

REFERRAL OF A PROJECT FOR A DECISION ON THE NEED FOR ASSESSMENT UNDER THE *ENVIRONMENT EFFECTS ACT 1978*

REFERRAL FORM

The *Environment Effects Act 1978* provides that where proposed works may have a significant effect on the environment, either a proponent or a decision-maker may refer these works (or project) to the Minister for Planning for advice as to whether an Environment Effects Statement (EES) is required.

This Referral Form is designed to assist in the provision of relevant information in accordance with the *Ministerial Guidelines for assessment of environmental effects under the Environment Effects Act 1978* (Seventh Edition, 2006). Where a decision-maker is referring a project, they should complete a Referral Form to the best of their ability, recognising that further information may need to be obtained from the proponent.

It will generally be useful for a proponent to discuss the preparation of a Referral with the Department of Planning and Community Development (DPCD) before submitting the Referral.

If a proponent believes that effective measures to address environmental risks are available, sufficient information could be provided in the Referral to substantiate this view. In contrast, if a proponent considers that further detailed environmental studies will be needed as part of project investigations, a more general description of potential effects and possible mitigation measures in the Referral may suffice.

In completing a Referral Form, the following should occur:

- Mark relevant boxes by changing the font colour of the 'cross' to black and provide additional information and explanation where requested.
- As a minimum, a brief response should be provided for each item in the Referral Form, with a more detailed response provided where the item is of particular relevance. Cross-references to sections or pages in supporting documents should also be provided. Information need only be provided once in the Referral Form, although relevant cross-referencing should be included.
- Responses should honestly reflect the potential for adverse environmental effects. A Referral will only be accepted for processing once DPCD is satisfied that it has been completed appropriately.
- Potentially significant effects should be described in sufficient detail for a reasonable conclusion to be drawn on whether the project could pose a significant risk to environmental assets. Responses should include:
 - a brief description of potential changes or risks to environmental assets resulting from the project;
 - available information on the likelihood and significance of such changes;
 - the sources and accuracy of this information, and associated uncertainties.
- Any attachments, maps and supporting reports should be provided in a secure folder with the Referral Form.
- A CD or DVD copy of all documents will be needed, especially if the size of electronic documents may cause email difficulties. **Individual documents should not exceed 2MB.**

- A completed form would normally be between 15 and 30 pages in length. Responses should not be constrained by the size of the text boxes provided. Text boxes should be extended to allow for an appropriate level of detail.
- The form should be completed in MS Word and not handwritten.

The party referring a project should submit a covering letter to the Minister for Planning together with a completed Referral Form, attaching supporting reports and other information that may be relevant. This should be sent to:

Postal address

**Minister for Planning
PO Box 500
EAST MELBOURNE VIC 3002**

Couriers

**Minister for Planning
Level 17, 8 Nicholson Street
EAST MELBOURNE VIC 3002**

In addition to the submission of the hardcopy to the Minister, separate submission of an electronic copy of the Referral via email to ees.referrals@dpcd.vic.gov.au is encouraged. This will assist the timely processing of a referral.

PART 1 PROPONENT DETAILS, PROJECT DESCRIPTION & LOCATION

1. Information on proponent and person making Referral

Name of Proponent:	VicRoads
Authorised person for proponent:	Nial Finegan
Position:	Regional Director, Metro North West Region, VicRoads
Postal address:	499 Ballarat Road Sunshine 3020
Email address:	Nial.finegan@roads.vic.gov.au
Phone number:	+61 3 9313 1111
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Person who prepared Referral:	Ian Bathie
Position:	Senior Strategic Planning Engineer
Organisation:	VicRoads
Postal address:	499 Ballarat Road, Sunshine 3020, Private Bag 4000
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Phone number:	+61 3 9313 1375
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Available industry & environmental expertise: (areas of 'in-house' expertise & consultancy firms engaged for project)	<p>The following consultants have assisted VicRoads with this referral:</p> <ul style="list-style-type: none"> • Maunsell AECOM: land use planning, social impact assessment, planning and approvals • Ecology Partners Pty Ltd: flora and fauna assessment • Heritage Insight Pty Ltd: Cultural Heritage Assessment

2. Project – brief outline

Project title: Palmers Road Corridor – Princes Freeway to Calder Freeway
<p>Project location: (describe location with AMG coordinates and attach A4/A3 map(s) showing project site or investigation area, as well as its regional and local context)</p> <p>VicRoads propose to duplicate a 25 km road running north-south between Dunnings Road (Point Cook) in the south to Calder Freeway (Keilor) in the north. The road will be referred to as the 'Palmers Road Corridor' which includes Palmers Road, Robinsons Road, Westwood Drive and Calder Park Drive. The route traverses the municipalities of the City of Wyndham, City of Brimbank, and the Shire of Melton. The start of the corridor is approximately 20 km west of Melbourne's CBD.</p> <p>Attachment 1 provides a map of the project location. The project area is a narrow corridor of land approximately 25 km long and 60 m wide. Four points are indicated on the map:</p> <ul style="list-style-type: none"> • Point 1 indicates the beginning of the Palmers Road Corridor. This point is located on the intersection of Palmers Road and Dunnings Road, Point Cook. • Points 2 and 3 are arbitrary points along the proposed Palmers Road Corridor • Point 4 indicates the end of the project area where the Palmers Road Corridor connects to the Calder Freeway in Keilor.

The specific locations of these points are detailed in Table 1.

Table 1: Location of project points shown in Attachment 1

location point	Latitude			Longitude		
	degrees	minutes	seconds	degrees	minutes	seconds
1	-37	53	10.27	144	45	48.75
2	-37	47	54.04	144	45	7.23
3	-37	43	47.28	144	44	48.75
4	-37	40	27.26	144	46	0.73

3. Project description

Aim/objectives of the project (what is its purpose / intended to achieve?):

The broad project objective is to reserve land for the future Palmers Road Corridor. Project objectives are organised into four themes:

Road Safety

- Reduce crashes along the Palmers Road Corridor

Access and Mobility

- Cater for future growth and promote bicycle and pedestrian travel through the Palmers Road Corridor

Transport Efficiency

- Cater for predicted long term traffic volumes and public transport needs
- Provide a facility that caters for commercial access to industrial and employment precincts along the Palmers Road Corridor

Environment

- Avoid (as much as possible) and then minimise impact on the natural and built environment, including retaining significant conservation areas along the Palmers Road Corridor.

Background/rationale of project (describe the context / basis for the proposal, eg. for siting):

In 2001 the Palmers Road Corridor was highlighted as a necessity in the Outer Western Suburbs Transport Strategy (OWSTS). The OWSTS provides transport recommendations for the outer western areas of Melbourne, including the municipalities of Wyndham, Brimbank and Melton.

The OWSTS identified strategic medium- to long-term transport requirements in these municipalities. The Palmers Road Corridor is considered to be a future major arterial route which will be used to link the Princes, Western and Calder Freeways. Similarly, the Victorian Department of Infrastructure (now the Department of Transport (DoT)) has identified the Palmers Road Corridor as an integral part of the Principal Public Transport Network. The road would provide a link between Sydenham, Deer Park, Caroline Springs and Point Cook.

Main components of the project (nature, siting & approx. dimensions; attach A4/A3 plan(s) of site layout if available):

The project proposes duplication in sections and construction of a new road in other sections for the Palmers Road Corridor (Attachment 2). This road corridor will be a six lane divided carriageway (including two bus lanes and two shared pedestrian/bike paths).

The design of the duplication varies along the length of the route depending on abutting land use and constraints. The recommended cross section provides for an off road shared use path and service lanes where properties are directly abutting the corridor north of the Western Highway.

Four cross sections have been adopted for the future corridor, based on advice from VicRoads, as follows:

- Undeveloped areas – Located south of the Western Highway on Palmers Road, Robinsons Road and Westwood Drive. The cross section adopted is 50 m, which includes provision for water sensitive design.
- Developed areas – Located north of the Western Highway on Westwood Drive and Calder Park Drive. The cross section adopted is 38 m and provides for kerbs and channels.
- Service lanes – Located north of the Western Highway on Westwood Drive where access to properties is directly from Westwood Drive. At these locations service roads have to be provided to achieve access management category AMC2. Cross sections of 45.4 m, for a service road on one side of the road, and 52.8 m, for service roads on both sides of the road, have been adopted.
- Bridge – Provides for a bridge to cross Kororoit Creek and grade separations at all railway crossings. The cross section is 35.6 m and includes allowance for cyclists and pedestrians across the structure and bridges barriers¹.

Ancillary components of the project (eg. upgraded access roads, new high-pressure gas pipeline; off-site resource processing):

Nil identified

Key construction activities:

The main construction activity will be civil and structural works associated with the construction of a new road and upgrading existing roads. Construction activities will include clearing of vegetation; general earthworks (including topsoil stripping, excavation, filling and topsoil spreading); subsurface testing; relocation of utility services; drainage installation; pavement construction; bridgeworks; landscaping; installation of noise and screening barriers; and installation of traffic controls, lighting and signage.

All pre-construction and construction works would be undertaken in accordance with VicRoads' *Environmental Management Guidelines* (2006). A Construction Environmental Management Plan would be implemented and this plan would include, among other things, measures to avoid (where possible) and minimise impacts on flora and fauna, cultural heritage, and amenity (e.g., dust, noise).

Key operational activities:

The main operational activity will be the ongoing road maintenance consistent with VicRoads' practices and standards and will include maintenance of landscape, storm water drains, any wetlands, road pavement, any bridges, electrical assets, traffic signals, road furniture, and line marking.

Key decommissioning activities (if applicable): N/A

Is the project an element or stage in a larger project?

No Yes If yes, please describe: the overall project strategy for delivery of all stages and components; the concept design for the overall project; and the intended scheduling of the design and development of project stages).

¹ SMEC (2009) Palmers Road Corridor Study. Report prepared for VicRoads.
Palmers Road Corridor
7 April 2009

Is the project related to any other past, current or mooted proposals in the region?

No Yes If yes, please identify related proposals.

The Palmers Road Corridor is part of the Outer Western Suburbs Transport Strategy (OWSTS) which was released by the Minister for Transport in October 2001. In addition to the Palmers Road Corridor, the strategy also outlined the Deer Park Bypass (which is currently under construction).

4. Project alternatives

Brief description of key alternatives considered to date (eg. locational, scale or design alternatives. If relevant, attach A4/A3 plans):

The opportunity to deviate from the existing road alignment has been limited primarily due to the quantity of existing and future development.

Brief description of key alternatives to be further investigated (if known):

The final alignment of the corridor through Westwood Drive is under consideration. Consideration is to be given to removing the service lane on the southbound carriageway of Westwood Drive between the Western Highway and Wigani Avenue.

5. Proposed exclusions

Statement of reasons for the proposed exclusion of any ancillary activities or further project stages from the scope of the project for assessment:

Not applicable

6. Project implementation

Implementing organisation (ultimately responsible for project, ie. not contractor):

VicRoads

Implementation timeframe:

Construction works for the duplication of Palmers Road are expected to commence in approximately 5-10 years. The duplication will be undertaken in sections with varying commencement times estimated as follows:

1. Dunnings Road to Deer Park Bypass, construction to commence in the next 5-10 years
2. Deer Park Bypass to the Western Highway, construction to commence in the next 10-15 years
3. Western Highway to Calder Freeway, construction to commence in the next 10-15 years

It is estimated that each section will take approximately three years to complete. Sections will be upgraded progressively in smaller segments as funds become available and based on demand.

Proposed staging (if applicable):

See implementation timeframe.

7. Description of proposed site or area of investigation

Has a preferred site for the project been selected?

- No Yes If no, please describe area for investigation.
If yes, please describe the preferred site in the next items (if practicable).

General description of preferred site, (including aspects such as topography/landform, soil types/degradation, drainage/ waterways, native/exotic vegetation cover, physical features, built structures, road frontages; attach ground-level photographs of site, as well as A4/A3 aerial/satellite image(s) and/or map(s) of site & surrounds, showing project footprint):

The Road Corridor is proposed to upgrade the road in some sections and construct new road in some sections (notably at the northern extent near Calder Freeway, south of Taylors Road to the Kororoit Creek crossing and near Williams Landing residential development).

The corridor is located on predominantly flat volcanic plains². A total of 149 taxa of plants (61 indigenous and 88 exotics) and 37 fauna species (25 indigenous and 12 exotic) were recorded within the project area during the field assessment undertaken by Ecology Partners³. The area supports eight fauna habitat types including: remnant indigenous grassland, remnant trees, rock outcropping/escarpments, dams/ponds, Kororoit Creek, Box-thorn thickets, planted trees and shrubs, and exotic grassland. The project area is affiliated with Ecological Vegetation Classes (EVC): *Heavier-soils* Plains Grassland (EVC 132_61) and Plains Grassy Wetland (EVC 125). The majority of the study area consists of modified vegetation (due to grazing and cropping), but there are areas of Plains Grassland and Plains Grassy Wetland vegetation in very poor to good condition.

The proposed Palmers Road Corridor crosses four waterways:

- Dohertys Drain
- Dunes Drain
- Laverton Creek
- Kororoit Creek.

The proposed Palmers Road Corridor lies within the municipalities of the City of Wyndham, City of Brimbank, and the Shire of Melton. Most of the land use in the area is residential with significant areas of rural land holdings. The northern part of this section of the alignment has been highly disturbed through the construction of roads and residential development and there is no remnant native vegetation in the northern section. Kororoit Creek runs through this section and there is associated remnant River Red Gums (*Eucalyptus camaldulensis*) lining the creek. There is a small area of embedded basalt with Tough Scurf-pea (*Cullen tenax*). There is a large, continuous area of Plains Grassland located on both sides of Robinsons Road, between Middle Road and Riding Boundary Road. The majority of the southern area has been highly disturbed through the construction of the southern end of Princes Freeway and the southern end of Palmers road, the Princes Freeway ramps and adjacent residential development. The area contains exotic and planted vegetation and no remnant native vegetation persists in this area.

Site area (if known): 126 approx. (hectares)

Route length (for linear infrastructure) 25(km) **and width** 50-60 approx.(m)

Current land use and development:

The current land use and development is outlined above and displayed in Attachment 3, but generally consists of residential housing with some industrial development.

² Heritage Insight (2007) Palmers Road Corridor Desktop Cultural Heritage Assessment. Report prepared for VicRoads.

³ Ecology Partners (2009) Palmers Road Corridor and Calder Park Interchange: Flora and Fauna Assessment, and Net Gain Analysis, West Melbourne, Victoria. Report prepared for VicRoads. Palmers Road Corridor
7 April 2009

Description of local setting (eg. adjoining land uses, road access, infrastructure, proximity to residences & urban centres):

The local setting is described above (General description of preferred site), but is generally dominated by residential development. The proposed alignment is adjacent to some existing businesses including shopping centres.

Planning context (eg. strategic planning, zoning & overlays, management plans):

The Palmers Road Corridor extends through the municipalities of Melton, Brimbank and Wyndham. Several sections of the proposed corridor have already been reserved for road purposes through Council Developer Contributions, and are vested in Council. However, there is also the need to apply for a Public Acquisition Overlay (PAO) throughout the proposed corridor. The grey sections depicted in Attachment 2 show the area which requires a PAO application.

State approval is required for amendments to the Planning Schemes under the *Planning and Environment Act 1987*. A Planning Scheme Amendment is proposed to ultimately reverse and secure the land for the Palmers Road Corridor project. The amendment applies to land required for the proposed Palmers Road Corridor project, which involves the progressive upgrade of Palmers Road, Robinsons Road, Westwood Drive and Calder Park Drive to an expanded divided road from Dunnings Road, Point Cook to the Calder Freeway, Calder Park.

Several sections of land within the road alignment of the Palmers Road Corridor have already been reserved for road purposes through Council Development Contributions, and are already vested in Council. These sections of land within the Palmers Road Corridor are considered to be adequate for the proposed road duplication. Amendments to the Planning Schemes are required for areas of the road alignment within the City of Brimbank which require a Public Acquisition Overlay (PAO) to ensure sufficient land is reserved for the road duplication. For the remainder of the road alignment, where the PAO is not required, a Road Zone – Category 1 will be introduced.

A summary of the zones and overlays which the corridor passes through are as follows⁴:

- The area between Dunnings Road and Sayers Road is dominated by areas zoned Residential Zone 1 (R1Z) and Priority Development Zone Schedule 1 (PDZ1) with small areas of services and utility, Princes Freeway, Industrial 3 Zone, an Urban Floodway Zone and a public use zone (PUZ2)
- The area between Sayers Road and Doherty's Road is zoned as R1Z, Urban Growth Zone (UGZ) and a Special Use Zone 3 (SUZ3). This area is subject to two planning overlays: Heritage Overlay (HO) and Development Plan Overlay (DPO).
- The area between Doherty's Road and Western Highway is zoned as Industrial 1 Zone (I1Z), Industrial 2 Zone (IN2Z), Industrial 3 Zone (IN3Z), UGZ, Commonwealth land, Farming Zone Schedule 1 (FZ1), Green Wedge Zone (GWZ), Special Use Zone 6 (SUZ6), Mixed Use Zone (MUZ), Other Public Use (PUZ), Business 3 Zone (B3Z) and R1Z. This area is subject to seven planning overlays: DPO, HO, Design and Development Overlay (DDO), PAO, Land Subject to Inundation (LSIO), Environmental Audit Overlay (EAO), and Special Building Overlay (SBO).
- The area between Western Highway and Melton Highway is zoned as MUZ, R1Z, IN3Z, Business 1 Zone (B1Z), Urban Floodway Zone (UFZ), Comprehensive Development Zone 1 (CDZ1), Public Park and Recreation Zone (PPRZ), and PUZ. This area is subject to four planning overlays: LSIO, HO, DPO and SBO.
- The area between Melton Highway and Calder Highway is zoned as R1Z, PPRZ, UFZ, Special Use Zone 1 (SUZ1), IN3Z and Public Conservation and Resource Zone (PCRZ). This area is subject to three planning overlays: SBO, DPO and PAO.

Local government area(s):

Melton, Brimbank and Wyndham

8. Existing environment

Overview of key environmental assets/sensitivities in project area and vicinity

(cf. general description of project site/study area under section 7):

The literature review and site assessment conducted by Ecology Partners Pty. Ltd.³ indicated that the site supports vegetation with affinities to three Ecological Vegetation Classes – *Heavier-Soils* Temperate Grassland of the Victorian Volcanic Plain (EVC 132_61), Creekline Grassy Woodland (EVC 68) and Plains Grassy Wetland (EVC 125). This is generally consistent with the extant DSE vegetation mapping for the region. A total of 149 taxa of plants (61 indigenous, 88 exotics) were recorded within the study area during the field assessment

The majority of the project area consists of modified vegetation (grazing, cropping). However, there are areas of Plains Grassland, Creekline Grassy Woodland and Plains Grassy Wetland vegetation ranges from very poor to good condition.

One significant flora species (listed in the EPBC Act and FFG Act), Spiny Rice-flower *Pimelea spinescens* subsp. *spinescens*, and one significant vegetation community (Natural Temperate Grasslands of the Victorian Volcanic Plain) (EPBC Act) were recorded in the project area during the surveys. Two state significant flora species (Tough Scurf-pea, *Cullen tenax* and Basalt Podolepis, *Podolepis* sp. 1) were recorded within the project area during the assessment. Fifteen species of regional conservation significance were recorded within the project area.

Thirty-seven terrestrial fauna species (25 indigenous, 12 exotics) were recorded during the 2009 assessment. The project area supports eight habitat types: remnant indigenous grassland, remnant trees, rock outcropping/escarpments, dams/ponds, Kororoit Creek, Box-thorn thickets, planted trees and shrubs, and exotic grassland. The overall fauna habitat value of these habitat types in the project area is considered moderate to high.

Kororoit Creek in the project area has deep open water pools and narrower sections that are heavily vegetated with emergent vegetation. The water quality is in fair condition and is considered typical for an urban stream in metropolitan Melbourne. Several remnant River Red Gums are growing along Kororoit Creek.

Thirty-nine state significant fauna species and at least 25 regionally significant species are documented on the Atlas of Victorian Wildlife (AVW). The Golden Sun Moth, Striped Legless Lizard and Growling Grass Frog are known to occur in the region, although no individuals were recorded during the targeted surveys. These species are listed in the FFG Act and EPBC Act). Eight fauna species listed in the FFG Act could occur in the project area.

PART 2 POTENTIAL ENVIRONMENTAL EFFECTS

11. Potentially significant environmental effects

Overview of potentially significant environmental effects (identify key potential effects and comment on their significance and likelihood, as well as key uncertainties):

Potentially significant environmental effects of this project are:

- Loss of vegetation from the following EVCs:
 - *Heavier-soils* Plains Grassland (EVC #132_61), which is listed as endangered in Victoria (2.5 ha); this vegetation community is also known as the EPBC Act listed Natural Temperate Grassland of the Victoria Volcanic Plain.
 - Plains Grassy Wetland (EVC 125), which is listed as endangered in Victoria (0.14 ha).
- Loss of two large old trees

- Loss of Spiny Rice Flower (*Pimelea spinescens* subsp. *spinescens*) individuals; this species is listed in the FFG Act and noted as critically endangered under the EPBC Act.
- Loss of Tough Scruf-pea (*Cullen tenax*) individuals; this species is listed in the FFG Act.
- Removal of habitat for other state and nationally significant flora species.
- Decreases in population sizes of local flora and fauna species.
- Loss of fauna habitat, including habitat that could be used by significant fauna species including the Golden Sun Moth, Striped Legless Lizard, and Growling Grass Frog, which are listed in the FFG Act and the EPBC Act. Also, loss of foraging habitat for the nationally significant Grey-headed Flying-fox (listed in the FFG Act and vulnerable in the EPBC Act).
- Disturbance to Kororoit Creek, which is denoted national conservation significance for its high quality habitat for the nationally significant Growling Grass Frog and wetland-dependent birds.
- Indirect disturbance to flora and fauna from habitat fragmentation, spread of weeds and soil pathogens and disturbance through noise generation
- Alteration of hydrological processes occurring during construction, which could remove habitat for flora and fauna species.

12. Native vegetation, flora and fauna

Native vegetation

Is any native vegetation likely to be cleared or otherwise affected by the project?

NYD No Yes If yes, answer the following questions and attach details.

What investigation of native vegetation in the project area has been done? (briefly describe)

VicRoads engaged Ecology Partners to undertake a detailed flora and fauna survey (including spring and tile survey) of the project's 25 km route (see Attachment 4, Figure 1 & 2).

Previous studies have also been conducted for the study area including:

- Biosis Research (2003) Flora and Fauna Assessment of the Proposed Palmers Road Extension, Laverton, Victoria
- Ecology Australia (2004) *Palmers Road Corridor – Desktop Flora and Fauna Review*

Biological databases maintained by DSE were reviewed, including the Atlas of Victorian Wildlife and Flora Information System. The presence of Ecological Vegetation Classes (EVC) within the study area were reviewed using DSE's biodiversity interactive maps, while information referring to matters (listed taxa and ecological communities, Ramsar wetlands) protected under the EPBC Act was also obtained from the Department of Environment Water Heritage and the Arts (DEWHA) Protected Matters Search Tool.

What is the maximum area of native vegetation that may need to be cleared?

NYD Estimated area ...2.64 ha (0.84 hha).....(hectares)

How much of this clearing would be authorised under a Forest Management Plan or Fire Protection Plan?

N/A approx. percent (if applicable)

Which Ecological Vegetation Classes may be affected? (if not authorised as above)

NYD Preliminary/detailed assessment completed. If assessed, please list.

The literature review indicates that the project area supports vegetation with affinities to three EVC:

1. *Heavier-soils* Plains Grassland (EVC #132_61), which is listed as endangered in Victoria
2. Plains Grassy Wetland (EVC 125), which is listed as endangered in Victoria
3. Creekline Grassy Woodland (EVC 68), which is listed as endangered in Victoria.

The site assessment only found *Heavier-soils* Plains Grassland (EVC #132_61) and Plains Grassy Wetland (EVC 125) in the project area.

Have potential vegetation offsets been identified as yet?

NYD Yes If yes, please briefly describe.

An investigation of offset sites in order to achieve net gain has not been undertaken. These options will be discussed with Melton, Wyndham and Brimbank Shire Councils and DSE.

The net gain assessment was conducted for the project area (based on the Native Vegetation Framework). Tables 2 and 3 summarise the quality and extent of native vegetation (in habitat hectares and scattered trees) that would be removed by the project. The assessment calculated that the project would remove 0.84 habitat hectares and would require a net gain offset of 1.4 habitat hectares. The project would remove two large old trees that would require protection of eight large old trees and recruitment/replanting of 40 new plants or recruitment of 240 new plants from Creekland Grassy Woodland EVC.

Table 2: Net gain habitat hectares

Conservation Significance	Target EVC	Total losses (hha)	Net Gain target (hha)	Net gain target (hha)
High	Plains Grassland	0.33	1.5	0.5
High	Plains Grassland (CI)	0.24	1.5	0.36
Very High	Plains Grassland	0.19	2	0.38
Very High	Plains Grassy Wetland	0.08	2	0.16
Total (hha)				1.40

Table 3: Net gain scattered tree targets based on the Native Vegetation Plan

Conservation significance	Size	No. trees to be removed	Protection	Recruitment	Recruitment only			
			Multiplier*	Offset total	Multiplier*	Offset total	Multiplier	Offset total
high	LOT	2	X4	8	X20	40	120	240

* These multipliers relate to the Port Phillip and Western Port Native Vegetation Plan. Frankston: Port Phillip and Westernport Catchment Management Authority. Port Phillip and Westernport Catchment Management Authority (2006).
LOT – Large old trees

Other information/comments? (eg. accuracy of information)

The Williams Landing residential development, which is proposed for construction, was not assessed in the study by Ecology Partners. The area, however, has been subject to a number of flora and fauna assessments in the past and the results of these surveys have been incorporated in the flora and fauna assessment information. Targeted surveys for the Williams Landing area have been advised.

NYD = not yet determined

Flora and fauna

What investigations of flora and fauna in the project area have been done?

(provide overview here and attach details of method and results of any surveys for the project & describe their accuracy)

FLORA:

A site assessment was undertaken during 28 and 31 of October 2006, 21 December 2006, 22 December 2008 and 14 January 2009 to obtain the terrestrial flora values within the study area and immediate surrounds. The study area was visually assessed. All vascular plants were recorded and overall vegetation condition was noted. Vegetation mapping was undertaken during the field survey through aerial photograph interpretation and using a Global Positioning System.

FAUNA:

A habitat assessment and targeted fauna survey was conducted between October 2006 and February 2007 and on 2-3 October 2008, 22 December 2008 and 14 January 2009 to obtain information on terrestrial fauna and fauna habitat within the project area and immediate surrounds. The study area was visually assessed and a number of fauna survey techniques were employed including roof tiling for Striped Legless Lizard and active searches for Golden Sun Moth and Growling Grass Frog (Ecology Partners, 2009)(see Attachment 4, Figure 2).

Have any threatened or migratory species or listed communities been recorded from the local area?

NYD No Yes If yes, please:

- List species/communities recorded in recent surveys and/or past observations.
- Indicate which of these have been recorded from the project site or nearby.

FLORA:

Two plants of the significant flora species, Spiny Rice-flower *Pimelea spinescens* subsp. *spinescens* (EPBC Act listed and FFG Act listed) were recorded in the study area (between Riding Boundary and Middle Road) during the surveys. Ten specimens of the Tough Scurf-pea, a species listed in the FFG Act, were recorded on the southern side of Kororoit Creek. An additional seven species (Button Wrinklewort, Clover Glycine, Purple Clover, Small Golden Moths, Large-headed Fireweed, Small Scurf-pea, Small Milkwort) of State significance (five of which are also listed in the EPBC Act) have habitat present in the project area (Table 4). However, based on the overall site condition and the survey effort, it is unlikely that many species of state conservation significance would occur throughout the study area. Ecology Partners (2009) noted that as habitat is present, particularly between Boundary Road and Middle Road, it is possible that some significant flora species may be identified through additional surveys as this season has suffered from particularly low rainfall levels making it difficult to detect some species. The significant flora and the likelihood that the flora occurs in the project area is summarised in Table 4. An additional five flora species (not listed in Table 4) have habitat present in the project area and are listed in the DSE Advisory List (although not listed in the FFG Act): Slender Bindweed (*Convolvulus angustissimus* subsp. *omnigracillis*), Slender Tick-trefoil (*Desmodium varians*), Arching Flax-lily (*Dianella* sp. aff. *Longifolia*), Proud Diuris (*Diuris punctata* var. *punctata*) and Basalt Podolepis (*Podolepis* sp. 1).

Table 4: Flora of national and state significance recorded close or within the project area

Common name	Scientific name	FFG Act	EPBC Act	DSE Advisory List	Occurrence
Austral Toadflax	<i>Thesium australe</i>	✓	VU	v	Habitat present, but low likelihood of occurrence
Basalt Peppercross	<i>Lepidium hyssopifolium</i>	✓	EN	e	Habitat present, but low likelihood of occurrence
Button Wrinklewort	<i>Rutidosis leptorhynchoides</i>	✓	EN	e	Habitat present
Clover Glycine	<i>Glycine latrobeana</i>	✓	VU	v	Habitat present
Maroon Leek-orchid	<i>Prasophyllum frenchii</i>	✓	EN	e	Habitat present, but low likelihood of occurrence
Matted Flax Lily	<i>Dianella amoena</i>	✓	EN	e	Habitat present, but low likelihood of occurrence One record (2000) from <1km east of the project area
Purple Clover	<i>Glycine latrobeana</i>	✓	VU	v	Habitat present. One record (1995) within 500m of the northern extent of the project area.
Spiny Rice-flower	<i>Pimelea spinescens</i> subsp. <i>spinescens</i>	✓	CR	v	Known occurrence. Two specimens recorded during project survey.
Small Golden Moths	<i>Diuris</i> sp. aff. <i>chryseopsis</i> (Basalt Plains)	✓	EN	v	Habitat present. One record (1996) from approximately 1km west of the study area and one record (1999) approximately 1km south of the project area.
Large-headed Fireweed	<i>Senecio macrocarpus</i>	✓	VU	e	Habitat present. One record (1984) from the study area and one record (1901) from 2km to the west of the study area.
Sunshine Diuris	<i>Diuris fragrantissima</i>	✓	EN	e	Habitat present, but low likelihood of occurrence
Austral Moonwort	<i>Botrychium australe</i>	✓	-	v	Habitat present, but low likelihood of occurrence
Basalt Sun-orchid	<i>Thelymitra gregaria</i>	✓	-	e	Habitat present, but low likelihood of occurrence
Brittle Greenhood	<i>Pterostylis truncata</i>	✓	-	e	Habitat present, but low likelihood of occurrence
Buloke	<i>Allocasuarina lehmannii</i>	✓	-	-	Habitat present, but low likelihood of occurrence
Pale Plover-daisy	<i>Leiocarpa leptolepis</i>	✓	-	e	Habitat present, but low likelihood of occurrence
Plump Swamp Wallaby-grass	<i>Amphibromus pithogastrus</i>	✓	-	e	Habitat present, but low likelihood of occurrence
Purple Diurus	<i>Diuris punctata</i> var. <i>punctata</i>	✓	-	v	Habitat present, but low likelihood of occurrence
Rough Eyebright	<i>Euphrasia scabra</i>	✓	-	e	Habitat present, but low likelihood of occurrence
Small Scurf-pea	<i>Cullen parvum</i>	✓	-	e	One record (1992) from within 2km of the project area (2)
Swamp Diuris	<i>Diuris plaustris</i>	✓	-	v	Habitat present, but low likelihood of occurrence
Tough Scurf-pea	<i>Cullen tenax</i>	✓	-	e	Known occurrence. One population of 11 specimens recorded during the project survey (1)

Common name	Scientific name	FFG Act	EPBC Act	DSE Advisory List	Occurrence
Small Milkwort	<i>Comesperma polygaloides</i>	✓	-	v	Seven records (from 1986–1988) within 1km of the project area. (2)
<p>CR - Critically Endangered under the EPBC Act</p> <p>EN – Endangered under the EPBC Act</p> <p>VU – Vulnerable under the EPBC Act</p> <p>L – listed under the FFG Act (afforded statutory State protection)</p> <p>e – endangered under DSE Advisory List (not afforded statutory State protection)</p> <p>v – vulnerable under DSE Advisory List (not afforded statutory State protection)</p> <p>r – rare under DSE Advisory List (not afforded statutory State protection)</p> <p>k – poorly known under DSE Advisory List (not afforded statutory State protection)</p>					

FAUNA:

The nationally significant (EPBC Act listed) and state significant (FFG Act listed) Golden Sun Moth, Striped Legless Lizard and Growling Grass Frog are known to occur in the project area, although no individuals were recorded during the targeted surveys undertaken by Ecology Partners (2009). It is likely that populations of Striped Legless Lizard and Golden Sun Moth are dependent on habitats within the project area for their long-term viability. A population of the Growling Grass Frog is likely to depend on Kororoit Creek and its associated off-stream waterbodies for its persistence in the study area (Ecology Partners, 2009).

There is suitable foraging habitat for the nationally and state (FFG Act listed) significant Grey-headed Flying-fox. Although small numbers may fly over the study area on occasions, and individuals may occasionally forage in remnant River Red Gums along Kororoit Creek, there is no suitable communal roosting habitat (Ecology Partners, 2009).

The FFG Act listed (and EPBC Act listed) Swift Parrot may fly over the study area en route to central and north Victoria although there is no suitable foraging or roosting habitat for the species in the study area. This medium-sized parrot breeds in Tasmania from September to April and then migrates to the mainland during April. On mainland Australia, Swift Parrot largely inhabits dry open eucalypt forests and woodlands, especially box-ironbark forests. It is also regularly recorded in urban areas during late autumn and over the winter months feeding on flowering street trees particularly planted eucalypts such as Red Ironbark and Spotted Gum (Ecology Partners, 2009).

No other nationally, state or regionally significant fauna were recorded in the study area during the surveys, although there is potential for populations of such species to occur. A large number of fauna species (primarily shorebirds and waterbirds) listed under the FFG Act have previously been recorded from within the local area (i.e. within a 10 kilometre radius of the project area). Several waterbirds listed under the FFG Act (e.g. Baillon's Crane, Great Egret, Hardhead) are expected to occupy wetland habitats (i.e. farm dams, Kororoit Creek) in the project area. Table 5 outlines the fauna species of National and State significance that could occur in the project area. These species have been identified by Ecology Partners (2009) as being resident in the project area or being a frequent, occasional or rare visitor to the area. An additional eight fauna species not listed in the FFG Act, but listed on the DSE Advisory List could occur in the project area: Hardhead (*Aythya Australis*), Brown Quail (*Coturnix ypsilophora*), Whiskered Tern (*Chlidonias hybridus*), Latham's Snipe (*Gallinago hardwickii*), Nankeen Night Heron (*Nycticorax caledonicus*), Spotted Harrier (*Circus assimilis*), Black-eared Cuckoo (*Chrysococcyx osculans*), and Fat-tailed Dunnart (*Sminthopsis crassicaudata*).

Table 5: Fauna of national and state significance recorded close or within the project area

Common name	Scientific name	FFG Act	EPBC Act	DSE Advisory List	Occurrence
Golden Sun Moth	<i>Synemon plana</i>	✓	CR	e	Several records from the local area, with the most recent record from 2005 (AVW). Targeted surveys for this project did not find this species, but they are likely to occur through the extensive areas of Kangaroo Grass in Corridor 1.
Striped Legless Lizard	<i>Delma impar</i>	✓	VU	e	A number of records from the local area (AVW) and a known population from 2km of the project area near Kororoit Creek and from Organ Pipes National Park. Although this species was not found during targeted surveys for the project, it is likely to be found in the project area.
Growling Grass Frog	<i>Litoria raniformis</i>	✓	VU	e	There are a number of records of this species from the local area, although it has been recorded in low numbers in waterbodies adjacent to Kororoit Creek.
Swift Parrot	<i>Lathamus discolor</i>	✓	EN	e	This species may fly over the study on route to central and northern Victoria although there is no suitable foraging or roosting habitat in the project area.
Grey-headed Flying-fox	<i>Pteropus poliocephalus</i>	✓	VU	v	Some individuals of this species may fly over the project area and may occasionally forage in remnant River Red Gums along Kororoit Creek, but there is no suitable communal roosting habitat in the project area.
Baillon's Crane	<i>Porzana pusilla</i>	✓	-	v	Could be an occasional visitor to the project area.
Eastern Great Egret	<i>Ardea modesta</i>	✓	-	v	Could be an occasional visitor to the project area
White-bellied Sea-eagle	<i>Haliaeetus leucogaster</i>	✓	-	v	Could fly over the project area, although this would rarely occur.
<p>CR - Critically Endangered under the EPBC Act EN – Endangered under the EPBC Act VU – Vulnerable under the EPBC Act L – listed under the FFG Act (afforded statutory State protection) e – endangered under DSE Advisory List (not afforded statutory State protection) v – vulnerable under DSE Advisory List (not afforded statutory State protection) r – rare under DSE Advisory List (not afforded statutory State protection) k – poorly known under DSE Advisory List (not afforded statutory State protection) AVW – Atlas of Victorian Wildlife</p>					

Golden Sun Moth, *Synemon plana*

There are several records of the Golden Sun Moth in the local area, the most recent being 2005 (AVW). There is a recent record of the Golden Sun Moth from private property on western Melbourne, in the vicinity of the proposed Deer Park Bypass, although the exact locality was not reported. There were no previous records of the species from that area prior to this record. There is a large population known from Eynesbury Grasslands, at Melton, where up to 60 males were recorded. Large populations of Golden Sun Moth are also known from the Craigieburn and Cooper Street Grasslands in the Craigieburn/Epping area, approximately 30 km north-east of the study area (Ecology Partners, 2009).

Targeted surveys undertaken during optimal survey conditions and in the highest quality habitat did not find any Golden Sun Moths. However, the species is likely to occur throughout the extensive areas of Kangaroo Grass, on both sides of Robinsons Road, between Middle Road and Boundary Road. There is a low likelihood of the species occurring in other remnants of indigenous grasses in the study area due to their lower quality and isolation from more extensive, interconnected patches (Ecology Partners, 2009).

The Golden Sun Moth occurs in native grassland dominated by greater than 40% cover of Wallaby Grass, in particular *Austrodanthonia carphoides* but may also inhabit areas dominated by *Themeda triandra* and also introduced grassland (Ecology Partners, 2009).

Prior to European settlement, the Golden Sun Moth was widespread and relatively continuous throughout its range, inhabiting grassy open woodlands and grassland, although it currently inhabits small isolated sites. The species is threatened by habitat loss, disturbance and fragmentation due to agricultural expansion and urbanisation. Populations have been isolated and fragmented, impeding the ability of the relatively immobile females to recolonise areas, thereby reducing the likelihood of genetic exchange (Ecology Partners, 2009).

Striped Legless Lizard *Delma impar*

There are 169 records of the Striped Legless Lizard in the local area, the most recent being 2005 (AVW). There is a known population near Kororoit Creek at the Cairnlea grasslands approximately two kilometres east of the study area, which is known to support one of the densest populations. At this location over 70 individuals were salvaged in one day (February 2006) during soil disturbance as part of the proposed residential development.

There is a population of Striped Legless Lizard that exists in indigenous grassland on both sides of Robinsons Road, between Middle Road and Riding Boundary Road, and in the vicinity of the Melbourne–Ballarat rail reserve. A known population also exists in Organ Pipes National Park immediately adjacent to the Calder Park Interchange. A total 203 individuals were released into the grassland in the National Park from 2001–2006. Monitoring in 2005 was still recording individuals released in 2001 so it is likely that a resident population is now established in the vicinity of the Calder Park Interchange. Indeed, many individuals are likely to use the VicRoads land as part of their home range.

The species was not recorded during the targeted surveys in the study area. However, remnant indigenous grassland dominated by Kangaroo Grass *Themeda triandra*, and scattered basalt rocks, provides suitable habitat for the Striped Legless Lizard, and it is likely to be present in the study area, particularly at (north-south):

- Calder Park Interchange
- proposed flora and fauna reserve in the vicinity of the Melbourne–Bendigo rail reserve
- Kororoit Creek corridor and associated exotic grassland
- Melbourne – Ballarat rail reserve north to Vanessa Drive
- Robinsons Road, between Middle Road and Riding Boundary Road.

There is also a low likelihood that the species is present on the grounds of the Chilean Sports Club which lies adjacent to Palmers Road, approximately 500 m north of Sayers Road.

The Striped Legless Lizard inhabits lowland native grasslands, typically dominated by native tussock forming grass species such as Kangaroo Grass and spear grasses *Austrostipa* spp. The species feeds on invertebrate prey and is considered as a selective arthropod feeder. Before European settlement the species was probably quite common across the Victorian Volcanic Plains, although subsequent loss and modification of native grassland areas have reduced the available habitat for this species. In Victoria, the species primarily occurs around the basalt plains to the west of Melbourne, and areas around Ballarat and Bendigo (Ecology Partners, 2009).

Growling Grass Frog *Litoria raniformis*

There are 198 confirmed records of the Growling Grass Frog in the local area, with the most recent from 2006 (AVW). The species was not recorded in the study area during the present field assessment, although the species was recorded in low numbers (less than five individuals) in small

off-stream waterbodies (Melbourne Water sediment ponds) adjacent to Kororoit Creek in 2005/06, approximately 400 m from the proposed Kororoit Creek crossing. The Growling Grass Frog is also known to occur in in-stream waterbodies along Kororoit Creek.

The species may use Kororoit Creek and its floodplain as a dispersal corridor. Kororoit Creek is considered to be of national conservation significance for the Growling Grass Frog. The ephemeral waterbodies in the study area (one located on the western side of Robinsons Road south of Riding Boundary Road; the other situated on the grounds of the Chilean Club sports ground) are unlikely to provide suitable habitat for the Growling Grass Frog due to their isolation from permanent waterbodies, high ephemerality and lack of suitable vegetation structure (i.e. emergent, submerged, fringing and floating vegetation). However, the two small ponds located several hundred metres north of Kororoit Creek contain high quality breeding habitat for the Growling Grass Frog because they are permanent, have high water quality, contain adequate vegetation cover and structure, and are situated in close proximity to a known population in in-stream and off-stream waterbodies along Kororoit Creek.

The Growling Grass Frog is largely associated with permanent or semi-permanent still or slow flowing waterbodies (i.e. streams, lagoons, farm dams and old quarry sites). Frogs can also use temporarily inundated waterbodies for breeding purposes providing they contain water over the breeding season. The species is typically associated with waterbodies supporting extensive cover of emergent, submerged and floating vegetation.

Waterbodies supporting these habitat characteristics and which are located within at least 500 m of each other are more likely to support a population of Growling Grass Frog, compared with isolated sites lacking important habitat features (Ecology Partners, 2009).

VEGETATION COMMUNITIES

The project area supports the *Heavier-soils* Plains Grassland (EVC #132_61), listed as endangered by the DSE (also known as the EPBC listed ecological community: Natural Temperate Grassland of Victorian Volcanic Plain, which is listed as Critically Endangered) and the endangered Plains Grassy Wetland (EVC 125) (Table 6).

Table 6: Vegetation communities in the project area

Vegetation community	Status	Area likely to be removed by project (ha)
<i>Heavier-soils</i> Plains Grassland (EVC #132_61)	CR	6.5
Plains Grassy Wetland (EVC 125)	e	0.2
Creekline Grassy Woodland (EVC 68)	e	nil
CR - Critically Endangered under the EPBC Act		
e – endangered in Victoria		

If known, what threatening processes affecting these species or communities may be exacerbated by the project? (eg. loss or fragmentation of habitats) Please describe briefly.

Direct and indirect impacts may occur as part of the proposed road construction and widening and are itemised below.

Direct impacts:

- Loss of 2.64 ha of two vegetation communities listed as endangered by DSE: Plains Grassland and Plains Grassy Wetland
- Loss of specimens of one nationally and state significant species, Spiny Rice Flower (*Pimelea spinescens* subs. *spinescens*)
- Loss of specimens of two species of state significance: Tough Scurf-pea (Cullen tenax) and Basalt Podolepis (*Podolepis* sp. 1)
- Loss of two Large Old Trees
- Removal of suitable habitat for state (and nationally) significant species (e.g. Striped Legless Lizard, Golden Sun Moth, Growling Grass Frog), thus leading to the direct mortality of animals during construction and ongoing deterioration of habitat and fragmentation
- Disturbance to a translocation site for the Striped Legless Lizard (Organ Pipes National

- Park)
- Disturbance to rock escarpments and outcropping, which provides habitat for threatened fauna
 - Trapping of fauna in open trenches and subsequent mortality
 - Decreases in population sizes of local flora and fauna species.

Indirect effects on adjacent areas are also possible if construction activities and drainage are not appropriately managed. Potential indirect impacts include:

- Alterations to hydrological process
- Disturbance to wildlife from increased human activity and increased noise during construction
- Indirect impacts to adjoining native vegetation/habitat
- Potential for further spread of weeds and soil pathogens from on-site activities and subsequent degradation of remaining native vegetation
- Contribution to the cumulative loss of habitat for nationally significant fauna species (Golden Sun Moth, Striped Legless Lizard, Growling Grass Frog) in western Melbourne and the wider Victorian Volcanic Plain bioregion.

Are any threatened or migratory species, other species of conservation significance or listed communities potentially affected by the project?

NYD No Yes If yes, please:

- List these species/communities:
- Indicate which species or communities could be subject to a major or extensive impact (including the loss of a genetically important population of a species listed or nominated for listing) Comment on likelihood of effects and associated uncertainties, if practicable.

Tables 7 and 8 outline the flora and fauna species/communities of conservation significance, their occurrence in the project area and potential impacts from the project. Although several days of field survey were undertaken for fauna species some migratory, transitory or uncommon fauna species may have been missed. It should be noted that while migratory species may occupy habitats within the project area on occasions, none of the project area provides habitat for an ecologically significant proportion of habitat for any of these species.

Table 7: Potential impacts on listed flora and vegetation communities

Species or communities	Occurrence in project area	Potential impact
Spiny Rice-flower	This species (two individual plants) was recorded in the project area during the project surveys in the western side of Corridor 1 between Riding Boundary and Middle Road.	Loss of specimens
Tough Scurf-pea	Ten specimens recorded on the southern side of Kororoit Creek at the top of a stony rise.	Loss of specimens
Small Scurf-pea	Not found during survey, but there is suitable habitat in the project area	Loss of potential habitat
Small Milkwort	Not found during survey, but there is suitable habitat in the project area	Loss of potential habitat
Plains Grassland	See Attachment 4, maps 3a to 3j	Loss of 6.5ha
Plains Grassy Wetland	See Attachment 4, maps 3a to 3j	Loss of 0.2 ha

Table 8: Potential impacts on listed fauna species.

Species	Occurrence in project area	Potential impact
Golden Sun Moth	Species is likely to occur in extensive area of Kangaroo Grass on both sides of Robinsons Road between Middle Road and Riding Boundary Road, but it is unlikely to occur in other remnants of indigenous grass in the project area due to lower quality	Removal of suitable habitat

	and habitat isolation.	
Striped Legless Lizard	A known population in indigenous grassland on both sides of Robinsons Road between Middle Road and Riding Boundary Road and in the vicinity of the Melbourne-Ballarat rail reserve. It is likely to be in the project area.	Removal of suitable habitat
Growing Grass Frog	This species was not recorded in the study area, but it does inhabit waterbodies adjacent to Kororoit Creek near the creek crossing. Two small ponds located several hundred metres north of Kororoit Creek contain potential habitat.	Potential loss of suitable habitat
Baillon's Crake	May occasionally use wetlands and dams in the project area	unknown
Eastern Great Egret	May occasionally use wetlands and dams in the project area	unknown
Hardhead	May occasionally use wetlands and dams in the project area	unknown
White-bellied Sea-eagle	May fly over the project area on rare occasions	unknown

Is mitigation of potential effects on indigenous flora and fauna proposed?

NYD No Yes If yes, please briefly describe.

Listed Flora and Fauna Species (EPBC Act and FFG Act)

Once the options of the proposed road works are completed, specific measures, along with the general measures listed below, will be considered to reduce the impacts on flora and fauna values. General measures, which could reduce the impacts on flora and fauna values include:

- Minimising the area to be disturbed (i.e. reduce the width of the construction footprint, including access tracks)
- Ensuring that sedimentation and pollution control measures, to the satisfaction of EPA, are undertaken at all times to prevent offsite impacts to waterways
- Restricting construction activities to a smaller area required for the road construction in areas of remnant vegetation including habitat hectare zones
- Installing temporary fencing to protect adjacent areas of native vegetation and to identify them as 'no go' areas (i.e. use of signage to highlight the significance of areas immediately opposite the study area)
- Informing contractors about areas of ecological value within the project area, possibly in the form of a toolbox talk
- Revegetating disturbed areas with an assortment of locally indigenous ground covers, if natural regeneration is poor
- Implementing a weed management plan to prevent spread of weeds
- Implementing a reinstatement plan to revegetate cleared areas with indigenous species
- Developing a detailed Construction Environmental Management Plan to outline measures to ensure ecological values on the site are protected during construction activities
- Developing a detailed Threatened Flora and Fauna Conservation Management Plan
- Salvaging significant plants/soil and using them for any rehabilitation/landscaping works and translocation of threatened species (note: a translocation plan would need to be developed)

Striped Legless Lizard salvage and translocation

In situ protection of Striped Legless Lizard habitat and populations (if indeed present) is considered the most suitable conservation outcome for the project. However, salvage and translocation measures will be undertaken after every possible alternative has been explored, and if areas of suitable grassland habitat are disturbed.

While DSE considers that salvage and translocation operations are not an optimal conservation outcome for the species, there is merit to undertake these operations, particularly where a suitable recipient site is identified and where ongoing habitat protection and management for the species is undertaken.

While Striped Legless Lizard was not detected during the survey it is recommended that if construction for the current corridor is approved salvage and translocation measures will be undertaken in areas of remnant grassland vegetation. Salvage and translocation measures have

recently been undertaken as part of the proposed Deer Park Bypass Project and also as part of several developments in western Melbourne.

A detailed Striped Legless Lizard Conservation Management Plan will be developed as part of the project. This plan will include management actions such as salvage and translocation measures. The plan will also outline ongoing management strategies/actions required for the long-term viability of translocated individuals.

Prior to construction of the Calder Park Interchange, discussions between DSE and VicRoads will be held to discuss the close proximity of a translocation release site in Organ Pipes National Park and the potential dependency of the population on grassland habitat within VicRoads land. This may also require negotiations with the Striped Legless Lizard National Recovery Team. Any translocation would need to be consistent with the objectives of the Flora and Fauna Guarantee Action Statement for this species⁴.

The following will be required for any salvage and translocation measures:

- Salvage will occur in areas of optimal habitat within the project area prior to any vehicles and machinery driving across the site. Salvage will occur during soil disturbance to minimise the number of animals lost.
- Salvage and translocation measures will be undertaken by two qualified zoologists familiar with the identification of the species and experienced with handling animals.
- Observers will inspect soil in the bucket of the excavator and also soil placed on the ground for animals.
- Any animals detected will be caught and placed in an appropriate capture bag for future translocations measures.
- Machinery operators will be made familiar with the appearance of the Striped Legless Lizard and salvage procedures.
- A suitable translocation site(s) will be predetermined and an overall management strategy to monitor the success of translocation animals would need to be developed prior to any site disturbance.

An alternative strategy would be for funding to be provided for one or more of the conservation objectives/actions outlined in the Flora and Fauna Guarantee Action Statement for the species⁵.

Growling Grass Frog salvage and translocation

While it is unlikely the Growling Grass Frog will be encountered during construction, there are two small waterbodies in the vicinity of Kororoit Creek that are potential habitat for this species. It is therefore considered prudent that salvage for the Growling Grass Frog be undertaken in this area prior to construction. Ecology Partners (2009) recommended that any frogs salvaged be released along Kororoit Creek, where the species has been previously recorded and which contains suitable habitat.

In the unlikely event that individuals are encountered during construction in other areas, suitable translocation sites will be determined in consultation with a qualified zoologist. Prior to construction and frog translocation, owners of the translocation site(s) will be notified and an agreement made to ensure that future land use and management does not compromise the longevity of the species on the site. Ideally, this will be in the form of a letter of support.

Frog translocation will be undertaken by a qualified zoologist experienced with these operations including:

- Prior to release morphological data including body size, sex and reproductive condition will be recorded for all frogs captured
- Each individual captured will be marked by injection of a passive integrated transponder (PIT) tag. This technique is currently being used by Ecology Partners Pty. Ltd. as part of a detailed mark-recapture study on the species throughout the Officer and Pakenham area. The technique is also being used as part of a mark-recapture study on the Growling Grass Frog in the Merri Creek Corridor (G. Heard, La Trobe University, pers. comm.)
- Frogs will be released at night into favourable micro-habitats such as areas containing dense

⁴ Webster, A., Fallu, R. & Preece, K. 1992. Flora & Fauna Guarantee Action Statement. Striped Legless Lizard *Delma impar*. Department of Sustainability and Environment
Palmer Road Corridor
7 April 2009

- vegetation along Kororoit Creek where there is sufficient cover
- Frogs will be translocated as soon as practicable after capture
 - Translocation will consider the potential spread of diseases (chytrid fungus), and impacts upon Growling Grass Frog and other frog populations at translocation sites
 - Any visibly sick or dying specimens will not be translocated and will be kept for further analysis to determine if infected with chytrid fungus
 - The success or failure of frog translocation will be documented/reviewed and submitted to DEWHA and DSE for review
 - Frog handling techniques adhering to the Hygiene Protocol for the Control of Disease in Frogs (NSW National Parks and Wildlife Service, 2001) will be administered during translocation.

Post construction activities such as monitoring Growling Grass Frog populations, habitat rehabilitation and management will be investigated and implemented as needed.

Other information/comments? (eg. accuracy of information)

13. Water environments

Will the project require significant volumes of fresh water (eg. > 1 Gl/yr)?

NYD No Yes If yes, indicate approximate volume and likely source.

Will the project discharge waste water or runoff to water environments?

NYD No Yes If yes, specify types of discharges and which environments.

Are any waterways, wetlands, estuaries or marine environments likely to be affected?

NYD No Yes If yes, specify which water environments, answer the following questions and attach any relevant details.

Several Drains and Creeks cross the proposed Palmers Road Corridor:

- Dohertys Drain
- Dunes Drain
- Laverton Creek
- Kororoit Creek (bridge crossing).

Kororoit Creek runs through the southern end of this corridor with remnant River Red Gums (*Eucalyptus camaldulensis*) lining the creek. The creek provides habitat for native fish, frogs (including the nationally significant Growling Grass Frog), waterbirds and the Water Rat (*Hydromys chrysogaster*).

Kororoit Creek will be crossed by a bridge and the other drains and creeks will be crossed using culverts. Potential environmental impacts during construction will be managed through a Construction Environmental Management Plan.

Are any of these water environments likely to support threatened or migratory species?

NYD No Yes If yes, specify which water environments.

Kororoit Creek is known habitat for the EPBC Act listed Growling Grass Frog.

Are any potentially affected wetlands listed under the Ramsar Convention or in 'A Directory of Important Wetlands in Australia'?

NYD No Yes If yes, please specify.

The proposed project site is within 10 km of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar site. Potential effects from construction on the Ramsar site are associated with impacts on waterways which drain into the Ramsar area. Management measures will be developed to avoid and minimise potential impacts on these waterways.

<p>Could the project affect streamflows? <input checked="" type="checkbox"/> NYD <input type="checkbox"/> No <input type="checkbox"/> Yes If yes, briefly describe implications for streamflows.</p> <p>It is considered unlikely that the project will affect streamflows during waterway crossings.</p>
<p>Could regional groundwater resources be affected by the project? <input checked="" type="checkbox"/> NYD <input type="checkbox"/> No <input type="checkbox"/> Yes If yes, describe in what way.</p> <p>It is considered unlikely that the project will affect regional groundwater resources.</p>
<p>Could environmental values (beneficial uses) of water environments be affected? <input checked="" type="checkbox"/> NYD <input type="checkbox"/> No <input type="checkbox"/> Yes If yes, identify waterways/water bodies and beneficial uses (as recognised by State Environment Protection Policies)</p> <p>It is considered unlikely that the project will affect environmental values of water environments.</p>
<p>Could aquatic, estuarine or marine ecosystems be affected by the project? <input checked="" type="checkbox"/> NYD <input type="checkbox"/> No <input type="checkbox"/> Yes If yes, describe in what way.</p> <p>The corridor crosses two drains and two creeks. There is potential for construction works to affect these aquatic ecosystems. A Construction Environmental Management Plan will be implemented to minimise the risk of sediment and pollution impacts on these waterways.</p>
<p>Is there a potential for extensive or major effects on the health or biodiversity of aquatic, estuarine or marine ecosystems over the long-term? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, please describe. Comment on likelihood of effects and associated uncertainties, if practicable.</p> <p>There will be removal of 0.14 ha of Plains Grassy Wetland EVC.</p>
<p>Is mitigation of potential effects on water environments proposed? <input type="checkbox"/> NYD <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If yes, please briefly describe.</p> <p>The stormwater runoff from road construction will be treated consistent with EPA requirements and consistent with the principles of Water Sensitive Road Design. Management measures will be detailed in a Construction Environmental Management Plan, which will be implemented during construction works. A bridge is planned to be constructed over Kororoit Creek.</p>
<p>Other information/comments? (eg. accuracy of information)</p> <p>Melbourne Water has identified land subject to inundation along the Palmer Road Corridor. New culverts will need to be installed beneath the Melbourne-Ballarat railway line on the western side of Robinsons Road to accommodate water flow⁵.</p>

14. Landscape and soils

Landscape

<p>Has a preliminary landscape assessment been prepared? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, please attach.</p> <p>A preliminary landscape assessment is currently in process and will be completed in May 2009.</p>
<p>Is the project to be located either within or near an area that is:</p> <ul style="list-style-type: none"> <p>Subject to a Landscape Significance Overlay or Environmental Significance Overlay? <input type="checkbox"/> NYD <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If yes, provide plan showing footprint relative to overlay.</p> <p>Environmental Significance Overlays are presented in Attachment 5 and apply to Kororoit Creek, the Melbourne-Ballarat Railway Line and the Melbourne-Bendigo Railway Line (City of Melton).</p> <p>Identified as of regional or State significance in a reputable study of landscape values? <input checked="" type="checkbox"/> NYD <input type="checkbox"/> No <input type="checkbox"/> Yes If yes, please specify.</p>

⁵ SMEC (2005) Palmers Road Corridor Study. Report prepared for VicRoads.
 Palmers Road Corridor
 7 April 2009

<ul style="list-style-type: none"> • Within or adjoining land reserved under the <i>National Parks Act 1975</i> ? <input type="checkbox"/> NYD <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, please specify. <p>Calder Freeway separates the corridor from Organ Pipes National Park. No land acquisition will be required north of Calder Freeway.</p> <ul style="list-style-type: none"> • Within or adjoining other public land used for conservation or recreational purposes ? <input type="checkbox"/> NYD <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If yes, please specify. <p>The corridor also abuts some park areas, including:</p> <ul style="list-style-type: none"> • Lachlans Field Park • Dalgook Farm Complex Homestead Park • Carinya Gardens Park • Native grasslands (Ravenhall) • A number of unnamed parks⁶.
<p>Is any clearing vegetation or alteration of landforms likely to affect landscape values? <input checked="" type="checkbox"/> NYD <input type="checkbox"/> No <input type="checkbox"/> Yes If yes, please briefly describe.</p> <p>Since the project involves the widening of an existing road, it is unlikely that the project will affect landscape values.</p>
<p>Is there a potential for effects on landscape values of regional or State importance? <input checked="" type="checkbox"/> NYD <input type="checkbox"/> No <input type="checkbox"/> Yes Please briefly explain response.</p>
<p>Is mitigation of potential landscape effects proposed? <input type="checkbox"/> NYD <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If yes, please briefly describe.</p> <p>Mitigation of potential landscape effects will be through landscaping treatment along the corridor.</p>
<p>Other information/comments? (eg. accuracy of information)</p>

Note: A preliminary landscape assessment is a specific requirement for a referral of a wind energy facility. This should provide a description of:

- The landscape character of the site and surrounding areas including landform, vegetation types and coverage, water features, any other notable features and current land use;
- The location of nearby dwellings, townships, recreation areas, major roads, above-ground utilities, tourist routes and walking tracks;
- Views to the site and to the proposed location of wind turbines from key vantage points (including views showing existing nearby dwellings and views from major roads, walking tracks and tourist routes) sufficient to give a sense of the overall site in its setting.

Soils

<p>Is there a potential for effects on land stability, acid sulphate soils or highly erodible soils? <input checked="" type="checkbox"/> NYD <input type="checkbox"/> No <input type="checkbox"/> Yes If yes, please briefly describe.</p>
<p>Are there geotechnical hazards that may either affect the project or be affected by it? <input checked="" type="checkbox"/> NYD <input type="checkbox"/> No <input type="checkbox"/> Yes If yes, please briefly describe.</p>
<p>Other information/comments? (eg. accuracy of information)</p>

⁶ Maunsell AECOM (2009) Palmers Road Land Use Assessment. Report prepared for VicRoads. Palmers Road Corridor
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15. Social environments

Is the project likely to generate significant volumes of road traffic, during construction or operation?

NYD No Yes If yes, provide estimate of traffic volume(s) if practicable.

The project is not expected to result in significant traffic volumes during construction. It has been determined that during operation access to services within Westwood Drive may be affected by traffic on the Palmers Road Corridor, but overall the project has wide community and stakeholder support.

Is there a potential for significant effects on the amenity of residents, due to emissions of dust or odours or changes in visual, noise or traffic conditions?

NYD No Yes If yes, briefly describe the nature of the changes in amenity conditions and the possible areas affected.

Amenity impacts may be felt by residents in sections of the corridor where the project will be built through established residential estates. Traffic through established residential areas could increase noise levels. For example, Sydenham-Hillside Primary School at the northern extent of the route voiced concern for potential noise impacts. A noise impact study is currently underway and the findings from this report will be applied to the VicRoads Traffic Noise Reduction Policy.

Is there a potential for exposure of a human community to health or safety hazards, due to emissions to air or water or noise or chemical hazards or associated transport?

NYD No Yes If yes, briefly describe the hazards and possible implications.

As above, an air quality assessment is currently underway.

Is there a potential for displacement of residences or severance of residential access to community resources due to the proposed development?

NYD No Yes If yes, briefly describe potential effects.

Some residents will be affected by dislocation as a consequence of the project on the western side of Robinsons Road between the Melbourne–Ballarat Railway Line and Riding Boundary Road. However, VicRoads has been in consultation with most land owners affected by dislocation and they are aware of the proposed project. Additionally, the Social Impact Assessment concluded that the corridor has been designed in such a way as to minimise dislocation of residents. One of the principle objectives of the project is to minimise any dislocation of residents or severance of communities, to the extent practicable.

An increase in traffic along sections of the corridor, particularly near parks and major shops, may create a severance effect as people may avoid crossing a wider road. Based on the Social Impact Assessment (Maunsell AECOM, 2009), this impact can be reduced through the application of appropriate mitigation measures. Overall, the consultation process has indicated that road movements and local road access will improved.

Are non-residential land use activities likely to be displaced as a result of the project?

NYD No Yes If yes, briefly describe the likely effects.

Access to services on Westwood Drive may be affected by the alignment which may disrupt businesses for both the short- and long-term. However, VicRoads has been in consultation with most land owners affected by dislocation and they are aware of the proposal.

Implementation of the project would require some land acquisition. The majority of the acquisition will be small parts of properties, including frontages of some rural landholdings. It is estimated one, and possibly two, dwellings will be affected by land acquisition.

Do any expected changes in non-residential land use activities have a potential to cause adverse effects on local residents/communities, social groups or industries?

NYD No Yes If yes, briefly describe the potential effects.

As stated above, the project will require acquisition of some private land in the Westwood Drive commercial area. Additionally, the project may affect access to services within this area (e.g. the project could prohibit trucks turning right into some properties) and some businesses will also lose front access and some car parking facilities. Further consultation will reveal the extent of dislocation that may occur in this area.

Is mitigation of potential social effects proposed?

NYD No Yes If yes, please briefly describe.

Based on recommendations in the Social Impact Assessment (Maunsell AECOM, 2009), the project will endeavour to minimise the impacts on businesses through continued consultation with affected business owners.

Other information/comments? (eg. accuracy of information)

Cultural heritage

Have relevant Indigenous organisations been consulted on the occurrence of Aboriginal cultural heritage within the project area?

No If no, list any organisations that it is proposed to consult.

Yes If yes, list the organisations so far consulted.

In November 2004, a site inspection was carried out by Heritage Insight with the Wurundjeri Chairperson.

In the region of the Palmers Road Corridor, northern section of Brimbank, the Wurundjeri Tribe is the Registered Aboriginal Party (RAP).

A Cultural Heritage Management Plan (CHMP) will be required for the project, which will involve extensive consultation with the relevant stakeholders, including the appointed RAP (Wurundjeri).

What investigations of cultural heritage in the project area have been done?

(attach details of method and results of any surveys for the project & describe their accuracy)

An archaeological desktop investigation was conducted for 15 km of the 25 km Palmers Road Corridor (the investigation concentrated on the areas to be covered by the Public Acquisition Overlay, refer Attachment 2).

Is any Aboriginal cultural heritage known from the project area?

NYD No Yes If yes, briefly describe:

- Any sites listed on the AAV Site Register
- Sites or areas of sensitivity recorded in recent surveys from the project site or nearby
- Sites or areas of sensitivity identified by representatives of Indigenous organisations

The desktop archaeological investigation shows that there are six registered Indigenous archaeological sites in the project area. A further 17 registered Indigenous archaeological sites are located close to the boundary of the study corridor. There have also been 12 areas of potential sensitivity for Indigenous archaeological sites identified within the study corridor.

Are there any cultural heritage places listed on the Heritage Register or the Archaeological Inventory under the *Heritage Act 1995* within the project area?

NYD No Yes If yes, please list.

Eight registered historic archaeological sites occur within the study corridor.

Is mitigation of potential cultural heritage effects proposed?

NYD No Yes If yes, please briefly describe.

Mitigation methods will be identified in discussion with specialist consultants and the Aboriginal representatives. All identified sites and areas of cultural significance will be avoided where practicable. Where avoidance is not possible, consent to disturb will be obtained from the relevant Authorities. An Aboriginal CHMP will be developed to cover the development of the project and this will include mitigation methods to minimise cultural heritage impacts.

Other information/comments? (eg. accuracy of information)

16. Energy, wastes & greenhouse gas emissions

What are the main sources of energy that the project facility would consume/generate?

- Electricity network. If possible, estimate power requirement/output
- Natural gas network. If possible, estimate gas requirement/output
- Generated on-site. If possible, estimate power capacity/output
- Other. Please describe.

Please add any relevant additional information.

What are the main forms of waste that would be generated by the project facility?

- Wastewater. Describe briefly.
- Solid chemical wastes. Describe briefly.
- Excavated material. Describe briefly.
- Other. Describe briefly.

Please provide relevant further information, including proposed management of wastes.

Some wastewater and excavated material will be generated during construction.

What level of greenhouse gas emissions is expected to result directly from operation of the project facility?

- Less than 50,000 tonnes of CO₂ equivalent per annum
- Between 50,000 and 100,000 tonnes of CO₂ equivalent per annum
- Between 100,000 and 200,000 tonnes of CO₂ equivalent per annum
- More than 200,000 tonnes of CO₂ equivalent per annum

Please add any relevant additional information, including any identified mitigation options.

Vehicles using the proposed road will generate greenhouse gas emissions, although this is considered an indirect result of project operation. While an assessment has not been conducted on greenhouse gas emissions, implementation of the project is expected to reduce greenhouse gas emissions in the area due to reduced traffic congestion.

17. Other environmental issues

Are there any other environmental issues arising from the proposed project?

No Yes If yes, briefly describe.

18. Environmental management

What measures are currently proposed to avoid, minimise or manage the main potential adverse environmental effects? (if not already described above)

Siting: Please describe briefly

Siting of the corridor has sought to minimise potential impacts on environmental values.

Design: Please describe briefly

Design of the corridor has sought to minimise potential impacts on environmental values including using Water Sensitive Urban Design principles.

Environmental management: Please describe briefly.

Measures that will be considered to reduce the impacts on flora and fauna values include reducing impacts on flora and fauna values by minimising the construction footprint, ensuring implementation of sedimentation and pollution control measures, protection of specific areas as 'no go' zones, revegetation and weed and threatened species management. Species translocation will also be considered (as a last resort) where appropriate for species conservation.

Other: Please describe briefly

Add any relevant additional information.

19. Other activities

Are there any other activities in the vicinity of the proposed project that have a potential for cumulative effects?

NYD No Yes If yes, briefly describe.

Based on the Land Use Assessment⁷ the Palmers Road Corridor will provide for the growth of residential, business and industry land use on the western side of Melbourne, which is supported by State and local strategic plans and local planning policies.

20. Investigation program

Study program

Have any environmental studies not referred to above been conducted for the project?

No Yes If yes, please list here and attach if relevant.

Has a program for future environmental studies been developed?

No Yes If yes, briefly describe.

The following environmental studies are currently in progress:

- Noise assessment
- Preliminary landscape assessment
- Air quality assessment.

⁷ Maunsell AECOM (2009) Palmers Road Land Use Assessment. Report prepared for VicRoads. Palmers Road Corridor
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Consultation program

Has a consultation program conducted to date for the project?

No Yes If yes, outline the consultation activities and the stakeholder groups or organisations consulted.

As part of the proposed Palmers Road Corridor, extensive consultation has occurred to ascertain any potential issues or risks to the process or the project as well as to obtain important feedback and input. Key stakeholders consulted include:

- Parks Victoria
- Melbourne Water
- Department of Planning and Community Development (DPCD)
- Victorian Growth Areas Authority
- Department of Sustainability and Environment
- City of Wyndham
- City of Brimbank
- Shire of Melton
- Land owners including Dennis Family Corporation, Cedar Woods, Bob Jane and Calder Park Thunderdome
- Port Phillip Prison.

Overall the stakeholder consultation activities were very well received by participants with project support from the majority of those consulted. The key outcomes from the stakeholder consultation process is summarised in Attachment 6.

Has a program for future consultation been developed?

NYD No Yes If yes, briefly describe.

A future consultation program is being developed which will include:

- Community consultation
- Distribution of information bulletins
- Mail outs to community members
- Project information on the VicRoads website.

Authorised person for proponent:

I,(full name),

.....(position), confirm that the information contained in this form is, to my knowledge, true and not misleading.

Signature _____

Date

Person who prepared this referral:

I,(full name),

.....(position), confirm that the information contained in this form is, to my knowledge, true and not misleading.

Signature _____

Date

Attachment 1

Attachment 2

Attachment 3

Attachment 4 Ecology Figures
(see attached)

Attachment 5

Attachment 6: Stakeholder consultation and key outcomes

Stakeholder	Key Findings
Parks Victoria	<ul style="list-style-type: none"> • Access issues for Victoria Road – Understanding that access will be provided to the Park from the north. • Potential environmental implications for grassland Robinsons Road and Middle Road. This will need to be a consideration during construction.
Melbourne Water	<ul style="list-style-type: none"> • Several Drains and Creeks cross the proposed Palmers Road Corridor, these include: <ul style="list-style-type: none"> ○ Dohertys Drain ○ Dunes Drain ○ Laverton Creek ○ Kororoit Creek • Potential for growing grass frog species in Laverton and Kororoit Creek.
DPCD	<ul style="list-style-type: none"> • Amenity Impacts: Need to look at mitigation issues to ensure that amenity impacts are minimised • Transit Cities M2030: Calder Park / Water Gardens. Important to consider this document and refer to in regards to land use. • Bob Jane site is included in the Transit Cities Document • Should refer to Sydenham Master Plan.
Growth Areas Authority	<ul style="list-style-type: none"> • Possible issues with the new industrial areas. • Key gap near Dennis Estate – Difficulty with bus services through that area. • Important area of growth where the Corridor is located as it is within and adjacent to the Urban Growth Boundary. • It is arguable that this area along the Palmers Road Corridor will experience growth due to land supply issues and the possible expansion (if decided by the government) of the Urban Growth Boundary. • Refer to Smart Growth Committee 2004/05. • Long term planning required for the open land area to the west of Corridor. It is important to look at the possible future directions of this land rather than just looking at current land use conditions. • Forward planning required at the southern end. Integrated employment and activity in order to ensure local services are all together in a small retail.
City of Wyndham	<ul style="list-style-type: none"> • The Port Phillip Mens Prison is proposed to have a buffer zone implemented around it that will be INZ3. It is proposed that the INZ3 buffer around the prison will not be a pure INZ3 as the intention is to allow heavier industry to locate there provided they don't cause amenity issues for the prison. A modified version of INZ3 is likely. • The prison is more concerned about having heavy industrial areas which may have emissions near them rather than an upgraded road. There are sensitive uses in the western side of the prison such as hospital and health services. Social research for the Social Impact Assessment will examine these issues in more detail. • Truganina Employment Precinct Structure Plan (draft) is being developed that relates to implementing industrial zones. Refer to the Structure Plan for further information. The Structure Plan includes a Proposed Business Activity Centre. VicRoads has objected to the proposal on the grounds of the Access management Policy. The Structure Plan has been sent out landholders but there has been no consultation on the Structure Plan. • Residential area located to the west side of Palmers Road may be affected. • Possible impact on K & S Freighters and lack of signalisation may affect their business. • Title issues are currently being sorted at the south west section of Boundary and Palmers Road.

Stakeholder	Key Findings
	<ul style="list-style-type: none"> • Most land owners have been informally aware of the proposal on the Wyndham side. <p>Impact on properties</p> <ul style="list-style-type: none"> • The Palmers Road deviation north of Sayers Road will require land acquisition as VicRoads have indicated they will acquire this land rather than rely on Council acquiring it through development contributions. • From Dohertys Road to Boundary Road - VicRoads needs to acquire an additional 10m of land starting on the west side of Palmers Road and shifting to the east side of Palmers Road between Permas Way and the future extension of Distribution Drive. Council is acquiring a 20m road widening on the west side from development contributions but VicRoads are now seeking a 50m wide reservation, not 40m as originally planned. This land is already zoned INZ3 and some as INZ2 and must have a Public Acquisition Overlay to ensure an ultimate 50m road reservation.
City of Brimbank	<ul style="list-style-type: none"> • The Council are generally supportive of the proposal • They suggested that Watergardens transport/structure plan be considered as part of the planning review.
Shire of Melton	<ul style="list-style-type: none"> • Supportive of the process. • Would like to be involved in any community consultation.
Department of Sustainability and Environment	<ul style="list-style-type: none"> • Potentially some important vegetation along the western side of Palmers Road – particularly in the southern end. • The northern interchange with the Calder Freeway was reviewed and DSE recommended that.
Dennis Family Corporation	<ul style="list-style-type: none"> • Supportive of the proposal • Want to ensure that adequate access is provided for residents to access the shopping centre.
Cedar Woods	<ul style="list-style-type: none"> • Generally supportive of the proposal. • Have concerns over the road width through their land. They believe that a bus lane is not the best use of space. • However, they stated that they can live with in.
Calder Park Thunderdome	<ul style="list-style-type: none"> • Supportive of the proposal, however would need to work through the key access issues associated with the road. • Detailed that catchments to the new railway line would need to be considered. It is envisaged that a large proportion of traffic that currently uses Watergardens Station would use the new station at the Thunder Dome instead.
Port Phillip Prison	<ul style="list-style-type: none"> • Issues with machinery during the construction stage (it is preferable to not have large machinery kept near the prison during construction). • Worried about associated land uses which may not be compatible with a prison (eg chemical plant) • Bus services: 50 percent of visitors to the prison use public transport. During construction it would be essential that these services still operated.

In summary, stakeholders and land owners consulted with had no major issues with the Palmers Road Corridor, and in general were supportive of the proposal.