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.

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

REFERRAL FORM

DINGLEY BYPASS
(WARRIGAL ROAD TO WESTALL ROAD)

Version 3: January 2007

PART 1 PROPONENT DETAILS, PROJECT DESCRIPTION & LOCATION

1. Information on proponent and person making Referral

Name of Proponent:	VicRoads
Authorised person for proponent:	Frank De Santis
Position:	Project Director – Eastern Projects
Postal address:	Unit 12/613 Maroondah Highway Mitcham VIC 3132
Email address:	Frank.DeSantis@roads.vic.gov.au
Phone number:	9872 7002
Facsimile number:	9872 7099
Person who prepared Referral:	Sam Kutrolli
Position:	Senior Project Delivery Engineer
Organisation:	VicRoads
Postal address:	Unit 12/613 Maroondah Highway Mitcham VIC 3132
Email address:	sam.kutrolli@roads.vic.gov.au
Phone number:	9872 7026
Facsimile number:	9872 7099
Available industry & environmental expertise: (areas of 'in-house' expertise & consultancy firms engaged for project)	VicRoads has extensive experience in road planning, construction and environmental management. Notwithstanding this, VicRoads has engaged suitably qualified consulting firms (Brett Lane and Associates for Flora and Fauna investigations and Urban Colours for Cultural Heritage investigations) to undertake necessary investigations and prepare relevant documentation.

2. Project – brief outline

Project title: Dingley Bypass – Warrigal Road to Westall Road
Project location: The project is located between Warrigal Road and Westall Road in Dingley along the Dingley Corridor road reservation, for a distance of approximately 6.4 km and is indicated in the Melways Street Directory (Melways 78 D6 to Melways 88 F2). The AMG coordinates for the project are 331256E:5799240N for the Warrigal Road end and 336171E:5796183N for the Westall Road end. A location of the site is provided as Attachment A1 and a general site plan of the project is provided as Attachment A2.
Short project description: Construction of a new high standard arterial road along the Dingley Corridor road reservation between Warrigal Road, Moorabbin and Westall Road, Dingley.

3. Project description

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

The objectives for the Dingley Bypass are as follows:

- improved accessibility to EastLink, and the south eastern suburbs;
- improved connection between residential and employment areas;
- improved regional freight efficiency;
- improved road safety;
- reduced congestion on the existing arterial network (eg Kingston Road, Heatherton Road, Old Dandenong Road and Centre Dandenong Road);
- improved level of service on key bus routes along Warrigal Road, Cheltenham Road and Springvale Road.

By improving access in the region, the link will also assist the City of Greater Dandenong achieve its long term access, mobility and planning objectives and assist the development of Dandenong as a Central Activities District.

Background/rationale of project:
A reservation for the Dingley Corridor has been included in planning schemes for over 40 years. The full Dingley Corridor reservation comprises an 19 km route between Warrigal Road, Moorabbin and the South Gippsland Freeway, Dandenong South.

A number of sections of the Dingley Corridor have already been constructed, or are currently under construction, including:

- Westall Road (Springvale Bypass) - four-lane dual carriageway arterial road between Spring Road and Springvale Road. Completed in 1994.
- South Road Extension - two-lane single carriageway arterial road between Warrigal Road and Old Dandenong Road. Completed in September 2007.
- Dandenong Bypass - four-lane dual carriageway arterial road between Perry Road and South Gippsland Highway (part of EastLink Project). Completed in December 2007.
- Dingley Arterial – six lane dual carriageway arterial road between Springvale Road and Perry Road, Keysborough. Currently under construction. Scheduled to be open to traffic in late 2012.

In October 2010, the state government committed $20M towards “investigating land acquisition and informing the design of the road” for the Dingley Bypass.

Main components of the project:

The project is proposed to consist of a 6.4 km dual carriageway arterial road between Warrigal Road and Westall Road with signalised at grade intersections at Warrigal Road, Clarinda Road, Kingston Road, Boundary Road, Tootal Road and Westall Road. Preliminary concept alignment plans are provided as Attachment B1 to this document.

A possible addition to the above works will include a grade separated interchange at Dingley Bypass/Springvale Road and provision of an additional lane for each carriageway along Westall Road between Springvale Road and the Dingley Bypass/Westall Road intersection. Drawings for these possible additional works have been included in the set of concept plans.

Ancillary components of the project:

Ancillary components of the project include the following:

- Relocation of utility services and installation of new street lights at intersections;
- Provision of a pedestrian/cycle path on the north side of the new alignment;
- Provision of a new access to the Lantrak landfill site involving upgrading of Victory Road;
- Possible extension of Spring Road to Springvale Road with new traffic signals;

- Truncation of Old Dandenong Road on the south side of the new alignment, Elder Street South, Grange Road, Old Boundary Road, Spring Road and Rowan Road.

Key construction activities:

The main construction activity will be civil works associated with the construction of a new road.

Construction activities will include clearing of vegetation, general earthworks (including topsoil stripping, excavation, filling and topsoil spreading) drainage installation, pavement construction, shared use path construction, fencing construction, landscaping and installation of traffic signals, lighting and signage.

Key operational activities:

The main operational activity will be the ongoing road maintenance consistent with prevailing practices and standards.

This will include the maintenance of landscape, storm water drains, road pavement, pedestrian/cycle path, traffic signals, street lighting, road furniture and line marking.

Key decommissioning activities:

Not applicable.

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

☐ No ☒ Yes

The construction of a new dual carriageway arterial road between Warrigal Road and Westall Road is the next stage in the long term investment plan for the Dingley Corridor. The final section to be constructed along the Dingley Corridor extends from South Gippsland Highway and South Gippsland Freeway. This would complete a high standard dual carriageway arterial alignment between Warrigal Road and South Gippsland Freeway. Over the long term, there is an opportunity to upgrade the Dingley Corridor to a freeway standard.

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

☐ No ☒ Yes If yes, please identify related proposals.

This project is related to the South Road Extension Project which consisted of the construction of a single two lane carriageway extending from Warrigal Road and connecting to Old Dandenong Road. The South Road Extension was opened to traffic in September 2007. The single carriageway constructed as part of the South Road Extension Project was designed to become one of the carriageways of the Dingley Bypass.

4. Project alternatives

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

Key alternatives considered to date included:

- Upgrade of the existing road network;
- Shifting the alignment north or south outside of the existing land reservation to avoid remnant vegetation (See Attachment B2).
- Constructing tunnels beneath remnant vegetation (See Attachment B3).
- Alternative design options at Westall Road that include a signalised intersection with Dingley Bypass priority or an interchange arrangement (See Attachments B4 and B5).

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

No further key alternatives are proposed to be investigated.

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:

VicRoads

Implementation timeframe:

An indicative project implementation timeframe is summarised in the table below, which is subject to funding availability. If an EES is required it is anticipated the timeframes below would be pushed back by around 18 months.

Milestone	Project Timeframe
Project Commencement	Mid 2011
Commence Survey / Preconstruction / Design	Mid 2011
Commence Land Acquisition	Early 2012
Advertise Contract	Early 2013
Contract Award	Mid 2013
Contract Construction	Late 2013 – Late 2015
Practical Completion (open to traffic)	Late 2015

Proposed staging:

The project is proposed to be constructed in a single stage of construction.

7. Description of proposed site or area of investigation

Has a preferred site for the project been selected?

☐ No ☒ Yes

A road reservation has been reserved along the Dingley Corridor for a future road. The preferred alignment between Warrigal Road and Westall Road has been located within this road reservation.

While alternative options outside of the existing road reservation have been investigated and will be documented as part of the Business Case process they are not preferred due to significant impact to a large number of existing residential properties that are not covered under a Public Acquisition Overlay.

General description of preferred site:

The preferred site is located approximately 20 kilometres south east of Melbourne and comprises of various land uses, including market gardens, quarries and commercial nurseries. The site lies within the Gippsland Plain bioregion and falls within the Port Phillip and Westernport catchment.

There are few scattered indigenous trees in the area with several patches of native vegetation

within the road reservation, including a large area of remnant vegetation on the western side of Westall Road. Surrounding land predominantly supports current residential developments and the site supports sandy soils on a mainly flat landscape. There is a large dam on the eastern side of the road reservation adjacent to an existing quarry just south of Elders Street.

A Melbourne Water concrete drain (Clarinda Main Drain) runs north south across the road reservation between Old Dandenong Road and Old Boundary Road.

Site area: Approximately 90 ha (Road reserve area)

Route length: Approximately 6.4 km **and width:** Typically ranges between 90 and 140 m

Current land use and development:

The land through which it is proposed to construct the Dingley Bypass is primarily zoned RDZ1 with a PAO on remaining areas. About 70% of the land is currently owned by VicRoads and is being leased for various uses including commercial, public parks and agricultural purposes.

The following land uses have been identified within the road reservation:

- Nurseries;
- Green open spaces;
- Lantrak landfill site;
- Agricultural areas; and
- Various roads that cross the alignment path.

Description of local setting:

The study area comprises approximately 90 hectares of public road reserve located in Clarinda and Dingley Village, approximately 20 km south east of Melbourne's CBD.

The northern end of the site (between Warrigal Road and Elder Street South) is bordered by residential development (to the north and north east) and Karkarook Park and plantation nurseries (to the south and south west).

The predominant adjoining land uses for the remaining section of the site are open paddocks, market gardens and landfill sites.

A college borders the site to the north at Old Boundary Road. At Tootal Road, the site is bordered by industry to the north and a church to the south. Between Tootal Road and Westall Road, the site is bordered by residential development to the north and market gardens to the south.

Access to adjoining properties will be maintained as existing where possible, and VicRoads is working closely with relevant stakeholders where alternative accesses will be required.

Planning context:

The site is predominantly included in the Kingston Planning Scheme but also partly included in the Greater Dandenong Planning Scheme (east of Tootal Road) and Glen Eira Planning Scheme West of Warrigal Road..

The project is well recognised in the Municipal Strategic Statement of the Kingston Planning Scheme with the proposed freeway clearly shown in both the Strategic Land Use Framework Plan (clause 21.04-3) and Transport and Access Framework Plan (clause 21.12). The first strategy of clause 21.12-3 is to:

> *Advocate for major road infrastructure construction in key priority areas including the Dingley Freeway (to Boundary Road, then to Springvale Road).*

The project is also well recognised in the Municipal Strategic Statement of the Greater Dandenong Planning Scheme with the proposed freeway clearly shown in both the Strategic

Framework Map (clause 21.03-3) and the Strategic Transport Framework (clause 21.07).

Land required for the project is primarily zoned as Road Zone category 1 (RDZ1) with some areas zoned as Residential 3 Zone (R3Z), Green Wedge Zone 2 (GWZ2), Green Wedge Zone 4 (GWZ4) and Special Use Zone 2 (SUZ2).

The following overlays exist within, or adjacent to, the land required:

- Design and Development Overlay 5 (DDO5).
- Heritage Overlay (HO).
- Land Subject to Inundation Overlay (LSIO).
- Public Acquisition Overlay (PAO).
- Special Building Overlay (SBO).

The following overlays exist adjacent to the land required in addition to those listed above:

- Vegetation Protection Overlay (VPO).

VicRoads is working closely with City of Kingston and City of Greater Dandenong to ensure all relevant planning permits and approvals associated with the above overlays are sought and issued within the timeframes allowed in the project schedule.

Local government area(s):

The proposed alignment runs through the City of Kingston and the City of Greater Dandenong.

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)**:**

Although the original vegetation along the Dingley road reservation was predominantly Heathy Woodland, virtually all of the vegetation along the route has been removed through agriculture, sand mining and urban development. Three main areas containing remnant vegetation include the following:

- Degraded remnants of Damp Sands Herb-rich Woodland Ecological Vegetation Class (EVC) on either side of Boundary Road;
- Scattered remnants of degraded Swamp Scrub EVC adjacent to Grange Road and between Grange and Tootal Roads;
- A large remnant of Damp Sands Herb-rich Woodland and Creekland Grassy Woodland EVCs on the western side of Westall Road between Tootal and Spring Road; and
- Scattered canopy trees along the median strip of Westall Road between Rowan Road and Springvale Road.

Virtually no indigenous vegetation occurs elsewhere along the Dingley Route and the above remnants are expected to continue to degrade unless actively managed to conserve their remaining vegetation/habitat values.

Other environmental sensitivities from the project include proximity to the following:

- Residential areas (between Warrigal Road and Elder Street south and between Tootal Road and Westall Road);
- A school (Heatherton Christian College, adjacent to Old Boundary Road);
- Landfills (potential contamination issues); and
- Public parks, in particular Karkarook Park.

9. Land availability and control

Is the proposal on, or partly on, Crown land?

☒ No ☒ Yes If yes, please provide details.

Current land tenure:

The majority of land required for the project is currently owned by VicRoads. A number of these properties are currently leased to a number of tenants with short term leases. The remaining areas of land needed for the project will require acquisition. The total amount of acquisition will be determined at the detailed design stage.

Refer to Attachment C which shows land owned by VicRoads and land where acquisition is proposed for this project (as per the concept design).

Intended land tenure:

Land required for the project will be declared as road reservation. Any surplus land may remain in VicRoads ownership for potential future road upgrades and may be leased to the public, or may be sold if assessed as surplus to VicRoads requirements.

Other interests in affected land:

Utility services in the road reservation. Initial investigation indicates minimal impact on utility services within the affected land. This will be confirmed in the detailed design phase.

10. Required approvals

State and Commonwealth approvals required for project components (if known):

A planning permit is not required for roadworks over much of the site, however a planning permit is required for buildings and works including roadworks in the areas affected by the Heritage Overlay and Land Subject to Inundation Overlay. A planning permit is also required for buildings and works including roadworks in the area affected by the Special Building Overlay unless the floodplain management authority has agreed in writing that the flowpath is not obstructed. A planning permit is also required for any road within the area affected by the Public Acquisition Overlay 2 (Public Open Space). Further, the removal of native vegetation associated with the project requires a planning permit (under section 52.17 of the Planning Schemes).

A licence would be required for the removal of protected flora from public land under the provisions of the *Flora and Fauna Guarantee Act 1988* (FFG Act).

The principles of Net Gain will be followed, where native vegetation removal is avoided where possible, minimised where practical, and offset if removal cannot practically be avoided. A number of design options that avoid and/or reduce impacts on flora and fauna have already been developed (refer Section 4).

A flora and fauna assessment undertaken for this project (dated December 2010) has concluded that no listed or protected flora species are susceptible to impacts from the proposal.

A referral would be required under the provisions of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) if there is potential for a significant impact on a matter of national environmental significance (MNES) listed under the Act. However, the flora and fauna assessment (December 2010) concluded that the project is unlikely to have a significant impact on a MNES except for potential impacts on two EPBC Act listed fauna species which may be resident in the locality:

- Southern Brown Bandicoot; and
- Growling Grass Frog.

In addition to the above two fauna species, the Southern Toadlet is listed on the DSE *Advisory*

List of Threatened Vertebrate Fauna in Victoria (2007b).

Targeted surveys were undertaken for all three above species to determine their presence in the study area.

The timing of targeted surveys for threatened fauna is strictly seasonal and are listed below:

o Growling Grass Frog (October to March);
o Southern Brown Bandicoot (All year round); and
o Southern Toadlet (March to July).

A targeted survey for the Growling Grass Frog was conducted in the study area on January 7th and 11th 2011.

A targeted survey for the Southern Brown Bandicoot was conducted between January 6th and January 21st 2011 using methods consistent with the DSE's Biodiversity Precinct Planning Kit (DSE 2009).

The Southern Toadlet targeted survey was undertaken on March 17th, 24th and April 4th 2011 using methods consistent with the DSE Biodiversity Precinct Planning Kit, including call playback and spotlighting.

The targeted surveys found no evidence of either of these species utilising the study area. The reports of these surveys concluded that potential impacts on these species are not likely and not significant. It has therefore been concluded that there is not potential for the project to have a significant impact on a MNES and that referral under the EPBC Act is not required.

Have any applications for approval been lodged?

☒ No ☐ Yes If yes, please provide details.

Approval agency consultation (agencies with whom the proposal has been discussed):

The Dingley Bypass (Warrigal Road to Westall Road) has been discussed with the Department of Planning and Community Development, Department of Sustainability and Environment, City of Kingston, City of Greater Dandenong, Melbourne Water and Parks Victoria.

Other agencies consulted:
Nil at this stage but will consult with all relevant state departments and agencies.

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):

No potentially significant environmental effects are considered likely given that:

- Less than 10 ha of intact native vegetation is proposed to be cleared;
- There would be no potential loss of a significant proportion of habitat for a threatened species;
- No Ramsar or important wetlands are within several kilometers of the study area;
- No aquatic, estuarine or marine ecosystems within the study area;
- No potential for extensive or major effects on the health, safety or well-being of the human community in the area; and
- Greenhouse gas emissions directly attributable to the operation of the facility will be less than 200,000 tonnes of carbon dioxide equivalent per annum. A net reduction in greenhouse emissions is expected from the operation of the facility as it will reduce congestion and provide a more efficient transport corridor compared to existing alternative routes.

Potential Environmental Effects however include the following:

- Vegetation removal. Impacts will be reduced by minimising the footprint width, complying with Victorias Net Gain Native Vegetation Management Framework requirements, and implementing an Environmental Management Plan.
- Cultural heritage. Impacts will be reduced by minimising the footprint width and implementing an endorsed Cultural Heritage Management Plan.
- Reduction of water quality from sediment and runoff from the site and roads. Impacts will be reduced during construction by implementing an EMP and post construction by implementing best practice water sensitive urban design treatments for road and stormwater runoff.
- Visual Impacts. Impacts will be reduced by implementing a landscape plan.
- Reduced air quality. VicRoads has undertaken a preliminary assessment using the EPA approved Air Quality Screening Tool and found that no State Environmental Protection Policy intervention levels will be approached or exceeded due to the project.
- Dust. Dust during construction will be reduced by implementing dust control measures such as stabilising disturbed soil through watering or grassing, undertaking rehabilitation of disturbed areas as soon as possible and the use of defined haul routes.
- Social Impacts. Impacts will be reduced by developing and implementing a consultation plan in liaison with the City of Kingston and City of Greater Dandenong and regular dialogue with impacted residents and stakeholders.
- Traffic disruption. Traffic disruption will be minimised as far as practicable. Traffic management plans will be put in place during construction with advance warning to commuters of any temporary delays.
- Production of Waste. Contractors will be encouraged to carry out all works in such a manner as to minimise the generation of waste materials and whenever possible to recover and recycle such materials.
- Noise. Increased ambient noise resulting from traffic using the new road link are proposed to be minimised through use of noise attenuation barriers, potentially in conjunction with architectural acoustic treatments to any highly impacted dwellings.

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?

A Flora and Fauna assessment was undertaken by Brett Lane and Associates (December 2010) – refer to Attachment D1 – followed by targeted surveys for three threatened fauna species (February - April 2011) – refer to Attachments D2, D3 and D4.

A Habitat Hectare and Net Gain assessment was also undertaken (May 2011) – refer to Attachment D5

A Flora and Fauna survey was also undertaken in May 2011 for the median strip along Westall Road between Spring Road and Springvale Road – refer to Attachment D6.

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

☐ NYD Estimated area ……1 to 4 Ha …….

The area of native vegetation to be cleared will be confirmed following design development. It is estimated that approximately 1 ha of native vegetation will need to be cleared.

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.

Following a field assessment conducted on the 28th September 2010 and an analysis of the study area, it was determined that no threatened flora species listed under the FFG Act or the EPBC Act are considered likely to occur in the study area.

The following Ecological Vegetation Classes may be affected by the Dingley Bypass project:

- Creekland Grassy Woodland (EVC 68); has an endangered conservation status in the Gippsland Plain bioregion.
- Damp Sands Herb-rich Woodland (EVC 3); has a vulnerable conservation status in the Gippsland Plain bioregion
- Plains Grassy Wetland (EVC 125); has an endangered conservation status in the Gippsland Plain bioregion.
- Plains Grassy Woodland (EVC 55); has an endangered conservation status in the Gippsland Plain bioregion.and
- Swamp Scrub (EVC 53) has an endangered conservation status in the Gippsland Plain bioregion.

A total of 14 remnant patches comprising these EVCs were identified in the study area (Brett Lane & Associates Pty Ltd, December 2010). Scattered trees that may be affected were also recorded in the study area.

Have potential vegetation offsets been identified as yet?

☒ NYD ☐ Yes If yes, please briefly describe.

A habitat hectare and net gain assessment was undertaken and a report has been included as Attachment D5. In consultation with local councils, it is proposed to use local offset sites where possible. If suitable local offsets cannot be found, it is proposed to purchase offsets from the Government's BushBroker scheme.

The habitat hectare assessment has identified the main areas of vegetation likely to be impacted by the project consist of the following:

- approximately 0.25 ha of Damp Sands Herb Rich Woodland (EVC3) of medium conservation significance;
- approximately 0.5 ha of Damp Sands Herb Rich Woodland (EVC3) of high conservation significance;
- 3 medium and 5 small scattered trees;
- An additional 2 medium and up to 45 small trees should a grade separation over Springvale Road be included with this project.

The habitat hectare and net gain assessment will be updated following design development.

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

Nil.

NYD = not yet determined

Flora and fauna

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

A Flora and Fauna assessment has been undertaken by Brett Lane and Associates (December 2010) – refer to Attachment D1 – followed by targeted surveys for two threatened fauna species (February – April 2011) – refer to Attachments D2, D3 and D4.

A habitat hectare and net gain assessment was also undertaken (April – May 2011) – refer to Attachment D5.

A Flora and Fauna survey was also undertaken in May 2011 for the median strip along Westall Road between Spring Road and Springvale Road – refer to Attachment D6.

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.

The flora and fauna assessment (Brett Lane & Associates Pty Ltd, December 2010) detected no rare or threatened flora species during the survey and concluded that no suitable habitat occurs on site for any listed flora species and that therefore, no threatened flora are considered likely to occur in the study area.

The flora and fauna assessment concluded that three threatened fauna species have the potential to be present in the study area and to be impacted by the proposal - Growling Grass Frog and Southern Brown Bandicoot (both listed under the EPBC Act and FFG Act) and Southern Toadlet (listed under the FFG Act). The assessment report therefore recommended that targeted surveys be carried out for each of these species.

Targeted surveys were subsequently carried out for the Growling Grass Frog, Southern Brown Bandicoot and Southern Toadlet (Brett Lane & Associates Pty Ltd, February – April 2011). These surveys did not record any of these species and concluded that potential impacts of the proposal are unlikely and not significant.

Several migratory bird species occasionally occur in the study area but the flora and fauna assessment concluded that due to the relatively small size of habitats in the study area, the proposal would be unlikely to have a significant impact on these species.

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.

Not Applicable.

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.

Refer to above summary of flora and fauna surveys and the conclusion that the proposal is unlikely to have a significant impact on threatened or migratory species or communities.

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

☐ NYD ☐ No ☒ Yes If yes, please briefly describe.

The principles of Net Gain will be followed, where native vegetation removal is avoided where possible, minimised where practical, and offset if removal cannot practically be avoided. A number of design options that avoid and/or reduce impacts on flora and fauna have already been developed (refer Section 4).

Other information/comments?

Nil.

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.

There maybe controlled discharge of excess rain water runoff into water courses after appropriate treatment. VicRoads will continue to liaise with Melbourne Water to ensure all necessary steps to avoid adverse impacts to receiving waters are avoided, and beneficial uses are protected.

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.

A large open concrete channel (Clarinda Main Drain) crosses the site midway between Old Dandenong Road and Boundary Road. This drain carries stormwater from the Clarinda and Clayton South area to the north of the site and runs into Mordialloc Creek approximately 6 kilometres to the south of the site.

Three other minor unnamed drains cross the site between Boundary and Tootal Roads.

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

☐ NYD ☒ No ☐ Yes If yes, specify which water environments.

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.

Could the project affect streamflows?

☐ NYD ☒ No ☐ Yes If yes, briefly describe implications for streamflows.

Could regional groundwater resources be affected by the project?
☐ NYD ☒ No ☐ Yes If yes, describe in what way.

Could environmental values (beneficial uses) of water environments be affected?
☐ NYD ☒ No ☐ Yes If yes, identify waterways/water bodies and beneficial uses (as recognised by State Environment Protection Policies)

VicRoads will continue to liaise with Melbourne Water to ensure all necessary steps to avoid adverse impacts to receiving waters are avoided, and beneficial uses are protected.

Could aquatic, estuarine or marine ecosystems be affected by the project?
☐ NYD ☒ No ☐ Yes If yes, describe in what way.

Is there a potential for extensive or major effects on the health or biodiversity of aquatic, estuarine or marine ecosystems over the long-term?
☒ No ☐ Yes If yes, please describe. Comment on likelihood of effects and associated uncertainties, if practicable.

Is mitigation of potential effects on water environments proposed?
☐ NYD ☐ No ☒ Yes If yes, please briefly describe.

A construction EMP requiring good construction practice for the containment and treatment of sediment from rain on exposed excavated land in accordance with EPA regulations and guidelines.

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

14. Landscape and soils

Landscape

Has a preliminary landscape assessment been prepared?
☒ No ☐ Yes If yes, please attach.

Is the project to be located either within or near an area that is:

- **Subject to a Landscape Significance Overlay or Environmental Significance Overlay?**
  ☐ NYD ☒ No ☐ Yes If yes, provide plan showing footprint relative to overlay.

- **Identified as of regional or State significance in a reputable study of landscape values?**
  ☐ NYD ☒ No ☐ Yes If yes, please specify.

- **Within or adjoining land reserved under the *National Parks Act 1975* ?**
  ☐ NYD ☒ No ☐ Yes If yes, please specify.

- **Within or adjoining other public land used for conservation or recreational purposes ?**
  ☐ NYD ☐ No ☒ Yes If yes, please specify.

Karkarook Park located at the Warrigal Road end of the project currently abuts the south side of the road reservation at the South Road Extension. An additional carriageway within the road reservation is proposed at this location.

A large area bordering Karkarook Park to the east and located south-west of Old Dandenong Road and north of Kingston Road is included in a Public Acquisition Overlay 2 (proposed public open space with Parks Victoria as the acquiring authority).

Another area to the north of the site and to the east of Grange Road is also included in a Public Acquisition Overlay 2 (proposed public open space with Parks Victoria as the acquiring authority).

Is any clearing vegetation or alteration of landforms likely to affect landscape values?
☐ NYD ☐ No ☒ Yes If yes, please briefly describe.

The project will require removal of vegetation located in the road reserve. Given the relatively flat nature of the land this clearing of vegetation would only affect landscape values at the local level.

Is there a potential for effects on landscape values of regional or State importance?
☐ NYD ☒ No ☐ Yes Please briefly explain response.

Is mitigation of potential landscape effects proposed?
☐ NYD ☐ No ☒ Yes If yes, please briefly describe.

Impact on landscape values will be minimised through implementation of an appropriate roadside landscape design.

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

Nil.

Soils

Is there a potential for effects on land stability, acid sulphate soils or highly erodible soils?
☐ NYD ☐ No ☒ Yes If yes, please briefly describe.

Geotechnical investigations indicate a potential for acid sulphate soils to occur below the water table. Further works are in progress to confirm this risk. If it is confirmed construction activities will be limited to above the water table wherever possible to mitigate the risk. Where construction within the water table is unavoidable (e.g. bridge piles), appropriate construction techniques will be adopted to mitigate risk (e.g. driven piles instead of bored piles to avoid oxidation of acid sulphate soils).

Are there geotechnical hazards that may either affect the project or be affected by it?
☐ NYD ☐ No ☐ Yes If yes, please briefly describe.

A geotechnical risk assessment (VicRoads, May 2009) and an assessment of the risk of encountering contaminated material (Golder Associates, August 2010) have been carried out. These are attached in Appendix E1 and E2 respectively. No significant risks that cannot be readily addressed have been identified.

The geotechnical risk assessment identified that the most significant risks are high groundwater tables and/or perched water tables that may contain leachate from landfills in the locality and underlying swamp deposits that have potential for differential settlement to occur. Soil and groundwater testing are recommended and will be carried out for areas identified with high or moderate risks.

The contamination risk assessment has revealed that either through solid waste landfilling operations or historical spills of contaminants, a number of properties both within and adjacent to the site present a risk of contaminated soils being present. For those properties identified as being of high or moderate risk within the road alignment, the report recommends sampling and characterisation of the potential contaminant load within the soil in order to assess the management option. Potential management options include retention on site or disposal to an appropriate waste management facility, depending upon the soil contamination categorisation.

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

Nil.

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.

There will be periods of increased traffic congestion during construction at the Warrigal Road,

Clarinda Road, Kingston Road, Boundary Road, Tootal Road and Westall Road intersections. Construction at these sites will be restricted to off peak periods to minimise traffic congestion.

Once the new road is opened to traffic, traffic flows in the surrounding road network will improve resulting in reduced traffic congestion. It is estimated that approximately 45,000 vehicles per day will use the new arterial road when it is opened to traffic.

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.

There is the potential for the emission of dust and noise during construction. These will be managed in accordance with EPA guidelines and regulations and VicRoads environmental management guidelines and specifications.

There will also be changes to the visual amenity of the area following road construction. This will be mitigated by implementation of an appropriate roadside landscape plan.

There will also be increased noise levels adjacent to the new road. Noise levels will be controlled in accordance with 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.

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.

Closure of Old Dandenong Road on the south side of the new alignment and Elders Street South, Old Boundary Road, Grange Road on either side of the new alignment is proposed. However, access to all properties will remain available via local roads in the area and none of the above closures is expected to create significant access constraints to affected properties.

Depending upon the inclusion of Springvale Road / Westall Road intersection grade separation in the project scope it is possible that Rowan Road may be required to be closed at Westall Road for road safety reasons. This site is already a road safety 'black spot' with a history of serious accidents. If required to be truncated access to all properties will still be readily available however some residents and patrons of the adjacent sporting facilities will be required to travel further. VicRoads consultants have identified the extension of Spring Road through to Springvale Road as an effective mitigating measure and VicRoads is exploring this option with City of Kingston.

If an interchange arrangement is adopted at the intersection of Westall Road and Dingley Bypass the closure of Spring Road / Westall Road intersection will be required for road safety reasons. The extension of Spring Road to Springvale Road mentioned above would also effectively mitigate impacts associated with this potential local road closure.

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.

Market gardeners and other commercial operators who have short term leases on land owned by VicRoads will not have their leases extended and therefore will be required to close or relocate their businesses.

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.

Market gardeners and other commercial operators who have short term leases on land owned by

VicRoads will not have their leases extended and therefore be required to close or relocate their businesses.

Is mitigation of potential social effects proposed?

☐ NYD ☐ No ☒ Yes If yes, please briefly describe.

Affected parties leasing land owned by VicRoads will be given notice that their leases will not be extended to allow them as much time as possible to make arrangements to cease operations.

As stated above, emissions of dust and noise during construction will be managed in accordance with EPA guidelines and regulations and VicRoads environmental management guidelines and specifications.

Changes to the visual amenity of the area will also be mitigated by implementation of an appropriate roadside landscape plan.

Operational noise levels are proposed to be controlled in accordance with VicRoads Traffic Noise Reduction Policy

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

Nil

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.

As there is no Registered Aboriginal Party for this area, the consultation so far has been with groups who have sent out representatives for fieldwork. Two of these were RAP applicants and the other was an interested Aboriginal Party that has also been consulted with for the project area.

VicRoads has also consulted with Aboriginal Affairs Victoria (AAV) regarding this project.

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

A Desktop and Standard Assessment was carried out by Urban Colours in 2011. A copy of the Desktop and Standard Assessment report including plans of the assessment are included as Attachment E.

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

Two registered Aboriginal Cultural Heritage places were identified during the Desktop Assessment within or immediately adjacent to the project area (VAHR 7922-0375 and VAHR 7922-1152). VAHR 7922-0375 is an earth feature and artefact scatter that is located in a park next to the activity boundary at Vella Court. VAHR 7922-1152 is an isolated quartz flake discovered in sub-surface deposits west of Springvale Road.

One new Aboriginal Place was recorded during the Standard Assessment. An isolated silcrete artefact was located within the activity area and within an industrial quarry site on Old Dandenong Road. The highly disturbed nature of the quarry site indicates that the artefact was not in situ but contained within fill material imported to the site.

The Desktop and Standard Assessments identified areas of Low and Moderate archaeological potential

The surface disturbance caused by market gardening activities, nurseries, road reserves and pastoral activities does not count as significant ground disturbance under the *Aboriginal Heritage Regulations.* It is possible that sub-surface deposits have survived in these areas. These areas have moderate potential for archaeological material.

Other areas such as those impacted by road construction, or quarry and landfill sites are regarded as significantly disturbed and have low potential for archaeological material.

A Complex Assessment is currently underway to further investigate the extent of Cultural Heritage in the project area.

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.

Is mitigation of potential cultural heritage effects proposed?

☐ NYD ☐ No ☒ Yes If yes, please briefly describe.

A Cultural Heritage Management Plan (CHMP) will be developed prior to commencement of construction. The CHMP will specify contingencies and responsibilities in the event of items of Aboriginal cultural heritage being discovered.

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

Nil.

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. Vehicle fuel (petrol, diesel, LPG) / Vehicle exhaust emissions

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. Earth excavation for removal from site for construction, however this is expected to be minimal as most of the new road will be built on fill, and earth excavated in cut sections will be used as fill where possible.

☐ Other.

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

☒ Less than 50,000 tonnes of CO_2 equivalent per annum

☐ Between 50,000 and 100,000 tonnes of CO_2 equivalent per annum

☐ Between 100,000 and 200,000 tonnes of CO_2 equivalent per annum

☐ More than 200,000 tonnes of CO_2 equivalent per annum

Greenhouse gas emission savings of around 10,000 tonnes of CO2 per annum are expected as a result of this project due to a reduction of congestion on the local road network.

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

☒ Design: Please describe briefly

The road is being designed within the reserved corridor to avoid as much native vegetation present as possible and minimise the extent of native vegetation that needs to be removed in line with Victoria's Native Vegetation Management Framework.

☒ Environmental management: Please describe briefly.

A Project Environmental Protection Strategy (PEPS) will be prepared in accordance with VicRoads Project Management Guidelines for Environmental Protection. This plan will address all environmental and social issues discovered in background studies to provide guidance for the design and construction phases of the project. The PEPS will also document relevant legislative environmental obligations.

A requirement of the contract for construction of the new road will be the development of a detailed Contractors Environmental Management Plan in line with the PEPS document. The contract will also require detailed environmental management plans be prepared for each construction activity and stage of work.

☒ Other: Please describe briefly

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.

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.

- A complex Cultural Heritage Assessment is underway.
- A noise level assessment is underway.

Has a program for future environmental studies been developed?

☒ No ☒ Yes If yes, briefly describe.

- A Habitat Hectare and Net Gain Assessment will be updated following design development to offset the removal of native vegetation.
- Soil and groundwater testing of areas identified as being of high or moderate geotechnical risk and/or risk of contaminated soils being present.
- A hydrologic and hydraulic analysis is currently underway and will be completed.shortly.

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. Significant consultation has been undertaken with the City of Kingston and City of Greater Dandenong. Consultation has also begun with other stakeholders including Lantrak and the Heatherton Christian College and some property owners as well as local sporting clubs with affected access.
Has a program for future consultation been developed? ☐ NYD ☐ No ☒ Yes If yes, briefly describe. A communications plan is being developed for this project and will be updated as the project progresses. It includes asking the community how they would like to be communicated with about the project and whether or not they support the project at an early stage; the results of which will form the basis for the communications plan.

Authorised person for proponent:

I, Frank De Santis.....(full name),

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

Signature _____

Date 10 June 2011

Person who prepared this referral:

I, Sam Kutrolli.....(full name),

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

Signature S. Kutrolli

Date 3 June 2011.

ATTACHMENTS

Attachment A1 – Locality Map
Attachment A2 – General Site Plan
Attachment B1 – Preliminary Alignment Plans
Attachment B2 – Alignment Options at Westall Road Through Residential Properties
Attachment B3 – Alignment Option at Westall Road – Tunnels
Attachment B4 – Alignment Option at Westall Road – Dingley Through Route
Attachment B5 – Alignment Option at Westall Road – Interchange Arrangement
Attachment C – VicRoads Owned Properties and Proposed Acquisition Areas
Attachment D1 – Desktop Flora and Fauna Assessment (Final)
Attachment D2 – Targeted Southern Brown Bandicoot Survey (Final)
Attachment D3 – Targeted Growling Grass Frog Survey (Final)
Attachment D4 – Targeted Southern Toadlet Survey (Final)
Attachment D5 – Habitat Hectare and Netgain Assessment June 2001
Attachment D6 – Flora and Fauna Assessment Report along Westall Road June 2011
Attachment E – Draft Desktop and Standard Cultural Heritaget March 2011