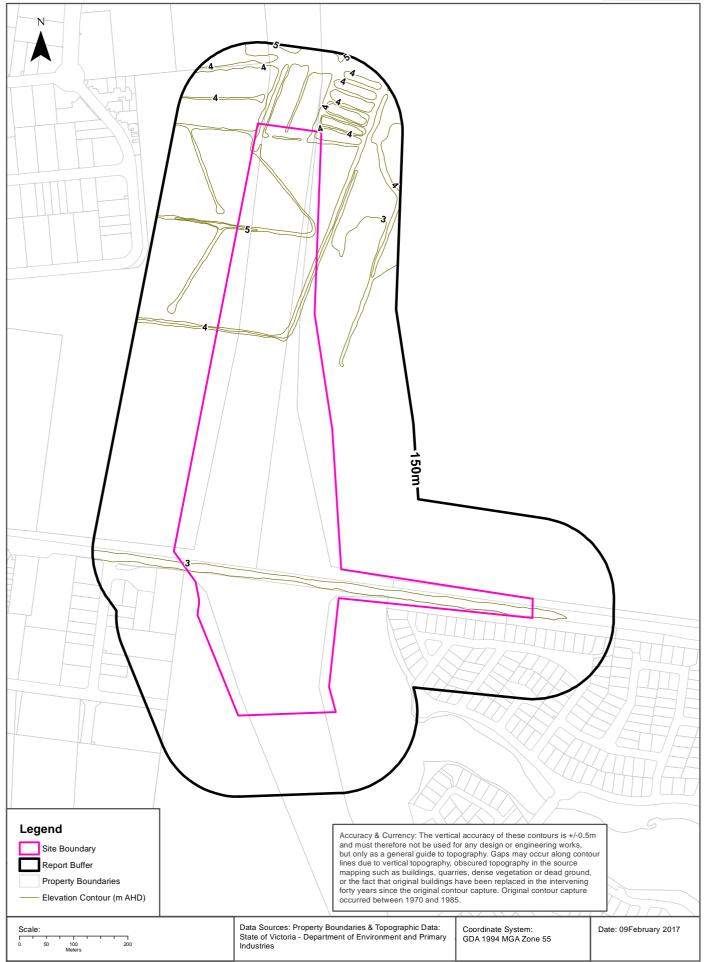
## **Topographic Data**





## **Elevation Contours (m AHD)**





# **EPA Records**

### **OSAR Proposed Road Alignments - Site 26 (Section 5)**

## **Current EPA Priority Sites Register**

#### What sites on the current EPA priority sites register exist within the report buffer?

Notice No	Address	Suburb	Issue	Loc Conf	Dist (m)	Direction
N/A	No records in buffer					

Priority Sites Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

# Former EPA Priority Sites & Other Pollution Notices

#### What sites within the report buffer have been issued a Pollution Notice? Note. Due to pollution notices being revoked and removed from published lists this is not an exhaustive list of all past pollution notices.

Notice No	Notice Type	Company	Address	Suburb	Status	Issue	Date Issued	Loc Conf	Dist	Dir
N/A	No records in buffer									

Pollution Notice Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

# **EPA Records**

### **OSAR Proposed Road Alignments - Site 26 (Section 5)**

### **EPA Environmental Audits**

#### What EPA environmental audit records exist within the report buffer? Note. Please click on CARMS No. to activate a hyperlink to online documentation. If link does not work, documentation may still be accessible via the EPA Interaction Portal.

CARMS No	Transaction No	Site	Address	Suburb	Date Complete	Loc Conf	Distance	Direction
N/A	No records in buffer							

Environmental Audit Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

## **EPA Groundwater Zones with Restricted Uses**

#### What EPA GQRUZ exist within the report buffer? Note. Please click on CARMS No. to activate a hyperlink to online documentation.

CARMS No	EPA Id	Site History	Site Address	Restricted Uses	Loc Conf	Distance	Direction
N/A	No records in buffer						

Environmental GQRUZ Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

# **EPA Records**

### **OSAR Proposed Road Alignments - Site 26 (Section 5)**

### **EPA Licensed Activities**

#### What EPA licensed activities exist within the report buffer?

Trans No	Licence No	Licence Type	Organisation	Premise Ref	Premise Address 1	Premise Address 2	Activities	Loc Conf	Dist (m)	Direction
N/A	No records in buffer									

Licensed Activity Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

## **Former EPA Licensed Activities**

#### What former EPA licensed activities exist within the report buffer?

Licence No	Organisation	Premise Address	Suburb	Activities	Loc Conf	Dist (m)	Direction
N/A	No records in buffer						

Former Licensed Activity Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

# **EPA Works Approvals**

#### What EPA works approvals exist within the report buffer?

Transaction No	Status	Approval No	Organisation	Premise Address	Suburb	Scheduled Categories	Loc Conf	Dist (m)	Direction
N/A	No records in buffer								

Works Approvals Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

# **Waste Management Facilities**

### **OSAR Proposed Road Alignments - Site 26 (Section 5)**

### **National Waste Management Site Database**

Sites on the National Waste Management Site Database within the report buffer:

Site Id	Owner	Name	Address	Suburb	Postcode	Landfill	Reprocess	Transfer	Loc Conf	Dist (m)	Direction
N/A	No records in buffer										

Waste Management Facilities Data Source: Australian Government Geoscience Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Statewide Waste and Resource Recovery Infrastructure Plan Facilities**

Statewide Waste and Resource Recovery Infrastructure Plan Facilities within the report buffer:

Map Id	Owner	Site Name	Address	Suburb	Category	Sub Category	Loc Conf	Distance	Direction
N/A	No records in buffer								

SWRRIPF Data Source: State Government Victoria - Department of Sustainability

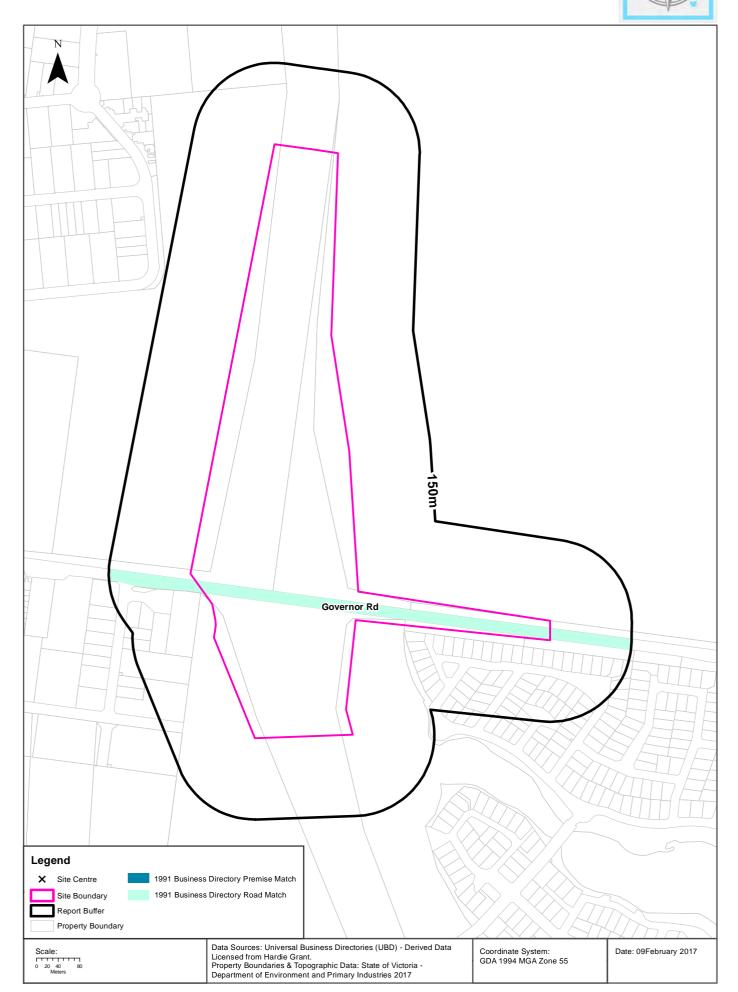
## **EPA Prescribed Industrial Waste**

EPA Prescribed industrial waste sites within the report buffer:

Map Id	Company Name	Address	Suburb	Treatment /Disposal	Transport	Accredited Agent	EPA List Status	Loc Conf	Dist (m)	Direct
N/A	No records in buffer									

Prescribed Industrial Waste Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

# Historical Business to Business Directory Activity 1991



# **Historical Business Directories**

### **OSAR Proposed Road Alignments - Site 26 (Section 5)**

## **1991 Business to Business Directory Records**

#### 1991 UBD Business Directory Records within 150m of the site:

Activity	Organisation	Address	Ref No.	Location Confidence	Distance	Direction
Steel Merchants - General	Ward, George Steel	Governor Rd., Braeside. 3105	21156	Road Match	0m	-

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

## **1991 Business to Business Directory Garages & Service Stations**

#### 1991 UBD Business Directory Garages & Service Stations within 1km of the site:

Activity	Organisation	Address	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer					

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

# **Historical Business Directories**

### **OSAR Proposed Road Alignments - Site 26 (Section 5)**

### **1980 Business Directory Records**

#### 1980 UBD Business Directory Records within 150m of the site:

Activity	Premise	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

### **1980 Business Directory Drycleaners, Garages & Service Stations**

#### Drycleaners, Garages & Service Stations from the 1980 UBD Business Directory within 1km of the site:

Activity	Premise	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

# **Historical Business Directories**

### **OSAR Proposed Road Alignments - Site 26 (Section 5)**

### **1960 Business Directory Drycleaners, Garages & Service Stations**

#### Drycleaners, Garages & Service Stations from the 1960 UBD Business Directory within 1km of the site:

Activity	Premise	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

## **1950 Business Directory Records**

#### 1950 UBD Business Directory Records within 150m of the site:

Activity	Premise	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

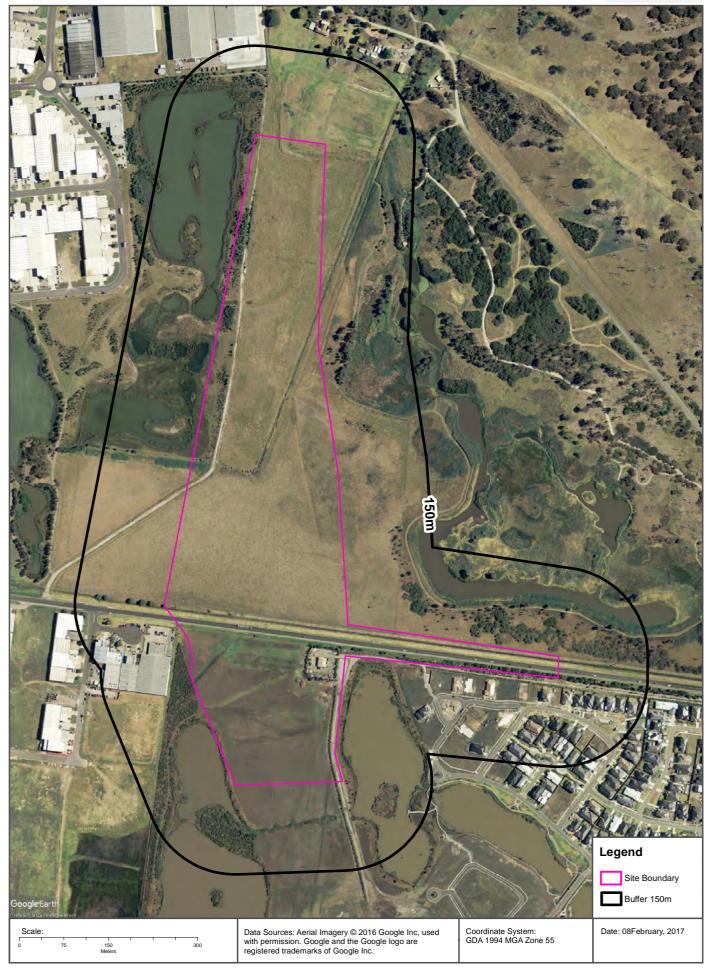
## **1950 Business Directory Drycleaners, Garages & Service Stations**

#### Drycleaners, Garages & Service Stations from the 1950 UBD Business Directory within 1km of the site:

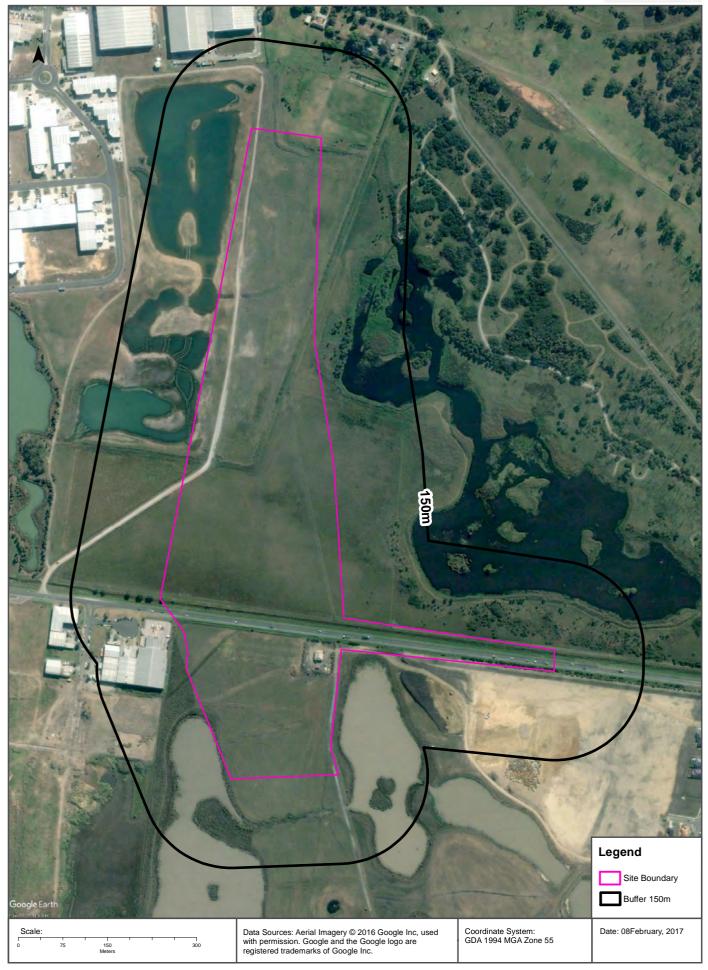
Activity	Premise	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

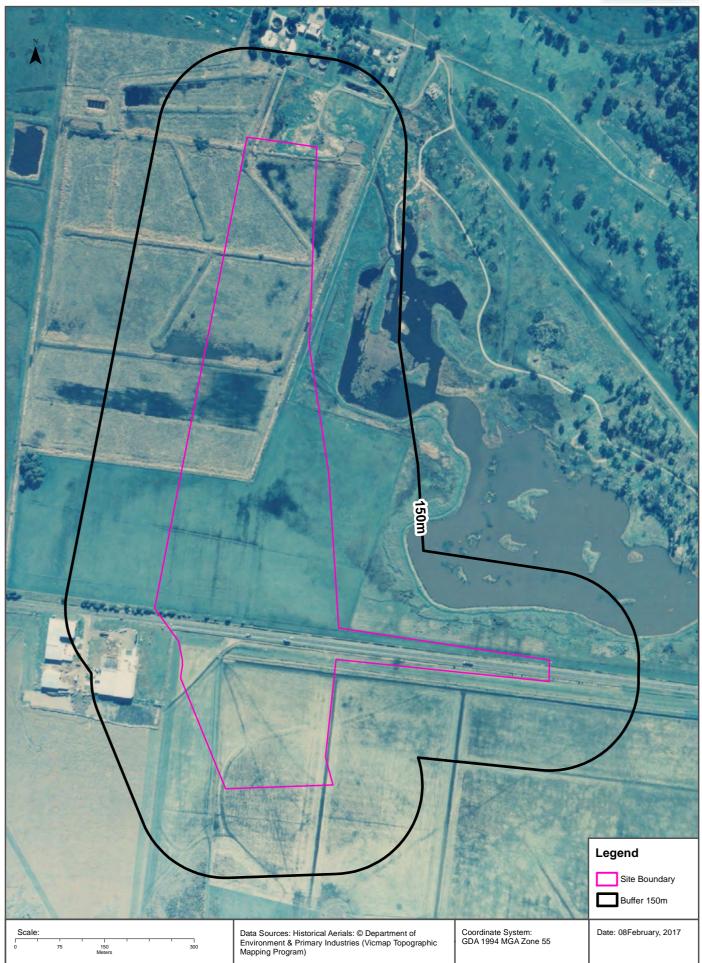




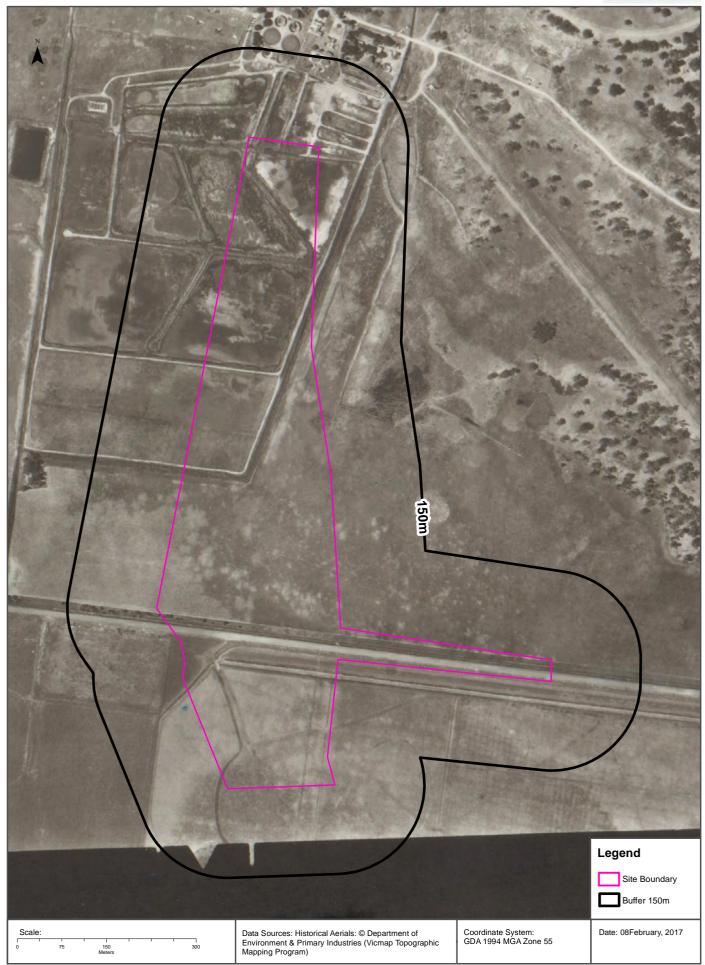




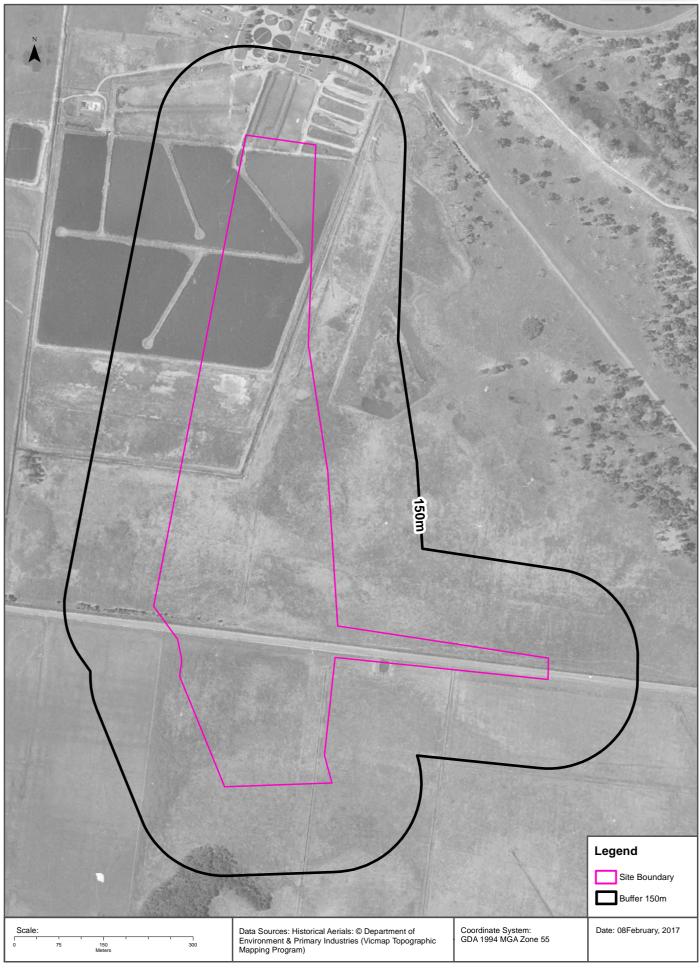




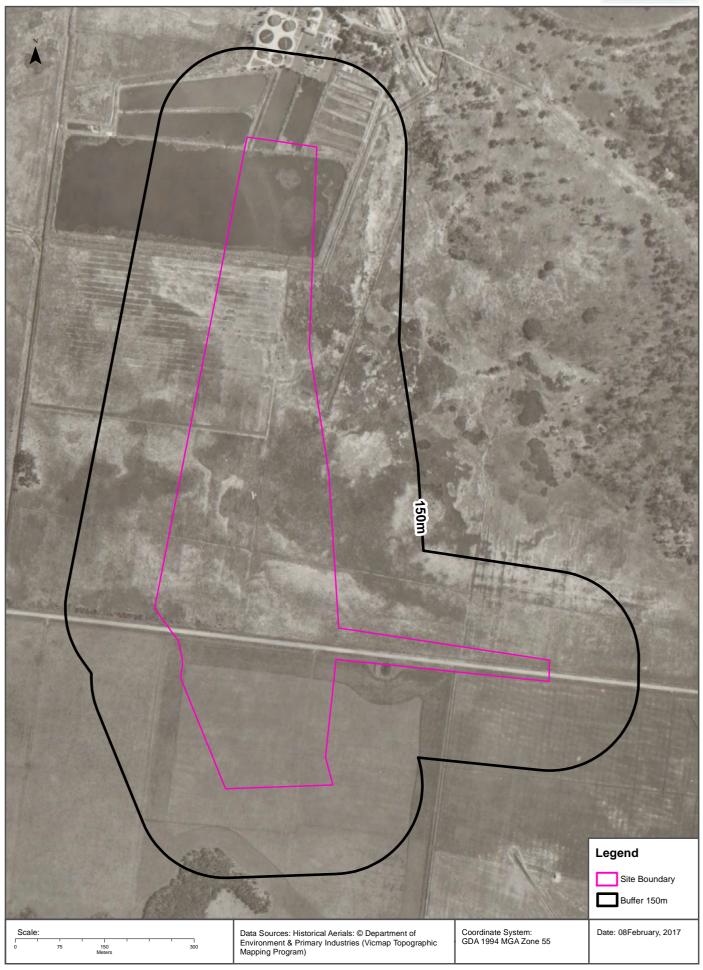




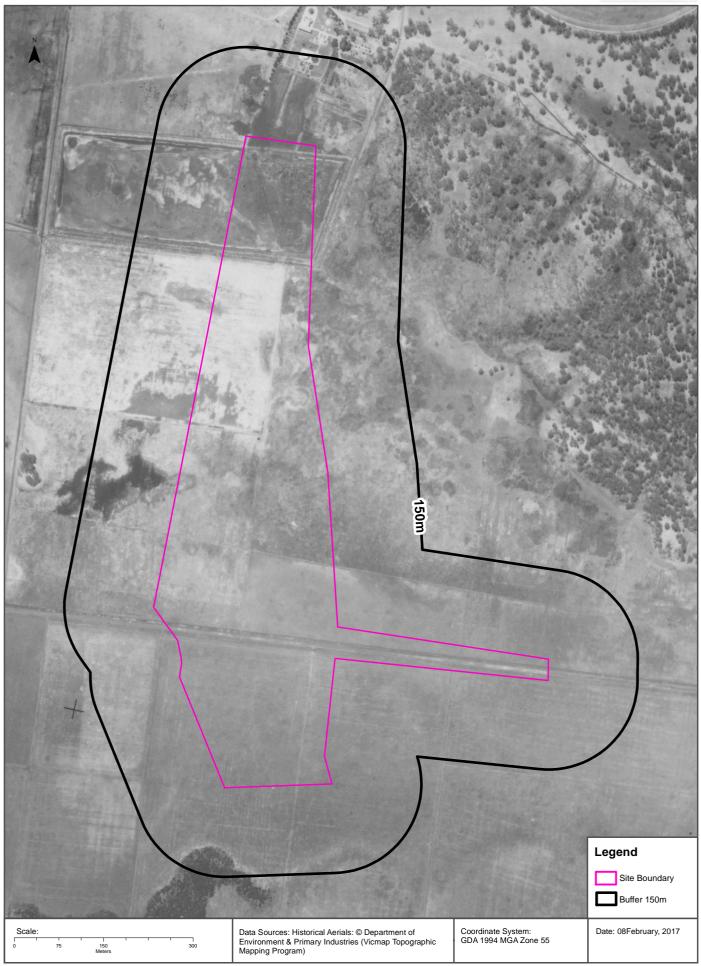






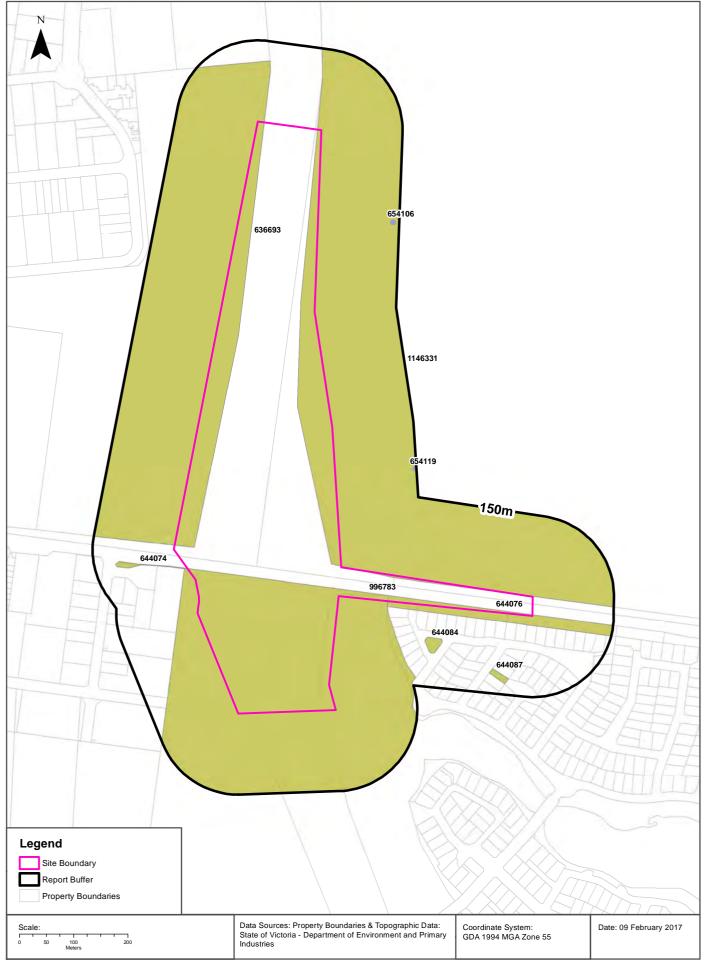






### **Features of Interest**





# **Features of Interest**

### **OSAR Proposed Road Alignments - Site 26 (Section 5)**

## **Features of Interest**

Features of Interest within 1km of the site:

Feature Id	Feature Type	Feature Sub Type	Name	Distance	Direction
996783	reserve	park		0m	Onsite
636693	reserve	park	Woodlands Industrial Estate Environmental Wetland	0m	Onsite
644076	reserve	park		0m	Onsite
1146331	reserve	conservation park	Braeside Park	0m	Onsite
644074	reserve	park		5m	South West
644084	reserve	park		59m	South East
644087	reserve	park		104m	South East
654106	sign	emergency marker	BSP403	133m	North East
654119	sign	emergency marker	BSP505	143m	East

Features of Interest Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

# Hydrogeology & Groundwater

### **OSAR Proposed Road Alignments - Site 26 (Section 5)**

### **Hydrogeology**

#### Description of aquifers within report buffer:

Description	Distance	Direction
Porous, extensive highly productive aquifers	0m	Onsite

Hydrogeology Map of Australia: Commonwealth of Australia (Geoscience Australia) Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Groundwater Salinity**

#### On-site Groundwater Salinity:

Groundwater Salinity	Percent Of Site Area
1,000 - 3,500 mg/l	100

### **Depth to Watertable**

On-site Depth to Watertable:

Depth to Watertable	Percent Of Site Area
Less than 5 metres	100

## **Surface Elevation**

Approximate on-site Surface Elevation:

Surface Elevation

3 AHDm to 4 AHDm

### **Basement Elevation**

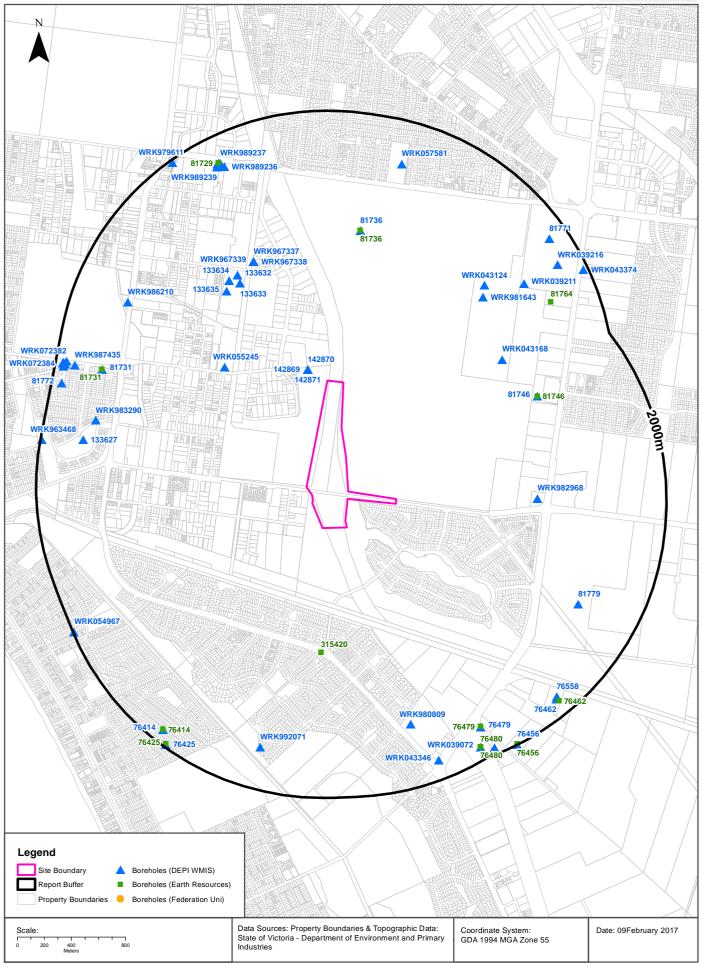
#### Approximate on-site Basement Elevation:

Basement Elevation - Basement Rocks comprise Lower Palaeozoic basement rocks that form the highlands and the crystalline basement; and Mesozoic rocks of the Otway and Gippsland basins both outcropping and subsurface -47 AHDm to -39 AHDm

Groundwater Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

### **Groundwater Boreholes**





# **Groundwater Boreholes**

### OSAR Proposed Road Alignments - Site 26 (Section 5)

# **Boreholes (DEPI WMIS)**

Boreholes from the Department of Environment and Primary Industries' Water Measurement Information System, within the report buffer:

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
142870	Groundwater Investigation	0.00m-12.50m SANDY CLAY	0.00m-5.00m INNER LINING - CASING = Pvc 5.00m-12.50m INNER LINING - SCREEN = Pvc 0.00m-4.00m OUTER LINING - GRAVEL = Cement 4.00m-4.50m OUTER LINING - GRAVEL = Bentonite 4.50m-12.50m OUTER LINING - GRAVEL = Gravel			1999-10-18	166	North
142869	Groundwater Investigation	0.00m-14.40m SANDY CLAY	0.00m-11.40m INNER LINING - CASING = Pvc 11.40m-14.40m INNER LINING - SCREEN = Pvc 10.40m-10.90m OUTER LINING - GRAVEL = Bentonite 10.90m-14.40m OUTER LINING - GRAVEL = Gravel			1999-11-03	166	North
142871	Groundwater Investigation	0.00m-12.50m SANDY CLAY	0.00m-5.00m INNER LINING - CASING = Pvc 5.00m-12.00m INNER LINING - SCREEN = Pvc 0.00m-4.00m OUTER LINING - GRAVEL = Cement 4.00m-4.50m OUTER LINING - GRAVEL = Bentonite 4.50m-12.50m OUTER LINING - GRAVEL = Gravel			1999-10-18	166	North
WRK055245	Observation		0.00m-2.00m INNER LINING - CASING = Pvc 2.00m-8.00m INNER LINING - SCREEN = Pvc 0.00m-1.50m OUTER LINING - GRAVEL = Bentonite 1.50m-8.00m OUTER LINING - GRAVEL = Gravel			2010-02-23	765	North West
133633	Groundwater Investigation	0.00m-1.30m FILL SAND & SANDY CLAY 1.30m-6.00m SANDY CLAY				1998-01-21	968	North West
133635	Groundwater Investigation	0.00m-1.50m FILL SANDY LOAM 1.50m-2.00m CLAY 2.00m-6.50m SANDY CLAY				1998-01-21	996	North West
133632	Groundwater Investigation	0.00m-0.90m FILL CLAYEY SILT 0.90m-3.50m SANDY CLAY 3.50m-6.00m CLAYEY SAND				1998-01-21	1026	North West
WRK967337							1036	North
WRK967339							1036	North
WRK967338							1036	North
133634	Groundwater Investigation	0.00m-1.00m FILL FRAVEL & SANDY CLAY 1.00m-5.50m SANDY CLAY 5.50m-6.00m CLAYEY SAND				1998-01-21	1037	North West
WRK982968							1046	East
81736	Domestic	0.00m-0.30m TOP SOIL 0.30m-0.91m WHITE SAND 0.91m-3.61m CLAY 3.61m-7.01m CLAY AND FINE SAND 7.01m-9.71m SHELL GRIT AND SHALE WITH COARSE PARTS 9.71m-11.84m COARSE WATER BEARING CLAY 11.84m-16.15m CLAY SHELL GRIT AND SHALE 16.15m-24.38m SHELL, GRIT AND SHALE	0.00m-22.86m INNER LINING - CASING = Pvc 22.86m-24.38m INNER LINING - SCREEN = Pvc		22.86m-24.38m Clay	1983-08-10	1134	North
WRK043168	Irrigation					1982-01-01	1188	North East
WRK981643							1212	North East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK043124	Not Known					1988-01-01	1269	North East
81746	Domestic	0.00m-3.05m BROWN CLAY 3.05m-15.24m BROWN SANDY CLAY 15.24m-24.38m BLUE GREY GRAVELLY CLAY 24.38m-39.62m GREY GREEN SANDY CLAY 39.62m-45.41m GREY GREEN GRAVELLY CLAY	0.00m-4.57m INNER LINING - CASING = Pvc 0.00m-33.05m INNER LINING - CASING = Pvc 33.05m-38.10m INNER LINING - SCREEN = Pvc 39.92m-41.15m INNER LINING - SCREEN = Wire W S/Steel		33.05m-38.10m Clay 39.92m-41.15m Clay	1982-02-28	1294	East
WRK039211	Irrigation	0.00m-0.30m SURFACE SANDY SOIL 0.30m-4.00m FINE SAND 4.00m-30.50m CLAYEY SAND & STONE PIECES 30.50m-37.00m SILTY ORANGE SAND 37.00m-41.00m SILTY GREY SAND 41.00m-47.00m FIRM GREY MUDSTONE 47.00m-130.00m MEDIUM HARD BLUE SHALE 130.00m-162.00m HD BL SHALE SOME FRACS ALTER.TO BCP/2813	0.00m-106.00m INNER LINING - CASING = Mild Steel 106.00m-162.00m INNER LINING - SCREEN = Mild Steel		106.00m- 162.00m Shale	1987-04-24	1524	North East
WRK980809							1535	South
81779	Not Known	0.00m-0.70m SANDY LOAM 0.70m-3.00m GREY CLAYEY SAND 3.00m-10.00m ORANGE SANDS 10.00m-14.00m GREY SANDS 14.00m-17.50m BLACK SANDS	0.00m-10.50m INNER LINING - CASING = Pvc 10.50m-16.50m INNER LINING SCREEN = Pvc 16.50m-17.50m INNER LINING - CASING = Pvc 8.50m-17.50m OUTER LINING - GRAVEL = Not Known		10.50m-16.50m Sand	1988-12-08	1538	South East
WRK986210							1586	North West
WRK983290							1625	West
81731	Not Known	0.00m-7.62m FINE BLUE CLAY 7.62m-11.27m FINE ORANGE CLAY 11.27m-44.80m MED/COARSE SILTY SAND 44.80m-52.70m SILTY SILURIAN CLAY 52.70m-122.00m HARD SANDSTONE	0.00m-54.00m INNER LINING - CASING = Steel 54.00m-122.00m INNER LINING - SCREEN = Steel		54.00m- 122.00m Sandstone	1983-02-16	1649	North West
WRK057581	Irrigation	0.00m-2.50m Sand 2.50m-3.20m sandy Clay 3.20m-6.50m Grey Clay 6.50m-13.30m Brown Sandy Clay 13.30m-18.50m Blue Clay 18.50m-20.50m Fine Sand 20.50m-32.00m Blue Clay 29.50m-32.00m Sand 32.00m-33.00m Blue Clay				2010-09-23	1678	North
WRK992071							1686	South
133627	Groundwater Investigation	0.00m-0.50m CLAY 0.50m-1.40m FILL CRUSEHD ROCK & SILTSTONE 1.40m-4.00m CLAY	1.00m-4.00m INNER LINING - SCREEN = Not Known		1.00m-4.00m Clay	1998-04-21	1687	West
WRK989236							1758	North
76479	Domestic	0.00m-3.00m BLACK CLAY 3.00m-9.00m YELLOW CLAY 9.00m-12.00m SANDY CLAY 12.00m-19.00m SAND (MEDIUM) 19.00m-24.38m CLAY IRONSTONE BANDS	0.00m-12.19m INNER LINING - CASING = Pvc Class 9 12.19m-18.29m INNER LINING - SCREEN = Pvc Class 9 18.29m-24.38m INNER LINING - CASING = Pvc Class 9		12.19m-18.29m Sand	1986-01-11	1767	South East
WRK989239							1779	North
WRK989237							1795	North
WRK989238							1798	North
81729	Domestic	0.00m-3.05m CLAY 3.05m-12.19m SANDY CLAY BROWN 12.19m-21.34m SAND BROWN 21.34m-36.58m SAND BREY 36.58m-49.38m SAND BLACK	0.00m-36.58m INNER LINING - CASING = Pvc 36.58m-38.10m INNER LINING SCREEN = Pvc 38.10m-44.50m INNER LINING - CASING = Pvc 42.98m-45.72m INNER LINING - SCREEN = Pvc		36.58m-38.10m Sand 42.98m-45.72m Sand	1982-12-23	1801	North
WRK039216	Not Known					1988-01-01	1811	North East
WRK987435							1853	West
WRK043346							1853	South
76558	Not Known					1988-01-01	1858	South East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
81771	Irrigation	0.00m-0.30m TOP SOIL 0.30m-13.70m ORANGE/BROWN CLAY 13.70m-14.00m CLAY BOUND SAND 14.00m-40.80m SANDY CLAY AND LAYERS OF LINESTONE 40.80m-43.20m COARSE SAND 43.20m-44.00m MUDSTONE	0.00m-40.70m INNER LINING - CASING = Mild Steel 40.70m-43.70m INNER LINING - SCREEN = Mild Steel 43.70m-44.00m INNER LINING - CASING = Mild Steel 0.00m-36.00m OUTER LINING - GRAVEL = Cement 36.00m-44.00m OUTER LINING - GRAVEL = Gravel		40.70m-43.70m Sand	1986-11-12	1860	North East
76462	Agro Industries, Domestic, Stock	0.00m-2.44m BLACK TOPSOIL 2.44m-3.00m GREY CLAY 3.00m-12.19m RED CLAY 12.19m-R8.29m GREY SANDY CLAY 18.29m-21.34m COARSE SAND	0.00m-18.29m INNER LINING - CASING = Pvc 18.29m-21.34m INNER LINING - SCREEN = Pvc		18.29m-21.34m Sand	1982-12-27	1870	South East
76414	Domestic	0.00m-1.30m PEAT - CLAY 1.30m-2.30m SAND - WET 2.30m-4.57m CLAY - WET 4.57m-0.00m WHITE-GREY SANDSTONE	0.00m-3.96m INNER LINING - CASING = Pvc 3.96m-4.57m INNER LINING - SCREEN = Pvc		3.96m-4.57m Sandstone	1983-02-24	1901	South West
WRK039072	Domestic, Irrigation, Stock	0.00m-3.00m BLACK CLAY 3.00m-9.00m YELLOW CLAY 9.00m-18.00m SANDY CLAY 18.00m-22.00m SAND (MEDIUM) 22.00m-24.38m CLAY (IRONSTONE BANDS)	0.00m-18.29m INNER LINING - CASING = Pvc 18.29m-21.34m INNER LINING - SCREEN = Pvc 21.34m-24.38m INNER LINING - CASING = Pvc		18.29m-21.34m Sand	1986-01-09	1905	South East
WRK072382	Observation	0.00m-0.30m GRAss/topsoil 0.30m-0.50m FILL/rubblegritty material 0.50m-0.70m Ddark sitty clay 0.70m-2.00m Stiff clay/yellow mottled 2.00m-4.00m CLAYey sand	0.00m-1.00m INNER LINING - CASING = Pvc 1.00m-4.00m INNER LINING - SCREEN = Pvc 0.00m-0.60m OUTER LINING - GRAVEL = Cement 0.60m-0.90m OUTER LINING - GRAVEL = Bentonite 0.90m-4.00m OUTER LINING - GRAVEL = Gravel		1.00m-4.00m Clay	2013-05-27	1921	West
WRK072379	Observation	0.00m-0.40m Rubble 0.40m-0.70m Black silt 0.70m-2.50m CLAY 2.50m-4.20m CLAYey sand/silt	0.00m-1.20m INNER LINING - CASING = Pvc 1.20m-4.20m INNER LINING - SLOT = Pvc 0.00m-0.80m OUTER LINING - GRAVEL = Cement 0.80m-1.00m OUTER LINING - GRAVEL = Bentonite 1.00m-4.20m OUTER LINING - GRAVEL = Gravel		1.20m-4.20m Clay	2013-05-28	1925	West
81772	Not Known		0.00m-95.80m INNER LINING - CASING = Galvanised Iron 96.00m-107.20m INNER LINING - SCREEN = Galvanised Iron			1987-03-27	1925	West
WRK072380	Observation	0.00m-0.40m FILLbuilding ruble/clay 0.40m-0.80m DArk peaty clay 0.80m-3.00m Mottled silty clay 3.00m-5.00m SANDy clay/silt 5.00m-6.00m wet sand & yellow clay	0.00m-1.50m INNER LINING - CASING = Pvc 1.50m-6.00m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement 0.50m-1.40m OUTER LINING - GRAVEL = Bentonite 1.40m-6.00m OUTER LINING - GRAVEL = Gravel		1.50m-6.00m Clay	2013-05-27	1938	West
WRK072381	Observation	0.00m-0.30m FILL/disturbed clay some rubble 0.30m-0.70m CLAYey silt/black 0.70m-1.50m SANDy clay/dense 1.50m-2.50m SANDy clay/silty 2.50m-4.20m LIGhter clayey sand/wet	0.00m-1.20m INNER LINING - CASING = Pvc 1.20m-4.20m INNER LINING - SCREEN = Pvc 0.00m-0.60m OUTER LINING - GRAVEL = Cement 0.60m-0.90m OUTER LINING - GRAVEL = Bentonite 0.90m-4.20m OUTER LINING - GRAVEL = Gravel		1.20m-4.20m Clay	2013-05-27	1941	West
WRK055858	Irrigation						1945	South East
WRK072384	Observation	0.00m-0.40m CLAY& some srubble bricks concretesome rocks 0.40m-0.80m SIsturbed clay 2.50m-3.00m SILTy clay & sand 3.00m-4.50m wet yellow clayey sand	0.00m-1.50m INNER LINING - CASING = Pvc 1.50m-4.50m INNER LINING - SCREEN = Pvc 0.00m-1.00m OUTER LINING - GRAVEL = Cement 1.00m-1.20m OUTER LINING - GRAVEL = Bentonite 1.20m-4.50m OUTER LINING - GRAVEL = Gravel		1.50m-4.50m Clay	2013-05-28	1946	West
WRK043374	Irrigation	0.00m-2.00m FINE & DRY SAND 2.00m-4.00m CLAY/SAND 4.00m-29.00m BRIGHTON GROUP 29.00m-42.00m SILTY SAND 42.00m-45.00m CLAY 45.00m-47.00m MUDSTONE CW 47.00m-66.00m MUDSTONE SOFT MW 66.00m-69.00m SANDSTONE HARD MW 69.00m-96.00m MUDSTONE FIRM MW	0.00m-90.00m INNER LINING - CASING = Pvc 90.00m-96.00m INNER LINING - SCREEN = Slotted Steel 0.00m-61.00m OUTER LINING - GRAVEL = Cement 61.00m-96.00m OUTER LINING - GRAVEL = Seal		90.00m-96.00m Mudstone	2009-01-21	1964	North East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
76425	Domestic	0.00m-0.61m LOAM 0.61m-1.06m WHITE SAND 1.06m-1.37m BLACK CLAY 1.37m-1.83m GREY SAND AND SHELLS 1.83m-2.27m BLACK CLAY 2.27m-2.74m GREY SAND AND SEA SHELLS 2.74m-3.35m BLACK CLAY 3.35m-3.66m GREY SAND AND SEA SHELLS 3.66m-4.57m BLACK CLAY 4.57m-5.18m GREY SAND AND SEA SHELLS	0.00m-4.57m INNER LINING - CASING = Pvc 4.57m-5.18m INNER LINING - SCREEN = Pvc		4.57m-5.18m Sand	1983-12-12	1977	South West
WRK979611							1978	North West
WRK963468	Domestic & Stock	0.00m-4.50m CLAY 4.50m-9.50m VERY FINE SAND, CLAY & SLIME	-0.30m-2.00m INNER LINING - CASING = Pvc 2.00m-9.50m INNER LINING - SCREEN = Stainless Steel			2004-03-05	1987	West
WRK054967	Domestic & Stock	0.00m-0.30m top soil 0.30m-8.00m old sea bed 8.00m-9.00m soft sandstone 9.00m-12.00m brown sands 12.00m-13.00m soft sandstone 13.00m-16.00m sands 16.00m-17.00m soft sandstone 17.00m-18.00m sands	0.00m-11.00m INNER LINING - CASING = Pvc 11.00m-17.00m INNER LINING - SCREEN = Pvc		0.00m-11.00m Sand 11.00m-17.00m Sand	2010-02-10	1991	South West
76456	Domestic, Stock	0.00m-3.00m BLACK CLAY 3.00m-9.00m YELLOW CLAY 9.00m-12.00m SANDY CLAY 12.00m-18.00m SAND (MEDIUM) 18.00m-22.25m CLAY WITH IRONSTONE BANDS	0.00m-12.19m INNER LINING - CASING = Pvc 12.19m-18.29m INNER LINING - SCREEN = Pvc 18.29m-22.25m INNER LINING - CASING = Pvc		12.19m-18.29m Sand	1983-11-23	1995	South East

Boreholes WMIS Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

# **Groundwater Boreholes**

### **OSAR Proposed Road Alignments - Site 26 (Section 5)**

### **Boreholes (Earth Resources Database)**

Boreholes from the Earth Resources dataset, within the report buffer:

Bore Id	Bore Type	Company	Usage	Method	Status	Drill Date	Depth	Elevation	Accuracy (m)	Dist (m)	Direct
315420		Department of Manufacturing & Industry Development				31/12/1928	67.06	20.00	100	920	South
81736		Private Individual/Corporati on	Domestic water supply	Rotary (diamond/drag bit)		10/08/1983	24.38		100	1135	North
81746		Private Individual/Corporati on	Domestic water supply	Rotary (diamond/drag bit)		28/02/1982	45.41		100	1292	East
81764		Private Individual/Corporati on	Public/town water supply	Air Percussion/Air Rotary		24/04/1987	127.60		100	1646	North East
81731		Local Government Authority	Irrigation	Air Percussion/Air Rotary		16/02/1983	122.00		100	1652	North West
76479		Private Individual/Corporati on	Domestic water supply	Air Percussion/Air Rotary		11/01/1986	24.38		100	1765	South East
81729		Private Individual/Corporati on	Domestic water supply	Rotary (diamond/drag bit)		23/12/1982	49.38		100	1803	North
76462		Private Individual/Corporati on	Stock/Poultry water supply	Air Percussion/Air Rotary		27/12/1982	21.34		100	1893	South East
76414		Private Individual/Corporati on	Domestic water supply	Hand Auger		24/02/1983	4.57		100	1901	South West
76480		Private Individual/Corporati on	Domestic water supply	Air Percussion/Air Rotary		09/01/1986	24.38		100	1903	South East
76480		Private Individual/Corporati on	Irrigation	Air Percussion/Air Rotary		09/01/1986	24.38		100	1903	South East
76425		Private Individual/Corporati on	Domestic water supply	Spear point (multiple system)		12/12/1983	5.18		100	1977	South West
76456		Private Individual/Corporati on	Domestic & Stock water supply	Air Percussion/Air Rotary		23/11/1983	22.25		100	1993	South East

Boreholes Earth Resources Data Source: © The State of Victoria, Department of Economic Development, Jobs, Transport and Resources 2015. Creative Commons Attribution 3.0 Australia

# **Boreholes (Federation University)**

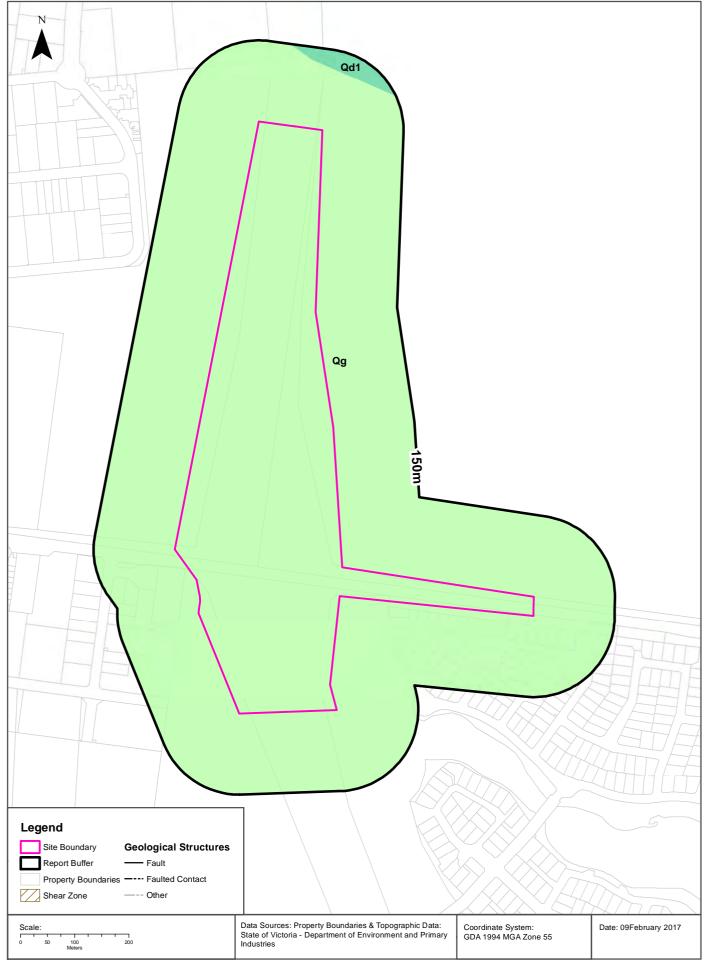
### Boreholes from the Federation University Australia dataset, within the report buffer:

Bore Id	Authority	Туре	Uses	Initial TD	Log	Dist (m)	Direct
N/A	No records within buffer						

Boreholes FedUni Data Source: © Federation University Australia

# Geology 1:250,000





# Geology

### **OSAR Proposed Road Alignments - Site 26 (Section 5)**

## **Geological Units**

### What are the Geological Units onsite?

Symbol	Name	Description	Geological Age	Lithology	Dataset
Qg	coastal lagoon deposits (Qg): generic	Silt, clay: dark grey to black; variably consolidated	Holocene to Holocene	silt material (significant); clay lithology (significant)	1:250,000

What are the Geological Units within the report buffer?

Symbol	Name	Description	Geological Age	Lithology	Dataset
Qd1	inland dune deposits (Qd1): generic	Sand, silt, clay: friable to consolidated; well sorted; includes both lunette deposits and deposits of longitudinal dunes	Quaternary to Quaternary	sand (significant); silt material (significant); clay lithology (significant)	1:250,000
Qg	coastal lagoon deposits (Qg): generic	Silt, clay: dark grey to black; variably consolidated	Holocene to Holocene	silt material (significant); clay lithology (significant)	1:250,000

Geology Data Custodian: State Government Victoria - Dept of Economic Development, Jobs, Transport & Resources Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

# Geology

### OSAR Proposed Road Alignments - Site 26 (Section 5)

### **Geological Structures**

What are the Geological Faults or Faulted Contacts onsite?

Map Id	Туре	Name	Contact	Positional Accuracy	Dataset
No features					1:250,000

What are the Dykes, Marker Beds and Veins onsite?

Map Id	Туре	Name	Description	Positional Accuracy	Dataset
No Data Covergae					

What are the Shear Zones onsite (1:250,000 scale)?

Map Id	Туре	Name	Description	Positional Accuracy	Dataset
No features					1:250,000

What are the Geological Faults or Faulted Contacts within the report buffer?

Map Id	Туре	Name	Contact	Positional Accuracy	Dataset
No features					1:250,000

What are the Dykes, Marker Beds and Veins within the report buffer?

Map Id	Туре	Name	Description	Positional Accuracy	Dataset
No Data Coverage					

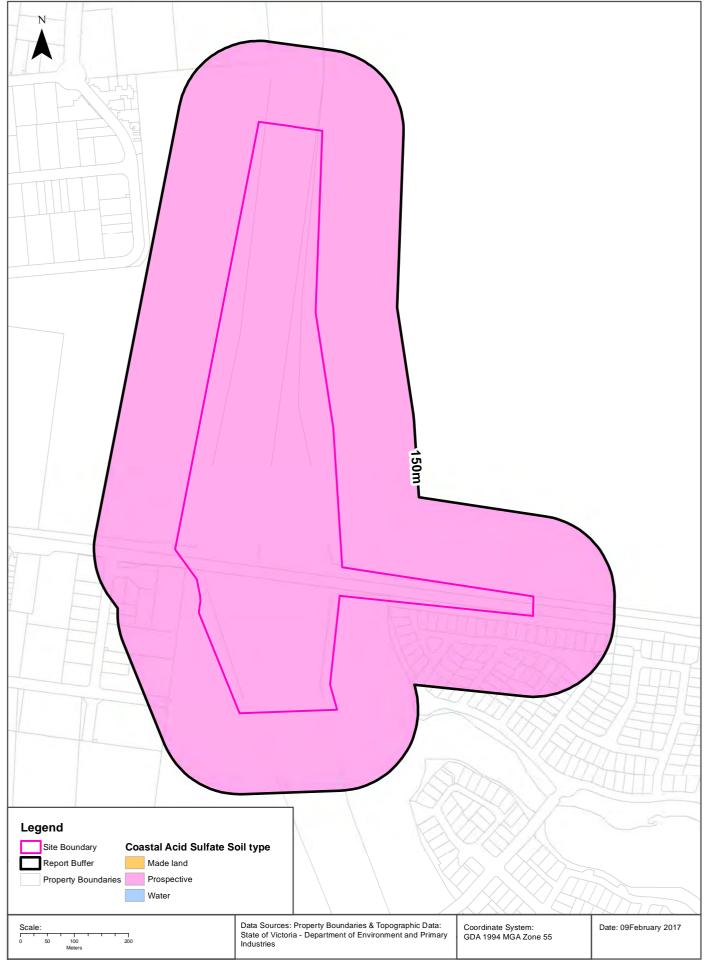
#### What are the Shear Zones within the report buffer (1:250,000 scale)?

Map Id	Туре	Name	Description	Positional Accuracy	Dataset
No features					1:250,000

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## **Coastal Acid Sulfate Soils**





# **Coastal Acid Sulfate Soils**

### **OSAR Proposed Road Alignments - Site 26 (Section 5)**

## **Coastal Acid Sulfate Soils**

### What are the on-site Coastal Acid Sulfate Soil types?

Coastal Acid Sulfate Soil Types	
Prospective	

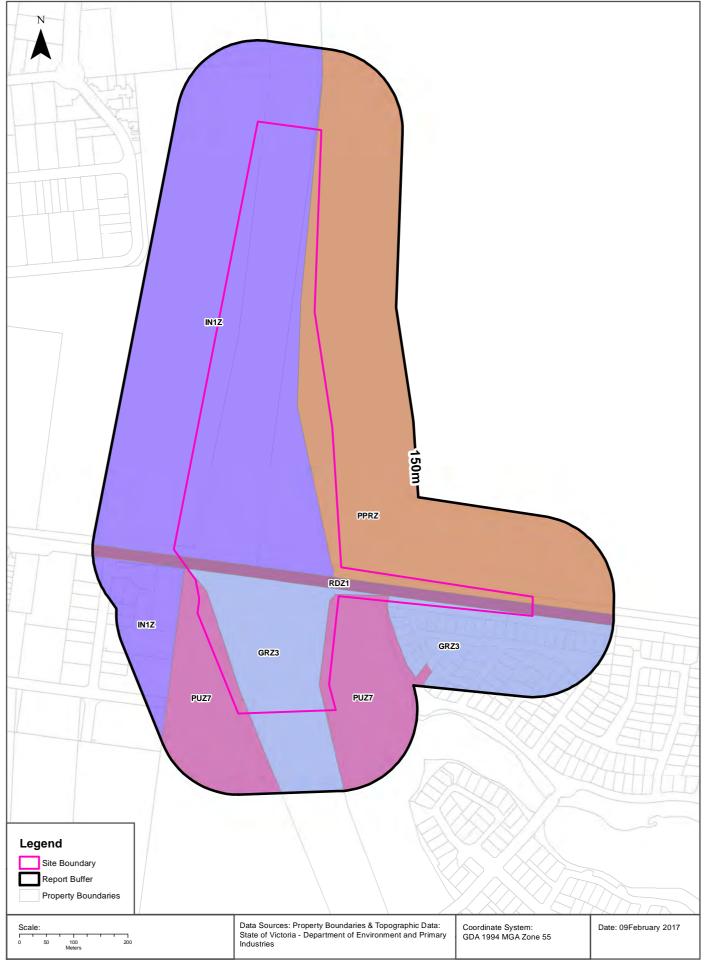
### What are the Coastal Acid Sulfate Soil types within the report buffer?

Coastal Acid Sulfate Soil Types	Distance	Direction
Prospective	0m	Onsite

Coastal Acid Sulfate Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Planning Zones**





# **Planning Zones**

### OSAR Proposed Road Alignments - Site 26 (Section 5)

### **Planning Zones**

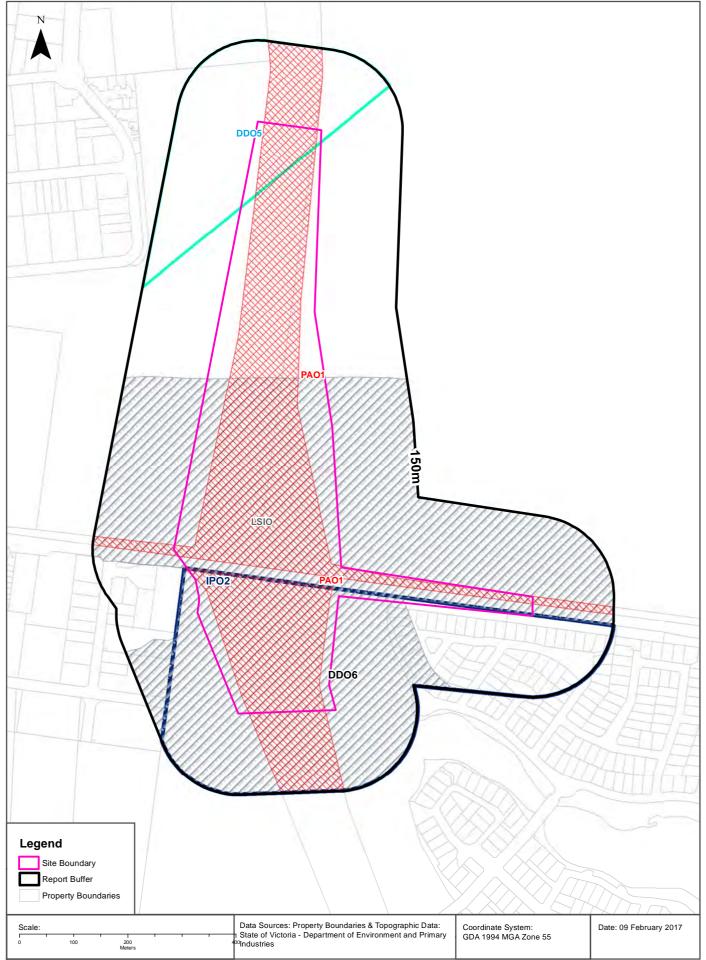
#### Planning zones within the report buffer:

Zone Code	Description	Distance	Direction
IN1Z	INDUSTRIAL 1 ZONE	0m	Onsite
GRZ3	GENERAL RESIDENTIAL ZONE - SCHEDULE 3	0m	Onsite
PPRZ	PUBLIC PARK AND RECREATION ZONE	0m	Onsite
RDZ1	ROAD ZONE - CATEGORY 1	0m	Onsite
PUZ7	PUBLIC USE ZONE - OTHER PUBLIC USE	0m	Onsite
IN1Z	INDUSTRIAL 1 ZONE	5m	South West

Planning Zone Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Planning Overlays**





# **Planning Overlays**

### **OSAR Proposed Road Alignments - Site 26 (Section 5)**

## **Planning Overlays**

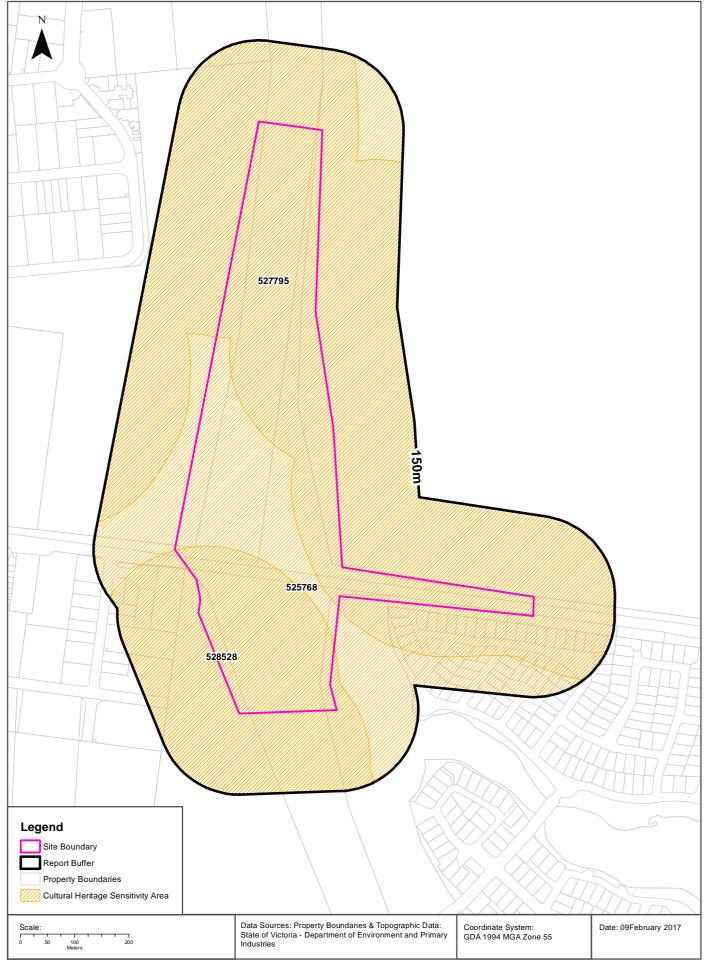
### Planning overlays within the report buffer:

Zone Code	Description	Distance	Direction
LSIO	LAND SUBJECT TO INUNDATION OVERLAY	0m	Onsite
PAO1	PUBLIC ACQUISITION OVERLAY 1	0m	Onsite
DDO6	DESIGN AND DEVELOPMENT OVERLAY - SCHEDULE 6	0m	Onsite
IPO2	INCORPORATED PLAN OVERLAY - SCHEDULE 2	0m	Onsite
DDO5	DESIGN AND DEVELOPMENT OVERLAY - SCHEDULE 5	0m	Onsite

Planning Overlay Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Cultural Heritage Sensitivity**





# **Cultural Heritage Sensitivity**

#### **OSAR Proposed Road Alignments - Site 26 (Section 5)**

## **Cultural Heritage Sensitivity**

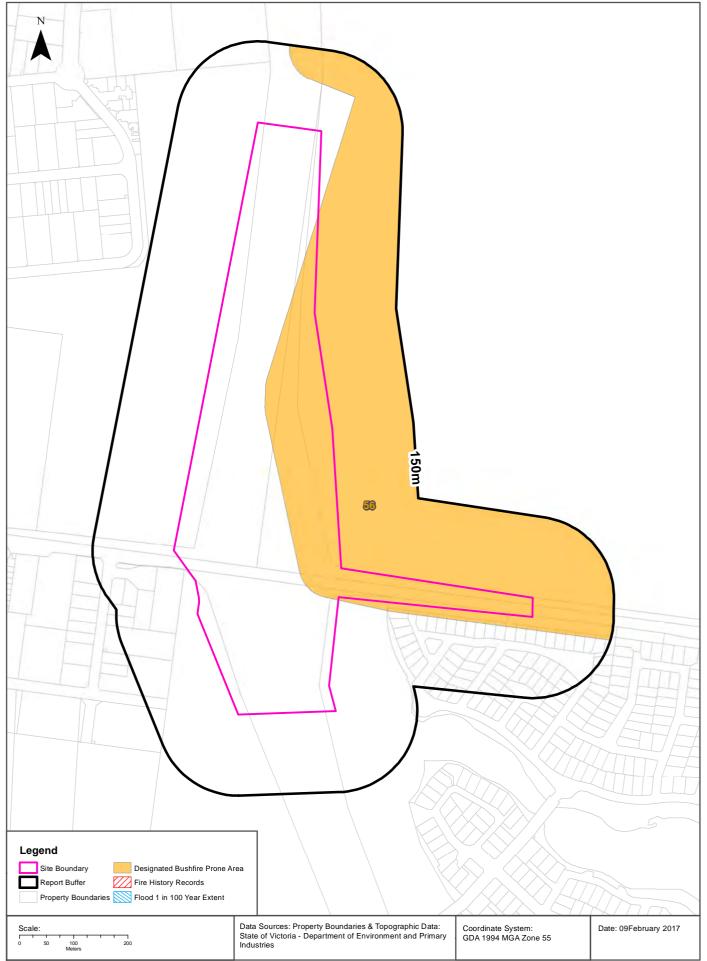
Areas of Cultural Heritage Sensitivity as specified in Division 3 of Part 2 in the Aboriginal Heritage Regulations 2007, within the report buffer:

Map Id	Culturally Sensitive	Distance	Direction
525768	YES	0m	Onsite
527795	YES	0m	Onsite
528528	YES	0m	Onsite

Cultural Heritage Sensitivity Data Custodian: State Government Victoria - Dept of Planning and Community Development Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

### **Natural Hazards**





## **Natural Hazards**

**OSAR Proposed Road Alignments - Site 26 (Section 5)** 

## **Bushfire Prone Areas**

What are the designated bushfire prone areas within the report buffer?

Map ID	Feature	Plan No	LGA	Gazetted Date	Distance	Direction
56	Designated Bushfire Prone Area	LEGL./14-158	KINGSTON	07/04/2014	0m	Onsite

Bushfire Prone Area Data Custodian: State Government Victoria - Dept of Transport, Planning & Local Infrastructure Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Fire History**

What are the fire history records of fires primarily on public land, within the report buffer?

Map Id	Fire Type	Fire Key	Season	Fire No	Fire Name	Treatment	Fire Cover	Start Date	Dist (m)	Direction
N/A	No records within buffer									

Fire History Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## Flood - 1 in 100 year modelled flood extent

#### What 1 in 100 year flood extent features exist within the report buffer?

Feature	Source	Method	Scale	Modified Date	Distance	Direction
N/A	No records within buffer					

Flood Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Ecological Constraints - Native Vegetation 2005 & RAMSAR Wetlands**





# **Ecological Constraints**

#### OSAR Proposed Road Alignments - Site 26 (Section 5)

### Native Vegetation (Modelled 2005 Ecological Vegetation Classes)

#### What native vegetation exists within the report buffer?

Veg Code	EVC Name	EVCCode	Group	Subgroup	Bioregion	Conservation Status	Geographic Occurance	Distance
GipP0053	Swamp Scrub	0053	Riparian Scrubs or Swampy Scrubs and Woodlands		Gippsland Plain	Endangered	Common	Om
GipP0125	Plains Grassy Wetland	0125	Wetlands	Freshwater	Gippsland Plain	Endangered	Naturally Restricted	0m

Native Vegetation Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **RAMSAR Wetlands**

#### What RAMSAR wetland areas exist within the report buffer?

Map ID	Site Name	Lake Name	Distance	Direction
N/A	No records within buffer			

RAMSAR Wetland Area Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

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# **Environmental Risk and Planning Report**

### **OSAR Proposed Road Alignments - Site 26 (Section 6)**

### **Report Buffer: 150m**

### Report Date: 09 Feb 2017 13:22:03

Disclaimer:

The purpose of this report is to provide an overview of some of the site history, environmental risk and planning information available, affecting an individual address or geographical area in which the property is located. It is not a substitute for an onsite inspection or review of other available reports and records. It is not intended to be, and should not be taken to be, a rating or assessment of the desirability or market value of the property or its features.

You should obtain independent advice before you make any decision based on the information within the report. The detailed terms applicable to use of this report are set out at the end of this report.

# **Table of Contents**

Location Confidences
Dataset Listings
Site Location Aerial
Topographic Features
Elevation Contours7
EPA Records
Waste Management Facilities11
Historical Business Activities12
Historical Aerial Imagery & Maps16
Features of Interest
Hydrogeology & Groundwater25
Groundwater Boreholes
Geology
Coastal Acid Sulfate Soils
Planning Zones
Planning Overlays
Cultural Heritage Sensitivity
Natural Hazards
Ecological Constraints
Terms & Conditions

## **Location Confidences**

Where Lotsearch has had to georeference features from supplied addresses, a location confidence has been assigned to the data record. This indicates a confidence to the positional accuracy of the feature. Where applicable, a code is given under the field heading "LocConf". These codes lookup to the following location confidences:

LC Code	Location Confidence
1	Georeferenced to the site location / premise or part of site
2	Georeferenced with the confidence of the general/approximate area
3	Georeferenced to the road or rail
4	Georeferenced to the road intersection
5	Feature is a buffered point
6	Land adjacent to Georeferenced Site
7	Georeferenced to a network of features

# **Dataset Listing**

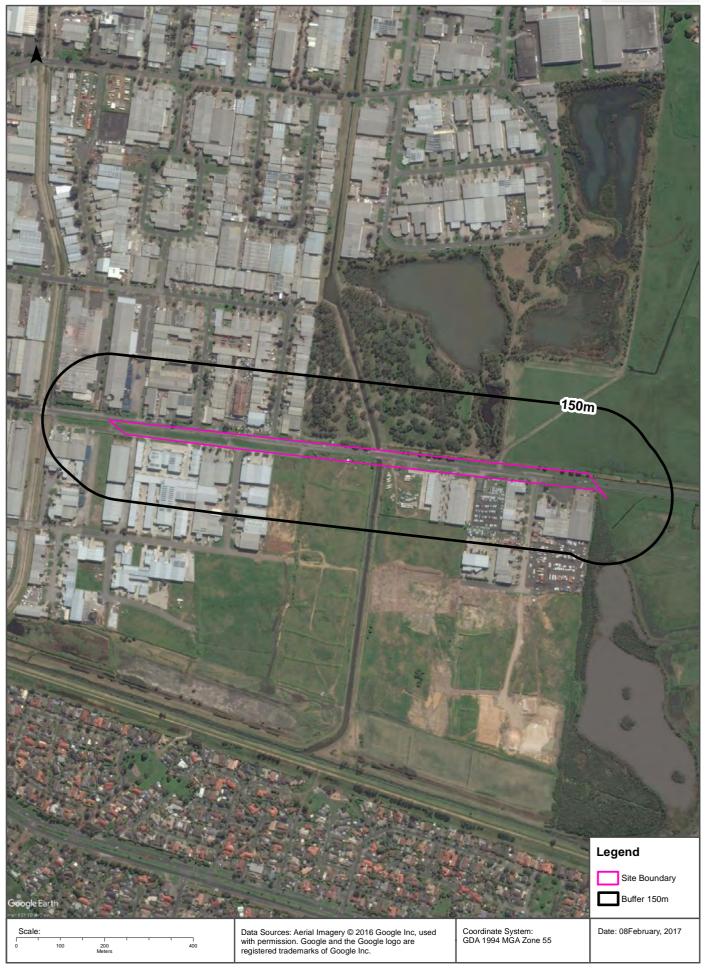
Datasets contained within this report, detailing their source and data currency:

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	No. Features Onsite	No. Features within 100m	No. Features in Buffer
Topographic and Cadastre data	State Government Victoria - Department of Environment, Land, Water & Planning	06/02/2017	06/02/2017	Quarterly	-	-	-
Current Priority Sites	Environment Protection Authority (Vic)	06/02/2017	31/12/2016	Monthly	0	0	0
Former Priority Sites & other Pollution Notices	Environment Protection Authority (Vic)	06/02/2017	05/01/2017	Monthly	0	0	0
EPA Environmental Audit Reports	Environment Protection Authority (Vic)	06/02/2017	24/11/2016	Monthly	0	0	0
Groundwater Zones with Restricted Uses	Environment Protection Authority (Vic)	06/02/2017	27/01/2017	Monthly	0	0	0
Licensed Activities	Environment Protection Authority (Vic)	06/02/2017	29/01/2017	Monthly	0	0	0
Former Licensed Activities	Environment Protection Authority (Vic)	06/02/2017	29/01/2017	Monthly	0	0	0
Works Approvals	Environment Protection Authority (Vic)	06/02/2017	06/02/2017	Monthly	0	0	0
National Waste Management Site Database	Geoscience Australia	06/02/2017	15/11/2012	Quarterly	0	0	0
Statewide Waste and Resource Recovery Infrastructure Plan Facilities	State Government Victoria - Department of Sustainability	27/11/2014	31/12/2012	None planned	0	0	0
EPA Prescribed Industrial Waste	Environment Protection Authority (Vic)	04/01/2017	04/01/2017	Quarterly	0	0	0
UBD Business to Business Directory 1991	Hardie Grant			Not required	1	15	20
UBD Business to Business Directory 1991 - Garages & Service Stations	Hardie Grant			Not required	0	0	0
UBD Business Directory 1980	Hardie Grant			Not required	0	0	0
UBD Business Directory 1980 Drycleaners, Motor Garages & Service Stations	Hardie Grant			Not required	0	0	0
UBD Business Directory 1960 Drycleaners, Motor Garages & Service Stations	Hardie Grant			Not required	0	0	0
UBD Business Directory 1950	Hardie Grant			Not required	0	0	0
UBD Business Directory 1950 Drycleaners, Motor Garages & Service Stations	Hardie Grant			Not required	0	0	0
Features of Interest	State Government Victoria - Department of Environment, Land, Water & Planning	03/02/2017	27/01/2017	Quarterly	3	4	4
Hydrogeology Map of Australia	Commonwealth of Australia (Geoscience Australia)	08/10/2014	17/03/2000	As required	1	1	1
Groundwater Salinity	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	29/08/2012	Unknown	1	-	-
Depth to Watertable	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	29/08/2012	Unknown	1	-	-
Surface Elevation	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	23/09/2013	Unknown	1	-	-
Basement Elevation	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	23/09/2013	Unknown	1	-	-
Groundwater Boreholes WMIS	State Government Victoria - Department of Environment, Land, Water & Planning	29/04/2016	28/04/2016	Annually	0	0	65
Groundwater Boreholes Earth Resources Database	The State of Victoria, Department of Economic Development, Jobs, Transport and Resources	29/04/2016	17/02/2010	As required	0	0	10
Groundwater Boreholes Fed Uni	Federation University Australia	29/04/2016	07/01/2014	As required	0	0	0
Geological Units 1:250,000	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	2	-	2
Geological Structures 1:250,000	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	0	-	0

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	No. Features Onsite	No. Features within 100m	No. Features in Buffer
Shear zones 250k	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	0	-	0
Coastal Acid Sulfate Soils	The State of Victoria, Department of Economic Development, Jobs, Transport and Resources	15/07/2016	30/03/2011	None planned	1	1	1
Planning Scheme Zones	State Government Victoria - Department of Environment, Land, Water & Planning	27/01/2017	27/01/2017	Quarterly	3	5	7
Planning Scheme Overlay	State Government Victoria - Department of Environment, Land, Water & Planning	27/01/2017	27/01/2017	Quarterly	4	4	4
Cultural Heritage Sensitivity	State Government Victoria - Department of Planning and Community Development	03/02/2017	27/01/2017	Quarterly	3	5	5
Bushfire Prone Area	State Government Victoria - Department of Transport, Planning and Local Infrastructure	27/01/2017	27/01/2017	Quarterly	0	0	0
Fire History	State Government Victoria - Department of Environment, Land, Water & Planning	27/01/2017	27/01/2017	Quarterly	0	0	0
Flood - 1 in 100 Year Modelled Flood Extent	State Government Victoria - Department of Environment, Land, Water & Planning	27/01/2017	27/01/2017	Quarterly	0	0	0
Native Vegetation (Modelled 2005 Ecological Vegetation Classes)	State Government Victoria - Department of Environment, Land, Water & Planning	13/01/2015	31/12/2005	None planned	3	3	3
RAMSAR Wetlands	State Government Victoria - Department of Environment, Land, Water & Planning	13/01/2015	24/06/2013	None planned	0	0	0

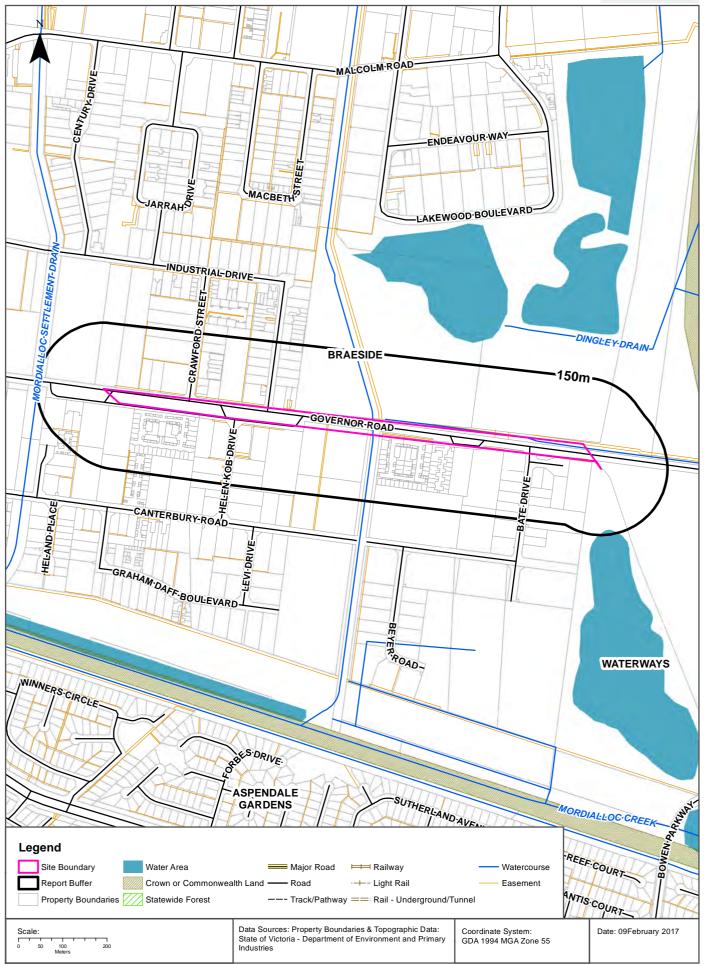






## **Topographic Data**





## **Elevation Contours (m AHD)**





## **EPA Records**

#### **OSAR Proposed Road Alignments - Site 26 (Section 6)**

## **Current EPA Priority Sites Register**

#### What sites on the current EPA priority sites register exist within the report buffer?

Notice No	Address	Suburb	Issue	Loc Conf	Dist (m)	Direction
N/A	No records in buffer					

Priority Sites Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

## Former EPA Priority Sites & Other Pollution Notices

#### What sites within the report buffer have been issued a Pollution Notice? Note. Due to pollution notices being revoked and removed from published lists this is not an exhaustive list of all past pollution notices.

Notice No	Notice Type	Company	Address	Suburb	Status	Issue	Date Issued	Loc Conf	Dist	Dir
N/A	No records in buffer									

Pollution Notice Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

## **EPA Records**

#### **OSAR Proposed Road Alignments - Site 26 (Section 6)**

### **EPA Environmental Audits**

What EPA environmental audit records exist within the report buffer? Note. Please click on CARMS No. to activate a hyperlink to online documentation. If link does not work, documentation may still be accessible via the EPA Interaction Portal.

CARMS No	Transaction No	Site	Address	Suburb	Date Complete	Loc Conf	Distance	Direction
N/A	No records in buffer							

Environmental Audit Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

## **EPA Groundwater Zones with Restricted Uses**

#### What EPA GQRUZ exist within the report buffer?

Note. Please click on CARMS No. to activate a hyperlink to online documentation.

CARMS No	EPA Id	Site History	Site Address	Restricted Uses	Loc Conf	Distance	Direction
N/A	No records in buffer						

Environmental GQRUZ Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

## **EPA Records**

#### **OSAR Proposed Road Alignments - Site 26 (Section 6)**

### **EPA Licensed Activities**

#### What EPA licensed activities exist within the report buffer?

Trans No	Licence No	Licence Type	Organisation	Premise Ref	Premise Address 1	Premise Address 2	Activities	Loc Conf	Dist (m)	Direction
N/A	No records in buffer									

Licensed Activity Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

## **Former EPA Licensed Activities**

#### What former EPA licensed activities exist within the report buffer?

Licence No	Organisation	Premise Address	Suburb	Activities	Loc Conf	Dist (m)	Direction
N/A	No records in buffer						

Former Licensed Activity Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

## **EPA Works Approvals**

#### What EPA works approvals exist within the report buffer?

Transaction No	Status	Approval No	Organisation	Premise Address	Suburb	Scheduled Categories	Loc Conf	Dist (m)	Direction
N/A	No records in buffer								

Works Approvals Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

# **Waste Management Facilities**

#### **OSAR Proposed Road Alignments - Site 26 (Section 6)**

### **National Waste Management Site Database**

Sites on the National Waste Management Site Database within the report buffer:

Site Id	Owner	Name	Address	Suburb	Postcode	Landfill	Reprocess	Transfer	Loc Conf	Dist (m)	Direction
N/A	No records in buffer										

Waste Management Facilities Data Source: Australian Government Geoscience Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Statewide Waste and Resource Recovery Infrastructure Plan Facilities**

Statewide Waste and Resource Recovery Infrastructure Plan Facilities within the report buffer:

Map Id	Owner	Site Name	Address	Suburb	Category	Sub Category	Loc Conf	Distance	Direction
N/A	No records in buffer								

SWRRIPF Data Source: State Government Victoria - Department of Sustainability

## **EPA Prescribed Industrial Waste**

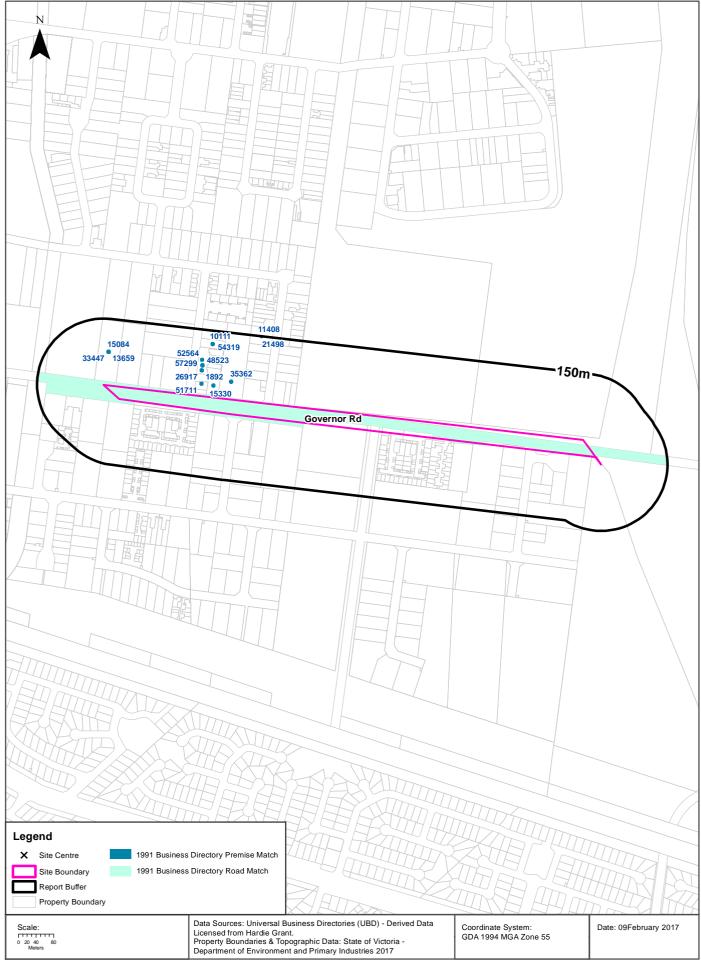
EPA Prescribed industrial waste sites within the report buffer:

Map Id	Company Name	Address	Suburb	Treatment /Disposal	Transport	Accredited Agent	EPA List Status	Loc Conf	Dist (m)	Direct
N/A	No records in buffer									

Prescribed Industrial Waste Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

## **Historical Business to Business Directory Activity 1991**





## **Historical Business Directories**

#### OSAR Proposed Road Alignments - Site 26 (Section 6)

### **1991 Business to Business Directory Records**

#### 1991 UBD Business Directory Records within 150m of the site:

Activity	Organisation	Address	Ref No.	Location Confidence	Distance	Direction
Steel Merchants - General	Ward, George Steel	Governor Rd., Braeside. 3105	21156	Road Match	0m	-
Die & Press Tool Makers	Maxwell Downs pty. Ltd.;,	243 Governor rd., Braeside Ave., heidelberg West 3081	15330	Premise Match	25m	West
Belt Mfrs &/or Dists - Ladies &/or Gents	Fashion belts	2/241 governor rd braeside 3195	51711	Premise Match	26m	West
Motor Wreckers	Kurglgetc Motor Wreckers Pty. Ltd	245 Governor Rd., Elieside. 3195,	35362	Premise Match	38m	West
Toolmakers	Centre Tooling	1 Crawford St Mordialloc 3195	1892	Premise Match	56m	West
Die & Press Tool Makers	centre tooling	1 crawford st mordialloc 3195	26917	Premise Match	56m	West
Machinery &/or Parts Mfrs &/or Dists	Pro Tooling & Engineering Pty Ltd	Factory 2/1 Crawford St Braeside 3195	11822	Premise Match	67m	West
Toolmakers	Pro Tooling & Engineering Pty Ltd	Factory 2/1 Crawford St Braeside 3195	48523	Premise Match	67m	West
Printing Machinery Mfrs. &/or Imps. &/or Dists.	Pro Tooling & Engineering Pty. Ltd.,	Factory 2/1 CriiirfOrd St, Breeside. 3195	57299	Premise Match	67m	West
Die & Press Tool Makers	Pro tooling & Engineering pty. Ltd.,	Factorty 2/1 Crawford St., Braeside 3195	13281	Premise Match	67m	West
Refrigerated Transport Services	Freighter Australia Pty Ltd	237 Governor Rd Braeside 3195	15084	Premise Match	73m	West
Trailer &/or Trailer Equipment Mfrs &/or Dists	Freighter Australia Pty Ltd	237 Governor Rd Braeside 3195	13659	Premise Match	73m	West
Trailer Dealers-New &/or Used	Freighter Australia Pty Ltd	237 Governor Rd Braeside 3195	5157	Premise Match	73m	West
Motor Truck Accessories &/or Spare Parts	Freighter Australia Pty. Ltd.,	237 Governor Rd Braeside 3195	33447	Premise Match	73m	West
Builders &/or Building Contractors	macro builders pty ltd factory	3/3 crawford st braeside 3195	52564	Premise Match	80m	West
Toolmakers	Jupiter Engineering Pty Ltd	7 Crawford St Braeside 3195	54319	Premise Match	118m	North West
Plastic Moulders	Jupiter Industries (kasia.) Pty. Ltd.,	7 Crawford St, Braeslde. 3195	10111	Premise Match	118m	North West
Laboratory Apparatus &/or Equipment Mfrs &/or Imps &/or Dists	Labco Pty Ltd	74 Industrial Dr Braeside 3195	21498	Premise Match	149m	North West
Hospital Equipment &/or Supplies Mfrs &/or Imps &/or Dists	Labco Pty Ltd	74 Industrial Dr Braeside 3195	11408	Premise Match	149m	North West
Instrument - Scientific - Mfrs. &/or Imps. &/or Dists	Labco Pty.Ltd	74 Industrial Dr., Braeside. 3195	48081	Premise Match	149m	North West

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

### **1991 Business to Business Directory Garages & Service Stations**

#### 1991 UBD Business Directory Garages & Service Stations within 1km of the site:

Activity	Organisation	Address	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer					

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

# **Historical Business Directories**

#### **OSAR Proposed Road Alignments - Site 26 (Section 6)**

### **1980 Business Directory Records**

#### 1980 UBD Business Directory Records within 150m of the site:

Activity	Premise	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

### **1980 Business Directory Drycleaners, Garages & Service Stations**

#### Drycleaners, Garages & Service Stations from the 1980 UBD Business Directory within 1km of the site:

Activity	Premise	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

# **Historical Business Directories**

#### **OSAR Proposed Road Alignments - Site 26 (Section 6)**

### **1960 Business Directory Drycleaners, Garages & Service Stations**

#### Drycleaners, Garages & Service Stations from the 1960 UBD Business Directory within 1km of the site:

Activity	Premise	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

### **1950 Business Directory Records**

#### 1950 UBD Business Directory Records within 150m of the site:

Activity	Premise	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

## **1950 Business Directory Drycleaners, Garages & Service Stations**

#### Drycleaners, Garages & Service Stations from the 1950 UBD Business Directory within 1km of the site:

Activity	Premise	Ref No.	Location Confidence	Distance	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant









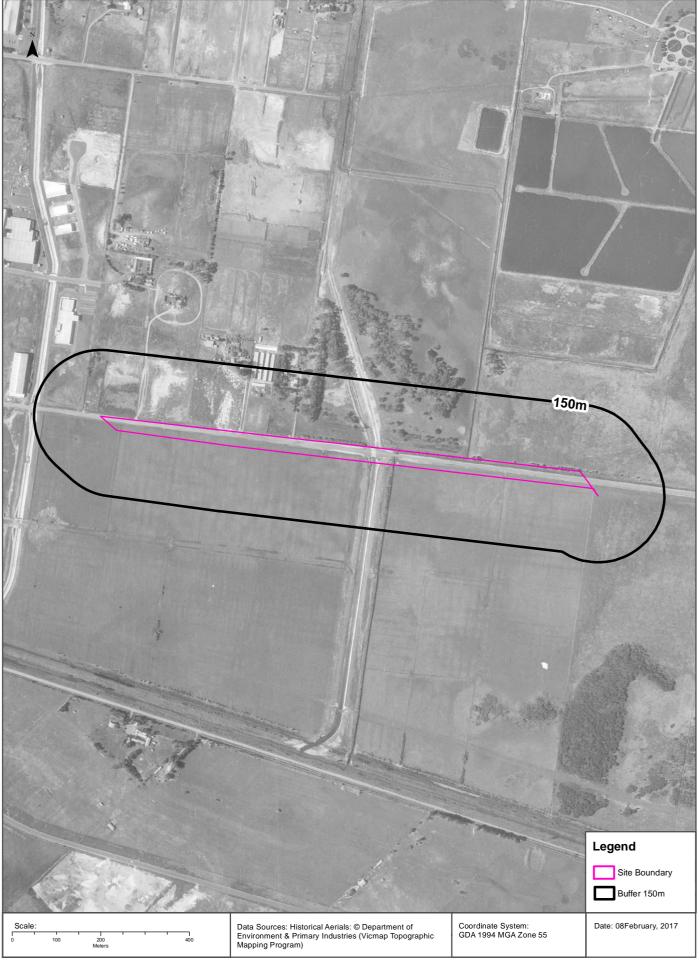






			Legend Site Boundary Buffer 150m
Scale: 0 100 200 400 Meters	Data Sources: Historical Aerials: © Department of Environment & Primary Industries (Vicmap Topographic Mapping Program)	Coordinate System: GDA 1994 MGA Zone 55	Date: 08February, 2017







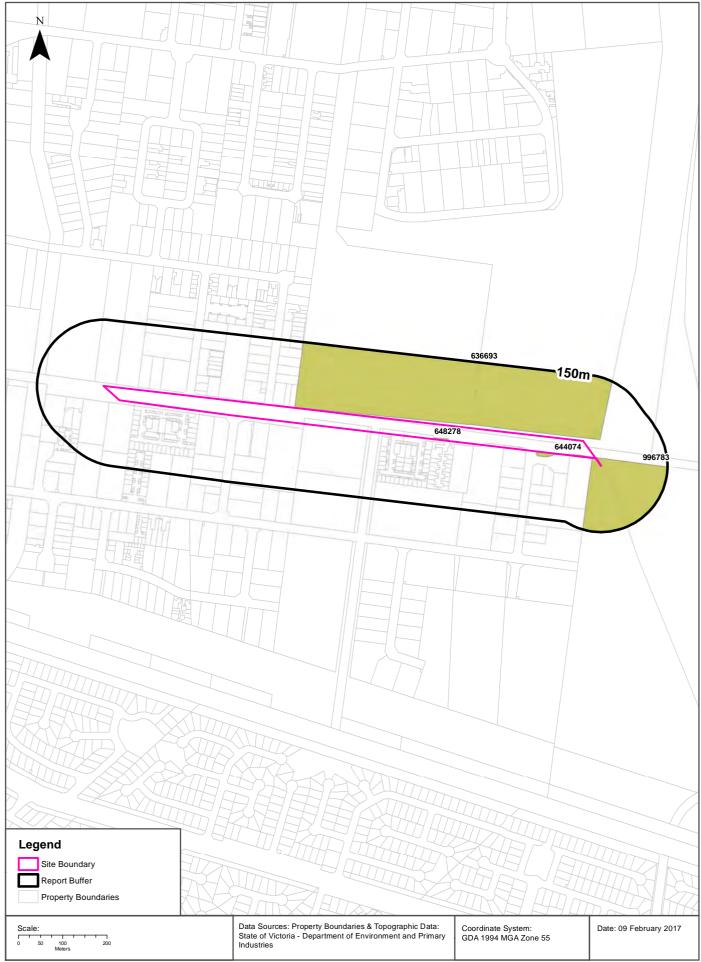






### **Features of Interest**





# **Features of Interest**

#### **OSAR Proposed Road Alignments - Site 26 (Section 6)**

## **Features of Interest**

Features of Interest within 1km of the site:

Feature Id	Feature Type	Feature Sub Type	Name	Distance	Direction
996783	reserve	park		0m	Onsite
648278	reserve	park		0m	Onsite
644074	reserve	park		0m	Onsite
636693	reserve	park	Woodlands Industrial Estate Environmental Wetland	1m	North East

Features of Interest Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

# Hydrogeology & Groundwater

#### **OSAR Proposed Road Alignments - Site 26 (Section 6)**

### **Hydrogeology**

#### Description of aquifers within report buffer:

Description	Distance	Direction
Porous, extensive highly productive aquifers	0m	Onsite

Hydrogeology Map of Australia: Commonwealth of Australia (Geoscience Australia) Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Groundwater Salinity**

#### On-site Groundwater Salinity:

Groundwater Salinity	Percent Of Site Area
1,000 - 3,500 mg/l	100

### **Depth to Watertable**

On-site Depth to Watertable:

Depth to Watertable	Percent Of Site Area
Less than 5 metres	100

## **Surface Elevation**

Approximate on-site Surface Elevation:

Surface Elevation

3 AHDm

### **Basement Elevation**

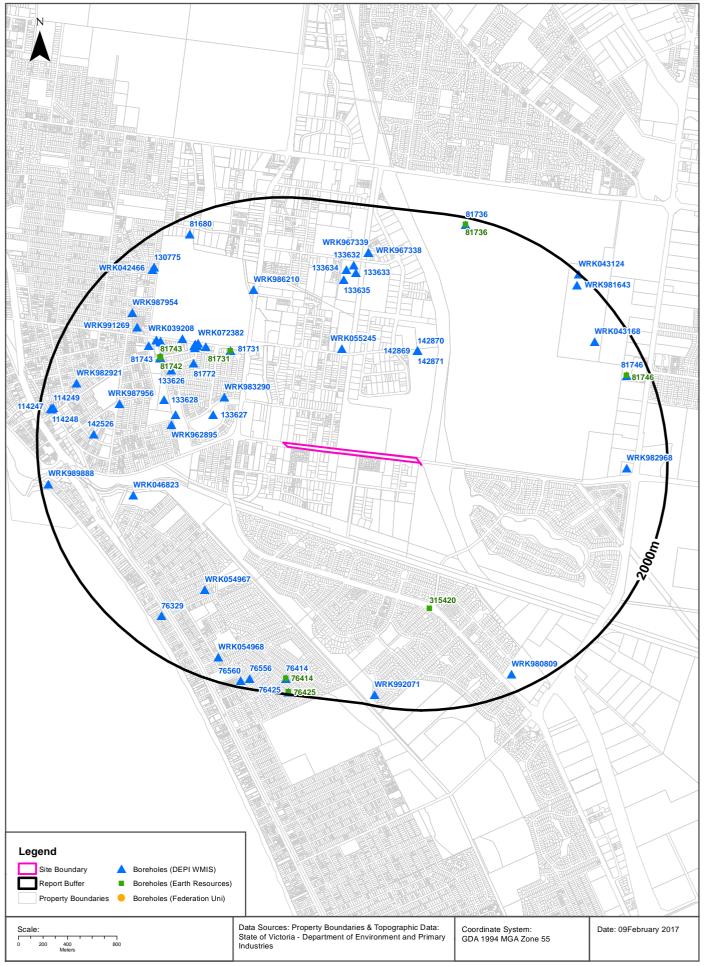
#### Approximate on-site Basement Elevation:

Basement Elevation - Basement Rocks comprise Lower Palaeozoic basement rocks that form the highlands and the crystalline basement; and Mesozoic rocks of the Otway and Gippsland basins both outcropping and subsurface -51 AHDm to -45 AHDm

Groundwater Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

### **Groundwater Boreholes**





## **Groundwater Boreholes**

### OSAR Proposed Road Alignments - Site 26 (Section 6)

## **Boreholes (DEPI WMIS)**

Boreholes from the Department of Environment and Primary Industries' Water Measurement Information System, within the report buffer:

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK983290							604	North West
133627	Groundwater Investigation	0.00m-0.50m CLAY 0.50m-1.40m FILL CRUSEHD ROCK & SILTSTONE 1.40m-4.00m CLAY	1.00m-4.00m INNER LINING - SCREEN = Not Known		1.00m-4.00m Clay	1998-04-21	611	West
WRK055245	Observation		0.00m-2.00m INNER LINING - CASING = Pvc 2.00m-8.00m INNER LINING - SCREEN = Pvc 0.00m-1.50m OUTER LINING - GRAVEL = Bentonite 1.50m-8.00m OUTER LINING - GRAVEL = Gravel			2010-02-23	817	North
81731	Not Known	0.00m-7.62m FINE BLUE CLAY 7.62m-11.27m FINE ORANGE CLAY 11.27m-44.80m MED/COARSE SILTY SAND 44.80m-52.70m SILTY SILURIAN CLAY 52.70m-122.00m HARD SANDSTONE	0.00m-54.00m INNER LINING - CASING = Steel 54.00m-122.00m INNER LINING - SCREEN = Steel		54.00m- 122.00m Sandstone	1983-02-16	862	North West
142871	Groundwater Investigation	0.00m-12.50m SANDY CLAY	0.00m-5.00m INNER LINING - CASING = Pvc 5.00m-12.00m INNER LINING - SCREEN = Pvc 0.00m-4.00m OUTER LINING - GRAVEL = Cement 4.00m-4.50m OUTER LINING - GRAVEL = Bentonite 4.50m-12.50m OUTER LINING - GRAVEL = Gravel			1999-10-18	868	North East
142870	Groundwater Investigation	0.00m-12.50m SANDY CLAY	0.00m-5.00m INNER LINING - CASING = Pvc 5.00m-12.50m INNER LINING - SCREEN = Pvc 0.00m-4.00m OUTER LINING - GRAVEL = Cement 4.00m-4.50m OUTER LINING - GRAVEL = Bentonite 4.50m-12.50m OUTER LINING - GRAVEL = Gravel			1999-10-18	868	North East
142869	Groundwater Investigation	0.00m-14.40m SANDY CLAY	0.00m-11.40m INNER LINING - CASING = Pvc 11.40m-14.40m INNER LINING SCREEN = Pvc 10.40m-10.90m OUTER LINING - GRAVEL = Bentonite 10.90m-14.40m OUTER LINING - GRAVEL = Gravel			1999-11-03	868	North East
WRK963468	Domestic & Stock	0.00m-4.50m CLAY 4.50m-9.50m VERY FINE SAND, CLAY & SLIME	-0.30m-2.00m INNER LINING - CASING = Pvc 2.00m-9.50m INNER LINING - SCREEN = Stainless Steel			2004-03-05	902	West
WRK962895							919	West
81772	Not Known		0.00m-95.80m INNER LINING - CASING = Galvanised Iron 96.00m-107.20m INNER LINING - SCREEN = Galvanised Iron			1987-03-27	974	North West
WRK987435							1003	North West
133628	Groundwater Investigation	0.00m-0.80m SILT 0.80m-2.00m SILTY CLAY 2.00m-4.00m SILTY SANDY CLAY	1.00m-4.00m INNER LINING - SCREEN = Not Known		1.00m-4.00m Clay	1998-04-21	1028	West
WRK072380	Observation	0.00m-0.40m FILLbuilding ruble/clay 0.40m-0.80m DArk peaty clay 0.80m-3.00m Mottled silty clay 3.00m-5.00m SANDy clay/silt 5.00m-6.00m wet sand & yellow clay	0.00m-1.50m INNER LINING - CASING = Pvc 1.50m-6.00m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement 0.50m-1.40m OUTER LINING - GRAVEL = Bentonite 1.40m-6.00m OUTER LINING - GRAVEL = Gravel		1.50m-6.00m Clay	2013-05-27	1055	North West

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK072379	Observation	0.00m-0.40m Rubble 0.40m-0.70m Black silt 0.70m-2.50m CLAY 2.50m-4.20m CLAYey sand/silt	0.00m-1.20m INNER LINING - CASING = Pvc 1.20m-4.20m INNER LINING - SLOT = Pvc 0.00m-0.80m OUTER LINING - GRAVEL = Cement 0.80m-1.00m OUTER LINING - GRAVEL = Bentonite 1.00m-4.20m OUTER LINING - GRAVEL = Gravel		1.20m-4.20m Clay	2013-05-28	1055	North West
WRK072382	Observation	0.00m-0.30m GRAss/topsoil 0.30m-0.50m FILL/rubblegritty material 0.50m-0.70m Ddark silty clay 0.70m-2.00m Stiff clay/yellow mottled 2.00m-4.00m CLAYey sand	0.00m-1.00m INNER LINING - CASING = Pvc 1.00m-4.00m INNER LINING - SCREEN = Pvc 0.00m-0.60m OUTER LINING - GRAVEL = Cement 0.60m-0.90m OUTER LINING - GRAVEL = Bentonite 0.90m-4.00m OUTER LINING - GRAVEL = Gravel		1.00m-4.00m Clay	2013-05-27	1066	North West
WRK072384	Observation	0.00m-0.40m CLAY& some srubble bricks concretesome rocks 0.40m-0.80m SIsturbed clay 2.50m-3.00m SILTy clay & sand 3.00m-4.50m wet yellow clayey sand	0.00m-1.50m INNER LINING - CASING = Pvc 1.50m-4.50m INNER LINING - SCREEN = Pvc 0.00m-1.00m OUTER LINING - GRAVEL = Cement 1.00m-1.20m OUTER LINING - GRAVEL = Bentonite 1.20m-4.50m OUTER LINING - GRAVEL = Gravel		1.50m-4.50m Clay	2013-05-28	1072	North West
WRK072381	Observation	0.00m-0.30m FILL/disturbed clay some rubble 0.30m-0.70m CLAYey silt/black 0.70m-1.50m SANDy clay/dense 1.50m-2.50m SANDy clay/silty 2.50m-4.20m LIGhter clayey sand/wet	0.00m-1.20m INNER LINING - CASING = Pvc 1.20m-4.20m INNER LINING - SCREEN = Pvc 0.00m-0.60m OUTER LINING - GRAVEL = Cement 0.60m-0.90m OUTER LINING - GRAVEL = Bentonite 0.90m-4.20m OUTER LINING - GRAVEL = Gravel		1.20m-4.20m Clay	2013-05-27	1074	North West
133626	Groundwater Investigation	0.00m-1.00m CLAY SAND 1.00m-3.50m CLAY SAND FINE	0.50m-3.50m INNER LINING - SCREEN = Not Known			1998-04-21	1081	North West
WRK039208	Irrigation		0.00m-60.35m INNER LINING - CASING = Not Known 56.08m-60.35m INNER LINING - SCREEN = Not Known			1963-12-31	1178	North West
81741	Not Known	0.00m-1.00m TOP SOIL AND SAND 1.00m-6.00m SANDY CLAY GREY 6.00m-18.00m SANDY CLAY BANDS SANDSTONE 18.00m-23.00m GREY CLAY WITH CHIPS OF SANDSTONE 23.00m-58.00m GREY SANDY CLAY WITH BROWN CAOL 58.00m-59.00m HARD BAND BASALT 59.00m-62.00m BLUE GREEN CLAY WITH CHIPS OF BASALT 62.00m-68.00m BLUE GREEN CLAY WITH BROWN COAL				1983-02-03	1212	North West
81742	Not Known	0.00m-2.00m SANDY CLAY GREY 2.00m-3.00m SANDY CLAY WHITE 3.00m-5.00m SANDY CLAY WHITE 5.00m-9.00m COARSE GRAVEL 9.00m-10.00m SANDY CLAY GREY 10.00m-23.00m SANDY CLAY GREY 23.00m-50.00m CLAY SANDY GREY WITH PLEATS OF MICA 50.00m-60.00m CLAY GREY WITH BANDS OF SAND STONE 60.00m-84.00m BLUE GREEN CLAY WITH HARD BANDS				1983-02-03	1212	North West
81740	Not Known	0.00m-1.00m TOP SOIL AND SAND 1.00m-4.00m SANDY CLAY 4.00m-11.00m SAND GRAVEL AND CLAY 11.00m-18.00m SANDY CLAY GREY 18.00m-24.00m CLAY WITH BANDS OF SAND STONE 24.00m-68.00m GREEN BLUE CLAY MARINE				1983-02-04	1212	North West
81743	Irrigation	0.00m-4.00m OLD TIP-FILLED 4.00m-49.00m SILTY CLAY 49.00m-51.00m HARD BAND 51.00m-57.50m WEATHERED BASALT 57.50m-63.00m BASALT 63.00m-65.00m WOODY CLAY/COAL 65.00m-67.50m GREY CLAY/MUDSTONE	0.00m-58.00m INNER LINING - CASING = Steel 58.00m-67.50m INNER LINING - SCREEN = Steel			1983-11-03	1217	North West
WRK986210							1270	North West
WRK054563	Observation					2010-07-01	1289	North West

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK046823	Irrigation	0.00m-0.30m TOP SOIL 0.30m-15.00m SANDY CLAYS & IRONSTONE 15.00m-56.80m MARL LAYERS UP TO 300MM THICK 56.80m-57.30m HARD LENSES (VOLCANIC?) 57.30m-63.00m WERRIBEE FORMATION LITTLE SAND 63.00m-72.00m WEATHERED SHALE 72.00m-87.00m FIRM SHALE 87.00m-88.00m FIRM SHALE 88.00m-91.00m FIRM TO HARD SHALE	0.00m-75.00m INNER LINING - CASING = Pvc 11.00m-75.00m OUTER LINING - GRAVEL = Cement		0.00m-75.00m Marl 75.00m-91.00m Shale	2005-08-29	1290	West
WRK054562	Observation					2010-07-01	1294	North West
WRK990956							1326	North West
WRK984509							1328	North West
WRK054967	Domestic & Stock	0.00m-0.30m top soil 0.30m-8.00m old sea bed 8.00m-9.00m soft sandstone 9.00m-12.00m brown sands 12.00m-13.00m soft sandstone 13.00m-17.00m soft sandstone 17.00m-18.00m sands	0.00m-11.00m INNER LINING - CASING = Pvc 11.00m-17.00m INNER LINING - SCREEN = Pvc		0.00m-11.00m Sand 11.00m-17.00m Sand	2010-02-10	1342	South West
WRK980684							1348	North West
WRK987956	Domestic	0.00m-0.20m FILL: SILTY SAND 0.20m-0.40m SAND 0.40m-0.60m SANDY CLAY 0.60m-2.00m SANDY CLAY 2.00m-4.50m SANDY CLAY 4.50m-9.00m CLAYEY SAND	0.00m-1.00m OUTER LINING - GRAVEL = Cement 4.50m-5.50m OUTER LINING - GRAVEL = Bentonite 5.50m-9.00m OUTER LINING - GRAVEL = Gravel			2008-09-24	1366	West
133635	Groundwater Investigation	0.00m-1.50m FILL SANDY LOAM 1.50m-2.00m CLAY 2.00m-6.50m SANDY CLAY				1998-01-21	1376	North
133633	Groundwater Investigation	0.00m-1.30m FILL SAND & SANDY CLAY 1.30m-6.00m SANDY CLAY				1998-01-21	1447	North
133634	Groundwater Investigation	0.00m-1.00m FILL FRAVEL & SANDY CLAY 1.00m-5.50m SANDY CLAY 5.50m-6.00m CLAYEY SAND				1998-01-21	1458	North
133632	Groundwater Investigation	0.00m-0.90m FILL CLAYEY SILT 0.90m-3.50m SANDY CLAY 3.50m-6.00m CLAYEY SAND				1998-01-21	1504	North
WRK991269							1513	North West
142526	Domestic	0.00m-0.50m SANDY LOAM 0.50m-18.00m SAND/CLAY 18.00m-50.00m SILT/CLAY 50.00m-56.00m SAND	0.00m-53.00m INNER LINING - CASING = Pvc 53.00m-56.00m INNER LINING - SCREEN = Pvc 0.00m-2.00m OUTER LINING - GRAVEL = Cement 2.00m-3.00m OUTER LINING - GRAVEL = Bentonite 50.00m-56.00m OUTER LINING - GRAVEL = Gravel			2000-10-06	1538	West
WRK967337							1617	North
WRK967339							1617	North
WRK967338							1617	North
WRK987954	Groundwater Investigation	0.00m-0.30m FILL: SANDY GRAVEL 0.30m-0.60m FILL: SILTY CLAY 0.60m-2.70m SILTY CLAY 2.70m-3.30m SANDY CLAY 3.30m-4.40m SAND 4.40m-11.20m CLAYEY SAND	0.00m-1.00m OUTER LINING - GRAVEL = Cement 6.00m-7.20m OUTER LINING - GRAVEL = Bentonite 7.20m-11.20m OUTER LINING - GRAVEL = Gravel			2008-09-24	1621	North West
WRK982968							1668	East
76329	Domestic, Stock		0.00m-4.26m INNER LINING - CASING = Abs Plastic 0.00m-4.26m INNER LINING - SCREEN = Not Known			1972-12-01	1716	South West
WRK043168	Irrigation					1982-01-01	1728	North East
WRK982921							1747	West
WRK042466	Irrigation		56.85m-0.00m OUTER LINING - GRAVEL = Packer			1963-12-31	1764	North West

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
130775	Not Used - Capped	0.00m-2.50m GREY FINE SOIL 2.50m-3.50m LIGHT TAN/BROWN CLAY/COARSE SAND LAYERS 3.50m-7.50m LIGHT BROWN/SILTY/FINE SAND CLAY 7.50m-11.50m DARK BROWN WEATHERED SANDSTONE 11.50m-48.40m BLACK/GREY SILTY CLAY FINE SHELLS 48.40m-50.50m BROWN SILTY CLAY/FINE SHELLS 50.50m-52.10m HARD GREN LIMESTONE 52.10m-53.30m SOFT GREEN LIMESTONE 53.30m-55.70m BROWN FIRM CLAY/FINE SAND 55.70m-57.00m WHITE/BROWN FIRM CLAY 57.00m-61.50m BLACK/GREY BASALT 61.50m-61.80m WEATHERED BLACK/GREY BASALT 63.70m-63.00m GREY/BROWN CLAY BASALT GRAVEL	-0.20m-55.65m INNER LINING - CASING = Abs Plastic 60.40m-64.00m INNER LINING - CASING = Abs Plastic 0.00m-40.00m OUTER LINING - GRAVEL = Cement 40.00m-64.00m OUTER LINING - GRAVEL = Gravel			1996-11-23	1771	North West
WRK054968	Domestic & Stock	0.00m-2.00m fien sand 2.00m-15.00m clay 15.00m-30.00m coarse sand	0.50m-22.00m INNER LINING - CASING = Pvc 22.00m-28.00m INNER LINING - SCREEN = Pvc 28.00m-30.00m INNER LINING - CASING = Pvc 0.00m-9.00m OUTER LINING - GRAVEL = Cement 9.00m-10.00m OUTER LINING - GRAVEL = Bentonite 10.00m-30.00m OUTER LINING - GRAVEL = Gravel		0.50m-22.00m Clay 22.00m-28.00m Sand 28.00m-30.00m Sand	2010-04-02	1802	South West
81746	Domestic	0.00m-3.05m BROWN CLAY 3.05m-15.24m BROWN SANDY CLAY 15.24m-24.38m BLUE GREY GRAVELLY CLAY 24.38m-39.62m GREY GREEN SANDY CLAY 39.62m-45.41m GREY GREEN GRAVELLY CLAY	0.00m-4.57m INNER LINING - CASING = Pvc 0.00m-33.05m INNER LINING - CASING = Pvc 33.05m-38.10m INNER LINING - SCREEN = Pvc 39.92m-41.15m INNER LINING - SCREEN = Wire W S/Steel		33.05m-38.10m Clay 39.92m-41.15m Clay	1982-02-28	1821	East
WRK980809							1852	South East
81680	Not Used - Capped	0.00m-12.19m YELLOW GREY CLAY 12.19m-21.34m SANDY GRAVEL AND CLAY 21.34m-47.24m LIGHT GREY SANDY CLAY 47.24m-47.55m SMALL BAND OF LIMESTONE 47.55m-53.34m COARSE SAND - SHELL AND WOOD 53.34m-55.78m DECOMPOSED BASALT 55.78m-60.96m HARD BASALT	0.00m-56.08m INNER LINING - CASING = Not Known 0.00m-56.08m OUTER LINING - GRAVEL = Cement			1973-01-13	1860	North West
76414	Domestic	0.00m-1.30m PEAT - CLAY 1.30m-2.30m SAND - WET 2.30m-4.57m CLAY - WET 4.57m-0.00m WHITE-GREY SANDSTONE	0.00m-3.96m INNER LINING - CASING = Pvc 3.96m-4.57m INNER LINING - SCREEN = Pvc		3.96m-4.57m Sandstone	1983-02-24	1872	South
114249	Groundwater Investigation	0.00m-0.20m CONCRETE & FILL 0.20m-0.70m BLACK SILTY SAND & BRICKS 0.70m-4.20m FIRM GREY / BROWN SILTY CLAYEY SANDS 4.20m-4.25m BROWN HARD IRONSTONE LENSES 4.25m-6.00m BROWN SILTY FIRM SAND	-0.10m-3.00m INNER LINING - CASING = Pvc Class 18 3.00m-6.00m INNER LINING - SCREEN = Pvc Class 18 1.80m-2.70m OUTER LINING - GRAVEL = Bentonite 2.70m-6.00m OUTER LINING - GRAVEL = Gravel		3.00m-6.00m Sand	1992-09-15	1888	West
114248	Groundwater Investigation	0.00m-0.15m CONCRETE 0.15m-0.85m BLACK MOIST SILTY CLAY SAND 0.85m-6.00m FIRM GREY/BROWN SILTY CLAY & CLAYEY SANDS	-0.10m-3.00m INNER LINING - CASING = Pvc Class 18 3.00m-6.00m INNER LINING - SCREEN = Pvc Class 18 2.00m-2.50m OUTER LINING - GRAVEL = Bentonite 2.50m-6.00m OUTER LINING - GRAVEL = Gravel		3.00m-6.00m Clay	1992-09-14	1897	West
WRK992378							1898	West
114247	Groundwater Investigation	0.00m-0.15m CONCRETE & FILL 0.15m-0.80m BLACK MOIST SILTY CLAY SAND 0.80m-1.20m FIRM GREY / BROWN SILTY CLAY 1.20m-6.00m FIRM CLAY / BROWN CLAYEY SAND	-0.10m-3.00m INNER LINING - CASING = Pvc Class 18 3.00m-6.00m INNER LINING - SCREEN = Pvc Class 18 2.00m-2.50m OUTER LINING - GRAVEL = Bentonite 2.50m-6.00m OUTER LINING - GRAVEL = Gravel		3.00m-6.00m Sand	1992-09-14	1907	West
WRK992071							1909	South
76556	Not Known					1988-01-01	1913	South West

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK981643							1921	North East
WRK989888	Domestic					2009-02-13	1936	West
76560	Not Known					1988-01-01	1943	South West
81736	Domestic	0.00m-0.30m TOP SOIL 0.30m-0.91m WHITE SAND 0.91m-3.61m CLAY 3.61m-7.01m CLAY AND FINE SAND 7.01m-9.71m SHELL GRIT AND SHALE WITH COARSE PARTS 9.71m-11.84m COARSE WATER BEARING CLAY 11.84m-16.15m CLAY SHELL GRIT AND SHALE 16.15m-24.38m SHELL, GRIT AND SHALE	0.00m-22.86m INNER LINING - CASING = Pvc 22.86m-24.38m INNER LINING - SCREEN = Pvc		22.86m-24.38m Clay	1983-08-10	1944	North East
76425	Domestic	0.00m-0.61m LOAM 0.61m-1.06m WHITE SAND 1.06m-1.37m BLACK CLAY 1.37m-1.83m GREY SAND AND SHELLS 1.83m-2.27m BLACK CLAY 2.27m-2.74m GREY SAND AND SEA SHELLS 2.74m-3.35m BLACK CLAY 3.35m-3.66m GREY SAND AND SEA SHELLS 3.66m-4.57m BLACK CLAY 4.57m-5.18m GREY SAND AND SEA SHELLS	0.00m-4.57m INNER LINING - CASING = Pvc 4.57m-5.18m INNER LINING - SCREEN = Pvc		4.57m-5.18m Sand	1983-12-12	1978	South
WRK043124	Not Known					1988-01-01	1994	North East

Boreholes WMIS Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Groundwater Boreholes**

#### **OSAR Proposed Road Alignments - Site 26 (Section 6)**

### **Boreholes (Earth Resources Database)**

Boreholes from the Earth Resources dataset, within the report buffer:

Bore Id	Bore Type	Company	Usage	Method	Status	Drill Date	Depth	Elevation	Accuracy (m)	Dist (m)	Direct
81731		Local Government Authority	Irrigation	Air Percussion/Air Rotary		16/02/1983	122.00		100	864	North West
315420		Department of Manufacturing & Industry Development				31/12/1928	67.06	20.00	100	1170	South East
81740		Private Individual/Corporati on		Rotary (diamond/drag bit)	Abandoned	04/02/1983	68.00		100	1214	North West
81741		Private Individual/Corporati on		Rotary (diamond/drag bit)	Abandoned	03/02/1983	68.00		100	1214	North West
81742		Private Individual/Corporati on		Rotary (diamond/drag bit)	Abandoned	03/02/1983	84.00		100	1214	North West
81743		Private Individual/Corporati on	Public/town water supply	Rotary (diamond/drag bit)		03/11/1983	67.50		100	1220	North West
81746		Private Individual/Corporati on	Domestic water supply	Rotary (diamond/drag bit)		28/02/1982	45.41		100	1819	East
76414		Private Individual/Corporati on	Domestic water supply	Hand Auger		24/02/1983	4.57		100	1871	South
81736		Private Individual/Corporati on	Domestic water supply	Rotary (diamond/drag bit)		10/08/1983	24.38		100	1945	North East
76425		Private Individual/Corporati on	Domestic water supply	Spear point (multiple system)		12/12/1983	5.18		100	1978	South

Boreholes Earth Resources Data Source: © The State of Victoria, Department of Economic Development, Jobs, Transport and Resources 2015. Creative Commons Attribution 3.0 Australia

## **Boreholes (Federation University)**

Boreholes from the Federation University Australia dataset, within the report buffer:

Bore Id	Authority	Туре	Uses	Initial TD	Log	Dist (m)	Direct
N/A	No records within buffer						

Boreholes FedUni Data Source: © Federation University Australia

## Geology 1:250,000





## Geology

#### OSAR Proposed Road Alignments - Site 26 (Section 6)

## **Geological Units**

#### What are the Geological Units onsite?

Symbol	Name	Description	Geological Age	Lithology	Dataset
Qd1	inland dune deposits (Qd1): generic	Sand, silt, clay: friable to consolidated; well sorted; includes both lunette deposits and deposits of longitudinal dunes	Quaternary to Quaternary	sand (significant); silt material (significant); clay lithology (significant)	1:250,000
Qg	coastal lagoon deposits (Qg): generic	Silt, clay: dark grey to black; variably consolidated	Holocene to Holocene	silt material (significant); clay lithology (significant)	1:250,000

#### What are the Geological Units within the report buffer?

Symbol	Name	Description	Geological Age	Lithology	Dataset
Qd1	inland dune deposits (Qd1): generic	Sand, silt, clay: friable to consolidated; well sorted; includes both lunette deposits and deposits of longitudinal dunes	Quaternary to Quaternary	sand (significant); silt material (significant); clay lithology (significant)	1:250,000
Qg	coastal lagoon deposits (Qg): generic	Silt, clay: dark grey to black; variably consolidated	Holocene to Holocene	silt material (significant); clay lithology (significant)	1:250,000

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## Geology

#### **OSAR Proposed Road Alignments - Site 26 (Section 6)**

### **Geological Structures**

What are the Geological Faults or Faulted Contacts onsite?

Map Id	Туре	Name	Contact	Positional Accuracy	Dataset
No features					1:250,000

What are the Dykes, Marker Beds and Veins onsite?

Map Id	Туре	Name	Description	Positional Accuracy	Dataset
No Data Covergae					

What are the Shear Zones onsite (1:250,000 scale)?

Map Id	Туре	Name	Description	Positional Accuracy	Dataset
No features					1:250,000

What are the Geological Faults or Faulted Contacts within the report buffer?

Map Id	Туре	Name	Contact	Positional Accuracy	Dataset
No features					1:250,000

What are the Dykes, Marker Beds and Veins within the report buffer?

Map Id	Туре	Name	Description	Positional Accuracy	Dataset
No Data Coverage					

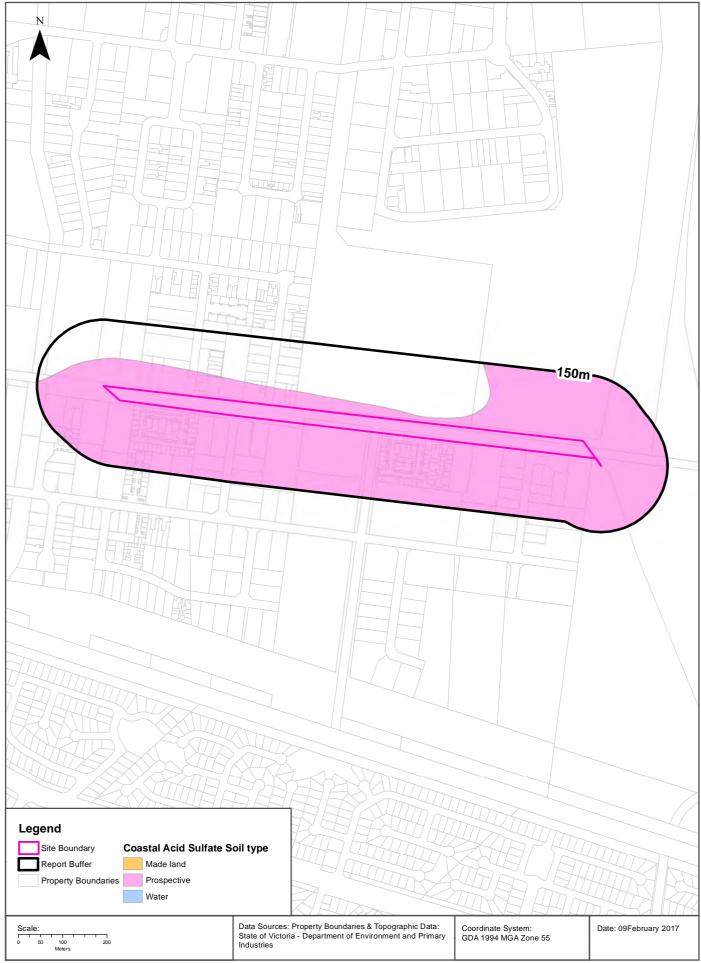
#### What are the Shear Zones within the report buffer (1:250,000 scale)?

Map Id	Туре	Name	Description	Positional Accuracy	Dataset
No features					1:250,000

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## **Coastal Acid Sulfate Soils**





# **Coastal Acid Sulfate Soils**

#### **OSAR Proposed Road Alignments - Site 26 (Section 6)**

## **Coastal Acid Sulfate Soils**

#### What are the on-site Coastal Acid Sulfate Soil types?

Coastal Acid Sulfate Soil Types	
Prospective	

#### What are the Coastal Acid Sulfate Soil types within the report buffer?

Coastal Acid Sulfate Soil Types	Distance	Direction
Prospective	0m	Onsite

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## **Planning Zones**





# **Planning Zones**

### OSAR Proposed Road Alignments - Site 26 (Section 6)

## **Planning Zones**

#### Planning zones within the report buffer:

Zone Code	Description	Distance	Direction
RDZ1	ROAD ZONE - CATEGORY 1	0m	Onsite
IN1Z	INDUSTRIAL 1 ZONE	0m	Onsite
PPRZ	PUBLIC PARK AND RECREATION ZONE	0m	Onsite
GRZ3	GENERAL RESIDENTIAL ZONE - SCHEDULE 3	0m	South East
PUZ7	PUBLIC USE ZONE - OTHER PUBLIC USE	0m	South East
UFZ	URBAN FLOODWAY ZONE	128m	West
UFZ	URBAN FLOODWAY ZONE	134m	North West

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